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ATTORNEY WORK PRODUCT

FOR: Jessica Rees
City Planner
City of University Park
FROM: Robert L. Dillard
DATE: April 5, 2018
SUBJECT: PZ-18-006; Application of the City of University Park to create Planned Development District 42 for the City's Water Tower at 3531 Northwest Parkway

Application was filed by the City of University Park to create a planned development district to allow specific uses on the elevated water storage facility at 3531 Northwest Parkway, including the addition of cellular telephone antenna.

During the planning and zoning commission public hearing on March 13th, several neighbors spoke in opposition and raised the issue of radio frequency emissions (RF) and their potential effects on the surrounding neighborhood and its residents.

The Telecommunications Act of 1996, 47 U.S.C.A. § 332, is a federal law which, in part, preserves but limits local zoning authority over decisions regarding the placement, construction, and modification of personal wireless service facilities.

The limitations placed on local zoning authority state, in part: "The regulation of the placement, construction, and modification of personal wireless service facilities by any state or local government or instrumentality thereof –

…

(iv) No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

In this statute, "personal wireless service facilities" means facilities for the provisions of personal wireless services, i.e. cellular telephone services. The "Commission" referred to is the Federal Communications Commission.

What this means is that the federal government has preempted the City's right to prohibit the placement of personal wireless service facilities on the basis of environmental effects of radio frequency emissions if such facilities comply with the FCC regulations concerning such emissions.

In view of this requirement, the City, when it entered into a potential ground and water tower lease agreement with AT&T, included a section which a requires AT&T to prepare and deliver to the City an evaluation of the radio frequency emissions from the tower site as required by the FCC, taking into consideration the addition of AT&T's equipment (cellular telephone antenna).

Because of that requirement, AT&T commissioned a radio frequency safety survey report with Waterford Consultants, LLC. Although technical in nature, Waterford's report and conclusion is that the AT&T facilities will be compliant with FCC regulations, but recommended that caution signs be placed at the entrance to the water tower facility. These caution signs have to do with occupational exposure limits of the FCC, not with the general public exposure limit.

I'll assume that representatives of AT&T and/or Waterford will be present at the Commission's public hearing on April 10th. If so they can testify as to the accuracy of my conclusion as well as any other relevant fact. If that testimony and all other facts considered by the Commission lead to the conclusion by the Commission that the RF emissions of the proposed AT&T facilities will not exceed the limits placed on those emissions by the FCC standards, then they may not deny the zoning application based solely on an argument of potential danger caused by RF emissions from these facilities.

United States Code Annotated
Title 47. Telecommunications (Refs & Annos)
Chapter 5. Wire or Radio Communication (Refs & Annos)

§ 332. Mobile services

United States Code Annotated Title 47. Telecommunications Effective: February 8, 1996 *(Approx. 5 pages)*
Part I. General Provisions

Proposed Legislation

Effective: February 8, 1996

47 U.S.C.A. § 332

§ 332. Mobile services

Currentness

(a) Factors which Commission must consider

In taking actions to manage the spectrum to be made available for use by the private mobile services, the Commission shall consider, consistent with section 151 of this title, whether such actions will--

(1) promote the safety of life and property;

(2) improve the efficiency of spectrum use and reduce the regulatory burden upon spectrum users, based upon sound engineering principles, user operational requirements, and marketplace demands;

(3) encourage competition and provide services to the largest feasible number of users; or

(4) increase interservice sharing opportunities between private mobile services and other services.

(b) Advisory coordinating committees

(1) The Commission, in coordinating the assignment of frequencies to stations in the private mobile services and in the fixed services (as defined by the Commission by rule), shall have authority to utilize assistance furnished by advisory coordinating committees consisting of individuals who are not officers or employees of the Federal Government.

(2) The authority of the Commission established in this subsection shall not be subject to or affected by the provisions of part III of Title 5 or section 1342 of Title 31.

(3) Any person who provides assistance to the Commission under this subsection shall not be considered, by reason of having provided such assistance, a Federal employee.

(4) Any advisory coordinating committee which furnishes assistance to the Commission under this subsection shall not be subject to the provisions of the Federal Advisory Committee Act.

