



**Wichita-Sedgwick County Metropolitan Area Planning Department**

January 7, 2011

City Wichita  
Property Management, c/o John Philbrick  
(Mail Stop 1-135)  
455 N Main  
Wichita, KS 67202

**RE: CON2010-00044** - City Conditional Use request for a wireless communication tower on property zoned LI Limited Industrial ("LI"); generally located west of Greenwich Road, on south side of 29<sup>th</sup> Street North.

Dear Ladies and Gentlemen:

At its regular meeting on **December 2, 2010**, the Wichita - Sedgwick County Metropolitan Area Planning Commission considered the above captioned request. The action of the MAPC was to **APPROVE** the request subject to the conditions on the attached resolution.

If you have any questions concerning this application, please contact our office at 268-4421.

Sincerely,

Bill Longnecker  
Senior Planner  
Current Plans Division

WL: mc  
Enclosure

Copies to: District II Councilmember Sue Schlapp, Mail Stop 1-13  
District II N.A. Antione Sherfield, Mail Stop 1-135  
Mark Clark, Appraiser's Office, 538 N Main Street, Wichita, KS, 67203  
John Oswald, Wichita Airports, Mail Stop 10  
Dennis McHugh, IT, Mail Stop 1-04  
Julianne Kallman, Engineering, Mail Stop 1-71  
Kurt Schroeder, Office of Central Inspection, Mail Stop 1-72  
J. R. Cox, Office of Central Inspection, Mail Stop 1-72  
Paul Hays, Office of Central Inspection, Mail Stop 1-72

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**CONDITIONAL USE RESOLUTION NO. CON2010-00044**

**WHEREAS**, the City of Wichita (Owner); pursuant to Section V-D of the Wichita-Sedgwick County Unified Zoning Code (herein referred to as Unified Zoning Code), requests a Conditional Use for a Wireless Communication Facility, with a lattice tower on approximately 47.63-acres zoned LI Limited Industrial ("LI") described as:

An 15-foot (x) 15-foot tower site located in that part of Lot 7, Block 1, Regency Park Addition, an addition to Wichita, Sedgwick County, Kansas, described as commencing at the Northwest corner of said Lot 7; thence N89°07'13"E, along the North line of said Lot 7, said North line also being the North line of the Northeast Quarter of Section 4, Township 27 South, Range 2 East of the 6<sup>th</sup> P.M., 193.68 feet; thence S 00°52'47"E, perpendicular to said North line, 17.68 feet for a place of beginning; thence N89°07'13"E, parallel with said North line, 15.00 feet; thence S00°52'47"E, 15.00 feet; thence S89°07'13"W, parallel with said North line, 15.00 feet; thence N00°52'47"W, 15.00 feet to the place of beginning; generally located west of Greenwich Road on the south side of 29<sup>th</sup> Street North, Wichita, Sedgwick County, Kansas.

**WHEREAS**, proper notice as required by the Unified Zoning Code and by the policy of the Metropolitan Area Planning Commission (hereinafter referred to as MAPC) has been given; and

**WHEREAS**, the MAPC did, at the meeting of December 2, 2010, consider said application; and

**WHEREAS**, the MAPC has authority to permit a Conditional Use, subject to any special conditions deemed appropriate in order to assure full compliance with the criteria of the Unified Zoning Code.

**NOW, THEREFORE, BE IT RESOLVED** by the MAPC that this application be approved to allow a Conditional Use for a Wireless Communication Facility, with a lattice tower on approximately 47.63-acres zoned LI Limited Industrial ("LI") described as:

A 15-foot (x) 15-foot tower site located in that part of Lot 7, Block 1, Regency Park Addition, an addition to Wichita, Sedgwick County, Kansas described as commencing at the Northwest corner of said Lot 7; thence N89°07'13"E, along the North line of said Lot 7, said North line also being the North line of the Northeast Quarter of Section 4, Township 27 South, Range 2 East of the 6<sup>th</sup> P.M., 193.68 feet; thence S 00°52'47"E, perpendicular to said North line, 17.68 feet for a place of beginning; thence N89°07'13"E, parallel with said North line, 15.00 feet; thence S00°52'47"E, 15.00 feet; thence S89°07'13"W, parallel with said North line, 15.00 feet; thence N00°52'47"W, 15.00 feet to the place of beginning; generally located west of Greenwich Road on the south side of 29<sup>th</sup> Street North, Wichita, Sedgwick County, Kansas.

