EXHIBIT E

ENGINEERING STATEMENT
RE IN SUPPORT OF CONSTRUCTION PERMIT
FOR REPACKED FACILITIES
PURSUANT TO DA 17-314
**WALV-CA, INDIANAPOLIS, INDIANA**
CHANNEL 17 8.18 KW ND ERP 269.8 METERS HAAT

JULY 2017

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 )

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1420 N Street, N.W., Suite One, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

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.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 10th day of July, 2017.

Notary Public

My Commission Expires: 2/28/2018

This engineering statement has been prepared in support of a construction permit for repacked facilities for Channel 17 pursuant to DA 17-314 on behalf of VideOhio, Inc., licensee of Class A TV station WALV-CD, licensed to Indianapolis, Indiana. WALV-CA presently is licensed to operate on television Channel 46 with a maximum visual effective radiated power ("ERP") of 15 kW non-directional with an antenna radiation center above mean sea level ("RCAMSL") of 521.8 meters and a height above average terrain ("HAAT") of 269.8 meters.

WALV-CA will provide its viewers appropriate advance notice of its plans to cease operations on Channel 46 prior to the transition, and will cease operating on Channel 46.

## Transmitter Site

The existing WALV transmitter site is located at Ditch Road and 96th Street, Hamilton County, Indiana. The existing tower (Exhibit E-1) has a total overall structure height above ground of 316.8 meters (1039.4 feet). The WALV-CD antenna will be side-mounted on this tower at 270.7 meters above ground level. The registration number for the existing tower is 1024109.

The geographic coordinates of the existing site are as follows:

North Latitude: 39° 55' 43"

West Longitude: 86° 10' 55"

NAD-27

North Latitude: 39° 55' 43.0"

West Longitude: 86° 10' 55.0"

NAD-83

Equipment Data

| | |
|---|---|
| Antenna: | ERI, Type AL8-17-PMC (or equivalent) non-directional antenna with 1.75° electrical beam tilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included as Exhibit E-2. |
| Transmission Line: | ERI, Type MACX350A, 3-/18", 50 ohm, rigid, with a length, 282 meters (926 feet) |
| Emission Mask: | Full-Service |

Power Data

| | | |
|---|---|---|
| Transmitter output | | 3.09 kW |
| Antenna/load test switch efficiency/loss | | 98.6% |
| Transmission line efficiency/loss 282 meters (926 feet) | | 63.27% |
| Input power to the antenna | | 1.925 kW |
| Antenna power gain, Main Lobe (-1.75) | Horizontal | 4.25 |
| | Vertical | 4.25 |
| Effective Radiated Power, Maximum | Horizontal | 8.18 kW |
| | Vertical | 8.18 kW |

Elevation Data
(unchanged)

| | |
|---|---|
| Vertical dimension for Channel 17 antenna | 4.02 meters<br>13.2 feet |
| Overall height above ground of the antenna structure (including beacon) | 316.8 meters<br>1039.4 feet |
| Center of radiation of Channel 17 antenna above ground | 270.7 meters<br>888 feet |
| Elevation of site above mean sea level | 251.1 meters<br>824 feet |
| Center of radiation of Channel 17 antenna above mean sea level | 521.8 meters<br>1712 feet |
| Overall height above mean sea level of existing tower and antenna (including beacon) | 567.9 meters<br>1863 feet |

Note: Slight height differences may result due to conversion to metric.

Topographic Data

The average HAAT for the eight cardinal radials from 3.2 to 16.1 kilometers has previously been established based on data from WTHR-DT.

Contour Data

Utilizing the formula in Section 73.625(b)(2) for the effective height along each radial the depression angle $\Delta_h$ for each azimuth has been calculated. The maximum radiation value has been used to calculate the ERP where the vertical radiation pattern field value at these angles is greater than 90% of the maximum.

Table I provides the distances calculated by TVStudy 2.2 along each radial to the predicted F(50,90) 49.044 dBu contour, the effective radiated power and the effective antenna heights. The predicted 49.044 dBu contour determined from the calculated distances are shown in the attached map (Exhibit E-3).

Exhibit E-4 reflects the proposed coverage contour in relation to that licensed.

The distances along each radial to the limit of the F(50,90) 49.044 dBu contour were determined from reference to the appropriate propagation data for UHF channels as published by the Federal Communications Commission in Section 73.699 of its rules.

## Environmental Statement

There are no AM stations located within five km of the existing WTHR-DT tower site. According to the FCC CDBS database, there are no FM stations and with the exception of WTHR-DT, no other full-service TV are stations located within 100 meters. Only one WALV-CD, licensed to Indianapolis, Indiana, shares the WTHR-DT tower.

Access to the tower property is prevented by a six-foot chain link fence with a locked gate. In addition, to prevent unauthorized access to the tower, a fence with three strands of barb wire with a locked gate encloses the tower base.

The proposed operation, based upon the current OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A, meets the provisions of the FCC radio frequency field (“RFF”) guidelines, and thus, complies with Section 1.1307 of the FCC Rules.

