

ENGINEERING STATEMENT
RE DIGITAL FLASHCUT APPLICATION
FOR CLASS A TELEVISION STATION
KCHM-CA, OKLAHOMA CITY, OKLAHOMA
CH.36 7.33 KW ERP (MAX DA) 540.7 METERS RCAMSL

JULY 2010

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

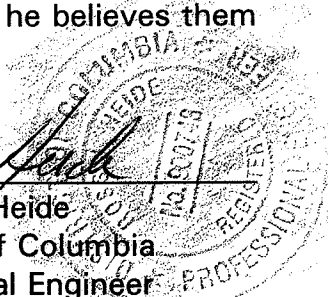
City of Washington)
) ss
District of Columbia)

Ross J. Heide, being duly sworn upon his oath, deposes and states that:

He is a graduate of the Massachusetts Institute of Technology in Operations Research and Management Science, a Registered Professional Engineer in the District of Columbia, and employed by Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

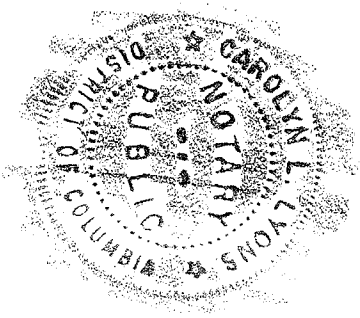
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Ross J. Heide
District of Columbia
Professional Engineer
Registration No. PE900748

Subscribed and sworn to before me this 20th day of July, 2010.



Carolyn Lyons
Notary Public

My Commission Expires: 2/28/2013

Introduction

This engineering statement has been prepared on behalf of Oklahoma Land Company, LLC in support of its proposed digital flashcut of construction permit ("CP") for Class A television station KCHM-CA, Channel 36, Oklahoma City, Oklahoma [BPTTA-20100223AEC]. The proposed locates to a different nearby tower with a center of radiation above mean sea level ("RCAMSL") of 540.7 meters and with an ERP of 7.33 kW (max DA).

Exhibits requested by FCC Form 301-CA are included with this report.

Antenna Site

The proposed Channel 36 antenna will be side-mounted on an existing tower with a center of radiation of 168.9 meters (554 feet) above ground level. The proposed antenna site is located at 5002 S. Shields Blvd., Oklahoma City, Oklahoma. The geographic coordinates (NAD-27) of the proposed site (existing tower) are as follows:

North Latitude: 35° 24' 53.8"

West Longitude: 97° 30' 35.9"

The tower registration number for their antenna structure is 1010023.

Transmitting Equipment

The following data provides the pertinent information concerning the proposed Class A digital television station operation.

Transmitter:	Type-approved, Axcera LU1000AT, 500 W average digital power output ("TPO") with stringent mask or equivalent
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KCHM-CA, OKLAHOMA CITY, OKLAHOMA

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Antenna: SWR, Type SWLP16OI/36 horizontally polarized, directional antenna with a power gain of 29.33 (14.67 dB) and 0.75° electrical beam tilt oriented at N 335° E (true)

Transmission Line: 170.7 meters (560 feet) of 1-5/8", 50 ohm, air dielectric, coaxial line; 0.529 dB loss/100 ft.

Power Data

Transmitter output	0.5 kW	-3.01 dBk
Transmission line efficiency/loss	49.94%	-3.015 dB
Power input to antenna	0.25 kW	-6.026 dBk
Antenna power gain (Peak Lobe -0.75°)	29.33	14.67 dB
Effective Radiated Power	7.33 kW	8.65 dBk

Elevation Data

Vertical dimension of Ch. 36 antenna (side-mounted w/o beacon or lightning rod)	8.5 meters 27.8 feet
Overall height of tower above ground (including beacon and lightning rod)	188.9 meters 619.8 feet
Elevation of radiation center of Ch. 36 antenna above ground	168.9 meters 554 feet
Elevation of site above mean sea level	371.8 meters 1219.8 feet
Elevation of center of Ch. 36 antenna above mean sea level	540.7 meters 1774.0 feet
Overall tower height above mean sea level (including beacon and lightning rod)	560.7 meters 1839.6 feet
Antenna Height Above Average Terrain	169.1 meters

Allocation

The attached Table II shows the stations potentially affected by the proposed KCHM-CA operation. The Longley-Rice (OET Bulletin 69) method predicts no impermissible interference.

Topographic Data

The average elevation data of each radial from 3.1-16.1 km was obtained from the 3-second database. The distances along each radial to the limits of the protected 51 dBu F(50,90) and noise-limited 41 dBu F(50,90) contours were determined from reference to the propagation data for Channels 14-69, as published by the FCC in Figure 10b, Section 73.699 of the FCC Rules without the use of the roughness correction.

Utilizing the formula in Section 73.684(c)(1) for the effective heights shown on the attached tabulation, it is found that the depression angle A_h , varies between 0.33 to 0.39 degrees. The relative field in the vertical radiation pattern at these angles is greater than 90% of the maximum. Therefore, maximum power at the vertical angle was used in determining the distance to the respective contours.

Contour Data

The distances to the contours, average elevations, and effective antenna heights are included on the attached tabulation (Table I). The contours determined from these distances are shown on the attached map, Exhibit E-3.

Existing and Proposed Service Areas

The map in Exhibit E-4 compares the service contour (74 dBu) for the authorized CP to the normally digital protected contour of the facilities proposed herein.

Environmental Statement

According to the applicant, the proposed facilities are not located near any known wilderness area, wildlife preserve, historic place, or Indian religious site. The proposed facilities are not located in a flood plain area. The proposed facilities will not affect or jeopardize the threatened or endangered species or their critical habitats. The installation of a DTV antenna on the existing tower does not involve any significant changes in the surface features.

The proposed facilities will not affect any districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.

