

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
CLEAR CHANNEL BROADCASTING LICENSES, INC.
RADIO STATION WFLF
PINE HILLS, FLORIDA

May 8, 2002

540 KHZ 50 KW-D, 46 KW-N U DA-2

TECHNICAL EXHIBIT
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CLEAR CHANNEL BROADCASTING LICENSES, INC.
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Technical Narrative

The technical exhibit of which this narrative is part has been prepared on behalf Clear Channel Broadcasting Licenses, Inc., licensee of AM broadcast station WFLF at Pine Hills, Florida. WFLF is licensed for full time operation on 540 kilohertz with daytime and nighttime power of 50 kilowatts, operating with different directional antenna patterns during daytime and nighttime hours. By means of this present application, the licensee proposes to change the WFLF transmitter site to be co-located and diplexed with radio station WQTM, Orlando, Florida. The proposal is classified as a minor change according to 47 CFR 73.3571(a)(2). As a Class B station operating on one of the channels listed in 73.25(c), the proposal satisfies 47 CFR 73.21(a)(2) which permits operation with a nominal power of not less than 0.25 kilowatt nor more than 50 kilowatts at any time. The proposal is acceptable for filing under the criteria set forth in 47 CFR 73.37.

The proposed facility will not have a significant environmental impact as defined by 47 CFR 1.1307. The Federal Aviation Administration has been notified of the proposal as new tower construction is proposed.

Proposed Transmitter Location

The location of the proposed WFLF facility will change. The proposed site will be co-located with WQTM, 740 kilohertz, Orlando, Florida. The new array center coordinates are:

28-28-53 North
81-39-43 West

Directional Antenna System

A total of six towers will be employed for the daytime directional antenna pattern. The nighttime directional antenna pattern will employ six towers, five of which are common with the daytime array. As indicated on Figure 1, tower 2 is 112.2 meters in height and has an overall height of 114.7 meters above ground level. Towers 1 and 3 through 7 are 109.7 meters in height and have overall heights that vary with foundation configurations and are presented on Sheet 1 of Figure 1. Sheet 2 of Figure 1 is a plat of the transmitter site showing the proposed tower arrangement and ground system. A summary of specifications for each of the directional antenna arrays is included herein as Figure 2.

The directional antenna patterns have been calculated in accordance with 47 CFR 73.150 assuming a

one-ohm lumped loss resistance at the current loop of each tower in the array. The daytime standard radiation pattern is shown herein as Figure 3 and is tabulated in Figure 4. The nighttime standard radiation pattern is shown herein as Figure 5 and tabulated in Figure 6.

Daytime Coverage

The proposed WFLF daytime field strength contours are depicted on Figure 7. As indicated on Figure 7, the proposed daytime 5 mV/m contour will completely encompass the city limits of Pine Hills. The Pine Hills city limits depicted were obtained from a map contained in the TIGER 1990 U.S. census files.

Daytime Allocation Study

A daytime allocation study was made utilizing FCC Figure M-3 as shown on Figure 8. Daytime field strength contours were calculated in accordance with 47 CFR 73.183. Measurement data from station license applications were applied where available. Figure 9 is a tabulation of the data employed in the calculation of daytime contours.

With respect to WAYR, Orange Park, Florida, protected and interference contour overlap exists with the licensed facility of WFLF. The proposed WFLF daytime field strength contours reduce contour overlap in both cases as shown on Sheets 3 and 4 of Figure 8. Also, a small amount of contour overlap exists with the licensed facilities of WYNN, WETC and WASG. In all cases, contour overlap is reduced between WFLF and these stations.

Based on this analysis, the proposed WFLF facility will comply with all applicable allocation criteria.

Nighttime Coverage

The proposed WFLF nighttime field strength contours are depicted on Figure 10. As can be seen from Figure 10, the proposed nighttime 14.9 mV/m nighttime interference-free contour will cover 100% of the area within the city limits of Pine Hills.

Nighttime Allocation Study

The proposed WFLF facility will afford nighttime protection to all domestic stations operating on 540 kHz and 550 kHz and all international allotments on 540 kHz. Figure 11 contains pertinent calculation data to support a conclusion that this proposal comports with all nighttime interference protection requirements.

The licensed WFLF facility enters into the 25% RSS limits of WDAK, Columbus, Georgia; WETC, Wendell-Zebulon, North Carolina and WAYR, Orange Park, Florida. The nighttime limit contributions from the proposed pattern do not exceed those of the present licensed pattern toward WDAK, WETC and WAYR.

With respect to Foreign Class A, co-channel stations XEWA, San Luis Potosi, Mexico and CBK, Watrous, Saskatoon, Canada, the proposed WFLF facility does not increase radiation over the span covering the protected 0.5 mV/m contour. The proposed WFLF facility will not

enter the 25% nighttime interference limit of any other domestic station studied.

Section 73.24(g)

The provisions of 47 CFR 73.24(g) require that the population within the 1,000 mV/m contour not exceed 1 percent of the population within the 25 mV/m groundwave contour or 300 persons, whichever is greater. At the proposed location, during daytime hours, the proposed 1,000 mV/m contour encompasses 380 persons or 0.054% percent of the 699,634 persons in the 25 mV/m contour. During nighttime hours, the proposed 1,000 mV/m contour encompasses 146 persons.

Environmental Considerations

The proposed WFLF operation was evaluated in terms of both the electric and magnetic field components which will be present at the base of each tower taking into account the total summed powers at both frequencies (540 and 740 kHz). Using Figures 1 through 4 of Supplement A to OET Bulletin 65, the worst case interpolated distance at which the electric and magnetic fields would fall below ANSI guidelines is shown in the following table:

<u>Tower Number</u>	<u>Distance (meters)</u>
1	<3
2	3
3	3
4	3
5	6

<u>Tower Number</u>	<u>Distance (meters)</u>
7	5
7	<3

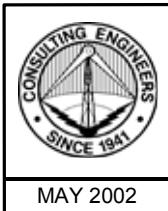
Accordingly, the areas surrounding the base of each tower will be appropriately restricted with a fence having a minimum radius with regard to the preceding table unless data obtained after construction has been completed indicates otherwise. The fence will assure that persons on the property outside the fenced area will not be exposed to radiofrequency field levels in excess of those recommended by the ANSI. In addition, warning signs will be posted.

The proposed operation is categorically excluded from environmental processing, as it meets all the criteria for such an exclusion as specified in 47 CFR 1.1306. The proposal does not involve construction at a site location as specified under 47 CFR 1.1307(a)(1)-(7) and the human exposure to radiofrequency radiation is predicted to be within the standards specified in 47 CFR 1.1307(b).

Matthew Folkert
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237

(941) 329-6000

May 8, 2002

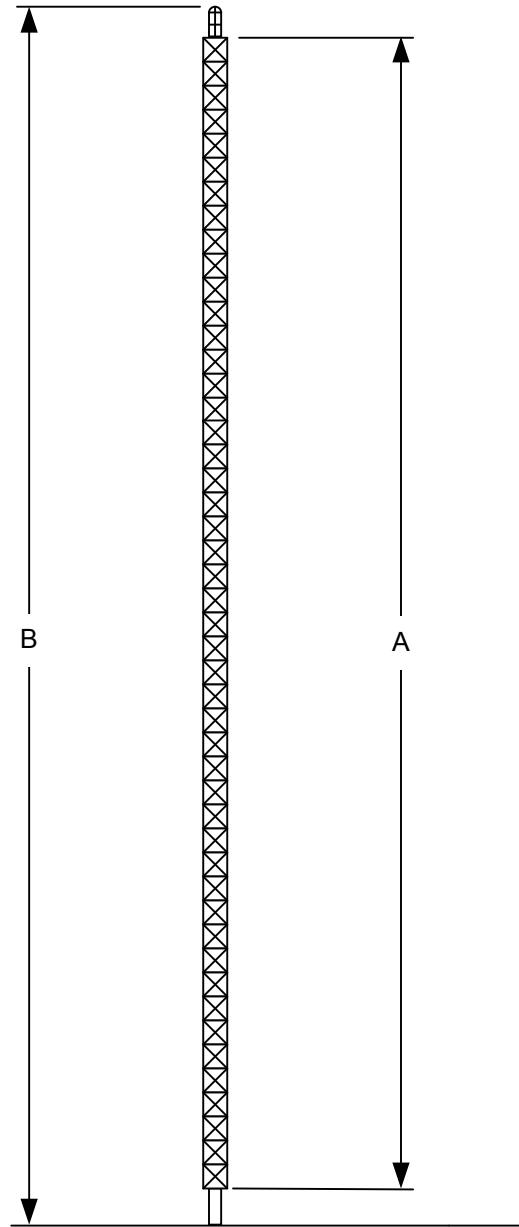


Site Coordinates(NAD 27)

28° 28' 53" N

81° 39' 43" W

<u>Tower Details</u>				
Desig	Reg. No.	A	B	
1	1039275	109.7 m	112.6 m	
2	1039276	112.2 m	114.7 m	
3	1039277	109.7 m	112.8 m	
4	1039278	109.7 m	111.8 m	
5	1039279	109.7 m	111.7 m	
6	1039280	109.7 m	112.0 m	
7	NEW	109.7 m	112.6 m	



Not To Scale

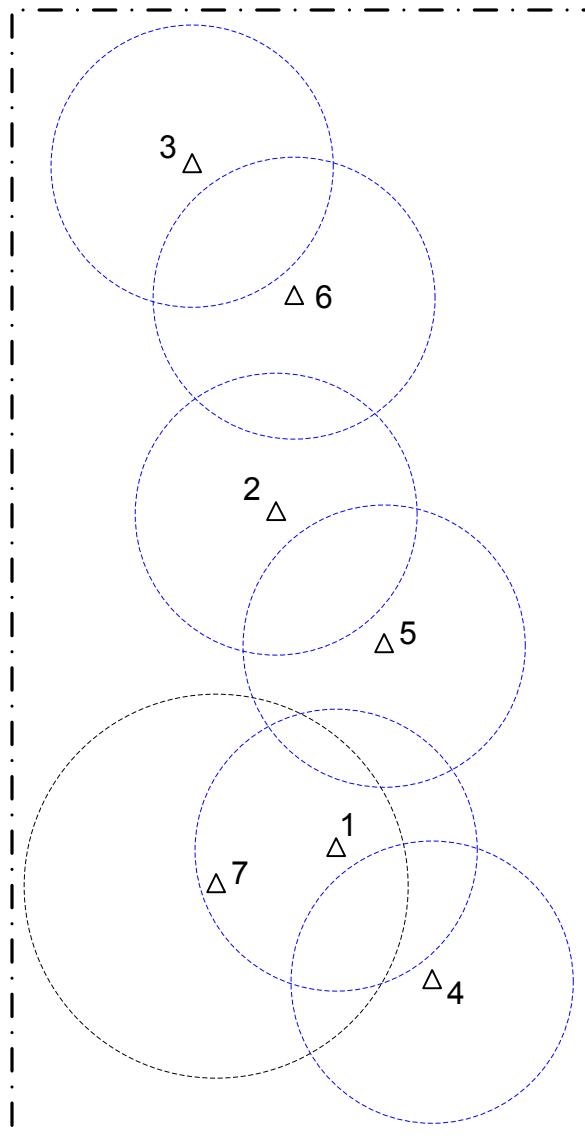
SKETCH OF ANTENNA ELEMENTS

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



MAY 2002



Note:

Towers 1 through 6 Existing
Tower 7 New

0 100 200
Scale(meters)

PLAT OF TRANSMITTER SITE

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2
Sheet 1 of 2

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WFLF
PINE WOODS, FLORIDA

540 KHz 50 KW-D, 46 KW-N U DA-2

Specification for Daytime and
Nighttime Directional Antenna Systems

Frequency:	540 kHz	
Hours of Operation:	Unlimited	
Power:	50 kW (Day), 46 kW (Night)	
Number of Towers:	7	
Type of Tower:	Uniform cross-section guyed, base-insulated	
Towers 1 and 3 through 7 - height above base insulator	109.7 m	
Tower 1 - overall height	112.6 m	
Tower 3 - overall height	112.8 m	
Tower 4 - overall height	111.8 m	
Tower 5 - overall height	111.7 m	
Tower 6 - overall height	112.0 m	
Tower 7 - overall height	112.6 m	
Tower 2 - height above base insulator	112.2 m	
Tower 2 - overall height	114.7 m	
Tower Arrangement:		
Tower No.	Spacing (deg.) / (m)	Orientation (deg. True)
1	0/0	0
2	159.6/252.0	348.7
3	322.8/159.6	347.4
4	70.8/122.4	150.5
5	99.5/351.4	12.4
6	260.2/246.3	355.4
7	63.9/275.9	251.9

Figure 2
Sheet 2 of 2

Element Field Parameters:

Daytime:

Tower No.	Field Ratio	Phase (degrees)
1	0.339	+73.2
2	0.464	+62.9
3	0.657	+61.1
4	0.110	+27.6
5	0.255	-7.6
6	1.000	+0.0

Nighttime:

Tower No.	Field Ratio	Phase (degrees)
2	1.000	+0.0
3	0.214	+19.9
4	0.509	-86.1
5	0.905	-132.8
6	0.559	-133.3
7	0.692	-2.7

