## DIGITAL FLASH-CUT APPLICATION LAWRENCE F. LOESCH W28CJ LPTV STATION CH 28 - 554-560 MHZ - 0.275 kW MANTEO, NORTH CAROLINA June 2012

## **EXHIBIT C**

## **Digital Transmission System Calculations**

Effective Radiated Power:

Horizontal

0.275 kilowatt

Antenna:

RF Technologies Corporation

Model - LP-1900-12-WB-17-28

Horizontal gain (maximum):

Power gain 20.4

Transmission Line:

(235 feet)

Andrew Corporation - LDF5-50A

7/8 foam dielectric foam

60.2% efficiency

Antenna filter:

Insertion loss 0.22 dB

95.060% efficiency<sup>1</sup>

Required Transmitter Power Output

To Reach Effective Radiated Power:

0.0236 kilowatt (23.6 watts)

<sup>1)</sup> The actual loss will be determined at installation and may result in a slight change of transmitter power output to maintain effective radiated power.