The FCC guideline for human exposure to RF radiation level for Channel 36 (602-608 MHz) is 2006 and 401 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) for controlled and uncontrolled environment, respectively. Computations made according to OET Bulletin 65 (Edition 97-01) show that based on the maximum ERP of 7.33 kW with 0.12 maximum antenna relative field factor towards ground and 168.9 meters antenna radiation center above ground, the RF radiation level would be less than $0.13 \mu\text{W}/\text{cm}^2$ at 2 meters above ground. This value is less than 0.03% of the FCC guideline for an uncontrolled environment.

With respect to work performed near the radiating elements, the applicant will establish procedures in coordination with other stations on the site to reduce or turn off the power to ensure that workers are not exposed to RF radiation levels exceeding FCC guidelines.

For the reasons stated above, the proposed Class A TV operation does not involve any action specified in Section 1.1307 of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.

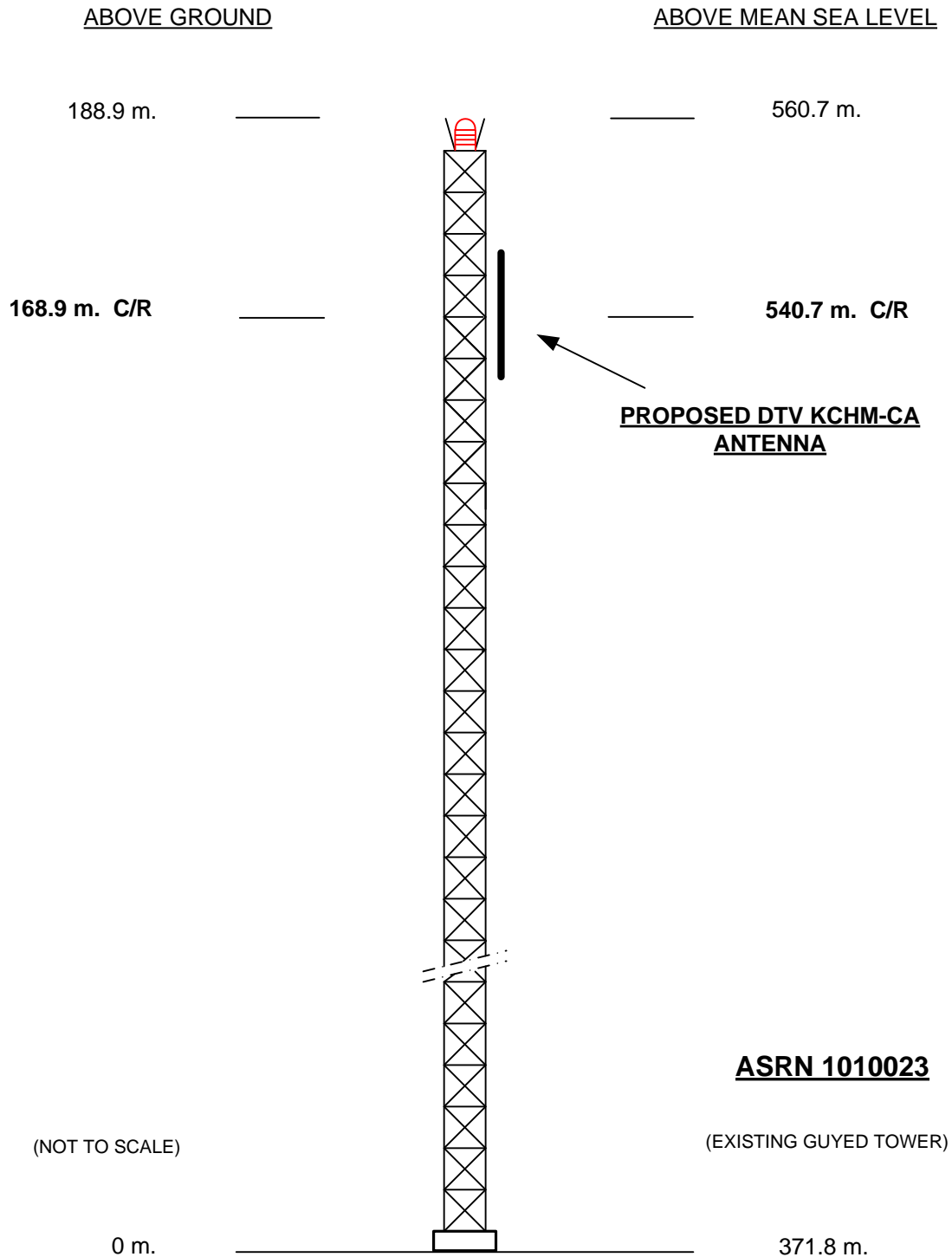


EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED OPERATION OF
KCHM-CA, OKLAHOMA CITY, OKLAHOMA
JULY 2010

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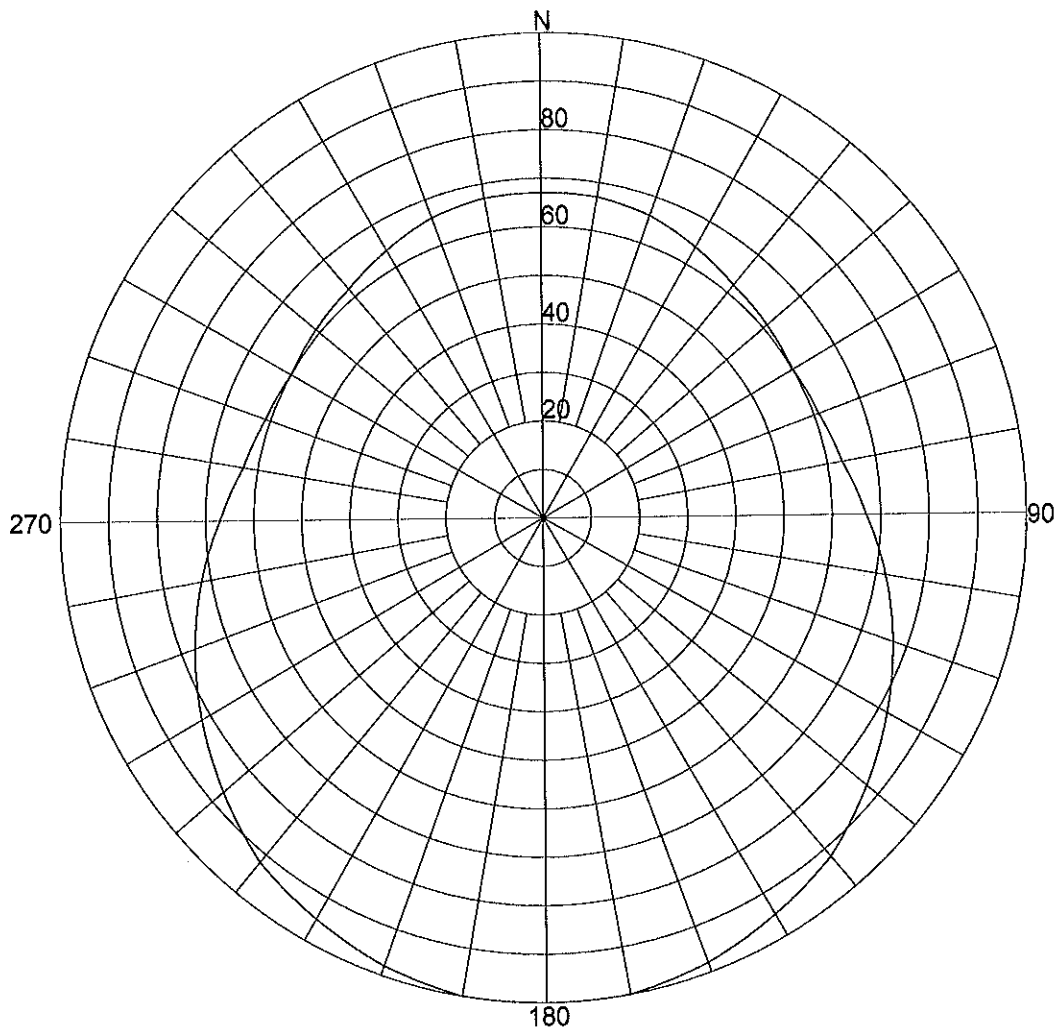
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EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KCHM-CA, OKLAHOMA CITY, OKLAHOMA

Note: The proposed orientation is with main lobe symmetric about azimuth N 335° E (true), whereas the attached manufacturer's azimuth plot and tabulation show the main lobe symmetric about azimuth 180°.



Azimuth Pattern

