

**EXHIBIT 10 – TECHNICAL NARRATIVE**

IN SUPPORT OF A MINOR CHANGE APPLICATION TO  
CHANGE CHANNEL TO 281D AND ANTENNA SITE LOCATION  
**W280EE, DOVER, DELAWARE**  
FEBRUARY 2013

This technical statement including the attached exhibits have been prepared on behalf of Delmarva Broadcasting Company (“DBC”), licensee of FM translator station, W280EE, Milford, Delaware, and is in support of a minor change application for construction permit to change channel and antenna site location.

W280EE is currently licensed to operate on Channel 280D (103.9 MHz) with 0.250 kW (V) effective radiated power (ERP) and 50 meters antenna height above mean sea level using a non-directional antenna. As a result of interference complaints to co-channel station WOCQ(FM), DBC proposes to modify the license and change antenna site location and operate on channel 281D (104.1 MHz) with 0.25 kW (H&V) ERP with 71.7 meters antenna height above mean sea level, and utilize a non-directional FM antenna. The antenna structure registration number of the existing tower is 1034028.

The existing antenna site is located east of the Mississippi river, and since the proposed (W280EE) FM translator is a “fill-in” it is limited to a maximum ERP of 0.25 kW. The attached Table 1 shows the proposed W280EE operation would comply with Section 74.1235 of the Commission’s rules with respect to power limitations and also shows the distances to the proposed 1 mV/m (60 dBu) contour.

As proposed to be modified, W280EE will re-broadcast the AM signal of WYUS, Milford, Delaware. The attached map (Figure 1) shows the computed 1.0 mV/m (60 dBu) contour of the proposed W280EE’s operation in relation to the predicted 2 mV/m contour of WYUS and the 25 mile radius from the WYUS transmitter site. Figure 1 indicates the

proposed 1 mV/m contour of W280EE would be entirely inside the 2 mV/m contour of AM station WYUS as well as within the WYUS 25 mile radius.

The following data provides detail information concerning the proposed FM translator operation of W280EE:

Name of the Licensee:	Delmarva Broadcasting Company	
Primary Station:	WYUS(AM), Milford, DE	
Via:	Off-Air	
Channel:	281D	
Hours of operation:	Unlimited	
Antenna Coordinates:	North Latitude:	39 deg 00 min 50 sec
	West Longitude:	75 deg 30 min 29 sec
Transmitter:	Type Accepted	
Antenna type:	Non-Directional	
	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)	59.5	59.5
Height of radiation center above means sea level (meters)	71.7	71.7
Antenna structure registration number:	1034028	

### **Interference**

The proposed FM translator operation of W280EE on Channel 281D 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 allocation study and maps (Figure 2 and 3,4,5) show the proposed W280EE 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 281.

Since W280EE will not be operating on Channels 201-220, Section 74.1205 is not pertinent.

### **Unattended Operation**

It is proposed to operate W280EE unattended in accordance with Section 74.1234 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 W280EE.

### **Environmental Protection Act**

As stated above, the proposed W280EE site would be located on an 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 59.5 meters above ground level, the proposed W280EE operation would have a maximum of 1.3 microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ) RF field at 2 meters above the base of the supporting structure assuming 0.5 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 W280EE facility would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, station W280EE, 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 (60 dBu) CONTOUR**  
**FOR THE PROPOSED FM TRANSLATOR OPERATION OF**  
**W280EE, DOVER, DELAWARE**  
**FEBRUARY 2013**

Call Letters: W280EE

Latitude: 39-00-50 N

Longitude: 075-30-29 W

ERP: 0.25 kW

Channel: 281D

Frequency: 104.1 MHz

AMSL Antenna Height: 71.7 m

Elevation: 12.2 m

Horiz. Antenna Pattern: Non-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	10.9	70.5
30.0	11.0	71.7
60.0	11.0	71.7
90.0	11.0	71.7
120.0	10.7	67.0
150.0	10.4	62.5
180.0	10.0	58.3
210.0	9.9	56.8
240.0	9.7	54.7
270.0	9.8	55.2
300.0	9.9	56.7
330.0	10.0	57.9

