

TECHNICAL EXHIBIT
MINOR CHANGE APPLICATION
AM STATION WDVM (FACILITY ID 1131)
EAU CLAIRE, WISCONSIN

JUNE 26, 2007

1050 KHZ 0.86 KW-D, 0.43 KW-N ND-2

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Technical Narrative

The technical exhibit of which this narrative is part has been prepared on behalf of AM broadcast station WDVM at Eau Claire, Wisconsin. WDVM is licensed as a Class B station for operation on 1050 kilohertz with a power of 1 kilowatt during daytime hours and 0.5 kilowatt during nighttime hours, while utilizing a non-directional antenna system. This application proposes to construct a new tower for fulltime operation adjacent to the existing tower. Due to the increase in efficiency there is a proposed decrease in daytime and nighttime power to 0.86 kilowatt and 0.43 kilowatt, respectively.

The proposal is classified as a minor change according to 47 CFR 73.3571(a)(2). As a Class B station operating on one of the channels listed in 73.25(c), the proposal satisfies 47 CFR 73.21(a)(2) which permits operation with a nominal power of not less than 0.25 kilowatt nor more than 50 kilowatts at any time. The proposal is acceptable for filing under the criteria set forth in 47 CFR 73.37.

The proposed tower has been registered with the FCC and has been assigned ASRN 1249136. The proposed tower will utilize a 6-wire skirt (80 degrees in electrical length) and operate as a folded unipole. The antenna tower will be 129.5 electrical degrees or 102.7 meters (337 feet) in physical height. The tower will have an overall height of 103.6 meters (340 feet) above ground level (see Figure 1).

Figure 2 is a plat of the transmitter site showing the proposed tower and ground system. 120 evenly spaced ground radials with an average length of 72.5 meters (238 feet, or 0.25λ) are proposed. The efficiency of 331.6 mV/m (at 1 kilometer for 1 kW) was determined using the FCC Media Bureau's "Figure 8" program. No correction factor was needed.

Figure 8 are photographs of the surrounding areas from the proposed site.

Daytime Coverage

The WDVM daytime field strength contours are depicted on Figure 3. As can be seen from the map, the change in daytime coverage is unnoticeable. The proposed daytime 5 mV/m contour completely encompasses the city limits of Eau Claire. The Eau Claire city limits depicted were obtained from a map contained in the TIGER 2000 U.S. census files. There are no population centroids within the proposed daytime 1000 mV/m contour.

Daytime Allocation Study

A daytime allocation study was made utilizing normal FCC Figure M-3 conductivity in all cases except to calculate the extent of the contours for station WJOK. For WJOK, measured conductivity data obtained from its last application for construction permit was used (BP-20060727ABC). Sheet 2 of Figure 4 is a map showing the allocation situation with respect to the pertinent stations. As can be seen, there is existing contour overlap with station KFIL, which will be reduced by the proposal, as tabulated below.

	Overlap Received by KFIL	Overlap Caused to KFIL
Licensed WDVM	282 sq km	259 sq km
Proposed WDVM	279 sq km	256 sq km
Net Change	-3 sq km	-3 sq km

There is no predicted contour overlap with station WJOK (LIC or CP).

Nighttime Coverage

The proposed WDVm nighttime field strength contours are depicted on Figure 5. The proposed nighttime 18.2 mV/m nighttime interference-free contour will slightly increase the coverage of Eau Claire as shown below.

	Eau Claire Area Served	Eau Claire Population Served
Licensed WDVm	44.4 sq km (53%)	45,230 (73%)
Proposed WDVm	44.8 sq km (54%)	45,517 (74%)
Net Change	+0.4 sq km	+287

A continued waiver of Section 73.24 (nighttime city coverage) is respectfully requested.

Nighttime Allocation Study

The proposed WDVm facility will afford nighttime protection to all stations and operating on 1040 kHz, 1050 kHz, and 1060 kHz. Figure 6 contains pertinent calculation data to support a conclusion that this proposal comports with all nighttime interference protection requirements. With respect to first-adjacent station WHO, multiple points along its 0.5 mV/m protected contour were studied (see map in Sheet 2 of Figure 6). The calculation for WDVm was based on 10% skywave propagation. The proposed operation will reduce the current impact to WHO along these various points as tabulated below.

Point	Latitude	Longitude	WHO Groundwave Signal Level (mV/m)	WDVm Licensed (mV/m)	WDVm Proposed (mV/m)
A	42-32-46	95-58-32	0.5	0.250	0.243
B	43-49-40	94-23-35	0.5	0.405	0.375
C	43-43-25	92-40-16	0.5	0.465	0.400
D	42-28-49	90-58-51	0.5	0.406	0.377
E	40-46-52	90-59-52	0.5	0.250	0.243
F	39-35-36	94-08-02	0.5	0.166	0.164

Canadian Allocation Study

The only Canadian station of concern is co-channel station CKSB (St. Boniface, Manitoba). The CKSB 0.5 mV/m groundwave contour dictates the protection scenario for CKSB. Multiple points along this contour and also at the U.S./Canadian Border were protected using the 26 dB ratio indicated in the U.S./Canadian Agreement (see Figure 7). The calculation for WDVM was based on 10% skywave propagation. The proposed operation will reduce the current impact to CKSB along these various points as tabulated below.

Point	Latitude	Longitude	CKSB Groundwave Signal Level (mV/m)	WDVM Licensed (mV/m)	WDVM Proposed (mV/m)
A	51-17-53	97-50-10	0.5	0.170	0.169
B	49-58-40	99-30-12	0.5	0.177	0.176
C	49-00-00	97-48-04	0.5	0.218	0.215
D	49-00-00	97-10-05	0.7	0.226	0.223
E	49-00-00	96-30-00	2.0	0.234	0.231
F	49-00-00	95-54-07	1.1	0.240	0.236
G	49-00-00	95-26-10	0.5	0.244	0.240
H	50-03-00	95-13-20	0.5	0.223	0.220

Radiofrequency Electromagnetic Field Exposure

The proposed WDVM operation, both daytime and nighttime, was evaluated in terms of both the electric and magnetic field components that will be present at the base of each tower. Using Tables 2 and 3 of Supplement A to OET Bulletin 65, the worst-case interpolated distance at which the electric and magnetic fields would fall below ANSI guidelines is 1 meter. The area surrounding the base of each tower will be appropriately restricted with a fence having a minimum radius of 1 meter (3.3 feet), unless data obtained after construction has been completed indicates otherwise. The fence should assure that persons on the property outside the fenced area will not be exposed to radiofrequency field levels in excess of the standards specified in 47 CFR 1.1307(b) for human exposure to radiofrequency radiation.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.