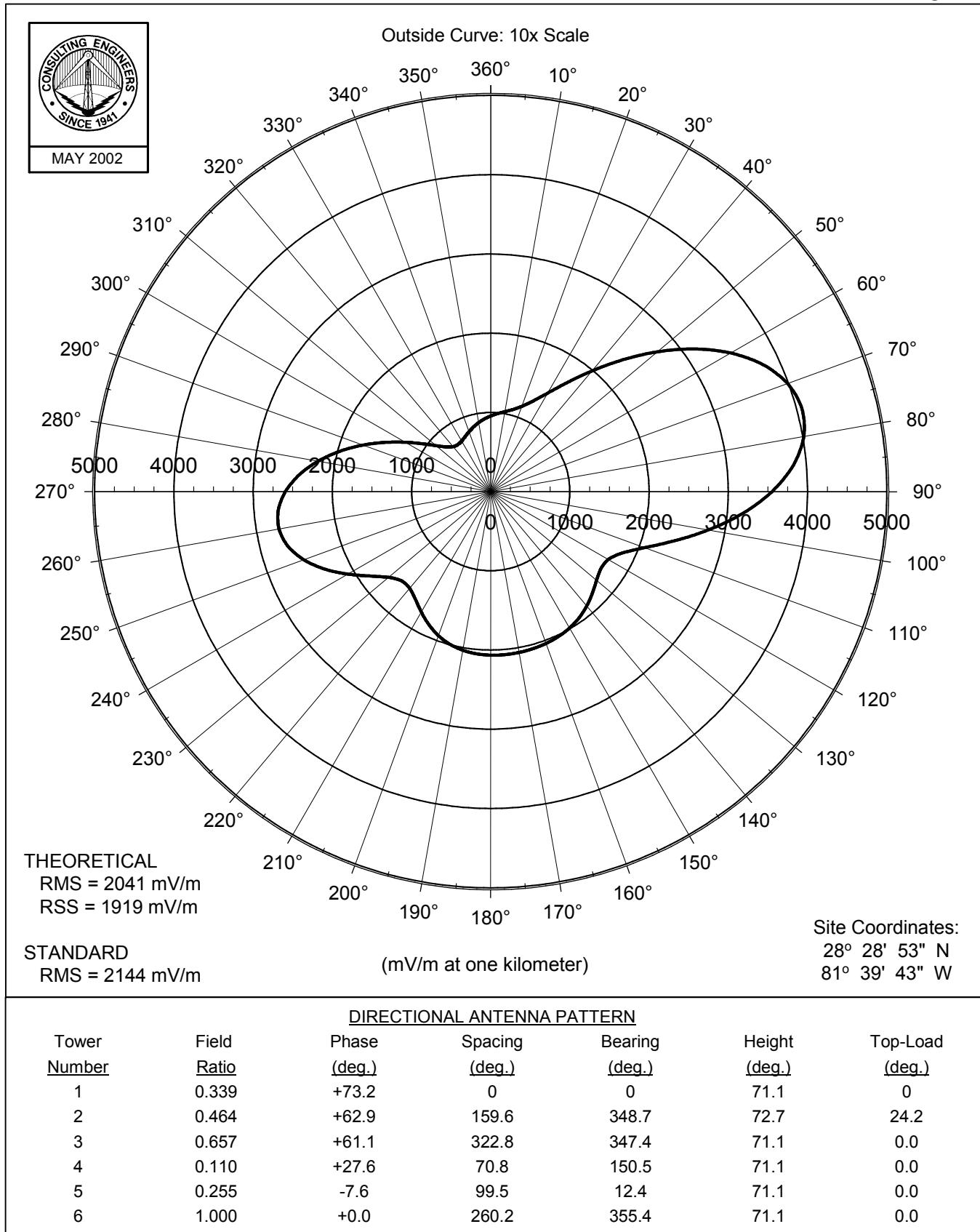
Ground System:

Installed about the base of each tower are 120 evenly spaced, buried copper wire radials (#10 AWG), extending 101.0 meters 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:

28° 28' 53" North Latitude
81° 39' 43" West Longitude

Figure 3



PROPOSED DAYTIME HORIZONTAL PLANE STANDARD RADIATION PATTERN

RADIO STATION WFLF
PINE HILLS, FLORIDA

540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4

TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION
OF CONSTRUCTION PERMIT
RADIO STATION WFLF
PINE HILLS, FLORIDA

540 KHZ 50 KW-D, 46 KW-N U DA-2

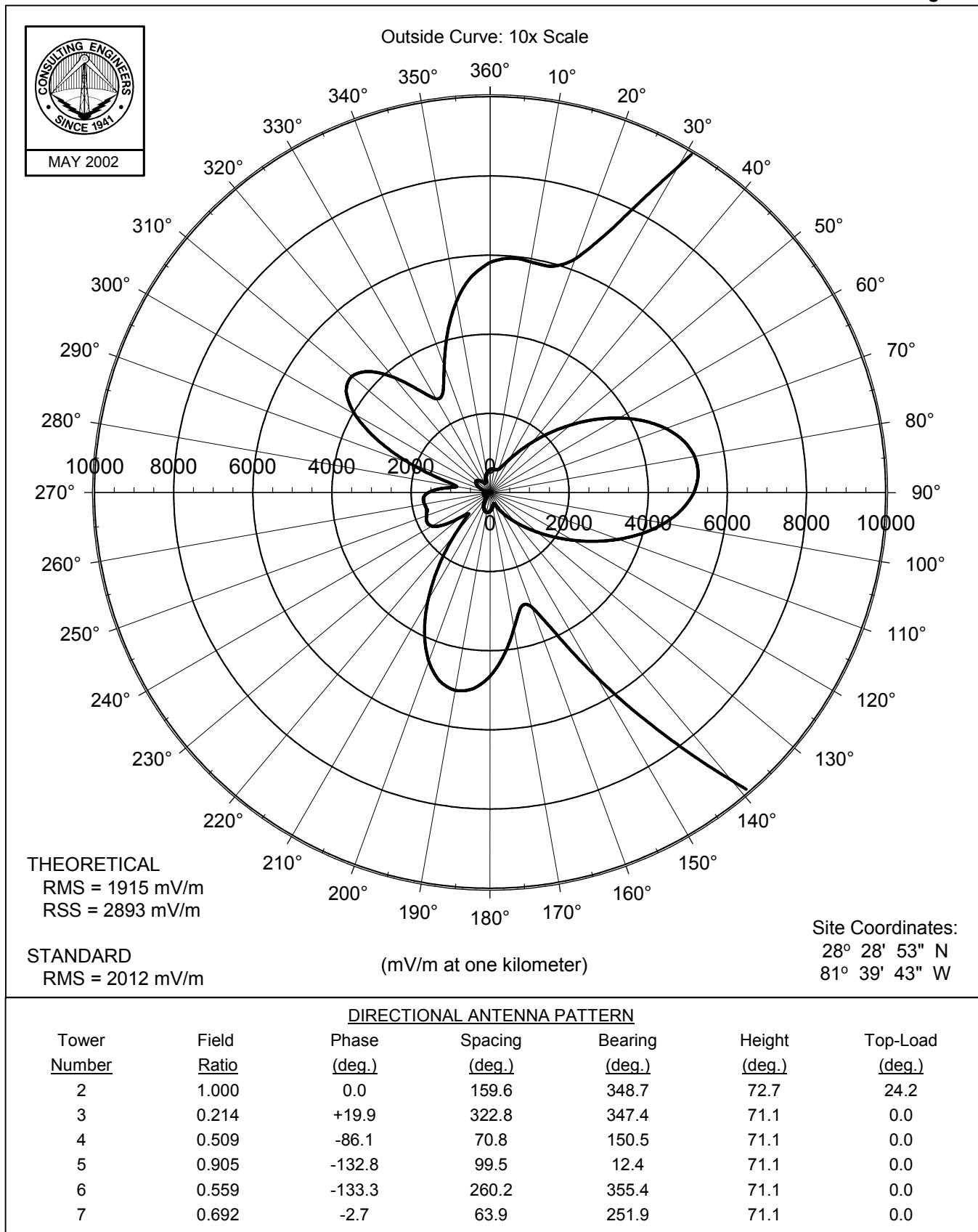
DAYTIME RADIATION PATTERN
(Radiation Values at One Kilometer)

<u>Tower Number</u>	<u>Field Ratio</u>	<u>Phase (deg.)</u>	<u>Spacing (deg.)</u>	<u>Bearing (deg.)</u>	<u>Height (deg.)</u>	<u>Loading (deg.)</u>
1	0.339	+73.2	0.0	0.0	71.1	0.0
2	0.464	+62.9	159.6	348.7	72.7	24.2
3	0.657	+61.1	322.8	347.4	71.1	0.0
4	0.110	+27.6	70.8	150.5	71.1	0.0
5	0.255	-7.6	99.5	12.4	71.1	0.0
6	1.000	+0.0	260.2	355.4	71.1	0.0

<u>Input Power (kW)</u>	<u>Loop Loss (ohms)</u>	<u>Theo. RMS (mV/m)</u>	<u>Theo. RSS (mV/m)</u>	<u>Q Factor (mV/m)</u>	<u>Standard RMS (mV/m)</u>
50	1.0	2041	1919	70.7	2144

<u>Azimuth (mV/m)</u>	<u>Field (mV/m)</u>						
0	955	90	3550	180	2062	270	2594
5	988	95	3187	185	2052	275	2428
10	1024	100	2788	190	2030	280	2215
15	1072	105	2397	195	1991	285	1972
20	1145	110	2064	200	1931	290	1718
25	1260	115	1830	205	1850	295	1472
30	1434	120	1712	210	1753	300	1247
35	1676	125	1696	215	1657	305	1055
40	1985	130	1742	220	1592	310	904
45	2348	135	1813	225	1592	315	800
50	2741	140	1884	230	1682	320	743
55	3135	145	1943	235	1856	325	726
60	3496	150	1987	240	2081	330	738
65	3790	155	2018	245	2313	335	767
70	3987	160	2038	250	2513	340	804
75	4064	165	2051	255	2653	345	844
80	4012	170	2059	260	2715	350	884
85	3835	175	2063	265	2694	355	921

Figure 5



PROPOSED NIGHTTIME HORIZONTAL PLANE STANDARD RADIATION PATTERN

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 W-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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PINE HILLS, FLORIDA

540 KHZ 50 KW-D, 46 KW-N U DA-2

NIGHTTIME RADIATION PATTERN
(Radiation Values at One Kilometer)

Tower Number	Field Ratio	Phase (deg.)	Spacing (deg.)	Bearing (deg.)	Modified (deg.)	Top-Loading (deg.)
2	1.000	0.0	159.6	348.7	72.7	24.2
3	0.214	+19.9	322.8	347.4	71.1	0.0
4	0.509	-86.1	70.8	150.5	71.1	0.0
5	0.905	-132.8	99.5	12.4	71.1	0.0
6	0.559	-133.3	260.2	355.4	71.1	0.0
7	0.692	-2.7	63.9	251.9	71.1	0.0
Input Power (kW)	Loop Loss (ohms)	Theo. RMS (mV/m)	Theo. RSS (mV/m)	Q Factor (mV/m)	Standard RMS (mV/m)	
46	1.0	1915	2894	72.3	2012	

Figure 6
Sheet 2 of 5

**Standard Radiation Pattern
(at One Kilometer)**

Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
0	580	563	518	455	401	393	457
5	592	578	539	489	454	466	539
10	589	578	550	521	513	551	638
15	588	583	572	570	595	660	759
20	624	626	636	663	718	803	910
25	736	744	771	821	895	990	1098
30	946	958	994	1054	1133	1227	1325
35	1256	1268	1304	1361	1434	1514	1593
40	1653	1663	1693	1739	1794	1851	1900
45	2123	2130	2148	2176	2205	2230	2241
50	2649	2651	2655	2657	2654	2639	2603
55	3206	3202	3188	3163	3122	3060	2974
60	3763	3753	3720	3664	3583	3474	3334
65	4284	4267	4216	4130	4009	3853	3662
70	4729	4706	4638	4526	4370	4173	3937
75	5061	5034	4953	4820	4637	4408	4137
80	5251	5221	5133	4987	4788	4540	4248
85	5282	5252	5161	5012	4809	4557	4260
90	5152	5123	5036	4894	4699	4456	4172
95	4873	4847	4769	4642	4467	4248	3989
100	4471	4450	4386	4279	4132	3947	3725
105	3985	3968	3919	3837	3723	3577	3400
110	3453	3442	3408	3351	3270	3165	3035
115	2915	2909	2889	2855	2805	2739	2653
120	2406	2403	2394	2378	2355	2322	2276
125	1947	1947	1946	1944	1940	1932	1918
130	1552	1553	1557	1564	1573	1583	1593
135	1221	1223	1230	1242	1258	1280	1306
140	947	950	959	973	995	1023	1059
145	720	724	734	752	777	809	851
150	533	538	551	571	599	634	678
155	389	394	408	430	459	495	539
160	306	310	320	338	361	391	430
165	301	301	301	304	311	326	352
170	350	346	336	321	306	297	302
175	414	407	388	360	327	296	276

Figure 6
Sheet 3 of 5

**Standard Radiation Pattern
(at One Kilometer)**

Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
0	573	706	831	928	983	988	937
5	655	785	904	993	1040	1035	973
10	756	881	992	1072	1107	1088	1013
15	878	997	1098	1164	1183	1148	1056
20	1027	1136	1221	1269	1269	1214	1103
25	1205	1299	1364	1389	1365	1286	1154
30	1416	1487	1526	1522	1469	1363	1206
35	1658	1699	1705	1667	1581	1444	1260
40	1931	1934	1900	1822	1698	1527	1315
45	2229	2186	2105	1983	1817	1611	1368
50	2542	2447	2316	2145	1936	1692	1420
55	2858	2708	2523	2302	2049	1769	1468
60	3162	2956	2717	2448	2153	1838	1510
65	3436	3178	2890	2576	2243	1897	1546
70	3664	3361	3030	2679	2314	1943	1573
75	3830	3492	3130	2751	2363	1974	1591
80	3920	3562	3182	2787	2387	1988	1598
85	3927	3565	3182	2785	2383	1984	1594
90	3851	3501	3129	2744	2352	1961	1579
95	3695	3372	3027	2665	2294	1922	1553
100	3471	3187	2880	2553	2213	1865	1518
105	3193	2957	2696	2412	2110	1795	1473
110	2878	2695	2485	2250	1991	1713	1420
115	2546	2415	2258	2073	1860	1622	1362
120	2214	2131	2024	1889	1723	1525	1299
125	1894	1854	1793	1704	1582	1426	1234
130	1598	1593	1571	1524	1444	1326	1168
135	1332	1355	1365	1353	1311	1228	1102
140	1100	1142	1177	1196	1185	1135	1038
145	901	956	1011	1053	1070	1048	978
150	733	797	865	926	965	967	921
155	594	663	740	815	872	895	869
160	483	552	635	720	792	831	822
165	395	462	548	641	723	775	780
170	331	390	477	575	666	728	744
175	285	335	421	523	620	689	714

