

▶ **FILE #:** 8-A-11-UR **AGENDA ITEM #** 30

POSTPONEMENT(S): 8/11/2011 **AGENDA DATE:** 9/8/2011

▶ **APPLICANT:** AT & T/NSORO

OWNER(S): Kenneth & Tiffany Rogers

TAX ID NUMBER: 126 177

JURISDICTION: County Commission District 9

▶ **LOCATION:** North side Kimberlin Heights Road, east of Porterfield Road

▶ **APPX. SIZE OF TRACT:** 21.55 acres

SECTOR PLAN: South County

GROWTH POLICY PLAN: Rural Area

ACCESSIBILITY: Access is via Kimberlin Heights Rd., a major collector street with a 19' pavement width within a 40' right-of-way.

UTILITIES: Water Source: Knox-Chapman Utility District

Sewer Source: NA

WATERSHED: Holston and French Broad and Gap Creek

▶ **ZONING:** A (Agricultural)

▶ **EXISTING LAND USE:** Residence and agricultural

▶ **PROPOSED USE:** Approval of a 195 ft. monopole telecommunications tower

HISTORY OF ZONING: None noted

SURROUNDING LAND USE AND ZONING: North: Vacant land / A (Agricultural)

South: Rural residential / A (Agricultural), RA (Low Density Residential) & CA (General Business)

East: Rural residential / A (Agricultural)

West: Vacant land / A (Agricultural)

NEIGHBORHOOD CONTEXT: The proposed site is located in an agricultural/rural residential area of eastern Knox County.

**STAFF RECOMMENDATION:**

▶ **APPROVE the request for a 195' monopole telecommunications tower in the A (Agricultural) zoning district subject to 6 conditions .**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance.
2. Submitting a revised plan for the paved turnaround area at the tower site that relocates the turnaround area from the southeast corner of the tower enclosure to the area in front of and on the east side of the existing shop building. The revised plan shall be submitted to the Knox County Fire Marshal and the Knox County Department of Engineering and Public Works for review and approval prior to any permits being issued.
3. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
4. Installing the proposed evergreen landscape screen along the fenced enclosure, as designated on the

site plans, within six months of the tower becoming operational.

5. Since the FAA does not require any lighting for this facility, there shall be no lighting on the tower.

6. 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 conditions noted above, this request meets all criteria for a use-on-review in the A zoning district.

#### **COMMENTS:**

This is a request for a new 195 foot monopole telecommunications tower to be located within a 10,000 square foot lease area located on a portion of a 21.55 acre tract. The subject property is zoned A (Agricultural), and telecommunication towers are considered as a use on review in this district.

The proposed tower site will have access to Kimberlin Heights Rd., a major collector street, by a driveway that currently serves a residence and some outbuildings. The existing driveway will be upgraded to a 16' wide concrete drive which meets the utility access driveway standards of the Knox County Fire Prevention Bureau.

Staff is recommending a condition that the applicant submit a revised plan for the paved turnaround area at the tower site. As designed, any emergency vehicle would have to back up with a downhill slope at the edge of pavement. Staff recommends relocating the turnaround area from the southeast corner of the tower enclosure to the area in front of and on the east side of the existing shop building. With this design the vehicles would back up to an uphill slope.

The proposed tower is required to be located 214.5 feet (110% of the tower height) from the nearest residence. The proposed tower far exceeds that minimum standard since the nearest residence is over 500' from the proposed tower. The applicant is proposing a 7' high security fence around the tower and equipment area. The FAA does require lighting for the tower.

The applicant states that there are no existing structures in the area that can be used for antenna placement to obtain the required coverage. The tower will support up to 3 telecommunication carrier antenna arrays. AT&T will be the principal client for the tower. A letter has been submitted stating that AT&T agrees to make its facilities available to other wireless providers under reasonable terms and conditions for shared use.

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' monopole telecommunications 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 in an area made up of primarily large tracts should have minimal impact on nearby residences.

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

1. With the recommended conditions, the proposed commercial telecommunications tower at this location meets the standards required in the A (Agricultural) 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, East 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 site is in a rural 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 South County Sector Plan proposes agricultural and rural residential uses on this property. With the

minimal site alteration required for the proposed tower (access drive also serves as a driveway for existing outbuildings), the proposed development is consistent with this land designation.

