

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KLKN LINCOLN LICENSE LLC, licensee of full-power television station KLKN(TV), Channel 8 in Lincoln, Nebraska, and licensee of a digital replacement translator (DRT) on Channel 31 in Lincoln, in support of its Application for Construction Permit to operate the DRT on Channel 35 as a result of displacement. No change in site location, antenna height or antenna pattern is proposed herein.

As a result of the Commission's repack of full-power television stations following the UHF spectrum auction, KMTV-TV in Omaha, Nebraska, was required to change channels from Channel 45 to Channel 31. In Exhibit B, we have plotted the noise-limited service contour of repacked KMTV-TV on Channel 31. To that map, we have added the 51 dbu service contour of the KLKN(TV) Channel 31 DRT, as licensed in BLCDT-20090903AAK. A Longley-Rice interference study reveals that the DRT causes predicted interference to 282,332 people within the licensed KMTV-TV service contour, according to the 2020 U.S. Census database. This number represents interference to 19.1% of the KMTV-TV service population. The interference area is shown in red on the map. Accordingly, the KLKN digital replacement translator is in a displacement situation and therefore requests operation on Channel 35.

It is proposed to replace the licensed KLKN(TV) DRT Channel 31 Dielectric TLP-8B directional antenna with the same model on Channel 35. The antenna will be mounted at the 91.4-meter level of the existing 97.5-meter communications/broadcast tower. The proposed effective radiated power for the facility is 5.6 kW in the horizontal plane. Exhibit C is a map upon which the predicted 51 dBu service contour of the proposed DRT facility is plotted. In

EXHIBIT A

Exhibit D, we provide a map on which the licensed service contour of the main KLKN(TV) facility is plotted in relation to the proposed 51 dBu service contour of the DRT facility. As shown, the contour from the proposed Lincoln DRT facility on Channel 35 is completely contained within the service contour of KLKN(TV), as required by Commission Rules.

Elevation and azimuth pattern data for the proposed Dielectric antenna appear in Exhibit E. Exhibit F contains the summary results from a TVStudy interference study, which was conducted using a cell size of 0.5 kilometers and increment spacing of 0.1 kilometer. It concludes that the proposed KLKN(TV) Channel 35 digital replacement translator facility meets the Commission's *de minimis* interference criteria to all co-channel and adjacent-channel post-repack full-power and Class A and LPTV/translator facilities.

A detailed power density calculation is provided in Exhibit G.

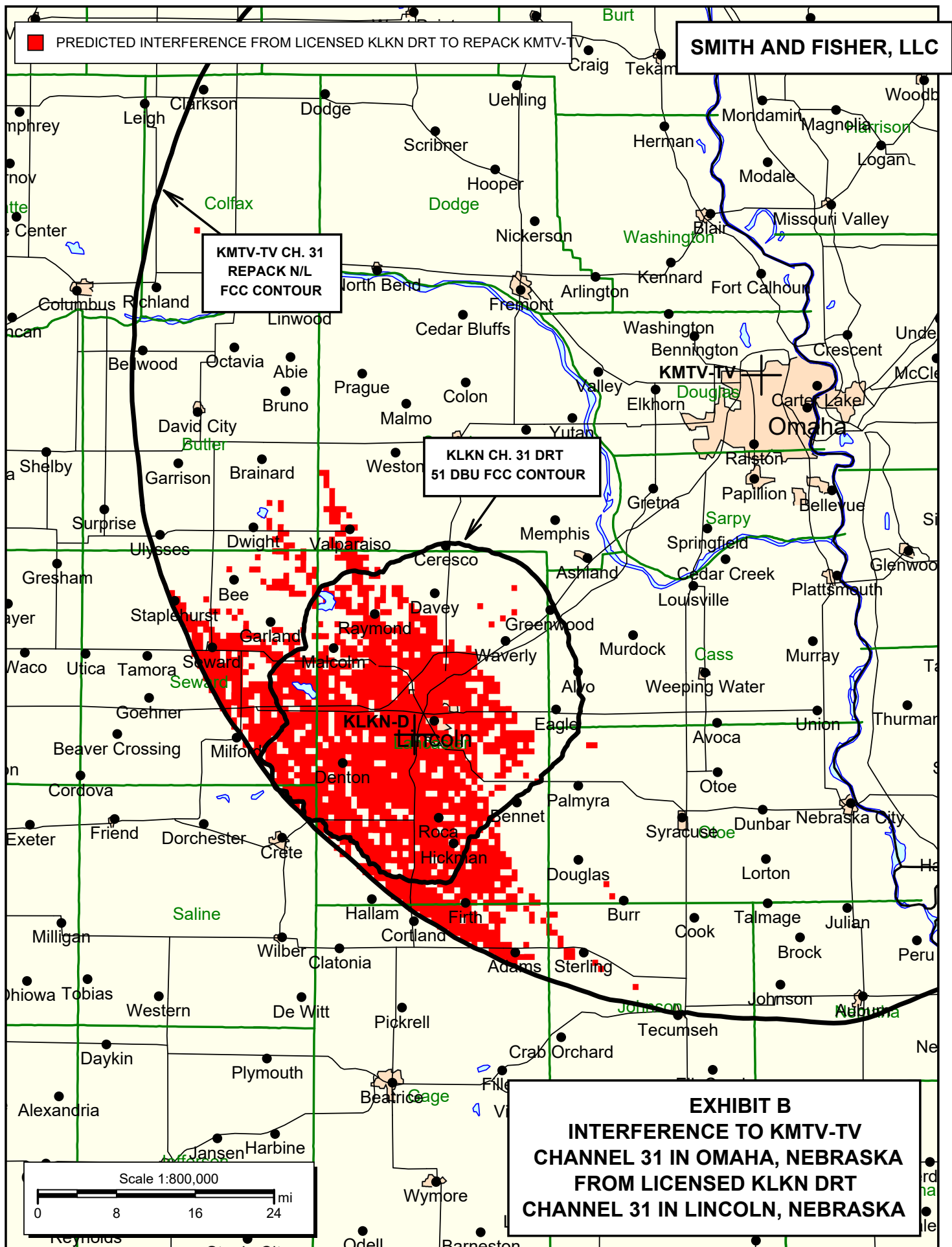
Since no change in the overall height or location of the existing communications tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1023299 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher", is written over a horizontal line.

