

**APPLICATION FOR A  
MINOR CHANGE  
CONSTRUCTION PERMIT  
TO A LICENSED FACILITY  
FCC FORM 301**

**Facility Identification Number 40901**

**WTID**

**Repton, Alabama**

**CHANNEL 266A – 101.1 MHz**

**ERP: 6.0 kW (H&V)**

**HAAT: 62 meters (H&V)**

**APPLICANT: Great South RFDC, LLC**

**November, 2006**

**Prepared by:**



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**Engineering Statement**  
**In Support of a Application**  
**For a Construction Permit**  
**WTID, Repton, Alabama - Channel 266A**

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**FOR ENGINEERING EXHIBITS F.C.C. FORM 301**

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## **ENGINEERING STATEMENT**

**In Support of an  
Application for a  
Construction Permit**

**WTID**

**Repton, Alabama**

**Channel 266A – 101.1 MHz**

**ERP: 6.0 kW(H&V)**

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**November, 2006**

### **General**

As broadcast technical consultants doing business as Reynolds Technical Associates (RTA), we have been authorized by Great South RFDC, LLC (herein referred to as “Great South” as well as “The Applicant”), licensee of WTID, Repton, Alabama, to conduct engineering studies and prepare the engineering portion of an application for a construction permit.

This instant application is seeking to change transmitter relocation, effective radiated power and all elevations of the transmitting antenna.

The application requires WTKX-FM, Pensacola, Florida to operate as a class C0, therefore the WTID application should be considered a trigger for reclassification of WTKX-FM. There are no other available channels for use by WTID that would avoid triggering WTKX-FM.

### **The Proposed Site (Exhibits E, Figure 1 through 6)**

Exhibit E, Figure 1 is a channel spacing study for the proposed facility.

The terrain and contour study for the proposed facility is being included as Exhibit E, Figure 2.

Exhibit E, Figure 3 is the service contour map displaying the FCC F(50,50) 70 and 60 dBu contours of the proposed.

Exhibit E, Figure 4 is a vertical sketch of the proposed antenna supporting structure. The proposed structure that will not require FAA filing or FCC registration according to a TOWAIR study was performed.

#### **Human Exposure** **(No Exhibits)**

The proposed FM facility was evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with the RF Worksheet #1 [FCC 301 Worksheet 7 (Page 4 and 5)].

The panel antenna for The Applicant's proposed FM broadcast station is to be placed on an existing tower. The proposed center of radiation above ground level of 50 meters, with an ERP (both horizontally and vertically) of 6.0 kW. The controlled/occupational limit, as well as the uncontrolled/general public limit is in compliance. Power density two (2) meters above ground is  $0.174 \text{ mW/cm}^2$ , well below the maximum allowable limit of  $0.2 \text{ mW/cm}^2$  for uncontrolled/general public exposure limits as well as the  $1.0 \text{ mW/cm}^2$  for controlled/occupational exposure limits

Should anyone be required to climb the tower, WTID will either reduce power or cease operation, so as to prevent hazardous exposure to radiofrequency radiation.

**Environmental Impact**  
**(No Exhibits)**

A grant of the proposed construction would not constitute a major action as defined in the Commission's Rules and Regulations.

During operation, the facility will produce no chemical or significant thermal pollution, and no ionizing radiation will be generated. Areas of high intensity radiofrequency fields will be confined to the immediate area of the transmitting antenna, far above the ground and away from any human and wildlife population.

The area is not officially designated as a wilderness area or wildlife preserve and is not pending consideration. The area has no significant value in American history, architecture, archaeology, or culture, which is listed in the Register of Historic Places, and it is not eligible for listing. It is not recognized either nationally or locally for special scenic or recreational value.

## **Conclusion**

This statement/application has been prepared for The Applicant by utilizing the latest available information, cross-checked with the Federal Communications Commission and other sources. Therefore, it is submitted that the proposed is in compliance with the Commission's Rules and Regulations and other sources. Therefore, it is submitted that the engineering data compiled and demonstrated herein for the proposed is in compliance with Commission's Rules and Regulations at the time of this application's filing date. We welcome the opportunity to discuss with the staff of the Federal Communications Commission the engineering data contained in this application. Should any questions arise concerning the information, please contact us.

