

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

Terrain  
170 474 m

**Ames, IA - KOEZ(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**

**KOEZ.L**  
Ames, IA  
0000177355  
Facility ID: 7823  
Latitude: 41-54-08.80 N  
Longitude: 093-54-16.10 W  
ERP: 100.00 kW  
Channel: 281C1 (104.1 MHz)  
AMSL Height: 578.0 m  
Pattern: Omni

60 dBμ F(50:50) Contour  
Total Population: 841,971  
Total Area: 15,376.2 sq. km

**KOEZ.L**  
**KOEZ(FM).aux**

**KOEZ(FM).aux**  
Ames, IA  
Proposed Auxiliary Operation  
Facility ID: 7823  
Latitude: 41-54-08.80 N  
Longitude: 093-54-16.10 W  
ERP: 54.00 kW  
Channel: 281C1 (104.1 MHz)  
AMSL Height: 473.9 m  
Horiz. Pattern: Omni

60 dBμ F(50:50) Contour  
Total Population: 764,200  
Total Area: 9,433.5 sq. km

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

Scale 1:1,000,000

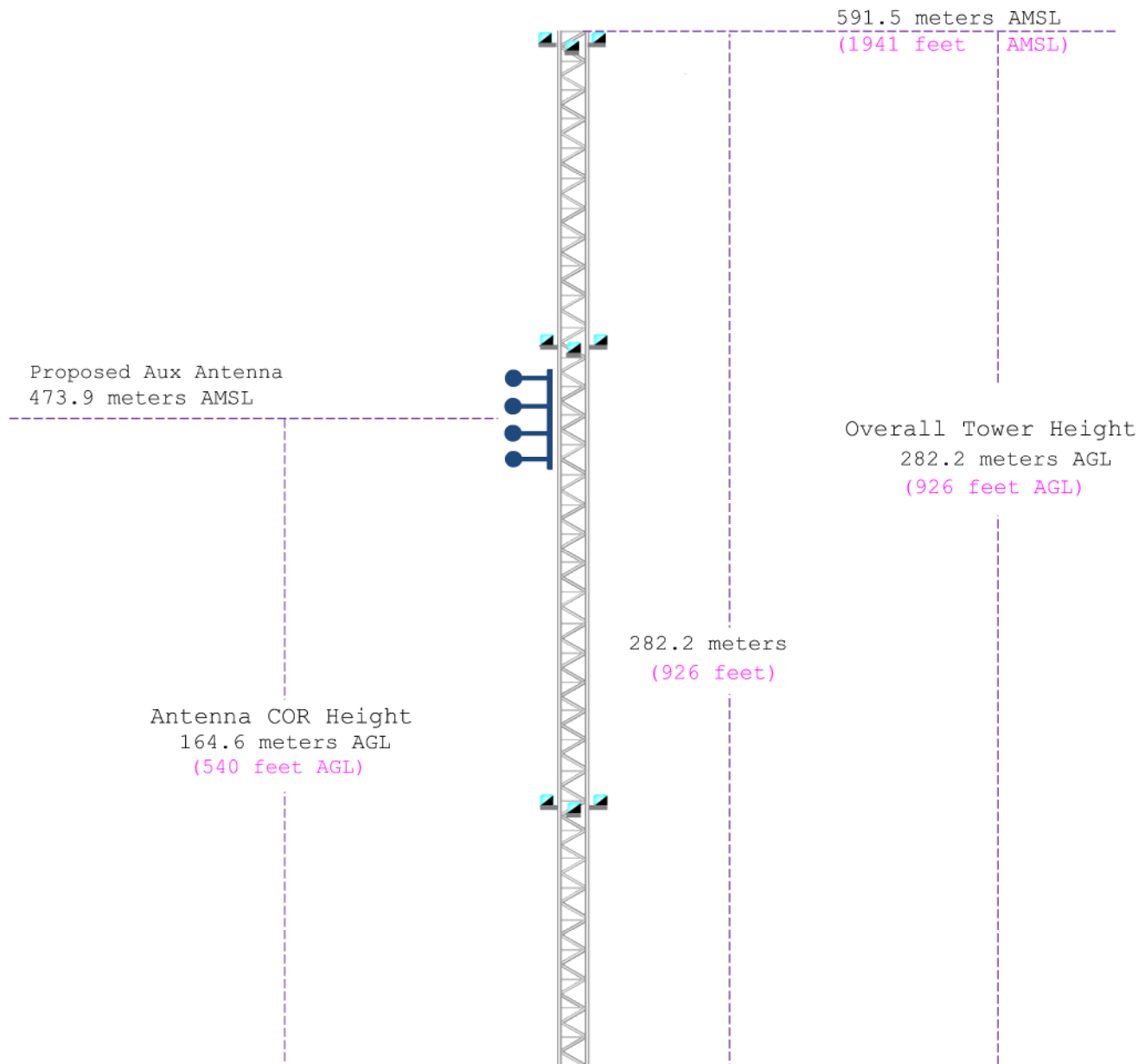
0 20 40 60 km

**§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.

# Ames, IA - KOEZ(FM) (Auxiliary FM)

## Vertical Plan of Antenna System



Ground Elevation: 309.3 meters AMSL (1015 feet AMSL)		
<b>Address:</b> 0.5 km south of the intersection of 310th Street and County Route 26 (west side)		
<b>City:</b> Woodward	<b>Latitude (D M S)</b>	<b>Longitude (D M S)</b>
<b>County:</b> Boone	---	---
<b>State:</b> Iowa	(NAD 1927)	
	Lat/Long 41-54-08.8 N 093-54-16.1 W (NAD 1983)	
<b>Antenna Structure Registration</b>	Drawing Is Not To Scale	<b>Asher Broadcast Consulting, LLC</b> justinasher@consultant.com 1(202)875-2986
1036828		

**Ames, IA - KOEZ(FM) (Auxiliary FM)**  
**Copy of Existing Antenna Structure Registration**  
**(public record copy)**

**Registration Detail**

Reg Number	1036828	Status	Constructed
File Number	A1205914	Constructed	10/21/1985
EMI	No	Dismantled	
NEPA	No		

**Antenna Structure**

Structure Type GTOWER - Guyed Structure Used for Communication Purposes

**Location** (in NAD83 Coordinates)

Lat/Long	41-54-08.8 N 093-54-16.1 W	Address	0.5 km south of the intersection of 310th Street and County Route 26 (west side)
City, State	WOODWARD , IA	County	BOONE
Zip	50276	Position of Tower in Array	
Center of AM Array			

**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
309.3	282.2
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
591.5	282.2

**Painting and Lighting Specifications**

FAA Chapters 4, 7, 15

Paint and Light in Accordance with FAA Circular Number 70/7460-1M

