

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRI-STATE CHRISTIAN TV, INC., licensee of digital television station KXTF-DT, Channel 34 in Twin Falls, Idaho, in support of its Application for Construction Permit to specify an increase in effective radiated power to 230 kW and operate with the station's top-mounted previous analog antenna. No change in site location proposed herein.

The previous Bogner analog antenna is mounted at the 29-meter level of the existing 35-meter structure on which the present KXTF-DT antenna is located. Exhibit B is a map upon which the predicted service contours of proposed KXTF-DT are plotted. As shown, the entire community of license, Twin Falls, Idaho, is encompassed by the proposed 48 dBu city-grade service contour.

An azimuth pattern for the Bogner directional antenna is included in Exhibit C. Exhibit D contains the summary results from a TVStudy interference study, which was conducted using a cell size of 2.0 kilometers and increment spacing of 1.0 kilometer. It concludes that the proposed KXTF-DT facility meets the Commission's de minimis interference criteria to all co-channel and adjacent-channel post-repack full-power and Class A facilities. A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the existing KXTF-DT tower is proposed herein, and due to the diminutive height of the tower (35 meters) and its proximity to the nearest airport runway, the Federal Aviation Administration has not been notified of this application. In addition, and for the same reasons, FCC Antenna Structure Registration is not required. This conclusion is supported by the Commission's TOWAIR software.

EXHIBIT A

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". The signature is stylized with a large "K", a small "T", and a long horizontal stroke for the "Fisher" part.

KEVIN T. FISHER

November 18, 2020

CONTOUR POPULATION  
2018 U.S. CENSUS DATA  
CITY-GRADE (48 DBU) : 131,889 (50,948 HH)  
NOISE-LIMITED SERVICE : 151,924 (58,679 HH)

