CASE NUMBER:

99-016

INDEX FOR CASE: 99-016
NEXTEL WEST CORPORATION
Construct
CELL SITE - 939 OLD WHITLEY - LAUREL COUNTY - LILY SITE

IN THE MATTER OF THE APPLICATION OF CROWN COMMUNICATIN INC.
AND NEXTEL WEST CORP. FOR ISSUANCE OF A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WIRELESS
COMMUNICATIONS FACILITY AT 939 OLD WHITLEY
IN THE TRUNKED CMRS/ESMR LICENSE AREA
IN THE COMMONWEALTH OF KENTUCKY
IN THE COUNTY OF LAUREL
SITE NAME: LILY

SEQ NBR	ENTRY DATE	REMARKS
0001	01/25/99	Application.
0002	01/26/99	Acknowledgement letter.
0003	02/01/99	No deficiencies letter
M0001	03/05/99	DAVID PIKE PIKE LEGAL GROUP-FEDERAL AVIATION & KY AIRPORT ZONING APPOVALS
M0002	03/12/99	CROWN COMMUNICATIONS DAVID PIKE-MOTION TO SUBMIT FOR EXPIDITED DECISION WITHOUT PUBLIC HEAR
0004	04/19/99	FINAL ORDER GRANTING CONSTRUCTION

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 99-016
NEXTEL WEST CORPORATION

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on April 19, 1999.

Parties of Record:

John Binkley
General Manager
Crown Communications, Inc.
1101 Bluegrass Parkway
Suite 330
Louisville, KY. 40299

Honorable William C. Gullett
Counsel for Nextel West Corporation
Brown, Todd & Heyburn PLLC
Suite 650
50 East River Center Boulevard
Covington, KY. 41011 1508

Honorable David A. Pike
Counsel for Crown Communications
Pike Legal Group
P. O. Box 369
Shepherdsville , KY. 40165 0369

Stephanie Bell
Secretary of the Commission

SB/sa
Enclosure

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CROWN COMMUNICATION INC. AND NEXTEL WEST CORP. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WIRELESS COMMUNICATIONS FACILITY AT 939 OLD WHITLEY IN THE TRUNKED CMRS/ESMR LICENSE AREA IN THE COMMONWEALTH OF KENTUCKY IN THE COUNTY OF LAUREL SITE NAME: LILY SITE NUMBER: 308KY	)))))))))	CASE NO. 99-016

O R D E R

On January, 25 1999, Crown Communication Inc. ("Crown") and Nextel West Corp. ("Nextel") (collectively, the "Applicants") filed an application seeking a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility consists of a guyed antenna tower not to exceed 375 feet in height, with attached antennas, to be located at 939 Old Whitley Road, Lily, Laurel County, Kentucky. The coordinates for the proposed facility are North Latitude 37° 0' 25.82" by West Longitude 84° 5' 47.11". Nextel has indicated its intent to locate wireless facilities on the proposed structure and has demonstrated the need for a facility at this site.

Crown has provided information regarding the structure of the tower, safety measures, and antenna design criteria for the proposed facility. Based upon the application, the design of the tower and foundation conforms to applicable nationally

recognized building standards, and the plans have been certified by a Registered Professional Engineer.

Pursuant to 807 KAR 5:063, Section 1(1)(n), the Applicants have notified the Judge Executive of Laurel County of the proposed construction. To date, no comments have been filed by the Judge Executive. The Applicants have filed applications with the Federal Aviation Administration and the Kentucky Airport Zoning Commission seeking approval for the construction and operation of the proposed facility. Both applications have been approved.

The Applicants have filed notices verifying that each person who owns property within 500 feet of the proposed facility has been notified of the pending construction. The notice solicited any comments and informed the property owners of their right to request intervention. In addition, notice of the proposed construction has been posted in a visible location for at least two weeks after filing the application. To date, no comments have been filed with the Commission.

Pursuant to KRS 278.280, the Commission is required to determine proper practices to be observed when it finds, upon complaint or on its own motion, that the facilities of any utility subject to its jurisdiction are unreasonable, unsafe, improper, or insufficient. To assist the Commission in its efforts to comply with this mandate, Crown should notify the Commission if it does not use this antenna tower to provide service in the manner set out in its application and this Order. Upon receipt of such notice, the Commission may, on its own motion, institute proceedings to consider the proper practices, including removal of the unused antenna tower, which should be observed by Crown.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that Crown should be granted a Certificate of Public Convenience and Necessity to construct the proposed facility.

IT IS THEREFORE ORDERED that:

1. Crown is granted a Certificate of Public Convenience and Necessity to construct a guyed antenna tower not to exceed 375 feet in height, with attached antennas, to be located at 939 Old Whitley Road, Lily, Laurel County, Kentucky. The coordinates for the proposed facility are North Latitude 37° 0' 25.82" by West Longitude 84° 5' 47.11".

2. Crown shall immediately notify the Commission in writing, if, after the antenna tower is built and utility service is commenced, the tower is not used for a period of 3 months in the manner authorized by this Order.

Done at Frankfort, Kentucky, this 19th day of April, 1999.

By the Commission

ATTEST:

Executive Director

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

January 26, 1999

Aaron Johnson
Zoning Manager
Crown Communications, Inc.
Commonwealth Business Center
11001 Bluegrass Parkway, Suite 330
Louisville, KY. 40299

Honorable William C. Gullett
Counsel for Nextel West Corporation
Brown, Todd & Heyburn PLLC
Suite 650
50 East River Center Boulevard
Covington, KY. 41011 1508

Honorable David A. Pike
Counsel for Crown Communications
Pike Legal Group
P. O. Box 369
Shepherdsville , KY. 40165 0369

RE: Case No. 99-016
NEXTEL WEST CORPORATION
(Construct) CELL SITE - 939 OLD WHITLEY - LAUREL COUNTY - LILY SITE

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received January 25, 1999 and has been assigned Case No. 99-016. In all future correspondence or filings in connection with this case, please reference the above case number.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

Stephanie Bell
Secretary of the Commission

SB/jc

99-00059

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

FILED
JAN 25 1999
PUBLIC SERVICE COMMISSION

In the matter of)
)
APPLICATION OF CROWN COMMUNICATION INC.)
AND NEXTEL WEST CORP. FOR ISSUANCE)
OF A CERTIFICATE OF PUBLIC CONVENIENCE AND)
NECESSITY TO CONSTRUCT A WIRELESS)
COMMUNICATIONS FACILITY AT 939 OLD WHITLEY)
IN THE TRUNKED CMRS/ESMR LICENSE AREA)
IN THE COMMONWEALTH OF KENTUCKY)
IN THE COUNTY OF LAUREL)
SITE NAME: LILY)
SITE NUMBER: 308KY)

CASE NO.:99-016

RECEIVED
JAN 25 1999
PUBLIC SERVICE COMMISSION

CROWN COMMUNICATION INC. ("CROWN"), as ultimate owner, and Nextel West Corp. ("Nextel"), as a licensed public utility in the Commonwealth of Kentucky, through counsel, pursuant to (i) KRS 278.020 and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit their Application for a Certificate of Public Convenience and Necessity ("CPCN") from the Public Service Commission of Kentucky ("Commission") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of Nextel's Commercial Mobile Radio Services ("CMRS"), and other wireless service provider collocations in the area described herein.

In support of this Application, CROWN and Nextel (hereinafter referred to as "Applicants"), respectfully provide and state the following information:

1. The complete name and address of the Applicants are:

   CROWN COMMUNICATION INC., 375 Southpointe Boulevard, Canonsburg, PA 15317, (724) 416-2000, having a local address of Commonwealth Business Center,

11001 Bluegrass Parkway, Suite 330, Louisville, Kentucky 40299, (502) 240-0044.

NEXTEL WEST CORP., d/b/a NEXTEL, 1505 Farm Credit Drive, McLean, VA 22102, (703) 394-3000.

2. CROWN COMMUNICATION INC. is a Delaware corporation that constructs, owns, maintains, and operates independent communications networks. CROWN owns and manages safe, clean, and well-maintained facilities. CROWN facilities do not generate smoke, odors, noise, noxious gases, vibrations, or increase traffic. Studies show that CROWN's facilities will not pollute air, soil, or water, nor will they adversely affect radio or television reception or transmission. A certified copy of the Certificate of Authority under the name of CROWN COMMUNICATION INC., issued by the Secretary of State of the Commonwealth of Kentucky, and a certified copy of the Articles of Incorporation issued by the Secretary of State of Delaware are attached hereto as **Exhibit A**.

3. After completion of the proposed WCF, CROWN will lease or license space on said tower and the surrounding site so that Nextel may locate and operate its CMRS/ESMR facility to include all required antennas and appurtenances. The proposed WCF will serve an area completely within Nextel's FCC licensed Trunked CMRS/ESMR service area in the Commonwealth of Kentucky. A copy of Nextel's FCC license, as well as NEXTEL's authorization from the Commission to provide wireless services is attached as **Exhibit B.** CROWN has located the proposed site in a manner such that other wireless communications service providers will desire to collocate on said tower, and will endeavor to provide all necessary facilities to make collocation attractive to them.

4. The public convenience and necessity require the construction of the proposed

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

February 1, 1999

Aaron Johnson
Zoning Manager
Crown Communications, Inc.
Commonwealth Business Center
11001 Bluegrass Parkway, Suite 330
Louisville, KY. 40299

Honorable William C. Gullett
Counsel for Nextel West Corporation
Brown, Todd & Heyburn PLLC
Suite 650
50 East River Center Boulevard
Covington, KY. 41011 1508

Honorable David A. Pike
Counsel for Crown Communications
Pike Legal Group
P. O. Box 369
Shepherdsville , KY. 40165 0369

RE: Case No. 99-016
NEXTEL WEST CORPORATION

The Commission staff has reviewed your application in the above case and finds that it meets the minimum filing requirements. Enclosed please find a stamped filed copy of the first page of your filing. This case has been docketed and will be processed as expeditiously as possible.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

99-00059

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

FILED
JAN 25 1999
PUBLIC SERVICE COMMISSION

In the matter of	)
	)
APPLICATION OF CROWN COMMUNICATION INC. AND NEXTEL WEST CORP. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WIRELESS COMMUNICATIONS FACILITY AT 939 OLD WHITLEY IN THE TRUNKED CMRS/ESMR LICENSE AREA IN THE COMMONWEALTH OF KENTUCKY IN THE COUNTY OF LAUREL SITE NAME: LILY SITE NUMBER: 308KY	)
	CASE NO.:99-016

RECEIVED
JAN 25 1999
PUBLIC SERVICE COMMISSION

CROWN COMMUNICATION INC. ("CROWN"), as ultimate owner, and Nextel West Corp. ("Nextel"), as a licensed public utility in the Commonwealth of Kentucky, through counsel, pursuant to (i) KRS 278.020 and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit their Application for a Certificate of Public Convenience and Necessity ("CPCN") from the Public Service Commission of Kentucky ("Commission") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of Nextel's Commercial Mobile Radio Services ("CMRS"), and other wireless service provider collocations in the area described herein.

In support of this Application, CROWN and Nextel (hereinafter referred to as "Applicants"), respectfully provide and state the following information:

1. The complete name and address of the Applicants are:

   CROWN COMMUNICATION INC., 375 Southpointe Boulevard, Canonsburg, PA 15317, (724) 416-2000, having a local address of Commonwealth Business Center,

Pike
Legal Group
Attorneys at Law

March 3, 1999

Susan G. Hutcherson
Filings Division Manager
Docket Branch
Kentucky Public Service Commission
730 Schenkel Lane
P. O. Box 615
Frankfort, Kentucky 40602

Re: Applicant: Crown Communication Inc.
PSC Case No.: 99-016
Crown Site No.: 308KY
Federal Aviation Administration Approval
Kentucky Airport Zoning Commission Approval

Dear Ms. Hutcherson:

Please accept this letter and the attached documents as an official filing in the above-referenced Public Service Commission action. The Certificate of Public Convenience and Necessity issued in this action called for the Applicant to file a copy of the Federal Aviation Administration and Kentucky Airport Zoning Commission approvals once they were obtained. Copies of this relevant documentation are attached to this letter for inclusion in the official case file.

If you have any questions or comments concerning this matter, please do not hesitate to contact me.

Sincerely,

David A. Pike
E-mail: pikelegal@aol.com

DAP/cmh

Enclosures

E-40 308 K4/CI24

Federal Aviation Administration
Southern Region
Air Traffic Division, ASO-520
P. O. Box 20636
Atlanta, GA 30320

ACKNOWLEDGEMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

CITY	STATE	LATITUDE/LONGITUDE	MSL	AGL	AMSL
LILY	KY	37-00-25.82 084-05-47.11	1143	375	1518

CROWN COMMUNICATION INC.
KRISTEN WEIDE
375 SOUTHPOINTE BLVD.
CANONSBURG, PA 15317

AERONAUTICAL STUDY
No: 98-ASO-7354-OE

Type Structure: ANTENNA TOWER SEE FREQUENCIES ~~BELOW~~ page2

The Federal Aviation Administration hereby acknowledges receipt of notice dated 11/17/98 concerning the proposed construction or alteration contained herein.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation, whether it should be marked and lighted to enhance safety in air navigation, and whether supplemental notice of start and completion of construction is required to permit timely charting and notification to airmen. The findings of that study are as follows:

The proposed construction would not exceed FAA obstruction standards and would not be a hazard to air navigation. However, the following applies to the construction proposed:

The structure should be obstruction marked and lighted per FAA Advisory Circular AC 70/7460-1J, 'Obstruction Marking and Lighting. CHAPTERS: [ ]-3 [X]-4 [X]-5 [X]-6 [ ]-7 [X]-8 [ ]-9 [ ]-10 [ ]-11 [ ]-12 [X]-13. **Dual red with medium intensity white lights.**

Supplemental notice is required ~~at least 10 days before the start of construction and~~ within five days after construction reaches its greatest height (use the enclosed FAA form).

This determination expires on 06/01/99 unless application is made, (if subject to the licensing authority of the Federal Communications Commission), to the FCC before that date, or it is otherwise extended, revised or terminated.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgement will be sent to that agency.

NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED

SIGNED Mary Z. Mc Burney Specialist, Airspace Branch.
Mary Z. Mc Burney (404) 305-~~5585~~ 5583
ISSUED IN: College Park, Georgia ON 11/30/98

Kentucky Airport Zoning Commission
125 Holmes Street
Frankfort, KY 40622

(502) 564-4480
fax: (502) 564-7953
No.: AS-063-LOZ-98-277

Echo 308 KY /LIZ4/

February 1, 1999

APPROVAL OF APPLICATION

APPLICANT:
CROWN COMMUNICATION INC
KRISTEN WEIDE, REGULATORY COORDINATOR
375 SOUTH POINTE BOULEVARD
Cannonsburg, PA 15317

SUBJECT: AS-063-LOZ-98-277

STRUCTURE:	Antenna Tower
LOCATION:	Lily , KY
COORDINATES:	37°00'25.82"N / 84°05'47.11"W
HEIGHT:	375'AGL/1,518'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct (375'AGL/1,518'AMSL) Antenna Tower near Lily , KY 37°00'26"N, 84°05'47"W.

This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit.

A copy of the approved application is enclosed for your files.

Dual obstruction lighting is required in accordance with 602 KAR 50:100.

Ronald Bland, Administrator

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:	)	
	)	
	)	
APPLICATION OF CROWN COMMUNICATION INC.	)	
AND NEXTEL WEST CORP. FOR ISSUANCE	)	
OF A CERTIFICATE OF PUBLIC CONVENIENCE AND	)	
NECESSITY TO CONSTRUCT A WIRELESS	)	CASE NO.: 99-016
COMMUNICATIONS FACILITY AT 929 OLD WHITLEY	)	
IN THE TRUNKED CMRS/ESMR LICENSE AREA	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF LAUREL	)	
SITE NAME: LILY	)	
SITE NUMBER: 308KY		

MOTION TO SUBMIT
FOR EXPEDITED DECISION WITHOUT PUBLIC HEARING

Come the Applicants, Crown Communication Inc. and Nextel West Corp., by counsel, and move the Kentucky Public Service Commission to promptly grant a Certificate of Public Convenience and Necessity ("CPCN") in the within Application proceeding based on the following facts and circumstances:

1. The Applicants have met all filing requirements under the Kentucky Revised Statutes and the Kentucky Administrative Regulations applicable to this proceeding.

2. There are no intervenors in this proceeding after Notice has been afforded pursuant to the terms of the Kentucky Revised Statutes and the Kentucky Administrative Regulations.

3. The Wireless Communications Facility which is the subject of this Application for a CPCN is a vital element of the provider's wireless communications network, and is necessary to provide service in accordance with the provisions of its license with the Federal Communications Commission.

WHEREFORE, Crown Communication Inc. and Nextel West Corp., Applicants herein, by counsel, urge the Kentucky Public Service Commission to promptly grant a Certificate of Public Convenience and Necessity in accordance with the terms of the Application in this proceeding without public hearing.

Respectfully submitted,

DAVID A. PIKE
PIKE LEGAL GROUP
200 S. Buckman Street
Post Office Box 369
Shepherdsville, KY 40165-0369
Telephone: (502) 955-4400
Telefax: (502) 543-4410
E-Mail: E-Mail: pikelegal@aol.com
ATTORNEY FOR
CROWN COMMUNICATION INC.

and

William C. Gullett
Brown Todd & Heyburn
50 E. RiverCenter Blvd., Ste. 650
Covington, KY 41011
ATTORNEY FOR NEXTEL WEST CORP.

WCF. The construction of the WCF will bring Nextel's CMRS/ESMR services to an area currently not served by Nextel and will thereby enhance the public's access to innovative and competitive wireless telecommunications services. The WCF will provide a necessary link in Nextel's telecommunications network that is designed to meet the increasing demands for wireless services in Kentucky's Trunked, CMRS/ESMR-licensed area. The WCF is an integral link in Nextel's network design that must be in place to cover the proposed service area.

5. CROWN's construction of the described WCF is desirable because it allows for the collocation of additional wireless service providers within the Laurel County portion of the Kentucky Trunked, CMRS/ESMR-licensed area. These services may include telecommunications, wireless data transfer and Internet services, wireless cable, paging systems, and other new products currently being developed in the wireless industry. In addition, the WCF will be available for use by governmental agencies and providers of emergency services. The WCF will provide a necessary link in CROWN's wireless network, and CROWN, as part of its business structure, will diligently pursue and encourage other wireless providers to collocate on the WCF. These services will provide increased competition in the South Central Kentucky telecommunications market, which will, in turn, promote competitive pricing, quality, and coverage options to users of telecommunications services in this area. CROWN's vested interest in the collocation of wireless service providers promotes the same goals for the consumers of South Kentucky.

6. The Applicants propose to construct a WCF at 939 Old Whitley Road, Lily, Kentucky, 40740 in an area located entirely within Laurel County. The proposed WCF will consist of a 350-foot guyed tower, with a 25-foot lightning arrestor attached at the top for a total height of 375 feet. The WCF will also include concrete foundations to accommodate

the placement of Nextel's proprietary radio electronics equipment. The equipment will be housed in a prefabricated shelter that will contain: (i) the transmitting and receiving equipment required to connect the WCF with Nextel's CMRS/ESMR users in Kentucky, (ii) telephone lines that will link the WCF with Nextel's other facilities, (iii) battery back-up that will allow Nextel to operate even after a loss of outside power, and (iv) all other necessary appurtenances. Nextel's equipment shelter will be approved for use in the Commonwealth of Kentucky by either the local building inspector or the Kentucky Department of Housing. The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached **as Exhibits C and D,** as required by 807 KAR 5:001 Section 9(2)(c). Periodic inspections will be performed on the WCF in accordance with the applicable regulations or requirements of the Commission. The list of competing utilities, corporations, or persons is attached as **Exhibit E.**

7. A Site Development Plan has been submitted with this Application as **Exhibit C**. A vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting both the tower height as well as a proposed configuration for NEXTEL's and future antenna mounts has also been included as part of **Exhibit C.** Foundation design plans and a description of the standard according to which the tower was designed signed and sealed by a professional engineer registered in Kentucky is included as part of **Exhibit D.**

8. The Applicants have considered the likely effects of the installation on nearby land uses and values and have concluded that there is no more suitable location reasonably

available from which adequate services can be provided, and that there are no reasonably available opportunities to collocate. The Applicants have attempted to collocate on towers designed to host multiple wireless services provider's facilities or existing structures, such as a telecommunications tower, or another suitable structure capable of supporting Nextel's facilities. No other towers were found to be located within the site vicinity. Information regarding the nearest towers, and CROWN's reasons for not utilizing these towers for collocation are presented as **Exhibit F.**

9. Kristen Weide conducted a preliminary aeronautical evaluation on November 11, 1998. The evaluation determined that a structure height of 375 feet at this site is within the FCC rules of Federal Aviation Regulation Part 77, Part 17 requirements. FAA authorization was issued on November 30th, approving the applied height and detailing the lightning and marking requirements for this facility. A copy of the FAA approval is attached as **Exhibit G.**

10. An application to the Kentucky Airport Zoning Commission (KAZC) was filed on November 11, 1998, a copy of which is attached as **Exhibit H.** Upon receiving authorization from the KAZC, the Applicants will forward a copy of the determination as a supplement to this Application.

11. A separate application to the Federal Communications Commission is not required for this facility.

12. ATC Associates Inc. ("ATC") performed soil boring(s) and subsequent geotechnical-engineering studies of the WCF site. ATC has performed hundreds of such studies for the communications industry. ATC's local office is located at 2815 Watterson

Trail, Louisville, Kentucky 40299-3868. The Senior Engineer for the WCF site is Michael Ronayne, PE, a registered professional engineer in the Commonwealth of Kentucky. His area of expertise is in the field of geotechnical engineering, including subsurface exploration. A copy of the Report of Geotechnical Exploration is attached hereto as **Exhibit I**.

13. Clear directions to proposed site from the County seat are attached as **Exhibit J.** They were prepared by Rodney Strong (502) 240-0044.

14. The property on which the WCF will be located is owned by Willie C. Cobb in a life estate, with remainder interest to William R Cobb, Janice Ison, and Thomas and Gilberta Farmer, and is located at 939 Old Whitley Road, Lily, Kentucky, 40740 . The WCF site is geographically positioned at 37° 00' 25.82" North latitude and at 84° 05' 47.11" West longitude. Nextel, pursuant to a Lease Agreement dated February 10th, 1998, has acquired the WCF site and associated property rights. A copy of the abbreviated Memorandum of Deed recorded with the County Clerk is attached as **Exhibit K.** Also, included as part of **Exhibit K** is the portion of the full agreement demonstrating that in the case of abandonment a method is provided to dismantle and remove the cellular antenna tower, including a timetable for removal.

15. Personnel directly responsible for the design and construction of the proposed WCF are well-qualified and experienced. Sabre performed the tower and foundation design. Sabre is a nationally recognized manufacturer and designer of communications towers. The engineer responsible for the design is Chi S. Lee, PE, a registered

professional engineer in the Commonwealth of Kentucky. His specialty is the design and engineering of guyed, self-support and monopole structures. He has served as Professional Engineer on various projects similar to the Applicants'. These projects include the design of towers and the required foundations of many other wireless facilities. All of the designs have been signed and sealed by Chi S. Lee. The construction of the proposed WCF will be performed by Crown Network Systems, an experienced, bonded, and insured erection company. The CROWN Tower Erection Manager, Harold Harrington, will manage the tower erection as well. Mr. Harrington is a tower installation manager for Crown and has been erecting towers for the telecommunications industry for over 15 years. All tower designs will meet or exceed applicable laws and regulations.

16. Based on his review of Federal Emergency Management Agency Flood Insurance Rate Maps, the registered land surveyor has noted on Page C-2 of **Exhibit C** that the proposed WCF is not located within any flood hazard area.

17. The possibility of high winds has been considered in the design of this tower. The tower has been designed and engineered by professional engineers using computer assistance and the same accepted codes and standards as are typically used for high-rise building construction. The tower has been designed to withstand a wind loading of 70 m.p.h., using the Uniform Building Code of 1991 ("UBC-91") and further modified by the 1993 Administrative Code. This tower has been designed in accordance with the Electronic Industries Association ("EIA") 222-F Standards, which have been accepted and approved by ANSI and is a nationally recognized tower design standard. Similarly, the proposed WCF design has been developed with consideration to potential ground shaking based on a

negligible seismic zone of 1. However, seismic loading is regarded as secondary to the wind loading, as described above.

18. The site development plan signed and sealed by Mario Alvarez was prepared by Alvar, Inc. and was designed from a survey performed by T. Alan Neal Company. This site development plan is drawn to a scale of no less than one (1) inch equals 200 feet, and identifies every owner of real estate within 500 feet of the proposed tower (according to the Property Valuation Administrator) and is incorporated in the survey on Page C-1 of **Exhibit C**. Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is incorporated in the survey on Page C-2 of **Exhibit C**.

19 CROWN, on behalf of itself and Nextel, has notified every person who owns property within 500 feet of the proposed tower by certified mail, return receipt requested, of the proposed construction, along with the possibility of a temporary site being built while awaiting final Commission approval. Each property owner has been given the docket number under which the proposed Application will be processed and has been informed of his or her right to request intervention. A list of the nearby property owners who received the notices, together with copies of the certified letters, are attached as **Exhibits L and M**, respectively.

20. CROWN, on behalf of itself and Nextel, has notified the Judge Executive of Laurel County by certified mail, return receipt requested, of the proposed construction. CROWN included in said notice the Public Service Commission docket number under which the

application will be processed and informed said entity of its right to request intervention. A copy of said notice is attached as **Exhibit N**. Laurel County has not registered for the right to regulate cell sites with the PSC, and has not adopted planning and zoning regulations in accordance with KRS Chapter 100.

21. The proposed WCF will be located at 939 Old Whitley Road, Lily, Kentucky, 40740. Two appropriate notice signs measuring at least two (2) feet in height and four (4) feet in width with all required language in letters of required height have been posted in a visible location on the proposed site and on the nearest public road and shall remain posted for at least two (2) weeks after filing of the Application. Copies of the postings are attached as **Exhibit O**. The location of the proposed facility has been published in a newspaper of general circulation in Laurel County, Kentucky.

22. The area in which the WCF is to be constructed does not have any zoning classification. There are no residences within a 500-foot radius of the centerline of the proposed tower location. The land surrounding the WCF site is presently being used for agricultural purposes with the balance of the remaining land consisting of raw acreage.

23. The process that was used in selecting the site for the proposed WCF by the Applicants' radio frequency engineers was consistent with the process used for selecting generally all other existing and proposed WCF facilities within the proposed network design area. Before beginning the acquisition process, the Applicants carefully evaluated the location of the required WCF for possible collocation opportunities on existing structures. Radio frequency engineers used computer programs to evaluate the most effective coverage design for facilitating collocation potential on the proposed tower.

CROWN and Nextel's radio frequency engineers have combined their efforts in order to develop a highly efficient network that is designed to serve the Federal Communications Commission licensed territory without extending beyond its approved boundary. The engineers selected the optimum vicinity in terms of elevation and location to provide the best quality service to customers in the service area. A proposed coverage area was considered by the Applicants when searching for sites that would provide both (i) the coverage deemed necessary by Nextel, and (ii) the coverage deemed necessary by CROWN to permit the integration of the proposed WCF into CROWN's overall network design. No suitable towers or existing structures were found in the immediate area that would meet the technical requirements for this element of the telecommunications network.

A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which a site should, pursuant to radio frequency requirements, be located is attached as **Exhibit P.**

24. All responses and requests associated with this Application may be directed to:

Aaron Johnson, Zoning Manager
Crown Communication Inc.
Commonwealth Business Center
11001 Bluegrass Parkway. Suite 330
Louisville, Kentucky 40299
(502) 240-0044 x.13

And

William C. Gullett, Esq.
Brown, Todd & Heyburn PLLC
Suite 650
50 East River Center Boulevard
Covington, KY 41011-1508
(606) 655-2683
COUNSEL FOR NEXTEL WEST CORP.

And

David A. Pike
Pike Legal Group
P.O. Box 369
Shepherdsville, Kentucky 40165-0369
(502) 955-4400
COUNSEL FOR CROWN COMMUNICATION INC.

WHEREFORE, the Applicants respectfully request that the Commission accept the foregoing Application for filing, and having met the requirements of KRS 278.020 and all applicable rules and regulations of the Commission, grant a Certificate of Public Convenience and Necessity to construct and operate the WCF at the location set forth herein for the respective networks in the Commonwealth of Kentucky.

Respectfully submitted,

David A. Pike
Pike Legal Group
P.O. Box 369
Shepherdsville, Kentucky 40165-0369
(502) 955-4400
COUNSEL FOR CROWN COMMUNICATION INC.

And

H. Lawson Walker II
William C. Gullett
Brown, Todd & Heyburn PLLC
Suite 650
50 East River Center Boulevard
Covington, KY 41011-1508
(606) 655-2683
COUNSEL FOR NEXTEL WEST CORP.

LIST OF EXHIBITS

A – CROWN's Articles of Incorporation & Certificate of Authority

B - Copy of Nextel West Corp.'s FCC License & Service Provider Certification

C – Site Development Plan

Vicinity Map	Cover Sheet
Topographic Map	Cover Sheet
Property Owner Listing	Sheet C-1
500' Vicinity Map	Sheet C-2
Legal Descriptions	Sheet C-2
Flood Plain Certification	Sheet C-2
Site Plan	Sheet C-1 & C-2
Vertical Tower Profile	Sheet C-4 & C-5

D – Tower and Foundation Design

E – Competing utilities, corporations, or persons list

F – Collocation report

G – Application to FAA & Approval

H– Application to Kentucky Airport Zoning Commission

I – Geotechnical Report

J – Directions to WCF Site

K – Copy of Real Estate Agreement

L – Certification of Notification

M – Copy of Property Owner Notification

N – Copy of Planning Commission Notice

O – Copy of Posting Notices

P – Copy of Radio Frequency Design Search Area

EXHIBIT A

CROWN'S ARTICLES OF INCORPORATION & CERTIFICATE OF AUTHORITY

See Exhibit "A" to Case Numbers 97-503 and 97-505 previously filed with the Public Service Commission.

