

TECHNICAL EXHIBIT  
AMENDMENT TO  
APPLICATION FOR CONSTRUCTION PERMIT  
WGUL-FM, INC.  
RADIO STATION WLSS  
SARASOTA, FLORIDA

February 25, 2004

930 KHZ 5.0 KW-D, 3.0 KW-N U DA-2

This amendment modifies the daytime parameters to comply with Cuban interference requirements. The following figures have been changed and should be replaced in their entirety.

Figure 1A to replace Figure 1  
Figure 2A to replace Figure 2  
Figure 3A to replace Figure 3  
Figure 6A to replace Figure 6  
Figure 8A to replace Figure 8  
Figure 9A to replace Figure 9

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Specifications for Daytime and Nighttime  
Directional Antenna Systems

Frequency: 930 kHz

Hours of Operation: Unlimited

Power: 5.0 kW (Day)  
3.0 kW (Night)

Number of Towers: 4 (Day & Night)

Type of Tower: Guyed, Uniform Cross-section,  
base-insulated

All Towers - height above  
base insulator 78.4 m (257 ft)

All Towers - overall height 80.3 m (263 ft)

Tower Registration:

Tower No.	Registration Number
1	1029598
2	1029599
3	1029600
4	1029601

Daytime and Nighttime Tower Arrangement:

Tower No.	Spacing (deg.) / (m)	Orientation (deg. True)
1	0.0	0.0
2	90.0/80.6	44.0
3	180.0/161.3	164.0
4	155.9/139.7	134.0

Daytime Element Field Parameters:

<u>Tower</u> <u>No.</u>	<u>Field</u> <u>Ratio</u>	<u>Phase</u> <u>(degrees)</u>
1	1.000	0.0
2	1.035	+105.0
3	0.938	+13.0
4	1.269	+101.0

Nighttime Element Field Parameters:

<u>Tower</u> <u>No.</u>	<u>Field</u> <u>Ratio</u>	<u>Phase</u> <u>(degrees)</u>
1	1.000	0.0
2	0.985	+87.1
3	0.888	-2.2
4	0.607	+91.3

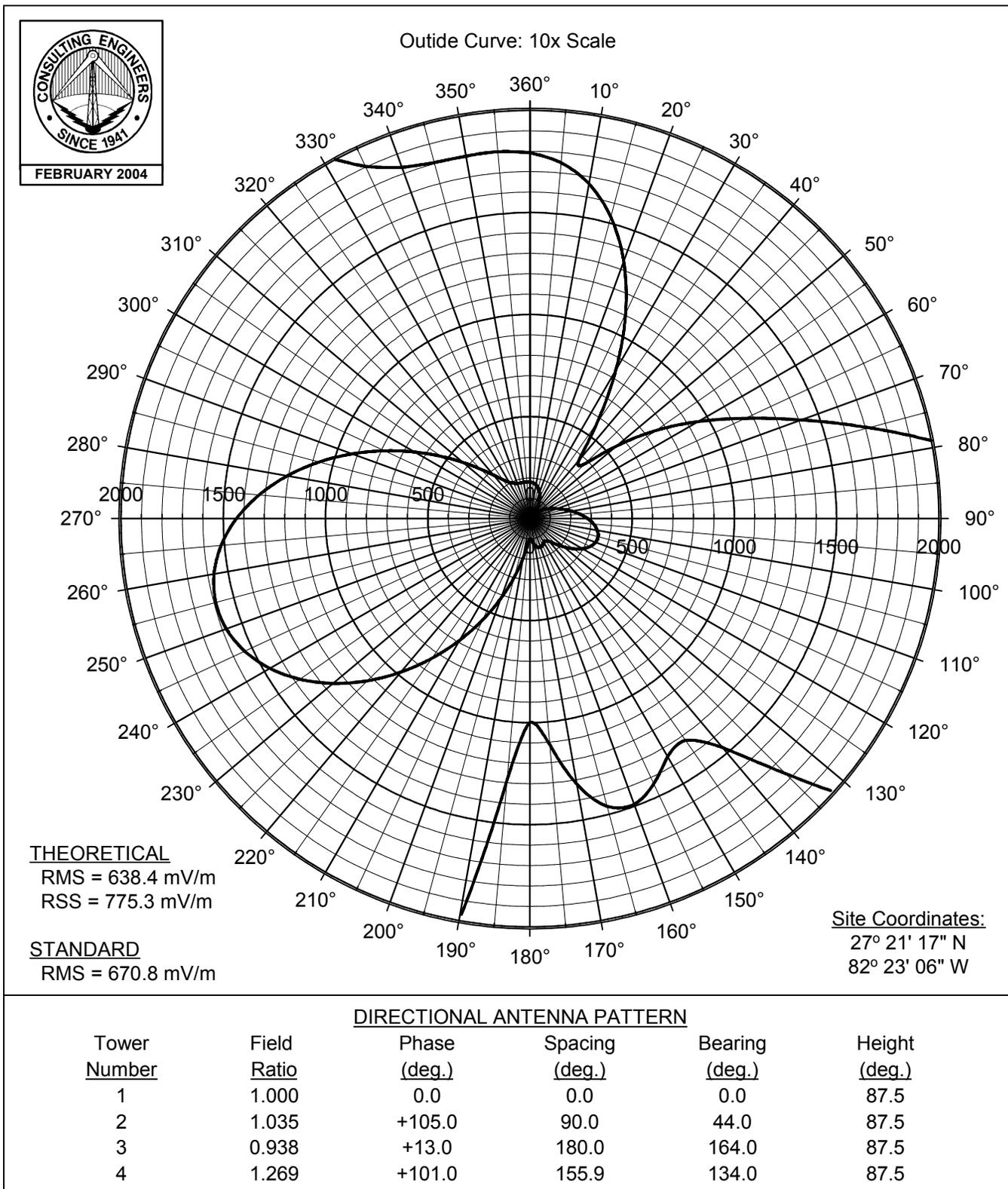
Daytime and Nighttime Ground System:

Installed about the base of each tower are 120 evenly spaced, buried copper wire radials (#10 AWG), extending 80.6 meters (265 ft) from all towers except where shortened and bonded to transverse copper strap between towers. In addition, copper strap runs from the transmitter and down the line of towers and is bonded to ground at the base of each tower.

Geographic Coordinates of  
Center of Antenna Array:

27° 21' 17" North Latitude  
82° 23' 06" West Longitude

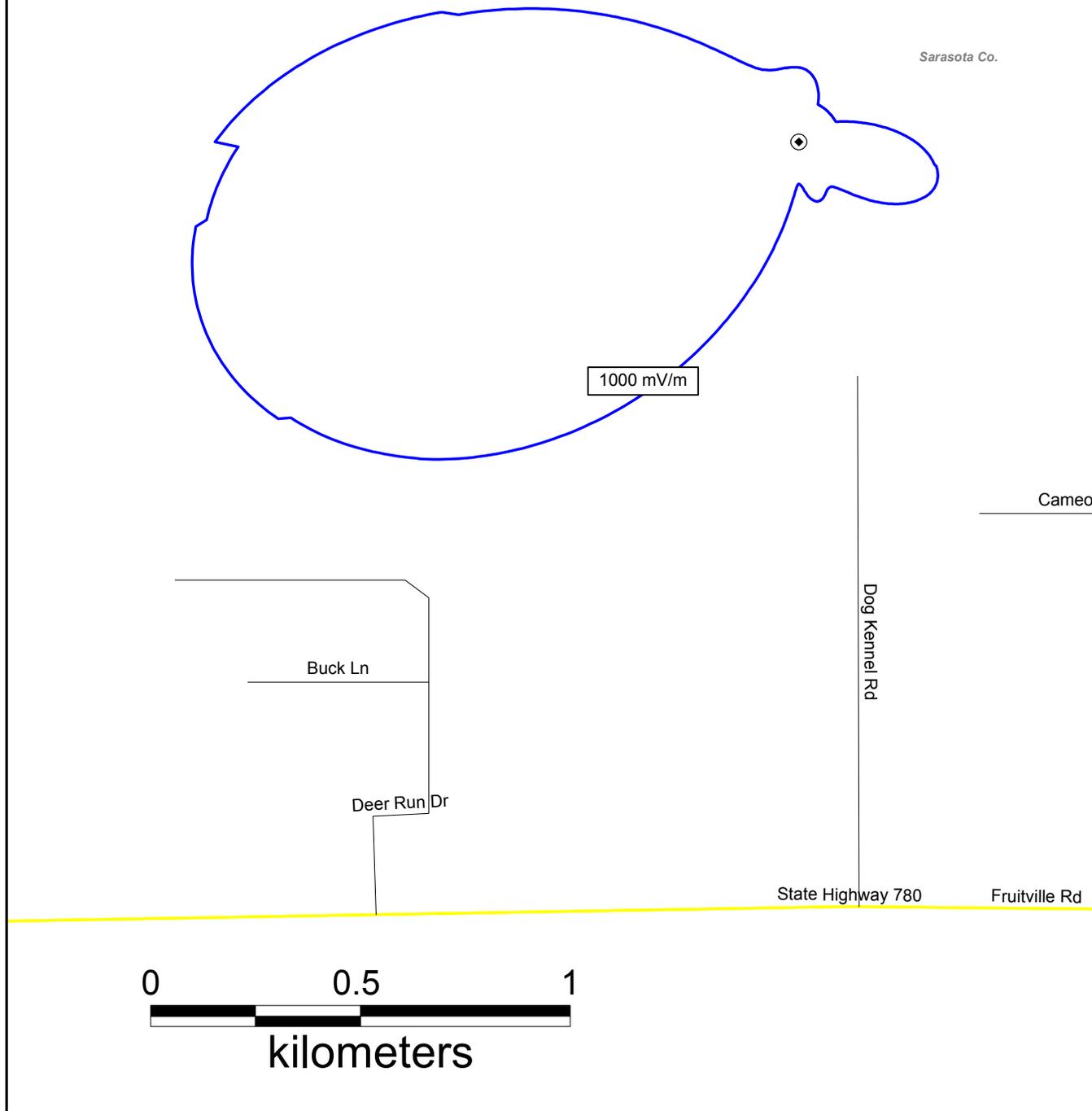
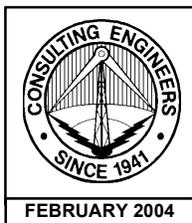
Figure 2A



