



**ENGINEERING STATEMENT**

**OF**

**BENJAMIN L. PIDEK, P.E.**

**IN SUPPORT OF**

**APPLICATION FOR CONSTRUCTION PERMIT**

**POST-INCENTIVE AUCTION ASSIGNMENT FACILITY**

**WMYD-TV**

**DETROIT, MI**

**Background**

Scripps Broadcasting Holdings LLC (Scripps) is the licensee of WMYD, located at Detroit, MI, which is presently authorized to operate its digital facility on Channel 21 with the following parameters:

**Pre-Incentive Auction Facility (Ch. 21)**

Coordinates: 42° 26' 52.5" N (NAD83)  
83° 10' 23.1" W  
ERP: 500.0 kW (DA)  
RCAMSL: 523.3m

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WMYD has been assigned Ch. 31 for its post-incentive auction facility with the following parameters:

Post-Incentive Auction Facility (Ch. 31)

Coordinates: 42° 26' 52.5" N (NAD83)  
83° 10' 23.1" W  
ERP: 622 kW (DA)  
RCAMSL: 523.3m

**Antenna System and Tower**

The existing top-mounted directional WMYD Ch. 21 antenna (Dielectric TFU-23ETT-R CT3 DC) is a coaxial slot antenna that is channel specific and not usable on Ch. 31. Scripps intends to replace the existing top-mounted antenna with a new directional coaxial slot antenna for Ch. 31 (Dielectric TFU-23ETT-R CT3). The azimuth and elevation patterns and dBk table for the proposed antenna have been attached to the application.

The replacement of the top-mounted antenna will not result in a change in the overall height of the structure. The tower has a candelabra platform at the top, occupied by two other television stations which have longer antennas than the proposed WMYD antenna.

The new Ch. 31 antenna will have a center of radiation of 523.3 m AMSL (with a calculated HAAT of 324m) which is the same height as the radiation center height of the assigned repack facility. The antenna manufacturer was able to replicate the exact same antenna azimuth pattern in the new antenna as that of the assigned repack antenna azimuth pattern; therefore, there will be no change from the assigned post-repack facility parameters.

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## **Coverage**

The entire principal community of Detroit, MI is well within the predicted F(50,90) 48 dBu contour based on the proposed directional 622 kW ERP.

## **Interference**

Scripps is not seeking to expand the WMYD noise-limited service contour beyond the noise-limited contour of its assigned post-incentive auction facility in any direction; therefore, no interference analysis is required to be submitted with this application.

## **Environmental/RFR**

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure is existing and registered, such conditions should not be an issue requiring further consideration.

The location of the proposed post-incentive auction facility is a multi-user site and it is assumed that the site is currently “in compliance” with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.004580 mW/cm<sup>2</sup>, which is less than 5% of the MPE for public exposure (0.384000 mW/cm<sup>2</sup>) at Ch. 31 (573-579 MHz). The contribution to the overall RFR from the proposed facility is negligible and, therefore, the site will remain “in compliance” with FCC guidelines.

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Scripps 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 potential RFR hazards is posted.

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**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 black ink, appearing to read "Ben Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.  
June 6, 2017

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