



LINCOLN COUNTY PLANNING & INSPECTIONS DEPARTMENT
302 NORTH ACADEMY STREET, SUITE A, LINCOLNTON, NORTH CAROLINA 28092
704-736-8440 OFFICE 704-736-8434 INSPECTION REQUEST LINE 704-732-9010 FAX

To: Board of Commissioners
Planning Board

From: Randy Hawkins, Zoning Administrator

Date: January 17, 2014

Re: CUP #333
Diamond Towers IV, LLC, applicant
Parcel ID# 72161

The following information is for use by the Lincoln County Board of Commissioners and Planning Board at their joint meeting/public hearing on February 3, 2014.

REQUEST

The applicant is requesting a conditional use permit to erect a 250-foot telecommunications tower in the R-SF (Residential Single-Family) district. Under the Unified Development Ordinance, a telecommunications tower in excess of 60 feet and no greater than 325 feet is a conditional use in the R-SF district, subject to certain standards.

SITE AREA AND DESCRIPTION

The 53-acre parcel is located at 1268 Owls Den Road, on the east side of Owls Den Road about one mile south of Reepsville Road. It is surrounded by property zoned R-SF. Land uses in this area are primarily agricultural and residential. The Lincoln County Land Use Plan designates this area as Rural Preservation. Low-density residential uses and limited small-scale commercial and/or industrial uses that are suited for and blend in well with rural environments are encouraged in this area.



County Of Lincoln, North Carolina

Planning Board

Applicant **Diamond Towers IV, LLC**

Application No. **CUP #333**

Property Location **1268 Owls Den Road**

Zoning District **R-SF**

Proposed Conditional Use **250-foot telecommunications tower**

FINDINGS OF FACT

1. The use will not materially endanger the public health or safety if located where proposed and developed according to plan. YES _____ NO _____

FACTUAL REASONS CITED: _____

2. The use meets all required conditions and specifications. YES _____ NO _____

FACTUAL REASONS CITED: _____

3. The use will not substantially injure the value of adjoining or abutting property unless the use is a public necessity. YES _____ NO _____

FACTUAL REASONS CITED: _____

4. The location and character of use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located and will be in general conformity with the Land Use Plan for the area in question. YES _____ NO _____

FACTUAL REASONS CITED: _____

After having held a Public Hearing on _____ and in light of the Findings of Facts listed herein, the following action was taken by the Lincoln County Planning Board:

In recommending such Conditional Use, the following conditions were recommended by the Lincoln County Planning Board:



Conditional Use Permit Application

Lincoln County Planning and Inspections Department
Zoning Administrator
302 N. Academy St., Suite A, Lincolnton, NC 28092
Phone: (704)736-8440 FAX: (704)732-9010

PART I

Applicant Name Diamond Towers IV LLC

Applicant Address 820 Morris Turnpike, Suite 104, Short Hills, NJ 07078

Applicant Phone Number Michael Rockwell, 704-576-6393

Property Owner Name L. J. Seagle III and Martha Seagle

Property Owner Address 1268 Owls Den Road, Lincolnton NC 28098

Property Owner Phone Number 704-735-1797

PART II

Property Location 1268 Owls Den Road, Lincolnton NC 28098

Property ID (10 digits) 3614-35-1395 Property size, 52.905 Acres

Parcel # (5 digits) 72161 Deed Book(s) 2426 Page(s) 649-651

PART III

Existing Zoning District R-SF

Briefly describe how the property is being used and any existing structures.

Residential /Agricultural with a residence and related farm outbuildings

Briefly explain the proposed use and/or structure which would require a Conditional Use Permit.

Proposed 250'-0" self-support wireless tower

\$750 APPLICATION FEE MUST BE RECEIVED BEFORE PROCESSING.

I hereby certify that all knowledge of the information provided for this application and attachments is true and correct to the best of my knowledge.

Applicant's Signature

12-2013

Date



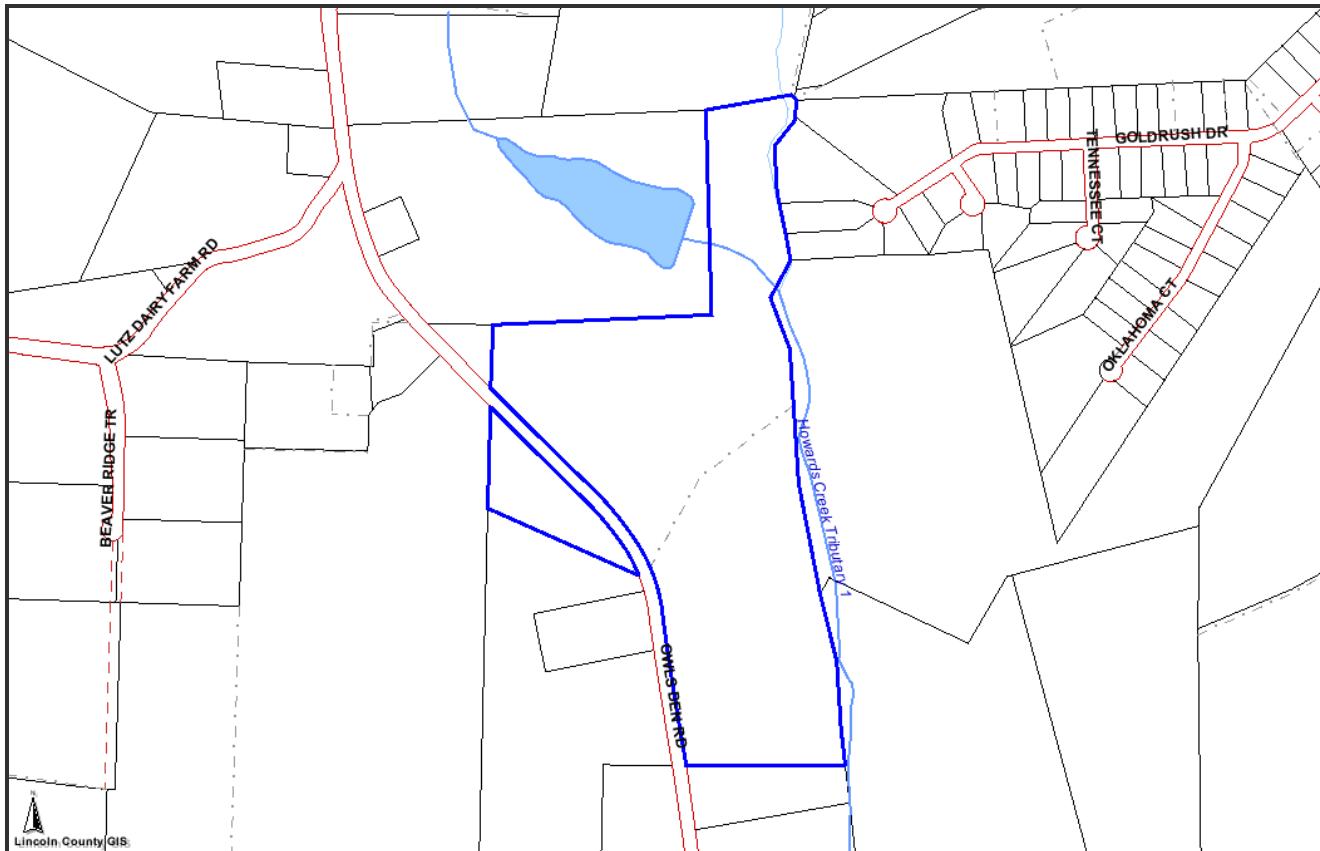
Lincoln County, NC

Office of the Tax Administrator, GIS Mapping Division

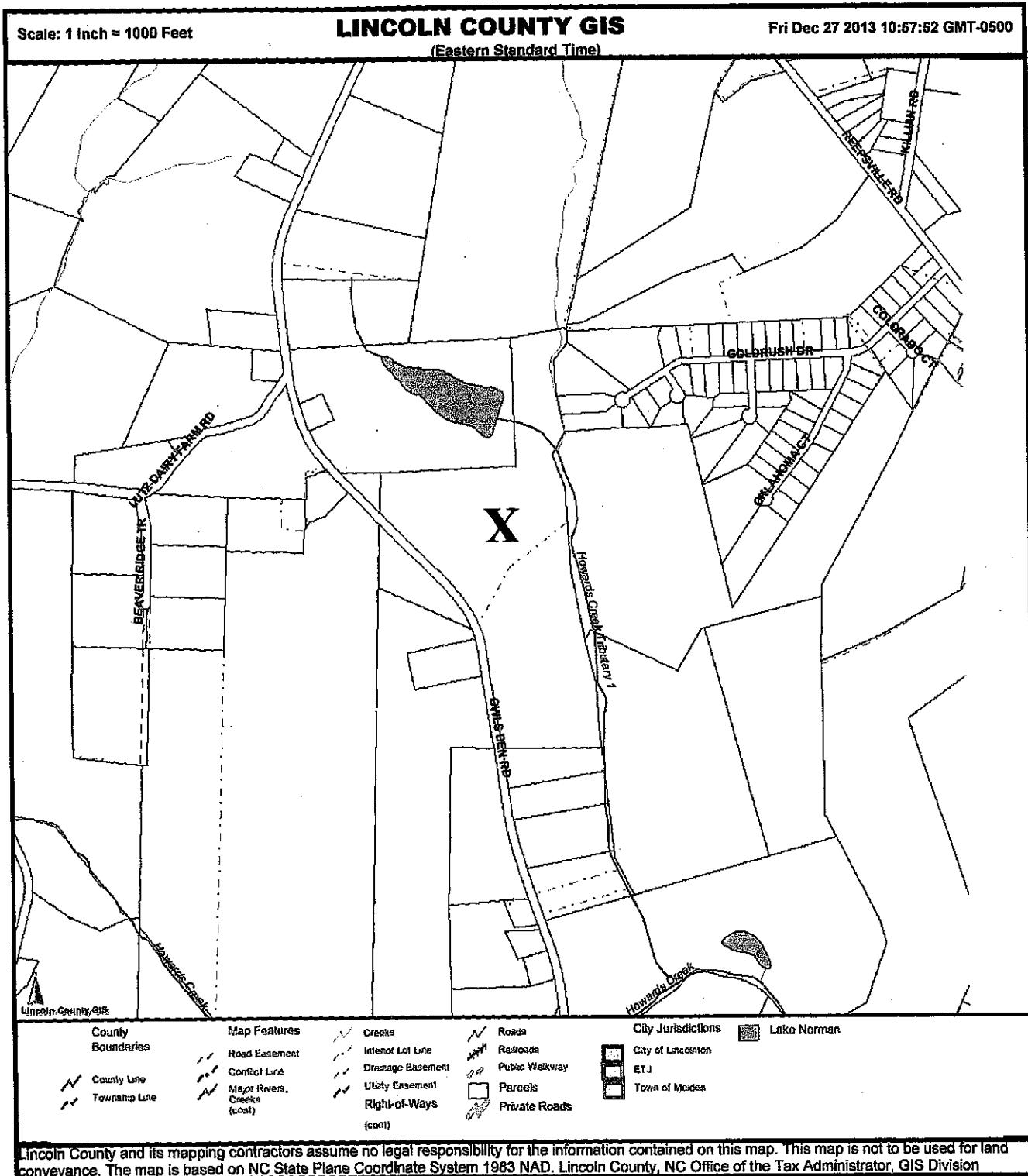
Lincoln County and its mapping contractors assume no legal responsibility for the information contained on this map. This map is not to be used for land conveyance. The map is based on NC State Plane Coordinate System 1983 NAD.



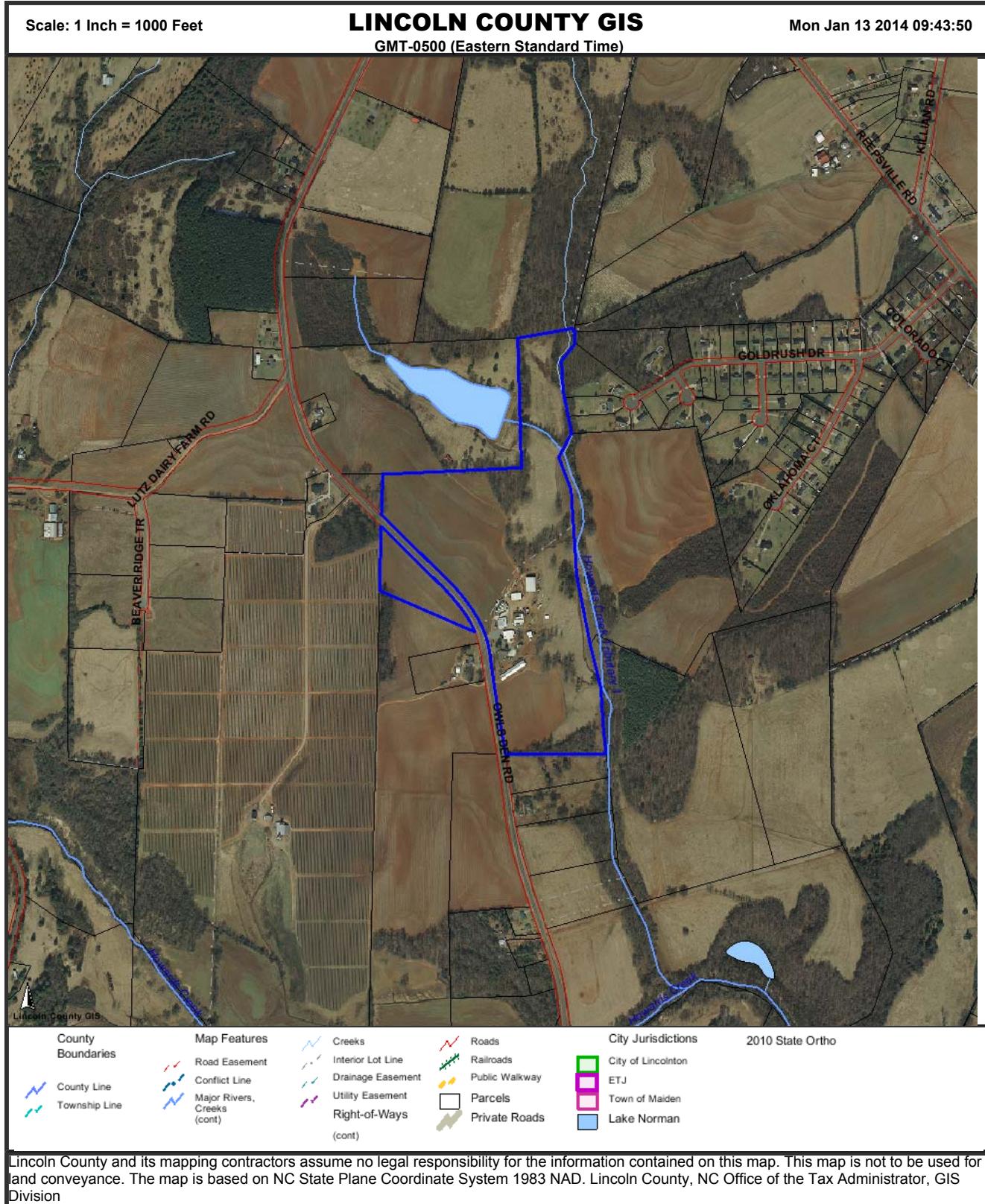
Date: 12/27/2013 Scale: 1 Inch = 800 Feet