**PROPOSED DAYTIME HORIZONTAL PLANE  
STANDARD RADIATION PATTERN**

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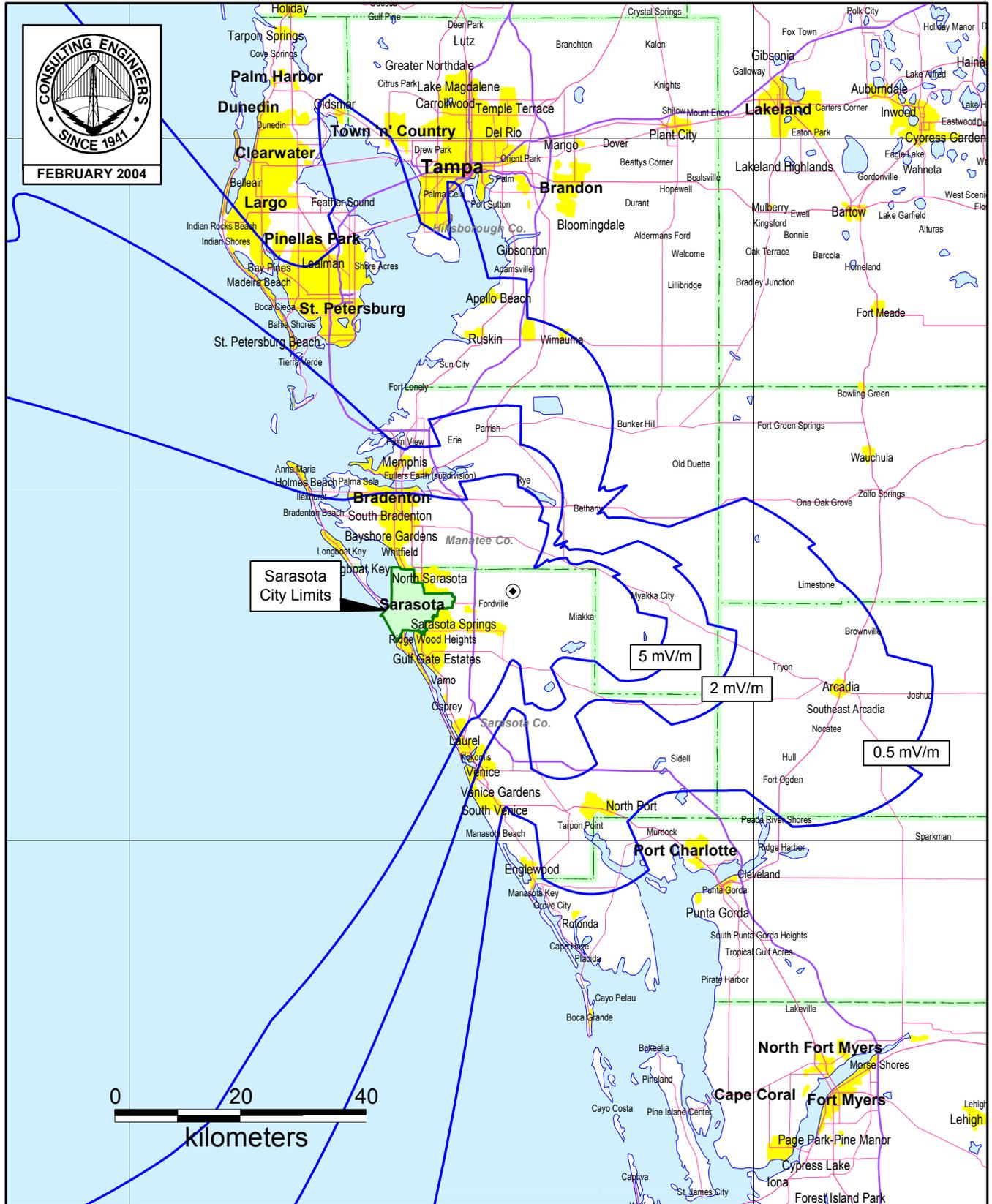
