

**APPLICATION FOR MODIFICATION OF
DTV CONSTRUCTION PERMIT
FCC FILE NO. BMPCDT-20040510AAP
FACILITY ID 61961
STATION KVLV-DT
FARGO, NORTH DAKOTA
CH 44 414 kW 543 M HAAT**

Technical Narrative

This technical exhibit has been prepared in support of an application for modification of the construction permit for station KVLV-DT on channel 44 at Fargo, North Dakota (File No. BMPCDT-20040510AAP). By means of this instant modification application, KVLV-DT proposes to decrease the directional antenna maximum effective radiated power ("ERP") from 414 kW to 356 kW and increase the antenna radiation center height above average terrain ("HAAT") by 33 meters, from 543 meters to 576 meters. No other changes are proposed. The instant application is considered a minor change in facilities pursuant to Section 73.3572(a). Furthermore, as detailed below, this instant application is also acceptable for filing under the criteria set forth in the FCC TV/DTV freeze as there will be no increase in KVLV-DT's authorized DTV service area in any direction.

Proposed Facilities

It is proposed to operate KVLV-DT from the existing tower (FCC Tower registration 1046244) (NAD27 coordinates: 47° 20' 32" N, 97° 17' 20" W) on DTV channel 44 (650-656 MHz) with a directional antenna maximum ERP of 356 kW and an antenna HAAT of 576 meters. No other changes are proposed. It is proposed to utilize a Dielectric model TFU-32DSB-J(C) directional antenna which will be mounted at 578 meters above ground level ("AGL") on the existing tower structure and will incorporate an electrical beam tilt of 1.0 degree. The proposed antenna radiation center height above mean sea level will be 878.42 meters.

Antenna Data

Figure 1 provides a graph of the horizontal and vertical plane relative patterns for the proposed Dielectric model TFU-32DSB-J(C) horizontally polarized, directional antenna system.

Response to Paragraph 11 - Interference Protection

The proposed KVLY-DT transmitter site is located within the US-Canadian border area. However, as the proposal does not involve a change in transmitter site coordinates or an extension of authorized coverage, it is not believed that Canadian coordination is necessary.

Compliance with TV Freeze Order

Figure 2 is a contour map which shows the location of the KVLY-DT predicted 41 dBu, F(50,90) contour for the authorized KVLY-DT channel 44 operation (File No. BMPCDT-20040510AAP) and the proposed KVLY-DT channel 44 operation as specified in this application. As indicated, the 41 dBu contour for this instant modification application is entirely within the authorized 41 dBu contour. Therefore, it is believed that this instant modification application is acceptable for filing under the criteria set forth in the FCC TV/DTV freeze as there will be no increase in the KVLY-DT channel 44 DTV service area, based on the currently authorized facilities, in any direction.

Principal City Coverage

Figure 3 shows the predicted 48 dBu, F(50,90) coverage contour for the proposed KVLY-DT channel 44 operation. As indicated, Fargo, North Dakota is located within the 48 dBu contour. The Fargo city limits were derived from information contained in the 2000 U.S. Census for North Dakota. The distances to the predicted 41 dBu and 48 dBu, F(50,90) coverage contours were determined in accordance with the provisions of Section 73.625.

Environmental Protection Act

The proposed facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 578 meters above ground level.

The maximum DTV ERP is 356 kW (horizontal polarization). The calculated power density at a point 2 meters above ground level is 0.00142 mW/cm². This is 0.3271% of the FCC's recommended limit of 0.435 mW/cm² for channel 44 for an "uncontrolled" environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

The transmitter building is locked. Access to the antenna supporting structure is precluded by a locked hatch. Appropriate warning signs are placed on the transmitter building and antenna supporting structure to warn the general public of the possible RF radiation exposure.

If work is to be performed on the tower in an area where overexposure could occur, KVLY-DT will take the necessary action to prevent overexposure of workers on the tower, including reducing the KVLY-DT transmitter power or ceasing KVLY-DT operation completely.