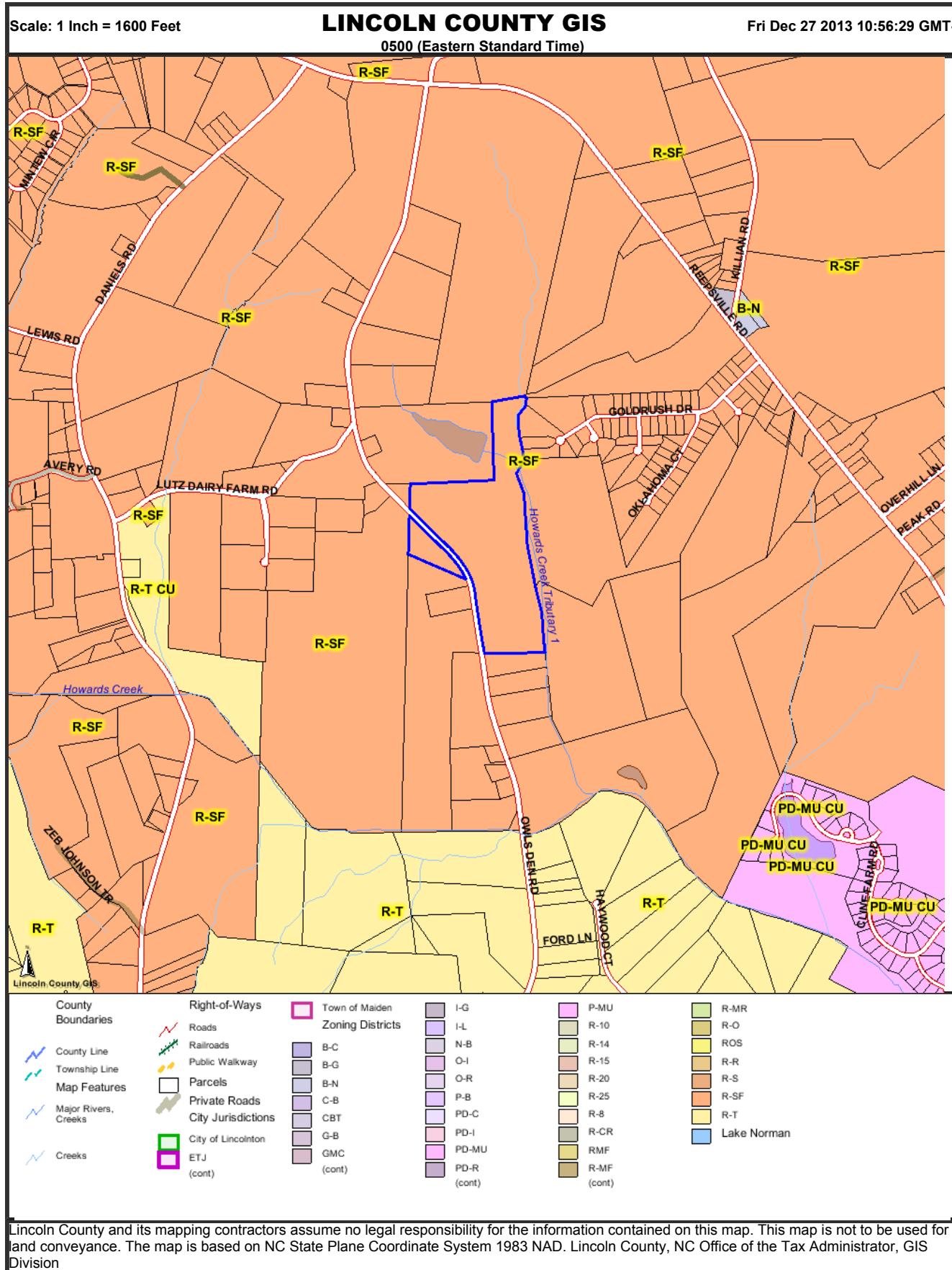
PHOTOS		PARCEL INFORMATION FOR 3614-35-1395									
		Parcel ID 72161 Owner SEAGLE L J III Map 3614-00 Mailing SEAGLE MARTHA B Account 0146859 Address 1268 OWLS DEN RD Deed 2426-649 Recorded 10/28/2013 Sale Price 0 Value Property Values Not Yet Determined Previous Parcel 14610 <p>----- All values are for tax year 2013. -----</p> Description QUICKEL LD/HM R1203 Deed Acres 0 Address 1268 OWLS DEN RD Tax Acres 52.9 Township HOWARDS CREEK Tax/Fire District UNION Main Improvement RANCH Value \$114,690 Main Sq Feet 2313 Stories 1 Year Built 1951 Total Value \$0 Zoning District Calculated Acres Voting Precinct Calculated Acres R-SF 52.91 DANIELS-VALE (DV08) 52.91 Watershed Class Not in a watershed 2000 Census County 37109 37109 FloodZone Description AE SPECIAL FLOOD HAZARD AREA BASE ELEVATION DETERMINED - 100 Panel X YEAR 3710360400 2.47 X NO FLOOD HAZARD 371036040050.43									
72161		Sewer District Not in the sewer district Tract 070700 Block 1016 49.02 070700 1017 3.89 Panel 3710360400 2.47 371036040050.43									



**X – proposed site of tower
Conditional Use Permit #333**



Lincoln County and its mapping contractors assume no legal responsibility for the information contained on this map. This map is not to be used for and conveyance. The map is based on NC State Plane Coordinate System 1983 NAD. Lincoln County, NC Office of the Tax Administrator, GIS Division





December 3, 2013

Mr. Andrew Bryant
Lincoln County Planning and Inspection Department
Zoning Director
302 N. Academy Street, Suite A
Lincolnton, NC 28092

Re: Proposed Telecommunication Tower located at 1268 Owls Den Road, Lincolnton, NC 28098; PIN # 3614-35-1395 ; AT&T Site Number: 074-648 and Diamond Site Name: Lincoln

Dear Mr. Bryant:

This letter is to inform you that Diamond Towers IV is filing an Application for a Conditional Use Permit for the telecommunication tower to be located at 1268 Owls Den Road, Lincolnton, NC 28098 . I am enclosing the Conditional Use Permit Application along with a check in the amount of \$750.00 for the required fees and all supporting documents.

If you have any questions or need further information, please contact me at (704) 576-6393.

Thank you for your assistance with this submission.

Most Respectfully,

Michael Rockwell
Agent for Diamond Towers IV
Network Building & Consulting, LLC

7380 Coca Cola Drive
Suite 106
Hanover, MD 21076
410.712.7092
www.networkbuilding.com

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Conditional Use Permit Application

Lincoln County Planning and Inspections Department
Zoning Administrator
302 N. Academy St., Suite A, Lincolnton, NC 28092
Phone: (704)736-8440 FAX: (704)732-9010

PART I

Applicant Name Diamond Towers I□ LLC

Applicant Address 820 Morris Turnpike, Suite 104, Short Hills, NJ 07078

Applicant Phone Number Michael Rockwell, 704-576-6393

Property Owner Name L. J. Seagle III and Martha Seagle

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PART II

Property Location 1268 Owls Den Road, Lincolnton NC 28098

Property ID (10 digits) 3614-35-1395 Property size 52.906 Acres

Parcel # (5 digits) 72161 Deed Book(s) 2426 Page(s) 649-651

PART III

Existing Zoning District R-SF

Briefly describe how the property is being used and any existing structures.

Residential /Agricultural with a residence and related farm outbuildings

Briefly explain the proposed use and/or structure which would require a Conditional Use Permit.

Proposed 250'-0" self-support wireless tower

\$750 APPLICATION FEE MUST BE RECEIVED BEFORE PROCESSING.

I hereby certify that all knowledge of the information provided for this application and attachments is true and correct to the best of my knowledge.

Applicant's Signature

Date

**RECOMMENDATIONS ON FINDINGS OF FACT FOR A
CONDITIONAL USE PERMIT**

Application # _____ Date _____

Applicant's Name _____

Applicant's Address _____

Property Location _____ Existing Zoning _____

Proposed Conditional Use _____

FINDINGS OF FACT

1. The use will not materially endanger the public health or safety if located where proposed and developed according to plan. YES _____ NO _____

FACTUAL REASONS CITED: _____

2. The use meets all required conditions and specifications. YES _____ NO _____

FACTUAL REASONS CITED: _____

3. The use will not substantially injure the value of adjoining or abutting property unless the use is a public necessity. YES _____ NO _____

FACTUAL REASONS CITED: _____

4. The location and character of use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located and will be in general conformity with the Land Use Plan for the area in question. YES _____ NO _____

FACTUAL REASONS CITED: _____

After having held a Public Hearing on _____ and in light of the Findings of Facts listed herein, the following action was taken by the Lincoln County Board of Commissioners:

In recommendation such Conditional Use, the following conditions were recommended by the Lincoln County Board of Commissioners: _____

BOARD'S ACTION

with attached conditions.

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December 3, 2013

Mr. Andrew Bryant
Lincoln County Planning and Inspection Department
Zoning Director
302 N. Academy Street, Suite A
Lincolnton, NC 28092

Re: Proposed Telecommunication Tower located at 1268 Owls Den Road, Lincolnton, NC 28098; PIN # 3614-35-1395 ; AT&T Site Number: 074-648 and Diamond Site Name: Lincoln

Dear Mr. Bryant:

Please accept this letter as a statement of justification. Per the Lincoln County Unified Department Ordinance (The “Ordinance”) the following items must be addressed.

A. The proposed tower, antenna or accessory structure and equipment will be placed in a location and in a manner which will minimize the visual impact on the surrounding area. Accessory structures and equipment must meet all applicable standards of this UDO.

The Proposed Tower Site will include a 250' self-support tower in height (“Tower”) on +/- 52.9 acre site. The Present Occupancy Type is residential/agricultural, and is zoned R-SF. The Ordinance allows towers as a conditional use in the R-SF District. Access to the Proposed Tower Site will be over an existing access road that will be upgraded as needed.

B. Approval for a proposed tower within a radius of 10,500 feet from an existing tower or other suitable structure shall not be issued unless the applicant certifies that the existing tower or structure does not meet applicant's structural specifications or technical design requirements, or that a co-location agreement could not be obtained at a reasonable market rate and in a timely manner.

As indicated in the enclosed letter from AT&T, including the AT&T search area and before and after coverage maps, AT&T did a search of the area and found no existing towers or supporting structures that would meet its needs within 10,500 feet. The proposed lease area will be 100 feet by 100 feet in size.

7380 Coca Cola Drive
Suite 106
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www.networkbuilding.com

C. Minimum tower setbacks shall be as follows:

1. From all lot lines and public right-of-ways, a distance equal to the tower's fall zone, as certified by a licensed professional engineer in the State of North Carolina, plus 20 feet; and
2. From any residential use, a distance of its height plus 50 feet, unless the owner of the use waives this requirement by a notarized affidavit.

The Tower as proposed will be set back at least four hundred fifty feet (450) from the nearest property line and no residential structures are located within the height of the Tower plus fifty feet (50'). Included in this package is a fall zone letter from the tower manufacturer ("Sabre Industries") documenting the fall zone and demonstrating that the tower is sufficient to meet the required setback.

D. The proposed tower must be designed to accommodate additional antennae equal in number to applicant's present and future requirements.

The included tower drawings provided by Sabre Industries show one proposed user, AT&T, and space for up to two (2) additional users. The drawings have been sealed by a North Carolina professional engineer and provide that the Tower will be designed to have the capacity to accommodate more than one user and be structurally sound. A statement by Diamond is enclosed indicating its willingness to allow additional carriers to co-locate at the proposed tower site.

E. Unless otherwise restricted, the height of a tower is limited per §2.2.1, Use Table. Antennae or equipment mounted on a building must meet the height requirements of §2.4.

§2.2.1 Use Table

P = Permitted | S = Special Use (Error! Reference source not found.) | C = Conditional Use (Error! Reference source not found.) | * = Group of Uses (Error! Reference source not found.)

Civic Uses	R-R	R-T	R-S	R-SF	R-CR	R-14	R-20	R-MR	R-MF	O-R	B-N	B-G	B-C	B-L	I-G	Use Standard
Wireless facility and tower (up to 60 ft)	P	P	P	P	P	P				P	P	P	P	P	P	§4.3.7
Wireless facility and tower (60-100 ft)	C	C	C	C	C	C				C	C	C	C	P	P	§4.3.7
Wireless facility and tower (101-325 ft.)	C	C	C	C						C	C	C	C	C	C	§4.3.7

Table §2.2.1 allows for a tower up to three hundred twenty five feet (325') in the R-SF district as a conditional use. The Proposed Tower Site will include a 250' self-support tower in height.



F. A tower must not be illuminated or contain any lighting unless otherwise required by State or Federal regulations.

The Tower will be illuminated only as required by the Federal Communications Commission (FCC), or other State or Federal Agency of competent jurisdiction.

G. The color of a tower and its antennae shall be one that will blend to the greatest extent possible with the natural surroundings.

The Tower will be constructed of galvanized steel or painted per applicable standards of the FAA or other applicable Federal or State agency.

H. No commercial signs or advertising shall be allowed on any tower, antennae, accessory structure or equipment.

Only signage required by the FCC and Federal or State regulations for emergency and cautionary purposes will be required at the Proposed Tower Site. No advertising shall be attached to the tower.

I. Existing towers may be replaced or modified providing that the existing height is not exceeded by more than 20 feet and the new or modified tower meets all of the above requirements except for the setback provisions.

Diamond Towers IV will comply with the above requirement.

J. Any tower, antennae, accessory structure or equipment that is not used for communication purposes for more than 120 days shall be considered as abandoned and shall be removed by the owner within 60 days. The County shall require financial guarantees in accordance with **Error! Reference source not found.** to guarantee removal of abandoned equipment in compliance with the requirements of this subsection.

Enclosed is a letter stating that Diamond Towers IV will provide a bond in the amount of 125% of the documented cost to remove the tower.

K. Telecommunication/transmission towers shall not be constructed unless the tower owner has general liability coverage of at least \$1,000,000. The owner of the tower shall provide the County with a certificate of insurance showing evidence of its coverage and the certificate shall contain a requirement that the insurance company notify the County 30 days prior to the cancellation, modification or failure to renew the insurance coverage required. Lapse of this insurance shall be deemed by the County to be sufficient grounds to revoke the applicable County permits.

Enclosed is proof of general liability insurance in the minimum amount of One Million (\$1,000,000) Dollars.