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**PROPOSED DAYTIME FIELD STRENGTH CONTOURS**

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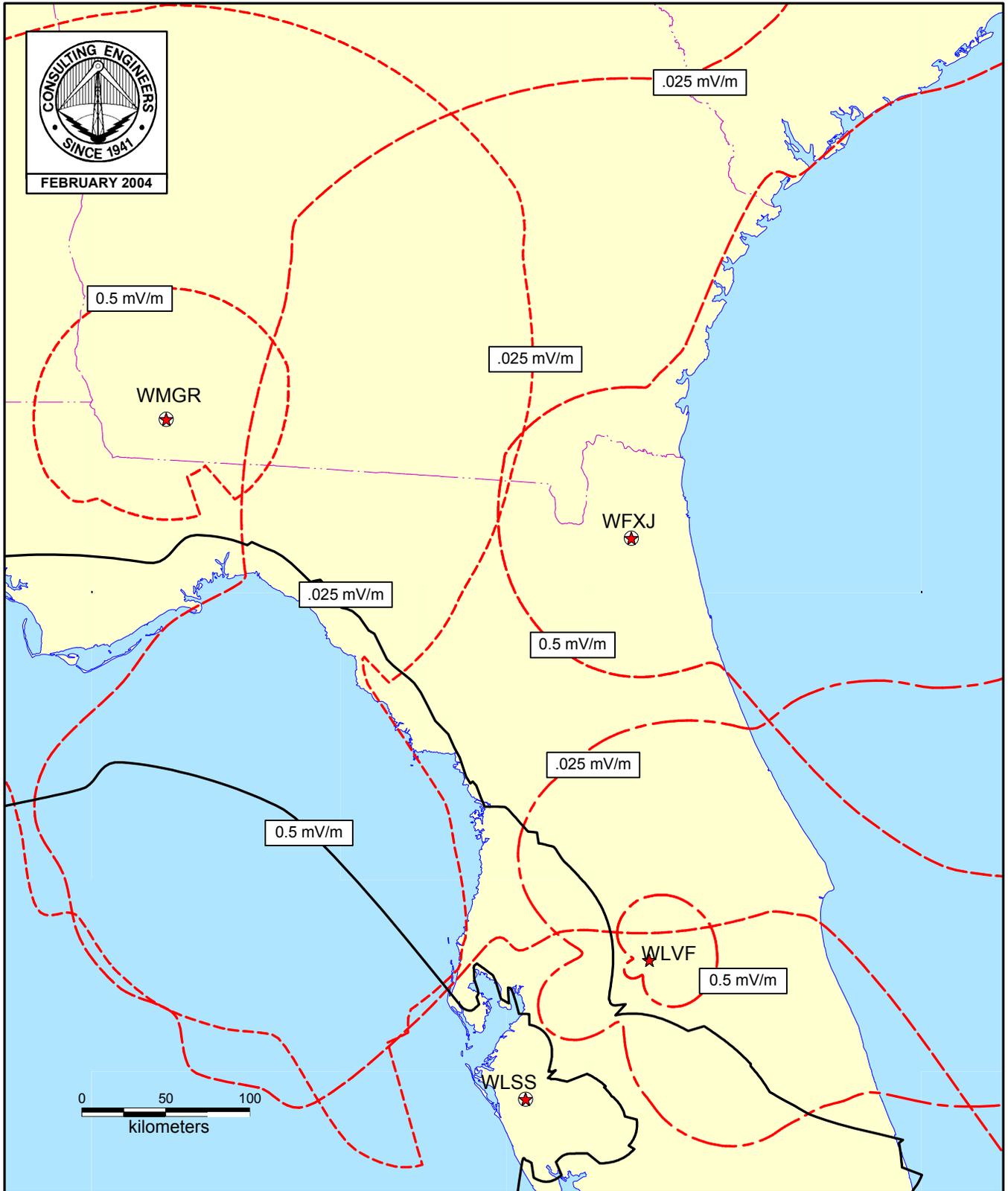