Average HAAT for radials shown: 62.9 m

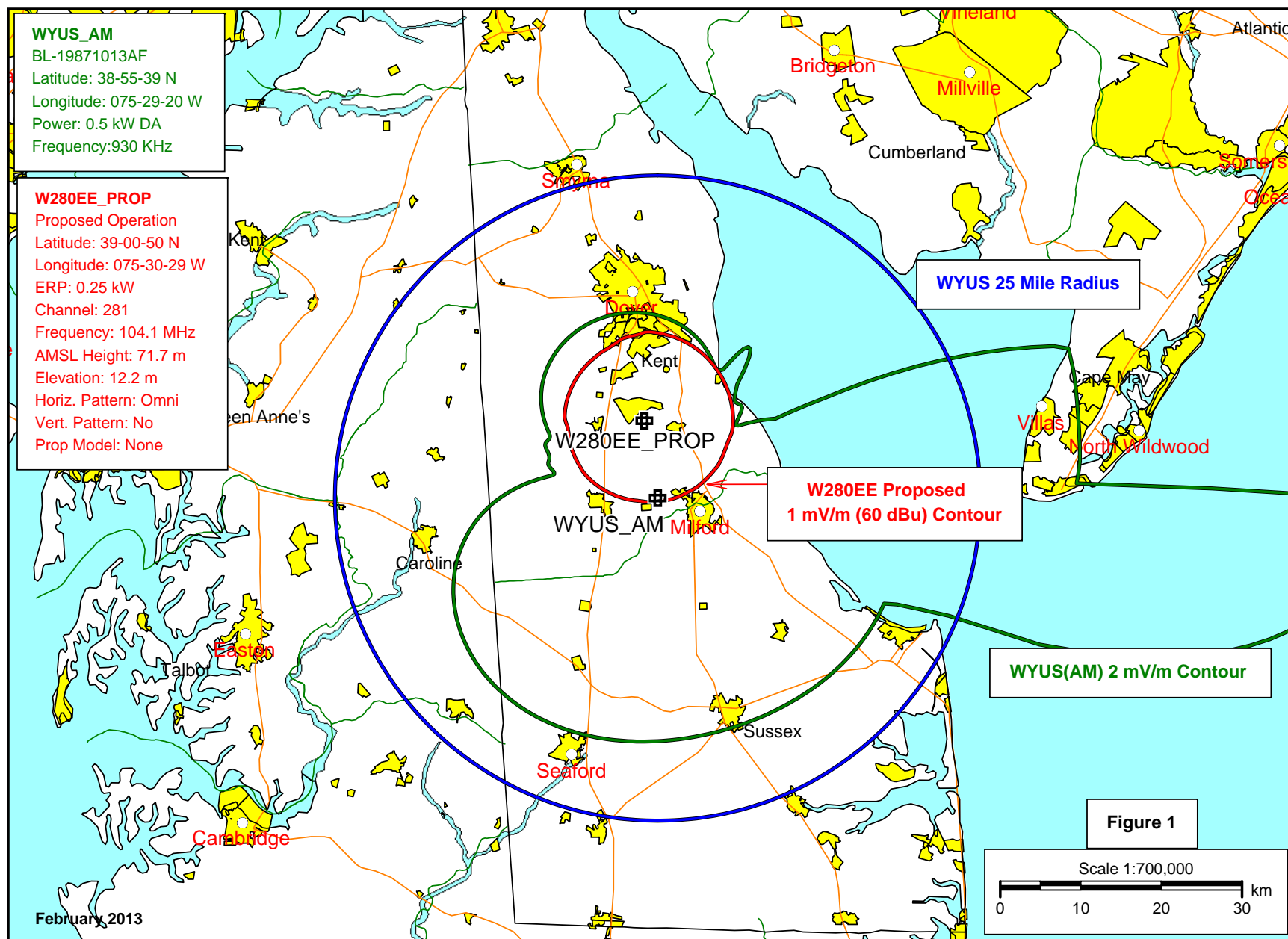


Exhibit 10 - Proposed 60 dBu FM Contour Of W280EE In Relation To The 2 mV/m AM Contour And The 25 Mile Radius Of WYUS

