

NARRATIVE

PERMIAN BASIN BROADCASTING, LLC

STATION **K266BT**

FACID **147288**

FILE NUMBER **BLFT-20161129AHC**

Applicant, Permian Basin Broadcasting, LLC (PBB) submits this minor change application for a construction permit to move the current licensed operation of K266BT to a new location. This move will also incorporate a change in frequency from ch 266 (101.1) to ch 273 (102.5).

New Location: Tower ASRN 1302848

NAD(83)
32 – 01 – 16.5 N
101 – 39 – 54.8 W

ERP – 0.205 KW (V) AND (H)
RCAGL – 84.5 METERS

MEXICO

Proposed location is 245.2 km from the US/Mexico Border. This application protects licensed facilities, construction permits, applications, allotments, and is in compliance the US/Mexico Treaty.

DISPLACEMENT

Secondary service translator K266BT, first adjacent channel to full power facility KBUG is displaced by KBUG. K266BT F(50,10) 54 db contour completely encompasses the protected F(50,50) 60 db contour of KBUG. This application seeks to relocate K266BT to another tower, ASR 1302848. An engineering study found a new frequency, channel 273 – 102.5 MHz that clears all other stations, construction permits, allotments, and applications.

Primary Station, KMMZ, Facility ID 46426, which is rebroadcast by K266BT will not be changed.

CHANGES MADE

New location for antenna:
ASRN 1302848
32 – 01 – 16.5 N
101 – 39 – 54.8 W

New RCAGL – 84.5 meters
New ERP – 0.205 KW (H) and (V)
New frequency – channel 273 (102.5)

EXHIBITS

Interference – Contour map for KBUG and K266BT

Exhibit 1 – Channel 273 (102.5) overlap clearance study

Exhibit 2 – Translator 60 db contour overlap

Exhibit 3 – FCC HAAT calculation using FCC Global Terrain indicating the 0 degree radial HAAT is 119 meters. Per FCC 74.1235 (2), the maximum ERP is 0.205 kw (205 watts).

Exhibit 4 – FMMODEL

Applicant will use the current antenna system, Shively 6812B – 3.