September 12, 2023

KEVIN T. FISHER



CONTOUR POPULATION
2020 U.S. CENSUS DATA
326,838 (137,205 HH)

SMITH AND FISHER, LLC

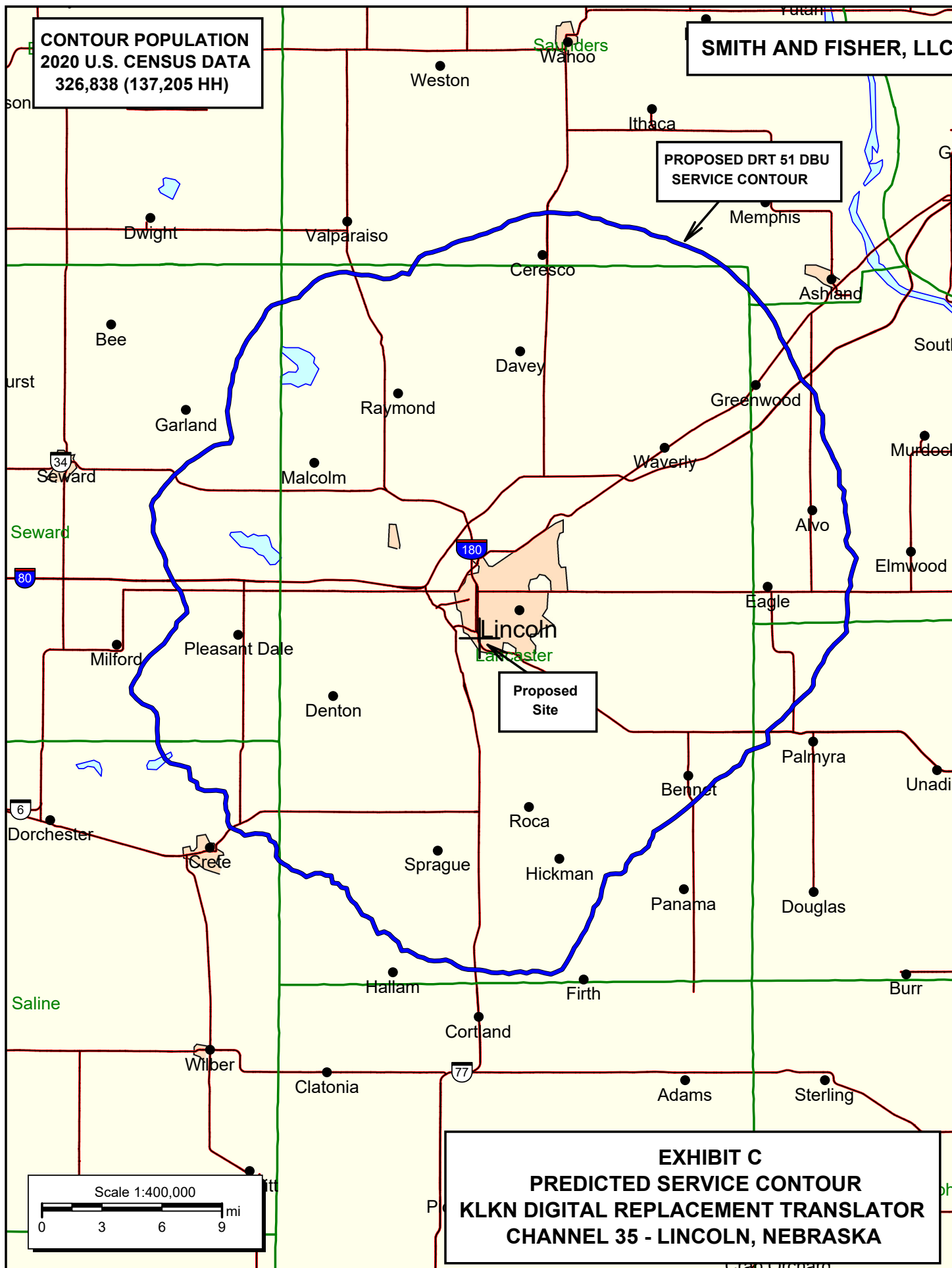
PROPOSED DRT 51 DBU
SERVICE CONTOUR

Proposed Site

EXHIBIT C
PREDICTED SERVICE CONTOUR
KLKN DIGITAL REPLACEMENT TRANSLATOR
