

▶ **FILE #:** 4-A-10-UR

AGENDA ITEM # 42

AGENDA DATE: 4/8/2010

▶ **APPLICANT:** U. S. CELLULAR CORPORATION

OWNER(S): ARTHUR HARRIS
 PATRICIA WOODS

TAX ID NUMBER: 32 112.07

JURISDICTION: County Commission District 8

▶ **LOCATION:** Southeast side of Old Rutledge Pike, southwest of Idumea Rd.

▶ **APPX. SIZE OF TRACT:** 33.28 acres

SECTOR PLAN: Northeast County

GROWTH POLICY PLAN: Planned Growth Area

ACCESSIBILITY: Access is via Old Rutledge Pike, a minor collector street with a 19' pavement width within a 50' right-of-way.

UTILITIES: Water Source: Northeast Knox Utility District

Sewer Source: Knoxville Utilities Board

WATERSHED: Flat Creek

▶ **ZONING:** A (Agricultural)

▶ **EXISTING LAND USE:** Residence and vacant land

▶ **PROPOSED USE:** 195' Monopole Telecommunications Tower

NA

HISTORY OF ZONING: None noted

SURROUNDING LAND USE AND ZONING: North: Residences and vacant land / RAE (Exclusive Residential) and A (Agricultural)

South: Vacant land / A (Agricultural)

East: Residences and vacant land / A (Agricultural)

West: Residences / A (Agricultural)

NEIGHBORHOOD CONTEXT: The proposed site is located along the Rutledge Pike / Old Rutledge Pike corridor just south of McAnnally Ridge and House Mountain in an area that is primarily rural residential development.

STAFF RECOMMENDATION:

▶ **APPROVE the development plan for a 195 foot monopole telecommunications tower in an A (Agricultural) zoning district subject to 5 conditions:**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance.
2. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
3. Since the FAA does not require any lighting for this facility, there shall be no lighting on the tower.
4. Installing an evergreen landscaping screen, as required by the Zoning Ordinance, along the northwest side of the fenced enclosure (side that parallels the adjoining property which is Tax Parcel 032-11212 and Old Rutledge Pike) within six months of the tower becoming operational.

5. At the time of the request for a building permit, posting a bond or other approved financial surety that would ensure the removal of the tower if it is abandoned.

With the above conditions, this request meets all requirements for approval of a use on review in the A zone.

COMMENTS:

This is a request for a new 195 foot monopole telecommunications tower to be located within a 3,500 square foot lease area located on a 33.28 acre tract. The subject property is zoned A (Agricultural) and telecommunication towers are considered as a use on review in this district. The property is heavily wooded and is located near the northeast end of a ridge located on the southwest side of Old Rutledge Pike. The proposed tower site will have access to Old Rutledge by a 30 foot wide access easement. Grades for the access drive to the tower site are proposed in some areas at 10% to 15%. The access drive will be a paved driveway with a width of 16'.

The tower was originally proposed as a 250' lattice telecommunications tower to be located on the northwest side of Rutledge Pike along McAnnally Ridge a major ridge line just south of House Mountain. Since the tower is intended to fill a gap in coverage along Rutledge Pike, staff had asked the applicant to look at the lower ridge lines along the southeast side of Rutledge Pike. The applicant withdrew the original application and submitted this new application. The applicant should be commended for working with staff on reducing the impact on one of the major ridge lines in the northeast portion of Knox County.

The proposed tower is required to be located 214.5 feet (110% of the tower height) from the nearest residence. The tower site is located approximately 505 feet from the nearest residence.

The visual impact on nearby residences will be minimal due to the tree coverage on this site. The applicant will be installing a 6 foot high security fence with three strands of barbed wire surrounding the tower and equipment area. Since the site is heavily wooded, the applicant is requesting a waiver on providing an evergreen landscape screen around the fenced enclosure. Since some of the ridgetop can be seen during the winter months staff is recommending that the landscape screen be placed along the northwest side of the enclosure which is the side that parallels the adjoining property and Old Rutledge Pike.

The tower is designed so it will collapse upon itself in case of a natural disaster or other failure. FAA does not require any lighting for the tower. The tower will support up to 5 telecommunication carrier antenna arrays. U. S. Cellular Corporation will be the principal client for the tower. A letter has been submitted stating that U. S. Cellular Corporation agrees to make this facility available to other wireless providers for co-location. There are no other towers within one mile of the proposed tower that could provide the coverage needed by the applicant.

Attached to the staff report are several support documents, including a report from MPC's tower consultant, Mr. Larry E. Perry. Mr. Perry's report describes the proposal and highlights his findings. Mr. Perry concludes that the 195' tower is technically justified by the materials submitted by the applicant (see attached report).

EFFECT OF THE PROPOSAL ON THE SUBJECT PROPERTY, SURROUNDING PROPERTY AND THE COMMUNITY AS A WHOLE

1. The proposed development will have minimal impact on local services since utilities are available to serve this site.
2. The tower site, being located within a heavily wooded area should have minimal impact on nearby residences.

CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOXVILLE ZONING ORDINANCE

1. The proposed commercial telecommunications tower at this location meets the standards required in the A zoning district.
2. The proposed tower is consistent with the general standards for uses permitted on review: The proposed development is consistent with the adopted plans and policies of the General Plan, Northeast County Sector Plan and Wireless Communications Facility Plan. The use is in harmony with the general purpose and intent of the Zoning Ordinance. Since this is a heavily wooded area, the use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas.

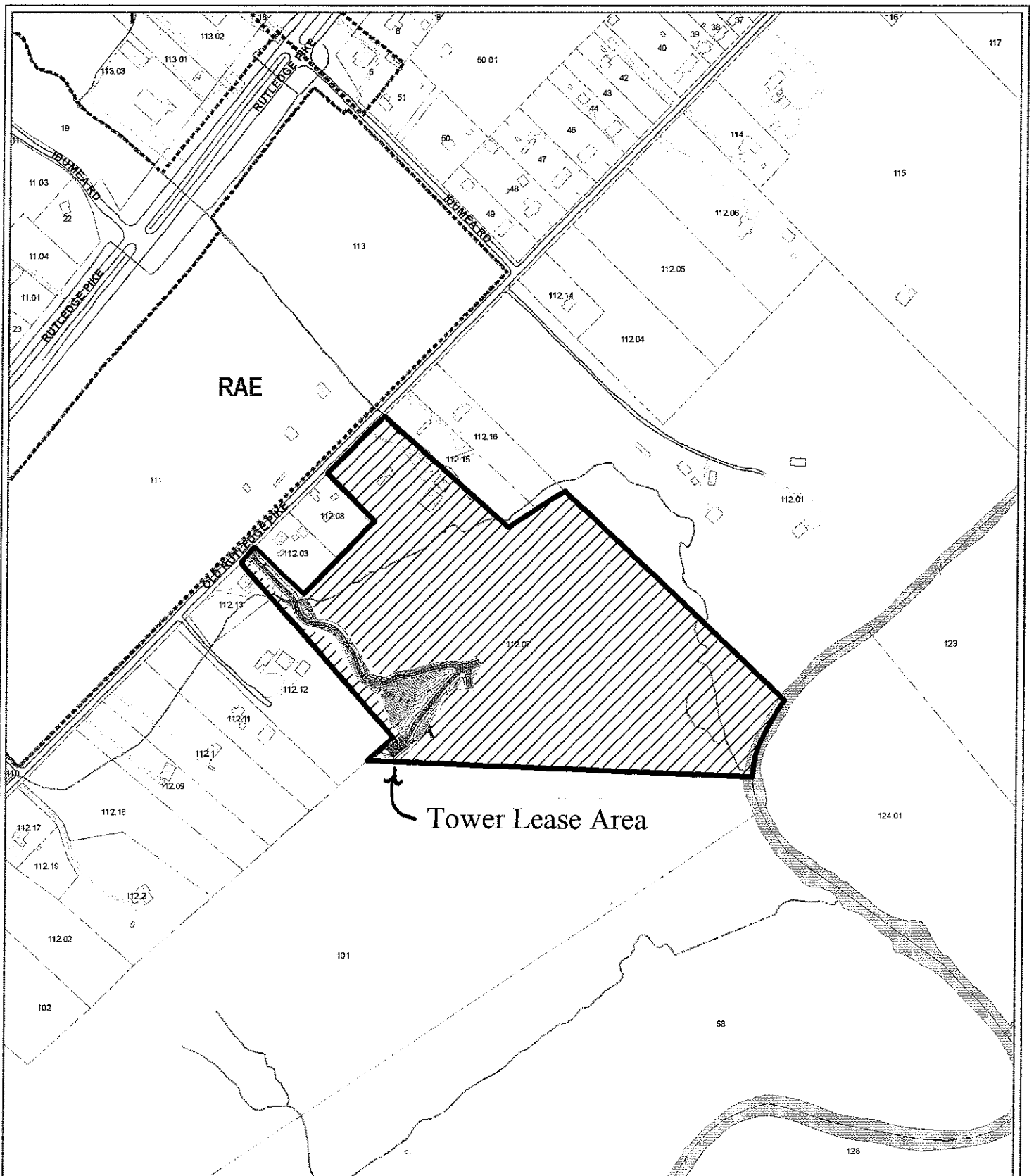
CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS

1. The Northeast County Sector Plan proposes low density residential uses and slope protection for this area. With the minimal site alteration required for the proposed tower (access drive will also serve as a driveway for a proposed residence at the top of the ridge), the proposed development is consistent with this land designation.
2. The Wireless Communications Facility Plan identifies the proposed 195' monopole as a "tall" monopole. Under the guidelines for Tower Placement section of the Facility Plan, the proposed tower falls within the "Opportunity Area" and "Avoidance Area" categories. The site is considered to be an "Opportunity Area" since the site is rural/heavily wooded. The plan takes a neutral position on tall monopoles located in this area. The site is also considered to be an "Avoidance Area" since it is located on a ridge line. The plan discourages tall monopoles along ridge lines. As previously mentioned, the tower was originally proposed along McAnnaly Ridge, a major ridge line as a 250' lattice tower. Understanding that U.S. Cellular needs to fill a gap of service in this area, staff can support the smaller monopole on the lower ridge line.
3. The site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

ESTIMATED TRAFFIC IMPACT: Not calculated.

ESTIMATED STUDENT YIELD: Not applicable.

MPC's approval or denial of this request is final, unless the action is appealed to the Knox County Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed. Appellants have 30 days to appeal an MPC decision in the County.



**4-A-10-UR
USE ON REVIEW**

Petitioner: U S Cellular Corporation



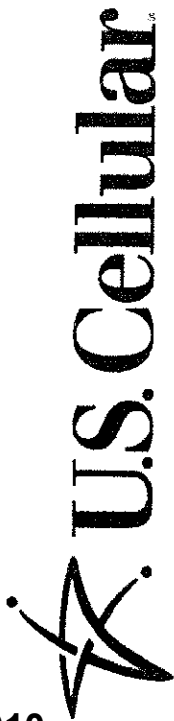
195' Monopole Telecommunications Tower in A (Agricultural)

Map No: 32

Jurisdiction: County

Original Print Date: 3/24/2010 Revised:
Metropolitan Planning Commission * City / County Building * Knoxville, TN 37902





9731 COGDILL ROAD,
SUITE 200
KNOXVILLE, TN 37932
(865) 777-7030

ENGINEERING AND DEVELOPMENT SERVICES, INC.
250 PRINCE STREET
SEVENVILLE, TN 37862
PHONE: (865) 774-7771
PHONE: (865) 977-9097
WWW.VISIONEDS.COM

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SITE SUMMARY

SITE NAME
SKAGGSTON TOWER SITE

NUMBER
#23488

SITE ADDRESS
KNOX MFC 911 ADDRESSING
AFTER MFC SITE APPROVAL
885-15-2507

PROPERTY ADDRESS
8840 OLD RUTLEDGE PIKE
MASCOT, TN 37206

PROPERTY OWNER
ARTHUR HARRIS AND PATRICIA WOODS
8912 OLD RUTLEDGE PIKE
MASCOT, TN 37608

APPLICANT
U.S. CELLULAR CORPORATION
871 COGDILL ROAD, SUITE 200
KNOXVILLE, TN 37932

AREA
LEASehold AREA
0.08 AC (3,500 SQ FT)

ACCESS UTILITY EASEMENT #1
0.05 AC (41,599 SQ FT)

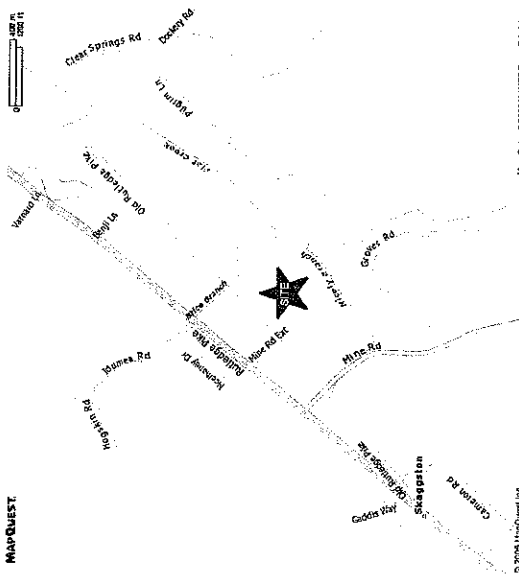
ACCESS UTILITY EASEMENT #2
0.06 AC (2,569 SQ FT)

ACCESS UTILITY EASEMENT #3
0.08 AC (2,072 SQ FT)

PROPOSED TOWER INFORMATION
TOWER TYPE - MONOPOLE
TOWER HEIGHT - 30' @ 501.1000'
LUMEN USE - 4 x 1000W @ 180000°
PROPOSED HEIGHT - 165'

PARCEL NUMBERS
- TAX MAP 605
- PARCEL 11207
- DB 2140
- PG 387

ZONING
KNOX COUNTY - A



DIRECTIONS

DRIVING DIRECTIONS FROM CLIENT MARKET OFFICE (140.75 AND PELLISSIPPI PARKWAY): TAKE I40 EAST TO EXIT 392 (RUTLEDGE PIKE) AND TURN RIGHT ON RUTLEDGE PIKE. GO APPROXIMATELY 0.2 MILES AND TURN LEFT ONTO OLD RUTLEDGE PIKE. GO 0.2 MILES AND TURN LEFT ONTO OLD RUTLEDGE PIKE. GO APPROXIMATELY 0.2 MILES TO THE PROPERTY ON THE RIGHT.