EXHIBIT B

COPY OF NEXTEL WEST CORP'S FCC LICENSE

See Exhibit "B" to Case Numbers 97-502 and 97-505 previously filed with the Public Service Commission.

Nextel is a Delaware corporation. Pursuant to 807 KAR 5:001 Sections 8(3) and 9(1)(a), a certified copy of the Articles of Incorporation of Nextel (previously called OneComm Corporation) and a certified copy of its Certificate of Authority to transact business in the Commonwealth of Kentucky were provied by Nextel to the Commission in Case No. 96-344 in which it applied for a Certificate to provide CMRS services, including its digital wide-area specialized mobile radio ("SMR") services (also known as "ESMR") and tranditional SMR services. A certified copy of the amendment to Nextel's Articles of Incorporation, reflecting the name change from OneComm Corporation to Nextel West Corp., was provided by Nextel to the Commission in Case No. 97-395. The Commission previously found that Nextel has the financial, technical and managerial ability to provide CMRS/SMR and ESMR services in its Order in Case No. 97-395, issued on September 29, 1997.

EXHIBIT C

CROWN
COMMUNICATION INC.

ECHO 308KY

LILY

350' GUYED TOWER

WITH (4) CARRIERS

CROWN
COMMUNICATION INC.
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044
(502) 240-0045 FAX

Alvar IDG
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

MARIO ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ARCHITECT

ARCHITECT

Alvar IDG
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

ELECTRICAL AND MECHANICAL ENGINEERS

Alvar IDG
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

N

CONSULTANT TEAM — SCALE: N.T.S.

SITE NAME: LILY

SITE NUMBER: ECHO 308KY

SITE ADDRESS:
939 OLD WHITLEY ROAD
LILY, KY 40740

OWNER:
BILL COBB
939 S. OLD WHITLEY RD.
LILY, KY 40740

APPLICANT:
CROWN COMMUNICATION INC.
11001 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299

ZONING: AREA OF PARCEL: PARCEL NUMBER(S):

PROJECT SUMMARY

REGIONAL MAP

VICINITY MAP

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: M.A.
REVIEWED BY: B.G. / M.A.

SITE NUMBER
ECHO 308KY

SITE NAME
LILY

SITE ADDRESS
939 OLD WHITLEY ROAD
LILY, KY 40740

SHEET TITLE
TITLE SHEET, SITE INFO

SHEET NUMBER
T1

(2 / A-2) DETAIL REFERENCE

(2 / A-2) ELEVATION REFERENCE

(2 / A-2) SECTION REFERENCE

[100] ROOM NUMBER

[21] KEYED NOTE

(1) REVISION

(1) KEY NOTE

SYMBOLS

FROM THE JUNCTION OF I-75 AND I-40, PROCEED NORTH ON I-75 APPROXIMATELY 86 MILES TO EXIT #29, THEN PROCEED EAST ON US-25E APPROXIMATELY 1.5 MILES TO US-25. TURN NORTH ON US-25, AND PROCEED APPROXIMATELY 5 MILES NORTH TO KY-552. TURN WEST ON KY-552, AND PROCEED APPROXIMATELY 2.5 MILES TO OLD WHITLEY ROAD (SEPULVADA RD. TO THE NORTH). TURN SOUTH ON OLD WHITLEY ROAD, AND PROCEED APPROXIMATELY .8 MILES TO DRIVEWAY ENTRANCE ON EAST SIDE OF ROAD. FOLLOW EXISTING DRIVEWAY APPROXIMATELY 120'. THE NEW ACCESS ROAD WILL THEN DEPART FROM THE EXISTING DRIVE, AND PROCEED APPROXIMATELY 500' FARTHER EAST, INTO SECOND FARM FIELD.

DIRECTIONS TO SITE

IMPORTANT NOTE FOR GENERAL CONTRACTOR
AT ALL NEW SERVICES & GROUNDING TRENCHES
PROVIDE "WARNING TAPE" @ 12" BELOW GRADE

BEFORE YOU DIG CALL
KENTUCKY UNDERGROUND

BEFORE YOU DIG!!
1-800-752-6007

GENERAL NOTE

A/C	AIR CONDITIONING
ADJ.	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
APPROX.	APPROXIMATELY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWG	AMERICAN WIRE GAUGE
BLDG.	BUILDING
BLK.	BLOCK
BMR	BASE MOBILE RADIO
B/S	BUILDING STANDARD
CLG	CEILING
CLR.	CLEAR
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
DBL.	DOUBLE
DIA., ø	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DN	DOWN
DTL.	DETAIL
DWG.	DRAWING
E	EAST
EA.	EACH
ELEV	ELEVATION
ELECT	ELECTRICAL
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.W.	EACH WAY
EXIST.	EXISTING
EXT	EXTERIOR
FIN.	FINISH
FLUOR.	FLUORESCENT
FLR	FLOOR
FT.	FOOT
GA.	GAUGE
GALV	GALVANIZE(D)
GC	GENERAL CONTRACTOR
GRND	GROUND
GWB	GYPSUM WALL BOARD
GYP.BD.	GYPSUM BOARD
HARDWD	HARDWOOD
HORIZ.	HORIZONTAL
HR	HOUR
HT.	HEIGHT
HVAC	HEATING, VENTING AIR CONDITIONING
I.D.	INSIDE DIA.
IN.	INCH
INFO	INFORMATION
INSUL.	INSULATION
INT.	INTERIOR
LB(S)	POUND(S)
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MFR.	MANUFACTURER
MGR	MANAGER
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPG.	OPENING
OPP	OPPOSITE
PLYWD.	PLYWOOD
PR	PAIR
PROJ	PROJECT
PROP	PROPERTY
PT	PRESSURE TREATED
REQ'D	REQUIRED
RM	ROOM
R.O.	ROUGH OPENING
S	SOUTH
SHT	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STL.	STEEL
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
S.V.	SHEET VINYL
THRU	THROUGH
TNND	TINNED
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
VIF	VERIFY IN FIELD
VT	VINYL TILE
W	WEST
W/	WITH
WIN	WINDOW
W/O	WITHOUT
W.P.	WATERPROOF
∠	ANGLE
&	AND
℄	CENTER LINE
ℙ	PROPERTY LINE
@	AT
#	NUMBER

ABBREVIATIONS

SUBMITED BY: _____

RECIEVED BY: _____

DATE: _____

SUBMITED/RECIEVED BY

SHEET NUMBER:	DESCRIPTION:
T1	TITLE SHEET SITE INFO
T2	SHEET INDEX, ABBREVIATIONS
SURVEY	
C-1	VICINITY MAP
C-2	SURVEY
ARCHITECTURAL	
A1	SITE PLAN
A2	SITE LAYOUT
A3	ELEVATIONS
A4	ELEVATIONS
A5	GENERAL DETAILS
A6	FENCE DETAILS
A7	GUYED TOWER DETAILS
ARCHITECTURAL NOTES	
AN-1	ARCHITECTURAL NOTES
AN-2	ARCHITECTURAL NOTES
AN-3	ARCHITECTURAL NOTES

SHEET INDEX

CROWN
COMMUNICATION INC.
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044
(502) 240-0045 FAX

Alvar INC.
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

MARIO ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ARCHITECT

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: _____
REVIEWED BY: B.G., M.A.

SITE NUMBER

ECHO 308KY

SITE NAME

LILY

SITE ADDRESS

939 OLD WHITLEY RD.
LILY, KY 40740

SHEET TITLE

SHEET LIST, ABBREVIATIONS

SHEET NUMBER

T2

SHEET 1

S1/1 – VICINITY AND 500' STRUCTURAL MAP

S1/2 – ABUTTING PROPERTY OWNERS

S1/3 – U.S.G.S. QUAD MAP

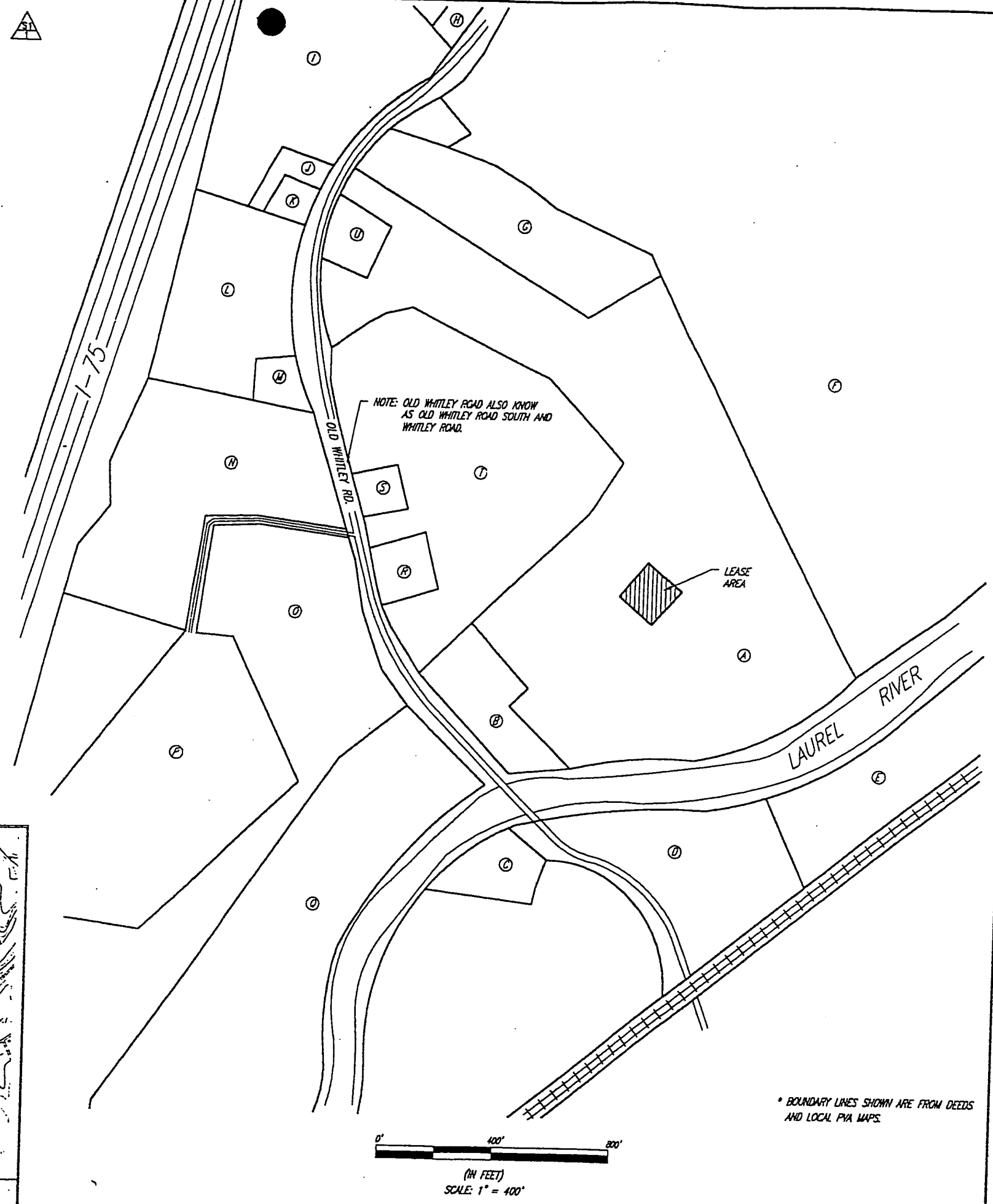
SHEET 2

S2/1 – LEASE AREA

S2/2 – 500' RADIUS

S2/3 – LEGAL DESCRIPTIONS

S2/4 – FLOOD ZONE DATA



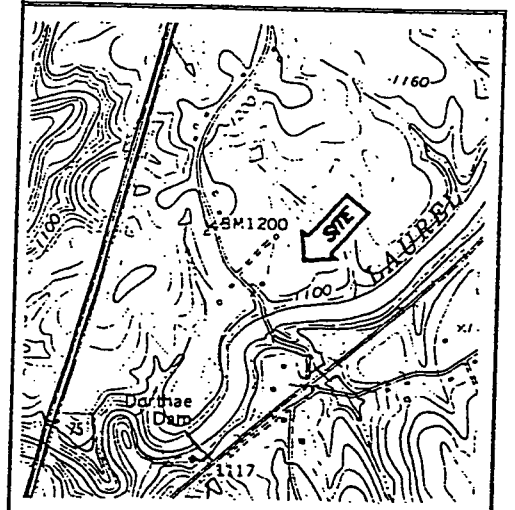
GRID NORTH

TRUE NORTH

01° 00' 10"

GRID NORTH BY G.P.S. OBSERVATION, ±10 SECONDS

NORTH IS BASED ON THE KENTUCKY STATE PLANE COORDINATE SYSTEM, SOUTH ZONE AND WAS DETERMINED BY COMPUTATION FROM G.P.S. OBSERVATION ON OCTOBER 20, 1998.



QUAD MAP
SCALE: 1"=2000'

U.S.G.S. 7 1/2 MINUTE QUAD MAP OF LILY, KY

0' 400' 800'

(IN FEET)
SCALE: 1" = 400'

* BOUNDARY LINES SHOWN ARE FROM DEEDS AND LOCAL PVA MAPS.

S1/2

(A) MAP 107, LOT 51
COBB, BILL
939 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 122, PAGE 364

(B) MAP 107, LOT 50
FARMER, THOMAS & GILBERTHA
775 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 305, PAGE 92

(C) MAP 107, LOT 109
SMITH, JOHN & PHYLLIS
70 WATER PLANT RD.
LILY, KY 40740
DEED BOOK 279, PAGE 633

(D) MAP 107, LOT 106
PARVIN, HARRY & HARRY SR.
4629 NORTHRIDGE DR.
BATAVIA, OH 45103
NO DEED FOUND

(E) MAP 107, LOT 98
CAMPBELL, RALPH & FREDA
1481 ROBINSON CREEK RD.
LILY, KY 40740
DEED BOOK 258, PAGE 594

(F) MAP 107, LOT 58
SASSER, RUBY M.
28 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 464, PAGE 199

(G) MAP 107, LOT 56
MOORE, DAVID & BRENDA
526 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 267, PAGE 523

(H) MAP 107, LOT 40
HUBBS, DELBERT & IRENE
P.O. BOX 244
LILY, KY 40740
DEED BOOK 464, PAGE 73

(I) MAP 107, LOT 41
JACKSON, JUANITA
549 S. OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 478, PAGE 252

(J) MAP 107, LOT 42
BARGER, TILFORD & EVIE
583 S. OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 380, PAGE 171

(K) MAP 107, LOT 43
SASSER, MINERVA
605 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 474, PAGE 122

(L) MAP 107, LOT 44
McGINNEY, DONNY & HELEN
P.O. BOX 23
LILY, KY 40740
DEED BOOK 338, PAGE 470

(M) MAP 107, LOT 45
STEELE, ROGER W. & LAWONDA
677 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 251, PAGE 453

(N) MAP 107, LOT 46
McQUEEN, FRANKIE W.
2532 W. MOSSMAN
TUCSON, AZ 85746
DEED BOOK 379, PAGE 467

(O) MAP 107, LOT 47
BEGLEY, BEULAH
829 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 372, PAGE 306

(P) MAP 107, LOT 48
CHURCH, GERALDINE
775 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 445, PAGE 479

(Q) MAP 107, LOT 49
COOK, SHELBY & JEWELL
P.O. BOX 149
LILY, KY 40740
DEED BOOK 237, PAGE 575

(R) MAP 107, LOT 52
TREADWAY, STEWART & RONDA
798 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 444, PAGE 369

(S) MAP 107, LOT 53
CAMPBELL, LAWUEL & JACQUELINE
762 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 434, PAGE 429

(T) MAP 107, LOT 54
SMITH, FORDE & JESSIE
710 OLD WHITLEY RD.
LILY, KY 40740
DEED BOOK 408, PAGE 379

(U) MAP 107, LOT 55
PROVENCE, STEVE & MELISSA
610 S. OLD WHITLEY RD.
LILY, KY 40740
NO DEED FOUND

CROWN COMMUNICATION INC

375 SOUTHPOINTE BLVD.
CANONSBURG
PENNSYLVANIA, 15317
OFFICE: (724) 416-2247
FAX: (724) 416-2254

T. Alan Neal Company

tan

(502) 635-5866
FAX: 636-5263

Civil Engineering
428 Wormack Street
Louisville, Kentucky 40217

Land Surveying

ECHO NUMBER: 308 KY

SITE NAME: COBB

SITE ADDRESS: 939 OLD WHITLEY RD. LILY, KY 40740

AREA: LEASE AREA = 22,500 sq. ft.

PROPERTY OWNER: BILL COBB 939 OLD WHITLEY RD. LILY, KY 40740

TAX MAP NUMBER: 107

PARCEL NUMBER: 51

SOURCE OF TITLE: DEED BOOK 122, PAGE 364

DWG BY:	CHKD BY:	DATE:
LAP	FSII	10.29.98

TAN PROJECT NO.: T-2388

SHEET 1 OF 2

REVISIONS:

STREET NAME (SPELL) 1.21.99

C1

SHEET 1

S1/1 – VICINITY AND 500' STRUCTURAL MAP

S1/2 – ABUTTING PROPERTY OWNERS

S1/3 – U.S.G.S. QUAD MAP

SHEET 2

S2/1 – LEASE AREA

S2/2 – 500' RADIUS

S2/3 – LEGAL DESCRIPTIONS

S2/4 – FLOOD ZONE DATA

SURVEYORS NOTES

SOURCE OF BEARING IS A G.P.S. OBSERVATION ON OCTOBER 20, 1998.

SOURCE OF ROTATION BASED ON THE WEST PROPERTY LINE OF THE COBB PROPERTY HAVING THE BEARING OF S 43° 33' W PER D.B. 122, PG. 364, AND THE CALCULATED BEARING OF S 40° 53' 51" W.

DISTANCES SHOWN TO PROPOSED AND FUTURE STRUCTURES ARE MEASURED FROM PROPOSED FENCE LINES.

NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS AND RIGHT OF WAYS WERE FURNISHED TO THE SURVEYOR EXCEPT AS SHOWN.

NO SEARCH OF PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE PARENT TRACT.

EXISTING CONTOURS ARE AT TWO FEET INTERVALS.

THERE IS NO ZONING IN LAUREL COUNTY PER CLERK'S OFFICE.

OLD WHITLEY ROAD ALSO KNOWN AS OLD WHITLEY ROAD SOUTH AND WHITLEY ROAD.

BENCHMARK

NORTH: 1890182.23
EAST: 2122970.43
ELEVATION: 1147.06'
LOCATION: BEING A SET IRON PIPE LOCATED ±115' NORTH OF THE EXISTING BARN

GRID NORTH
TRUE NORTH
01° 00' 10"
GRID NORTH BY G.P.S. OBSERVATION ±10 SECONDS

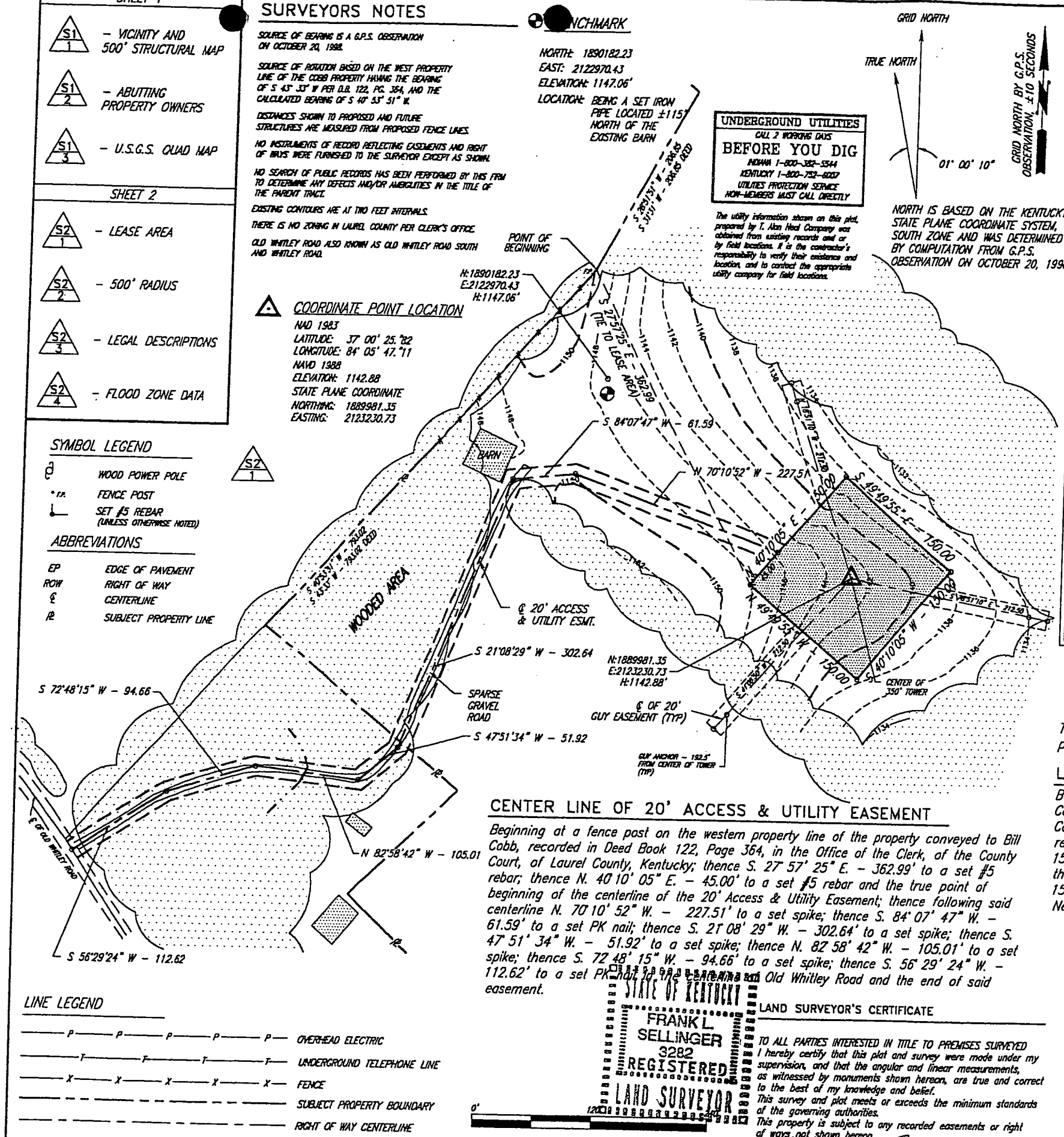
UNDERGROUND UTILITIES
CALL 2 WORKING DAYS
BEFORE YOU DIG
INDIANA 1-800-382-5544
KENTUCKY 1-800-752-6007
UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST CALL DIRECTLY

The utility information shown on this plat, prepared by T. Alan Neal Company was obtained from existing records and or by field locations. It is the contractor's responsibility to verify their existence and location, and to contact the appropriate utility company for field locations.

NORTH IS BASED ON THE KENTUCKY STATE PLANE COORDINATE SYSTEM, SOUTH ZONE AND WAS DETERMINED BY COMPUTATION FROM G.P.S. OBSERVATION ON OCTOBER 20, 1998.

COORDINATE POINT LOCATION

NAD 1983
LATITUDE: 37° 00' 25."82
LONGITUDE: 84° 05' 47."11
NAVD 1988
ELEVATION: 1142.88
STATE PLANE COORDINATE
NORTHING: 1889981.35
EASTING: 2123230.73



CENTER LINE OF 20' ACCESS & UTILITY EASEMENT

Beginning at a fence post on the western property line of the property conveyed to Bill Cobb, recorded in Deed Book 122, Page 364, in the Office of the Clerk, of the County Court, of Laurel County, Kentucky; thence S. 27° 57' 25" E. – 362.99' to a set #5 rebar; thence N. 40° 10' 05" E. – 45.00' to a set #5 rebar and the true point of beginning of the centerline of the 20' Access & Utility Easement; thence following said centerline N. 70° 10' 52" W. – 227.51' to a set spike; thence S. 84° 07' 47" W. – 61.59' to a set PK nail; thence S. 21° 08' 29" W. – 302.64' to a set spike; thence S. 47° 51' 34" W. – 51.92' to a set spike; thence N. 82° 58' 42" W. – 105.01' to a set spike; thence S. 72° 48' 15" W. – 94.66' to a set spike; thence S. 56° 29' 24" W. – 112.62' to a set PK nail to the centerline of Old Whitley Road and the end of said easement.

SYMBOL LEGEND

- WOOD POWER POLE
- r.f. FENCE POST
- SET #5 REBAR (UNLESS OTHERWISE NOTED)

ABBREVIATIONS

- EP EDGE OF PAVEMENT
- ROW RIGHT OF WAY
- ℄ CENTERLINE
- ℘ SUBJECT PROPERTY LINE

LINE LEGEND

- P—P—P—P—P— OVERHEAD ELECTRIC
- T—T—T—T— UNDERGROUND TELEPHONE LINE
- X—X—X—X—X— FENCE
- SUBJECT PROPERTY BOUNDARY
- RIGHT OF WAY CENTERLINE

NOTE: SYMBOLS, ABBREVIATIONS, OR LINESTYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE

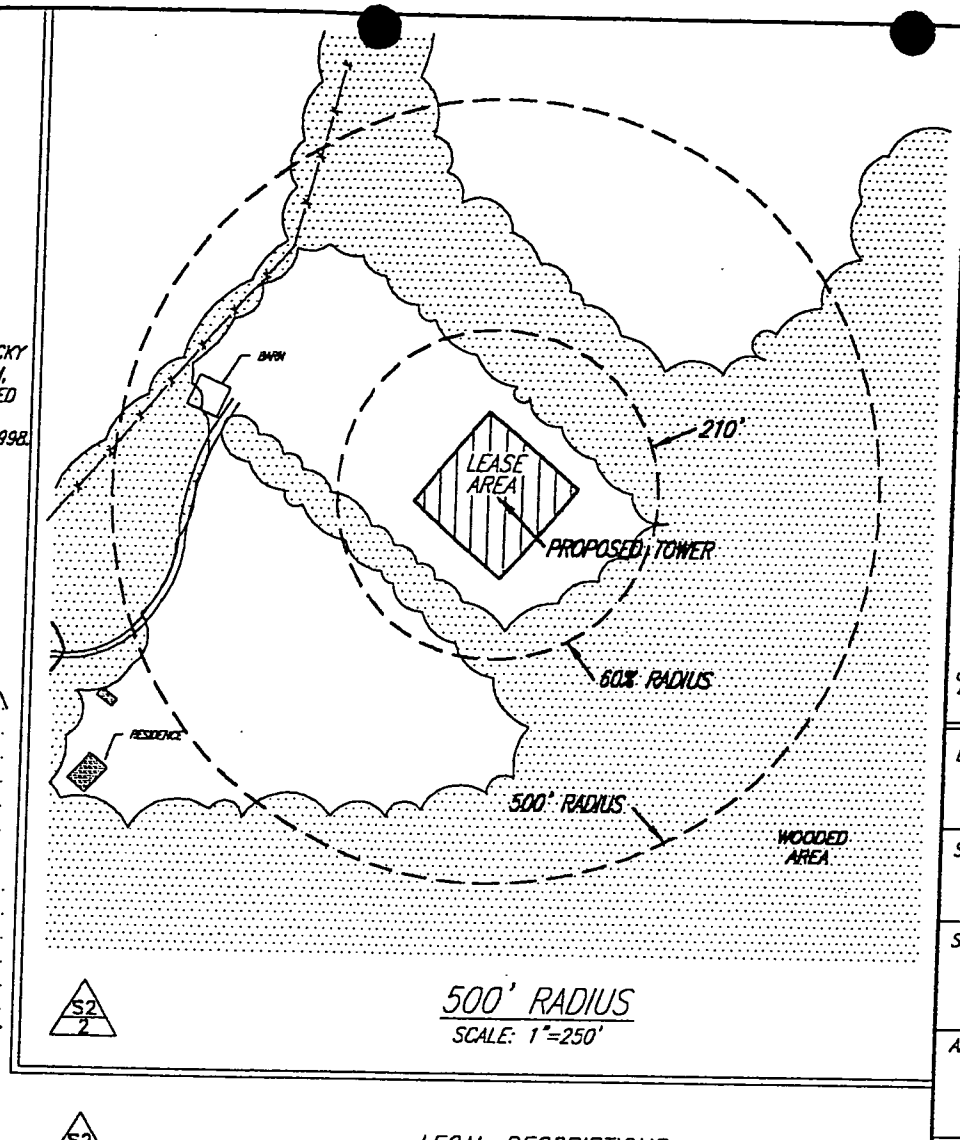
0' 120' (IN FEET)
SCALE: 1" = 120'

LAND SURVEYOR'S CERTIFICATE

STATE OF KENTUCKY
FRANK L. SELLINGER
3282
REGISTERED
LAND SURVEYOR

TO ALL PARTIES INTERESTED IN TITLE TO PREMISES SURVEYED
I hereby certify that this plat and survey were made under my supervision, and that the angular and linear measurements, as witnessed by monuments shown hereon, are true and correct to the best of my knowledge and belief.
This survey and plat meets or exceeds the minimum standards of the governing authorities.
This property is subject to any recorded easements or right of ways not shown hereon.