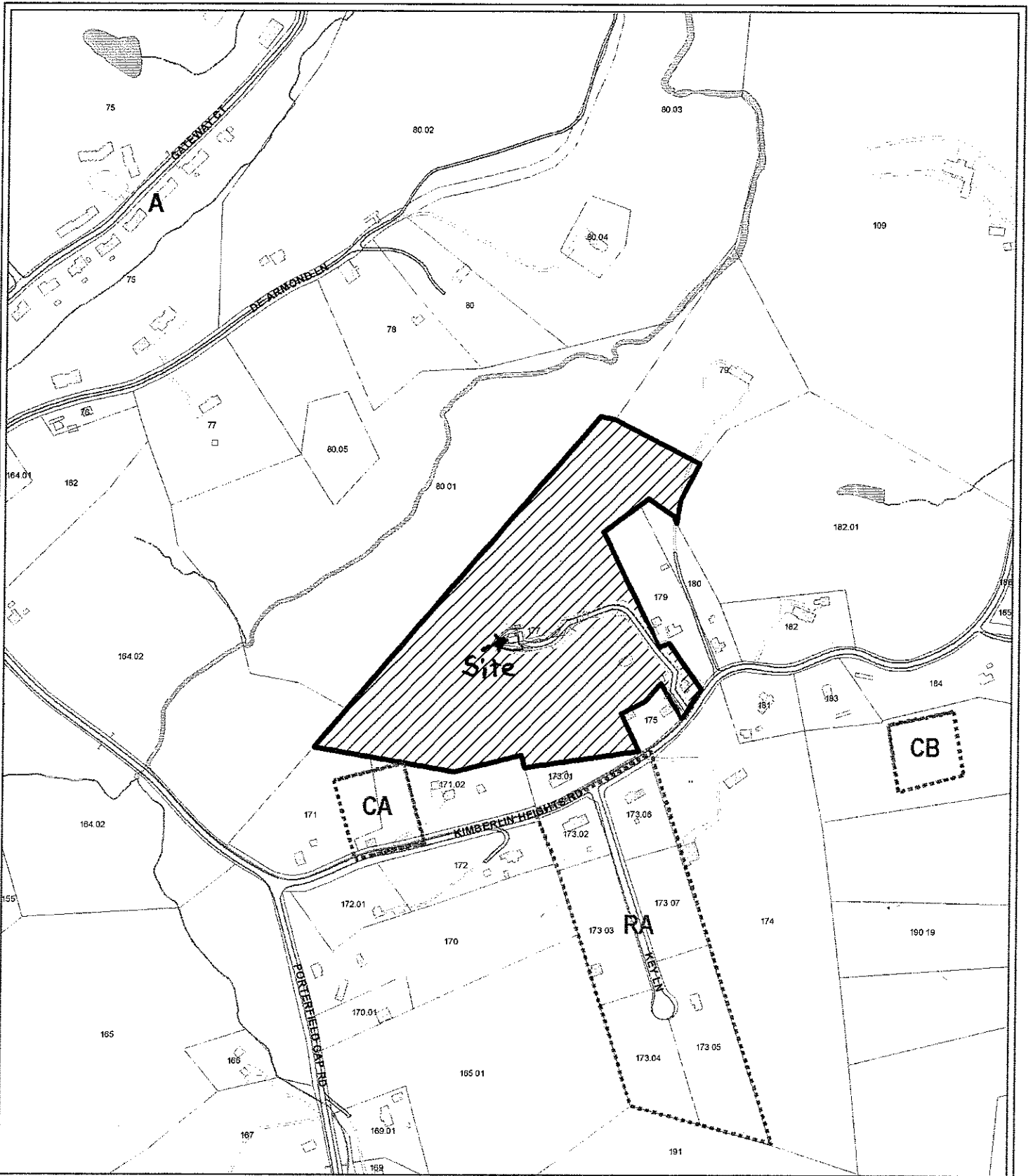
2. Under the guidelines for tower placement in the Wireless Communications Facility Plan this proposed monopole tower is considered a "Tall Monopole". The proposed tower site is located on the edge of a rural/heavily wooded area and is adjacent to pasture. The plan considers both rural/heavily wooded areas and pasture areas to be "Opportunity Areas" for the location of telecommunication towers. The Plan takes a neutral position on a tall monopole tower located at this site. The site is also within a "Sensitive Area" since it is located on a small hill below a ridgeline. The Plan also takes a neutral position for the proposed tower under this category.

3. The site is located within the Rural 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.



**8-A-11-UR  
USE ON REVIEW**

Petitioner: AT & T/SORO



Approval of a 195 ft monopole telecommunications tower in A (Agricultural)

Map No: 126

Jurisdiction: County



Original Print Date: 7/27/2011 Revised:  
Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

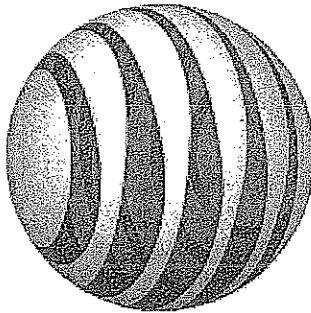
SITE NAME

KIMBERLIN HEIGHTS

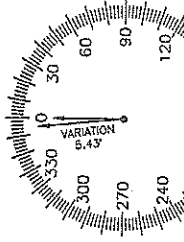
SITE NUMBER

10153392 / KN1278

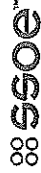
NEW EQUIPMENT AND NEW ANTENNAS  
ON A NEW 195' MONOPOLE TOWER



at&t



8-A-1-UR  
**REVISED**  
8-22-11



SITE NAME  
KIMBERLIN HEIGHTS  
SITE NUMBER  
10153392 / KN1278  
SITE ADDRESS  
2811 KIMBERLIN HEIGHTS RD,  
KNOXVILLE, TN 37920



NSORO, LLC  
520 AIRPARK CENTER DRIVE  
NASHVILLE, TN 37217

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CLIENT PROJECT NO. 888888

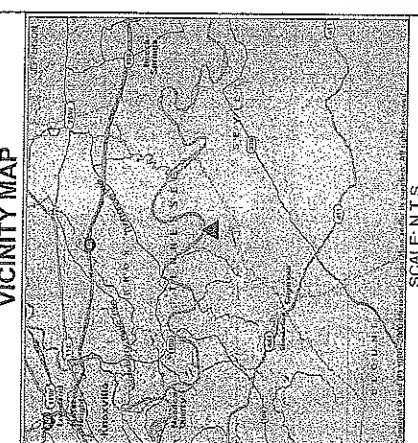
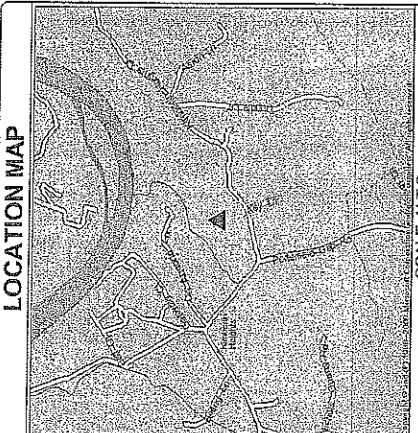
1	DESIGN	DATE	PROJECT
2	PERMIT	DATE	PROJECT
3	CONSTRUCTION	DATE	PROJECT
4	AS-BUILT	DATE	PROJECT
5	FINAL	DATE	PROJECT

DATE: Aug 03, 2011 10:32:18 USER: jk

SHEET #	TITLE SHEET	REV. #
T-1	TITLE SHEET	1
S 1 of 2	SURVEY PLAN	N/A
S 2 of 2	SURVEY PROFILE	N/A
C-1	OVERALL SITE PLAN	1
C-1.1	ENLARGED SITE PLAN	1
C-1.2	SETBACKS	1
C-2	EVERGREEN SCREENING PLAN	1
C-2.1	GRADING SPECIFICATIONS AND NOTES	1
C-3	GRADING PLAN	1
C-4	CIVIL DETAILS	1
C-5	ANTENNA ELEVATIONS & DETAILS	1
S-1	FOUNDATION PLAN	1
E-1	ELECTRICAL SPECIFICATIONS	1
E-2	ANTENNA INSTALLATION SPECIFICATIONS	1
E-3	OVERALL UTILITY ROUTING PLAN	1
E-4	COMPOUND UTILITY ROUTING PLAN	1
E-4.1	BUILDING GROUNDING PLAN	1
E-5	ELECTRICAL DETAILS	1
E-6	ELECTRICAL DETAILS	1
E-7	ELECTRICAL DETAILS	1
E-8	ELECTRICAL DETAILS	1

A/E DOCUMENT REVIEW STATUS	
TITLE	DATE
NSORO-MASTEC PROP.	
NSORO-MASTEC RF:	
A&E PROP:	
A&T RF:	
PROPERTY OWNER:	

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH CONSTRUCTION OF THE PROJECT DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.