The RFF contribution of each station will be calculated using the following formula:

$$S = \frac{33.4(F^2)\ \text{Total ERP}}{R^2}$$

where:

S = power density in μW/cm²
F = relative field factor
Total ERP = ERP Horizontal Polarization + ERP Vertical Polarization
R = RCAGL - 2 meters

ERP = RMS ERP in watts for DTV Stations

For WTHR-DT currently is licensed to operate with 42.1 kW ERP (circular polarization) using a Dielectric, TCL-16A13 antenna. See FCC File No. BLDTA-20111229AAU. The antenna manufacturer representative indicates that the elevation pattern for this antenna shows a maximum relative field of less than 0.132 towards the ground in the vicinity of the tower. Using this relative field factor and the procedures prescribed in OET Bulletin No. 65, the maximum RFF resulting from the present operation at two meters above the base (297.9 meters) of the tower is calculated to be less than one microwatts/cm$^2$. This is less than one percent of the 200 microwatts/cm$^2$ maximum human exposure to RFF recommended by the current FCC guidelines for an uncontrolled environment.

WALV-CA proposes to operate with a ERI, Type AL8-17-PMC antenna with an effective radiated power of 8.18 kW on UHF Channel 17 with a center of radiation above ground of 270.7 meters (888.1 feet). As shown, the elevation pattern for this antenna shows a maximum relative field of less than 0.120 (30° to 90°) towards the ground in the vicinity of the tower.

Using this relative field factor and the procedures prescribed in OET Bulletin 65, the maximum RFF resulting from the proposed operation is less than one μW/cm² at 2 meters above the ground. This is less than one percent of the 327 μW/cm$^2$ maximum human exposure to RFF recommended by the FCC guidelines for an uncontrolled environment.

The total contribution by WTHR-DT stations and the proposed WALV-CD operation at 2 meters above ground level is less than two percent of the current FCC guidelines for an uncontrolled environment.

Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

## Environmental Statement

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the licensee indicates:

(a)(1) The proposed facilities are not located in an officially designated wilderness area.

(a)(2) The proposed facilities located on an existing tower are not located in an officially designated wildlife preserve.

(a)(3) The proposed facilities located on an existing tower will not affect any listed threatened or endangered species or habitats.

(a)(3)(ii) The proposed facilities located on an existing tower will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.

(a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.

(a)(5) The existing tower is not located near any known Indian religious sites.

(a)(6) The existing tower is not located in a flood plain.

(a)(7) The operation of the DTV facilities into an existing antenna that is on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.

(a)(8) The existing tower lighting will remain unchanged.

(b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.