Frank L. Sellinger 3282
Frank L. Sellinger Ky. Reg. No. 1-22-99



S2/2 500' RADIUS
SCALE: 1"=250'

S2/3 LEGAL DESCRIPTIONS:

This is a description for Crown Communication Inc., of an area to be leased from the property of Bill Cobb, which is further described as follows:

LEASE AREA

Beginning at a fence post on the western property line of the property conveyed to Bill Cobb, recorded in Deed Book 122, Page 364, in the Office of the Clerk, of the County Court, of Laurel County, Kentucky; thence S. 27° 57' 25" E. – 362.99' to a set #5 rebar and the true point of beginning of the Lease Area; thence N. 40° 10' 05" E. – 150.00' to a set #5 rebar; thence S. 49° 49' 55" E. – 150.00' to a set #5 rebar; thence S. 40° 10' 05" W. – 150.00' to a set #5 rebar; thence N. 49° 49' 55" W. – 150.00' to the point of beginning containing 22,500 sq. ft. as per survey by T. Alan Neal Company dated November 11, 1998.

"CELLULAR COMMUNICATION TOWER SITE SURVEY"
AS REFERENCED AS "EXHIBIT C"

OWNER APPROVAL: _____ DATE: _____

CROWN APPROVAL: _____ DATE: _____

S2/4 I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 210134 0175B DATED 11-2-90 AND THE LEASE AREA DOES NOT APPEAR TO BE IN A FLOOD PRONE AREA. THE LEASE AREA IS LOCATED IN ZONE X.

CROWN COMMUNICATION INC
375 SOUTHPOINTE BLVD.
CANONSBURG
PENNSYLVANIA, 15317
OFFICE: (724) 416-2247
FAX: (724) 416-2254

T. Alan Neal Company
tan
(502) 635-5868
FAX: 636-5263
Civil Engineering
428 Warnock Street
Land Surveying
Louisville, Kentucky 40217

ECHO NUMBER: 308 KY

SITE NAME: COBB

SITE ADDRESS: 939 OLD WHITLEY RD. LILY, KY 40740

AREA: LEASE AREA = 22500 sq. ft.

PROPERTY OWNER: BILL-COBB 939 OLD WHITLEY RD. LILY, KY 40740

TAX MAP NUMBER: 107

PARCEL NUMBER: 51

SOURCE OF TITLE: DEED BOOK 122, PAGE 364

DWG BY:	CHKD BY:	DATE:
LAP	FSII	11.10.98

TAN PROJECT NO.: T-2388

SHEET 2 OF 2

REVISIONS:
- GUY EASEMENTS ADDED 11.13.98
- STREET NAME (SPELL) 1.21.99

C2

SITE PLAN NOTES

THE PROPOSED DEVELOPMENT IS FOR A 350 FOOT HIGH GUYED TOWER AND UP TO 4 ANCILLARY CABINETS ITS LOCATION IS AT 939 OLD WHITLEY RD LILY, KY 40740

THE TOWER AND ELECTRICAL EQUIPMENT BUILDING WILL BE ACCESED BY A PROPOSED STABILIZED DRIVE FROM AN EXISTING ASPHALT ROADWAY (S. OLD WHITLEY RD.) A PUBLIC RIGHT OF WAY.

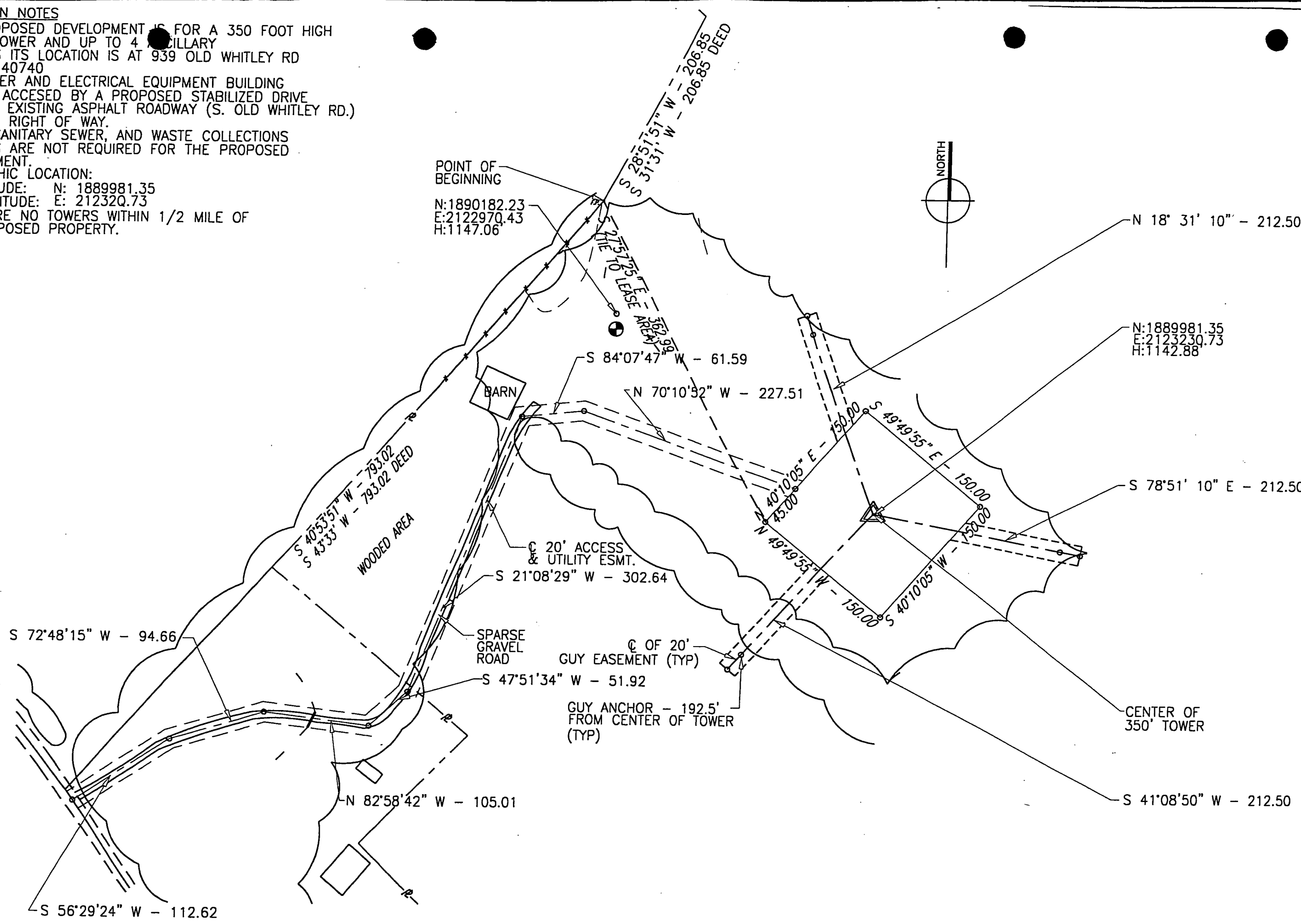
WATER, SANITARY SEWER, AND WASTE COLLECTIONS SERVICES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.

GEOGRAPHIC LOCATION:

LATITUDE: N: 1889981.35

LONGITUDE: E: 212320.73

THERE ARE NO TOWERS WITHIN 1/2 MILE OF THE PROPOSED PROPERTY.



SITE PLAN — SCALE: 1/8"=1'-0" | 1

CROWN COMMUNICATION INC.
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044
(502) 240-0045 FAX

Alvar IDE
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

MARIO ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
CHIEF

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: KL
REVIEWED BY: B.G. M.A.

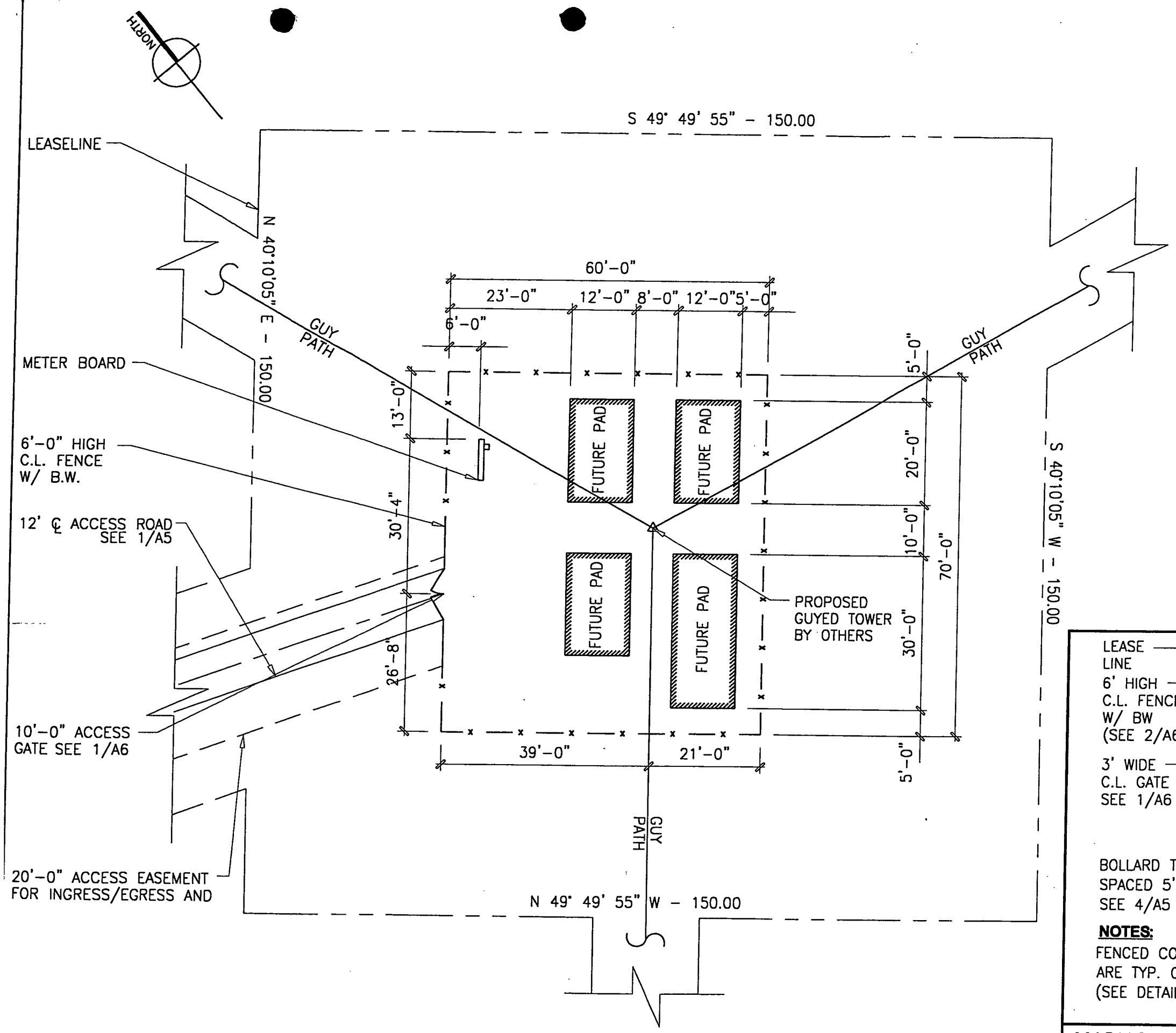
SITE NUMBER
ECHO 308KY

SITE NAME
LILY

SITE ADDRESS
939 OLD WHITLEY ROAD
LILY, KY 40740

SHEET TITLE
SITE PLAN

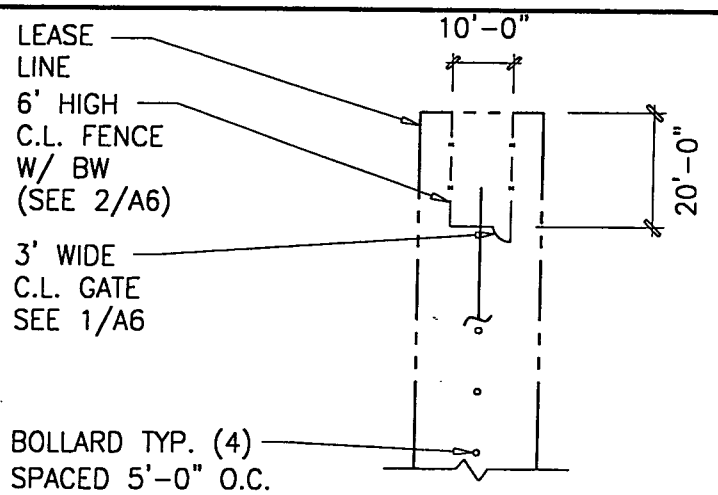
SHEET NUMBER
A1



SITE PLAN

NOTES:

1. FOR ADDITIONAL SITE INFO. SEE A1
2. REMOVE ALL VEGETATION & CLEAN AREA W/ LEASE AREA (WHERE REQ'D)
3. FINISH GRADING TO PROVIDE EFFECTIVE DRAINAGE W/ A SLOPE OF NO LESS THAN ONE EIGHT (1/8") PER FOOT FLOWING AWAY FROM EQUIP FOR A MIN DISTANCE OF SIX FEET (6') IN ALL DIRECTIONS, NOT TO EXCEED A TOTAL OF 8" DROP
4. LOCATE ALL U.G. UTILITIES PRIOR TO STARTING ANY CONST.
5. FENCED COMPOUND FINISHED SURFACE SEE DETAIL 2/A5



NOTES:

FENCED COMPOUND AND GUYED WIRE ANCHORS ARE TYP. OF (6) PER MANUF. SPECS. (SEE DETAIL 3/A7)

ANCHOR FENCE PLAN

SCALE: 1/16" = 1'-0" | 2

SCALE: 1"=20'-0" | 1

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Alvar IDC
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

RONALD A. ALVAR REGISTERED NO. 4851 COMMONWEALTH OF KENTUCKY ARCHITECT
Z.D.

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY:
REVIEWED BY: B.G., M.A.

SITE NUMBER

ECHO 308KY

SITE NAME

LILY

SITE ADDRESS

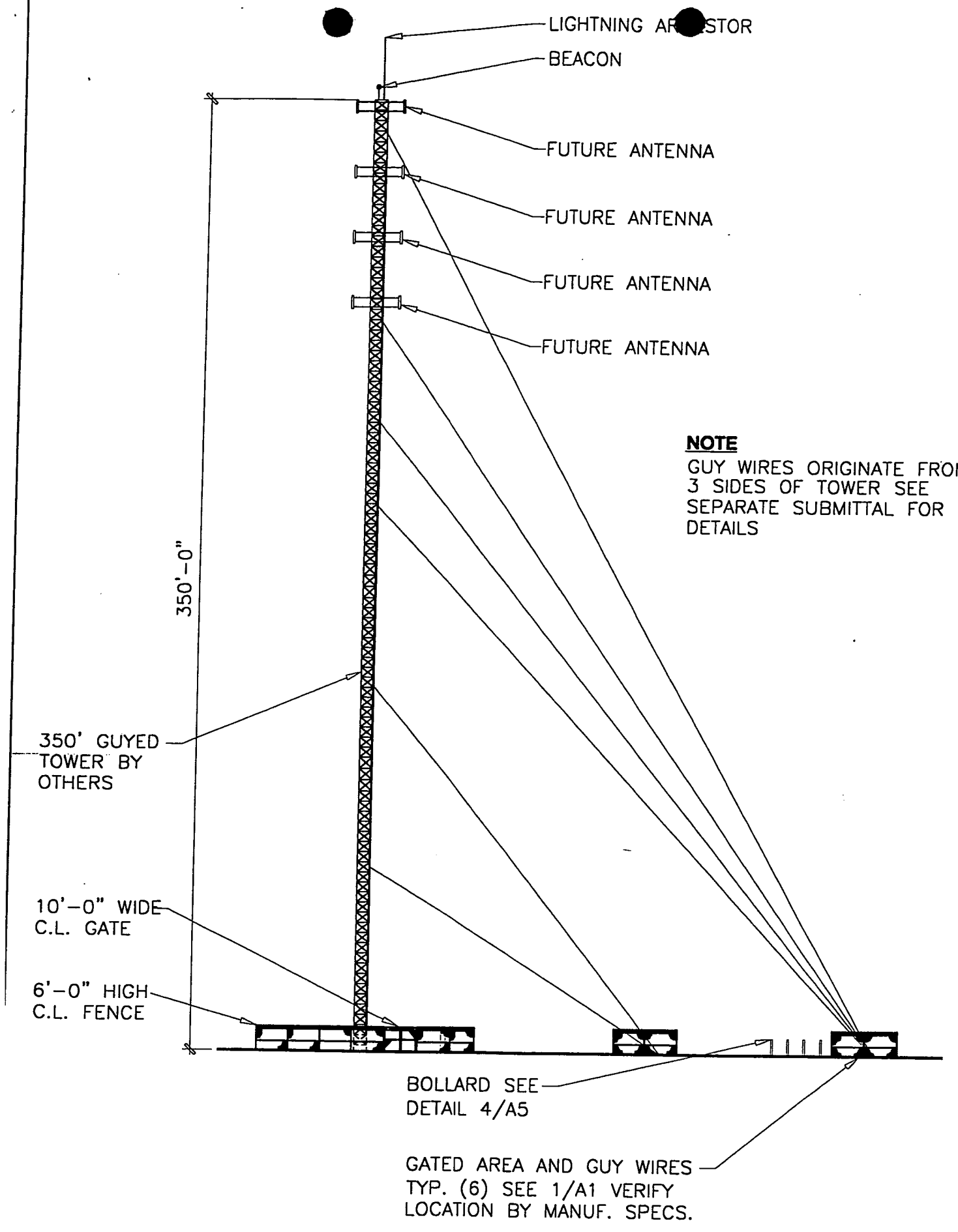
939 OLD WHITLEY ROAD
LILY, KY 40740

SHEET TITLE

SITE LAYOUT

SHEET NUMBER

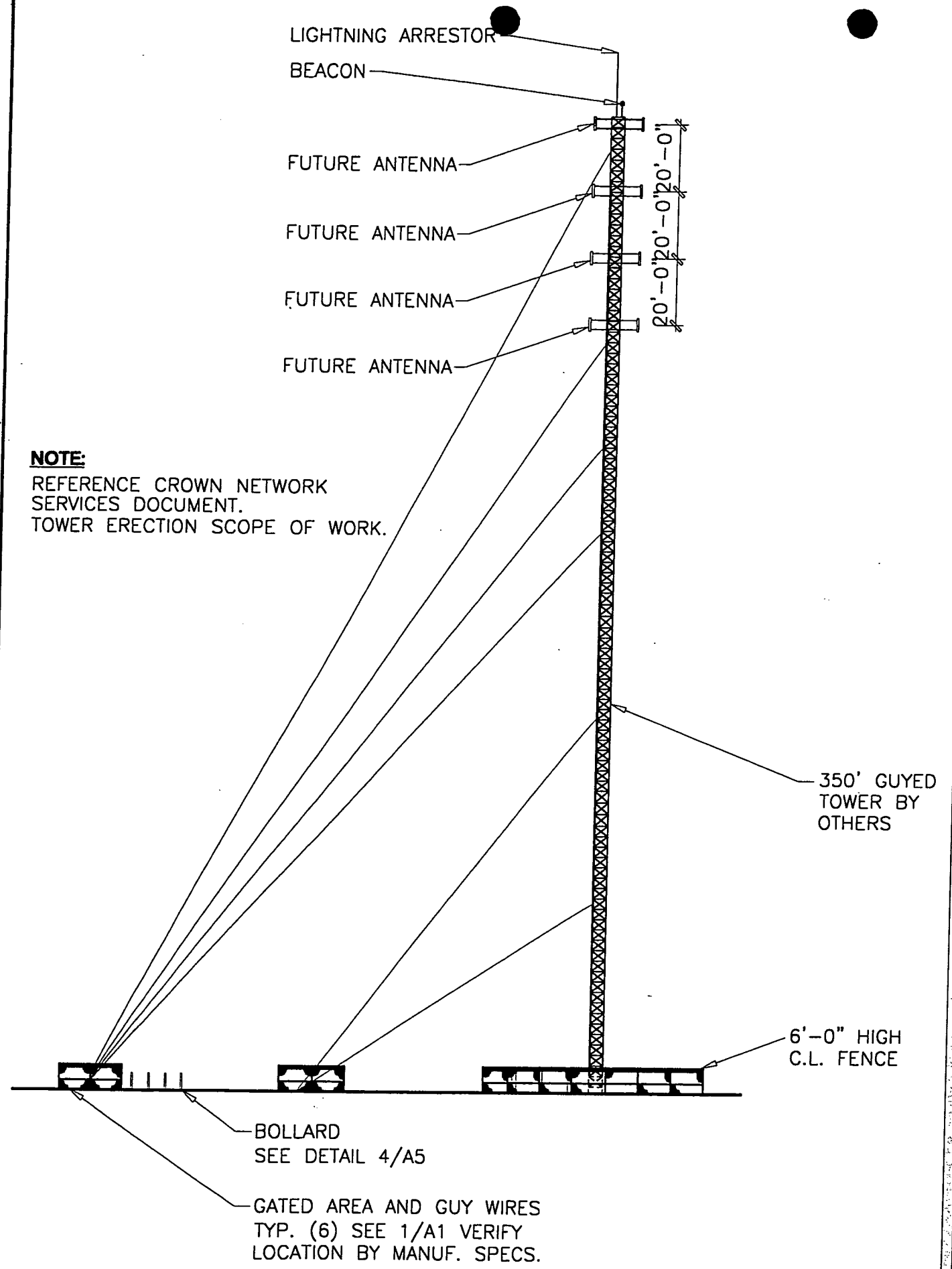
A2



NOTE
GUY WIRES ORIGINATE FROM 3 SIDES OF TOWER SEE SEPARATE SUBMITTAL FOR DETAILS

WEST ELEVATION

SCALE: 1" = 40'-0" | 2



NOTE:
REFERENCE CROWN NETWORK SERVICES DOCUMENT.
TOWER ERECTION SCOPE OF WORK.

EAST ELEVATION

SCALE: 1" = 40'-0" | 1

CROWN
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SUITE # 330
LOUISVILLE, KY 40299
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(502) 240-0045 FAX

Alvar INC.
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

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ADA REMBERT MARTINEZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ARCHITECT
A.D.

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: M.A.
REVIEWED BY: B.C. M.A.

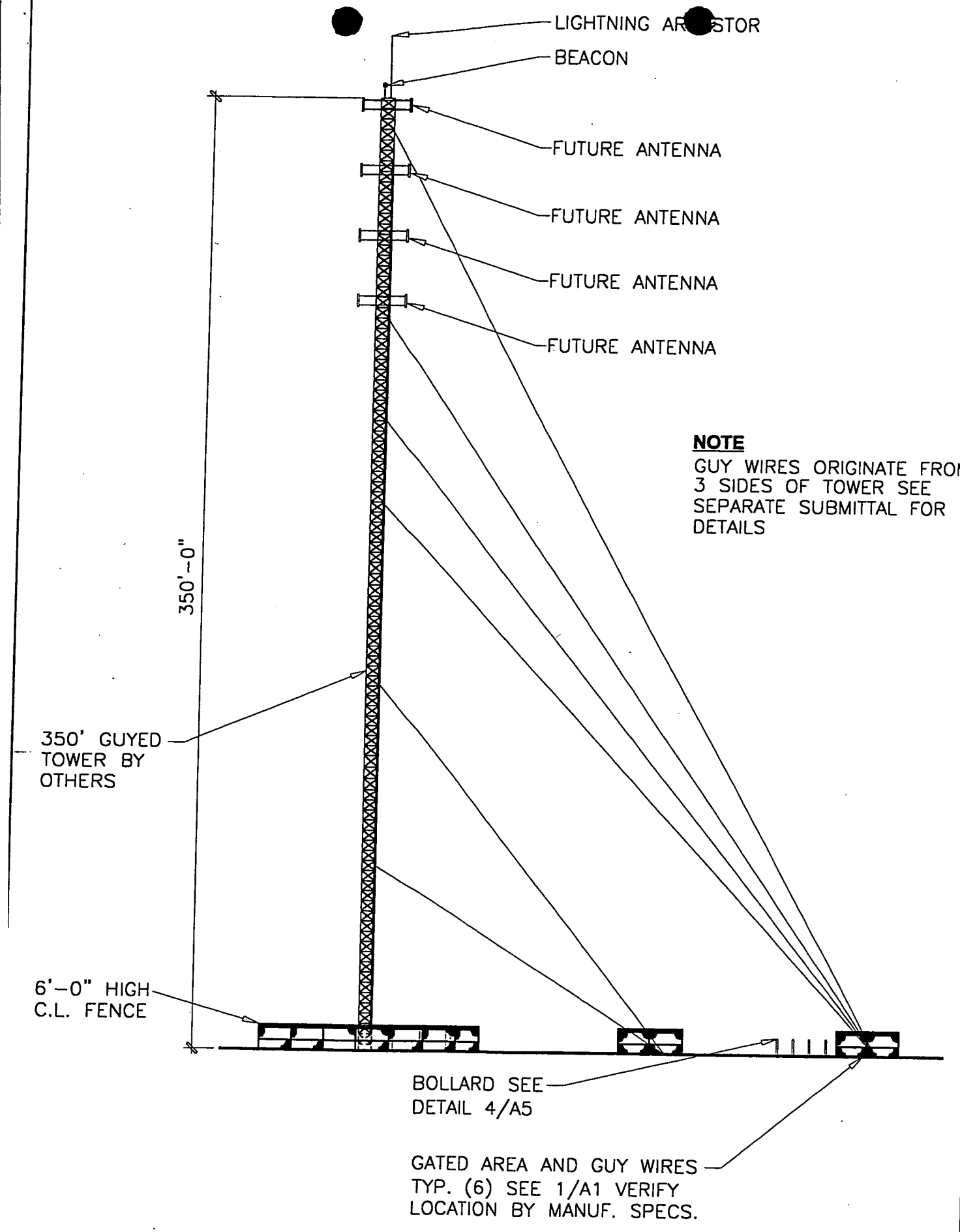
SITE NUMBER
ECHO 308KY

SITE NAME
LILY

SITE ADDRESS
939 OLD WHITLEY RD.
LILY, KY 40740

SHEET TITLE
EAST AND WEST ELEVATIONS

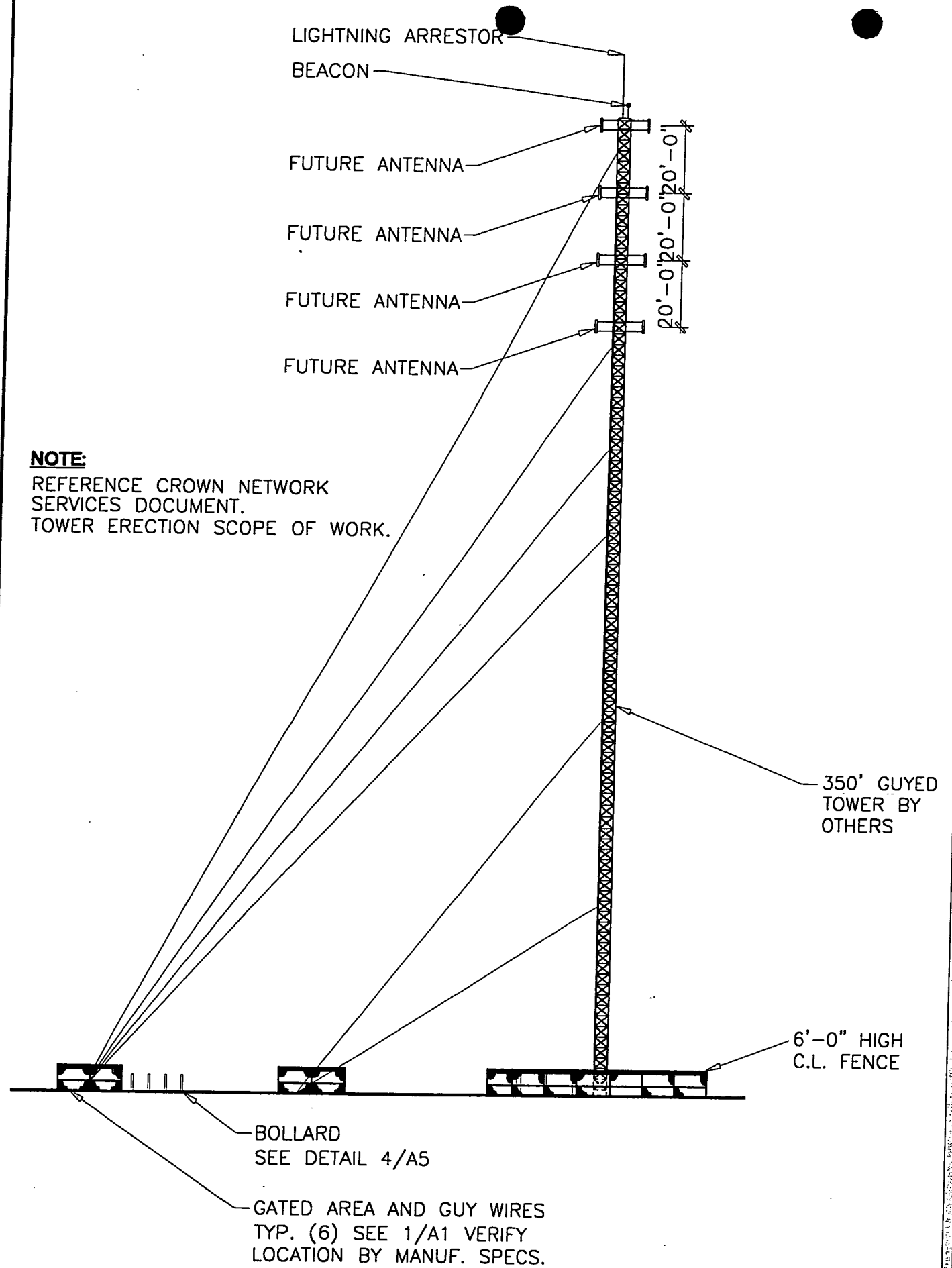
SHEET NUMBER
A3



NOTE
GUY WIRES ORIGINATE FROM 3 SIDES OF TOWER SEE SEPARATE SUBMITTAL FOR DETAILS

NORTH ELEVATION

SCALE: 1" = 40'-0" | 2



NOTE:
REFERENCE CROWN NETWORK SERVICES DOCUMENT.
TOWER ERECTION SCOPE OF WORK.