**DRIVING DIRECTIONS**  
From the Nashville M50 at 2027 Brick Church Pike, Nashville TN 37207, go southeast on Brick Church Pike toward Southern Blvd for 0.7 miles. Turn left to merge onto I-24 E for 5.7 miles. Exit onto I-40 E. Follow I-40 east to exit 308 (Streakberry Pike). Turn right on Streakberry Pike and turn left, follow to intersection of Hwy 71/44 (Chapman Highway) and turn left. Go past underpass and turn right onto Johnson Bible College. Keep on past Johnson Bible College at bottom of topography to reach garage building. Site will be at rear of building.

**CODE COMPLIANCE**  
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES, UNLESS OTHERWISE NOTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:  
1. 2006 INTERNATIONAL BUILDING CODE  
2. 2006 INTERNATIONAL PLUMBING CODE  
3. 2006 INTERNATIONAL MECHANICAL CODE  
4. 2006 INTERNATIONAL FUEL GAS CODE  
5. 2006 IFC SAFETY CODE (IFC 101)

**DO NOT SCALE DRAWINGS**  
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 OCCURRING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

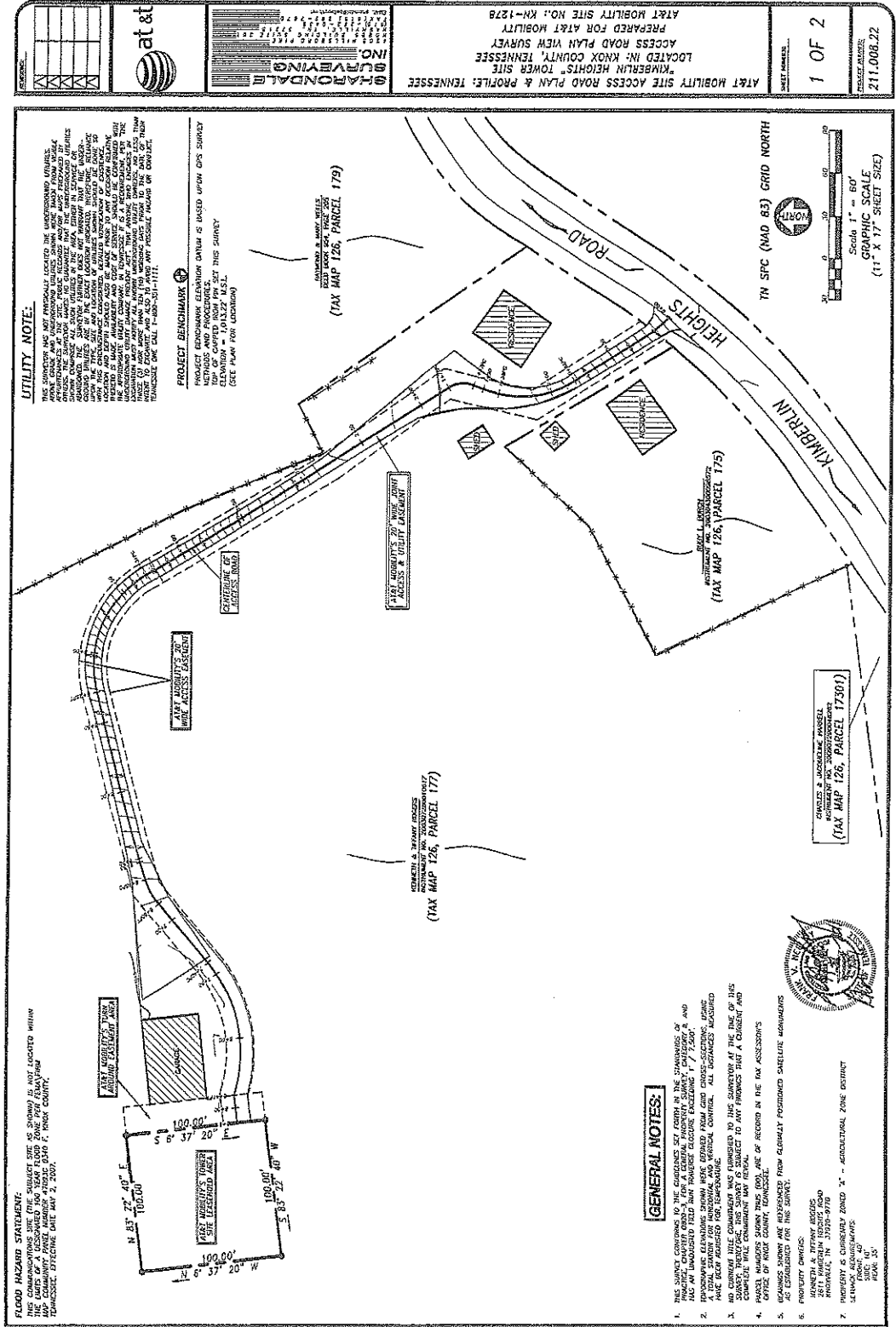
**UNDERGROUND SERVICE ALERT**  
811  
CALL 3 WORKING DAYS BEFORE YOU DIG!