(c) Regulatory treatment of mobile services

(1) Common carrier treatment of commercial mobile services

(A) A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this chapter, except for such provisions of subchapter II of this chapter as the Commission may specify by regulation as inapplicable to that service or person. In

prescribing or amending any such regulation, the Commission may not specify any provision of section 201, 202, or 208 of this title, and may specify any other provision only if the Commission determines that--

(i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory;

(ii) enforcement of such provision is not necessary for the protection of consumers; and

(iii) specifying such provision is consistent with the public interest.

(B) Upon reasonable request of any person providing commercial mobile service, the Commission shall order a common carrier to establish physical connections with such service pursuant to the provisions of section 201 of this title. Except to the extent that the Commission is required to respond to such a request, this subparagraph shall not be construed as a limitation or expansion of the Commission's authority to order interconnection pursuant to this chapter.

(C) The Commission shall review competitive market conditions with respect to commercial mobile services and shall include in its annual report an analysis of those conditions. Such analysis shall include an identification of the number of competitors in various commercial mobile services, an analysis of whether or not there is effective competition, an analysis of whether any of such competitors have a dominant share of the market for such services, and a statement of whether additional providers or classes of providers in those services would be likely to enhance competition. As a part of making a determination with respect to the public interest under subparagraph (A)(iii), the Commission shall consider whether the proposed regulation (or amendment thereof) will promote competitive market conditions, including the extent to which such regulation (or amendment) will enhance competition among providers of commercial mobile services. If the Commission determines that such regulation (or amendment) will promote competition among providers of commercial mobile services, such determination may be the basis for a Commission finding that such regulation (or amendment) is in the public interest.

(D) The Commission shall, not later than 180 days after August 10, 1993, complete a rulemaking required to implement this paragraph with respect to the licensing of personal communications services, including making any determinations required by subparagraph (C).

(2) Non-common carrier treatment of private mobile services

A person engaged in the provision of a service that is a private mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose under this chapter. A common carrier (other than a person that was treated as a provider of a private land mobile service prior to August 10, 1993) shall not provide any dispatch service on any frequency allocated for common carrier service, except to the extent such dispatch service is provided on stations licensed in the domestic public land mobile radio service before January 1, 1982. The Commission may by regulation terminate, in whole or in part, the prohibition contained in the preceding sentence if the Commission determines that such termination will serve the public interest.

(3) State preemption

(A) Notwithstanding sections 152(b) and 221(b) of this title, no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services. Nothing in this subparagraph shall exempt providers of commercial mobile services (where such services are a substitute for land line telephone exchange service for a substantial portion of the communications within such State) from requirements imposed by a State commission on all providers of telecommunications services necessary to ensure the universal availability of telecommunications service at affordable rates. Notwithstanding the first sentence of this subparagraph, a State may petition the Commission for authority to regulate the rates for any commercial mobile service and the Commission shall grant such petition if such State demonstrates that--

(i) market conditions with respect to such services fail to protect subscribers adequately from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory; or

(ii) such market conditions exist and such service is a replacement for land line telephone exchange service for a substantial portion of the telephone land line exchange service within such State.

The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition. If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such periods of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory.

(B) If a State has in effect on June 1, 1993, any regulation concerning the rates for any commercial mobile service offered in such State on such date, such State may, no later than 1 year after August 10, 1993, petition the Commission requesting that the State be authorized to continue exercising authority over such rates. If a State files such a petition, the State's existing regulation shall, notwithstanding subparagraph (A), remain in effect until the Commission completes all action (including any reconsideration) on such petition. The Commission shall review such petition in accordance with the procedures established in such subparagraph, shall complete all action (including any reconsideration) within 12 months after such petition is filed, and shall grant such petition if the State satisfies the showing required under subparagraph (A)(i) or (A)(ii). If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such period of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory. After a reasonable period of time, as determined by the Commission, has elapsed from the issuance of an order under subparagraph (A) or this subparagraph, any interested party may petition the Commission for an order that the exercise of authority by a State pursuant to such subparagraph is no longer necessary to ensure that the rates for commercial mobile services are just and reasonable and not unjustly or unreasonably discriminatory. The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition in whole or in part.