Map Date: 03/26/2010 by T. Tolson

4-A-10-UR
REVISED
3-26-10

SHEET INDEX

| SHEET NUMBER | DESCRIPTION |
|-------------------------|------------------------|
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| 2 OF 3 | SITE SURVEY |
| 3 OF 3 | LEGAL DESCRIPTIONS |
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| C1.01 | SITE LAYOUT PLAN |
| C1.02 | NOTES |
| C1.03 | ROAD PROFILE |
| C1.04 | EMERGENCY ACCESS PLAN |
| C1.05 | EMERGENCY ADDRESS PLAN |
| C2.01 | ACCESS SITE DISTANCE |
| C2.02 | TOWER ELEVATION PLAN |
| C3.01 | DETAILS |
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| C3.03 | DETAILS |
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| C3.06 | DETAILS |
| C3.07 | DETAILS |
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| E1.00 | ELECTRICAL SITE PLAN |
| E1.01 | ELECTRICAL PLAN |
| E1.02 | ELECTRICAL NOTES |
| E1.03 | ELECTRICAL NOTES |
| E2.01 | GROUNDING NOTES |
| E2.02 | GROUNDING NOTES |
| E2.03 | GROUNDING DETAILS |



COVER SHEET
"SKAGGSTON" TOWER SITE
LOCATED IN MASCOT,
KNOX COUNTY, TENNESSEE
CONSTRUCTION DOCUMENTS
PREPARED FOR U.S. CELLULAR
U.S. CELLULAR SITE NO: 223485

ENGINEERING AND DEVELOPMENT SERVICES, INC.
308 PRINCE STREET
SEVENVILLE, TN 37862
PHONE: (865) 774-7771
WWW.VISIONEDS.COM

REVISIONS:

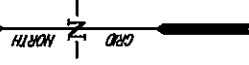
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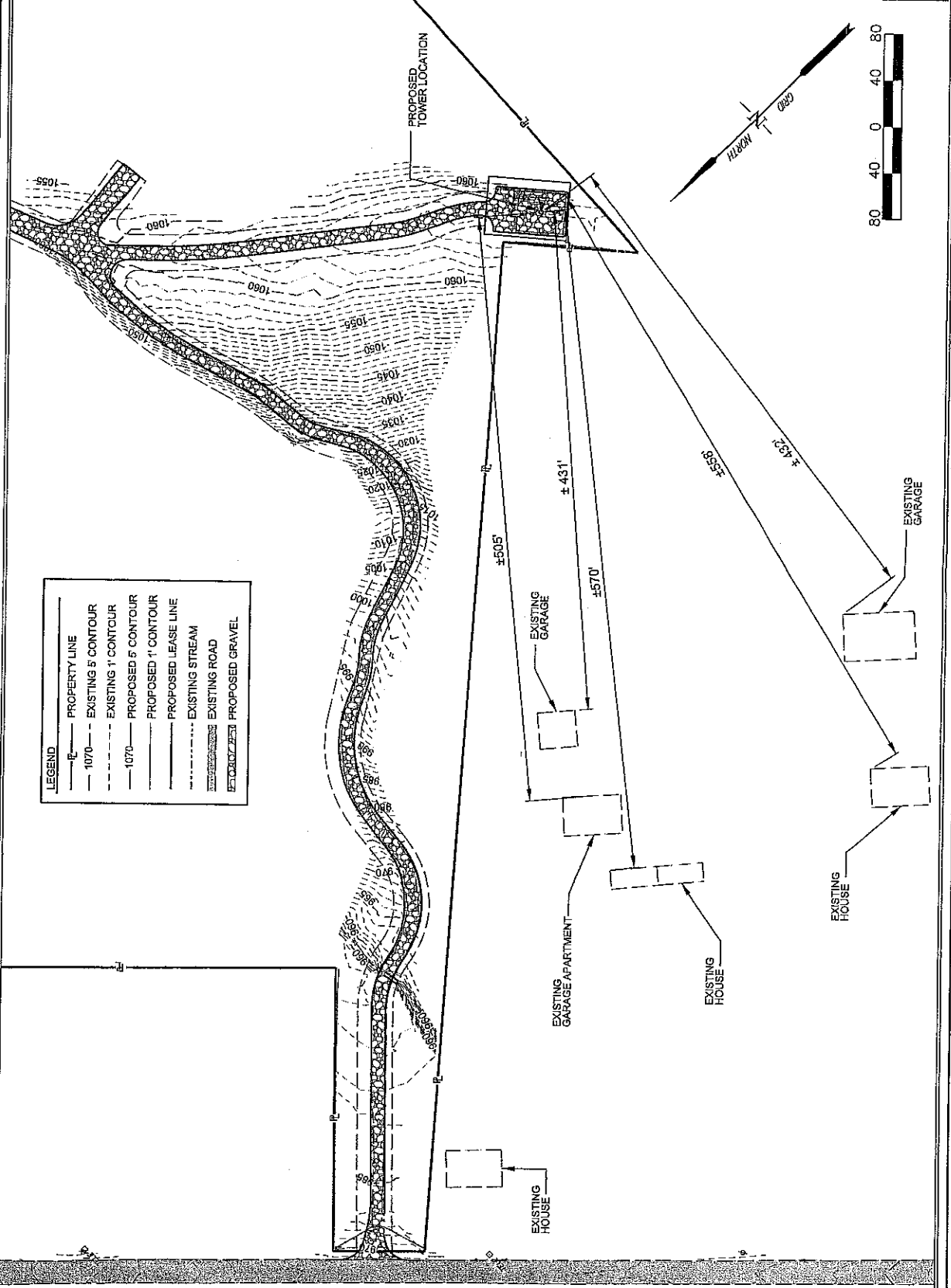
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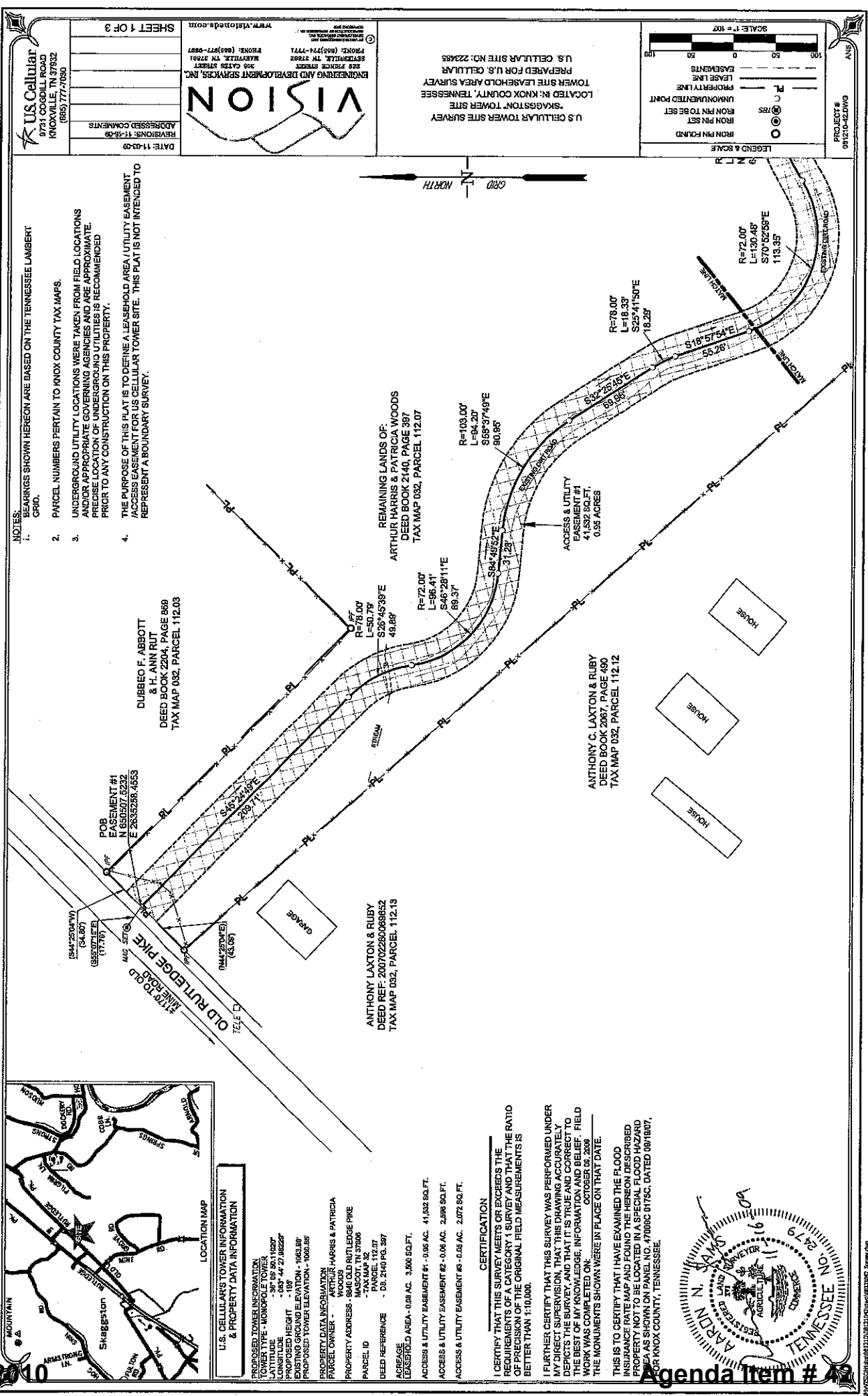
COVER

7831 COGDILL ROAD
KNOXVILLE, TN 37932
(865) 777-7030

PROJECT #
081210-42





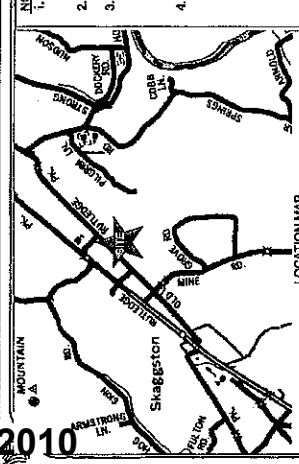
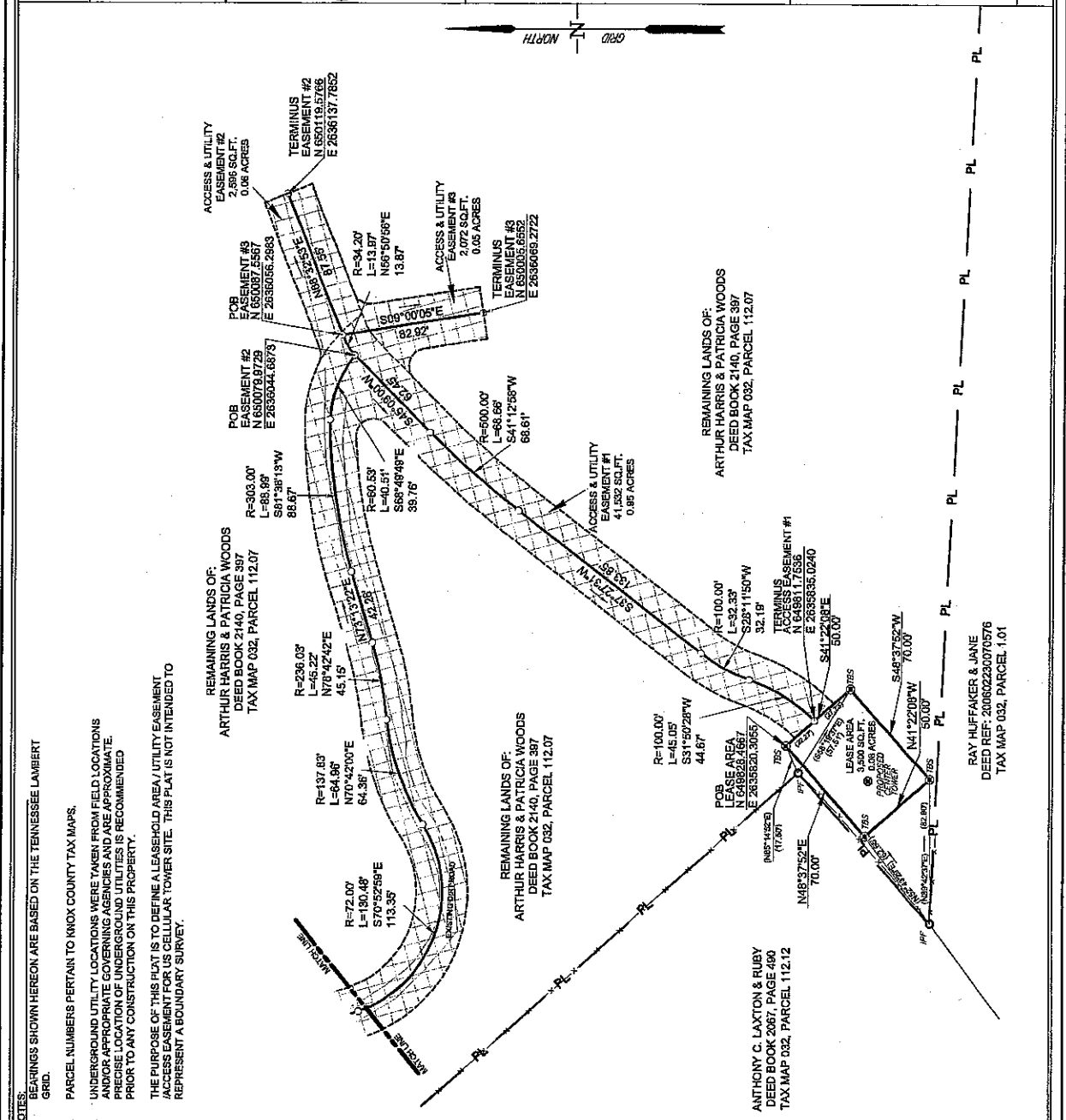


VISION
ENGINEERING AND DEVELOPMENT SERVICES, INC.
225 POND STREET
KNOXVILLE, TN 37901
PHONE: (605)774-7771
WWW.VISIONDESIGN.COM

U.S. CELLULAR TOWER SITE SURVEY
PREPARED FOR U.S. CELLULAR
TOWER SITE LEASOLD AREA SURVEY
LOCATED IN KNOX COUNTY, TENNESSEE
U.S. CELLULAR TOWER SITE NO. 222465

LEGEND & SCALE
IRON PIN FOUND
IRON PIN TO BE SET
UNMONUMENTED POINT
PROPERTY LINE
LEASE LINE
EASEMENTS
SCALE: 1" = 80'

DATE: 11-03-09
ADDRESS COMMENTS
REVISIONS: 11-15-09
SHEET 2 OF 3



U.S. CELLULAR TOWER INFORMATION & PROPERTY DATA INFORMATION

PROJECT NAME: MOUNTAIN CREEK TOWER
TOWER TYPE: MONOPOL TOWER
LATITUDE: 35° 02' 56.11200"
LONGITUDE: -83° 44' 27.88228"
PROPOSED HEIGHT: 135'
PROPOSED HEIGHT - 100'
PROPOSED TOWER ELEVATION: 1063.90'
PROPOSED TOWER ELEVATION - 1040.00'

PROPERTY DATA INFORMATION
PARCEL OWNER: WOODS, HARRIS & PATRICIA
PROPERTY ADDRESS: 8840 OLD RUTLEDGE PIKE
MADCOCK, TN 37088
PARCEL ID: PARCEL 112.07
DEED REFERENCE: DB. 2140 PG. 397

ACCESS & UTILITY EASEMENT #1 - 0.06 AC. 41,332 SQ. FT.
ACCESS & UTILITY EASEMENT #2 - 0.06 AC. 2,598 SQ. FT.
ACCESS & UTILITY EASEMENT #3 - 0.06 AC. 2,072 SQ. FT.