Jonathan N. Edwards

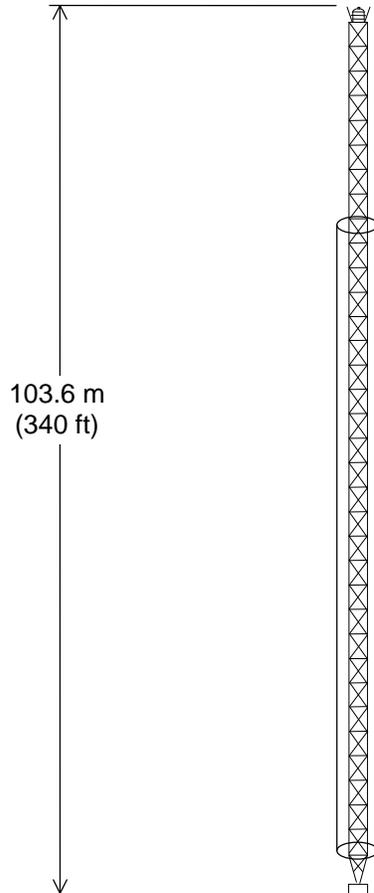
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

June 26, 2007



Registration No. 1249136

371.9 m AMSL
(1220 ft AMSL)



Folded
Unipole
Skirt

Site Coordinates:
44° 46' 38" N
91° 28' 29" W
(NAD 27)

268.3 m AMSL
(880 ft AMSL)