Systems With Reliability Inc.

Scale: Linear

Unit: Relative Field

CLIENT: *NIA Broadcasting, KCHM*

Date: 5/3/2004

ANTENNA TYPE: SWLP16OI/36 FCC File No.: BPTTL-20000712AAR

FREQUENCY: 605

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.69813 / 2.3dB

PATTERN RMS: 0.767

Relative Field Tabulation(Azimuth)

Azimuth Heading	Relative Field(dB)	Azimuth Heading	Relative Field(dB)
0	.6700 (-3.47)	180	1.0000 (0.01)
5	.6700 (-3.47)	185	1.0000 (0.01)
10	.6700 (-3.47)	190	1.0000 (0.01)
15	.6650 (-3.53)	195	.9900 (-0.08)
20	.6600 (-3.6)	200	.9800 (-0.17)
25	.6500 (-3.73)	205	.9650 (-0.3)
30	.6400 (-3.86)	210	.9500 (-0.44)
35	.6300 (-4)	215	.9350 (-0.57)
40	.6200 (-4.14)	220	.9200 (-0.71)
45	.6150 (-4.21)	225	.8950 (-0.95)
50	.6100 (-4.28)	230	.8700 (-1.2)
55	.6050 (-4.35)	235	.8450 (-1.45)
60	.6000 (-4.42)	240	.8200 (-1.71)
65	.6050 (-4.35)	245	.7950 (-1.98)
70	.6100 (-4.28)	250	.7700 (-2.26)
75	.6200 (-4.14)	255	.7450 (-2.55)
80	.6300 (-4)	260	.7200 (-2.84)
85	.6500 (-3.73)	265	.6950 (-3.15)
90	.6700 (-3.47)	270	.6700 (-3.47)
95	.6950 (-3.15)	275	.6500 (-3.73)
100	.7200 (-2.84)	280	.6300 (-4)
105	.7450 (-2.55)	285	.6200 (-4.14)
110	.7700 (-2.26)	290	.6100 (-4.28)
115	.7950 (-1.98)	295	.6050 (-4.35)
120	.8200 (-1.71)	300	.6000 (-4.42)
125	.8450 (-1.45)	305	.6050 (-4.35)
130	.8700 (-1.2)	310	.6100 (-4.28)
135	.8950 (-0.95)	315	.6150 (-4.21)
140	.9200 (-0.71)	320	.6200 (-4.14)
145	.9350 (-0.57)	325	.6300 (-4)
150	.9500 (-0.44)	330	.6400 (-3.86)
155	.9650 (-0.3)	335	.6500 (-3.73)
160	.9800 (-0.17)	340	.6600 (-3.6)
165	.9900 (-0.08)	345	.6650 (-3.53)
170	1.0000 (0.01)	350	.6700 (-3.47)
175	1.0000 (0.01)	355	.6700 (-3.47)

Systems With Reliability Inc.