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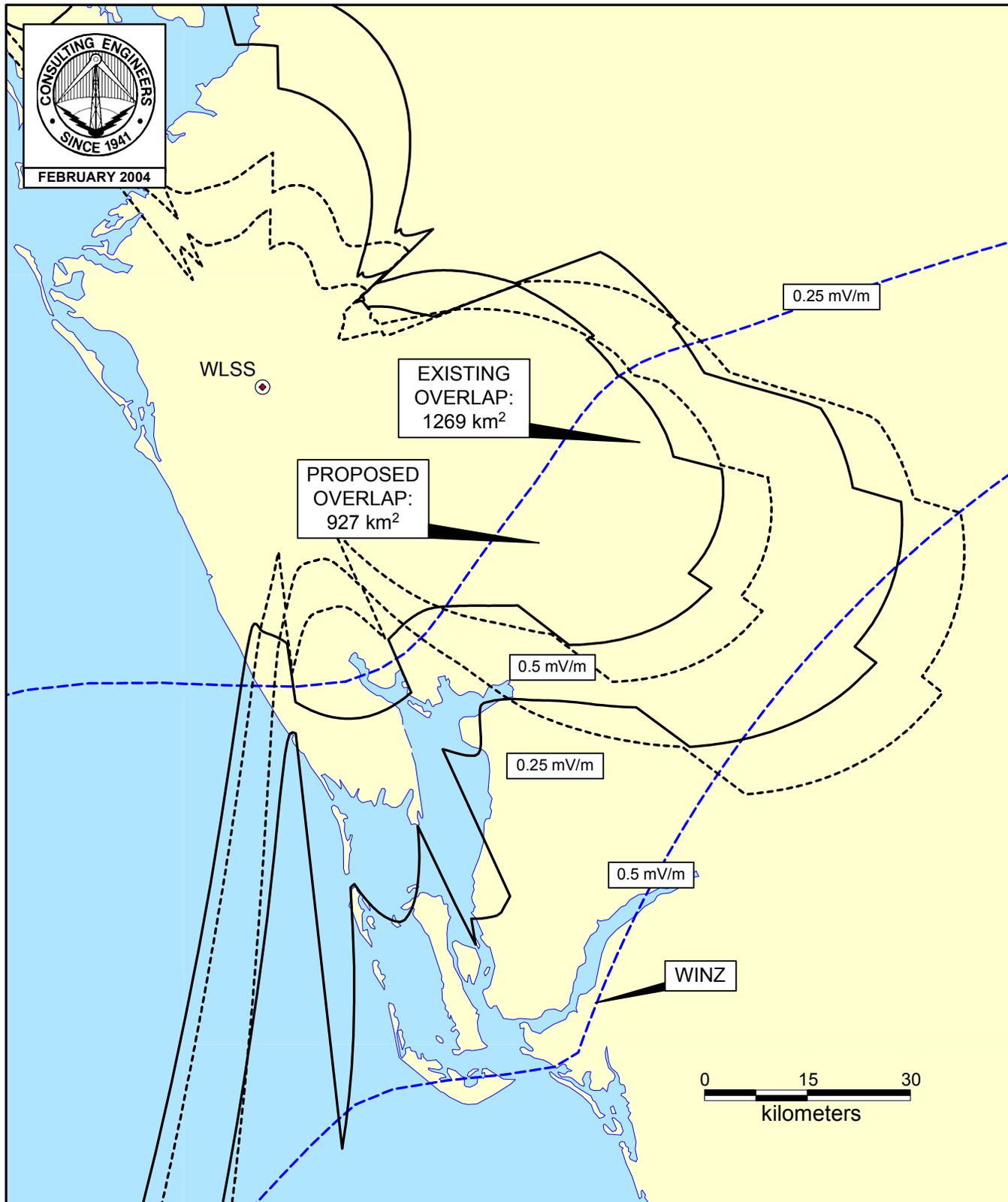
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## **DAYTIME ALLOCATION STUDY**

