

## **Allocation Study**

### **1. Compliance with 47 C.F.R. 73.207**

The proposed facility meets all minimum distance separation requirements with regard to co-channel, first, second, or third adjacent channel stations, and those separated by 53/54 channels, except the licensed facilities of the following stations:

| Station | Channel | City of License | Facility ID | Distance Short-Spaced |
|---------|---------|-----------------|-------------|-----------------------|
| WLBC-FM | 281B    | Muncie, IN      | 17602       | 10.4km                |
| WNLT    | 282A    | Delhi Hills, OH | 69986       | 10.1km                |
| WJKR    | 280A    | Worthington, OH | 60099       | 9.3km                 |
| WNRJ    | 280A    | Vienna, WV      | 18534       | 1.8km                 |

This application proposes contour protection (47 C.F.R. 73.215. 47 C.F.R. 73.215(e)) for WLBC-FM, WNLT, WJKR, and WNRJ.

The minimum separation requirement between a class C0 and a class B facility (WPAY-FM and WLBC-FM), which are cochannel, is 266 km. Exhibit 18-A shows that WLBC-FM is separated from the proposed facility by 261.59 km. The existing CFR 73.213(a) spacing with respect to WLBC-FM 281B will continue to be upheld. As seen in Exhibit 20, there is no prohibited overlap of the service and interfering contours of WPAY-FM and WLBC-FM.

The minimum separation requirement between a class C0 and a class A facility (WPAY-FM and WNLT), which are first adjacent channels, is 130 km. Exhibit 18-A shows that WNLT is separated from the proposed facility by 141.91 km.

The minimum separation requirement between a class C0 and a class A facility (WPAY-FM and WJKR), which are first adjacent channels, is 130 km. Exhibit 18-B shows that WJKR is separated from the proposed facility by 142.71 km.

The minimum separation requirement between a class C0 and a class A facility (WPAY-FM and WNRJ), which are first adjacent channels, is 130 km. Exhibit 18-B shows that WNRJ is separated from the proposed facility by 150.25 km.

Therefore, the proposed facility is permitted to use contour protection toward the short-spaced facility (See Exhibit 20 for compliance with contour protection requirements).

## **2. Fully Spaced Theoretical Site**

A theoretical allotment site has been identified. It is located at 38° 32' 09.0" N by 082° 57' 56.0" W and is, in fact, fully spaced. If necessary, the applicant could construct a tower at that location. However, to construct a new tower would cause financial hardship.

### **Exhibit Index:**

- Exhibit 18-A shows the spacing at the proposed site.
- Exhibit 18-B demonstrates the theoretical allotment site meets the minimum distance separation requirements of 47 C.F.R. 73.207.
- Exhibit 18-C is a topographical map showing the location of the theoretical allotment site.
- Exhibit 18-D shows the city of license coverage map for the theoretical allotment site. Note both the 70dbu(F50-50) and the 59km uniform circle fully encompass the proposed Community of License of Portsmouth, OH.
- Exhibit 20 shows the protected and interfering contours of the proposed operation and the short-spaced stations.

# **WPAY-FM Site Spacing**

|                                     |                              |                 |
|-------------------------------------|------------------------------|-----------------|
| REFERENCE                           |                              | DISPLAY DATES   |
| 38 41 00.0 N.                       | CLASS = C0 Int = C           | DATA 09-21-17   |
| 83 00 46.0 W.                       | Current Spacings to 3rd Adj. | SEARCH 09-22-17 |
| ----- Channel 281 - 104.1 MHz ----- |                              |                 |

| Call     | Channel     | Location          | Azi      | Dist   | FCC   | Margin |
|----------|-------------|-------------------|----------|--------|-------|--------|
| WPAY-FM  | LIC-Z 281C0 | New Boston        | OH 0.0   | 0.00   | 270.0 | -270.0 |
| WASP-LP  | LIC 283L1   | Huntington        | WV 128.1 | 55.07  | 84.0  | -28.9  |
| W283BO   | APP 281D    | Lancaster         | OH 19.1  | 120.01 | 141.0 | -21.0  |
| WLBC-FM* | LIC 281B    | Muncie            | IN 309.7 | 261.59 | 272.0 | -10.4  |
| WNLT     | LIC-N 282A  | Delhi Hills       | OH 289.8 | 141.91 | 152.0 | -10.1  |
| WJKR     | LIC-Z 280A  | Worthington       | OH 356.8 | 142.71 | 152.0 | -9.3   |
| WNRJ     | LIC-Z 280A  | Vienna            | WV 60.3  | 150.25 | 152.0 | -1.8   |
| WZDA     | LIC-Z 280A  | Beavercreek       | OH 318.6 | 154.83 | 152.0 | 2.8    |
| W279CE   | LIC 279D    | Middleport        | OH 63.3  | 93.97  | 84.0  | 10.0   |
| W227CI   | LIC 227D    | Catlettsburg      | KY 123.5 | 43.44  | 25.0  | 18.4   |
| WYWH-LP  | LIC 283L1   | Athens            | OH 47.6  | 107.73 | 84.0  | 23.7   |
| WXXQ-FM  | LIC-N 280A  | Whitesburg        | KY 172.1 | 176.23 | 152.0 | 24.2   |
| WCKQ     | LIC-Z 281C3 | Campbellsville    | KY 234.8 | 255.84 | 226.0 | 29.8   |
| WNNP     | LIC 282A    | Richwood          | OH 351.5 | 182.20 | 152.0 | 30.2   |
| W283AP   | LIC 283D    | Prestonsburg      | KY 170.7 | 114.42 | 84.0  | 30.4   |
| WETT     | LIC 281A    | Bridgeport        | WV 72.9  | 245.48 | 215.0 | 30.5   |
| WCBJ     | LIC 279A    | Campton           | KY 198.1 | 120.54 | 86.0  | 34.5   |
| W283AQ   | LIC-D 283D  | Cross Lanes       | WV 104.9 | 120.01 | 84.0  | 36.0   |
| W283AQ   | CP -D 283D  | Cross Lanes       | WV 104.9 | 120.01 | 84.0  | 36.0   |
| W283BO   | LIC 283D    | Lancaster         | OH 16.9  | 122.22 | 84.0  | 38.2   |
| WJFZ-LP  | LIC 281L1   | Zanesville        | OH 30.7  | 162.81 | 122.0 | 40.8   |
| W227AX   | LIC 227D    | Morehead          | KY 211.5 | 66.05  | 25.0  | 41.1   |
| WJFY-LP  | LIC 282L1   | Newark            | OH 19.6  | 152.10 | 111.0 | 41.1   |
| WQAL     | LIC 281B    | Cleveland         | OH 19.7  | 314.47 | 272.0 | 42.5   |
| WWEL     | LIC 280A    | London            | KY 209.0 | 195.12 | 152.0 | 43.1   |
| WLKT     | LIC-N 283C2 | Lexington-fayette | KY 239.3 | 132.44 | 89.0  | 43.4   |
| W281AJ   | LIC 281D    | Beckley           | WV 122.3 | 189.96 | 141.0 | 49.0   |
| WYDX-LP  | CP 281L1    | Frankfort         | KY 252.8 | 171.53 | 122.0 | 49.5   |
| W280DO   | LIC 280D    | Lexington         | KY 239.6 | 145.02 | 94.0  | 51.0   |
| WRBI     | LIC 280A    | Batesville        | IN 287.9 | 203.50 | 152.0 | 51.5   |
| WGRR     | LIC-Z 278B  | Hamilton          | OH 294.2 | 142.94 | 89.0  | 53.9   |
| W283CL   | LIC-D 283D  | Columbus          | OH 359.7 | 139.20 | 84.0  | 55.2   |
| WNND     | LIC-Z 278A  | Pickerington      | OH 9.9   | 142.80 | 86.0  | 56.8   |
| WVPV-LP  | LIC 282L1   | Cairo             | WV 69.2  | 171.03 | 111.0 | 60.0   |
| W283BL   | LIC 283D    | Malta             | OH 42.6  | 146.00 | 84.0  | 62.0   |
| WULL-LP  | LIC 282L1   | Ivydale           | WV 94.8  | 173.04 | 111.0 | 62.0   |
| WVRC-FM  | LIC 284A    | Spencer           | WV 84.7  | 150.00 | 86.0  | 64.0   |
| WTQR     | LIC-N 281C  | Winston-salem     | NC 136.9 | 346.61 | 281.0 | 65.6   |
| WTUE     | LIC 284B    | Dayton            | OH 318.6 | 154.83 | 89.0  | 65.8   |
| 1762480  | APP 278D    | Parkersburg       | WV 60.4  | 149.90 | 84.0  | 65.9   |
| 1763024  | APP 278D    | Spencer           | WV 84.7  | 150.00 | 84.0  | 66.0   |
| W282CD   | LIC 282D    | Dayton            | OH 322.7 | 160.35 | 94.0  | 66.4   |

\* = WPAY-FM will continue to be a 73.213(a) facility with respect to WLBC-FM

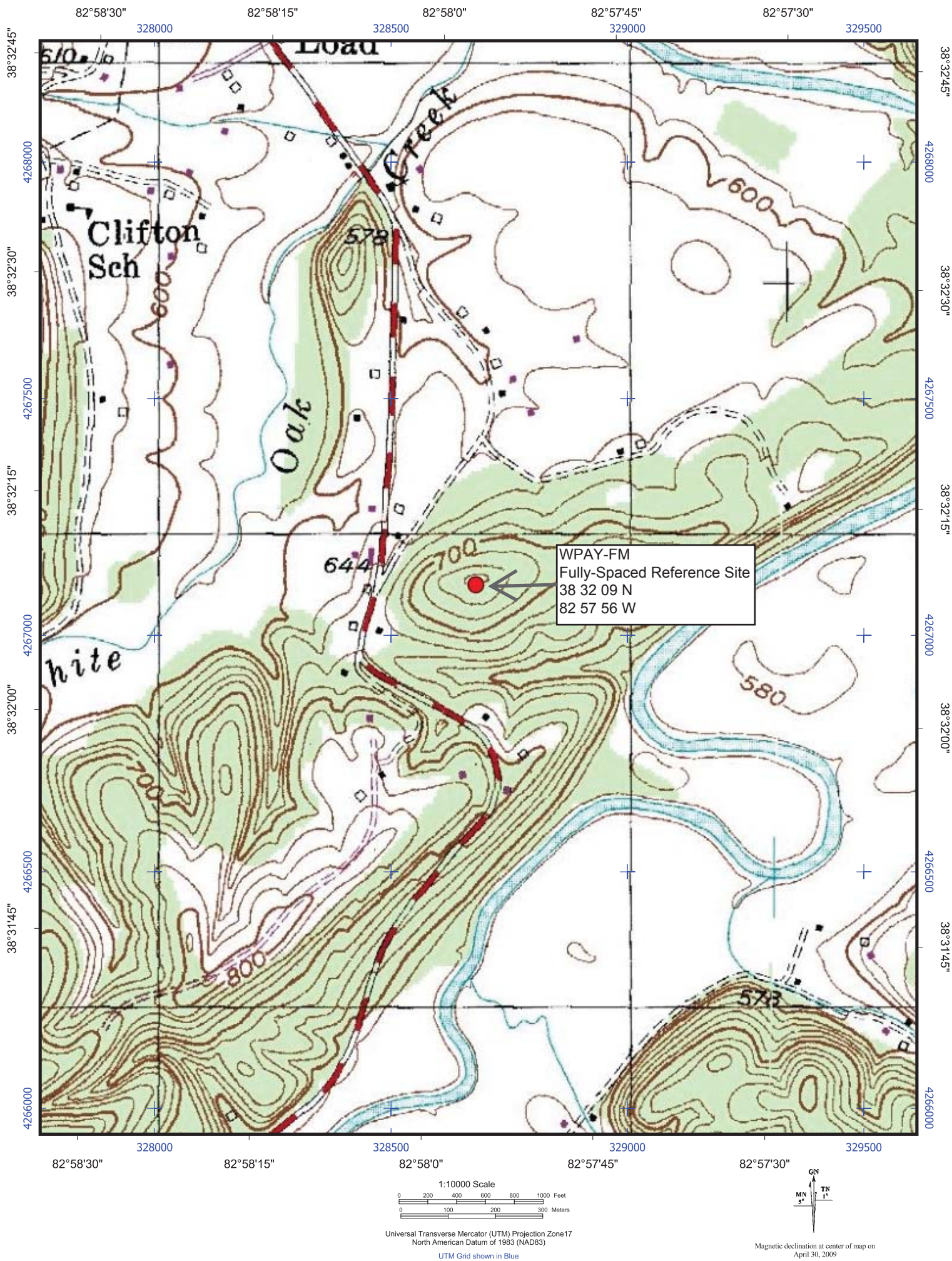
## Theoretical Site Spacing

REFERENCE  
38 32 09.0 N. CLASS = C0  
82 57 56.0 W. Current Spacings to 3rd Adj.  
----- Channel 281 - 104.1 MHz -----

DISPLAY DATES  
DATA 08-22-17  
SEARCH 08-23-17

| Call    | Channel     | Location          | Azi      | Dist   | FCC   | Margin |
|---------|-------------|-------------------|----------|--------|-------|--------|
| WPAY-FM | LIC-Z 281C0 | New Boston        | OH 346.0 | 16.88  | 270.0 | -253.1 |
| WASP-LP | LIC 283L1   | Huntington        | WV 114.1 | 43.02  | 84.0  | -41.0  |
| W283BO  | APP 281D    | Lancaster         | OH 15.2  | 134.44 | 141.0 | -6.6   |
| WNLN    | LIC-N 282A  | Delhi Hills       | OH 295.2 | 151.96 | 152.0 | -0.04  |
| WLBC-FM | LIC 281B    | Muncie            | IN 311.8 | 275.38 | 272.0 | 3.4    |
| WNRJ    | LIC-Z 280A  | Vienna            | WV 54.3  | 155.62 | 152.0 | 3.6    |
| WJKR    | LIC-Z 280A  | Worthington       | OH 355.6 | 159.32 | 152.0 | 7.3    |
| WXXQ-FM | LIC-N 280A  | Whitesburg        | KY 172.7 | 159.46 | 152.0 | 7.5    |
| W227CI  | LIC 227D    | Catlettsburg      | KY 103.2 | 33.03  | 25.0  | 8.0    |
| W283AP  | LIC 283D    | Prestonsburg      | KY 171.6 | 97.60  | 84.0  | 13.6   |
| W279CE  | LIC 279D    | Middleport        | OH 53.7  | 99.00  | 84.0  | 15.0   |
| WZDA    | LIC-Z 280A  | Beavercreek       | OH 321.3 | 170.00 | 152.0 | 18.0   |
| WCBJ    | LIC 279A    | Campton           | KY 203.0 | 106.65 | 86.0  | 20.7   |
| WCKQ    | LIC-Z 281C3 | Campbellsville    | KY 238.5 | 250.30 | 226.0 | 24.3   |
| W283AQ  | LIC-D 283D  | Cross Lanes       | WV 97.4  | 112.80 | 84.0  | 28.8   |
| W283AQ  | CP -D 283D  | Cross Lanes       | WV 97.4  | 112.80 | 84.0  | 28.8   |
| W227AX  | LIC 227D    | Morehead          | KY 224.1 | 55.59  | 25.0  | 30.6   |
| WWEL    | LIC 280A    | London            | KY 212.6 | 183.17 | 152.0 | 31.2   |
| WETT    | LIC 281A    | Bridgeport        | WV 69.0  | 246.92 | 215.0 | 31.9   |
| WYWH-LP | LIC 283L1   | Athens            | OH 40.3  | 116.66 | 84.0  | 32.7   |
| W281AJ  | LIC 281D    | Beckley           | WV 118.6 | 178.14 | 141.0 | 37.1   |
| WLKT    | LIC-N 283C2 | Lexington-fayette | KY 246.6 | 128.68 | 89.0  | 39.7   |
| WNNP    | LIC 282A    | Richwood          | OH 351.1 | 199.01 | 152.0 | 47.0   |
| W280DO  | LIC 280D    | Lexington         | KY 246.2 | 141.24 | 94.0  | 47.2   |
| WYDX-LP | CP 281L1    | Frankfort         | KY 258.5 | 171.47 | 122.0 | 49.5   |
| WTQR    | LIC-N 281C  | Winston-salem     | NC 135.5 | 331.95 | 281.0 | 51.0   |
| W283BO  | LIC 283D    | Lancaster         | OH 13.3  | 136.96 | 84.0  | 53.0   |
| WJFZ-LP | LIC 281L1   | Zanesville        | OH 26.8  | 175.18 | 122.0 | 53.2   |
| W282BZ  | LIC-D 282D  | Elkhorn City      | KY 157.8 | 147.28 | 94.0  | 53.3   |
| WJFY-LP | LIC 282L1   | Newark            | OH 16.4  | 166.39 | 111.0 | 55.4   |
| WQAL    | LIC 281B    | Cleveland         | OH 18.1  | 328.61 | 272.0 | 56.6   |
| WULL-LP | LIC 282L1   | Ivydale           | WV 89.4  | 168.32 | 111.0 | 57.3   |
| WRBI    | LIC 280A    | Batesville        | IN 291.8 | 212.92 | 152.0 | 60.9   |
| WVRC-FM | LIC 284A    | Spencer           | WV 78.3  | 148.34 | 86.0  | 62.3   |
| WVPV-LP | LIC 282L1   | Cairo             | WV 63.7  | 173.78 | 111.0 | 62.8   |
| WEZJ-FM | LIC-Z 282C3 | Williamsburg      | KY 208.8 | 226.21 | 163.0 | 63.2   |
| WJMD    | LIC 284A    | Hazard            | KY 187.4 | 150.24 | 86.0  | 64.2   |
| 1763024 | APP 278D    | Spencer           | WV 78.3  | 148.34 | 84.0  | 64.3   |
| WGRR    | LIC-Z 278B  | Hamilton          | OH 299.2 | 153.96 | 89.0  | 65.0   |

# WPAY-FM Reference Site Topographical Map Exhibit 18-C





# Exhibit 18-D Community of License Coverage From Theoretical Fully Spaced Site

WPAY-FM Fully Spaced (281)

WPAY-FM Fully Spaced  
BLED20110609AAI  
Latitude: 38-32-09 N  
Longitude: 082-57-56 W  
ERP: 100.00 kW  
Channel: 281  
Frequency: 104.1 MHz  
AMSL Height: 689.035 m  
Elevation: 323.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

Red Shaded Area  
Community of License  
Portsmouth, OH Corporate Boundary

