K268CI
Butte, MT

Proposed Minor Modification
of Licensed Translator Facility

Application Overview:

The Applicant proposes to modify BLFT-20130813ACL using the following parameters:

Tech Box:

Channel:	268
Antenna Coordinates:	N46-00-23, W112-26-28 (NAD 27)
ASRN:	1031582
Tower Site Base AMSL:	2496 m
Overall Tower Height AGL:	62 m
COR AGL:	30 m
ERP:	0.21 kW
Directional Antenna:	Yes - see Exhibit 4

Primary Station and Translator Protected Contour Relationship:

Exhibit 1 demonstrates that the proposed fill-in translator facility's protected contour is completely encompassed by the 2 mV/m contour and 25 mile radius contour of the primary station being rebroadcast – KBOW(AM) Butte, MT.

Interference Study (Adjacent Stations):

Exhibit 2 is a contour overlap study demonstrating that the proposed antenna site provides requisite contour protection towards all applications, authorizations, and permits pursuant to Section 74.1204 with the exception of the following:

- KZMT(FM) (BLH-20041122ACA) on its Second adjacent channel

Section 74.1204(a) states that "an application for an FM translator station will not be accepted for filing if the proposed operation would involve overlap of predicted field strength contours with any other station, including commercial and noncommercial educational FM stations, FM translators and Class D (secondary) noncommercial educational FM stations." However, Section 74.1204(d) states, "the provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or other such factors as may be applicable." Using the undesired-to-desired ratio method regarding interference to a second or third adjacent frequency, interference is predicted to occur where the translator's undesired signal exceeds the protection station's desired signal by more than 40 dB. The free space formula was used to determine the signal strength of the proposed facility, in dBu, at the antenna site of the adjacent station(s).

Exhibit 2A includes a contour comparison map depicting where that the protected F(50,50) 60 dBu contour for KZMT(FM) overlaps the F(50,10) 100 dBu contour for the proposed facility.

Exhibit 2B includes a satellite view of the proposed translator site. There are no structures or public roads (other than the site access road to the tower) within the area where the proposed translator's interfering contour overlaps the protected contour of KZMT(FM). Therefore, due to the absence of "potential listeners" within the interference contour, no interference is expected to occur.

Proposed Translator Located Below Other Antennas:

Since the proposed Translator antenna is located below the other previously authorized facilities on the tower, it will have no effect on the antenna pattern of the previously authorized facilities on the tower.

Downward Radiation Study (FM Model):

The proposed FM Facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET Bulletin 65, Second Edition 97-01, August, 1997). The Commission's FM Model Power Density Prediction program was employed to determine the Field. Using the Phelps-Dodge "Ring Stub" Worst Case antenna with 1 sections and 1 wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 5.4% of the Uncontrolled Standard with a Power Density of 10.77 microwatts per square centimeter 7.6 meters from the base of the tower.