Figure 6
Sheet 4 of 5

**Standard Radiation Pattern
(at One Kilometer)**

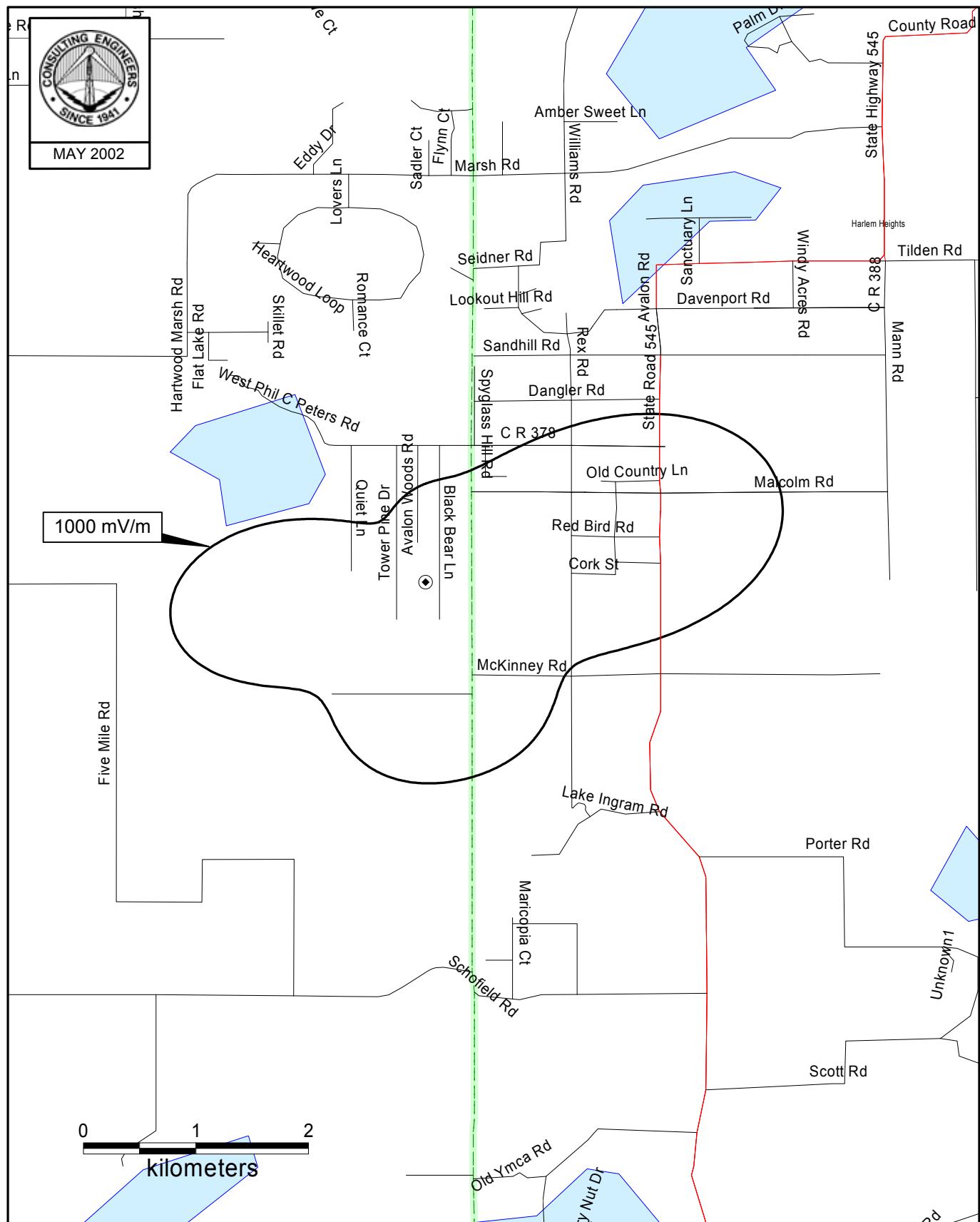
Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
180	467	459	435	398	353	304	264
185	501	492	465	423	369	309	254
190	511	502	473	428	370	303	240
195	497	487	458	412	352	282	216
200	457	448	420	374	314	246	184
205	396	387	360	317	260	196	148
210	318	309	284	244	192	141	124
215	228	220	198	163	123	101	135
220	138	132	115	92.6	84.4	116	180
225	78.7	77.0	75.9	86.6	118	170	237
230	97.2	101	114	139	177	230	293
235	142	146	161	188	227	278	339
240	170	175	191	218	258	309	370
245	178	183	199	228	269	323	386
250	172	177	192	220	264	321	388
255	167	169	180	206	249	310	382
260	168	168	172	190	231	293	370
265	168	165	162	174	212	277	358
270	154	149	142	151	191	261	348
275	118	113	106	120	171	250	343
280	85.0	79.9	75.5	101	164	249	344
285	124	121	117	135	186	263	355
290	217	213	205	207	235	293	373
295	315	309	296	286	294	331	396
300	395	388	371	351	345	365	416
305	445	437	416	391	375	385	427
310	458	449	427	398	379	385	425
315	434	425	402	372	353	361	407
320	382	373	348	317	299	316	374
325	319	309	279	243	225	254	333
330	276	262	223	171	140	186	291
335	282	266	218	144	75.5	133	261
340	339	321	271	192	111	132	256
345	416	398	347	271	193	184	280
350	489	471	420	346	273	253	326
355	545	528	479	409	342	324	386

Figure 6
Sheet 5 of 5

**Standard Radiation Pattern
(at One Kilometer)**

Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
180	253	293	378	483	584	659	689
185	229	262	348	456	559	636	669
190	207	241	330	440	543	620	654
195	186	228	323	434	535	610	644
200	168	227	328	438	536	607	637
205	161	240	344	451	543	608	635
210	176	267	370	471	556	614	635
215	212	305	404	496	572	623	637
220	261	351	441	524	592	634	642
225	315	397	479	553	611	646	647
230	365	441	515	581	631	658	653
235	407	477	546	605	649	669	659
240	437	505	570	626	664	680	666
245	454	524	588	641	677	689	672
250	461	533	599	653	687	697	677
255	460	536	605	661	695	704	682
260	454	535	608	666	702	710	687
265	447	533	610	670	707	716	692
270	441	532	611	673	711	721	696
275	440	533	614	677	716	726	701
280	443	536	619	682	721	731	706
285	451	543	625	688	727	736	711
290	463	552	632	694	733	742	717
295	477	562	639	701	740	749	723
300	489	570	646	708	747	756	730
305	495	574	651	713	753	764	738
310	493	574	653	718	761	772	747
315	481	568	653	723	768	781	756
320	461	559	652	727	777	792	767
325	437	548	651	733	787	804	780
330	415	540	652	741	799	819	794
335	401	537	658	754	815	836	810
340	401	544	671	772	836	857	829
345	419	563	693	797	862	882	851
350	454	596	727	830	895	912	876
355	506	644	772	873	935	947	905

