



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76137

Aeronautical Study No.
2013-AGL-4769-OE
Prior Study No.
1996-AGL-2451-OE

Issued Date: 06/06/2013

Eric Smith
Board of Control of Northern Michigan University
1401 Presque Isle Avenue
Marquette, MI 49855-5356

Exhibit 15.1
FAA Determination
(ASR Modification Pending)

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower - LaBranche MI Tower
Location:	LaBranche, MI
Latitude:	45-53-05.00N NAD 83
Longitude:	87-29-19.00W
Heights:	980 feet site elevation (SE) 300 feet above ground level (AGL) 1280 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure should continue to be marked/lighted utilizing paint/red lights.

See attachment for additional condition(s) or information.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (310) 725-6558. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AGL-4769-OE.

Signature Control No: 189285863-191225081

(DNE)

LaDonna James
Technician

Attachment(s)
Additional Information
Frequency Data
Map(s)

cc: FCC

Exhibit 15.2

Vertical Plan of Antenna System

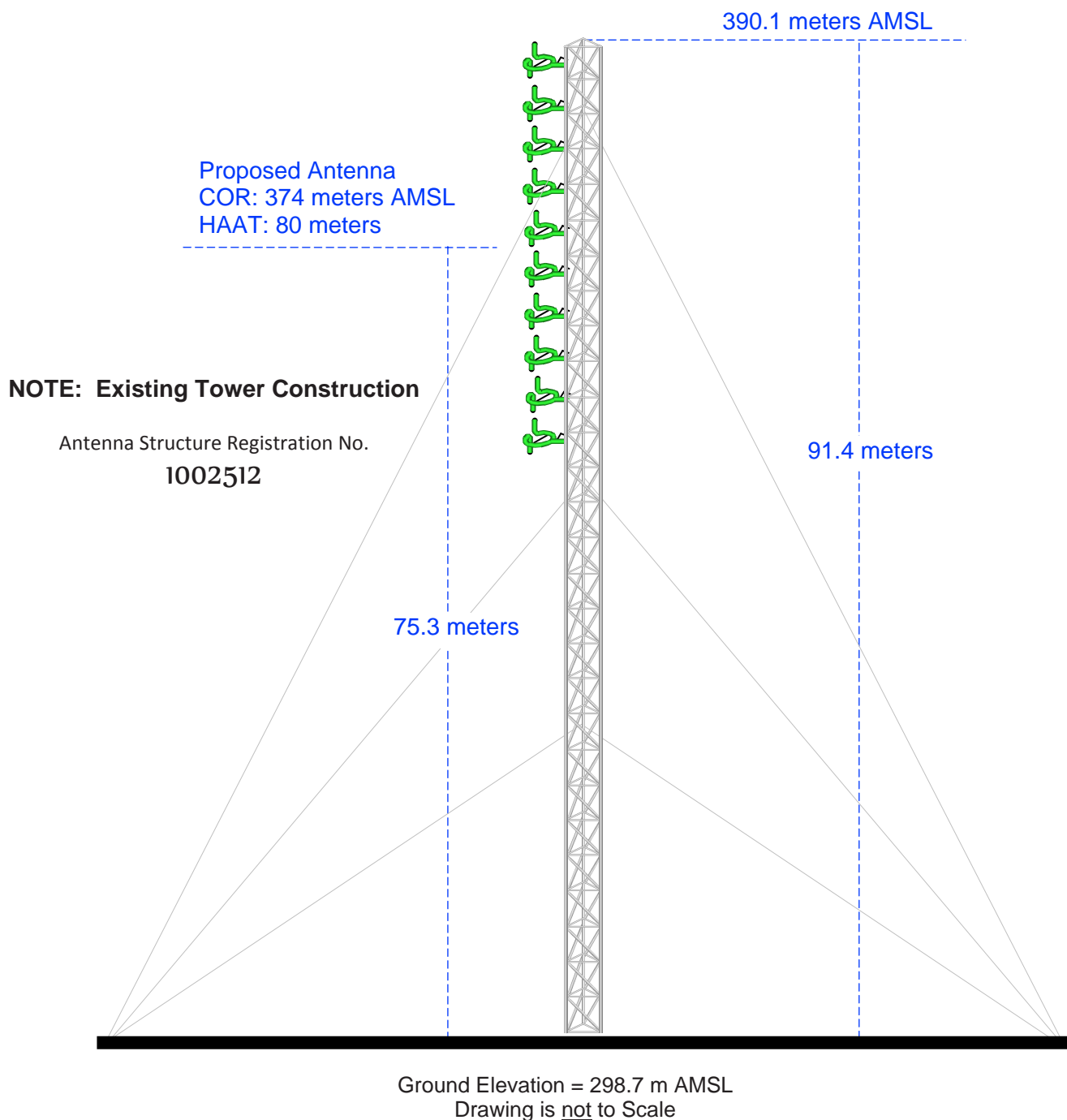
The site is located on south side of M-89, approximately 1 mile west of LaBranche, Menominee, County, MI.

Site Location (NAD 27)

NL: 45° 53' 05"

WL: 87° 29' 19"

(45-53-05.0 NL; 87-29-19.0 WL NAD1983)



MUNN-REESE, INC.

Broadcast Engineering Consultants
Coldwater, MI 49036

Exhibit 15.3

Proposed FM Operating Specifications

Applicant: West Central Michigan Media Ministries

Call: WUPJ(FM)

City of License: Escanaba, MI

Frequency: 90.9 MHz **Channel:** 215C1 **ERP:** 100.0 kW **HAAT:** 80 M

Transmitter Location: The site is located on the south side of M-89, approximately 1 mile west of LaBranche.

City: LeBranche

County: Menominee County

State: Michigan

Site Coordinates: NL: 45° 53' 05" / WL: 87° 29' 19"

Tower Registration Number: 1002512

Proposed Operation: Class C1

Effective Radiated Power: 100.0 kW (H) 100.0 kW (V)

Height of Antenna Radiation Center Above:

	<u>Average Terrain</u>	<u>Mean Sea Level</u>	<u>Ground</u>
Horizontal	80 meters	374.0 meters	75.3 meters
Vertical	80 meters	374.0 meters	75.3 meters

Elevation of Tower Site : 298.7 Meters AMSL

Overall Height of Structure Above Ground : 91.4 Meters AGL

Overall Height of Structure Above Mean Sea Level: 390.1 Meters AMSL

WUPJ.C

BNPED20071018AKU

Latitude: 45-53-01 N

Longitude: 087-29-07 W

ERP: 100.00 kW

Channel: 215

Frequency: 90.9 MHz

AMSL Height: 360.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

60 dBu Contour

Total Population: 42,028

Total Area: 3,957 sq. km

(adjusted for water)

US Census 2010 PL Data

60 dBu Contour

Total Population: 43,518

Total Area: 3,957 sq. km

(adjusted for water)

US Census 2000 SF1 Data

WUPJ.A

Proposed Operation

Latitude: 45-53-05 N

Longitude: 087-29-19 W

ERP: 100.00 kW

Channel: 215

Frequency: 90.9 MHz

AMSL Height: 374.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

60 dBu Contour

Total Population: 43,310

Total Area: 4,529 sq. km

(adjusted for water)

US Census 2010 PL Data

60 dBu Contour

Total Population: 44,421

Total Area: 4,529 sq. km

(adjusted for water)

US Census 2000 SF1 Data

Exhibit 15.4 - Present and Proposed Contour Study