The following pages are exhibits prepared and assembled in support of the proposed.

### **Statement of the Consultants**

The instant engineering statement was prepared for Great South RFDC, LLC ("The Applicant") and supports an application for a construction permit of WTID, Repton, Alabama.

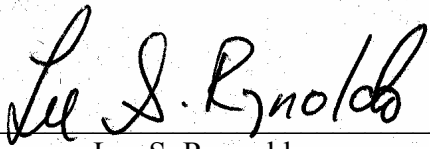
It was developed by RTA and may not be used for purposes other than submission to the Commission by the Applicant.

It may not be reproduced in its entirety, or in part, by anyone (other than from the Commission) without the written consent of RTA.

It is prepared for The Applicant under contractual agreement, and its certification by RTA is used accordingly. If The Applicant fails in its contractual obligation, RTA reserves the right to withdraw its certification.

The information in this application is compiled from the most recent Commission and outside data. RTA is not responsible for errors resulting from incorrect data or unpublished rule and procedure changes.

For RTA:

  
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Lee S. Reynolds

November 10<sup>th</sup>, 2006

6930 Cahaba Valley Road, Suite 202  
Birmingham, Alabama 35242  
(205) 618-2020

**Engineering Statement  
In Support of an  
Application for a Construction Permit  
WTID(FM), Channel 266A, Repton, AL**

**WTID Channel Spacing Study**

REFERENCE		DISPLAY DATES
31 21 34 N	CLASS = A	DATA 10-17-06
87 10 02 W	Current Spacings	SEARCH 11-15-06
----- Channel 266 - 101.1 MHz -----		

Call	Channel	Location	Dist	Azi	FCC	Margin
<b>WTID</b>	<b>LIC 266A</b>	<b>Repton</b>	<b>AL 14.60</b>	<b>311.2</b>	<b>115.0</b>	<b>-100.40</b>
Of no concern:						
Licensed coordinates of WFNU						
<b>WTKX-F</b>	<b>LIC 268C</b>	<b>Pensacola</b>	<b>FL 93.15</b>	<b>203.4</b>	<b>95.0</b>	<b>-1.85</b>
<b>WTKX-F</b>	<b>CP 268C</b>	<b>Pensacola</b>	<b>FL 93.17</b>	<b>203.3</b>	<b>95.0</b>	<b>-1.83</b>
Of concern:						
Triggered to class C0 in instant application						
WJLQ	LIC 264C	Pensacola	FL 94.57	208.9	95.0	-0.43
WVVL	LIC 266A	Elba	AL 115.08	86.8	115.0	0.08
AL6444	RSV 265C2	Orrville	AL 111.81	12.1	106.0	5.81
<b>WTKXFM</b>	<b>APP 268C0</b>	<b>Pensacola</b>	<b>FL 93.15</b>	<b>203.4</b>	<b>86.0</b>	<b>7.15</b>
Of note:						
Proposed facility for WTKX after it is triggered to a class C0.						
WALX	LIC 265C2	Selma	AL 114.47	13.9	106.0	8.47
WALX.C	CP 265C2	Orrville	AL 114.47	13.9	106.0	8.47
WYOO	LIC-Z 266C3	Springfield	FL 186.33	134.4	142.0	44.33
WJDQ	LIC 267C1	Meridian	MS 178.89	306.7	133.0	45.89