**FAA Notification**

FAA Study	2021-ACE-4685-OE	FAA Issue Date	11/13/2021
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**Owner & Contact Information**

FRN	0003576667	Owner Entity Type	Limited Liability Company
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**Owner**

Saga Communications of Iowa, LLC  
73 Kercheval Avenue  
Suite 201  
Grosse Pointe Farms , MI 48236

P: (313)886-7070  
F:  
E: fccllicenses@sagacom.com

**Contact**

Attention To: Tom Atkins  
73 Kercheval Avenue  
Suite 201  
Grosse Pointe Farms , MI 48236

P: (313)886-7070  
F:  
E: fccllicenses@sagacom.com

**Last Action Status**

Status	Constructed	Received	12/06/2021
Purpose	Notification	Entered	12/06/2021
Mode	Interactive		

**Related Applications**

12/06/2021	A1205914 - Notification (NT)
12/06/2021	A1205913 - Modification (MD)
06/22/2005	A0452784 - Admin Update (AU)
Related applications (4)	

**Comments**

**Comments**

None

**History**

**Date**

12/06/2021

12/06/2021

06/23/2005

All History (6)

**Event**

Construction Notification Received

Modification Received

Registration Printed

**Pleadings**

Pleading Type	Filer Name	Description	Date Entered
None			

**Automated Letters**

06/23/2005	Authorization, Reference 432462
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***Ames, IA - KOEZ(FM) (Auxiliary FM)***  
**HAAT and Miscellaneous Coordinate Information**

**HAAT Calculation (NAD 1983):**

N. Lat. = 415408.8    W. Lng. = 935416.1  
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	301.4	172.5	54.0000	17.32	1.000	55.55
045	321.2	152.7	54.0000	17.32	1.000	53.24
090	310.5	163.4	54.0000	17.32	1.000	54.56
135	278.0	195.9	54.0000	17.32	1.000	57.69
180	295.6	178.3	54.0000	17.32	1.000	56.13
225	298.4	175.5	54.0000	17.32	1.000	55.86
270	314.7	159.2	54.0000	17.32	1.000	54.06
315	328.6	145.3	54.0000	17.32	1.000	52.25

Ave El= 306.05 M    HAAT= 167.85 M    AMSL= 473.9 M

**NAD 1983 to NAD 1927 Conversion:**

**Various Coordinate Conversion Calculations (NAD 1983):**

Position Type	Lat Lon
<b>Degrees Lat Long</b>	41.9024444°, -093.9044722°
<b>Degrees Minutes</b>	41°54.14667', -093°54.26833'
<b>Degrees Minutes Seconds</b>	41°54'08.8000", -093°54'16.1000"
<b>UTM</b>	15T 424979mE 4639340mN
<b>UTM centimeter</b>	15T 424979.11mE 4639340.32mN
<b>MGRS</b>	15TVG2497939340
<b>Grid North</b>	-0.6°
<b>GARS</b>	173LZ15
<b>Maidenhead</b>	EN31BV16LO10
<b>GEOREF</b>	FJMM05735414