Additionally, KVLY-DT will cooperate with other site users to assure that work is performed at the site without exceeding the FCC maximum permissible exposure limit (MPE) for occupational /controlled exposure.

Please note that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process



Exhibit No.

Date	29 Jun 2006		
Call Letters	KVLY-DT	Channel	44
Location	Fargo, North Dakota		
Customer			
Antenna Type	TFU-32DSB-J (C)		

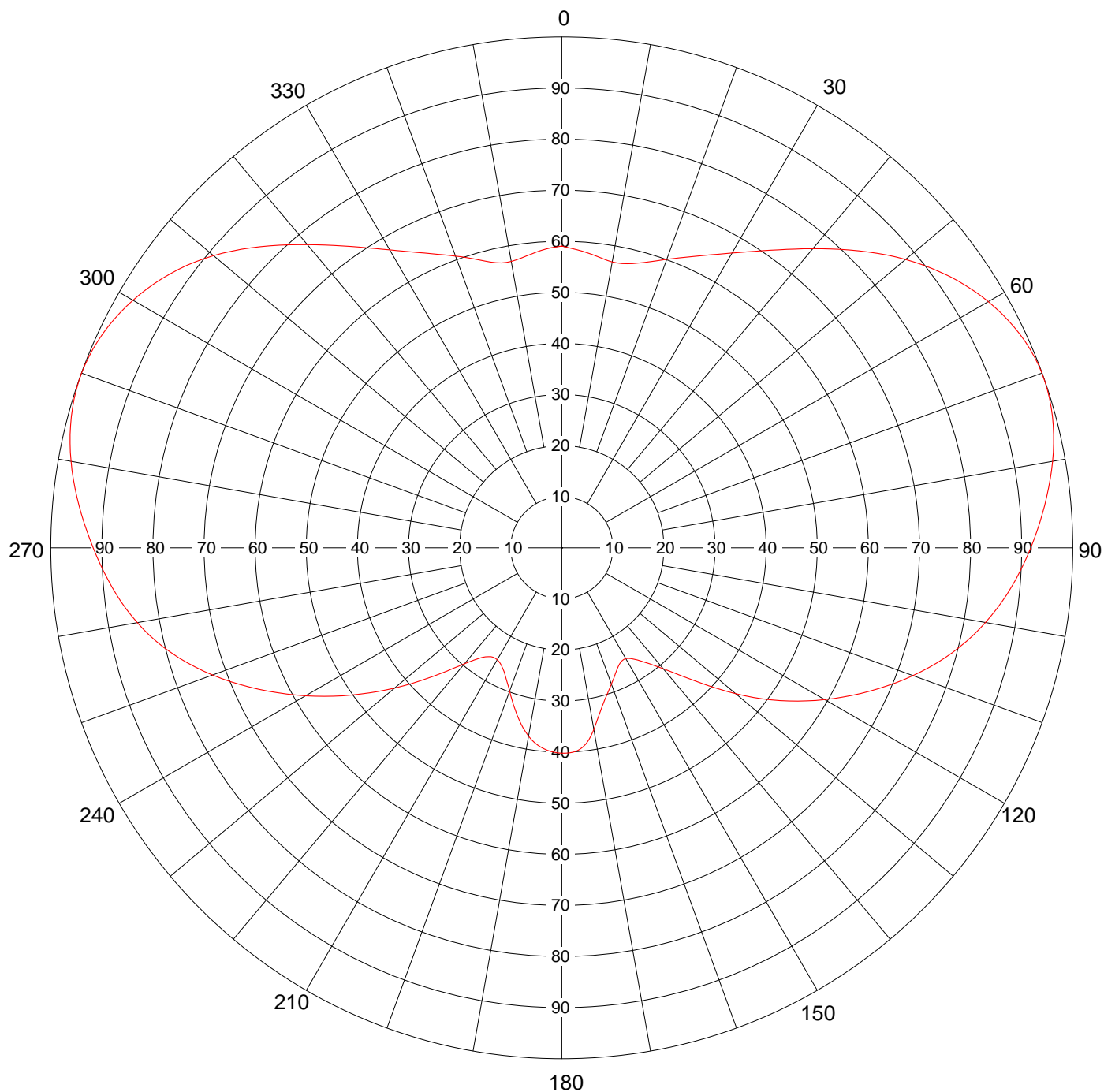
AZIMUTH PATTERN

Gain
Calculated / Measured

2.0 (3.01 dB)
Calculated

Frequency
Drawing #

653 MHz
DSB-J



Remarks:



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TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **DSB-J**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.591	558.8	27.47
10	0.568	516.2	27.13
20	0.601	577.9	27.62
30	0.666	709.7	28.51
40	0.764	933.9	29.70
50	0.878	1233.4	30.91
60	0.964	1486.9	31.72
70	1.000	1600.0	32.04
80	0.975	1521.0	31.82
90	0.918	1348.4	31.30
100	0.842	1134.3	30.55
110	0.731	855.0	29.32
120	0.594	564.5	27.52
130	0.444	315.4	24.99
140	0.309	152.8	21.84
150	0.250	100.0	20.00
160	0.284	129.0	21.11
170	0.361	208.5	23.19
180	0.402	258.6	24.13
190	0.374	223.8	23.50
200	0.299	143.0	21.55
210	0.253	102.4	20.10
220	0.296	140.2	21.47
230	0.427	291.7	24.65
240	0.579	536.4	27.29
250	0.728	848.0	29.28
260	0.844	1139.7	30.57
270	0.917	1345.4	31.29
280	0.975	1521.0	31.82
290	1.000	1600.0	32.04
300	0.969	1502.3	31.77
310	0.890	1267.4	31.03
320	0.775	961.0	29.83
330	0.673	724.7	28.60
340	0.608	591.5	27.72
350	0.569	518.0	27.14

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
0	0.591	558.8	27.47
71	1.000	1600.0	32.04
179	0.402	258.6	24.13
290	1.000	1600.0	32.04

Minima

Angle	Field	ERP (kW)	ERP (dBk)
11	0.568	516.2	27.13
151	0.250	100.0	20.00
211	0.252	101.6	20.07
349	0.569	518.0	27.14

