ENGINEERING STATEMENT

OF

JOHN F.X. BROWNE, P.E.

IN SUPPORT OF AN APPLICATION FOR

MINOR CHANGE IN A LICENSED FACILITY

WPTD-DT

DAYTON, OH

Background

Greater Dayton Public TV, Inc. is the licensee of WPDT-DT which has been authorized to operate its post-transition DTV facility on Channel 16 (BLEDT-20090506ACA) at Dayton, OH, with an ERP of 155 kW at a HAAT of 350m. The tower is located at the following coordinates:

(NAD27)
39° 43' 16'' N
84° 15' 00'' W

WPTD now wishes to utilize a different omni-directional antenna that is shorter and has a radiation center 5.8 meters lower than the antenna specified in the license. Since the antenna is 5.8 meters lower, GDPTV proposes to increase the ERP to 163 kW so that the service contour will be identical to that of the licensed facility.

Site

The proposed facility is located within the Canadian border zone for purposes of coordination; however, since the service contour will remain the same as presently authorized, further Canadian coordination should not be required.

Antenna System and Tower

WPTD proposes to replace its omni-directional RCA TFU-25G analog antenna with a new Dielectric TFU-14GTH/VP-R04. This antenna is elliptically polarized and the vertically polarized radiation component will not exceed the horizontally polarized component at any azimuth. The antenna is installed on a registerd tower (ASR#1011760). The presently authorized overall height of 624.7m AMSL (with appurtenances) will be reduced to an overall height of 613m AMSL. The antenna will have a new a center-of-radiation of 607.2m AMSL (with a calculated HAAT of 344.2m). The FAA will be notified of the shorter overall height and the ASR will be modified.

ERP

A new ERP of 163 kW is requested so that the 41 dBu F(50,90) contour will match that of the authorized facility. Attached (as figure 1) is a map that depicts the contours of the authorized facility and the proposed facility.

Coverage

The entire principal community of Dayton, OH is well within the predicted F(50,90) 48 dBu contour based on the proposed 163 kW ERP.

Interference

Studies were conducted with the proposed parameters using software that emulates the software used by the FCC (OET-69 analysis). The results of the study indicate that the proposed facility will meet the interference protection criteria with respect to full-service DTV and Class A domestic stations.

Environmental/RFR

The proposed construction does not require preparation of an Environmental Assessment as it does not involve any of the factors listed in Section 1.1306.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.001786 mW/cm^2 which is less than 5% of the MPE for public exposure (0.323 mW/cm^2) at the proposed frequency and, therefore, the proposal is excluded from further consideration.

WPTD agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure. The tower base is enclosed by a locked security fence and appropriate signage warning of RFR hazards is posted.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

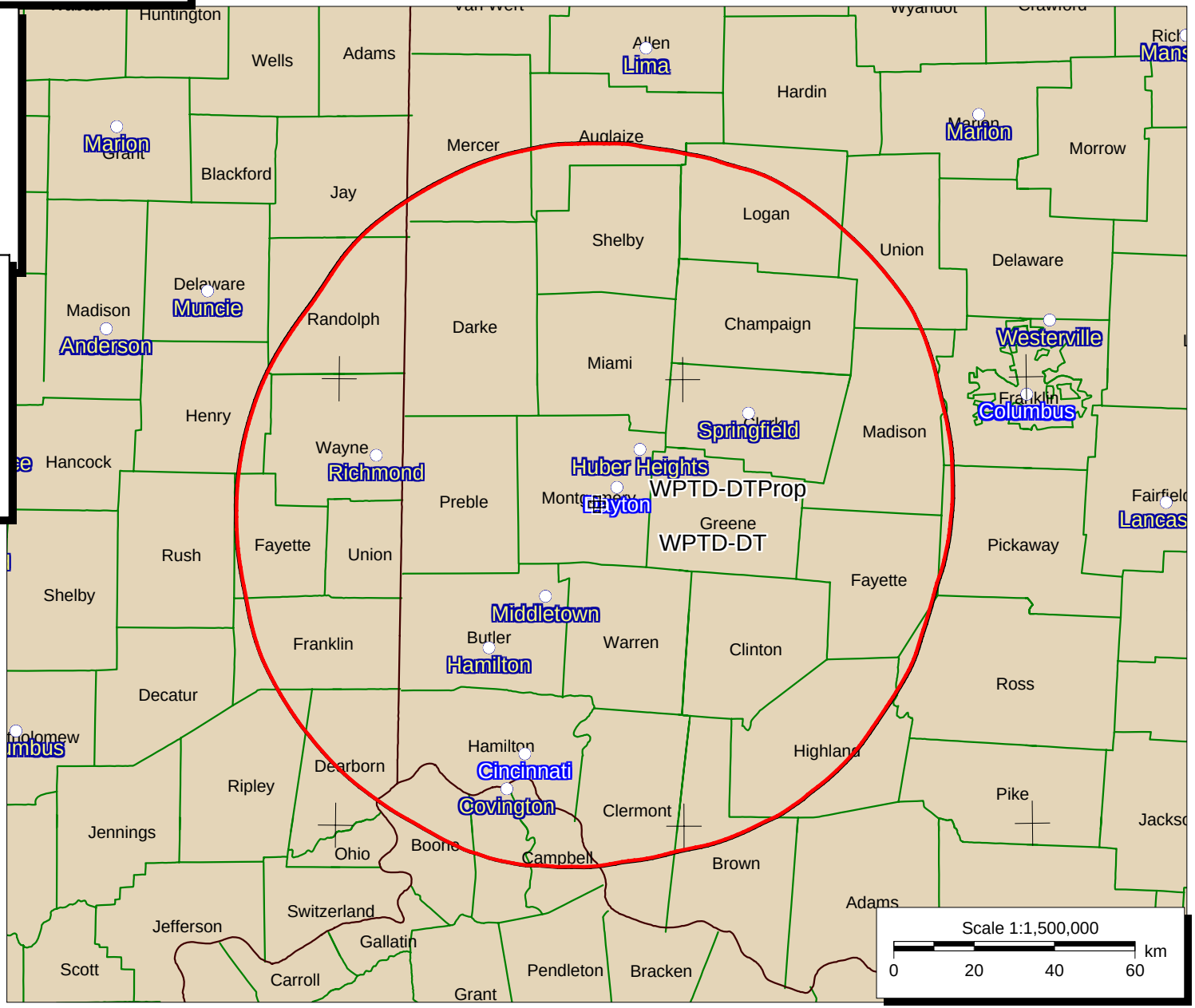
John F. X. Browne, P.E.
July 20, 2009

John F.X. Browne & Associates P.C.

Comparision of WPTD-DT Licensed Facility And WPTD-DT Proposed Facilility

WPTD-DT
BMPEDT20080613ABK
Latitude: 39-43-16 N
Longitude: 084-15-00 W
ERP: 155.00 kW
Channel: 16
Frequency: 485.0 MHz
AMSL Height: 613.0 m
Horiz. Pattern: Omni

WPTD-DTProp
Latitude: 39-43-16 N
Longitude: 084-15-00 W
ERP: 163.00 kW
Channel: 16
Frequency: 485.0 MHz
AMSL Height: 607.2 m
Horiz. Pattern: Omni
Date:7-20-2009



Black = 41 dBu F(50,90) Contour of WPTD-DT Licensed Facility
Red = 41 dBu F(50,90) Contour of WPTD-DT Proposed Facility

Fig. 1