SOUTH ELEVATION

SCALE: 1" = 40'-0" | 1

CROWN
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ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

MARIO ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ARCHITECT
Z.D.

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY:
REVIEWED BY: B.G. M.A.

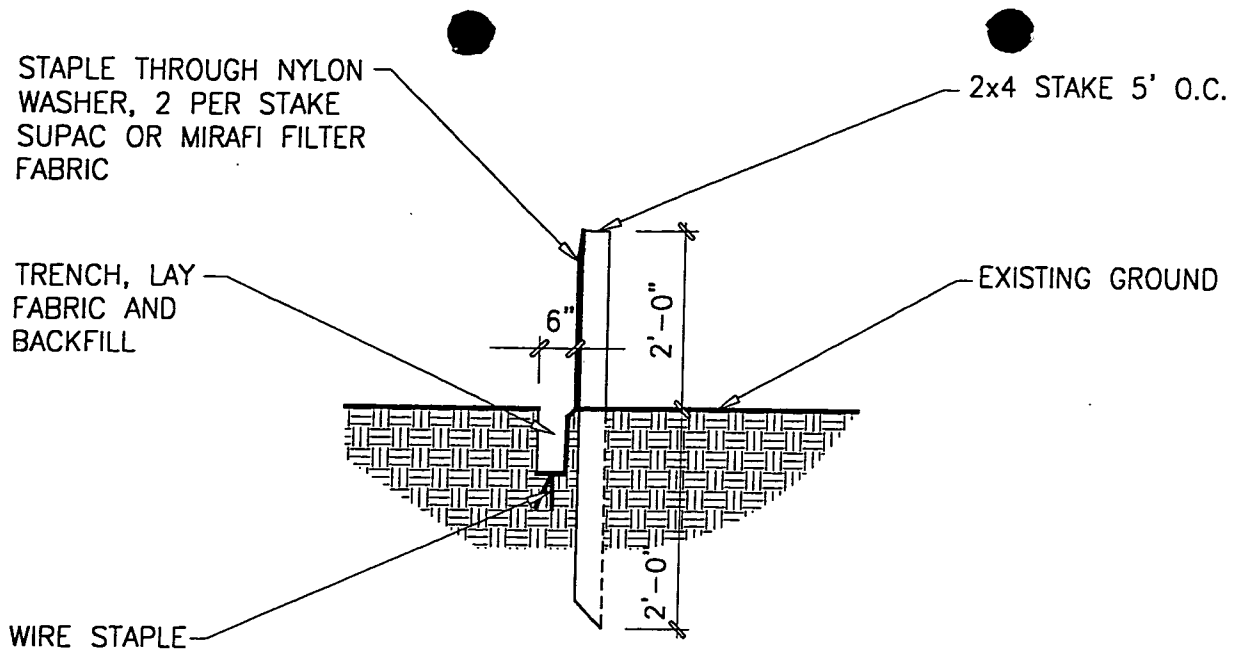
SITE NUMBER
ECHO 308KY

SITE NAME
LILY

SITE ADDRESS
939 OLD WHITLEY RD.
LILY, KY 40740

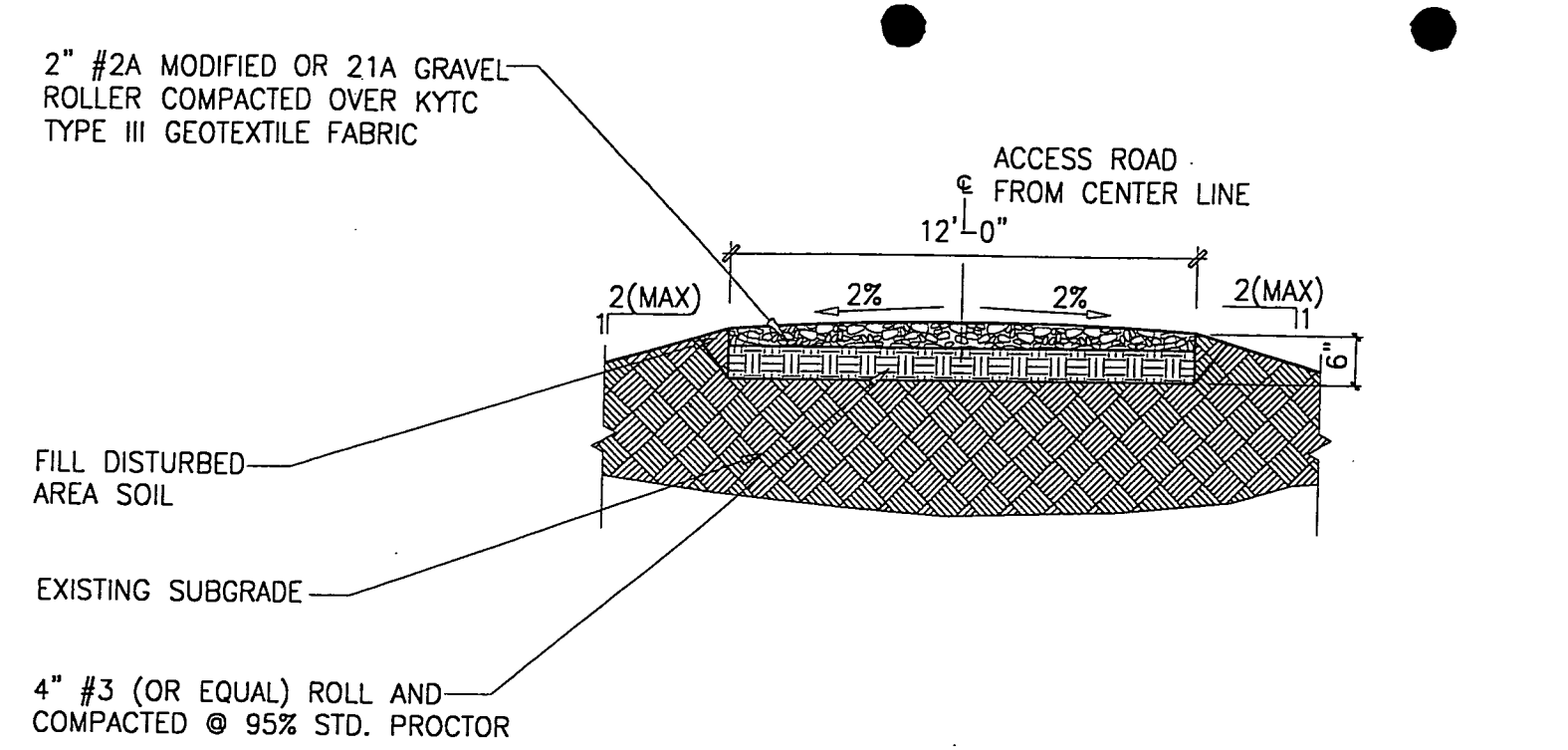
SHEET TITLE
NORTH AND SOUTH ELEVATIONS

SHEET NUMBER
A4



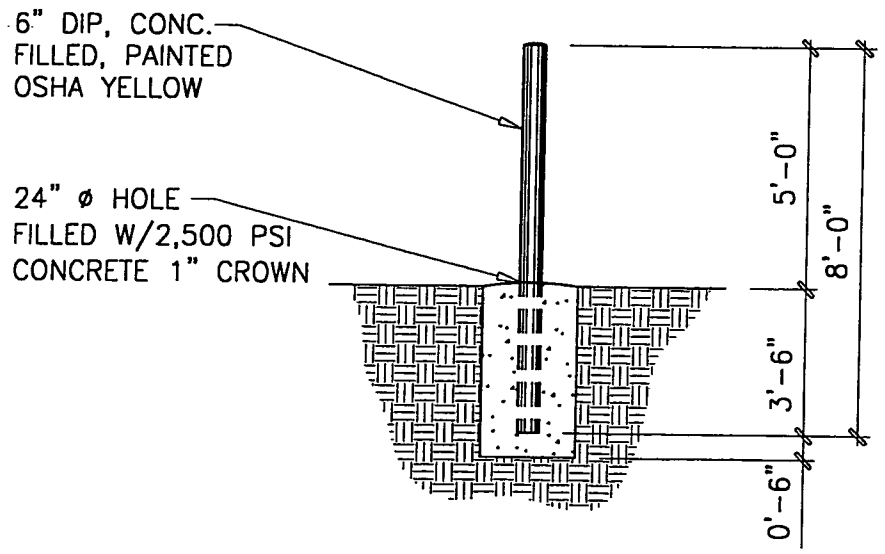
SILT FENCE

SCALE: N.T.S. | 3



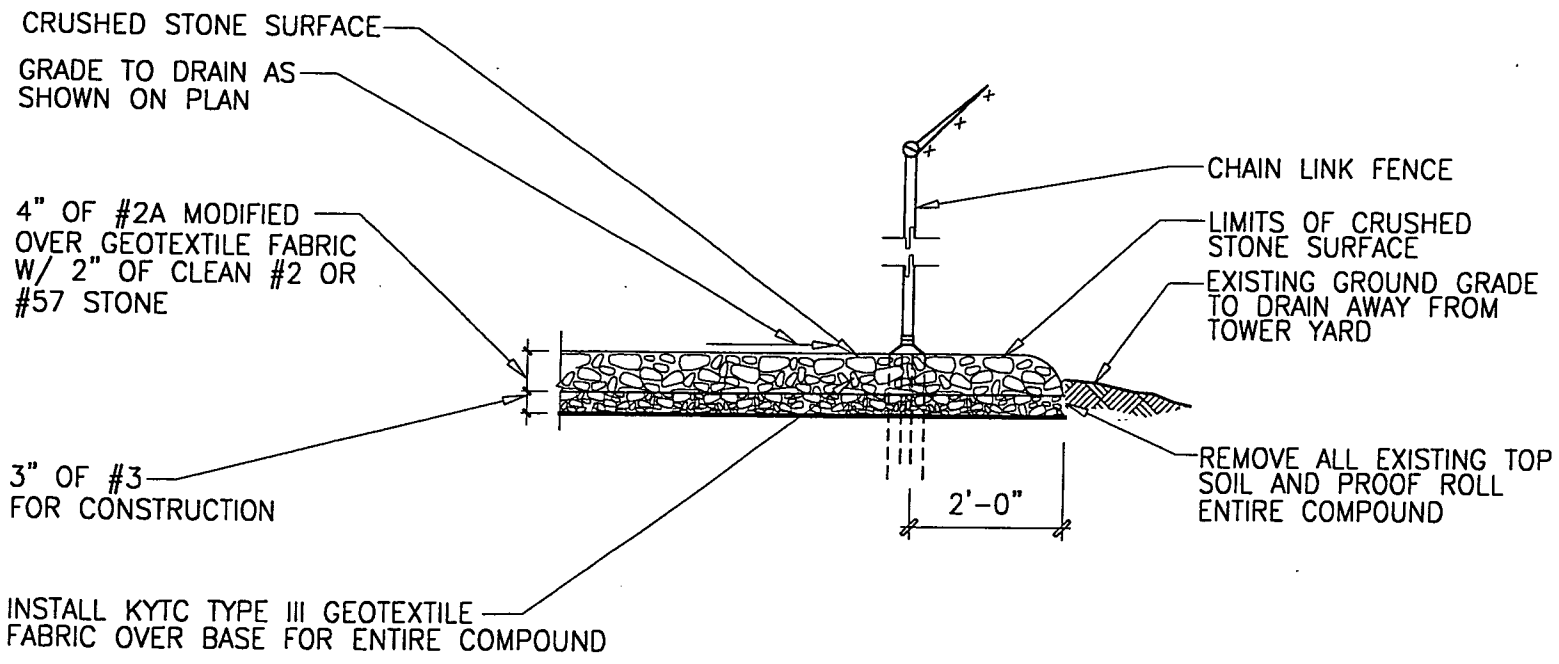
GRAVEL ACCESS ROAD

SCALE: N.T.S. | 1



BOLLARD DETAIL

SCALE: N.T.S. | 4



SECTION THROUGH TOWER YARD

SCALE: N.T.S. | 2

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Alvar IDC
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO. _____

PROPRIETARY INFORMATION

ADRO ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ARCHITECT
Z.D.

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: [illegible]
REVIEWED BY: B.G., M.A.

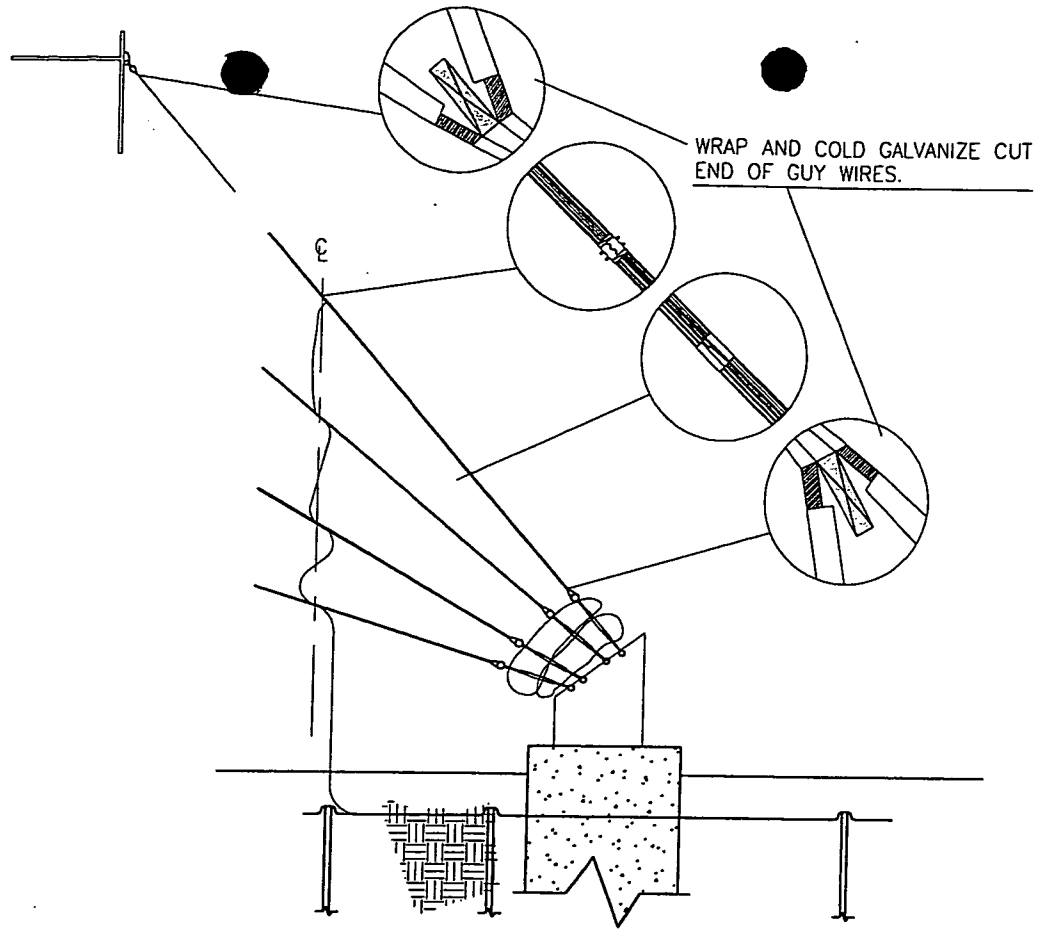
SITE NUMBER
ECHO 308KY

SITE NAME
LILY

SITE ADDRESS
939 OLD WHITLEY ROAD
LILY, KY 40740

SHEET TITLE
SITE WORK DETAILS

SHEET NUMBER
A5



NOT USED — SCALE: N.T.S. — 4

NOT USED — SCALE: N.T.S. — 2

NOT USED — SCALE: N.T.S. — 3

NOT USED — SCALE: N.T.S. — 1

CROWN
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Alvar INC.
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044 EXT. 17
(502) 240-0045 FAX

CASE NO.

PROPRIETARY INFORMATION

ADAM ALVAREZ
REGISTERED
NO. 4851
COMMONWEALTH OF KENTUCKY
ALVAR, INC.
Z.D.

#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY: KL
REVIEWED BY: B.G., M.A.

SITE NUMBER

ECHO 308KY

SITE NAME

LILY

SITE ADDRESS

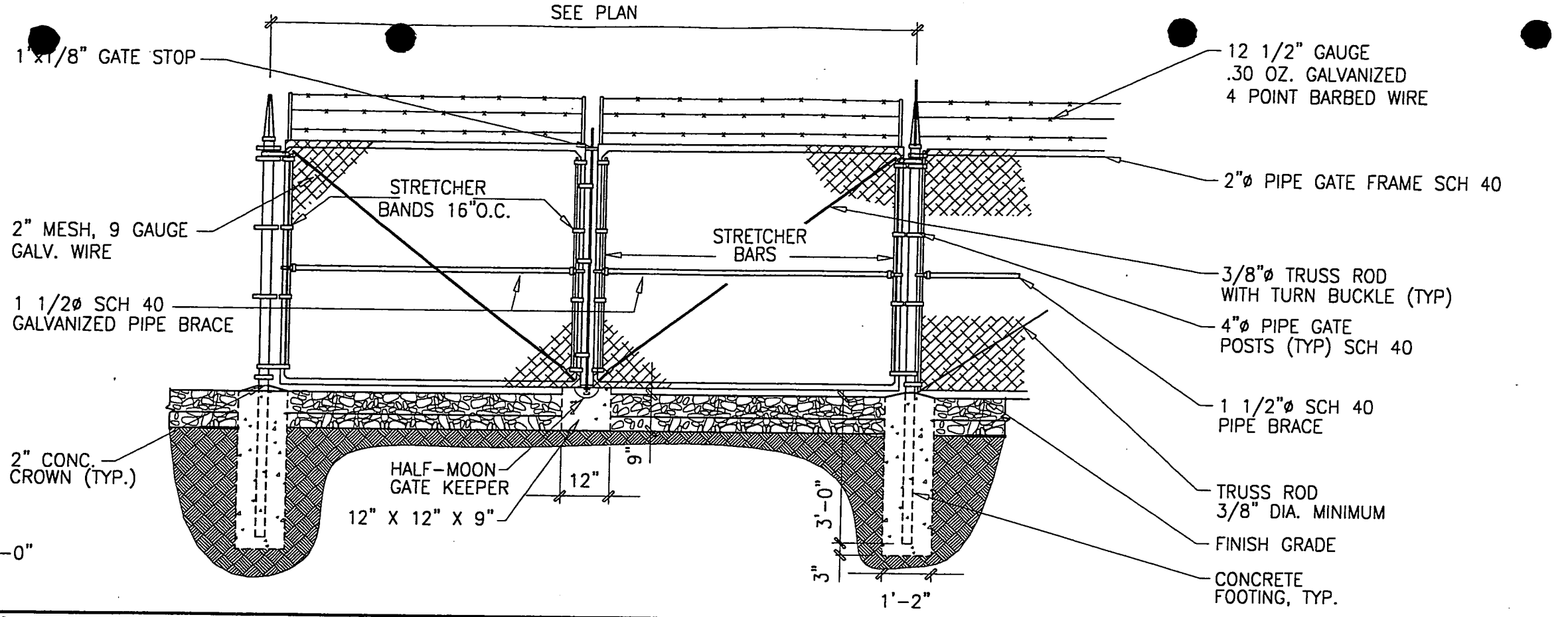
939 OLD WHITLEY ROAD
LILY, KY 40740

SHEET TITLE

GUYED TOWER DETAIL

SHEET NUMBER

A7

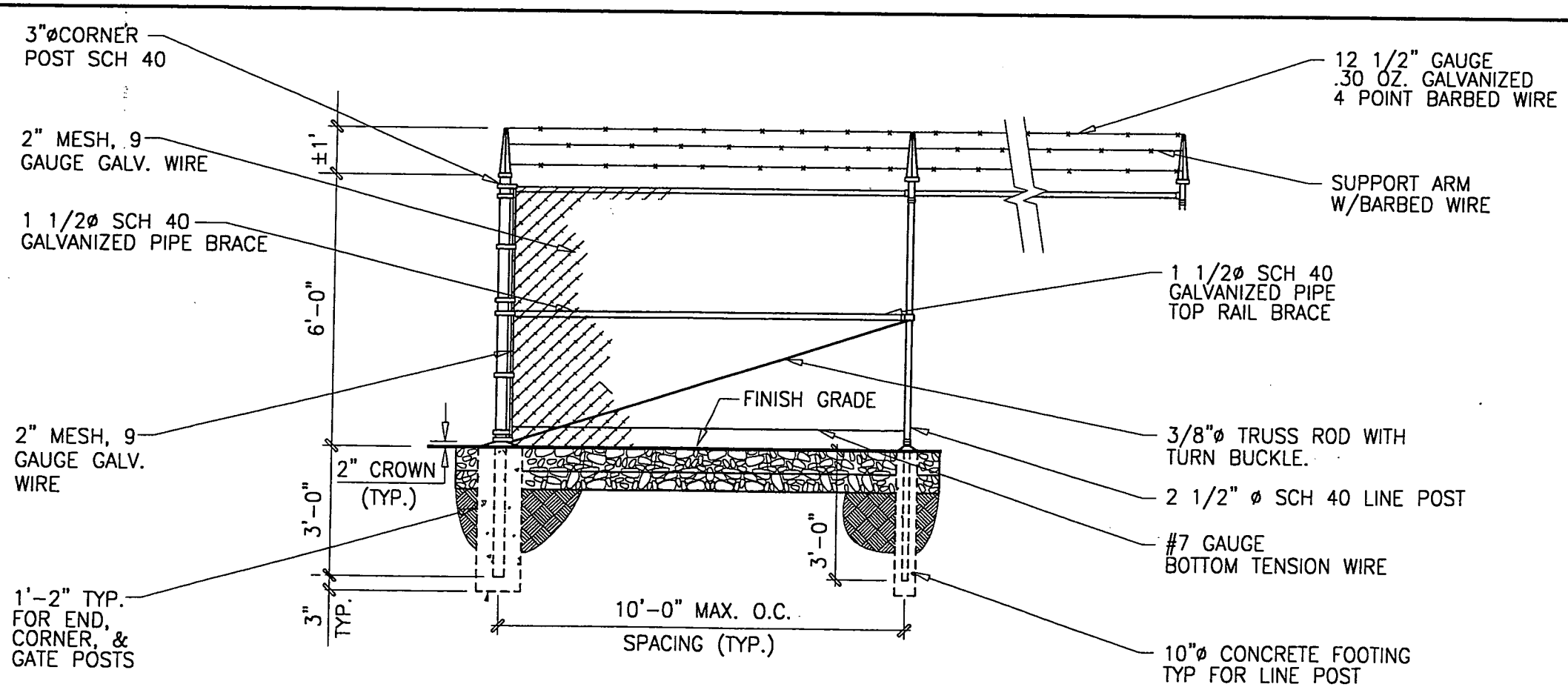


NOTE:

*FOR GATES LARGER THAN 8'-0" USE DOUBLE LEAF

FENCE GATE DETAIL

SCALE: N.T.S. | 1



NOTE: GALVANIZE ALL MATERIAL AFTER FABRICATION IN ACCORDANCE WITH ASTM-A53, ASTM- B633, ASTM- A392

CHAIN LINK FENCE DETAIL

SCALE: N.T.S. | 2

CROWN
COMMUNICATION INC.
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
(502) 240 0044
(502) 240-0045 FAX

Alvar INC.
ARCHITECTS AND ENGINEERS
11001 BLUEGRASS PARKWAY
SUITE # 330
LOUISVILLE, KY 40299
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(502) 240-0045 FAX

CASE NO.

PROPRIETARY INFORMATION

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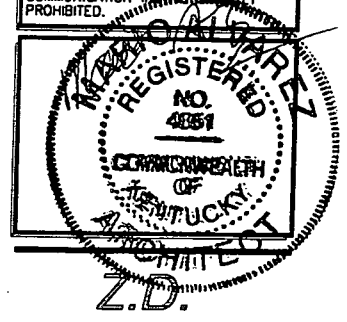


#	DATE	ISSUE
	12/21/98	PRELIMINARY
	1/22/99	REDLINES

DRAWN BY: ADA
CHECKED BY:
REVIEWED BY: B.G. / M.A.

SITE NUMBER

ECHO 308KY

SITE NAME

LILY

SITE ADDRESS

939 OLD WHITLEY ROAD
LILY, KY 40740

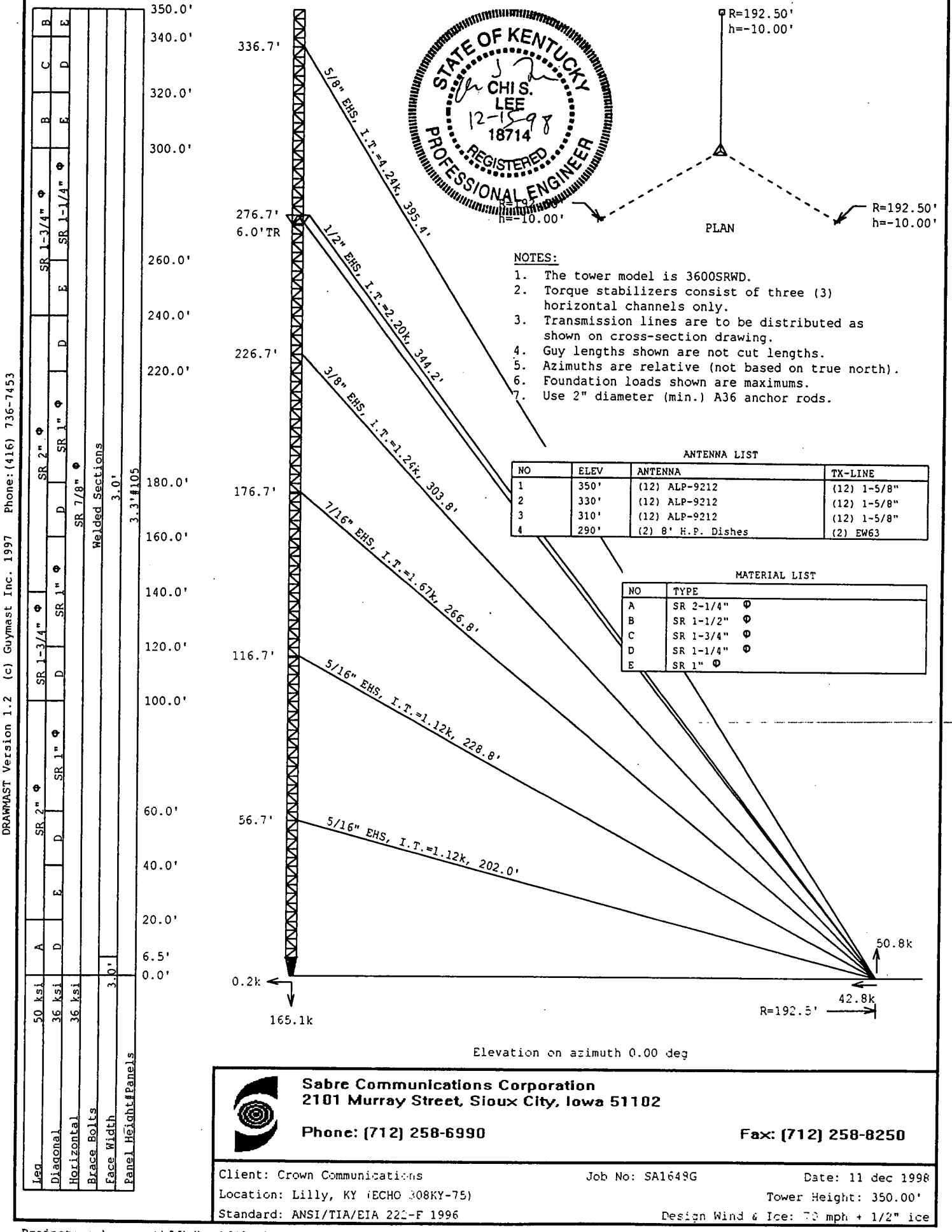
SHEET TITLE

FENCE DETAILS

SHEET NUMBER

A6

Exhibit D - Tower and Foundation Design



Elevation on azimuth 0.00 deg

Sabre Communications Corporation
2101 Murray Street, Sioux City, Iowa 51102

Phone: (712) 258-6990 **Fax: (712) 258-8250**

Client: Crown Communications | Job No: SA1648G | Date: 11 dec 1998
Location: Lilly, KY (ECHO 308KY-75) | Tower Height: 350.00'
Standard: ANSI/TIA/EIA 222-F 1996 | Design Wind & Ice: 79 mph + 1/2" ice

Project: c:\guymast\36\d\sa1648g.lcd

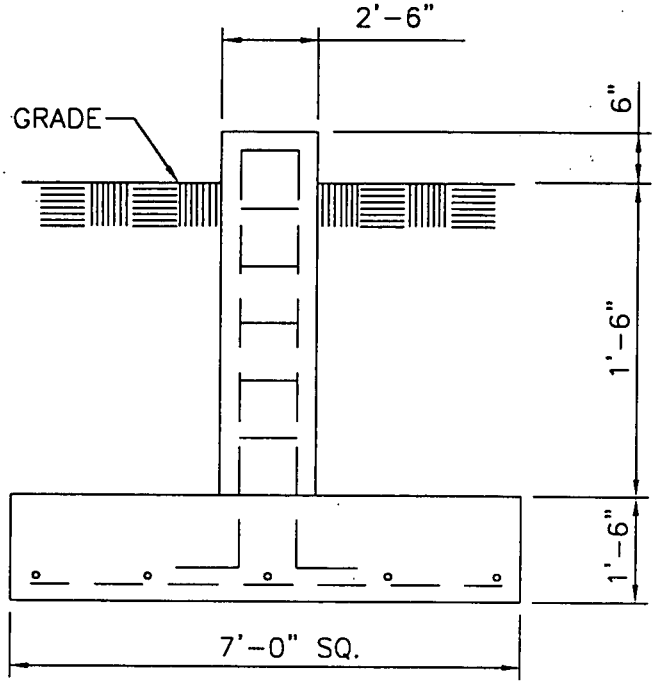
SABRE COMMUNICATIONS CORPORATION
2101 MURRAY STREET P.O. BOX 658 SIOUX CITY, IOWA 51102
PHONE: (712) 258-6690 FAX: (712) 258-8250

NO. SA1648-G
COVER PAGE 2
DATE 12/14/98
BY KJT/MLC

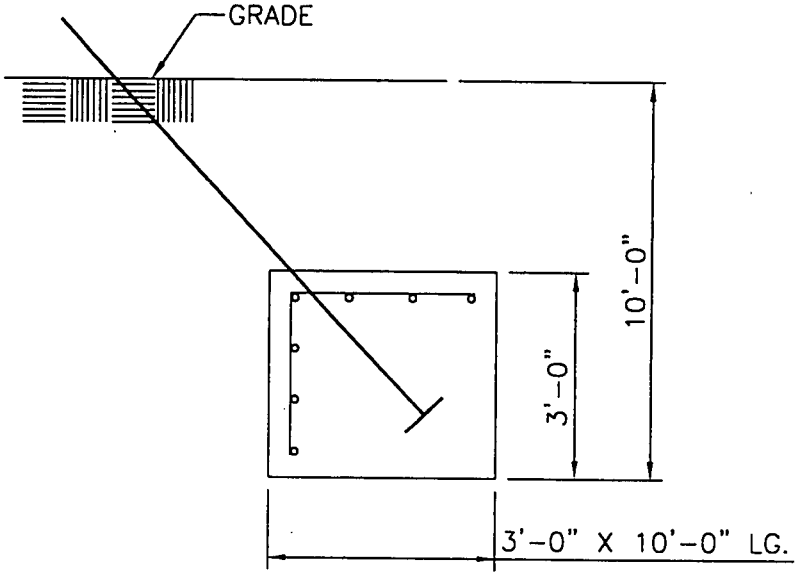
CUSTOMER: CROWN COMMUNICATIONS

SITE: LILLY, KY (ECHO 308KY-75)

TITLE: 350 FT. MODEL 3600 SRW GUYED TOWER (36" FACE) AT 70 MPH WIND + 1/2" ICE PER EIA-222-F-1996. ANTENNA LOADING PER PAGE 1 OF STRESS ANALYSIS.