CHANNEL 35 - LINCOLN, NEBRASKA

Scale 1:400,000

0 3 6 9 mi



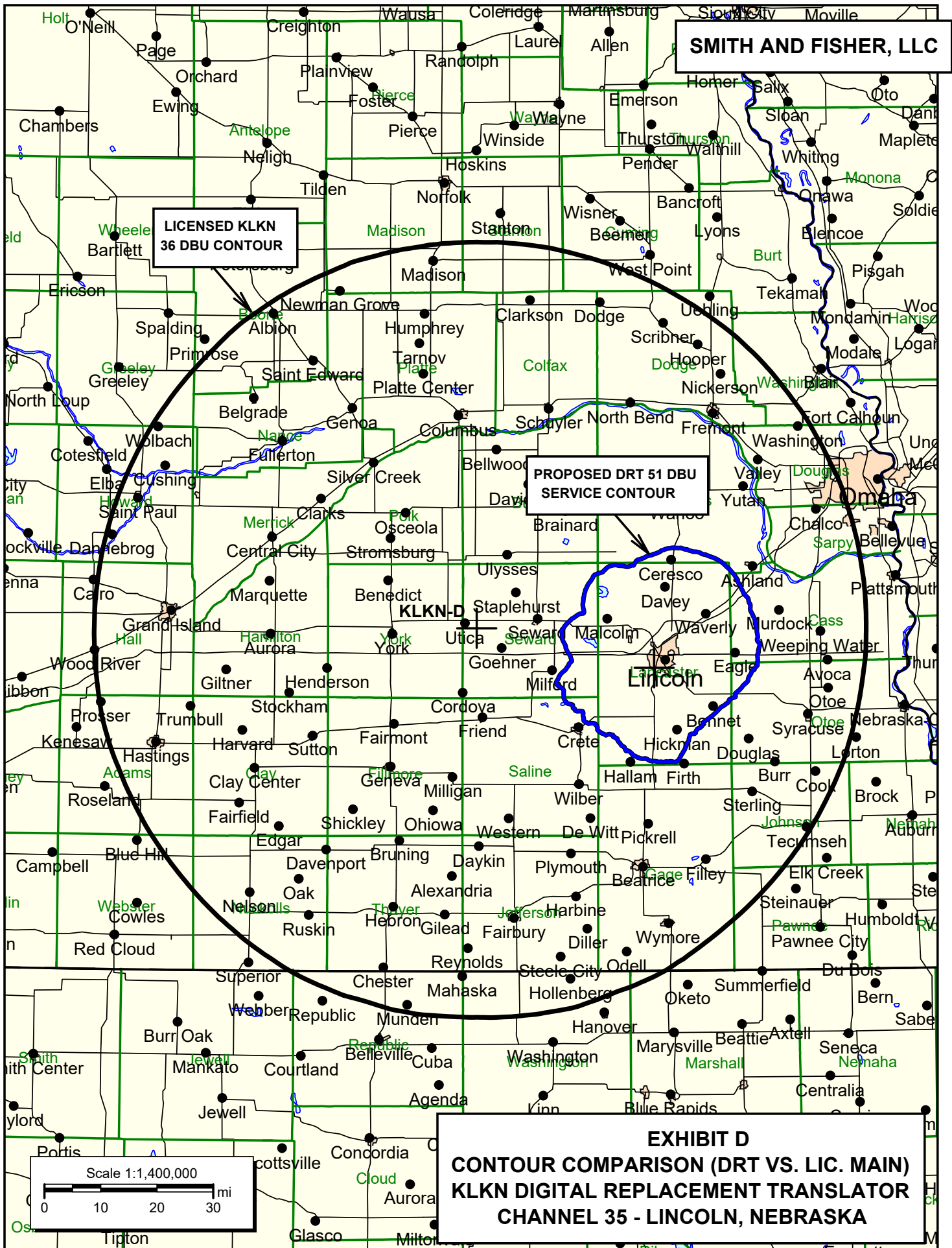


EXHIBIT E

Horizontal Polarization AZIMUTH PATTERN

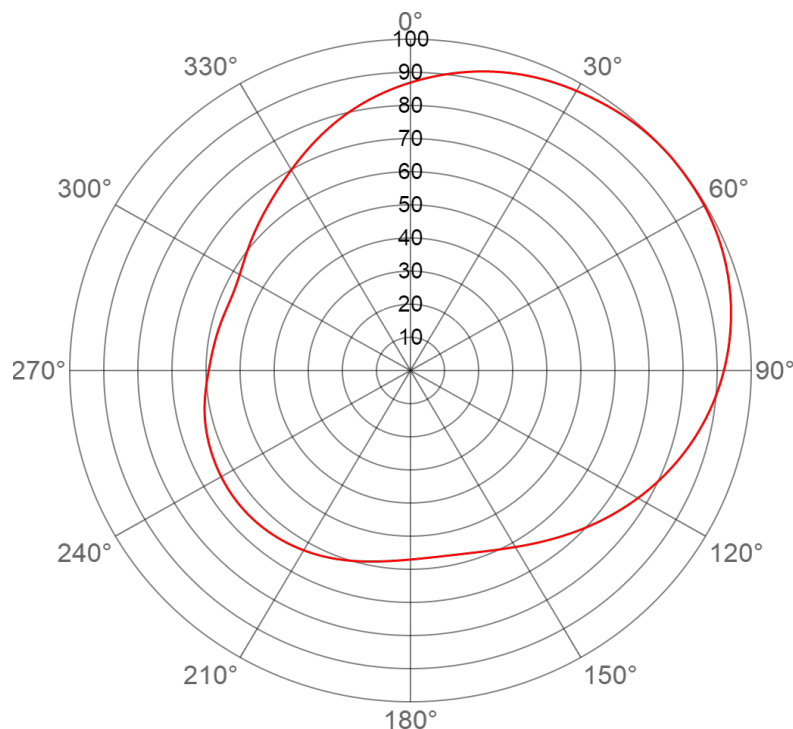


Exhibit No.
Date **12 Aug 2020**
Call Letters
Channel **35**
Antenna Type **TLP-8TLP**
Location
Customer