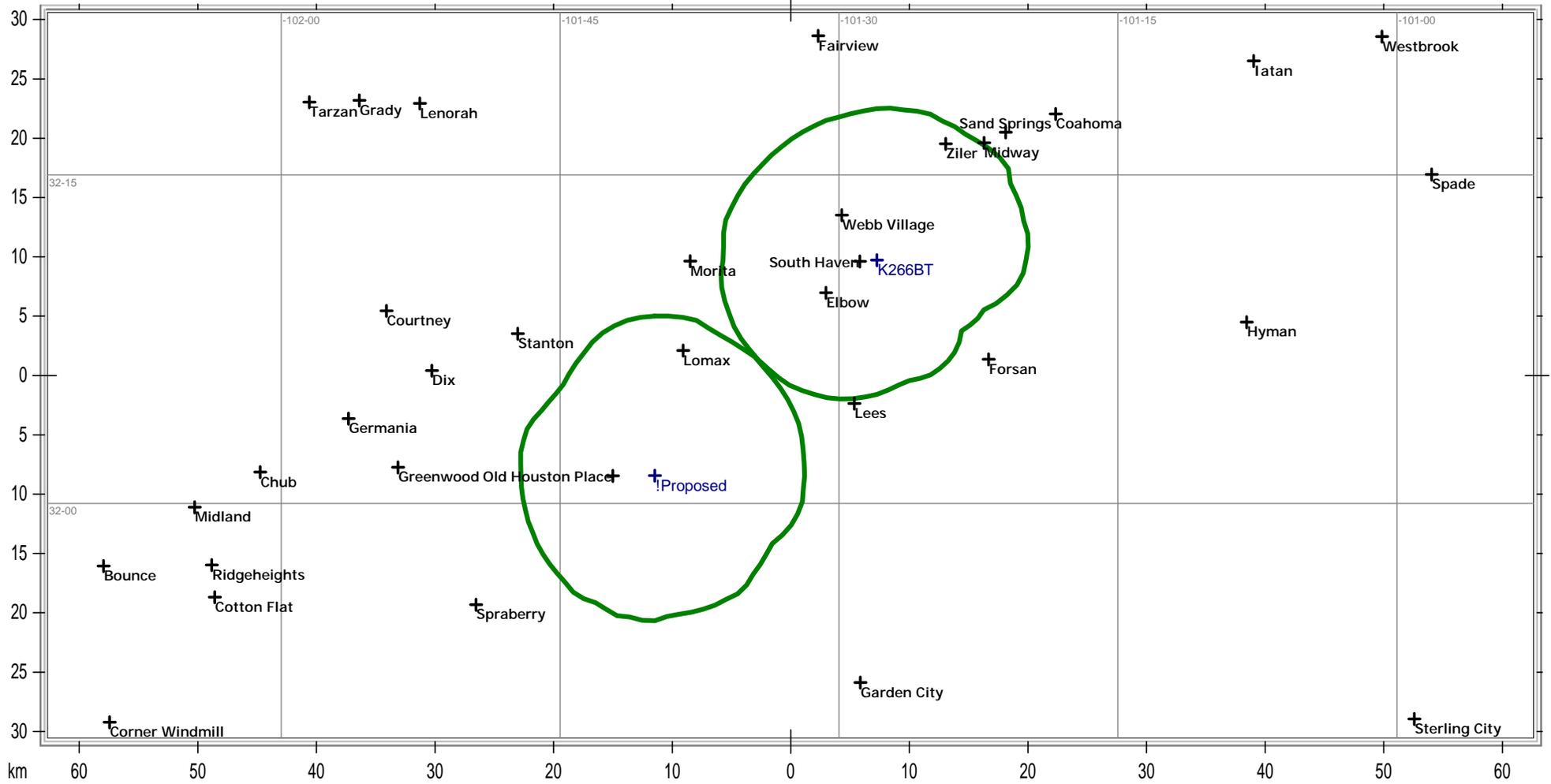
$S = 1.2 \mu\text{W}/\text{cm}^2$, which is 0.6% of the maximum allowable uncontrolled $200 \mu\text{W}/\text{cm}^2$ public exposure. Since this is less than 5%, no further analysis was done.

Applicant will place appropriate signage at the site. Whenever there are personal working at the site or on the tower, applicant will reduce ERP or cease transmission.

Exhibit 5 – Aerial of site

**EXHIBIT 1
PROPOSED K266BT
CHANNEL 273**

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance_km	Sep	Clr
KBYH-LP	TX	MIDLAND	102.7	274	100	LP100	LIC	40.94	56	11.31 dB
KFZX	TX	GARDENDALE	102.1	271	100000	C	LIC	104.58	95	12.63 dB
KZII-FM	TX	LUBBOCK	102.5	273	100000	C1	LIC	166.94	200	16.11 dB
KWOJ-LP	TX	SAN ANGELO	102.5	273	100	LP100	LIC	131.49	67	22.26 dB
KHXS	TX	MERKEL	102.7	274	100000	C1	LIC	152.73	133	26.17 dB
KWFR	TX	SAN ANGELO	101.9	270	100000	C1	LIC	124.33	75	26.19 dB
KKCN	TX	BALLINGER	103.1	276	100000	C1	LIC	154.2	75	31.10 dB
KIXN	NM	HOBBS	102.9	275	100000	C1	LIC	160.89	75	32.04 dB
K219FH	TX	MIDLAND	91.7	219	50	D	LIC	37.97	0	38
KGQD-LP	TX	KERMIT	102.7	274	95	LP100	LIC	136.79	56	37.50 dB



State Borders Lat/Lon Grid

EXHIBIT 3

Antenna Height Above Average Terrain Calculations -- Results**Input Data**

Latitude **32° 1' 16.5"** North
Longitude **101° 39' 54.8"** West (NAD 83)