PROJECT SUMMARY	
SITE NAME:	AMERICAN REDUCTION
SITE NUMBER:	10153392 / KN1278
PROPOSED TOWER TYPE:	MONOPOLE
PROPOSED TOWER HEIGHT:	195'
PROJECT LOCATION:	ROCK COUNTY
OWNER:	UNASSIGNED
OWNER'S PROJECT NUMBER:	126 177
OWNER'S PROJECT NAME:	UNASSIGNED
CLIENT ADDRESS:	2811 KIMBERLIN HEIGHTS RD, KNOXVILLE, TN 37920
DESIGNER:	35 55 0147 WOOD (GEORGETOWN) 10005 BURNING WOOD DRIVE KNOXVILLE, TN 37921
DATE:	10/14/06
SCALE:	AS SHOWN
PROJECT ADDRESS:	520 AIRPARK CENTER DRIVE NASHVILLE, TN 37217
PROJECT PHONE:	(615) 252-1644
PROJECT FAX:	(615) 252-1644
PROJECT EMAIL:	520 AIRPARK CENTER DRIVE NASHVILLE, TN 37217
PROJECT WEBSITE:	(615) 252-1644

CONSULTANT TEAM	
ENGINEER/ARCHITECT:	SSOE, INC. 2000 BURNING WOOD DRIVE NASHVILLE, TN 37217 (615) 401-7200
OWNER:	NSORO, LLC 520 AIRPARK CENTER DRIVE NASHVILLE, TN 37217 (615) 252-1644
OWNER'S PROJECT NUMBER:	126 177
OWNER'S PROJECT NAME:	UNASSIGNED
CLIENT ADDRESS:	2811 KIMBERLIN HEIGHTS RD, KNOXVILLE, TN 37920
DESIGNER:	35 55 0147 WOOD (GEORGETOWN) 10005 BURNING WOOD DRIVE KNOXVILLE, TN 37921
DATE:	10/14/06
SCALE:	AS SHOWN
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PROJECT PHONE:	(615) 252-1644
PROJECT FAX:	(615) 252-1644
PROJECT EMAIL:	520 AIRPARK CENTER DRIVE NASHVILLE, TN 37217
PROJECT WEBSITE:	(615) 252-1644

UTILITIES	
UTILITY PROVIDER:	KNOXVILLE UTILITIES BOARD 400 5th Ave S KNOXVILLE, TN 37902 (615) 528-4400
UTILITY OWNER:	UNASSIGNED
UTILITY ADDRESS:	UNASSIGNED
UTILITY PHONE:	UNASSIGNED
UTILITY FAX:	UNASSIGNED
UTILITY EMAIL:	UNASSIGNED
UTILITY WEBSITE:	UNASSIGNED

TITLE SHEET  
T-1



**FLOOD HAZARD STATEMENT:**  
 THE COMMERCIAL ZONE (TAX MAP 126, PARCEL 179) IS NOT LOCATED WITHIN  
 ANY FLOOD HAZARD ZONE AS SHOWN ON THE FLOOD HAZARD MAP  
 MAP COMMUNITY PANEL NUMBER: FSDIC 0340 F, KNOX COUNTY,  
 TENNESSEE. EFFECTIVE DATE: MAY 2, 2001.

**UTILITY NOTE:**  
 THIS SURVEY HAS NOT IDENTIFIED THE UNDERGROUND UTILITIES,  
 INCLUDING BUT NOT LIMITED TO, GAS, WATER, SEWER, AND  
 TELEPHONE LINES. THE SURVEYOR HAS BEEN ADVISED BY THE  
 OWNER THAT THERE ARE NO UTILITIES IN THE AREA. THE SURVEYOR  
 HAS CONDUCTED VISUAL INSPECTIONS OF THE AREA AND HAS  
 FOUND NO UTILITIES. THE SURVEYOR IS NOT RESPONSIBLE FOR  
 ANY DAMAGE TO UTILITIES OR OTHER PROPERTY CAUSED BY  
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 ANY DAMAGE TO UTILITIES OR OTHER PROPERTY CAUSED BY  
 THE SURVEY.

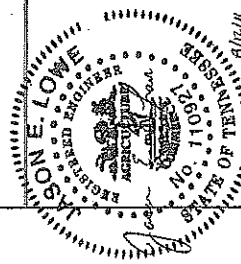
**PROJECT BENCHMARK:**  
 PROJECT BENCHMARK ELEVATION DATA IS BASED UPON GDS SURVEY  
 METHODS AND PROCEDURES.  
 BENCHMARK ELEVATION = 1014.22 M.S.L.  
 (SEE PLAN FOR LOCATION)

**GENERAL NOTES:**  
 1. THIS SURVEY CONFORMS TO THE CURRENT SET FORMS IN THE JURISDICTION OF  
 THE SURVEYOR. THE SURVEYOR HAS CONDUCTED VISUAL INSPECTIONS OF  
 THE AREA AND HAS FOUND NO UTILITIES. THE SURVEYOR IS NOT  
 RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR OTHER PROPERTY  
 CAUSED BY THE SURVEY. THE SURVEYOR IS NOT RESPONSIBLE FOR  
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 ANY DAMAGE TO UTILITIES OR OTHER PROPERTY CAUSED BY  
 THE SURVEY.

**FLOOD HAZARD STATEMENT:**  
 THE COMMERCIAL ZONE (TAX MAP 126, PARCEL 179) IS NOT LOCATED WITHIN  
 ANY FLOOD HAZARD ZONE AS SHOWN ON THE FLOOD HAZARD MAP  
 MAP COMMUNITY PANEL NUMBER: FSDIC 0340 F, KNOX COUNTY,  
 TENNESSEE. EFFECTIVE DATE: MAY 2, 2001.

**GENERAL NOTES:**  
 1. THIS SURVEY CONFORMS TO THE CURRENT SET FORMS IN THE JURISDICTION OF  
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 ANY DAMAGE TO UTILITIES OR OTHER PROPERTY CAUSED BY  
 THE SURVEY.