Smith and Fisher, LLC

Proposed KXTF-DT  
N/L Service Contour

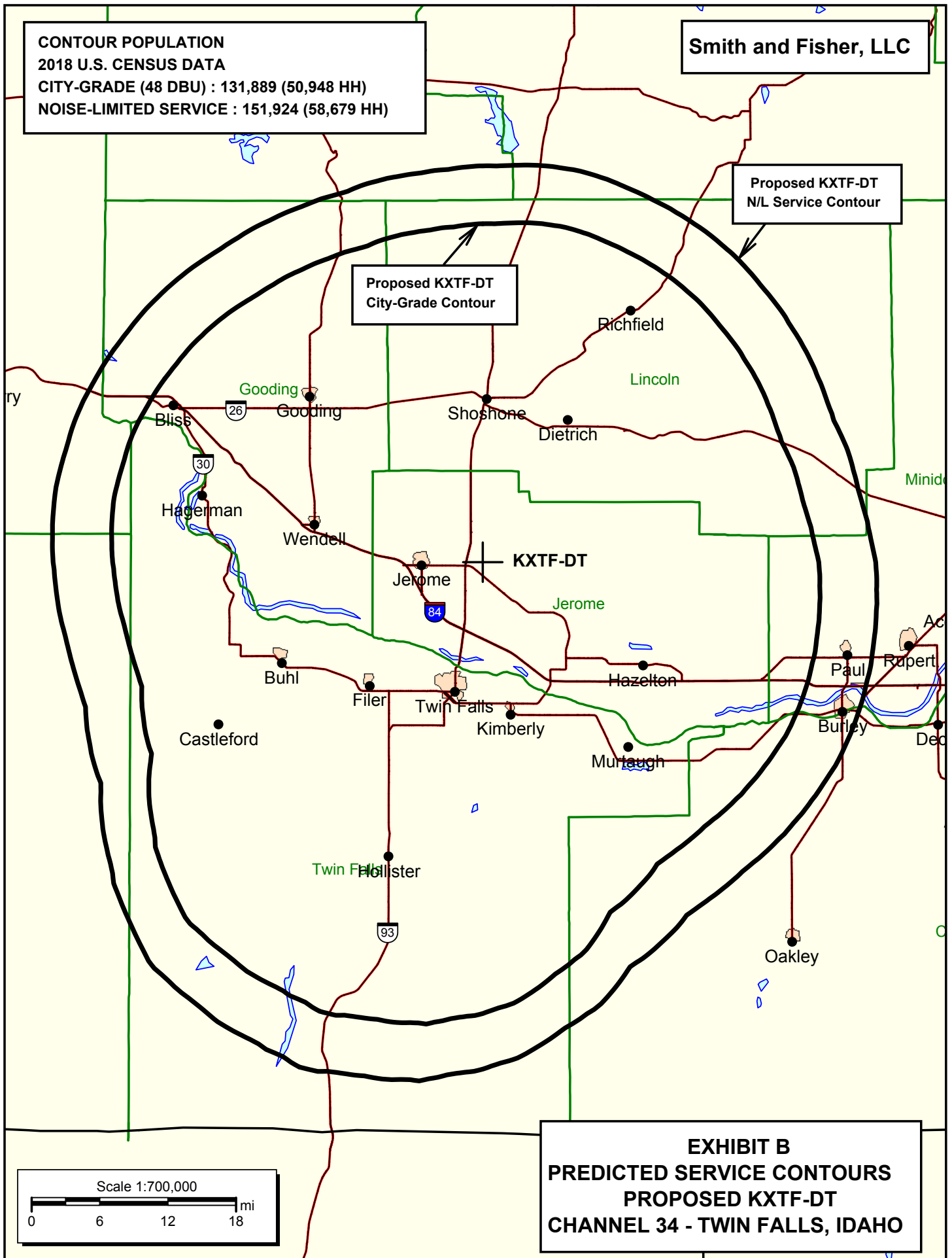
Proposed KXTF-DT  
City-Grade Contour

KXTF-DT

EXHIBIT B  
PREDICTED SERVICE CONTOURS  
PROPOSED KXTF-DT  
CHANNEL 34 - TWIN FALLS, IDAHO

Scale 1:700,000

0 6 12 18 mi

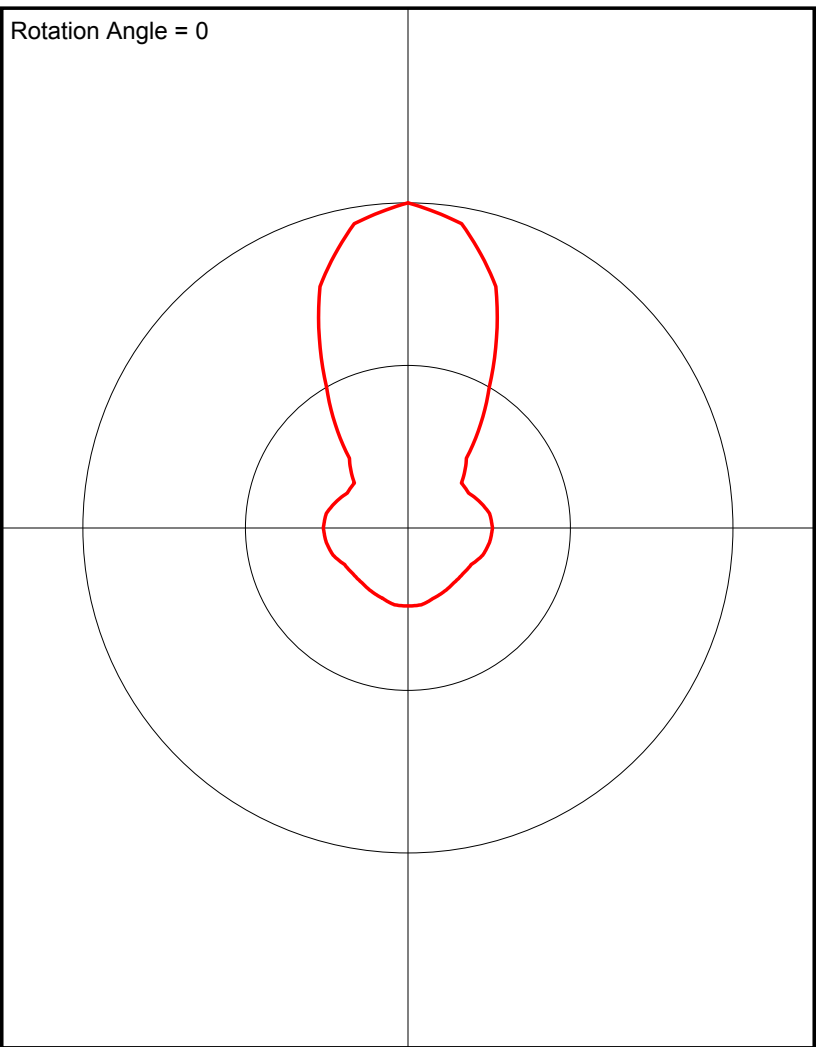


Antenna Pattern

Pre-Rotation Antenna Pattern....

Rotation Angle = 0

Azimuth (deg)	Relative Field
0.0	1.0
10.0	0.95
20.0	0.79
30.0	0.5
40.0	0.28
50.0	0.215
60.0	0.215
70.0	0.235
80.0	0.255
90.0	0.26
100.0	0.255
110.0	0.245
120.0	0.225
130.0	0.22
140.0	0.22
150.0	0.225
160.0	0.23
170.0	0.24
180.0	0.24
190.0	0.24
200.0	0.23
210.0	0.225
220.0	0.22
230.0	0.22
240.0	0.225
250.0	0.245
260.0	0.255
270.0	0.26
280.0	0.255
290.0	0.235
300.0	0.215
310.0	0.215
320.0	0.28
330.0	0.5
340.0	0.79
350.0	0.95



TVSTUDY INTERFERENCE ANALYSIS RESULTS  
PROPOSED KXTF-DT  
CHANNEL 34 – TWIN FALLS, IDAHO

Study created: 2020.11.18 10:19:38

Study build station data: LMS TV 2020-11-16

Proposal: KXTF D34 DT LIC TWIN FALLS, ID

File number: BLCDT20110201ACB

Facility ID: 1255

Station data: User record

Record ID: 929

Country: U.S.

Zone: II

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	K34NC-D	D34	DC	LIC	FISH CREEK, ETC., ID	BLANK0000121408	155.7 km
No	KUTV	D34	DT	LIC	SALT LAKE CITY, UT	BLANK0000113902	294.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D34

Latitude: 42 43 41.60 N (NAD83)

Longitude: 114 24 46.10 W