Approved subject to the following conditions:

- A. Waive the compatibility height standards to allow a 120-foot tall, self-supporting, lattice type communication tower. The 15-foot (x) 15-foot tower site shall be located in Lot 7, Block 1, Regency Park Addition.

- B. This Conditional Use will amend provision #5 of Protective Overlay #13, to allow the tower as the only structure over 55 feet tall on this site.
- C. All requirements of Art. III Sec. III.D.6.g., of the Unified Zoning Code shall be met.
- D. The applicant shall obtain all permits necessary to construct the wireless communication facility, and the wireless communication facility shall be erected within one year of approval of the Conditional Use by the MAPC or governing body, as applicable.
- E. The support structure shall be a "lattice" design that generally conforms to the approved site elevation and that has the appropriate lighting and/or markings as approved by Jabara Airport and the FAA.
- F. The applicant shall submit a current copy of FAA approval to the MAPD and the Code Enforcement Office prior to the issuance of a building permit; done.
- G. The tower site shall be developed in general conformance with the approved site plan.
- H. The site shall be developed and operated in compliance with all federal, state, and local rules and regulations.
- I. If the Zoning Administrator finds that there is a violation of any of the conditions of the Conditional Use, the Zoning Administrator, in addition to enforcing the other remedies set forth in Article VIII of the Unified Zoning Code, may, with the concurrence of the Planning Director, declare that the Conditional Use is null and void.

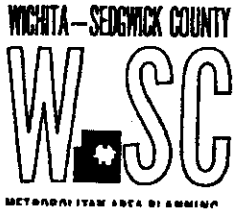
Adopted this 2nd Day of December 2011

METROPOLITAN AREA PLANNING COMMISSION

Debra Miller Stevens  
Debra Miller Stevens, Chair MAPC

ATTEST:

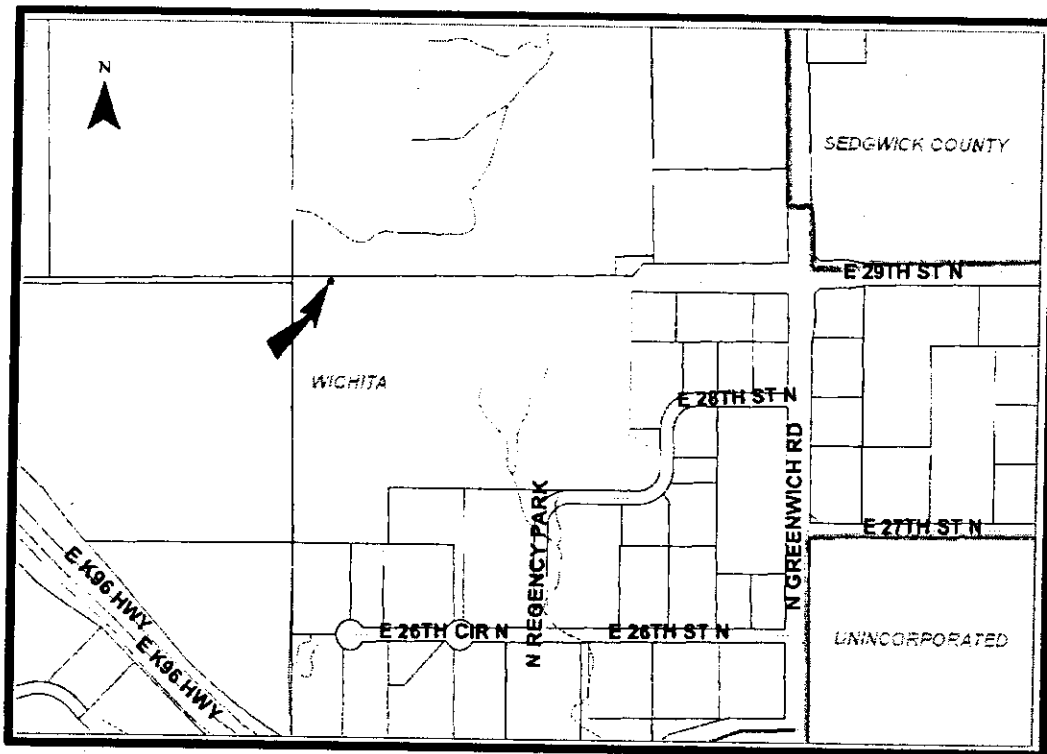
John L. Schlegel  
John L. Schlegel, Secretary