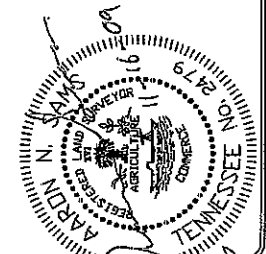
CERTIFICATION

I CERTIFY THAT THIS SURVEY MEETS OR EXCEEDS THE REQUIREMENTS OF A CATEGORY 1 SURVEY AND THAT THE RATIO OF PRECISION OF THE ORIGINAL FIELD MEASUREMENTS IS BETTER THAN 1:10,000.

I FURTHER CERTIFY THAT THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION, THAT THIS DRAWING ACCURATELY DEPICTS THE SURVEY, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE FIELD WORK WAS COMPLETED ON OCTOBER 09, 2009. THE MONUMENTS SHOWN WERE IN PLACE ON THAT DATE.

THIS IS TO CERTIFY THAT I HAVE EXAMINED THE FLOOD INSURANCE RATE MAP AND FOUND A PORTION OF THE HEREIN DESCRIBED PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON PANEL NO. 47098C 0176F, DATED 08-02-07, FOR KNOX COUNTY, TENNESSEE.

AGENDA ITEM # 49



- NOTES:**
- BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE LAMBERT GRID.
 - PARCEL NUMBERS PERTAIN TO KNOX COUNTY TAX MAPS.
 - UNDERGROUND UTILITY LOCATIONS WERE TAKEN FROM FIELD LOCATIONS AND/OR APPROPRIATE GOVERNING AGENCIES AND ARE APPROXIMATE. PRECISE LOCATION OF UNDERGROUND UTILITIES IS RECOMMENDED PRIOR TO ANY CONSTRUCTION ON THIS PROPERTY.
 - THE PURPOSE OF THIS PLAT IS TO DEFINE A LEASEHOLD AREA / UTILITY EASEMENT ACCESS EASEMENT FOR U.S. CELLULAR TOWER SITE. THIS PLAT IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY.

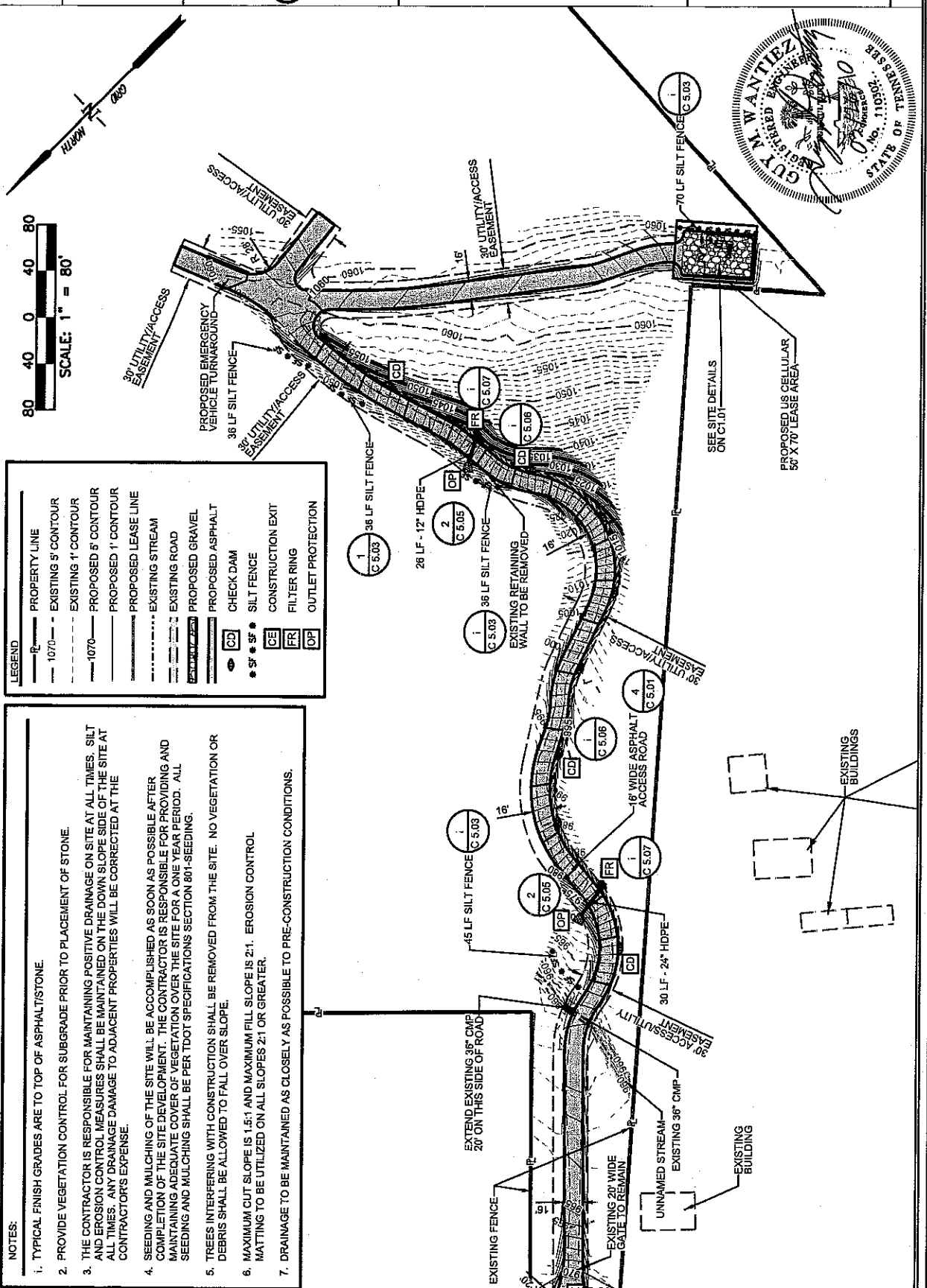
VISION
ENGINEERING AND DEVELOPMENT SERVICES, INC.
229 PINECREEK STREET
KNOXVILLE, TN 37912
PHONE: (615) 774-7711
FAX: (615) 774-7712
WWW.VISIONEDS.COM

SITE ACCESS PLAN
'KAGGSTON' TOWER SITE
LOCATED IN: MASCOIT,
KNOX COUNTY, TENNESSEE
CONSTRUCTION DOCUMENTS
PREPARED FOR U.S. CELLULAR
U.S. CELLULAR SITE NO: 223485

DATE: 11-16-09
REVISIONS: 03-25-10
SHEET #

C1.00

PROJECT #
081210-42
E.I.M.V.



LEGEND

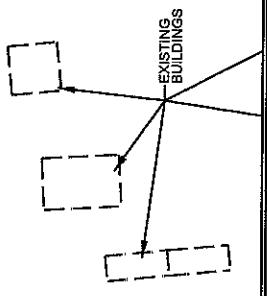
| | |
|-------|---------------------|
| — | PROPERTY LINE |
| - - - | EXISTING 9' CONTOUR |
| - - - | EXISTING 1' CONTOUR |
| - - - | PROPOSED 5' CONTOUR |
| - - - | PROPOSED 1' CONTOUR |
| - - - | PROPOSED LEASE LINE |
| - - - | EXISTING STREAM |
| - - - | EXISTING ROAD |
| - - - | PROPOSED GRAVEL |
| - - - | PROPOSED ASPHALT |
| CD | CHECK DAM |
| SF | SILT FENCE |
| CE | CONSTRUCTION EXIT |
| FR | FILTER RING |
| OP | OUTLET PROTECTION |

- NOTES:**
1. TYPICAL FINISH GRADES ARE TO TOP OF ASPHALT/STONE.
 2. PROVIDE VEGETATION CONTROL FOR SUBGRADE PRIOR TO PLACEMENT OF STONE.
 3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON SITE AT ALL TIMES. SILT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED ON THE DOWN SLOPE SIDE OF THE SITE AT ALL TIMES. ANY DRAINAGE DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
 4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD. ALL SEEDING AND MULCHING SHALL BE PER TDOT SPECIFICATIONS SECTION 801-SEEDING.
 5. TREES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED FROM THE SITE. NO VEGETATION OR DEBRIS SHALL BE ALLOWED TO FALL OVER SLOPE.
 6. MAXIMUM CUT SLOPE IS 1.5:1 AND MAXIMUM FILL SLOPE IS 2:1. EROSION CONTROL MATTING TO BE UTILIZED ON ALL SLOPES 2:1 OR GREATER.
 7. DRAINAGE TO BE MAINTAINED AS CLOSELY AS POSSIBLE TO PRE-CONSTRUCTION CONDITIONS.



SEE SITE DETAILS
ON C1.01

PROPOSED U.S. CELLULAR
50' X 70' LEASE AREA



C1.01

874 CORKILL ROAD
KNOXVILLE, TN 37932
(615) 777-7930

DATE: 11-19-09
REVISIONS: 03-25-10

VISION
ENGINEERING AND DEVELOPMENT SERVICES, INC.
255 FRANK STREET
MEMPHIS, TN 38101
PHONE: (901) 977-8927
WWW.visioneda.com

CONTRACT 2009
BY: VISION ENGINEERING AND DEVELOPMENT SERVICES, INC.
REGISTERED PROFESSIONAL ENGINEER
PHONE: (615) 774-7721
SERVICES: 111-1111

SITE PLAN
"SKAGSTON" TOWER SITE
LOCATED IN: MASCO, TENNESSEE
CONSTRUCTION DOCUMENTS
PREPARED FOR U.S. CELLULAR
U.S. CELLULAR SITE NO: 223485

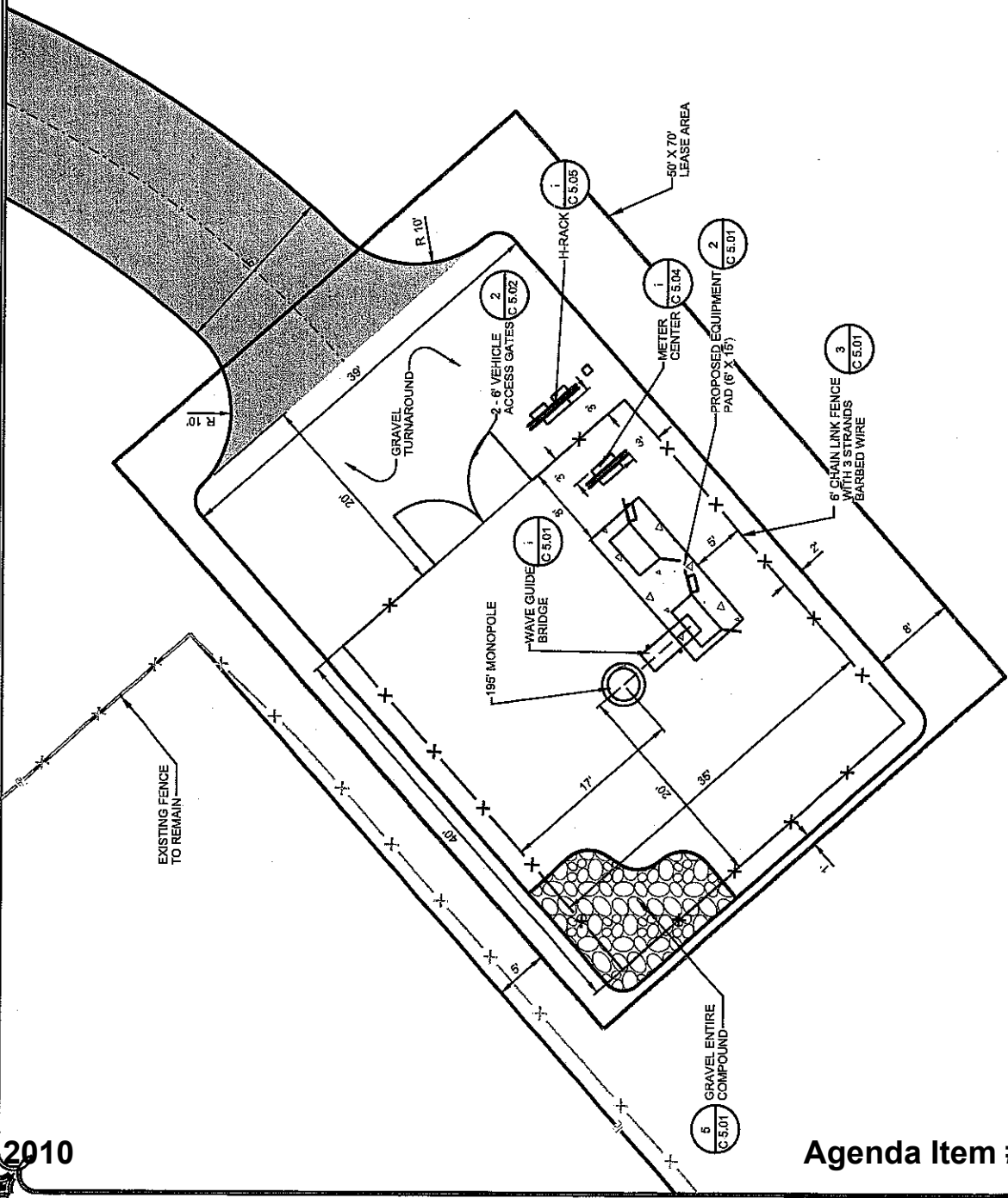
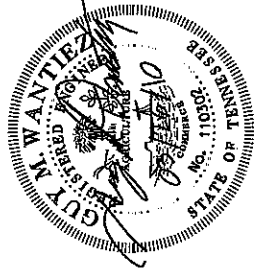
PROJECT # 081210-42



GRID NORTH

LEGEND

- PROPERTY LINE
- - - PROPOSED FENCE
- - - EXISTING FENCE
- - - PROPOSED GRAVEL
- - - PROPOSED LEASE LINE



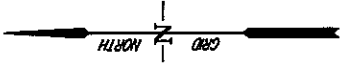
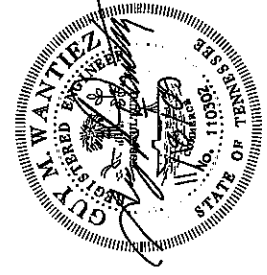
GRADING PLAN

"SKAGGSTON" TOWER SITE
LOCATED IN: MASCOOT,
KNOX COUNTY, TENNESSEE
CONSTRUCTION DOCUMENTS
PREPARED FOR U.S. CELLULAR
U.S. CELLULAR SITE NO: 223485