Height AMSL: 1335.0 m

HAAT: 152.0 m

Peak ERP: 230 kW

Antenna: Bogner B16UD at 200 Degrees True

Elev Pattn: Generic

Elec Tilt: 0.50

40.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	12.2 kW	132.8 m	55.9 km
45.0	11.9	126.9	55.4
90.0	13.8	118.1	55.5
135.0	11.6	152.7	57.2
180.0	144	192.1	72.2
225.0	95.7	212.4	71.7
270.0	12.7	198.7	60.6
315.0	12.7	164.9	58.4

Database HAAT does not agree with computed HAAT

Database HAAT: 152 m    Computed HAAT: 162 m

Distance to Canadian border: 697.2 km

Distance to Mexican border: 1112.9 km

Conditions at FCC monitoring station: Livermore CA

Bearing: 230.7 degrees    Distance: 834.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 107.5 degrees    Distance: 814.6 km

Study cell size: 2.00 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 KXTF-DT  
CHANNEL 34 – TWIN FALLS, IDAHO

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Twin Falls facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 230 kW, an antenna radiation center 29 meters above ground, and assuming a vertical relative field value of 10 percent at the steeper elevation angles for the proposed Bogner B16UD antenna, maximum power density two meters above ground of  $0.105 \text{ mW/cm}^2$  is calculated to occur near the base of the tower. Since this is only 27 percent of the  $0.39 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 34 (590-596 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.