

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KNOXVILLE TV LLC, licensee of digital Low Power Television Station KHDS-LD, Channel 51 in Salina, Kansas, in support of its displacement Application for Construction Permit to specify operation on Channel 29. This station is being displaced by T-Mobile's implementation of service on the present KHDS-LD channel. No change in site location, antenna azimuth pattern or antenna height is proposed herein.

It is proposed to mount an ERI omnidirectional antenna at the 86.6-meter level of the existing 89.9-meter tower on which the present KHDS-LD antenna is located. The proposed effective radiated power for the facility is 15.0 kW in horizontal plane, which is the present power level of KHDS-LD. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

Elevation pattern data for the proposed ERI 12-bay antenna appears in Exhibit C. Exhibit D is a summary report from a TVStudy interference analysis for the proposed facility. Our study employed a cell size and increment spacing of 1 kilometer. Further the applicant proposes use of a stringent mask filter. The results indicate that the proposed KHDS-LD facility meets the Commission's interference requirements to all full-power and low-power co-channel and adjacent-channel television facilities. A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the existing KHDS-LD tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In

EXHIBIT A

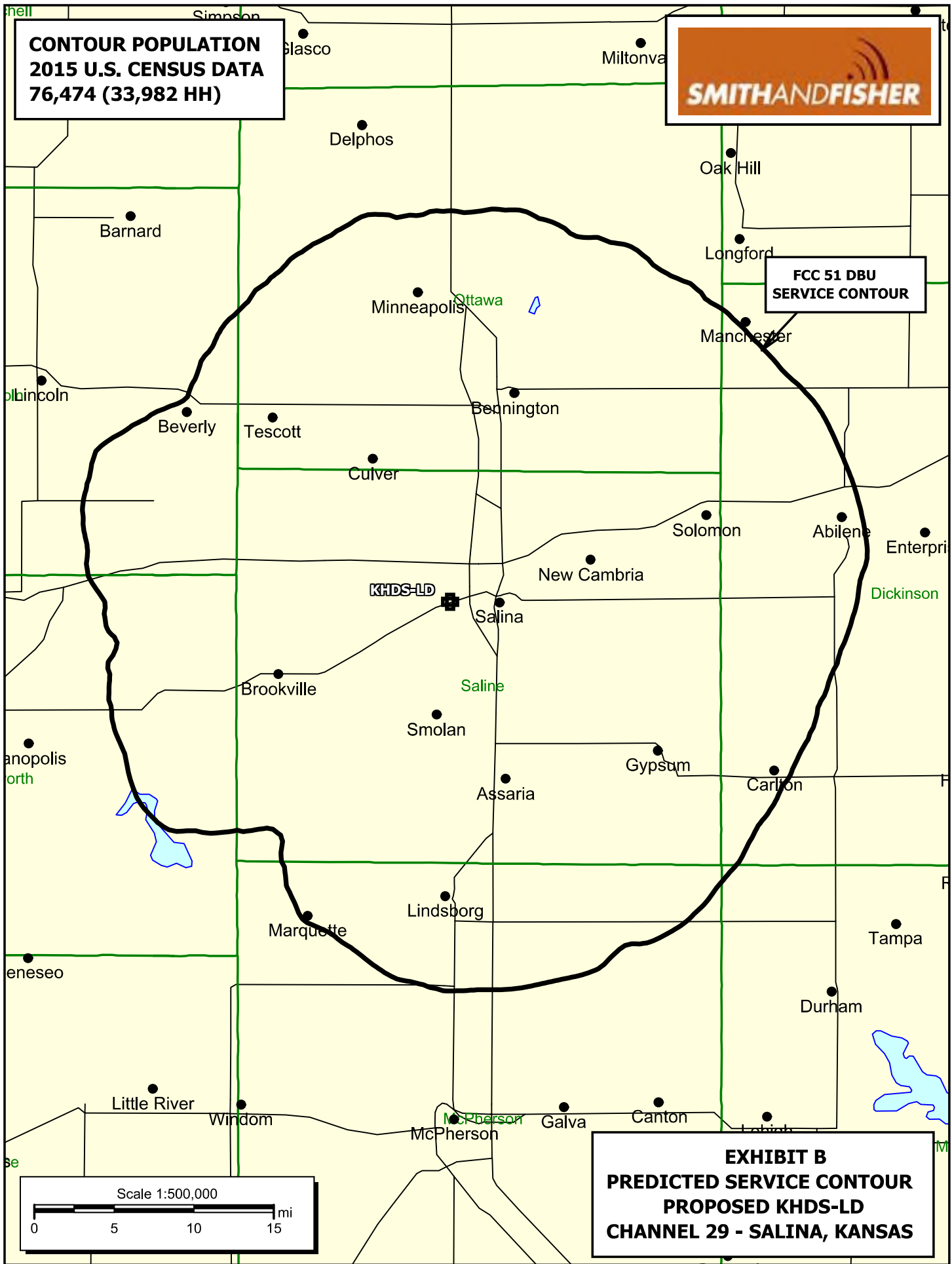
addition, the Federal Communications Commission issued Antenna Structure Registration Number 1039952 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read 'K. T. Fisher', with a stylized, elongated final letter.

