

**TECHNICAL EXHIBIT**

**IN SUPPORT OF A MINOR CHANGE APPLICATION TO  
INCREASE EFFECTIVE RADIATED POWER  
AND CORRECT ANTENNA LOCATION AND HEIGHT  
W300AO, MANAHAWKIN, NEW JERSEY  
AUGUST 2007**

This technical statement including the attached exhibits has been prepared on behalf of Jersey Shore Broadcasting Corporation (“JSBC”), licensee of FM translator station, W300AO, Manahawkin, New Jersey, and is in support of an application to increase the station’s effective radiated power and correct the antenna location and height.

W300AO is licensed to operate on Channel 300D (107.9 MHz) with 0.019 kW (H&V) effective radiated power (ERP) and 94 meters antenna height above average terrain using a non-directional antenna. JSBC proposes to modify the license and operate with 0.25 kW (H&V) ERP and 95<sup>1</sup> meters antenna height above average terrain and to utilize a directional FM antenna. The proposed FM antenna would replace the current antenna and will be mounted at the same elevation on the existing tower. The height of the antenna will be 101 meters above ground level and 106 meters AMSL. The antenna structure registration number of the existing tower is 1027616.

The existing antenna site is located east of the Mississippi river, and since the proposed (W300AO) FM translator is a “fill-in” it is limited to a maximum ERP of 0.25 kW. The attached Table I shows the proposed W300AO operation would comply with Section 74.1235 of the Commission’s rules with respect to power limitations. The attached Table II shows the proposed W300AO directional antenna pattern and tabulation.

The proposed W300AO operation would continue to re-broadcast the FM signal of WJRZ-FM, Manahawkin, New Jersey which currently operates on Channel 261A (100.1 MHz). The attached map (Figure 1) shows the computed 1.0 mV/m contour of the

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<sup>1</sup> Based on 3 Second US Terrain Database

proposed W300AO's operation in relation to the similar contour of WJRZ-FM which operates with 1.7 kW ERP and 133 meters HAAT. Figure 1 indicates the proposed 1 mV/m contour of W264AM would be entirely inside the similar contour of WJRZ-FM.

The following data provides detail information concerning the proposed FM translator W300AO operation:

Name of the Permittee:	Jersey Shore Broadcasting Corporation
Principal community to be served:	NJ-Manahawkin
Primary Station:	WJRZ-FM, Channel 261A, Manahawkin, NJ
Via:	Off-the-air
Channel:	300D
Hours of operation:	Unlimited
Antenna Coordinates:	North Latitude: 39 deg 41 min 53 sec West Longitude: 74 deg 14 min 06 sec
Transmitter:	Type Accepted
Antenna type:	Directional
Major lobe directions:	N 80° E Clw N 230° E

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the horizontal plane (kW)	0.25	0.25
Height of radiation center above ground (meters)	101.0	101.0
Height of radiation center above means sea level (meters)	106.0	106.0
Antenna structure registration number:	1027616	

### **Interference**

The proposed FM translator operation of W300AO on Channel 300 will comply with Section 74.1204 of the Commission's rules with respect to interference caused to any existing or proposed FM stations and translators. The attached maps (Figure 2 and 3) show the proposed W300AO operation would not cause prohibited contour overlap with any other pertinent FM station or proposal operating on co-channel and on  $\pm 3$  channels of Channel 300 with the exception of third adjacent channel station WPUR, Atlantic City, NJ.

WPUR is a class B1 station and currently operates on channel 297 (107.3 MHz) with 13.5 kW ERP and 137 meters HAAT. The licensed WPUR operation has a computed signal level at the W300AO transmitter site of 59.3 dBu. The attached topographic map (Figure 4) shows the computed 99.3 dBu (92.3 mV/m) contours of the present non-directional and the proposed W300AO directional operations and indicates there is no increase in the contour over the current licensed operation where there are existing houses. It is believed that due to the rural nature of the W300AO transmitter site, the minus three channel relationship coupled with the WPUR application (BMPH-20070711ABW) to re-locate to a new site whereby its 57 DBu contour would not overlap the W300AO transmitter site, no interference will result. The attached Table III shows a listing of all FM stations considered in the allocation study.

Since W300AO will not be operating on Channels 201-220, Section 74.1205 is not pertinent.

### **Unattended Operation**

It is proposed to operate W300AO unattended in accordance with Section 74.124 of the Commission's rules.

### **Multiple Translators**

The applicant does not have any interest in an FM translator or applications which serve the same area and re-broadcast the same signal as W300AO.

### **Environmental Protection Act**

As stated above, the proposed W300AO site would be located on its current licensed existing tower. The environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent, therefore, those issues have not been addressed.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the FCC OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 0.5 kW and a radiation center of 101 meters above ground level, the proposed W300AO operation would have a maximum of 0.2 microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ) RF field at 2 meters above the base of the supporting structure assuming 0.3 antenna relative field in the downward direction.

Non-commercial station WNJM is also located on the tower structure operating with effective radiated power of 0.201 kW and a radiation center of 85 meters above ground level. The WNJM operation would have a maximum of 0.1 microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ) RF field at 2 meters above the base of the supporting structure assuming 0.3 antenna relative field in the downward direction. The Commission's guidelines for the FM band are 1,000  $\mu\text{W}/\text{cm}^2$  for the

occupational/controlled and  $200 \mu\text{W}/\text{cm}^2$  for the general population/uncontrolled environment.

Therefore, members of the public and personnel working around the proposed W300AO facility would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, station W300AO, in coordination with other users, has established procedures to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

**TABLE I**  
**COMPUTED 1.0 mV/m CONTOUR**  
**FOR THE PROPOSED FM TRANSLATOR OPERATION OF**  
**W300AO, MANHAWKIN, NEW JERSEY**  
**AUGUST 2007**

Call Letters: W300AO

Latitude: 39-41-53 N

Longitude: 074-12-06 W

ERP: 0.25 kW

Channel: 300

Frequency: 107.9 MHz

AMSL Antenna Height: 106 m

Elevation: 5.1 m

Horiz. Antenna Pattern: Directional

Vert. Elevation Pattern: No

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 50.0 %

Field Strength: 1.0 mV/m (60.00 dBuV/m)

Primary Terrain: V-Soft 3 Second US Terrain

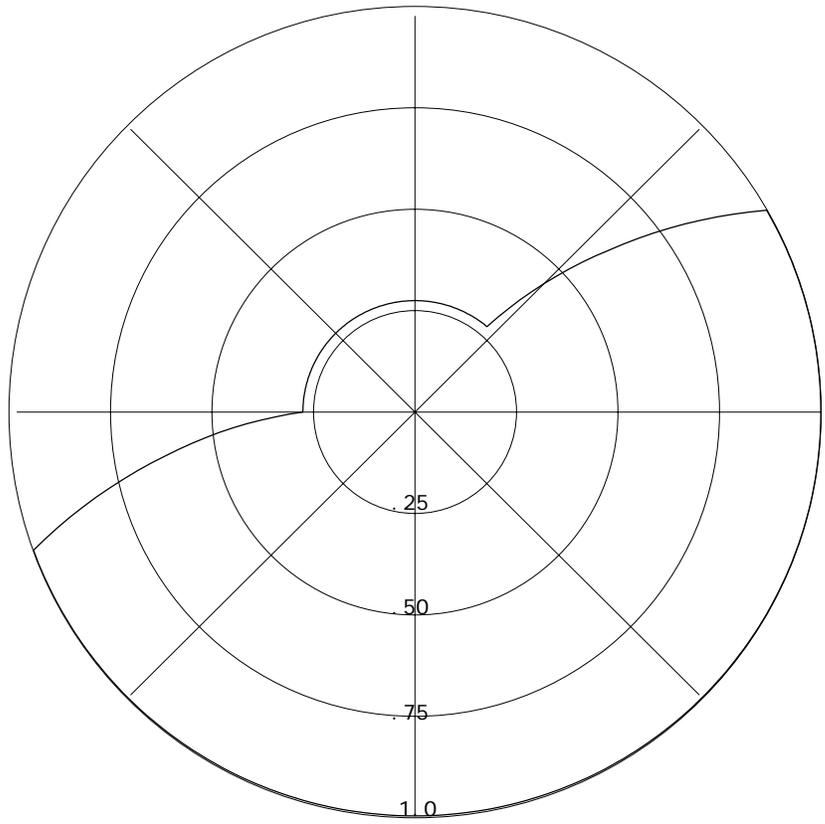
<u>Bearing (deg)</u>	<u>Distance (km)</u>	<u>HAAT (m)</u>
0.0	6.4	89.3
30.0	7.0	105.6
60.0	13.2	105.8
90.0	13.2	105.8
120.0	13.2	105.8
150.0	13.2	105.9
180.0	13.2	105.7
210.0	13.2	105.3
240.0	12.1	92.0
270.0	6.1	80.9
300.0	6.0	78.8
330.0	5.8	72.7

Average HAAT for radials shown: 96.0 m

Bearing    Field % Voltage

Graph is Percent Relative Field Voltage

000	=	0.276
010	=	0.276
020	=	0.276
030	=	0.276
040	=	0.276
050	=	0.624
060	=	1.000
070	=	1.000
080	=	1.000
090	=	1.000
100	=	1.000
110	=	1.000
120	=	1.000
130	=	1.000
140	=	1.000
150	=	1.000
160	=	1.000
170	=	1.000
180	=	1.000
190	=	1.000
200	=	1.000
210	=	1.000
220	=	1.000
230	=	1.000
240	=	1.000
250	=	1.000
260	=	0.624
270	=	0.276
280	=	0.276
290	=	0.276
300	=	0.276
310	=	0.276
320	=	0.276
330	=	0.276
340	=	0.276
350	=	0.276



Jersey Shore Broadcasting Corporation  
W300A0 Allocation Study

REFERENCE  
39 41 53.0 N.  
74 14 06.0 W.

CH# 300D - 107.9 MHz, Pwr= 0.019 kW, HAAT=96.0 M, COR= 105.9 M  
Average Protected F(50-50)= 6.69 km

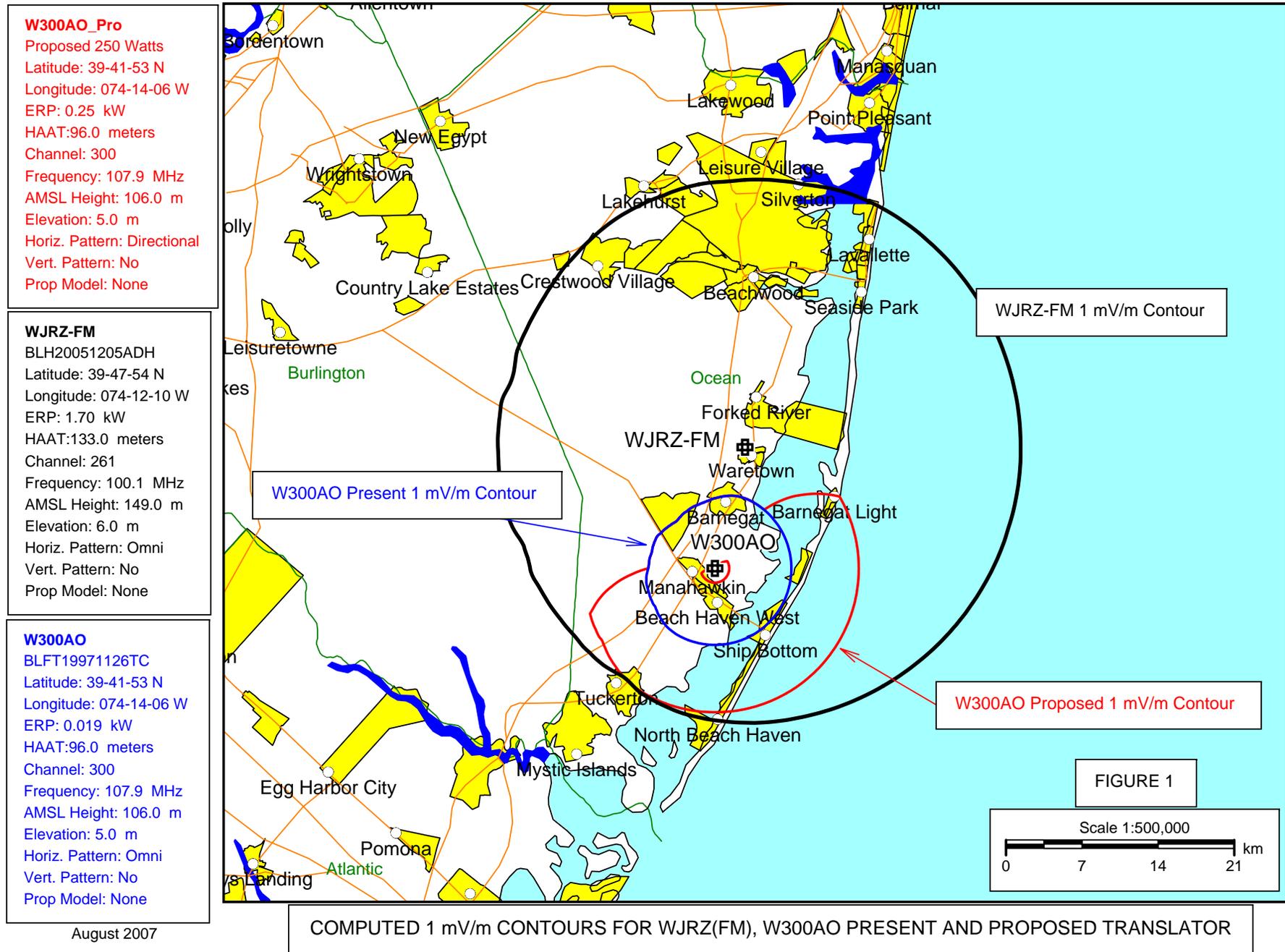
DISPLAY DATES  
DATA 08-15-07  
SEARCH 08-15-07

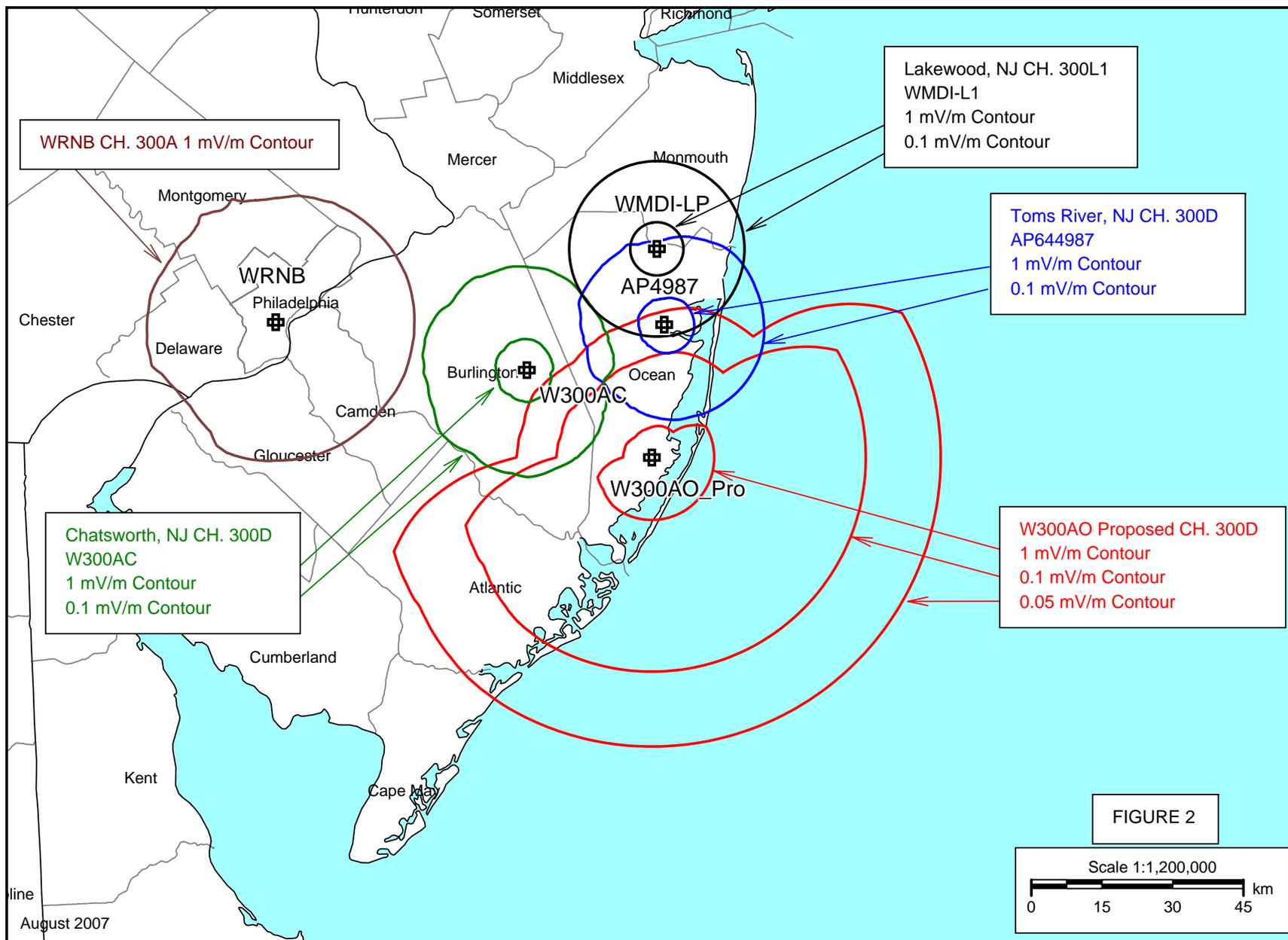
CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT (M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
300A Pennsauken	AL1922	RSV NJ	---	297.1 116.6	75.40 RM10615	40 00 12.0 75 01 19.0	6.000 100	87.3 120	28.8	-14.99	36.52
297B1 Atlantic City	WPUR	LIC DCX NJ		202.8 22.7	40.58 BLH20050519AEJ	39 21 40.0 74 25 05.0	13.500 137	4.0 138	45.0	29.60	-4.86*
300A Pennsauken	WRNB	LIC ZCX NJ		289.8 109.2	84.73 BLH20050622AAL	39 57 09.0 75 10 05.0	0.780 276	82.5 304	29.4	-0.87	45.24 Radio One Licenses, Lic
297B1 Atlantic City	WPUR	APP _CX NJ		218.2 38.0	45.46 BMPH20070711ABW	39 22 35.0 74 33 44.0	25.000 100	4.0 105	44.0	34.54	1.07 Millennium Atlantic City L
300D Toms River	AP4987	APP _C_ NJ		5.3 185.3	28.28 BNPFT20030317BFV	39 57 06.0 74 12 16.0	0.020	19.7 87	6.0	5.15	11.38 Wyr's Broadcasting
300D Chatsworth, Etc.	W300AC	LIC _HN NJ		305.1 124.9	32.33 BLFT19930806TD	39 51 52.0 74 32 41.0	0.035 68	19.4 96	5.8	9.89	16.66 Mercer County Community Co
299D Toms River	AP8054	APP _C_ NJ		5.6 185.6	28.31 BNPFT20030314BSY	39 57 06.6 74 12 09.5	0.038	9.4 79	6.6	15.47	16.80 Susan Clinton
300L1 Lakewood	WMDI -LP	LIC _C_ NJ		1.4 181.4	44.21 BLL20040524ANV	40 05 46.0 74 13 21.0	0.100 7	18.6 32	5.6	22.30	27.84 American Institute For Jew
299A Port Norris	RADD	ADD _C_ NJ		234.1 53.5	85.13	39 14 47.0 75 02 04.0	6.000 100	42.6 105	27.6	35.93	48.25 Dana J. Puopolo
299D New Egypt	AP5019	APP _C_ NJ		333.7 153.6	47.71 BNPFT20030317BFY	40 04 58.0 74 29 00.0	0.055	8.2 92	5.8	36.46	37.57 Wyr's Broadcasting
300D Glendola	AP2600	APP DC_ NJ		11.7 191.8	56.13 BNPFT20030313BOW	40 11 34.5 74 06 02.4	0.080	12.0 51	3.8	40.62	41.12 Best Media, Inc.
299D Ewansville	AP2852	APP DC_ NJ		305.4 125.1	52.96 BNPFT20030313BPJ	39 58 21.5 74 44 27.4	0.250	8.0 41	5.7	41.89	42.94 Best Media, Inc.
300B Westport	WEBE	LIC _C_ CT		28.2 208.8	186.22 BMLH19890329KD	41 10 14.0 73 11 05.0	50.000 117	137.3 147	64.7	45.32	104.68 Cumulus Licensing Lic
300D Holmdel	AP5748	APP _C_ NJ		3.7 183.8	77.65 BNPFT20030317FLO	40 23 45.0 74 10 30.0	0.010	23.2 174	6.9	51.08	59.88 New Jersey Public Broadcas
297D Mount Holly	AP6178	APP _C_ NJ		305.6 125.3	58.43 BNPFT20030312BGP	40 00 08.7 74 47 31.0	0.013	0.3 47	3.4	55.14	54.98 Burlington County College
298B New York	WBLS	LIC _CN NY		10.2 190.3	118.53 BLH19940204KN	40 44 54.0 73 59 10.0	4.200 415	3.9 429	62.4	111.12	56.01 Urban Radio I, L.I.C.
300D East Brunswick	AP3113	APP _C_ NJ		345.0 164.8	81.28 BNPFT20030317IXM	40 24 16.6 74 29 03.5	0.055	19.5 86	5.9	58.64	65.34 Radio Assist Ministry, Inc
298D Moorestown	AP5149	APP _C_ NJ		298.5 118.1	64.44 BNPFT20030317EWZ	39 58 21.0 74 53 54.0	0.025	0.4 66	5.4	60.96	58.96 New Jersey Public Broadcas
300D Red Bank	AP4144	APP _C_ NJ		10.9 191.0	72.90 BNPFT20030312ASF	40 20 33.0 74 04 18.0	0.002	6.7 44	2.2	62.72	59.52 Calvary Chapel Four Winds
300D Princeton Junction	WWPH	LIC _HN NJ		334.2 153.9	75.08 BLED19800422AA	40 18 20.0 74 37 16.0	0.017 11	11.5 44	3.6	60.51	61.73 West Windsor-plainsboro Re

Terrain database is USGS 03 SEC

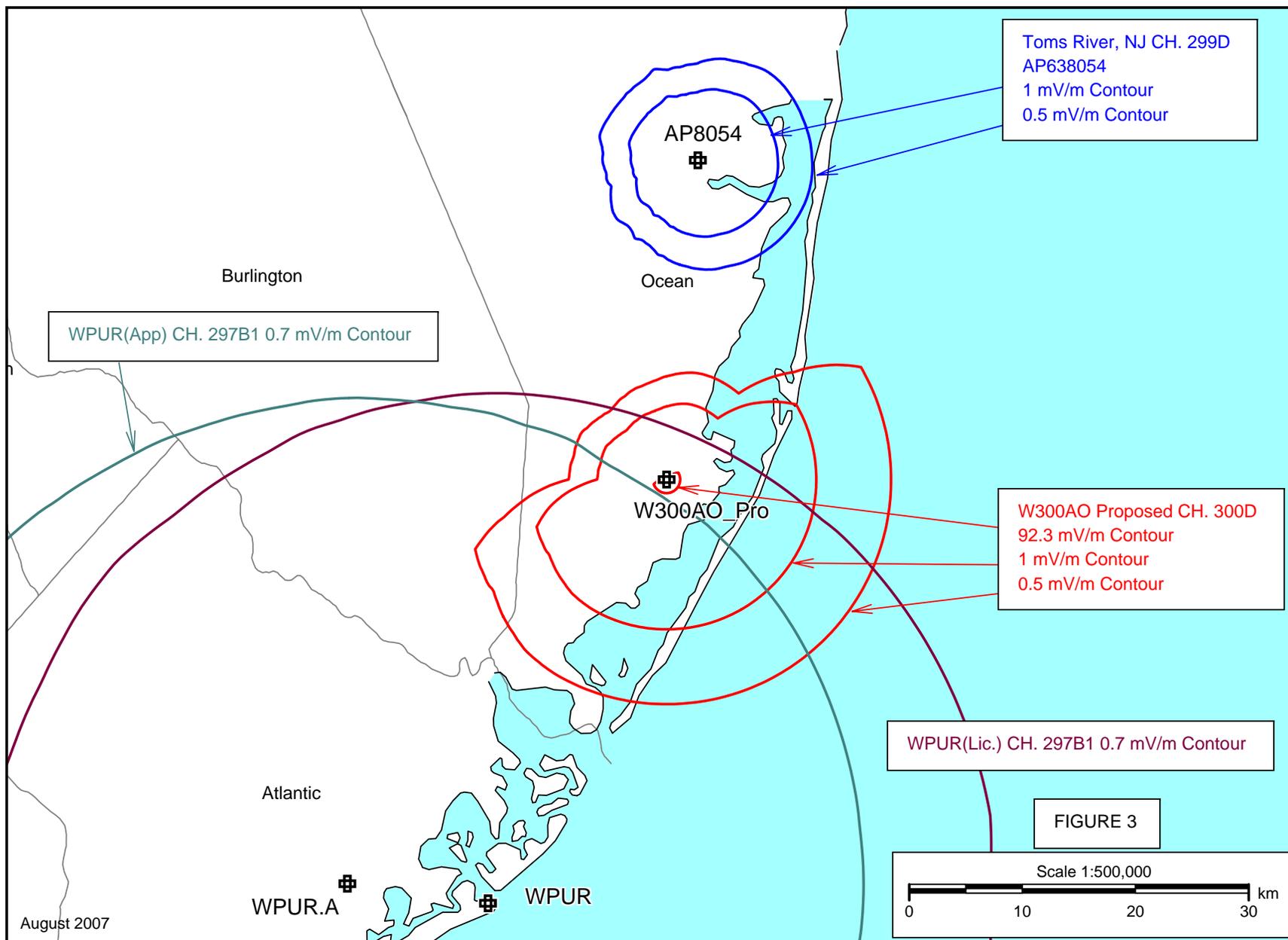
ERP and HAAT are on direct line to and from reference station.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beam tilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

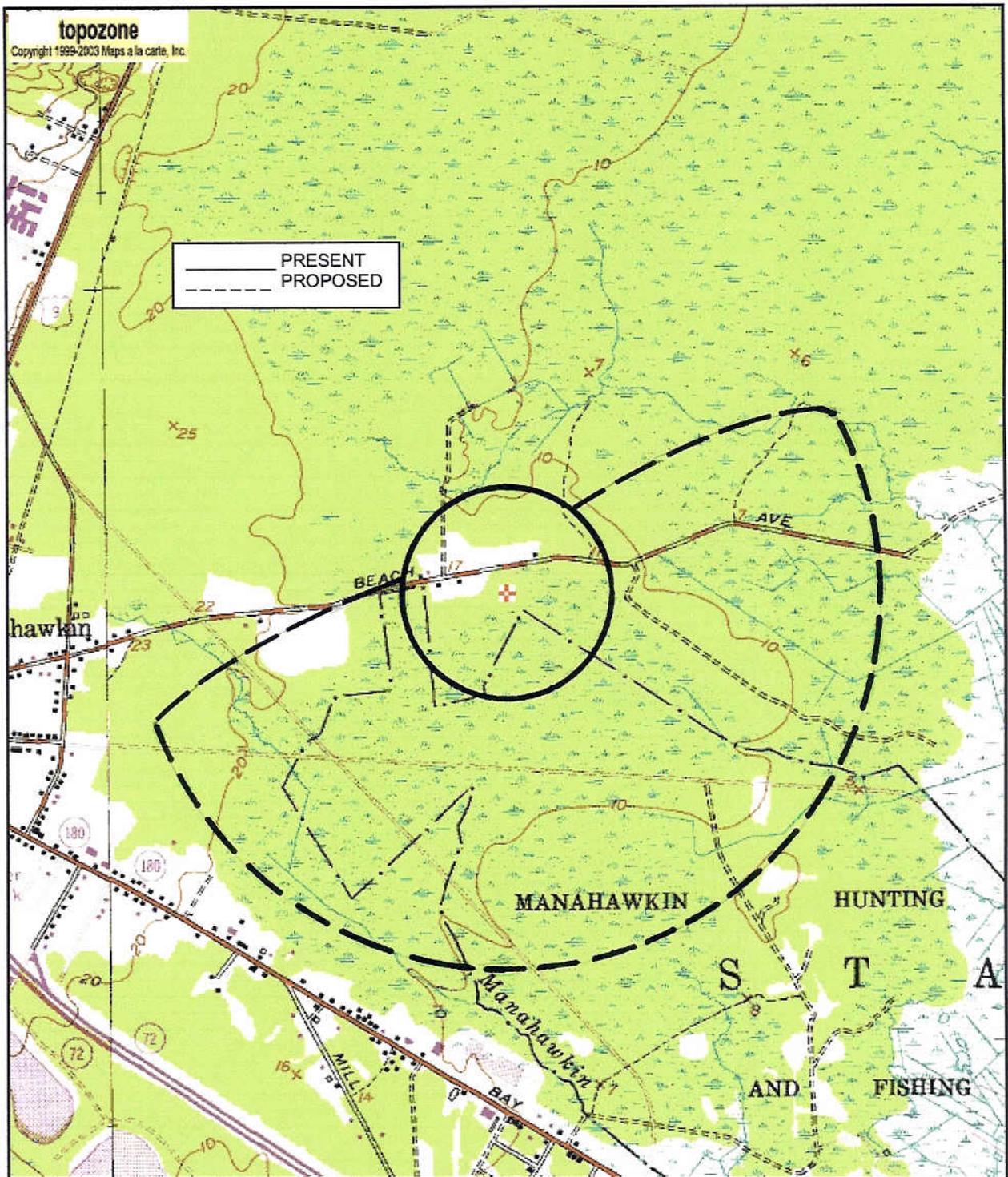




CO-CH ALLOCATION MAP FOR THE PROPOSED W300AO, MANAHAWKIN, NJ TRANSLATOR OPERATION



ADJACENT CHANNEL ALLOCATION MAP FOR THE PROPOSED W300AO, MANAHAWKIN, NJ TRANSLATOR OPERATION



0 0.3 0.6 0.9 1.2 1.5 km  
 0 0.1 0.2 0.3 0.4 0.5 mi  
 39° 41' 57"N, 74° 14' 05"W (NAD27)  
**WJRZ Radio Heliport, USGS Ship Bottom (NJ) Quadrangle**  
 Projection is UTM Zone 18 NAD83 Datum

M\*  
 G  
 M=-12.924  
 G=0.489

FIGURE 4  
 COMPUTED 99.3 dBu CONTOURS OF THE  
 PRESENT LICENSED AND PROPOSED OPERATIONS OF  
 W300AO, MANAHAWKIN, NEW JERSEY  
 August 2007