(4) Regulatory treatment of communications satellite corporation

Nothing in this subsection shall be construed to alter or affect the regulatory treatment required by title IV of the Communications Satellite Act of 1962 [47 U.S.C.A. § 741 et seq.] of the corporation authorized by title III of such Act [47 U.S.C.A. § 731 et seq.].

(5) Space segment capacity

Nothing in this section shall prohibit the Commission from continuing to determine whether the provision of space segment capacity by satellite systems to providers of commercial mobile services shall be treated as common carriage.

(6) Foreign ownership

The Commission, upon a petition for waiver filed within 6 months after August 10, 1993, may waive the application of section 310(b) of this title to any foreign ownership that lawfully existed before May 24, 1993, of any provider of a private land mobile service that will be treated as a common carrier as a result of the enactment of the Omnibus Budget Reconciliation Act of 1993, but only upon the following conditions:

(A) The extent of foreign ownership interest shall not be increased above the extent which existed on May 24, 1993.

(B) Such waiver shall not permit the subsequent transfer of ownership to any other person in violation of section 310(b) of this title.

(7) Preservation of local zoning authority

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions

regarding the placement, construction, and modification of personal wireless service facilities.

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions

For purposes of this paragraph--

(i) the term "personal wireless services" means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term "personal wireless service facilities" means facilities for the provision of personal wireless services; and

(iii) the term "unlicensed wireless service" means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) of this title).

(8) Mobile services access

A person engaged in the provision of commercial mobile services, insofar as such person is so engaged, shall not be required to provide equal access to common carriers for the provision of telephone toll services. If the Commission determines that subscribers to such services are denied access to the provider of telephone toll services of the subscribers' choice, and that such denial is contrary to the public interest, convenience, and necessity, then the Commission shall prescribe regulations to afford subscribers unblocked access to the provider of telephone toll services of the subscribers' choice through the use of a carrier identification code assigned to such provider or other mechanism. The requirements for unblocking shall not apply to mobile satellite services unless the Commission finds it to be in the public interest to apply such requirements to such services.

(d) Definitions

For purposes of this section--

(1) the term "commercial mobile service" means any mobile service (as defined in section 153 of this title) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission;

(2) the term "interconnected service" means service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission) or service for which a request for interconnection is pending pursuant to subsection (c)(1)(B) of this section; and

(3) the term "private mobile service" means any mobile service (as defined in section 153 of this title) that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission.

CREDIT(S)

(June 19, 1934, c. 652, Title III, § 332, formerly § 331, as added Pub.L. 97-259, Title I, § 120(a), Sept. 13, 1982, 96 Stat. 1096; renumbered § 332, Pub.L. 102-385, § 25(b), Oct. 5, 1992, 106 Stat. 1502; amended Pub.L. 103-66, Title VI, § 6002(b)(2)(A), Aug. 10, 1993, 107 Stat. 393; Pub.L. 104-104, § 3(d)(2), Title VII, §§ 704(a), 705, Feb. 8, 1996, 110 Stat. 61, 151, 153.)

Notes of Decisions (369)

47 U.S.C.A. § 332, 47 USCA § 332
Current through P.L. 115-132.

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Under a traditional zoning analysis, the test for the granting of a use variance would require a showing that (1) the land in question cannot yield a reasonable return if used only for a purpose allowed in that zone; (2) that the plight of the owner is due to unique circumstances and not to the general conditions in the neighborhood which may reflect the unreasonableness of the zoning ordinance itself; and (3) that the use to be authorized by the variance will not alter the essential character of the locality.[16]

Under New Jersey law, an applicant for a use variance must prove "special reasons," and that the variance can be granted without substantial detriment to the public good and without substantial impairment of the zone plan and the zoning ordinance.[17] The classification of the use as inherently beneficial results in a per se finding that the "special reasons" are shown as a matter of law.[18] Thus, the applicant for a use variance is relieved of half of the burden of proving entitlement to the variance.

Additionally, a Board is free to define cellular telephone towers in terms of service and functions (a telephone facility), rather than in terms of its technology (radio telephone).[19] In Laitala v. Douglas County Board of Adjustment,[20] a Wisconsin appellate court rejected the argument that since the cellular radio antennas used radio technology, not telephone technology and since the antenna was of a height more frequently associated with radio towers, rather than traditional telephone poles, that the tower was a prohibited radio tower within the meaning of the zoning ordinance.