SITE NAME: **KIMBERLIN HEIGHTS**  
 SITE NUMBER: **1015392 / KN1278**  
 SITE ADDRESS: **2811 KIMBERLIN HEIGHTS RD. KNOXVILLE, TN 37920**



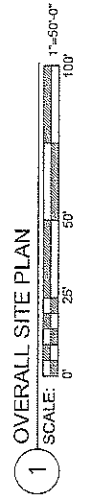
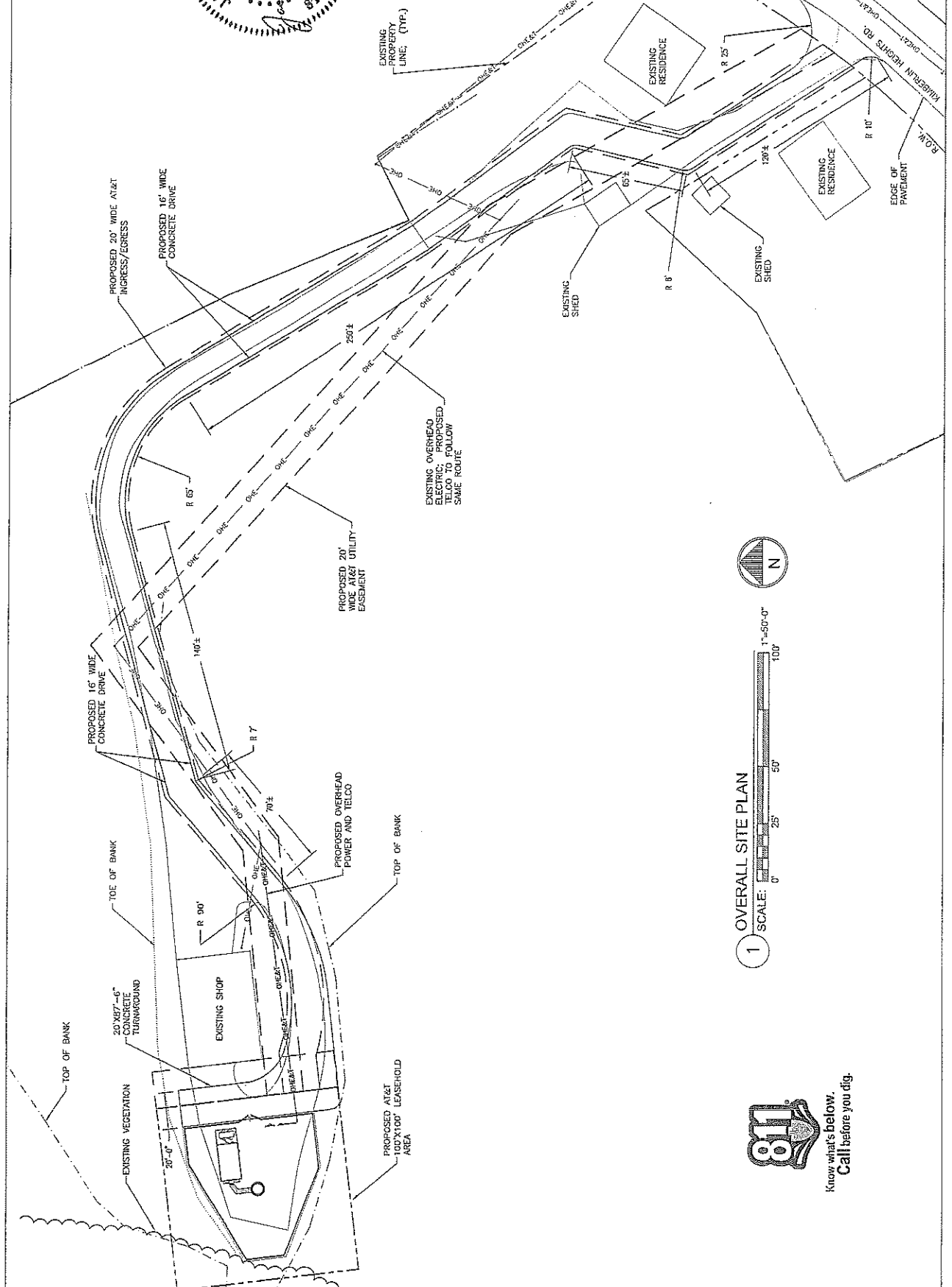
**INSORO, LLC**  
 520 AIRPARK CENTER DRIVE  
 NASHVILLE, TN 37217

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NO.	DATE	DESCRIPTION
1	08/18/11	ISSUED FOR PERMITS
2	08/18/11	ISSUED FOR PERMITS
3	08/18/11	ISSUED FOR PERMITS
4	08/18/11	ISSUED FOR PERMITS
5	08/18/11	ISSUED FOR PERMITS
6	08/18/11	ISSUED FOR PERMITS
7	08/18/11	ISSUED FOR PERMITS
8	08/18/11	ISSUED FOR PERMITS
9	08/18/11	ISSUED FOR PERMITS
10	08/18/11	ISSUED FOR PERMITS

PROJECT NO: **010-01365-00**  
 PRODUCT NAME: **1000 WHITE FLOOR DRIVE**  
 DRAWING: **1000 WHITE FLOOR DRIVE**  
 SHEET NO: **OVERALL SITE PLAN**  
 SHEET TOTAL: **1**

