BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

Amended Agenda

WEDNESDAY, FEBRUARY 13, 2013
4:00 p.m.
-Consider approval of the minutes for January 2, January 14, January 16 and January 23, 2013.

CONSENT AGENDA

(1) (a) Consider approval of Commission Orders; and
(b) Consider approval of applications for authorized emergency vehicle permits for Duane Filkins, Robert Rombach, and John E Steele, Jr. of Kanwaka Fire Dept; H. Wayne Riley, Jonathan A. Morris, William Shockley of Lecompton Fire/EMS.

REGULAR AGENDA

(2) **CUP-12-00287**: Consider approval of a Conditional Use Permit for construction of a 180' tall communication tower for county emergency communication equipment, to be located east of the existing water tank near the southeast corner of N 400 Road and E 550 Road. Submitted by Selective Site Consultants on behalf of Douglas County Emergency. Jere McElhaney, property owner of record. (PC Item 2; approved 9-0 on 1/28/13) Sandra Day will present the item.

(3) Consider approval of lease agreement for Globe Tower Site with property owner to construct and operate emergency radio communications for Douglas County ECC. (Scott Ruf) - *Memo to be sent to Commissioners this afternoon; backup to follow on Monday.*

(4) Consider approval of a site location plan for a private utility use, as detailed through an oil and gas lease held by Altavista Energy, Inc, for a 15' X 40' building to service oil and gas machinery in the SE ¼ of section 11-15-20. (Linda Finger)-*No backup. Presentation at meeting.*

(5) Executive Session to discuss acquisition of right-of-way for a county road project. The justification is to prevent cost escalations and to detriment of the Douglas County and its taxpayers and to maintain attorney client privilege on a matter involving Douglas County.

(6) (a) Consider approval of Accounts Payable (if necessary)
(b) Appointments
-Lawrence Douglas County Metropolitan Planning Commission 05/13
-Heritage Conservation Council 05/13
-Property Crimes Compensation Board 04/13
(c) Public Comment
(d) Miscellaneous

(7) Adjourn

WEDNESDAY, FEBRUARY 20, 2013 – 4:00 meeting only
4 p.m.-
Consent Agenda
-Merit Increase for Elected Officials and County Administrator (Sarah Plinsky)

Regular agenda:
-CUP-12-00248: Consider a Conditional Use Permit for Baker Wetlands Visitor Center Complex, located at 1365 N 1250 Rd. Submitted by Baker University, for the KS Department of Transportation, property owner of record. (PC Item 10; approved 9-0 on 1/30/13) Mary Miller will present the item
-Consider revisions to Access Management road classification map (Keith Browning)

WEDNESDAY, FEBRUARY 27, 2013

6:35 p.m.

-CUP-12-00099: Consider a Conditional Use Permit for sand excavation and extraction for Penny Sand Pit, approximately 434 acres located on the NE Corner of N 1500 Road & E 1850 Road. Submitted by Landplan Engineering, for William Penny & Van LLC, property owners of record. (Mary Miller will present the item.)

WEDNESDAY, MARCH 6, 2013

-Proclamation declaring March 10-17, 2013 as "Ninth Street Missionary Baptist Church Anniversary Celebration Week"

6:35 p.m.

Consider revised phasing schedule for Big Springs Quarry, CUP-12-09-06, located at 2 North 1700 Road, Lecompton. Submitted by Eric Bettis, for Mid-States Materials; operator of Big Springs Quarry. Mary Miller will present.

WEDNESDAY, MAY 22, 2013-Cancelled

***Note**: The Douglas County Commission meets regularly on Wednesdays at 4:00 P.M. for administrative items and 6:35 P.M. for public items at the Douglas County Courthouse. Specific regular meeting dates that are not listed above have not been cancelled unless specifically noted on this schedule.*

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: _____ New
✓ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: DUANE FICKINS

Street Address: 327 EISENHOWER DR. Phone # (785) 766-5094

City: LAWRENCE State: KS Zip Code: 66049 County: DG

Make of Vehicle: HONDA Year of Vehicle: 2004

Style of Vehicle: CR-V License Tag #: KS FF # 613

VIN #: JHLPD6847-4C018024 Driver's License #: K02-54-4317

Vehicle Insurance Company Name: ALLSTATE Policy #: 9-BS-446521 05/09
**Attach copy of insurance card.

Agency: KANSAS FIRE DEPT.

Agency Address: 548 N1200 RD. LAWRENCE, KS. 66049

Agency Head Signature: James Fullin - Chief - 1400

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

_____ 30-Nov-12
Signature of Applicant Date

_____ 1-30-13 007
Kenneth M. McGovern, Sheriff Date Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information: Check One: X New
_____ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: ROBERT ROMBACH DEPUTY CHIEF 1401

Street Address: 629 N 1500 Rd Phone # (785) 393.9224

City: LAWRENCE State: KS Zip Code: 66049 County: DOUGLAS

Make of Vehicle: JEEP Year of Vehicle: 2004

Style of Vehicle: GR CHEROKEE License Tag #: FIRE FIGHTER 5167

VIN #: 1J4GW48534C390570 Driver's License #: K01-30-5659

Vehicle Insurance Company Name: STATE FARM Policy #: 092-5584-F11-16B
**Attach copy of insurance card.

Agency: KANWAKA FIRE DEPARTMENT

Agency Address: 548 E 550 Rd, LAWRENCE KS 66049

Agency Head Signature: _____

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

_____ 1/28/2013
Signature of Applicant Date

_____ 1-30-13 16
Kenneth M. McGovern, Sheriff Date Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: ___X___ New (CHANGE TO NEW CAR)
___X___ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: ROBERT RUMBACH DEPUTY CHIEF 1401

Street Address: 629 N 1500 Rd Phone # (785) 393 9224

City: LAWRENCE State: KS Zip Code: 66049 County: DOUGLAS

Make of Vehicle: CHEVROLET Year of Vehicle: 2013

Style of Vehicle: CAMARO License Tag #: FIRE FIGHTER 10965

VIN #: 2G1FF1E31D9126325 Driver's License #: K01-30-5659

Vehicle Insurance Company Name: STATE FARM INSURANCE Policy #: 207-8697-A26-16N
**Attach copy of insurance card.

Agency: KANWAKA FIRE DEPARTMENT

Agency Address: 548 E 550 Rd. LAWRENCE KS 66049

Agency Head Signature: [signature] 1/10

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

[signature] 1/28/2013
Signature of Applicant Date

[signature] 1-30-13 10
Kenneth M. McGovern, Sheriff Date Permit #

Authorization granted by County Commission on this _____ day of _____, 200___.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: _____ New
_X_ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: John E Steele

Street Address: 517 N 1663 RD Phone # (785) 766[redacted] - 3541

City: Lawrence State: KS Zip Code: 66049 County: Douglas

Make of Vehicle: Chevy Year of Vehicle: 2002

Style of Vehicle: pick up License Tag #: KS FIRE 5436

VIN #: 2GCEK19T421255504 Driver's License #: K03-10-7800

Vehicle Insurance Company Name: State Farm Policy #: 242-9386 F08-16M
**Attach copy of insurance card.

Agency: Kanwaka Fire Dept.

Agency Address: 548 N 1700 RD Law, KS 66049

Agency Head Signature: [signature] 1400

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

[signature] 1/17/13
Signature of Applicant Date

[signature] 1-30-13 8
Kenneth M. McGovern, Sheriff Date Permit #

Authorization granted by County Commission on this _____ day of _____, 20__.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: _____ New
_X_ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: John E Steele

Street Address: 517 N 1663 RD Phone # (785) 766-3541

City: Lawrence State: KS Zip Code: 66049 County: Douglas

Make of Vehicle: Chevy Year of Vehicle: 2008

Style of Vehicle: Van License Tag #: PON 651

VIN #: 1GCGG25C 381172876 Driver's License #: K03-10-7800

Vehicle Insurance Company Name: State Farm Policy #: 2881832-E25-161
**Attach copy of insurance card.

Agency: Kanwaka Fire Dept.

Agency Address: 548 N 1700 RD Law, KS 66049

Agency Head Signature: _____

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

_____ 1/17/13
Signature of Applicant Date

_____ 1-30-13 9
Kenneth M. McGovern, Sheriff Date Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: _____ New
✓ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: H. Wayne Riley

Street Address: 415 Boone / P.O. Box 154 Phone # (785) 887-6221

City: Lecompton State: KS Zip Code: 66050 County: Douglas

Make of Vehicle: Ford Year of Vehicle: 2011

Style of Vehicle: Ranger P/U License Tag #: 518 FF Tag

VIN #: 1FTKR4EE9BPA63943 Driver's License #: K01-51-5043

Vehicle Insurance Company Name: State Farm Policy #: 280-6447-F14 16D
**Attach copy of insurance card.

Agency: Lecompton FIRE/EMS

Agency Address: P.O. Box 154

Agency Head Signature: H. Wayne Riley

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

H. Wayne Riley
Signature of Applicant — 12-10-12 Date

Kenneth M. McGovern, Sheriff — 1-30-13 Date — 15 Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information: Check One: X New ____ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: Jonathan A. Morris

Street Address: 594 N 1800 Rd Phone # (785) 217-7709

City: Lecompton State: KS Zip Code: 66050 County: Douglas

Make of Vehicle: Dodge Year of Vehicle: 2006

Style of Vehicle: Dakota Pickup License Tag #: 11352 Firefighter

VIN #: 1D7HW48NX6S590171 Driver's License #: K01-61-21-02

Vehicle Insurance Company Name: Shelter Ins Policy #: 15-1-6122937-11
**Attach copy of insurance card.

Agency: Lecompton Fire/EMS

Agency Address: P.O. Box 154 Lecompton, Ks 66050

Agency Head Signature: H. Wayne Tilley

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

Jonathan A. Morris
Signature of Applicant — 12/8/12 Date

Kenneth M. McGovern, Sheriff — 1-30-13 Date — 17 Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

DOUGLAS COUNTY
APPLICATION FOR AN AUTHORIZED EMERGENCY VEHICLE PERMIT

Please type or print the following information:

Check One: _____ New
_X_ Annual Renewal
(If renewal, attach old permit. **Must be renewed annually by January 31.**)

Name: WILLIAM M SHOCKLEY

Street Address: 954 North 1950 ROAD Phone # (785) 842-2337

City: LAWRENCE State: KANSAS Zip Code: 66049 County: DOUGLAS

Make of Vehicle: ~~FORD~~ GMC Year of Vehicle: 1984

Style of Vehicle: FLAT BED 4X4 PICKUP License Tag #: KBØWDW

VIN #: 1GTEK24CXE5508491 Driver's License #: K02-06-6004

Vehicle Insurance Company Name: KEY INS. CO. Policy #: KKS0728657
**Attach copy of insurance card.

Agency: LECOMPTON FIRE/EMS

Agency Address: P.O. BOX 154

Agency Head Signature: H. Wayne Riley, Fire Chief

I HEARBY CERTIFY, I have read and agree to abide by the requirements set forth in Chapter 8 of the Kansas Statutes which relate to the operation of Emergency Vehicles.

I FURTHER CERTIFY, I will drive with due regard for the safety of others as required by K.S.A. 8-1506.

I FURTHER CERTIFY, I will return my permit when requested by the Sheriff. This permit is not transferable to any other person or vehicle.

I FURTHER CERTIFY, violating any of these laws and/or rules and the commission of other serious traffic violations may be grounds for the cancellation of my vehicle being designated as an "Authorized Emergency Vehicle".

William M. Shockley
Signature of Applicant — 12-25-2012 Date

Kenneth M. McGovern, Sheriff — 1-30-13 Date — 5 Permit #

Authorization granted by County Commission on this _____ day of _____, 200____.

S:Forms:emergency vehicle permit authorization

PLANNING COMMISSION REPORT
Regular Agenda – Public Hearing Item

PC Staff Report
1/28/13

ITEM NO. 2: CONDITIONAL USE PERMIT; COMMUNICATION TOWER; NEAR THE SOUTHEAST CORNER OF N 400 ROAD AND E 550 ROAD (SLD)

CUP-12-00287: Consider a Conditional Use Permit for a 180' self-support communication tower to be located east of the existing water tank near the southeast corner of N 400 Road and E 550 Road. Submitted by Selective Site Consultants on behalf of Douglas County Emergency. Jere McElhaney, property owner of record.

STAFF RECOMMENDATION: Staff recommends approval of the Conditional Use Permit for the 180' tower and forwarding it to the County Commission subject to the following conditions:

1) The provision of a revised site plan add the following notes to the face of the drawing:
   a) *"The owner at the owner's expense shall remove any tower that is not in use for a period of three years or more."*
   b) "A sign shall be posted on the tower or the exterior fence around the base of the tower noting the name and telephone number of the tower owner/operator."
   c) *"Use of this tower for other carriers shall require County Commission approval as the tower owner in addition to site plan review and approval of any a co-location request for new equipment."*
   d) *"A change of ownership of the tower shall require a new Conditional Use Permit and public hearing."* This will allow review of the intended use of the tower and public notice of the proposed change.

Reason for Request: *"To enhance and upgrade Douglas County's emergency communication system to the P25 800 MHz Digital Radio standard."*

KEY POINTS

- Per Section 12-319-4.31 of the Zoning Regulations for the Unincorporated Territory of Douglas County, *Radio, television, telecommunication and microwave towers* are uses which may be approved as a Conditional Use.

DESCRIPTION OF USE

Request is for the construction of a 180' tower to accommodate public communication equipment specifically for Douglas County. The tower is proposed to be constructed on a 100' by 100' leased area.

ASSOCIATED CASES/OTHER ACTION REQUIRED

- Board of County Commissioners' approval of the Conditional Use.
- Zoning and Codes Office issuance of a Conditional Use Permit when plans have been released to the Zoning and Codes Office and conditions of approval have been met.

PUBLIC COMMENT

- No public comment was received prior to the printing this staff report.

Site Summary:	
Subject Property:	76 acres
Proposed Buildings:	180' communication tower and base equipment and generator.

GENERAL INFORMATION

(Figure 1)

Current Zoning and Land Use:	A (County-Agricultural) District; 76-acre agricultural field.
Surrounding Zoning and Land Use:	A (County-Agricultural) District in all directions. Rural Water District No. 5 water tank to the west. Agricultural fields to the north, south and east.

I. ZONING AND USES OF PROPERTY NEARBY

This property is located on the south side of N 400 Road and east of E 550 Road. The tower location is north of the townsite of Globe located in southwest Douglas County. The property and the surrounding area is zoned A (Agricultural). This area is rural in nature and includes large tracts of land for agricultural activities with scattered rural residential homes located along County roads. Section 12-319-4.31 (d) (5) recommends that towers be located in commercial, industrial or agricultural zoning districts. The subject property is zoned Agricultural.

Staff Finding – Nearby properties are zoned A (Agricultural) and contain agricultural land uses. The proposed tower would be located in a recommended district.

II. CHARACTER OF THE AREA

This property is located in the southwest portion of Douglas County. This area is a rural portion of Douglas County. There are no urban growth boundaries that extend to this portion of Douglas County. The area includes large parcels of land used primarily for agricultural purposes.

Staff Finding – This area is rural in nature, with agricultural lands, and scattered residential homes along county roads.

III. SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN RESTRICTED

Applicant's response:
"The subject property is used for agricultural purposes. The site is suitable for the above proposed use."

The current zoning designation for the property is A (Agricultural) District, a variety of agriculture-related uses are allowed. Towers are allowed in this district with approval of a Conditional Use Permit. Additionally, the agricultural district is a recommended base district for towers. The proposed request will not alter the underlying zoning district.

Staff Finding – The property is suitable for agricultural uses. A Conditional Use Permit (CUP) does not change the underlying zoning; therefore, the suitability of the property for agricultural uses will not be altered.

IV. LENGTH OF TIME SUBJECT PROPERTY HAS REMAINED VACANT AS ZONED

This A (Agricultural) zoning has been in place since 1966. The proposed tower will be located on a leased area in the northwest corner of the site. There are no improvements on the property. An existing water tower is located to the west of the proposed lease area on a separate parcel. The property is vacant and has been since the adoption of zoning in 1966.

Staff Finding – The property is vacant and has been since the adoption of the zoning in 1966.

V. EXTENT TO WHICH REMOVAL OF RESTRICTIONS WILL DETRIMENTALLY AFFECT NEARBY PROPERTY

Applicant's Response:
"There will be no detrimental affect. The proposed use is adjacent to an existing water tank. The use is unmanned, will generate little traffic, noise or pollution."

Section 12-319-1.01 of the County Zoning Regulations recognize that "*....certain uses may be desirable when located in the community, but that these uses may be incompatible with other uses permitted in a district...when found to be in the interest of the public health, safety, morals and general welfare of the community may be permitted, except as otherwise specified in any district from which they are prohibited."*

This request is for a 180' self-supporting communication tower. The purpose of the tower is for the location of emergency communication equipment only. Other communication carriers such as Sprint, AT&T, T-Mobile are not proposed to provide equipment on this tower structure. There is no office or staff associated with this structure. Access to the site shall be limited to regular service and maintenance of the tower and associated equipment. There are few residents located within the immediate area. Land parcels are generally 50 acres or larger. There are no anticipated detrimental effects to nearby property owners from the proposed land use.

Staff Finding – Given the large parcel size and the very low density of residential use there should be no detrimental effect on surrounding property.

VI. RELATIVE GAIN TO THE PUBLIC HEALTH, SAFETY AND WELFARE BY THE DESTRUCTION OF THE VALUE OF THE PETITIONER'S PROPERTY AS COMPARED TO THE HARDSHIP IMPOSED UPON THE INDIVIDUAL LANDOWNERS

Applicant's Response:
"Enhanced communication for first responders in Douglas County. Please see attached memo from Scott Ruf dated April 20, 2012."

The purpose of this criterion is to compare the effect of denial of the request on the public health, safety and welfare to the effect on the individual landowner.

The applicant states "the overarching goal of Douglas County Emergency Communications is to provide highly efficient, effective and interoperable public safety communications for City and County Police, fire and EMS agencies...". The applicant is a public service division of the local government. The application notes the existing communication system is aging and that state and federal requirements make it necessary for Douglas County to expand and upgrade the existing system. (Refer to memo to David Corliss, City Manager and Craig Weinaug, County Administrator, dated April 20, 2012).

The purpose of this request is to extend coverage to a portion of Douglas County that currently lacks coverage. Denial of this request hinders the County's ability to implement planned communication improvements as part of the basic pubic services provided to residents of Douglas County.

Staff Finding – Approval of the request will facilitate planned emergency communication coverage for the southwest portion of Douglas County. Approval will benefit the public health, safety, and convenience by providing more reliable communication to emergency personnel as needed.

VI. CONFORMANCE WITH THE COMPREHENSIVE PLAN

The subject property is not located within an identified urban growth area. The comprehensive plan recommends that agricultural uses continue to be the predominant land use within the areas of the county beyond the designated urban growth areas. Uses permitted in the rural area should continue to be limited to those which are compatible with agricultural production and uses.

Staff Finding – The comprehensive plan recommends that uses in the rural area be limited to those compatible with agricultural uses and that the design should be consistent with the rural character. A Conditional Use Permit can be used to allow specific non-residential uses subject to approval of a site plan. This tool allows proportional development in harmony with the surrounding area. The proposed request is consistent with the Comprehensive Plan.

STAFF REVIEW

Section 12-319-4.31 allows radio, television, telecommunication, and microwave towers in Douglas County subject to approval of a Conditional Use Permit when the structures are more than 100' tall. This section also provides guidelines and standards intended to be used during the review of the application.

The proposed site plan shows the location of a new structure to accommodate equipment specific to the purposes of the Douglas County Emergency Communication Department. This application differs from previous similar applications where the applicant intended the structure for telecommunication equipment by private carriers. Prior to the construction of a new tower an applicant is required to show reasonable proof that there is no opportunity to "co-locate" on another tower within the proximity of the proposed location. In this case there is a rural water tower immediately to the west of the proposed site. However that structure does not provide adequate vertical elevation to meet the minimum operational standards of the equipment needed by the County Emergency Communication Department.

Per section 12-319-4.31 (c)(3) new towers are required to provide space for "at least three two-way antennas for every 150' of tower height, or at least one two-way antenna and one microwave facility for every 150 feet of tower heights." The applicant is requesting a waiver from the co-location provisions of the Zoning Regulations. The structure is designed to accommodate multiple carrier equipment; however, the intent of this tower is to provide space for emergency communication (public) equipment only. There is no intent to sub-lease space on this tower to other carriers. This would allow remaining tower space to be reserved for future equipment intended to serve the public system.

As with any tower, if the equipment is removed and the tower is vacant for 3 years then the tower owner (Douglas County) would be required to remove the structure. All towers are required to provide a sign on the structure or fence around the base of the tower identifying the tower owner/operator with a name and phone number. These elements should be added to the site plan as notes for future reference.

The County Zoning Regulations require the tower to be setback a distance equal to the height of the tower from any property line except that the setback may be reduced if documentation from a registered engineer is submitted certifying the fall zone of the tower in event of a failure or collapse. The proposed structure complies with the setback in relationship to the east and south property lines. The site plan shows a fall zone of 70' of the centerline of the tower. The tower setback exceeds 70' from the north and west property lines.

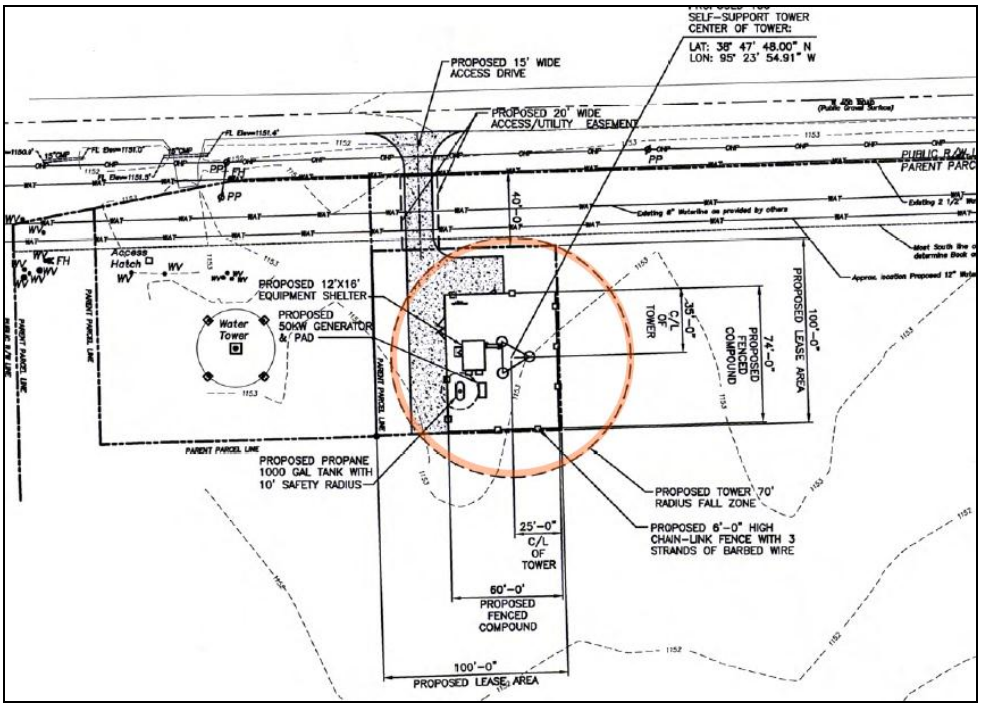


Figure 2

Any ground equipment such as placement of an equipment cabinet or generator must comply with the base building setbacks of the district. Ground equipment must be setback 50' from N 400 Road (a local road). The site plan shows the equipment setback 93' from the north property line. The minimum sideyard setback is 10'. The proposed dequipment is located more than 40' from the west property line. These measurements are provided for the two closest property lines. The building setbacks are highlighted in Figure 3 at the end of this report.

The application states that towers less than 200' are not typically required to be lighted by the FAA. Lighting of the equipment shelter should be limited to the area around the access doorway. Any lighting added to the site shall require review and approval by the County Zoning Administrator per applicable building permits to ensure lighting is limited to the site and directed downward.

Use of this tower for other carriers shall require County Commission approval as the tower owner. Change of ownership of the tower shall require a new Conditional Use Permit and public hearing. This will allow review of the intended use of the tower and public notice of the proposed change.

Conclusion

This request is for the construction of a new communication tower for the exclusive use of public communication equipment. Additional notes are recommended to clarify the use and intent of this tower. Staff recommends approval of the Conditional Use Permit for a 180' tower located southeast of the intersection of N 400 road and E 550 Road (CUP-12-00287) as conditioned.

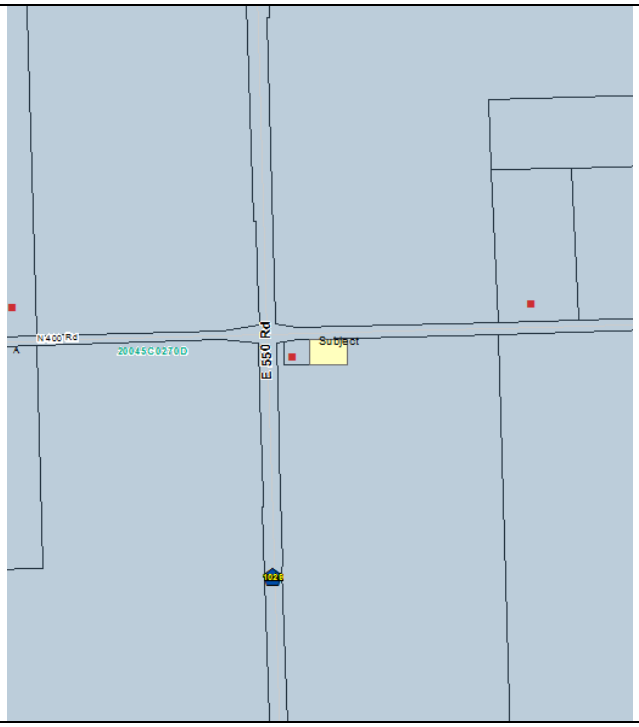


Figure 1a. Zoning of area. Subject property outlined.

Figure 1b. Land use of area.

Building Setbacks

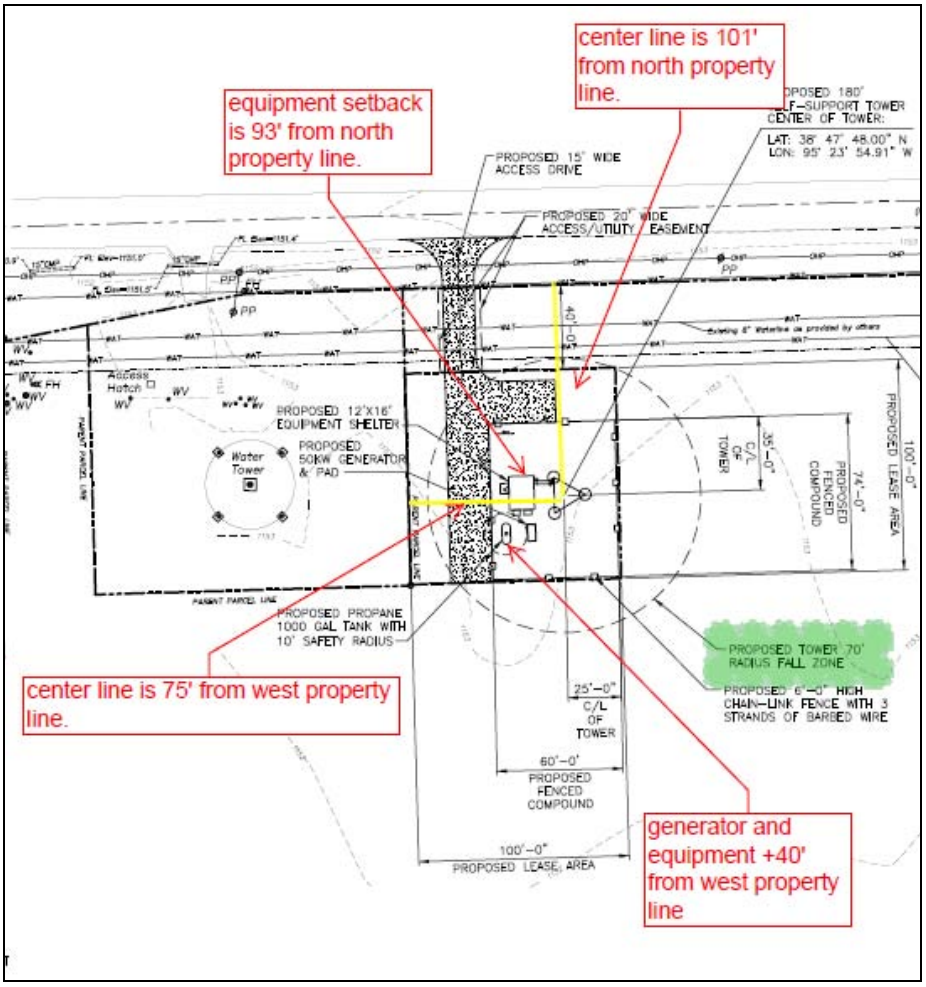


Figure 3

Douglas County 9-1-1 Emergency Communications

To: **Mr. David Corliss, Lawrence City Manager**
Mr. Craig Weinaug, Douglas County Administrator

From: **Scott W. Ruf, Director, DGCO Emergency Communications**

Date: **April 20, 2012**

Re: **P25 800 MHz Digital Radio Project**

The overarching goal of Douglas County Emergency Communications is to provide highly efficient, effective and interoperable public safety communications for city and county police, fire and EMS agencies and the citizens they serve. The Public Safety Radio System provides public safety two-way radio communications for Police, Fire, EMS, Public Works, and other county agencies that depend on reliable communications day-to-day and during crisis events. Replacement/upgrading of the existing Motorola network complies with our mission and goals by maintaining the County's capabilities to address homeland security issues and manmade / natural disasters through interoperable communications for all public safety agencies.