Figure 7
Sheet 1 of 2

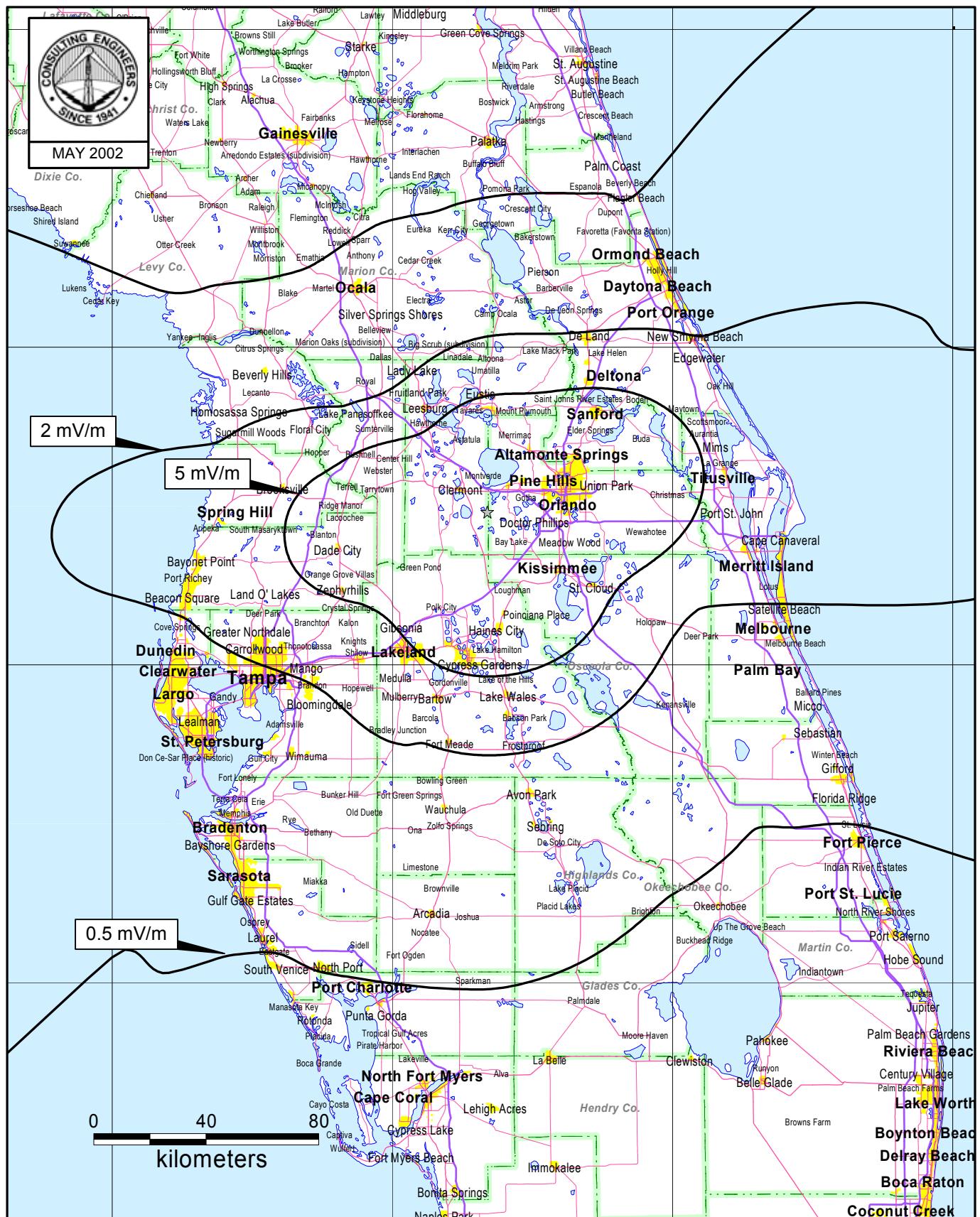


PROPOSED DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 7
Sheet 2 of 2

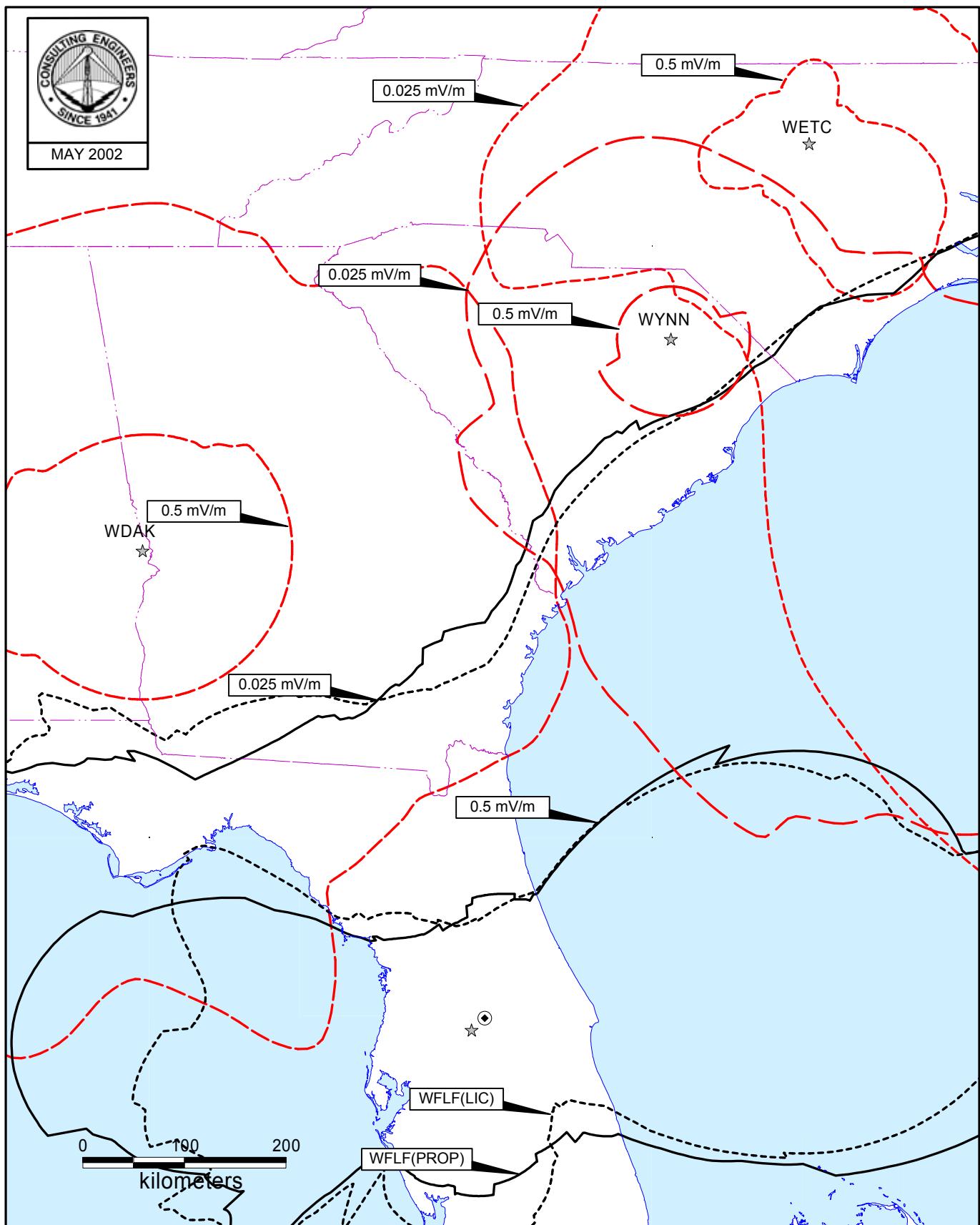


PROPOSED DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 8
Sheet 1 of 5



DAYTIME ALLOCATION STUDY

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

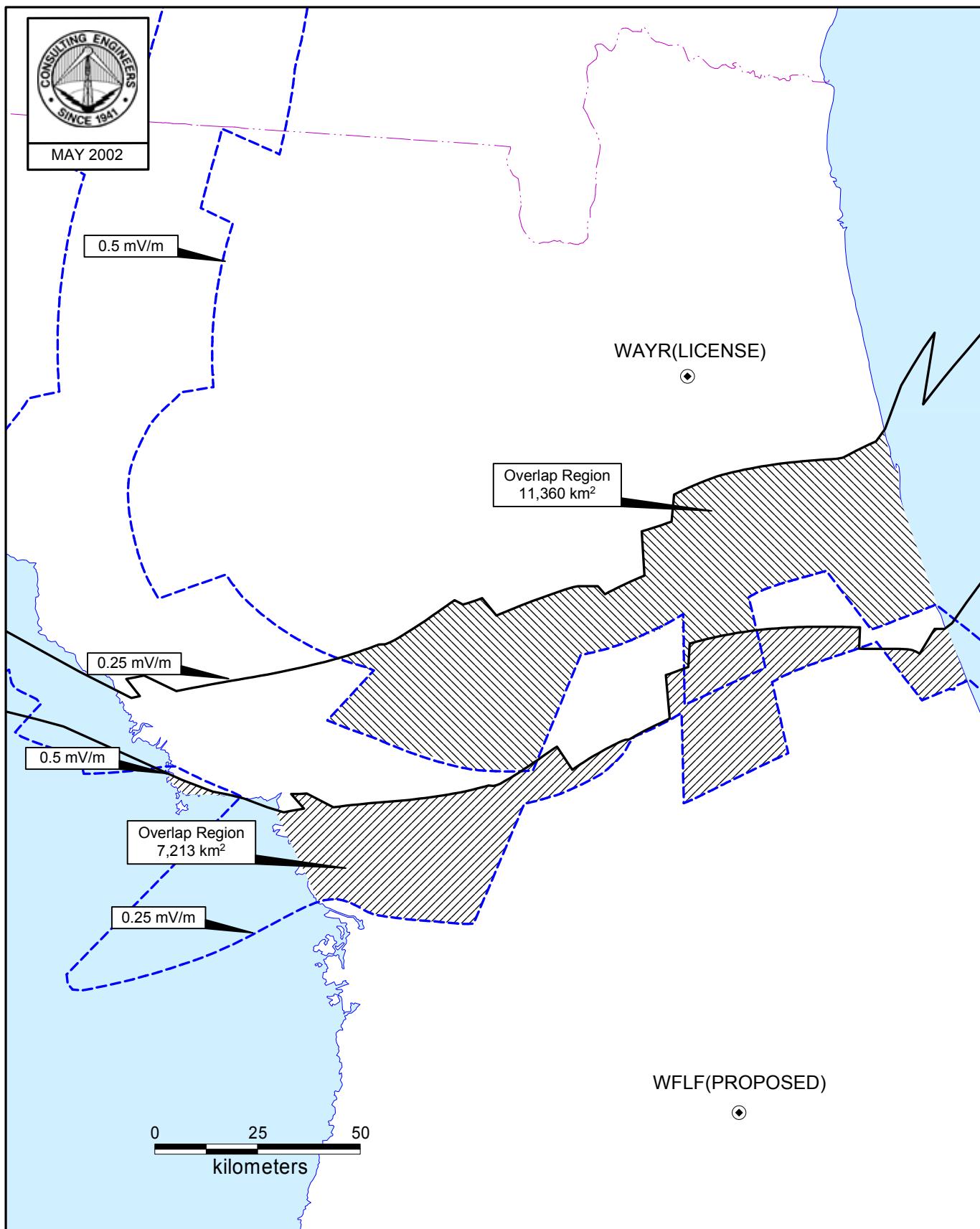
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



DAYTIME ALLOCATION STUDY

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

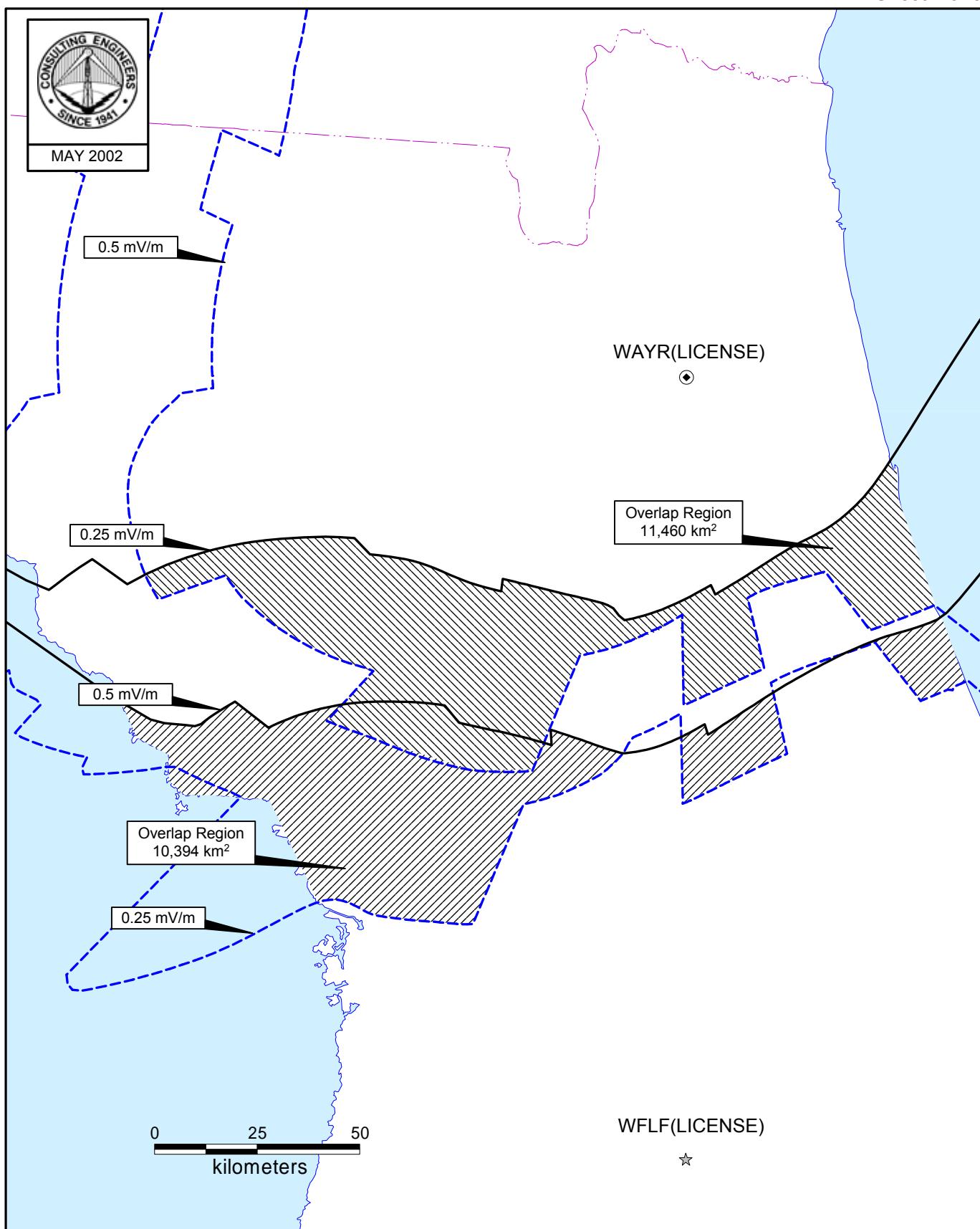
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



DAYTIME ALLOCATION STUDY

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

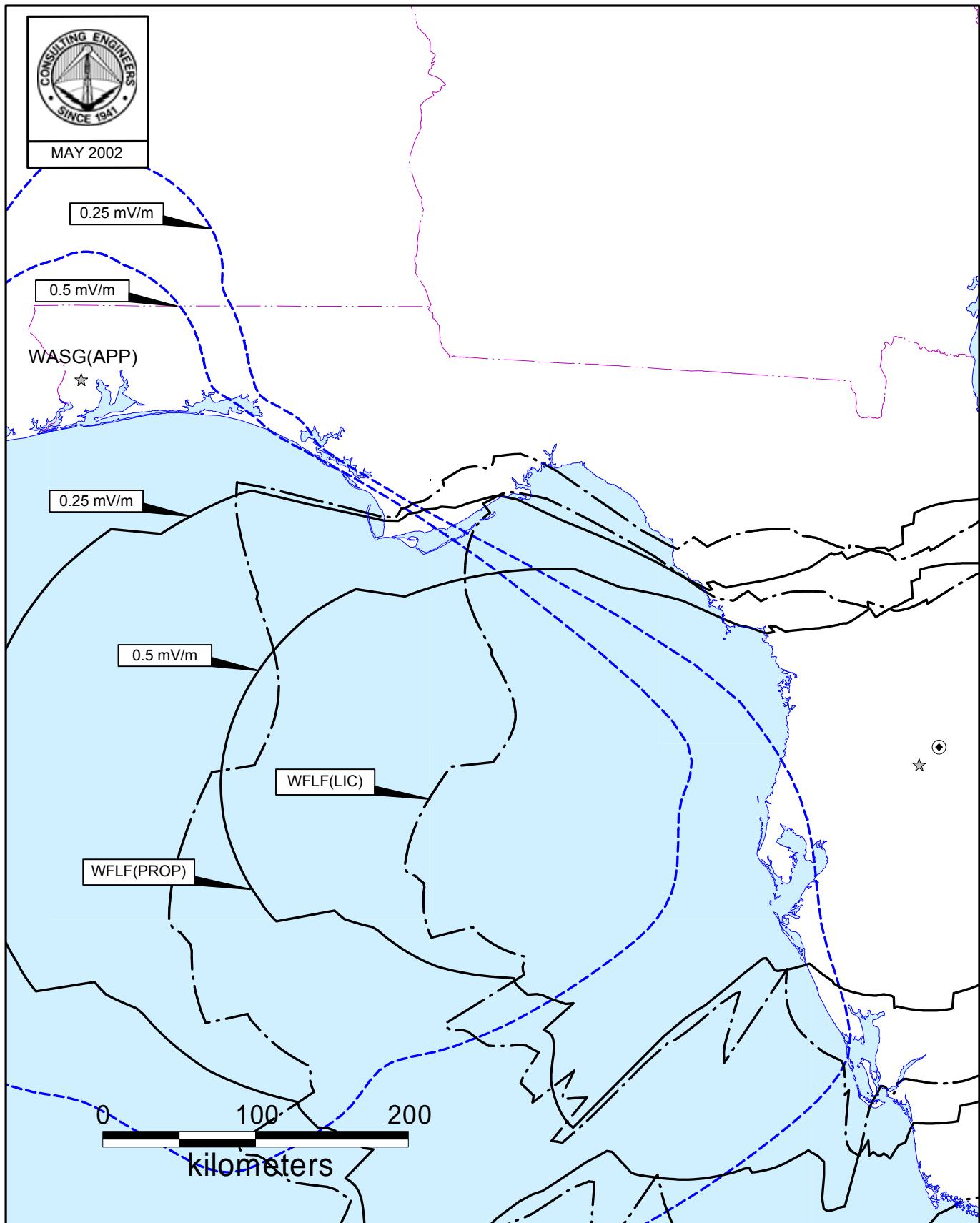
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DAYTIME ALLOCATION STUDY

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



DAYTIME ALLOCATION STUDY

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WFLF
PINE HILLS, FLORIDA

540 KHZ 50 KW-D, 46 KW-N U DA-2

Tabulation of Data Employed in
Calculation of Groundwave Contours

Figure 9
Sheet 2 of 5

Call: WFLF - PROPOSED
Pine Hills, Florida
Coordinates: 28-28-53 North 081-39-43 West
Frequency: 540 kHz

Measured Conductivity Data:

Azimuth (deg)	Region 1 (mS/m)	Distance 1 (km)	Region 2 (mS/m)	Distance 2 (km)
22-42	4	27.5	3	29
50-70	3	22	2	28.7
71-91	2.5	20	3	33
94-112	2	22	3	27
113-128	5	11.5	2	29.75
129-142	3	20	2	31.7
143-158	1.25	25	1	27.9
159-176	2	22	1.5	32.1
177-190	2	30.72		
191-204	2	19	1.5	25.65
205-224	1.5	29.72		
236-256	2	15	1.5	34.12
259-272	2	26.4		
273-286	2.5	18	2	28.76
287-305	1.5	26.45		
307-322	1.5	30.25		
323-333	1	15.5	1.5	32.24
334-350	1.5	13.5	1	23.2
354-14	1.5	15	3	29.38

Note:

1. Measured conductivity from WQTM(formerly WWNZ) Application for License, BL-19910401AC
2. FCC Figure M-3 conductivity employed along all other azimuths

Figure 9
Sheet 3 of 5

Call: WFLF - LICENSE
Pine Hills, Florida
Coordinates: 28-22-52 North 081-47-31 West
Frequency: 540 kHz

Measured Conductivity Data:

Azimuth (deg)	Region 1 (mS/m)	Distance 1 (km)	Region 2 (mS/m)	Distance 2 (km)
35-50	1.5	22	1.75	31.8
70-89	2	30	2.5	47.8
90-110	1	5	1.75	31.8
119-129	1.25	42.3		
130-144	1.25	24	1	43.6
145-160	1.75	43.1		
161-175	1.5	20	2	32.3
176-192	2	39.7		
214-229	2	20	4	52.4
230-234	2.5	19	4	50
235-242	3	23	4	52.1
243-251	3	40	2.5	47.4
252-258	3	46.3		
259-270	2	10	3	43.7
271-285	2.5	44.2		
286-301	2.5	45.7		
302-315	3	47.3		
316-332	2.5	27.9		
343-02	2.5	28.6		

Note:

1. Measured conductivity from WFLF Application for License, BL-921217AD
2. FCC Figure M-3 conductivity employed along all other azimuths

Figure 9
Sheet 4 of 5

Call: WAYR - LICENSE
Pine Hills, Florida
Coordinates: 30-04-21 North 081-47-24 West
Frequency: 550 kHz

Measured Conductivity Data:

Azimuth (deg)	Region 1 (mS/m)	Distance 1 (km)	Region 2 (mS/m)	Distance 2 (km)
11-31	4	35.7		
54-74	4	2.5	3	20.3
94-114	6	20	4	35.1
119-139	4	32.7		
145-165	1.5	38		
181-201	1	30.5		
227-247	2	23	1.5	33.2
269-289	3	19	2	31.8
299-319	3	9	1.5	33.7
329-349	2	15	1.5	34.6

Note:

1. Measured conductivity from WAYR Application for License, BL-19910727AC
2. FCC Figure M-3 conductivity employed along all other azimuths

Figure 9
Sheet 5 of 5

Call: WDAK - LICENSE
Columbus, Georgia
Coordinates: 32-25-49 North 085-03-58 West
Frequency: 540 kHz

FCC Figure M-3 conductivity employed along all azimuths

Call: WYNN - LICENSE
Florence, South Carolina
Coordinates: 34-13-05 North 079-48-30 West
Frequency: 540 kHz