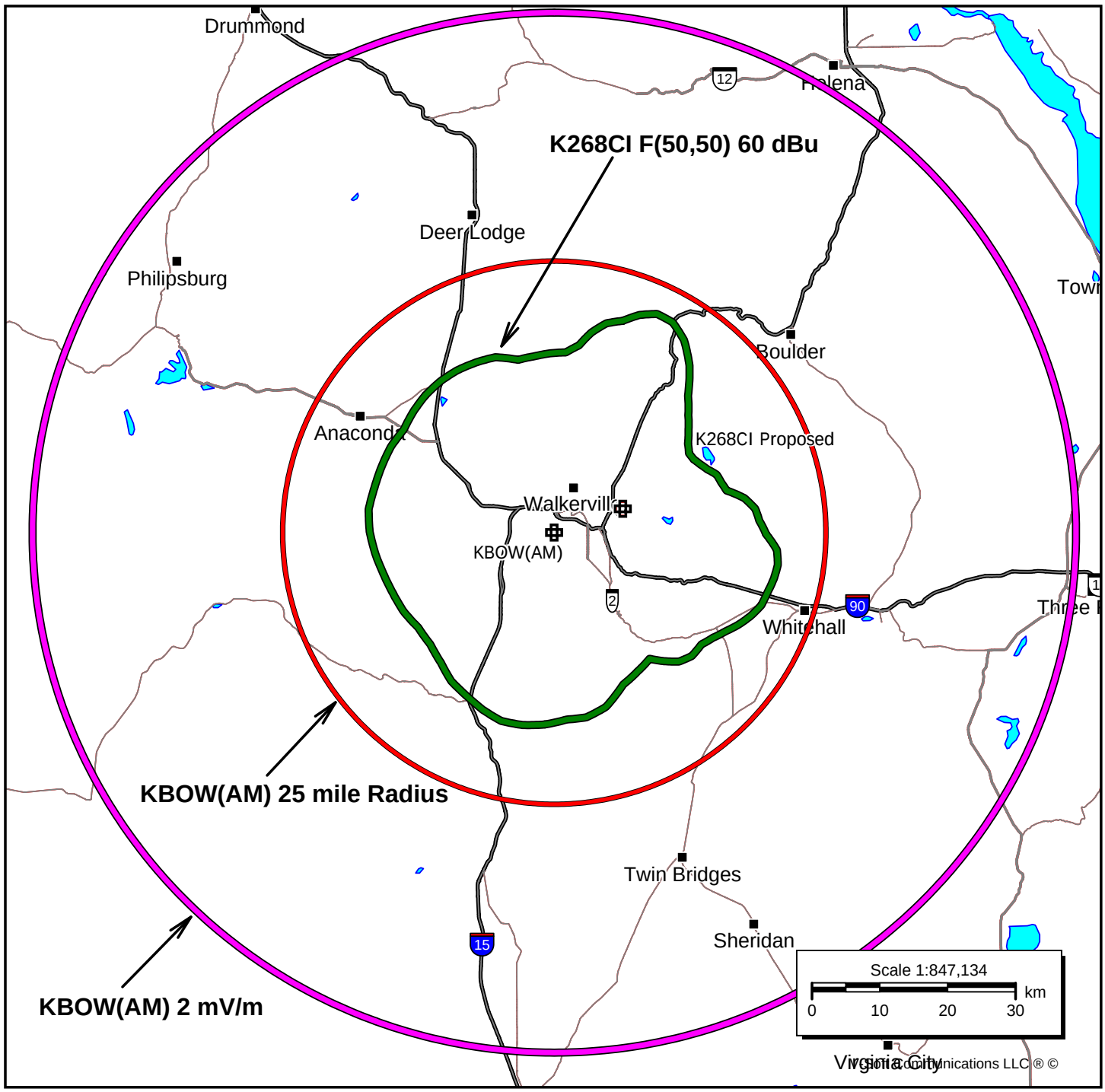
Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

Existing Tower:

The proposed facility is exempt from environmental processing because the facility is not located at a location specified in Section 1.1307(a)(1)-(8) of the Commission's Rules and since the tower in question already exists.

Exhibit 1

Primary Station Protected Contour
vs.
Proposed Translator Protected Contour



REF
K268CI Proposed
KBOW(AM)