Height of antenna radiation center above mean sea level: **883.5** meters AMSL

Number of Evenly Spaced Radials = **12** 0° is referenced to True North

Results

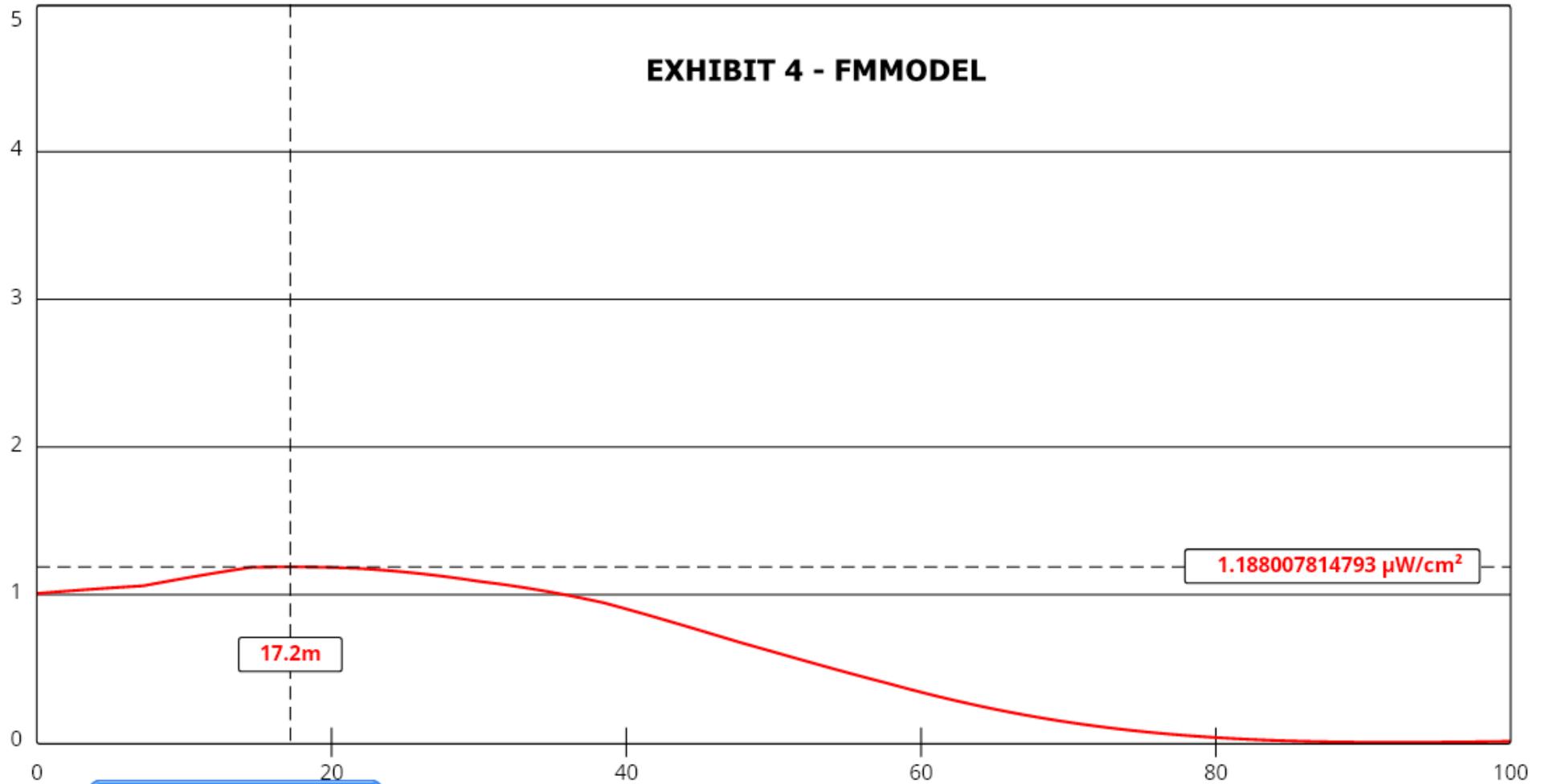
Calculated HAAT = **96 meters**

Antenna Height Above Average Terrain calculated
using 1 km [GLOBE terrain data](#)

Individual "Radial HAAT" Values, in meters

0°	119.4 m
30°	113.0 m
60°	109.7 m
90°	104.3 m
120°	86.7 m
150°	95.8 m
180°	97.3 m
210°	95.3 m
240°	85.8 m
270°	81.6 m
300°	76.8 m
330°	91.6 m

EXHIBIT 4 - FMMODEL



[View Tabular Results +](#)