Not to Scale

PROPOSED ANTENNA AND SUPPORTING STRUCTURE

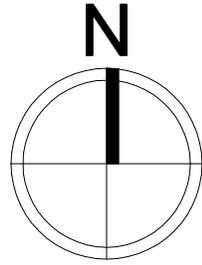
AM STATION WDVM

EAU CLAIRE, WISCONSIN

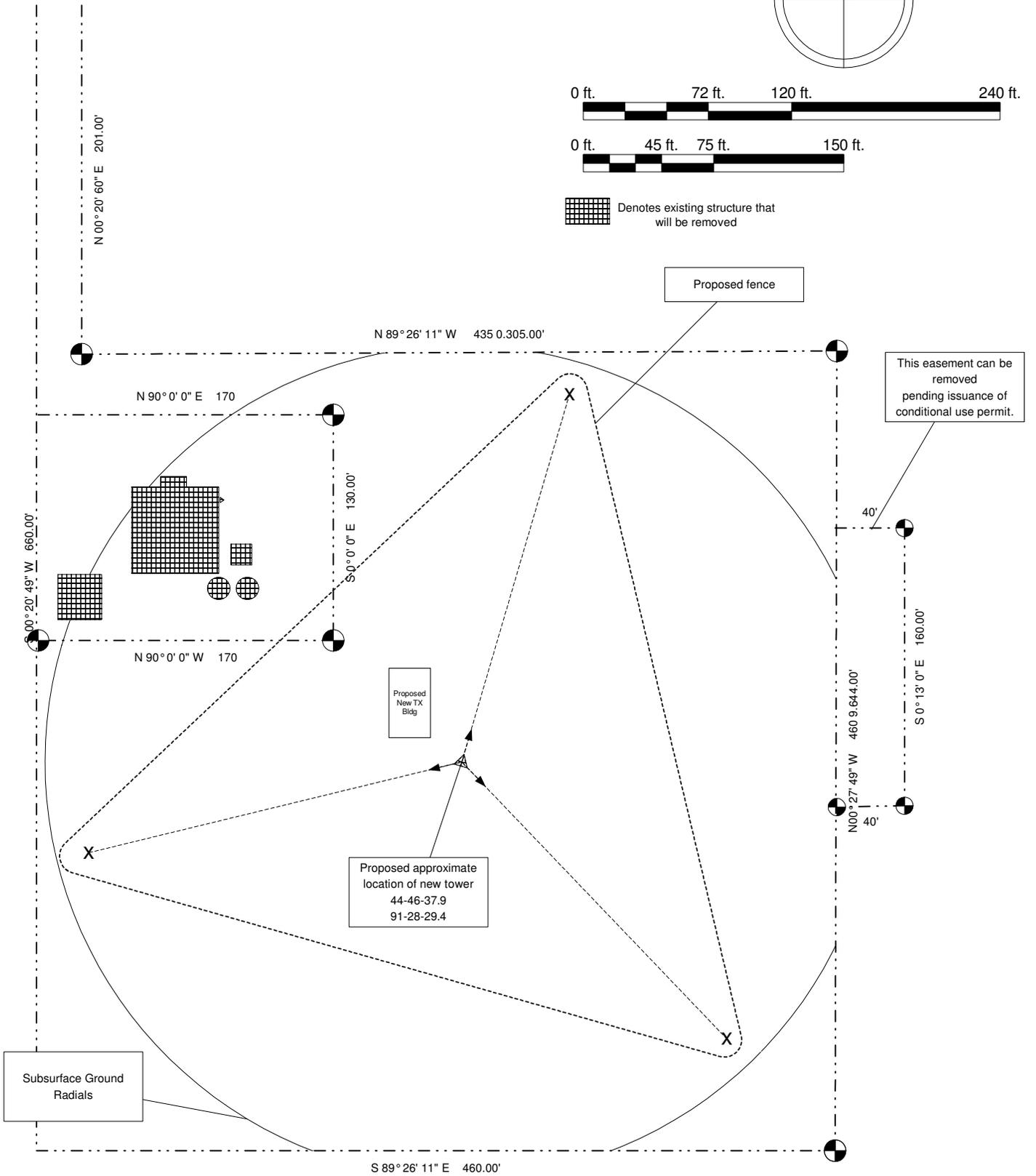
1050 KHZ 0.86 KW-D, 0.43 KW-N ND-2

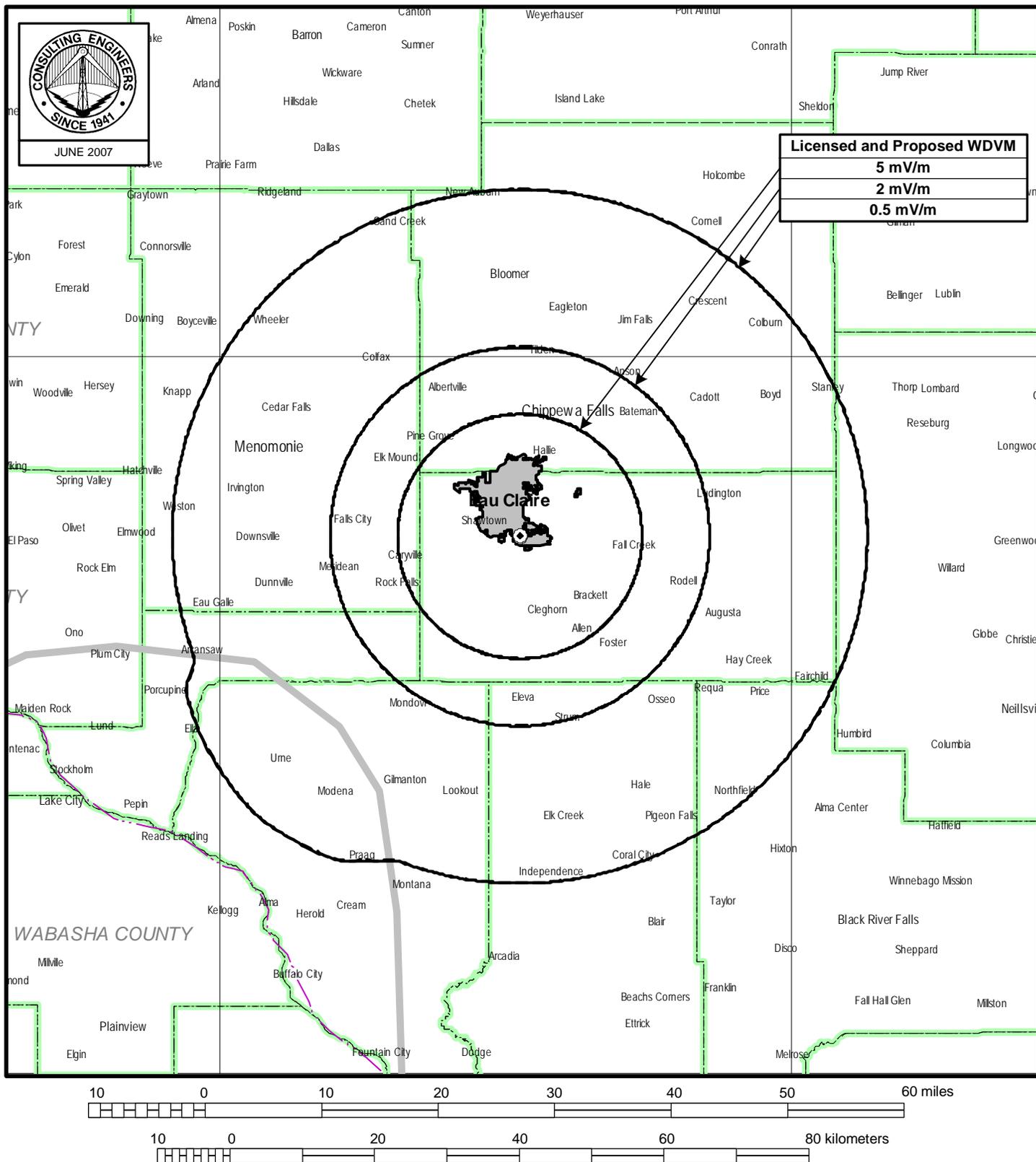
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