Over the years public safety radio communications has developed from a conventional voice radio system to a much more advanced system of voice and data technologies, supported by networks that deliver unprecedented levels of interoperability, capacity, coverage, bandwidth, and flexibility. Douglas County's current system is an aging system fast approaching its end of life that simply cannot deliver in today's advanced systems and technologies. State and federal mandates and changes have made it necessary for Douglas County to pursue alternatives to our current system that will greatly expand our capabilities and ensure that emergency responders can communicate as needed , on demand, and as authorized at all levels of government and across all disciplines.

The most pressing among existing problems and not unique to Douglas County is a lack of interoperability among public safety agencies. Public safety personnel from different agencies frequently lack the ability to communicate with one another, or with their counterparts in neighboring jurisdictions. A lack of interoperability within a region can severely hinder the ability of public safety agencies to provide a coordinated response to natural disasters, catastrophic accidents, or even routine public safety emergencies.

The ECC and 911 Advisory Board over the past year has worked to address concerns about increased radio coverage, the security of radio frequencies, and the ability for the Police

and Fire Departments to communicate with each other. As a result of these concerns, ECC and 911 Advisory Board solicited solutions to convert from an analog to a digital radio system, which for the first time will allow the public safety agencies in Douglas County to coordinate over the air the efforts of multiple agencies responding to an emergency.

Challenges & Limitations of Current System

The Public Safety Radio System is the mission critical system in the event of a man-made or natural disaster. The system must be renovated and upgraded to comply with existing laws and changes in technology. Given the current pace of technology, systems that were designed and installed as little as 10 years ago are now considered obsolete. Douglas County's system was installed in 1999 with an additional channel added to the system in 2004.

In short, the Douglas County Public Safety Radio System is getting old, is increasingly difficult to maintain, some vital terminal equipment can no longer be acquired, repaired, or maintained, and reliable spare equipment is hard to find. Critical trunking controller equipment is no longer supported and replacement equipment is essentially cost prohibitive. Analog technology is steadily being replaced with more flexible digital technology. The system is also at/close to capacity so the addition of Fire/EMS departments could overload the trunking system giving users a system "busy" which poses a threat to first responder safety.

In addition to the aging out of the system and its technology are the operational constraints resulting in limited capacity and lack of expandability. Capacity limits due to outdated usage requirements of the system could mean that personnel may not be able to get the system access they need. A lack of expandability means that problems with coverage, system load, and channel congestion cannot be easily addressed.

The current 800MHz radio system utilizes analog technology for the backbone transmitters and uses a mix of analog and digital handheld equipment. Although agency users can acquire analog radios, this legacy hand-held equipment is in its final period of support. Newly acquired radios use digital technology or a hybrid of both analog and digital. This move is consistent with the FCC transitioning from analog to digital television transmission in February 2009.

Analog radio works well. However, analog two-way radio has reached the limits of innovations. Some enterprises are finding they need more than the fundamentals that analog two-way radio delivers. Licensed channels are becoming crowded and more capacity is required. There is the need for more flexible ways to communicate with users both inside and outside our organizations.

Digital radio provides a powerful, flexible platform that DGCO can adapt to meet these needs and more. By migrating from analog to digital two-way radio communications, DGCO can fill immediate needs and build a strong technical foundation for adding new functionality in the future. Police, fire and emergency medical operations are more complex today than ever

before. With the introduction of new responsibilities such as community oriented policing and advanced life support emergency medical services, public safety personnel are taking on significant new duties and responsibilities placing more diverse requirements on our communications system.

A lack of interoperability is another critical operational constraint in Douglas County's system. This is caused by agencies using incompatible equipment, different frequency bands (in DGCO law enforcement and public works use 800 MHz and all fire/EMS use VHF), and unique operational protocols. Yet, the changing requirements of public safety have placed a greater emphasis on joint operations and task forces, thus the need for communications interoperability.

Other challenges associated with the radio system are the physical location and size of the Emergency Communications Center itself. The need to expand the system and increase its capacity is paramount we must also do the same in the dispatch center. In order to maintain acceptable service levels we must expand the center from six dispatch positions to eight (layout includes for future growth of up to 10). Failure to also grow the capacity and capabilities of the dispatch center will greatly hinder our ability to safely serve our public safety agencies and the community. It will also require us to revisit the issue within 2-4 years of upgrading the radio system costing significant amounts of money to achieve what can easily be achieved in a cost effective and efficient manner as part of this project.

System Overview

The current DGCO system is a 6 channel, 4 site (Lecompton, Stratford, Baldwin City & Eudora) analog 800 MHz Analog Trunked System for all DGCO law enforcement and public works departments. LDCFM and the rural township fire departments all operate on the same 4 site system but in the VHF radio spectrum. The system was installed and functional in September 1999 as a 5 channel, 3 site system. In 2004 a fourth channel was added to accommodate increase radio system usage. Finally, in fall of 2011 we added new 50' tower in Eudora to accommodate public safety concerns related to areas of Douglas County and Eudora with regard to system coverage issues. This location is strictly to expand coverage to the low lying areas of Eudora and the County along the river.

The DGCO ECC is currently set-up with 6 dispatch/call-taker positions and KU Public Safety has 3 dispatch/call-taker positions. We serve as each other's support and back-up if needed. Although I cannot speak directly for KU, DGCO ECC is poorly designed and has no easy way to expand to accommodate new technology and growth.

In addition to the aging out of the system and capacity issues the third is coverage. The County as well as areas of all three incorporated cities has coverage issues and "dead spots" where communication abilities are extremely limited. There is currently no interoperability between law enforcement and fire agencies.

Justification & Recommendation

The investment (approx. $7M) in the new P25 800 MHz Digital Radio System provides new and upgraded infrastructure to the personnel and agencies that desperately need it using modern technology and capabilities; this project removes and replaces the noncompliant portions of the existing DGCO radio infrastructure to provide a P25 standards based, AES encrypted capable, 800 MHz LMR system to a new, updated system; adds additional capacity to support the other components agencies require of the system and share those components; the ECC will continue to look for other cost effective technology as part of its strategic outlook.

As previously stated Douglas County's current radio system infrastructure is aging out and in need of replacement. Our current system has reached its limits and is not capable of growth now or in the future. With emerging and alternative technologies becoming available and necessary, coupled by state and federal authorities mandating interoperability and the migration to new spectrums there are little choices for us moving forward and the need to replace our radio infrastructure is necessary.

The question was presented with regard to the need/requirement for the City of Lawrence to have to invest in infrastructure costs associated with sites outside the City and in support of the other cities and county. Due to the proposed design and build out of the system as an autonomous cell or expansion of the KSDOT Radio System the proposed site locations (Flair & Globe) as well any upgrades to existing sites (i.e. Lecompton & Stratford) is a small part of the project. The real cost associated with this project is the need to expand to 8-channels and the technology associated with this expansion. This expansion is needed to accommodate public safety (LPD & LDCFM) and public service agencies (Public Works, Streets, Sanitation) from the City of Lawrence as well as the rural township fire departments (less than 2% of system usage). Lawrence Police, LDCFM and Lawrence Public Works account for over 80% of system usage and communication resources. The upgrade of the system to accommodate all the users and the technology needed to meet the need today and in the future as well as the building in of redundancies are the major factors driving the size and scope of the project.

It is the recommendation of myself in consultation with members of the P25 committee and the 9-1-1 Advisory Board to move forward with the proposal by Motorola Solutions in partnership with Kansas DOT. We believe this is the best and most efficient proposal providing Douglas County with the capabilities to fully utilize existing and new technologies in designing a system that will serve the ever-growing demands of our public safety users, providing greater interoperability and scalability taking us far into the future. The following are a few reasons for this recommendation:

- Motorola is one of only a few vendors in the country and state that has implemented a digital simulcast radio system in a county of comparable size;
- By using Motorola we will be able to expand/upgrade some already-existing infrastructure, preserving the County's prior investment;

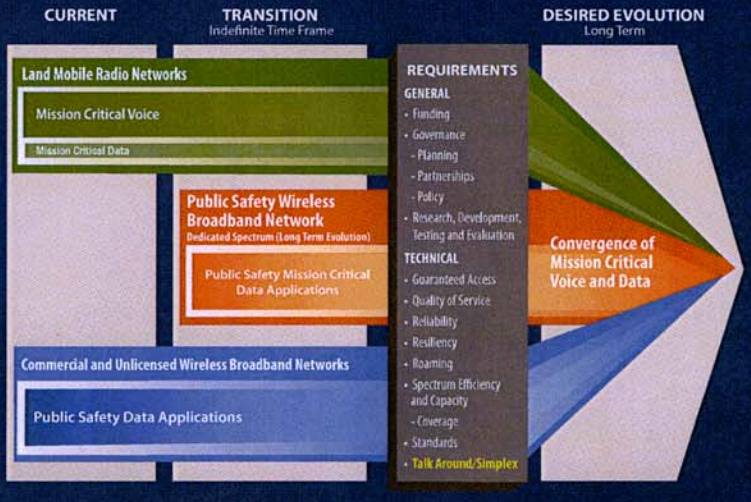
- The County and many of the cities already own/utilize electronic equipment that is compatible with Motorola components;

- Including all necessary equipment, services and construction on one contract enables the County to hold Motorola accountable for entire system-wide success should any individual aspect of it fail.

This recommendation and the estimated project cost of $7M is made based on our review of the current and future needs of all public safety as well as public service agencies in Douglas County. We have presented the best solution for Douglas County so that the decision-makers at all levels of county and city government can meet their obligation to make use of technology to ensure the public's safety and improve services to their citizens.

Public Safety Communications Evolution

November 2011



Homeland Security

Public Safety Communications Evolution

The Department of Homeland Security's Office of Emergency Communications (OEC) developed this brochure in collaboration with SAFECOM and the National Council of Statewide Interoperability Coordinators, with the support and input of public safety officials at multiple levels of government across the country. This brochure will 1) help educate the public safety community and elected and appointed officials about the future of emergency communications; 2) describe the evolution of emergency communications and how traditional land mobile radio (LMR) communications used today may converge with wireless broadband in the future if specific requirements are met; and 3) further discuss some of the most important requirements that must be met to achieve the desired long-term state of convergence.

The public safety community has made significant strides toward strengthening national preparedness and improving emergency communications capabilities. First responders, however, continue to be limited by fragmented networks and decades-old wireless technologies. Deploying a cost-effective, nationwide public safety wireless broadband network will provide public safety agencies with access to advanced, cutting edge technologies and applications to improve their emergency response capabilities. The nationwide public safety wireless broadband network needs to be closely aligned to commercial deployments of Long Term Evolution (LTE) wireless services to keep pace with changes in technology and leverage cost efficiencies. It must also deliver mission critical voice and data communications to public safety agencies in State, local, and tribal jurisdictions across the Nation, as well as Federal responders and secondary users (such as transportation or utilities). However, the transition from LMR to broadband will not occur overnight, and Federal, State, local, and private sector entities must work together to develop requirements and standards to assure mission critical operations.

In the near term, wireless broadband will complement LMR, not replace it. Wireless broadband does not currently meet the requirements for emergency response voice communications, therefore LMR will be around for years.

Investments in LMR will continue to be necessary now and well into the future. Even with the emergence of broadband, it will still be years before emergency responders can rely on broadband technologies for their mission critical communications. Public safety must continue LMR investments as appropriate in this context.

Public safety is using broadband today for data applications, but not for mission critical emergency response voice communications. Although initial data applications will not provide LMR type voice capabilities, they are vital and can dramatically improve emergency response.

In the future, broadband could support mission critical voice. However, requirements must be met and multiple challenges must be addressed. Some public safety agencies will use broadband for emergency response voice communications if requirements are met and solutions to these challenges are determined and implemented. Until broadband is technically capable of supporting emergency response voice communications and the nationwide public safety wireless broadband network is fully deployed, some agencies may need to continue to use LMR for their communications.

Public Safety Communications Today

Currently, the public safety community relies on traditional LMR systems to support mission critical communications. These radio systems provide a reliable means for personnel in the field to communicate with each other and with command and control centers. As LMR systems evolved over many decades, there are a number of varying, often incompatible systems in use nationwide. As a result, public safety has struggled to communicate across jurisdictional and agency lines.

In addition, public safety agencies use a combination of low bandwidth and high-speed broadband data (largely commercial networks) to support response efforts and perform functions such as digital dispatch, license plate queries, text messaging, and transmission of low resolution images. While important, the majority of current broadband data solutions have limited ability to support emergency responders because most are not interoperable or built to public safety standards.

What is Wireless Broadband?

Wireless broadband provides high-speed data communications in a mobile environment. Because of public safety's unique mission, emergency responders require wireless broadband services and devices with guaranteed access and a high level of reliability, coverage, and security not likely to be offered by commercial systems.

The Nationwide Pubic Safety Wireless Broadband Network

By providing mobile access to real-time, multimedia information, a nationwide public safety wireless broadband network holds the promise to drastically advance the public safety community's ability to communicate among response agencies and access the information necessary to make the most informed decisions possible. For example, public safety will be able to access video images of a crime in progress, download building plans of a burning building to a handheld device, or connect rapidly and securely with personnel from other towns and cities. Just as smartphones have changed the way businesses operate, these technology advancements will dramatically change the way emergency responders communicate and operate.

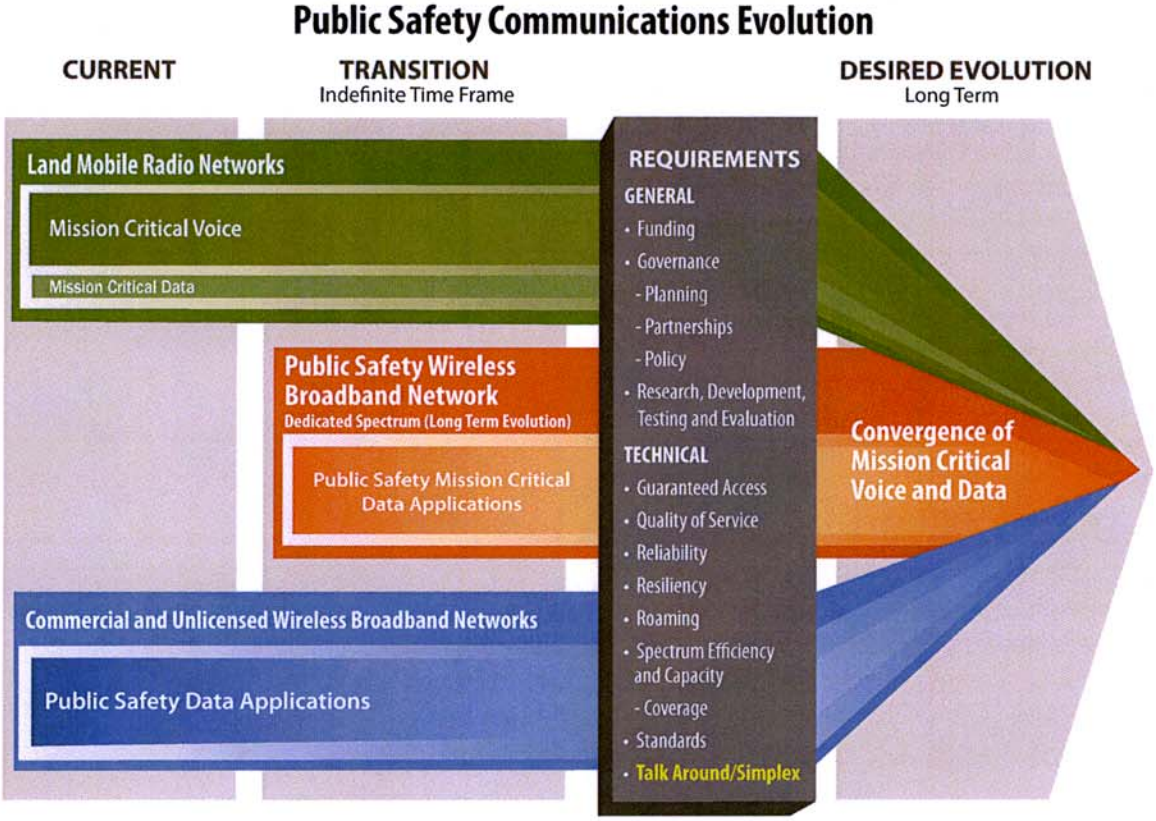


Figure 1: This graphic illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.