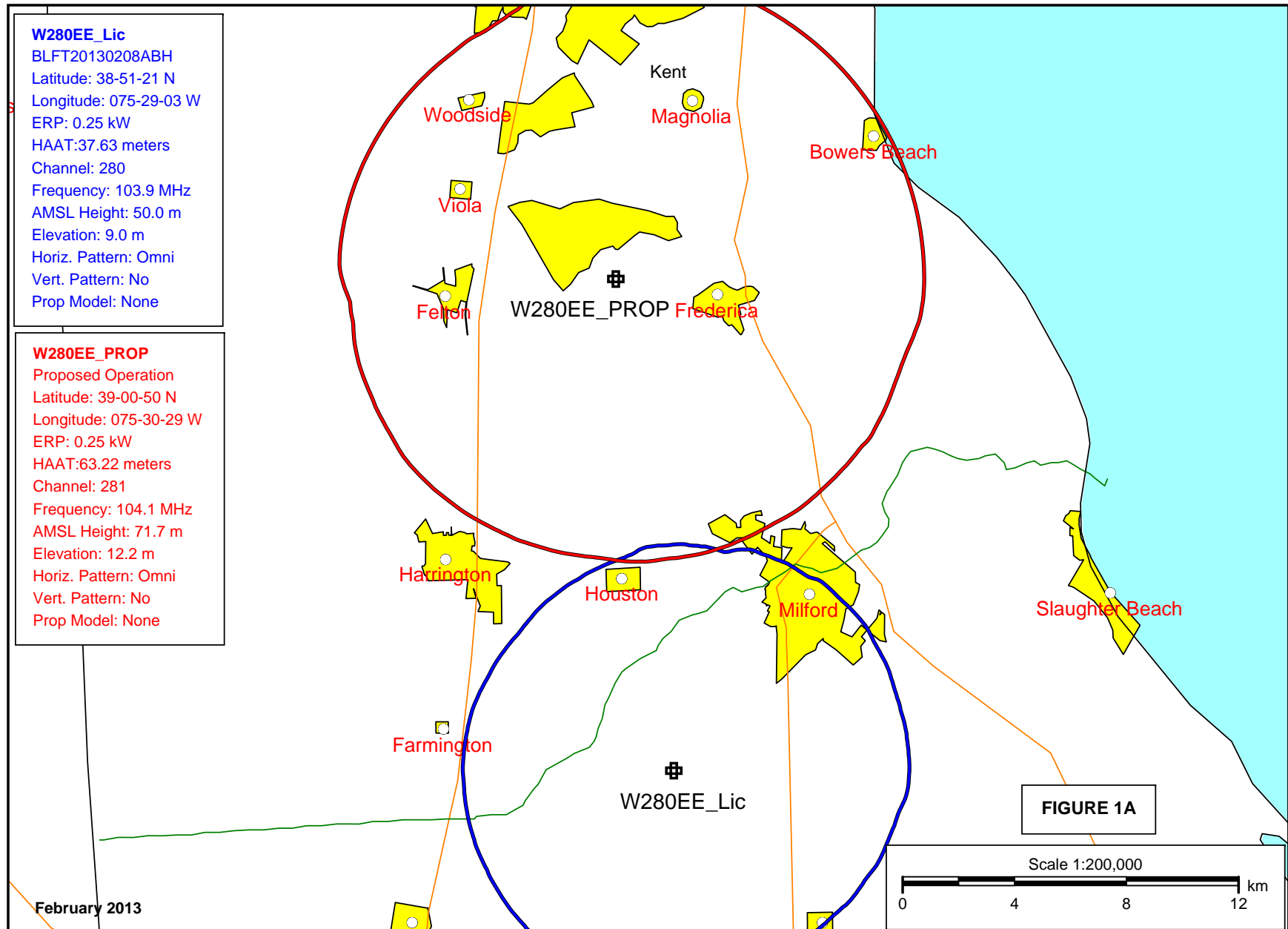


Exhibit 10 - Overlap Of Present Licensed (BLFT-20130208ABH) And Proposed 60 dBu (1 mV/m) FM Contours Of W280EE