L. A combination of landscaped vegetative buffers, landscaped earthen berms or preservation of existing vegetative shall be provided around the perimeter of the site of any wireless telecommunications facility to effectively screen the view of the equipment compound from surrounding perspectives. The standard buffer shall consist of a mix of native trees and shrubs planted in a landscaped area at least ten (10) feet outside of the perimeter.

Diamond Towers IV's will comply with all of the above landscape requirements. Included in the zoning drawing (Sheet L-1) is a landscape plan. The Proposed Tower Site will be cleared only as necessary to construct the Tower.

M. All antenna support structures shall be enclosed by security fencing not less than six (6) feet in height.

As indicated in the construction drawings the Tower base is enclosed in a chain link fence eight (8) feet in height

This tower site as proposed meets all of the conditions and specifications of the Ordinance and will not materially endanger the public health or safety. Wireless service is considered a public necessity in some cases as it is often the only means citizens have to emergency services.

The location and character of the use, if developed according to the plan as submitted and recommended, will be in harmony with the area in which it is to be located. The proposed tower will meet the infrastructure needs of this area of the County and will provide much needed access to emergency services.

If you have any questions or need further information, please contact me at (704) 576-6393. Thank you for your assistance with this submission.

Most Respectfully,

Michael Rockwell
Agent for Diamond Towers IV
Network Building & Consulting, LLC

Placeholder for Tabbed Divider



December 3, 2013

Mr. Andrew Bryant
Lincoln County Planning and Inspection Department
Zoning Director
302 N. Academy Street, Suite A
Lincolnton, NC 28092

Re: Proposed Telecommunication Tower located at 1268 Owls Den Road, Lincolnton, NC 28098; PIN # 3614-35-1395 ; AT&T Site Number: 074-648 and Diamond Site Name: Lincoln

Dear Mr. Bryant:

This letter is to confirm that Diamond Towers IV will provide a bond in the amount of 125% of the documented cost to remove the tower, prior to the building permit being issued. The documented cost will be provided to the County in the form of a letter from an engineer licensed in the state of North Carolina. This bond will be to satisfy the equipment specified in the Lincoln County UDO to cover the cost of tower removal should it ever be abandoned.

If you have any questions or need further information, please contact me at (704) 576-6393.

Most Respectfully,

Michael Rockwell
Agent for Diamond Towers IV
Network Building & Consulting, LLC

7380 Coca Cola Drive
Suite 106
Hanover, MD 21076
410.712.7092
www.networkbuilding.com

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CERTIFICATE OF LIABILITY INSURANCE

DIAMO-5

OP ID: NC

DATE (MM/DD/YYYY)

11/26/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERs NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Henderson Brothers, Inc. 920 Ft Duquesne Blvd Pittsburgh, PA 15222 Clem J. Wandrisco, III		CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A: Federal Insurance Company	20281
INSURED	Diamond Communications, LLC Michael Brett 820 Morris Turnpike Suite 104 Short Hills, NJ 07078	INSURER B:	
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS				
A	GENERAL LIABILITY		35868533	09/15/2013	09/15/2014	EACH OCCURRENCE	\$ 1,000,000			
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000			
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person)	\$ 10,000			
						PERSONAL & ADV INJURY	\$ 1,000,000			
						GENERAL AGGREGATE	\$ 2,000,000			
						PRODUCTS - COMP/OP AGG	\$ 2,000,000			
	GEN'L AGGREGATE LIMIT APPLIES PER:									
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO- JECT <input type="checkbox"/> LOC					\$				
	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident)	\$			
	<input type="checkbox"/> ANY AUTO					BODILY INJURY (Per person)	\$			
	<input type="checkbox"/> ALL OWNED AUTOS					BODILY INJURY (Per accident)	\$			
	<input type="checkbox"/> HIRED AUTOS					PROPERTY DAMAGE (PER ACCIDENT)	\$			
							\$			
	UMBRELLA LIAB					EACH OCCURRENCE	\$			
	<input type="checkbox"/> EXCESS LIAB					AGGREGATE	\$			
	<input type="checkbox"/> DED					RETENTION \$				\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y / N <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A			WC STATUTORY LIMITS	OTHR			
						E.L. EACH ACCIDENT	\$			
						E.L. DISEASE - EA EMPLOYEE	\$			
						E.L. DISEASE - POLICY LIMIT	\$			

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Site Name: NC017 Lincoln

CERTIFICATE HOLDER

CANCELLATION

Lincoln County Lincolnton, NC	LICOLNC	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
		AUTHORIZED REPRESENTATIVE Clem J. Wandrisco, III

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January 6, 2013

Lincoln County Planning Department
302 N. Academy Street
Lincoln County, NC 28092
Attn: Randy Hawkins

Re: Communications Facility Application
1268 Owls Den Road, Lincolnton, NC

Dear Mr. Hawkins:

This report and letter is given in support of AT&T's application for a zoning and construction permit for the above communications facility. This report will describe the need and justification for the site and FCC compliance in its operation.

Site Justification. The Federal Telecommunications Act and FCC rules require that AT&T achieve service throughout the Lincoln County Service Area. While AT&T has achieved a degree of coverage in this licensed area; it is spotty and scattered in areas such as the area between *Owls Den Rd, Reepsville Rd, Daniel Rd LINCOLN* County of North Carolina. AT&T's goal is to maintain an industry standard level of coverage throughout its licensed coverage in the Carolinas. The industry standard level of coverage is -82 dBm. There is a great demand for service in the area of this proposed site and our level of service does not reach the industry standard level of coverage. The engineering profile of the coverage in this area without the proposed site is attached as Exhibit 1 and clearly shows the scattered coverage presently in *Owls Den Rd, Reepsville Rd, Daniel Rd in LINCOLN area.*

We have conducted an extensive engineering study of this area to determine the best location for a communications facility in order to provide coverage while using a minimum number of towers. Attached as Exhibit 2 is an engineering profile of the area depicting coverage of the same area as in Exhibit 1 after the installation of this proposed communications facility. AT&T has a bona fide need to construct and operate this communications facility in order to provide the necessary level of service in this area and no other combination of locations or engineering technologies will satisfy this need.

FCC Compliance. This facility will comply with and operate in accordance with all Federal Communications Commission rules and regulations, including those with respect to environmental effects of electromagnetic emissions.

Maximum Permissible Output Power

The FCC states in 47 CFR 24.232(a) that the maximum radiated power for an antenna with a height above average terrain of less than 300 meters (984 feet) is 1640 watts Effective Isotropic Radiated Power (EIRP).

The proposed PCS antennas will be transmitting with less than 820 Watts EIRP or approximately 50% of the maximum allowable power and will therefore pose no danger to the health or safety of persons near the tower.



RF Exposure to Persons Near the Tower

The FCC states in 47 CFR 1.1310 that the maximum permissible exposure level from radiation for the general population at PCS frequencies is 1 milliwatt per centimeter squared (mw/cm²). This is a measure of the RF power density at or below which there are no harmful effects from the exposure.

The antenna that AT&T is using on this site is designed to transmit most of the signal in a horizontal direction (parallel to the ground) at a height of approximately 250 feet above ground. This is necessary to provide a useable signal level throughout the 1 to 3 mile radius around the tower. Within the first 600 feet from the tower the signal does not need to be as strong consequently the antenna is designed to limit the signal towards the ground to approximately ½ Watt. When this ½ Watt of power reaches the ground its energy has been greatly reduced to the point where the RF exposure is 0.00000017 mw/cm² or less than 2/10,000th of a percent of the maximum allowable exposure level permitted by the FCC.

The calculations are based on typical antenna patterns for the type of antenna that AT&T is using on the proposed tower. The actual limits may vary slightly but in no case will they even come close to reaching the FCC limits. The maximum power will not exceed the FCC minimum standard at any range from the site at ground level, therefore posing no danger to the health, safety and well being of persons near the facility.

The FCC's OET Bulletin 65 (Edition 97-01), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields," provides guidelines for predicting radio frequency (RF) field levels, which can be used in evaluating FCC RF safety compliance. Using the predictive methods described in OET Bulletin 65 and the FCC-adopted standards for general public Maximum Permissible Exposure (MPE) defined in Appendix A to OET Bulletin 65, the following evaluation for the proposed site was performed:

Distance from Tower Base (feet)	Power Density (mW/cm ²)*	Percent of FCC MPE**	Fraction of FCC MPE
10	0.000013	0.002178	1/ 459
20	0.000015	0.002590	1/ 386
50	0.000009	0.001626	1/ 615
100	0.000029	0.005039	1/ 198
150	0.000054	0.009240	1/ 108
200	0.000011	0.001879	1/ 532
250	0.000005	0.000929	1/ 1076
300	0.000021	0.003561	1/ 280
350	0.000014	0.002371	1/ 421
400	0.000003	0.000476	1/ 2100
450	0.000005	0.000811	1/ 1233
500	0.000021	0.003690	1/ 271
550	0.000056	0.009586	1/ 104
600	0.000077	0.013236	1/ 75

* milliWatts/square centimeter

** FCC's Maximum Permissible Exposure at 1900 MHz is 0.58 mW/cm²

The data presented in the table above confirms that the integration of the proposed site will pose no RF safety hazard to the general public.



Existing Sites. Attached as Exhibit 3 is a report from the FCC Antenna Structure Registration database. This report was generated with a search area radius of 2 miles (3.2 kilometers) using the proposed site location as the center. The report shows that there are no existing tower sites, existing buildings or structures such as water towers, co-location sites or similar structures in the prescribed search or coverage area and we are, likewise, unaware of any which would meet the criteria required for this particular site.

Antenna Description. The site is designed to use 65-degree beamwidth CellMax antennas, Model CMA_BDH_6521_E0-6_A1_1910MHz_XXDT

AT&T engineers are available to you to answer any further questions you may have regarding the matters covered in this report.

Sincerely,

Charles McDonnell

AT&T Mobility
(704)254-4031



MCDONNELL, CHARLES C
RF Design Engineer
300 S. Brevard St. Room 1127
Charlotte, NC 28202-2350

DATE: January 6, 2014
SUBJECT: RF Justification for AT&T Wireless Site: 074-648

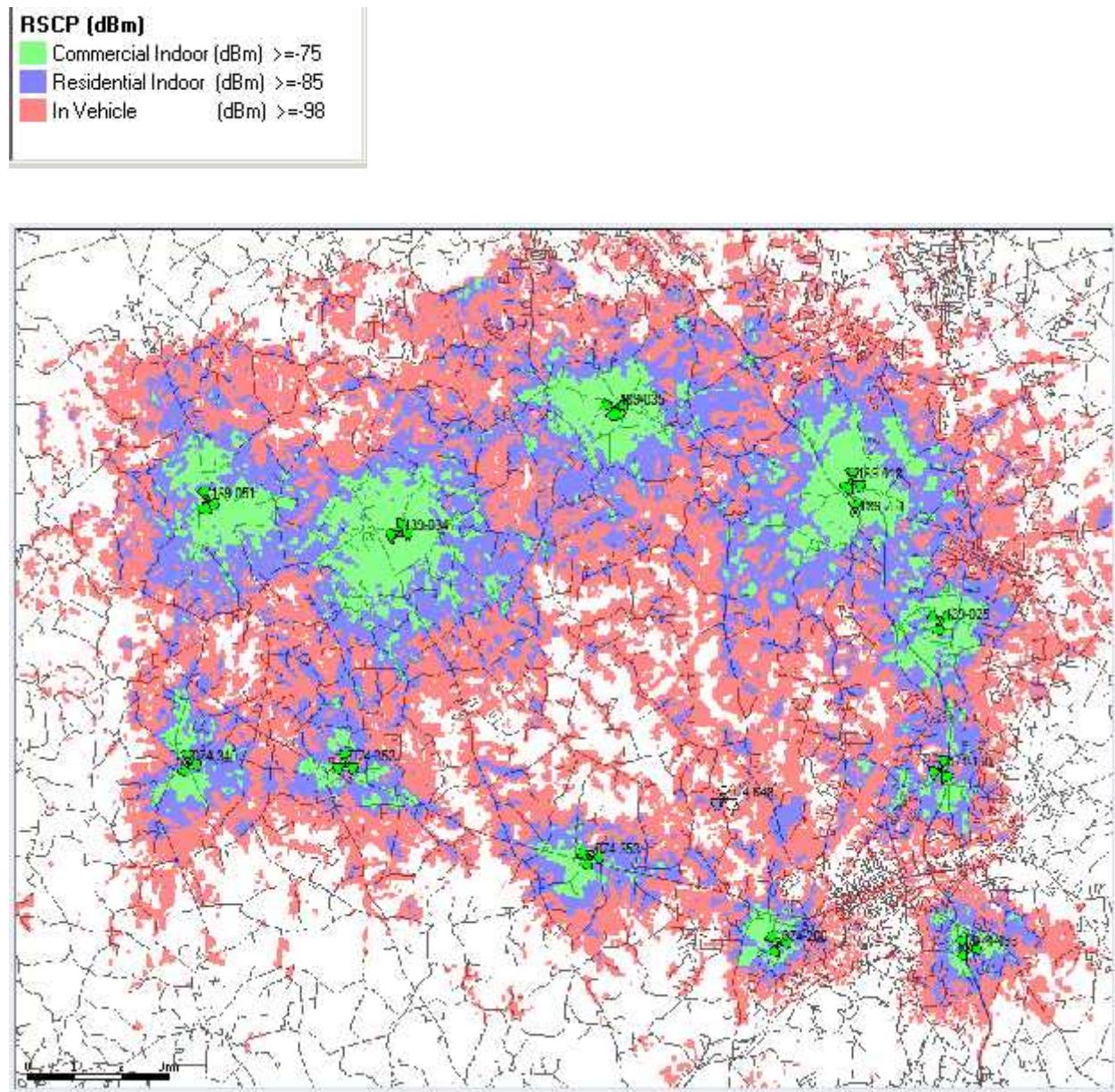
AT&T Mobility has been requested to provide justification for our proposed site 074-648. AT&T Mobility is currently in the process of enhancing/expanding our existing coverage in LINCOLN County. The proposed site will provide coverage Owls Den Rd, Reepsville Rd, Daniel Rd and surrounding areas. Existing structures have been utilized whenever possible. **Figure 1** shows the general area within LINCOLN County that the new site will be located. In **Figure 1** blue text and corresponding icons indicate the location of all existing sites and the white text box indicates the location of the proposed site.