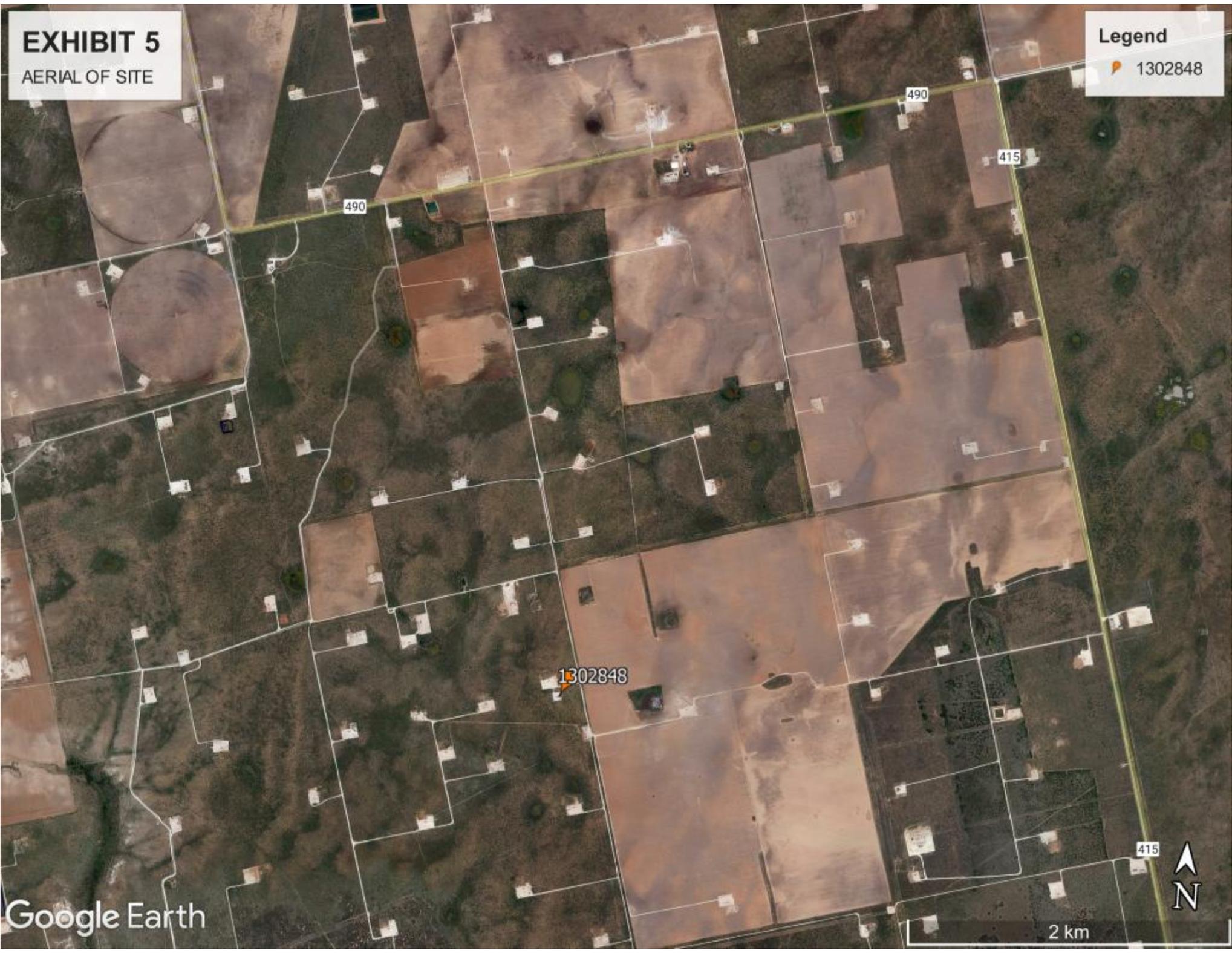
Channel Selection	Channel 273 (102.5 MHz) ▾		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other" ▾		
Height (m)	<input type="text" value="84.5"/>	Distance (m)	<input type="text" value="100"/>
ERP-H (W)	<input type="text" value="205"/>	ERP-V (W)	<input type="text" value="205"/>
Num of Elements	<input type="text" value="3"/>	λ	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	

