CONSOLIDATED

ENGINEERING EXHIBIT

FCC Form 349 Long Form - Section III-A - Engineering

BROWN BROADCAST SERVICES
INCORPORATED
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ENGINEERING STATEMENT
AMENDMENT TO LONG-FORM APPLICATION FOR A NEW FM TRANSLATOR

SUMMARY

Community Media Assistance Project (CMAP), formerly known as Northwest Community Radio Project[1], hereby submits an amendment to a 349 Long-Form application, to serve Donelson, TN. The original Short-Form submission was BNPFT-20030317MAU. An LPFM Preclusion Study was included as part of the amended Short Form and Settlement, filed in July, 2013. The antenna height is increased, but the ERP is reduced. Not other changes are proposed herein, from the amended Short-Form. Since the location and translator-class status has not changed, the last-filed LPFM Preclusion is still completely valid. However, the Preclusion Map is attached herein, in Attachment 1.

CMAP is a non-profit organization. This proposal would rebroadcast WFRN-LP, Pasquo, TN.

[1]This name change has been duly registered with the State of Oregon. The FCC Auctions Desk was notified of the change, by letter, on March 20, 2013. The FRN and CDBS records have been updated. There has been no change in the mission, purpose, or board members of the organization, since its inception in 2003. Only the name has changed. The original 2003 Short Form was filed under the "old" name.

EXHIBIT 13
FM OVERLAP REQUIREMENTS

INTERFERENCE PROTECTION

This application meets all requirements of 47 CFR §74.1204 regarding interference protection to other stations and authorizations. See **Exhibit 13a.**

Contour protection to 2nd adjacent station WUBT, Russelville KY, and 3rd-adjacent station WRLT, Franklin, TN, are provided using the ratio method. WRLT is the worst case. The F(50/50) contour of WRLT is 61.45dBu at the proposed translator site. Using the appropriate U/D ratio of 40dB, the corresponding interfering contour of the proposed translator is therefore 101.45dBu. At the full 1 watt ERP, this contour extends to a distance of 58.9 meters from the antenna. However, the field strength of the proposed translator's antenna system falls quickly at depression angles below the horizon. Using elevation pattern data provided by SWR for an FMEC/2-.75WS 2-bay antenna, the distance to the 101.45dBu contour at various depression angles is tabulated in **Exhibit 13b**.

The proposed antenna would be on a 23 meter tower, with the center of radiation at 15 meters AGL. As shown by **Exhibit 13b**, the worst-case 3rd adjacent interfering contour extends no closer than 1.28 meters above the ground. All populated areas within range are at least 18 meters lower than the hilltop base of the tower, so the actual clearances of all populated areas beneath the interfering contour are much greater than shown here. Therefore, there are no populated areas within the interference zone.

Exhibit 13a
Contour Protection

Brown Broadcast Services, Inc.
Job: 20030317MAU Donelson LONG FORM.fmj
Master Database: 2013_Aug_29.fmd
Lat: N36:10:28 Lon: W086:40:09 NAD-27
Scale: 1:250000
Channel: 264 Class: DX

rfInvestigator Version 3.7.10
by rfSoftware, Inc.
Date: 8/30/2013 6:40:20 PM
Key:
City Grade
Protected
Co-Channel
1st Adj
2nd/3rd Adj

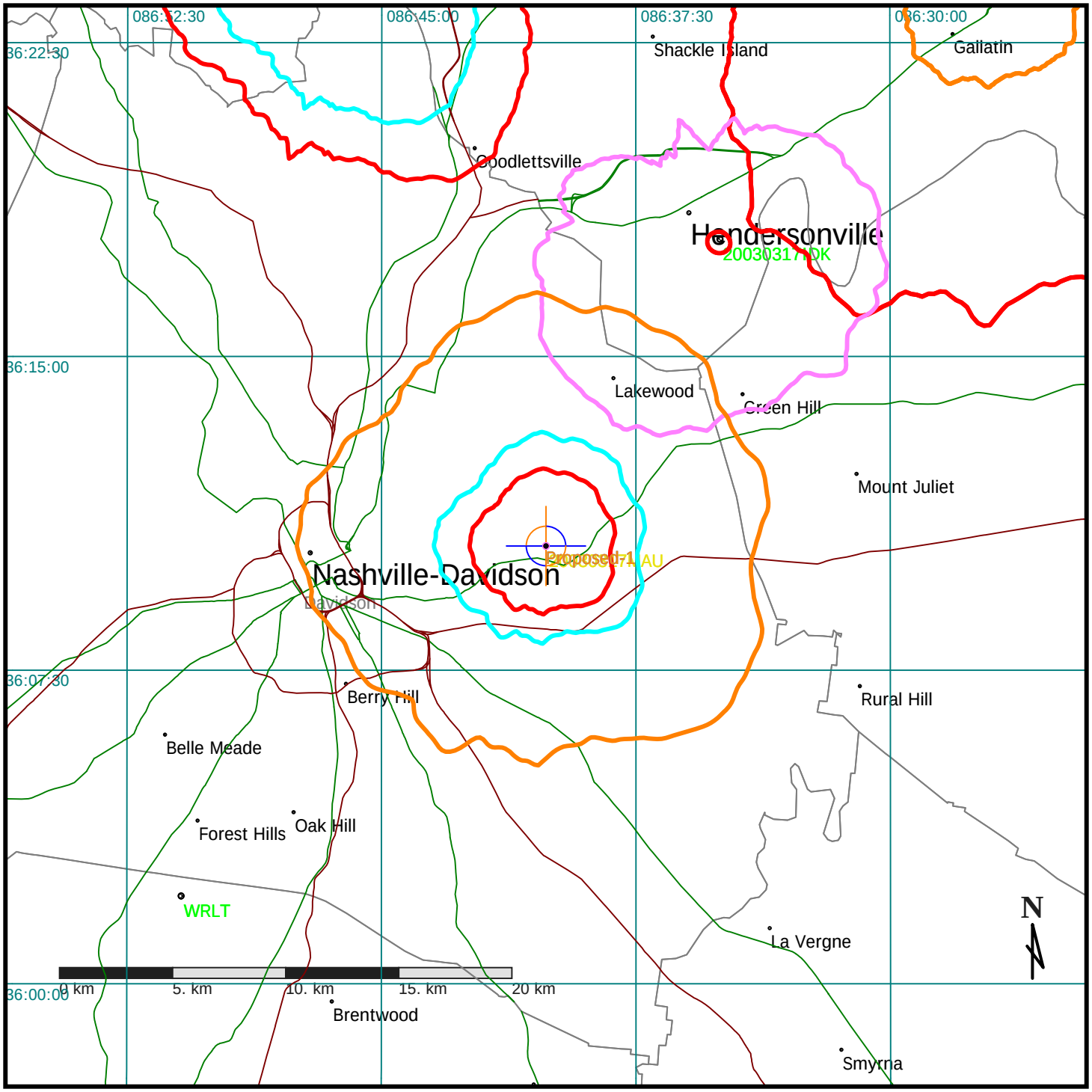

EXHIBIT 13b

SECOND & THIRD-ADJACENT INTERFERENCE PROTECTION TO POPULATED AREAS

20030317MAU	<CALL LETTERS OR FILE NUMBER
DONELSON TN	<PROPOSED COMMUNITY OF LICENSE
101.50	<INTERFERING CONTOUR OF PROPOSAL - dBu
0.119	<V/m
WRLT, Franklin, TN	<2nd or 3rd-ADJ STN REQUIRING INTERFERENCE PROT. (worst case)
1	<PROP. ERP (W)
SWR FMEC/2-.75WS	<ANTENNA MODEL

max ERP (W)	depression angle below horizon (dg)	relative field	ERP (W)	angular distance to contour (m)	vertical distance (below antenna) (m)	horiz distance to contour (m)	vertical distance below antenna required to clear nearest populated level (m)	clearance of interfering contour above nearest populated level (m)
1	0	1	1.00	58.91	0.0	58.9	15	**15.00**
1	5	0.976	0.95	57.49	5.0	57.3	15	**9.99**
1	10	0.905	0.82	53.31	9.3	52.5	15	**5.74**
1	15	0.795	0.63	46.83	12.1	45.2	15	**2.88**
1	20	0.655	0.43	38.58	13.2	36.3	15	**1.80**
1	25	0.498	0.25	29.34	12.4	26.6	15	**2.60**
1	30	0.337	0.11	19.85	9.9	17.2	15	**5.07**
1	35	0.182	0.03	10.72	6.1	8.8	15	**8.85**
1	40	0.044	0.00	2.59	1.7	2.0	15	**13.33**
1	45	0.07	0.00	4.12	2.9	2.9	15	**12.08**
1	50	0.157	0.02	9.25	7.1	5.9	15	**7.92**
1	55	0.217	0.05	12.78	10.5	7.3	15	**4.53**
1	60	0.249	0.06	14.67	12.7	7.3	15	**2.30**
1	65	0.257	0.07	15.14	13.7	6.4	15	**1.28**
1	70	0.245	0.06	14.43	13.6	4.9	15	**1.44**
1	75	0.216	0.05	12.72	12.3	3.3	15	**2.71**
1	80	0.175	0.03	10.31	10.2	1.8	15	**4.85**
1	85	0.125	0.02	7.36	7.3	0.6	15	**7.66**
1	90	0	0.00		0.0	0.0	15	**15.00**

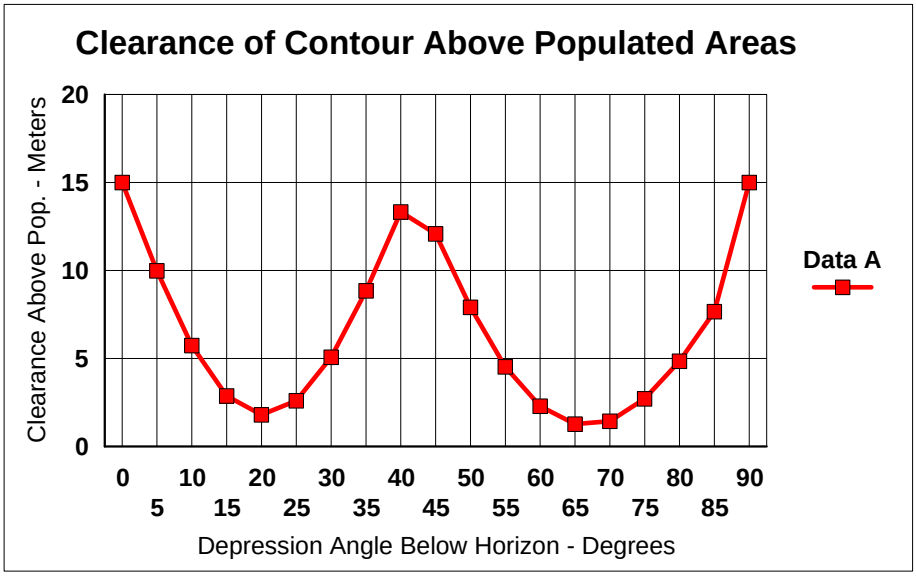

EXHIBIT 17

ENVIRONMENTAL PROTECTION ACT / NEIR ANALYSIS

The applicant proposes mounting a new SWR FMEC/2-.75WS two-bay, 3/4 wave-spaced antenna at 15m above the ground. The SWR FMEC antenna is a functional equivalent of the Jampro Double-V "Penetrator" antenna. Calculations were made using FM Model for Windows, version 2.10, using the "Jampro Double-V (EPA)" setting. This setting indicated a peak exposure of 0.023μW/cm^2, at 5.6 meters from the tower. This represents 0.012% of the Maximum Permissible Exposure (MPE) of 200μW/cm^2 for uncontrolled environments.

The applicant will ensure that public access to the tower is restricted by fencing, anti-climb devices, or other appropriate measures. The site will be posted with appropriate RF exposure warning signs. If tower climbing by authorized personnel becomes necessary, transmitter power will be reduced or operation will cease, as necessary, so as to not exceed the RF exposure limits.