Figure 1: Map of AT&T Wireless' Existing and Proposed Sites



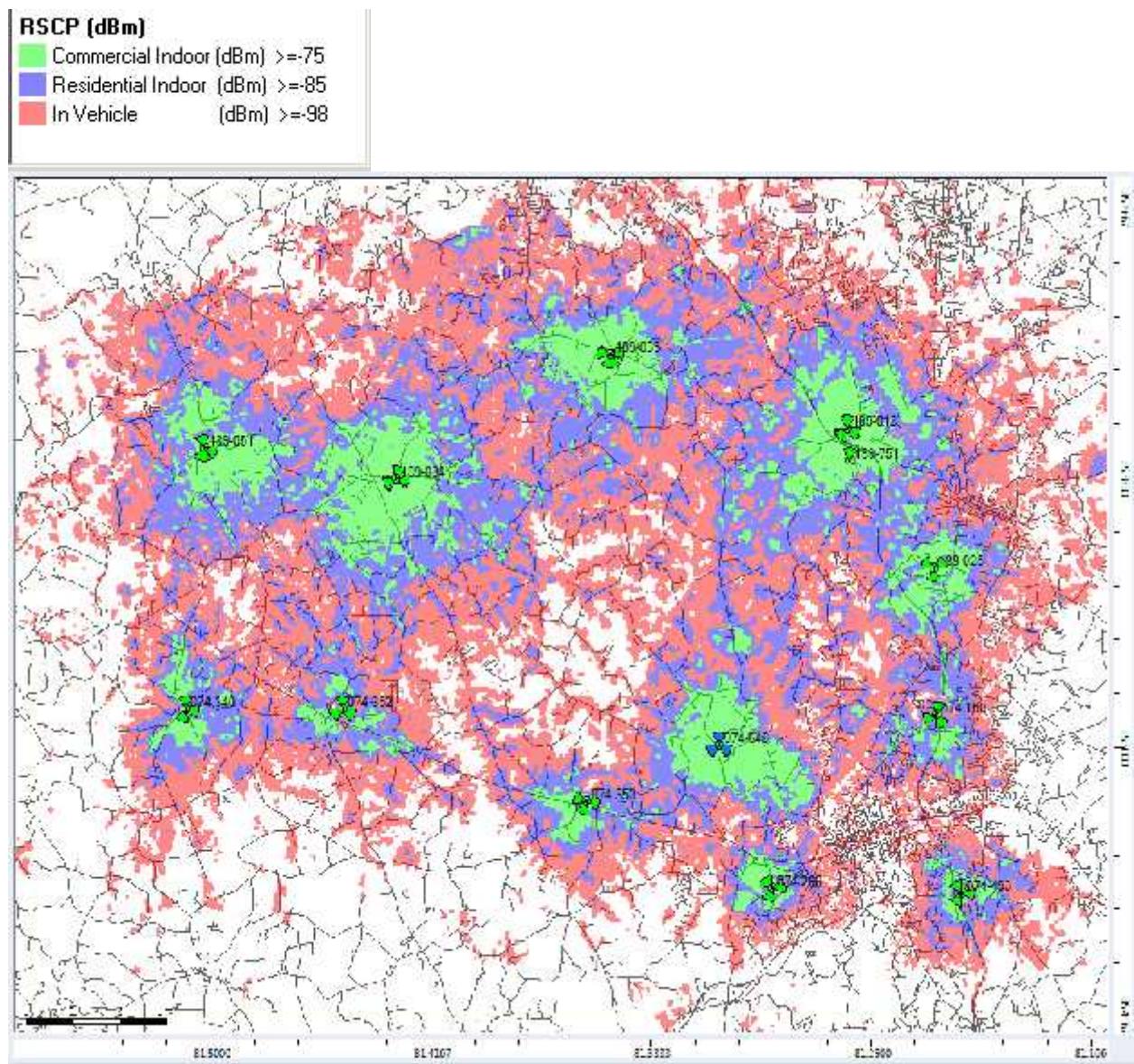
Currently AT&T Mobility does not have adequate coverage in the concerning area. Refer to [**Figure 2**](#), which shows coverage without the proposed site 074-648.

[**Figure 2: \(Exhibit-1\) Map of AT&T Wireless' Coverage without 074-648**](#)



With the addition of proposed site 074-648 AT&T Mobility will provide adequate coverage to Owls Den Rd, Reepsville Rd, Daniel Rd in LINCOLN NC. Refer to [Figure 3](#) which shows coverage with proposed site 074-648.

Figure 3: (Exhibit-2) Map of AT&T Wireless' Coverage with 074-648



If there are any further questions regarding this data I can be reached at

MCDONNELL, CHARLES C

RF Design Engineer

300 S. Brevard St. Room 1127

Charlotte, NC 28202-2350

Tel: 704 254-4031

E-mail: cm5113@att.com

Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > ASR Search

[FCC Site Map](#)

ASR Registration Search

Registration Search Results

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Displayed Results

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 = Pending Application(s)

Specified Search

Latitude='35-30-1.1 N', Longitude='81-18-27 W', Radius=3.2 Kilometers

[ASR Help](#)

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[ASR Online Systems](#)

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[Help](#) | [Tech Support](#)

Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Phone: 1-877-480-3201

TTY: 1-717-338-2824

[Submit Help Request](#)

Placeholder for Tabbed Divider



Orazio Russo
SVP Marketing and Business Development
820 Morris Turnpike, Suite 104
Short Hills, NJ 07078

December 16, 2013

Mr. Randy Hawkins
Zoning Administrator
302 N. Academy Street, Suite A
Lincolnton, NC 28092

Dear Mr. Hawkins:

Diamond Communications LLC ("Diamond") along with its subsidiary, Diamond Towers IV LLC, is one of the leading wireless communications tower owner/operators in the United States. We actively market all of our tower sites to the various wireless carriers that are licensed to operate networks within any given area. Our marketing efforts include direct contact with our carrier customers, e-mail and via the internet.

This site will be structurally designed as a co-locatable tower and made available to all wireless carriers. The rental rates charged to potential carriers seeking to co-locate equipment on this tower will be based on our existing contractual agreements and / or market rates that are typically charged for similar installations located in similar markets as determined by Diamond.

I would like to thank you in advance for your consideration of our application to construct a new tower in your area as this structure will enhance the wireless telephony and data coverage for local residents, first responders and individuals traveling throughout this area.

Very truly yours,

Orazio Russo
SVP Marketing and Business Development
Diamond Communications LLC

Placeholder for Tabbed Divider

This document presented and filed:

10/28/2013 09:33:31 AM

DEED

Fee \$26.00 Transfer Tax: \$0.00

514266



Lincoln County North Carolina
Danny R. Hester, Register of Deeds

526 (3)

Prepared by: Richard E Jonas, Attorney at Law, Lincolnton, NC
After recording mail to: Grantee

NO STAMPS

STATE OF NORTH CAROLINA

COUNTY OF LINCOLN

**WARRANTY DEED
OF COMBINATION**

THIS PROPERTY ____ IS ____ IS NOT THE PRIMARY RESIDENCE OF THE GRANTOR.

This deed made this 25 day of October, 2013, by and between

L. J. SEAGLE III and wife MARTHA B. SEAGLE

hereinafter referred to as "Grantor" and

L. J. SEAGLE III and wife MARTHA B. SEAGLE

Address: 1268 Owls Den Road
Lincolnton, NC 28092

hereinafter referred to as "Grantee."

The designation "Grantor and Grantee" as used herein shall include said parties, their heirs, personal representatives, successors and assigns and shall include the singular, plural, masculine, feminine or neuter as required by the context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in Lincoln County, N. C. and more particularly described as follows:

The parties to this deed currently own two contiguous properties identified as tax parcel 14608 and tax parcel 72161. A metes and bounds description of tax parcel 14608 is found in deed book 457 page 597 and a metes and bounds description of tax parcel 72161 is found in deed book 968 page 817.

It is the intent of the parties and the purpose of this deed is to COMBINE THE PROPERTIES INTO A SINGLE PROPERTY AND A SINGLE TAX PARCEL.

A combined description of the combined properties is found on Exhibit A.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereunto belonging to the said Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated. Title to the property hereinabove described is subject to the following exceptions:

Valid and enforceable reservations, restrictions, conditions, easements and rights-of-ways in the record chain of title.

The draftsman of this deed did not examine or certify title and did not participate in the closing of this transaction.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, the day and year first above written.

L. J. Seagle III (SEAL)
L. J. Seagle III

Martha B. Seagle (SEAL)
Martha B. Seagle

NORTH CAROLINA,

COUNTY OF LINCOLN

I certify that the following person(s) personally appeared before me this day and each acknowledging to me that he or she voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated:

L. J. Seagle III and wife Martha B. Seagle

Witness my hand and Notarial Seal, this the 25 day of October, 2013.

Richard E. Jonas
Official Signature of Notary

Richard E. Jonas
Notary's printed or typed name

My Commission Expires: 6-13-14

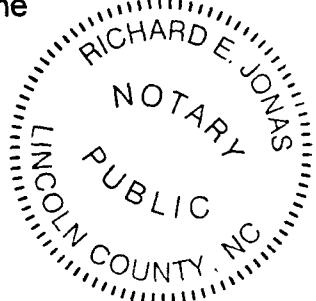


EXHIBIT A

L.J. Seagle, III

BEGINNING at a stone in the field and runs thence with the old Quickel line South 1 1/2 deg. West 49 1/2 poles to a stake, a new corner on the old line; thence a new line South 67 1/4 East 48-3/5 poles to a stake, now a point in the center of Owl Den Road, old southern corner of Seagle land described in deed recorded in Book 457 Page 597 and the old northwestern corner of Seagle land described Book 968, Page 817; thence in a southerly direction along the center of Owl Den Road 895 feet more or less to the northwestern corner of Mayfield property (tax parcel 14612); thence with Mayfield North 89 East 45.09 poles to a point in the branch; thence up the branch North 3 East 32 poles to a point in the branch; thence North 22 West 6 poles to a point; thence North 3 West 15 poles to a point; thence North 12-1/2 West 30 poles to a point; thence North 5 West 20 poles to a point; thence with the branch as it meanders as follows: North 3 1/2 East 10 poles; North 17 West 22-2/5 poles; North 1 West 16-4/5 poles; North 10 1/4 West 18-3/5 poles; North 21 East 13-3/5 poles to a stake in the branch, old corner in the old Quickel line; thence with the old Quickel line South 87 1/2 West 24 poles to a stone, an old corner; thence with the old Quickel line South 4 1/2 East 55-4/5 poles to a stone, an old corner; thence with the old Quickel line South 87 1/2 West 60-1/5 poles to the BEGINNING.

The above description is a combined description of Tax Parcel 14608 and Tax Parcel 72161 into one new parcel.

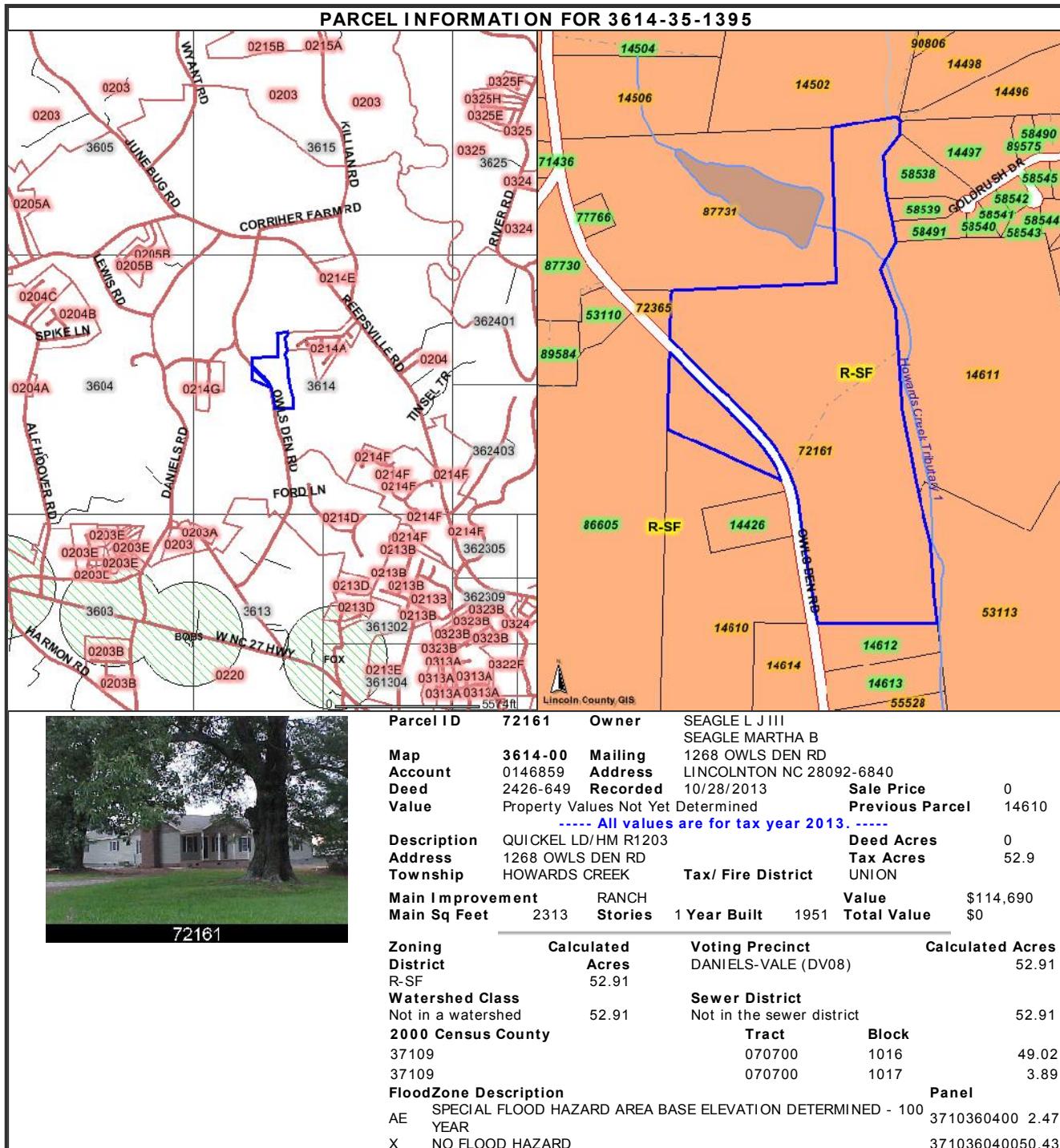


Lincoln County, NC

Office of the Tax Administrator, GIS Mapping Division

Lincoln County and its mapping contractors assume no legal responsibility for the information contained on this map. This map is not to be used for land conveyance. The map is based on NC State Plane Coordinate System 1983 NAD.