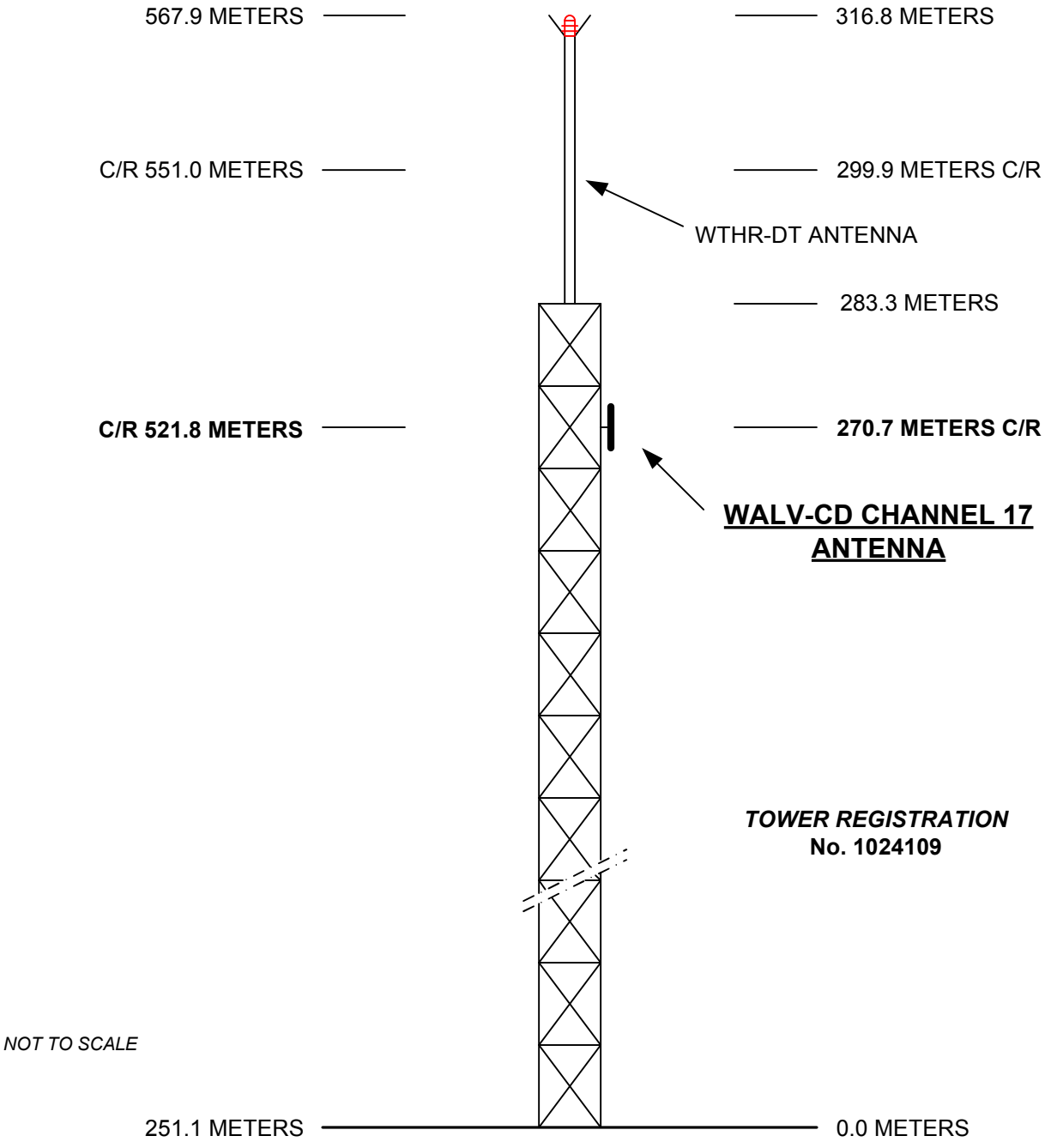



EXHIBIT E-1
VERTICAL SKETCH
FOR THE REPACKING OPERATION OF
**WALV-CD, INDIANAPOLIS, INDIANA**
CHANNEL 17 8.18 kW ERP 521.8 METERS RC/AMSL
JULY 2017

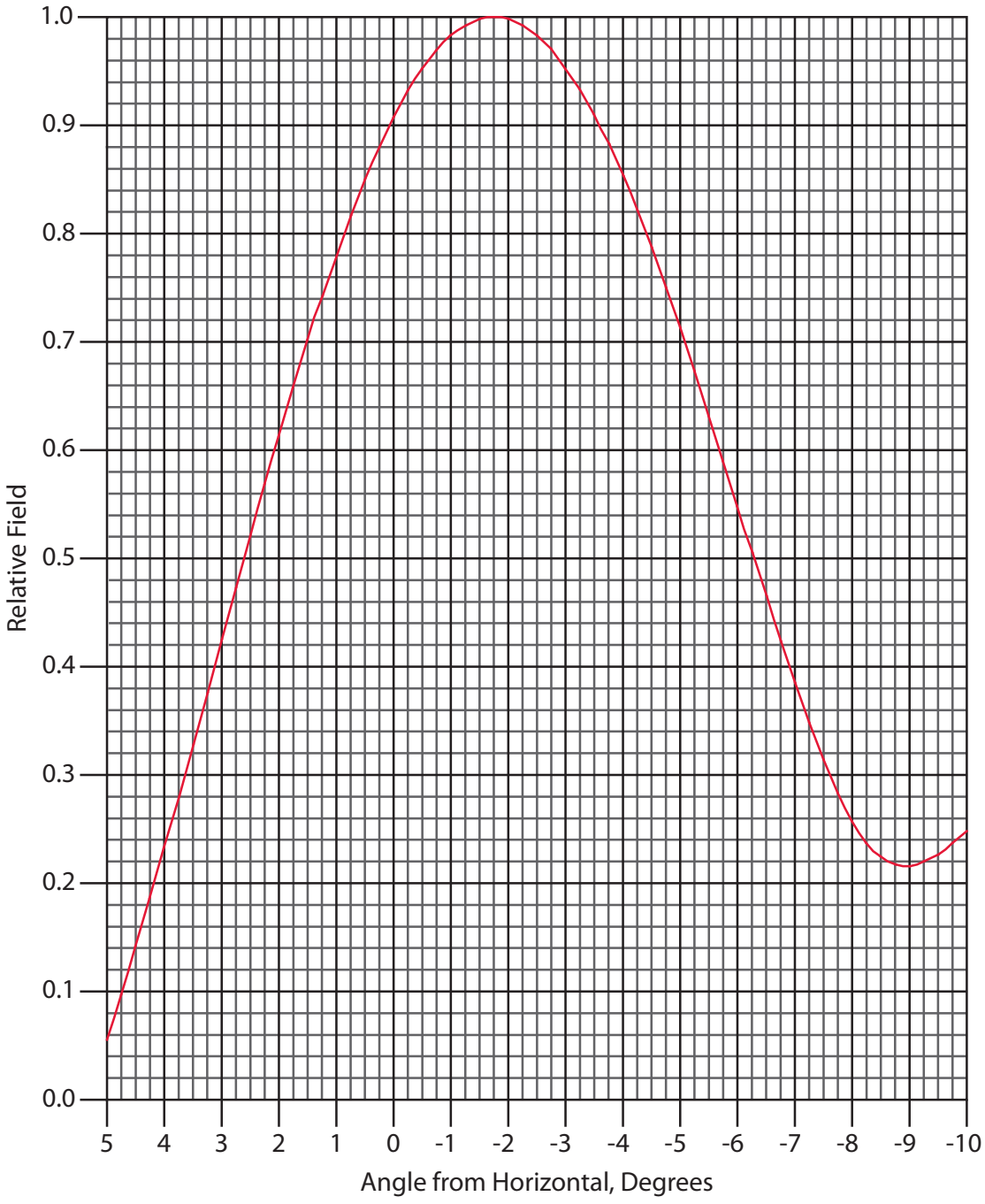
**COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.**