TOWER BASE
(3.09 CU. YDS. EACH)



GUY ANCHOR
(3.33 CU. YDS. EACH)

REBAR SCHEDULE PER TOWER BASE AND PAD & PIER	
TOWER BASE	PIER: (6) #7 V-BARS W/ #3 TIES @ 12" C/C PAD: (8) #7 H-BARS EA. WAY EVENLY SPACED BOT ONLY
GUY ANCHOR	(7) #7 H-BARS X 9'-6" (10) #3 BENT BARS EVENLY SPACED

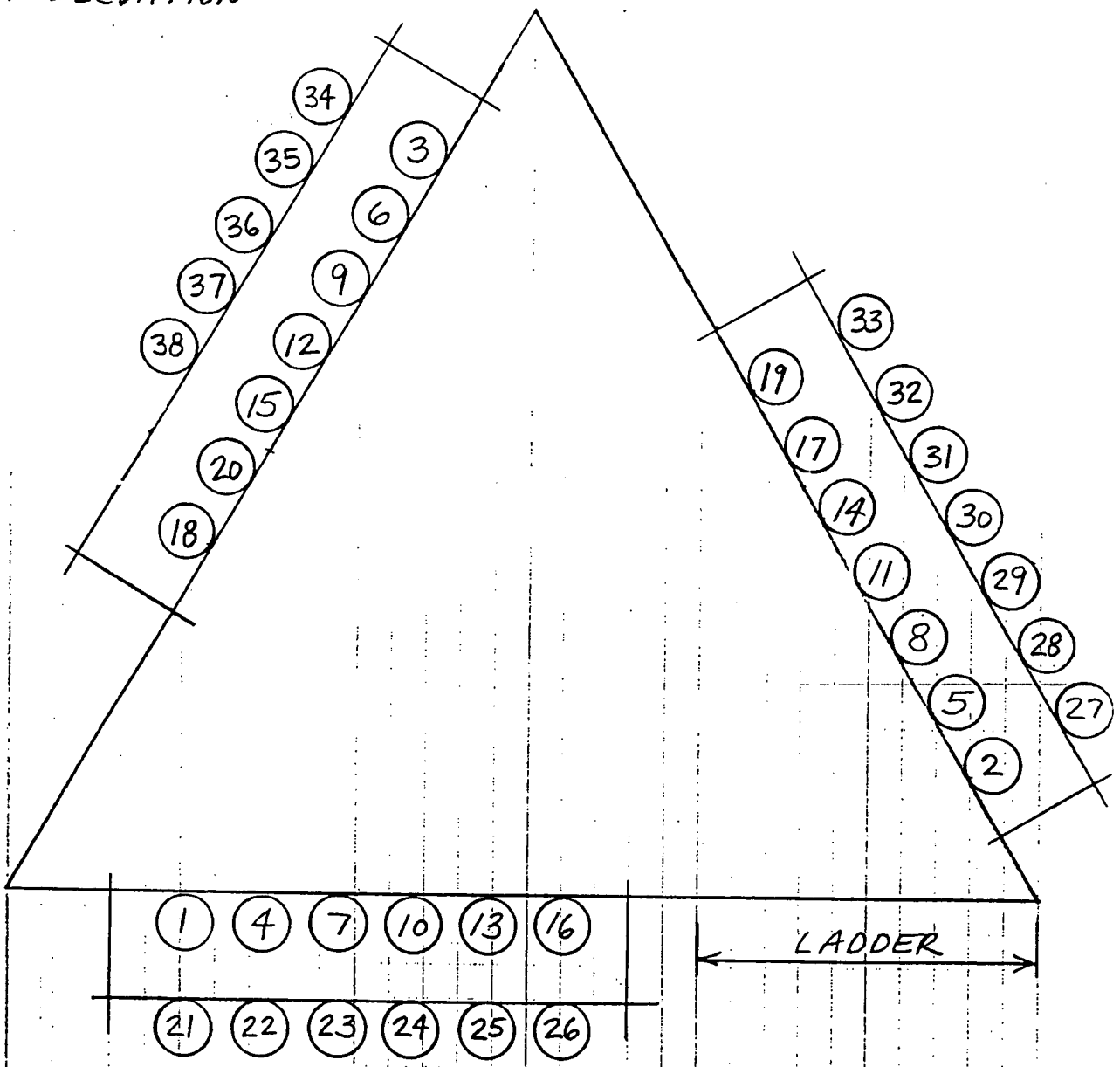
STATE OF KENTUCKY
CHI S. LEE
12-15-98
18714
REGISTERED
PROFESSIONAL ENGINEER

NOTES

1). MINIMUM CONCRETE COMPRESSIVE STRENGTH IS 3000 PSI.
2). 3" MINIMUM CONCRETE COVER.
3). REBARS PER ASTM A615 GR. 60.
4). FOUNDATION DESIGN IS BASED UPON SOILS REPORT (JOB NO. 13000.8G21) BY ATC ASSOCIATES, INC. DATED 11/25/98.
5). SEE SOILS REPORT FOR COMPACTION REQUIREMENTS.

SABRE COMMUNICATIONS CORPORATION	NAME K. TINDALL	DATE 12/11/98	FILE NO. SA1648G
CUSTOMER CROWN COMMUNICATIONS PROJECT LILLY, KY (ECHO 308KY-75)			PAGE 3

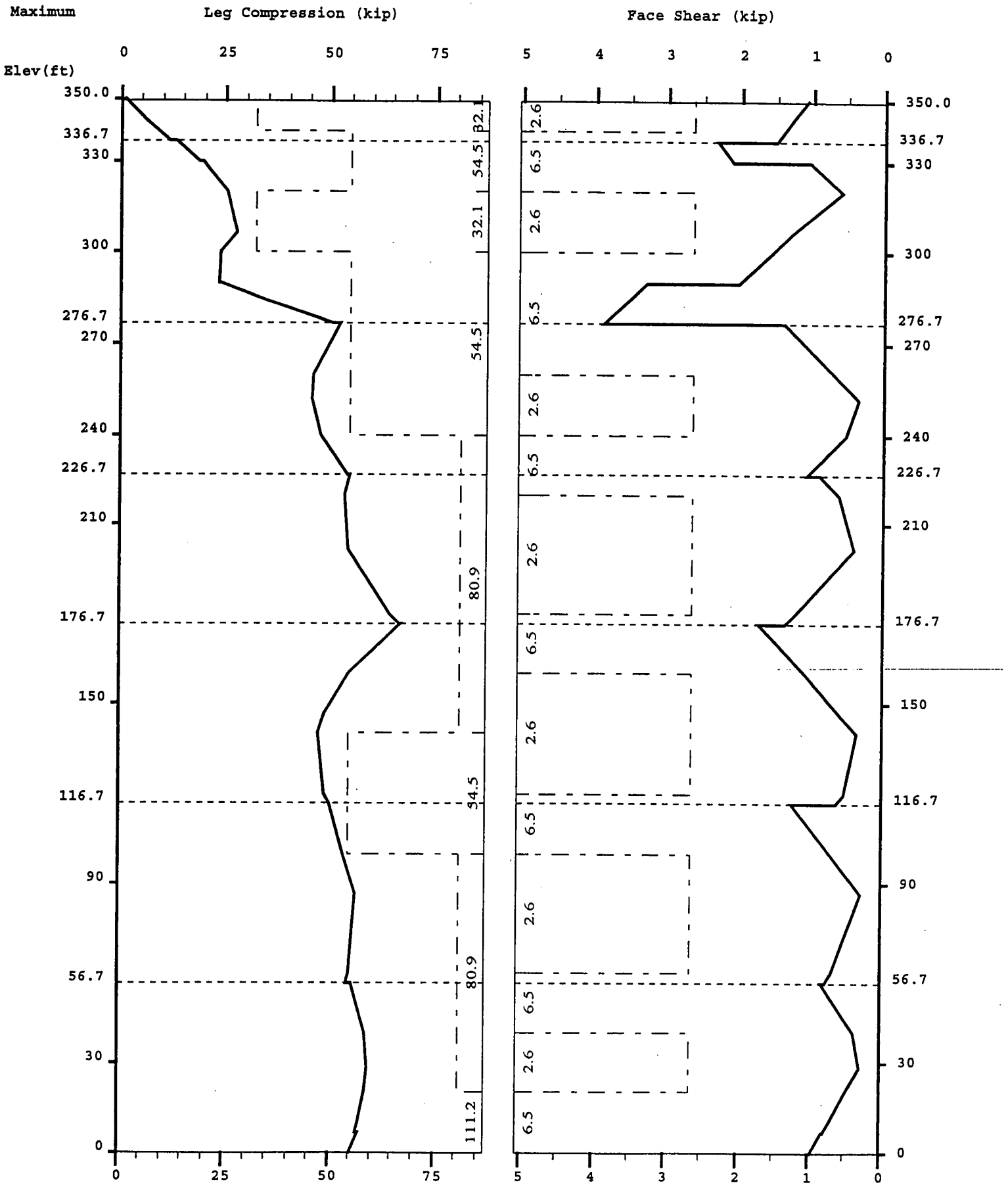
LINES ARE NUMBERED FROM HIGHEST ELEVATION TO LOWEST ELEVATION



ARRANGEMENT FOR A TOTAL OF

LINES

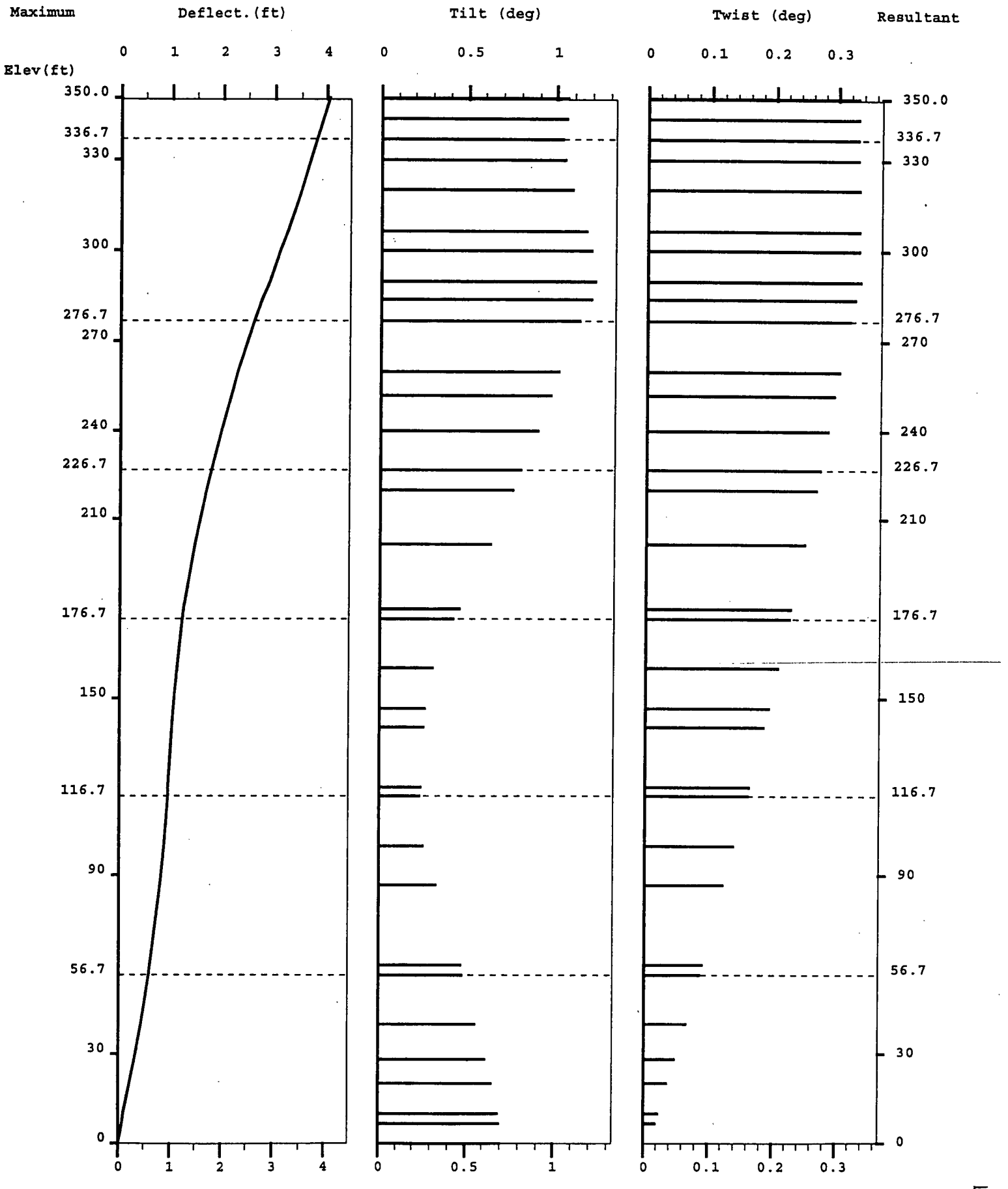
[SA1648G]-350 FT 3600 CROWN COMM LILLY KY (ECHO 308LA-75) 12-11-98 KJT



GUYPLOT Ver 4.0 (c) Guymast Inc. 1997 Phone:(416) 736-7453 11 dec 1998

Licensed to: Sabre Communications 8:28:53

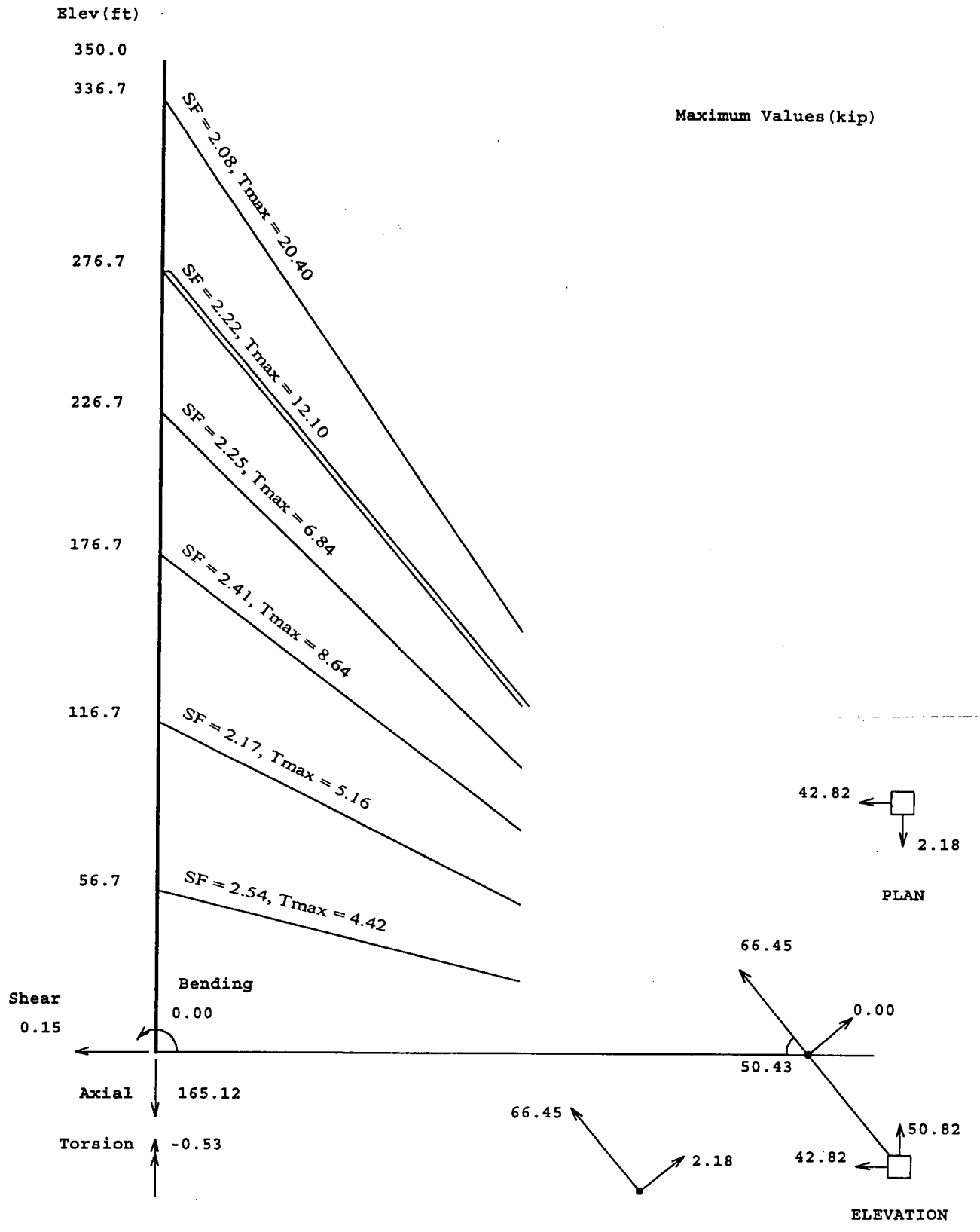
[SA1648G]-350 FT 3600 CROWN COMM LILLY KY (ECHO 308LA-75) 12-11-98 KJT



Project: c:\guymast\36\d\sa1648g.gym

[SA1648G]-350 FT 3600 CROWN COMM LILLY KY (ECHO 308LA-75) 12-11-98 KJT

Guy Tensions, Anchor Loads and Base Loads



p.A1

GUYMAST (USA)-Guyed Tower Analysis (c) 1997 Guymast Inc.
Phone: (416) 736-7453
Processed under license at: Fax : (416) 736-4372

Sabre Communications on: 11 dec 1998 at: 8:39:53

[SA1648G]-350 FT 3600 CROWN COMM LILLY KY (ECHO 308LA-75) 12-11-98

STATE OF KENTUCKY
CHI S. LEE
12-15-98
18714
REGISTERED PROFESSIONAL ENGINEER

MAST DATA

UPPER ELEV FT	MAST TYPE OF WEB	NO OF LEGS *	GEOM FACE WIDTH FT *	GEOM PANEL HEIGHT FT *	X-SECTION-AREA ONE LEG IN.SQ.	X-SECTION-AREA ONE DIAG IN.SQ. *	BARE WEIGHT K/FT.	ELASTIC MODULUS KIP/IN.SQ	TEMP COEFF /DEG
350.0	4	3	3.000	3.333	2.800	0.980	0.048	29000.0	0.0000116
6.5	4	3	2.236	3.333	3.980	1.230	0.060	29000.0	0.0000116

* If NO OF LEGS is 1 : that part of the mast is assumed to be Cylindrical
and : FACE WIDTH = outside diameter
PANEL HEIGHT = thickness
AREA OF DIAG = Poisson ratio

GUY GEOMETRY

ELEV FT	GUY AZI DEG	DIAMETER IN.	HEIGHT FT.	RADIUS FT.	MAST ATTACH RADIUS FT.	ATTACH AZI DEG	INITIAL TENSION KIP
336.7	240.0	0.625	346.7	192.5	1.730	240.0	4.240
336.7	120.0	0.625	346.7	192.5	1.730	120.0	4.240
336.7	0.0	0.625	346.7	192.5	1.730	0.0	4.240
276.7	0.0	0.500	286.7	192.5	3.460	300.0	2.200
276.7	240.0	0.500	286.7	192.5	3.460	300.0	2.200
276.7	240.0	0.500	286.7	192.5	3.460	180.0	2.200
276.7	120.0	0.500	286.7	192.5	3.460	180.0	2.200
276.7	120.0	0.500	286.7	192.5	3.460	60.0	2.200
276.7	0.0	0.500	286.7	192.5	3.460	60.0	2.200
226.7	240.0	0.375	236.7	192.5	1.730	240.0	1.240
226.7	120.0	0.375	236.7	192.5	1.730	120.0	1.240
226.7	0.0	0.375	236.7	192.5	1.730	0.0	1.240
176.7	240.0	0.438	186.7	192.5	1.730	240.0	1.670
176.7	120.0	0.438	186.7	192.5	1.730	120.0	1.670
176.7	0.0	0.438	186.7	192.5	1.730	0.0	1.670
116.7	240.0	0.313	126.7	192.5	1.730	240.0	1.120
116.7	120.0	0.313	126.7	192.5	1.730	120.0	1.120
116.7	0.0	0.313	126.7	192.5	1.730	0.0	1.120
56.7	240.0	0.313	66.7	192.5	1.730	240.0	1.120

56.7	120.0	0.313	66.7	192.5	1.730	120.0	1.120
56.7	0.0	0.313	66.7	192.5	1.730	0.0	1.120

GUY MATERIAL PROPERTIES

ELEV FT	GUY AZI DEG	BREAKING STRENGTH KIP	GUY WEIGHT LBS/FT	GUY AREA IN.SQ	ELASTIC MODULUS KIP/IN.SQ	THERMAL COEFF /DEG	UNSTRESS LENGTH FT
336.7	240.0	42.400	0.819	0.234	25500.0	0.0000120	395.413
336.7	120.0	42.400	0.819	0.234	25500.0	0.0000120	395.413
336.7	0.0	42.400	0.819	0.234	25500.0	0.0000120	395.413
276.7	0.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
276.7	240.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
276.7	240.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
276.7	120.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
276.7	120.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
276.7	0.0	26.900	0.525	0.150	25500.0	0.0000120	344.173
226.7	240.0	15.400	0.270	0.084	26800.0	0.0000120	303.828
226.7	120.0	15.400	0.270	0.084	26800.0	0.0000120	303.828
226.7	0.0	15.400	0.270	0.084	26800.0	0.0000120	303.828
176.7	240.0	20.800	0.388	0.115	26800.0	0.0000120	266.777
176.7	120.0	20.800	0.388	0.115	26800.0	0.0000120	266.777
176.7	0.0	20.800	0.388	0.115	26800.0	0.0000120	266.777
116.7	240.0	11.200	0.222	0.059	26800.0	0.0000120	228.842
116.7	120.0	11.200	0.222	0.059	26800.0	0.0000120	228.842
116.7	0.0	11.200	0.222	0.059	26800.0	0.0000120	228.842
56.7	240.0	11.200	0.222	0.059	26800.0	0.0000120	201.951
56.7	120.0	11.200	0.222	0.059	26800.0	0.0000120	201.951
56.7	0.0	11.200	0.222	0.059	26800.0	0.0000120	201.951

FACTORED LEG AND FACE SHEAR RESISTANCE

BOTTOM ELEV ft	TOP ELEV ft	LEG COMP kip	FACE SHEAR kip
0.00	20.00	111.22	6.49
20.00	40.00	80.89	2.64
40.00	60.00	80.89	6.49
60.00	80.00	80.89	2.64
80.00	100.00	80.89	2.64
100.00	120.00	54.52	6.49
120.00	140.00	54.52	2.64
140.00	160.00	80.89	2.64
160.00	180.00	80.89	6.49
180.00	200.00	80.89	2.64
200.00	220.00	80.89	2.64
220.00	240.00	80.89	6.49
240.00	260.00	54.52	2.64
260.00	280.00	54.52	6.49
280.00	300.00	54.52	6.49
300.00	320.00	32.07	2.64
320.00	340.00	54.52	6.49
340.00	350.00	32.07	2.64

LOADING CONDITION A

60.6 MPH + 1/2" ICE WIND AZ 0 DEGREES *

MAST LOADING

LOAD TYPE	ELEV FT	.FORCES (KIP & N	E	KIP/FT) DOWN	.MOMENTS (FT.K & N	E	FT.K/FT) TORSION	ANT-ORIENT AZI DEG	VERT DEG
C	350.0	-1.630	0.000	3.000	0.00	0.00	0.00	0.0	0.00
C	330.0	-1.610	0.000	3.000	0.00	0.00	0.00	0.0	0.00
C	310.0	-1.580	0.000	3.000	0.00	0.00	0.00	0.0	0.00
C	290.0	-1.155	0.000	0.947	2.59	0.00	0.00	0.0	0.00
C	290.0	-0.974	0.000	0.947	-1.77	0.00	0.00	180.0	0.00
C	276.7	-0.230	0.000	0.560	0.00	0.00	0.00	0.0	0.00
D	350.0	-0.047	0.000	0.083	0.00	0.00	0.00		
D	340.0	-0.047	0.000	0.083	0.00	0.00	0.00		
D	340.0	-0.048	0.000	0.097	0.00	0.00	0.00		
D	330.0	-0.048	0.000	0.097	0.00	0.00	0.00		
D	330.0	-0.065	0.000	0.127	0.00	0.00	0.00		
D	320.0	-0.064	0.000	0.127	0.00	0.00	0.00		
D	320.0	-0.062	0.000	0.113	0.00	0.00	0.00		
D	310.0	-0.062	0.000	0.113	0.00	0.00	0.00		
D	310.0	-0.063	0.000	0.144	0.00	0.00	0.00		
D	300.0	-0.063	0.000	0.144	0.00	0.00	0.00		
D	300.0	-0.064	0.000	0.158	0.00	0.00	0.00		
D	290.0	-0.064	0.000	0.158	0.00	0.00	0.00		
D	290.0	-0.064	0.000	0.161	0.00	0.00	0.00		
D	260.0	-0.062	0.000	0.161	0.00	0.00	0.00		
D	260.0	-0.060	0.000	0.154	0.00	0.00	0.00		
D	240.0	-0.060	0.000	0.154	0.00	0.00	0.00		
D	240.0	-0.061	0.000	0.169	0.00	0.00	0.00		
D	220.0	-0.061	0.000	0.169	0.00	0.00	0.00		
D	220.0	-0.059	0.000	0.162	0.00	0.00	0.00		
D	200.0	-0.058	0.000	0.162	0.00	0.00	0.00		
D	200.0	-0.058	0.000	0.162	0.00	0.00	0.00		
D	180.0	-0.057	0.000	0.162	0.00	0.00	0.00		
D	180.0	-0.056	0.000	0.169	0.00	0.00	0.00		
D	160.0	-0.056	0.000	0.169	0.00	0.00	0.00		
D	160.0	-0.053	0.000	0.162	0.00	0.00	0.00		
D	140.0	-0.053	0.000	0.162	0.00	0.00	0.00		
D	140.0	-0.052	0.000	0.154	0.00	0.00	0.00		
D	120.0	-0.051	0.000	0.154	0.00	0.00	0.00		
D	120.0	-0.049	0.000	0.161	0.00	0.00	0.00		
D	100.0	-0.048	0.000	0.161	0.00	0.00	0.00		
D	100.0	-0.046	0.000	0.162	0.00	0.00	0.00		
D	60.0	-0.044	0.000	0.162	0.00	0.00	0.00		
D	60.0	-0.040	0.000	0.169	0.00	0.00	0.00		
D	40.0	-0.039	0.000	0.169	0.00	0.00	0.00		
D	40.0	-0.035	0.000	0.162	0.00	0.00	0.00		
D	20.0	-0.035	0.000	0.162	0.00	0.00	0.00		
D	20.0	-0.036	0.000	0.178	0.00	0.00	0.00		
D	10.0	-0.036	0.000	0.178	0.00	0.00	0.00		