FCC Figure M-3 conductivity employed along all azimuths

Call: WETC - LICENSE
Wendell-Zebulon, North Carolina
Coordinates: 35-52-09 North 078-25-56 West
Frequency: 540 kHz

FCC Figure M-3 conductivity employed along all azimuths

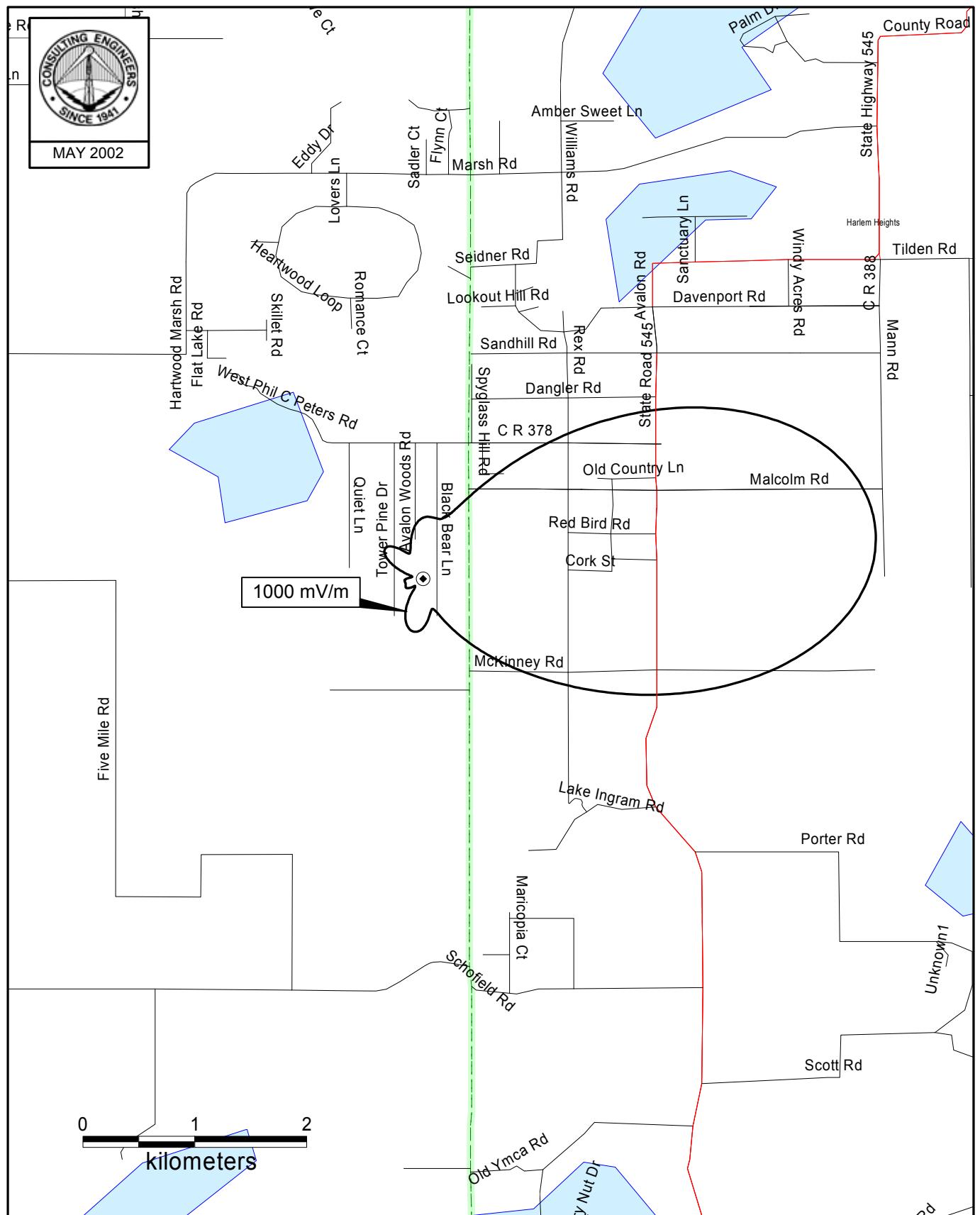
Call: CMNA
Manzanillo, Cuba
Coordinates: 20-20-00 North 077-08-00 West
Frequency: 540 kHz

FCC Figure M-3 conductivity employed along all azimuths

Call: WASG - APPLICATION
Atmore, Alabama
Coordinates: 31-00-26 North 087-32-15 West
Frequency: 550 kHz

FCC Figure M-3 conductivity employed along all azimuths

Figure 10
Sheet 1 of 2

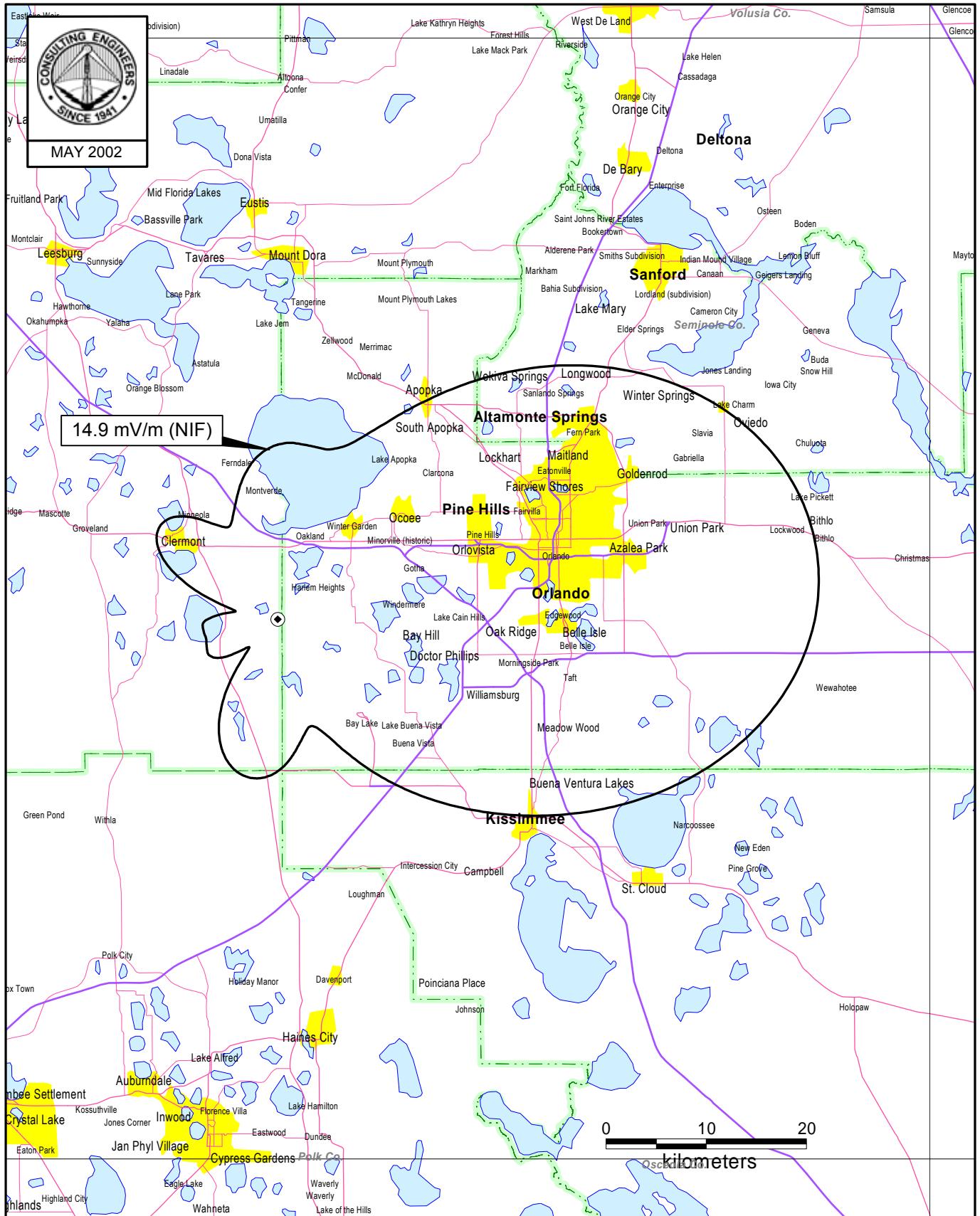


PROPOSED NIGHTTIME FIELD STRENGTH CONTOURS

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D, 46 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 10
Sheet 2 of 2



PROPOSED NIGHTTIME FIELD STRENGTH CONTOURS

RADIO STATION WFLF
PINE HILLS, FLORIDA
540 KHZ 50 KW-D. 46 KW-N U DA-2

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WFLF
PINE HILLS, FLORIDA

540 KHZ 50 KW-D, 46 KW-N U DA-2

Nighttime Allocation Study

To Station (Call) WFLF	28-28-53		081-39-43					
From Station(Call)	XEWA	WDAK	KNOE	YVOV	CJSB	HJKA	HALI	
Frequency(kHz)	540.000	540.000	540.000	540.000	540.000	540.000	540.000	
G.C. Distance(km)	2057.000	548.200	1103.200	2243.400	1928.500	2773.100	2401.300	
Slant Distance (km)	2066.665	583.552	1121.229	2252.336	1938.878	2780.297	2409.654	
Bearing degrees	66.003	142.754	111.405	335.281	197.587	344.044	227.536	
Mid-Pt Latitude(deg)	25.620	30.480	30.620	19.480	36.870	16.570	36.910	
Geo. M.P. Lat.	36.140	41.570	41.490	30.860	48.160	27.930	48.370	
Min-Angle(deg)	0.000	13.470	4.950	0.000	0.000	0.000	0.000	
Max-Angle(deg)	1.980	22.310	9.730	1.020	2.710	0.000	0.260	
Horiz. Rad (mV/m)	4513.680	357.680	622.340	1383.990	1585.770	978.600	1393.900	
Max Vert. Rad. (mV/m)	4513.675	333.749	618.783	1383.992	1585.769	978.600	1393.902	
Skywave Mult.	16.533	108.621	40.046	16.529	12.639	12.333	7.993	
Night Limit (mV/m)	14.925	7.250	4.956	4.575	4.009	2.414	2.228	
From Station(Call)	WWCS	HICM	CBK	WDUN	WRRD	XEMIT1	WDMV	
Frequency(kHz)	540.000	540.000	540.000	550.000	540.000	540.000	540.000	
G.C. Distance(km)	1319.700	1638.300	3247.300	681.500	1750.200	1735.100	1204.700	
Slant Distance (km)	1334.801	1650.423	3253.489	710.217	1761.591	1746.589	1221.230	
Bearing degrees	186.322	314.897	133.410	162.182	158.515	36.357	209.749	
Mid-Pt Latitude(deg)	34.390	23.590	40.680	31.410	35.950	22.430	33.300	
Geo. M.P. Lat.	45.590	35.010	51.120	42.540	46.950	33.300	44.610	
Min-Angle(deg)	3.250	1.330	0.000	10.390	0.760	0.830	4.100	
Max-Angle(deg)	7.280	4.600	0.000	17.780	3.820	3.920	8.500	
Horiz. Rad (mV/m)	320.180	309.500	2241.810	879.210	413.410	250.520	142.800	
Max Vert. Rad. (mV/m)	319.444	309.378	2241.810	844.238	413.318	250.486	142.354	
Skywave Mult.	27.833	24.992	3.315	81.026	16.039	23.795	33.187	
Night Limit (mV/m)	1.778	1.546	1.486	1.368	1.326	1.192	0.945	

RSS Night Limit to station

50 % Exclusion = 14.925 mV/m from XEWA
 25 % Exclusion = 17.911 mV/m from XEWA WDAK KNOE YVOV
 0 % Exclusion = 19.083

* - enters the 25% RSS calculation
 ** - enters the 50% RSS calculation

Figure 11
Sheet 2 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF LICENSE

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF
Coordinates : 28 22 52 81 47 31

Toward Station	Freq. (kHz)	GC Dist. (km)	Angles Bear. (degT)	Min (deg)	Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
DKUHB	540	7302.2	323.4	.0	.0	.22	.47	.54	.14	3162.7
KIEZ	540	3809.6	294.3	.0	.0	3.81	9.44	10.52	2.61	3415.3
WFLF	540	.0	.0	.0	.0	.00	15.14	18.02	.00	.0
WDAK	540	550.1	326.2	13.4	22.2	108.14	18.40	19.31	5.84	270.0*
KNOE	540	1097.0	297.5	5.0	9.8	40.43	25.83	25.83	6.46	798.5
WDMV	540	1285.7	18.6	3.5	7.6	29.43	25.02	27.49	6.87	1167.4
WETC	540	890.4	19.9	7.2	13.0	54.60	16.34	17.76	8.06	738.2*
WWCS	540	1332.1	5.9	3.2	7.2	27.42	13.13	13.13	3.28	598.5
WZER	540	1757.0	342.8	.7	3.8	15.98	8.60	9.07	2.27	709.4
HJKA	540	2766.5	161.5	.0	.0	1.74	10.80	10.80	5.40	15490.1
HICM	540	1640.9	129.5	3.0	3.0	7.87	7.62	7.90	3.81	2421.6
YVOV	540	2239.6	151.6	.0	.0	3.02	7.64	7.64	3.82	6321.1
XE	540	3192.8	283.6	.0	.0	3.10	15.76	15.76	7.88	12712.0
XEMIT1	540	1718.4	220.2	2.5	2.5	16.91	45.26	45.26	22.63	6689.7
CBT	540	3192.3	37.1	.0	.0	3.10	2.55	2.96	1.14	1843.8
XEWA1	540	1856.9	265.0	1.7	1.7	13.21	94.40	94.40	47.20	17865.6
NEW	540	1942.4	14.2	1.3	1.3	11.43	27.14	27.14	13.57	5936.2
CBEF	540	1535.0	356.0	3.7	3.7	24.66	6.16	7.14	3.08	624.6
CBGA-1	540	2593.2	29.1	.0	.0	5.16	17.26	18.42	8.63	8367.3
CBK	540	3250.4	329.4	.0	.0	1.11	.96	1.00	.48	2164.9
XEWA	540	2041.7	254.4	.8	.8	9.82	4.61	4.79	2.31	1174.0
CMNA	540	1011.2	151.2	8.4	8.4	25.07	4.78	5.86	2.39	477.1
KIEZ	540	3809.6	294.3	.0	.0	3.81	9.44	10.52	2.61	3415.3
WDAK	540	548.8	325.9	13.5	22.3	108.49	18.46	19.35	5.82	268.1*
WDMV	540	1284.4	17.9	3.5	7.6	29.47	24.61	27.29	6.82	1157.6
WDMV	540	1220.4	26.6	4.0	8.3	32.51	36.25	36.25	9.06	1393.9
JAFF	540	1834.4	26.1	.4	3.3	14.58	10.20	13.00	3.25	1113.9
PINE	540	2482.9	310.9	.0	.0	8.56	15.50	15.50	3.88	2263.6
TICAL	540	2068.7	186.6	.6	.6	3.77	5.48	6.08	2.74	3637.1
YSHV	540	1787.1	206.7	2.1	2.1	5.94	8.59	8.94	4.29	3614.6
MORN	540	2761.5	127.1	.0	.0	1.75	5.41	5.68	2.71	7727.9
YNDW	540	1863.9	195.2	1.7	1.7	5.20	5.07	5.64	2.53	2438.2
HOU 23	540	2213.2	181.8	.0	.0	3.13	7.35	7.63	3.67	5877.4