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

## Elevation Pattern

| | | |
|---|---|---|
| **Type:** | AL8PM7 | |
| **Directivity** | *Numeric* | *dBd* |
| **Main Lobe:** | 8.50 | (9.29) |
| **Horizontal:** | 7.00 | (8.45) |
| **Beam Tilt** | -1.75 ° | |
| **Polarization:** | Horizontal and Vertical | |
| **Frequency:** | | |
| **Location:** | | |

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# Tabulated Data for Elevation Pattern

## Type: AL8PM7

-5 to 10 degrees in 0.25 degree increments
10 to 90 degrees in 0.50 degree increments

| Angle | Field | dB |
|---|---|---|
| 5.00 | 0.056 | -25.04 |
| 4.75 | 0.097 | -20.26 |
| 4.50 | 0.141 | -17.02 |
| 4.25 | 0.186 | -14.61 |
| 4.00 | 0.233 | -12.65 |
| 3.75 | 0.280 | -11.06 |
| 3.50 | 0.328 | -9.68 |
| 3.25 | 0.376 | -8.50 |
| 3.00 | 0.425 | -7.43 |
| 2.75 | 0.473 | -6.50 |
| 2.50 | 0.521 | -5.66 |
| 2.25 | 0.568 | -4.91 |
| 2.00 | 0.614 | -4.24 |
| 1.75 | 0.658 | -3.64 |
| 1.50 | 0.701 | -3.09 |
| 1.25 | 0.742 | -2.59 |
| 1.00 | 0.780 | -2.16 |
| 0.75 | 0.816 | -1.77 |
| 0.50 | 0.850 | -1.41 |
| 0.25 | 0.880 | -1.11 |
| 0.00 | 0.908 | -0.84 |
| -0.25 | 0.932 | -0.61 |
| -0.50 | 0.952 | -0.43 |
| -0.75 | 0.969 | -0.27 |
| -1.00 | 0.983 | -0.15 |
| -1.25 | 0.992 | -0.07 |
| -1.50 | 0.998 | -0.02 |
| -1.75 | 1.000 | 0.00 |
| -2.00 | 0.998 | -0.02 |
| -2.25 | 0.992 | -0.07 |
| -2.50 | 0.983 | -0.15 |
| -2.75 | 0.970 | -0.26 |
| -3.00 | 0.953 | -0.42 |
| -3.25 | 0.933 | -0.60 |
| -3.50 | 0.910 | -0.82 |
| -3.75 | 0.883 | -1.08 |
| -4.00 | 0.854 | -1.37 |
| -4.25 | 0.822 | -1.70 |
| -4.50 | 0.787 | -2.08 |
| -4.75 | 0.751 | -2.49 |
| -5.00 | 0.713 | -2.94 |
| -5.25 | 0.673 | -3.44 |
| -5.50 | 0.632 | -3.99 |
| -5.75 | 0.590 | -4.58 |
| -6.00 | 0.548 | -5.22 |

| Angle | Field | dB |
|---|---|---|
| -6.25 | 0.506 | -5.92 |
| -6.50 | 0.465 | -6.65 |
| -6.75 | 0.424 | -7.45 |
| -7.00 | 0.385 | -8.29 |
| -7.25 | 0.348 | -9.17 |
| -7.50 | 0.314 | -10.06 |
| -7.75 | 0.284 | -10.93 |
| -8.00 | 0.258 | -11.77 |
| -8.25 | 0.238 | -12.47 |
| -8.50 | 0.225 | -12.96 |
| -8.75 | 0.217 | -13.27 |
| -9.00 | 0.216 | -13.31 |
| -9.25 | 0.220 | -13.15 |
| -9.50 | 0.227 | -12.88 |
| -9.75 | 0.237 | -12.51 |
| -10.00 | 0.248 | -12.11 |
| -10.50 | 0.270 | -11.37 |
| -11.00 | 0.287 | -10.84 |
| -11.50 | 0.298 | -10.52 |
| -12.00 | 0.299 | -10.49 |
| -12.50 | 0.292 | -10.69 |
| -13.00 | 0.277 | -11.15 |
| -13.50 | 0.255 | -11.87 |
| -14.00 | 0.227 | -12.88 |
| -14.50 | 0.195 | -14.20 |
| -15.00 | 0.161 | -15.86 |
| -15.50 | 0.128 | -17.86 |
| -16.00 | 0.101 | -19.91 |
| -16.50 | 0.087 | -21.21 |
| -17.00 | 0.090 | -20.92 |
| -17.50 | 0.105 | -19.58 |
| -18.00 | 0.125 | -18.06 |
| -18.50 | 0.144 | -16.83 |
| -19.00 | 0.159 | -15.97 |
| -19.50 | 0.169 | -15.44 |
| -20.00 | 0.174 | -15.19 |
| -20.50 | 0.173 | -15.24 |
| -21.00 | 0.167 | -15.55 |
| -21.50 | 0.155 | -16.19 |
| -22.00 | 0.140 | -17.08 |
| -22.50 | 0.120 | -18.42 |
| -23.00 | 0.099 | -20.09 |
| -23.50 | 0.078 | -22.16 |
| -24.00 | 0.060 | -24.44 |
| -24.50 | 0.050 | -26.02 |