* SEVEN WIND DIRECTIONS WERE ANALYZED ONLY ONE IS SHOWN IN FULL

D	10.0	-0.036	0.000	0.177	0.00	0.00	0.00
D	3.2	-0.035	0.000	0.178	0.00	0.00	0.00
D	3.2	-0.034	0.000	0.173	0.00	0.00	0.00
D	0.0	-0.034	0.000	0.173	0.00	0.00	0.00

GUY LOADING
==========

.. WIND LOADING ... AZI	SPEED	REF PRESS	TEMP CHANGE	.ICE LOAD.. RAD	DENS	CONV TOL	PROFILES. CAB	WIND	.LOAD FACTORS. WIND	DEAD	ICE
DEG	MPH	PSF	DEG	IN	PCF						
0.0	60.6	0.00	-10.00	0.50	56.00	0.0100	2	1	1.00	1.00	1.00

CABLE PROFILE: 1 - CATENARY 2 - PARABOLIC

WIND PROFILE: 1 - EIA 222 F 2 - Kz = 1 ; Gh = 1
3 - EIA 222 C 4 - Special Factors
5 - Site Specific Wind Formula

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GUYMAST (USA)-Guyed Tower Analysis (c) 1997 Guymast Inc.
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[SA1648G]-350 FT 3600 CROWN COMM LILLY KY (ECHO 308LA-75) 12-11-98 KJT

MAXIMUM LEG LOADS AND FACE SHEARS (KIP - stress in KSI)
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MAST ELEV FT	MAX LEG LOADS AXIAL	BENDING TENS	BENDING COMP	TOTAL TENS	TOTAL COMP	MAX FACE SHEARS TORSN	BEAM	TOTAL
350.00	1.0A	0.0D	0.0D	0.0A	1.0D	0.0A	1.1D	1.1D
	1.2A	4.6A	4.6G	3.4A	5.8G	0.0A	1.3D	1.3D
343.34	1.2A	4.6A	4.6G	3.4A	5.8G	0.0A	1.3D	1.3D
	1.4A	10.0A	10.2G	8.6A	11.6G	0.0A	1.5D	1.5D
336.67	12.6G	1.2E	1.0D	0.0A	13.1C	0.0B	2.3F	2.3F
	12.8G	8.5G	8.1A	0.0A	18.6B	0.0B	2.1F	2.1F
330.00	13.8G	8.5G	8.1A	0.0A	19.6B	0.0B	1.0F	1.0F
	14.2G	13.6G	13.3A	0.0A	25.2A	0.0B	0.6A	0.6F
320.00								

	14.2G	13.6G	13.3A	0.0A	25.2A	0.0B	0.6A	0.6F
	15.7G	13.7G	14.3A	0.0A	27.7A	0.0B	1.3D	1.3D
306.67								
	15.7G	13.7G	14.3A	0.0A	27.7A	0.0B	1.3D	1.3D
	16.1G	8.7G	10.0A	0.0A	23.7A	0.0B	1.6D	1.6D
300.00								
	16.1G	8.7G	10.0A	0.0A	23.7A	0.0B	1.6D	1.6D
	16.6G	8.5C	7.7D	0.0A	23.4C	0.0B	2.0D	2.0D
290.00								
	17.2G	8.7C	7.6D	0.0A	23.9C	-0.4E	-3.1B	3.3F
	17.5G	13.8D	17.8C	0.0A	34.9C	-0.4E	-3.4B	3.6F
284.19								
	17.5G	13.8D	17.8C	0.0A	34.9C	-0.4E	-3.4B	3.6F
	17.9G	26.4E	32.9C	10.9E	50.5C	-0.4E	-3.7B	3.9F
276.67								
	30.6G	17.1E	22.3C	0.0A	52.1C	-0.1D	-1.3D	1.4D
	31.5G	9.7D	14.8C	0.0A	45.7G	-0.1D	-0.6E	0.7D
260.01								
	31.5G	9.7D	14.8C	0.0A	45.7G	-0.1D	-0.6E	0.7D
	31.9G	8.0D	13.5G	0.0A	45.4G	-0.1D	-0.3E	0.3E
251.67								
	31.9G	8.0D	13.5G	0.0A	45.4G	-0.1D	-0.3E	0.3E
	32.5G	8.1F	15.1G	0.0A	47.6G	-0.1D	-0.5G	0.5C
240.01								
	32.5G	8.1F	15.1G	0.0A	47.6G	-0.1D	-0.5G	0.5C
	33.3G	11.7B	20.9G	0.0A	54.1G	-0.1D	-1.0G	1.1C
226.67								
	36.6G	9.5B	18.1G	0.0A	54.7G	-0.1D	-0.8C	0.9D
	37.0G	8.2B	16.3G	0.0A	53.3G	-0.1D	-0.5C	0.6D
220.01								
	37.0G	8.2B	16.3G	0.0A	53.3G	-0.1D	-0.5C	0.6D
	38.0G	8.7B	16.3G	0.0A	54.3G	-0.1D	-0.3E	0.4E
201.67								
	38.0G	8.7B	16.3G	0.0A	54.3G	-0.1D	-0.3E	0.4E
	39.2G	17.2A	25.1G	0.0A	64.3G	-0.1D	-1.2F	1.2B
180.02								
	39.2G	17.2A	25.1G	0.0A	64.3G	-0.1D	-1.2F	1.2B
	39.4G	19.5A	27.3G	0.0A	66.6G	-0.1D	-1.3F	1.4B
176.67								
	42.8G	16.4A	24.1G	0.0A	66.9G	-0.2D	1.6B	1.7D
	43.7G	5.9B	10.9G	0.0A	54.7G	-0.2D	-1.0G	1.1D
160.02								
	43.7G	5.9B	10.9G	0.0A	54.7G	-0.2D	-1.0G	1.1D
	44.5G	5.1F	5.7F	0.0A	48.9G	-0.2D	-0.5G	0.6D
146.67								

	44.5G	5.1F	5.7F	0.0A	48.9G	-0.2D	-0.5G	0.6D
	44.8G	4.9F	4.4F	0.0A	47.4G	-0.2D	-0.3G	0.3D
140.02								
	44.8G	4.9F	4.4F	0.0A	47.4G	-0.2D	-0.3G	0.3D
	45.8G	4.0F	4.9F	0.0A	48.9G	-0.2D	0.5D	0.5B
120.02								
	45.8G	4.0F	4.9F	0.0A	48.9G	-0.2D	0.5D	0.5B
	46.0G	3.8F	5.6F	0.0A	50.0G	-0.2D	0.6D	0.6B
116.67								
	47.7G	3.9F	4.4F	0.0A	50.0G	-0.2D	-1.2G	1.3D
	48.6G	10.6C	8.7E	0.0A	53.5C	-0.2D	-0.6G	0.7D
100.03								
	48.6G	10.6C	8.7E	0.0A	53.5C	-0.2D	-0.6G	0.7D
	49.3G	14.5C	11.1E	0.0A	56.4F	-0.2D	-0.2G	0.3D
86.67								
	49.3G	14.5C	11.1E	0.0A	56.4F	-0.2D	-0.2G	0.3D
	50.7G	8.7C	4.8A	0.0A	55.0G	-0.2D	0.7D	0.7B
60.03								
	50.7G	8.7C	4.8A	0.0A	55.0G	-0.2D	0.7D	0.7B
	50.9G	6.8C	3.6C	0.0A	54.2G	-0.2D	0.8D	0.8B
56.67								
	51.8G	7.5C	4.0C	0.0A	55.5G	-0.2D	0.6F	0.8D
	52.8G	12.3C	8.3A	0.0A	58.9G	-0.2D	0.2F	0.4D
40.03								
	52.8G	12.3C	8.3A	0.0A	58.9G	-0.2D	0.2F	0.4D
	53.4G	12.0C	8.6A	0.0A	59.4G	-0.2D	-0.2C	0.3D
28.33								
	53.4G	12.0C	8.6A	0.0A	59.4G	-0.2D	-0.2C	0.3D
	53.9G	10.1C	7.4A	0.0A	58.9G	-0.2D	-0.4C	0.5C
20.03								
	53.9G	10.1C	7.4A	0.0A	58.9G	-0.2D	-0.4C	0.5C
	54.5G	6.0C	4.5A	0.0A	57.4G	-0.2D	-0.6C	0.7C
10.03								
	54.5G	6.0C	4.5A	0.0A	57.4G	-0.2D	-0.6C	0.7C
	54.7G	4.1C	3.1A	0.0A	56.7G	-0.2D	-0.7C	0.8C
6.50								
	54.7G	5.5C	4.1A	0.0A	57.4G	-0.3D	-0.7C	0.8C
	55.0G	0.0G	0.0C	0.0A	55.0G	-0.3D	-0.9C	0.9C
0.00								

MAXIMUM MAST DEFORMATION CALCULATED

MAST	.....DEFLECTIONS (FT).....				.....ROTATIONS (DEG).....			
ELEV	..... HORIZONTAL			DOWN	..... TILT			TWIST
FT	NORTH	EAST	TOTAL		NORTH	EAST	TOTAL	

350.0	4.05G	-3.19C	4.05G	0.15G	1.06G	-0.90C	1.06G	0.33D
343.3	3.93G	-3.09C	3.93G	0.15G	1.05G	-0.89C	1.05G	0.33D
336.7	3.81G	-2.98C	3.81G	0.15G	1.03G	-0.88C	1.03G	0.33D
330.0	3.69G	-2.88C	3.69G	0.15G	1.04G	-0.88C	1.04G	0.33D
320.0	3.50G	-2.72C	3.50G	0.15G	1.08G	-0.91C	1.08G	0.33D
306.7	3.24G	-2.51C	3.24G	0.14G	1.16G	-0.96C	1.16G	0.33D
300.0	3.10G	-2.40C	3.10G	0.14G	1.20G	-0.97C	1.20G	0.33D
290.0	2.89G	-2.23C	2.89G	0.14G	1.21G	-0.95C	1.21G	0.33D
284.2	2.77G	-2.13C	2.77G	0.14G	1.19G	-0.92C	1.19G	0.33D
276.7	2.62G	-2.02C	2.62G	0.14G	1.13G	-0.85C	1.13G	0.32D
260.0	2.31G	-1.79C	2.31G	0.13G	1.01G	-0.73C	1.01G	0.30D
251.7	2.16G	-1.69C	2.16G	0.13G	0.96G	-0.69C	0.96G	0.29D
240.0	1.97G	-1.55C	1.97G	0.12G	0.90G	-0.63C	0.90G	0.28D
226.7	1.78G	-1.41C	1.78G	0.12G	0.80G	-0.55C	0.80G	0.27D
220.0	1.68G	-1.35C	1.68G	0.11G	0.75G	-0.52C	0.75G	0.27D
201.7	1.46G	-1.20C	1.46G	0.10G	0.64G	-0.43C	0.64G	0.25D
180.0	1.25G	-1.06C	1.25G	0.10G	0.46G	-0.31C	0.46G	0.23D
176.7	1.23G	-1.04C	1.23G	0.09G	0.42G	-0.28C	0.42G	0.22D
160.0	1.12G	-0.97C	1.12C	0.09G	0.31G	-0.20C	0.31G	0.21D
146.7	1.06G	-0.93C	1.07C	0.08G	0.27G	-0.19C	0.27G	0.19D
140.0	1.03G	-0.90C	1.04C	0.08G	0.26G	-0.19C	0.26G	0.18D
120.0	0.94G	-0.84C	0.96C	0.07G	0.24G	-0.19C	0.24G	0.16D
116.7	0.93G	-0.83C	0.95C	0.06G	0.23G	-0.19C	0.23G	0.16D
100.0	0.86G	-0.77C	0.88C	0.05G	0.26G	-0.23C	0.26C	0.14D
86.7	0.79G	-0.71C	0.81C	0.05G	0.32G	-0.29C	0.33C	0.12D
60.0	0.61G	-0.54C	0.63C	0.03G	0.45G	-0.41C	0.47C	0.09D
56.7	0.58G	-0.52C	0.60C	0.03G	0.46G	-0.42C	0.48C	0.09D
40.0	0.44G	-0.39C	0.45C	0.02G	0.53G	-0.48C	0.55C	0.06D
28.3	0.32G	-0.29C	0.33C	0.02G	0.59G	-0.53C	0.61C	0.05D
20.0	0.23G	-0.21C	0.24C	0.01G	0.63G	-0.56C	0.65C	0.04D
10.0	0.12G	-0.11C	0.12C	0.00G	0.66G	-0.59C	0.68C	0.02D
6.5	0.08G	-0.07C	0.08C	0.00G	0.67G	-0.60C	0.69C	0.02D
0.0	0.00A	0.00A	0.00A	0.00A	0.68G	-0.60C	0.70C	0.00A

MAXIMUM ANTENNA ROTATIONS

ELEV FT	ORIENTATION AZI DEG	ORIENTATION ELEV DEG	BEAM DEFLECTIONS (DEG) ROLL	YAW	PITCH	TOTAL
350.0	0.0	0.0	0.898 C	0.334 D	-1.055 G	1.055 G
330.0	0.0	0.0	0.880 C	0.334 D	-1.038 G	1.038 G
310.0	0.0	0.0	0.944 C	0.336 D	-1.145 G	1.145 G
290.0	0.0	0.0	0.950 C	0.338 D	-1.212 G	1.212 G
290.0	180.0	0.0	-0.950 C	0.338 D	1.212 G	1.212 G
276.7	0.0	0.0	0.845 C	0.321 D	-1.127 G	1.127 G

MAXIMUM INTERNAL MAST FORCES

MAST ELEV FT	TOTAL AXIAL KIP	SHEAR N - S KIP	SHEAR E - W KIP	MOMENT N - S FT-KIP	MOMENT E - W FT-KIP	TORSION FT-KIP
350.0						
	3.00 A	-1.63 A	-1.63 D	0.00 E	0.00 D	0.00 A
	3.56 A	1.98 G	-1.95 D	-12.04 G	11.94 D	0.00 A
343.3						
	3.56 A	1.98 G	-1.95 D	-12.04 G	11.94 D	0.00 A
	4.16 A	2.34 G	-2.28 D	-26.42 G	26.02 D	0.00 A
	*	+	+	&	&	@
336.7	33.55 G	-6.87 G	6.04 D	25.08 G	-22.84 D	-0.13 B
	37.71 G	-3.60 G	3.14 D	2.16 A	3.19 D	-0.13 B
	38.36 G	-3.24 G	2.81 D	22.06 G	-16.97 D	-0.13 B
330.0						
	41.36 G	-1.63 G	1.20 D	22.06 G	-16.97 D	-0.13 B
	42.63 G	0.98 A	0.53 D	35.30 G	-25.94 D	-0.13 B
320.0						
	42.63 G	0.98 A	0.53 D	35.30 G	-25.94 D	-0.13 B
	47.24 G	1.66 G	-1.91 D	-37.09 A	-21.95 D	-0.13 B
306.7						
	47.24 G	1.66 G	-1.91 D	-37.09 A	-21.95 D	-0.13 B
	48.21 G	2.14 G	-2.35 D	-25.98 A	-7.52 D	-0.13 B
300.0						
	48.21 G	2.14 G	-2.35 D	-25.98 A	-7.52 D	-0.13 B

	49.79 G	2.88 G	-3.01 D	11.23 E	23.61 C	-0.13 B
290.0						
	51.68 G	5.01 G	-4.12 D	10.41 E	23.61 C	1.04 E
	52.62 G	5.44 G	-4.50 D	-34.57 G	45.66 C	1.04 E
284.2						
	52.62 G	5.44 G	-4.50 D	-34.57 G	45.66 C	1.04 E
	53.83 G	5.99 G	-5.00 D	-77.72 G	80.41 D	1.04 E
	*	+	+	&	&	@
276.7	37.34 G	-8.68 G	7.45 D	-25.06 A	-25.74 D	-0.86 E
	91.73 G	-1.77 G	1.90 D	-53.70 G	54.66 D	0.34 D
	94.42 G	0.70 A	0.86 E	-37.02 G	35.33 C	0.34 D
260.0						
	94.42 G	0.70 A	0.86 E	-37.02 G	35.33 C	0.34 D
	95.71 G	0.20 A	0.42 E	-35.06 G	31.63 C	0.34 D
251.7						
	95.71 G	0.20 A	0.42 E	-35.06 G	31.63 C	0.34 D
	97.51 G	0.83 G	-0.48 C	-39.35 G	32.54 C	0.34 D
240.0						
	97.51 G	0.83 G	-0.48 C	-39.35 G	32.54 C	0.34 D
	99.76 G	1.77 G	-1.30 C	-54.19 G	42.29 C	0.34 D
	*	+	+	&	&	@
226.7	10.13 G	-2.63 G	2.16 D	7.24 G	-6.28 D	-0.08 B
	109.89 G	-1.22 G	1.15 C	-46.95 G	36.30 C	0.36 D
	111.02 G	-0.76 G	0.74 C	-42.32 G	31.38 C	0.36 D
220.0						
	111.02 G	-0.76 G	0.74 C	-42.32 G	31.38 C	0.36 D
	114.00 G	-0.58 A	-0.40 D	-42.30 G	29.30 C	0.36 D
201.7						
	114.00 G	-0.58 A	-0.40 D	-42.30 G	29.30 C	0.36 D
	117.51 G	1.92 G	-1.70 D	-65.26 G	48.09 D	0.36 D
180.0						
	117.51 G	1.92 G	-1.70 D	-65.26 G	48.09 D	0.36 D
	118.08 G	2.14 G	-1.89 D	-70.83 G	53.32 D	0.36 D
	*	+	+	&	&	@
176.7	10.31 G	-4.30 G	3.90 D	8.30 G	-7.65 D	-0.09 B
	128.39 G	-2.75 G	2.36 D	-62.53 G	45.66 D	0.40 D
	131.20 G	-1.67 G	1.39 C	-28.43 G	15.74 C	0.40 D
160.0						
	131.20 G	-1.67 G	1.39 C	-28.43 G	15.74 C	0.40 D
	133.37 G	-0.86 G	0.68 C	-14.75 F	-7.64 E	0.40 D
146.7						

	133.37 G	-0.86 G	0.68 C	-14.75 F	-7.64 E	0.40 D
	134.45 G	-0.45 G	0.33 C	-11.38 F	-10.11 E	0.40 D
140.0	.....	.....	.....	.....	.....	.....
	134.45 G	-0.45 G	0.33 C	-11.38 F	-10.11 E	0.40 D
	137.54 G	-0.75 A	-0.78 D	-12.69 F	5.52 B	0.40 D
120.0	.....	.....	.....	.....	.....	.....
	137.54 G	-0.75 A	-0.78 D	-12.69 F	5.52 B	0.40 D
	138.08 G	0.93 G	-0.95 D	-14.55 F	6.66 B	0.40 D
	*	+	+	&	&	@
116.7	4.98 C	-3.13 G	2.79 C	4.05 G	-3.66 D	-0.09 B
	142.98 G	-2.01 G	1.65 C	-11.53 F	-5.16 E	0.46 D
	145.67 G	-1.08 G	0.84 C	23.44 G	-24.61 C	0.46 D
100.0	.....	.....	.....	.....	.....	.....
	145.67 G	-1.08 G	0.84 C	23.44 G	-24.61 C	0.46 D
	147.84 G	-0.38 G	0.23 C	34.60 G	-33.10 C	0.46 D
86.7	.....	.....	.....	.....	.....	.....
	147.84 G	-0.38 G	0.23 C	34.60 G	-33.10 C	0.46 D
	152.16 G	-1.06 A	-1.08 D	22.03 G	-19.41 C	0.46 D
60.0	.....	.....	.....	.....	.....	.....
	152.16 G	-1.06 A	-1.08 D	22.03 G	-19.41 C	0.46 D
	152.73 G	-1.20 A	-1.22 D	17.30 G	-14.94 C	0.46 D
	*	+	+	&	&	@
56.7	2.82 C	-2.83 G	2.70 D	1.87 G	-1.80 D	-0.08 B
	155.50 G	0.88 A	0.93 D	19.17 G	-16.63 C	0.53 D
	158.32 G	-0.26 F	0.25 D	31.68 G	-27.37 C	0.53 D
40.0	.....	.....	.....	.....	.....	.....
	158.32 G	-0.26 F	0.25 D	31.68 G	-27.37 C	0.53 D
	160.22 G	0.35 G	-0.30 C	31.08 G	-26.83 C	0.53 D
28.3	.....	.....	.....	.....	.....	.....
	160.22 G	0.35 G	-0.30 C	31.08 G	-26.83 C	0.53 D
	161.57 G	0.68 G	-0.59 C	26.17 G	-22.59 C	0.53 D
20.0	.....	.....	.....	.....	.....	.....
	161.57 G	0.68 G	-0.59 C	26.17 G	-22.59 C	0.53 D
	163.35 G	1.09 G	-0.95 C	15.50 G	-13.38 C	0.53 D
10.0	.....	.....	.....	.....	.....	.....
	163.35 G	1.09 G	-0.95 C	15.50 G	-13.38 C	0.53 D
	163.98 G	1.24 G	-1.07 C	10.56 G	-9.11 C	0.53 D
6.5	.....	.....	.....	.....	.....	.....
	163.98 G	1.24 G	-1.07 C	10.56 G	-9.11 C	0.53 D
	165.12 G	1.50 G	-1.30 C	0.00 G	0.00 D	0.53 D
base reaction	165.12 G	0.15 G	-0.15 C	0.00 G	0.00 D	-0.53 D

* VERTICAL GUY LOAD & GUY ECCENTRIC MOMENT
\+ HORIZONTAL REACTION @ TORSIONAL RESISTANCE

MAXIMUM GUY FORCES AT MAST

GUY LEVEL FT	GUY AZI	COMPONENTS AT MAST N KIP	E KIP	DOWN KIP	TOTAL KIP	FACTOR OF SAFETY	GUY ANGLES VERT	HORIZ
336.7	0.0	9.4B	-0.4D	18.0A	20.3A	2.1A	-62.4A	-10.6E
	120.0	-4.7D	8.3F	18.1F	20.4F	2.1F	-62.5E	9.8A
	240.0	-4.0G	-7.5G	16.0G	18.1G	2.3G	-62.1G	-9.8A
276.7	0.0	6.4B	-0.4D	10.2B	12.1B	2.2B	-57.9A	-9.9E
	120.0	-3.2E	5.6F	10.2F	12.1F	2.2F	-58.0E	9.4A
	120.0	-3.1D	5.3F	9.7E	11.4E	2.4E	-58.1E	9.2A
	240.0	-2.5G	-4.8G	8.5G	10.1G	2.7G	-57.6G	-9.2A
	240.0	-2.7G	-5.2G	9.2G	10.9G	2.5G	-57.5G	-9.4A
	0.0	6.4A	-0.4D	10.2A	12.0A	2.2A	-57.9A	-10.0E
226.7	0.0	4.1A	-0.3D	5.5A	6.8A	2.3A	-53.1A	-9.0E
	120.0	-2.0D	3.5F	5.3E	6.7E	2.3E	-53.2E	8.7A
	240.0	-1.6G	-3.2G	4.8G	6.0G	2.6G	-52.7G	-8.7A
176.7	0.0	6.0A	-0.2D	6.2A	8.6A	2.4A	-45.8B	-7.7F
	120.0	-3.0E	5.2E	6.1E	8.6E	2.4E	-45.8D	7.0A
	240.0	-2.3G	-4.3G	5.0G	7.0G	3.0G	-45.7G	-7.7B
116.7	0.0	4.2A	-0.2D	2.9A	5.1A	2.2A	-37.9G	-6.7F
	120.0	-2.1E	3.7E	3.0E	5.2E	2.2E	-35.0G	6.2A
	240.0	-1.6G	-3.0G	2.4G	4.2G	2.7G	-37.9C	6.9D
56.7	0.0	4.1A	-0.1D	1.5A	4.4A	2.6A	-25.5G	-4.1E
	120.0	-2.1E	3.6E	1.5E	4.4E	2.5E	-21.2A	4.3A
	240.0	-1.6G	-3.0G	1.3G	3.7G	3.1G	-25.7C	4.6E

MAXIMUM GUY FORCES AT ANCHOR

GUY LEVEL FT	GUY AZI	COMPONENTS AT ANCHOR RAD KIP	LAT KIP	VERT KIP	TOTAL KIP	FACTOR OF SAFETY
336.7	0.0	10.1A	0.5D	17.0B	19.8A	2.1A
	120.0	10.1F	-0.5B	17.1F	19.9F	2.1F
	240.0	8.9G	-0.5F	15.2G	17.6G	2.4G
276.7	0.0	6.9B	0.3D	9.6B	11.8B	2.3B

	120.0	6.9F	0.4G	9.6F	11.8F	2.3F
	120.0	6.5E	-0.4B	9.0F	11.1E	2.4E
	240.0	5.7G	0.4A	8.0G	9.8G	2.7G
	240.0	6.1G	-0.5F	8.6G	10.6G	2.5G
	0.0	6.9A	0.4D	9.5A	11.7A	2.3A
226.7	0.0	4.4A	0.3D	5.0A	6.7A	2.3A
	120.0	4.3E	-0.3B	4.9E	6.5E	2.4E
	240.0	3.8G	-0.3F	4.4G	5.8G	2.6G
176.7	0.0	6.2A	0.3D	5.8A	8.5A	2.5A
	120.0	6.2E	-0.3B	5.7E	8.4E	2.5E
	240.0	5.0G	-0.3F	4.7G	6.9G	3.0G
116.7	0.0	4.3A	0.2D	2.7A	5.0A	2.2A
	120.0	4.3E	-0.2B	2.7E	5.1E	2.2E
	240.0	3.5G	-0.2F	2.2G	4.1G	2.7G
56.7	0.0	4.1A	0.1D	1.3A	4.3A	2.6A
	120.0	4.2E	-0.1B	1.4E	4.4E	2.6E
	240.0	3.4G	-0.1F	1.1G	3.6G	3.1G

MAXIMUM ANCHOR LOADS
==========

AZI DEG	RADIUS FT	GUY TO ELEV FT	....ANCHOR LOADS..... HORIZ KIP	VERT KIP	LATER-AL KIP	.....SHAFT FORCES..... AXIAL KIP	...LATERAL... VERT PLANE KIP	HORIZ PLANE KIP	ANGLE DEG
0.0	192.5	336.7	10.1A	17.0B	0.5D	19.5A	3.2A	0.5D	
		276.7	6.9A	9.5A	0.4D	11.7A	0.9A	0.4D	
		276.7	6.9B	9.6B	0.4D	11.8B	0.9A	0.4D	
		226.7	4.4A	5.0A	0.3D	6.7A	-0.2B	0.3D	
		176.7	6.2A	5.8A	0.3D	8.4A	-1.1A	0.3D	
		116.7	4.3A	2.7A	0.2D	4.8A	-1.5A	0.2D	
		56.7	4.1A	1.3A	0.1D	3.7A	-2.3A	0.1D	
			42.8A	50.8A	2.2D	66.5A	0.0C	2.2D	49.9A
120.0	192.5	336.7	10.1F	17.1F	-0.5B	19.7F	3.2E	-0.5B	
		276.7	6.5E	9.0F	-0.4B	11.0E	0.9E	-0.4B	
		276.7	6.9F	9.6F	-0.4B	11.8F	0.9E	-0.4B	
		226.7	4.3E	4.9E	-0.3B	6.5E	-0.2F	-0.3B	
		176.7	6.2E	5.7E	-0.3B	8.3E	-1.0F	-0.3B	
		116.7	4.3E	2.7E	-0.2B	4.8E	-1.5E	-0.2B	
		56.7	4.2E	1.4E	-0.1B	3.7E	-2.3E	-0.1B	
			42.1E	49.7F	-2.2B	65.1E	0.0F	-2.2B	49.7E
240.0	192.5	336.7	8.9G	15.2G	-0.5F	17.4G	2.8G	-0.5F	
		276.7	6.1G	8.6G	-0.4F	10.5G	0.8G	-0.4F	

276.7	5.7G	8.0G	-0.4F	9.8G	0.7G	-0.4F	
226.7	3.8G	4.4G	-0.3F	5.8G	-0.1G	-0.3F	
176.7	5.0G	4.7G	-0.3F	6.8G	-0.9G	-0.3F	
116.7	3.5G	2.2G	-0.2F	3.9G	-1.3G	-0.2F	
56.7	3.4G	1.1G	-0.1F	3.0G	-1.9G	-0.1F	
	36.5G	44.2G	-2.2F	57.3G	0.0G	-2.2F	50.4G

GUYED TOWER SPREAD FOOTING DESIGN BY SABRE COMMUNICATIONS, CORP.