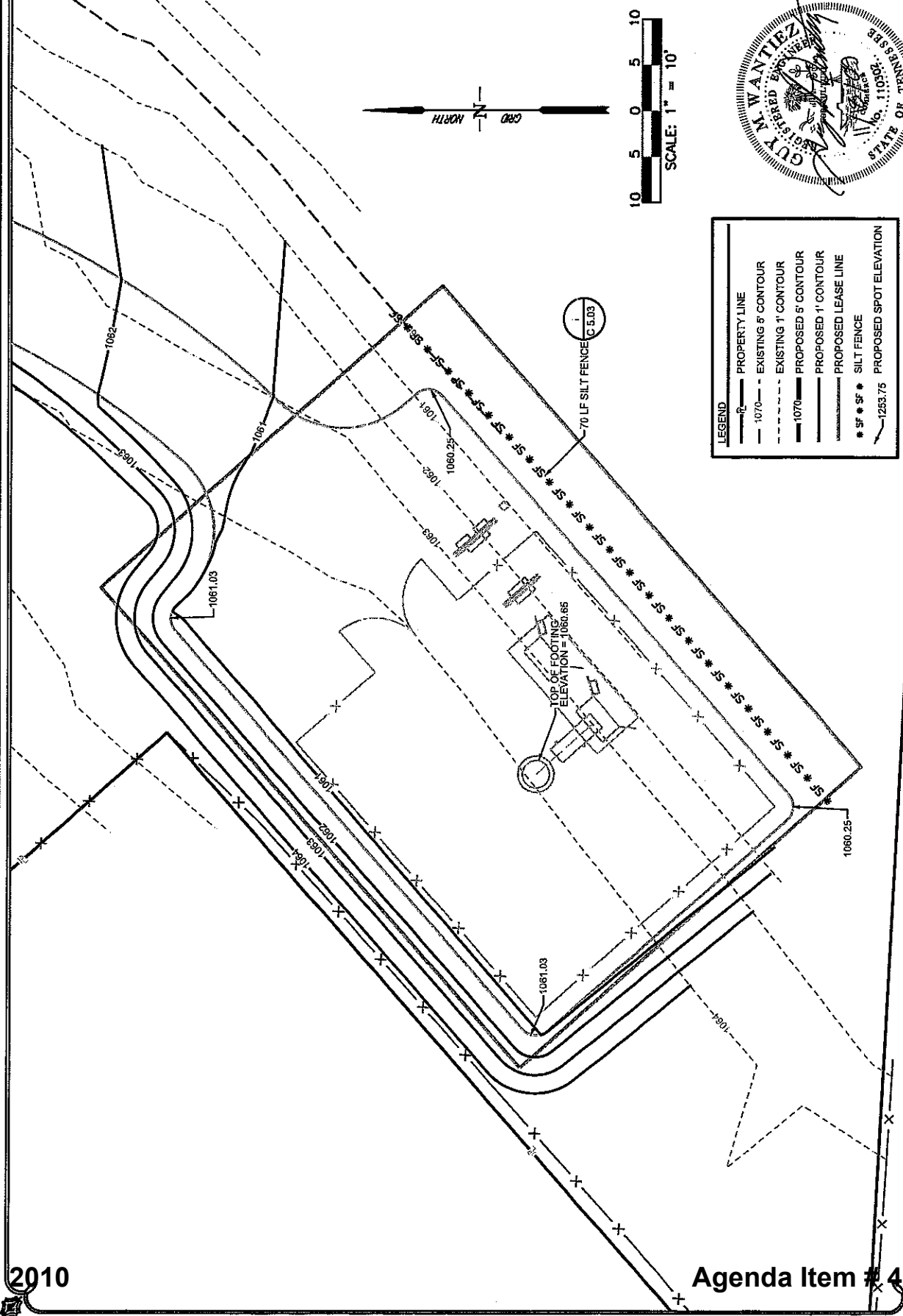
VISION
ENGINEERING AND DEVELOPMENT SERVICES, INC.
209 PRINCE STREET
HARRISBURG, TN 37068
PHONE: (661) 774-7771
FAX: (661) 774-7772
www.visioneda.com

US Cellular
8731 COBBLE ROAD
KNOXVILLE, TN 37922
(865) 777-2030

DATE: 11-18-09
REVISIONS:
SHEET # **C3.01**




| LEGEND | |
|--------|-------------------------|
| | PROPERTY LINE |
| | EXISTING 5' CONTOUR |
| | EXISTING 1' CONTOUR |
| | PROPOSED 5' CONTOUR |
| | PROPOSED 1' CONTOUR |
| | PROPOSED LEASE LINE |
| | SILT FENCE |
| | PROPOSED SPOT ELEVATION |



ACCESS ROAD PROFILE
 'SKAGSTON' TOWER SITE
 LOCATED IN: MASCOOT,
 KNOX COUNTY, TENNESSEE
 CONSTRUCTION DOCUMENTS
 PREPARED FOR U.S. CELLULAR
 U.S. CELLULAR SITE NO: 223485

ENGINEERING AND DEVELOPMENT SERVICES, INC.
 525 PINEBERRY STREET
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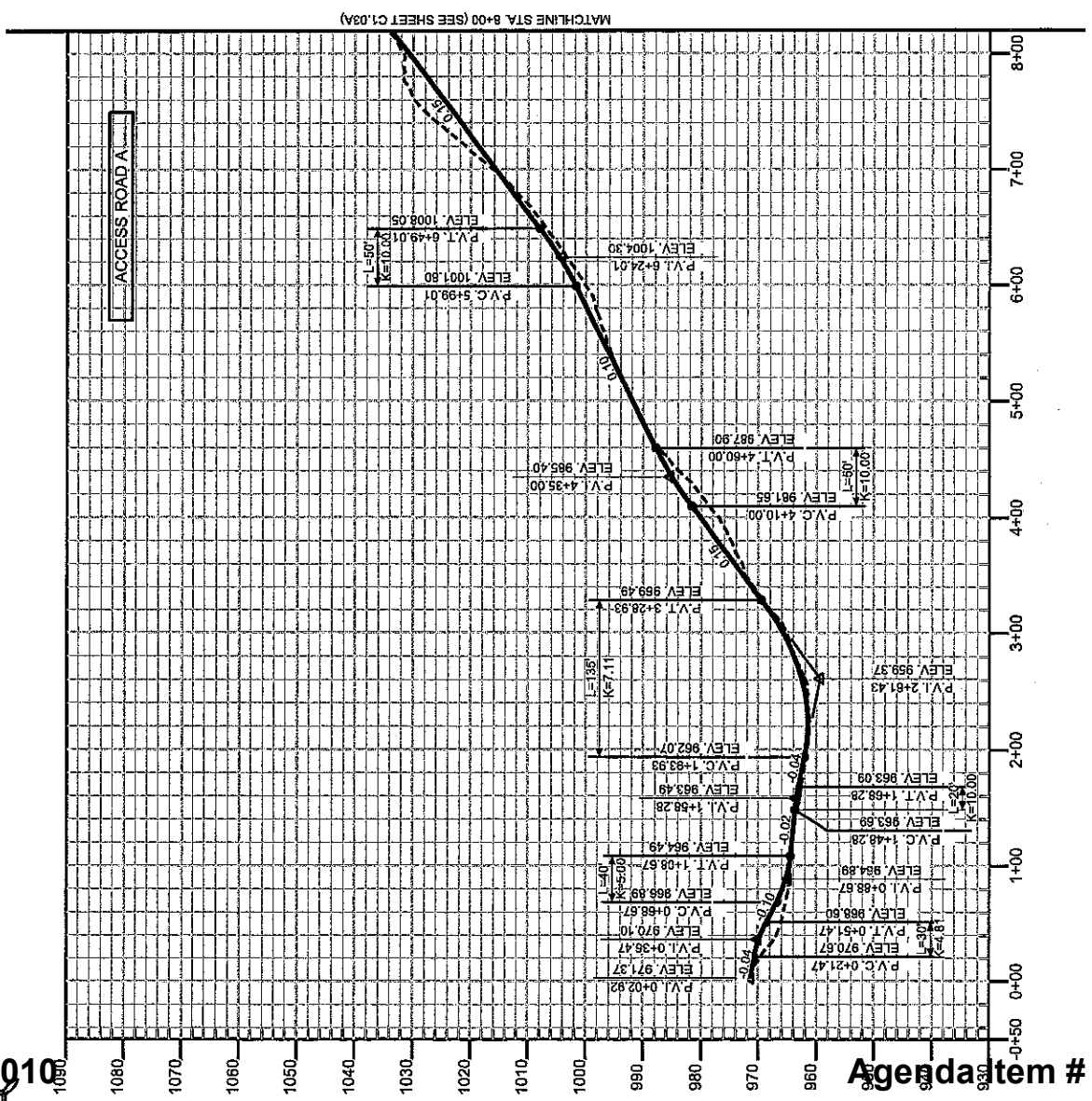


DATE: 11-18-08
 REVISIONS: 03-25-10
 SHEET # C1.03

9731 CORDILL ROAD
 KNOXVILLE, TN 37832
 (865) 777-7330



SCALE:
 HORIZONTAL: 1" = 100'
 VERTICAL: 1" = 20'



ACCESS ROAD PROFILE
 SKAGSTON TOWER SITE
 LOCATED IN: MASCO,
 KNOX COUNTY, TENNESSEE
 CONSTRUCTION DOCUMENTS
 PREPARED FOR U.S. CELLULAR
 U.S. CELLULAR SITE NO. 223485

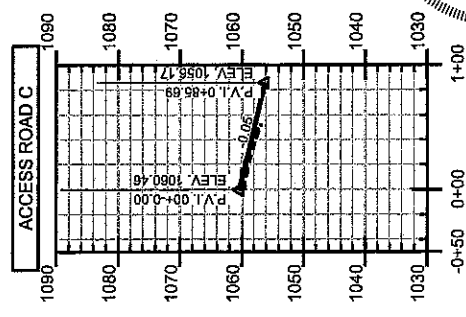
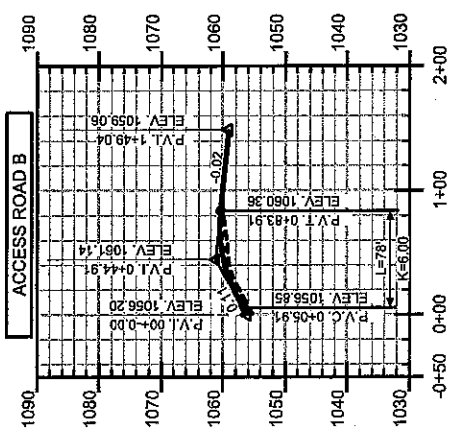
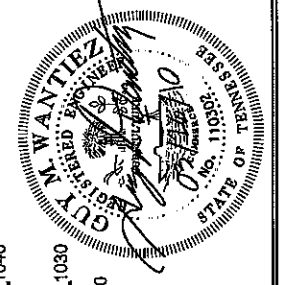
VISION
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 305 GAYNES STREET
 MEMPHIS, TN 38102
 PHONE: (901) 724-7721
 FAX: (901) 724-7721
 www.visioned.com

DATE: 03/28/10

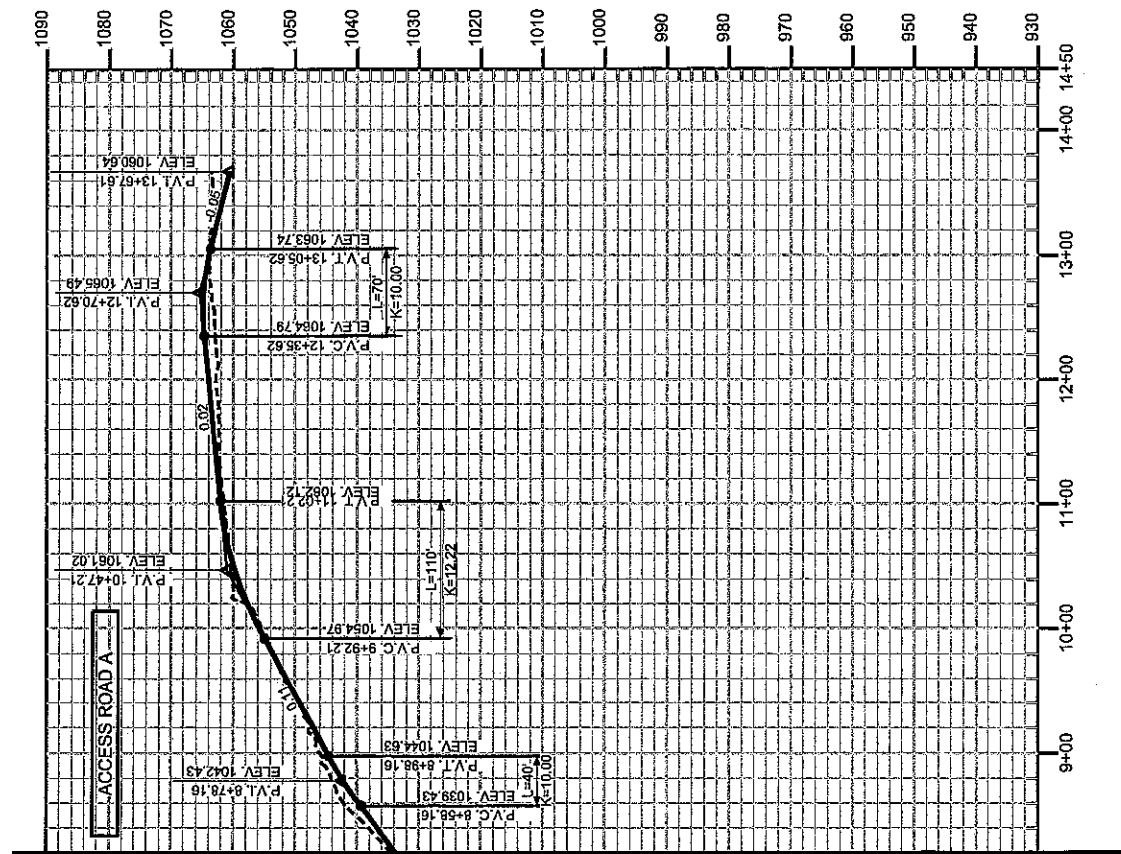
REVISIONS:

SHEET # **C1.03A**

874 COSGILL ROAD
 KNOXVILLE, TN 37932
 (615) 777-7030



SCALE:
 HORIZONTAL: 1" = 100'
 VERTICAL: 1" = 20'