 Denotes existing structure that will be removed





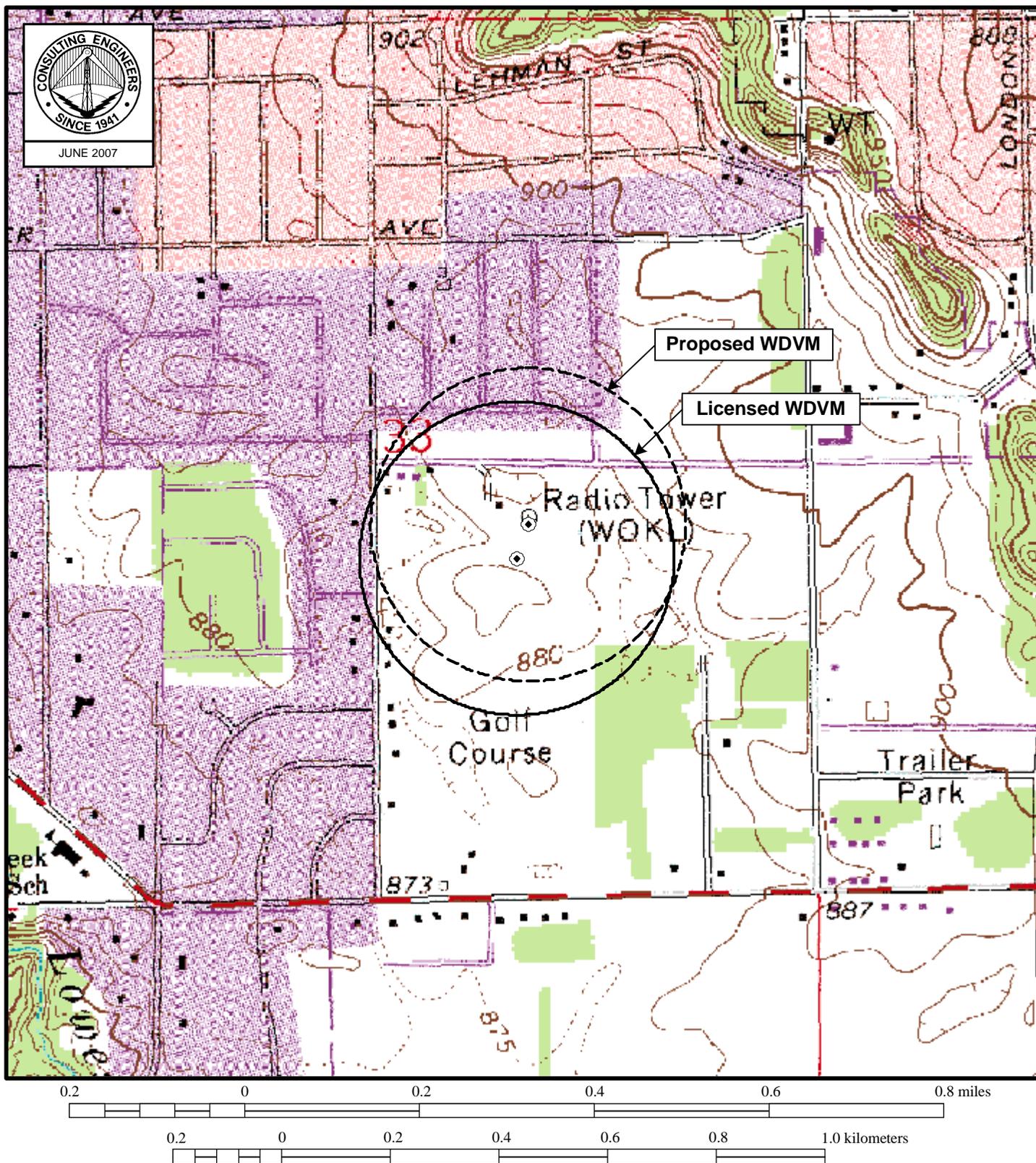
DAYTIME COVERAGE CONTOURS

AM STATION WDVM

EAU CLAIRE, WISCONSIN

1050 KHZ 0.86 KW-D, 0.43 KW-CH ND-2

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1000 mV/m DAYTIME COVERAGE CONTOURS

AM STATION WDVM
EAU CLAIRE, WISCONSIN
1050 KHZ 0.86 KW-D, 0.43 KW-N ND-2

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Data Employed in Calculation of Groundwave Contours

With the exception of station WJOK, all groundwave contours were calculated using the appropriate directional or non-directional radiation and FCC Figure M-3 conductivity.

WJOK, Kaukauna, Wisconsin

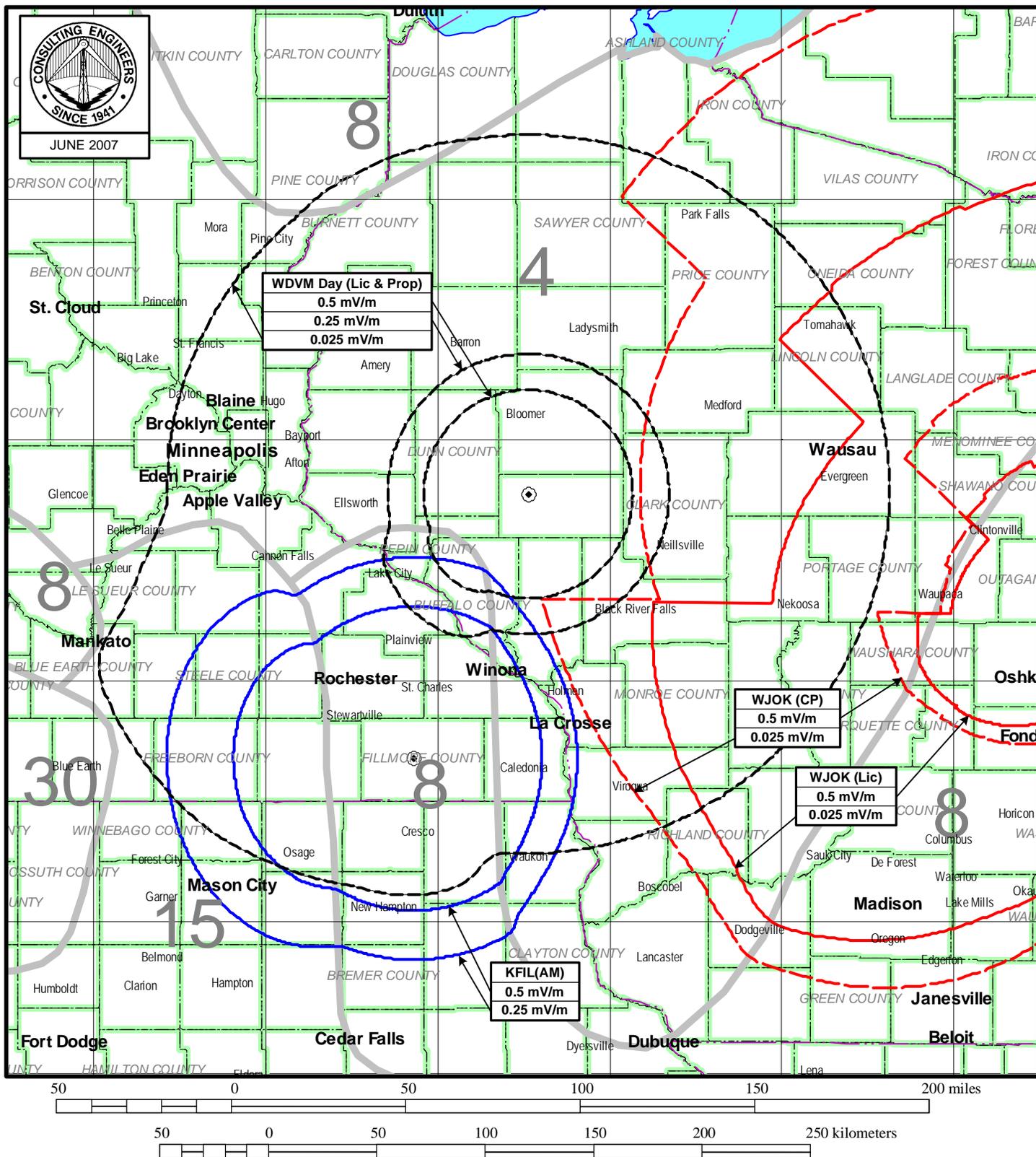
1050 kHz 1 kW DA-D (LICENSED)