350' 3600 CROWN COMM LILLY LA (ECHO 308KY-75) 12-11-98 KJT

REACTIONS:-

BASE SHEAR = 0.20 kips
COMPRESSION = 165.10 kips

ALLOW. SOIL BEARING CAPACITY (psf)	=	4000
Fy OF RE-BARS (ksi)	=	60
Fc OF CONCRETE (ksi)	=	3
HEIGHT OF PIER ABOVE GRADE (ft)	=	.5

*** GUYED TOWER SPREAD FOOTING SIZE AND CAPACITY ***

DIMENSION OF PIER = 2 ft. SQUARE OR 2.5 ft. DIAMETER

AREA OF RE-BARS OF PIER (sq. in.)	=	3.53
DEPTH OF BOTTOM OF PAD BELOW GRADE (ft)	=	3.00
THICKNESS OF PAD (ft)	=	1.50
WIDTH OF PAD (ft)	=	7.00
AREA OF BOTTOM RE-BARS OF PAD (sq. in.)	=	2.96
MIN. REQUIRED As (sq. in.)	=	2.72

VOLUME OF CONCRETE OF EACH FOOTING (cu. yd.)	=	3.09
CALCULATED SOIL BEARING PRESSURE (ksf)	=	3.37
ALLOWABLE SOIL BEARING PRESSURE (ksf)	=	4.00
CALCULATED PUNCHING SHEAR (KIPS)	=	224.58
ALLOWABLE PUNCHING SHEAR (KIPS)	=	391.60
CALCULATED BEAM SHEAR (KIPS)	=	43.44
ALLOWABLE BEAM SHEAR (KIPS)	=	109.50

PIER: (6) #7 bars w/ #3 ties @12"

PAD: (8) #7 bars, both ways, bottom only

GUY ANCHOR BLOCK DESIGN BY SABRE COMMUNICATIONS, CORP.

350' 3600 CROWN COMM LILLY LA (ECHO 308KY-75) 12-11-98 KJT

GUY ANCHOR REACTIONS:-

HORIZONTAL FORCE = 42.80 kips
UPLIFT FORCE = 50.80 kips

ANGLES OF CONE OF UPLIFT (deg)
FRONT ANGLE = 30 BACK ANGLE = 30 SIDE ANGLES = 30

WATER TABLE BELOW GRADE (ft)	=	9999
WEIGHT OF SOIL (pcf)	=	120
SAFETY FACTOR OF SOIL REQUIRED	=	2
WEIGHT OF CONCRETE (pcf)	=	150
SAFETY FACTOR OF CONCRETE REQUIRED	=	1.25
ULTIMATE PASSIVE PRESSURE (psf/ft)	=	480
DEPTH OF TOP SOIL IGNORED (ft.)	=	0
ULTIMATE FRICTION COEFFICIENT (u)	=	0

NOTE ON DRAWING: SEE SOILS REPORT FOR COMPACTION REQUIREMENTS

*** REQUIRED ANCHOR BLOCK SIZE AND CAPACITY ***

LENGTH (ft)	= 10.00*
WIDTH (ft)	= 3.00*
HEIGHT (ft)	= 3.00
DEPTH TO BOTTOM OF BLOCK (ft)	= 10.00

* ANCHOR BLOCK WITHOUT UNDERCUT

ALLOWABLE HORIZONTAL SOIL FORCE (kips)	=	61.20
ALLOWABLE HORIZONTAL FRICTION (kips)	=	0.00
TOTAL ALLOWABLE HORIZONTAL FORCE (kips)	=	61.20
ALLOWABLE UPLIFT FORCE (kips)	=	53.91
VOLUME OF CONCRETE OF EACH BLOCK (cu. yd.)	=	3.33

Fy OF RE-BARS (ksi)	=	60.00
AREA OF RE-BARS OF TOP OF BLOCK (sq. in.)	=	1.11
AREA OF RE-BARS OF FRONT FACE (sq. in.)	=	0.94
TOTAL REQ'D MIN. AREA OF RE-BARS (sq. in.)	=	3.80

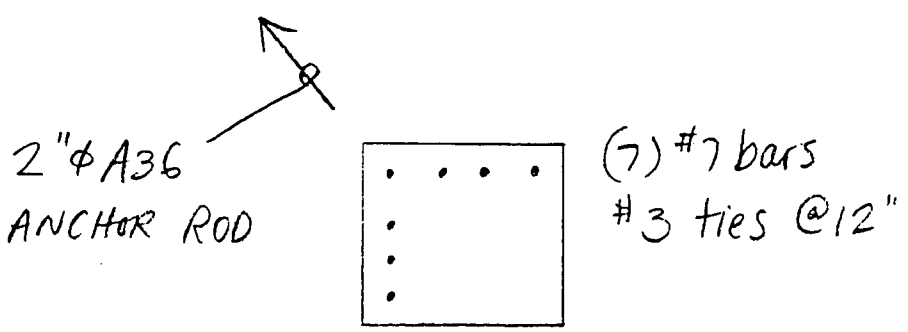


Exhibit E

COMPETING UTILITIES, CORPORATIONS OR PERSONS

- NextWave
- Powertel
- Mercury PCS II
- BellSouth Wireless Cable, Inc.
- BellSouth Mobility, Inc.
- GTE Mobilenet, Inc.
- AT&T Wireless
- SPRINT PCS
- APEX
- SBA
- American Tower

Exhibit F – Collocation Report

Site: 308KY

Other towers within 1 mile: none

Other towers within 2 miles: One 300' Guyed tower.

A Radio Frequency Propagation model of the area shows that this other tower is not acceptable for the following reasons:

1. The tower is not tall enough.

2. The tower is outside of the search area.

308KY - Lily

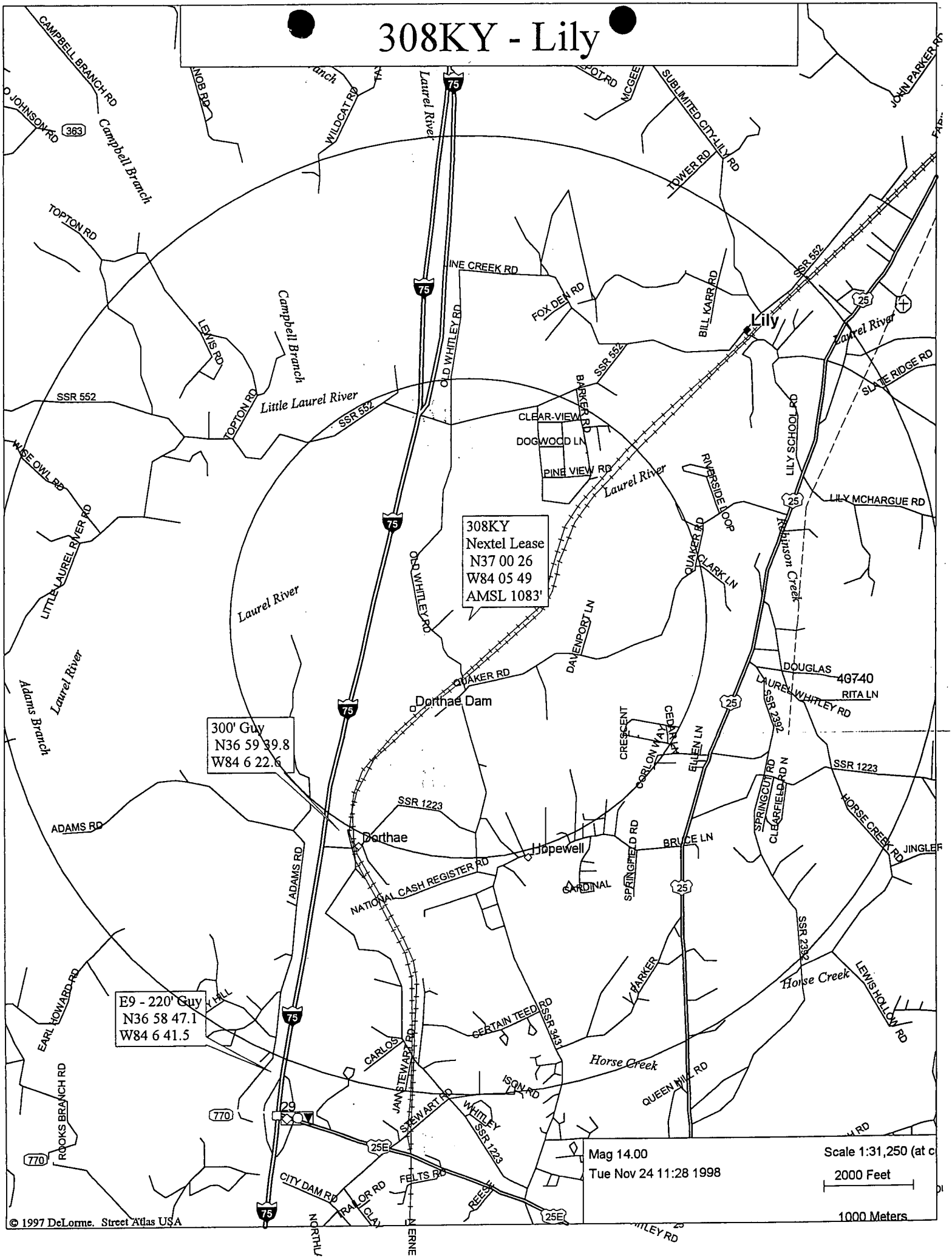

308KY
Nextel Lease
N37 00 26
W84 05 49
AMSL 1083'
300' Guy
N36 59 39.8
W84 6 22.6
E9 - 220' Guy
N36 58 47.1
W84 6 41.5
Lily
Dorthae
Dorthae Dam
Hopewell
Laurel River
Little Laurel River
Campbell Branch
Horse Creek
Robinson Creek
Adams Branch
SSR 552
SSR 1223
SSR 2392
SSR 3431
ADAMS RD
OLD WHITLEY RD
QUAKER RD
TOPTON RD
LEWIS RD
BARKER RD
CLEAR-VIEW
DOGWOOD LN
PINE VIEW RD
RIVERSIDE LOOP
CLARK LN
DAVENPORT LN
LILY MCHARGUE RD
LILY SCHOOL LN
SLATE RIDGE RD
BILL KARR RD
FOX DEN RD
TOWER RD
SUBLIMITED CITY-LILY RD
JOHN PARKER RD
WILDCAT RD
CAMPBELL BRANCH RD
WISE OWL RD
LITTLE LAUREL RIVER RD
EARL HOWARD RD
ROOKS BRANCH RD
CARLOS
JAMES STEWART RD
STEWART RD
CERTAIN TEED RD
QUEEN MILL RD
LEWIS HOLLOW RD
HORSE CREEK RD
JINGLER
SPRINGFIELD RD
CLEARFIELD RD N
SPRINGCUT RD
CRESCENT
CARLON WAY
CEDAR LN
ELLEN LN
LAUREL WHITLEY RD
RITA LN
DOUGLAS
40740
BRUCE LN
CARDINAL
NATIONAL CASH REGISTER RD
CITY DAM RD
TAYLOR RD
FELTS RD
NORTHERN
WHITLEY
ISON RD
Mag 14.00
Tue Nov 24 11:28 1998
Scale 1:31,250 (at c
2000 Feet
1000 Meters
© 1997 DeLorme. Street Atlas USA

Exhibit G – Application to FAA for Approval

308 KY/LIL9

Federal Aviation Administration
Southern Region
Air Traffic Division, ASO-520
P. O. Box 20636
Atlanta, GA 30320

ACKNOWLEDGEMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

CITY	STATE	LATITUDE/LONGITUDE	MSL	AGL	AMSL
LILY	KY	37-00-25.82 084-05-47.11	1143	375	1518

CROWN COMMUNICATION INC.
KRISTEN WEIDE
375 SOUTHPOINTE BLVD.
CANONSBURG, PA 15317

AERONAUTICAL STUDY
No: 98-ASO-7354-OE

Type Structure: ANTENNA TOWER SEE FREQUENCIES ~~BELOW~~ page2

The Federal Aviation Administration hereby acknowledges receipt of notice dated 11/17/98 concerning the proposed construction or alteration contained herein.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation, whether it should be marked and lighted to enhance safety in air navigation, and whether supplemental notice of start and completion of construction is required to permit timely charting and notification to airmen. The findings of that study are as follows:

The proposed construction would not exceed FAA obstruction standards and would not be a hazard to air navigation. However, the following applies to the construction proposed:

The structure should be obstruction marked and lighted per FAA Advisory Circular AC 70/7460-1J, 'Obstruction Marking and Lighting. CHAPTERS: [ ]-3 [X]-4 [X]-5 [X]-6 [ ]-7 [X]-8 [ ]-9 [ ]-10 [ ]-11 [ ]-12 [X]-13. Dual red with medium intensity white lights.

Supplemental notice is required ~~at least 10 days before the start of construction and~~ within five days after construction reaches its greatest height (use the enclosed FAA form).

This determination expires on 06/01/99 unless application is made, (if subject to the licensing authority of the Federal Communications Commission), to the FCC before that date, or it is otherwise extended, revised or terminated.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgement will be sent to that agency.

NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED

SIGNED Mary Z. Mc Burney Specialist, Airspace Branch.
Mary Z. Mc Burney (404) 305-~~5585~~ 5583
ISSUED IN: College Park, Georgia ON 11/30/98

98-ASO-7354-OE

Frequency Band	Effective Radiated Power
33-54 MHz	100 Watts
72-73 MHz	100 Watts
144-162 MHz	250 Watts
220-222 MHz	100 Watts
450-502 MHz	250 Watts
806-880 MHz	250 Watts
890-960 MHz	500 Watts
1,500 MHz	500 Watts
1,900-2,000 MHz	500 Watts
5,000-6,500 MHz	100 Watts
10,000-11,000 MHz	100 Watts
18,000 MHz	100 Watts
21,000 MHz	100 Watts
24,000 MHz	100 Watts
38,000 MHz	100 Watts

Form Approved OMB NO. 2120-0001

US Department of Transportation
Federal Aviation Administration

Notice of Proposed Construction or Alteration

Aeronautical Study Number

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
[X] New Construction	[X] Permanent	Beginning 02/11/1999
[ ] Alteration *	[ ] Temporary (Duration ____ months)	End 05/11/1999

* If Alteration, provide previous FAA Aeronautical Study Number, if available :

3A. Name, address, and telephone number of individual, company corporation, etc. proposing the construction or alteration. (Number, Street, City, State, and Zip Code)

Kristen Weide
Crown Communication Inc.
375 Southpointe Blvd.
Canonsburg, PA 15317

((724)) 416-2247
Area Code Telephone Number

3B. Name, address and telephone number of proponent's representative, if different than 3A. above.

( ) _____
Area Code Telephone Number

2. Complete Description of Structure

Please describe the proposed construction or alteration.

A. For proposals involving transmitting stations, include effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP.

B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures.

C. For buildings, include site orientation, dimensions, and construction materials of the proposed or altered structure.

D. **Optional**— Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.

See Attached

4. Location Of Structure

A. Coordinates (to hundredths of seconds, if known)

Latitude	°	'	"
	37	00	25.82
Longitude	°	'	"
	084	05	47.11

4D. Source of coordinate information for item 4A. above.

[ ] USGS 7.5' Quad Chart [X] Survey [ ] Other Specify

Indicate the reference datum.

[ ] NAD 27 [X] NAD 83 [ ] Other Specify

B. Nearest City or Town and State	C. Nearest public or military airport, heliport, flightpark, or seaplane base	A. Elevation of site above mean sea level.
Lily, KY	LOZ: LONDON-CORBIN ARPT-MAGEE FL	01143
(1). Distance to 4B	(1). Distance from structure to nearest point of nearest runway	B. Height of structure including all appurtenances and lighting above ground or water.
1 statute miles	4.5307 nm	0375
(2). Direction to 4B	(2). Direction from structure to airport	C. Overall height above mean sea level (A + B)
45 degrees	11.18 degrees	01518

5. Height and Elevation (to nearest foot)

4E. **Description of site location with respect to highways, streets, airports, prominent terrain, features, existing structures, etc.** Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor's certification.

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1501). Persons who knowingly and willfully violate the Notice requirements of Part 77 are subject to a civil penalty of $1,000 per day until the notice is received, pursuant to Section 901(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1471(a)) as well as the fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date	Typed or Printed Name and Title of Person Filing Notice	Signature
11-11-1998	Kristen Weide/Regulatory Coordinator	

FOR FAA USE ONLY *FAA will either return this form or issue a separate acknowledgement.*

The Proposal:

[ ] Does not require a notice to FAA.

[ ] Is not identified as an obstruction under any standard of FAR, Part 77, Subpart C, and would not be a hazard to navigation.

[ ] Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to navigation.

[ ] Should be obstruction [ ] marked [ ] lighted per FAA Advisory Circular 70/7460-1, Chapters _____

[ ] Obstruction marking and lighting are not necessary.

Supplemental Notice of Construction, FAA Form 7460-2, is required any time the project is abandoned, or

[ ] At least 48 hours before the start of construction.

[ ] Within five days after the construction reaches its greatest height.

This determination expires on _____ unless:

(a) extended, revised or terminated by the issuing office;

(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit is made to the FCC on or before the above expiration date. In such cases the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that agency.

Remarks

NAD 83 Coordinates (Use these coordinates for any future correspondence with the FAA)	Latitude	°	'	"	Longitude	°	'	"

Issued In	Signature	Date

FAA Form 7460-1 (8-94) Supersedes Previous Edition

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Latitude:	37-00-25.82
Longitude:	084-05-47.11

Aeronautical Study Number

2. COMPLETE DESCRIPTION OF STRUCTURE AT: Lily, KY

A. For proposals involving transmitting stations, including effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP.

See Attachment

B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures.

C. For Buildings, include site orientation, dimensions, and construction materials.

Site is to include a wireless communication tower and equipment building.

D. Optional - Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.

Dual lighting in accordance with Advisory Circular 70/7460-1J, Chapters 4, 8, 13.

4. LOCATION OF STRUCTURE

4E. Description of site location with respect to highways, street, airports, prominent terrain, features, existing structures, etc. Please attache a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor's sertification.

Please see attached USGS quad map.

Exhibit H – Application to Kentucky Airport Zoning Commission

ON REVERSE SIDE OF FORM-

TC 56-50(Rev. 01/96)

KENTUCKY TRANSPORTATION CABINET, DIVISION OF AERONAUTICS, 125 HOLMES STREET, FRANKFORT KY 40622

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

AERONAUTICAL STUDY NUMBER ---

1. NATURE OF PROPOSAL

A. TYPE	B. CLASS	C. WORK SCHEDULE
X NEW CONSTRUCTION	X PERMANENT	BEGIN 02/11/1999
__ ALTERATION	__ TEMPORARY	END 05/11/1999

2. DESCRIPTION OF STRUCTURE

Antenna Tower
-see attached-

3A. APPLICANT -NAME, ADDRESS & TELEPHONE

Kristen Weide
Crown Communication Inc.
375 Southpointe Boulevard
Canonsburg, PA 15317

B. REPRESENTATIVE OF APPLICANT - NAME, ADDRESS & TELEPHONE

4. LOCATION OF STRUCTURE

A. GEOGRAPHIC COORDINATES (NEAREST SECOND)	B. NEAREST KY CITY	C. NEAREST KY AIRPORT
LATITUDE 37°00'25.82"	(1) DISTANCE TO 4B 1 statute mile	(1) DISTANCE TO RUNWAY 4.5307 NM
LONGITUDE 084°05'47.11"	(2) DIRECTION TO 4B 45 degrees	(2) DIRECTION TO AIRPORT 11.18 degrees

5. HEIGHT & ELEVATION

A. SITE ELEVATION (ABOVE MEAN SEA LEVEL) LOZ:London-Corbin ARPT-Maggee FL	01143
B. HEIGHT OF STRUCTURE, INCLUDING APPURTENANCES AND LIGHTS (ABOVE GROUND LEVEL)	0375
C. OVERALL HEIGHT (AMSL) (A+B)	01518

6. OBSTRUCTION MARKING & LIGHTING

	YES	NO
A. MARKED FOR THE PROTECTION OF AIR NAVIGATION (FLAGS, SPHERES, ETC.)		
B. OBSTRUCTION MARKED IN ACCORDANCE WITH 602KAR50:100 (FAA AC 70/7460-1J)	X	
C. OBSTRUCTION LIGHTED IN ACCORDANCE WITH 602KAR50:100 (FAA AC 70/7460-1J)	X	

7. HAS "NOTICE OF CONSTRUCTION OR ALTERATION" (FORM 7460-1) BEEN FILED WITH THE FEDERAL AVIATION ADMINISTRATION? Yes IF SO, WHEN? 11/11/1998

8. CERTIFICATION - I HEREBY CERTIFY THAT ALL THE ABOVE STATEMENTS MADE BY ME ARE TRUE, COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY Kristen Weide/Regulatory Coordinator DATE 11/11/1998
NAME (PRINTED), SIGNATURE & TITLE

PENALTIES - PERSONS FAILING TO COMPLY WITH KENTUCKY REVISED STATUTES AND KENTUCKY AIRPORT ZONING COMMISSION ADMINISTRATIVE REGULATIONS ARE LIABLE FOR FINES OR IMPRISONMENT AS SET FORTH IN KRS 183.990(3). NON-COMPLIANCE WITH FEDERAL AVIATION ADMINISTRATION REGULATIONS MAY RESULT IN FURTHER PENALTIES.

COMMISSION ACTION	___ CHAIRMAN, KAZC (OR) ___ ADMINISTRATOR, KAZC
APPROVED ___	
DISAPPROVED ___	_____ DATE _____

Exhibit I- Geotechnical Report

GEOTECHNICAL ENGINEERING STUDY
ALVAR, INC
LILY COMMUNICATIONS TOWER
308KY
LILY, KENTUCKY
ATC Project No. 13000.8G21

Prepared For:

ALVAR, INC.
11001 Bluegrass Parkway, Suite 330
Louisville, Kentucky 40299

Attention: Mr. Ken Jessee

ATC ASSOCIATES INC.

2815 Watterson Trail
Louisville, Kentucky 40299
502.267.8355
Fax 502.267.8528

November 25, 1998

Alvar, Inc.
11001 Bluegrass Parkway, Suite 330
Louisville, Kentucky 40299

Attention: Mr. Ken Jessee

Re: Geotechnical Engineering Study
Proposed Lily Communications Tower
308KY
Lily, Kentucky
ATC Project No. 13800.8G21

Gentlemen:

Transmitted herewith is our geotechnical engineering report for the referenced project as authorized in accordance with our January 15, 1998 proposal for environmental and geotechnical support services. This report contains our findings, an engineering interpretation of these findings with respect to the available project characteristics, and recommendations to aid design and construction of the tower foundations. We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, please contact our office.

Cordially,

ATC Associates Inc.

Elizabeth W. Stuber, E.I.T.
Project Engineer

David L. Warder, P.E.
Regional Geotechnical Engineer

Copies submitted: (4) Mr. Ken Jessee, Alvar, Inc.

GEOTECHNICAL ENGINEERING STUDY
PROPOSED LILY COMMUNICATIONS TOWER
939 S. OLD WHITLEY ROAD
LILY, KENTUCKY
ATC Project No. 13000.8G21

PREPARED FOR:

Alvar, Inc.
11001 Bluegrass Parkway, Suite 330
Louisville, Kentucky 40299

PREPARED BY:

ATC Associates Inc.
2815 Watterson Trail
Louisville, Kentucky 40299
November 25, 1998

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

APPENDIX

GEOTECHNICAL ENGINEERING INVESTIGATION

Proposed Communications Transmission Tower
Alvar/Lily Site 308KY
939 S. Old Whitley Road
Lily, Kentucky
ATC Project No. 13000.8G21

1. PURPOSE AND SCOPE

The purpose of this study was to determine the general subsurface conditions at the location of the proposed tower by drilling one soil test boring and to evaluate this data with respect to foundations concept and design for the proposed tower. Also included is an evaluation of the site with respect to potential construction problems and recommendations dealing with quality control during construction. No test borings were drilled at the proposed guy anchor locations because the orientation of the tower was not known at the time of our field investigation. The scope of our study did not include any investigation to determine the mining history of the site or the presence or absence of mining below the site.

2. PROJECT CHARACTERISTICS

Alvar is planning to construct a guyed communications tower at 939 S. Old Whitley Road in Lily, Kentucky. The proposed tower location is shown on the Site Vicinity Map in the Appendix. At the time of our field exploration, the site was part of a open farm field. The existing topography is gently rolling with the immediate area of the tower being relatively flat.

No foundation design loads had been provided. We assume that the tower will be supported on a concrete foundation with guy anchors radiating from the tower 120 degrees apart, with the guy cables secured by concrete dead-weight anchors located approximately 150 feet from the tower center. We assume that the maximum downward load on the tower will not exceed about 200 kips and that the maximum uplift and lateral forces in the guy anchors will be in the range of 75 to 100 kips/anchor. The development will also include a small equipment building near the base of the tower.

3. SUBSURFACE CONDITIONS

The subsurface conditions were explored by drilling one test boring at the proposed tower location. The tower center was staked in the field by the project surveyor. Because the anchor locations were not located in the field, the investigation was limited to a single boring at the tower center. The Geotechnical Soil Test Boring Log, which is included in the Appendix, describe the materials and conditions encountered. Sheets defining the terms and symbols used on the boring log and explaining

the Standard Penetration Test (SPT) procedure can also be found in the Appendix. The general subsurface conditions disclosed by the test boring is discussed in the following paragraphs.

There was no clearly identifiable topsoil layer at the ground surface. The boring encountered apparently natural clayey silt (ML) of low plasticity with varying amounts of weathered sandstone from the ground surface. The SPT N-values in the clayey silt ranged from 28 blows per foot to 50 blows per 6 inches of sampler penetration indicating a very stiff to hard consistency. Pocket penetrometer values used to estimate the unconfined compressive strength of cohesive soil ranged from 3.2 to 4.5 tons per square foot.

The boring encountered auger refusal at 12 feet below the existing ground surface. Auger refusal is the depth below which a test boring can no longer be advanced with hollow stem augers. Core drilling is required to determine the character and continuity of auger refusal material.

Groundwater observations made at completion of drilling operations indicated the boring to be dry. It must be noted, however, that short term water readings are generally not a reliable indication of the actual groundwater level. Furthermore, it must be emphasized that the groundwater level is generally not stationary, but will fluctuate seasonally.

According to the Seismic Zone Map of the United States, Lily, Kentucky is within Zone 1. In this system, Zone 3 is the most seismically active while Zone 0 has the lowest earthquake potential.

Considering the subsurface conditions encountered at the site and Table 16-J in the 1997 Uniform Building Code, the soil-profile type is S_C.

4. FOUNDATION DESIGN RECOMMENDATIONS

The following design recommendations have been developed on the basis of the previously described project characteristics (Section 2.0) and subsurface conditions (Section 3.0). The recommendations are based on the assumption that subsurface conditions at the anchor locations are similar to these at the tower center. This office must be notified if different conditions are noted at the anchor locations, if the project description included herein is incorrect, or if the proposed structure location is changed to establish if revisions to the following recommendations are necessary.

4.1. Tower Foundation

Our findings indicate that the proposed tower can be supported on a spread footing bearing at or below a depth of 2.5 feet below the existing ground surface. The footing can be designed for a net allowable soil pressure of 4,000 lbs/sq.ft. It is important that the foundation excavation be carefully inspected as described in Section 5.1 to insure that the foundation will bear on suitable material.

In using net pressures, the weight of the foundation and backfill over the foundation need not be considered; hence, only loads applied at or above the existing ground surface elevation need to be used for dimensioning the foundation. The bottom of the tower foundation should bear at a depth of at least 2.5 feet below the final exterior grade for frost protection.

It is estimated that resulting foundation settlements should not exceed about 0.75 inches. Careful field control will contribute substantially to minimizing the settlements.

4.2. Guy Anchors

The guy anchor blocks must be designed to resist both the uplift and horizontal components of the guy cable forces. The uplift force will be resisted by the dead weight of the anchor block as well as the soil material that is placed over the anchor block. Unless a very high factor of safety is used, only the weight of the soil immediately above and within the perimeter of the anchor block should be used in calculating uplift resistance. A total soil unit weight of 120 lbs/cu. ft. can be used for the backfill material that is placed above the anchor blocks, provided it is compacted as recommended in Section 5.2. Using this procedure, it is recommended that a safety factor of at least 1.3 be used for calculating uplift resistance from an anchor block, provided only the weight of the anchor block and the soil immediately above it are used to resist uplift forces. If additional uplift resistance is needed, it will be necessary to anchor the guy anchors into bedrock.

4.3. Equipment Building

The equipment building may be supported on shallow, spread footings bearing in the shallow clay soil and designed for a net allowable soil pressure of 3,000 pounds per square foot. The footings should be at least ten inches wide and should bear at a depth of at least 30 inches to minimize the effects of frost action. Any topsoil, frozen or excessively soft material must be removed beneath footings.

The floor slab for the new equipment building may be subgrade supported on a properly prepared subgrade. The slab should be designed and adequately reinforced to resist the loads proposed. The exposed subgrade should be carefully inspected by probing and testing as needed. Any organic material (topsoil) still in place, frozen or excessively soft soil and other undesirable materials should be removed.

Once the subgrade has been properly prepared and evaluated, fill may be placed to attain desired final grades. Any non-organic, naturally occurring, non-expansive soils can be used fro structural fill, including those encountered on this site, pending evaluation by the geotechnical engineer.

All engineered fill should be compacted to a dry density of at least 95 percent of the standard Proctor maximum dry density (ASTM D698). The compaction should be accomplished by placing the fill in about eight inch loose lifts and mechanically compacting each lift to at least the specified

density. Field tests should be performed on each lift as necessary to insure that adequate compaction is being achieved.

Surface run-off water should be drained away from the excavation and not allowed to pond. It is recommended that all foundation concrete be placed the same day the excavation is made.

