

## #8.8 WIRELESS COMMUNICATION FACILITIES IN DOUGLAS COUNTY

THE COUNTY BOARD OF SUPERVISORS OF THE COUNTY OF DOUGLAS DOES ORDAIN AS FOLLOWS:

### SECTION I. INTRODUCTION

WHEREAS, the Federal Communications Commission (FCC) has issued wireless communication licenses for personal communications services and other wireless technologies in order for those license holders to provide wireless services throughout the United States, and

WHEREAS, the growing demand from citizens and businesses for new wireless communications services has produced an increased need for the installations of wireless communication facilities, and

WHEREAS, the location, siting, design and construction of wireless communication facilities can have adverse impacts on celestial observation and the surrounding area.

NOW, THEREFORE, to accommodate the communication needs of residents and businesses while protecting health, safety, and welfare, to minimize adverse visual effects of wireless facilities through careful design and siting standards, to avoid potential hazards or damage to adjacent properties from tower failure through structural standards and setback requirements, to maximize the use of existing and approved towers and structures for new wireless communications antennas, and to reduce the number of towers needed to serve the area, the Douglas County Board of Supervisors do ordain as follows:

### SECTION II. DEFINITIONS

- (1) ALTERNATIVE TOWER STRUCTURE: Any structure not specifically designed or intended for the placement of antennas and wireless communication equipment.
- (2) ANTENNA: Any device or equipment used for the transmission or reception of electromagnetic waves, which may include omni-directional antenna (rod), directional antenna (panel) or parabolic antenna (disc).
- (3) COLLOCATION: The location of more than one antenna or set of antennas on the same tower structure.
- (4) FAA: Federal Aviation Administration.
- (5) FCC: Federal Communications Commission.
- (6) HEIGHT: The distance measured from ground level to the highest point on a tower or structure, including any attachments.
- (7) TOWER: Any structure that is designed and constructed primarily for the purpose

of supporting one or more antennas, including guy towers, monopole towers and self-supporting lattice towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures and the like.

- (8) TOWER ACCESSORY STRUCTURE: Any structure located at the base of a tower for housing base receiving or transmitting equipment.
- (9) WIRELESS COMMUNICATIONS: Any personal wireless services as defined in the Telecommunications Act of 1996, including FCC licensed commercial wireless telecommunications services such as cellular, personal communication services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging and similar services that currently exist or may be developed.

### SECTION III. APPLICABILITY

- (1) PREEXISTING TOWERS AND ANTENNAS: Any tower or antenna for which a permit has been issued prior to the effective date of this ordinance shall not be required to meet the requirements of this ordinance, however any addition or change to a preexisting tower or antenna shall comply with all applicable requirements of this ordinance.
- (2) AMATEUR RADIO AND RECEIVE ONLY ANTENNAS: This ordinance shall not govern the installation of any tower or antenna less than 90 feet in height, that is owned and/or operated by a federally licensed amateur radio operator or is used exclusively for receive-only antennas.

### SECTION IV. GENERAL REQUIREMENTS

- (1) All towers and antennas shall comply with all FCC and FAA rules, regulations and standards. If such standards and regulations are changed, then the owners of the towers and antennas governed by this ordinance shall bring such tower and antennas into compliance with such revised standards and regulations within six (6) months of the effective date of such standards and regulations, unless a more stringent compliance schedule is mandated by the controlling federal agency. Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owners expense.
- (2) Design and installation of all towers shall comply with the manufacturer's specifications. Plans shall be approved and certified by a registered professional engineer.
- (3) Installation of all towers and antennas shall comply with all applicable state and local building and electrical codes.

- (4) For leased sites, written authorization for siting the wireless communication facilities from the property owner must be provided.
- (5) All towers and antennas must be adequately insured for injury and property damage.
- (6) All unused towers and antennas must be removed within 12 months of cessation of operation or use, unless a written exemption is provided by the Douglas County Zoning Committee. After the facilities are removed, the site shall be restored to its original or an improved condition, and anchoring elements shall be removed from the ground to within 8 feet of ground level. If removal and/or restoration is not completed, Douglas County is authorized to cause the complete removal and site restoration and the cost shall be assessed against the property as a special assessment.
- (7) When applicable, proposals to erect new towers and antennas shall be accompanied by any required state or local agency license or application for such license.
- (8) Only one tower is permitted on a parcel of land. Additional towers may be permitted with a special exception permit if the additional tower is located within 200 feet of the existing tower and all other requirements of this ordinance are met.
- (9) The monopole design is the preferred tower structure. Use of guy or lattice towers must be justified on the basis of collocation opportunities or specific structural requirements.
- (10) The construction or installation of any wireless communication facilities or related equipment requires a permit from the Douglas County Zoning office prior to beginning installation or construction. A conditional-use permit will be required for all new and replacement towers. A land-use permit is required for additional and replacement antennas on existing towers and structures from the Douglas County Zoning office prior to beginning installation or construction.

## SECTION V. PROHIBITIONS

- (1) No tower or antenna may be installed on a parcel within a subdivision created for residential purposes.
- (2) No advertising message shall be affixed to any tower or antenna, other than that required by the FCC.
- (3) Towers and antennas shall not be artificially illuminated unless required by FCC or FAA regulations.
- (4) Whenever any tower is required to have flashing type lighting or illumination, the use of red flashing lights shall be required during the night time hours as opposed to white strobe lights unless otherwise Federally mandated.
- (5) No part of any tower or antenna shall extend across or over any right-of-way, public

street, public highway, public sidewalk, or property line.

- (6) All visible light emitting devices shall be prohibited from being used on any tower at anytime with the exception of the requirements by the FCC or FAA for safety purposes.