Date: 12/3/2013 Scale: 1 Inch = 848 Feet



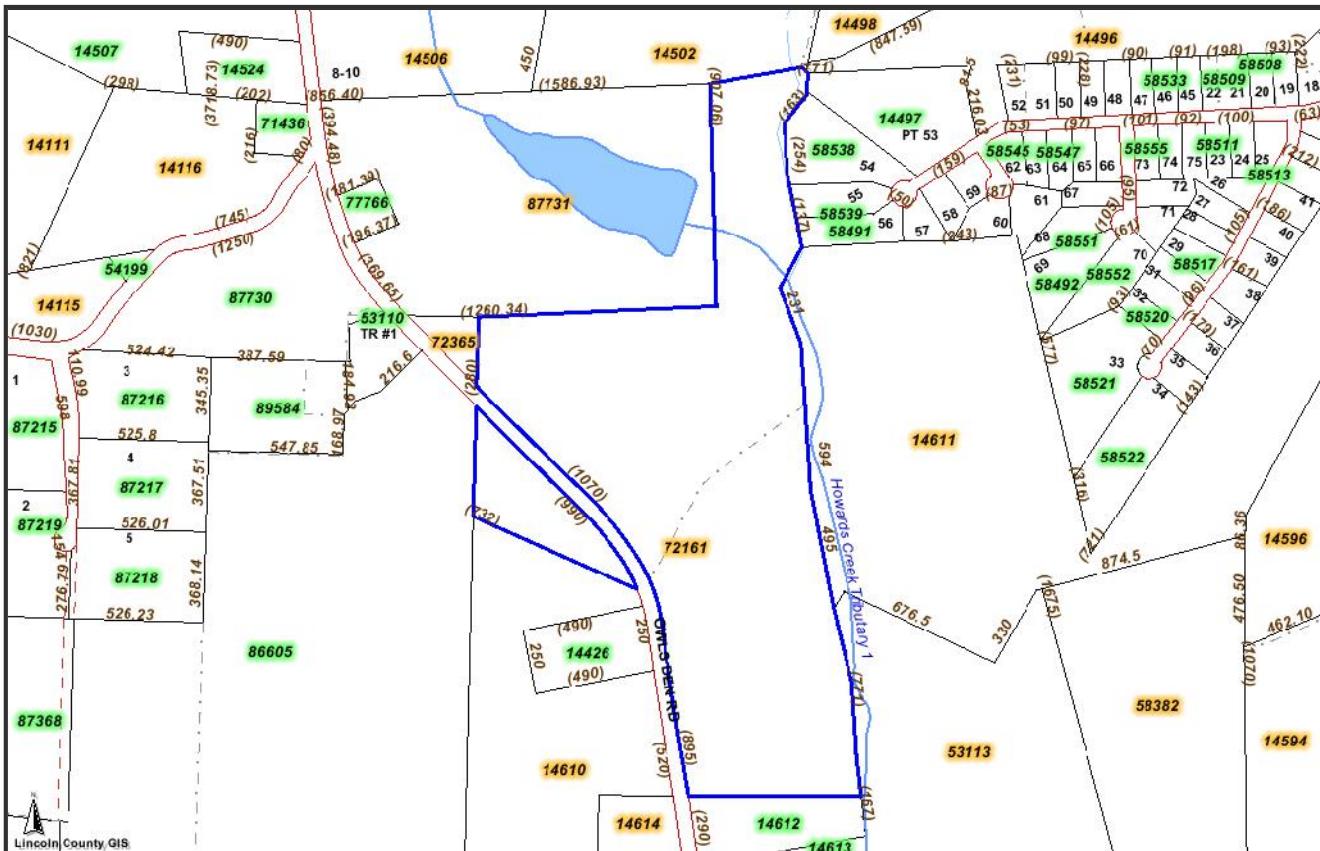


Lincoln County, NC

Office of the Tax Administrator, GIS Mapping Division

Lincoln County and its mapping contractors assume no legal responsibility for the information contained on this map. This map is not to be used for land conveyance. The map is based on NC State Plane Coordinate System 1983 NAD.

Date: 12/3/2013 Scale: 1 Inch = 737 Feet



PHOTOS



72161

PARCEL INFORMATION FOR 3614-35-1395

Parcel ID	72161	Owner	SEAGLE L J III SEAGLE MARTHA B
Map Account	3614-00 0146859	Mailing Address	1268 OWLS DEN RD LINCOLNTON NC 28092-6840
Deed Value	2426-649 Recorded	10/28/2013	Sale Price 0 Property Values Not Yet Determined Previous Parcel 14610
----- All values are for tax year 2013. -----			
Description	QUICKEL LD/HM R1203	Deed Acres	0
Address	1268 OWLS DEN RD	Tax Acres	52.9
Township	HOWARDS CREEK	Tax/ Fire District	UNION
Main Improvement	RANCH	Value	\$114,690
Main Sq Feet	2313	1 Year Built	1951
Zoning District	Calculated Acres	Voting Precinct	Calculated Acres
R-SF	52.91	DANIELS-VALE (DV08)	52.91
Watershed Class		Sewer District	
Not in a watershed	52.91	Not in the sewer district	52.91
2000 Census County		Tract	Block
37109		070700	1016 49.02
37109		070700	1017 3.89
FloodZone Description		Panel	
AE	SPECIAL FLOOD HAZARD AREA BASE ELEVATION DETERMINED - 100	3710360400	2.47
YEAR			
X	NO FLOOD HAZARD	371036040050.43	

Placeholder for Tabbed Divider



December 19, 2013

DIAMOND COMMUNICATIONS LLC
820 Morris Turnpike, Suite 104
Short Hills, NJ 07078

Attn: Karey Vawter
(404) 909-8705

Dear Ms. Vawter:

Per your recent request, please find following our quotation for a 250' Sabre Model S3TL self-supporting tower.

If you have any questions or require further information, please feel free to contact me at (800) 369-6690, ext. 11612.

Sincerely,
SABRE COMMUNICATIONS

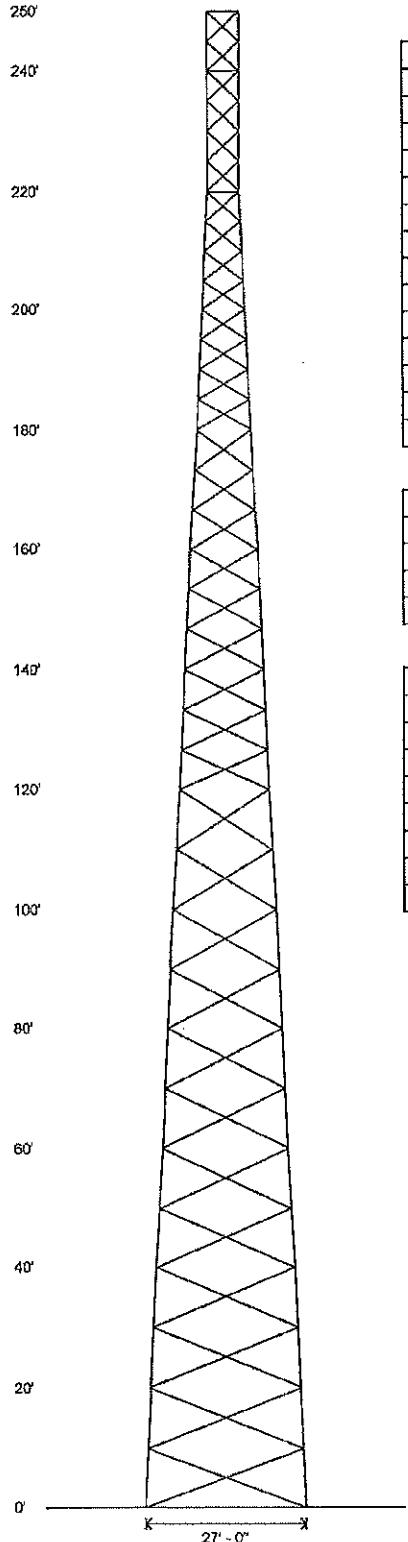


Chad Peters
Southeast Sales Manager

Enclosure: Per Above

CJP: kl

SIZES ARE PRELIMINARY AND MAY CHANGE UPON FINAL DESIGN									
Legs	8.625 OD X .500		8.625 OD X .322		A	5.563 OD X .375	B	C	D
Diagonals	L 4 X 4 X 14		L 3 1/2 X 3 1/2 X 14		L 3 X 3 X 14	L 3 X 3 X 16	L 1 1/2 X 2 1/2 X 3/16	L 2 X 2 X 1/8	E
Horizontals									F
Brace Bolts	(2) 5/8"								G H F
Top Face Width	25'		23'		21'	19'	17'	15'	
Panel Count/Height						13'	11'	9'	
Section Weight	5465		5253		5013	4634	3597	3274	
						3145	2309	2211	
							1598	1230	
								998	
									408



Designed Appurtenance Loading

Elev	Description	Tx-Line
250	3T-Boom(R) - 12ft Face - 3ft Standoff	
250	(6) RRUS 11 Panel Antennas	(2) 7/8"
250	(1) DC6-48-60-18-8F	(1) 1 1/2"
250	(3) CMA-BDHH/6521/E0-6 Panel Antennas	
250	(9) 98" x 12.1" x 8.6" Panel Antennas	
240	3T-Boom(R) - 12ft Face - 3ft Standoff	
240	(6) TMAs	
240	(12) 8' x 1' x 3in Panel Antennas	(18) 1 5/8"
230	3T-Boom(R) - 12ft Face - 3ft Standoff	
230	(6) TMAs	
230	(12) 8' x 1' x 3in Panel Antennas	(18) 1 5/8"
220	3T-Boom(R) - 12ft Face - 3ft Standoff	
220	(6) TMAs	
220	(12) 8' x 1' x 3in Panel Antennas	(18) 1 5/8"

Base Reactions

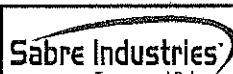
Total Foundation		Individual Footing	
Shear (kips)	74.75	Shear (kips)	45.17
Axial (kips)	173.31	Compression (kips)	486
Moment (ft-kips)	10373	Uplift (kips)	408
Torsion (ft-kips)	-43.04		

Material List

Display	Value
A	5.563 OD X .500
B	4.500 OD X .337
C	3.500 OD X .300
D	2.875 OD X .203
E	2.375 OD X .154
F	L 2 X 2 X 1/8
G	L 2 X 2 X 3/16
H	NONE

Notes

- 1) All legs are 50 ksi.
- 2) All braces are 36 ksi.
- 3) All brace bolts are A325-X.
- 4) The tower model is S3TL Series HD1.
- 5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
- 6) Azimuths are relative (not based on true north).
- 7) Foundation loads shown are maximums.
- 8) (6) 1 1/2" dia. F1554 grade 105 anchor bolts per leg. Minimum 58" embedment from top of concrete to top of nut.
- 9) All unequal angles are oriented with the short leg vertical.
- 10) Weights shown are estimates. Final weights may vary.
- 11) This tower was designed for a basic wind speed of 90 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 12) The foundation loads shown are factored loads.



Sabre Communications Corporation 2101 Murray Street P.O. Box 658 Sioux City, IA 51102-0658 Phone: (712) 254-6590 Fax: (712) 254-9159	Quote: 14-1175-CJP Customer: DIAMOND COMMUNICATIONS LLC Site Name: Lincoln (Segele), NC Description: 250' S3TL Date: 6/17/2013 By: KJL Page: 1
---	--

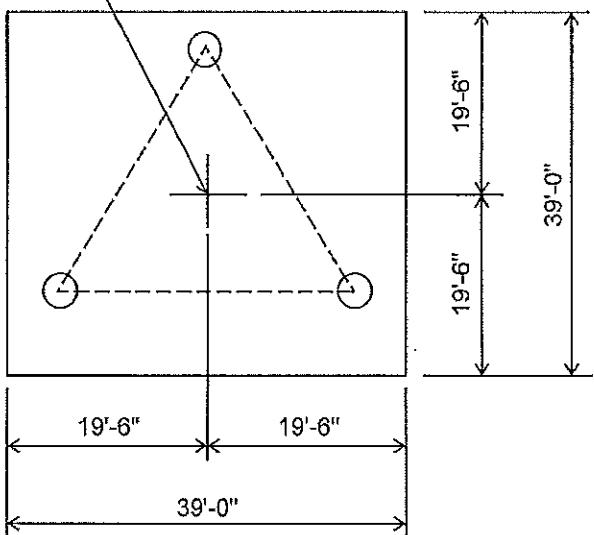
Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 565 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Customer: DIAMOND COMMUNICATIONS LLC
Site: Lincoln (Segal), NC

250 ft. Model S3TL Self Supporting Tower At
 90 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G-2005.

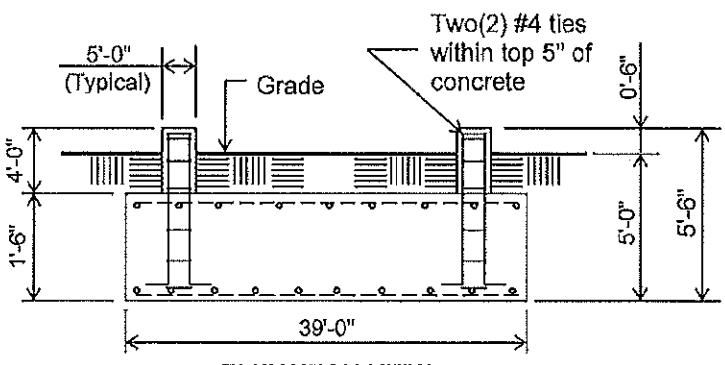
PRELIMINARY -NOT FOR CONSTRUCTION-

Center of Tower
and Foundation



Notes:

- 1). Concrete shall have a minimum 3000 PSI, in accordance with 3000 PSI, in accordance with ACI 318-05.
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on presumptive clay soil as defined in ANSI/TIA-222-G-2005.
- 6). The foundation design is based on presumptive clay soil as defined in ANSI/TIA-222-G-2005. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.



(93.23 Cu. Yds.)
 (1 REQUIRED)

- 6). The foundation is based on the following factored loads:
 Factored download (kips) = 68.1
 Factored overturn (kip-ft) = 10373.32
 Factored shear (kips) = 74.75
- 7). This is a design drawing only. Please see final construction drawings for all installation details.