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 3 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF LICENSE

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF
Coordinates : 28 22 52 81 47 31

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
YVUR	540	3056.3	144.2	.0	.0	1.37	10.13	10.13	5.07	18477.0
NEW	540	4156.7	315.3	.0	.0	1.72	18.99	18.99	9.50	27527.8
NEW	540	2417.9	36.7	.0	.0	6.27	15.95	17.21	7.97	6358.9
CHIC	540	2404.5	19.6	.0	.0	6.37	28.23	31.27	14.11	11077.8
NEW	540	2404.5	19.6	.0	.0	6.37	28.23	31.27	14.11	11077.8
XEWA	540	2044.0	254.6	.7	.7	9.79	4.61	4.79	2.31	1177.1
KTZN	550	6108.4	326.9	.0	.0	.35	.97	1.28	.32	45323.5
KGME	550	2925.4	288.6	.0	.0	7.08	4.12	5.18	1.29	9132.0
KUZZ	550	3570.1	292.1	.0	.0	4.52	6.23	7.12	1.78	19682.1
KRAI	550	2704.6	306.8	.0	.0	7.29	7.59	9.50	2.37	16285.1
WAYR	550	188.1	.3	37.0	51.4	303.31	18.33	20.73	7.23	1192.6*
WDUN	550	688.7	344.5	10.3	17.6	79.88	6.06	6.93	1.73	1084.8
KMVI	550	7478.8	282.3	.0	.0	1.13	1.45	1.61	.40	17778.3
KTRS	550	1377.5	328.1	2.9	6.7	26.54	3.94	5.21	1.30	2454.9
KBOW	550	3321.7	314.4	.0	.0	4.05	5.84	7.50	1.88	23157.2
WIOZ	550	783.8	15.6	8.6	15.2	66.22	14.68	15.78	3.86	2915.1
KFYR	550	2621.0	326.7	.0	.0	6.64	2.90	3.76	.94	7076.1
WGR	550	1621.3	8.6	1.4	4.7	18.59	3.67	4.82	1.20	3238.6
WKRC	550	1206.5	349.0	4.1	8.5	32.98	3.32	4.11	1.03	1559.8
KOAC	550	4061.1	307.8	.0	.0	2.63	1.79	2.67	.67	12717.9
WPAB	550	1929.6	123.5	.0	2.7	19.19	8.70	9.02	2.26	5876.3
WLKW	550	1772.7	29.3	.6	3.7	15.84	15.99	15.99	4.00	12620.6
KCRS	550	1983.7	286.9	.0	2.4	15.03	8.50	9.79	2.45	8137.7
KTSA	550	1620.7	278.4	1.4	4.7	21.92	7.34	8.56	2.14	4884.6
WSVA	550	1150.9	12.7	4.5	9.1	35.75	15.98	16.70	4.17	5838.0
WASG	550	585.2	296.0	12.5	20.9	99.93	17.51	20.67	5.17	2584.9
KMVI	550	7478.8	282.3	.0	.0	1.13	1.45	1.61	.40	17777.3
NEW	550	3678.3	299.7	.0	.0	3.85	8.17	9.49	2.37	30787.5
WLKW	550	1772.6	29.3	.6	3.7	15.84	15.99	15.99	4.00	12620.2
WDDZ	550	1772.7	29.3	.6	3.7	15.84	15.98	15.98	4.00	12617.5
KTSA	550	1620.8	278.4	1.4	4.7	21.92	7.35	8.56	2.14	4884.8
WSAU	550	1957.1	341.5	.0	2.5	12.61	15.18	16.85	4.21	16706.1

* - enters the 25% RSS calculation
** - enters the 50% RSS calculation

Figure 11
Sheet 4 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	Dist. (km)	GC Bear. (degT)	Angles Min (deg)	Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
DKUHB	540	7300.8	323.4	.0	.0	.21	.47	.54	.14	3214.1
KIEZ	540	3816.6	294.2	.0	.0	3.79	9.44	10.52	2.61	3440.4
WFLF	540	16.9	228.8	.0	.0	.00	15.14	18.02	.00	.0
WDAK	540	548.2	324.5	13.5	22.3	108.62	18.40	19.31	5.82	266.9
KNOE	540	1103.2	296.8	4.9	9.7	40.05	25.83	25.83	6.46	806.0
WDMV	540	1271.1	18.3	3.6	7.8	29.97	25.02	27.49	6.87	1146.4
WETC	540	875.6	19.5	7.4	13.3	55.97	16.34	17.76	8.06	720.1
WWCS	540	1319.7	5.5	3.2	7.3	27.83	13.13	13.13	3.28	589.7
WZER	540	1750.2	342.4	.8	3.8	16.06	8.60	9.07	2.27	705.6
HJKA	540	2773.1	161.8	.0	.0	1.73	10.80	10.80	5.40	15577.2
HICM	540	1638.3	130.2	3.0	3.0	7.91	7.62	7.90	3.81	2408.3
YVOV	540	2243.4	152.1	.0	.0	3.01	7.64	7.64	3.82	6352.8
XE	540	3202.5	283.4	.0	.0	3.08	15.76	15.76	7.88	12798.0
XEMIT1	540	1735.1	220.4	2.4	2.4	16.38	45.26	45.26	22.63	6907.0
CBT	540	3175.8	37.1	.0	.0	3.14	2.55	2.96	1.14	1819.3
XEWA1	540	1870.6	264.7	1.6	1.6	12.91	94.40	94.40	47.20	18286.2
NEW	540	1928.5	14.0	1.3	1.3	11.70	27.14	27.14	13.57	5798.9
CBEF	540	1524.8	355.5	3.7	3.7	25.14	6.16	7.14	3.08	612.5
CBGA-1	540	2577.3	29.0	.0	.0	5.24	17.26	18.42	8.63	8228.5
CBK	540	3247.3	329.2	.0	.0	1.11	.96	1.00	.48	2159.6
XEWA	540	2057.0	254.3	.7	.7	9.62	4.61	4.79	2.31	1198.7
CMNA	540	1015.0	152.2	8.4	8.4	24.92	4.78	5.86	2.39	480.0
KIEZ	540	3816.6	294.2	.0	.0	3.79	9.44	10.52	2.61	3440.4
WDAK	540	546.9	324.2	13.5	22.4	108.95	18.46	19.35	4.84	222.0
WDMV	540	1269.9	17.6	3.6	7.8	30.01	24.61	27.29	6.82	1136.9
WDMV	540	1204.7	26.4	4.1	8.5	33.18	36.25	36.25	9.06	1365.6
JAFF	540	1818.8	26.0	.4	3.4	14.80	10.20	13.00	3.25	1098.0
PINE	540	2485.2	310.6	.0	.0	8.52	15.50	15.50	3.88	2274.0
TICAL	540	2081.3	187.0	.6	.6	3.70	5.48	6.08	2.74	3700.3
YSHV	540	1802.8	206.9	2.0	2.0	5.78	8.59	8.94	4.29	3715.1
MORN	540	2758.2	127.5	.0	.0	1.76	5.41	5.68	2.71	7705.8
YNDW	540	1878.0	195.5	1.6	1.6	5.07	5.07	5.64	2.53	2497.5
HOU 23	540	2224.8	182.2	.0	.0	3.08	7.35	7.63	3.67	5966.7

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 5 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
YVUR	540	3058.0	144.5	.0	.0	1.37	10.13	10.13	5.07	18500.3
NEW	540	4157.7	315.2	.0	.0	1.72	18.99	18.99	9.50	27542.4
NEW	540	2401.3	36.6	.0	.0	6.39	15.95	17.21	7.97	6234.3
CHIC	540	2389.8	19.4	.0	.0	6.46	28.23	31.27	14.11	10915.9
NEW	540	2389.8	19.4	.0	.0	6.46	28.23	31.27	14.11	10915.9
XEWA	540	2059.2	254.5	.7	.7	9.59	4.61	4.79	2.31	1202.0
KTZN	550	6106.0	326.9	.0	.0	.35	.97	1.28	.32	45912.1
KGME	550	2934.0	288.4	.0	.0	7.03	4.12	5.18	1.29	9204.5
KUZZ	550	3577.7	291.9	.0	.0	4.49	6.23	7.12	1.78	19828.9
KRAI	550	2708.2	306.5	.0	.0	7.25	7.59	9.50	2.37	16374.9
WAYR	550	177.3	356.0	38.7	53.0	314.12	18.33	20.73	7.23	1151.4
WDUN	550	681.5	343.3	10.4	17.8	81.03	6.06	6.93	1.73	1069.4
KMVI	550	7488.8	282.3	.0	.0	1.12	1.45	1.61	.40	17942.8
KTRS	550	1374.8	327.5	2.9	6.8	26.59	3.94	5.21	1.30	2449.8
KBOW	550	3323.0	314.2	.0	.0	4.03	5.84	7.50	1.88	23279.6
WIOZ	550	769.6	15.0	8.9	15.5	67.96	14.68	15.78	3.86	2840.6
KFYR	550	2618.7	326.4	.0	.0	6.62	2.90	3.76	.94	7088.3
WGR	550	1608.4	8.3	1.5	4.8	18.83	3.67	4.82	1.20	3197.0
WKRC	550	1198.1	348.4	4.1	8.6	33.34	3.32	4.11	1.03	1543.4
KOAC	550	4064.3	307.6	.0	.0	2.61	1.79	2.67	.67	12807.4
WPAB	550	1925.2	124.0	.0	2.7	19.23	8.70	9.02	2.26	5862.1
WLKW	550	1756.7	29.1	.7	3.8	16.08	15.99	15.99	4.00	12430.0
KCRS	550	1992.7	286.6	.0	2.3	14.90	8.50	9.79	2.45	8214.1
KTSA	550	1631.7	278.0	1.4	4.6	21.62	7.34	8.56	2.14	4951.4
WSVA	550	1137.3	12.2	4.6	9.3	36.42	15.98	16.70	4.17	5730.7
WDEV	550	1933.4	21.8	.0	2.7	12.74	5.68	6.59	1.65	6462.5
KARI	550	4154.9	314.7	.0	.0	2.11	20.71	22.16	5.54	*****
WSAU	550	1950.6	341.1	.0	2.6	12.66	15.18	16.85	4.21	16638.8
WASG	550	591.9	294.6	12.3	20.6	98.45	17.51	20.67	5.17	2623.6
KMVI	550	7488.8	282.3	.0	.0	1.12	1.45	1.61	.40	17941.9
NEW	550	3683.9	299.5	.0	.0	3.83	8.17	9.49	2.37	31003.8
WLKW	550	1756.7	29.1	.7	3.8	16.08	15.99	15.99	4.00	12429.6
WDDZ	550	1756.7	29.1	.7	3.8	16.08	15.98	15.98	4.00	12427.0
KTSA	550	1631.7	278.0	1.4	4.6	21.62	7.35	8.56	2.14	4951.6
WSAU	550	1950.6	341.1	.0	2.6	12.66	15.18	16.85	4.21	16638.8

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 6 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF LICENSE TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF
Coordinates : 28 22 52 81 47 31

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
XEW295	540	3198.3	275.4	.0	.0	3.09	.50	.50	.50	809.9
XEW300	540	3132.9	277.4	.0	.0	3.25	.50	.50	.50	769.9
XEW305	540	3061.7	279.4	.0	.0	3.43	.50	.50	.50	729.1
XEW310	540	2984.9	281.4	.0	.0	3.64	.50	.50	.50	687.3
XEW315	540	2902.8	283.4	.0	.0	3.89	.50	.50	.50	643.3
XEW317	540	2868.5	284.2	.0	.0	4.01	.50	.50	.50	624.2
XEWA00	540	1941.3	262.5	1.3	1.3	11.45	.50	.50	.50	218.3
XEWA20	540	1853.1	261.0	1.7	1.7	13.29	.50	.50	.50	188.0
XEWA40	540	1800.7	258.3	2.0	2.0	14.57	.50	.50	.50	171.6
XEWA60	540	1781.5	255.4	2.1	2.1	15.07	.50	.50	.50	165.9
XEWA80	540	1781.6	252.4	2.1	2.1	15.06	.50	.50	.50	166.0
XEW100	540	1799.9	249.1	2.0	2.0	14.59	.50	.50	.50	171.3
XEW120	540	1882.1	247.1	1.6	1.6	12.66	.50	.50	.50	197.5
XEW140	540	1972.3	244.6	1.1	1.1	10.88	.50	.50	.50	229.8
XEW160	540	2094.3	244.5	.5	.5	9.13	.50	.50	.50	273.7
XEW180	540	2200.9	246.1	.0	.0	7.98	.50	.50	.50	313.3
XEW200	540	2293.5	248.1	.0	.0	7.06	.50	.50	.50	354.3
XEW220	540	2384.6	250.4	.0	.0	6.50	.50	.50	.50	384.9
XEW240	540	2342.1	253.6	.0	.0	6.75	.50	.50	.50	370.3
XEW260	540	2327.3	256.2	.0	.0	6.84	.50	.50	.50	365.3
XEW280	540	2289.1	258.6	.0	.0	7.12	.50	.50	.50	351.4
XEW300	540	2304.8	262.8	.0	.0	6.98	.50	.50	.50	358.0
XEW320	540	2183.1	264.6	.1	.1	8.16	.50	.50	.50	306.3
XEW340	540	2053.6	266.0	.7	.7	9.66	.50	.50	.50	258.7
MEXI01	540	983.5	209.3	8.8	8.8	65.82	9.19	9.19	4.74 **	360.4
MEXI02	540	938.9	213.1	9.4	9.4	70.64	9.95	9.95	3.55 **	251.3
MEXI03	540	914.1	214.7	9.8	9.8	73.43	10.20	10.20	3.05 **	207.7
MEXI04	540	921.1	215.9	9.7	9.7	72.63	10.58	10.58	2.66 **	182.9
MEXI05	540	923.8	216.5	9.6	9.6	72.33	10.79	10.79	2.45 **	169.1
MEXI06	540	941.9	217.7	9.4	9.4	70.31	11.32	11.32	2.07 **	147.6
MEXI07	540	979.3	221.0	8.9	8.9	66.27	12.81	12.81	1.31 **	98.9
MEXI08	540	1016.6	223.1	8.4	8.4	62.43	14.04	14.04	1.02 **	81.9
MEXI09	540	1064.9	224.6	7.8	7.8	57.85	15.30	15.30	.88 **	76.0
MEXI10	540	1104.9	226.4	7.3	7.3	54.40	16.64	16.64	.83	76.5
MEXI11	540	1151.6	227.8	6.8	6.8	49.87	18.08	18.08	.90	90.5