EXHIBIT 5

AERIAL OF SITE

Legend

📍 1302848



490

490

415

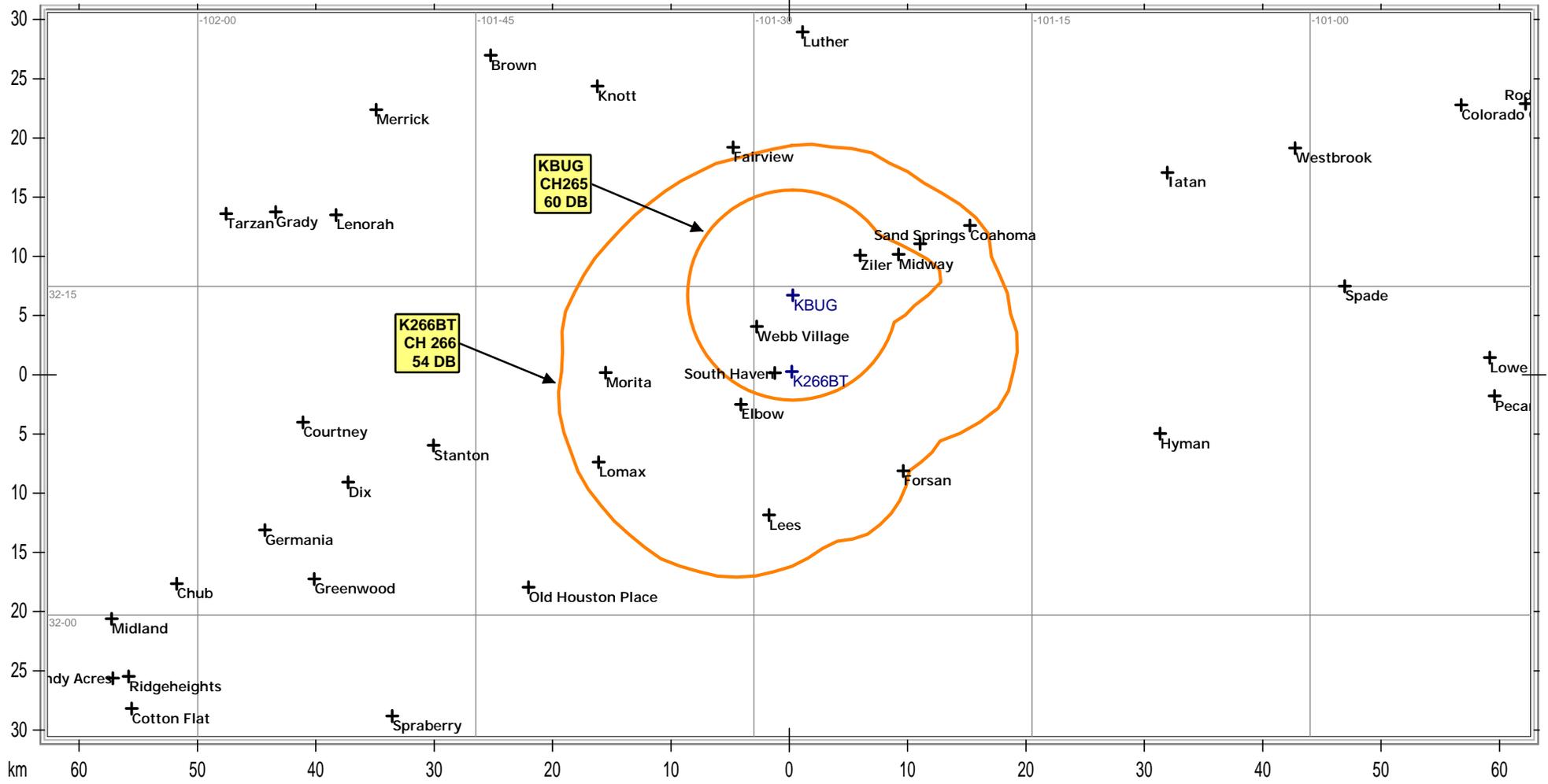
1302848

415



2 km

Google Earth



State Borders Lat/Lon Grid