Gain **1.7 (2.30 dB)**
Calculated
Drawing # **TLP-B**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.869	36	0.986	72	0.977	108	0.836	144	0.641	180	0.571	216	0.636	252	0.628	288	0.572	324	0.668
1	0.874	37	0.988	73	0.975	109	0.831	145	0.637	181	0.572	217	0.637	253	0.626	289	0.571	325	0.673
2	0.879	38	0.990	74	0.972	110	0.826	146	0.632	182	0.573	218	0.638	254	0.625	290	0.570	326	0.678
3	0.883	39	0.991	75	0.970	111	0.820	147	0.628	183	0.574	219	0.639	255	0.623	291	0.570	327	0.683
4	0.888	40	0.993	76	0.967	112	0.815	148	0.624	184	0.575	220	0.640	256	0.621	292	0.570	328	0.688
5	0.893	41	0.994	77	0.964	113	0.810	149	0.619	185	0.577	221	0.641	257	0.619	293	0.570	329	0.694
6	0.897	42	0.995	78	0.961	114	0.804	150	0.615	186	0.578	222	0.642	258	0.618	294	0.570	330	0.699
7	0.902	43	0.996	79	0.958	115	0.799	151	0.612	187	0.580	223	0.643	259	0.616	295	0.571	331	0.705
8	0.906	44	0.997	80	0.955	116	0.793	152	0.608	188	0.582	224	0.643	260	0.613	296	0.572	332	0.711
9	0.910	45	0.998	81	0.952	117	0.787	153	0.604	189	0.584	225	0.644	261	0.611	297	0.573	333	0.716
10	0.914	46	0.999	82	0.949	118	0.782	154	0.601	190	0.586	226	0.644	262	0.609	298	0.575	334	0.722
11	0.919	47	0.999	83	0.946	119	0.776	155	0.597	191	0.588	227	0.645	263	0.607	299	0.577	335	0.728
12	0.923	48	0.999	84	0.942	120	0.771	156	0.594	192	0.590	228	0.645	264	0.605	300	0.579	336	0.734
13	0.927	49	1.000	85	0.939	121	0.765	157	0.591	193	0.592	229	0.645	265	0.602	301	0.581	337	0.740
14	0.930	50	1.000	86	0.935	122	0.759	158	0.589	194	0.594	230	0.645	266	0.600	302	0.584	338	0.747
15	0.934	51	1.000	87	0.932	123	0.754	159	0.586	195	0.596	231	0.645	267	0.598	303	0.587	339	0.753
16	0.938	52	0.999	88	0.928	124	0.748	160	0.583	196	0.598	232	0.645	268	0.596	304	0.590	340	0.759
17	0.941	53	0.999	89	0.924	125	0.742	161	0.581	197	0.600	233	0.645	269	0.594	305	0.593	341	0.765
18	0.944	54	0.999	90	0.920	126	0.737	162	0.579	198	0.603	234	0.645	270	0.592	306	0.596	342	0.771
19	0.948	55	0.998	91	0.916	127	0.731	163	0.577	199	0.605	235	0.644	271	0.590	307	0.600	343	0.777
20	0.951	56	0.998	92	0.912	128	0.726	164	0.575	200	0.607	236	0.644	272	0.589	308	0.603	344	0.783
21	0.954	57	0.998	93	0.908	129	0.720	165	0.574	201	0.609	237	0.643	273	0.587	309	0.607	345	0.789
22	0.956	58	0.997	94	0.904	130	0.714	166	0.573	202	0.611	238	0.643	274	0.586	310	0.610	346	0.795
23	0.959	59	0.996	95	0.899	131	0.709	167	0.571	203	0.614	239	0.642	275	0.584	311	0.614	347	0.801
24	0.962	60	0.996	96	0.895	132	0.703	168	0.570	204	0.616	240	0.641	276	0.583	312	0.618	348	0.806
25	0.964	61	0.995	97	0.890	133	0.698	169	0.569	205	0.618	241	0.640	277	0.582	313	0.622	349	0.812
26	0.966	62	0.994	98	0.886	134	0.692	170	0.569	206	0.619	242	0.640	278	0.581	314	0.625	350	0.817
27	0.968	63	0.993	99	0.881	135	0.687	171	0.568	207	0.621	243	0.639	279	0.580	315	0.629	351	0.823
28	0.971	64	0.992	100	0.876	136	0.682	172	0.568	208	0.623	244	0.638	280	0.579	316	0.633	352	0.828
29	0.973	65	0.990	101	0.872	137	0.676	173	0.568	209	0.625	245	0.637	281	0.578	317	0.637	353	0.834
30	0.975	66	0.989	102	0.867	138	0.671	174	0.568	210	0.627	246	0.636	282	0.577	318	0.641	354	0.839
31	0.977	67	0.987	103	0.862	139	0.666	175	0.568	211	0.628	247	0.634	283	0.576	319	0.646	355	0.844
32	0.979	68	0.985	104	0.857	140	0.661	176	0.568	212	0.630	248	0.633	284	0.575	320	0.650	356	0.849
33	0.980	69	0.983	105	0.852	141	0.656	177	0.569	213	0.632	249	0.632	285	0.574	321	0.654	357	0.854
34	0.982	70	0.981	106	0.847	142	0.651	178	0.569	214	0.633	250	0.631	286	0.573	322	0.659	358	0.859
35	0.984	71	0.979	107	0.842	143	0.646	179	0.570	215	0.634	251	0.629	287	0.572	323	0.663	359	0.864

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ELEVATION PATTERN

Exhibit No.

