



ENGINEERING STATEMENT
OF
JOHN F.X. BROWNE, P.E.
IN SUPPORT OF
APPLICATION FOR CONSTRUCTION PERMIT
FOR POST-TRANSITION DTV FACILITY
AND
5 MILE "FREEZE" WAIVER REQUEST
WPTV-DT
WEST PALM BEACH, FL

Background

Scripps Howard Broadcasting Company (SHB) is the licensee of WPTV, located at West Palm Beach, FL, which is presently operating its digital facility on out-of-core Channel 55 with the following parameters:

Pre-transition Facility (Ch. 55)

Coordinates: 26° 35' 20" N (NAD27)
80° 12' 43" W
ERP: 900 kW (DA)
HAAT: 387m



WPTV elected Channel 12 and has been allotted the post-transition DTV operation Appendix B facility parameters listed below:

Post-transition Facility (Ch. 12)

Coordinates: 26° 35' 20" N (NAD27)
80° 12' 43" W
ERP: 13.4 kW (DA)
HAAT: 387m

During the channel election process, WPTV was given the choice of electing its Channel 55 DTV replication facility or its "maximized" DTV facility. As neither facility replicated its analog coverage, WPTV certified to its maximized facility since it provides more coverage than the allotment facility. The translation of the UHF Channel 55 parameters to the WPTV allotted post-transition VHF Channel 12 facility has resulted in the specification of an antenna pattern (as part of the Appendix B facility parameters) based on the "maximized" Channel 55 directional antenna pattern; this pattern cannot be achieved on Channel 12 with a practical antenna.

In October 2007, WPTV filed a Petition for Reconsideration of the Seventh Report and Order (MB Docket #87-268) requesting that its Appendix B facility antenna pattern be amended to specify an omni-directional pattern (no other parameter changes were requested). The change in pattern proposed therein would not result in any new interference to potentially affected Appendix B facilities. However, WPTV filed the Petition for Reconsideration before the Commission amended its rules creating a freeze waiver policy that allows expansion of a station's coverage area up to 5 miles in any direction. Based on the change in policy, WPTV is requesting an omni-directional ERP of 15.5 kW (instead of 13.4 kW, DA) which will increase its coverage (while not expanding the Appendix B facility coverage more than 5 miles) but will still not match the coverage area of the analog facility.



Furthermore, the application for construction permit for the WPTV post-transition facility will specify coordinates that are one second different in longitude from those specified in Appendix B based on the calculated NAD27 coordinates translated from the original NAD83 coordinates. The proposed alternative parameters for WPTV are listed below:

Post-transition Facility (Ch. 12)

(Based on Freeze Waiver Request)

Coordinates: 26° 35' 20" N (NAD27)
80° 12' 44" W
ERP: 15.5 kW (omni)
HAAT: 387m

Antenna System and Tower

WPTV-DT will use a Dielectric omni-directional antenna (THV-10A12/VP O4) which will be top-mounted on the tower (ASR#1220033) at the coordinates specified above. The structure will have an overall height of 400.3m AMSL (with appurtenances) and the antenna will have a center of radiation of 391m AMSL with a calculated HAAT of 387m. The proposed WPTV facility will incorporate both horizontal (15.5 kW) and vertical polarization (6.7 kW). (See attached VP pattern at Figure 1.) The vertically polarized radiation component will not exceed the authorized horizontally polarized component in any azimuth.

Coverage

The entire principal community of West Palm Beach, FL is well within the predicted F(50,90) 43 dBu contour using the proposed omni-directional 15.5 kW ERP.



Interference and Waiver Request

SHB requests a waiver of the “freeze” for WPTV under the Commission’s new 5 mile “freeze” waiver policy established in the Report and Order for the Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television (R&O). The proposed WPTV facility (15.5 kW, omni-directional ERP with an HAAT of 387m) satisfies all three of the Commission’s requirements to qualify for the waiver:

1. Scripps will use a new antenna to try avoiding a significant reduction in post-transition service from its analog service area. A map of the WMAR analog service contour compared to its Appendix B facility service contour and the proposed facility service contour is attached, hereto, as Figure 2.
2. The expansion of the proposed WPTV post-transition facility service contour does not exceed its Appendix B service contour by more than 5 miles in any direction. Table 1, attached hereto, contains a table with a comparison of the distances to the contour (at increments of 10°) of the proposed WPTV post-transition facility vs. its Appendix B facility.
3. Based on studies conducted using software that emulates the software used by the FCC, the proposed WPTV facility would not cause more than 0.5% new interference to any other Appendix B facilities.

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 0.000138 mW/cm² which is less than 5% of the MPE for public exposure (0.2 mW/cm²) at the proposed frequency and, therefore, the proposal is excluded from further consideration.



SHB 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 are 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 are 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.

A handwritten signature in cursive script, reading "John F.X. Browne", written over a horizontal line.

John F.X. Browne, P.E.
February 27, 2008



Proposal Number

Revision

Date

16 Jan 2008

Call Letters

WPTV

Channel

12

Location

West Palm Beach, FL

Customer

Antenna Type

THV-10A12?VP O4

VERTICAL POLARIZATION AZIMUTH PATTERN

Gain

1.46 (1.64 dB)

Frequency

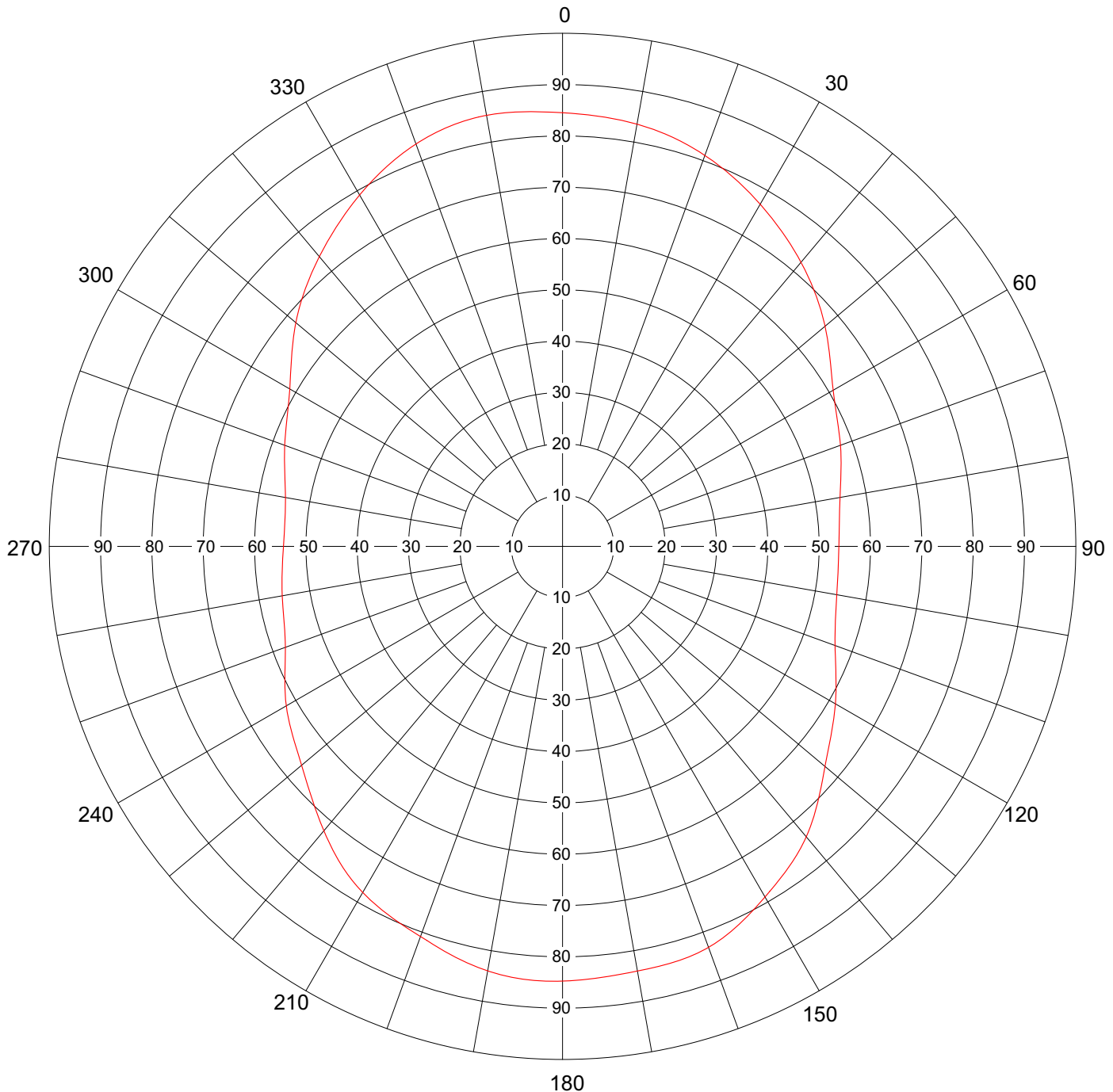
207 MHz

Calculated / Measured

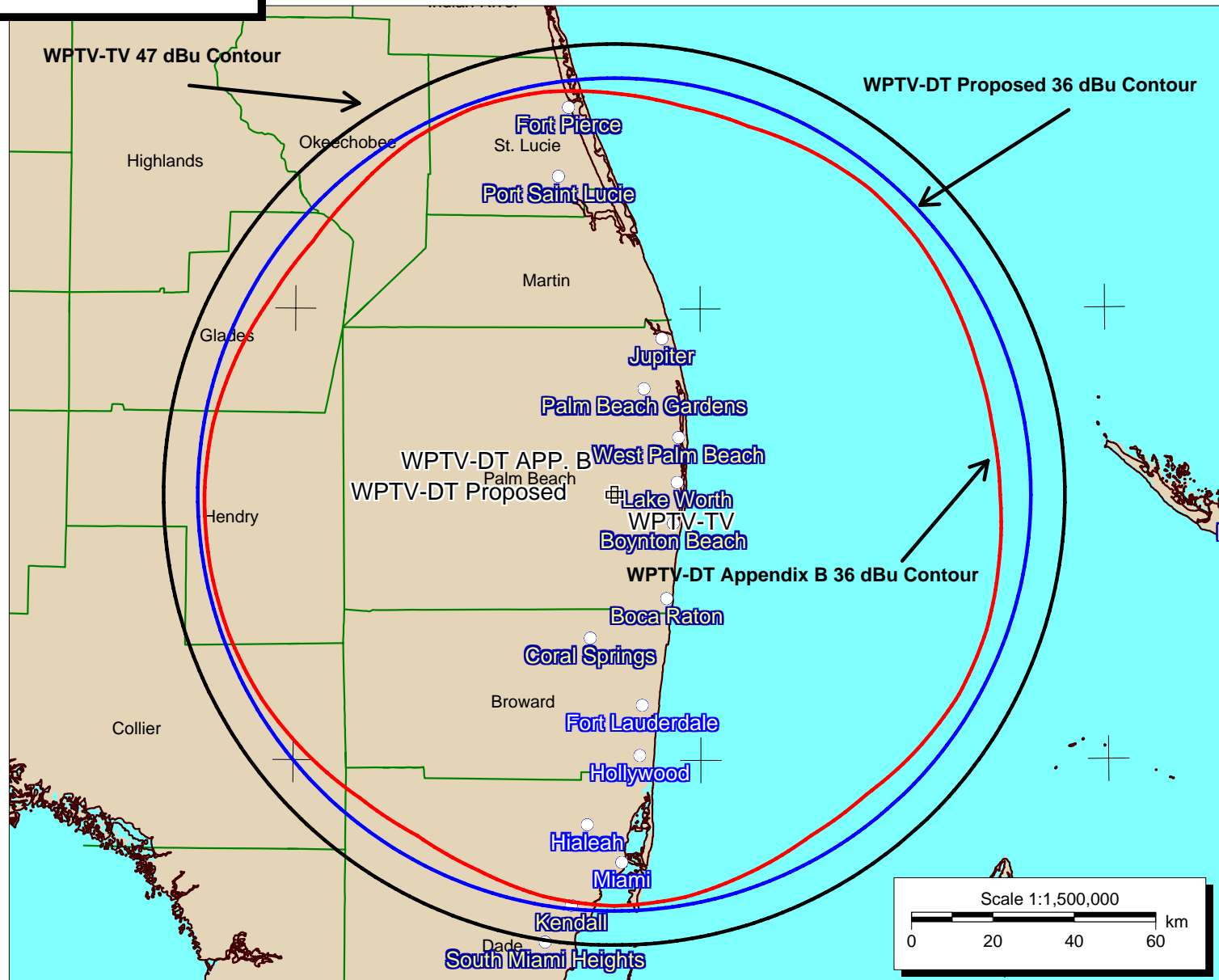
Measured

Drawing #

WPTV-DT CH 12 207MHZ VER



Remarks:



Black - WPTV-TV 47 dBu F(50,50) Grade B Contour
Red - WPTV-DT Appendix B 36 dBu F(50,90) Noise Limited Contour
Blue - WPTV-DT Proposed 36 dBu F(50,90) Noise Limited Contour

Figure 2

Table 1
WPTV-DT
Appendix B Facility vs. Proposed Facility Contour Distance Table

<u>Degrees</u>	Appendix B Facility ERP - 13.4 (DA)	Proposed Facility ERP - 15.5 kW (O)	<u>Difference (miles)</u>
	<u>Distance (miles)</u>	<u>Distance (miles)</u>	
0	61.21	63.51	2.30
10	60.15	63.51	3.36
20	59.78	63.51	3.73
30	60.34	63.51	3.17
40	60.77	63.51	2.73
50	60.40	63.51	3.11
60	59.59	63.51	3.91
70	58.85	63.51	4.66
80	58.60	63.51	4.91
90	58.85	63.51	4.66
100	59.59	63.51	3.91
110	60.40	63.51	3.11
120	60.77	63.51	2.73
130	60.34	63.51	3.17
140	59.72	63.51	3.79
150	60.03	63.51	3.48
160	61.21	63.51	2.30
170	62.33	63.51	1.18
180	62.76	63.51	0.75
190	62.20	63.57	1.37
200	60.96	63.57	2.61
210	60.09	63.57	3.48
220	60.40	63.57	3.17
230	61.33	63.57	2.24
240	62.20	63.57	1.37
250	62.51	63.57	1.06
260	62.64	63.57	0.93
270	62.51	63.57	1.06
280	62.20	63.57	1.37
290	61.33	63.57	2.24
300	60.40	63.57	3.17
310	60.09	63.57	3.48
320	60.96	63.57	2.61
330	62.20	63.57	1.37
340	62.76	63.51	0.75
350	62.33	63.51	1.18