Exhibit 2

Section 74.1204
Interference Tabulations

K268CI Butte, MT
Section 74.1204 Overlap Study

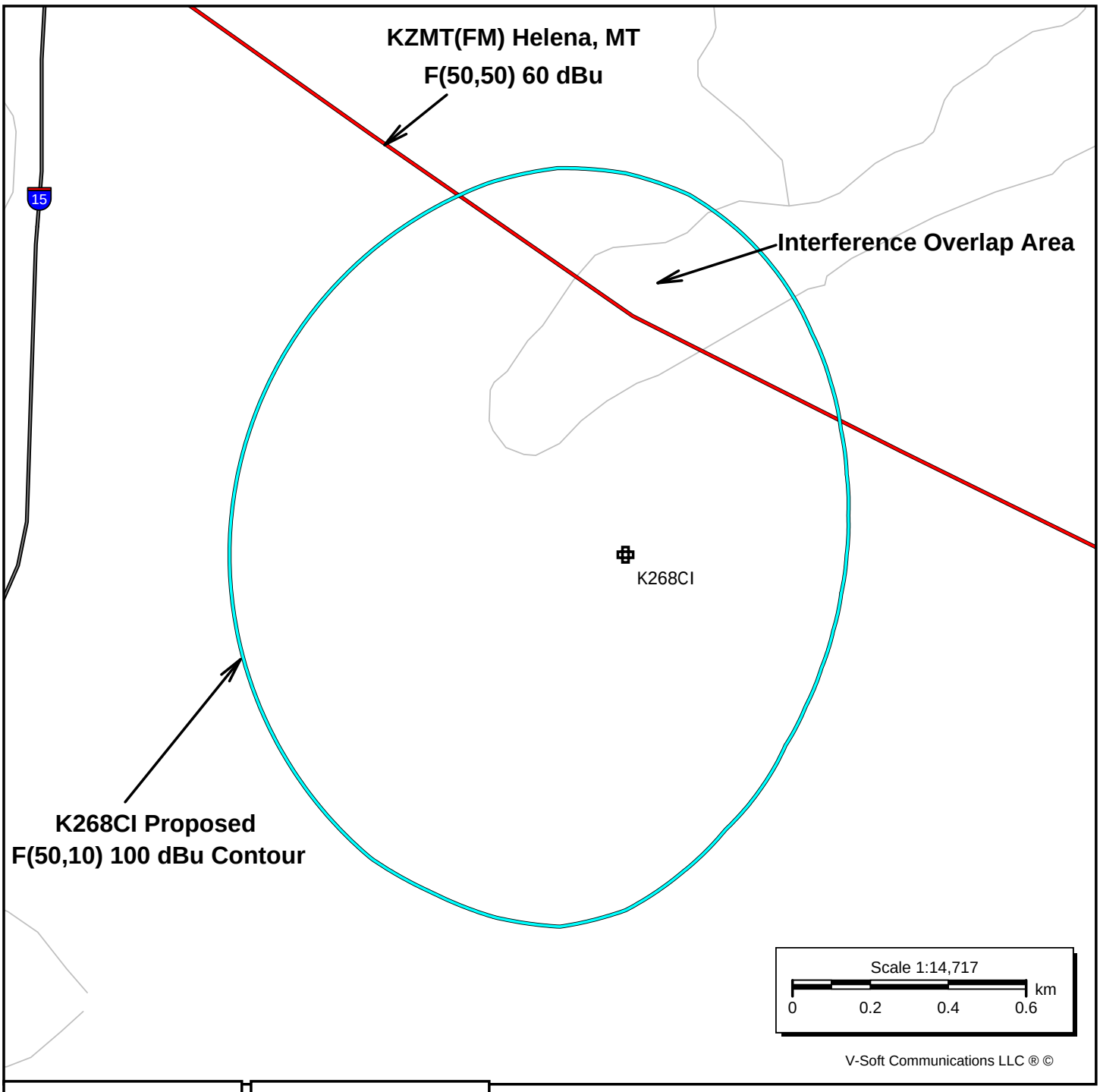
REFERENCE CH# 268D - 101.5 MHz, Pwr= 0.21 kW DA, HAAT= 550.2 M, COR= 2526 M DISPLAY DATES
46 00 23.0 N. Average Protected F(50-50)= 29.42 km DATA 04-15-14
112 26 28.0 W. Standard Directional SEARCH 04-25-14

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
268D K268CI	LIC DV_	0.0	0.00	46 00 23.0	0.250	17.2	3.2	-44.9*	-86.4*
Butte	MT	0.0	BLFT20130813ACL	112 26 28.0	575	2553	Butte Broadcasting Incorpo		
266C KZMT	LIC _C_	5.9	82.84	46 44 51.8	95.000	11.8	82.0	42.2	-6.6
Helena	MT	185.9	BLH20041122ACA	112 19 47.6	607	2278	Ccr-helena Iv, Llc		
268L1 KIEF-LP	CP ___	98.9	76.42	45 53 47.0	0.100			37.0	2.9
Three Forks	MT	279.6	BNPL20131022AOA	111 28 05.0	-34	1271	Church Of The Hard Rock		
268C1 KGVO-FM	LIC NC_	307.6	147.28	46 48 08.0	3.600	99.3	38.6	15.6	15.6
Frenchtown	MT	126.4	BLH20071105AER	113 58 21.0	637	1916	Townsquare Media Missoula		
269L1 1592459	APP ___	70.8	66.07	46 11 55.6	0.100			43.3	38.1
Radersburg	MT	251.4	BNPL20131114BER	111 37 57.0	-57	1336	Broadwater County Disaster		
271C2 KBMC	LIC _CN	113.8	99.91	45 38 18.0	20.500	5.9	53.1	69.7	46.3
Bozeman	MT	294.7	BLED19940223KA	111 16 05.0	222	1770	Montana State University -		

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.
All separation margins (if shown) include rounding
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.