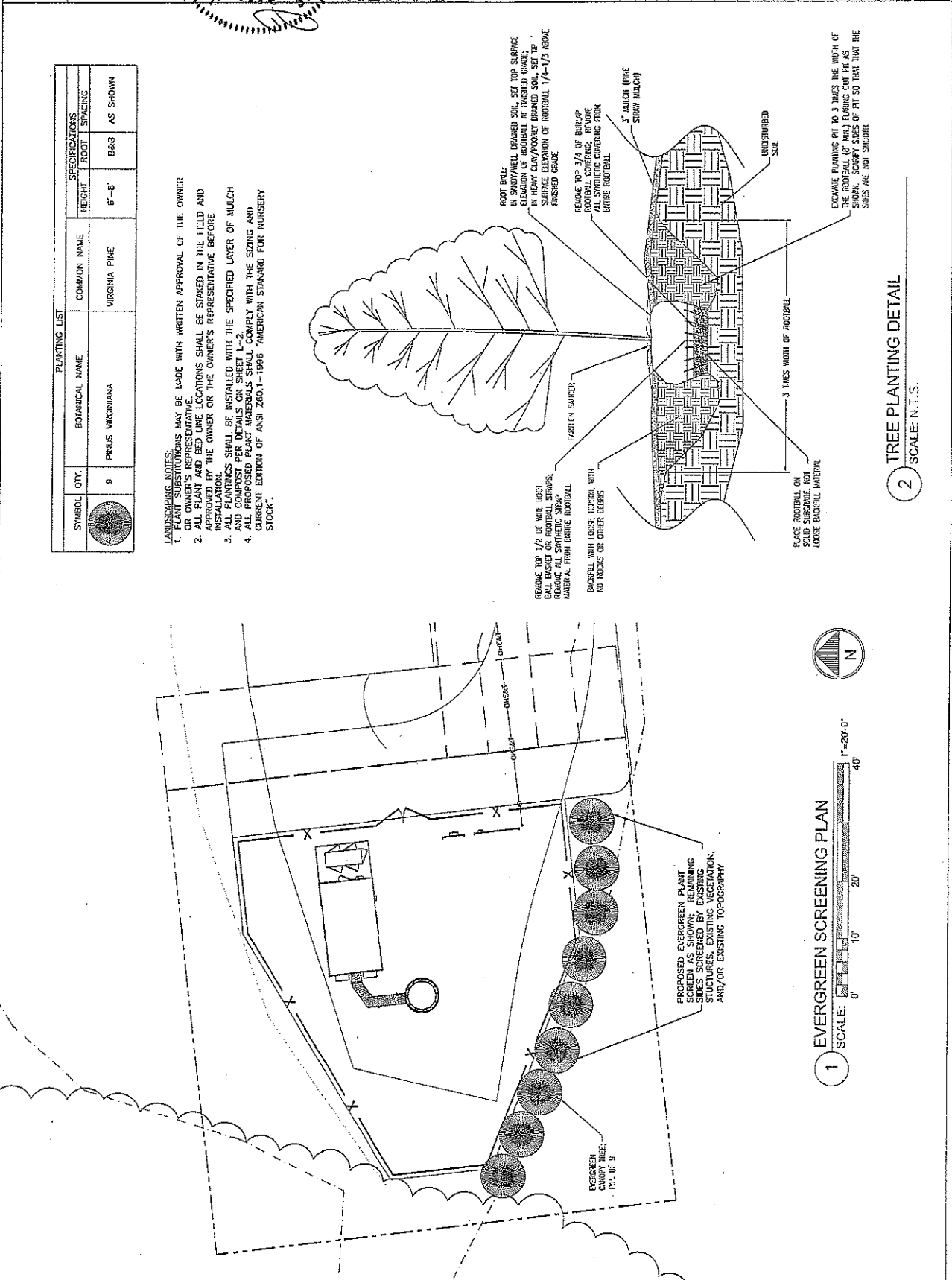
**OVERALL SITE PLAN**  
 10000



Know what's below.  
 Call before you dig.







PLANTING LIST		SPECIFICATIONS			
SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	ROOT SPACING
	9	PINUS VIRGINIANA	VIRGINIA PINE	6'-8"	B&B AS SHOWN

- LANDSCAPING NOTES:**
1. PLANT SUBSTITUTIONS MAY BE MADE WITH WRITTEN APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
  2. ALL PLANT AND BED LINE LOCATIONS SHALL BE STAKED IN THE FIELD AND INSTALLED BY THE OWNER OR THE OWNER'S REPRESENTATIVE BEFORE INSTALLATION.
  3. ALL PLANTINGS SHALL BE INSTALLED WITH THE SPECIFIED LAYER OF MULCH AND COMPOST PER DETAILS ON SHEET L-2.
  4. ALL PROPOSED PLANT MATERIALS SHALL COMPLY WITH THE SIZING AND CURRENT EDITION OF ANSI Z60.1--1996 'AMERICAN STANDARD FOR NURSERY STOCK'.

**nsoro**  
we just gotte business

**NSORO, LLC**  
 520 AIRPARK CENTER DRIVE  
 NASHVILLE, TN 37217

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PROJECT NO.	010-01383-00
DESIGNED BY	FLOYD WHITE
CHECKED BY	FLOYD WHITE
DATE	08/11/11
SCALE	AS SHOWN
PROJECT LOCATION	2811 KIMBERLIN HEIGHTS RD, KNOXVILLE, TN 37920
CLIENT PROJECT NO.	101433392



**SSOE, Inc.**  
 1015 BROADWAY, SUITE 200  
 NASHVILLE, TN 37203  
 PHONE: 615-259-8800  
 FAX: 615-259-8801  
 WWW.SSOE.COM