# STAFF REPORT

MAPC, December 2, 2010  
DAB II, December 6, 2010

- CASE NUMBER:** CON2010-00044
- APPLICANT:** City of Wichita – Information Technology Department, c/o Dennis McHugh (owner/applicant)
- REQUEST:** Conditional Use for a wireless communication facility.
- CURRENT ZONING:** LI Limited Industrial (“LI”)
- SITE SIZE:** An 18-foot (x) 18-foot tower site located within approximately 47.63-acres.
- LOCATION:** Generally located west of the 29th Street North - Greenwich Road intersection. (District II)
- PROPOSED USE:** Ground mounted 120-foot self-supporting, lattice, microwave tower



**BACKGROUND:** The City of Wichita – Information Technology Department (IT) is requesting a Conditional Use that would permit the construction of a ground mounted, 120-foot tall, galvanized steel, lattice, self-supporting, microwave communication tower. The 18-foot (x) 18-foot tower site is located in the northwest portion of the 47.63-acre public park, Stryker Soccer Complex. The Stryker Soccer Complex is located west of 29<sup>th</sup> Street North – Greenwich Road intersection. The LI Limited Industrial (“LI”) zoned site is listed as a “Property Eligible for an Administrative Permit,” and the proposed 120-foot tall tower is less than the permitted 150 feet in the LI zoning district. However, the proximity of the tower to the northern, abutting SF-5 Single-Family Residential (“SF-5”) zoned public park Northeast Baseball Complex prevents it from complying with the compatibility height standards; Sec. IV-C.5.b., of the Unified Zoning Code (UZC). Per the “Wireless Communication Master Plan” (Wireless Plan, Sec. III-D.6.g.3.e.) the compatibility height standards for a ground mounted tower cannot be waived by, Sec.V-I.2.d. of the UZC (Administrative Zoning Adjustment), thus the Conditional Use request to waive the compatibility height standards.

The proposed facility is one of at least nine facilities the City has operating or will operate to provide constant communication, remote monitoring and control of all planned and future (at this time) City Transit services, Public Works traffic signal upgrades, City Fire’s in house training and conferencing, and the Aquifer Storage and Recovery (“ASR”) and water production facilities. The towers will be part of a microwave signal network that operates via point-to-point links between control-monitoring locations. These sites and the others were selected on a survey for the network design regarding spectrum analysis and the required line-of-site locations.

The applicant has stated that this microwave signal requires a tower with a much lower tolerance for deflection/sway by wind or by asymmetrical solar heating (stated as the 99.9 percent reliability standard), than your typical broadband signal used by cell phone services, which are typically located on (swaged or slip joint construction) monopoles. The applicant contends that the proposed 120-foot lattice tower(s) meets the 99.9 percent reliability standard, while meeting the intent of the Wireless Plan for the design of a tower to “Minimizing the height, mass or proportion of the facility to minimize conflict with the character of its proposed surroundings.” The applicant has the opinion that a 120-foot monopole used for a microwave signal (bolted-flanged construction) that would meet the 99.9 percent reliability standard presents more obtrusive mass to its surroundings than the proposed lattice tower. The proposed lattice tower will be nine-feet wide at its base, tapering to a three-foot width at the height of 60 feet and maintaining the three-foot width for the remaining 60 feet of the 120 foot tall tower. A 120-foot tall monopole constructed to meet the 99.9 per cent reliability standard would be nine-foot wide at its base tapering to and three-foot width at the top.

Historically the other public entity in the City or County using this type of microwave technology is USD #259, whose towers were established in 1988 prior to the adoption of the Wireless Plan in 2000. At that time, USD #259 constructed lattice, self-supporting, microwave communication towers, with no co-location capabilities. In the past year, after much deliberation into the merits of a lattice tower as opposed to a monopole, the MAPC has recommended approval of three other 150-foot to 120-foot tall IT lattice towers; CON2009-43, CON2010-29 and CON2010-30.