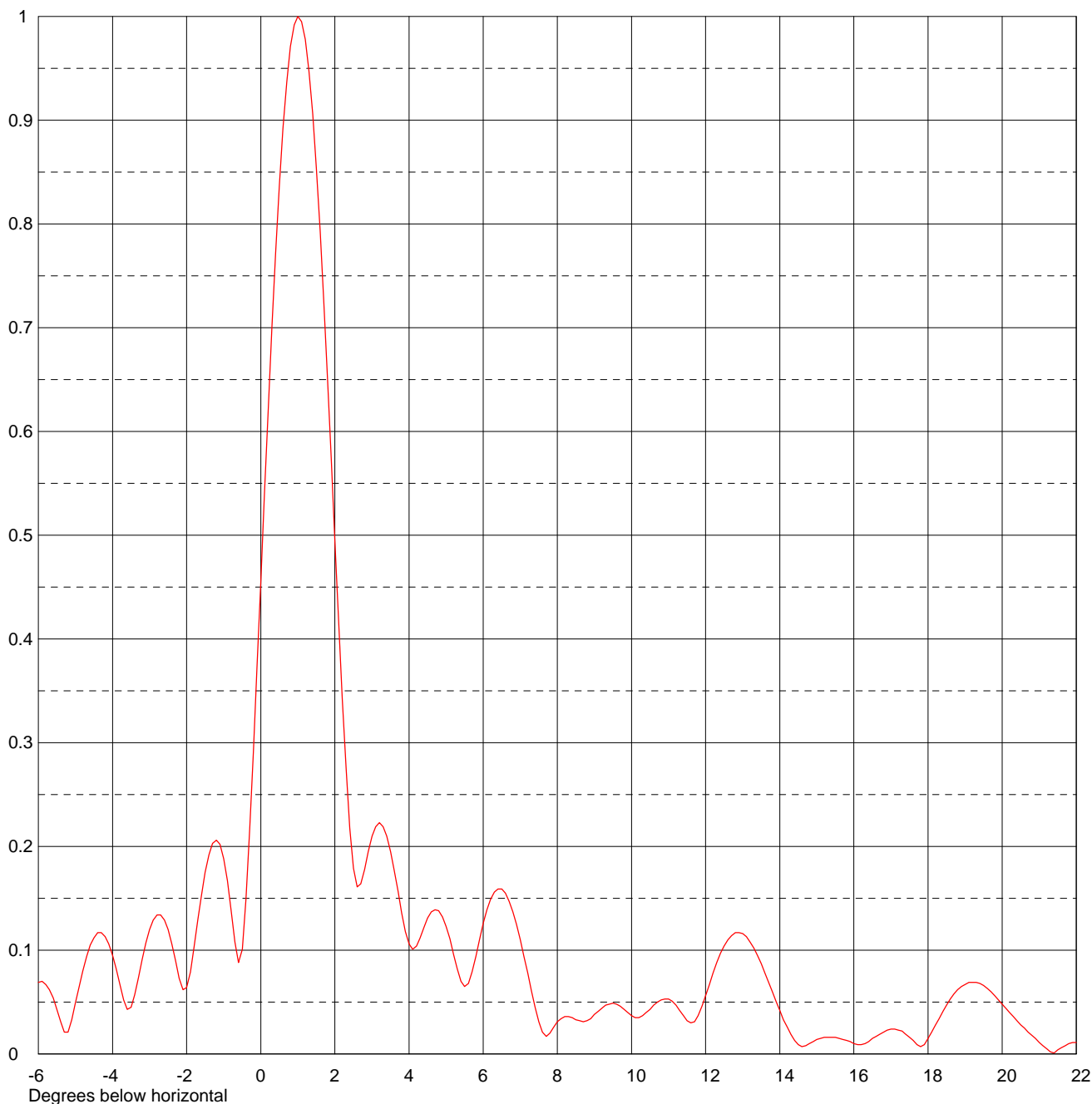
Remarks:



Date	29 Jun 2006		
Call Letters	KVLY-DT	Channel	44
Location	Fargo, North Dakota		
Customer			
Antenna Type	TFU-32DSB-J (C)		

ELEVATION PATTERN

RMS Gain at Main Lobe	32.0 (15.05 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	6.7 (8.26 dB)	Frequency	653.00 MHz
Calculated / Measured	Calculated	Drawing #	32B320100



Remarks:



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 Call Letters **KVLY-DT** Channel **44**
 Location **Fargo, North Dakota**
 Customer
 Antenna Type **TFU-32DSB-J (C)**