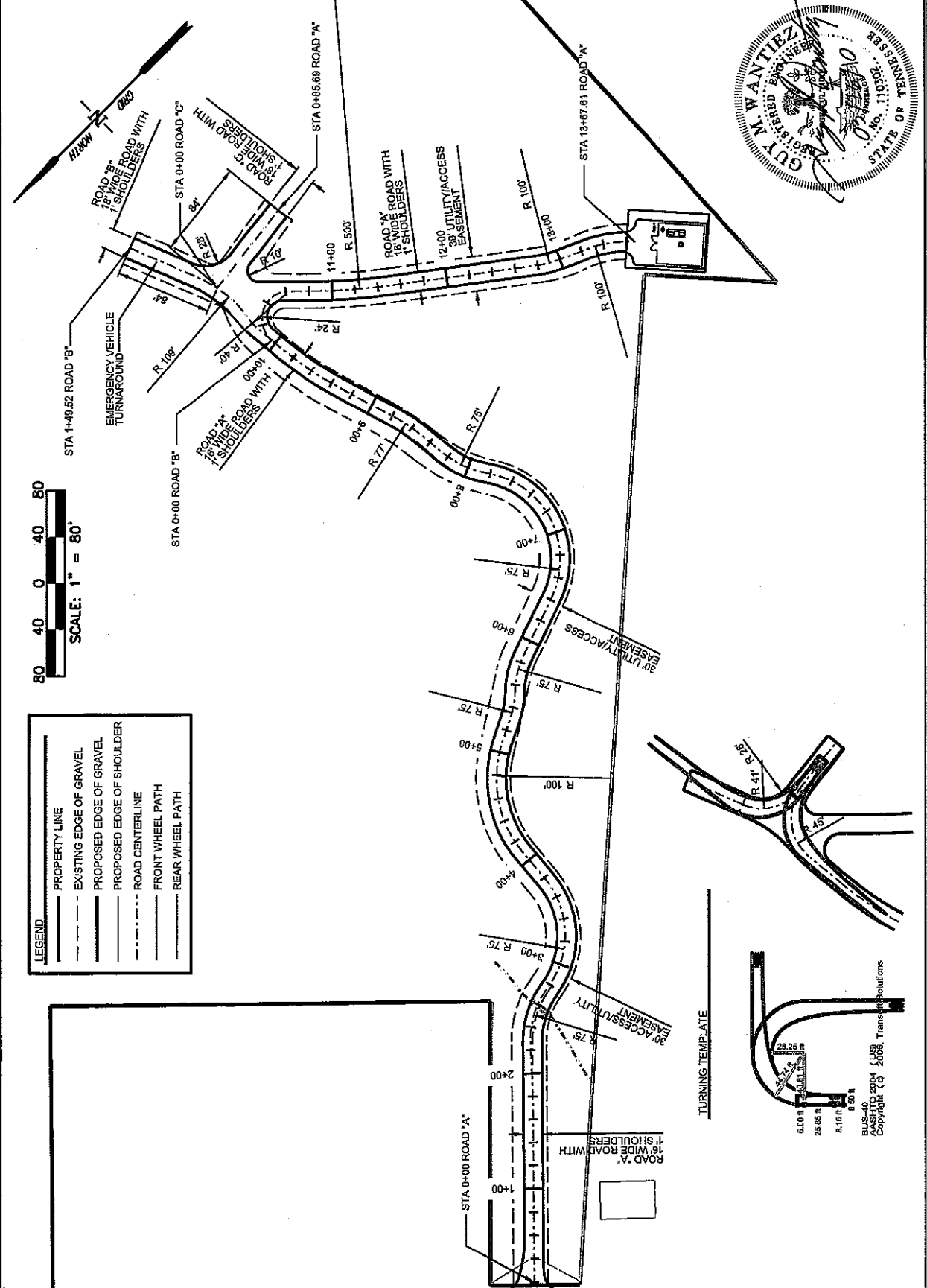
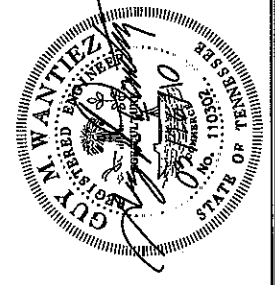


MATCHLINE STA. 8+00 (SEE SHEET C1.03)

EMERGENCY ACCESS PLAN
 *SKAGSTON TOWER SITE
 LOCATED IN: MASCOIT,
 KNOX COUNTY, TENNESSEE
 CONSTRUCTION DOCUMENTS
 PREPARED FOR U.S. CELLULAR
 U.S. CELLULAR SITE NO: 223485

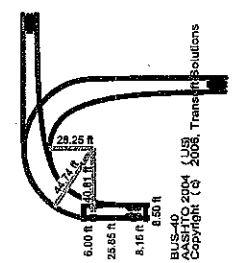
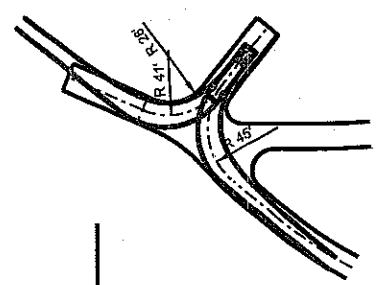
VISION
 ENGINEERING AND DEVELOPMENT SERVICES, INC.
 208 PERRICK STREET
 KENTUCKY, TN 37622
 PHONE: (615) 777-4387
 FAX: (615) 777-4388
 WWW.VISIONDESIGN.COM

DATE: 11-18-09
 REVISIONS: 03-25-10
 SHEET # **C1.04**



LEGEND

| | |
|-------|---------------------------|
| — | PROPERTY LINE |
| - - - | EXISTING EDGE OF GRAVEL |
| - - - | PROPOSED EDGE OF GRAVEL |
| - - - | PROPOSED EDGE OF SHOULDER |
| - - - | ROAD CENTERLINE |
| - - - | FRONT WHEEL PATH |
| - - - | REAR WHEEL PATH |



TURNING TEMPLATE

BUS-40
 EAST-10
 Copyright © 2008, TransSolutions

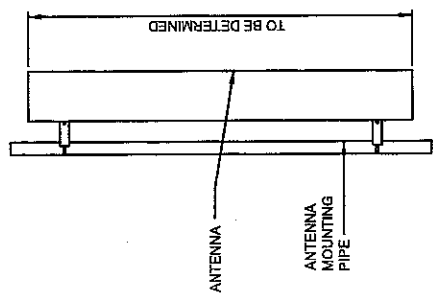
US Cellular
8731 COBBLE ROAD
KNOXVILLE, TN 37932
(865) 777-7030

VISION
ENGINEERING AND DEVELOPMENT SERVICES, INC.
222 PRINCE STREET
KNOXVILLE, TN 37902
PHONE: (615) 977-8597
FAX: (615) 977-8597
www.visioneds.com

DATE: 11-16-08
REVISIONS:
SHEET # **C2.01**

TOWER ELEVATIONS
SKAGGSTON TOWER SITE
LOCATED IN: MASCOI,
KNOX COUNTY, TENNESSEE
CONSTRUCTION DOCUMENTS
PREPARED FOR U.S. CELLULAR
U S CELLULAR SITE NO: 223485

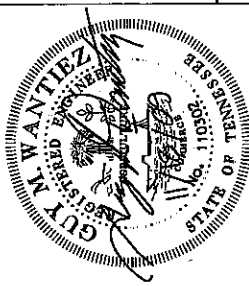
PROJECT #
081210-42
EJM



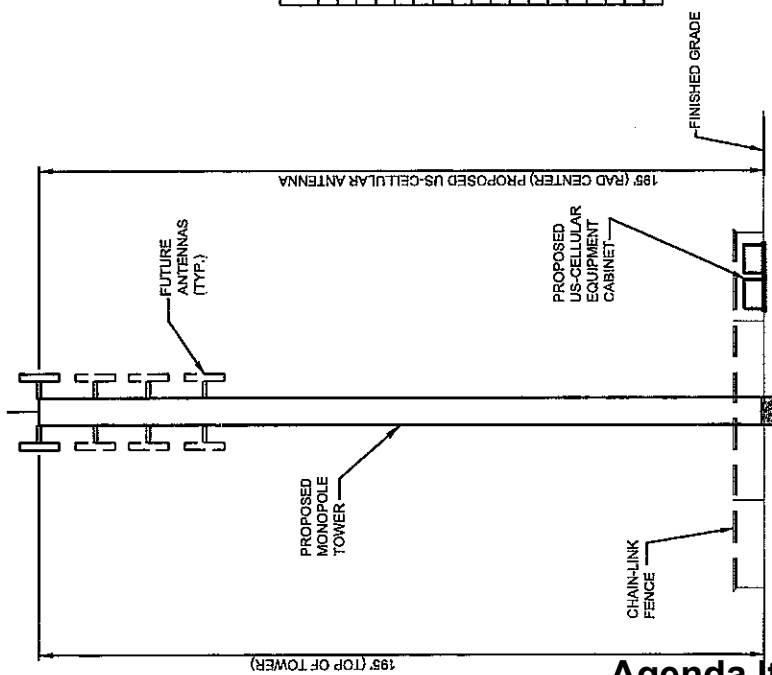
2 ANTENNA SECTION
NTS
C2.01

| POS # | ANTENNA ID | ANTENNA MODEL | GAIN | ANT. ERP | PA SETTING | MECH. DT | ELEC. DT | ANT. HEIGHT | AZIMUTH | CABLE LENGTH | CABLE SIZE |
|-------|------------|---------------|------|----------|------------|----------|----------|-------------|---------|--------------|------------|
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| 18 | | | | | | | | | | | |

NO INFORMATION PROVIDED TO ENGINEER



3 ANTENNA SCHEDULE
NTS
C2.01



1 TOWER ELEVATION
NTS
C2.01

US CELLULAR

Telecommunications Tower Site Review

USE ON REVIEW APPLICATION # 4-A-10-UR

CONSULTANT'S SUMMARY

Skaggston Site

Knoxville County

Location: 9840 Old Rutledge Pike near Rutledge Pike and House Mountain Recreational Area

Proposed Tower Height: 195 foot monopole

Address: 9840 Old Rutledge Pike
Knoxville, Tennessee

District: # 8 County **Map Number:** 032 **Parcel** 112.07

Use: Telecommunications antenna support structure

Zoning: A (Agricultural)

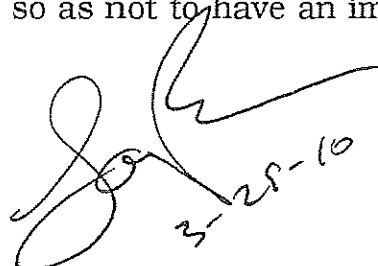
Land Planning Area: LDR, SLPA---Planned Growth

Variances and waivers: None required, however, applicant requests a variance on the landscaping requirements of the Ordinance since the site is located in a heavily wooded area and the equipment facility base cannot be seen from a public road.

Need: The applicant is US Cellular a licensed cellular carrier by the Federal Communications Commission and possibly other users. The applicant has proven a need for the site for its coverage requirements.

Instant Proposal: Construct a 195 foot monopole type support structure.

Consultant's Recommendation: The site and application meets the requirements of the Ordinance, and is the replacement for the original application found in 8-I-09-UR in which we requested the applicant to seek a site across Rutledge Pike so as not to have an impact on the House Mountain recreational area.



A handwritten signature in black ink, followed by the date "3-25-10".

**REPORT TO
METROPOLITAN PLANNING COMMISSION**

for

Proposed Telecommunications Tower Site
Located at 9840 Old Rutledge Pike
Knoxville, TN known as

SKAGGSTON SITE

US CELLULAR

UOR 4-A-10-UR

COMPLIANCE WITH

THE MPC TELECOMMUNICATIONS FACILITY ORDINANCE

4/01/2010

The proposed site for the applicant is a 195 foot monopole antenna support structure (including antennas and lightning rod) to be located east of Rutledge Pike Road in Northeast Knox County. The supporting material from applicant has been reviewed for technical and Federal/State legal compliance As well as with the Knox County Wireless Communication Facilities Plan from 2002. This is a new telecommunications site. This site is known as a fill site (explained in the report). This site is the replacement site for the original application found in 8-I-09 UR from last year which was proposed for the opposite side of Rutledge Pike but within the House Mountain Recreational area. The MPC recommended moving to the other side of Rutledge Pike so as not to impact the House Mountain Recreational area and the applicant agreed, thus this site application.

REQUESTED

1. **Location.** The location is within the **County** of Knox in **District 8** and is located on **Tax Map Number 032 Parcel 112.07**
2. **Zoning.** A (Agricultural)
3. **Land Planning Area:** LDR, SLPA---Planned Growth
4. **Proposed Tower Height:** 195 foot monopole
5. **Address:** 9840 Old Rutledge Pike
Knoxville, Tennessee

3. **Tower height.** The requested height is 195 feet above ground level will support up to 4 additional telecommunications carrier antennas for a total of 5 users. Lighting will **not** be required on this structure.

4. **Variances.** The set back requirements in Article 4.92 of the Ordinance for Knox County for "A" sites requires that the structure be set back a minimum distance of 110% of the structure height or in this case 215 feet from the nearest dwelling unit (residence). The proposed site meets that requirement and no variances are required as the nearest dwelling is more than 500 feet from the base of the monopole. However, the applicant is requesting a variance on section 4.92.02(4) requirement for landscaping the site. The proposed site is within a heavily wooded area and the base area cannot be seen from a public road as the applicant proposes to leave as much of the natural vegetation in place as possible which will accomplish the desired screening.

5. **Site.** This application is for the construction of a new monopole type antenna support structure to be located in a heavily wooded parcel and is on a ridgetop overlooking Rutledge Pike from the east and facing House Mountain.

6. **Use.** This antenna support structure will be used for telecommunications with the present state of the art communications technology using PCS and cellular communication sources. The applicant is US Cellular Corporation and there are 4 possible additional telecommunications users for the facility.

7. **Setbacks.** The setback requirements are that the facility must be 110% height of the tower from any dwelling unit. The applicant meets that requirement and no variances are required.

8. **Height.** The proposed structure is for 195 feet with no lighting required.

EVALUATION

The following is a list of items reviewed:

Zoning Ordinance for Knoxville Tennessee by Metropolitan Planning Commission---Telecommunication Facilities Section (as amended thru October 1, 2004)

Knoxville City Wireless Communications Facilities Plan dated 2002.

Check for other existing towers capable of supporting the load and elevation clearance requested by the applicant herein and within 1 mile radius of site.

Check for Antenna Support Structure stress analysis for co-location users' equipment support

Review support structure drawings and specifications with applicant

Review FAA lighting and marking requirements and proposals

Review FCC requirements regarding signal coverage, towers and lighting

Review applicant's justification for site in compliance with the FCC's requirements for telecommunication company providers compliance with required coverage for the use of the general public.

Review Site plan by applicant
Check Zoning

Check setbacks for building and antenna support structure

Check for compliance with Wireless Communication Facility Plan

Check proximity to other structures and district boundaries

Check nature of surrounding land uses
Check surrounding foliage and tree coverage

Check design of tower for esthetic changes

Check height requirements necessary for coverage

Check separation from other towers

Check frequencies proposed for possible interference to TV and radio reception in the immediate vicinity of the structure.

DISCUSSION

I visited the proposed tower site that is a part of this review and discussed the area with the applicant.

The site elevation at this location is 1060 feet. It is located in a heavily wooded timberland across Rutledge Pike from the House Mountain Recreational Area.

The request is for a 195 foot monopole of which US Cellular will use the top 15 feet and the additional usable lower 100 feet is for other carriers' expansion.

This a "fill" site. By that is meant that the coverage is inadequate in the area at the present from present facilities in the area and that the site is to be used as primary signal coverage to "fill in" a hole in the present

coverage caused by the rugged terrain surrounding the proposed site.

The site is a good elevation location and by the addition of a cell site here, it would probably eliminate the need for other sites nearby.

The proposed structure should not affect adjacent property as it is on a parcel of land that is agricultural and is heavily wooded. The site would be screened from any area roads by the woods.

It is located in an A zoned area.

This site is a replacement site for the original request in 8-I-09-UR made last year for the opposite side of Rutledge Pike and within the House Mountain Recreational Area and which the MPC suggested moving across Rutledge Pike to the East side so as not to have an impact on the House Mountain Recreational Area. The applicant has reapplied and followed the suggestion.

