

Terrain
0 580 m

NED 03 SEC Terrain Database
US Census 2020 PL Database
NAD 1983 Coordinate Datum

Midland, MI - WUGN(FM) (Auxiliary FM)

Service Contour Study:

Proposed Auxiliary vs Primary

47 C.F.R. Section 73.1675(a)(1)(ii) Study

Primary 1.0 mV/m (60 dBμ) Contour

Proposed Auxiliary 1.0 mV/m (60 dBμ) Contour

WUGN(FM).L
Midland, MI
BLED20130702ABR
Facility ID: 20639
Latitude: 43-30-57.10 N
Longitude: 084-32-45 W
ERP: 100.00 kW
Channel: 259C0 (99.7 MHz)
AMSL Height: 519.0 m
Pattern: Omni

60 dBμ F(50:50) Contour
Total Population: 727,578
Total Area: 16,602.4 sq. km

WUGN(FM).aux
Midland, MI
Proposed Auxiliary Operation
Facility ID: 20639
Latitude: 43-30-57.60 N
Longitude: 084-32-44.90 W
ERP: 19.50 kW
Channel: 259C0 (99.7 MHz)
AMSL Height: 408.4 m
Horiz. Pattern: Omni

60 dBμ F(50:50) Contour
Total Population: 374,857
Total Area: 7,344.2 sq. km

WUGN(FM).L
WUGN(FM).aux

Asher Broadcast Consulting LLC
justinasher@consultant.com
1 (202) 875-2986

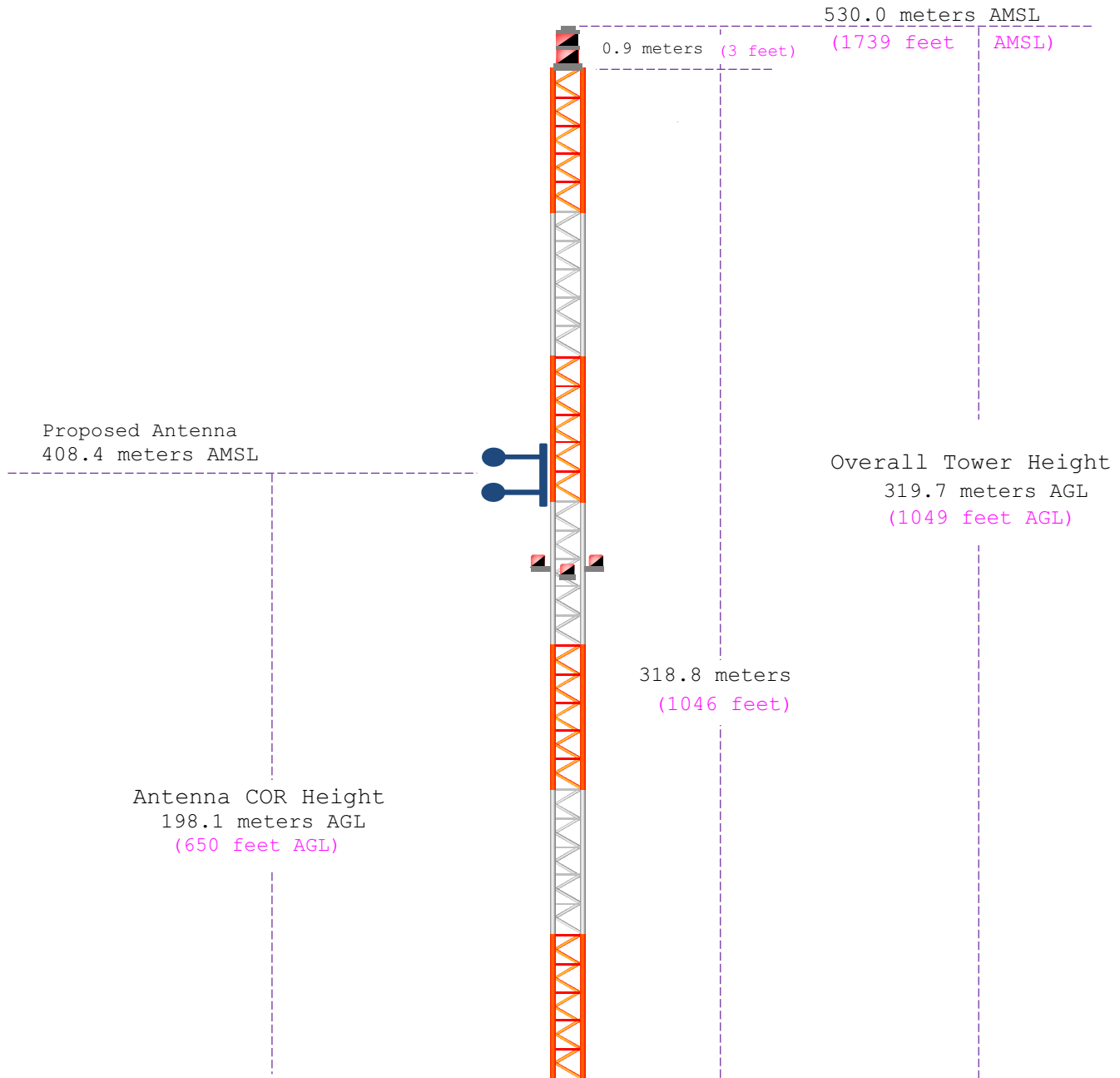
Scale 1:1,100,000
0 20 40 60 km

§73.1675(a)(1)(ii) Auxiliary antennas.