Exhibit 2A

Proposed F(50,10) 100 dBu
Contour of K268CI
and
Authorized F(50,50) 60 dBu
Contour of KZMT(FM)

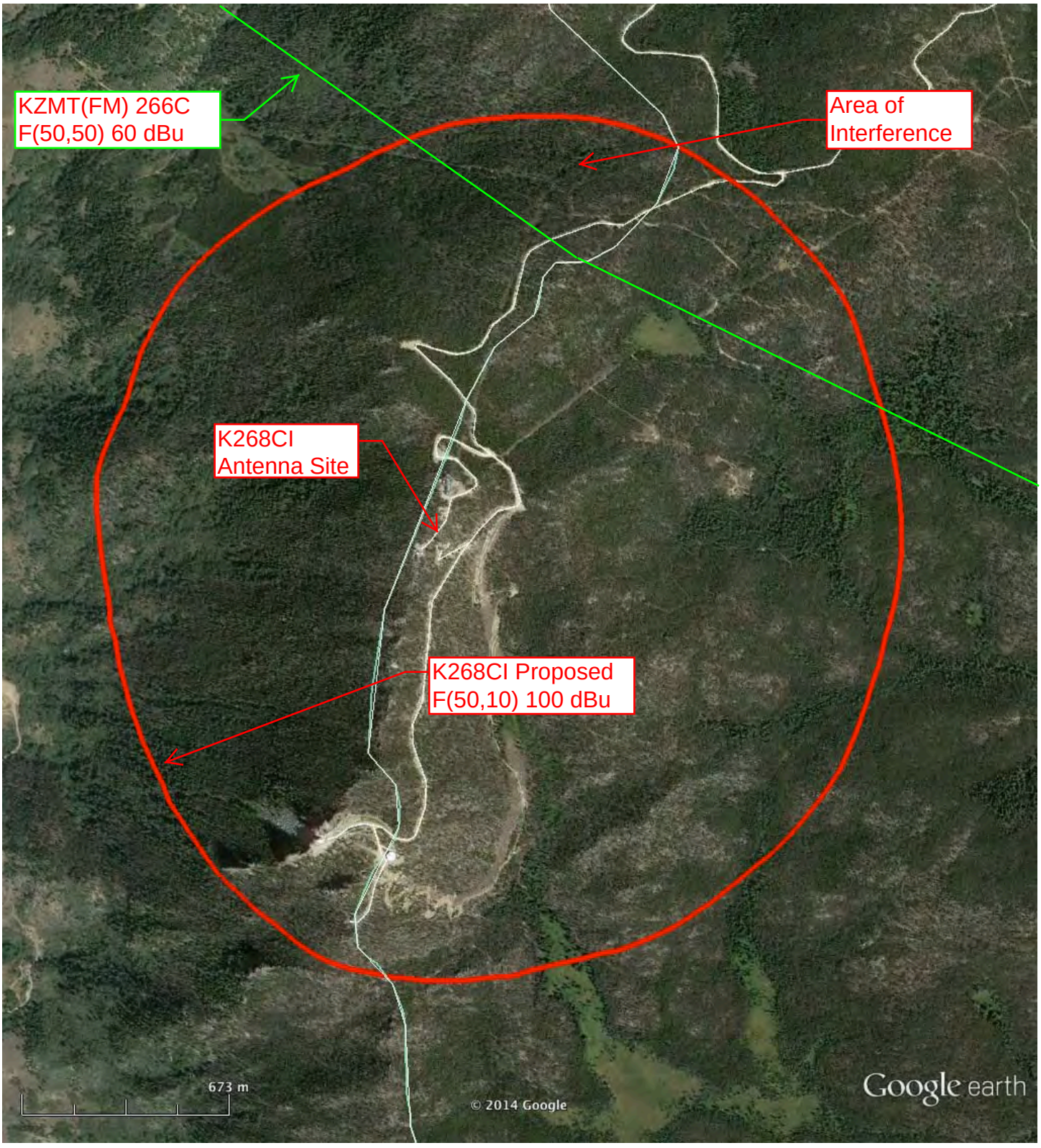


K268CI
Proposed
Channel: 268D
Frequency: 101.5 MHz
Latitude: 46-00-23 N
Longitude: 112-26-28 W
COR AGL Height: 30.0 m
COR AMSL Height: 2526.0 m
Base Elevation: 2496.0 m
COR HAAT: 523.19 m
ERP: 0.21 kW
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

KZMT
BLH20041122ACA
Channel: 266C
Frequency: 101.1 MHz
Latitude: 46-44-51.80 N
Longitude: 112-19-47.60 W
COR AGL Height: 45.7 m
COR AMSL Height: 2278.0 m
Base Elevation: 2232.3 m
COR HAAT: 607.0 m
ERP: 95.00 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 2B