1050 kHz 5 kW DA-D (CP)

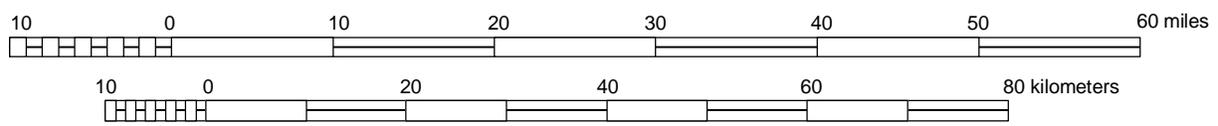
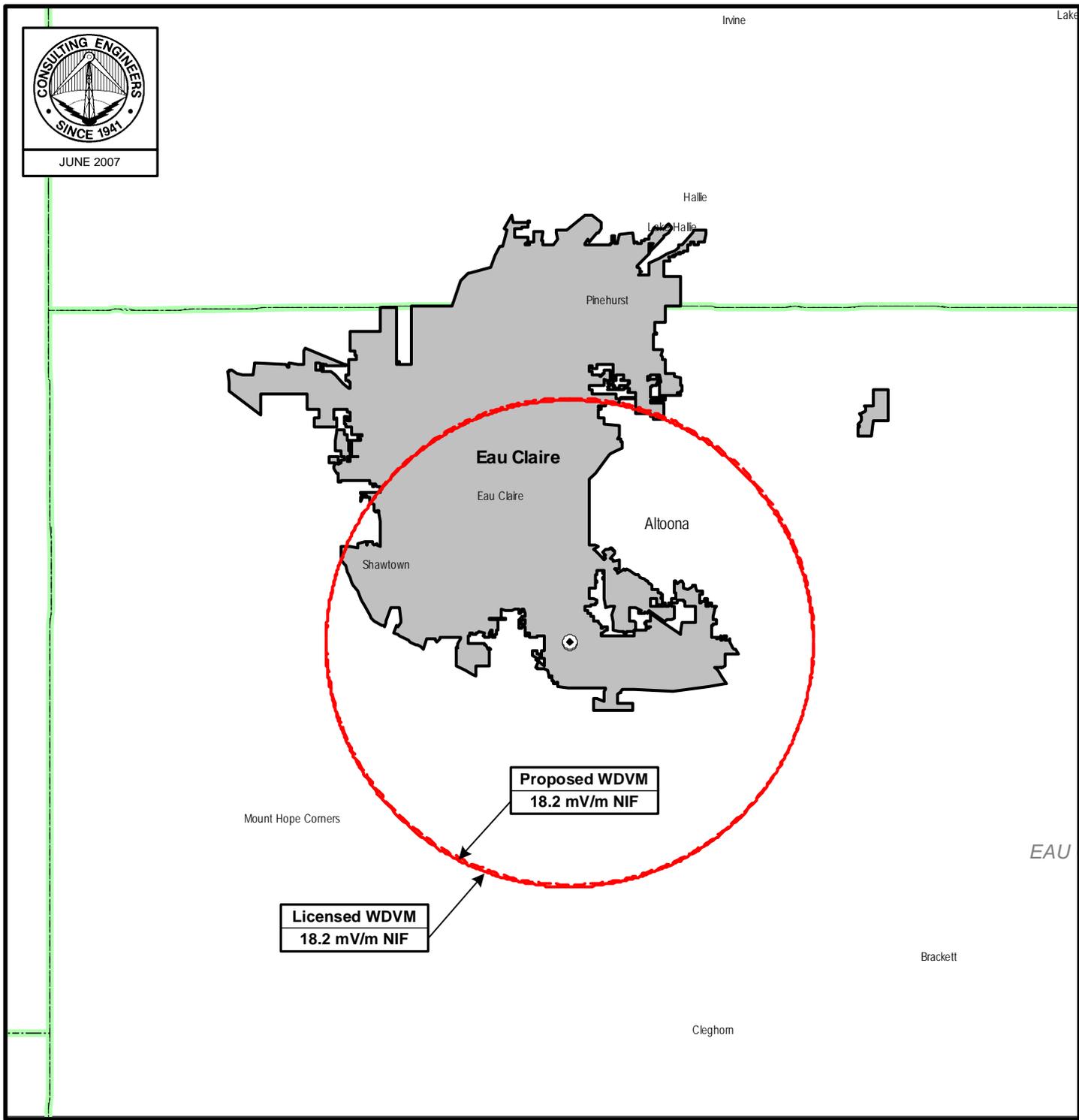
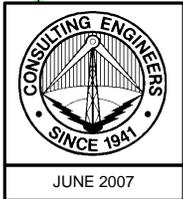
Licensed Coordinates: 44° 14' 51" N, 88° 18' 00" W

Standard pattern radiation applied along all azimuths. Measured conductivity applied +/- 10° from measured radial. FCC Figure M-3 conductivity applied beyond the extent of the measurements and on all other azimuths. Measured conductivities were obtained from WJOK application for construction permit (BP-20060727ABC).