[2] Preemption by the Telecommunications Act of 1996 (TCA)

[a] Preemption and Limitations Under the Act

The Telecommunications Act of 1996 (TCA) significantly limited the authority for local governments to regulate cellular and PCS facilities. It amended Section 332 of the existing law to address the issue of preemption. Under the somewhat misleading heading of "Preservation of Local Zoning Authority,"[21] and following a general statement regarding the preservation of such authority,[22] it added the following language:

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facility, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the commission as being substantially in accord with the adopted comprehensive plan or part thereof. Va. Code §§ 15.2-2232(A).

Discussed at 258 Va. at 563–64, 522 S.E.2d at 879 (1999).

[16] *In re* Otto v. Steinhilber, 282 N.Y. 71, 76, 24 N.E.2d 851, *reh'g denied,* 282 N.Y. 681, 26 N.E.2d 811 (1939).

[17] N.J.S.A. § 40:55D-70(d).

[18] Sica v. Board of Adjustment, 127 N.J. 152, 160, 603 A.2d 30 (1992). For a later decision of the same court on this subject, *see* Smart SMR of New York, Inc. v. Borough of Fair Lawn, 152 N.J. 309, 704 A.2d 1271 (1998), discussed in § 10A.06[4], *below.*

[19] Laitala v. Douglas County Board of Adjustment, 175 Wis. 2d 625 (Ct. App. 1993).

[20] 175 Wis. 2d 625 (Ct. App. 1993).

[21] 47 U.S.C. § 332(c)(7).

[22] 47 U.S.C. § 332(c)(7)(A).

Telecommunications Act and at the same time limit the number of new structures, a number of communities now make it easier to install antennas on existing structures than to obtain permits to erect new towers.[237]

§ 10A.07 Radiation

In addition to the more traditional questions which arise in telecommunication zoning cases, applicants for permission to site telecommunications equipment also raise health concerns over exposure to electromagnetic radiation that is emitted by transmitting equipment.[1]

The radiation emitted by telecommunications equipment, known as non-ionizing

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conclude that in doing so, the ZBA had allowed the TCA to preempt its own findings regarding variance criteria. Next, the trial court did not err in finding unnecessary hardship. The evidence showed that a tower of the height that was approved was necessary to fill what could be considered a significant gap in coverage. Furthermore, there was evidence that the tower and its compound would not create noise or traffic. There was substantial evidence supporting the ZBA's decision regarding property values, including the numerous studies submitted, the testimony of at least one appraiser, the lack of abatement requests in comparable areas, its own knowledge of the area, and personal observations made during simulated height tests. As for other criteria, there was evidence that the tower would be screened; would be located at the point furthest from abutting properties; would not generate noise, traffic, or odors; and would limit the need for more towers.

[237] *See, for example*, In re Appeal of Curtis, 179 Vt. 620, 896 A.2d 742, 2006 VT 9 (2006). The case concerned the installation of wireless telecommunications antennas in the bell towers of a church in the city and the construction of a shed on church property to house related equipment. The environmental court granted each party partial summary judgment by holding that the project was not prohibited by the town's zoning bylaws but that it required site plan approval. The residents asserted that the environmental court erred in upholding the permit because a bylaw mandated only one principal use or structure on a lot and that the antenna and shed provided for two additional uses. The court found no error with regard to the environmental court harmonizing the relevant bylaw sections and finding that the project did not amount to a second principal use and, instead, constituted an allowed subordinate use. The court did find error, however, with regard to requiring further site plan approval for the project because, such additional approval was not required for a small scale project such as the one at issue. The court included these comments in its decision:

> On appeal, residents argue that the environmental court erred in upholding the permit because the project is precluded by § 308 of the bylaw. That section mandates that, in urban residential districts, there be "only one principal use or structure on a lot unless otherwise approved under the Planned Unit Development provisions." The antenna and shed were not approved under the Planned Unit Development provisions. Residents argue that § 308 precludes the construction of wireless telecommunications facilities on the church lot because the facilities would be an impermissible second principal use of the property and the shed an impermissible second principal structure. The environmental court harmonized the bylaw sections and held that the project does not amount to a second principal use, but instead constitutes an "allowed subordinate use." Noting the bylaw's preference for stealth placement of wireless facilities, the court reasoned that § 308 does not "preclude approval of a subordinate or incidental second use on a lot that is specifically authorized elsewhere in the Zoning Bylaw and is not a second principal use on that lot."