RADIO STATION WLSS  
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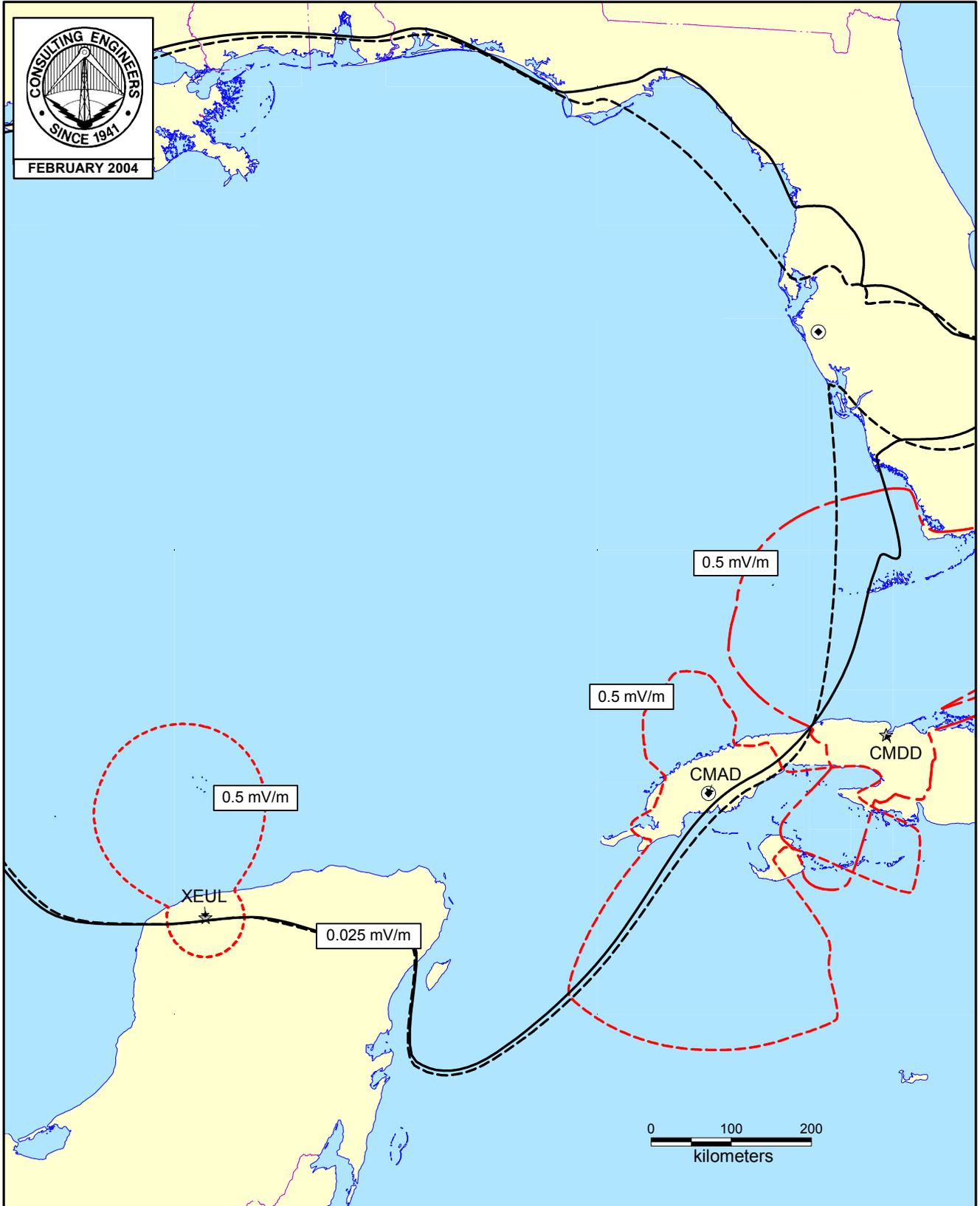
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Tabulation of Data Employed in  
Calculation of Groundwave Contours