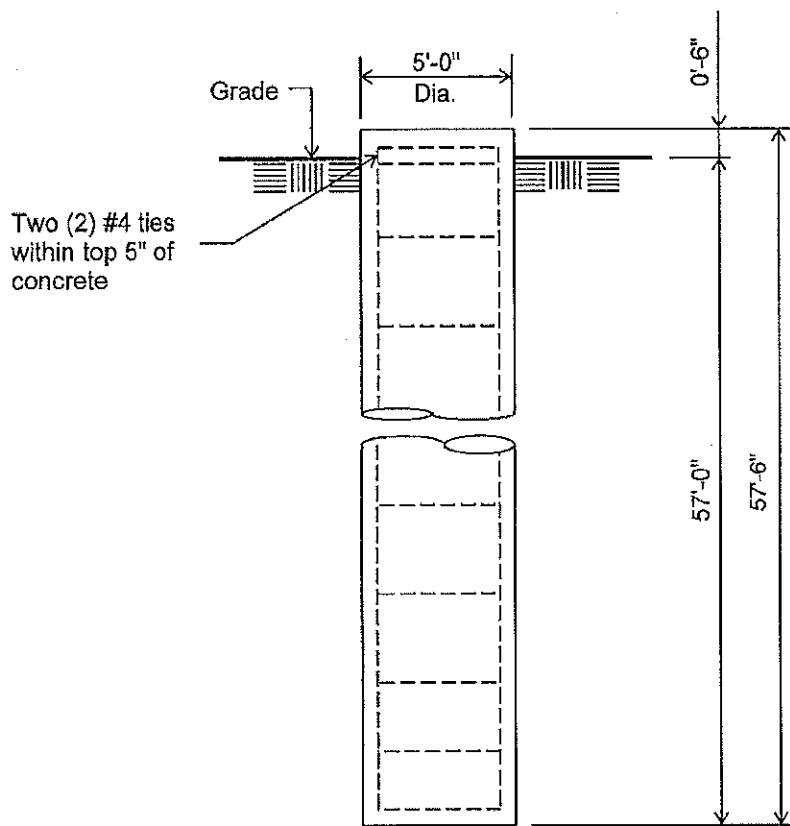
Rebar Schedule per Mat and per Pier	
Pier	(24) #7 vertical rebar w/hooks at bottom w/ #4 Rebar ties, two (2) within top 5" of pier then 12" C/C
Mat	(64) #9 horizontal rebar evenly spaced each way top and bottom. (256 total)

Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Customer: DIAMOND COMMUNICATIONS LLC
Site: Lincoln (Segale), NC

250 ft. Model S3TL Self Supporting Tower At
90 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G-2005.

PRELIMINARY -NOT FOR CONSTRUCTION-



ELEVATION VIEW
(41.82 Cu. Yds. each)
(3 REQUIRED)

Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 3000 PSI, in accordance with ACI 318-05.
- 2). Rebars to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on presumptive clay soil as defined in ANSI/TIA-222-G-2005. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.
- 6). The foundation is based on the following factored loads:
Factored uplift (kips) = 408.06
Factored download (kips) = 466.33
Factored shear (kips) = 45.17
- 7). This is a design drawing only. Please see final construction drawings for all installation details.

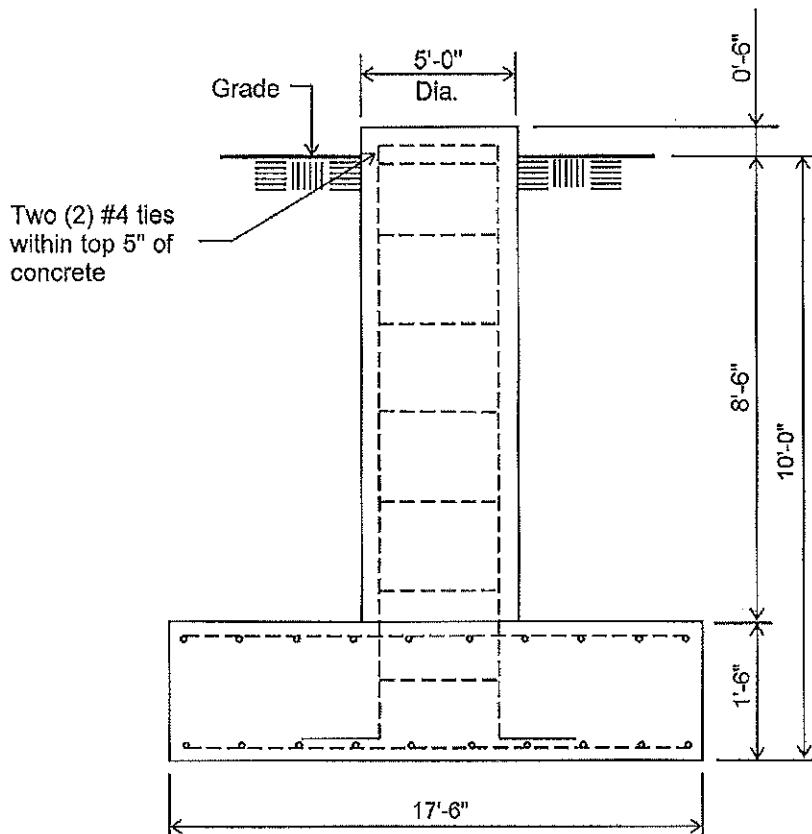
Rebar Schedule per Pier	
Pier	(24) #7 vertical rebar w/#4 ties, two (2) within top 5" of pier then 12" C/C

Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Customer: DIAMOND COMMUNICATIONS LLC
Site: Lincoln (Segale), NC

250 ft. Model S3TL Self Supporting Tower At
90 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G-2005.

PRELIMINARY -NOT FOR CONSTRUCTION-



ELEVATION VIEW
(23.56 Cu. Yds. each)
(3 REQUIRED)

Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 3000 PSI, in accordance with ACI 318-05.
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation is based on presumptive clay soil as defined in ANSI/TIA-222-G-2005. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.
- 6). The foundation is based on the following factored loads:
Factored uplift (kips) = 408.06
Factored download (kips) = 466.33
Factored shear (kips) = 45.17
- 7). This is a design drawing only. Please see final construction drawings for all installation details.

Rebar Schedule per Pad and Pier	
Pier	(24) #7 vertical rebar w/hooks at bottom w/#4 ties, two (2) within top 5" of pier then 12" C/C
Pad	(23) #7 horizontal rebar evenly spaced each way top and bottom (92 Total)

Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Placeholder for Tabbed Divider

December 2, 2013

Ms. Kary Vawter
Diamond Communications
820 Morris Turnpike, Suite 104
Short Hills, NJ 07078

RE: Proposed 250 ft Sabre self-supporting tower for Lincoln (Segale), NC

Dear Ms. Vawter,

The above referenced tower has been designed for a Basic Wind Speed of 90 mph with no ice and 30 mph with 3/4" ice, Structure Class II, Exposure Category C, Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G, "Structural Standard for Antenna Supporting Structures and Antennas".

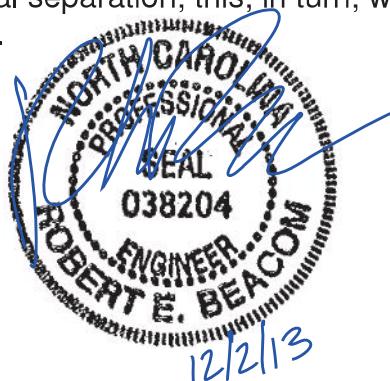
When Sabre towers are designed according to this Standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%.

Therefore, it is highly unlikely that the tower will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors. Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within one or more of the tower members in the upper portion. This would result in a buckling failure mode, where the loaded member would bend beyond its elastic limit (beyond the point where the member would return to its original shape upon removal of the wind load).

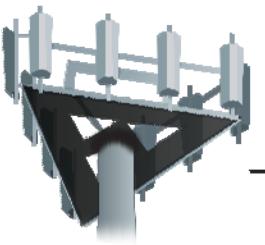
Therefore, it is likely that the overall effect of such an extreme wind event would be localized buckling of a tower section. Assuming that the wind pressure profile is similar to that used to design the tower, the tower is most likely to buckle at the location of the highest combined stress ratio in the upper portion of the tower. This would result in the portion of the tower above the failure location "folding over" onto the portion of the tower below the failure location. ***Please note that this letter only applies to the above referenced tower designed and manufactured by Sabre Towers & Poles.*** In the unlikely event of total separation, this, in turn, would result in collapse of the section above, within a radius of 250 feet.

Sincerely,

Robert E. Beacom, P.E.
Design Engineer I



Placeholder for Tabbed Divider



Diamond

Communications LLC

ZONING DRAWINGS

SITE NAME: LINCOLN

SITE NUMBER: NB085

1268 OWLS DEN ROAD
LINCOLNTON, NC 28092
LINCOLN COUNTY

SITE INFORMATION	
SCOPE OF WORK:	PROJECT CONSISTS OF INSTALLING A PROPOSED WIRELESS TELECOMMUNICATIONS FACILITY.
SITE ADDRESS:	1268 OWLS DEN ROAD LINCOLNTON, NC 28092
APPLICANT:	DIAMOND COMMUNICATIONS LLC 820 MORRIS TURNPIKE, SUITE 104 SHORT HILLS, NJ 07078
LATITUDE (NAD 83):	35°30'07.01"
LONGITUDE (NAD 83):	-81°18'28.24"
JURISDICTION: TOWNSHIP:	LINCOLN COUNTY HOWARDS CREEK
ZONING:	R-SF
PARCEL ID:	72161
PARCEL AREA:	52.9± ACRES
DEED REFERENCE:	DEED BOOK - 2426 PAGE - 649-651
PARCEL OWNER: ADDRESS:	LAWRENCE JOHN SEAGLE III AND MARTHA B. SEAGLE 1268 OWLS DEN ROAD LINCOLNTON, NC 28092
POWER COMPANY: CONTACT:	RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION PHONE - 1-800-521-0920
TELCO COMPANY: CONTACT:	AT&T PHONE - 1-800-632-4943
GROUND ELEVATION:	856.7' (AMSL)
STRUCTURE TYPE:	SELF-SUPPORT TOWER
STRUCTURE HEIGHT:	250.0' (AGL)
ANTENNA CENTERLINE:	250.0' (AGL)

PROJECT TEAM	
APPLICANT:	DIAMOND COMMUNICATIONS LLC 820 MORRIS TURNPIKE, SUITE 104 SHORT HILLS, NJ 07078
CONTACTS:	KAREY VAWTER - (404) 569-6086 JAMIE LAHR - (262) 649-4431
ENGINEERING FIRM:	NB+C ENGINEERING SERVICES, LLC. 7380 COCA COLA DRIVE, SUITE 106 HANOVER, MD 21076 (410) 712-7092
DO NOT SCALE DRAWINGS	
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.	



DIRECTIONS

FROM CHARLOTTE DOUGLAS INTERNATIONAL AIRPORT:
TAKE 1-85 S TOWARD GASTONIA. TAKE EXIT 17 FOR US-321 N. TURN LEFT ONTO US-321 N/N CHESTER ST. CONTINUE TO FOLLOW US-321 N. TAKE EXIT 20 TOWARD HIGH SHOALS/LINCOLNTON. TURN LEFT ONTO US-321BUS NIGASTONIA HWY. CONTINUE TO FOLLOW GASTONIA HWY. CONTINUE ONTO S ASPEN ST. TURN RIGHT ONTO COURT SQUARE DR. TURN RIGHT ONTO W MAIN ST. CONTINUE ONTO NC-27 W/RIVERSIDE DR. CONTINUE TO FOLLOW NC-27 W. TURN RIGHT ONTO ROCK DAM RD. TURN RIGHT ONTO OWLS DEN RD. DESTINATION WILL BE ON THE RIGHT.

CODE COMPLIANCE

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.
- 2009 INTERNATIONAL BUILDING CODE
 - 2008 NATIONAL ELECTRICAL CODE
 - 2009 NFPA 101, LIFE SAFETY CODE
 - 2009 IFC
 - AMERICAN CONCRETE INSTITUTE
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION
 - MANUAL OF STEEL CONSTRUCTION 13TH EDITION
 - ANSI/TIA-222-G
 - TIA 607
 - INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
 - IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
 - TELECORDIA GR-1275
 - ANSI/T 311



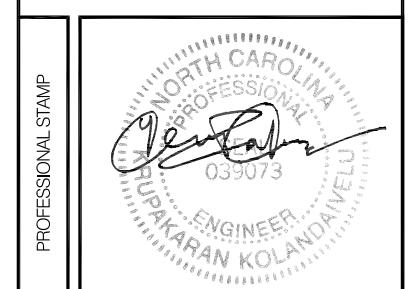
DRAWING INDEX		
T-1	TITLE SHEET	
Z-1	SITE PLAN	
Z-2	PARTIAL SITE PLAN	
C-1	COMPOUND PLAN & ELEVATION	
A-1	ANTENNA DETAILS	
L-1	LANDSCAPE PLAN & DETAILS	

APPROVAL BLOCK		
PROPERTY OWNER	DATE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
SITE ACQUISITION	DATE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CONSTRUCTION MANAGER	DATE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
ZONING	DATE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
RF ENGINEER	DATE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



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NB085
1268 OWLS DEN ROAD
LINCOLNTON, NC 28092
LINCOLN COUNTY

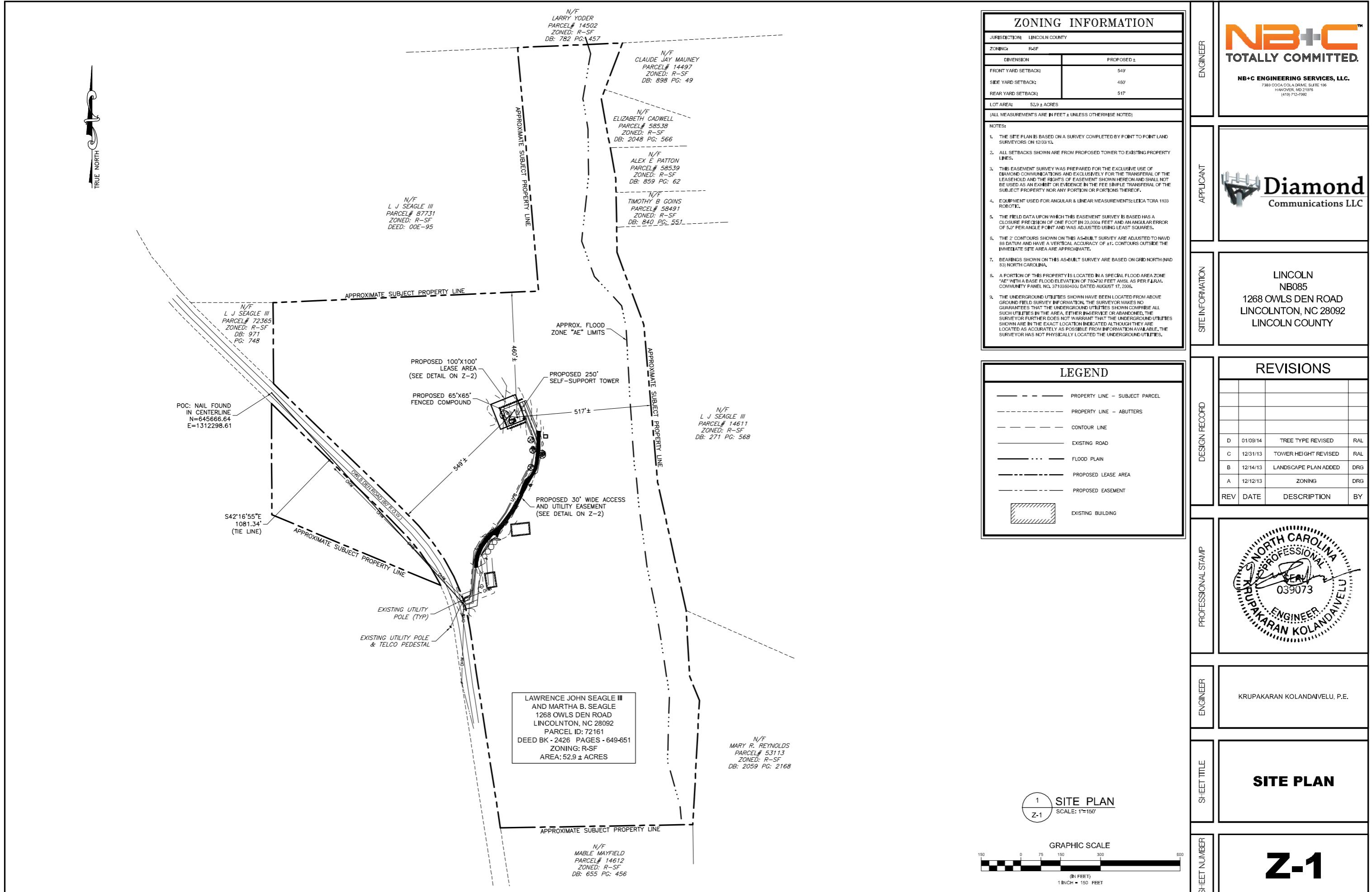
REVISIONS		
DESIGN RECORD		
D	01/09/14	TREE TYPE REVISED RAL
C	12/31/13	TOWER HEIGHT REVISED RAL
B	12/14/13	LANDSCAPE PLAN ADDED DRG
A	12/12/13	ZONING DRG
REV	DATE	DESCRIPTION BY



