



Lawrence-Douglas County
Metropolitan Planning Office
P.O. Box 708 6 E. 6th Street
Lawrence, KS 66044-0708

Re: **T-Mobile (Knights of Columbus) Communications Application Review**
City of Lawrence, Kansas

To: Sandra Day

Overview:

The City of Lawrence, Kansas requested Olsson Associates to review a communications application from T-Mobile in accordance to city code Article 5 Section 20-529(7) New Telecommunications Tower – Burden of Proof and associated subsections (I-V). This application covered the proposed installation of a communication tower located on the property of Knights of Columbus (Council 1372) located at 2206 E. 23rd Street Lawrence, KS 66044. Upon review of the submitted application packet, a field review was completed to verify that all information submitted within the application packet fulfilled the codes of the City of Lawrence.

Findings:

Section 20-529(7) subsection (I) states "No existing Telecommunications Towers or Structures are located within the geographic area required to meet the applicants engineering requirements." Olsson Associates verified that within the applicants requested radio frequency (RF) propagation map, that the above mentioned property was the only location that would meet the RF engineers' required RF coverage area and that the other locations within one mile of the facility would not provide the desired results.

Section 20-529(7) subsection (II) states "Existing Telecommunications Towers or Structures are not of sufficient Height, and could not be extended to become sufficient in Height, to meet the applicants engineering requirements." Four locations were identified by T-Mobile as potential locations only two met the desired height requirements. The two locations meeting height requirements were the 200' Cingular SST Tower located off Greenway and the 200' Guyed Tower located between N. 1500 Road and E. 17th Street. The two towers meet the required height but do not provide the RF coverage required by the applicant.

Section 20-529(7) subsection (III) states "Existing Telecommunications Tower or Structures do not have sufficient structural capacity to support the applicant's proposed Telecommunications Antenna and related equipment; and the existing or approved Telecommunications Tower cannot be reinforced, modified or replaced to accommodate planned or equivalent equipment at a reasonable cost." Four locations were identified by T-Mobile as possible locations but of these four more than likely two locations could be reinforced,



modified or replaced to accommodate planned or equivalent equipment at a reasonable cost but do not meet the applicants required RF coverage.

Section 20-529(7) subsection (IV) states "The proposed Telecommunications Antenna would cause electromagnetic interference with an existing Telecommunications Antenna on the Telecommunications Tower or Structure, or the Telecommunications Antenna on the existing Telecommunications Tower or Structure would cause interference with the proposed Telecommunications Antenna; and reconfiguration would not resolve the interference problem." The PCS/Cellular industry is heavily regulated by the FCC pertaining to operating frequencies and specifically assigned bandwidths. T-Mobile is federally licensed to operate a wireless telecommunications network within the City of Lawrence and is only proposing to install equipment that will operate within the licensed frequencies of 1.870 GHz, 1.885 GHz, 1.950GHz and 1.965 GHz. With this in mind the FCC mandates that the telecommunications facility and licensed frequencies will not have any detrimental interference on existing radio frequency communications.

Section 20-529(7) subsection (V) states: "The applicant demonstrates that there are other limiting factors, not including the provisions of the Article, that render existing Telecommunications Towers or Structures unsuitable for its proposed Telecommunications Antenna." T-Mobile did not provide any additional factors beyond those identified in the previous subsections.

Summary:

In conclusion it is our opinion that T-Mobile has met all requirements set forth by the City of Lawrence in reference to city code Article 5 Section 20-529(7) and all associated subsections for the property of the Knights of Columbus (Council 1372) located at 2206 E. 23rd Street, Lawrence, KS 66044.

I hope this letter adequately addresses the needs of the City of Lawrence. Feel free to contact me if you need additional information.

Sincerely,
Olsson Associates

A handwritten signature in black ink, appearing to read "Jeffrey W. Holsted", is written over a light blue horizontal line.

Jeffrey W. Holsted