Call: WLSS - Licensed and Proposed  
 Sarasota, FL  
 Coordinates: 27-21-17 North 82-23-06 West  
 Frequency: 930 kHz

Azimuth	Region 1	Dist 1	Region 2	Dist 2	Region 3	Dist 3	Region 4	Dist 4	Region 5	Dist 5
(deg)	(mS/m)	(km)								
3-20	10	6.5	7	11.5	5.5	17	4	26.1		
21-40	15	4	7	12	4	24.4				
48-67	10	7.4	5	10	3.5	11	2.5	19	2	24.2
82-99	10	3	15	12	6	15	4	24.6		
100-113	20	11	12	16	8	22	6	24.1		
114-130	15	13	8	25						
154-174	20	18	12	25.3						
210-230	7	20.3								
242-262	8	19.1								
270-290	15	3.3	10	11	7	26.3				
334-350	15	3.3	10	6.7	7	24.6				
351-2	10	6.3	7	24.5						

Measured data from Application BMP-860519AB

FCC M3 conductivity employed along all other azimuths

Call: WMGR - License  
 Jacksonville, FL  
 Coordinates: 30-54-25 North 84-33-02 West  
 Frequency: 930 kHz

Azimuth	Region 1	Dist 1	Region 2	Dist 2	Region 3	Dist 3
(deg)	(mS/m)	(km)	(mS/m)	(km)	(mS/m)	(km)
140-160	1	24	0.5	56.2	1.5	93.7

FCC M3 conductivity employed along all other azimuths

Call: WFXJ - License  
 Jacksonville, FL  
 Coordinates: 30-17-09 North 81-44-52 West  
 Frequency: 930 kHz

FCC M3 conductivity employed along all azimuths

Call: WLVF - License  
Haines City, FL  
Coordinates: 28-04-52 North 81-38-22 West  
Frequency: 930 kHz

FCC M3 conductivity employed along all azimuths

Call: WRFX - License  
Miami, FL  
Coordinates: 25-57-36 North 80-16-13 West  
Frequency: 940 kHz

FCC M3 conductivity employed along all azimuths

Call: CMAD  
Pinar Del Rio, CU  
Coordinates: 22-23-00 North 83-41-00 West  
Frequency: 930 kHz

Region 2 conductivity employed along all azimuths

Call: CMDD  
Matanzas, CU  
Coordinates: 23-01-00 North 81-35-00 West  
Frequency: 930 kHz

Region 2 conductivity employed along all azimuths

Call: XEUL  
Merida, MX  
Coordinates: 21-02-55 North 89-37-58 West  
Frequency: 930 kHz

Region 2 conductivity employed along all azimuths