Date

12 Aug 2020

EXHIBIT E

Call Letters

Channel

35

Antenna Type

TLP-8TLP

Location

Customer

RMS Gain at Main Lobe

8.0 (9.03 dB)

Beam Tilt

1.5 Degrees

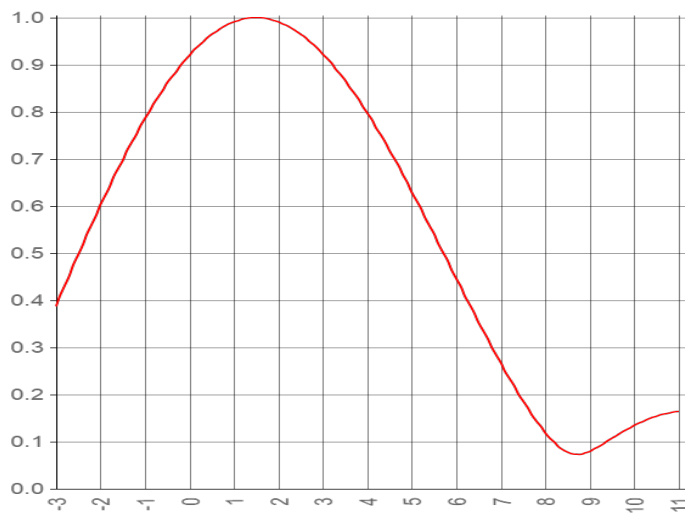
RMS Gain at Horizontal

6.8 (8.32 dB)

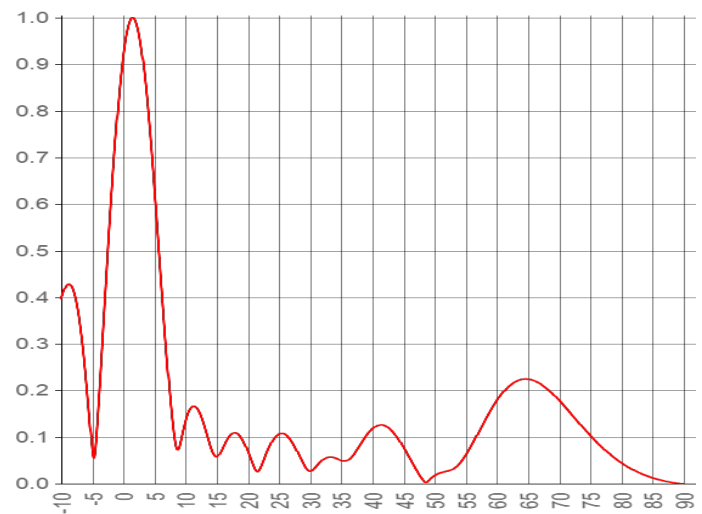
Drawing #

08L080150

Calculated



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.396	10	0.134	30	0.027	50	0.018	70	0.179
-9	0.427	11	0.164	31	0.037	51	0.024	71	0.164
-8	0.413	12	0.158	32	0.051	52	0.027	72	0.148
-7	0.346	13	0.124	33	0.057	53	0.032	73	0.133
-6	0.225	14	0.080	34	0.055	54	0.044	74	0.118
-5	0.072	15	0.058	35	0.050	55	0.062	75	0.103
-4	0.169	16	0.078	36	0.050	56	0.085	76	0.089
-3	0.387	17	0.102	37	0.063	57	0.109	77	0.077
-2	0.601	18	0.109	38	0.083	58	0.134	78	0.065
-1	0.786	19	0.097	39	0.103	59	0.158	79	0.054
0	0.921	20	0.069	40	0.118	60	0.179	80	0.045
1	0.991	21	0.035	41	0.125	61	0.197	81	0.036
2	0.991	22	0.033	42	0.124	62	0.210	82	0.029
3	0.923	23	0.066	43	0.115	63	0.219	83	0.023
4	0.797	24	0.093	44	0.099	64	0.224	84	0.017
5	0.631	25	0.107	45	0.078	65	0.224	85	0.013
6	0.446	26	0.106	46	0.054	66	0.221	86	0.009
7	0.266	27	0.091	47	0.031	67	0.214	87	0.005
8	0.119	28	0.067	48	0.011	68	0.204	88	0.003
9	0.079	29	0.041	49	0.007	69	0.192	89	0.001