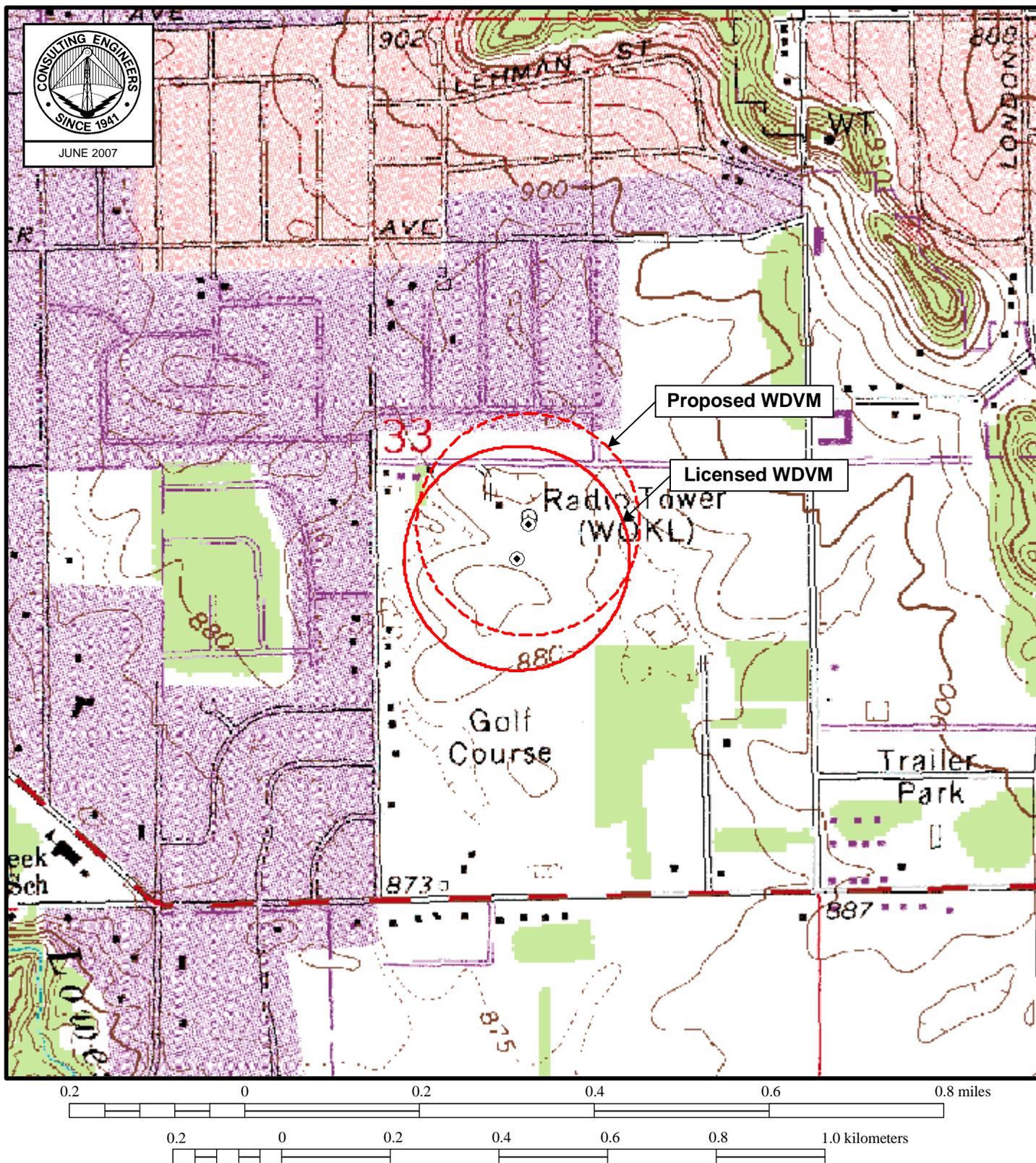
<u>Azimuth(deg.T)</u>	<u>Conductivity/End Distance(mS/m/km)</u>
210	10/6.3
245	7/3.2, 10/14.4
284	5/62, 2/102.6
304	5/65, 2/102.4
335	5/3.2, 10/32



DAYTIME ALLOCATION STUDY
AM STATION WDVm
EAU CLAIRE, WISCONSIN
1050 KHZ 0.86 KW-D, 0.43 KW-N ND-2
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NIGHTTIME COVERAGE CONTOURS
AM STATION WDVM
EAU CLAIRE, WISCONSIN
1050 KHZ 0.86 KW-D, 0.43 KW-CH ND-2
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1000 mV/m NIGHTTIME COVERAGE CONTOURS

AM STATION WDVM
EAU CLAIRE, WISCONSIN
1050 KHZ 0.86 KW-D, 0.43 KW-N ND-2

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WDVM NIF CALCULATION

Station Information:

Call: WDVM
 Freq: 1050 kHz
 EAU CLAIRE, WI, US
 Lat: 44-46-38 N
 Lng: 091-28-29 W
 Power: 0.43 kW
 Theo RMS: 331.60 mV/m @ 1km

Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Contributors:

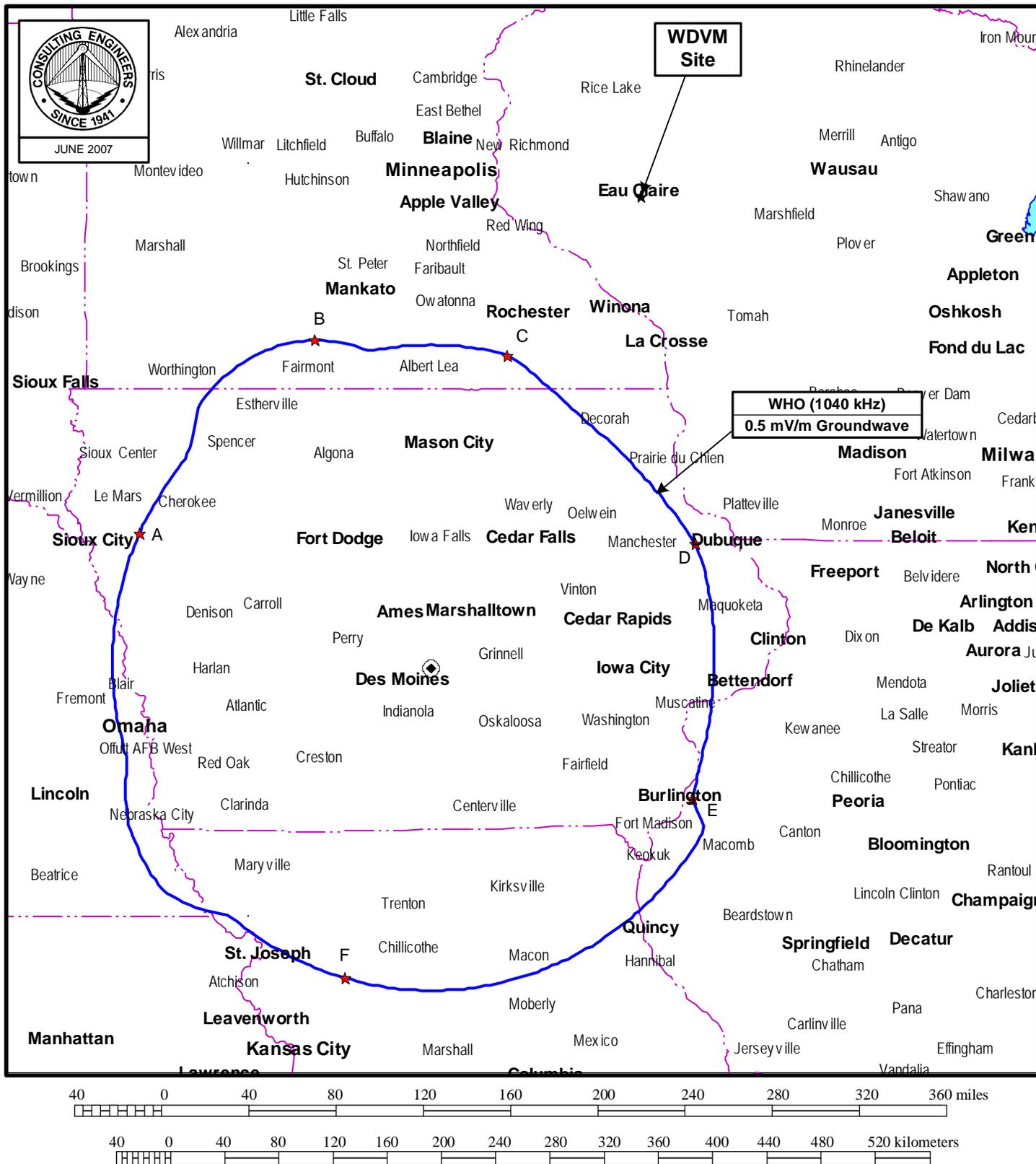
Call	Freq (kHz)	City	St	Ct	Dist (km)	Azi (deg)	Theta		Max V-Rad (mV/m)	SW Mult (uV/m)	Limit (mV/m)	Limit (%)	RSS Limit (mV/m)
							Min (deg)	Max (deg)					
CKSB/A	1050	ST. BONIFACE	MB	CA	700.5	140.0	10.0	17.3	1329.52	50.33	13.382	100.0	13.382
XEG/A	1050	MONTERREY	NL	MX	2260.3	18.0	0.0	0.9	4236.76	10.42	8.831	66.0	16.034
CFYN/A	1050	SAULT STE MARIE	ON	CA	591.6	253.2	12.3	20.7	608.12	71.02	8.638	53.9	18.213

Night Allocation Protection Report

Call: WDVM
 Freq: 1050 kHz
 EAU CLAIRE, WI, US
 Lat: 44-46-38 N
 Lng: 091-28-29 W
 Power: 0.43 kW
 Theo RMS: 331.60 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	129.5	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
CKSB/A	CA	MB	ST. BONIFACE	99.25	4.134	208.25	204.68	3.57
50% = 6.595, 25% = 8.608; WDVM=4.13 XEG/A=3.99 WJOK=3.24 WEPN=2.91 KLOH=2.85 CFYN/A=2.72 WTKA=2.57								
WHO (115)	US	IA	DES MOINES	123.39	0.500	203.50E	198.12	5.38
KLOH	US	MN	PIPESTONE	137.37	5.495	200.03	193.37	6.66
50% = 12.2, 25% = 14.968; XEG/A=10.79 CKSB/A=5.69 WDVM=5.50 WHO=5.47 CFYN/A=3.88								
WLIP	US	WI	KENOSHA	146.66	5.826	198.60	191.45	7.16
50% = 14.758, 25% = 19.736; XEG/A=9.75 CHUM/A=8.75 CFYN/A=6.81 CKSB/A=6.73 WTCA=6.06 WDVM=5.83 WHO=5.36 WDZ=5.19								
WJOK	US	WI	KAUKAUNA	219.59	7.927	180.49	167.68	12.81
50% = 16.634, 25% = 22.549; CFYN/A=11.56 CKSB/A=8.53 XEG/A=8.38 WDVM=7.93 CHUM/A=7.70 WTKA=6.61 WLIP=5.99 WTCA=5.48								
WJOK	US	WI	KAUKAUNA	219.59	7.927	180.49	167.68	12.81
50% = 16.634, 25% = 22.549; CFYN/A=11.56 CKSB/A=8.53 XEG/A=8.38 WDVM=7.93 CHUM/A=7.70 WTKA=6.61 WLIP=5.99 WTCA=5.48								
WDZ	US	IL	DECATUR	83.78	4.147	247.46	206.92	40.54
50% = 13.41, 25% = 16.586; XEG/A=13.41 WHO=5.72 WLIP=4.73 CKSB/A=4.55 WCVX=4.41								
WTCA	US	IN	PLYMOUTH	85.31	4.647	272.38	206.08	66.30
50% = 13.398, 25% = 18.59; XEG/A=10.16 CHUM/A=8.74 CFYN/A=6.13 WLIP=6.13 WDZ=5.73 WCVX=5.69 CKSB/A=5.07								
XEG/A (300)	MX	NL	MONTERREY	6.45	0.500	387.62S	217.44	170.17
WCVX	US	OH	CINCINNATI	46.14	4.261	461.72	213.43	248.29
50% = 13.988, 25% = 17.045; XEG/A=11.11 WTCA=8.49 WGAT=5.24 CHUM/A=5.08 CFYN/A=4.74 WDZ=4.37								
CJNB/A	CA	SK	NORTH BATTLEFOR	25.47	2.699	529.67	216.43	313.24
50% = 5.397, 25% = 6.397; CKSB/A=4.59 XEG/A=2.84 KEYF=2.29 KBLE=1.86 KLOH=1.76								
WEPN	US	NY	NEW YORK	14.94	1.615	540.63	217.10	323.53
50% = 5.988, 25% = 6.461; XEG/A=5.34 KYW=2.71 WVXX=1.74 CHUM/A=1.69								
WTKA	US	MI	ANN ARBOR	60.87	6.544	537.54	210.40	327.14
50% = 23.466, 25% = 26.174; CHUM/A=20.45 CFYN/A=11.51 XEG/A=8.26 WEPN=8.13								