Recent advances in wireless data communications are increasing mobile access to applications and providing real-time information needed by public safety. Whether used in routine daily activities or large-scale responses, these new capabilities will improve emergency communications and response effectiveness. The Advanced Automatic Crash Notification example demonstrates how wireless broadband applications can provide instant actionable knowledge to emergency response personnel. The right information (e.g., weather reports, drivers' licenses and photos, prison records) provided to the right people at the right time will result in more effective emergency response. These and other emergency response applications are only possible with the support of high-speed wireless broadband.

While the public safety community has long recognized the importance of wireless broadband, they also recognize certain challenges must be overcome and requirements met for this technology to meet all of their communications needs. It will take time to address these requirements and integrate wireless broadband into public safety operations. In the future, the public safety wireless broadband network will dramatically enhance the capabilities of emergency responders if these requirements are met.

Advanced Automatic Crash Notification will provide pre-arrival information to hospitals and enable responders to make faster and well-informed decisions about resources to send to a scene. This will allow for faster diagnosis and treatment of patients by Emergency Medical Technicians (EMT) or even a virtual physician in the back of the ambulance to expedite proper lifesaving treatment.

The Nationwide Public Safety Wireless Broadband Network will allow first responders to match a subject's photograph (taken with a smartphone or Tablet PC) against databases such as the Department of Motor Vehicles or booking databases to determine identity.[1]

What about the SAFECOM Interoperability Continuum?

The five critical success elements outlined in the SAFECOM Interoperability Continuum (Governance, Standard Operating Procedures, Technology, Training and Exercise, and Usage) not only apply to LMR communications planning, but also to broadband and are important to consider when planning and implementing interoperability solutions for all public safety communications technologies. The Continuum will continue to be used as a guiding framework for interoperability planning.

Public Safety Communications Evolution

The community's vision of the evolution of public safety communications as it transitions from today's technology to the desired long term state of convergence is depicted in the graphic (Figure 1), which outlines a conceptual framework for building wireless broadband communications while maintaining LMR networks to support mission critical voice

1 United States, White House, The Benefits of Transitioning to a Nationwide Wireless Broadband Network for Public Safety, June 2011.

communications. This section describes the elements of this framework in more detail, including a description of the desired converged environment and the requirements that must be met to achieve this desired evolution.

In the current state of communications, LMR networks, commercial broadband networks, and a nationwide public safety wireless broadband network are evolving in parallel. As communications evolve, public safety will continue to use the reliable mission critical voice communications offered by traditional LMR systems; at the same time, agencies will begin to implement emerging wireless broadband services and applications. During the transition period, public safety will begin building out a dedicated public safety wireless broadband network and public safety organizations will begin to transition from commercial broadband services to the public safety dedicated network. If and when the technical and non-technical requirements can be met and are proven to achieve mission critical voice capability, it is desired that over time agencies will migrate entirely to this broadband technology. Since wireless broadband technology does not yet currently support a mission critical voice capability (talk around/simplex/direct mode), there will be a significant period of time where both wireless broadband and traditional LMR are necessary.

Land Mobile Radio Networks

Mission critical voice communications have historically been delivered using LMR systems built to public safety requirements and operated by individual agencies or jurisdictions.

Mission Critical Voice

Reliable voice communications are essential for day-to-day operations, large-scale responses, and other tactical situations. Voice communications provide emergency responders with instant, reliable, and continuous connectivity between dispatch agencies and responders and also among multiple responders. Presently, mission critical voice is achieved by dedicated LMR networks. The ability to talk responder to responder or one responder to many responders is a critical feature.

Mission Critical Data

The emergency response community uses limited data communications to complement mission critical voice communications. Emergency responders currently use data services for basic functions such as digital dispatch; license, vehicle, and wanted person queries; text messaging; and transmission of low resolution images. Emergency response agencies have achieved wireless data capabilities by either building their own systems or using a commercial wireless service. Although functional, current public safety data services are generally limited in speed and do not support advanced, real-time applications needed by emergency responders.

Public Safety Wireless Broadband Network

Public safety envisions a dedicated network built to public safety requirements using dedicated spectrum. The public safety community has identified LTE as the standard technology for development of this network. As this capability is built out using LTE technology, public safety will continue to work with industry and all levels of government to advance the technology and address the requirements necessary to reach the desired evolution. During the transition period, public safety will begin using LTE for mission critical data applications. In the meantime, the public safety community will be working to develop wireless broadband technology that can support all of public safety's mission critical communication needs including voice.

Commercial and Unlicensed Wireless Broadband Networks

Emergency responders are increasing the use of commercial and unlicensed broadband networks to augment their mission critical communications. Although not built to public safety standards, commercial and unlicensed networks are valuable as a complement to reliable LMR voice networks. As commercial broadband capabilities are made available, public safety agencies are beginning to use these services to complement their current LMR communications. Agencies will use their LMR networks for mission critical voice communications, and will use commercial wireless broadband for non-mission critical data communications. Over time, reliable public safety broadband networks based on LTE technology will be built to public safety requirements. As a nationwide public safety wireless broadband network is built out, real-time mission critical broadband applications will migrate to this network as their capabilities are validated by responders.

Requirements

General and technical requirements must be met for the desired evolution to be achieved.

General Requirements

Funding

Emergency response agencies face the challenge of having to support their current mission critical systems while planning for the build-out of emerging technologies, including wireless broadband. To successfully do so, Federal, State, and local funding will be needed to pay for the costs associated with the build-out and sustainment of a wireless broadband network. OEC is working to coordinate Federal grant guidance related to emergency communications via the Emergency Communications Preparedness Center. Coordinated grant guidance will help to ensure consistency in Federal grant policy, promote technical standards that improve interoperability, and ensure compatibility among Federally-funded investments. Coordinated and consistent guidance across all programs will also enable stakeholders to leverage grants from various agencies to support emergency communication improvement projects.

Governance—Planning, Partnerships, and Policy

Coordination and collaboration among interoperable communications stakeholders makes the success of any governance

structure possible. A nationwide interoperable public safety wireless broadband network requires a nationwide architecture and governance structure. In addition to technical and managerial competence, governance requires the active engagement of interoperable emergency communications stakeholders operating at the Federal, State, local, and tribal levels, across jurisdictions and disciplines.

Planning: It is critical that public safety stakeholders engage in nationwide, statewide, regional, and tactical planning. Planning and coordination among entities such as Statewide Interoperability Coordinators, Statewide Interoperability Governing Bodies, Regional Interoperability Committees, and Federal partners form an essential foundation for achieving statewide communications interoperability goals and initiatives.

Partnerships: The willingness of different disciplines and jurisdictions to partner on compatible solutions is often more important than the technologies they intend to use. As wireless broadband communications evolve, partnerships will continue to be critical, particularly with respect to developing and deploying a nationwide, open-standards network that aligns with commercial wireless broadband technologies and applications. Further, the development of a dedicated nationwide public safety wireless broadband network will require closer coordination and partnering between industry and government. Public safety agencies need to evaluate their governance bodies to ensure they include those stakeholders that rely on and deliver communications during emergencies as well as industry subject matter experts. The partnerships built through governance provide agencies with access to knowledge (e.g., best practices and lessons learned) and resources previously unavailable.

Policy: It is critical for all levels of government to proactively and collaboratively develop policies and plans for emerging emergency communications technologies. A nationwide public safety wireless broadband network, in particular, will require a nationwide governance structure, in collaboration with States, localities, and tribes to develop new initiatives, strategies, and time frames related to investments and deployment. These will need to be documented in the National Emergency Communications Plan and each State's Statewide Communication Interoperability Plan.

Research, Development, Testing, and Evaluation (RDT&E)

RDT&E efforts will ensure that emergency responders have reliable, effective, standardized, and interoperable wireless broadband capabilities and applications. Research and development are critical to determine how systems will meet emergency response requirements, and if these capabilities will sustain functionality in the harsh environments in which emergency responders work.

Technical Requirements

As wireless broadband networks evolve, the emergency response community will increasingly leverage these networks to support their operations. To achieve a converged evolution state, the nationwide public safety wireless broadband network will need to support the following technical requirements:

Guaranteed Access

Emergency responders must have guaranteed access to reliable and instantaneous communications at all times to effectively respond to emergency incidents. Guaranteed access is a critical feature for public safety, especially when using commercial networks.

Quality of Service (QoS)

Public safety requires a network that can guarantee a certain level of performance for critical applications. As all public safety communications move toward a converged broadband wireless environment, some data on the network will be more important than others and will need to be prioritized. In a network, QoS specifies how certain types of data are handled and how that data is prioritized among various users and applications. QoS ensures reliable performance.

Reliability

For emergency responders to be able to rely on a network for mission critical communications, it must be designed to minimize capacity loss and service degradation.

Resiliency

Systems that support emergency response must be developed with resiliency in mind. Highly reliable and redundant power, components, infrastructure, and communication paths must be included to reduce the possibility of disruption in service.

Roaming

To perform their jobs efficiently, emergency responders require the ability to seamlessly roam between public safety and commercial networks, as necessary.

Spectrum Efficiency and Capacity

The rapid growth of wireless broadband-enabled applications and services has placed constraints on available spectrum capacity in the commercial marketplace, sometimes rendering commercial networks slow and unresponsive. This can have major implications for emergency responders who require access to information to successfully accomplish their missions. Sufficient capacity and spectrum efficiency is needed if the nationwide public safety wireless broadband network is to meet the emergency response community's needs. In addition, public safety requires wireless signal coverage that ensures reliable operations in wide geographic regions including major population centers as well as rural areas.

Standards

Defining technical standards is critical to ensuring that interoperability and public safety-specific features are built into wireless broadband systems.

Standards-based systems will provide backwards compatibility, which will allow emergency responders to continue to communicate effectively on their current mission critical voice systems as wireless broadband networks and applications mature and are integrated into existing systems. As previously stated, the emergency response community has identified LTE as the technology standard for the proposed 700 megahertz (MHz) nationwide public safety wireless broadband network. LTE is a technology

standard widely adopted by the private sector and endorsed by the Federal Communications Commission for use in next generation commercial networks. The LTE standard has evolved based on commercial requirements; however, over time the standard could be enhanced to meet the public safety community's needs. Difficulties lie in public safety's ability to influence a global standard such as LTE because emergency responders represent a small percentage of the LTE consumer market.

Talk Around/Simplex/Direct Mode

Talk around, also known as simplex or direct mode, is the ability to talk device-to-device. This is an important feature for public safety operations because it allows a group of responders in the field to talk directly to each other when outside of the existing network infrastructure coverage or if the network infrastructure has been damaged. For example, this is a critical feature when firefighters respond to a wildfire that is outside of network coverage or to an incident in the basement of a burning building that may be beyond the network's coverage.

Convergence of Mission Critical Voice and Data

A "converged network," a dedicated public safety wireless broadband infrastructure capable of offering mission critical voice, data, and video to emergency responders, is important because it reduces costs of developing and maintaining systems and increases the effectiveness of emergency responders in the field. However, convergence will be a long term and gradual transition as agencies integrate new technologies, rather than replace existing systems. The pace of convergence will vary from agency to agency and will be influenced by operational requirements, existing systems, and funding levels. During this migration period, solutions for connecting traditional LMR with broadband systems will be necessary. Even when the nationwide public safety network is capable of meeting public safety requirements, some agencies may need to operate separate LMR systems until the public safety wireless broadband network is fully deployed in their regions. Broadband technology for mission critical voice is not currently in place and it is still too early to define the timeframe for such a transition. Therefore, additional investments will continue to be necessary for both LMR and a dedicated public safety wireless broadband network simultaneously.

SAFECOM is a communications program of the Department of Homeland Security. SAFECOM provides research, development, testing and evaluation, guidance, tools, and templates on interoperable communications-related issues to local, tribal, state, and Federal emergency response agencies. The Office of Emergency Communications (OEC) supports SAFECOM's development of grant guidance, policy, tools, and templates, and provides direct assistance to local, tribal, state, and Federal practitioners. The Office for Interoperability and Compatibility (OIC) supports SAFECOM's research, development, testing and evaluation, standards, and tools such as reports and guidelines. OEC is an office within the Directorate for National Protection and Programs. OIC is an office within the Science and Technology Directorate.

Homeland Security SAFECOM

Visit www.safecomprogram.gov or call 1-866-969-SAFE

Additional Information and Resources

Administration

- "The Benefits of Transitioning to a Nationwide Wireless Broadband Network for Public Safety" (June 2011)
  www.whitehouse.gov/sites/default/files/uploads/publicsafetyreport.pdf
- National Telecommunications and Information Administration, Comments, FCC Docket No. 06-229, "Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band." (June 10, 2011)
  http://fjallfoss.fcc.gov/ecfs/comment/view?id=6016823007

Federal Communications Commission National Broadband Plan

- www.broadband.gov/plan

National Public Safety Telecommunications Council

- http://www.npstc.org/broadband.jsp

Office of Emergency Communications

- Homepage: http://www.dhs.gov/xabout/structure/gc_1189774174005.shtm
- National Emergency Communications Plan: www.dhs.gov/files/publications/gc_1217521334397.shtm

Public Safety Communications Research Program

- www.pscr.gov

SAFECOM

- Homepage: www.safecomprogram.gov
- Interoperability Continuum:
  http://www.safecomprogram.gov/SiteCollectionDocuments/Interoperability_Continuum_Brochure_2.pdf

valmont
STRUCTURES

October 2, 2012

Mr. Brian White
Motorola, Inc.
1301 E. Algonquin Road
MS IL02, Post 17J
Schaumburg, IL 60196

SUBJECT: Valmont Tower Quotation # 180687-01, Model V-17.0 x 180' Self Support Tower
Site Location: Globe Site, Overton, KS

Thank you for your inquiry concerning tower design codes and practices as they relate to your requested tower designs.

Valmont Structures / Pirod has been designing and building guyed and self-supporting towers and monopoles since the early 1950's. During this time, we have sold thousands of towers ranging in height form as little as 50' high to in excess of 1400'. These towers were individually engineered to accommodate the loading requirements imparted by the design wind speed, ice considerations, antenna loading, and other factors dictated by the national code requirements existing at the time the tower was built.