The LI zoned site/public park is developed as soccer fields, stands and accessory buildings. The area on the south side of the site is zoned LI and SF-5, and is either vacant or partially developed with office – warehouses. Vacant LI zoned land and a small retail strip is located east of the site. The vacant SF-5 zoned Northeast Baseball Complex public park and vacant LI zoned property abut the north side of the site. The subject site's close proximity to the SF-5 zoned Northeast Baseball Complex public park is the reason the site is non-compliant with the UZC's compatibility height standards. Vacant SF-5 zoned properties abut the west side of the subject site.

The LI zoned Jabara airport is located northwest of the subject site. The applicant has provided a letter from the Victor White, Director of the Department of Airports (Wichita) stating that they will not object to the proposed tower site if the proper lighting and/or markings are installed on the tower/site. The proposed tower and associated communication frequencies and wattages must meet standards determined by the Federal Aviation Administration (FAA) to pose no hazard to air navigation; the FAA has provided a "Determination of No Hazard to Air Navigation."

The tower site is gated, with a solid wooden fence, and a minimum of landscaping around it; the site meets the screening requirement, but needs more landscaping, specifically evergreens and large deciduous trees that will provide a year round visual buffer that will be taller than the solid wooden fence.

The proposed tower will allow co-location for two other communication antennas, which meets the Design Guidelines of the Wireless Plan. However the applicant has incorrectly stated that the Wireless Plan "...states that another carrier shall be responsible to pay any modification on the structure to accommodate additional communication equipment." The intent of co-location was to "...limit the total number of support structures required to provide wireless communication services to the community; Wireless Plan, Sec. VI.C. The applicant's statement would seem to discourage co-location. The applicant has stated that there is one 60-foot tall communication tower located within a mile of the site on the west edge of the main north-south runway of Jabara Airport. However this tower will not accommodate their point to point system.

**CASE HISTORY:** The site was rezoned, SCZ-0734, from SF-20 Single-Family Residential ("SF-20") to LI with Protective Overlay PO #13, June 27, 2000. Provision #5 of the PO had a maximum height for all structures of 55 feet; CON2010-44 will amend provision #5's height restriction for this structure only. The site was platted as part of the Regency Park Addition and recorded with the Register of Deeds February 29, 2000.

**ADJACENT ZONING AND LAND USE:**

NORTH:	SF-5, LI	Vacant land, undeveloped park land, Jabara Airport
SOUTH:	LI, SF-5	Office – warehouses, vacant land
EAST:	LI	Vacant land, small retail strip
WEST:	SF-5	Vacant land

**PUBLIC SERVICES:** All utilities are available to the site. The site has access to 29<sup>th</sup> Street North, a paved local street, which dead ends at the east side of the subject site. West of the subject site, 29<sup>th</sup> (from Webb Road going east towards the subject site) was vacated for development of Jabara Airport; VAC2009-00015, V-1679 and V-1701