**EVERGREEN SCREENING PLAN**

C-1.3

DATE: Aug 09, 2011 2:45pm USER: fwhite









**SITE NAME:**  
KIMBERLIN HEIGHTS

**SITE NUMBER:**  
10153392 / KN1278

2611 KIMBERLIN HEIGHTS RD.  
KNOXVILLE, TN 37920



**INSORO, LLC**  
520 AIRPARK CENTER DRIVE  
NASHVILLE, TN 37217

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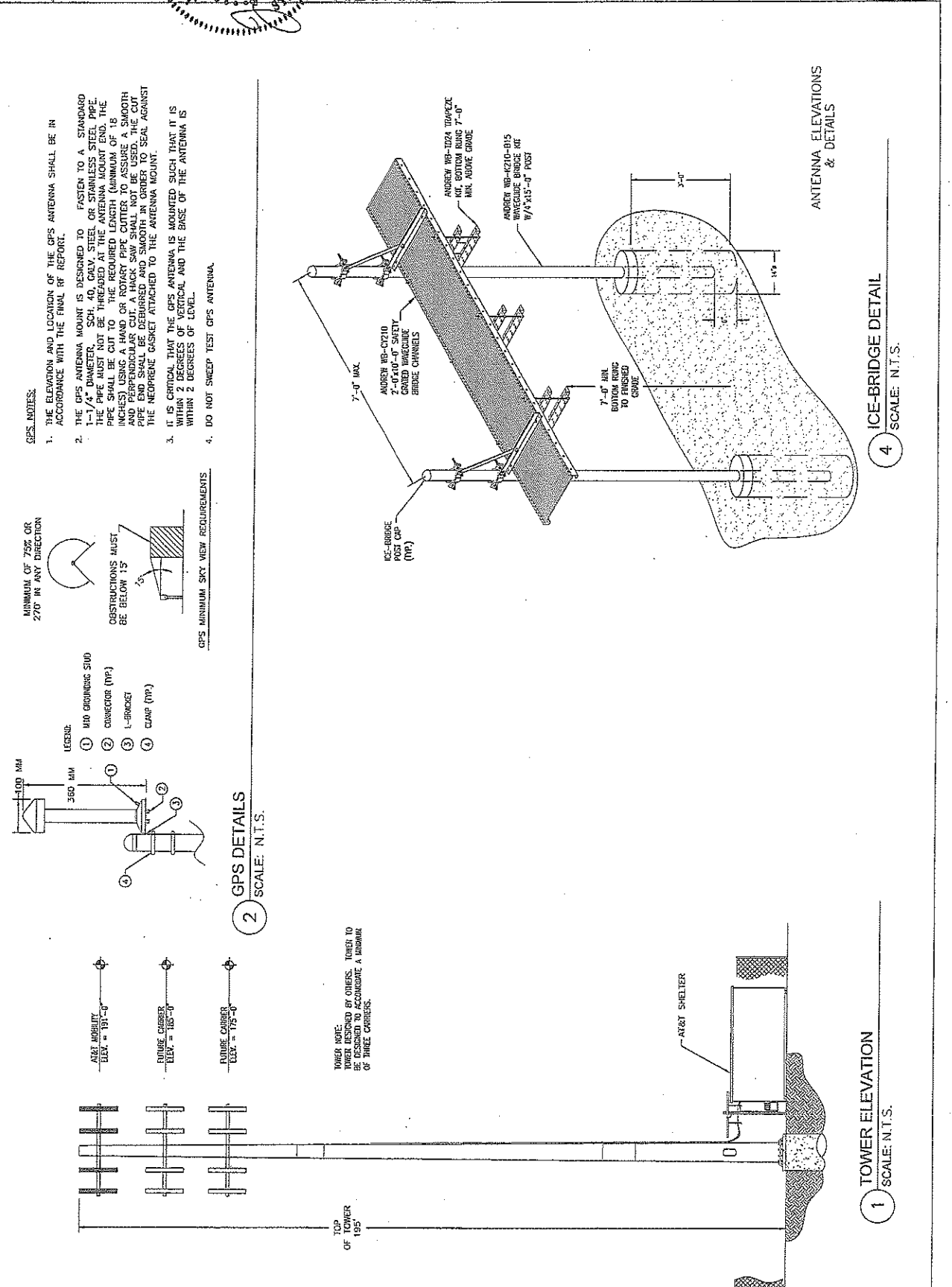
1	GENERAL	MECHANICAL/ELECTRICAL
2	STRUCTURAL	FOUNDATION
3	MECHANICAL	PLUMBING
4	ELECTRICAL	TELECOMMUNICATIONS
5	MECHANICAL	MECHANICAL
6	MECHANICAL	MECHANICAL
7	MECHANICAL	MECHANICAL
8	MECHANICAL	MECHANICAL
9	MECHANICAL	MECHANICAL
10	MECHANICAL	MECHANICAL
11	MECHANICAL	MECHANICAL
12	MECHANICAL	MECHANICAL
13	MECHANICAL	MECHANICAL
14	MECHANICAL	MECHANICAL
15	MECHANICAL	MECHANICAL
16	MECHANICAL	MECHANICAL
17	MECHANICAL	MECHANICAL
18	MECHANICAL	MECHANICAL
19	MECHANICAL	MECHANICAL
20	MECHANICAL	MECHANICAL

**SSOE, Inc.**  
11000 Old Hickory Road, Suite 200  
Nashville, TN 37204  
Tel: 615-885-7270  
Fax: 615-885-7271

**PROJECT NO.:** 010-01363-00  
**PROJECT NAME:** FLOOD WARE  
**CLIENT:** FLOOD WARE  
**DESIGNER:** INSORO, LLC  
**DATE:** 08/14/10

**ANTENNA ELEVATIONS & DETAILS**

**C-5**



**ATT MOBILITY TELECOMMUNICATIONS**

**Telecommunications Tower Site Review**

**8-A-11-UR**

**CONSULTANT'S SUMMARY**

**KIMBERLIN HEIGHTS ROAD**

**South Knox County**

**Location:** 2611 Kimberlin Heights Road, Knox County

**Proposed Tower Height:** 195 foot Monopole

**Address:** 2611 Kimberlin Heights Road  
Knoxville, Tennessee 37920

**District:** South Knox County #9 **Instrument Number:** 1276177

**Use:** Telecommunications antenna structure

**Zoning:** A (Agricultural)

**Variances and waivers:** None required or requested

**Need:** The applicant is ATT Mobility Telecommunications a licensed PCS carrier by the Federal Communications Commission and possibly other users.

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

**Consultant's Recommendation:** The site and application meets the requirements of the Ordinance and the spirit of the Facilities Plan. The applicant has proven a need for the site to comply with its FCC mandated coverage requirements.

A handwritten signature in black ink, appearing to be 'John', with the date '2-20-11' written below it.

**REPORT TO  
METROPOLITAN PLANNING COMMISSION**

for

Proposed Telecommunications Tower Site  
Located at 2611 Kimberlin Heights Road  
Knoxville, TN known as

**Kimberlin Heights**

**ATT MOBILITY**

**UOR 8-A-11-UR**

**COMPLIANCE WITH**

**THE MPC TELECOMMUNICATIONS FACILITY ORDINANCE**

7/20/2011

The proposed site for the applicant is a 195 foot monopole to be located near 2611 Kimberlin Heights Road, Knoxville in South Knox County. The supporting material from applicant has been reviewed for technical and Federal/State legal compliance as well as with the Knoxville City Wireless Communication Facilities Plan from 2002. This is a new telecommunications site.

**REQUESTED**

1. **Location.** The location is within the **County** of Knox in the **South** District and in the Knox County Register of Deeds Office in Instrument # 126177.

2. **Zoning.** A (Agricultural)

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

4. **Variiances.** 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. The proposed site is greater than 285 feet from the nearest residential unit, thus a variance will not be required.

5. **Site.** This application is for the construction of a new monopole to be located at the edge of an open field with woods on the west portion of the parcel and a small rural metal building immediately to the east. The site rises 68 feet from the primary road entrance to the site to the site itself over a distance of about 800 feet.

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 ATT Mobility Telecommunications and there are 3 possible future additional users for the facility.