The ANSI/TIA-222-G-2005 Standard represents the latest refinement of specific minimum requirements for tower engineers and manufacturers to follow to help assure that the tower structure and its foundations are designed to meet the most realistic conditions for local weather while assuring that the tower is designed to stringent factors of safety. This tower is designed to 90 MPH Basic Wind Speed with no ice, and 40 MPH Basic Wind Speed with 1.0" radial ice per ANSI/TIA-222-G-2005 criteria using Service Class III, Exposure C, and Topographical Category 1.

The "G" version of the code incorporates an escalating wind factor based on tower height. If 90 MPH 3 second gust is the basic design wind speed at the 10 meter height, then per the specification, this speed is then increased in stages up the tower. "Meeting the code" implies that the design will have all of the code requirements for safety factors intact at the wind speed specified. Thus, the ultimate survival speed would be considerably higher.

The foregoing is with specific reference to tower failures induced by extreme weather conditions. However, tower failure can also result from human misadventure or vandalism. Therefore, security fencing is advisable to protect against accident or vandalism.

valmont
STRUCTURES

While failure is extremely rare in any kind of tower, it is especially so for self supported towers and monopoles. In fact, only if a tower or monopole were subjected to a direct hit from a tornado or the severest of hurricanes would failure be predicted, and then usually only if hit by flying debris.

This specific tower is designed such that its first point of predicted failure is in the region above the 80' level. The predicted mode of wind induced failure would be a buckling of the tower legs in the region above the 80' level with the top 100' of the tower folding over about the intact 80' base. This would then effect a fall zone radius within 70' or less of the tower base.

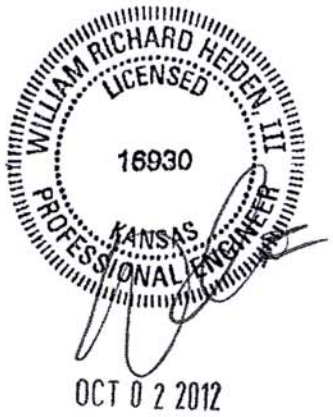
As Chief Engineer of the company and a registered P.E. in 48 states, I oversee all engineering and application of our towers. I am a graduate engineer from Purdue University and am assisted by two other registered professional engineers on our staff.

Valmont Structures / Pirod is an AISC approved shop. All Valmont Structures / Pirod welders are AWS qualified. Mathematical and physical tests are performed routinely on tower sections and designs as required. Our total design, engineer and build process has been quality audited by our customers including public utilities, telephone companies, government agencies, and of course Valmont is an AISC certified facility.

We trust the above and the attached will be helpful to you. If you should need anything else, please let us know at your convenience.

Sincerely,

William R. Heiden III, P.E.
Chief Engineer
Ext. #5243



OCT 0 2 2012

PiROD
MICROFLECT

Communications Division, Valmont Industries, Inc.
1545 Pidco Drive Plymouth, Indiana 46563-4005 USA
574-936-4221 Fax 574-936-6796 www.valmont.com

AREA MAP

VICINITY MAP

DRIVING DIRECTIONS

DRIVE TO DIRECTIONS AS FOLLOWS:

FROM THE JUNCTION OF I–35 & I–435 IN OVERLAND PARK, KANSAS. GO SOUTHWEST ON I–35 FOR (11.1 MI) TO US–56 W/W 175TH STREET. GO WEST ON US–56 W/W 175TH STREET FOR (29.1 MI) TO E 550 ROAD. GO NORTH ON E 550 ROAD FOR (1.0 MI) TO N 400 ROAD. GO EAST ON N 400 ROAD FOR (262 FT) TO SITE LOCATION.

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. INTERNATIONAL BUILDING CODE
2. INTERNATIONAL MECHANICAL CODE
3. ANSI/TIA–222 STRUCTURAL STANDARD
4. NFPA 780 – LIGHTNING PROTECTION CODE
5. INTERNATIONAL PLUMBING CODE
6. NATIONAL ELECTRICAL CODE

PROJECT INFORMATION

PROJECT ADDRESS: TBD N.400 ROAD
OVERBROOK, KANSAS 66524

PROPERTY OWNER: JERE McELHANEY
580 N 400TH ROAD
OVERBROOK, KANSAS 66524

STRUCTURAL INFORMATION:

LATITUDE:	38° 47' 48.00" N
LONGITUDE:	95° 23' 54.91" W
GROUND ELEV:	1153' AMSL
TOWER HT:	180'-0" AGL
ANTENNA BASE ELEVATION:	135'-0" AGL
MW ANTENNA CL:	120'-0" & 100'-0" AGL

APPLICANT: DOUGLAS COUNTY EMERGENCY COMMUNICATIONS
111 EAST 11TH STREET, UNIT 200
LAWRENCE, KANSAS 66044
CONTACT: SCOTT RUF
PHONE: (785)-838-2470

CONTRACTOR SHALL REFER TO HAYDEN TOWER SERVICE, INC FOR DETAILED SPECIFICATIONS FOR CELL SITES FOR ANY ITEMS OR WORK NOT LISTED OR DETAILED HEREON. STANDARD SPECIFICATIONS SHALL SUPERSEDE WHERE CONFLICTS OCCUR.

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CONSULTING TEAM

ENGINEER: SSC, INC.
9900 WEST 109TH STREET, SUITE 300
OVERLAND PARK, KANSAS 66210
PHONE: (913) 438-7700
FAX: (913) 438-7777

M.L. OWENS - LEAD ENGINEER

S.D. KEISLING - LEAD ELECTRICAL

D.C. PELLAND - LEAD DESIGNER

APPROVALS

	PHONE	DATE
REAL ESTATE		
ZONING		
CONSTRUCTION		
RF		
OPERATIONS		
LANDLORD		

UTILITY INFORMATION

POWER COMPANY:

TELEPHONE COMPANY:

KANSAS ONE–CALL SYSTEMS, INC.
CALL BEFORE YOU DIG – DRILL – BLAST
800–344–7233
(DIG–SAFE)
(316) 687–3753
(FAX)
KANSAS ONE CALL SYSTEM, INC.

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DRAWING INDEX

SHEET NUMBER	TITLE DESCRIPTION	REVISION	RESPONSIBLE DISCIPLINE
T-1	TITLE SHEET	C	SC/E
	TOPOGRAPHIC SURVEY		
A-1	OVERALL SITE PLAN	C	SC
A-2	ENLARGED SITE PLAN	C	SC
A-3	TOWER ELEVATION	C	SC

DOUGLAS COUNTY EMERGENCY COMMUNICATIONS

SITE NAME:
GLOBE

Approved and Released
City of Lawrence
Douglas County
PLANNING & DEVELOPMENT SERVICES
Case No.
Approval Date:
Release Date:
Planner:
_____of_____Sheets
Asst./Director:

MOTOROLA SOLUTIONS

Hayden
TOWER SERVICE, INC.
2936 NW Highway 24
Topeka, Kansas 66618
Phone: (785) 232-1840
Fax: (785) 232-1877

SSC
9900 West 109th Street, Suite 300
Overland Park, Kansas 66210
Phone: 913-438-7700 Fax: 913-438-7777

STATE OF KANSAS
CERTIFICATE OF AUTHORIZATION #E-571

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KV KEVIN VANMAELE	22105	STRUCTURAL/CIVIL	SC
SDK SHELTON D. KEISLING	13654	ELECTRICAL	E
TMS TERRANCE M. SUPER	9250	ELECTRICAL	E

DESIGNER: K.L. LUNDBERG

LEAD EE: S.D. KEISLING

LEAD CE/SE: M.L. OWENS

SUBMITTALS

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B	11/14/12	REISSUED FOR REVIEW	DCP
C	12/12/12	REVISED PER COUNTY COMMENTS	KLL

SITE NAME
GLOBE

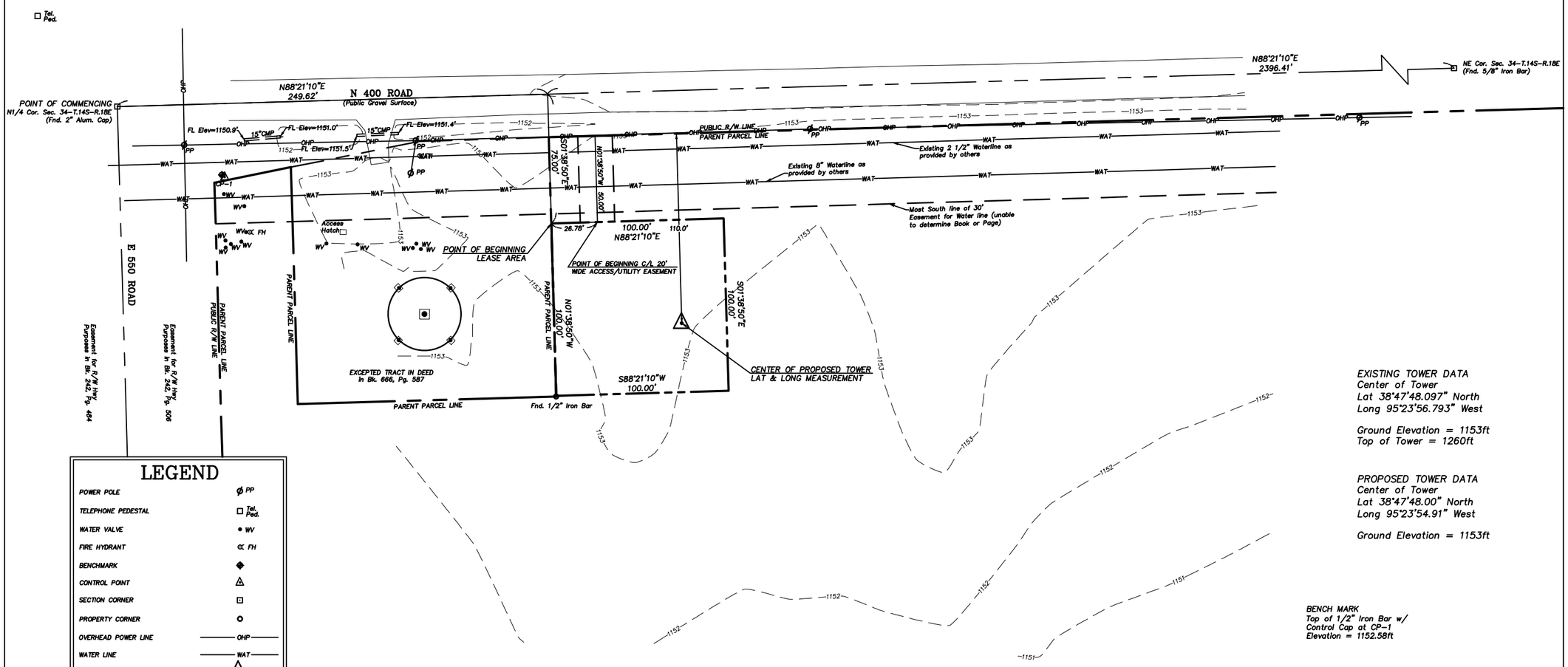
SITE NUMBER

SITE ADDRESS
TBD N. 400 ROAD
OVERBROOK, KANSAS
66524

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GLOBE
PART OF SEC. 34, T. 14S, R. 18E, IN DOUGLAS COUNTY, KANSAS



LEGEND

POWER POLE	∅ PP
TELEPHONE PEDESTAL	□ Tel. Ped.
WATER VALVE	• WV
FIRE HYDRANT	FH
BENCHMARK	◆
CONTROL POINT	△
SECTION CORNER	⊡
PROPERTY CORNER	○
OVERHEAD POWER LINE	OHP
WATER LINE	WAT
TOWER POINT	⊙

EXISTING TOWER DATA
Center of Tower
Lat 38°47'48.097" North
Long 95°23'56.793" West

Ground Elevation = 1153ft
Top of Tower = 1260ft

PROPOSED TOWER DATA
Center of Tower
Lat 38°47'48.00" North
Long 95°23'54.91" West

Ground Elevation = 1153ft

BENCH MARK
Top of 1/2" Iron Bar w/ Control Cap at CP–1
Elevation = 1152.58ft

Property information shown hereon was provided by Kansas Secured Title–Douglas County, Certificate No. 3122750, dated October 10, 2012 at 8:00 a.m..

Information affecting Lease Area is noted unless shown hereon.

Information not shown hereon:

Oil and Gas Lease in Bk. 130, Pg. 314. (Blanket in nature)

R/W Easement to Rural Water District No. 5 in Bk. 305, Pg. 77. (Undefined location)

R/W Easement to Rural Water District No. 5 in Bk. 686, Pg. 1822. (Undefined location)

R/W Easement to Rural Water District No. 5 in Bk. 686, Pg. 1824. (Undefined location)

R/W Easement to Rural Water District No. 5 in Bk. 963, Pg. 1362. (Undefined location)

Notes:

Bearings shown hereon are based on Kansas State Plane Coordinate System of 1983 (NAD 83).

Coordinates were derived using GPS Static Survey methods and post processed data with Magellan/Ashtech receivers and "Locus System" processor software.

Set 1/2" iron bar at Lease corners unless otherwise noted.

The purpose of this survey is to establish and describe a Lease Parcel and associated easements. This is not a boundary survey of the Parent Parcel.

The utilities as shown on this drawing were developed from the information available (existing utility maps, aboveground observations and or surface markings placed on the ground by the utility company or a representative thereof). This company has made no attempt to excavate or go below surface to locate utilities and does not extend or imply a guaranty or warranty as to the exact location of or complete inventory of utilities in this area. It shall be the contractors responsibility to verify the location and depth of all utilities (whether shown or not) prior to excavation or construction and to protect said utilities from damage.

PROPERTY DESCRIPTION: Parent Parcel as Provided

The West–One–half of the Northeast Quarter of Section 34, Township 14 South, Range 18 East of the 6th P.M., in Douglas County, Kansas, LESS AND EXCEPT a tract deed in Book 666, Page 587.

NOTE: The parent parcel graphically shown hereon, in full or in part, is the same as that described above.

PROPERTY DESCRIPTION: LEASE AREA AND ACCESS/UTILITY EASEMENT

A 100 foot by 100 foot Lease Area and a 20 foot wide Access/Utility Easement, situated in the West Half of the Northeast Quarter of Section 34, Township 14 South, Range 18 East of the 6th P.M., in Douglas County, Kansas, more particularly described as follows:

COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet to the POINT OF BEGINNING of said Lease Area; thence North 88°21'10" East, a distance of 100.00 feet; thence South 01°38'50" East, a distance of 100.00 feet; thence South 88°21'10" West, a distance of 100.00 feet (Fnd. 1/2" Iron Bar); thence North 01°38'50" West, a distance of 100.00 feet to the POINT OF BEGINNING. Containing 10,000 square feet (0.23 acres).

AND a 20 foot wide Access/Utility Easement, lying 10.00 feet on each side of the following described centerline:

COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet; thence North 88°21'10" East, a distance of 26.78 feet to the POINT OF BEGINNING of said centerline; thence North 01°38'50" West, a distance of 50.00 feet to the South Right of Way line of N 400 ROAD (Public R/W) and the POINT OF TERMINATION.