Using the MPC's Wireless Facilities Matrix the site qualifies as a Neutral site in that it is less than 199 feet and located on a rural heavily wooded area. While it is located on a ridgetop that would normally place it in a discouraged area, it is located a significant way from Rutledge Pike and the impact on the area should be minimal.

The proposed access road to the site rises from 917 feet to 1059 feet in a little over 1050 feet. The grade along the road varies between 10 and 15%. This may create a problem for any emergency vehicles if the road is gravel as proposed. Others will have to make any determination in this regard.

There are no other antenna support structures within 1.75 miles of this site and reviewing that site, the coverage needed for this area could not be achieved using that tower.

DISCUSSION RE FACILITIES PLAN

The Facilities plan is a guideline adopted by the MPC in 2002 for the placement and appearance of wireless communications facilities. The following discussion is based on this application and how it relates to the Plan. The plan is an advisory plan and not a legal requirement.

(1) **View Protection**--The structure (195 feet) coupled with no lighting requirements and even though located near the House Mountain Recreational Area, and being a monopole should have no impact on the view aesthetics of the area.

(2) **Land Use Compatibility**---The proposed site is on a ridgeline, but the structure and associated building/facilities would be compatible with the local land use and the surrounding area is wooded. The site will be unmanned and will have no impact on noise, traffic or air pollution.

(3) **Design Compatibility**---The proposed location in a heavily wooded area would blend in with surrounding agricultural land usage and design. The new structure will be a monopole type structure less than 199 feet and which is one of the least obtrusive type antenna support structures from a visibility viewpoint.

(A) **Opportunity Area**---This location is Neutral and located in an opportunity area of the Matrix.

SUMMARY

(1) The proposed antenna support structure is a 195 foot monopole including antennas. Lighting will NOT be required for this structure by the FAA due to its proposed height.

(2) A review of the structure stress analysis on the proposed structure and specifications support the use of the monopole by four other potential users in the future.

(3) The structure design meets or exceeds FCC and EIA requirements.

(4) The area surrounding the site is heavily wooded and zoned Agricultural. There are no residences within 500 feet of the tower.

(5) There is no general use technology (such as satellite communications) that is available at the present time nor in the immediate future that would negate the need for the structure. However, should such a technology become available and the structure of no further use, the Ordinance at Article 4.92 requires it to be removed.

(6) The proposed equipment housing facility is an outdoor cabinet and will have no impact on the aesthetics of the adjacent land uses. The landscape plan indicates that the fenced area will be surrounded by wooded vegetation that is presently existing.

(7) The applicant has received authorization from the various governmental agencies, including the Federal Communications Commission, to provide communication service to the citizens of Knoxville, Tennessee.

(8) The requested site will have minimal impact on the community involved by its very location.

(9) There are no other antenna support structures within 1 mile of the proposed site that are usable for the coverage required.

(10) There are no waivers required but the applicant is requesting a variance on the landscape requirements in 4.92.02(4) in that the site is located in a heavily wooded area and the base and equipment facilities cannot be seen from a public road due to the vegetation.

(11) The proposed site and structure will have no environmental impact within the federal guidelines.

(12) Assuming that there are 4 carriers operating cellular or PCS transmitters/receivers at this site and all are operating at the same time, the radiation produced by the combination of all the users at the same time using the standards and protocols proposed and used by the carriers today, will be considerably below that established by the Federal Communications Commission and the EPA as creating any danger to humans or animals.

(13) There is a need for the structure in this area to provide for the wide spectrum wireless internet service and for other wireless voice and data services to be provided under government regulation by the various proposed carriers who plan to use the site.

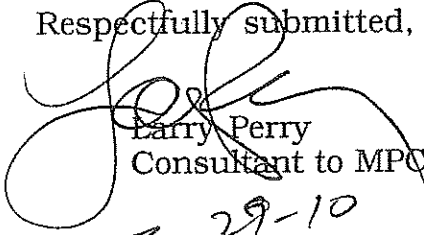
(14) **Access road concern.** I have a concern about the grade of the access road that in some cases exceed 11%. This grade may be beyond the grade considered by the Knox County Emergency Management staff as a safe grade for emergency vehicles on a graveled road and the applicant may have to pave a portion to meet the Emergency requirements but that is for others to evaluate.

(15) There are no other antenna structures within 2 mile radius that would allow the coverage needed by the applicant for this area.

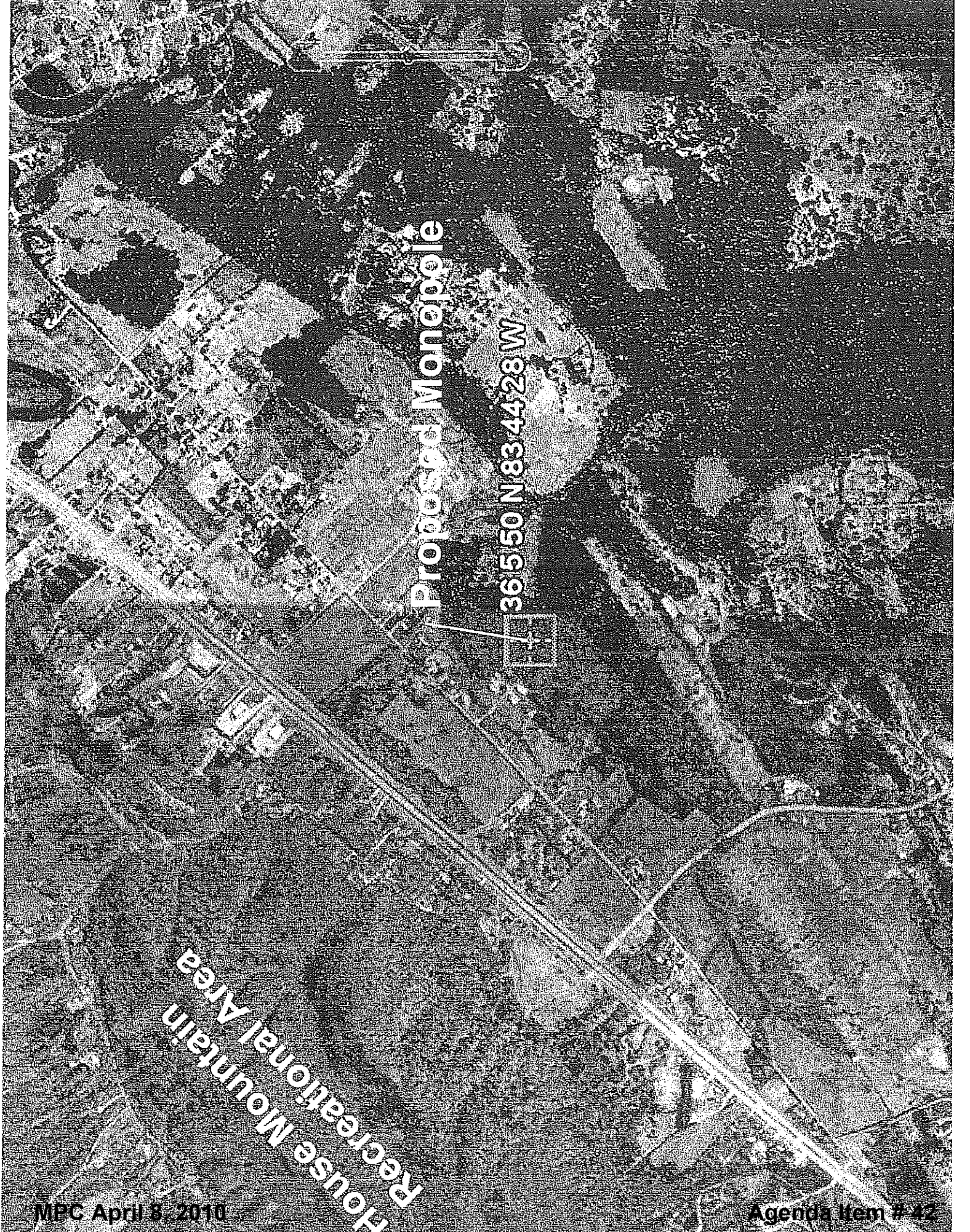
RECOMMENDATION

In light of the analysis and review of documents, it is my professional opinion that the applicant meets all requirements of the Ordinance and the federal requirements.

Respectfully submitted,



Larry Perry
Consultant to MPC
3-29-10



Proposed Monopole


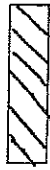

36°50'N 83°44'28"W

**House Mountain
Recreational Area**

SKAGG TOWN
 US Cellular 4-A-10-UR

EXHIBIT 7.
 LAND USE/WIRELESS FACILITIES MATRIX

| | Co. Location | Stealth Structure | Low Monopole Below 90' | Moderate Monopole 90'-150' | Tall Monopole 150'-199' | Lattice Tower | Guyed Tower |
|--------------------------|--|-------------------|------------------------|----------------------------|-------------------------|---------------|-------------|
| Opportunity Areas | Industrial/Business Park | | | | | | |
| | Industrial Use | | | | | | |
| | Pre-approved Government-owned Property | | | | | | |
| | Urban Expressway Corridor | | | | | | |
| | Rural/Heavily Wooded | | | | | | |
| | Pasture | | | | | | |
| | Central Business District | | | | | | |
| Sensitive Areas | Office/Commercial Corridor | | | | | | |
| | Shopping Center | | | | | | |
| | Within 500' of a residence | | | | | | |
| Avoidance Areas | Rural Residential | | | | | | |
| | Non-residential Properties in a Residential Area (church, cemetery, library, etc.) | | | | | | |
| | Multi-family Residential | | | | | | |
| | On Hill Below Ridgeline | | | | | | |
| Avoidance Areas | Conservation Open Space | | | | | | |
| | Scenic Highway | | | | | | |
| | Public Park | | | | | | |
| | Ridge Top/Ridge Line | | | | | | |
| | Scenic Vista | | | | | | |
| | Historic District/Site | | | | | | |
| | Single-family Residential | | | | | | |
| Vacant Residential Lot | | | | | | | |

Encouraged  Neutral  Discouraged 

KRAMER RAYSON LLP
ATTORNEYS AT LAW

POST OFFICE BOX 629
KNOXVILLE, TENNESSEE 37901-0629

SPECIAL COUNSEL
SHANNON D. COLEMAN

OF COUNSEL
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HUGH W. MORGAN
G. WILSON HORDE

OFFICES
FIRST TENNESSEE PLAZA, SUITE 2500
800 SOUTH GAY STREET
KNOXVILLE, TENNESSEE 37929
TELEPHONE 865 525-5134
TELECOPIER 865 522-5723

105 DONNER DRIVE, SUITE B
OAK RIDGE, TENNESSEE 37830
TELEPHONE 865 220-5134
TELECOPIER 865 220-5132

R.R. KRAMER (1888-1966)
CARTER B. WALL (1915-1968)
ANDREW JOHNSON (1918-1985)
JACKSON C. KRAMER (1921-1993)
R. ARNOLD KRAMER (1918-1993)

E. H. RAYSON
JOHN B. RAYSON
JOHN T. JOHNSON, JR.
WARREN L. GOOCH
WAYNE R. KRAMER
EDWARD G. PHILLIPS
THOMAS M. HALE
JACKSON G. KRAMER
BEECHER A. BARTLETT, JR.
ROBERT W. KNOLTON
JOHN C. BURGIN, JR.
CHARLES M. FINN
ROBERT A. CRAWFORD
JOHN E. WINTERS
ROBERT L. BOWMAN
CHARLES E. YOUNG, JR.
STEVEN E. KRAMER
KATE E. TUCKER
BETSY J. BECK
WILLIAM J. CARVER
J. MATTHEW BROTHERTON
BIANCA F. WHITE

February 19, 2010

Metropolitan Planning Commission
City-County Building, Suite 403
400 Main Avenue
Knoxville, Tennessee 37902

**Re: U.S. Cellular Corporation
Application for Tower Site Use-On-Review**

Dear Sir or Madam:

Please be advised that the undersigned represents U.S. Cellular Corporation ("USCC"). USCC hereby files the enclosed Use-On-Review Application and requests that it be placed on the agenda for the April 8, 2010 Metropolitan Planning Commission meeting. Such Use-On-Review Application requests approval for a proposed cellular communications monopole to be located on property owned by Patricia Woods and Arthur Harris, at 9840 Old Rutledge Pike in Knox County, Tennessee. Accordingly, enclosed herewith please find the following items:

1. Completed Application Form as signed by an authorized representative of USCC and as signed by the property owners, Patricia Woods and Arthur Harris.
2. Information Summary and Table of Contents.
3. Ten (10) copies of the Development Plan with Exhibits 1 through 14 attached.
4. USCC's check in the amount of Two Thousand Three Hundred Dollars (\$2,300.00), made payable to the Metropolitan Planning Commission. This check represents payment of (i) the \$800.00 fee for filing a Use-on-Review Application for a site in an agricultural zone that is larger than one (1) acre, and (ii) the \$1,500.00 fee for the escrow deposit relative to the Professional Engineering Consultant's fee.

As noted, USCC is proposing that a cellular communications monopole be placed on a parcel consisting of approximately thirty-three (33) acres owned by Patricia Woods and Arthur Harris at 9840 Old Rutledge Pike in Knox County, Tennessee. USCC has entered into a lease with the property owner for the proposed site.

USCC recognizes that pursuant to Article 4.92.02(1)(f) of the Knox County Zoning Ordinance, a professional engineering consultant qualified in the design and installation of wireless communications facilities may be employed to review its application. Accordingly, the One Thousand Five Hundred Dollar (\$1,500.00) escrow fee specified in the Zoning Ordinance is enclosed. USCC further understands that such fee shall not exceed One Thousand Five Hundred Dollars (\$1,500.00) in total.

USCC proposes to construct a 195 foot monopole. Since the proposed monopole will be less than 200 feet in height, FAA Regulations will not require the monopole to be lighted. In addition, as required by Article 4.92.02(1)(a) of the Knox County Zoning Ordinance, the monopole will be constructed to support at least four (4) antenna arrays for co-location purposes. USCC's letter of intent setting forth its commitment to permit co-location on the proposed monopole is included with the Application as Exhibit 5.

The monopole is proposed for this area in order to fill a radio frequency coverage gap experienced by USCC along Rutledge Pike, Old Rutledge Pike, Mine Road, Grove Road, Millertown Pike and other areas in the vicinity, and to address capacity issues on existing USCC sites. Moreover, signal hand-offs between USCC's existing sites surrounding this area are impeded because of terrain blocking and because of capacity constraints.

Radio frequency coverage maps showing coverage with and without the proposed monopole are attached to the Application as Exhibits 8 and 9.

In an effort to address tower proliferation concerns, USCC performed a search in the proposed coverage area for other existing towers on which co-location might be possible. As noted on Exhibit 2, no existing towers or other suitable structures are located within a one-mile search ring. The closest existing tower, as shown on Exhibit 2, is owned by Pinnacle Towers, LLC and is located approximately 1.75 miles from the proposed site, but USCC cannot co-locate on such tower because it is fully loaded. Such tower also holds only public service equipment and is not structurally sufficient to hold cellular antennae.

USCC also searched for other existing structures within the area of the proposed site on which co-location might be feasible. No suitable existing structures are present in this area.