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TVSTUDY INTERFERENCE ANALYSIS RESULTS
 PROPOSED KLKN DISPLACED DRT
 CHANNEL 35 – LINCOLN, NEBRASKA

Study created: 2023.09.12 16:31:51

Study build station data: LMS TV 2023-08-30 #5

Proposal: KLKN D35 LD CP LINCOLN, NE

File number: BLANK0000120472

Facility ID: 11264

Station data: User record

Record ID: 5

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K36QD-D	N21-	TX	LIC	Omaha, NE	BLTT20060510AAY	149.4 km
No	WDAF-TV	D34	DT	LIC	KANSAS CITY, MO	BLANK0000155694	261.4
No	K34IB-D	D34	LD	LIC	DECATUR, NE	BLDTT20081125APS	141.3
No	KUSD-TV	D34	DT	LIC	VERMILLION, SD	BLEDT20100310ABZ	252.5
No	K35PA-D	D35	LD	LIC	MASON CITY, IA	BLANK0000195934	374.3
Yes	KHIN	D35	DT	LIC	RED OAK, IA	BLANK0000030114	136.7
No	KRIN	D35	DT	LIC	WATERLOO, IA	BLEDT20050218ABQ	437.7
No	KMTW	D35	DT	LIC	HUTCHINSON, KS	BLANK0000201733	323.2
No	K35KX-D	D35	LD	LIC	TOPEKA, KS	BLANK0000121576	235.1
No	K35IZ-D	D35	LD	LIC	JACKSON, MN	BLDTT20090811AAV	344.0
No	KOZJ	D35	DT	LIC	JOPLIN, MO	BLANK0000059543	452.2
No	KQML-LD	D35	LD	LIC	Kansas city, MO	BLANK0000124480	271.2
No	KNEN-LD	D35	LD	LIC	NORFOLK, NE	BLANK0000004598	148.5
No	K36IO-D	D36	LD	LIC	MANHATTAN, KS	BLDTL20090908ADI	172.8
No	KSHB-TV	D36	DT	LIC	KANSAS CITY, MO	BLANK0000153577	272.7
No	K36MO-D	D36	LD	LIC	LINCOLN, NE	BLANK0000198096	75.7
No	K36MO-D	D36	LD	CP	LINCOLN, NE	BLANK0000193301	75.7
No	K36QD-D	D36-	LD	LIC	Omaha, NE	BLANK0000160449	70.0
No	K36QD-D	D36-	LD	CP	Omaha, NE	BLANK0000211420	70.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D35

Mask: Full Service

Latitude: 40 46 47.00 N (NAD83)

Longitude: 96 42 18.00 W

Height AMSL: 436.7 m

HAAT: 0.0 m

Peak ERP: 5.60 kW

Antenna: DIE-TLP-8B (ID 94572) 0.0 deg

Elev Pattn: Generic

Elec Tilt: 1.50

50.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	4.23 kW	70.0 m	32.7 km
45.0	5.56	72.2	34.4
90.0	4.74	49.0	29.4
135.0	2.65	27.7	21.6
180.0	1.83	60.7	27.1
225.0	2.31	39.9	23.6
270.0	1.96	50.5	25.5
315.0	2.22	65.5	28.8

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 54 m

Distance to Canadian border: 890.0 km

Distance to Mexican border: 1294.9 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 276.8 degrees Distance: 145.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 267.3 degrees Distance: 723.6 km

Study cell size: 0.50 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

No IX check failures found.

POWER DENSITY CALCULATION

PROPOSED KLKN DIGITAL REPLACEMENT TRANSLATOR
CHANNEL 35 – LINCOLN, NEBRASKA
[DISPLACEMENT OF BLCDT-20090903AAK]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Lincoln facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 5.6 kW, an antenna radiation center 91.4 meters above ground, and the specific elevation pattern of the proposed Dielectric TLP-8B antenna, maximum power density two meters above ground of 0.00097 mW/cm² is calculated to occur 42 meters northeast of the base of the tower. Since this is only 0.2 percent of the 0.40 mW/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 35 (596-602 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.