Satellite Picture of
F(50,10) Interfering Contour



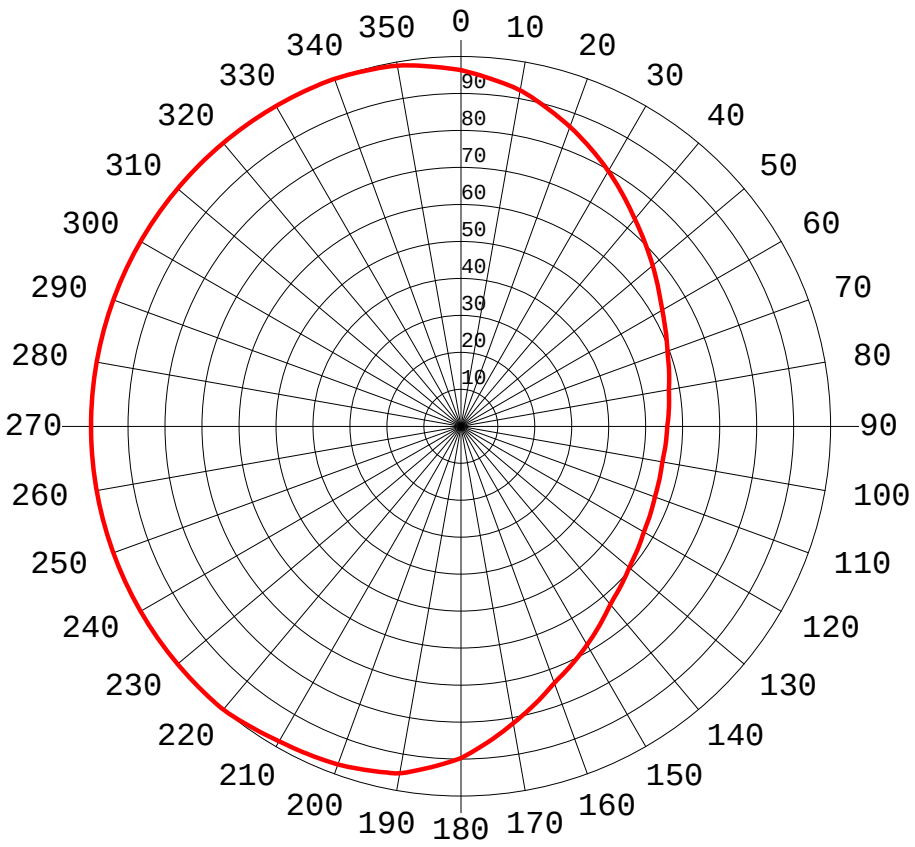
Google Earth Pro

feet 4000
km 1

Exhibit 4

Proposed Directional Pattern
Azimuth Tabulations

Nicom BKG77-1 Azimuth Pattern



Azi	Rel	dBk	kW	dB
0	1.000	-6.78	0.210	0.00
10	1.000	-6.78	0.210	0.00
20	1.000	-6.78	0.210	0.00
30	1.000	-6.78	0.210	0.00
40	1.000	-6.78	0.210	0.00
50	1.000	-6.78	0.210	0.00
60	1.000	-6.78	0.210	0.00
70	0.991	-6.86	0.206	-0.08
80	0.963	-7.11	0.195	-0.33
90	0.923	-7.47	0.179	-0.70
100	0.862	-8.07	0.156	-1.29
110	0.797	-8.75	0.133	-1.97
120	0.731	-9.50	0.112	-2.72
130	0.676	-10.18	0.096	-3.40
140	0.628	-10.82	0.083	-4.04
150	0.594	-11.30	0.074	-4.52
160	0.571	-11.65	0.068	-4.87
170	0.558	-11.85	0.065	-5.07

Azi	Rel	dBk	kW	dB
180	0.553	-11.92	0.064	-5.15
190	0.558	-11.85	0.065	-5.07
200	0.571	-11.65	0.068	-4.87
210	0.594	-11.30	0.074	-4.52
220	0.628	-10.82	0.083	-4.04
230	0.682	-10.10	0.098	-3.32
240	0.738	-9.42	0.114	-2.64
250	0.815	-8.55	0.139	-1.78
260	0.897	-7.72	0.169	-0.94
270	0.953	-7.20	0.191	-0.42
280	0.973	-7.02	0.199	-0.24
290	0.983	-6.93	0.203	-0.15
300	1.000	-6.78	0.210	0.00
310	1.000	-6.78	0.210	0.00
320	1.000	-6.78	0.210	0.00
330	1.000	-6.78	0.210	0.00
340	1.000	-6.78	0.210	0.00
350	1.000	-6.78	0.210	0.00

Rotation Angle = 280