

Comprehensive Technical Statement
In Support of
Multi-Cultural Diversity Radio
Long Form Application for New FM Station
FCC Facility ID # 191572
Channel 224C, 92.7 MHz
Grand Portage, MN

Canadian Notification Required

Introduction

Multi-Cultural Diversity Radio ("MCDR") was the successful bidder for Grand Portage, WI (MM-FM1008-C) in FM Auction 94.

MDR proposes to construct a new tower.

Data Sources

Distances were calculated using the FCC method defined in §73.208 of the Commission's Rules. The contours shown in this report were generated using antenna center above mean sea level, NAD-27 coordinates, and the USGS-03 three-second terrain data set.

Allocation Considerations

The following table includes all conflicts that do not exceed the spacing requirements of §73.207 (column "fsrq") by at least 50 km (column "fsΔ"):

facid	adj	chan	status	call	cy	st	city	erp	haat	brg	km	fsrq	fsΔ
0	0	224C	VAC		US	MN	GRAND PORTAGE	100	600	102	5.67	290	-284.33
191572	0	224C	APP	NEW	US	MN	GRAND PORTAGE	100	600	102	5.67	290	-284.33
42940	1	225C1	LIC	WSCD-FM	US	MN	DULUTH	70	185	234	221.61	209	12.61
-1	0	224B	VAC		CA	ON	DRYDEN	50	150	313	300.76	274	26.76
78080	1	223C2	LIC	WIRN	US	MN	BUHL	26	170	258	233.12	188	45.12
-1	54	278A	VAC		CA	ON	SHUNIAH TOWNSHIP	2.5	157	38	77.60	29	48.60

The first two records are the subject allotment and short form application. They will be replaced. All other conflicts are fully spaced. There is no need for separate reference coordinates.

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Blanketing Interference

At the proposed 100 kW maximum ERP, the distance to the blanketing contour is 3.94 km. The population within the blanketing contour is zero. Applicant commits to resolving any blanketing complaints in accordance with §73.318.

Quiet Zones

The proposed site is outside the National Radio Quiet Zone (National Radio Astronomy Observatory Notification Area) in West Virginia.

The proposed site is outside the Arecibo Observatory notification area in Puerto Rico.

The proposed site is not within a 100 km extension of the Table Mountain Radio Receiving Zone in Colorado.

Protected Monitoring Stations

The nearest Protected Monitoring Station is 666 km distant, in Allegan, MI.

International

The FM Agreements with Canada and Mexico require evaluation and potential coordination of any proposal within 320 km of the border.

The distance to the nearest point along the US/Mexico border is 1,980 km. Coordination with Mexico is not required.

The distance to the nearest point along the US/Canada border is 5.0 km from the proposed site. Evaluation with respect to Canadian facilities and proposals is required.

This allotment was coordinated with Canada as an unrestricted Class C. Notification of the actual location and operating parameters will be required. International notification data is provided on the following page.

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International Notification Data

Channel 224

Class C

Antenna Coordinates 47 58 29.0 N
(NAD 83) 89 45 31.9 W

Transmission parameters H V

RCAMSL 783 m -

RCAGL 250 m -

HAAT 468 m -

ERP (Max) 100 kW -

Beam Tilt Not applicable

Antenna Omnidirectional

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Tech Box

Channel	224
Class	C
Antenna Coordinates (NAD-27)	47 58 29 N 89 45 32 W
ASR	New, FAA notification filed
Overall HAGL	267 m
Transmission parameters	H V
RCAMSL	783 m -
RCAGL	250 m -
HAAT	468 m ¹ -
ERP (Max)	100 kW -
Beam Tilt	Not applicable
Antenna	An omnidirectional antenna is proposed.

¹ The 0°, 45° and 315° radials were truncated at the Canadian border per §73.313(d)(2)

Coverage Map



Community Coverage

The principal community of Grand Portage lies within the proposed 70 dBu f(50,50) contour:

Main Studio Location

The main studio location has not yet been determined. Applicant commits to compliance with the requirements of §73.1125.