**Engineering Statement  
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WTID(FM), Channel 266A, Repton, AL**

**WTID Terrain/Contour Study**

**Reference Coordinates:**

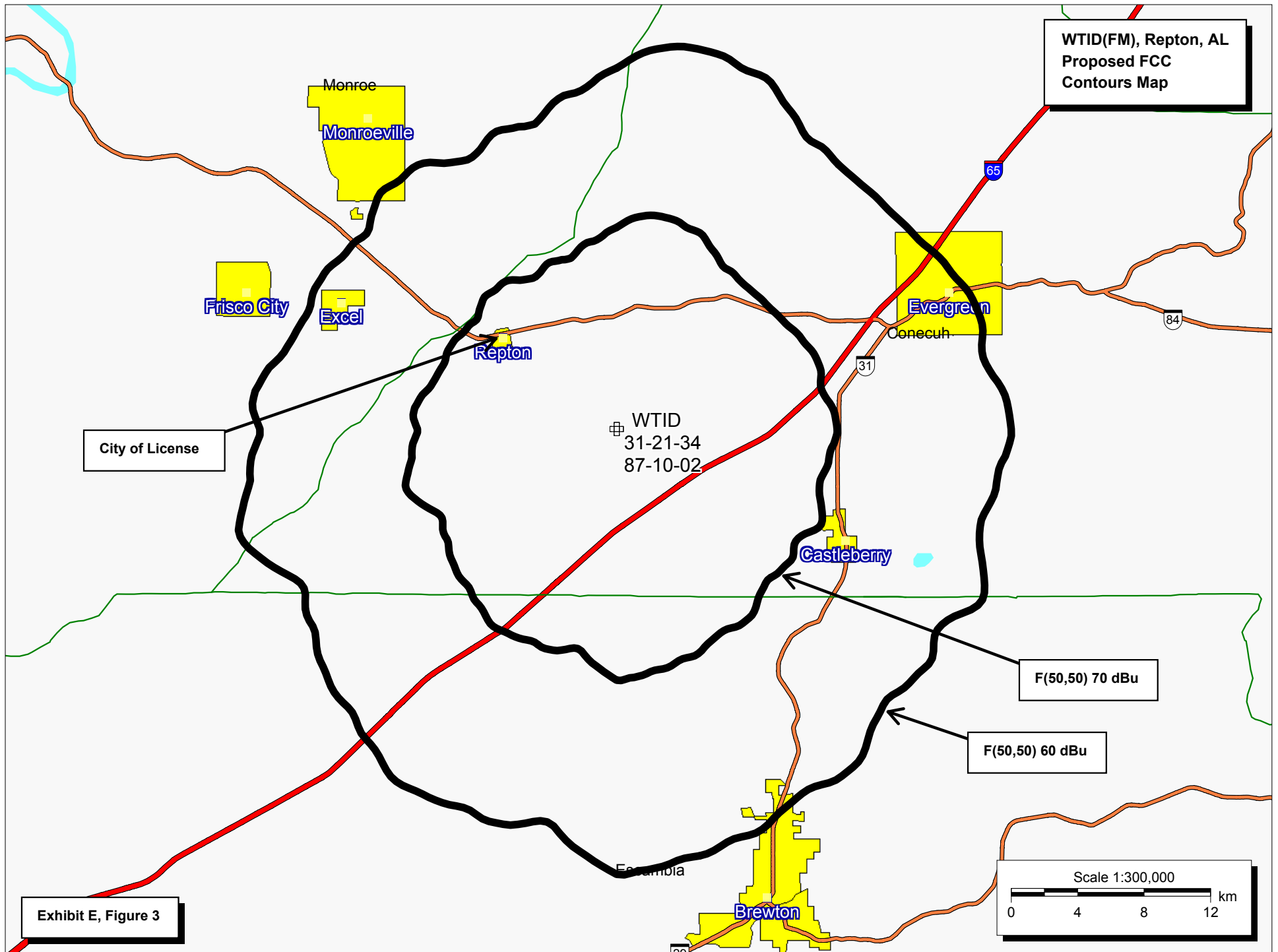
**North Latitude: 31-21-34**

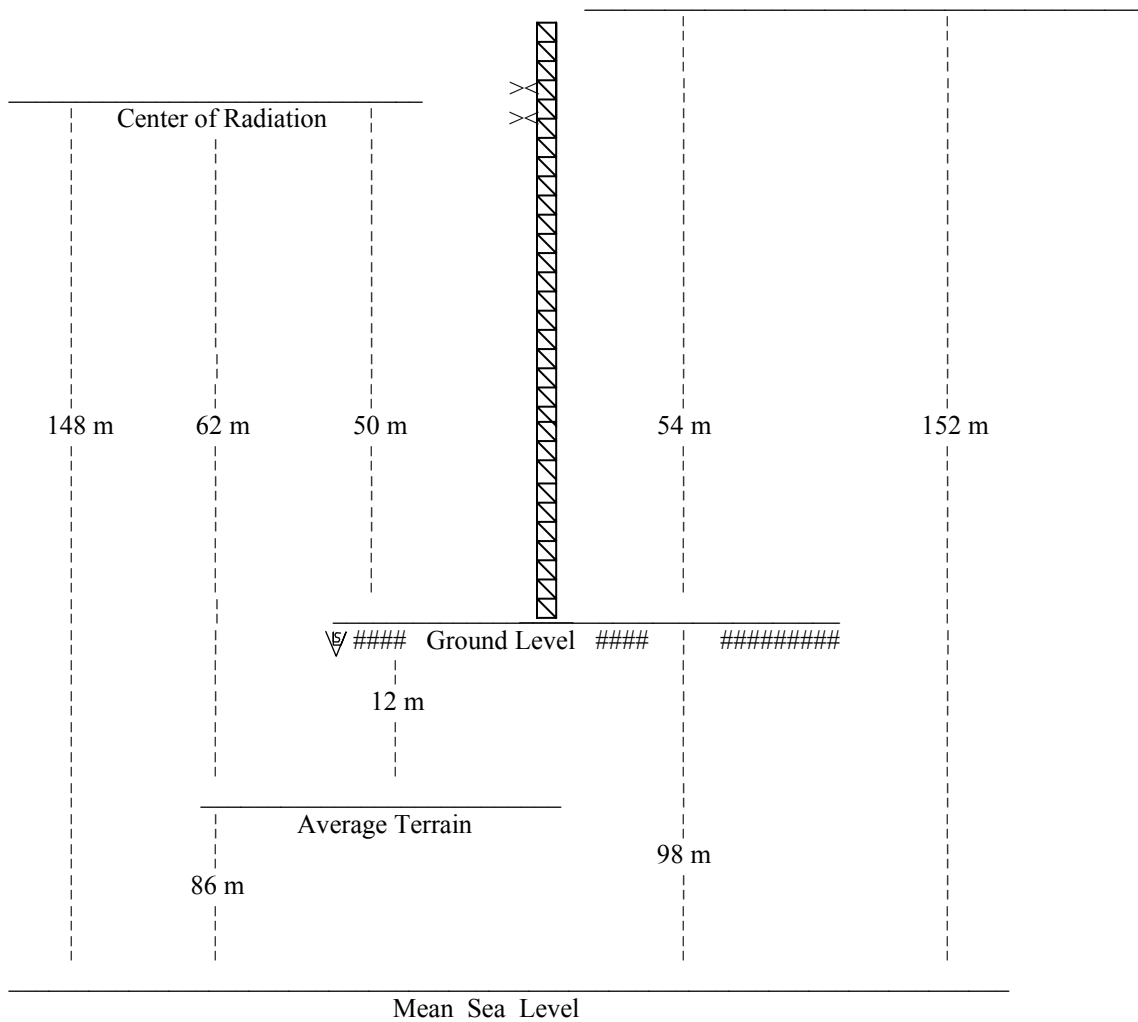
**West Longitude: 87-10-02**

Azimuth °T.	ERP = 6.0 kW Ave. Elev.	FM - 2-6 Tables		F(50-50) Distance to	F(50-50) Distance to
	3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	70 dBu Contour km	60 dBu Contour km
0	92.3	55.7	7.782	12.1	21.7
5	85.4	62.6	7.782	12.8	22.9
10	82.1	65.9	7.782	13.0	23.4
15	82.1	65.9	7.782	13.1	23.4
20	84.9	63.1	7.782	12.8	22.9
25	87.1	60.9	7.782	12.6	22.6
30	93.1	54.9	7.782	12.0	21.6
35	96.3	51.7	7.782	11.7	20.9
40	97.1	50.9	7.782	11.6	20.8
45	96.9	51.1	7.782	11.6	20.8
50	96.1	51.9	7.782	11.7	21.0
55	94.7	53.3	7.782	11.9	21.3
60	92.3	55.7	7.782	12.1	21.7
65	89.4	58.6	7.782	12.4	22.2
70	85.8	62.2	7.782	12.7	22.8
75	85.7	62.3	7.782	12.7	22.8
80	87.4	60.6	7.782	12.6	22.6