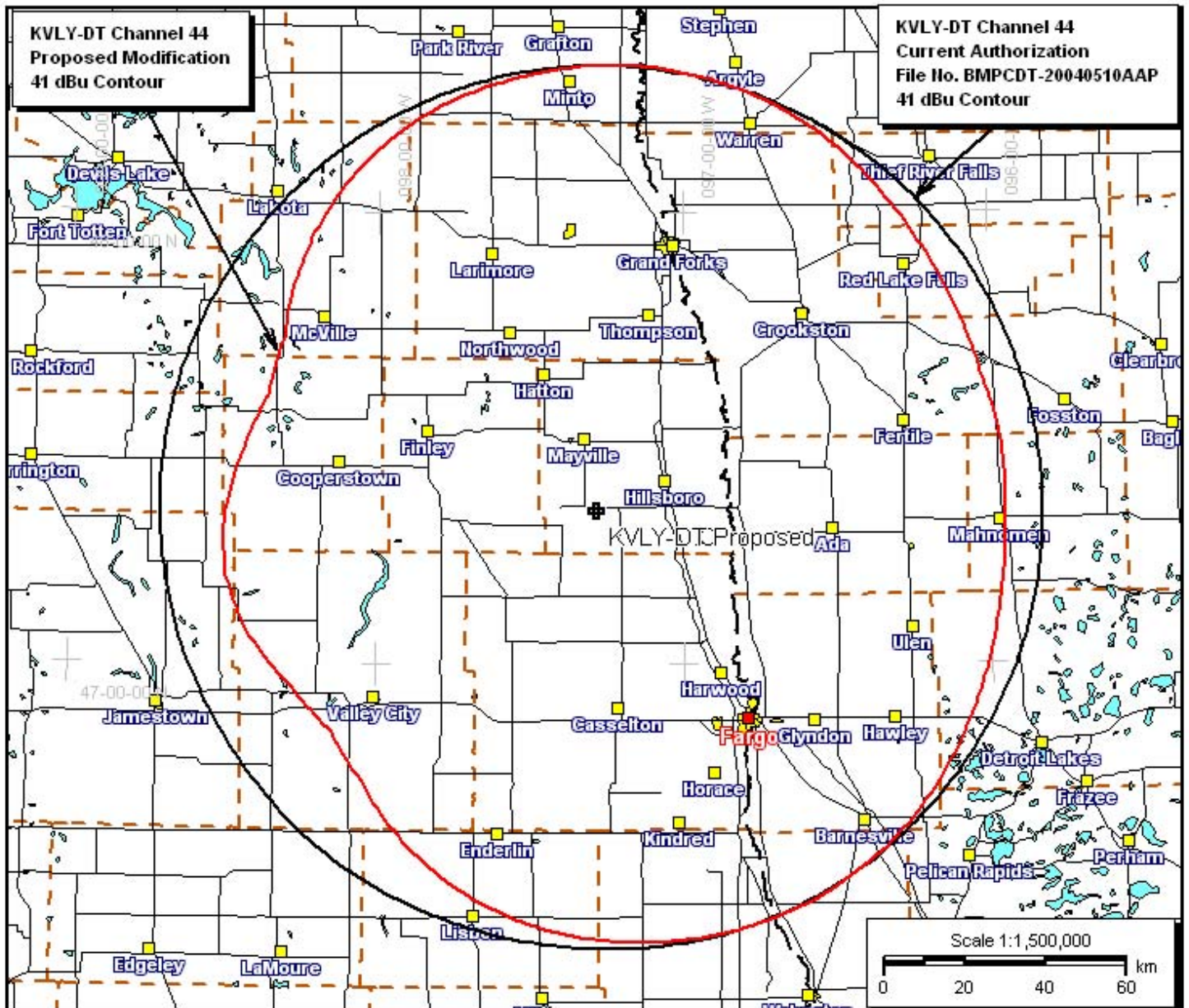
TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **32B320100-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.128	2.4	0.218	10.6	0.047	30.5	0.007	51.0	0.003	71.5	0.042
-9.5	0.055	2.6	0.161	10.8	0.052	31.0	0.014	51.5	0.004	72.0	0.048
-9.0	0.088	2.8	0.178	11.0	0.053	31.5	0.017	52.0	0.006	72.5	0.053
-8.5	0.065	3.0	0.210	11.5	0.032	32.0	0.022	52.5	0.008	73.0	0.055
-8.0	0.039	3.2	0.223	12.0	0.056	32.5	0.030	53.0	0.007	73.5	0.055
-7.5	0.069	3.4	0.210	12.5	0.104	33.0	0.032	53.5	0.005	74.0	0.053
-7.0	0.045	3.6	0.177	13.0	0.116	33.5	0.028	54.0	0.004	74.5	0.050
-6.5	0.027	3.8	0.136	13.5	0.087	34.0	0.022	54.5	0.010	75.0	0.046
-6.0	0.069	4.0	0.106	14.0	0.042	34.5	0.019	55.0	0.015	75.5	0.041
-5.5	0.043	4.2	0.104	14.5	0.009	35.0	0.016	55.5	0.017	76.0	0.036
-5.0	0.049	4.4	0.122	15.0	0.014	35.5	0.011	56.0	0.014	76.5	0.031
-4.5	0.112	4.6	0.137	15.5	0.016	36.0	0.002	56.5	0.011	77.0	0.026
-4.0	0.095	4.8	0.138	16.0	0.010	36.5	0.009	57.0	0.025	77.5	0.021
-3.5	0.045	5.0	0.123	16.5	0.015	37.0	0.019	57.5	0.049	78.0	0.017
-3.0	0.120	5.2	0.096	17.0	0.024	37.5	0.022	58.0	0.075	78.5	0.014
-2.8	0.134	5.4	0.070	17.5	0.016	38.0	0.014	58.5	0.097	79.0	0.011
-2.6	0.129	5.6	0.068	18.0	0.015	38.5	0.011	59.0	0.113	79.5	0.008
-2.4	0.106	5.8	0.094	18.5	0.047	39.0	0.047	59.5	0.119	80.0	0.006
-2.2	0.073	6.0	0.126	19.0	0.067	39.5	0.086	60.0	0.115	80.5	0.005