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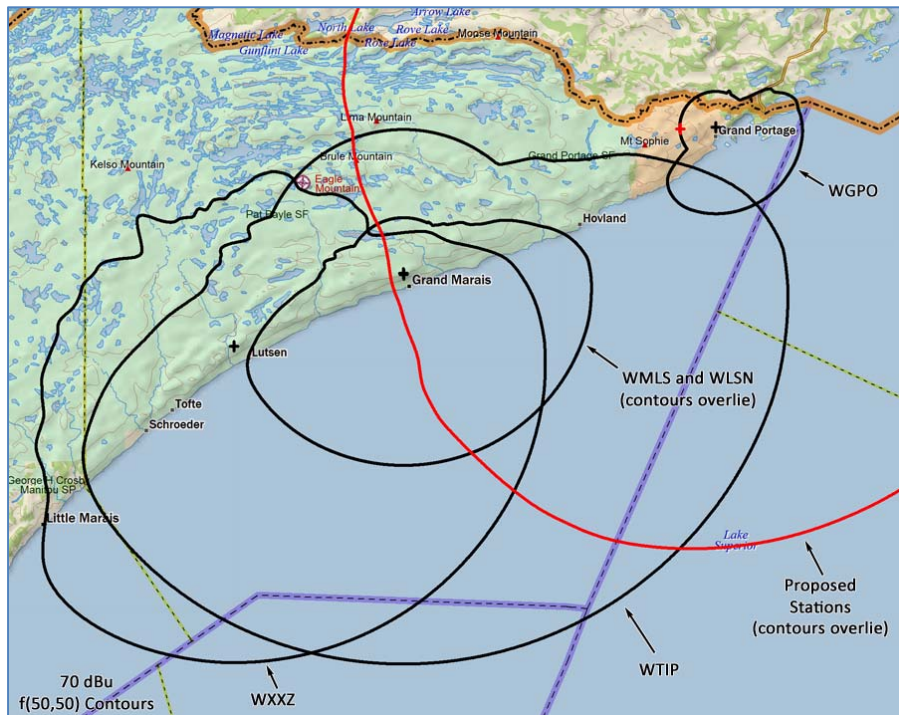
Multiple Ownership

MCDR is the successful bidder for two other allotments in Auction 94. One is in Grand Portage, MN, and the other is in Caroline, WI, more than 300 km from the proposed facility. MDCR and its principals have no other broadcast interests.

Because the applicant proposes two FM stations in Grand Portage, a multiple ownership study is necessary.

In the smallest markets (under 15 stations), it is permissible for an entity to hold attributable interests in up to five stations, three of which may be in the same service, with a limit of 50% of the stations in the market. The applicant proposes to hold two FM stations. At least five other FM stations overlap the proposed 70 dBu f(50,50) contours:

Call	FC C Facility ID #	City and State
WGPO	174256	Grand Portage, MN
WLSN	92302	Grand Marais, MN
WMLS	92306	Grand Marais, MN
WTIP	55568	Grand Marais, MN
WXXZ	18531	Grand Marais, MN



This creates a total market of at least seven signals. Common attribution of two signals represents significantly less than 50% of the market, and the combination is acceptable.

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RF Exposure

The applicant is applying for two facilities on the same tower. Each has a proposed ERP of 100 kW-H-only.

For the proposed ten-bay antenna, with the stations operating at the maximum combined ERP of 200 kW-H-only mounted at 250 m above ground, FMMODEL returns a maximum exposure of 23.6 $\mu\text{W}/\text{cm}^2$, or 11.8% of the permissible limit for casual / uncontrolled exposure.

The tower will be fenced and locked, and appropriate warning signage will be provided. Applicant commits to reducing power or shutting down temporarily as necessary to protect workers on the tower.

Environmental

The applicant proposes to construct new tower with an overall height of 267 m (875') above ground.

The proposed site is a developed broadcast site with two existing shorter towers.

The FAA has been notified of the proposed construction, and an aeronautical study has been requested.

An NPA filing will be done after the aeronautical study is complete and a determination has been provided.

The site is on Ojibwa Nation Tribal Lands. The applicant has reasonable assurance from Tribal representatives that the site will be available.

Should the Commission determine that an Environmental Assessment is necessary, applicant commits to providing it.

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