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 7 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF LICENSE TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF
Coordinates : 28 22 52 81 47 31

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
MEXI12	540	1190.6	228.3	6.5	6.5	46.71	19.15	19.15	.96	102.4
MEXI13	540	1281.1	225.2	5.6	5.6	39.85	18.87	18.87	.94	118.3
MEXI14	540	1314.8	225.1	5.3	5.3	37.45	19.26	19.26	.96	128.6
MEXI15	540	1391.6	224.2	4.7	4.7	32.42	19.58	19.58	.98	151.0
MEXI16	540	1494.2	226.2	3.9	3.9	26.66	22.06	22.06	1.10	206.7
MEXI17	540	1589.1	228.3	3.3	3.3	22.04	24.82	24.82	1.24	281.6
MEXI18	540	1677.5	230.5	2.7	2.7	18.34	27.71	27.71	1.38	377.7
MEXI19	540	1731.1	233.8	2.4	2.4	16.51	31.18	31.18	1.56	472.2
MEXI20	540	1774.0	237.4	2.2	2.2	15.27	34.47	34.47	1.72	564.3
MEXI21	540	1761.6	241.4	2.2	2.2	15.60	36.43	36.43	1.82	583.5
MEXI22	540	1769.3	243.7	2.2	2.2	15.39	37.11	37.11	1.86	602.5
MEXI23	540	1768.2	245.8	2.2	2.2	15.42	37.62	37.62	1.88	609.8
MEXI24	540	1728.2	248.2	2.4	2.4	16.60	37.63	37.63	1.88	566.6
MEXI25	540	1750.8	249.7	2.3	2.3	15.90	37.31	37.31	1.87	586.5
MEXI26	540	1706.3	253.1	2.6	2.6	17.31	37.39	37.39	1.87	539.9
MEXI27	540	1661.7	256.6	2.8	2.8	18.93	37.64	37.64	1.88	497.0
MEXI28	540	1606.4	260.1	3.2	3.2	21.24	36.94	36.94	1.85	434.8
MEXI29	540	1541.7	263.5	3.6	3.6	24.34	35.38	35.38	1.77	363.4
MEXI30	540	1577.9	263.5	3.4	3.4	22.57	35.89	35.89	1.79	397.4
MEXI31	540	1621.8	264.6	3.1	3.1	20.57	36.15	36.15	1.81	439.3
MEXI32	540	1667.0	265.6	2.8	2.8	18.73	36.35	36.35	1.82	485.0
MEXI33	540	1694.0	266.4	2.6	2.6	17.73	36.33	36.33	1.82	512.0
MEXI34	540	1711.6	266.6	2.5	2.5	17.13	36.40	36.40	1.82	531.1
MEXI35	540	1715.4	268.0	2.5	2.5	17.01	35.84	35.84	1.79	526.7
MEXI36	540	1718.9	268.7	2.5	2.5	16.90	35.55	35.55	1.78	525.8
MEXI37	540	1737.9	269.8	2.4	2.4	16.29	35.22	35.22	1.76	540.4
MEXI38	540	1738.5	270.9	2.4	2.4	16.28	34.59	34.59	1.73	531.1
MEXI39	540	1748.8	271.5	2.3	2.3	15.95	34.27	34.27	1.71	536.8
MEXI40	540	1775.7	272.9	2.2	2.2	15.22	33.52	33.52	1.68	550.5
MEXI41	540	1782.9	273.0	2.1	2.1	15.03	33.46	33.46	1.67	556.6
MEXI42	540	1811.2	274.9	2.0	2.0	14.31	32.02	32.02	1.60	559.5
MEXI43	540	1838.8	276.7	1.8	1.8	13.63	30.14	30.14	1.51	552.8
MEXI44	540	1871.2	278.0	1.6	1.6	12.89	28.83	28.83	1.44	558.9
MEXI45	540	1895.9	279.0	1.5	1.5	12.36	27.86	27.86	1.39	563.6
MEXI46	540	1923.2	279.5	1.4	1.4	11.81	27.26	27.26	1.36	577.3

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 8 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF LICENSE TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF
Coordinates : 28 22 52 81 47 31

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
MEXI47	540	1967.1	279.5	1.1	1.1	10.97	27.08	27.08	1.35	616.9
MEXI48	540	1998.7	279.8	1.0	1.0	10.44	26.60	26.60	1.33	637.2
MEXI49	540	2032.3	279.4	.8	.8	9.95	26.91	26.91	1.35	676.0
MEXI50	540	2065.9	277.5	.6	.6	9.50	28.69	28.69	1.43	754.6
MEXI51	540	2095.5	277.1	.5	.5	9.12	28.96	28.96	1.45	793.4
MEXI52	540	2162.0	278.1	.2	.2	8.38	27.27	27.27	1.36	812.9
MEXI53	540	2227.0	280.2	.0	.0	7.71	23.79	23.79	1.19	770.8
MEXI54	540	2255.5	282.2	.0	.0	7.43	21.12	21.12	1.06	710.4
MEXI55	540	2310.2	283.1	.0	.0	6.95	19.50	19.50	.98	701.4
MEXI56	540	2352.5	284.1	.0	.0	6.69	17.70	17.70	.88	661.0
MEXI57	540	2405.7	285.2	.0	.0	6.36	15.96	15.96	.80	627.2
MEXI58	540	2448.8	285.1	.0	.0	6.04	15.40	15.40	.77	637.3
MEXI59	540	2496.1	285.1	.0	.0	5.71	14.76	14.76	.74	646.8
MEXI60	540	2543.3	285.0	.0	.0	5.43	14.09	14.09	.70	647.9
MEXI61	540	2562.2	285.1	.0	.0	5.33	13.81	13.81	.69	647.6
MEXI62	540	2561.6	284.3	.0	.0	5.33	14.46	14.46	.72	678.2
MEXI63	540	2589.7	283.9	.0	.0	5.18	14.40	14.40	.72	695.3
MEXI64	540	2637.2	283.9	.0	.0	4.94	13.65	13.65	.68	690.9
MEXI65	540	2684.7	283.9	.0	.0	4.71	12.90	12.90	.64	685.3
MEXI66	540	2732.2	283.9	.0	.0	4.51	12.16	12.16	.61	674.2
MEXI67	540	2779.6	283.9	.0	.0	4.33	11.44	11.44	.57	660.4
MEXI68	540	2827.1	283.9	.0	.0	4.15	10.73	10.73	.54	645.0
MEXI85	540	2955.5	269.3	.0	.0	3.72	19.07	19.07	.95	1279.4
MEXI86	540	2887.5	264.1	.0	.0	3.94	24.35	24.35	1.22	1545.0
MEXI87	540	2600.0	258.5	.0	.0	5.12	35.23	35.23	1.76	1718.8
MEXI88	540	2382.7	245.5	.0	.0	6.51	36.83	36.83	1.84	1414.8

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 9 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
XEW295	540	3209.9	275.2	.0	.0	3.06	.50	.50	.50	816.4
XEW300	540	3144.0	277.3	.0	.0	3.22	.50	.50	.50	776.6
XEW305	540	3072.4	279.3	.0	.0	3.40	.50	.50	.50	735.1
XEW310	540	2995.2	281.3	.0	.0	3.61	.50	.50	.50	693.2
XEW315	540	2912.6	283.2	.0	.0	3.86	.50	.50	.50	648.4
XEW317	540	2878.1	284.0	.0	.0	3.97	.50	.50	.50	629.5
XEWA00	540	1955.3	262.3	1.2	1.2	11.19	.50	.50	.50	223.5
XEWA20	540	1867.4	260.8	1.6	1.6	12.97	.50	.50	.50	192.7
XEWA40	540	1815.4	258.1	1.9	1.9	14.20	.50	.50	.50	176.1
XEWA60	540	1796.6	255.2	2.0	2.0	14.67	.50	.50	.50	170.4
XEWA80	540	1797.1	252.2	2.0	2.0	14.66	.50	.50	.50	170.5
XEW100	540	1815.8	248.9	1.9	1.9	14.19	.50	.50	.50	176.2
XEW120	540	1898.1	247.0	1.5	1.5	12.31	.50	.50	.50	203.0
XEW140	540	1988.6	244.5	1.0	1.0	10.59	.50	.50	.50	236.0
XEW160	540	2110.6	244.5	.4	.4	8.95	.50	.50	.50	279.4
XEW180	540	2217.0	246.1	.0	.0	7.81	.50	.50	.50	319.9
XEW200	540	2309.5	248.0	.0	.0	6.95	.50	.50	.50	359.5
XEW220	540	2400.3	250.3	.0	.0	6.40	.50	.50	.50	390.5
XEW240	540	2357.5	253.5	.0	.0	6.66	.50	.50	.50	375.5
XEW260	540	2342.3	256.1	.0	.0	6.75	.50	.50	.50	370.4
XEW280	540	2303.7	258.4	.0	.0	6.99	.50	.50	.50	357.6
XEW300	540	2318.8	262.7	.0	.0	6.90	.50	.50	.50	362.6
XEW320	540	2196.8	264.4	.0	.0	8.02	.50	.50	.50	311.6
XEW340	540	2067.1	265.7	.6	.6	9.49	.50	.50	.50	263.5
MEXI01	540	999.5	209.7	8.6	8.6	64.17	9.19	9.19	4.74	369.7
MEXI02	540	955.2	213.4	9.2	9.2	68.85	9.95	9.95	3.55	257.7
MEXI03	540	930.5	215.0	9.5	9.5	71.57	10.20	10.20	3.05	212.9
MEXI04	540	937.6	216.2	9.4	9.4	70.78	10.58	10.58	2.66	187.7
MEXI05	540	940.4	216.8	9.4	9.4	70.48	10.79	10.79	2.45	173.3
MEXI06	540	958.5	217.9	9.1	9.1	68.49	11.32	11.32	2.07	149.9
MEXI07	540	996.0	221.2	8.6	8.6	64.53	12.81	12.81	1.31	101.5
MEXI08	540	1033.4	223.3	8.2	8.2	60.76	14.04	14.04	1.02	84.2
MEXI09	540	1081.8	224.7	7.6	7.6	56.41	15.30	15.30	.88	78.5
MEXI10	540	1121.7	226.5	7.2	7.2	52.71	16.64	16.64	.83	78.9
MEXI11	540	1168.5	227.8	6.7	6.7	48.47	18.08	18.08	.90	93.1

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 10 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
MEXI12	540	1207.5	228.4	6.3	6.3	45.38	19.15	19.15	.96	105.4
MEXI13	540	1298.0	225.4	5.5	5.5	38.65	18.87	18.87	.94	122.0
MEXI14	540	1331.7	225.2	5.2	5.2	36.29	19.26	19.26	.96	132.7
MEXI15	540	1408.5	224.4	4.6	4.6	31.40	19.58	19.58	.98	155.9
MEXI16	540	1511.0	226.3	3.8	3.8	25.81	22.06	22.06	1.10	213.5
MEXI17	540	1606.0	228.4	3.2	3.2	21.26	24.82	24.82	1.24	291.9
MEXI18	540	1694.4	230.5	2.6	2.6	17.72	27.71	27.71	1.38	390.8
MEXI19	540	1747.9	233.8	2.3	2.3	15.98	31.18	31.18	1.56	487.8
MEXI20	540	1790.7	237.4	2.1	2.1	14.83	34.47	34.47	1.72	581.0
MEXI21	540	1778.1	241.3	2.1	2.1	15.16	36.43	36.43	1.82	600.6
MEXI22	540	1785.6	243.6	2.1	2.1	14.96	37.11	37.11	1.86	620.0
MEXI23	540	1784.3	245.7	2.1	2.1	14.99	37.62	37.62	1.88	627.2
MEXI24	540	1744.2	248.1	2.3	2.3	16.10	37.63	37.63	1.88	584.2
MEXI25	540	1766.6	249.6	2.2	2.2	15.47	37.31	37.31	1.87	602.9
MEXI26	540	1721.7	252.9	2.5	2.5	16.81	37.39	37.39	1.87	556.0
MEXI27	540	1676.7	256.4	2.7	2.7	18.37	37.64	37.64	1.88	512.3
MEXI28	540	1620.9	259.9	3.1	3.1	20.61	36.94	36.94	1.85	448.2
MEXI29	540	1555.6	263.2	3.5	3.5	23.67	35.38	35.38	1.77	373.6
MEXI30	540	1591.8	263.2	3.3	3.3	21.91	35.89	35.89	1.79	409.4
MEXI31	540	1635.5	264.4	3.0	3.0	19.98	36.15	36.15	1.81	452.1
MEXI32	540	1680.5	265.3	2.7	2.7	18.22	36.35	36.35	1.82	498.5
MEXI33	540	1707.4	266.1	2.6	2.6	17.27	36.33	36.33	1.82	525.7
MEXI34	540	1725.0	266.3	2.4	2.4	16.70	36.40	36.40	1.82	544.9
MEXI35	540	1728.5	267.7	2.4	2.4	16.59	35.84	35.84	1.79	540.1
MEXI36	540	1731.9	268.5	2.4	2.4	16.48	35.55	35.55	1.78	539.0
MEXI37	540	1750.7	269.5	2.3	2.3	15.90	35.22	35.22	1.76	553.7
MEXI38	540	1751.0	270.6	2.3	2.3	15.89	34.59	34.59	1.73	543.9
MEXI39	540	1761.3	271.2	2.2	2.2	15.61	34.27	34.27	1.71	548.6
MEXI40	540	1787.9	272.6	2.1	2.1	14.90	33.52	33.52	1.68	562.4
MEXI41	540	1795.1	272.7	2.0	2.0	14.71	33.46	33.46	1.67	568.5
MEXI42	540	1822.9	274.5	1.9	1.9	14.01	32.02	32.02	1.60	571.2
MEXI43	540	1850.2	276.4	1.7	1.7	13.36	30.14	30.14	1.51	563.9
MEXI44	540	1882.3	277.7	1.6	1.6	12.65	28.83	28.83	1.44	569.5
MEXI45	540	1906.8	278.7	1.4	1.4	12.14	27.86	27.86	1.39	573.9
MEXI46	540	1933.9	279.2	1.3	1.3	11.59	27.26	27.26	1.36	587.8

