

**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: B

Latitude: 30-35-51 N / Longitude: 087-52-57 W

Power: 10 kW - RMS: 282.5 mV/m @1km

# Towers: 1 - Licensed Coordinates - Dashed Lines

**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: D

Latitude: 30-35-50 N / Longitude: 087-52-58 W

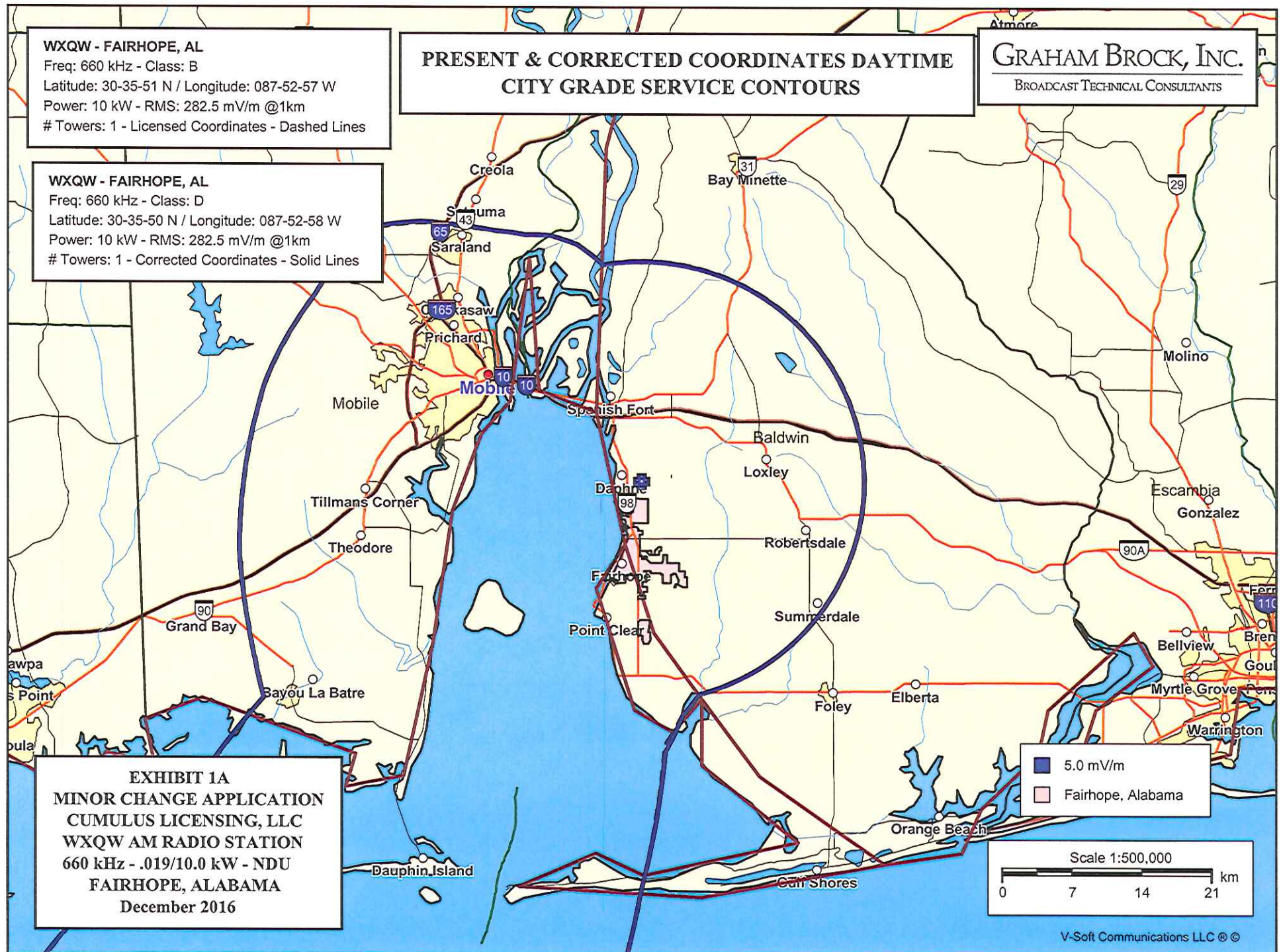
Power: 10 kW - RMS: 282.5 mV/m @1km

# Towers: 1 - Corrected Coordinates - Solid Lines

**PRESENT & CORRECTED COORDINATES DAYTIME  
CITY GRADE SERVICE CONTOURS**

**GRAHAM BROCK, INC.**

BROADCAST TECHNICAL CONSULTANTS





**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: B

Latitude: 30-35-51 N / Longitude: 087-52-57 W

Power: 0.85 kW - RMS: 282.5 mV/m @1km

# Towers: 3 - Licensed Coordinates - Dashed Lines

**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: D

Latitude: 30-35-50 N / Longitude: 087-52-58 W

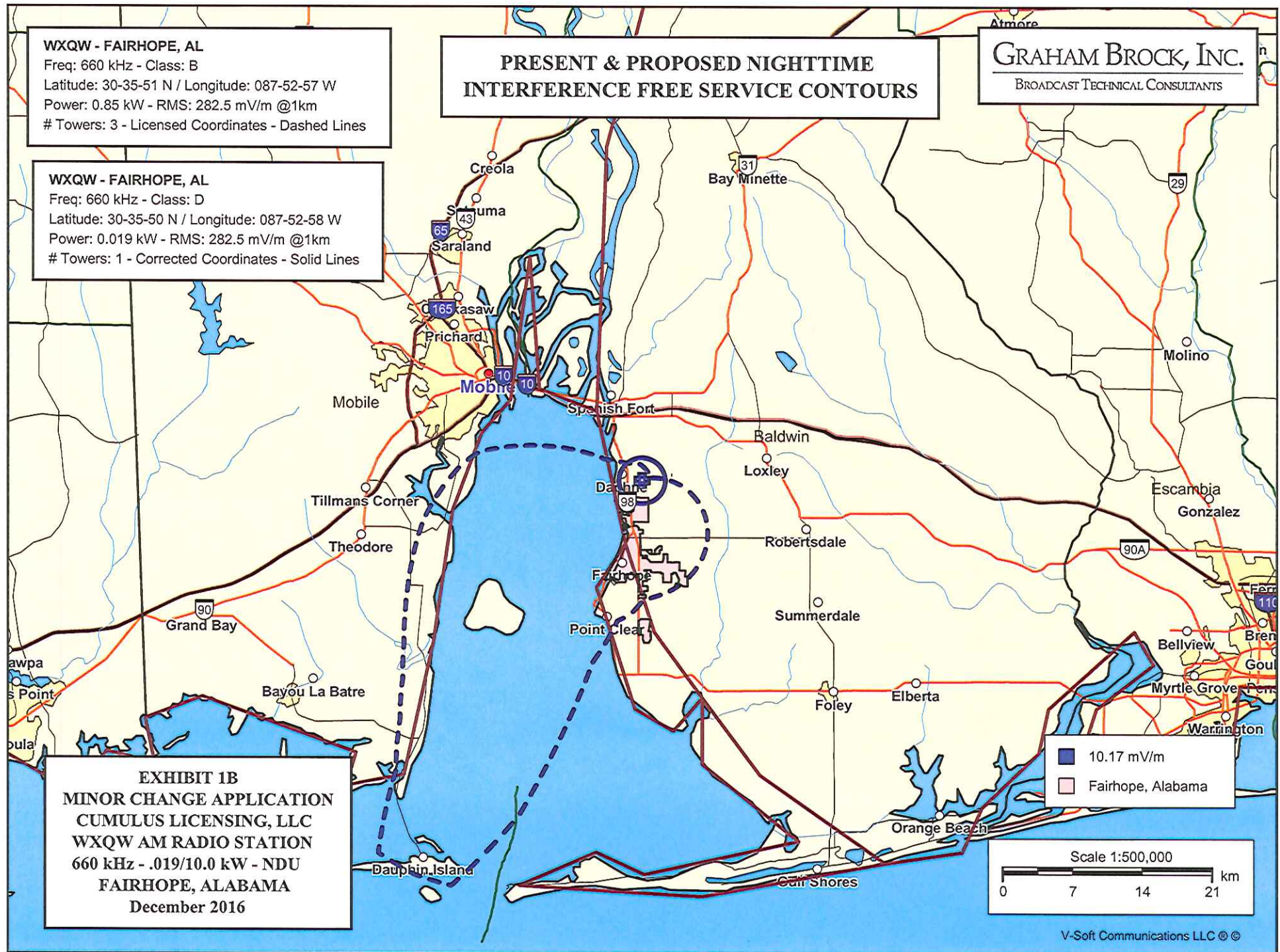
Power: 0.019 kW - RMS: 282.5 mV/m @1km

# Towers: 1 - Corrected Coordinates - Solid Lines

**PRESENT & PROPOSED NIGHTTIME  
INTERFERENCE FREE SERVICE CONTOURS**

**GRAHAM BROCK, INC.**

BROADCAST TECHNICAL CONSULTANTS



**EXHIBIT 1B**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**



**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: B

Latitude: 30-35-51 N / Longitude: 087-52-57 W

Power: 0.85 kW - RMS: 282.5 mV/m @1km

# Towers: 3 - Licensed Coordinates - Dashed Lines

**WXQW - FAIRHOPE, AL**

Freq: 660 kHz - Class: D

Latitude: 30-35-50 N / Longitude: 087-52-58 W

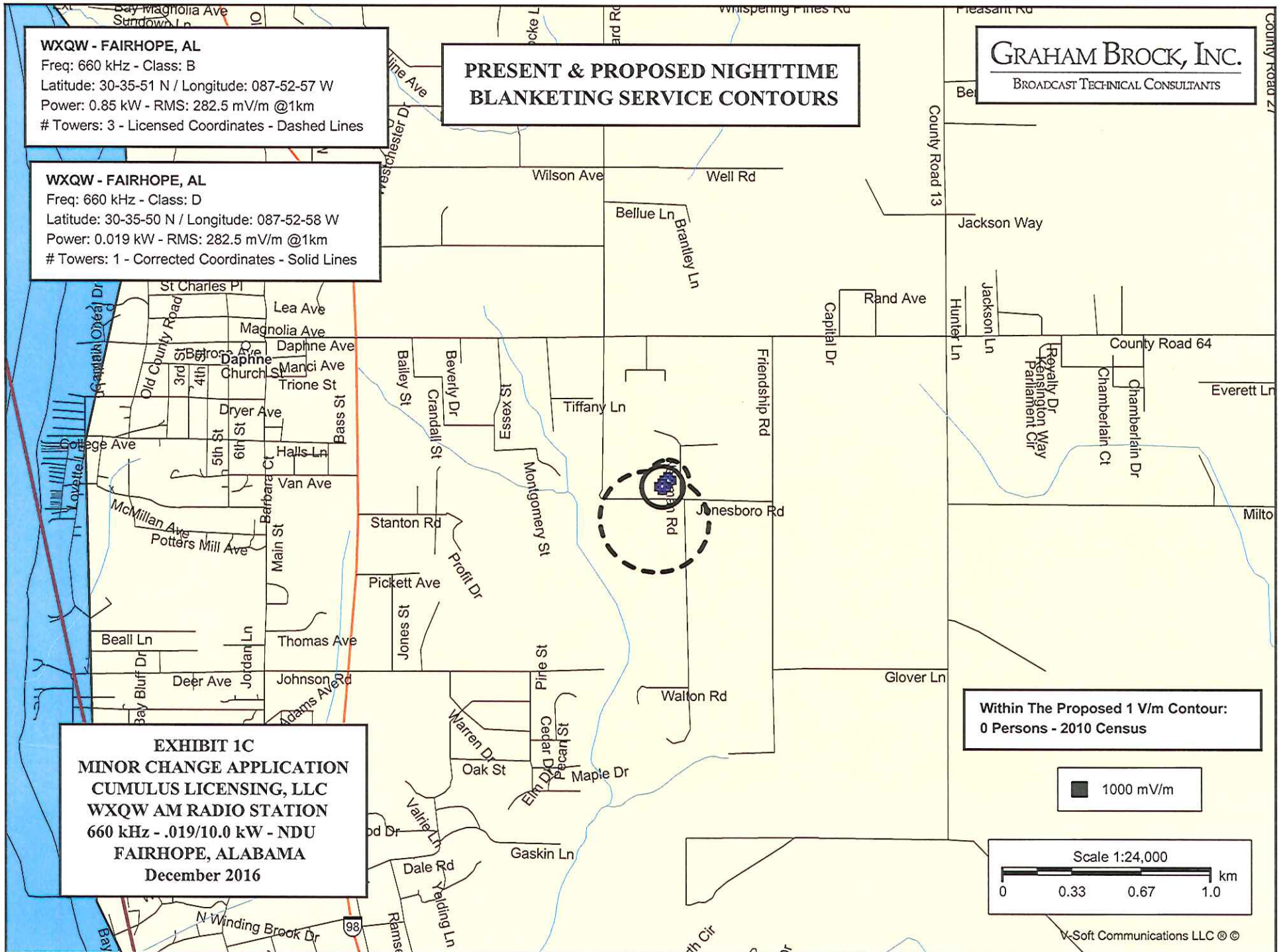
Power: 0.019 kW - RMS: 282.5 mV/m @1km

# Towers: 1 - Corrected Coordinates - Solid Lines

**PRESENT & PROPOSED NIGHTTIME  
BLANKETING SERVICE CONTOURS**

**GRAHAM BROCK, INC.**

BROADCAST TECHNICAL CONSULTANTS



**EXHIBIT 1C**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**Within The Proposed 1 V/m Contour:**  
**0 Persons - 2010 Census**

1000 mV/m

Scale 1:24,000

0 0.33 0.67 1.0 km

V-Soft Communications LLC ©

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1D**

**Proposed Daytime Service Contours**

North Latitude: 30° 35' 50"  
West Longitude: 87° 52' 58"

Azimuth	Radiation (mV/m at one km)	Distances to Contours in Kilometers :			
		Contour levels in mV/m.			
		1000.000	5.000	2.000	.500
0.0	893.34	0.70	22.19	33.98	68.97
5.0	893.34	0.70	22.19	33.98	64.02
10.0	893.34	0.70	22.19	33.98	64.02
15.0	893.34	0.70	22.19	33.98	64.02
20.0	893.34	0.70	22.19	33.98	64.02
25.0	893.34	0.70	22.19	33.98	64.02
30.0	893.34	0.70	22.19	33.98	64.02
35.0	893.34	0.70	22.19	33.98	64.02
40.0	893.34	0.70	22.19	33.98	64.02
45.0	893.34	0.70	22.19	33.98	64.02
50.0	893.34	0.70	22.19	33.98	64.02
55.0	893.34	0.70	22.19	33.98	64.02
60.0	893.34	0.70	22.19	33.98	64.02
65.0	893.34	0.70	22.19	33.98	64.02
70.0	893.34	0.70	22.19	33.98	64.02
75.0	893.34	0.70	22.19	33.98	64.02
80.0	893.34	0.70	22.19	33.98	64.02
85.0	893.34	0.70	22.19	33.98	64.02
90.0	893.34	0.70	22.19	33.98	64.02
95.0	893.34	0.70	22.19	33.98	64.02
100.0	893.34	0.70	22.19	33.98	64.02
105.0	893.34	0.70	22.19	33.98	64.02
110.0	893.34	0.70	22.19	33.98	75.54
115.0	893.34	0.70	22.19	33.98	82.82
120.0	893.34	0.70	22.19	33.98	128.44
125.0	893.34	0.70	22.19	33.98	159.18
130.0	893.34	0.70	22.19	33.98	178.82
135.0	893.34	0.70	22.19	33.98	178.69
140.0	893.34	0.70	22.19	33.98	167.43
145.0	893.34	0.70	22.19	33.98	185.72
150.0	893.34	0.70	22.19	33.98	206.81
155.0	893.34	0.70	22.19	33.98	229.82
160.0	893.34	0.70	22.19	36.00	274.84
165.0	893.34	0.70	22.19	65.74	330.51
170.0	893.34	0.70	23.86	128.84	393.61
175.0	893.34	0.70	27.29	140.84	405.61

Ground Conductivity : FCC M-3

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1D (continued)**

**Proposed Daytime Service Contours**

North Latitude: 30° 35' 50"  
West Longitude: 87° 52' 58"

Azimuth	Radiation (mV/m at one km)	Distances to Contours in Kilometers :			
		Contour levels in mV/m.			
		1000.000	5.000	2.000	.500
180.0	893.34	0.70	41.04	171.00	435.76
185.0	893.34	0.70	60.44	193.99	458.76
190.0	893.34	0.70	88.34	221.89	486.66
195.0	893.34	0.70	113.74	247.30	512.07
200.0	893.34	0.70	134.29	267.84	532.61
205.0	893.34	0.70	143.30	276.85	541.62
210.0	893.34	0.70	144.44	278.00	542.77
215.0	893.34	0.70	145.23	268.51	533.28
220.0	893.34	0.70	134.79	224.64	489.41
225.0	893.34	0.70	102.88	212.51	472.36
230.0	893.34	0.70	83.86	210.12	461.02
235.0	893.34	0.70	55.08	188.33	398.75
240.0	893.34	0.70	43.55	153.82	276.69
245.0	893.34	0.70	42.57	58.74	210.37
250.0	893.34	0.70	41.81	57.97	161.74
255.0	893.34	0.70	41.22	57.39	121.99
260.0	893.34	0.70	40.77	56.94	96.19
265.0	893.34	0.70	40.21	56.38	95.63
270.0	893.34	0.70	39.74	55.90	95.15
275.0	893.34	0.70	39.37	55.53	94.79
280.0	893.34	0.70	39.09	55.25	94.50
285.0	893.34	0.70	38.88	55.05	94.30
290.0	893.34	0.70	38.49	54.65	93.91
295.0	893.34	0.70	38.05	54.21	93.47
300.0	893.34	0.70	37.66	53.82	93.07
305.0	893.34	0.70	37.66	53.83	93.08
310.0	893.34	0.70	37.90	54.07	93.32
315.0	893.34	0.70	36.53	52.70	91.95
320.0	893.34	0.70	34.24	50.41	89.66
325.0	893.34	0.70	31.54	47.70	86.95
330.0	893.34	0.70	29.23	45.39	84.65
335.0	893.34	0.70	27.47	43.64	82.89
340.0	893.34	0.70	26.40	42.57	81.82
345.0	893.34	0.70	24.75	40.91	80.16
350.0	893.34	0.70	22.19	38.12	77.37
355.0	893.34	0.70	22.19	33.98	72.71

Ground Conductivity : FCC M-3



**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1E**

**Present Daytime Service Contours**

North Latitude: 30° 35' 51"  
West Longitude: 87° 52' 57"

Azimuth	Radiation (mV/m at one km)	Distances to Contours in Kilometers :			
		Contour levels in mV/m.			
		1000.000	5.000	2.000	.500
0.0	893.34	0.70	22.19	33.98	68.94
5.0	893.34	0.70	22.19	33.98	64.02
10.0	893.34	0.70	22.19	33.98	64.02
15.0	893.34	0.70	22.19	33.98	64.02
20.0	893.34	0.70	22.19	33.98	64.02
25.0	893.34	0.70	22.19	33.98	64.02
30.0	893.34	0.70	22.19	33.98	64.02
35.0	893.34	0.70	22.19	33.98	64.02
40.0	893.34	0.70	22.19	33.98	64.02
45.0	893.34	0.70	22.19	33.98	64.02
50.0	893.34	0.70	22.19	33.98	64.02
55.0	893.34	0.70	22.19	33.98	64.02
60.0	893.34	0.70	22.19	33.98	64.02
65.0	893.34	0.70	22.19	33.98	64.02
70.0	893.34	0.70	22.19	33.98	64.02
75.0	893.34	0.70	22.19	33.98	64.02
80.0	893.34	0.70	22.19	33.98	64.02
85.0	893.34	0.70	22.19	33.98	64.02
90.0	893.34	0.70	22.19	33.98	64.02
95.0	893.34	0.70	22.19	33.98	64.02
100.0	893.34	0.70	22.19	33.98	64.02
105.0	893.34	0.70	22.19	33.98	64.02
110.0	893.34	0.70	22.19	33.98	75.60
115.0	893.34	0.70	22.19	33.98	82.62
120.0	893.34	0.70	22.19	33.98	128.25
125.0	893.34	0.70	22.19	33.98	158.80
130.0	893.34	0.70	22.19	33.98	178.79
135.0	893.34	0.70	22.19	33.98	178.80
140.0	893.34	0.70	22.19	33.98	167.19
145.0	893.34	0.70	22.19	33.98	185.48
150.0	893.34	0.70	22.19	33.98	206.42
155.0	893.34	0.70	22.19	33.98	229.44
160.0	893.34	0.70	22.19	35.74	273.91
165.0	893.34	0.70	22.19	64.15	328.92
170.0	893.34	0.70	23.82	128.50	393.27
175.0	893.34	0.70	26.68	140.17	404.93

Ground Conductivity : FCC M-3

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1E (continued)**

North Latitude: 30° 35' 51"  
West Longitude: 87° 52' 57"

Azimuth	Radiation (mV/m at one km)	Distances to Contours in Kilometers :			
		Contour levels in mV/m.			
		1000.000	5.000	2.000	.500
180.0	893.34	0.70	40.98	170.32	435.09
185.0	893.34	0.70	59.65	193.21	457.98
190.0	893.34	0.70	87.65	221.20	485.97
195.0	893.34	0.70	112.98	246.54	511.31
200.0	893.34	0.70	133.85	267.41	532.18
205.0	893.34	0.70	143.16	276.72	541.49
210.0	893.34	0.70	144.33	277.89	542.66
215.0	893.34	0.70	145.14	268.45	533.22
220.0	893.34	0.70	134.70	224.56	489.32
225.0	893.34	0.70	102.76	212.49	472.24
230.0	893.34	0.70	83.64	210.07	460.82
235.0	893.34	0.70	54.81	188.06	398.49
240.0	893.34	0.70	43.56	153.37	276.53
245.0	893.34	0.70	42.57	58.74	210.27
250.0	893.34	0.70	41.81	57.98	160.91
255.0	893.34	0.70	41.22	57.39	121.77
260.0	893.34	0.70	40.77	56.94	96.19
265.0	893.34	0.70	40.21	56.37	95.63
270.0	893.34	0.70	39.73	55.90	95.15
275.0	893.34	0.70	39.36	55.53	94.78
280.0	893.34	0.70	39.08	55.24	94.50
285.0	893.34	0.70	38.87	55.04	94.29
290.0	893.34	0.70	38.47	54.63	93.88
295.0	893.34	0.70	38.02	54.19	93.44
300.0	893.34	0.70	37.63	53.79	93.05
305.0	893.34	0.70	37.65	53.81	93.06
310.0	893.34	0.70	37.88	54.05	93.30
315.0	893.34	0.70	36.41	52.58	91.83
320.0	893.34	0.70	34.11	50.27	89.52
325.0	893.34	0.70	31.38	47.54	86.79
330.0	893.34	0.70	29.18	45.35	84.60
335.0	893.34	0.70	27.45	43.61	82.86
340.0	893.34	0.70	26.37	42.54	81.79
345.0	893.34	0.70	24.71	40.87	80.13
350.0	893.34	0.70	22.19	38.07	77.32
355.0	893.34	0.70	22.19	33.98	72.70

Ground Conductivity: FCC M-3

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1F**

**Proposed Nighttime Service Contours**

North Latitude: 30° 35' 50"  
West Longitude: 87° 52' 58"

Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:		Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:	
		1000.000	* 10.168			1000.000	* 10.168
0.0	38.94	0.10	2.31	180.0	38.94	0.10	2.31
5.0	38.94	0.10	2.31	185.0	38.94	0.10	2.31
10.0	38.94	0.10	2.31	190.0	38.94	0.10	2.31
15.0	38.94	0.10	2.31	195.0	38.94	0.10	2.31
20.0	38.94	0.10	2.31	200.0	38.94	0.10	2.31
25.0	38.94	0.10	2.31	205.0	38.94	0.10	2.31
30.0	38.94	0.10	2.31	210.0	38.94	0.10	2.31
35.0	38.94	0.10	2.31	215.0	38.94	0.10	2.31
40.0	38.94	0.10	2.31	220.0	38.94	0.10	2.31
45.0	38.94	0.10	2.31	225.0	38.94	0.10	2.31
50.0	38.94	0.10	2.31	230.0	38.94	0.10	2.31
55.0	38.94	0.10	2.31	235.0	38.94	0.10	2.31
60.0	38.94	0.10	2.31	240.0	38.94	0.10	2.31
65.0	38.94	0.10	2.31	245.0	38.94	0.10	2.31
70.0	38.94	0.10	2.31	250.0	38.94	0.10	2.31
75.0	38.94	0.10	2.31	255.0	38.94	0.10	2.31
80.0	38.94	0.10	2.31	260.0	38.94	0.10	2.31
85.0	38.94	0.10	2.31	265.0	38.94	0.10	2.31
90.0	38.94	0.10	2.31	270.0	38.94	0.10	2.31
95.0	38.94	0.10	2.31	275.0	38.94	0.10	2.31
100.0	38.94	0.10	2.31	280.0	38.94	0.10	2.31
105.0	38.94	0.10	2.31	285.0	38.94	0.10	2.31
110.0	38.94	0.10	2.31	290.0	38.94	0.10	2.31
115.0	38.94	0.10	2.31	295.0	38.94	0.10	2.31
120.0	38.94	0.10	2.31	300.0	38.94	0.10	2.31
125.0	38.94	0.10	2.31	305.0	38.94	0.10	2.31
130.0	38.94	0.10	2.31	310.0	38.94	0.10	2.31
135.0	38.94	0.10	2.31	315.0	38.94	0.10	2.31
140.0	38.94	0.10	2.31	320.0	38.94	0.10	2.31
145.0	38.94	0.10	2.31	325.0	38.94	0.10	2.31
150.0	38.94	0.10	2.31	330.0	38.94	0.10	2.31
155.0	38.94	0.10	2.31	335.0	38.94	0.10	2.31
160.0	38.94	0.10	2.31	340.0	38.94	0.10	2.31
165.0	38.94	0.10	2.31	345.0	38.94	0.10	2.31
170.0	38.94	0.10	2.31	350.0	38.94	0.10	2.31
175.0	38.94	0.10	2.31	355.0	38.94	0.10	2.31

\* - Nighttime Interference Free Contour

GROUND CONDUCTIVITY: FCC M-3



**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1G**

**Present Nighttime Service Contours**

North Latitude: 30° 35' 51"  
West Longitude: 87° 52' 57"

Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:		Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:	
		1000.000	* 10.168			1000.000	* 10.168
0.0	22.01	0.10	1.48	180.0	525.45	0.44	12.18
5.0	20.12	0.10	1.37	185.0	534.60	0.44	13.53
10.0	18.52	0.10	1.28	190.0	540.83	0.45	14.40
15.0	17.17	0.10	1.21	195.0	544.20	0.45	18.93
20.0	15.98	0.10	1.14	200.0	544.72	0.45	35.97
25.0	14.95	0.10	1.07	205.0	542.41	0.45	45.08
30.0	14.13	0.10	1.02	210.0	537.26	0.45	45.78
35.0	13.69	0.10	1.00	215.0	529.24	0.44	45.87
40.0	13.74	0.10	1.00	220.0	518.31	0.43	38.21
45.0	14.20	0.10	1.03	225.0	504.45	0.42	34.16
50.0	14.77	0.10	1.06	230.0	487.63	0.41	31.18
55.0	15.02	0.10	1.08	235.0	467.88	0.39	29.02
60.0	14.55	0.10	1.05	240.0	445.28	0.38	27.31
65.0	13.24	0.10	0.97	245.0	419.97	0.36	25.81
70.0	11.87	0.10	0.88	250.0	392.17	0.34	24.47
75.0	13.31	0.10	0.97	255.0	362.22	0.31	23.23
80.0	20.35	0.10	1.39	260.0	330.54	0.29	22.05
85.0	32.52	0.10	2.01	265.0	297.63	0.26	20.69
90.0	48.90	0.10	2.73	270.0	264.08	0.23	19.35
95.0	69.06	0.10	3.50	275.0	230.57	0.20	18.05
100.0	92.70	0.10	4.28	280.0	197.78	0.18	16.48
105.0	119.46	0.11	5.06	285.0	166.41	0.15	13.23
110.0	148.91	0.14	5.82	290.0	137.17	0.13	10.10
115.0	180.50	0.16	6.55	295.0	110.71	0.10	7.13
120.0	213.63	0.19	7.25	300.0	87.65	0.10	4.33
125.0	247.65	0.22	7.90	305.0	68.55	0.10	3.48
130.0	281.87	0.25	8.52	310.0	53.85	0.10	2.93
135.0	315.65	0.27	9.08	315.0	43.75	0.10	2.52
140.0	348.36	0.30	9.59	320.0	37.83	0.10	2.26
145.0	379.46	0.33	10.06	325.0	34.88	0.10	2.12
150.0	408.51	0.35	10.47	330.0	33.37	0.10	2.05
155.0	435.13	0.37	10.84	335.0	32.14	0.10	1.99
160.0	459.07	0.39	11.15	340.0	30.63	0.10	1.92
165.0	480.14	0.40	11.42	345.0	28.71	0.10	1.82
170.0	498.24	0.42	11.65	350.0	26.48	0.10	1.71
175.0	513.34	0.43	11.84	355.0	24.18	0.10	1.59

\* - Nighttime Interference Free Contour  
Ground Conductivity - FCC M-3



**WXQW**

Property Plat & Ground System

**EXHIBIT #1H**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**Extent of Ground System**

Google Earth

1000 ft

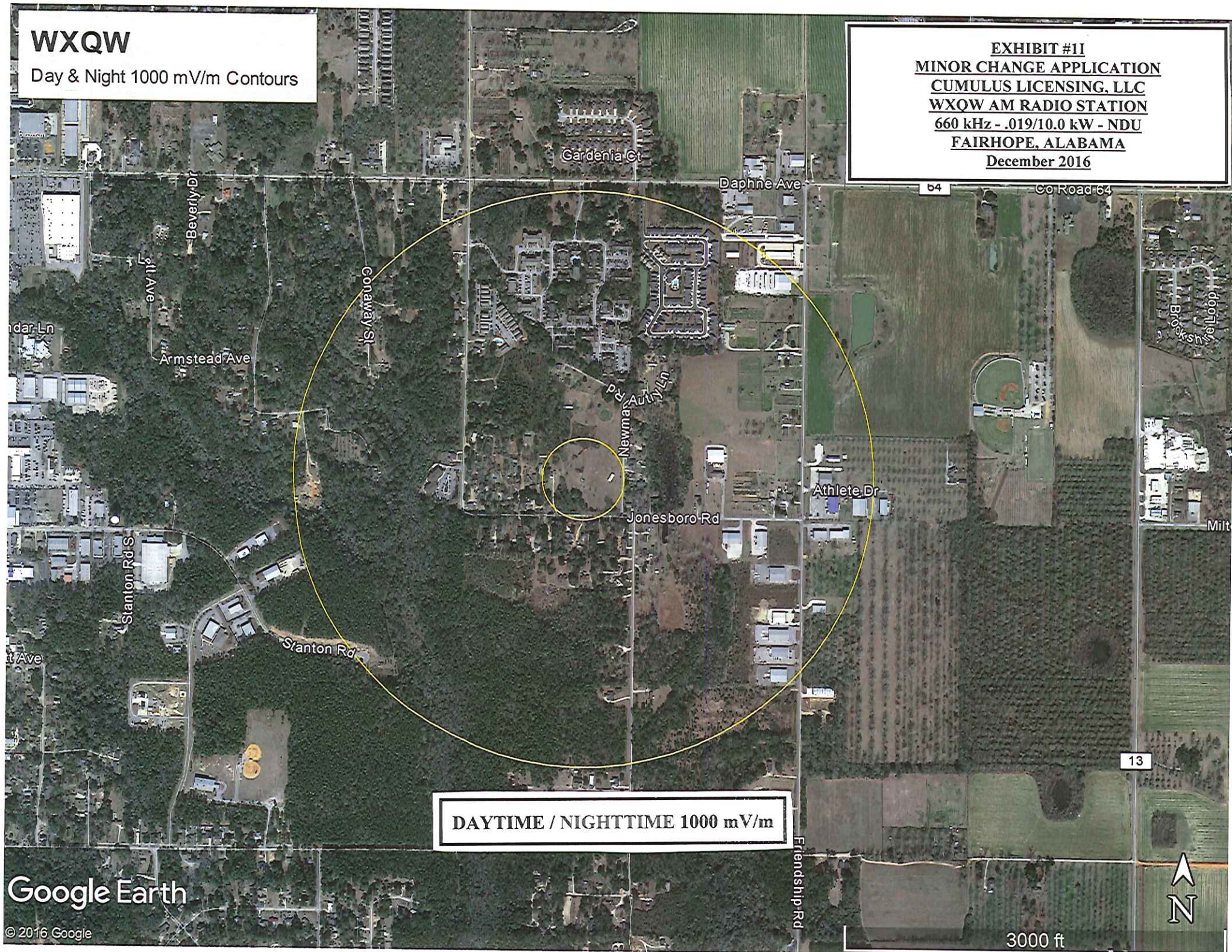




**WXQW**

Day & Night 1000 mV/m Contours

**EXHIBIT #11**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**



**DAYTIME / NIGHTTIME 1000 mV/m**

Google Earth

© 2016 Google

3000 ft



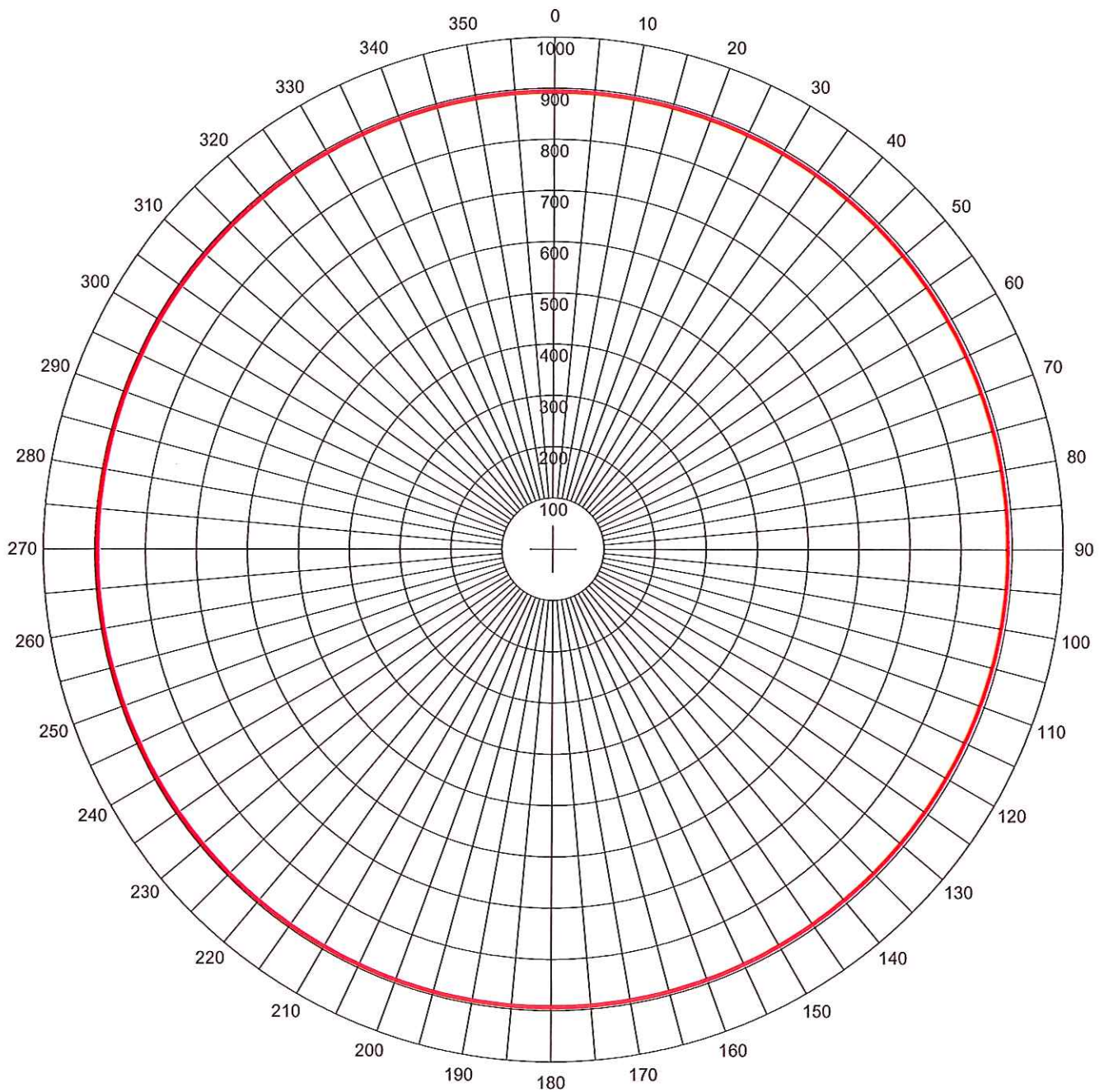
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**EXHIBIT #1J**

ID Stations Study at 30 35 50 N, 87 52 58 W, Search Distance = 16 km

Call	Service	City	State	Chan.	Power	Coordinates		Dist-km	Azimuth	File Number
AM										
WXQW	D	FAIRHOPE	AL	660	0010.000kW	303551N	875257W	000.0	040.4	BL19961216AF
WABF	D	FAIRHOPE	AL	1220	0001.000kW	303039N	875413W	009.8	191.7	BL20020114ABF
WMOB	D	MOBILE	AL	1360	0009.000kW	304054N	880002W	014.7	309.8	BMM120140328ALF
FM										
WYFR-L	L	Fairhope	AL	210L1	0000.100kW	303335N	875333W	004.3	192.6	BLL20160926ABH
WHEX-L	L	Mobile	AL	284L1	0000.020kW	303933N	875333W	006.9	352.3	BNPL20131021ABQ
W214BN	X	Malbis	AL	214D	0000.013kW	303944N	875008W	008.5	032.0	BLFT20010320ABY
W214BN	X	Malbis	AL	214D	0000.019kW	304036N	875418W	009.1	346.5	BFPT20130712AAX
W295BB	X	Fairhope	AL	295D	0000.099kW	303039N	875413W	009.8	191.7	BLFT20130528AAB
W277CS	X	Spanish Fort	AL	277D	0000.250kW	304045N	875024W	010.0	024.2	BLFT20150504AAH
WBHYFM	M	Mobile	AL	203C1	0033.000kW	304055N	874941W	010.8	029.0	BLD19920401KB
WHIL	M	Mobile	AL	217C	0100.000kW	304120N	874949W	011.3	026.2	BLD19950728KE
WRKH	M	Mobile	AL	241C	0077.000kW	304120N	874949W	011.3	026.2	BMLH20130123AEQ
WABD	M	Mobile	AL	248C	0100.000kW	304120N	874949W	011.3	026.2	BLH19890412KB
WMXC	M	Mobile	AL	260C	0100.000kW	304120N	874949W	011.3	026.2	BMLH20130123AEM
TV										
WEIQ-D	T	Mobile	AL	41 3E	0464.000kW	303933N	875333W	006.9	352.3	BLD20101119AFA
W32EM-	G	Lumberton	MS	32 D	0006.000kW	304036N	875418W	009.1	346.5	BLANK0000014032
WGOX-L	G	Crestview	FL	43 D	0015.000kW	304045N	875024W	010.0	024.2	BLANK0000010659
AP922	G	Mobile	AL	44 D	0010.000kW	303001N	875420W	011.0	191.4	BDCCDTL20121026A
WKRQ-D	T	Mobile	AL	27 3C	1000.000kW	304120N	874949W	011.3	026.2	BLCDT20100125ADI
WFNA-D	T	Gulf Shores	AL	25 3C	1000.000kW	304116N	874754W	012.9	038.7	BLCDT20100614AQJ
WALA-D	T	Mobile	AL	09 3C	0029.000kW	304117N	874754W	012.9	038.6	BLCDT20050316ADI





Erss = 893.34 mV/m@1km  
 Theo RMS: 893.343 mV/m@1km

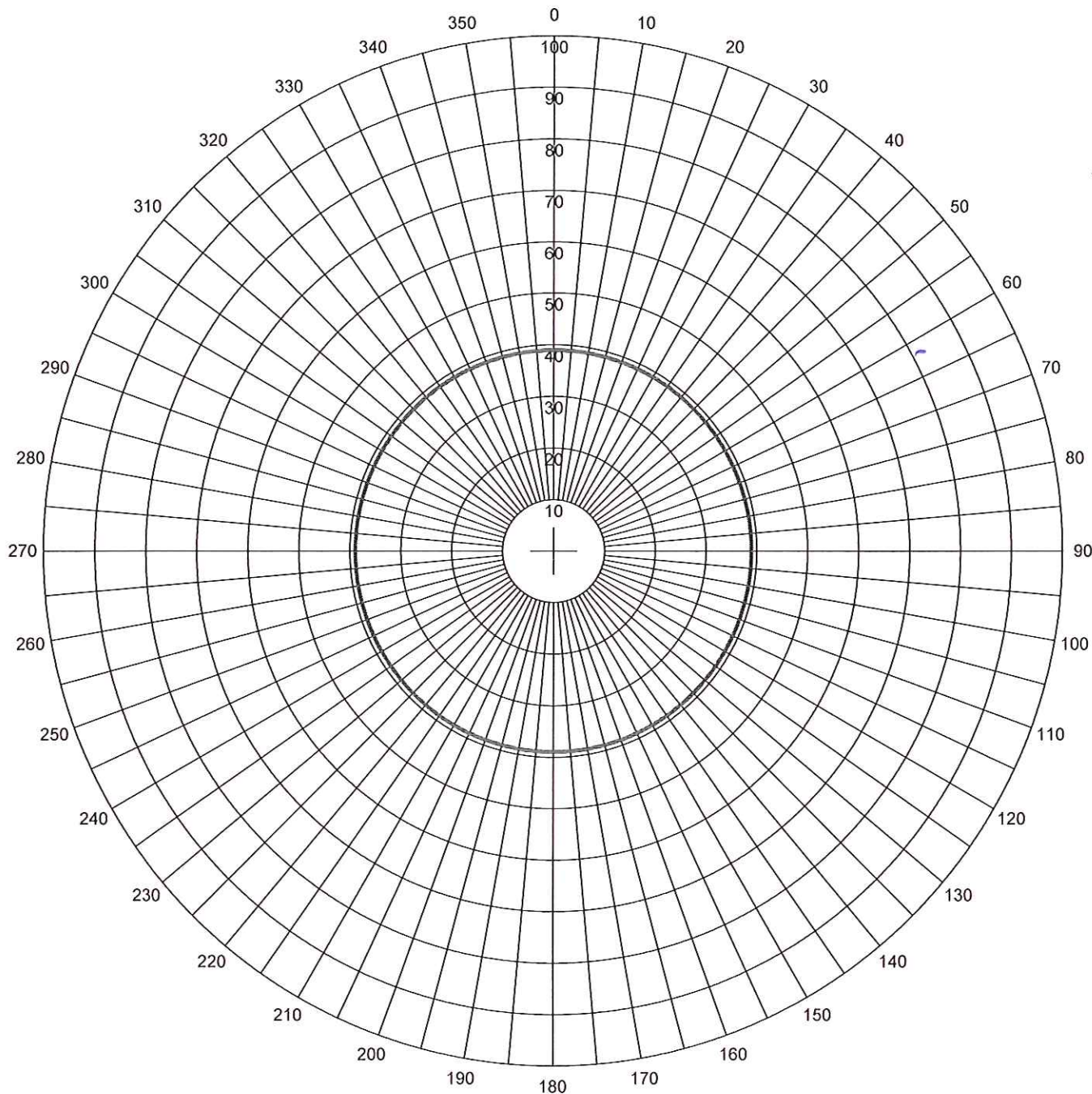
Theoretical Horizontal Plane Pattern

— Pattern (mV/m @ 1km)  
 — Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	-999.0	0	1	51.2	15.0	0.0	0.0

**EXHIBIT #1K**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

Call: WXQW  
 Freq: 660 kHz  
 FAIRHOPE, AL, US  
 Hours: D  
 Lat: 30-35-50 N  
 Lng: 087-52-58 W  
 Power: 10.0 kW  
 Theo RMS: 282.50 mV/m@1km



Erss = 38.94 mV/m@1km  
 Theo RMS: 38.94 mV/m@1km

Theoretical Horizontal Plane Pattern

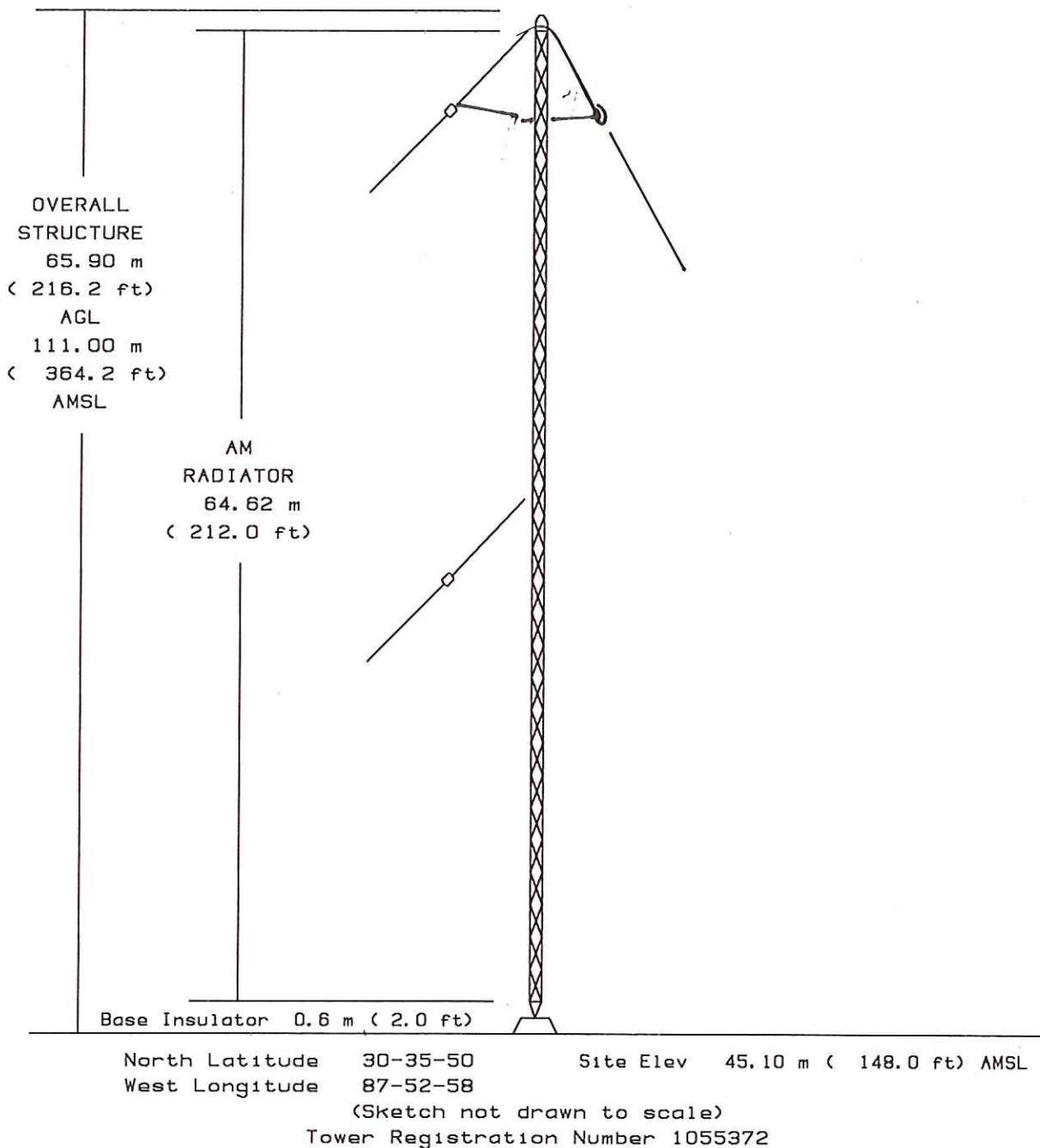
—— Pattern (mV/m @ 1km)  
 —— Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	-999.0	0	1	51.2	15.0	0.0	0.0

Call: WXQW  
 Freq: 660 kHz  
 FAIRHOPE, AL, US  
 Hours: D  
 Lat: 30-35-50 N  
 Lng: 087-52-58 W  
 Power: 0.019 kW  
 Theo RMS: 282.50 mV/m@1km

**EXHIBIT #1L**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**





### VERTICAL PLAN SKETCH

SITE ELEVATION - 45 m ( 148 ft) AMSL  
TOP OF STRUCTURE - 66 m ( 216 ft) AGL  
111 m ( 364 ft) AMSL  
AM Radiator - 65 m ( 212 ft)

FIGURES ROUNDED TO NEAREST METER (FOOT).

EXHIBIT #1M  
MINOR CHANGE APPLICATION  
CUMULUS LICENSING, LLC  
WXQW AM RADIO STATION  
660 kHz - .019/10.0 kW - NDU  
FAIRHOPE, ALABAMA  
December 2016

**GRAHAM BROCK, INC.**

BROADCAST TECHNICAL CONSULTANTS

**EXHIBIT #1N**  
**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING, LLC**  
**WXQW AM RADIO STATION**  
**660 kHz - .019/10.0 kW - NDU**  
**FAIRHOPE, ALABAMA**  
**December 2016**

**Registration Detail**

Reg Number	1055372	Status	Constructed
File Number	A0976675	Constructed	05/01/1988
EMI	No	Dismantled	
NEPA	No		

**Antenna Structure**

Structure Type 3TA1 - Antenna Tower Array - 1st N = # towers 2nd N =

**Location** (in NAD83 Coordinates)

Lat/Long	30-35-51.0 N 087-52-58.0 W	Address	TWR 1 - 104 NEWMAN LANE
City, State	DAPHNE , AL		
Zip	36526	County	BALDWIN
Center of AM Array	30-35-52.0 N 087-52-57.0 W	Position of Tower in Array	

**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
45.1	65.9
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
111.0	65.1

**Painting and Lighting Specifications**

FAA Chapters 3, 4, 5, 13

Paint and Light in Accordance with FAA Circular Number 70/7460-1J

**FAA Notification**

FAA Study	98-ASO-4637-OE	FAA Issue Date	07/24/1998
-----------	----------------	----------------	------------

**Owner & Contact Information**

FRN	0008321234	Owner Entity Type	Limited Liability Company
Assignor FRN	0024789356	Assignor ID	L01961766

**Owner**

Cumulus Broadcasting LLC  
Attention To: Gary Kline  
3280 Peachtree Road, NW  
Suite 2300  
Atlanta , GA 30305

P: (404)949-0700  
F:  
E: gary.kline@cumulus.com

**Contact**

P:  
F:  
E:

**Last Action Status**

Status	Constructed	Received	08/03/2015
Purpose	Change Owner	Entered	08/03/2015
Mode	Interactive		



#### Related Applications

08/03/2015      A0976675 - Change Owner (OC)

08/19/1998      A0065105 - New (NE)

α

#### Comments

##### Comments

None

α

#### History

##### Date

##### Event

08/04/2015

Registration Printed

08/04/2015

Change of Ownership Letter Sent

08/03/2015

Change of Ownership Received

All History (4)

α

#### Automated Letters

08/04/2015

Authorization, Reference

08/04/2015

Ownership Change, Reference 873861

α

MINOR CHANGE APPLICATION  
CUMULUS LICENSING, LLC  
WXQW AM RADIO STATION  
660 kHz - .019/10.0 kW - NDU  
FAIRHOPE, ALABAMA  
December 2016

EXHIBIT #10

NADCON

North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

=====

Transformation #: 1      Region: Conus

	Latitude	Longitude
NAD 27 datum values:	30 35 50.30754	87 52 58.02515
NAD 83 datum values:	30 35 51.00000	87 52 58.00000
NAD 27 - NAD 83 shift values:	-0.69246	0.02515(secs.)
	-21.324	0.670 (meters)
Magnitude of total shift:		21.335(meters)