**CONFORMANCE TO PLANS/POLICIES:** The Wireless Communication Master Plan (Wireless Plan) is an element of the Comprehensive Plan that outlines the guidelines for locating wireless communication facilities. The Location Guidelines of the Wireless Communication Master Plan requires a Conditional Use for new undisguised ground mounted facilities over 150-feet in height in the zoning district, that comply with the compatibility setback standards; the tower does not comply with the compatibility height standards, thus the Conditional Use request. The Design Guidelines of the Wireless Plan indicate that new facilities should: 1) Preserve the pre-existing character of the area as much as possible; there are no other communication towers within a mile of the site; this will be the first in this immediate area. However, an advantage for this site is that the area is not entirely developed and the area is mostly zoned LI, with a mix of public parks (one developed but the other not) and mostly office-warehouse. Close proximity to Jabara Airport has been reviewed and approved (with the appropriate lighting and/or markings on the tower) by the FAA and Jabara 2) Minimize the height, mass, or proportion of the tower; 3) Minimize the tower's silhouette, with monopoles favored over lattice type structures for up to 150-feet and a preference for antennas mounted flush to the support structure over triangular "top hat" antenna arrays; in reference to Standards 2 and 3, the applicant has the opinion that a 120-foot monopole used for a microwave signal (bolted-flanged construction) that would meet the 99.9 percent reliability standard, presents more obtrusive mass to its surroundings than the proposed lattice tower. 4) Use colors, textures, and materials on the towers that blend in with the existing environment; the tower's close proximity to Jabara Airport will require the appropriate lighting and/or markings on the tower. 5) Conceal or disguise the tower as a flagpole, clock tower, or church steeple; Planning is not aware that these are options have been investigated. 6) Place towers in areas where trees and/or buildings obscure some or all of the facility; this an area with very few trees, the recommended 6-8 foot tall solid screening and landscaping will be all that conceals the tower. 7) Place towers on walls or roofs of buildings; the applicant has used this option when available, using the City Water tower at Webb Road and 53<sup>rd</sup> Street North, the KTA tower at Webb Road and I-135 and the City Hall roof, this option does not appear to be present in this area. 8) Screen towers through landscaping, walls, and/or fencing; the applicant will provide a solid fence around the site, but needs to provide more landscaping. All mature trees on the site need to be retained. 9) Paint towers red and white instead of using strobe lighting; see #4 above. The application appears to meet most of these considerations.

**RECOMMENDATION:** The applicant has provided an explanation for the choice of this site and for requesting a 120-foot tall lattice tower over a monopole. The towers will be part of a microwave signal network that operates via point-to-point links between control-monitoring locations. These sites and the others were selected on a survey for the network design regarding spectrum analysis and the required line of site locations. This area has started to develop with the subject site's soccer complex, some office – warehouses and small strip retail, although most of the land is undeveloped. The LI zoned Jabara Airport is the most significant development in the area. This would be the first communication tower in this area's

mile radius, with the exception a 60-foot tall communication tower located within a mile of the site on the west edge of the main north-south runway of Jabara Airport.

The applicant has stated that this microwave signal requires a tower with a much lower tolerance for deflection/sway by wind or by asymmetrical solar heating (stated as the 99.9 percent reliability standard), than your typical broadband signal used by cell phone services, which are typically located on (swaged or slip joint construction) monopoles. The applicant contends that the proposed 120-foot lattice tower meets the 99.9 percent reliability standard, while meeting the intent of the Wireless Plan for the design of a tower to "Minimizing the height, mass or proportion of the facility to minimize conflict with the character of its proposed surroundings." The applicant has the opinion that a 120-foot monopole used for a microwave signal (bolted-flanged construction) that would meet the 99.9 percent reliability standard presents more obtrusive mass to its surroundings than the proposed lattice tower.

In Staff's opinion the current request does not aim to circumvent the Master Plan's standard of equal accountability between a government agency/the regulatory authority and the private sector, but attempts to provide the most reliable structure for a microwave signal network that operates via point-to-point links between control-monitoring locations (which requires tower structural considerations that are not required for a broadband signal, typical of cell phone providers), and whose mass and silhouette has a minimal impact (no greater than a monopole constructed to transmit this microwave signal) on the immediate area. As required by the UZC and the Wireless Master Plan, all future requests made by other public and governmental agencies and the wireless industry will be considered by a case by case basis.

Based upon these factors and the information available prior to the public hearing, planning staff recommends that CON2010-00044 be APPROVED subject to the following conditions:

- A. Waive the compatibility height standards to allow a 120-foot tall, lattice, self-supporting, microwave communication tower. The 18-foot (x) 18-foot tower site shall be located in Lot 7, Block 1, Regency Park Addition.
- B. This Conditional Use will amend provision #5 of PO #13, to allow the tower as the only structure over 55 feet tall on this site.
- C. All requirements of Art. III Sec. III.D.6.g. of the Unified Zoning Code shall be met.
- D. The applicant shall obtain all permits necessary to construct the wireless communication facility, and the wireless communication facility shall be erected within one year of approval of the Conditional Use by the MAPC or governing body, as applicable.
- E. The support structure shall be a "lattice" design that generally conforms to the approved site elevation and that has the appropriate lighting and/or markings as approved by Jabara Airport and the FAA.
- F. The tower will be built to allow for the co-location of at least two other providers, without the cost to modify the tower's structural integrity for co-location being the sole responsibility of the party(s) interested in co-location on the tower; the applicant will provide a letter stating this to be filed with this case.
- G. The applicant shall submit a current copy of FAA approval to the MAPD and the Code Enforcement Office prior to the issuance of a building permit; done.
- H. The tower site shall be developed in general conformance with the approved site plan.