-2.0	0.064	6.2	0.149	19.5	0.066	40.0	0.116	60.5	0.100	81.0	0.004
-1.8	0.103	6.4	0.159	20.0	0.048	40.5	0.127	61.0	0.078	81.5	0.003
-1.6	0.153	6.6	0.155	20.5	0.028	41.0	0.115	61.5	0.053	82.0	0.002
-1.4	0.192	6.8	0.137	21.0	0.011	41.5	0.086	62.0	0.030	82.5	0.002
-1.2	0.206	7.0	0.110	21.5	0.004	42.0	0.051	62.5	0.021	83.0	0.001
-1.0	0.188	7.2	0.078	22.0	0.011	42.5	0.027	63.0	0.029	83.5	0.001
-0.8	0.139	7.4	0.045	22.5	0.006	43.0	0.025	63.5	0.036	84.0	0.001
-0.6	0.088	7.6	0.021	23.0	0.012	43.5	0.026	64.0	0.037	84.5	0.001
-0.4	0.149	7.8	0.020	23.5	0.023	44.0	0.021	64.5	0.032	85.0	0.001
-0.2	0.291	8.0	0.031	24.0	0.013	44.5	0.015	65.0	0.024	85.5	0.000
0.0	0.456	8.2	0.036	24.5	0.022	45.0	0.015	65.5	0.016	86.0	0.000
0.2	0.622	8.4	0.035	25.0	0.072	45.5	0.015	66.0	0.015	86.5	0.000
0.4	0.772	8.6	0.032	25.5	0.113	46.0	0.012	66.5	0.022	87.0	0.000
0.6	0.892	8.8	0.032	26.0	0.129	46.5	0.007	67.0	0.027	87.5	0.000
0.8	0.971	9.0	0.038	26.5	0.114	47.0	0.008	67.5	0.030	88.0	0.000
1.0	1.000	9.2	0.044	27.0	0.079	47.5	0.010	68.0	0.029	88.5	0.000
1.2	0.978	9.4	0.048	27.5	0.041	48.0	0.009	68.5	0.024	89.0	0.000
1.4	0.906	9.6	0.048	28.0	0.021	48.5	0.005	69.0	0.016	89.5	0.000
1.6	0.793	9.8	0.043	28.5	0.022	49.0	0.001	69.5	0.010	90.0	0.000
1.8	0.651	10.0	0.037	29.0	0.024	49.5	0.004	70.0	0.014		
2.0	0.495	10.2	0.035	29.5	0.018	50.0	0.005	70.5	0.023		
2.2	0.342	10.4	0.040	30.0	0.007	50.5	0.004	71.0	0.033		