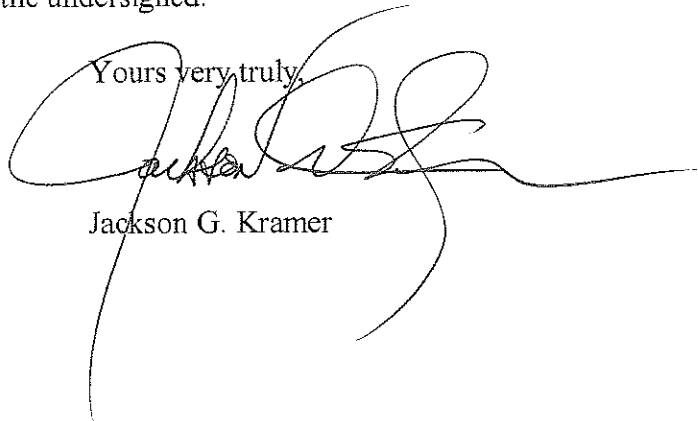
This proposed monopole is also consistent with the Goals, Objectives and Policies of the Wireless Communications Facilities Plan ("Plan") adopted by the Metropolitan Planning Commission in September, 2002. The structure is a monopole less than 200 feet in height and will not be lit. The proposed site is located on a large, agriculturally zoned parcel and is located a significant distance away from Old Rutledge Pike. As shown by the photographs of the proposed

site attached as Collective Exhibit 12, wooded areas are located between Old Rutledge Pike and the proposed site, and the base of the monopole will not be visible from Old Rutledge Pike, thereby screening a significant part of the monopole from passersby.

In addition, the proposed monopole meets the Plan's objective of being separated from any nearby residents by a distance of at least one hundred ten percent (110%) of the tower height (in this instance, two hundred fourteen and one-half (214.5) feet). As shown by Exhibit A to the Construction Drawings that are attached as Exhibit 1 to the Application, no residential structures are located within two hundred fourteen and one-half (214.5) feet of the proposed site. The closest residence to this site is located more than five hundred (500) feet from the proposed site and is separated from the site by a heavily wooded area. Thus, such residence is shielded from the proposed site by an existing stand of trees that will remain in place.

Thank you very much for your assistance in this matter. Should you need any additional information, please do not hesitate to contact the undersigned.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Jackson G. Kramer', is written over a horizontal line. The signature is fluid and cursive, with a large loop at the end.

Jackson G. Kramer

JGK/tsg
Enclosures

INFORMATION SUMMARY AND TABLE OF CONTENTS

USE ON REVIEW APPLICATION FOR

U. S. CELLULAR'S SKAGGSTON SITE NUMBER 223485

1. Site Plan - Construction Drawings, attached as Exhibit 1
2. No towers registered with the FCC as Telecommunications Towers were found on the FCC data base within a one-mile search ring (See Exhibit 2). FCC Data Base results of search ring are attached as Exhibit 3.
3. & 4. Application is made directly by the carrier -

U. S. Cellular Corporation
9731 Cogdill Road, Suite 200
Knoxville, Tennessee 37932

Contact: John Locascio, Senior Project Manager
Telephone: (865) 777-7039
Facsimile: (865) 777-7012

5. Basic Tower Information:
 - (a) U. S. Cellular Corporation ("USCC") proposes a monopole. The monopole will be located on property owned by Patricia Woods and Arthur Harris at 9840 Old Rutledge Pike in Knox County, Tennessee. The equipment compound and the base of the monopole will be enclosed within a chain link fence six (6) feet in height.
 - (b) The monopole will be one hundred ninety-five (195) feet in height.
 - (c) Since the monopole will be less than two hundred (200) feet in height, no FAA lighting will be necessary.
 - (d) The specifications for an almost identical monopole are provided in Exhibit 4. The monopole is designed and will be constructed to permit co-location for at least three additional carriers.
 - (e) The leasehold area is fifty (50) feet by seventy (70) feet. An area forty (40) feet by forty (40) feet will be enclosed by a chain link fence six (6) feet in height and topped with three (3) strands of barbed wire. See Construction Drawings, p. C1.01. The monopole and all ancillary equipment will be located within this fenced compound.

6. USCC's Letter of Intent committing itself to allow shared use of the proposed monopole is attached as Exhibit 5. Other likely candidates for co-location:
 - AT&T
 - Verizon
 - Sprint/Nextel
 - T-Mobile
 - Cricket (Leap Wireless)
7. Zoning Map:

Proposed site and adjacent properties are zoned A. Site zoning and zoning of adjacent parcels are shown on Exhibit 6. Map of larger area within one mile of proposed site to be provided by the Metropolitan Planning Commission. General map of area attached as Exhibit 7.
8. Coverage Map without proposed site - Exhibit 8
9. Coverage Map with proposed site - Exhibit 9
10. Proposed landscaping – The site is heavily wooded and pursuant to Section 4.92.02(4)(b) of the Knox County, Tennessee Zoning Ordinance, USCC believes that existing natural vegetation will achieve the required screening. See photographs of site attached Collective Exhibit 12. However, should the determination be made that additional landscaping is necessary, USCC will meet the landscaping requirements of Section 4.92.02(4) of said Zoning Ordinance.
11. Technical Justifications Narrative - Exhibit 10
12. Variances or Waivers from Ordinance - Exhibit 11
13. Photographs of proposed site – Collective Exhibit 12
14. Safety Statements - Exhibit 13
15. Photosimulation of monopole on proposed site - Exhibit 14



Data use subject to license.

Scale 1 : 50,000

TN
MN (5.3" W)



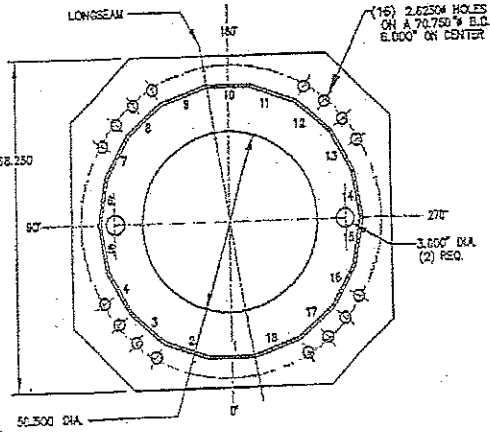
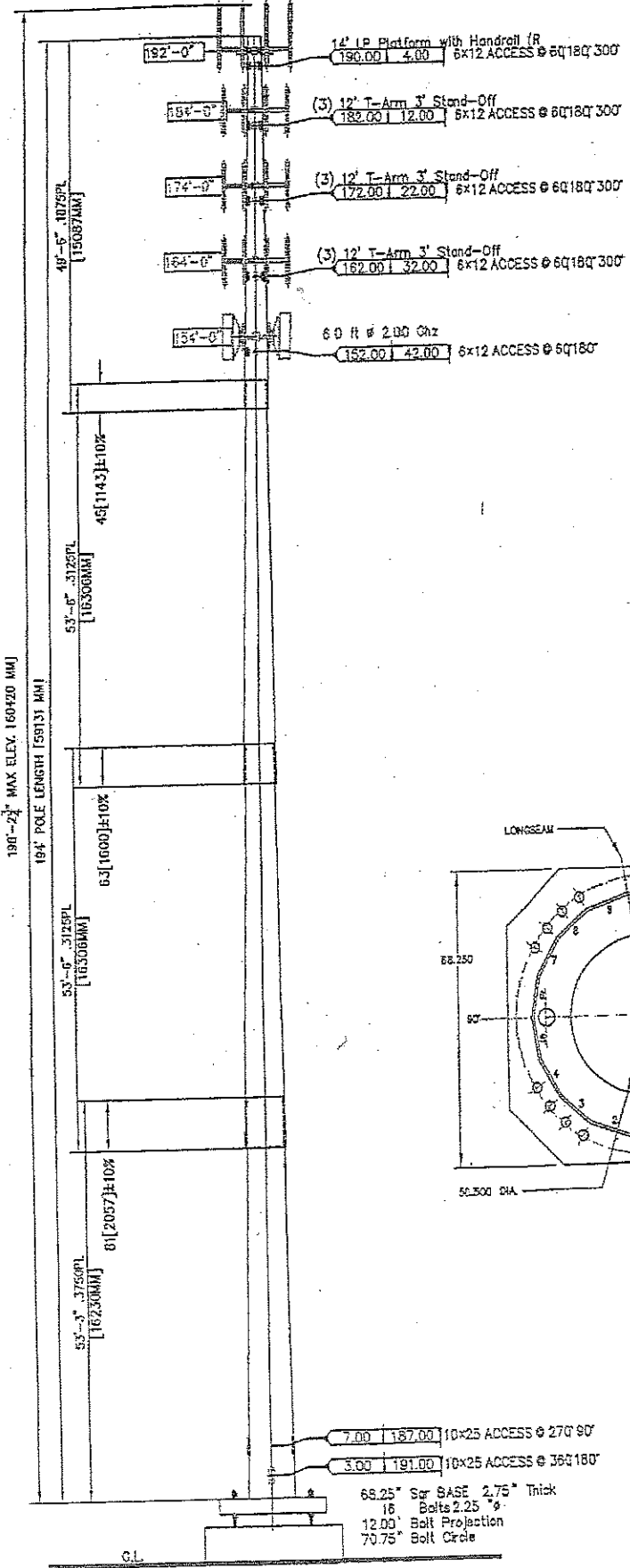
| POLE SPECIFICATIONS | |
|---------------------|------------------|
| POLE HEIGHT | 194.00 FEET |
| TAPER | .2500 IN/FT |
| POLE SHAPE | 18 SIDED POLYGON |
| ORIENTATION | FLAT-FLAT |

| Lev | Qty | Elev ft | Futura | DESCRIPTION |
|-----|-----|---------|--------|-----------------------------------|
| 1 | 1 | 192.00 | | 14' LP Platform with Handrail (R) |
| 2 | 3 | 184.00 | F | 12' T-Arm 3' Stand-Off |
| 3 | 3 | 174.00 | F | 12' T-Arm 3' Stand-Off |
| 4 | 3 | 164.00 | F | 12' T-Arm 3' Stand-Off |
| 5 | 2 | 154.00 | F | 60 ft @ 2.00 Ghz |

| Load Case | DESCRIPTION | Wind (mph) | OLF | Rad Vert | Ice | Factors Gust | Wind Cf | Wind (psf) |
|-----------|--------------------|------------|------|----------|-----|--------------|---------|------------|
| 1) | Max Wind | 70.0 | 1.00 | | | 1.69 | .65 | 21.2 |
| 2) | Max Wind Load x.75 | 60.6 | 1.00 | | | 1.69 | .65 | 15.9 |
| 3) | Everyday Operating | 50.0 | 1.00 | | | 1.69 | .65 | 10.8 |

| Load Case | DESCRIPTION | Res Axial (kips) | Base Shear (kips) | Base Moment (ft-k) | Disp DEFL (ft) | @Top SWAY (deg) |
|-----------|--------------------|------------------|-------------------|--------------------|----------------|-----------------|
| 1) | Max Wind | 46.9 | 25.8 | 3780 | 13.8 | 8.81 |
| 2) | Max Wind Load x.75 | 55.0 | 20.7 | 3126 | 11.6 | 7.47 |
| 3) | Everyday Operating | 46.4 | 13.2 | 1937 | 7.1 | 4.52 |

- 1) FULL HEIGHT STEP BOLTS
- 2) ANTENNA FEED LINES RUN INSIDE POLE
- 3) THE MONOPOLE WAS DESIGNED IN ACCORDANCE WITH EA/TA-222-F



ESTIMATED STRUCTURE WEIGHT= 36.6 Kips

US CELLULAR

Sabre
Communications Corporation

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195.00 MONOPOLE

| | | | |
|------------|---------|-------------------|--------|
| 00-00000 | SIZE | DRAWING NO. | REV |
| DATE | 30Oct07 | A 08-4005-PE | |
| DRAWN BY | | REFERENCE DRAWING | SCALE |
| CHECKED BY | TRC | | N.T.S. |
| | | | PAGE 1 |



Metropolitan Planning Commission
of Knoxville/Knox County
4th Floor, City-County Building
400 Main Avenue
Knoxville, Tennessee 37902

February 18, 2010

**Re: U.S. Cellular Corporation
Proposed Skaggston Site**

Dear Sir or Madam:

This letter is written to confirm U.S. Cellular Corporation's ("USCC") commitment to shared use of its proposed cellular communications monopole site at 9840 Old Rutledge Pike in Knox County, Tennessee.

As you are aware, Knox County Zoning Ordinance Article 4.92.02(1)(a) requires that any proposed communications tower 130 feet in height or greater be built to accommodate at least three antenna arrays for co-location purposes. USCC is proposing that the monopole on Old Rutledge Pike be 195 feet in height. USCC hereby states that it will construct the monopole to accommodate the required three antenna arrays.

Furthermore, please accept this letter as confirmation that pursuant to Knox County Zoning Ordinance Article 4.92.02(1)(b), USCC and its successors are committed to allowing shared use of the monopole at rental rates commensurate to those being charged in similar situations, so long as any additional user agrees in writing to meet reasonable terms and conditions concerning use of USCC=s monopole and so long as space on such monopole remains available.

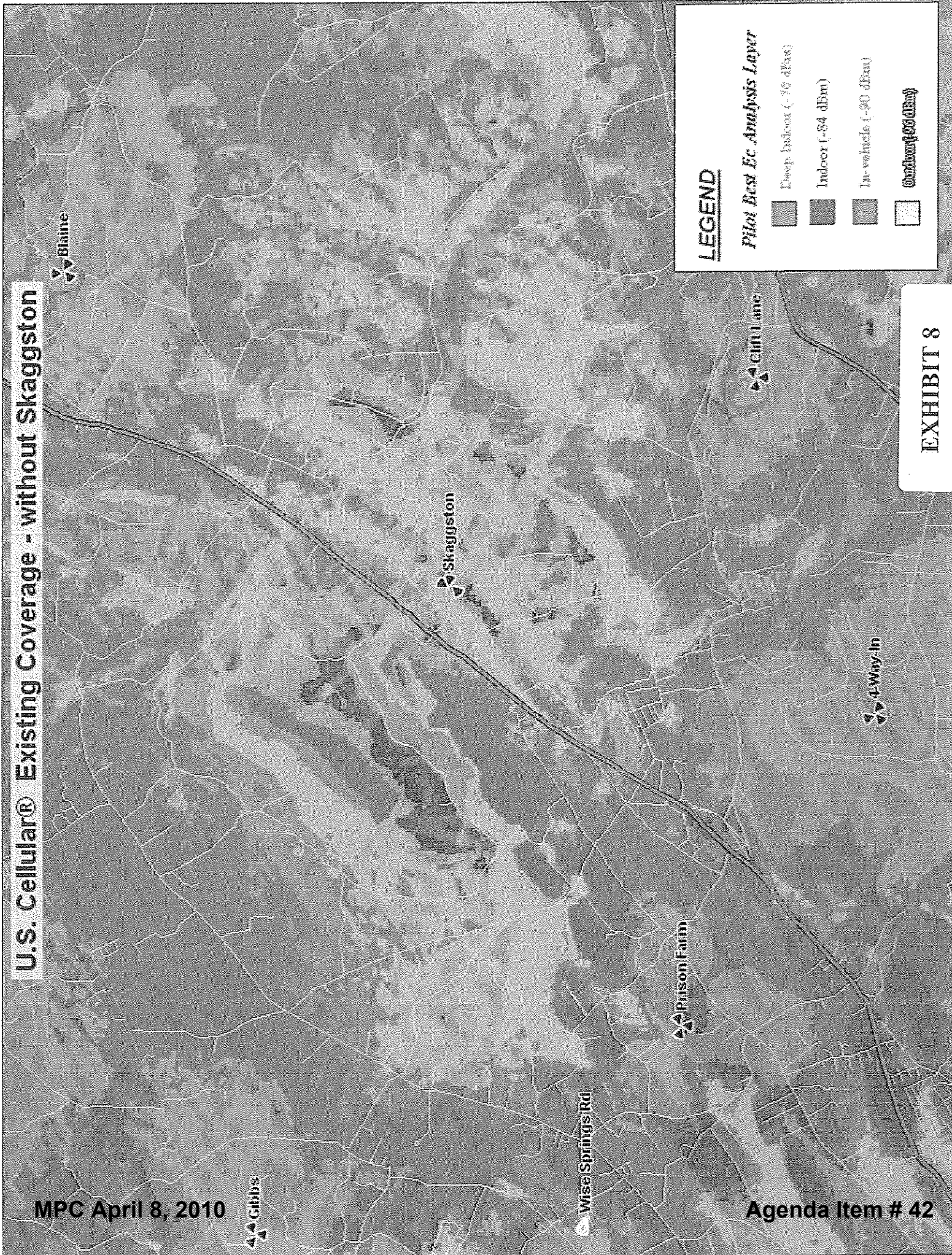
I trust that this letter is sufficient to address the inquiries posed concerning shared use. However, should you need additional information, please do not hesitate to contact either the undersigned at (865) 777-7039 or USCC=s attorney, Jackson G. Kramer, at (865) 525-5134.