- I. The site shall be developed and operated in compliance with all federal, state, and local rules and regulations.
- J. If the Zoning Administrator finds that there is a violation of any of the conditions of the Conditional Use, the Zoning Administrator, in addition to enforcing the other remedies set forth in Article VIII of the Unified Zoning Code, may, with the concurrence of the Planning Director, declare that the Conditional Use is null and void.

This recommendation is based on the following findings:

1. The zoning, uses and character of the neighborhood: The LI zoned site/public park is developed as soccer fields, stands and concession buildings. The area on the south side of the site is zoned LI and SF-5, and is either vacant or partially developed with office – warehouses. Vacant LI zoned land and a small retail strip is located east of the site. The vacant SF-5 zoned Northeast Baseball Complex public park and vacant LI zoned property abut the north side of the site. The subject site's close proximity to the SF-5 zoned Northeast Baseball Complex public park is the reason the site is non-compliant with the UZC's compatibility height standards. Vacant SF-5 zoned properties abut the west side of the subject site. The LI zoned Jabara airport is located northwest of the subject site.
2. The suitability of the subject property for the uses to which it has been restricted: The site could continue to be used for the LI uses as permitted by the UZC. A Conditional Use may permit a wireless communication facility of over 150 feet in LI zoning, with conformance to the UZC and the Wireless Communication Master Plan. The proposed facility conforms to most of those guidelines, with the exception that it fails to meet the compatibility standards, thus the Conditional Use request, which will also amend provision #5 of PO #13, to allow the tower as the only structure over 55 feet tall on this site. The tower will be part of a microwave signal network that operates via point-to-point links between control-monitoring locations. This network will provide constant communication, remote monitoring and control of all planned and future (at this time) City Transit services, Public Works traffic signal upgrades, City Fire's in house training and conferencing and the Aquifer Storage and Recovery ("ASR") and water production facilities.
3. Extent to which removal of the restrictions will detrimentally affect nearby property: The area is zoned mostly LI with Jabara airport being the most significant development in the still developing area. Detrimental effects on the area's mostly office -warehouse development will be minimized to a degree by the Conditional Use standards of the UZC, plus communication towers are common in industrial areas. The differences between the mass and silhouette of a self-supporting lattice tower and a monopole built for the microwave signal can be seen as minimal in regards to their impact with the character of the immediate LI zoned area. The public park site is listed as a "Property Eligible for an Administrative Permit," both considerations are favorable. Improvements to the communication technologies at the facility will benefit the region.
4. Conformance of the requested change to the adopted or recognized Comprehensive Plan: The Wireless Communication Master Plan (Wireless Plan) is an element of the Comprehensive Plan that outlines the guidelines for locating wireless communication facilities. The Location Guidelines of the Wireless Communication Master Plan requires