An auxiliary antenna is one that is permanently installed and available for use when the main antenna is out of service for repairs or replacement. An auxiliary antenna may be located at the same transmitter site as the station's main antenna or at a separate site. The service contour of the auxiliary antenna may not extend beyond the following corresponding contour for the main facility: (ii) FM stations: The 1.0 mV/m field strength contours.

Midland, MI - WUGN(FM) (Auxiliary FM)

Vertical Plan of Antenna System and Support Tower



Ground Elevation: 210.3 meters AMSL (690 feet AMSL)		
Address: 3253 SOUTH GENEVA ROAD		
City: SAINT LOUIS	Latitude (D M S) Longitude (D M S)	
County: MIDLAND	--- (NAD 1927)	
State: MICHIGAN	Lat/Long: 43-30-57.6 N 084-32-44.9 W (NAD 1983)	
Antenna Structure Registration 1007986	Drawing Is Not To Scale	Asher Broadcast Consulting, LLC justinasher@consultant.com 1(202)875-2986

Midland, MI - WUGN(FM) (Auxiliary FM)
Copy of Existing Antenna Structure Registration
(public record copy)

Registration Detail

Reg Number	1007986	Status	Constructed
File Number	A0732047	Constructed	08/01/1995
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

Location (in NAD83 Coordinates)

Lat/Long	43-30-57.6 N 084-32-44.9 W	Address	3253 S GENEVA RD
City, State	SAINT LOUIS , MI		
Zip	48880	County	MIDLAND
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
210.3	319.7
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
530.0	318.8

Painting and Lighting Specifications

FAA Chapters 3, 4, 5, 9
Paint and Light in Accordance with FAA Circular Number 70/7460-1G

FAA Notification

FAA Study	2011-AGL-3183-OE	FAA Issue Date	07/07/2011
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Owner & Contact Information

FRN	0001599315	Owner Entity Type	
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Owner

FAMILY LIFE BROADCASTING SYSTEM
Attention To: Michael Brinks
7355 N. Oracle Road
Tucson , AZ 85704

P: (520)219-7730
F:
E: mbrinks@flc.org

Contact

P:
F:
E:

Last Action Status

Status	Constructed	Received	07/12/2011
Purpose	Admin Update	Entered	07/12/2011
Mode	Interactive		

Related Applications

07/12/2011 A0731936 - Modification (MD)
07/12/2011 A0731937 - Notification (NT)
07/12/2011 A0732047 - Admin Update (AU)

Related applications (4)

Comments

Comments

None

History

Date	Event
07/13/2011	Registration Printed
07/13/2011	Registration Printed
07/12/2011	ASR Application receipt email sent: Tower email

All History (8)

Pleadings

Pleading Type	Filer Name	Description	Date Entered
None			

Automated Letters

None

Midland, MI - WUGN(FM) (Auxiliary FM)

HAAT and Miscellaneous Coordinate Information

HAAT Calculation (NAD 1983):

N. Lat. = 433057.6 W. Lng. = 843244.9
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - NED 03 SEC

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	208.6	199.8	19.5000	12.90	1.000	48.85
045	200.9	207.5	19.5000	12.90	1.000	49.48
090	205.4	203.0	19.5000	12.90	1.000	49.12
135	214.1	194.3	19.5000	12.90	1.000	48.40
180	218.6	189.8	19.5000	12.90	1.000	48.03
225	225.7	182.7	19.5000	12.90	1.000	47.44
270	227.1	181.3	19.5000	12.90	1.000	47.32
315	217.2	191.2	19.5000	12.90	1.000	48.15

Ave El= 214.70 M HAAT= 193.70 M AMSL= 408.4 M

NAD 1983 to NAD 1927 Conversion:

Various Coordinate Conversion Calculations (NAD 1983):

Position Type	Lat Lon
Degrees Lat Long	43.5160000°, -084.5458056°
Degrees Minutes	43°30.96000', -084°32.74833'
Degrees Minutes Seconds	43°30'57.6000", -084°32'44.9000"
UTM	16T 698358mE 4821044mN
UTM centimeter	16T 698358.53mE 4821044.38mN
MGRS	16TFP9835821044
Grid North	1.7°
GARS	191MD49
Maidenhead	EN73RM43MU01
GEOREF	GJFP27253096