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 11 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO XEWA

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Angles Bear. (degT)	Min (deg)	Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
MEXI47	540	1977.8	279.2	1.1	1.1	10.78	27.08	27.08	1.35	627.9
MEXI48	540	2009.3	279.5	.9	.9	10.27	26.60	26.60	1.33	647.7
MEXI49	540	2043.1	279.1	.7	.7	9.80	26.91	26.91	1.35	686.0
MEXI50	540	2077.0	277.2	.6	.6	9.36	28.69	28.69	1.43	766.2
MEXI51	540	2106.8	276.8	.4	.4	8.99	28.96	28.96	1.45	804.8
MEXI52	540	2173.0	277.8	.1	.1	8.27	27.27	27.27	1.36	824.4
MEXI53	540	2237.6	279.9	.0	.0	7.61	23.79	23.79	1.19	781.4
MEXI54	540	2265.6	281.9	.0	.0	7.34	21.12	21.12	1.06	719.8
MEXI55	540	2320.1	282.8	.0	.0	6.89	19.50	19.50	.98	707.8
MEXI56	540	2362.2	283.9	.0	.0	6.63	17.70	17.70	.88	666.8
MEXI57	540	2415.1	284.9	.0	.0	6.29	15.96	15.96	.80	634.3
MEXI58	540	2458.2	284.9	.0	.0	5.97	15.40	15.40	.77	644.5
MEXI59	540	2505.5	284.8	.0	.0	5.65	14.76	14.76	.74	653.1
MEXI60	540	2552.7	284.8	.0	.0	5.38	14.09	14.09	.70	654.3
MEXI61	540	2571.6	284.8	.0	.0	5.28	13.81	13.81	.69	653.9
MEXI62	540	2571.2	284.1	.0	.0	5.28	14.46	14.46	.72	684.9
MEXI63	540	2599.4	283.6	.0	.0	5.13	14.40	14.40	.72	702.3
MEXI64	540	2646.9	283.7	.0	.0	4.89	13.65	13.65	.68	697.7
MEXI65	540	2694.4	283.7	.0	.0	4.66	12.90	12.90	.64	692.5
MEXI66	540	2741.8	283.7	.0	.0	4.47	12.16	12.16	.61	679.8
MEXI67	540	2789.3	283.7	.0	.0	4.29	11.44	11.44	.57	665.9
MEXI68	540	2836.8	283.7	.0	.0	4.12	10.73	10.73	.54	650.6
MEXI85	540	2968.4	269.1	.0	.0	3.69	19.07	19.07	.95	1292.7
MEXI86	540	2901.2	264.0	.0	.0	3.89	24.35	24.35	1.22	1563.9
MEXI87	540	2614.7	258.4	.0	.0	5.05	35.23	35.23	1.76	1744.3
MEXI88	540	2398.9	245.4	.0	.0	6.41	36.83	36.83	1.84	1435.4

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 12 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO CBK

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
CBK-00	540	4057.2	341.0	.0	.0	1.82	.50	.50	.50	1373.9
CBK-10	540	3935.6	343.2	.0	.0	1.94	.50	.50	.50	1287.6
CBK-20	540	3794.9	345.2	.0	.0	2.10	.50	.50	.50	1191.8
CBK-30	540	3637.7	346.8	.0	.0	2.31	.50	.50	.50	1083.4
CBK-40	540	3467.1	348.1	.0	.0	2.57	.50	.50	.50	972.5
CBK-50	540	3286.7	349.0	.0	.0	2.90	.50	.50	.50	860.9
CBK-60	540	3100.7	349.4	.0	.0	3.33	.50	.50	.50	751.1
CBK-70	540	2914.2	349.1	.0	.0	3.85	.50	.50	.50	649.2
CBK-80	540	2732.9	348.1	.0	.0	4.51	.50	.50	.50	554.8
CBK-90	540	2564.0	346.4	.0	.0	5.32	.50	.50	.50	470.1
CBK100	540	2415.1	343.7	.0	.0	6.29	.50	.50	.50	397.5
CBK106	540	2339.1	341.6	.0	.0	6.77	.50	.50	.50	369.3
CBK260	540	3976.5	315.8	.0	.0	1.90	.50	.50	.50	1314.5
CBK270	540	4091.8	318.0	.0	.0	1.78	.50	.50	.50	1401.5
CBK280	540	4185.5	320.4	.0	.0	1.70	.50	.50	.50	1471.3
CBK290	540	4256.1	323.0	.0	.0	1.65	.50	.50	.50	1517.7
CBK300	540	4302.4	325.6	.0	.0	1.61	.50	.50	.50	1553.4
CBK310	540	4323.7	328.3	.0	.0	1.59	.50	.50	.50	1569.9
CBK320	540	4319.7	330.9	.0	.0	1.60	.50	.50	.50	1566.8
CBK330	540	4290.4	333.6	.0	.0	1.62	.50	.50	.50	1544.0
CBK340	540	4236.3	336.2	.0	.0	1.66	.50	.50	.50	1509.8
CBK350	540	4158.2	338.7	.0	.0	1.72	.50	.50	.50	1450.5
CBK-00	540	3545.5	334.3	.0	.0	2.45	.50	.50	.50	1022.0
CBK-20	540	3435.9	336.0	.0	.0	2.62	.50	.50	.50	953.5
CBK-40	540	3305.6	337.7	.0	.0	2.87	.50	.50	.50	872.3
CBK-60	540	3142.9	337.7	.0	.0	3.22	.50	.50	.50	775.9
CBK-80	540	2986.5	336.8	.0	.0	3.63	.50	.50	.50	688.2
CBK100	540	2848.5	334.8	.0	.0	4.08	.50	.50	.50	613.2
CBK120	540	2725.7	331.9	.0	.0	4.53	.50	.50	.50	551.4
CBK140	540	2664.1	327.7	.0	.0	4.80	.50	.50	.50	520.4
CBK160	540	2778.4	324.1	.0	.0	4.33	.50	.50	.50	576.7
CBK180	540	2928.9	321.9	.0	.0	3.81	.50	.50	.50	657.0
CBK200	540	3082.2	320.4	.0	.0	3.38	.50	.50	.50	740.6
CBK220	540	3252.7	320.0	.0	.0	2.97	.50	.50	.50	840.9
CBK240	540	3432.2	320.3	.0	.0	2.63	.50	.50	.50	951.3

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

Figure 11
Sheet 13 of 14

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO CBK

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
CBK260	540	3581.5	322.1	.0	.0	2.39	.50	.50	.50	1045.6
CBK280	540	3660.2	324.8	.0	.0	2.27	.50	.50	.50	1099.0
CBK300	540	3706.9	327.4	.0	.0	2.21	.50	.50	.50	1131.6
CBK320	540	3676.7	330.0	.0	.0	2.25	.50	.50	.50	1110.6
CBK340	540	3623.6	332.3	.0	.0	2.33	.50	.50	.50	1073.8
CAN137	540	2332.4	341.5	.0	.0	6.81	1.00	1.00	.50	367.0
CAN138	540	2347.7	341.1	.0	.0	6.72	1.03	1.03	.51	382.6
CAN139	540	2383.8	340.8	.0	.0	6.50	1.09	1.09	.54	417.7
CAN140	540	2389.4	340.5	.0	.0	6.47	1.11	1.11	.55	428.4
CAN141	540	2379.3	340.4	.0	.0	6.53	1.10	1.10	.55	421.4
CAN142	540	2379.7	340.2	.0	.0	6.52	1.11	1.11	.55	424.6
CAN143	540	2412.3	339.9	.0	.0	6.31	1.16	1.16	.58	461.1
CAN144	540	2446.0	339.4	.0	.0	6.06	1.24	1.24	.62	510.6
CAN145	540	2449.6	338.8	.0	.0	6.04	1.27	1.27	.64	526.9
CAN146	540	2460.2	338.3	.0	.0	5.96	1.31	1.31	.66	550.4
CAN147	540	2488.1	337.8	.0	.0	5.76	1.38	1.38	.69	598.6
CAN148	540	2515.1	337.3	.0	.0	5.59	1.44	1.44	.72	644.5
CAN149	540	2536.4	337.5	.0	.0	5.47	1.46	1.46	.73	668.0
CAN150	540	2572.6	337.8	.0	.0	5.27	1.50	1.50	.75	713.5
CAN151	540	2591.6	337.4	.0	.0	5.17	1.55	1.55	.77	750.1
CAN152	540	2554.8	336.9	.0	.0	5.37	1.52	1.52	.76	706.0
CAN153	540	2568.3	336.4	.0	.0	5.29	1.56	1.56	.78	736.7
CAN154	540	2588.1	335.7	.0	.0	5.19	1.63	1.63	.81	783.8
CAN155	540	2608.4	335.0	.0	.0	5.08	1.70	1.70	.85	833.7
CAN156	540	2629.3	334.4	.0	.0	4.97	1.75	1.75	.88	879.5
CAN157	540	2650.7	333.7	.0	.0	4.87	1.80	1.80	.90	927.3
CAN158	540	2672.6	333.1	.0	.0	4.76	1.86	1.86	.93	975.1
CAN159	540	2695.0	332.4	.0	.0	4.65	1.91	1.91	.95	1023.8
CAN160	540	2717.8	331.8	.0	.0	4.56	1.95	1.95	.98	1068.0
CAN161	540	2741.1	331.2	.0	.0	4.47	2.00	2.00	1.00	1118.5
CAN162	540	2764.9	330.6	.0	.0	4.39	2.05	2.05	1.03	1169.9
CAN163	540	2789.1	330.0	.0	.0	4.30	2.10	2.10	1.05	1221.0
CAN164	540	2813.7	329.5	.0	.0	4.20	2.15	2.15	1.07	1277.2
CAN165	540	2838.8	328.9	.0	.0	4.11	2.20	2.20	1.10	1337.5
CAN166	540	2864.2	328.4	.0	.0	4.02	2.25	2.25	1.13	1399.1

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation

**Figure 11
Sheet 14 of 14**

duTreil, Lundin & Rackley, Inc.
Sarasota, Florida

Job Title : WFLF PROPOSED TO CBK

Frequency 540 kHz

Night Permissible Vertical Radiation From Station : WFLF-P
Coordinates : 28 28 53 81 39 43

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear. (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (uV/m)	50 % Ex-RSS (mV/m)	25 % Ex-RSS (mV/m)	Reqd. Prot. (mV/m)	Permisbl Vert-Rad mV/m@1km
CAN167	540	2890.0	327.8	.0	.0	3.93	2.29	2.29	1.15	1459.4
CAN168	540	2916.2	327.3	.0	.0	3.84	2.33	2.33	1.17	1516.5
CAN169	540	2942.8	326.8	.0	.0	3.76	2.37	2.37	1.18	1574.6
CAN170	540	2969.7	326.3	.0	.0	3.68	2.40	2.40	1.20	1628.2
CAN171	540	2997.0	325.8	.0	.0	3.60	2.42	2.42	1.21	1678.5
CAN172	540	3024.6	325.4	.0	.0	3.53	2.43	2.43	1.21	1721.1
CAN173	540	3052.6	324.9	.0	.0	3.45	2.43	2.43	1.22	1759.5
CAN174	540	3080.8	324.4	.0	.0	3.38	2.43	2.43	1.21	1794.7
CAN175	540	3109.4	324.0	.0	.0	3.31	2.41	2.41	1.21	1825.2
CAN176	540	3138.2	323.6	.0	.0	3.23	2.39	2.39	1.20	1850.9
CAN177	540	3167.4	323.2	.0	.0	3.16	2.36	2.36	1.18	1867.7
CAN178	540	3196.8	322.8	.0	.0	3.09	2.32	2.32	1.16	1877.0
CAN179	540	3226.5	322.4	.0	.0	3.03	2.28	2.28	1.14	1886.2
CAN180	540	3256.5	322.0	.0	.0	2.97	2.24	2.24	1.12	1888.6
CAN181	540	3286.7	321.6	.0	.0	2.90	2.19	2.19	1.10	1885.4
CAN182	540	3317.2	321.2	.0	.0	2.84	2.14	2.14	1.07	1880.1
CAN183	540	3347.9	320.9	.0	.0	2.78	2.09	2.09	1.04	1876.2
CAN184	540	3378.8	320.6	.0	.0	2.72	2.04	2.04	1.02	1875.1
CAN185	540	3410.0	320.2	.0	.0	2.67	1.99	1.99	1.00	1868.4
CAN186	540	3441.3	319.9	.0	.0	2.61	1.94	1.94	.97	1858.0
CAN187	540	3472.9	319.6	.0	.0	2.56	1.90	1.90	.95	1850.7
CAN188	540	3504.7	319.3	.0	.0	2.51	1.85	1.85	.92	1838.5
CAN189	540	3536.7	319.0	.0	.0	2.46	1.79	1.79	.90	1823.3
CAN190	540	3568.9	318.7	.0	.0	2.41	1.74	1.74	.87	1802.7
CAN191	540	3601.2	318.4	.0	.0	2.36	1.68	1.68	.84	1778.6
CAN192	540	3633.8	318.1	.0	.0	2.31	1.61	1.61	.81	1742.2
CAN193	540	3666.5	317.8	.0	.0	2.27	1.55	1.55	.77	1705.8
CAN194	540	3699.4	317.6	.0	.0	2.22	1.49	1.49	.74	1674.1
CAN195	540	3732.4	317.3	.0	.0	2.18	1.43	1.43	.71	1640.3
CAN196	540	3765.6	317.1	.0	.0	2.13	1.37	1.37	.68	1600.0
CAN197	540	3798.9	316.8	.0	.0	2.09	1.30	1.30	.65	1552.8
CAN198	540	3832.4	316.6	.0	.0	2.05	1.24	1.24	.62	1504.5
CAN199	540	3866.1	316.4	.0	.0	2.02	1.17	1.17	.59	1458.9
CAN200	540	3899.8	316.2	.0	.0	1.98	1.12	1.12	.56	1411.1
CAN201	540	3933.7	316.0	.0	.0	1.94	1.06	1.06	.53	1361.0

* - enters the 25% RSS calculation

** - enters the 50% RSS calculation