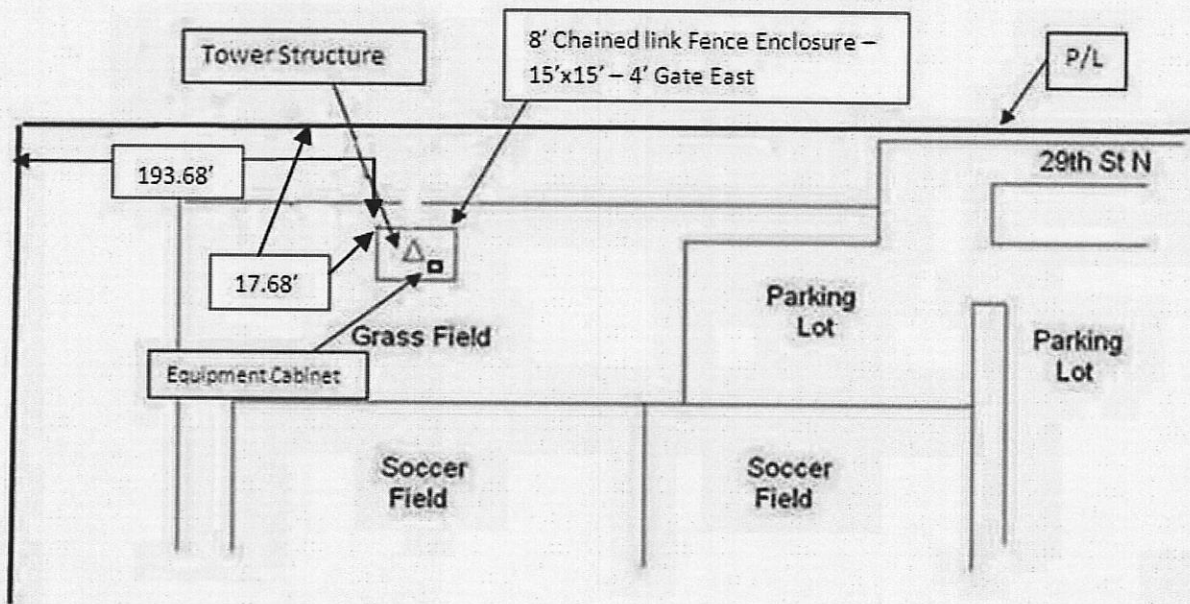
a Conditional Use for new undisguised ground mounted facilities over 150-feet in height in the zoning district, that comply with the compatibility setback standards; the tower does not comply with the compatibility height standards, thus the Conditional Use request. The Design Guidelines of the Wireless Plan indicate that new facilities should:

- 1) Preserve the pre-existing character of the area as much as possible; there are no other communication towers within a mile of the site; this will be the first in this immediate area. However, an advantage for this site is that the area is not entirely developed and the area is mostly zoned LI, with a mix of public parks (one developed but the other not) and mostly office-warehouse. Close proximity to Jabara Airport has been reviewed and approved (with the appropriate lighting and/or markings on the tower) by the FAA and Jabara.
- 2) Minimize the height, mass, or proportion of the tower.
- 3) Minimize the tower's silhouette, with monopoles favored over lattice type structures for up to 150-feet and a preference for antennas mounted flush to the support structure over triangular "top hat" antenna arrays; in reference to Standards 2 and 3, the applicant has the opinion that a 120-foot monopole used for a microwave signal (bolted-flanged construction) that would meet the 99.9 percent reliability standard, presents more obtrusive mass to its surroundings than the proposed lattice tower.
- 4) Use colors, textures, and materials on the towers that blend in with the existing environment; the towers close proximity to Jabara Airport will require the appropriate lighting and/or markings on the tower.
- 5) Conceal or disguise the tower as a flagpole, clock tower, or church steeple; Planning is not aware that these are options have been investigated.
- 6) Place towers in areas where trees and/or buildings obscure some or all of the facility; this an area with very few trees, the recommended 6-8 foot tall solid screening and landscaping will be all that conceals the tower.
- 7) Place towers on walls or roofs of buildings; The applicant has used this option when available, using the City Water tower at Webb Road and 53<sup>rd</sup> Street North, the KTA tower at Webb Road and I-135 and the City Hall roof, this option does not appear to be present in this area.
- 8) Screen towers through landscaping, walls, and/or fencing; the applicant will provide a solid fence around the site, but needs to provide more landscaping. All mature trees on the site need to be retained
- 9) Paint towers red and white instead of using strobe lighting; see #4 above.

The application appears to meet most of these considerations.

5. Impact of the proposed development on community facilities: FAA and Jabara Airport approval should ensure that the proposed tower does not detrimentally impact the operation of airports in the vicinity. The tower would be an accessory facility used to provide constant remote monitoring and control of all planned and future (at this time) City Transit services, Public Works traffic single upgrades, City Fire's in house training and conferencing and the Aquifer Storage and Recovery ("ASR") and water production facilities.

# SITE PLAN



**SITE PLAN**  
Bill Longacker March 10, 2011  
APPROVED \_\_\_\_\_ BY \_\_\_\_\_