5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

It is possible that variations in subsurface conditions will be encountered during construction. Although minor variations can be readily evaluated and adjusted for during construction, it is recommended the geotechnical engineer or a representative be retained to perform continuous inspection and review during construction of the soils-related phases of the work. This will permit correlation between the test boring data and the actual soil conditions encountered during construction.

5.1. Tower Foundation Excavation

The tower foundation excavations should be inspected by the geotechnical engineer or a qualified soils technician to insure that all undesirable material is removed and that the foundation will bear on satisfactory material as decried in Section 4.1. At the time of such inspection, it will be

necessary to make hand auger borings or use a hand penetration device in the base of the foundation excavation to insure that the soils below the base are satisfactory for foundation support. The necessary depth of penetration will be established during inspection.

If undercutting is required in order to remove unsuitable materials at the tower foundation location, the foundation bearing elevation may be re-established by backfilling after all undesirable materials have been removed or the foundation can be placed at the lower depth. The undercut excavation beneath the foundation should extend to suitable bearing soils and the dimensions of the excavation base should be determined by imaginary planes extending outward and down on a 2 (vertical) to 1 (horizontal) slope from the base perimeter of the foundation. The entire excavation should than be refilled with a well-compacted granular fill as described in Section 5.2 or lean concrete may be used. Special care should be exercised to remove any sloughed, loose or soft materials near the base of the excavation slopes with benches as necessary, to insure that no pockets of loose or soft materials will be left in place along the excavation slopes below the foundation bearing level.

Soils exposed in the base of the foundation excavation should be protected against any detrimental changes in conditions such as from disturbance, rain and freezing. Surface run-off water should be drained away from the excavation and not allowed to pond. If possible, all concrete should be placed that same day the excavation is made. If this is not practical, the excavation should be adequately protect.

5.2. Fill Compaction

All engineered fill placed adjacent to and above the tower foundation and guy anchor blocks should be compacted to a dry density of at least 95 percent of the standard Proctor maximum dry density (ASTM D-698). This minimum compaction requirement should be increased to 100 percent for any fill placed below the tower foundation bearing elevation. Any fill placed beneath the tower foundation should be limited to well-graded sand and gravel or crushed stone. The compaction should be accomplished by placing the fill in about 8 inch (or less) loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density test should be performed on each lift as necessary to insure that adequate moisture conditioning and compaction is being achieved.

Compaction by flooding is not considered acceptable. This method will generally not achieve the desired compaction and the large quantities of water will tend to soften the foundation soils.

5.3. Construction Dewatering

No serious dewatering problems are anticipated. At the time of our investigation, the ground water level appeared to be below the anticipated excavation depths. However, depending upon seasonal conditions, some minor seepage into excavations may be experienced. It is anticipated

that any such seepage can be handled by conventional dewatering methods such as pumping from sumps.

6. FIELD INVESTIGATION

One soil test boring was drilled at the location established in the field by the project surveyor. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in the test boring. The boring was extended to the auger refusal depth of 12 feet below existing grade. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

The boring log is included below along with a sheet defining the terms and symbols used on the log and an explanation of the Standard Penetration Test (SPT) procedure. The log presents visual descriptions of the soil strata encountered, Unified System soil classifications, groundwater observations, sampling information, laboratory test results, and other pertinent field data and observations.

7. LABORATORY INVESTIGATION

The split-spoon samples were inspected and visually classified by a geotechnical engineer in general accordance with the Unified Soil Classification System and the field boring logs were edited as necessary. To aid in classifying the soil samples and to check the general soil characteristics pocket

penetrometer tests were performed on selected samples. The results of these tests are included on the boring log.

8. WARRANTY AND LIMITATIONS OF STUDY

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either express or implied. ATC Associates Inc. is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

A geotechnical study is inherently limited since the engineering recommendations are developed from information obtained from a test boring that only depicts subsurface conditions at the specific location, time and depth shown on the log. Soil conditions at other locations may differ from those encountered in the test boring, and the passage of time may cause the soil conditions to change from those described in this report.

The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that the soils connected construction phases are properly completed. If significant variations or changes are in evidence, it may then be necessary to reevaluate the recommendations of this report. Furthermore, if

the project characteristics are altered significantly from those discussed in this report, if the project information contained in this report is incorrect, or if additional information becomes available, a review must be made by this office to determine if any modification in the recommendations will be required.

APPENDIX

SITE.VICINITY MAP

GEOTECHNICAL BORING LOG

SOIL SAMPLE CLASSIFICATION

MATERIALS GRAPHICS LEGEND

Alvar 308KY - Lily, KY

Mag 14.00
Wed Nov 25 11:20 1998
Scale 1:31,250 (at center)
2000 Feet
1000 Meters

- Local Road
- Trail
- US Highway
- Interstate/Limited Access
- State Route
- Utility/Pipe
- Railroad
- Point of Interest
- Small Town
- Locale
- Water
- River/Canal
- Intermittent River

VATC Associates Inc.
2815 Watterson Trail
Louisville, Kentucky 40299

GEOTECHNICAL BORING LOG

CLIENT: ALVAR, Inc
PROJECT: Proposed 308KY Tower
LOCATION: Lily, Kentucky

BORING NUMBER: B-1
PROJECT NUMBER: 13000.8G21
PROJECT MANAGER: Beth Stuber

Surface Elevation:
Date Started: 11/21/98
Date Completed: 11/21/98

Hammer Weight: 140 lbs.
Hammer Drop: 30 in.
Drill Foreman: J. Wharton

Hole Dia.: 7.5 in.
Boring Method: HSA
Supervisor: B. Stuber

ELEV	MATERIAL DESCRIPTION	LAYER DEPTH & TYPE	DEPTH SCALE	SAMPLE DATA NO	BLOWS	TYPE	REC	w,%	PP,tsf	NOTES
	CLAYEY SILT (ML) - hard, dry, tan			1	7-14-18	SPT	67		4.5	
	- with sandstone fragments		5	2	12-15-13	SPT	67		3.2	
				3	21-30-26	SPT	67		--	
				4	50/6"	SPT	67		--	
			10							
	AUGER REFUSAL	12.0								
			15							The borehole was dry at the completion of drilling operations.
			20							
			25							
			30							
			35							

GEOTECHNICAL 13000-21.GPJ 11/23/98

SOIL SAMPLE CLASSIFICATION

GRANULAR SOILS

(Silt, Sand, Gravel and Combinations)

Density	
Very Loose	- 5 blows/ft. or less
Loose	- 6 to 10 blows/ft.
Medium Dense	- 11 to 30 blows/ft.
Dense	- 31 to 50 blows/ft.
Very Dense	- 51 blows/ft. or more

Relative Proportions	Percent
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Particle Size Identification		
Boulders	- 8 inch diameter or more	
Cobbles	- 3 to 8 inch diameter	
Gravel	- Coarse	- 1 to 3 inch
	Medium	- ½ to 1 inch
	Fine	- ¼ to ½ inch
Sand	- Coarse	- 2.00 mm to ¼ inch
	- Medium	- 0.42 to 2.00 mm
	- Fine	- 0.074 to 0.42 mm
	- Silt	- 0.002 to 0.074 mm
Clay	- less than 0.002 mm	

COHESIVE SOILS

(Clay, Silt and Combinations)

Consistency	
Very Soft	- 3 blows/ft. or less
Soft	- 4 to 5 blows/ft.
Medium Stiff	- 6 to 10 blows/ft.
Stiff	- 11 to 15 blows/ft.
Very Stiff	- 16 to 30 blows/ft.
Hard	- 31 blows/ft. or more

Plasticity	
Degree of Plasticity	Plasticity Index
None to Slight	0 - 4
Slight	5 - 7
Medium	8 - 22
High to Very High	over 22

Classification on logs are made by visual inspection of samples unless otherwise undicated.

Standard Penetration Test - Driving a 2.0" O.D., 1-3/8" I.D. split-spoon sampler a distance of 12 inches into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. The sample is initially driven 6 inches to penetrate into undisturbed soil, then the test is performed. The number of hammer blows for seating the spoon and making the test are recorded for each 6 inches of penetration on the boring log (Example: 6-8-9). The standard penetration test N-value can be obtained by adding the last two figures (i.e. 8+9=17 blows/ft.). (ASTM D-1586)

Strata Changes - In the column "Material Description" on the boring log, the horizontal lines represent strata changes. A solid line (___) represents an actually observed change, a dashed line (- - - -) represents an estimated change.

Ground Water observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc. may cause changes in the water levels indicated on the logs.

VATC

MATERIAL GRAPHICS LEGEND

 - Asphalt

 - Concrete

 - Topsoil

 - Fill

 - Reinforced Concrete

 - Cinders & Ash

 - CL, Low Plasticity Lean Clay

 - CH, High Plasticity Lean Clay

 - ML, Low Plasticity Inorganic Silt

 - MH, High Plasticity Inorganic Silt

 - OL, Low Plasticity Organic Silts and Clays

 - OH, High Plasticity Organic Silts and Clays

 - Crawfish Soil, a mix of inorganic and organic silts

 - Peat, weathered organic material

 - SP, Poorly Graded Sand

 - SW, Well Graded Sand

 - SC, Clayey, Poorly Graded Sand

 - SM, Silty, Poorly Graded Sand

 - GP, Poorly Graded Gravel

 - GW, Well Graded Gravel

 - GC, Clayey, Poorly Graded Gravel

 - GM, Silty, Poorly Graded Gravel

 - Glacial Till

 - CL-CH, Typical Dual Classification, Low to High Plasticity Lean Clay

 - Claystone

 - Siltstone

 - Sandstone

 - Limestone

 - Shale

 - Limestone and Shale Interbeds

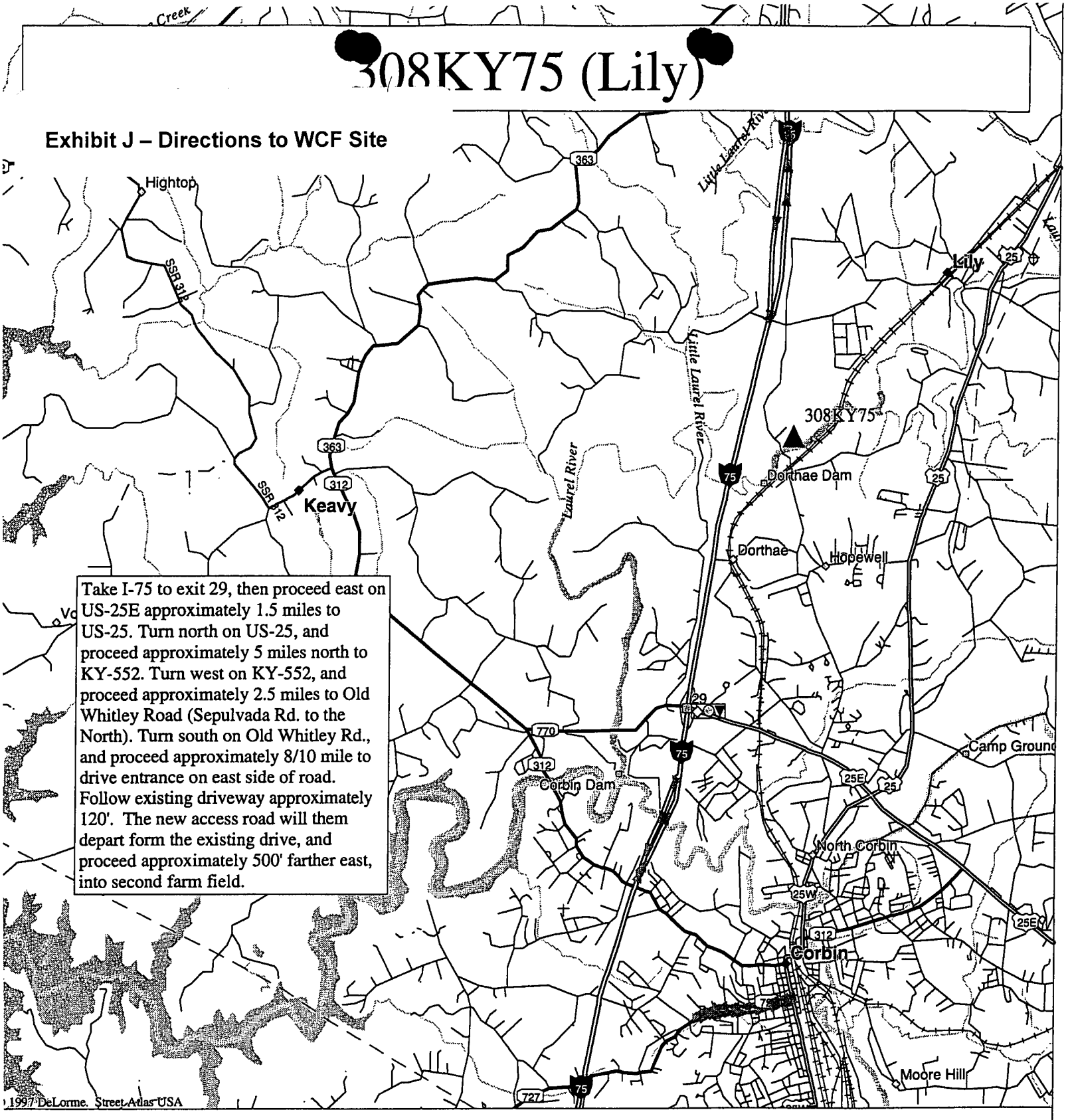
 - Dolomite

 - Partially Weathered Rock

 - Coal

308KY75 (Lily)

Exhibit J – Directions to WCF Site



Mag 13.00
Wed Dec 02 17:58 1998
Scale 1:62,500 (at center)
1 Miles
2 KM

- Local Road
- Major Connector
- State Route
- Exit/Gas
- Exit/Lodging
- Exit/Food
- Trail
- US Highway
- Interstate/Limited Access
- Exit
- Utility/Pipe
- Railroad
- Point of Interest
- Small Town
- Locale
- Cemetery
- County Boundary
- Water
- River/Canal
- Intermittent River

EXHIBIT K

MKT: KY
Site:K-5104-B

MEMORANDUM OF AGREEMENT

CLERK: Please return this document to: Nextel Communications
Attention: Mr. Ried Zulager
1505 Farm Credit Drive
McLean, Virginia 22102

This Lease Agreement ("Agreement") is entered into this 10TH day of FEBRUARY, 1998, between Nextel West Corp., a Delaware corporation, d/b/a Nextel Communications ("Lessee"), and Willie C. Cobb, a widower, as life tenant, and William Ralph Cobb, single; Janice Cobb Ison, single; Gilberta Jacqueline Cobb Farmer and spouse, Thomas Farmer, as tenants in common in the remainder ("Lessor").

1. Lessor and Lessee entered into a Communications Site Lease Agreement ("Agreement") on the 10TH day of FEBRUARY 1998, for the purpose of installing, operating and maintaining a radio communications facility and other improvements. All of the foregoing are set forth in the Agreement.

2. The term of the Agreement shall be five (5) years commencing on the date Lessee commences construction or eighteen (18) months from the date when Lessee executes the Agreement, whichever first occurs ("Commencement Date") and terminating on the fifth (5th) anniversary of the Commencement Date (the "Term") unless otherwise terminated as provided in the Agreement. Lessee shall have the right to extend the Term for five (5) successive five (5) year periods (the "Renewal Terms") on the same terms and conditions as set forth therein. The Agreement shall automatically be extended for each successive Renewal Term unless Lessee notifies Lessor of its intention not to renew prior to commencement of the succeeding Renewal Term.

3. The Land which is the subject of the Agreement is described in Exhibit A annexed hereto. The portion of the Land being leased to Lessee (the "Premises") is described in Exhibit B annexed hereto.

4. Lessor has granted to Lessee easements across the Land for access to install, repair and maintain guy wires, guy anchors and guy enclosures ("Azimuth Easements"). Such Azimuth Easements shall encompass that area of the Land, the width and length of which shall be sufficient for the construction of Lessee Facilities, and as more fully described in Exhibit B annexed hereto. Lessor acknowledges that the right of access to the Azimuth Easements shall include the right by Lessee to clear any underbrush or vegetation adjacent to the Azimuth Easements which may block access to the Azimuth Easements.

   The Azimuth Easements granted therein shall run with the Land and be appurtenant to and for the benefit of the Premises, and shall be coterminous with the Agreement. Lessor shall not use nor permit its employees, agents, successors or assigns, or any future lessee to use the Land in any manner which interferes with Lessee's use of the Azimuth Easements. The benefits and obligations of the Azimuth Easements shall be a covenant running with the Land and shall inure to and be binding upon the successors, assigns and heirs of the parties.

EXHIBIT K, ADDENDUM

Site # 308KY

Agreement for Tower Site Restoration

In the event that the easement is terminated, Grantee shall, within a twelve (12) month period, remove its buildings, tower and all above ground fixtures and restore the easement property to its original condition, reasonable wear and tear excepted.

Grantor

Willie Cobb Date: 1-21-99

Willie Cobb
Print Name

Grantee

Date: 1/22/99

Crown Communication Inc.

EXHIBIT L

CERTIFICATION OF NOTIFICATION

Public Service Commission of Kentucky

RE: Public Notice
Case No.: 99-061
Our Site No.: 308KY

As part of the Application for a Certificate of Public Convenience, all property owners within 500 feet of the proposed tower have been notified of the proposed construction by certified mail, return receipt requested. A copy of said letter is attached as Exhibit "M", which was sent to the list of property owners, attached as page 2 of this exhibit.

The local planning board or county Judge executive has also been notified of the proposed construction. A copy of said letter is attached as Exhibit "N", which was sent to the Laural County Government.

This complete mailing was sent out on January 20, 1999.

Attested to by,

Aaron Johnson
Zoning Manager
Crown Communication Inc.

Exhibit "M"

Listing of Notification for Crown Communication's Site 308KY Lily

Hon. Jimmy Williams 101 South Main London, KY 40741	Cobb, Bill 939 Old Whitney Road Lily, KY 40740
Farmer, Thomas & Gilbertha 775 Old Whitney Road Lily, KY 40740	Sasser, Ruby M. 28 Old Whitney Road Lily, KY 40740
Smith, Fordie & Jessie 710 Old Whitney Road Lily, KY 40740	

Exhibit M – Copy of Property Owner Notification

CROWN®
COMMUNICATIONS

Wednesday, January 20, 1999

Cobb, Bill
939 Old Whitney Road
Lily, Kentucky 40740

RE: Public Notice - Public Service Commission of Kentucky
Case #: 99-016 Crown Site #: 308KY

Dear Mr. Cobb:

Crown Communication Inc. and Nextel West, Inc. have applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide wireless telecommunication services. The facility will include a 350 foot tower with appurtenances attached to a maximum height of 375 feet, and a ground level equipment shelter to be located at 939 S. Old Whitney Road, Lily, Kentucky, 40740. A temporary tower of shorter stature might be erected at said location while awaiting final PSC approval, and the approved tower is operational. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you own property within a 500' radius of the proposed tower

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above. Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, Post Office Box 615, Frankfort, Kentucky 40602. Please refer to Case No: 99-016 in your correspondence.

Feel free to call me at (502) 240-0044 x.13 if you have any questions.

Sincerely,

Aaron Johnson

Aaron Johnson
Zoning Manager, Crown Communications

CROWN®
COMMUNICATIONS

Wednesday, January 20, 1999

Farmer, Thomas & Gilbertha
775 Old Whitney Road
Lily, Kentucky 40740

RE: Public Notice - Public Service Commission of Kentucky
Case #: 99-016 Crown Site #: 308KY

Dear Mr. & Mrs. Farmer:

Crown Communication Inc. and Nextel West, Inc. have applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide wireless telecommunication services. The facility will include a 350 foot tower with appurtenances attached to a maximum height of 375 feet, and a ground level equipment shelter to be located at 939 S. Old Whitney Road, Lily, Kentucky, 40740. A temporary tower of shorter stature might be erected at said location while awaiting final PSC approval, and the approved tower is operational. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you own property within a 500' radius of the proposed tower

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above. Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, Post Office Box 615, Frankfort, Kentucky 40602. Please refer to Case No: 99-016 in your correspondence.

Feel free to call me at (502) 240-0044 x.13 if you have any questions.

Sincerely,

Aaron Johnson
Zoning Manager, Crown Communications

Crown Communication Inc. • Crown Network Systems, Inc. • Crown Mobile Systems, Inc.
Reply to: 11001 Bluegrass Parkway • Commonwealth Business Center - Suite 330 • Louisville, KY 40299 • Phone: (502) 240-0044 • Fax: (502) 240-0045
Headquarters in Pittsburgh, PA
USA Headquarters • Southpointe • 375 Southpointe Blvd. • Canonsburg, PA 15317 • Phone: (724) 416-2000 • Fax (724) 416-2200

CROWN®
COMMUNICATIONS

Wednesday, January 20, 1999

Sasser, Ruby M.
28 Old Whitney Road
Lily, Kentucky 40740

RE: Public Notice - Public Service Commission of Kentucky
Case #: 99-016 Crown Site #: 308KY

Dear Ms. Sasser:

Crown Communication Inc. and Nextel West, Inc. have applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide wireless telecommunication services. The facility will include a 350 foot tower with appurtenances attached to a maximum height of 375 feet, and a ground level equipment shelter to be located at 939 S. Old Whitney Road, Lily, Kentucky, 40740. A temporary tower of shorter stature might be erected at said location while awaiting final PSC approval, and the approved tower is operational. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you own property within a 500' radius of the proposed tower

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above. Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, Post Office Box 615, Frankfort, Kentucky 40602. Please refer to Case No: 99-016 in your correspondence.

Feel free to call me at (502) 240-0044 x.13 if you have any questions.

Sincerely,

Aaron Johnson
Zoning Manager, Crown Communications

CROWN®
COMMUNICATIONS

Wednesday, January 20, 1999

Smith, Fordie & Jessie
710 Old Whitney Road
Lily, Kentucky 40740

RE: Public Notice - Public Service Commission of Kentucky
Case #: 99-016 Crown Site #: 308KY

Dear Mr. & Mr. Smith:

Crown Communication Inc. and Nextel West, Inc. have applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide wireless telecommunication services. The facility will include a 350 foot tower with appurtenances attached to a maximum height of 375 feet, and a ground level equipment shelter to be located at 939 S. Old Whitney Road, Lily, Kentucky, 40740. A temporary tower of shorter stature might be erected at said location while awaiting final PSC approval, and the approved tower is operational. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you own property within a 500' radius of the proposed tower

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above. Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, Post Office Box 615, Frankfort, Kentucky 40602. Please refer to Case No: 99-016 in your correspondence.

Feel free to call me at (502) 240-0044 x.13 if you have any questions.

Sincerely,

Aaron Johnson
Zoning Manager, Crown Communications

Exhibit N – Copy of Planning Commission Notice

CROWN® COMMUNICATIONS

Wednesday, January 20, 1999

Hon. Jimmy Williams
101 South Main
London, Kentucky 40741

RE: Public Notice - Public Service Commission of Kentucky
Case #: 99-016 Crown Site #: 308KY

Dear Hon. Williams:

Crown Communication Inc. and Nextel West, Inc. have applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide wireless telecommunication services. The facility will include a 350 foot tower with appurtenances attached to a maximum height of 375 feet, and a ground level equipment shelter to be located at 939 S. Old Whitney Road, Lily, Kentucky, 40740. A temporary tower of shorter stature might be erected at said location while awaiting final PSC approval, and the approved tower is operational. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you are the Judge Executive of Laurel County.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above. Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, Post Office Box 615, Frankfort, Kentucky 40602. Please refer to Case No: 99-016 in your correspondence.

Feel free to call me at (502) 240-0044 x.13 if you have any questions.

Sincerely,

Aaron Johnson

Aaron Johnson
Zoning Manager, Crown Communications

Crown Communication Inc. • Crown Network Systems, Inc. • Crown Mobile Systems, Inc.
Reply to: 11001 Bluegrass Parkway • Commonwealth Business Center - Suite 330 • Louisville, KY 40299 • Phone: (502) 240-0044 • Fax: (502) 240-0045
Headquarters in Pittsburgh, PA
USA Headquarters • Southpointe • 375 Southpointe Blvd. • Canonsburg, PA 15317 • Phone: (724) 416-2000 • Fax (724) 416-2200

Exhibit O – Copies of Signs posted

Crown Communications and Nextel West Inc. propose to construct a

TELECOMMUNICATIONS TOWER

on this site. If you have questions, please contact Aaron Johnson, Crown Communication Inc. 11001 Bluegrass Parkway, Suite 330 Louisville, KY 40299, (502) 240-0044. or the Executive Director, Public Service Commission, 730 Schenkel Lane, P.O. Box 615, Frankfort, KY 40602.
Please refer to Docket #99-016 in your correspondence

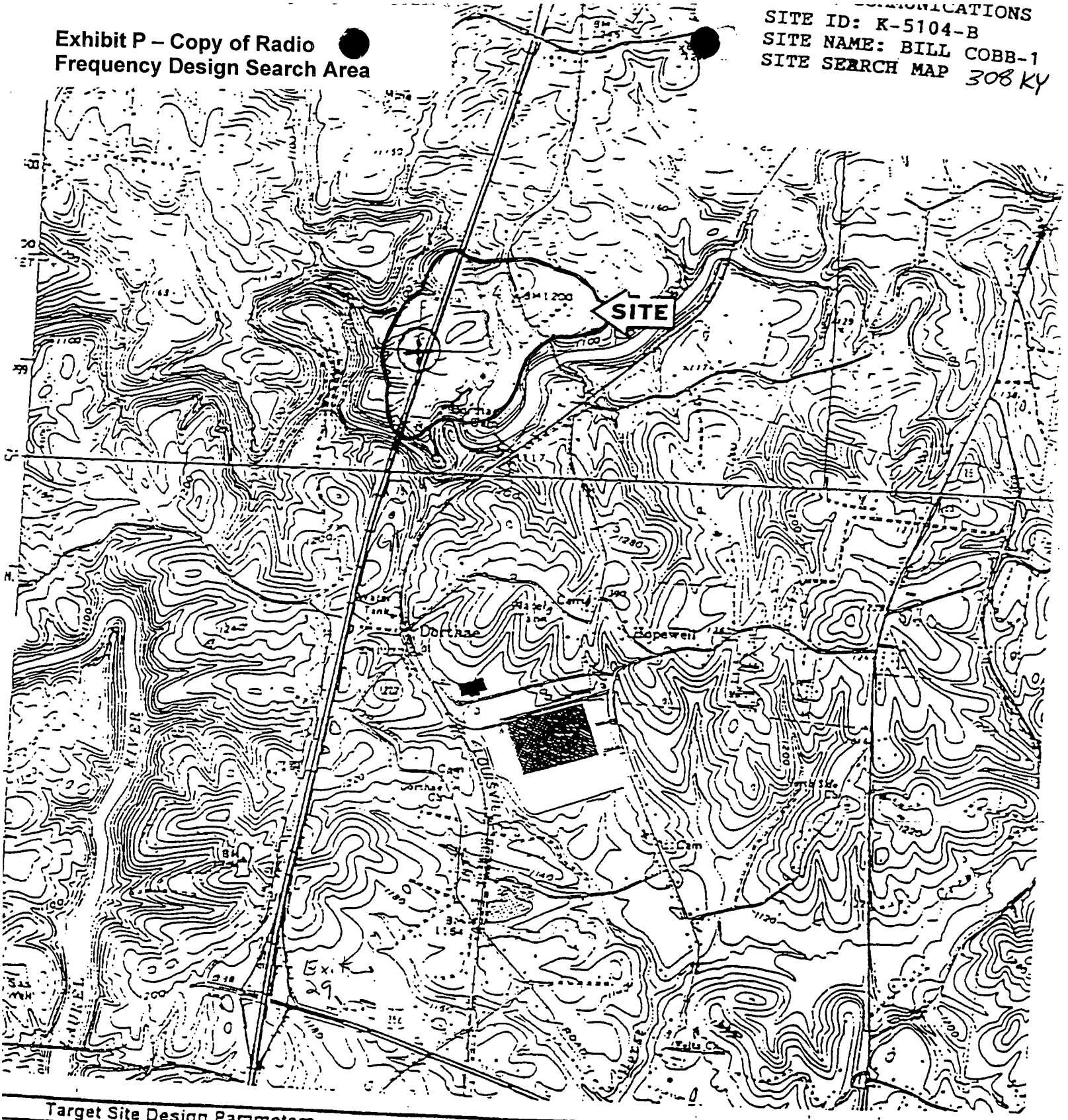
Crown Communications and Nextel West Inc. propose to construct a

TELECOMMUNICATIONS TOWER

near this site. If you have questions, please contact Aaron Johnson, Crown Communication Inc. 11001 Bluegrass Parkway, Suite 330 Louisville, KY 40299, (502) 240-0044. or the Executive Director, Public Service Commission, 730 Schenkel Lane, P.O. Box 615, Frankfort, KY 40602.
Please refer to Docket #99-016 in your correspondence

Exhibit P – Copy of Radio Frequency Design Search Area

SITE ID: K-5104-B
SITE NAME: BILL COBB-1
SITE SEARCH MAP 308 KY



Target Site Design Parameters					Search Area guidelines (for other than Target Site)			
Name:	Lily	Latitude:	37-00-19	N	ALLOWABLE RADIATION CENTER HEIGHT RANGE: AMSL			
ID:	K-5104-00	Longitude	84-06-17	W	MIN:	1525	MAX:	1575
et	Alabama	Ground Elev.:	1175	AMSL				
:	Tennessee	Rad. Center:	350	ft.	Site Objectives:	Cover I-75		
ty:	Laurel	Correction Factor:	3	dB				
Map:	Lily	Antenna:	FV60-15-00NA					
se Date:	4/29/97	Version:	1.1		Issuing Engineer:	Mustafa Rasekh	Date:	4/29/97