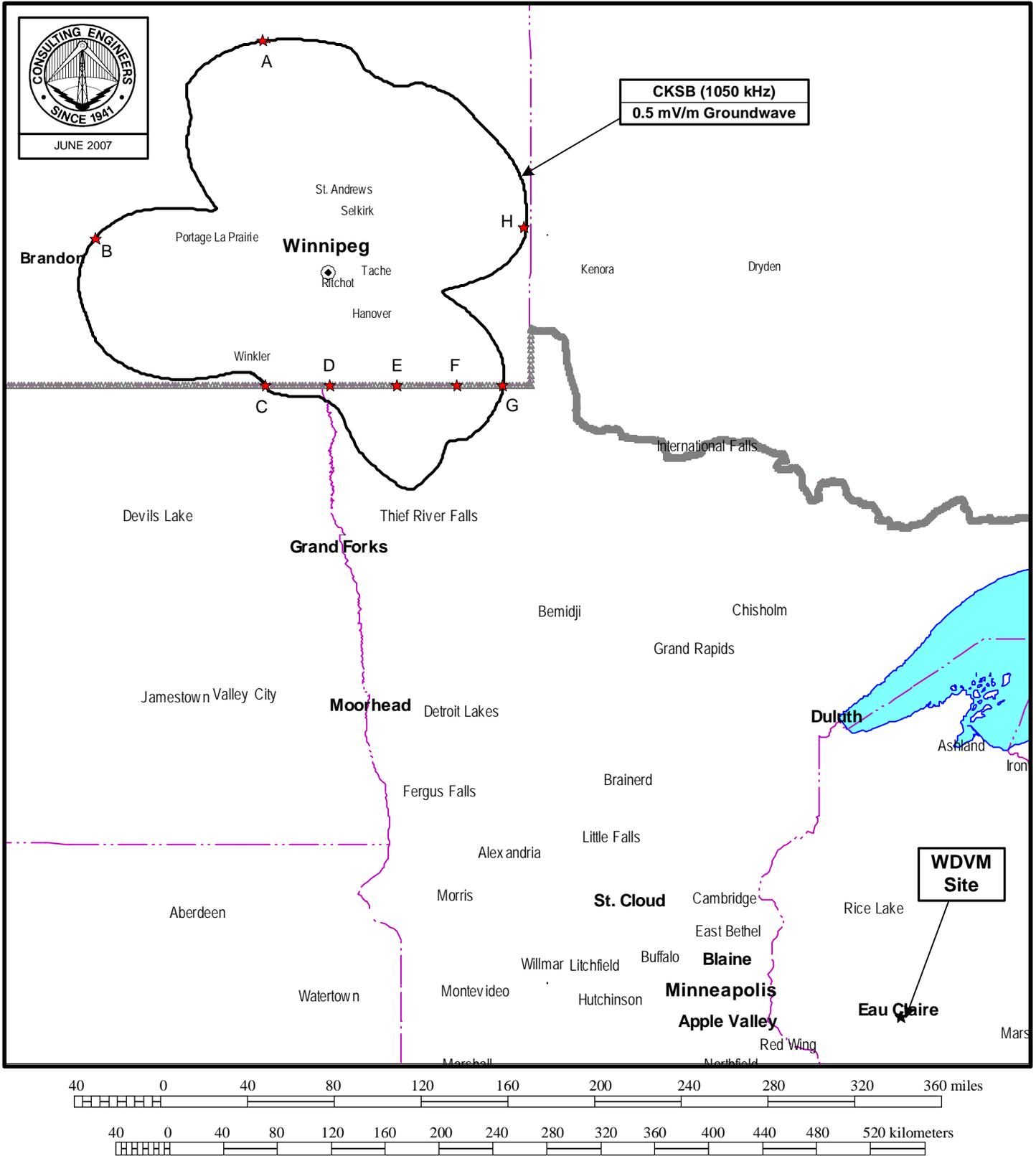
CLASS A ALLOCATION MAP

AM STATION WDVM

EAU CLAIRE, WISCONSIN

1050 KHZ 0.86 KW-D, 0.43 KW-CH ND-2

du Treil, Lundin & Rackley, Inc Sarasota, Florida



CANADIAN ALLOCATION MAP
AM STATION WDVM
EAU CLAIRE, WISCONSIN
1050 KHZ 0.86 KW-D, 0.43 KW-CH ND-2
du Treil, Lundin & Rackley, Inc Sarasota, Florida

SITE PHOTOGRAPHS



NORTH



NORTHEAST



EAST



SOUTHEAST



SOUTH



SOUTHWEST



WEST



NORTHWEST