| Angle | Field | dB |
|---|---|---|
| -25.00 | 0.053 | -25.51 |
| -25.50 | 0.066 | -23.61 |
| -26.00 | 0.083 | -21.62 |
| -26.50 | 0.098 | -20.18 |
| -27.00 | 0.112 | -19.02 |
| -27.50 | 0.122 | -18.27 |
| -28.00 | 0.128 | -17.86 |
| -28.50 | 0.131 | -17.65 |
| -29.00 | 0.129 | -17.79 |
| -29.50 | 0.124 | -18.13 |
| -30.00 | 0.115 | -18.79 |
| -30.50 | 0.103 | -19.74 |
| -31.00 | 0.088 | -21.11 |
| -31.50 | 0.073 | -22.73 |
| -32.00 | 0.056 | -25.04 |
| -32.50 | 0.042 | -27.54 |
| -33.00 | 0.034 | -29.37 |
| -33.50 | 0.037 | -28.64 |
| -34.00 | 0.048 | -26.38 |
| -34.50 | 0.061 | -24.29 |
| -35.00 | 0.075 | -22.50 |
| -35.50 | 0.087 | -21.21 |
| -36.00 | 0.098 | -20.18 |
| -36.50 | 0.105 | -19.58 |
| -37.00 | 0.110 | -19.17 |
| -37.50 | 0.112 | -19.02 |
| -38.00 | 0.111 | -19.09 |
| -38.50 | 0.107 | -19.41 |
| -39.00 | 0.100 | -20.00 |
| -39.50 | 0.091 | -20.82 |
| -40.00 | 0.080 | -21.94 |
| -40.50 | 0.068 | -23.35 |
| -41.00 | 0.055 | -25.19 |
| -41.50 | 0.041 | -27.74 |
| -42.00 | 0.029 | -30.75 |
| -42.50 | 0.022 | -33.15 |
| -43.00 | 0.026 | -31.70 |
| -43.50 | 0.037 | -28.64 |
| -44.00 | 0.050 | -26.02 |
| -44.50 | 0.062 | -24.15 |
| -45.00 | 0.074 | -22.62 |
| -45.50 | 0.084 | -21.51 |
| -46.00 | 0.092 | -20.72 |
| -46.50 | 0.099 | -20.09 |
| -47.00 | 0.104 | -19.66 |

| Angle | Field | dB |
|---|---|---|
| -47.50 | 0.106 | -19.49 |
| -48.00 | 0.106 | -19.49 |
| -48.50 | 0.105 | -19.58 |
| -49.00 | 0.101 | -19.91 |
| -49.50 | 0.096 | -20.35 |
| -50.00 | 0.089 | -21.01 |
| -50.50 | 0.080 | -21.94 |
| -51.00 | 0.070 | -23.10 |
| -51.50 | 0.059 | -24.58 |
| -52.00 | 0.048 | -26.38 |
| -52.50 | 0.035 | -29.12 |
| -53.00 | 0.023 | -32.77 |
| -53.50 | 0.011 | -39.17 |
| -54.00 | 0.009 | -40.92 |
| -54.50 | 0.020 | -33.98 |
| -55.00 | 0.032 | -29.90 |
| -55.50 | 0.044 | -27.13 |
| -56.00 | 0.056 | -25.04 |
| -56.50 | 0.066 | -23.61 |
| -57.00 | 0.076 | -22.38 |
| -57.50 | 0.085 | -21.41 |
| -58.00 | 0.093 | -20.63 |
| -58.50 | 0.099 | -20.09 |
| -59.00 | 0.105 | -19.58 |
| -59.50 | 0.109 | -19.25 |
| -60.00 | 0.112 | -19.02 |
| -60.50 | 0.114 | -18.86 |
| -61.00 | 0.115 | -18.79 |
| -61.50 | 0.115 | -18.79 |
| -62.00 | 0.114 | -18.86 |
| -62.50 | 0.112 | -19.02 |
| -63.00 | 0.109 | -19.25 |
| -63.50 | 0.105 | -19.58 |
| -64.00 | 0.101 | -19.91 |
| -64.50 | 0.095 | -20.45 |
| -65.00 | 0.090 | -20.92 |
| -65.50 | 0.084 | -21.51 |
| -66.00 | 0.077 | -22.27 |
| -66.50 | 0.071 | -22.97 |
| -67.00 | 0.064 | -23.88 |
| -67.50 | 0.058 | -24.73 |
| -68.00 | 0.051 | -25.85 |
| -68.50 | 0.045 | -26.94 |
| -69.00 | 0.040 | -27.96 |
| -69.50 | 0.035 | -29.12 |

| Angle | Field | dB |
|---|---|---|
| -70.00 | 0.032 | -29.90 |
| -70.50 | 0.030 | -30.46 |
| -71.00 | 0.030 | -30.46 |
| -71.50 | 0.031 | -30.17 |
| -72.00 | 0.033 | -29.63 |
| -72.50 | 0.035 | -29.12 |
| -73.00 | 0.038 | -28.40 |
| -73.50 | 0.042 | -27.54 |
| -74.00 | 0.045 | -26.94 |
| -74.50 | 0.048 | -26.38 |
| -75.00 | 0.051 | -25.85 |
| -75.50 | 0.053 | -25.51 |
| -76.00 | 0.056 | -25.04 |
| -76.50 | 0.057 | -24.88 |
| -77.00 | 0.059 | -24.58 |
| -77.50 | 0.060 | -24.44 |
| -78.00 | 0.061 | -24.29 |
| -78.50 | 0.061 | -24.29 |
| -79.00 | 0.061 | -24.29 |
| -79.50 | 0.061 | -24.29 |
| -80.00 | 0.060 | -24.44 |
| -80.50 | 0.059 | -24.58 |
| -81.00 | 0.058 | -24.73 |
| -81.50 | 0.056 | -25.04 |
| -82.00 | 0.054 | -25.35 |
| -82.50 | 0.052 | -25.68 |
| -83.00 | 0.050 | -26.02 |
| -83.50 | 0.047 | -26.56 |
| -84.00 | 0.044 | -27.13 |
| -84.50 | 0.041 | -27.74 |
| -85.00 | 0.038 | -28.40 |
| -85.50 | 0.035 | -29.12 |
| -86.00 | 0.031 | -30.17 |
| -86.50 | 0.028 | -31.06 |
| -87.00 | 0.024 | -32.40 |
| -87.50 | 0.020 | -33.98 |
| -88.00 | 0.016 | -35.92 |
| -88.50 | 0.012 | -38.42 |
| -89.00 | 0.008 | -41.94 |
| -89.50 | 0.004 | -47.96 |
| -90.00 | 0.000 | --- |

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TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
WALV-CD, INDIANAPOLIS, INDIANA
CHANNEL 17 8.18 KW ERP 521.8 METERS RC/AMSL
JULY 2017

| Radial Bearing (N ° E, T) | Average* Elevation 3.2 to 16.1 km meters | Effective Height meters | Depression Angle degrees | ERP At Radio Horizon kW | Distance to Contour F(50/90) 58 dBu City Grade km | 49.044 dBu Noise-Limited km |
|---|---|---|---|---|---|---|
| 0 | 275.6 | 246.2 | 0.435 | 8.18 | 40.8 | 51.6 |
| 10 | 270.1 | 251.7 | 0.439 | 8.18 | 41.1 | 51.9 |
| 20 | 264.7 | 257.1 | 0.444 | 8.18 | 41.4 | 52.2 |
| 30 | 259.3 | 262.5 | 0.449 | 8.18 | 41.6 | 52.5 |
| 40 | 253.9 | 267.9 | 0.453 | 8.18 | 41.9 | 52.8 |
| 50 | 249.8 | 272.0 | 0.457 | 8.18 | 42.1 | 53.0 |
| 60 | 247.2 | 274.6 | 0.459 | 8.18 | 42.2 | 53.2 |
| 70 | 244.5 | 277.3 | 0.461 | 8.18 | 42.3 | 53.3 |
| 80 | 241.8 | 280.0 | 0.463 | 8.18 | 42.5 | 53.5 |
| 90 | 239.2 | 282.6 | 0.466 | 8.18 | 42.6 | 53.6 |
| 100 | 238.6 | 283.2 | 0.466 | 8.18 | 42.6 | 53.6 |
| 110 | 238.0 | 283.8 | 0.467 | 8.18 | 42.6 | 53.7 |
| 120 | 237.4 | 284.4 | 0.467 | 8.18 | 42.7 | 53.7 |
| 130 | 236.8 | 285.0 | 0.468 | 8.18 | 42.7 | 53.7 |
| 140 | 235.7 | 286.1 | 0.469 | 8.18 | 42.8 | 53.8 |
| 150 | 234.1 | 287.7 | 0.470 | 8.18 | 42.8 | 53.9 |
| 160 | 232.5 | 289.3 | 0.471 | 8.18 | 42.9 | 54.0 |
| 170 | 230.8 | 291.0 | 0.472 | 8.18 | 43.0 | 54.1 |
| 180 | 229.2 | 292.6 | 0.474 | 8.18 | 43.1 | 54.2 |
| 190 | 234.3 | 287.5 | 0.470 | 8.18 | 42.8 | 53.9 |
| 200 | 239.4 | 282.4 | 0.465 | 8.18 | 42.6 | 53.6 |
| 210 | 244.5 | 277.3 | 0.461 | 8.18 | 42.3 | 53.3 |
| 220 | 249.6 | 272.2 | 0.457 | 8.18 | 42.1 | 53.0 |
| 230 | 254.3 | 267.5 | 0.453 | 8.18 | 41.9 | 52.8 |
| 240 | 258.7 | 263.1 | 0.449 | 8.18 | 41.7 | 52.5 |
| 250 | 263.1 | 258.7 | 0.446 | 8.18 | 41.4 | 52.3 |
| 260 | 267.4 | 254.4 | 0.442 | 8.18 | 41.2 | 52.0 |
| 270 | 271.8 | 250.0 | 0.438 | 8.18 | 41.0 | 51.8 |

COHEN, DIPPELL, AND EVERIST, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
WALV-CD, INDIANAPOLIS, INDIANA
CHANNEL 17 8.18 KW ERP 521.8 METERS RC/AMSL
JULY 2017

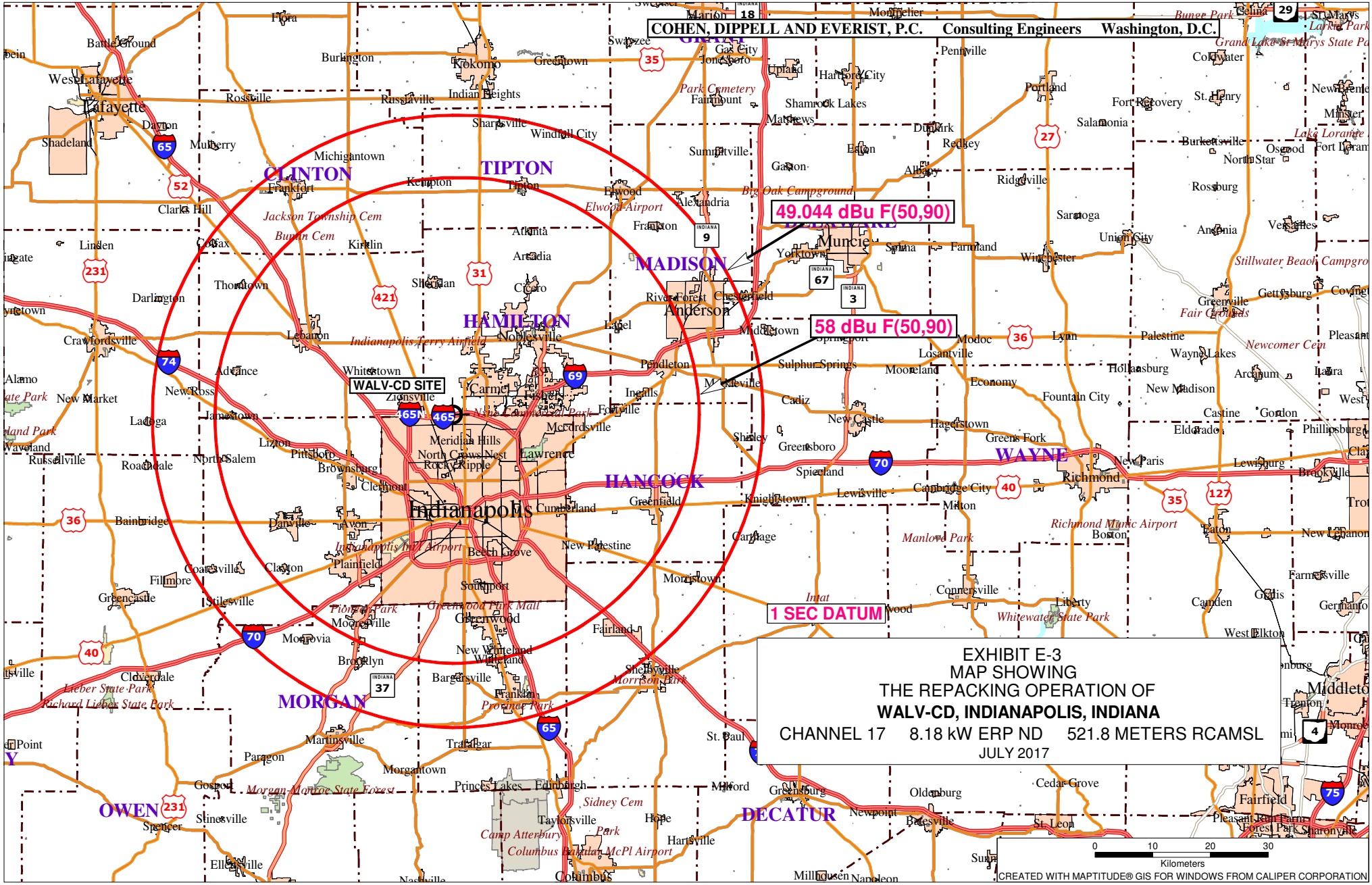
| Radial Bearing (N ° E, T) | Average* Elevation 3.2 to 16.1 km meters | Effective Height meters | Depression Angle degrees | ERP At Radio Horizon kW | Distance to Contour F(50/90) 58 dBu City Grade km | 49.044 dBu Noise-Limited km |
|---|---|---|---|---|---|---|
| 280 | 272.2 | 249.6 | 0.438 | 8.18 | 41.0 | 51.8 |
| 290 | 272.6 | 249.2 | 0.437 | 8.18 | 41.0 | 51.8 |
| 300 | 273.0 | 248.8 | 0.437 | 8.18 | 41.0 | 51.7 |
| 310 | 273.4 | 248.4 | 0.437 | 8.18 | 40.9 | 51.7 |
| 320 | 273.8 | 248.0 | 0.436 | 8.18 | 40.9 | 51.7 |
| 330 | 274.3 | 247.5 | 0.436 | 8.18 | 40.9 | 51.7 |
| 340 | 274.7 | 247.1 | 0.435 | 8.18 | 40.9 | 51.6 |
| 350 | 275.1 | 246.7 | 0.435 | 8.18 | 40.8 | 51.6 |

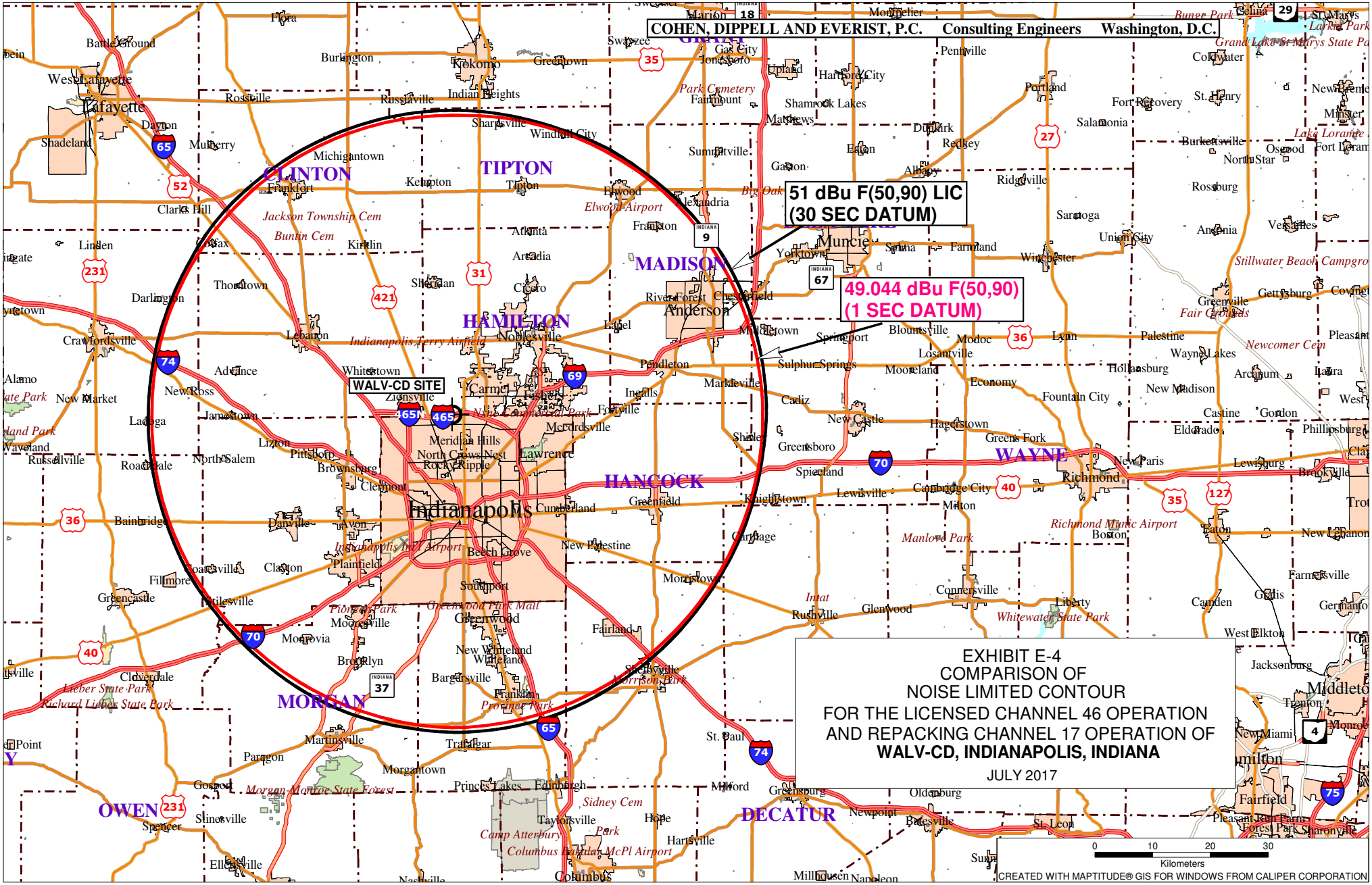
*Based on data from FCC one-second data base.

DTV Channel 17 (488-494 MHz)
Average Elevation 3.2 to 16.1 km 253.6 meters AMSL
Center of Radiation 521.8 meters AMSL
Effective Radiated Power 8.18 kW (9.1 dBk) Max.

North Latitude: 39˚ 55' 43"
West Longitude: 86˚ 10' 55"

(NAD-27)


COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.
49.044 dBu F(50,90)
58 dBu F(50,90)
1 SEC DATUM
WALV-CD SITE
CLINTON
TIPTON
MADISON
HAMILTON
HANCOCK
WAYNE
MORGAN
OWEN
DECATUR
Indianapolis
Anderson
Muncie
Lafayette
EXHIBIT E-3
MAP SHOWING
THE REPACKING OPERATION OF
WALV-CD, INDIANAPOLIS, INDIANA
CHANNEL 17 8.18 kW ERP ND 521.8 METERS RCAMSL
JULY 2017
0 10 20 30
Kilometers
CREATED WITH MAPTITUDE® GIS FOR WINDOWS FROM CALIPER CORPORATION


COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.
51 dBu F(50,90) LIC
(30 SEC DATUM)
49.044 dBu F(50,90)
(1 SEC DATUM)
WALV-CD SITE
CLINTON
TIPTON
MADISON
HAMILTON
HANCOCK
WAYNE
MORGAN
OWEN
DECATUR
Indianapolis
Muncie
Anderson
Lafayette
EXHIBIT E-4
COMPARISON OF
NOISE LIMITED CONTOUR
FOR THE LICENSED CHANNEL 46 OPERATION
AND REPACKING CHANNEL 17 OPERATION OF
WALV-CD, INDIANAPOLIS, INDIANA
JULY 2017
0 10 20 30
Kilometers
CREATED WITH MAPTITUDE® GIS FOR WINDOWS FROM CALIPER CORPORATION