

# Land-Mobile Analysis

## Engineering Exhibit

### WYPX-TV – Amsterdam, NY

Facility ID: 13933

Licensee “ION MEDIA ALBANY LICENSE, INC” has filed an application (0000068031) to operate on Post-Repack DTV channel 19. The application transmits from Antenna Structure Registration Number 1004679 with a Latitude of 42° 38' 13.0" N+ and a Longitude of 074° 0.0' 3.0" W-. The HAAT is 294.5m (AGL 71.07m) with an AMSL of 534.4m. An ERP of 600 kW will be utilized.

An analysis was preformed to further examine the results of this application of Land-Mobile license WQMH982 Passaic, NJ (Wayne, Township of). This license consists of four fixed locations and one mobile area. The city center of Passaic, NJ is 183.8 km from the transmit location of the application. The location details of WQMH982 are:

<b>Location</b>	<b>Transmitter Address /Area of Operation</b>	<b>Latitude, Longitude</b>
<u>1 - Fixed</u>	224 HAMBURG TPKE WAYNE, NJ PASSAIC County	40-56-49.5 N, 074-12-11.3 W
<u>2 - Fixed</u>	JACKSON AVE WAYNE, NJ PASSAIC County	40-57-47.5 N, 074-15-20.0 W
<u>3 - Fixed</u>	TOWER ROAD POMPTON LAKES, NJ PASSAIC County	40-59-47.0 N, 074-16-48.0 W
<u>4 - Fixed</u>	201 WILLOWBROOK DRIVE WAYNE, NJ PASSAIC County	40-53-08.0 N, 074-15-20.8 W
<u>5 - Mobile</u>	30.0 km radius around a fixed location <u>2</u>	

These fixed locations and one mobile 30 kilometer circle (every 30°) along with their technical parameters were studied to determine an estimate field strength and interaction resulting from the applications operation. Figure 1 illustrates the parameters of WQMH982 Passaic, NJ.

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Below (Figure 2) indicates that predicted field strength levels for the application at the WQMH982 locations as follows:

Label	Lat	Lng	Predicted Signal Level (dBuV/m)
Location 1	40-56-49.49 N	074-12-11.30 W	-3.854
Location 2	40-57-47.48 N	074-15-20.02 W	-5.857
Location 3	40-59-47 N	074-16-48 W	-5.473
Location 4	40-53-08.02 N	074-15-20.81 W	2.184
Radius 1	41-13-59.33 N	074-15-16.14 W	10.523
Radius 2	41-11-49.32 N	074-04-34.66 W	0.666
Radius 3	41-05-53.34 N	073-56-46.32 W	15.756
Radius 4	40-57-43.51 N	073-53-54.55 W	4.575
Radius 5	40-49-37.06 N	073-56-47.67 W	-0.029
Radius 6	40-43-43.02 N	074-04-39.13 W	11.455
Radius 7	40-41-31.56 N	074-15-19.24 W	1.632
Radius 8	40-43-45.39 N	074-25-56.21 W	3.841
Radius 9	40-49-37.01 N	074-33-50.85 W	-5.451
Radius 10	40-57-45.86 N	074-36-40.86 W	-1.811
Radius 11	41-05-50.89 N	074-33-52.27 W	1.039
Radius 12	41-11-46.89 N	074-26-00.79 W	0.569

Furthermore, the vast majority of the WQMH982 operation is located in an urban environment. Figure 3 predicts field strength levels for the application at the WQMH982 locations applying urban characteristics as follows:

Label	Lat	Lng	Predicted Signal Level (dBuV/m)
Location 1	40-56-49.49 N	074-12-11.30 W	-8.264
Location 2	40-57-47.48 N	074-15-20.02 W	-10.428
Location 3	40-59-47 N	074-16-48 W	-10.454
Location 4	40-53-08.02 N	074-15-20.81 W	-1.359
Radius 1	41-13-59.33 N	074-15-16.14 W	2.38
Radius 2	41-11-49.32 N	074-04-34.66 W	-7.151
Radius 3	41-05-53.34 N	073-56-46.32 W	9.25
Radius 4	40-57-43.51 N	073-53-54.55 W	-0.102
Radius 5	40-49-37.06 N	073-56-47.67 W	-2.923
Radius 6	40-43-43.02 N	074-04-39.13 W	9.878
Radius 7	40-41-31.56 N	074-15-19.24 W	0.654
Radius 8	40-43-45.39 N	074-25-56.21 W	2.606
Radius 9	40-49-37.01 N	074-33-50.85 W	-7.704
Radius 10	40-57-45.86 N	074-36-40.86 W	-5.704
Radius 11	41-05-50.89 N	074-33-52.27 W	-4.711
Radius 12	41-11-46.89 N	074-26-00.79 W	-6.776

# Land-Mobile Analysis Engineering Exhibit Figure 1



## Figure 2



### Figure 3