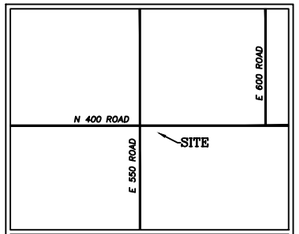
CERTIFICATION:

I HEREBY CERTIFY THAT A SURVEY WAS MADE BY ME, OR UNDER MY DIRECT SUPERVISION, ON THE GROUND OF THE LEASE AREA, LEASE ACCESS EASEMENT, AND LEASE UTILITY EASEMENT PREMISES HEREIN DESCRIBED, AND THE RESULTS OF SAID SURVEY ARE REPRESENTED HEREON. THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS OVER SAID LEASE PREMISES TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

JEFFREY B. LOVELACE KS–LS1326

DATE: _____

11–13–12: REV. PER COMMENTS
11–05–12: ADDED A/E
10–23–12: ADDED WATER LINES
10–23–12: ADDED TITLE
10–01–12: ADDED PROPERTY



LOVELACE & ASSOCIATES
Land Surveying - Land Planning
Telecommunications Surveys
929 SE 3rd Street Lee's Summit, Missouri 64063
Phone: (816) 347-9997 Fax: (816) 347-9979

SURVEY COORDINATED BY:

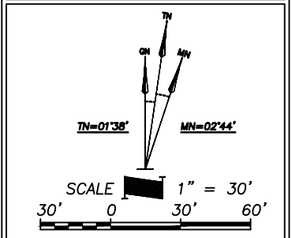
LOVELACE AND ASSOCIATES, LLC
P.O. BOX 68,
LEE'S SUMMIT, MO 64063
TELEPHONE: 816–347–9997
FAX: 816–347–9979

SURVEY PROVIDED BY:

LOVELACE AND ASSOCIATES, LLC
P.O. BOX 68,
LEE'S SUMMIT, MO 64063
TELEPHONE: 816–347–9997
FAX: 816–347–9979

SURVEY PROVIDED FOR:

HAYDEN TOWER SERVICE, INC.
2836 NW HWY 24,
TOPEKA, KS 66618



FLOOD NOTE:

According to my interpretations of Community Panel No. 20045C0270D of the Flood Insurance Rate Map for Douglas County, Kansas, dated August 5, 2010 the subject property is in Flood Zone "X", ie. "areas determined to be Outside the 0.2% annual chance floodplain".

KANSAS ONE-CALL SYSTEMS, INC.
CALL BEFORE YOU DIG – DRILL – BLAST
800-344-7233 (DIG-SAFE)
(316) 687-3753 (FAX)
KANSAS ONE CALL SYSTEM, INC.

SITE NAME:
GLOBE

SITE LOCATION:
DOUGLAS COUNTY, KANSAS

LA PROJECT NO.: 12380

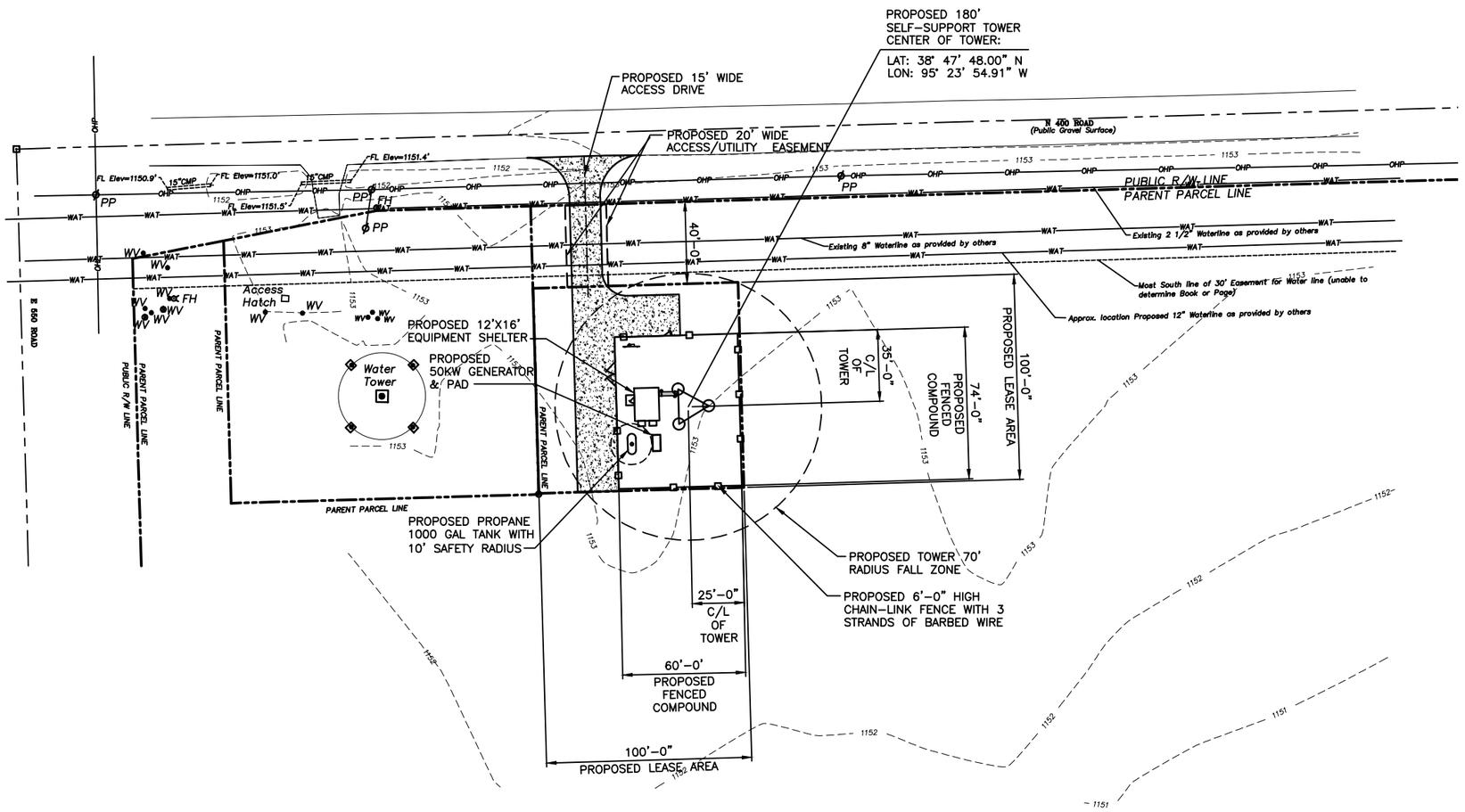
DRAWN BY: A.C.T.

CHECKED BY: J.B.L.

DATE: 09–20–12

FIELDWORK DATE: 09–17–12

SHEET NUMBER
1 OF 1



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N

0' 10' 20' 30' 60' 90'

OVERALL SITE PLAN | 1

MOTOROLA SOLUTIONS

Hayden
TOWER SERVICE, INC.
2936 NW Highway 24
Topeka, Kansas 66618
Phone: (785) 232-1840
Fax: (785) 232-1877

SSC
9900 West 109th Street, Suite 300
Overland Park, Kansas 66210
Phone: 913-438-7700 Fax: 913-438-7777

STATE OF KANSAS

CERTIFICATE OF AUTHORIZATION #E-571

RESPONSIBLE ENGINEERS:		RESPONSIBLE DISCIPLINE:	
MLO MICHAEL L. OWENS	16917	STRUCTURAL/CIVIL	SC
KV KEVIN VANMAELE	22105	STRUCTURAL/CIVIL	SC
SDK SHELTON D. KEISLING	13654	ELECTRICAL	E
TMS TERRANCE M. SUPER	9250	ELECTRICAL	E

DESIGNER:	K.L. LUNDBERG
LEAD EE:	S.D. KEISLING
LEAD CE/SE:	M.L. OWENS

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B	11/14/12	REISSUED FOR REVIEW	DCP
C	12/12/12	REVISED PER COUNTY COMMENTS	KLL

SITE NAME

GLOBE

SITE NUMBER

SITE ADDRESS

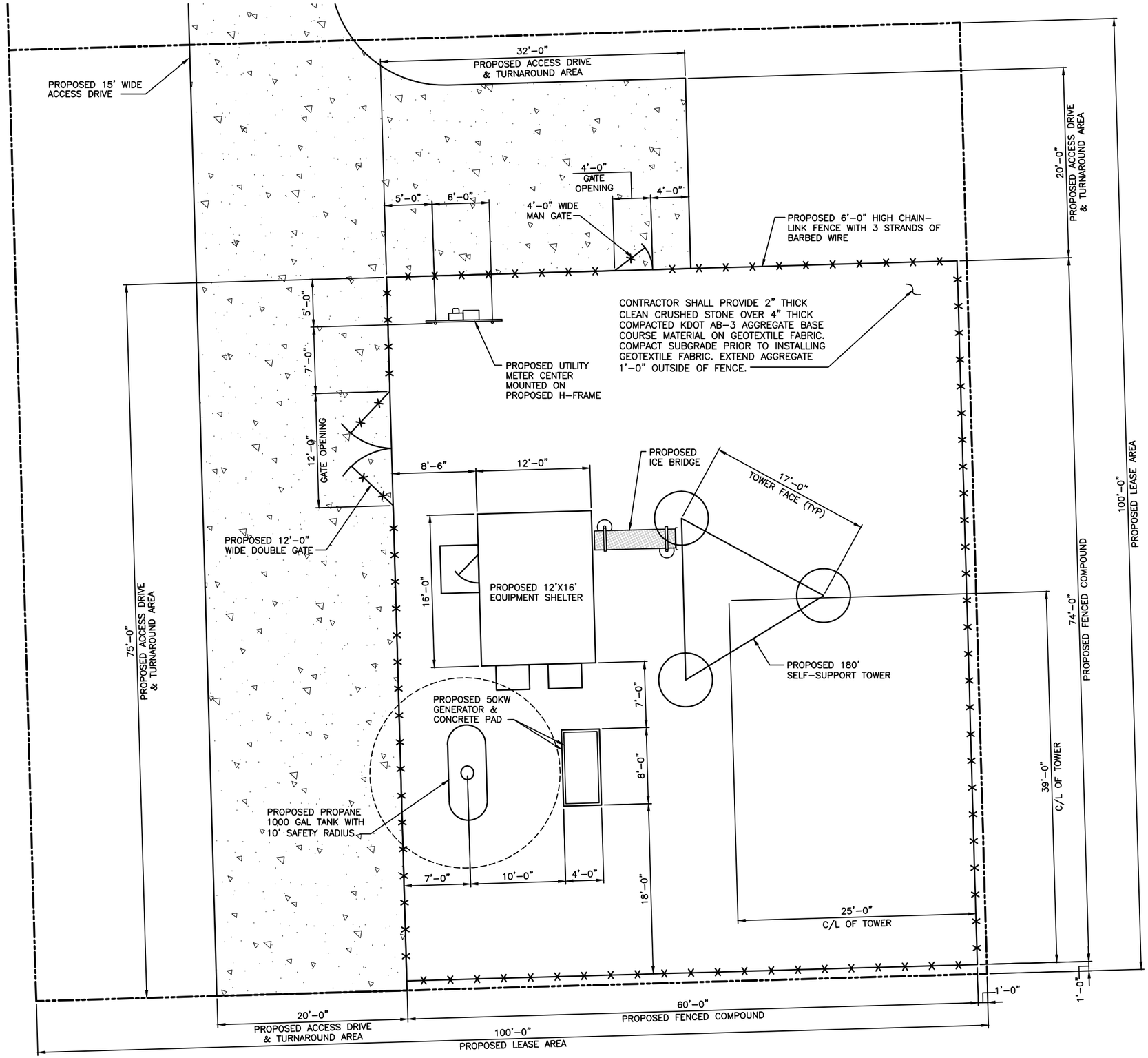
TBD N. 400 ROAD
OVERBROOK, KANSAS
66524

SHEET TITLE

OVERALL SITE PLAN

SHEET NUMBER

A-1



ENLARGED SITE PLAN | 1

MOTOROLA SOLUTIONS

Hayden TOWER SERVICE, INC.
2936 NW Highway 24
Topeka, Kansas 66618
Phone: (785) 232-1840
Fax: (785) 232-1877

SSC
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GLOBE

SITE NUMBER

SITE ADDRESS

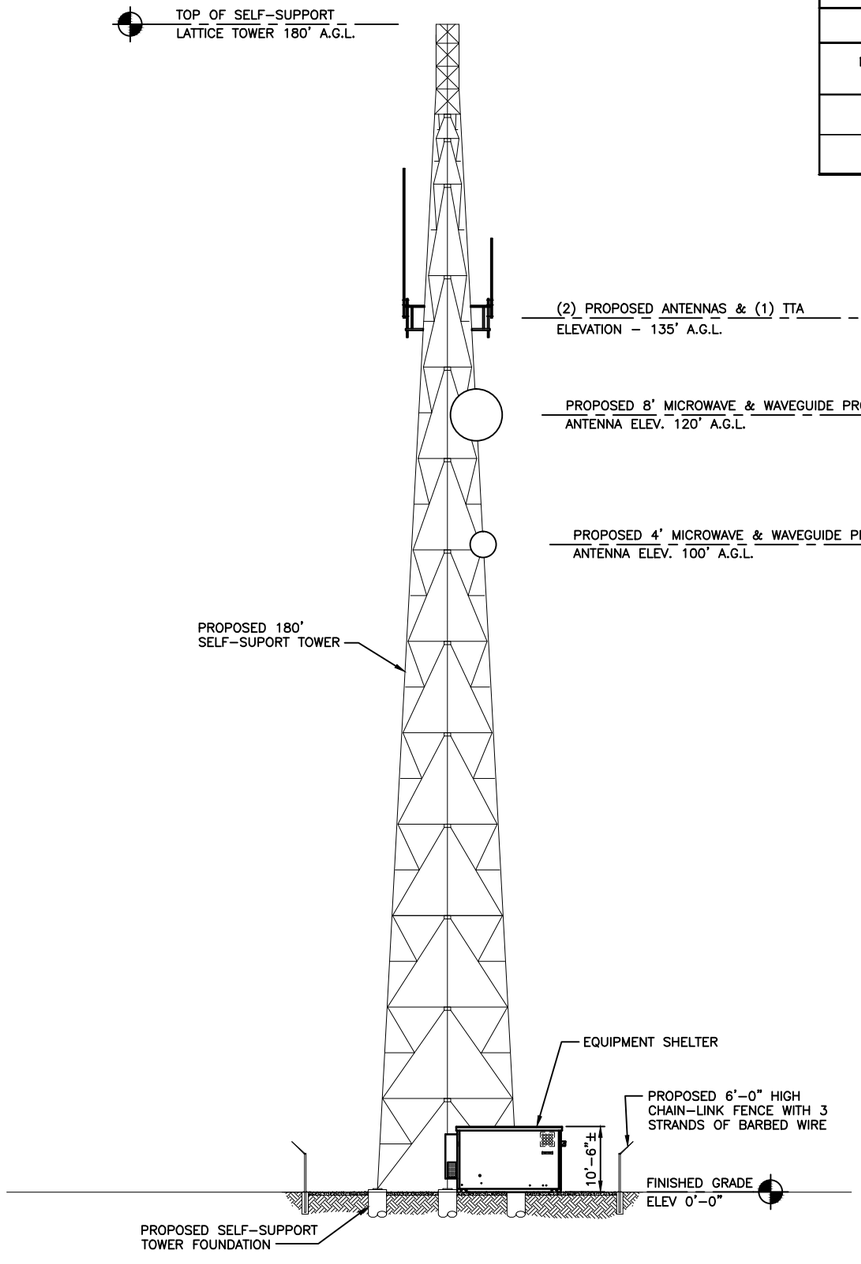
TBD N. 400 ROAD
OVERBROOK, KANSAS
66524

SHEET TITLE

ENLARGED SITE PLAN

SHEET NUMBER

A-2



ANTENNA LOADING KEY

ANTENNA MODEL #	QTY.	ANTENNA BASE ELEVATION	LINE SIZE	LINE LENGTH	AZIMUTH	FREQUENCY	NEW OR EXISTING	MOUNT TYPE	SIDE ARM MOUNT	PROPOSED OR FUTURE LOADING
BMR10-0	1	135'-0"	1 1/4"	185'	TBD	TBD	N	6' STANDOFF	YES	PROPOSED
BMR10-B	1	135'-0"	7/8"	185'	TBD	TBD	N	6' STANDOFF	YES	PROPOSED
TTA	1	135'-0"	1/2"	185'	N/A	TBD	N	N/A	YES	PROPOSED

MICROWAVE LOADING KEY

MICROWAVE MODEL #	QTY.	MICROWAVE ANTENNA C/L ELEVATION	LINE SIZE	LINE LENGTH	AZIMUTH	FREQUENCY	RADOME	DISH SIZE	DISH MOUNT	PROPOSED OR FUTURE LOADING
TBD	1	120'-0"	CNT400	TBD	350.73°	TBD	YES	8'	YES	PROPOSED
TBD	1	100'-0"	CNT400	TBD	60.37°	TBD	YES	4'	YES	PROPOSED

NOTES:

1. ALL TOWER INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES ONLY, AND MAY DIFFER FROM THE FINAL DESIGN PROVIDED BY THE TOWER MANUFACTURER. THE CONTRACTOR SHALL CONSTRUCT THE TOWER, FOOTINGS, AND ALL OTHER RELATED COMPONENTS IN ACCORDANCE WITH THE TOWER MANUFACTURER'S DRAWINGS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL DOCUMENT THE AS-BUILT CONDITION OF THE TOWER.