Remarks:

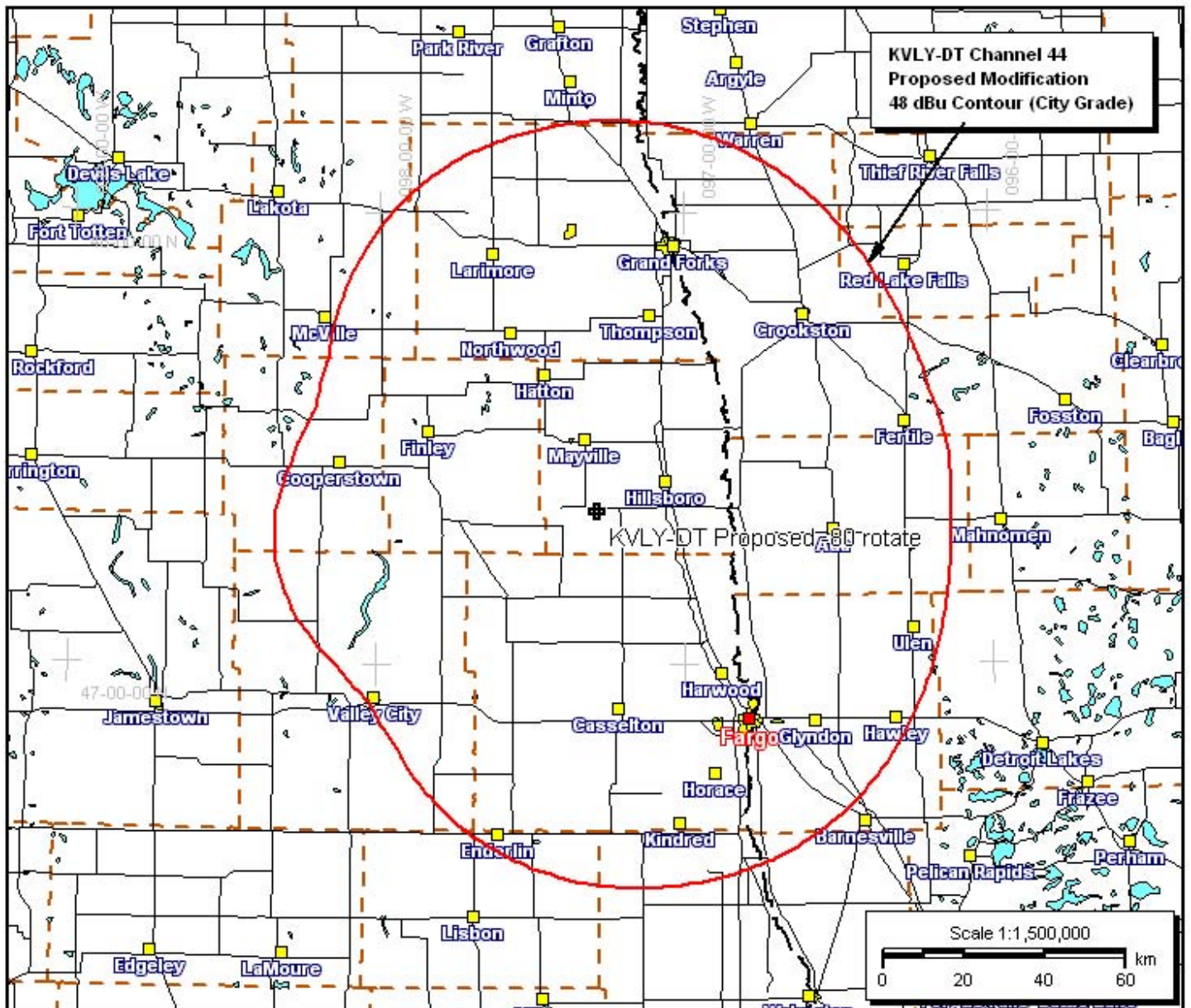
Figure 2



KVLY-DT
Fargo, North Dakota

41 dBu Contour of Current Authorization
and
41 dBu Contour of the Proposed Modification

Figure 3



KFYR-DT
Fargo, North Dakota

48 dBu Contour (City Grade) of Proposed Modification