
Proposed Minor Construction Permit Modification Application

The proposed minor construction permit modification application for KLFG specifies a new antenna height and ERP as is indicated below:

	Licensed	Construction Permit	CP Modification
Channel / Class	208 C3	208 C1	208 C1
Geographical Coordinates	42 40 18 / 94 09 11	42 49 03 /94 24 41	42 49 03 /94 24 41
ASRN	1017936	1253947	1253947
Site AMSL	339.0 m	356.0	356.0
Tower AGL	185.0 m	365.8 m	365.8 m
COR AGL	113 m	282 m	252 m
COR AMSL	452 m	638 m	608 m
HAAT	111 m	287 m	257 m
ERP	17.0 kW (V only, non-DA)	30.0 kW (H&V, non-DA)	34.0 kW (H&V, non-DA)

The below listed pages of this exhibit contains information as indicated.

Page 2 Tabulation of HAAT / distance to 1 mV/m contour
Page 3 1 mV/m contour coverage map
Page 4 - 5 Channel study

Tabulation of HAAT / distance to 1 mV/m contour

CH 208 42 49 03 / 94 24 41 34.0 kW ERP (H&V, non-da) 608 m COR AMSL 257 m HAAT

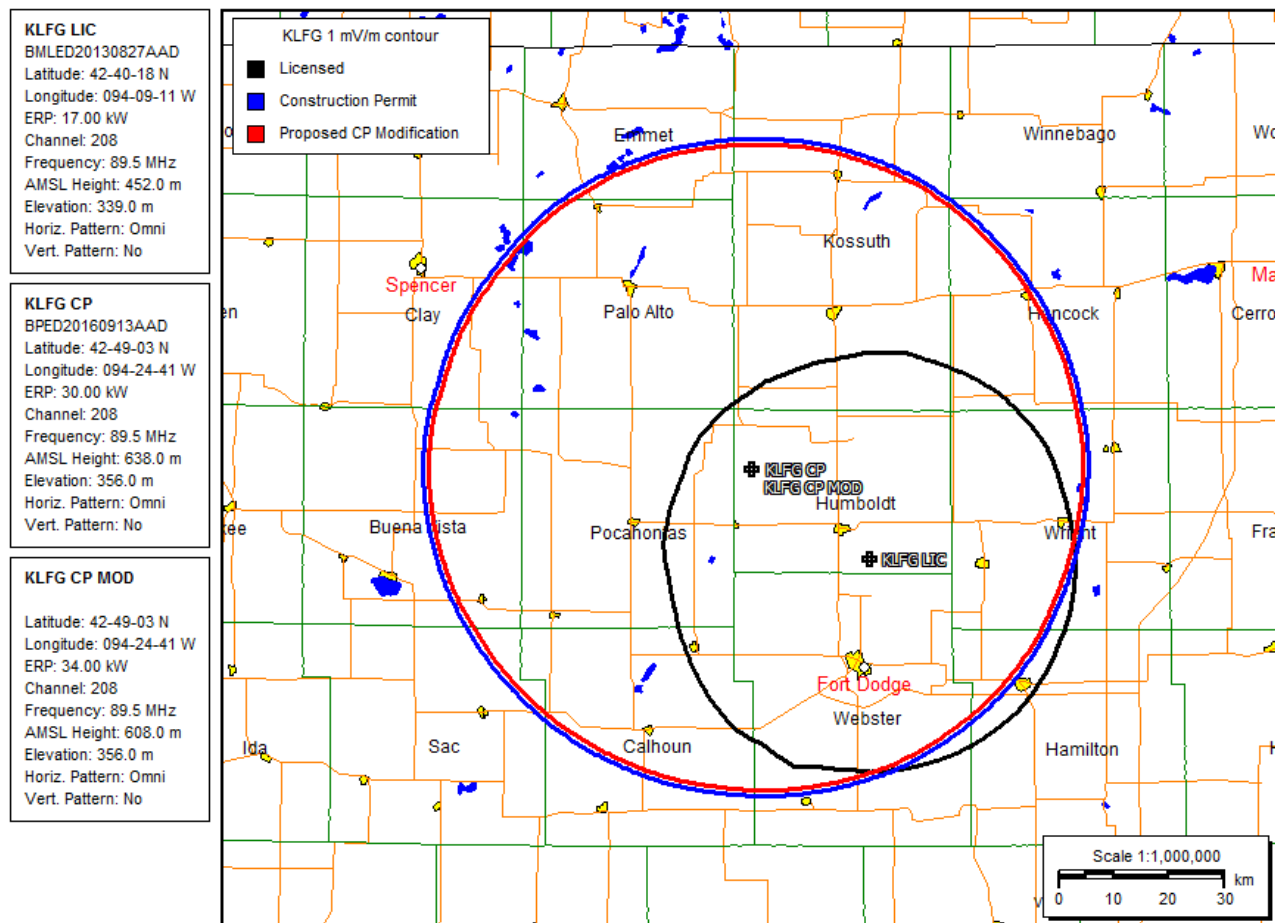
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	348.4	259.6	34.0000	15.31	1.000	58.60
010	344.8	263.2	34.0000	15.31	1.000	58.86
020	343.8	264.2	34.0000	15.31	1.000	58.94
030	340.7	267.3	34.0000	15.31	1.000	59.17
040	340.7	267.3	34.0000	15.31	1.000	59.17
045	341.7	266.3	34.0000	15.31	1.000	59.10
050	341.5	266.5	34.0000	15.31	1.000	59.11
060	342.1	265.9	34.0000	15.31	1.000	59.06
070	340.2	267.8	34.0000	15.31	1.000	59.21
080	341.3	266.7	34.0000	15.31	1.000	59.13
090	339.8	268.2	34.0000	15.31	1.000	59.24
100	342.8	265.2	34.0000	15.31	1.000	59.02
110	343.4	264.6	34.0000	15.31	1.000	58.97
120	340.0	268.0	34.0000	15.31	1.000	59.22
130	340.0	268.0	34.0000	15.31	1.000	59.22
135	341.5	266.5	34.0000	15.31	1.000	59.11
140	344.7	263.3	34.0000	15.31	1.000	58.87
150	348.8	259.2	34.0000	15.31	1.000	58.57
160	354.2	253.8	34.0000	15.31	1.000	58.17
170	360.0	248.0	34.0000	15.31	1.000	57.74
180	365.1	242.9	34.0000	15.31	1.000	57.36
190	367.9	240.1	34.0000	15.31	1.000	57.15
200	368.1	239.9	34.0000	15.31	1.000	57.13
210	366.8	241.2	34.0000	15.31	1.000	57.23
220	365.8	242.2	34.0000	15.31	1.000	57.31
225	366.2	241.8	34.0000	15.31	1.000	57.28
230	364.7	243.3	34.0000	15.31	1.000	57.39
240	362.3	245.7	34.0000	15.31	1.000	57.57
250	357.4	250.6	34.0000	15.31	1.000	57.93
260	355.3	252.7	34.0000	15.31	1.000	58.09
270	353.6	254.4	34.0000	15.31	1.000	58.21
280	355.2	252.8	34.0000	15.31	1.000	58.09
290	359.3	248.7	34.0000	15.31	1.000	57.79
300	357.0	251.0	34.0000	15.31	1.000	57.96
310	358.0	250.0	34.0000	15.31	1.000	57.89
315	355.0	253.0	34.0000	15.31	1.000	58.11
320	350.9	257.1	34.0000	15.31	1.000	58.41
330	350.3	257.7	34.0000	15.31	1.000	58.46
340	349.8	258.2	34.0000	15.31	1.000	58.50
350	350.0	258.0	34.0000	15.31	1.000	58.48

FCC 30 second terrain database

(yellow highlighted values establish average HAAT)

1 mV/m contour

The proposed 1 mV/m contour will continue to have overlap with the licensed 1 mV/m contour.



Allocation Study

CH 208		42 49 03 / 94 24 41		34.0 kW ERP (H&V, non-da)		608 m COR AMSL		257 m HAAT		
CH CITY/ STATE	CALL	TYPE	AZI. <--	DIST(KM) FILE #	LAT. LNG.	ERP(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
<u>Reference station:</u>										
208C3 Fort Dodge, IA	KLFG	LIC	127.5 307.6	26.64 BMLED20130827AAD	42 40 18.0 94 09 11.0	17.000 111	106.9 452	37.8 Educational Media Foundation		
208C1 Fort Dodge, IA	KLFG	CP	0.0 0.0	0.00 BPED20160913AAD	42 49 03.0 94 24 41.0	30.000 287	142.0 638	59.6 Educational Media Foundation		
<u>1st, 2nd, & 3rd adjacent channel relationships:</u>										
205C2 Spirit Lake, IA	KJIA	LIC	312.4 131.9	87.17 BLED20020828AAS	43 20 34.0 95 12 24.0	50.000 83	4.5 530	42.2 Minn-iowa Christian Broadcasting, Inc.	24.7	38.2
206A Story City, IA	KHOI	LIC	136.7 317.3	103.56 BLED20120817ABC	42 08 11.0 93 33 05.0	2.750 77	2.0 385	20.9 Khoi Fm	42.5	75.6
207C3 Des Moines, IA	KJMC	LIC	152.3 332.9	145.47 BLED20040512AAD	41 39 21.0 93 35 51.0	7.100 61	29.4 331	20.0 Minority Communications, Inc.	57.5	39.5
207C1 Worthington, MN	KRSW	LIC	314.5 133.5	170.78 BLED19941220KA	43 53 01.0 95 55 44.0	100.000 169	90.1 689	60.3 Minnesota Public Radio	22.6	25.1
208C3 Cedar Falls, IA	KHKE	LIC	104.6 286.0	177.33 BLED19971014KH	42 23 55.0 92 19 34.0	10.000 127	98.0 402	34.5 University Of Northern Iowa	20.4	0.2
208A Franklin. MN	KFNK	LIC	349.0 168.7	193.62 BLED20121119APU	44 31 38.0 94 52 35.0	0.100 16	18.6 308	5.6 South Central Oklahoma Christian Broadcasting	116.6	45.9
208A Decorah, IA	KLCD	LIC	74.5 256.3	220.71 BLED19811023AJ	43 18 56.0 91 47 18.0	0.100 55	20.6 387	6.2 Minnesota Public Radio	140.9	71.7
209C2 Mankato, MN	KMSU	LIC	12.5 192.8	150.83 BLED20091202ABZ	44 08 31.0 94 00 06.0	17.000 133	61.8 425	41.3 Mankato State University	30.1	23.1
209C Council Bluffs. IA	KIWR	LIC	219.1 38.0	214.18 BLED19810923AA	41 18 40.0 96 01 37.0	100.000 326	109.7 670	75.2 Iowa Western Community Col	47.1	54.6
209C1 Vermillion, SD	KUSD	LIC	278.4 96.8	195.60 BLED19920212KA	43 03 00.0 96 47 12.0	32.000 202	78.7 614	53.3 South Dakota Board Of Directors for ED. Comm	58.7	56.7
211C Ames, IA	WOI-FM	LIC	149.4 330.0	129.84 BLED978	41 48 33.0 93 36 53.0	100.000 454	12.0 745	82.3 Iowa State University Of Science And Technology	59.3	40.6
<u>I.F. relationships:</u>										
261C3 Emmetsburg, IA	KUYU	LIC	313.3 133.0	49.80 BLH20030819AAJ	43 07 24.0 94 51 28.0	16.000 125			23.5R	26.3M
FCC 30 second terrain database										

Allocation Study

KHKE (LIC) CH 208 C3
10 kW ERP
402 m COR AMSL
42 23 55 / 92 19 34

KLFG (Proposed) CH 208 C1
34 kW ERP
608 m COR AMSL
42 49 03 / 94 24 41

Protected 60 dBu

Interfering 40 dBu

Azimuth (deg)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (deg)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
277.0	010.0000	0119.1	034.6	106.7	034.0000	0264.2	143.2	39.89
278.0	010.0000	0118.9	034.6	106.5	034.0000	0264.2	143.1	39.91
279.0	010.0000	0118.7	034.5	106.2	034.0000	0264.2	143.0	39.93
280.0	010.0000	0119.0	034.6	106.0	034.0000	0264.3	142.9	39.95
281.0	010.0000	0119.2	034.6	105.8	034.0000	0264.3	142.8	39.97
282.0	010.0000	0119.1	034.6	105.5	034.0000	0264.3	142.8	39.97
283.0	010.0000	0118.9	034.6	105.3	034.0000	0264.3	142.7	39.98
284.0	010.0000	0118.6	034.5	105.0	034.0000	0264.3	142.7	39.98
285.0	010.0000	0118.4	034.5	104.8	034.0000	0264.3	142.8	39.98
286.0	010.0000	0118.5	034.5	104.6	034.0000	0264.3	142.7	39.98
287.0	010.0000	0118.7	034.5	104.3	034.0000	0264.3	142.7	39.98
288.0	010.0000	0118.8	034.5	104.1	034.0000	0264.3	142.7	39.98
289.0	010.0000	0119.0	034.6	103.8	034.0000	0264.3	142.7	39.98
290.0	010.0000	0119.3	034.6	103.6	034.0000	0264.4	142.7	39.98
291.0	010.0000	0119.8	034.7	103.3	034.0000	0264.4	142.7	39.98
292.0	010.0000	0120.3	034.7	103.1	034.0000	0264.4	142.8	39.98
293.0	010.0000	0120.8	034.8	102.8	034.0000	0264.5	142.8	39.97
294.0	010.0000	0121.0	034.8	102.6	034.0000	0264.5	142.9	39.96
295.0	010.0000	0121.2	034.8	102.4	034.0000	0264.6	142.9	39.94
296.0	010.0000	0121.7	034.9	102.1	034.0000	0264.6	143.0	39.93
297.0	010.0000	0122.4	035.0	101.9	034.0000	0264.7	143.1	39.92
298.0	010.0000	0123.0	035.0	101.6	034.0000	0264.7	143.2	39.90
299.0	010.0000	0123.4	035.1	101.4	034.0000	0264.8	143.3	39.88