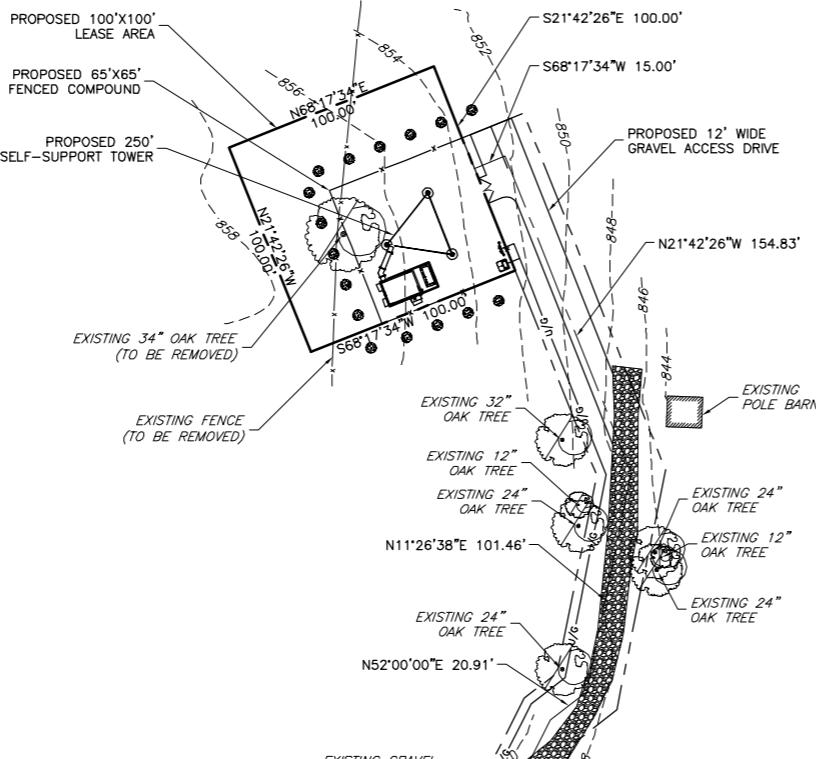
KRUPAKARAN KOLANDAIVELU, P.E.



T-1

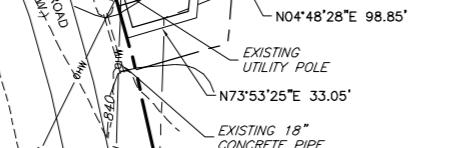
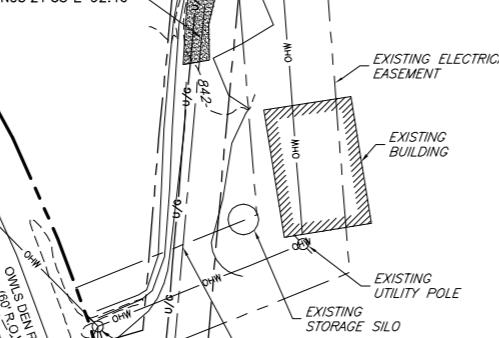
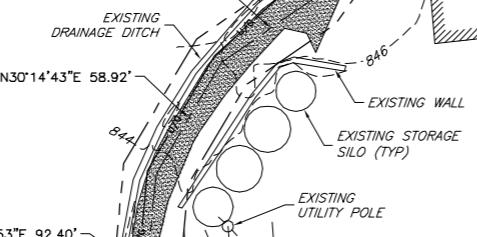


TRUE NORTH



PROPOSED U/G POWER AND TELCO RUNS IN NEW PVC CONDUIT FROM EXISTING UTILITY POLE NEAR ENTRANCE TO METER BOARD AND TELCO CABINET LOCATED IN COMPOUND

PROPOSED 30' WIDE ACCESS AND UTILITY EASEMENT



LEGEND

- PROPERTY LINE - SUBJECT PARCEL
- PROPERTY LINE - ABUTTERS
- XXX CONTOUR LINE
- EXISTING ROAD
- EXISTING FENCE
- OHW EXISTING OVERHEAD WIRES
- EXISTING EASEMENT
- U/G PROPOSED U/G UTILITES
- € OF PROPOSED EASEMENT
- PROPOSED LEASE AREA
- PROPOSED GRAVEL ROAD
- PROPOSED EASEMENT
- EXISTING BUILDING

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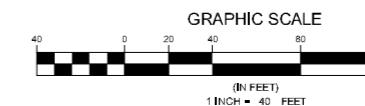
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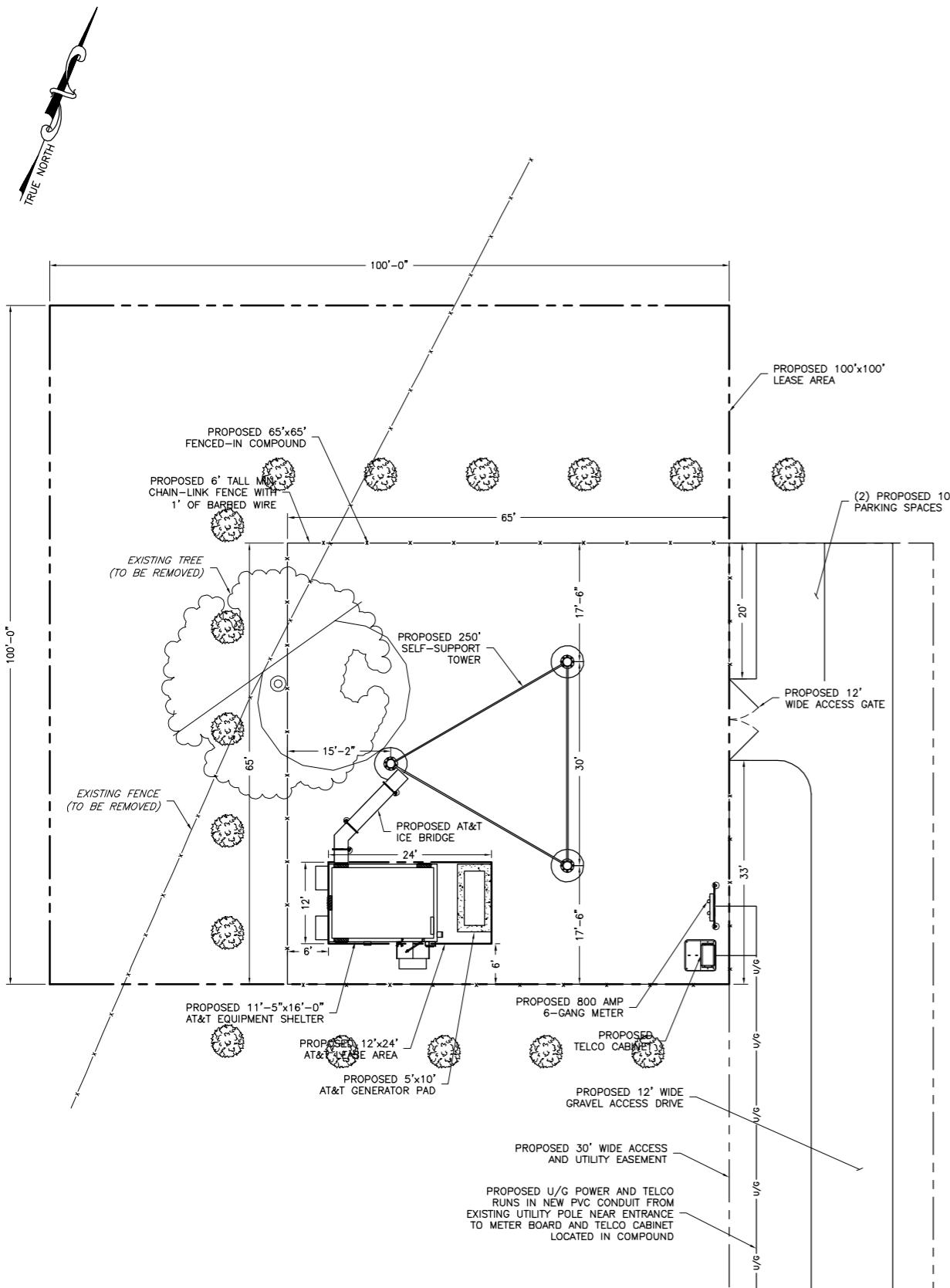
KRUPAKARAN KOLANDAIVELU, P.E.

PARTIAL SITE PLAN

1 PARTIAL SITE PLAN
Z-2
SCALE: 1"=40'



Z-2



1
C-1 **COMPOUND PLAN**
SCALE: 1" = 10'

A graphic scale for drawing 100 feet long. The scale is marked at 10, 0, 5, 10, 20, and 40. Below the scale, the text '(IN FEET)' is written in parentheses, and '1 INCH = 10 FEET' is written below it.

PROPOSED AT&T
ANTENNAS

TOP OF PROPOSED TOWER
ELEV.=250.0' ± AGL

PROPOSED C OF AT&T ANTENNAS
ELEV.=250.0' ± AGL

PROPOSED 250'
SELF-SUPPORT
TOWER

PROPOSED AT&T
EQUIPMENT SHELTER

PROPOSED 65'x65'
FENCED-IN COMPOUND

GROUND LEVEL
ELEV.=0.0' ± AGL

5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.

2
C-1 **ELEVATION**
SCALE: 1/16" = 1'

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITIES COMPANY OR OTHER PUBLIC AUTHORITIES.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
 3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY.
 5. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 6. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 7. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION.
 8. TRANSMITTER EQUIPMENT AND ANTENNAS ARE DESIGNED TO MEET ANSI/EIA/TIA 222-G (NC EDITION) REQUIREMENTS.
 9. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
 10. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
 11. IF ANY UNDERGROUND UTILITIES OR STRUCTURES EXIST BENEATH THE PROJECT AREA, CONTRACTOR MUST LOCATE IT AND CONTACT THE APPLICANT & THE OWNER'S REPRESENTATIVE.
 12. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION BY TECHNICIANS APPROXIMATELY 2 TIMES PER MONTH.
 13. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
 14. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
 15. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
 16. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
 17. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
 18. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.

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INCOLNTON, NC 28092
LINCOLN COUNTY

REVISIONS

REV	DATE	DESCRIPTION	BY
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B	12/14/13	LANDSCAPE PLAN ADDED	DRG
A	12/12/13	ZONING	DRG

A circular seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "PROFESSIONAL" at the bottom. The inner circle contains "ENGINEER" at the top and "SEAL" at the bottom. A signature is written across the center. Below the signature, the number "039073" is stamped. The entire seal is enclosed in a dotted circle.

KRUPAKARAN KOLANDAIYELU, B.E

COMPOUND PLAN & ELEVATION

C-1

ENGINEER

APPlicant

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

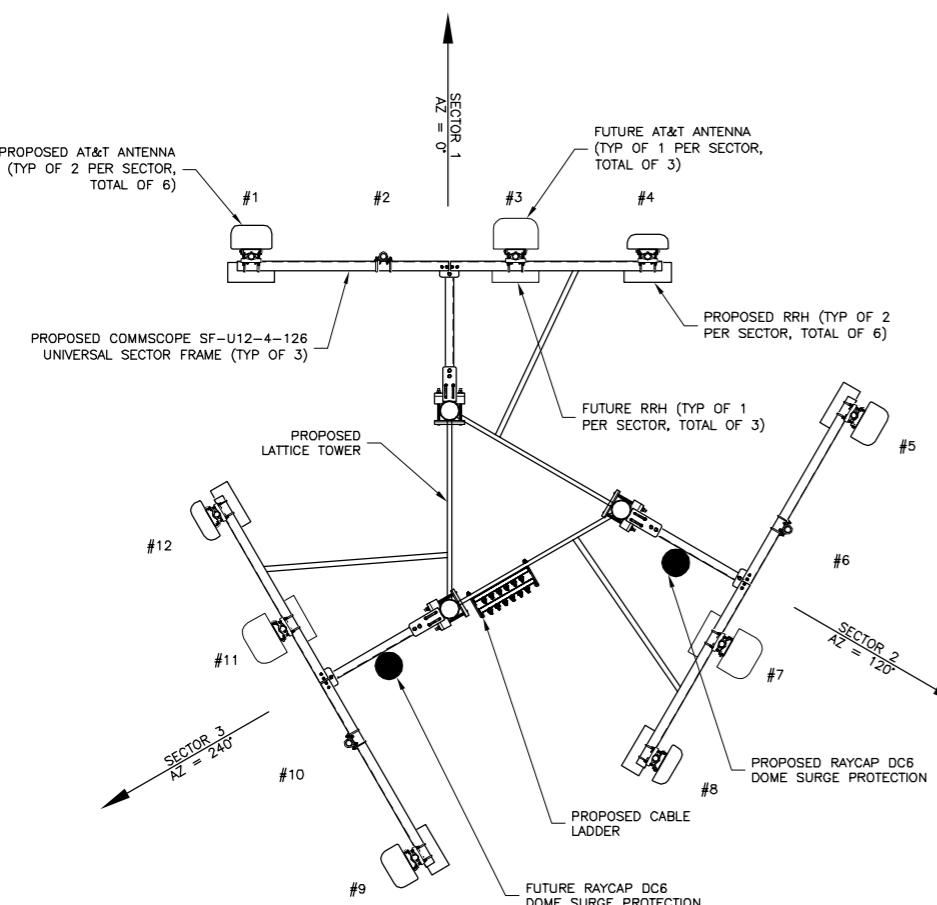
ENGINEER

HEET TIME

SHEET NUMBER

ANTENNA AND COAX CABLE SCHEDULE										
ANTENNA POSITION	ANTENNA VENDOR	ANTENNA MODEL #	AZIMUTH	RAD CENTER	M TILT	CABLE QUANTITY, MODEL, SIZE	CABLE LENGTH	COLOR CODE	RRH MODEL #	
SECTOR #1	#1	ERICSSON	KRC118057-1	0°	250'-0"	TBD	COMMSCOPE RFFT-36SM-001-125M	300'±	1 ORANGE	ERICSSON RRUS-11
	#2	-	-	-	-	-	-	-	-	
	#3	TBD	TBD	0°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	TBD
	#4	CELLMAX	CMA-BDHH/6521/E0-6	0°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	ERICSSON RRUS-11
SECTOR #2	#5	ERICSSON	KRC118057-1	120°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	ERICSSON RRUS-11
	#6	-	-	-	-	-	-	-	-	
	#7	TBD	TBD	120°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	TBD
	#8	CELLMAX	CMA-BDHH/6521/E0-6	120°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	ERICSSON RRUS-11
SECTOR #3	#9	ERICSSON	KRC118057-1	240°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	ERICSSON RRUS-11
	#10	-	-	-	-	-	-	-	-	
	#11	TBD	TBD	240°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	TBD
	#12	CELLMAX	CMA-BDHH/6521/E0-6	240°	250'-0"	TBD	SEE NOTE 1	300'±	SEE NOTE 1	ERICSSON RRUS-11