Yours very truly,

A handwritten signature in black ink, appearing to read "John Locascio".

John Locascio
Senior Project Manager

U.S. Cellular® Existing Coverage - without Skaggston



LEGEND

Pilot Best Ec. Analysis Layer





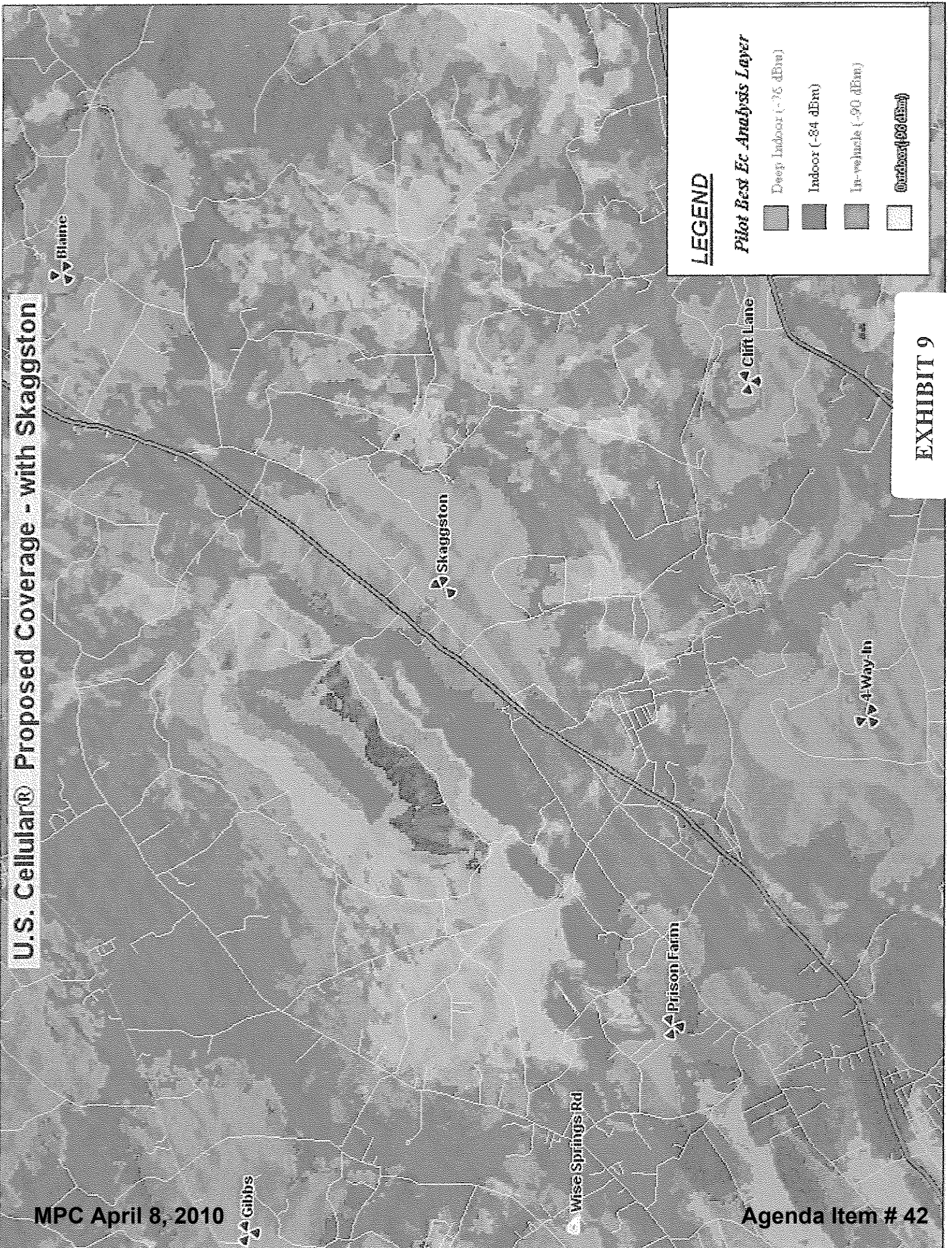
-  Deep Indoor (-70 dBm)
-  Indoor (-84 dBm)
-  In-vehicle (-90 dBm)
-  Outdoors (-95 dBm)

EXHIBIT 8

U.S. Cellular® Proposed Coverage - with Skaggston



LEGEND

Pilot Best Ec Analysis Layer





| | |
|---|-----------------------|
|  | Deep Indoor (-76 dBm) |
|  | Indoor (-84 dBm) |
|  | In-vehicle (-90 dBm) |
|  | Outdoor (-100 dBm) |

EXHIBIT 9

**TECHNICAL JUSTIFICATION FOR PROPOSED
SKAGGSTON CELLSITE 223-485**

Prepared by: Isaac Ndiaye
RF Engineer
U.S. Cellular®

Proposal: Build a digital only CDMA 2000 cellular telephone communications monopole at Old Rutledge Pike, Mascot, Knox County, Tennessee on approximately 33.28 acres of property owned by Patricia Woods and Arthur Harris.

Tower: U.S. Cellular Corporation ("USCC") proposes to construct a 195 ft. above ground level monopole. The proposed site is at 1,063 feet AMSL per the mandatory 2C survey. Because the height of the monopole is less than 200 ft. above ground level, FAA regulations do not require any lighting.

RF Justification: USCC proposes to build this facility in this area to fill in radio frequency coverage gaps as well as strengthen coverage in the areas of Rutledge Pike (Hwy-11W) between the towns of Mascot and Blaine, and along Old Rutledge Pike, Mine Road, Grove Road, Millertown Pike, Clear Springs Road, and other areas in the vicinity. This facility will also augment existing coverage, provide additional capacity, and reduce access failures and dropped calls on existing USCC sites in the area in question.

USCC's existing Blaine and Luttrell sites are located a significant distance away from the coverage gaps and thus are not able to provide adequate service. USCC's Clift Lane, Gibbs and Prison Farm sites are terrain blocked from the areas of proposed coverage improvements. In an attempt to address customer requests for better service around the Rutledge Pike and Skaggston areas, USCC is proposing this monopole at this specific location to improve the coverage in this major junction. This poor coverage, as shown by the weak signal in USCC's coverage map, can be efficiently corrected by a full cell site at this proposed location.

Co-location: The alternatives of co-locating USCC's equipment and antennas on existing structures in the surrounding area were considered. In accordance with the Knox County Zoning Ordinance, a search was performed to identify any existing registered structures within one mile of the proposed site. There were no towers found within one mile of the proposed site. The closest existing tower is located approximately 1.75 miles from the proposed site, but USCC cannot co-locate on such tower because it is a fully loaded tower and there is no available location. Further, such tower holds only public service equipment and is not constructed to hold cellular antennae. Finally, such tower's ground elevation is so high that cellular signals would cause interference, rather than connectivity, with other cell sites.

The next closest existing tower to the proposed site is located over 2.5 miles away from USCC's proposed location, and such tower also does not meet USCC's coverage needs. The tower in question is owned by SBA, Towers, Inc., and USCC is already co-located on such tower. Thus, this existing SBA location does not fill the existing coverage gaps that the Skaggston location is designed to eliminate.

The Old Rutledge Pike location is the ideal placement for this proposed monopole that will help meet the majority of USCC's customers' coverage needs in this area as well as help USCC control the radio frequency in such a way that the coverage does not interfere with USCC's existing Network.

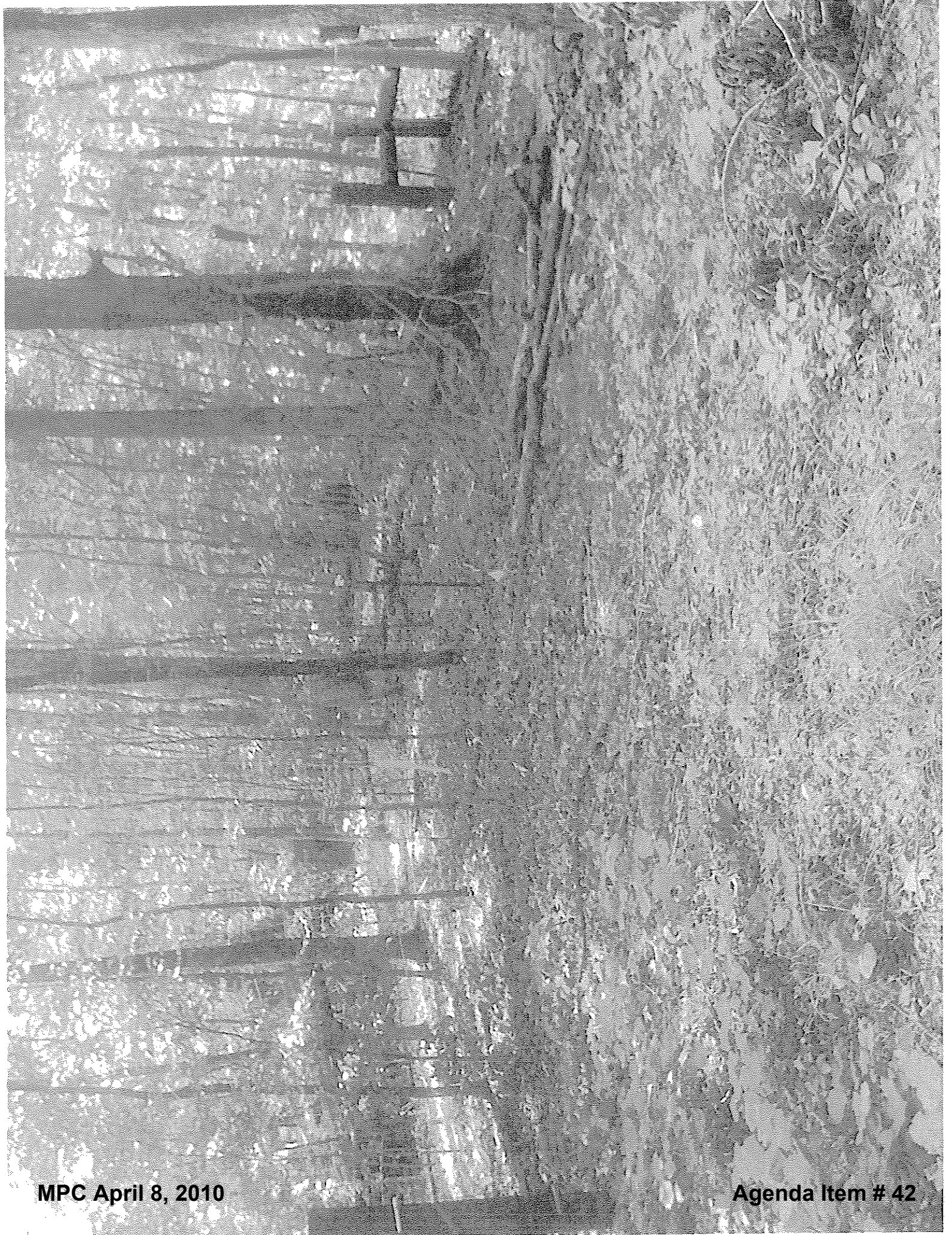
EXHIBIT 11

List of variances and/or waivers from zoning ordinance requirements:

Applicant is requesting one (1) variance from the Knox County, Tennessee Zoning Ordinance relative to landscaping.

Landscaping Variance and/or Waiver: Article 4.92.02(4) sets forth landscaping requirements for telecommunications towers. Section 4.92.02(4)(b) states that “new or existing vegetation, earth berms, existing topographic features, walls, fences, building and features other than those described above may be used to meet the requirements of these regulations if the code administrator finds that they achieve the same degree of screening as 4.a.” As can be seen from photographs of the proposed site attached as Collective Exhibit 12, the proposed site is heavily wooded. Applicant intends to leave as much natural vegetation in place as possible, and Applicant therefore respectfully submits that the existing natural vegetation will accomplish the desired screening objectives set forth in the Zoning Ordinance. Therefore, Applicant respectfully requests a waiver of the landscape requirements set forth in the Zoning Ordinance. However, should the determination be made that landscaping is required, Applicant will comply with the landscaping requirements set forth in the Zoning Ordinance.





MPC April 8, 2010

Agenda Item # 42

EXHIBIT 13

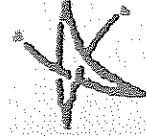
Site Plan shows that proposed site provides satisfactory protection from hazardous energies by children and passersby:

Applicant states that its site and the planned structures will more than adequately provide a barrier and act as a deterrent to any hazardous energies by children or other passersby in the area. The proposed pole and all equipment cabinets and ancillary equipment will be placed within a fenced enclosure that meets the fencing requirements of the Zoning Ordinance. The fence will be six (6) feet in height and will be topped with 3 strands of barbed wire (see Construction Drawings Page C1.01). The proposed pole will have no steps on at least the lower twenty (20) feet so as to prevent climbing.

J:\US CELLULAR\SKAGGSTON ZONING MATTER - SITE #2 (2009)\SKAGGSTON SITE #2 - EXHIBIT 13.DOC

Existing View



 U.S. Cellular

Skaggston
223485

195ft. Monopole
Simulation

View from Rutledge Pike/ Mine Road
approximately 3,050ft. west of site