CLIENT: NIA Broadcasting, KCHM

Date: 5/3/2004

ANTENNA TYPE: SWLP16OI/36 FCC File No.: BPTTL-20000712AAR

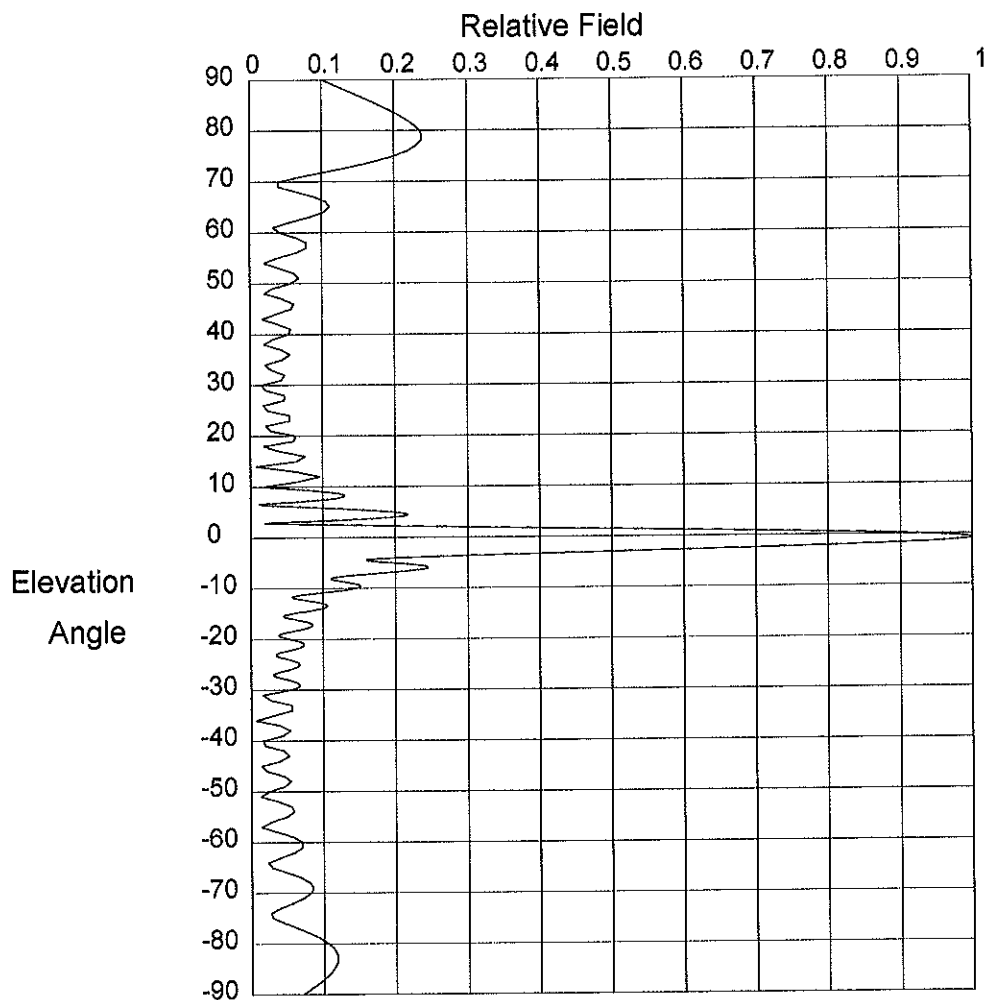
FREQUENCY: 605

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.69813 / 2.3dB

PATTERN RMS: 0.767



Elevation Pattern

Scale: Linear

Units: Field, Relative

Systems With Reliability Inc.

Date: 5/3/2004

CLIENT: *NIA Broadcasting, KCHM*

ANTENNA TYPE: SWLP16OI/36

FREQUENCY: 605

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 17.271/12.373 dBd

Beam Tilt (Deg.): -.75

DIRECTIVITY(Horiz): 14.79/11.70 dBd

Null Fill(s)(%): 15, 10, 5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
3.2	.082 (-21.717)	-4.4	.16 (-15.893)	-12.0	.061 (-24.305)
3.0	.035 (-29.192)	-4.6	.161 (-15.846)	-12.2	.068 (-23.295)
2.8	.02 (-34.082)	-4.8	.174 (-15.167)	-12.4	.077 (-22.223)
2.6	.079 (-22.04)	-5.0	.193 (-14.298)	-12.6	.086 (-21.277)
2.4	.144 (-16.856)	-5.2	.211 (-13.505)	-12.8	.094 (-20.526)
2.2	.212 (-13.46)	-5.4	.227 (-12.886)	-13.0	.10 (-19.981)
2.0	.284 (-10.929)	-5.6	.238 (-12.467)	-13.2	.104 (-19.641)
1.8	.358 (-8.92)	-5.8	.244 (-12.246)	-13.4	.106 (-19.498)
1.6	.433 (-7.271)	-6.0	.245 (-12.214)	-13.6	.105 (-19.547)
1.4	.508 (-5.89)	-6.2	.241 (-12.363)	-13.8	.103 (-19.785)
1.2	.581 (-4.72)	-6.4	.232 (-12.687)	-14.0	.098 (-20.215)
1.0	.651 (-3.724)	-6.6	.219 (-13.18)	-14.2	.091 (-20.839)
.8	.718 (-2.877)	-6.8	.203 (-13.837)	-14.4	.083 (-21.663)
.6	.78 (-2.161)	-7.0	.185 (-14.649)	-14.6	.073 (-22.683)
.4	.836 (-1.561)	-7.2	.166 (-15.595)	-14.8	.064 (-23.874)
.2	.884 (-1.067)	-7.4	.147 (-16.627)	-15.0	.055 (-25.145)
.0	.925 (-0.673)	-7.6	.131 (-17.653)	-15.2	.049 (-26.279)
-.2	.958 (-0.373)	-7.8	.119 (-18.515)	-15.4	.045 (-26.915)
-.4	.981 (-0.162)	-8.0	.112 (-19.028)	-15.6	.046 (-26.779)
-.6	.996 (-0.039)	-8.2	.111 (-19.086)	-15.8	.05 (-26.003)
-.8	1.00 (0)	-8.4	.115 (-18.752)	-16.0	.057 (-24.956)
-1.0	.995 (-0.046)	-8.6	.123 (-18.204)	-16.2	.064 (-23.921)
-1.2	.98 (-0.176)	-8.8	.132 (-17.614)	-16.4	.071 (-23.03)
-1.4	.956 (-0.392)	-9.0	.14 (-17.092)	-16.6	.076 (-22.327)
-1.6	.923 (-0.696)	-9.2	.146 (-16.697)	-16.8	.081 (-21.822)
-1.8	.882 (-1.091)	-9.4	.15 (-16.454)	-17.0	.084 (-21.509)
-2.0	.834 (-1.581)	-9.6	.152 (-16.375)	-17.2	.085 (-21.384)
-2.2	.779 (-2.171)	-9.8	.15 (-16.467)	-17.4	.085 (-21.443)
-2.4	.719 (-2.869)	-10.0	.146 (-16.733)	-17.6	.082 (-21.684)
-2.6	.654 (-3.685)	-10.2	.138 (-17.181)	-17.8	.078 (-22.109)
-2.8	.587 (-4.628)	-10.4	.129 (-17.817)	-18.0	.073 (-22.721)
-3.0	.518 (-5.712)	-10.6	.117 (-18.651)	-18.2	.067 (-23.523)
-3.2	.449 (-6.952)	-10.8	.104 (-19.689)	-18.4	.06 (-24.506)
-3.4	.382 (-8.363)	-11.0	.09 (-20.922)	-18.6	.052 (-25.638)
-3.6	.318 (-9.95)	-11.2	.077 (-22.298)	-18.8	.046 (-26.817)
-3.8	.26 (-11.689)	-11.4	.066 (-23.655)	-19.0	.041 (-27.82)
-4.0	.212 (-13.473)	-11.6	.059 (-24.65)	-19.2	.038 (-28.316)
-4.2	.177 (-15.023)	-11.8	.057 (-24.881)	-19.4	.039 (-28.098)