179 Vt. at 621-22, 896 A.2d at 744.

[1] Hernandez, *Phone Antennas Resisted Out of Fear and Esthetics*, N.Y. Times, Aug. 16, 1994; Ragonetti, *Towering Problem? Land Use Regulation of Commercial Broadcast Towers*, 15 Zoning and Land Use Report no.2, Feb. 1992.

electromagnetic radiation, is different from ionizing radiation like x-rays.[2] Unlike ionizing radiation, the radio waves do not have the capability to change molecular structure or alter genetic material. While there is uniform agreement that exposure to ionizing radiation poses severe health risks, there is no agreement over whether exposure to the relatively low levels of non-ionizing electromagnetic radiation generated by telecommunications facilities is hazardous to health.[3]

The FCC has adopted the standards established by the American National Standards Institute (ANSI)[4] for exposure to non-ionizing electromagnetic energy.[5] In its "Questions and Answers about Biological Effect and Potential Hazards of Radio Frequency Radiation,"[6] the FCC explained that it had chosen to meet its obligation under the National Environmental Policy Act (NEPA) by reliance on the ANSI standards because "the FCC must use what it considered to be the best available standard at the time. The 1989 (non-government) ANSI standard was chosen because it was considered to be widely accepted and technically supportable."[7]

The FCC has not preempted state and local authorities from establishing their own radio-frequency protection guidelines. Some states, such as New Jersey, have statutorily preempted local regulation of radio-frequency emissions.[8] Other states, such as Pennsylvania, do not regulate non-ionizing radiation and depend on the FCC's guidelines.

The extent of preemption of local and state authority to regulate this issue is not

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[2] Hernandez, *Phone Antennas Resisted Out of Fear and Esthetics,* N.Y. Times, Aug. 16, 1994; Ragonetti, *Towering Problem? Land Use Regulation of Commercial Broadcast Towers,* 15 Zoning and Land Use Report no.2, Feb. 1992.

[3] "The amount of individual exposure to radio frequency energy varies according to the strength of the broadcast signal, the type of antenna used, the individual's distance from the source, and his duration of exposure." Electromagnetic Energy Policy Alliance Fact Sheet No. 2. The level of radio frequency emissions depends on the type of equipment employed. AM radio signals (540 to 1600 kHz on the AM radio dial) are usually transmitted from towers up to 300 feet tall. Approximately ninety percent of all AM stations use transmitting powers of 5,000 watts (5 kilowatts) or less. A small number of AM stations are authorized to broadcast at powers up to 50,000 watts. FM radio signals (88 to 108 MHz on the FM dial) are transmitted from atop tall buildings or towers averaging 250 feet high. Many FM stations are authorized to transmit signals with powers up to 100 kilowatts, although most use powers less than that. Television signals operate with maximum permitted powers depending on TV channel number: channels 2-6 may use up to 100 kilowatts, channels 7-13 may use up to 316 kilowatts, and channels 14-69 may use up to 5000 kilowatts. In order to get maximum geographic coverage, most TV antennas are mounted at heights in excess of 900 feet. Id. A typical cellular telephone antenna emits 100 watts of power.

[4] ANSI C95.1-1982, as modified, ANSI C95.1-1991.

[5] 47 C.F.R. § 1.1307(B).

[6] OET Bulletin No. 56, 3d ed., Jan. 1989.

[7] OET Bulletin No. 56, 3d ed., Jan. 1989. The relevant ANSI standard for public exposure to radiation hazards is a power level of 0.5 mw/cm2.

[8] Radiation Protection Act, N.J.S.A. 26:2D-1. *See* L.I.M.A. Partners v. Borough of Northvale, 219 N.J. Super. 512 (App. Div. 1987). New Jersey currently follows the ANSI standards but is considering an amendment to these regulations.