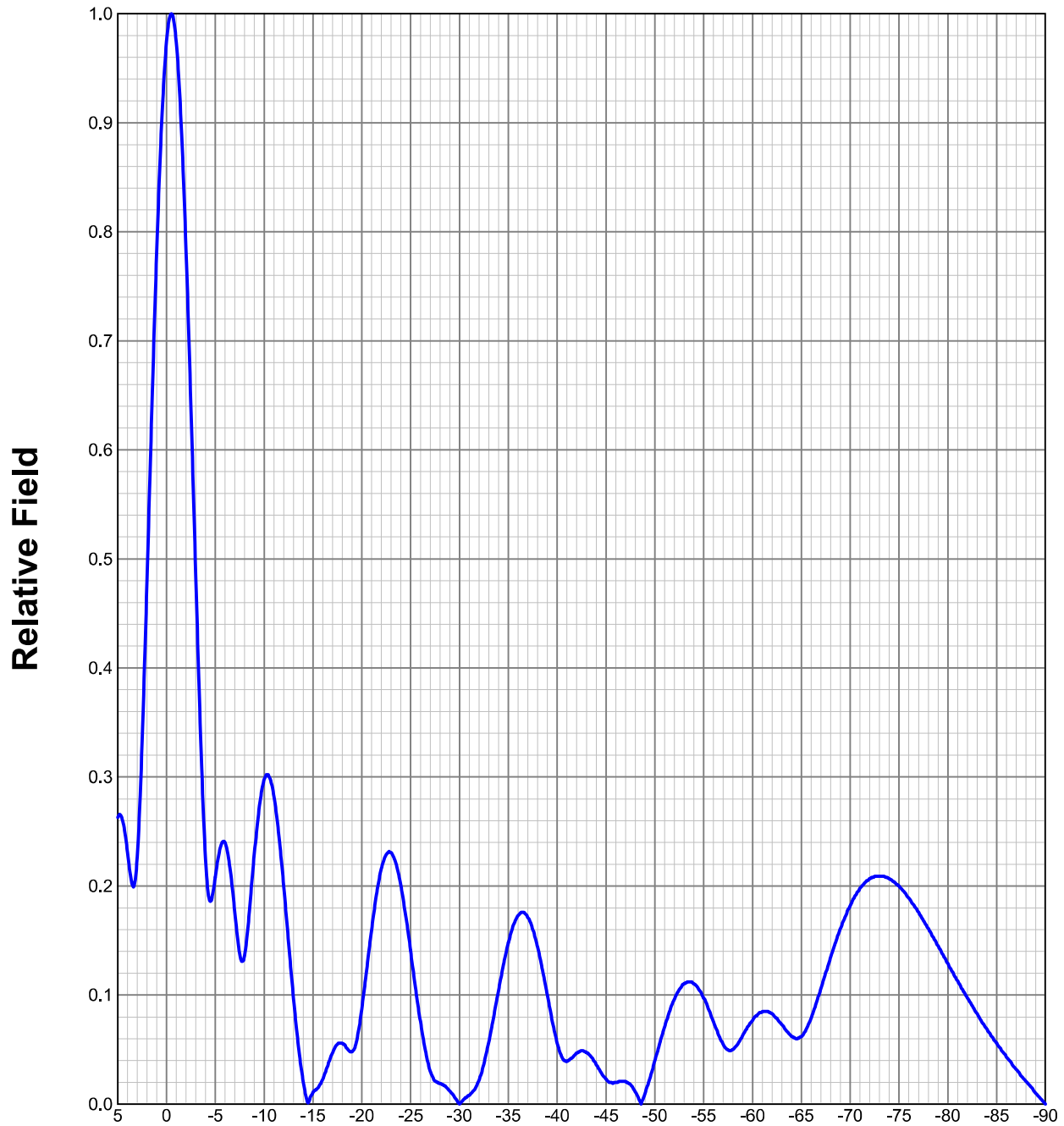
KEVIN T. FISHER

July 18, 2017



**ELEVATION PATTERN**

Type:	ALP12L2		Channel:	29
Directivity:	Numeric	dBd	Location:	
Main Lobe:	12.64	11.02	Beam Tilt:	-0.50
Horizontal:	12.02	10.80	Polarization:	Horizontal



Preliminary, subject to final design and review.