Systems With Reliability Inc.

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CLIENT: *NIA Broadcasting, KCHM*

Date: 5/3/2004

ANTENNA TYPE: SWLP16OI/36

FREQUENCY: 605

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 17.271/12.373 dBd

Beam Tilt (Deg.): -.75

DIRECTIVITY(Horiz): 14.79/11.70 dBd

Null Fill(s)(%): 15, 10, 5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
-19.6	.043 (-27.311)	-27.2	.032 (-29.909)	-54.0	.059 (-24.522)
-19.8	.048 (-26.287)	-27.4	.035 (-29.055)	-55.0	.049 (-26.241)
-20.0	.054 (-25.275)	-27.6	.04 (-27.946)	-56.0	.027 (-31.256)
-20.2	.06 (-24.396)	-27.8	.046 (-26.836)	-57.0	.014 (-37.199)
-20.4	.065 (-23.693)	-28.0	.051 (-25.847)	-58.0	.036 (-28.821)
-20.6	.069 (-23.176)	-28.2	.056 (-25.025)	-59.0	.058 (-24.731)
-20.8	.072 (-22.842)	-28.4	.06 (-24.378)	-60.0	.07 (-23.08)
-21.0	.073 (-22.687)	-28.6	.064 (-23.904)	-61.0	.07 (-23.037)
-21.2	.073 (-22.707)	-28.8	.066 (-23.597)	-62.0	.06 (-24.482)
-21.4	.072 (-22.902)	-29.0	.067 (-23.455)	-63.0	.041 (-27.75)
-21.6	.069 (-23.273)	-29.2	.067 (-23.477)	-64.0	.023 (-32.826)
-21.8	.064 (-23.822)	-29.4	.066 (-23.665)	-65.0	.028 (-30.919)
-22.0	.059 (-24.553)	-29.6	.063 (-24.03)	-66.0	.049 (-26.116)
-22.2	.053 (-25.459)	-29.8	.059 (-24.586)	-67.0	.068 (-23.3)
-22.4	.047 (-26.514)	-30.0	.054 (-25.359)	-68.0	.081 (-21.847)
-22.6	.042 (-27.638)	-31.0	.016 (-35.747)	-69.0	.085 (-21.365)
-22.8	.037 (-28.65)	-32.0	.027 (-31.279)	-70.0	.082 (-21.699)
-23.0	.034 (-29.254)	-33.0	.056 (-25.059)	-71.0	.072 (-22.835)
-23.2	.035 (-29.2)	-34.0	.057 (-24.866)	-72.0	.057 (-24.882)
-23.4	.037 (-28.535)	-35.0	.032 (-29.839)	-73.0	.04 (-28.039)
-23.6	.042 (-27.551)	-36.0	.006 (-43.751)	-74.0	.026 (-31.561)
-23.8	.047 (-26.517)	-37.0	.04 (-28.058)	-75.0	.03 (-30.514)
-24.0	.053 (-25.581)	-38.0	.054 (-25.375)	-76.0	.046 (-26.745)
-24.2	.058 (-24.802)	-39.0	.044 (-27.116)	-77.0	.064 (-23.836)
-24.4	.062 (-24.199)	-40.0	.016 (-35.78)	-78.0	.081 (-21.819)
-24.6	.065 (-23.772)	-41.0	.02 (-34.07)	-79.0	.095 (-20.428)
-24.8	.067 (-23.517)	-42.0	.045 (-26.917)	-80.0	.106 (-19.489)
-25.0	.067 (-23.432)	-43.0	.053 (-25.588)	-81.0	.114 (-18.894)
-25.2	.067 (-23.515)	-44.0	.04 (-27.984)	-82.0	.118 (-18.573)
-25.4	.065 (-23.766)	-45.0	.014 (-37.048)	-83.0	.119 (-18.482)
-25.6	.062 (-24.188)	-46.0	.022 (-33.228)	-84.0	.118 (-18.59)
-25.8	.058 (-24.787)	-47.0	.045 (-26.847)	-85.0	.114 (-18.88)
-26.0	.053 (-25.566)	-48.0	.055 (-25.258)	-86.0	.108 (-19.341)
-26.2	.047 (-26.518)	-49.0	.046 (-26.697)	-87.0	.10 (-19.973)
-26.4	.042 (-27.613)	-50.0	.024 (-32.266)	-88.0	.091 (-20.783)
-26.6	.037 (-28.751)	-51.0	.013 (-37.64)	-89.0	.081 (-21.789)
-26.8	.033 (-29.716)	-52.0	.038 (-28.498)	-90.0	.071 (-23.023)
-27.0	.031 (-30.175)	-53.0	.055 (-25.119)	90.0	.00 (-50)

Systems With Reliability Inc.