TOWER ELEVATION | 1

MOTOROLA SOLUTIONS

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Topeka, Kansas 66618
Phone: (785) 232-1840
Fax: (785) 232-1877

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LEAD CE/SE: M.L. OWENS

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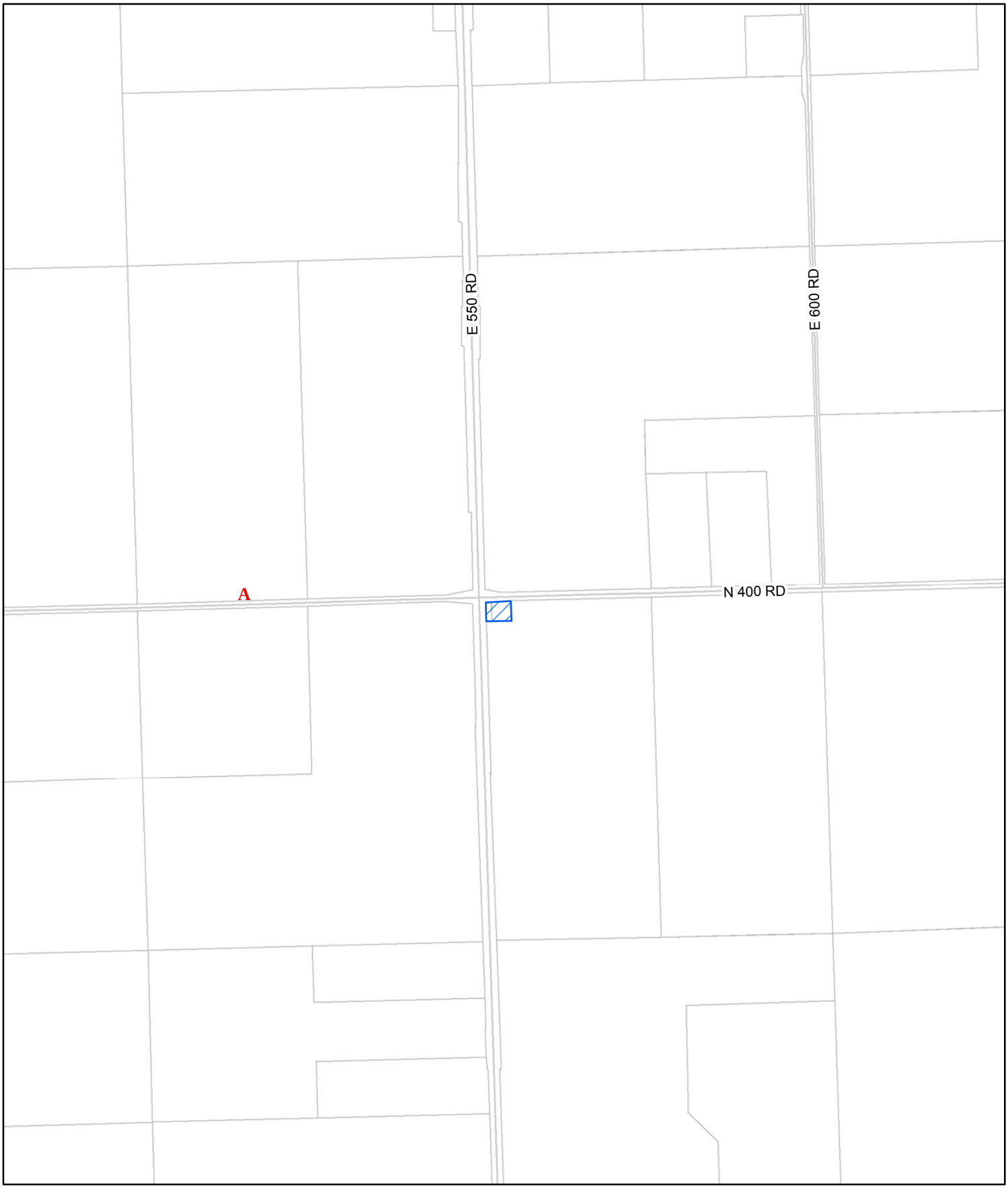
66524

SHEET TITLE
TOWER ELEVATION

SHEET NUMBER
A-3



CUP-12-00287: Conditional Use Permit for Douglas County Emergency Communications System 180' tower 580 N 400 Rd

Lawrence-Douglas County Planning Office

January 2013

N
W E
S

Area Requested

Scale: 1 Inch = 1000 Feet

ITEM NO. 2 CONDITIONAL USE PERMIT FOR COMMUNICATIONS TOWER; NEAR THE SOUTHEAST CORNER OF N 400 RD & E 550 RD (SLD)

CUP-12-00287: Consider a Conditional Use Permit for construction of a 180' tall communication tower for county emergency communication equipment, to be located east of the existing water tank near the southeast corner of N 400 Road and E 550 Road. Submitted by Selective Site Consultants on behalf of Douglas County Emergency. Jere McElhaney, property owner of record.

STAFF PRESENTATION
Ms. Sandra Day presented the item.

APPLICANT PRESENTATION
Mr. Trevor Wood, Selective Site Consultants, was present for questioning.

PUBLIC HEARING
No public comment.

COMMISSION DISCUSSION
Commissioner Hird said the upgrade in the communication system was a big step forward for Douglas County.

ACTION TAKEN
Motioned by Commissioner Hird, seconded by Commissioner von Achen, to approve the Conditional Use Permit for the 180' tower and forwarding it to the County Commission subject to the following conditions:

1.) The provision of a revised site plan add the following notes to the face of the drawing:
   a) "*The owner at the owner's expense shall remove any tower that is not in use for a period of three years or more."*
   b) "A sign shall be posted on the tower or the exterior fence around the base of the tower noting the name and telephone number of the tower owner/operator."
   c) *"Use of this tower for other carriers shall require County Commission approval as the tower owner in addition to site plan review and approval of any a co-location request for new equipment."*
   d) *"A change of ownership of the tower shall require a new Conditional Use Permit and public hearing."* This will allow review of the intended use of the tower and public notice of the proposed change.

   Unanimously approved 9-0.

DOUGLAS COUNTY EMERGENCY COMMUNICATIONS

111 East 11th Street, Unit 200
Lawrence, KS 66044

phone: (785) 832-5237
fax: (785) 330-2801

website: www.douglas-county.com
email: eccdept@douglas-county.com

MEMORANDUM

To : Board of County Commissioners

From : Scott W. Ruf, Director of Emergency Communications

Date : February 13, 2013

Re : Regular Agenda item to approve a Lease Agreement with Jere McElhaney (property owner) for use of land at proposed Globe Site for construction and operation of an emergency communications radio tower.

This lease agreement will permit Douglas County Emergency Communications to construct and operate an emergency communications radio tower as part of the new P25 Radio Project approved in September 2012.

The construction of this tower will provide much needed radio coverage for our first responders increasing efficiencies in response times as well as first responder safety to the south and west areas of rural Douglas County.

Ongoing maintenance, lease and operating costs are a qualifying expense under the Kansas 911 Act and will not reflect an increase to the general fund obligations as they relate to the support and maintenance of the radio system.

Action Required: Regular Agenda approval of the Lease Agreement between Jere McElhaney (property owner) and Douglas County.

LEASE AGREEMENT

THIS LEASE AGREEMENT (this "**Lease**") is entered into effective February ___, 2013 by and between Jere M. McElhaney, a single person ("**Landlord**") and the Board of County Commissioners of Douglas County, Kansas ("**Tenant**"). Landlord and Tenant (together, the "**Parties**" and each a "**Party**") hereby contract and agree as follows:

WHEREAS, Landlord is the owner of certain real property consisting of approximately 160 acres of land located in Douglas County, Kansas legally described as follows:

NW Quarter of Section 34,Township 14 South, Range 18 East of the 6th Principal Meridian,

(the "**Property**"); and

WHEREAS, Landlord desires to demise and lease to Tenant, and Tenant desires to rent from Landlord a portion of the Property, more particularly described on **Exhibit A** attached hereto and made a part hereof (the "**Premises**").

NOW, THEREFORE in consideration of the mutual promises and covenants contained herein, the Parties hereby agree as follows:

1. **Commencement Date and Term of Lease:** This lease shall commence on the date Tenant commences construction of the Communications Facility (as defined below) ("**Commencement Date**"). After Tenant commences construction, the Parties agree to execute a memorandum documenting the Commencement Date in the form set forth in **Exhibit B**. The initial term of this Lease shall commence on the Commencement Date and end on the last day of the month in which the 10th anniversary of the Commencement Date occurs. Tenant shall have the option to extend this Lease for two additional terms of 10 years each, by providing written notice to Landlord of its intent to extend this Lease at least 180 days prior to the expiration of the initial term or 180 days prior to the expiration of any renewal term, as the case may be. Tenant's failure to timely send such written notice, however, shall not serve as a forfeiture of Tenant's option to extend the Lease unless the Landlord notifies the Tenant of such failure and Tenant does not provide written notice to Landlord of its intent to extend this Lease within 30 days of Landlord's notification. The "**Term**" of this Lease shall be the initial 10 year term and, to the extent Tenant exercises Tenant's option to extend the lease, any renewal terms.

2. **Removal/Restoration:** All portions of the Communication Facility brought onto the Premises by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during the term of this Lease. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of the Landlord that all

improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of the Tenant and may be removed by Tenant at any time during the Term. Upon the expiration or termination of this Lease, Tenant, at its sole cost and expense, shall restore the surface of the Premises to a condition substantially the same as its condition as of the Commencement Date, including, without limitation, the removal of all communications equipment and the removal of the Communications Facility from the Premises.

3. **Permitted Use:**

(a) Tenant may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of a radio communications tower, communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure, associated antennas, equipment shelters or cabinets and fencing, and any other items reasonably necessary to the successful and secure use of the Premises, the primarily use of which is for public safety communications, primarily for public safety communications (collectively the "**Communications Facility**").

(b) Landlord and Tenant agree that any portion of the Communication Facility that may have been conceptually described will not be deemed to limit the location of the Communications Facility or Tenant's permitted use of the Premises. Tenant has the right to install and operate transmission cables from the equipment shelter or cabinet to the antennas, electric lines from the main feed to the equipment shelter or cabinet and communication lines from the main entry point to the equipment shelter or cabinet, and to make Premises improvements, alterations, upgrades or additions appropriate for Tenant's use. Tenant has the right to modify, supplement, replace, upgrade, expand the equipment, increase the number of antennas or relocate the Communication Facility within the Premises at any time during the term of this Lease. Notwithstanding anything in this section to the contrary, Tenant shall bear the full cost of any improvements or alterations that it makes to the Premises during the term of this Lease. Tenant agrees to comply with all applicable governmental laws, rules, statutes and regulations, relating to its use of the Communications Facility on the Premises.

(c) Tenant agrees that it will not use, generate, store or dispose of any Hazardous Material on, under, about or within the Land in violation of any law or regulation. As used in this paragraph, "Hazardous Material" shall mean petroleum or any petroleum product, asbestos, any substance known by the state in which the Land is located to cause cancer and/or reproductive toxicity, and/or any substance, chemical or waste that is identified as hazardous, toxic or dangerous in any applicable federal, state or local law or regulation. This paragraph shall survive the termination of this Agreement.

4. **Rent and Taxes:**

(a) Commencing on the Commencement Date, Tenant will pay the Landlord a monthly rental payment ("**Rent**") according the schedule provided below, on or before the 5th day of each month in advance. Rent will be prorated for any partial month. Rent for the initial month will be paid by Tenant to Landlord on the earlier of (i) 15 days after the Commencement Date or (ii) the 5th day of the subsequent month when Tenant pays Landlord Rent for the first full month.

(b) Rent during the initial 10 year Term under this Lease is payable in the following amounts:

Any month during calendar year 2013, $1,000 (i.e. $12,000 per year).

Any month during calendar year 2014, $1,050 (i.e. $12,600 per year).

Any month during calendar year 2015, $1,100 (i.e. $13,200 per year).

Any month during calendar year 2016 and thereafter during the initial 10 year Term, the monthly rate for the immediately preceding year plus $50, plus an inflation adjustment, determined as follows:

(i) The index for computing the inflation adjustment is the Consumer Price Index for All-Urban Consumers (CPI-U) United States City Average, All Items (1982-84 = 100), as issued by the Bureau of Labor Statistics of the United States Department of Labor (the "**Index**"). In the event that the Bureau of Labor Statistics makes major revisions to this index or changes the index base, the new consumer price index that most closely resembles the foregoing shall be used, with appropriate adjustments for changes in the index base.

(ii) The Index figure shall be obtained January of the calendar year for which the Rent is being determined (the "**Adjustment Date**") and also for January of the immediately preceding year (the "**Index Date**").

