**SAMPLE TELECOMMUNICATIONS FACILITY ORDINANCE**

**Section**1. DEFINITIONS. In this ordinance:

“Antenna” means a device for radiating or receiving radio waves, television signals, microwave signals, signals from satellites, and similar signals.

“Antenna structure” means an antenna consisting of two or more radiating elements, generally similar, which are arranged and excited in such a manner as to obtain directional radiation patterns. It includes any structural members which are necessary to maintain the proper electrical relationships between the radiating elements but does not include the mast or other structure used to support the array as a whole, nor does it include the transmission line which supplies energy to or receives energy from the array as a whole.

“Broadcast receiving antenna” means an outside antenna used for the reception of signals transmitted by stations licensed by the Federal Communications Commission in the Radio Broadcast Services, including AM, FM and TV, and includes dish antennas intended to receive signals from satellites.

“Collinear antenna” means a linear array in which the radiating elements are disposed end-to-end in a substantially straight vertical line.

“Communications antenna” means an outside antenna used for the transmission of signals by stations licensed by the Federal Communications Commission in the several radio services other than the Radio Broadcast Services, or for the reception of signals transmitted by such stations.

“Dipole” means a driven element in the form of a conductor approximately one-half wavelength long, split at its electrical center for connection to the transmission line feeding the antenna.

“Director element” means a parasitic element located forward of the driven element of an antenna, intended to increase the directive gain of the antenna in the forward direction.

“Driven element” means a radiation element coupled directly to the transmission line feeding the antenna.

“Inverted-V antenna” means an antenna consisting of a single dipole constructed of wire and supported at the center and ends in such a manner as to form an inverted “V” in a vertical plane.

“Linear array” means an array antenna having the centers of the radiating elements lying along a straight line.

“Mast” means a pole of wood or metal, or a tower fabricated of metal, used to support a broadcast receiving antenna or a communications antenna and maintain it at the proper elevation.

“Parabolic antenna” means an antenna consisting of a driven element and a reflector element, the latter having the shape of portion of a paraboloid of revolution.

“Parasitic element” means a radiating element which is not directly coupled to the transmission line feeding the antenna. It includes director elements and reflector elements.

“Radiating element” means a basic subdivision of an antenna which in itself is capable of effectively radiating or receiving radio waves. It includes driven elements and parasitic elements.

“Reflector element” means a parasitic element located in a direction other than forward of the driven element of an antenna, intended to increase the directive gain of the antenna in the forward direction.

“Whip antenna” means an antenna consisting of a single, slender, rod-like driven element, less than one wavelength long, which is supported only at its base and is fed at or near its base. It may include at its base a group of conductors disposed horizontally, or substantially so, forming an artificial ground plane.

“Yagi antenna” means a linear array in which the radiating elements are parallel to each other and are disposed along and perpendicular to a single supporting boom. The plane of the radiating elements may be vertical or horizontal.

**Section**2. REGULATIONS. It shall be unlawful for any person to erect or cause to be erected within the city any outside antenna without first submitting plans for such antenna to the director of planning and development for approval. The director of planning and development shall issue a permit for the erection of an antenna complying with the provisions of this ordinance, and the permit fee shall be $*[dollar amount of fee]*. The permit procedure shall be for the purpose of insuring that an antenna is installed in conformance to requirements of this ordinance. The director of planning and development shall be guided by the following standards in the approval of the antenna plans:

(a) Broadcast receiving antennas.

1. Permissible types. Broadcast receiving antennas may be of any type.

2. Maximum allowable dimensions. Broadcast receiving antennas may be of any size compatible with the height limitations hereinafter prescribed.

3. Height and placement limitations. The following limitations shall apply to broadcast receiving antennas in all areas in the city:

A. Whip antennas. If the antenna is mounted on a building, the lower extremity of the driven element shall be located not more than three feet above the surface of the roof, directly beneath the antenna. If the antenna is not mounted on a building, the lower extremity of the driven element shall be located not more than twelve feet above ground level.

B. Other antennas. If the antenna is mounted on a building, no part of the antenna structure shall extend to a height of more than six feet above the surface of the roof directly beneath the antenna. If the antenna is not mounted on a building, no part of the antenna structure shall extend to a height of more than fifteen feet above ground level.

(b) Communications antennas.

1. Permissible types. The use of communications antennas shall be restricted to the following types:

Whip antennas

Inverted-V antennas

Collinear antennas

Yagi antennas

Parabolic antennas

2. Maximum allowable dimensions. Dimensions of the several allowable types of communications antennas shall be limited as follows:

A. Whip antennas. The antenna may be of any size compatible with the height limitations hereinafter prescribed.

B. Inverted-V antennas. The radiating element may be of any size compatible with the height and placement limitations hereinafter prescribed.

C. Collinear antennas. The antenna may be of any size compatible with the height limitations hereinafter prescribed.

D. Yagi antennas. The length of the single boom supporting the radiating elements shall not exceed twenty feet. The length of the longest radiating element shall not exceed thirty feet.

(c) Height and placement limitations. The following limitations shall apply to the several allowable types of communications antennas in the indicated areas of the city:

1. Areas zoned M-1. In areas zoned M-1, no part of the antenna structure shall extend to a height of more than sixty feet above ground level.

2. Commercial and professional zones. The provisions governing broadcast receiving antennas shall apply.

3. Other areas. In areas other than those zoned M-1, commercial or professional, not more than one communications antenna shall be permitted on a property, except that two antennas shall be permitted on a property if one of the two antennas is a whip antenna. No part of the antenna structure shall extend to a height of more than twenty-five (25) feet above the highest point of the roof of the principal building on the property. The mast supporting the antenna or supporting the center of the antenna in the case of an inverted-V antenna, shall be of the self-supporting type, without guy wires. The maximum cross-sectional dimension of the mast shall not at any point along the axis of the mast exceed fifteen inches, plus one-third inch for each foot of distance between such point and the top of the mast.

**Section**3. EXCEPTIONS. Nothing contained in this ordinance shall prevent the installation and maintenance of antennas necessary for the operation of public authorities for the protection of the health, safety and welfare of the community. Plans for such antennas shall be reviewed by the director of planning and development before installation.

**Section**4. *[PENALTY.]*