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CLIENT: NIA Broadcasting, KCHM

Date: 5/3/2004

ANTENNA TYPE: SWLP16OI/36

FREQUENCY: 605

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 17.271/12.373 dBd

Beam Tilt (Deg.): -.75

DIRECTIVITY(Horiz): 14.79/11.70 dBd

Null Fill(s)(%): 15, 10, 5

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KCHM-CA, OKLAHOMA CITY, OKLAHOMA
CHANNEL 36 7.33 KW ERP 540.7 RCAMSL
JULY 2010

<u>Radial</u> <u>Bearing</u> (N ° E, T)	<u>Average*</u> <u>Elevation</u> <u>3 to 16.1 km</u>	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u> degrees	<u>ERP At</u> <u>Radio</u> <u>Horizon</u> kW	<u>Distance to Contour</u>	
	meters				<u>F(50/90)</u> <u>51 dBu</u> km	<u>F(50/90)</u> <u>41 dBu</u> km
0	356.4	184.3	0.376	6.826	44.9	56.5
10	354.5	186.2	0.378	6.436	44.7	56.4
20	351.5	189.2	0.381	5.885	44.4	56.1
30	365.6	175.1	0.367	5.221	43.0	54.6
40	359.6	181.1	0.373	4.633	42.8	54.4
50	364.4	176.3	0.368	4.068	41.8	53.5
60	370.8	169.9	0.361	3.541	40.7	52.3
70	375.0	165.7	0.357	3.078	39.8	51.4
80	379.8	160.9	0.351	2.8	39.0	50.6
90	384.4	156.3	0.346	2.683	38.5	50.0
100	384.9	155.8	0.346	2.683	38.4	50.0
110	380.3	160.4	0.351	2.763	38.9	50.5
120	378.7	162.0	0.353	2.9	39.2	50.8
130	374.0	166.7	0.358	3.106	39.9	51.5
140	378.6	162.1	0.353	3.251	39.8	51.4
150	375.4	165.3	0.356	3.3	40.1	51.7
160	376.9	163.8	0.355	3.3	40.0	51.6
170	373.7	167.0	0.358	3.251	40.1	51.7
180	375.5	165.2	0.356	3.106	39.8	51.4
190	371.9	168.8	0.360	2.9	39.6	51.3
200	367.0	173.7	0.365	2.763	39.7	51.3
210	370.1	170.6	0.362	2.683	39.4	51.0
220	373.9	166.8	0.358	2.674	39.1	50.7
230	379.7	161.0	0.351	2.8	39.0	50.6
240	386.1	154.6	0.344	3.078	39.1	50.6
250	390.9	149.8	0.339	3.541	39.5	50.9
260	398.0	142.7	0.331	4.068	39.7	51.1
270	392.0	148.7	0.338	4.633	40.8	52.2

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KCHM-CA, OKLAHOMA CITY, OKLAHOMA
CHANNEL 36 7.33 KW ERP 540.7 RCAMSL
JULY 2010

<u>Radial</u> <u>Bearing</u> (N ° E, T)	<u>Average*</u>	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u> degrees	<u>ERP At</u> <u>Radio</u> <u>Horizon</u> kW	<u>Distance to Contour</u>	
	<u>Elevation</u> <u>3 to 16.1 km</u> meters				<u>F(50/90)</u> <u>51 dBu</u> km	<u>F(50/90)</u> <u>41 dBu</u> km
280	382.3	158.4	0.349	5.234	42.0	53.5
290	370.1	170.6	0.362	5.898	43.4	54.9
300	372.6	168.1	0.359	6.436	43.7	55.2
310	376.6	164.1	0.355	6.84	43.7	55.2
320	376.7	164.0	0.355	7.213	44.0	55.5
330	373.1	167.6	0.359	7.33	44.3	55.8
340	364.2	176.5	0.368	7.33	44.8	56.4
350	359.6	181.1	0.373	7.213	45.0	56.6

DTV Channel 36 (602-608 MHz)

Average Elevation 3.2 to 16.1 km 374 meters AMSL

Center of Radiation 540.7 meters AMSL

Antenna Height Above Average Terrain 165.5 meters

Effective Radiated Power 7.33 kW (8.65 dBk) Max.

North Latitude: 35° 24' 53.8"

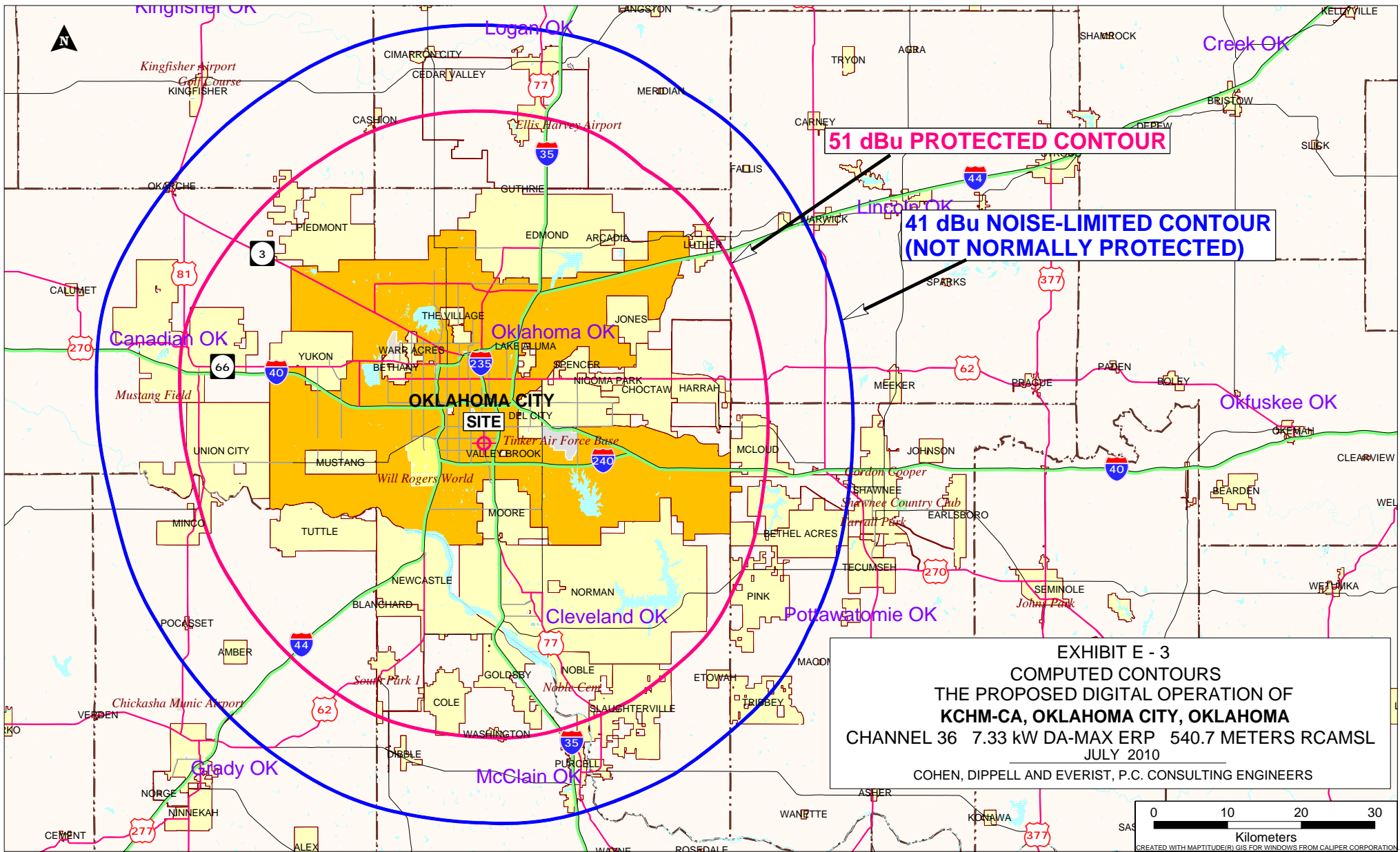
West Longitude: 97° 30' 35.9"

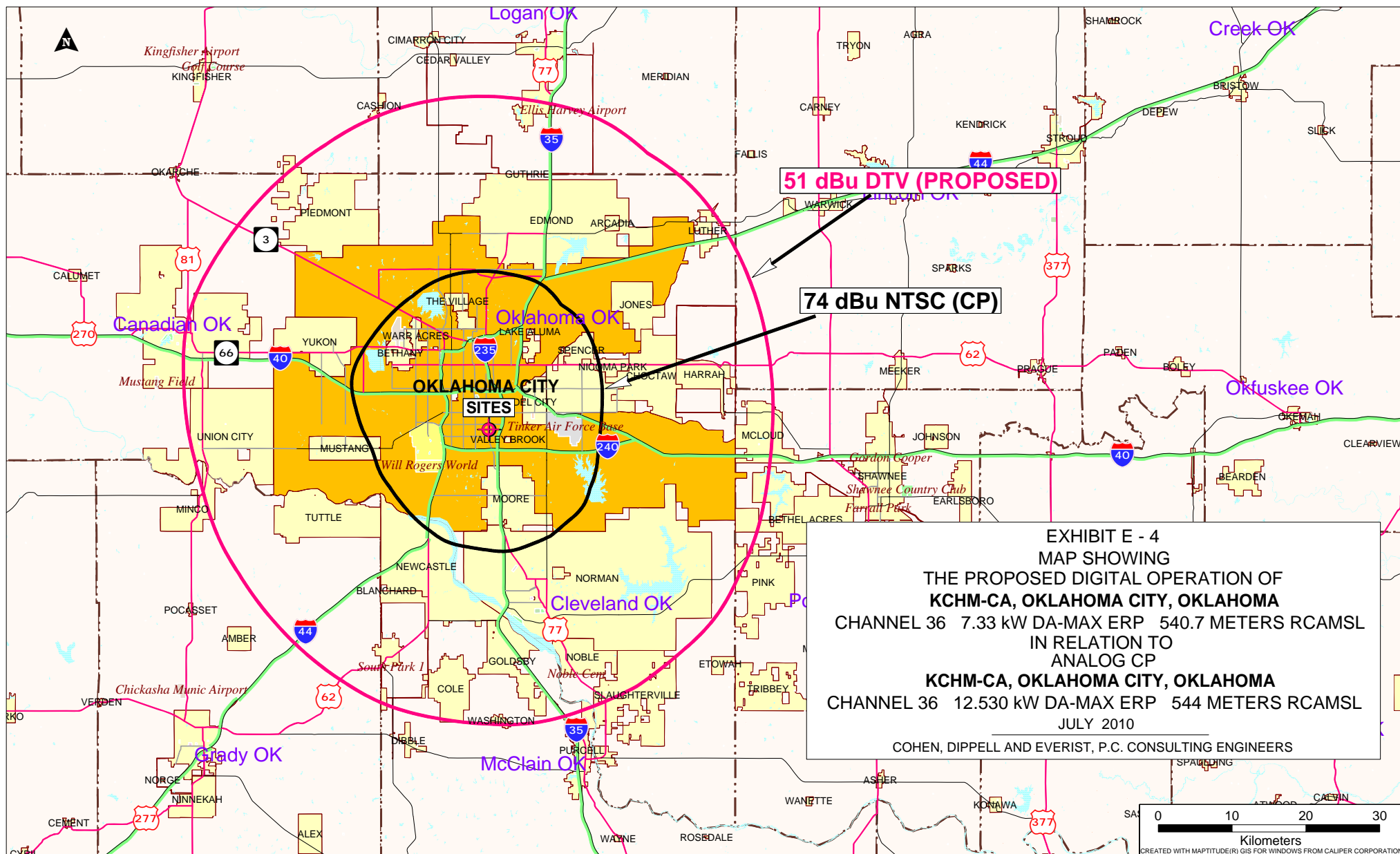
(NAD-27)