#### SECTION VI. PERFORMANCE STANDARDS

- (1) Tower structures shall be setback from the nearest property line a distance equal to the height of the tower plus the distance of any attachments extending above or beyond the tower. This setback may be reduced to 75% of the combined height of the tower plus any attachments if the applicant submits an engineering report from a registered professional engineer that certifies that the tower is designed and engineered to collapse upon failure within the distance from the highest point of the structure to the property line.
- (2) Towers shall not be located within 500 feet of any residence other than the residence on the parcel on which the tower is to be located.
- (3) New towers shall be designed structurally and electrically to accommodate the applicant's antennas and comparable antennas for at least 2 additional users (3 total users), if the tower is 130 feet or more in height. Towers must also be designed to allow for future rearrangement of antennas on the tower and accept antennas mounted at different heights.

#### SECTION VII. SCREENING AND LANDSCAPING

The tower location shall provide for the maximum amount of screening of the facilities. The site shall be landscaped with a buffer of plant materials that effectively screens the view of all tower accessory structures, equipment and improvements at ground level from adjacent properties. The standard buffer shall consist of a landscaped strip at least 4 feet wide outside the perimeter of the area where tower accessory structures and equipment are located at ground level. In locations where the visual impact of the tower would be minimal, the landscaping requirement may be reduced or waived by the governing authority. Existing mature vegetation and natural landforms on the site shall be preserved to the maximum extent possible.

#### SECTION VIII. SECURITY FENCING AND LIGHTING

- (1) All towers shall be reasonably protected against unauthorized access. The bottom of the tower from ground level to 12 feet above ground shall be designed to preclude unauthorized climbing and shall be enclosed with a minimum of 6 feet high chain link fence with a locked gate.
- (2) Security lighting for on-ground facilities and equipment is permitted, as long as it is down shielded to keep light within the boundaries of the site.

## SECTION IX. COLOR AND MATERIALS

All metal towers shall be constructed or treated with corrosion resistant material.

## SECTION X. PARKING AND ACCESS

Adequate parking spaces shall be provided on each site so that parking on public road right-of-way will not be necessary. Additional parking may be required by the governing authority if the minimum parking proves to be inadequate. Access must be provided by a gated, all-weather driveway.

## SECTION XI. COLLOCATION/SHARING OF FACILITIES

No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the governing authority that no existing tower or structure can accommodate the applicant's proposed antenna. Supporting evidence may consist of any of the following conditions:

- (1) No existing towers or structures are located within the geographic area required to meet the applicant's engineering requirements.
- (2) Existing towers or structures are not of sufficient height to meet the applicant's engineering requirements.
- (3) Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.
- (4) The applicant's proposed system would cause electromagnetic interference with the system on the existing tower or structure, or the system on the existing tower or structure would cause interference with the applicant's proposed system.
- (5) The fees, cost, or contractual provisions required by the owner to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable. Costs exceeding new tower development are considered unreasonable.
- (6) The applicant demonstrates that there are other limiting factors that render existing towers or structures unsuitable.

## SECTION XII. APPLICATIONS

All applications for permits for new wireless communication facilities shall include the following information.

- (1) A report from a registered professional engineer and other professionals which:

- (a) describes the tower height and design, including a cross section and elevation;
  - (b) certifies the facility's compliance with structural and electrical standards;
  - (c) describes the tower's capacity, including the potential number and type of antennas that it can accommodate;
  - (d) describes the lighting to be placed on the tower if required by the FCC or FAA;
  - (e) certifies that the facilities will not cause destructive interference with previously established public safety communications systems as required by the FCC;
  - (f) describes how the requirements and standards of these ordinances will be met by the proposed facilities.
- (2) Each application shall include a facility plan:
- (a) Written description of the type of consumer services each provider will provide to its customers (cellular, PCS, SMR, ESMR, paging or other anticipated wireless communication services).
  - (b) Provide a map of the County which shows the geographic service areas of the existing and proposed cell site, including sites to be up-graded or replaced.

### SECTION XIII. REQUIREMENTS FOR NOTIFICATION

- (1) The Zoning Office will advise the applicant(s) to contact the township(s) before the application is acted on at the Zoning Committee public hearing.
- (2) The townships and adjoining property owners are to be notified at the same time the public notice is sent to the newspaper.

### SECTION XIV. LANDOWNER ACKNOWLEDGMENT

Written acknowledgment by the landowner of a leased site that he/she will abide by all applicable terms and conditions of the building permit including the restoration and reclamation requirements of this ordinance.

### SECTION XV. ADDITIONAL INFORMATION AND ANALYSIS

- (1) Additional information and analysis may be required as deemed necessary by the Zoning Committee, at the applicant's expense.

- (2) Any information of an engineering nature that the applicant submits, whether civil, mechanical, or electrical shall be certified by a licensed professional engineer.

#### SECTION XVI. EXISTING TOWER / NEW ANTENNA

Applications for a permit to add a new antenna to an existing tower or structure shall be exempt from the requirements under heading APPLICATIONS, subsection (1), items (a), (b), (c), (d), and (e), inclusive.

#### SECTION XVII. ALTERNATIVE TOWER STRUCTURE

- (1) If an antenna is installed on an alternative tower structure, the antenna and supporting electrical and mechanical equipment must be of a neutral color that is identical to, or closely compatible with, the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible.
- (2) If equipment is to be installed on an alternative tower structure, applicant shall furnish a report from a professional engineer certifying the proposed alternative tower structure to be suitable for applicants equipment and intended use. Suitable shall be understood to include, but not be limited to, structural integrity and human safety concerns.

#### SECTION XVIII. EFFECTIVE DATE

This ordinance shall become effective upon its adoption by the Douglas County Board of Supervisors and publication.

Dated this 17th day of February, 2000.