TVSTUDY INTERFERENCE ANALYSIS RESULTS  
PROPOSED KHDS-LD  
CHANNEL 29 – SALINA, KANSAS

Study created: 2017.07.18 12:16:48

Study build station data: LMS TV 2017-04-14 (2)

Proposal: KHDS-LD D29 LD LIC SALINA, KS

File number: BLDLTL20121130BPC

Facility ID: 65527

Station data: User record

Record ID: 23

Country: U.S.

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
K15CN	N15z	TX	LIC	SALINA, KS	BLTTL19880714IH	5.4 km
KKSU-LD	N21z	TX	LIC	MANHATTAN, KS	BLTTL19950512ID	101.9
K28NE-D	D28	LD	CP	HAYS, KS	BNPDTL20100514AHB	148.3
KWKD-LP	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	130.6
KWKD-LP	D28	LD	CP	WICHITA, KS	BDFCDTL20101025AAU	116.3
KHNE-TV	D28	DT	LIC	HASTINGS, NE	BLEDT20030409ABN	217.7
KSAS-LP	D29	LD	LIC	DODGE CITY, KS	BLDTL20140106DOA	239.7
K29JU-D	D29	LD	CP	GARDEN CITY, KS	BNPDTL20100108ADI	290.9
K29KL-D	D29	LD	CP	INDEPENDENCE, KS	BDCCDTL20120314ACP	293.3
KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	273.8
KWNB-LD	D29	LD	LIC	MCCOOK, NE	BLDTL20070619AAU	298.8
K29KK-D	D29	LD	CP	NORFOLK, NE	BDCCDTL20120206AAL	323.7
KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDT20081105ACO	365.0
KTZT-CD	D29	DC	LIC	TULSA, OK	BLDTA20120430AEA	333.1
K29HZ-D	D29	LD	LIC	WOODWARD, ETC., OK	BLDTT20101007ABM	289.8
K30LZ-D	D30	LD	CP	FORT RILEY, KS	BNPDTL20100510AFK	89.2
KGBD-LD	D30	LD	LIC	GREAT BEND, KS	BLDTL20121217ACU	103.4
K30NO-D	D30	LD	CP	PAXICO, KS	BNPDTL20100514AIC	131.3
K30LK-D	D30	LD	CP	SALINA, KS	BNPDTL20100419ACL	0.1
KSMI-LD	D30	LD	LIC	WICHITA, KS	BLANK0000011260	116.3
KSMI-LD	D30	LD	CP	WICHITA, KS	BDISDTL20111219ADQ	116.3
KGHK-LD	D30	LD	CP	HASTINGS, NE	BLANK0000007861	219.9
K31BW	N31	TX	LIC	MANHATTAN, KS	BLTTL19890119II	100.4

Data is not available for AM station check

Record parameters as studied:

Channel: D29

Mask: Stringent

Latitude: 38 50 27.00 N (NAD83)

Longitude: 97 40 8.00 W

Height AMSL: 462.7 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: ERI-AL12-51-PL (ID 111295) 0.0 deg

50.2 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	75.5 m	40.3 km
45.0	15.0	77.4	40.6
90.0	15.0	87.1	42.0
135.0	15.0	78.2	40.7
180.0	15.0	73.0	39.9
225.0	15.0	56.3	37.1
270.0	15.0	53.1	36.4
315.0	15.0	53.1	36.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m    Computed HAAT: 69 m

Distance to Canadian border: 1119.2 km

Distance to Mexican border: 1064.2 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 344.6 degrees    Distance: 240.3 km

ERP: 15.0 kW    Field strength: 3.7 dBu, 0.0 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 284.7 degrees    Distance: 663.4 km

Study cell size: 1.00 km

Profile point spacing: 1.00 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 KHDS-LD  
CHANNEL 29 – SALINA, KANSAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Salina facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW, an antenna radiation center 86.6 meters above ground, and the specific elevation pattern of the proposed ERI antenna, maximum power density two meters above ground of  $0.0028 \text{ mW/cm}^2$  is calculated to occur 25 meters from the base of the tower. Since this is only 0.8 percent of the  $0.37 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 29 (560-566 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.