(iii) The new monthly Rent shall then be computed by multiplying the monthly Rent for the immediately preceding year by a fraction, the numerator of which is the Index figure on the Adjustment Date and the denominator of which is the Index figure on the Index Date. For example, assuming the Rent for the immediately preceding year was $1,100, Index figure on the Adjustment Date is 116 and the Index figure on the Index Date is 110, the new monthly Rent shall be $1,150 ($1,100 from prior year plus $50) x 116/110 = $1,121.73. If the Index figure for the Adjustment Date is not available and the new monthly Rent is not calculated in time for payment of the January Rent, Tenant shall pay the same monthly Rent as in the immediately preceding calendar year and shall pay any additional Rent after the new monthly Rent is calculated.

(c) Rent during any renewal Term under this Lease shall be calculated in a manner similar to Rent during the initial 10 year Term, as provided in Subparagraph (b), except the automatic annual increases of $50 per month shall not apply. For example, assuming the Rent for the last year of the initial Term is $1,600 and Tenant exercises its right to extend the Term of this Lease for an additional 10 years, the Index figure on the Adjustment Date is 125 and the Index figure on the Index Date is 120, the new monthly Rent for the first year of the additional 10 year Term shall be $1,600 x 125/120 = $1,666.67. Monthly Rent for each subsequent calendar year of any renewal Term shall be determined accordingly.

(d) In addition to the Rent provided for in Subparagraph (b) or Subparagraph (c), as the case may be, Tenant shall pay Landlord, as additional rent, 50% of any rents or royalties Tenant receives from third parties in connection with any such third party's co-location of communications antennas and related equipment as part of the Communications Facility.

(e) Tenant, at its sole cost and expense, shall pay all taxes levied against the Premises, and/or the Communications Facility, including, without limitation, any personal property taxes, or governmental assessments in connection with the use of the Premises, if any.

5. **Warranties; Contingencies; and Cooperation:** Landlord makes no warranties or representations in connection with the Property or Premises. Tenant accepts the Premises in "as is" condition. Landlord agrees that this Lease and Tenant's ability to use the Premises is contingent upon (i) Tenant's ability to obtain all governmental licenses, permits, approvals deemed necessary or appropriate by Tenant for its use of the Premises, and (ii) Tenant entering into an agreement with any mortgagees of the Property consenting to this Lease and, provided Tenant complies with the terms of this Lease and attorns to the new owner of the portion containing the Premises, agreeing not to disturb it in the event of a mortgage foreclosure. Landlord authorizes Tenant to prepare, execute and file all required applications to obtain such licenses, permits, and approvals and agrees to execute such documents as may be reasonably required to assist Tenant in securing the appropriate zoning and other regulatory approvals in connection with the construction of the Communications Facility on the Premises. In addition, Tenant shall have the right to initiate the ordering and/or scheduling of necessary utilities.

6. **Construction, Operation and Maintenance of the Communications Facility and Premises:** All of Tenant's construction, installation, and maintenance work in connection with the Tower shall be performed at Tenant's sole cost and expense and in a good and workmanlike manner. Tenant shall provide Landlord a copy of the plans and specifications for the Communications Facility, which shall include the location of any maintenance building, cabling, and other improvements. Tenant shall operate the Equipment in compliance with all applicable laws and Federal Communications Commission ("FCC") requirements. Throughout the Term of this Lease, Tenant, at its sole cost and expense, shall pay all costs associated with the

Communications Facility. Tenant will not cause or permit any mechanic's lien to be placed on the Premises, and Tenant agrees to indemnify, defend and hold harmless Landlord from any such lien from a party claiming by, through or under Tenant. Tenant shall be obligated to maintain the Communications Facility in a structurally sound condition and Tenant shall make any and all necessary repairs to the Communications Facility and Premises. Tenant shall be responsible for compliance with all marking and lighting requirements of the Federal Aviation Administration ("FAA") and the FCC, to the extent such requirements are due solely to Tenant's use of the Premises. Prior to commencement of construction of the Communications Facility, Tenant, at its sole cost and expense, agrees to improve the security and road access to the Premises. Landlord hereby grants Tenant the right to landscape and contour the Premises and that portion of the Property necessary to account for drainage. Tenant shall maintain the area within the fence that Tenant will construct to surround the Communications Facility in a reasonable condition, as compared to the surrounding land, and will not permit grass or other vegetation to become overgrown. During the first 24 months after the Commencement Date, Landlord shall mow and weed the landscaping and vegetation located on the Premises outside the fence, including the perimeter of the fence, in a reasonable condition and, thereafter, Landlord and Tenant will negotiate as to whether Landlord will maintain the areas outside the fence for a charge or whether Tenant will maintain the areas outside the fence.

7. **Access:** At all times throughout the Term of this Lease, Tenant and its employees, agents, and subcontractors, will have 24 hour per day, 7 day per week pedestrian and vehicular ingress and egress across the Property in order to construct, maintain, and use the Communications Facility and any utilities serving the Premises and Landlord grants to Tenant an easement for such access. The parties agree that access to the Premises shall be limited to the Parties to this Lease together with their designees, successors, and assigns and further agree that access will be at all times controlled by a locking device for which Landlord need not necessarily be provided a key.

8. **Insurance and Indemnity:** Tenant will carry personal property insurance in connection with its Communications Facility. Tenant will carry general liability insurance, which will name Landlord as an additional insured and Tenant shall provide Landlord a copy of such certificate of insurance upon Landlord's request. Tenant agrees to indemnify, save harmless, and defend Landlord from and against any and all claims, actions, damages, liability and expense in connection with personal injury and/or damage to property arising from or out of any occurrence in, upon or at the Premises caused by the negligence or willful misconduct of Tenant, co-located subtenant, or their employees, agents or independent contractors in connection with this Lease; provided, however, that Tenant's indemnification obligations shall not exceed the maximum amount it could owe under the Kansas Tort Claims Act, as then in effect. Any defense conducted by Tenant of any such claims, actions, damages, liabilities and expenses will be conducted by attorneys chosen by Tenant after consultation with Landlord, and Tenant will be liable for the payment of any and all court costs, expenses of litigation, reasonable attorneys' fees and any judgment that may be entered therein.

9. **Assignment and Subletting:** Tenant will have no right to assign this Lease without Landlord's prior written consent, but Tenant may sublease the Premises. Tenant's right to sublease the Premises includes the right to permit public and private entities to co-locate communications antennas and related equipment on the Communications Facility, without Landlord's consent; provided, however, that Tenant shall pay additional Rent as provided in Section 4.

10. **Default and Right to Cure:**

(a) The following will be deemed a default by Tenant and a breach of this Lease: (i) Tenant's failure to pay Rent when due if such Rent remains unpaid for more than 30 days after receipt of written notice from Landlord of such failure to pay,; or (ii) Tenant's failure to perform any other term or condition under this Agreement within 60 days after receipt of written notice from Landlord specifying the failure. No such failure, however, will be deemed to exist if Tenant has commenced to cure such default within such period and provided that such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Tenant. If Tenant remains in default beyond any applicable cure period, Landlord will have the right to exercise any and all rights and remedies available to it under law and equity.

(b) The following will be deemed a default by Landlord and a breach of this Lease: Landlord's failure to perform any term, condition or breach of any warranty or covenant under this Lease within 60 days after receipt of written notice from Tenant specifying the failure. No such failure, however, will be deemed to exist if Landlord has commenced to cure the default within such period and provided such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Landlord. If Landlord remains in default beyond any applicable cure period, Tenant will have the right to exercise any and all rights available to it under law and equity, including the right to cure Landlord's default and to deduct the reasonable costs of such cure from any monies due to Landlord by Tenant.

11. **Eminent Domain:** In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within 5 business days. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's reasonable determination, to render the Premises unsuitable for Tenant's permitted use, this Lease will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeding, which for Tenant will include, where applicable, the value of its Communication Facility, together with moving and relocation expenses. Landlord shall reimburse Tenant for any prepaid Rent on a prorated basis.

12. **Notices:** All notices and other communications must be in writing and shall be effective three (3) days after deposit in the United States Mail, certified and postage paid, or upon receipt if personally delivered or sent by next business day delivery via a nationally recognized overnight courier to the address as set forth below. Landlord and Tenant may, from time to time, designate any other address for this purpose by providing written notice to the other party.

If to Tenant:

Douglas County, Kansas
Attn: Director of Emergency Communications
111 East 11th Street, Unit 200
Lawrence, Kansas 66044

If to Landlord:

Mr. Jere M. McElhaney
580 North 400 Road
Overbrook, KS 66524

13. **Successors and Assigns**: This Lease shall run with the land and shall be binding upon and inure to the benefit of the Parties and their respective heirs, executors, administrators, successors, and assigns.

14. **Entire Agreement:** This Lease constitutes the entire agreement between the Parties. Any amendments to this Lease shall be in writing and executed by an authorized representative for both Parties.

15. **Cooperation:** Each Party agrees to cooperate with the other in executing any additional documents reasonably necessary to facilitate the purposes of this Lease. The Parties agree to execute and deliver a Memorandum of Lease for recording in the office of the Douglas County Register of Deeds in accordance with the form set forth in **Exhibit C**.

16. **Governing Law:** This Lease shall be governed by the laws of the State of Kansas.

17. **Authorization:** The persons who have executed this Lease represent and warrant that they are duly authorized to execute this Lease in their individual or representative capacities as indicated.

18. **Counterparts:** This Lease may be executed in any number of counterpart copies, each of which shall be deemed an original, but all of which together, shall constitute a single instrument.

IN WITNESS WHEREOF, the undersigned do hereby set their hands to this Lease on the dates stated below but effective the date and year first above written.

LANDLORD:

_____
Jere M. McElhaney

Date: _____

TENANT:

Board of County Commissioners of Douglas County, Kansas Douglas County, Kansas

By: _____
Print Name: Mike Gaughan
Its: Chair

Date: _____

ATTEST:

_____
County Clerk

EXHIBIT A TO LEASE

Description of the Premises

A 100 foot by 100 foot Lease Area and a 20 foot wide Access/Utility Easement, situated in the West Half of the Northeast Quarter of Section 34, Township 14 South, Range 18 East of the 6th P.M., in Douglas County, Kansas, more particularly described as follows:

> COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet to the POINT OF BEGINNING of said Lease Area; thence North 88°21'10" East, a distance of 100.00 feet; thence South 01°38'50" East, a distance of 100.00 feet; thence South 88°21'10" West, a distance of 100.00 feet (Fnd. ½" Iron Bar); thence North 01°38'50" West, a distance of 100.00 feet to the POINT OF BEGINNING. Containing 10,000 square feet (0.23 acres).

AND a 20 foot wide Access/Utility Easement, lying 10.00 feet on each side of the following described centerline:

> COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet: thence North 88°21'10" East, a distance of 26.78 feet to the POINT OF BEGINNING of said centerline; thence North 01°38'50" West, a distance of 50.00 feet to the South Right of Way of N 400 ROAD (Public R/W) and the POINT OF TERMINATION.

EXHIBIT B TO LEASE

Lease Commencement Date Memorandum

This Lease Commencement Date Memorandum is entered into on this ____ day of _____, 2013, by and between Jere M. McElhaney, a single person, (hereinafter referred to as "**Landlord**") and Board of County Commissioners of Douglas County, Kansas (hereinafter referred to as "**Tenant**").

1. Landlord and Tenant entered into a certain Lease Agreement ("**Lease**") on the _____ day of _____, 201__, for the purpose of installing, operating and maintaining a Communications Facility. All of the foregoing are set forth in the Lease.

2. The Commencement Date of the Lease was _____.

3. All capitalized terms herein, not otherwise defined herein shall have the same meaning as provided in the Lease.

IN WITNESS WHEREOF, the parties have executed this Lease Commencement Date Memorandum as of the day and year first above written.

LANDLORD:

_____
Jere M. McElhaney
Date: _____

TENANT:

Attest:

Board of County Commissioners of Douglas County, Kansas Douglas County, Kansas

_____
County Clerk

By: _____
Print Name: _____
Its: Chair
Date: _____

EXHIBIT C TO LEASE

Memorandum of Lease

This Memorandum of Lease is entered into on this ____ day of _____, 2013, by and between Jere M. McElhaney, a single person (hereinafter referred to as "**Landlord**") and Board of County Commissioners of Douglas County, Kansas (hereinafter referred to as "**Tenant**").

1. Landlord and Tenant entered into a certain Lease Agreement ("**Lease**") on the _____ day of _____, 201__, for the purpose of installing, operating and maintaining a Communications Facility. All of the foregoing are set forth in the Lease.

2. The term of the Lease is for an Initial Term of 10 years commencing on the date that Tenant commences construction and ending on the last day of the month in which the 10th anniversary of the Commencement Date occurs. Tenant has two successive 10 year options to extend the Lease.

3. The portion of the land being leased to Tenant (the "**Premises**") is described in **Exhibit A** annexed hereto.

4. The Lease is binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

5. All capitalized terms herein, not otherwise defined herein shall have the same meaning as provided in the Lease.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.

LANDLORD:

_____
Jere M. McElhaney
Date: _____

TENANT:

Attest:

Board of County Commissioners of Douglas County, Kansas Douglas County, Kansas

_____
County Clerk

By: _____
Print Name: Mike Gaughan
Its: Chair
Date: _____

EXHIBIT A to MEMORANDUM OF LEASE

Description of the Premises

A 100 foot by 100 foot Lease Area and a 20 foot wide Access/Utility Easement, situated in the West Half of the Northeast Quarter of Section 34, Township 14 South, Range 18 East of the 6th P.M., in Douglas County, Kansas, more particularly described as follows:

> COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet to the POINT OF BEGINNING of said Lease Area; thence North 88°21'10" East, a distance of 100.00 feet; thence South 01°38'50" East, a distance of 100.00 feet; thence South 88°21'10" West, a distance of 100.00 feet (Fnd. ½" Iron Bar); thence North 01°38'50" West, a distance of 100.00 feet to the POINT OF BEGINNING. Containing 10,000 square feet (0.23 acres).

AND a 20 foot wide Access/Utility Easement, lying 10.00 feet on each side of the following described centerline:

> COMMENCING at the North Quarter Corner of said Section 34 (Fnd. 2" Alum. Cap); thence along the North line of said Northeast Quarter, North 88°21'10" East, a distance of 249.62 feet; thence leaving said North line, South 01°38'50" East, a distance of 75.00 feet: thence North 88°21'10" East, a distance of 26.78 feet to the POINT OF BEGINNING of said centerline; thence North 01°38'50" West, a distance of 50.00 feet to the South Right of Way of N 400 ROAD (Public R/W) and the POINT OF TERMINATION.

ACKNOWLEDGEMENT

STATE OF KANSAS)
) ss:
COUNTY OF DOUGLAS)

BE IT REMEMBERED that on February ____, 2013, before me, the undersigned, a Notary Public in and for said County and State, came Jere M. McElhaney, a single person, who is personally known to me to be the person who executed the within instrument and duly acknowledged the execution of the same on his own behalf.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal the day and year last above written.

_____
Notary Public
My appointment Expires:

ACKNOWLEDGEMENT

STATE OF KANSAS)
) ss:
COUNTY OF DOUGLAS)

BE IT REMEMBERED that on February ____, 2013, before me, the undersigned, a notary public in and for the County and State aforesaid, came Mike Gaughan, the Chair of the Board of County Commissioners of Douglas County, Kansas, who is personally known to me to be the same person who executed the within instrument as such officer and duly acknowledged the execution of the same on behalf of Douglas County, Kansas.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____
Notary Public
My appointment Expires: