TECHNICAL STATEMENT
K229BZ FOWLER, COLORADO, CH. 230D
MOUNTAIN COMMUNITY TRANSLATORS. LLC
FCC FORM 349
DECEMBER 2011

This Technical Statement is made in support of a minor change application for FM translator station, K229BZ licensed to Fowler, Colorado, facility ID 140729. K229BZ seeks to increase its maximum Effective Radiated Power to 0.25 kilowatts, modify its current directional pattern, and remain at its current existing tower site, tower registration # 1238958, and become a fill-in translator for KAVA(AM) Pueblo, Colorado, facility ID 54259. K229BZ also seeks to "one step" channel change from its current 229D operation, to its first adjacent channel 230D.

The proposed operation of K229BZ specifies a maximum Effective Radiated Power of 0.25 kilowatts. It will operate with a directional antenna with an "off the shelf" type antenna, or a Nicom, circular polarized antenna. The antenna will be mounted on an existing tower with an over height of 213 meters above the ground. The antenna will be mounted with a Center of Radiation of 178 meters above the ground, and 1680 meters Above Mean Sea Level. The NAD 27 coordinates of this tower are located at N 38° 06' 22", W 104° 29' 18".

Figure 1 is a detailed interference study conducted on channel 230D with these new proposed facilities. It shows that the new operation of K229BZ will not cause any interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 230, with the exception of 2nd adjacent channel station KILO Colorado Springs, Colorado operating on channel 232C, facility ID 12367.

The proposed operation of K229BZ on 230D is located within the protected 60 dBμ contour of the 2nd adjacent channel of KILO. Figure 2 shows the coverage area for the worse case 100 dBμ interference contour F(50-10) and shows that there is no population in the area of interference. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned with private access. The transmitter building is uninhabited and does not have indoor plumbing. Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K229BZ until such interference can be eliminated.

Since K229BZ will not be changing its transmitter site location, it can be assumed that K229BZ will overlap with the proposed 60 dBμ contour of K229BZ on channel 230D.

Figure 3 is the directional antenna data for the proposed Nicom BKG-77 antenna system proposed to be used.

The proposed operation of K229BZ Fowler will be considered a “Fill-In” operation for KAVA(AM) Pueblo, Colorado, operating on 1480 kHz, facility ID 54259. Figure 4 shows that the proposed 60 dBμ contour for the proposed K229BZ will not extend beyond the presently licensed operation of KAVA’s 2.0 mv/m daytime contour, or a 25 mile (40 Km) radius of the KAVA transmitter site. Since this is a “Fill-In” translator, the maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

It was found that the new proposed operation of K229BZ Fowler, Colorado on channel 230D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1, DETAILED INTERFERENCE STUDY
K229BZ FOWLER, COLORADO, CH. 230D

REFERENCE CH# 230D - 93.9 MHz, Pwr= 0.25 kW DA, HAAT= 172.9 M, COR= 1680 M DISPLAY DATES
38 06 22.0 N. Average Protected F(50-50)= 17.27 km DATA 12-08-11
104 29 18.0 W. Standard Directional SEARCH 12-08-11

CH CITY	CALL STATE	TYPE	ANT <--	AZI	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
229D Fowler	K229BZ CO	LIC	DC_	0.0 0.0	0.0 BPFT20110209AAX	38 06 22.0 104 29 18.0	0.150 173	17.6 1680	11.9 Mountain Community Transla	-36.6	-40.2
232C Colorado Springs	KILO CO	LIC	_C_	335.5 155.3	78.1 BLH20070426AAL	38 44 44.0 104 51 42.0	79.000 670	16.7 2922	104.4 Colorado Springs Radio Bro	42.8	-27.4
230C1 Raton	KRTN-FM NM	LIC	_C_	177.6 357.6	158.1 BLH20010418AAG	36 40 59.0 104 24 50.0	26.000 441	160.1 2389	70.0 Enchanted Air, Inc.	-13.2	51.9
228D Pueblo	K228EY CO	LIC	_C_	348.0 168.0	30.2 BLFT20090408AEP	38 22 21.0 104 33 38.0	0.041 168	0.4 1685	12.4 Pikes Peak Community Colle	10.8	16.7
231D Walsenburg	K234BE CO	APP	_C_	208.9 28.7	60.7 BPFT20111108AOQ	37 37 39.0 104 49 17.0	0.050	19.3 2065	12.8 The Colorado College	32.3	37.3
229C2 Salida	KSBV CO	LIC	_CX	286.4 105.4	138.4 BLH20020828AAQ	38 26 47.0 106 00 37.0	1.000 830	81.8 3572	54.9 Arkansas Valley Broadcasti	39.8	58.1
229D Colorado Springs	629875 CO	APP	DE_	335.6 155.3	78.1 BNPFT20030312AJI	38 44 43.0 104 51 39.0	0.010 499	0.4 2718	0.2 Educational Communications	59.1	46.4
283C3 Canon City	KSTY CO	LIC	_CX	290.4 110.0	67.4 BLH20071003ABD	38 18 54.0 105 12 40.0	8.600 14	58.5 2138	50.8 Royal Gorge Broadcasting,	12.0R	55.4M
227D Colorado Springs	629882 CO	APP	DE_	335.6 155.3	78.1 BNPFT20030312AJS	38 44 43.0 104 51 39.0	0.010 499	0.2 2718	15.7 Educational Communications	59.4	60.8
230D Westcreek	631674 CO	APP	_C_	338.4 158.1	127.9 BNPFT20030310BGE	39 10 33.0 105 02 03.1	0.010	18.0 2823	5.1 Way-fm Media , Inc.	91.7	60.3
230D Trinidad	KRTN-FM1 CO	LIC	_C_	180.9 0.9	104.1 BLFTB20070730AAP	37 10 07.0 104 30 24.0	0.100	18.6 1859	5.6 Enchanted Air, Inc.	74.4	62.0
227D Cimmaron Hills	651528 CO	APP	_C_	342.6 162.4	83.0 BNPFT20030317MCX	38 49 08.0 104 46 32.0	0.140 -58	0.8 1900	13.9 Educational Media Foundati	63.4	67.9
227D Canon City	637449 CO	APP	_C_	302.7 122.2	84.8 BNPFT20030317CSH	38 30 55.0 105 18 27.0	0.010 406	0.2 2451	15.2 Radio Assist Ministry, Inc	66.9	68.5
227D Canon City	992379 CO	APP	DC_	302.7 122.2	84.8 BNPFT20030829ALJ	38 30 55.0 105 18 27.0	0.001 406	0.0 2451	4.2 Radio Assist Ministry, Inc	67.0	78.4
229D Monument	631407 CO	APP	_C_	343.7 163.4	110.3 BNPFT20030310AVZ	39 03 31.0 104 50 54.1	0.250 -191	20.2 2103	13.5 Way-fm Media , Inc.	71.3	68.7
229A Hugo	KHIH CO	APP	_HX	32.2 212.7	131.6 BPH20111114AVK	39 06 20.0 103 40 30.0	6.000 87	37.4 1751	23.5 Kona Coast Radio, Llc.	75.8	76.8
229A Hugo	KHIH CO	RSV-A	___	37.5 218.1	144.6	39 08 01.0 103 28 05.0	6.000 100	38.8 1686	25.3 Kona Coast Radio, Llc.	86.0	89.9
284A Calhan	KKCS CO	LIC	NHX	8.7 188.8	100.3 BLH20090518ADM	38 59 57.0 104 18 47.0	0.400 145	21.3 2139	20.2 Calhan Radio, Llc	10.0R	90.3M
284A Calhan	KKCS CO	CP	NCX	8.7 188.8	100.3 BPH20100930AJI	38 59 57.0 104 18 47.0	1.550 198	33.7 2192	31.1 Calhan Radio, Llc	10.0R	90.3M
228D Woodland Park	K228EM CO	LIC	_C_	332.9 152.6	110.0 BLFT20070823AEI	38 59 12.0 105 04 04.0	0.015 34	0.3 2774	4.2 Cheyenne Mountain Public B	91.4	96.5
230A Frisco	KYSL CO	LIC	_CN	319.4 138.3	214.1 BLH19940808KA	39 33 22.0 106 06 53.0	0.560 324	94.1 3549	33.8 Krystal Broadcasting, Inco	101.8	122.8
229A Limon	KIIQ CO	LIC	_CX	28.1 208.6	146.5 BLH20041025AEJ	39 16 00.0 103 41 15.0	1.000 -32	14.2 1649	10.2 Percheron Growth, Llc	112.4	106.9
228C1 Lamar	KLMR-FM CO	LIC	_CX	92.1 273.3	165.9 BLH20070126ACC	38 02 10.0 102 35 58.0	100.000 146	6.8 1292	56.3 Ccr-lamar Iv, Llc	140.2	108.2
227C1 Wheat Ridge	KTCL CO	LIC	DCX	340.6 160.1	191.9 BLH20070621AQR	39 43 59.0 105 14 10.0	71.000 346	9.7 2256	70.5 Citicasters Licenses, Inc.	163.5	115.3
228A Alamosa	KALQ-FM CO	LIC	_CN	240.0 59.1	139.3 BLH4443	37 28 20.0 105 51 13.0	2.800 40	1.8 2341	17.7 East Side Broadcasting, Ll	125.9	120.8

CH CALL	TYPE ANT	AZI	DIST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY	STATE	<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
231C KKXK	LIC _CY	276.3	277.2	38 20 16.0	100.000	127.5	84.7	133.8	166.4
Montrose	CO	94.4	BLH19961009KC	107 38 23.0	574	3094	Ccr-montrose Iv, Llc		
230A KCWA	LIC ZCX	347.6	271.7	40 29 37.0	0.580	97.7	35.6	155.1	177.1
Loveland	CO	167.1	BLH20101214ACL	105 10 53.0	319	2098	Way Media, Inc.		

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

* TRANSLATOR BEING MODIFIED BY THIS APPLICATION.

** NO REAL LIFE INTERFERENCE WILL BE CAUSED TO KILO COLORADO SPRINGS, CO SINCE THE PROPOSED 100 DBU INTERFERENCE CONTOUR WILL NOT COVER ANY POPULATION. SEE THE TECHNICAL STATEMENT FOR MORE DETAILS.

FIGURE 2, PROPOSED 100 DBU INTERFERENCE CONTOUR
K229BZ FOWLER, COLORADO, CH. 230D

Coverage Study - NGDC 30 SEC
12-08-2011

K229BZ CH230 D , 0.25 kW, 172.9M HAAT, 1680.0M COR AMSL
Interference Contour = 100 dBu. Population = 0

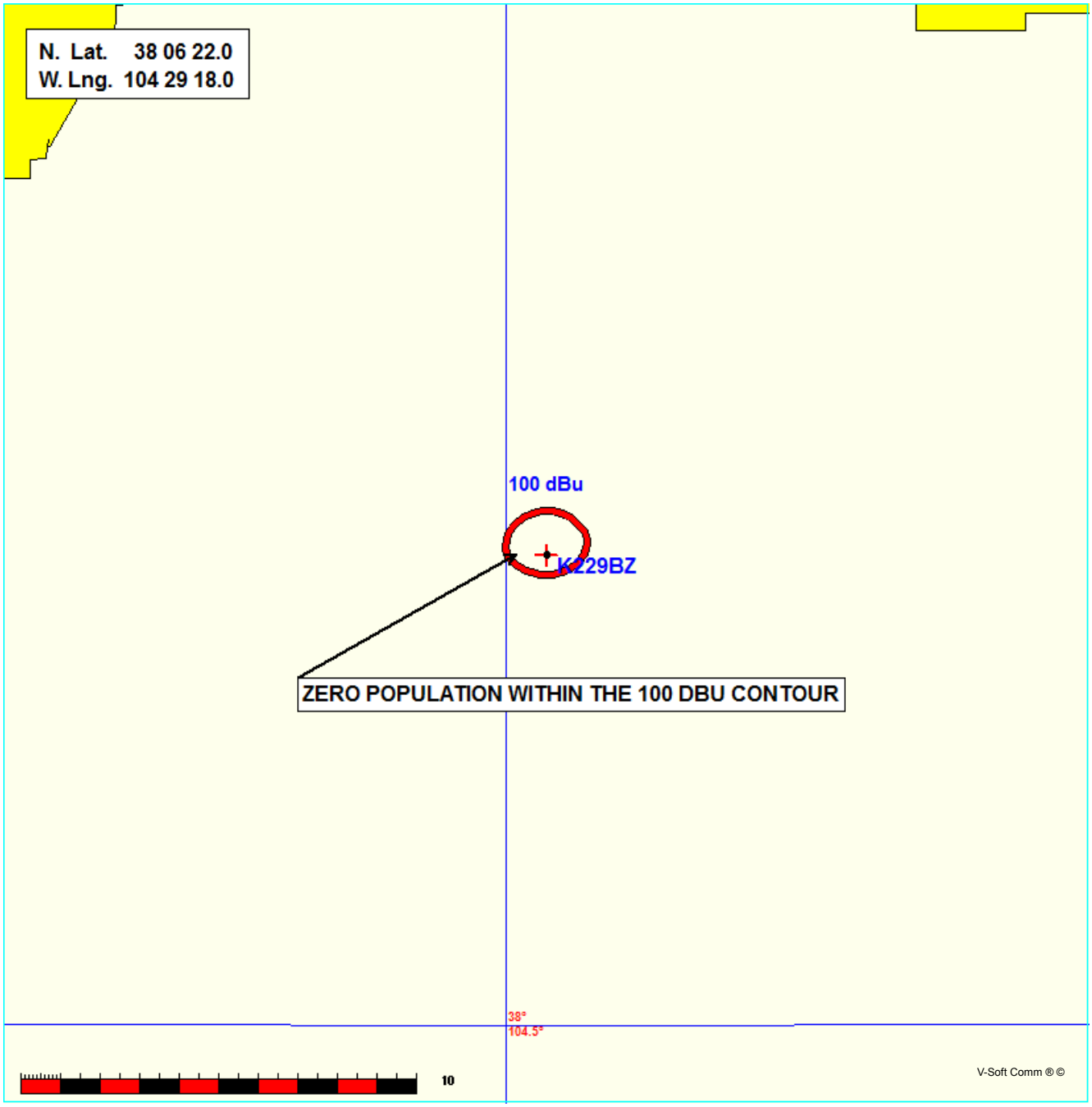
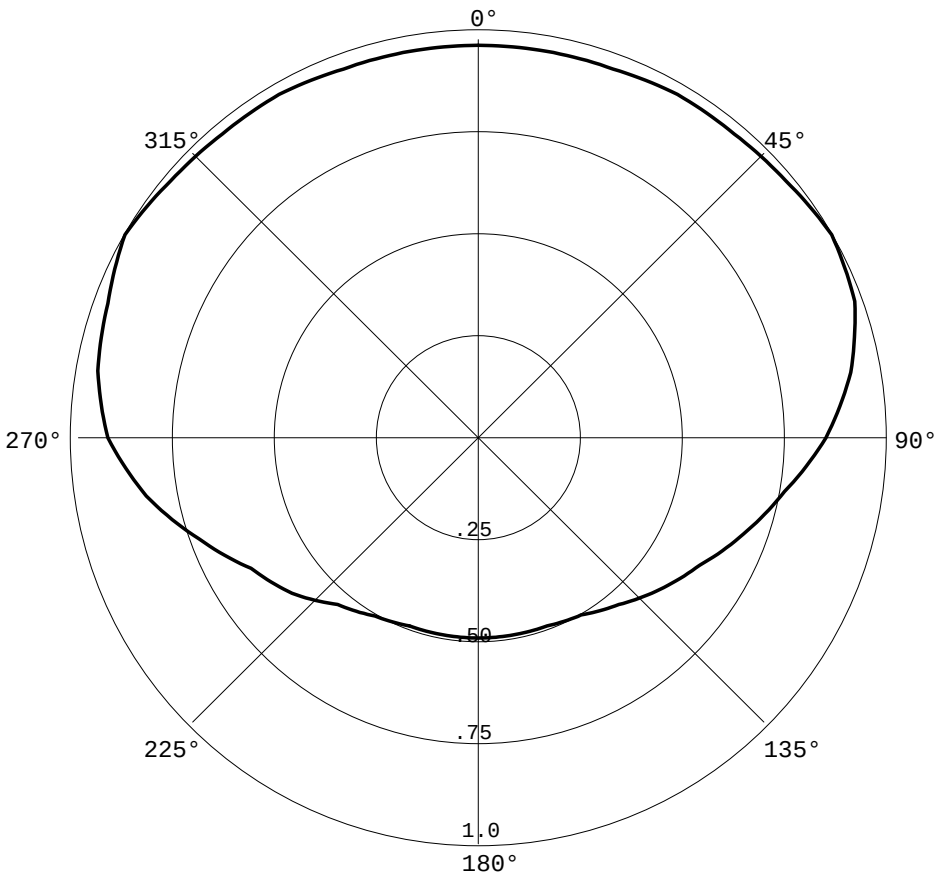


FIGURE 3, DIRECTIONAL ANTENNA DATA

K229BZ 12-08-2011 RMS(V)= .811
FOWLER, COLORADO
NICOM BKG 77, DIRECTIONAL ANTENNA

Azi	Field	dBk	kW
000	0.966	-06.321	0.233
010	0.966	-06.321	0.233
020	0.966	-06.321	0.233
030	0.976	-06.232	0.238
040	0.976	-06.232	0.238
050	0.984	-06.161	0.242
060	1.000	-06.021	0.250
070	0.982	-06.178	0.241
080	0.927	-06.679	0.215
090	0.852	-07.412	0.181
100	0.762	-08.382	0.145
110	0.692	-09.218	0.120
120	0.627	-10.075	0.098
130	0.581	-10.737	0.084
140	0.536	-11.437	0.072
150	0.504	-11.972	0.064
160	0.493	-12.164	0.061
170	0.493	-12.164	0.061
180	0.493	-12.164	0.061
190	0.493	-12.164	0.061
200	0.493	-12.164	0.061
210	0.507	-11.920	0.064
220	0.536	-11.437	0.072
230	0.596	-10.516	0.089
240	0.643	-09.856	0.103
250	0.728	-08.778	0.132
260	0.826	-07.681	0.171
270	0.908	-06.859	0.206
280	0.947	-06.494	0.224
290	0.966	-06.321	0.233
300	1.000	-06.021	0.250
310	0.984	-06.161	0.242
320	0.976	-06.232	0.238
330	0.976	-06.232	0.238
340	0.966	-06.321	0.233
350	0.966	-06.321	0.233

Graph is Relative Field



K229BZ
BPFT20110209AAX
Latitude: 38-06-22 N
Longitude: 104-29-18 W
ERP: 0.25 kW
Channel: 230
Frequency: 93.9 MHz
AMSL Height: 1680.0 m
Elevation: 1502.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

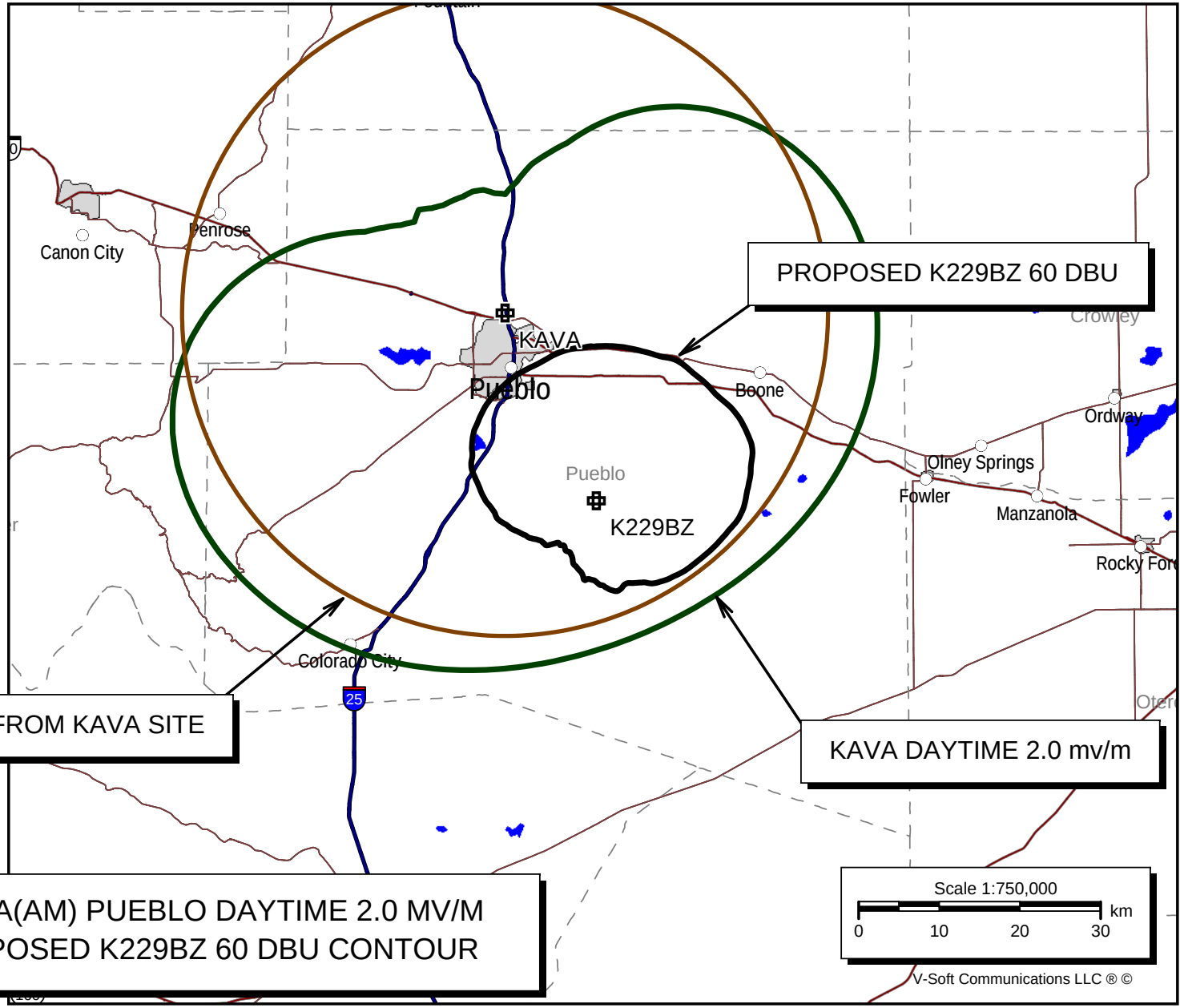


FIGURE 4 - KAVA(AM) PUEBLO DAYTIME 2.0 MV/M
WITH THE PROPOSED K229BZ 60 DBU CONTOUR