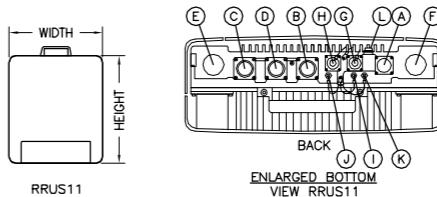
NOTES:
1. PROPOSED AND FUTURE ANTENNAS CONNECTED BY SINGLE SHARED FIBER CABLE.
2. ANTENNAS IN POSITIONS # 3, 7, & 11 ARE FUTURE ANTENNAS.
3. CABLE LENGTH INCREASED BY 10%



1
A-1
NTS
ANTENNA MOUNTING PLAN



ERICSSON KRC118057-1	CELLMAX CMA-B/6521/E0-6
DIMENSIONS (HXWXD) 55.2"X14.8"X8.6"	DIMENSIONS (HXWXD) 81"X15"X5.2"
WEIGHT 100 LBS	WEIGHT 62 LBS



SIZE AND WEIGHT TABLE

RRU	WIDTH	DEPTH	HEIGHT W/O CABLE MANAGEMENT COVER	WEIGHT W/O BRACKET
RRUS11 WITH SOLAR SHIELD	17.0"	7.2"	19.7"	51 LBS.

MINIMUM CLEARANCE TABLE - INSTALL PER MANUFACTURER SPECIFICATIONS

RRU CABINET	CLEARANCES RRUS11 (INCHES)	COMMENTS
FRONT	36"	INSTALLATION ACCESS
REAR	0"	ZERO REAR CLEARANCE IS ALLOWED USING SUPPLIED MOUNTING BRACKETS
RIGHT	0"	AIR FLOW
LEFT	0"	AIR FLOW
ABOVE/TOP	16"	FROM CEILING FOR AIR FLOW (NOTE 1)
BOTTOM	8"	CONDUIT ROUTING/AIR FLOW

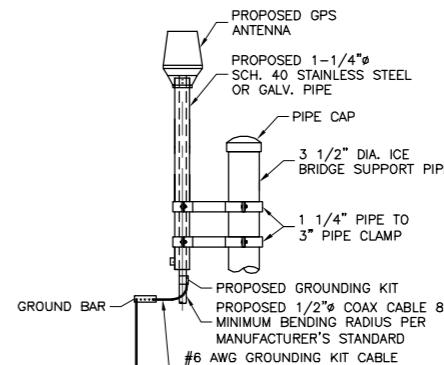
CONNECTION INTERFACE

POSITION (ID)	DESCRIPTION	MARKING	POSITION (ID)	DESCRIPTION	MARKING
A	-48 V DC POWER SUPPLY		G	ALD (FOR RET)	ALD
B	LOCAL MAINTENANCE TERMINAL (LMT)	LMT	H	EXTERNAL ALARM	Q
C	OPTICAL CABLE 1	③-1	I	CROSS CONNECT RXA	RXA I/O
D	OPTICAL CABLE 2	③-2	J	RXA CO-SITE	RXA OUT
E	ANTENNA 1	A ↔	K	CROSS CONNECT RXB	RXB I/O
F	ANTENNA 2	B ↔	L	EARTH GROUNDING	EBT

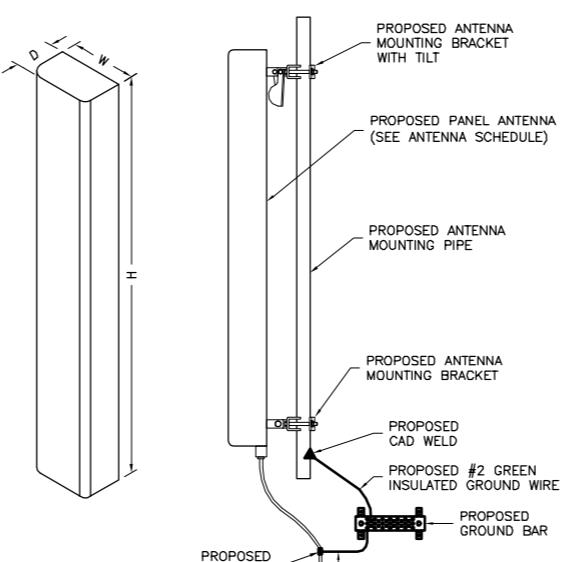
NOTES:

1. STACKING OF RRU's IS NOT PERMITTED
2. NO PAINTING OF RRU OR THE SOLAR SHIELD IS ALLOWED

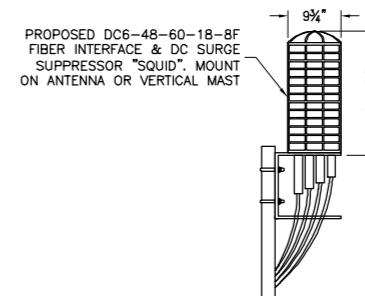
4
A-1
NTS
ERICSSON REMOTE RADIO UNIT (RRU)



3
A-1
NTS
GPS MOUNTING DETAIL



2
A-1
NTS
TYPICAL ANTENNA MOUNTING DETAIL



5
A-1
NTS
DC6 MOUNTING DETAIL



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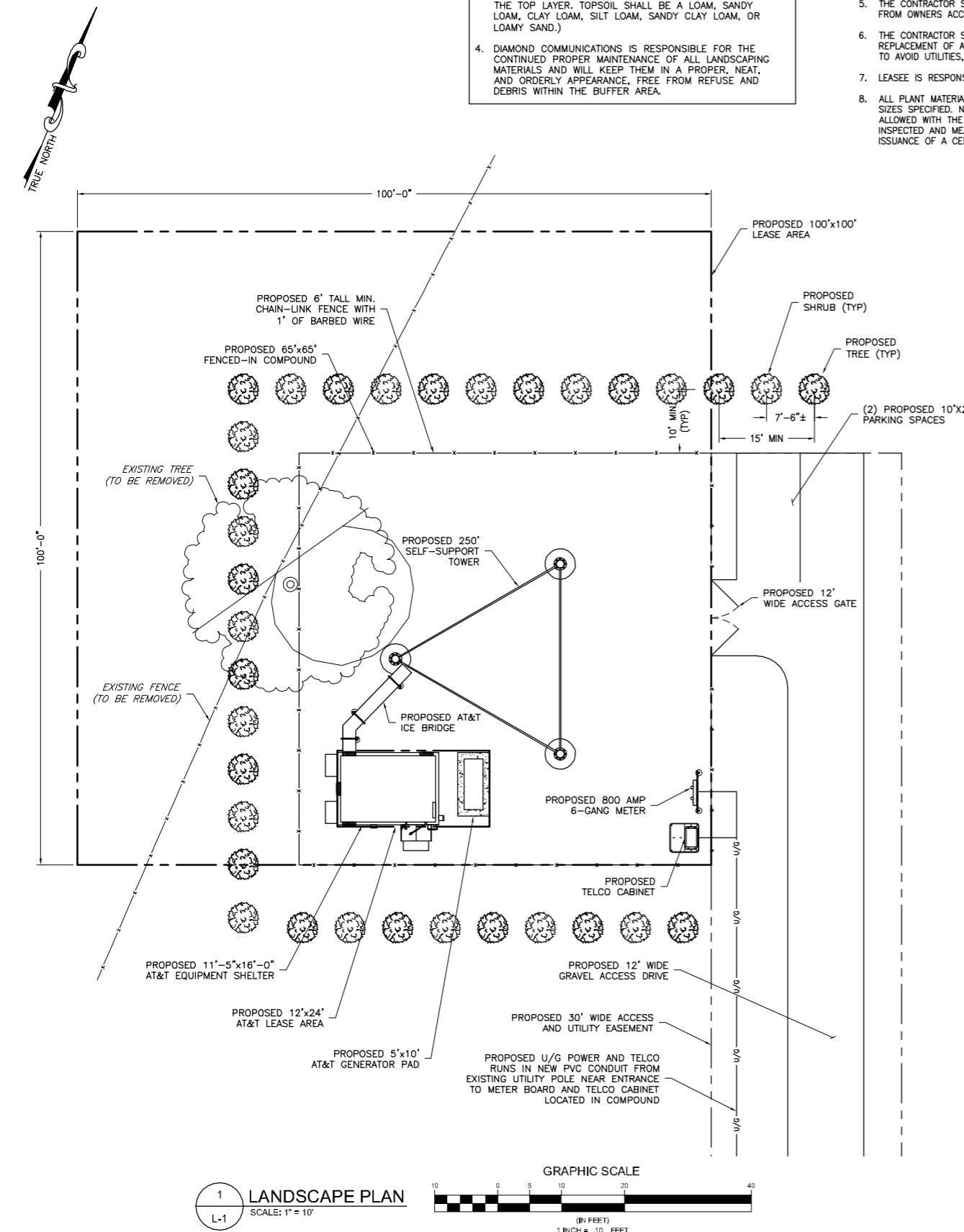
KRUPAKARAN KOLANDAIVELU, P.E.

ANTENNA DETAILS

SHEET NUMBER
A-1

LANDSCAPING NOTES:

1. EXTREME CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING TREES SCHEDULED TO REMAIN.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OR COMPENSATION OF DAMAGED TREES.
3. CONTRACTOR TO REMOVE ALL EXISTING GRAVEL, SITE DEBRIS, ETC. TO A DEPTH WHERE NATIVE SOIL IS FREE FROM FOREIGN MATERIALS. (SOILS SHALL THEN BE REPLACED WITH A MINIMUM OF 6" OF CLEAN TOPSOIL AS THE TOP LAYER. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND.)
4. DIAMOND COMMUNICATIONS IS RESPONSIBLE FOR THE CONTINUED PROPER MAINTENANCE OF ALL LANDSCAPING MATERIALS AND WILL KEEP THEM IN A PROPER, NEAT, AND ORDERLY APPEARANCE, FREE FROM REFUSE AND DEBRIS WITHIN THE BUFFER AREA.



PLANTING SCHEDULE

QUANTITY	BOTANICAL - COMMON NAME	SIZE
16	LEUCOTHOE FONTANESIANA - DROOPING LEUCOTHOE	3' - 5'
17	CARPINUS CAROLINIANA - AMERICAN HORNBEAM	5' - 7'

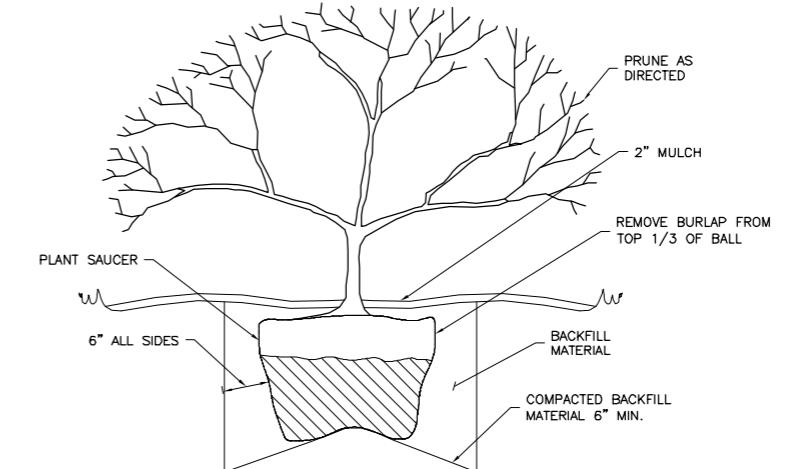
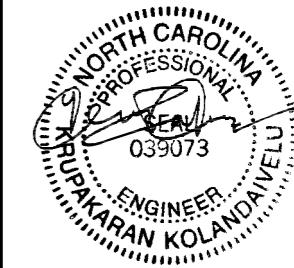
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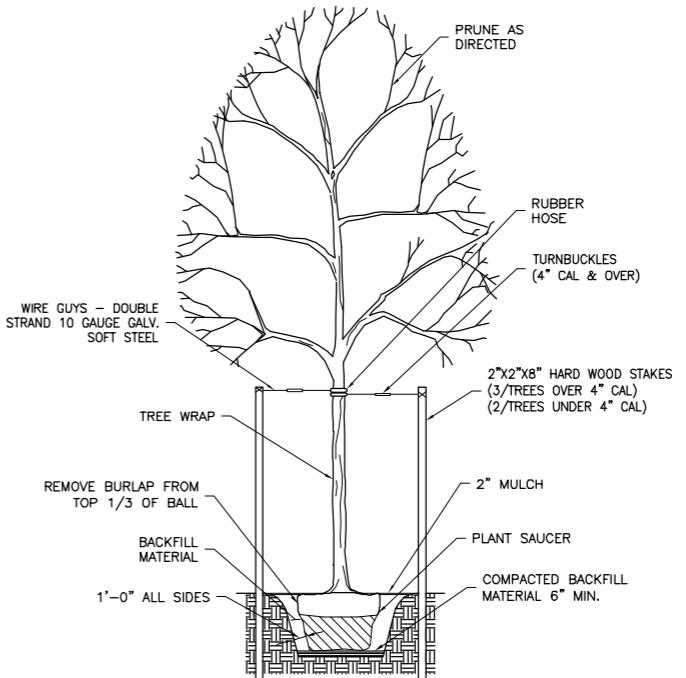
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2 SHRUB PLANTING DETAIL
L-1 NTS



3 TREE PLANTING DETAIL
L-1 NTS

LANDSCAPE PLAN & DETAILS

L-1

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER