



**United States of America**  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION LICENSE**

Authorizing Official:

Official Mailing Address:

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ADELL RADIO GROUP, INC.  
 20733 WEST TEN MILE ROAD  
 SOUTHFIELD MI 48075

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Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau

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Facility Id: 13664

Call Sign: WFDF

License File Number: BL-20081211AGB

Grant Date: September 03, 2009

This license expires 3:00 a.m.  
 local time, October 01, 2012.

This license covers permit no.: BP-20060309ACY

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:  
 Local Standard Time (Non-Advanced)

Jan.	8:00 AM	5:30 PM	Jul.	5:15 AM	8:15 PM
Feb.	7:30 AM	6:00 PM	Aug.	5:45 AM	7:30 PM
Mar.	6:45 AM	6:45 PM	Sep.	6:15 AM	6:45 PM
Apr.	6:00 AM	7:15 PM	Oct.	6:45 AM	6:00 PM
May	5:15 AM	7:45 PM	Nov.	7:30 AM	5:15 PM
Jun.	5:00 AM	8:15 PM	Dec.	8:00 AM	5:00 PM

Callsign: WFDF

License No.: BL-20081211AGB

Name of Licensee: ADELL RADIO GROUP, INC.

Station Location: FARMINGTON HILLS, MI

Frequency (kHz): 910

Station Class: B

Antenna Coordinates:

Day

Latitude: N 42 Deg 03 Min 57 Sec

Longitude: W 83 Deg 23 Min 39 Sec

Night

Latitude: N 42 Deg 03 Min 57 Sec

Longitude: W 83 Deg 23 Min 39 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 25.0

Antenna Input Power (kW): Day: 52.65 Night: 26.32

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 32.4 Night: 22.9

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1238044	
2	1238077	
3	1238045	
4	1238047	
5	1238049	
6	1238051	
7	1238052	
8	1238056	

Night:

Tower No.	ASRN	Overall Height (m)
1	1238044	
2	1238077	
3	1238045	
4	1238047	
5	1238049	
6	1238051	
7	1238052	
8	1238056	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2205.3      Night: 1578  
 Standard RMS (mV/m/km):                      Night: 1658  
 Augmented RMS (mV/m/km):    Day: 2317.887  
 Q Factor:                                      Day:                      Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.6330	258.500	0.0000	0.000	0	127.0
2	0.9180	260.100	169.6000	88.300	0	127.0
3	0.7970	279.100	245.4000	85.600	0	127.0
4	0.6030	288.800	404.9000	88.400	0	127.0
5	0.6440	350.000	83.2000	180.700	0	127.0
6	1.0000	0.000	187.5000	114.000	0	127.0
7	0.7080	31.100	246.8000	105.400	0	127.0
8	0.6360	18.700	407.6000	99.300	0	127.0

\* Tower Reference Switch

- 0 = Spacing and orientation from reference tower
- 1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	48.5	46.0	195.00
2	71.0	46.0	163.00
3	101.0	60.0	190.00
4	217.0	50.0	120.00
5	242.0	38.0	219.70
6	261.0	38.0	169.00

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.5910	-104.800	0.0000	0.000	0	127.0
2	0.8440	-109.600	169.6000	88.300	0	127.0
3	0.8120	-91.600	245.4000	85.600	0	127.0
4	0.7010	-63.100	404.9000	88.400	0	127.0
5	0.5860	-10.700	83.2000	180.700	0	127.0
6	1.0000	0.000	187.5000	114.000	0	127.0

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
7	0.7270	24.000	246.8000	105.400	0	127.0
8	0.5540	34.200	407.6000	99.300	0	127.0

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	5.6	0.743
2	0	1
3	24.2	1.004
4	25.2	0.76
5	94.3	0.73
6	100	1.18
7	129.3	0.778
8	113.3	0.765

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-14.2	0.765
2	-18.2	1.039
3	0	1
4	23.4	0.816
5	78.6	0.782
6	85.7	1.14
7	112.7	0.945
8	115.5	0.567

Antenna Monitor: POTOMAC INSTRUMENTS MODEL AM 1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
48.5	8.29	19.25
71	6.14	21.81
101	4.01	32.3
150	5.64	14
191	3.43	19.37
217	5.02	32.03
261	3.71	34.11

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
56	7	11.56
106.5	4.74	11.36
163	6.83	13.4
212	5.42	38.27
270	8.74	3.51

Special operating conditions or restrictions:

- 1 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

## Special operating conditions or restrictions:

## 2 Location of Monitoring Points:

## Daytime:

Direction of 48.5° TN. The monitoring point is at 28930 W. Huron River Drive, west driveway.

Direction of 71° TN. Coming from Will Carleton, at the intersection of Will Carleton and Port Creek Rd, turn right on Port Creek Rd. and proceed south approximately 1.4 km to the monitor point. The measurement is taken on the east side of the road near the cemetery sign.

Direction of 101.0° TN. The monitor point is located just south of the "Y" intersection between Sweitzer Rd. and Creek Rd.

Direction of 150° TN. The monitor point is located on the west side of the road approximately 0.1 km north of the intersection of Calkins Rd. and E. Labo Rd. and south of Mailbox No. 10027.

Direction of 191° TN. Coming from Maxwell Rd., to the intersection of Maxwell Rd. and Sigler, turn right on Sigler Rd. and proceed west approximately 0.3 km to the monitor point. The monitor point is located west of the bridge guardrails and has been designated with a painted "X" on the south side of the road.

Direction of 217° TN. Coming from Exeter Rd., to the intersection of Exeter and O'Hara Rd., turn right on O'Hara Rd. and proceed west approximately 0.9 km to the monitor point. The monitor point is located on the south side of the road near a two-tone tan and brown house.

Direction of 261.0° TN. Coming from O'Hara Rd, proceed to the intersection of O'Hara Rd. and Finzel Rd. Turn right on Finzel Rd. and proceed north approximately 3.2 km to the intersection of Finzel Rd. and Fay Rd. Turn right on Fay Rd and proceed northeast 0.25 km to the monitor point. The monitor point is located at the farm drive to tree red round top barns.

## Nighttime:

Direction on of 56.0° true North. The monitor point is at the end of Pine St. (#29499), SW side of cul-de-sac at the red mark.

Direction of 106.5° true North. The monitor point is on Creek Road between Ready Road & Sweitzer Road. (NAD83) 42°03'13.3" N 83°20'20.2"W

Direction of 163° true North. The monitoring point is at mailbox of 495 Newport Road.

Direction of 212° true North. The monitoring point is across from 10232 Stoney Creek Road.

Direction of 270° true North. The monitoring point is across from 13396 Capernal Road (in line with flagpole).

Ground System: The ground system consists of 120 evenly spaced, buried copper radials, extending 82.4 meters in length, about the base of the towers except where shortened to terminate at transverse copper straps running between the towers.

\*\*\* END OF AUTHORIZATION \*\*\*