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
TABULATION OF
LONGLEY-RICE ANALYSIS
FOR THE OPERATION OF
KCHM-CA, OKLAHOMA CITY, OKLAHOMA
CHANNEL 36 7.33 KW ERP 540.7 METERS RCAMSL
JULY 2010

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
21	KTOU-LP	OKLAHOMA CITY OK	3.2	LIC	BLTTL-20011116ABI	No interference
21	K21DF	STILLWATER OK	82.1	LIC	BLTT-19940616IH	0.00%
22	DK22ED	WEATHERFORD OK	110.9	LIC	BLTT-19950127JD	0.00%
35	K35CU	ADA OK	106	CP	BDFCDTT-20090821AAE	No interference
35	K35CU	ADA OK	106	LIC	BLTT-19960111AG	No interference
35	NEW	GERONIMO OK	135.1	APP	BNPDTL-20100510AKV	No interference
35	K35JY-D	LAMONT OK	131.3	CP	BNPDTT-20090903ABB	0.00%
35	KEGG-LP	MCALESTER OK	165.8	LIC	BLTT-20051017ABG	0.00%
35	KUOK	WOODWARD OK	198.8	CP MO	BMPCDT-20080620ALR	No interference
35	KUOK	WOODWARD OK	198.8	PLN	DTVPLN-DTVPLN86532	0.00%
35	KJBO-LP	WICHITA FALLS TX	193.3	LIC	BLTTL-19900423JN	0.00%
36	KFFS-CA	FAYETTEVILLE AR	310.5	LIC	BLTT-19951107ID	No interference
36	K64FW	JOPLIN MO	323	CP	BDISDTL-20060331AYL	No interference
36	K36EV	ALTUS OK	188.8	LIC	BLTT-20010306AAV	No interference
36	K36KE-D	ARDMORE OK	166.8	CP	BNPDTT-20090828ADL	0.00%
36	KRSC-TV	CLAREMORE OK	203.3	PLN	DTVPLN-DTVPLN57431	No interference
36	KRSC-TV	CLAREMORE OK	203.3	LIC	BLEDT-20061011AAM	No interference
36	NEW	ERICK OK	215.7	APP	BNPDTL-20100406ACL	No interference
36	K36AB-D	LAWTON OK	111.9	LIC	BLDTT-20091229ACY	0.11%
36	NEW	MULDROW OK	263.7	APP	BNPDTL-20100505AJX	No interference
36	K36IY-D	WEATHERFORD OK	110.9	LIC	BLDTT-20100225ABI	No interference
36	K36JM	ABILENE TX	403.1	CP	BNPTTL-20000818ABM	0.00%
36	KDFI	DALLAS TX	323.2	PLN	DTVPLN-DTVPLN17037	0.00%
36	KDFI	DALLAS TX	323.2	LIC	BLCDDT-20081027AAS	No interference
36	K36CA-D	MEMPHIS TX	289.3	LIC	BLDTT-20100402ACP	No interference
36	K36CC	TULIA TX	397.4	CP	BDFCDTT-20090710AGN	0.00%
36	K36CC	TULIA TX	397.4	LIC	BLTTL-20040408ABG	0.00%
36	K36HF	TUSCOLA TX	398.5	LIC	BLTTL-20070613ADK	0.00%
36	KUWF-LP	WICHITA FALLS TX	197.1	LIC	BLTTL-20070119ADJ	No interference
38	KOHC-CA	OKLAHOMA CITY OK	8	LIC	BLTTA-20050808ACU	No interference





Section III - Engineering (Digital)

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. All items must be completed. The response "on file" is not acceptable.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

TECH BOX

1. Channel: _____

2. Antenna Location Coordinates: (NAD 27)

____° ____' ____" ☐ N ☐ S Latitude
____° ____' ____" ☐ E ☐ W Longitude

3. Antenna Structure Registration Number: _____

☐

Not applicable

See Explanation in
Exhibit No.

☐

FAA Notification Filed with FAA

4. Antenna Location Site Elevation Above Mean Sea Level: _____ meters

5. Overall Tower Height Above Ground Level: _____ meters

6. Height of Radiation Center Above Ground Level: _____ meters

7. Maximum Effective Radiated Power (ERP): _____ kW

8. Transmitter Output Power: _____ kW

9. a. Transmitting Antenna: ☐ Nondirectional ☐ Directional "Off-the-shelf" ☐ Directional composite

Manufacturer

Model

b. Electrical Beam Tilt: _____ degrees ☐ Not applicable

c. Directional Antenna Relative Field Values:

Rotation: _____° ☐ No rotation ☐ N/A (Nondirectional)

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

10. Out-of-channel Emission Mask: Simple ☐ Stringent ☐

CERTIFICATION

11. **Interference.** The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 73.6016, 73.6017, 73.6018, 73.6019, 73.6020, 73.6027 and 74.794(b).

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See Explanation in Exhibit No.
---	-----------------------------------

12. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (*i.e.*, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance. An **Exhibit is required.**

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See Explanation in Exhibit No.
---	-----------------------------------

By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

Exhibit No.

13. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:

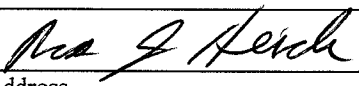
<input type="checkbox"/> Yes <input type="checkbox"/> No	See Explanation in Exhibit No.
--	-----------------------------------

☐ The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.

☐ Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Ross J. Heide		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date July 20, 2010	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, NW, Suite 1100			
City Washington		State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-111		E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001),
AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)),
AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).