W280EE_Proposed Operation Delmarva Broadcasting Company											
REFERENCE	CH#	281D	-	104.1	MHz,	Pwr= 0.25 kW,	HAAT= 62.9 M,	COR= 71.7 M	DISPLAY DATES		
39 00 50.0 N.									DATA 02-19-13		
75 30 29.0 W.									SEARCH 02-19-13		
									Average Protected F(50-50)= 10.39 km		
									Omni-directional		
CH	CALL	TYPE	ANT	AZI	DI ST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
281B WPRS-FM Waldorf	LIC _CX MD	249.6 68.8	123.79 BMLH20070809ABE	38 37 07.4 76 50 39.0	20.000 244	130.1 295	66.4	-15.9*	8.9	Radio One Licenses, LIc	
280D W280EE Milford	LIC _C_ DE	173.3 353.3	17.69 BLFT20130208ABH	38 51 21.0 75 29 03.0	0.250	11.4 50	8.0	-3.9	-4.5	Delmarva Broadcasting Comp	
284B WOHQ Ocean City-salisbur	LIC _CN MD	164.8 345.0	72.12 BLH19800505AB	38 23 15.0 75 17 30.0	33.000 186	5.8 189	64.3	56.1	6.1	Capstar Tx LIc	
279B WXCY Havre De Grace	LIC DCX MD	320.3 140.0	79.73 BLH20021015ABT	39 33 52.0 76 06 07.0	37.000 168	5.5 217	63.1	64.3	15.1	Delmarva Broadcasting Comp	
282B WZFT Baltimore	LIC ZCX MD	290.4 109.6	104.71 BLH20090123AAG	39 20 10.0 76 38 59.0	13.000 294	79.7 378	67.4	15.2	16.6	Citicasters Licenses, Inc.	
280A WOCQ Berlin	LIC _CN MD	166.6 346.7	72.11 BLH19980630KF	38 22 58.0 75 18 58.0	6.000 100	43.8 111	28.3	18.1	29.6	Great Scott Broadcasting	
283D 633088 Rio Grande	APP _C_ NJ	269.1 88.9	31.30 BNPFT20030311ACN	39 00 32.6 75 52 13.4	0.038 71	0.4 82	6.5	21.1	23.7	Edward A. Schober	
278A WJKI Bethany Beach	LIC NCN DE	145.2 325.4	59.68 BLH19960611KA	38 34 21.0 75 06 58.0	1.450 146	2.0 148	24.2	47.2	34.4	Great Scott Broadcasting	
281B WAEB-FM Allentown Grandfathered at 50KW ERP/152 Meters Haat	LIC _CN PA	357.8 177.7	189.86 BLH7006	40 43 13.0 75 35 44.0	50.000 152	143.8 353	70.0	35.2	65.6	Capstar Tx LIc	
279B WMGM Atlantic City	LIC DCN NJ	63.7 244.3	95.42 BLH19971121KA	39 23 24.0 74 30 45.0	50.000 106	5.0 112	58.2	79.4	35.7	Longport Media, LIc	
228B WZBH« Millsboro	APP ZCX DE	161.5 341.7	57.41 BMPH20070511ACZ	38 31 24.0 75 17 55.0	50.000 150	12.8 160	58.8	15.0R	42.9M	Great Scott Broadcasting	
281B WNNK-FM Harrisburg	LIC _CX PA	320.0 139.1	190.31 BMLH20050804ADH	40 18 59.0 76 57 04.0	22.500 221	136.5 379	70.7	43.9	70.1	Cumulus Licensing LIc	
281D 640024 Hammonton	APP _C_ NJ	41.1 221.5	88.87 BNPFT20030314AXY	39 36 53.0 74 49 35.7	0.080 46	20.0 67	6.0	57.8	45.4	Edward A. Schober	
228B1 WZBH« Georgetown To Channel 228B, Millsboro, DE. per D96-13	LIC _CN DE	161.5 341.7	57.41 BLH19881115KH	38 31 24.0 75 17 55.0	11.000 148	12.8 158	58.8	12.0R	45.9M	Great Scott Broadcasting	
281D 633194 Absecon	APP _C_ NJ	63.4 244.0	90.91 BNPFT20030317E0B	39 22 35.0 74 33 44.0	0.019 97	22.5 102	6.7	57.4	46.7	Hope Christian Church Of M	
283B WFFF Philadelphia	LIC _C_ PA	11.3 191.5	116.55 BMLH20090513AAG	40 02 30.0 75 14 24.0	11.500 308	5.4 376	66.9	100.1	48.0	Amfm Radio Licenses, L.I.c	

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
\*\*\*affixed to 'IN' or 'OUT' values = site inside protected contour.  
« = Station meets FCC minimum distance spacing for its class.

EXHIBIT 10 - FIGURE 2  
ALLOCATION STUDY FOR  
THE PROPOSED FM OPERATION OF  
W280EE, DOVER, DELAWARE  
FEBRUARY 2013

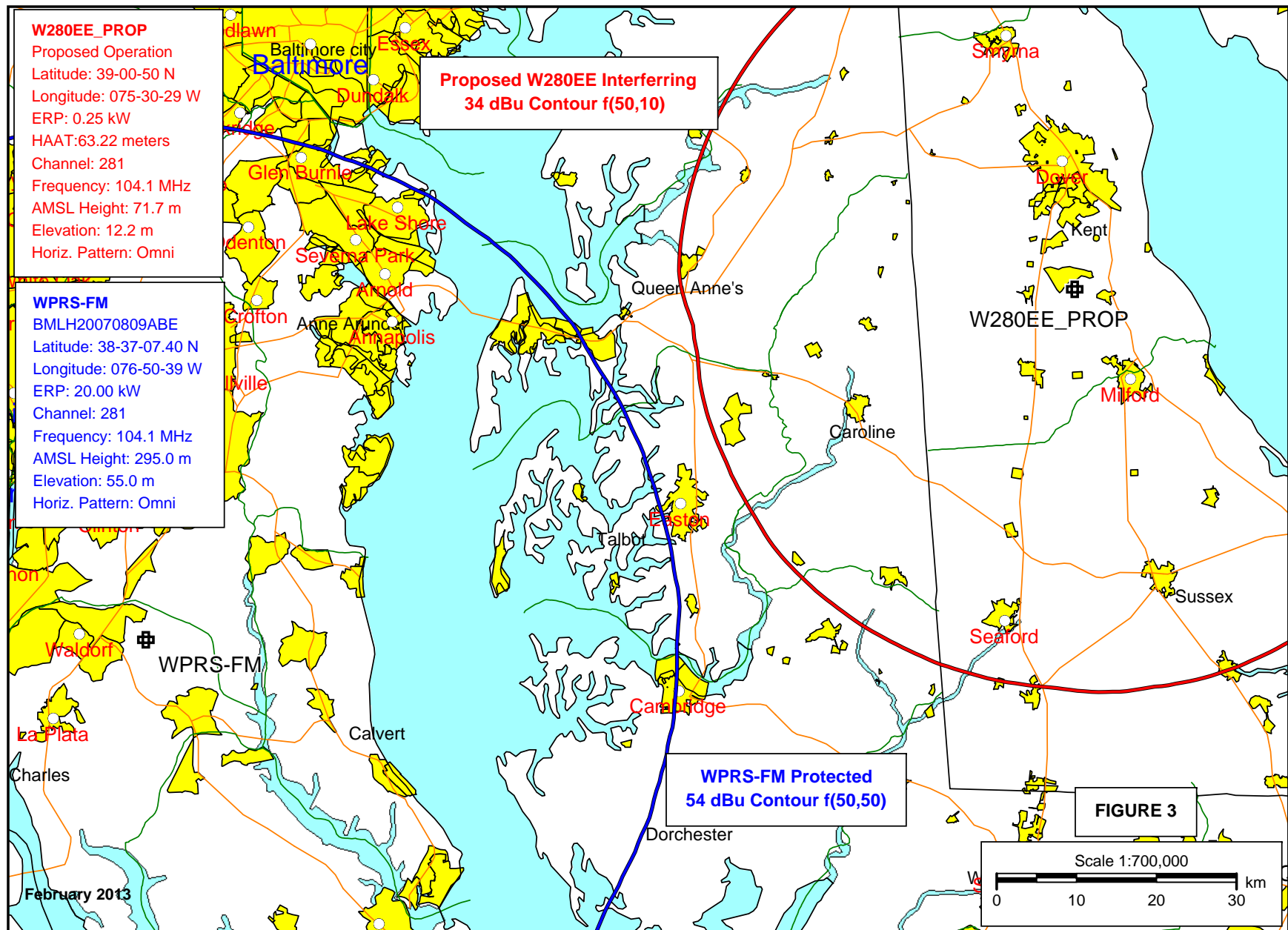


Exhibit 10 - Allocation Map Of Proposed 34 dBu (0.05 mV/m) FM Contour Of W280EE In Relation To 54 dBu (0.5 mV/m) Of WPRS-FM

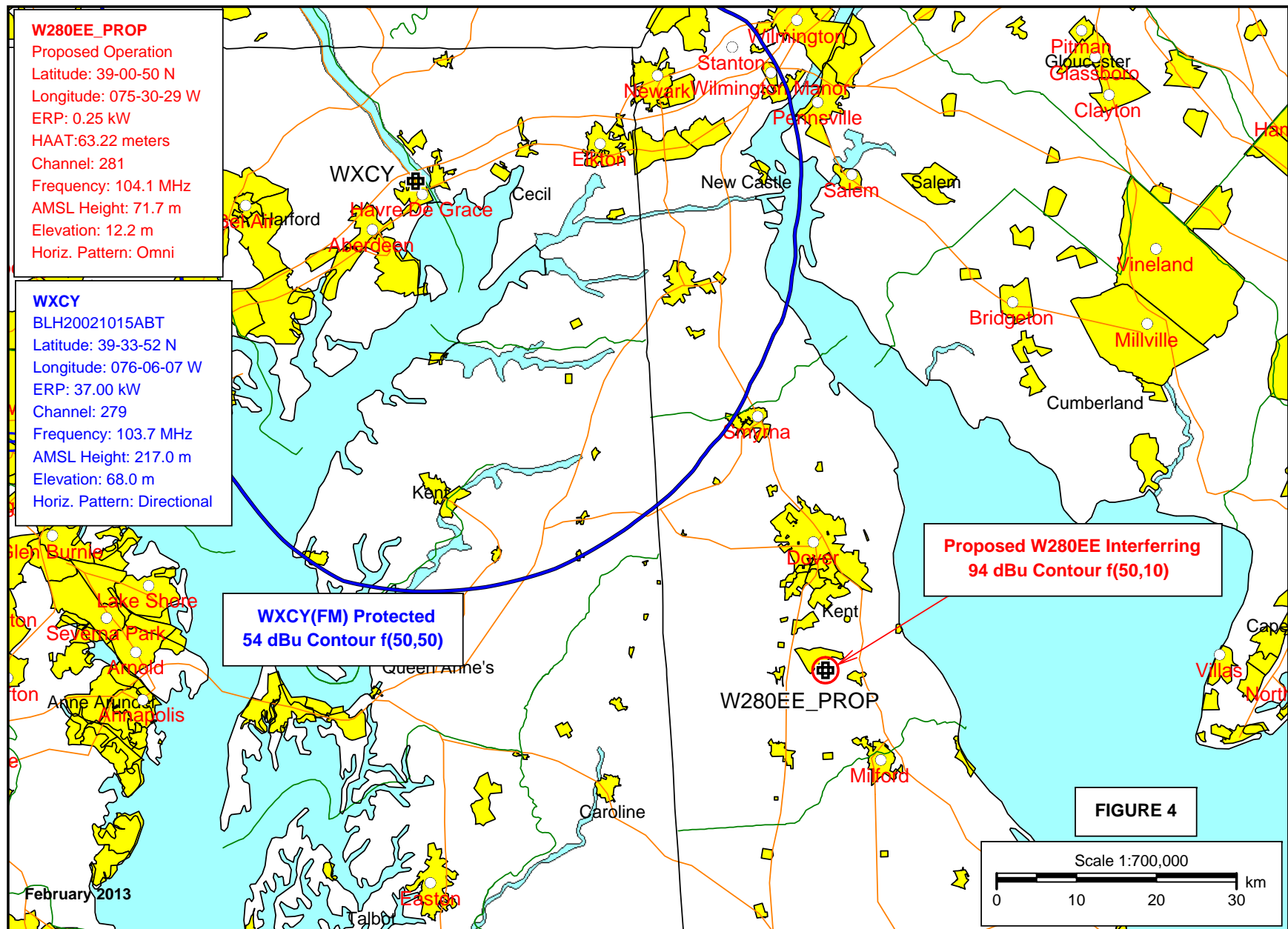


Exhibit 10 - Allocation Map Of Proposed 94 dBu (50 mV/m) FM Contour Of W280EE In Relation To 54 dBu (0.5 mV/m) Of WXCY(FM)

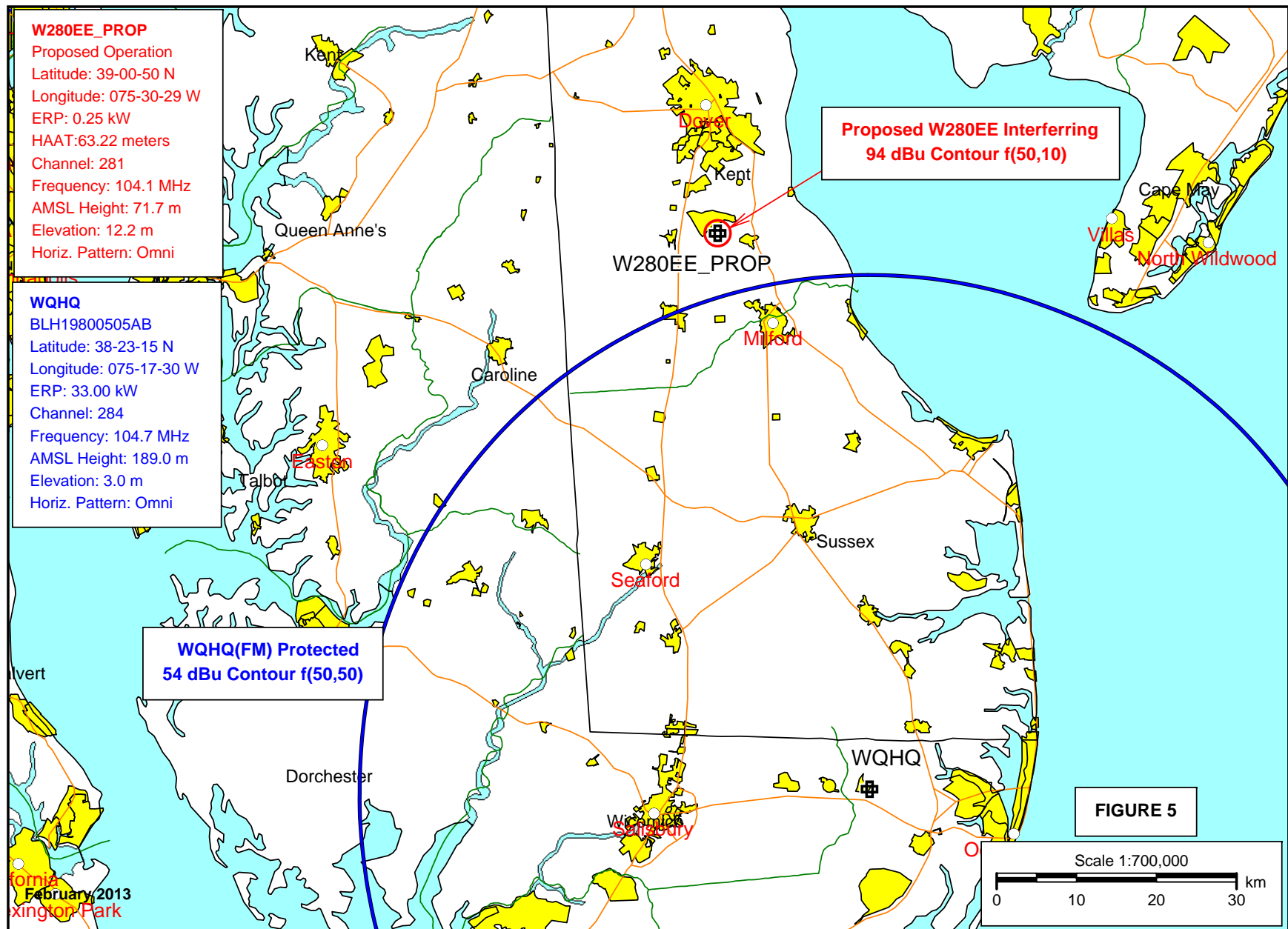


Exhibit 10 - Allocation Map Of Proposed 94 dBu (50 mV/m) FM Contour Of W280EE In Relation To 54 dBu (0.5 mV/m) Of WQHQ(FM)