85	81.6	66.4	7.782	13.1	23.4
90	79.6	68.4	7.782	13.3	23.7
95	82.9	65.1	7.782	13.0	23.2
100	84.2	63.8	7.782	12.9	23.0
105	86.8	61.2	7.782	12.6	22.6
110	81.8	66.2	7.782	13.1	23.4
115	76.0	72.0	7.782	13.6	24.3
120	84.5	63.5	7.782	12.8	23.0
125	82.7	65.3	7.782	13.0	23.3
130	82.3	65.7	7.782	13.0	23.3
135	84.5	63.5	7.782	12.8	23.0
140	79.6	68.4	7.782	13.3	23.7
145	72.5	75.5	7.782	13.9	24.8
150	73.2	74.8	7.782	13.8	24.7
155	72.4	75.6	7.782	13.9	24.8

Continued on the next page

ERP = 6.0 kW		FM - 2-6 Tables		F(50-50)	F(50-50)
Azimuth °T.	Ave. Elev.	Effective Antenna Height	ERP (dBk)	Distance to	Distance to
	3 to 16 km Meters AMSL			70 dBu Contour km	60 dBu Contour km
160	67.0	81.0	7.782	14.4	25.6
165	66.3	81.7	7.782	14.4	25.7
170	63.4	84.6	7.782	14.7	26.1
175	60.8	87.2	7.782	14.9	26.5
180	58.9	89.1	7.782	15.1	26.8
185	67.8	80.2	7.782	14.3	25.5
190	77.9	70.1	7.782	13.4	24.0
195	73.4	74.6	7.782	13.8	24.7
200	73.3	74.7	7.782	13.8	24.7
205	72.5	75.5	7.782	13.9	24.8
210	71.5	76.5	7.782	14.0	25.0