7. **Setbacks.** The setback requirements are that the facility must be 110% height of the tower from any dwelling unit. A variance will not be required as the site is located more than 285 feet from the nearest dwelling unit.

8. **Height.** The proposed structure is for 195 feet.

## **EVALUATION**

The following is a list of items reviewed:

Zoning Ordinance for Knoxville Tennessee by Metropolitan Planning Commission---Telecommunication Facilities Section (as amended thru June 28, 2010)

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 about 1014 feet AMSL. It is located on a partially wooded parcel on the west and north and open field to the east and southeast.

The request is for a 195 foot self supported monopole tower of which ATT will use the top 15 feet and the additional usable next area is for other carriers' expansion.

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 and more than 650 feet from the nearest road. The site would be screened from any area roads to the north by the woods but would be seen on the south looking north.

It is located in an A zoned area that is adjacent to a RR (Rural Residential) Area.

The access road has a rise of 68 feet over a distance of about 800 feet from the primary road to the site.

There are no variances required as the landowner owns all the property on all sides for more than 300 feet from the tower base. The tower will not require lighting.

There are other similar towers located to the northeast, east and southwest of the proposed location, but all are more than 1 mile away, thus the height required. The terrain in the area is rugged and rolling hills and pastures.

## 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 foot monopole tower, is to be located at the edge of a wooded area to the west and north and open fields to the east and south east. The local view protection will be provided by landscaping by the applicant that conforms to the MPC recommendations.

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

(3) **Design Compatibility**---The proposed landscaping and facility design would blend in with surrounding agricultural land usage and design. The new structure will be a monopole type structure which is the least obtrusive type antenna support structures.

(A) **Opportunity Areas**---This proposed site is in an area zoned Agricultural (A). While it is in a field near a wooded parcel, it is in a Neutral (Rural/heavily wooded area) Opportunity area.

(B) **Sensitive Area**---This site is not in a sensitive area as it is isolated wooded to the north and located more than 350 feet from any residence and there are very few residences in the area and none in the immediate area.

(C) **Avoidance Areas**---This location is not in an avoidance area although on a hill, but the surround area is rolling hills.

Under the matrix it would be considered a NEUTRAL OPPORTUNITY Site.

## SUMMARY

(1) The proposed antenna support structure is a 195 foot monopole including antennas. There are no lighting requirements for this structure required by the FAA.

(2) A review of the structure stress analysis on the proposed structure and specifications support the use of the monopole by possible 3 other potential users in the future.



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

(4) The area surrounding the site is slightly wooded and zoned Agricultural and Rural Residential. There are no residences within 350 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 to north and southwest and will be bordered on the southeast and northeast by new landscaping by the applicant.

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

(8) The requested site will have little impact on the community involved when compared with the benefits to be derived from the advanced service offered by the applicant.

(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 requested or required.

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

(12) The nature of the development in the surrounding area is not such as to pose a potential hazard to the proposed tower or to create an undesirable environment for the proposed structure.

(13) 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.

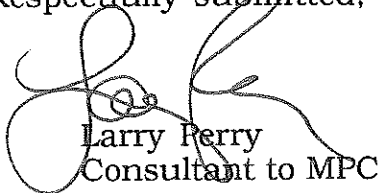
(14) There is a need for the structure in this area to provide for the wide spectrum wireless internet service and for other wireless voice and data services to be provided under government regulation by the various proposed carriers who plan to use the site.

(15) The applicant has proven a need for the site and coverage to be provided by this location.

### **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 spirit of the Facilities Plan as discussed above and is required for the applicant to meet their coverage requirements for the County of Knox.

Respectfully submitted,



Larry Perry  
Consultant to MPC

2611 Kimberlin Heights Rd, Knoxville, TN 37920



ATT Mobility  
Kimberlin Heights

2410 ft

© 2011 Google



Proposed Site



2611 Kimberlin Heights Rd, Knoxville, TN 37920

ATT Mobility Site  
Kimberlin Heights  
Knoxville TN

© 2011 Google

341 ft

35°55'40.32" N 89°44'27.00" W elev 818 ft

1992

Imagery Date: 10/8/2010

Eye alt 2475 ft

**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
<b>Opportunity Areas</b>	Industrial/Business Park						
	Industrial Use						
	Pre-approved Government-owned Property						
	Urban Expressway Corridor				*		
	Rural/Heavily Wooded				*		
	Pasture						
	Central Business District						
	Office/Commercial Corridor						
Shopping Center							
<b>Sensitive Areas</b>	Within 500' of a residence						
	Rural Residential						
	Non-residential Properties in a Residential Area (church, cemetery, library, etc.)						
	Multi-family Residential						
	On Hill Below Ridgeline				*		
<b>Avoidance Areas</b>	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



May 27, 2011

Knoxville/Knox County  
Metropolitan Planning Commission  
Suite 403, City of County Building  
400 Main Street  
Knoxville, TN 37902

Dear Sir or Madam:

**Re: Shared Use for AT&T Mobility Telecommunications Tower, Kimberlin Heights  
Zoning Ordinance 4.92.02(b) for Knox County, Tennessee as Amended June 28, 2010**

AT&T Mobility is submitting for approval a telecommunications tower to be located in Knoxville, Knox County, Tennessee. In compliance with Section 4.92.02(b) of the above ordinance, AT&T Mobility and its successors are committed to allow shared use of our proposed tower, provided any additional user agrees in writing to meet reasonable terms and conditions for shared use. We further understand this section shall not obligate AT&T Mobility or its successors to co-locate additional antennas on such tower, nor is it intended to limit the rights of parties to set rent or establish other terms and conditions for the shared use of the telecommunications tower.

Sincerely,

A handwritten signature in cursive script that reads "Lucinda E. Neff".

Lucinda E. Neff  
Senior Real Estate & Construction Manager  
AT&T Mobility  
615-221-3607





**Erika Helle**  
RF Design Engineer  
East TN  
3585 Workman Road  
Knoxville, TN 37921  
(865) 824-2231

June 14, 2011

Knox County

Re: 232P0278-- Kimberlin Heights

Dear Sir or Madam:

No suitable facilities within a ½ mile radius of our proposed tower exist that would allow service to be provided to the proposed coverage area.

Sincerely,

*Erika Helle*  
Erika Helle  
RF Design Engineer