215	74.3	73.7	7.782	13.7	24.5
220	78.6	69.4	7.782	13.4	23.9
225	82.7	65.3	7.782	13.0	23.3
230	85.5	62.5	7.782	12.8	22.8
235	90.2	57.8	7.782	12.3	22.1
240	92.8	55.2	7.782	12.1	21.6
245	94.2	53.8	7.782	11.9	21.4
250	86.1	61.9	7.782	12.7	22.8
255	80.9	67.1	7.782	13.2	23.5
260	86.9	61.1	7.782	12.6	22.6
265	90.2	57.8	7.782	12.3	22.1
270	93.7	54.3	7.782	12.0	21.5
275	91.2	56.8	7.782	12.2	21.9
280	94.8	53.2	7.782	11.9	21.2
285	99.3	48.7	7.782	11.3	20.3
290	101.1	46.9	7.782	11.1	19.9
295	100.6	47.4	7.782	11.2	20.0
300	101.8	46.2	7.782	11.0	19.8
305	103.4	44.6	7.782	10.8	19.4
310	103.5	44.5	7.782	10.8	19.4
315	100.2	47.8	7.782	11.2	20.1
320	101.3	46.7	7.782	11.1	19.9
325	102.6	45.4	7.782	10.9	19.6
330	106.6	41.4	7.782	10.4	18.6
335	105.4	42.6	7.782	10.6	18.9
340	104.1	43.9	7.782	10.7	19.2
345	105.0	43.0	7.782	10.6	19.0
350	99.9	48.1	7.782	11.3	20.2
355	97.7	50.3	7.782	11.5	20.6





Proposed Location - 31° 21' 34" N. Lat.

87° 10' 02" W. Long. [NAD 27]

NOT DRAWN TO SCALE

Proposed antenna - 2 element