Comprehensive Technical Exhibit

Application for Construction Permit

WGTU-DT – Traverse City, Michigan

Tucker Broadcasting of Traverse City, Inc.

June, 2008

General

The following engineering statement and attached exhibits have been prepared for **Tucker Broadcasting of Traverse City, Inc.**, ("Tucker"), licensee of television station WGTU(TV) at Traverse City, Michigan, and are in support of their application for construction permit for WGTU-DT post transition facilities.[1]

WGTU(TV) currently operates on channel 29 as an NTSC facility with pre-transition DTV operations on channel 31. In the post-transition environment, WGTU-DT will operate on channel 29 pursuant to the Commission's DTV Table of Allotments. This application is being filed to request a construction permit for the post-transition DTV facilities, which will vary slightly from those listed in Appendix B to the Commission's order adopting the DTV table of allotments.

Discussion of WGTU-DT Allotment and Proposed Facilities

In the Appendix B table of allotments, WGTU-DT is specified as operating in the post-transition environment on channel 29. The table in Appendix B specifies a maximum effective radiated power of 62.1 kW at an antenna center of 393 meters above average terrain. An Antenna ID of 74491 is associated with this allotment, which is similar in shape, but not identical to the current NTSC antenna, which will be used in the post-transition environment.

The proposed facility would operate with a maximum effective radiated power of 64.8 kW at a center of radiation at 393 meters above average terrain. The increase in the maximum effective radiated power from the Appendix B value to 64.8 kW is being requested in order to maintain the currently licensed maximum effective radiated power of the same value.[2] The antenna currently in

[1] The Facility ID for WGTUY is 59280.
[2] See WGTU-DT license BLCDT-20070821ADQ.

use for both the NTSC and licensed DTV facilities, which is a multi-channel broadband antenna, will be utilized in the post-transition environment. WGTU will therefore flash-cut from analog to digital operations on channel 29 either at the conclusion of NTSC operations, or ahead of the statutory deadline if approval is sought and received from the Commission to do so.

Due to the minor differences between the actual and Appendix B patterns as well as the increase in the maximum effective radiated power, the proposed noise limited service contour will vary from the allocated contour. Exhibits E-1 and E-2 depict and tabulate the predicted noise limited service contour for the proposed and Appendix B facilities. As these two exhibits demonstrate, the proposed noise limited contour would not exceed the allocated contour by more than five miles at any azimuth.

Although the distance to the noise limited contour would be greater along certain azimuths than the allocation contour, impermissible interference would not result from the proposed facility to any other relevant facility. Exhibits E-3 and E-4 provide the outgoing interference study for the proposed facility. These exhibits demonstrate that the proposed facility is predicted to cause interference to zero population. The proposed facility is also predicted to cause interference to zero square kilometers of land area.

The differences in the noise limited service contours will also result in minor changes to the DTV service area of the facility, although in land coverage only. Exhibits E-5 and E-6 illustrate and tabulate the predicted DTV service area of the proposed facility. As these two exhibits demonstrate, the predicted population within the proposed DTV service area is 332,485 persons, which when accounting for rounding identically matches the Appendix B population of 332 thousand persons.

The proposed facility will comply with the community coverage requirements of Section 73.625 of the Commission's Rules. Exhibit E-7 illustrates the predicted 48 and 41 dBu F(50,90) service contours along with the received signal based on Longley-Rice bounded by the 41 dBu contour. As this map demonstrates, the community of license, Traverse City, Michigan, would receive a signal well in excess of 48 dBu.

The antenna that would be utilized by the proposed facility is the existing Dielectric Communications model TUF-P4-12/48H-1 antenna. This is considered a directional antenna operating with 0.75 degrees of electrical beamtilt. No mechanical beamtilt is proposed or utilized. Following Exhibit E-7 are three pages illustrating the patterns for the antenna that would be utilized. These printouts were copied from the WGTU(TV) application for construction permit.[3] The proposed antenna is neither part of an AM radiator nor located in proximity to an AM transmission facility.

The proposed facility would not constitute a significant environmental impact. The absence of a significant environmental impact is predicted on two considerations. First, WGTU-DT would utilize the existing WGTU(DT) antenna system for DTV operations. Since no new tower or excavation would be necessary in order to complete construction, the proposed facility would not result in an increase in the present environmental impact from the existing facility.

Secondly, the proposed facility would not by itself result in human exposure to non-ionizing radiation levels exceeding the applicable safety standards. All areas of the transmitter site would lie within depression angles from the antenna where the relative field is 0.3 or less. Utilizing the

[3] See BPCT-20021112AAC. Directional patterns from the Dielectric engineering proposal for WGTU.

power density equations in OET Bulletin 65, the predicted power density at ground level would be 1.55 $\mu W/cm^2$.[4] Since this predicted power density is less than the upper limit of 373 $\mu W/cm^2$ permissible under the uncontrolled environment condition, it is apparent that the proposed facility will not result in potentially hazardous non-ionizing radiation exposure to humans at ground level.[5] In addition, the applicant certifies that it will coordinate with other present and future users of the site to ensure that workers are not exposed to levels of non-ionizing radiation which may exceed applicable safety standards. Such coordination will include, but is not necessarily limited to, a reduction in transmitter power or cessation of operation.

The requirements of Section 73.1030 of the Commission's Rules are applicable in this particular case however the applicant would be in compliance with this section of the Rules. The proposed facility would not operate in any of the radio astronomy zones described in Section 73.1030, however, it would be located in the vicinity of the Allegan, Michigan FCC monitoring facility. Utilizing the Commission's distance calculation methodology, the proposed facility would be located at a distance of 249 kilometers (154 miles) at an azimuth of 16.4 degrees true from this protected facility. Since the proposed facility would operate with an average effective radiated power of 70 kW at a distance in excess of 80 kilometers from this protected facility, it is believed that no further notification is required to be made concerning this facility based on Section 73.1030(c)(3)(iv) of the Commission's Rules.

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[4] Power density calculated by:

$$S = \frac{33.4(E)^2(P)}{h^2} = \frac{33.4(0.3)^2(70000)}{(368.6)^2} = 1.55$$

[5] Power density calculations based on height above ground minus two meters to accommodate human height. Upper limit of uncontrolled environment for UHF channels is f/1500. Lower edge of channel used as "f" variable to provide lower limit.

The structure utilized by the proposed facility is registered with the Commission. The ASR number assigned to this tower is 1006720. No physical changes to the structure are proposed in this application.

Affidavit

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.

Above signature is digitized copy of actual signature
License Expires November 30, 2009

Jeremy D. Ruck, PE
June 19, 2008

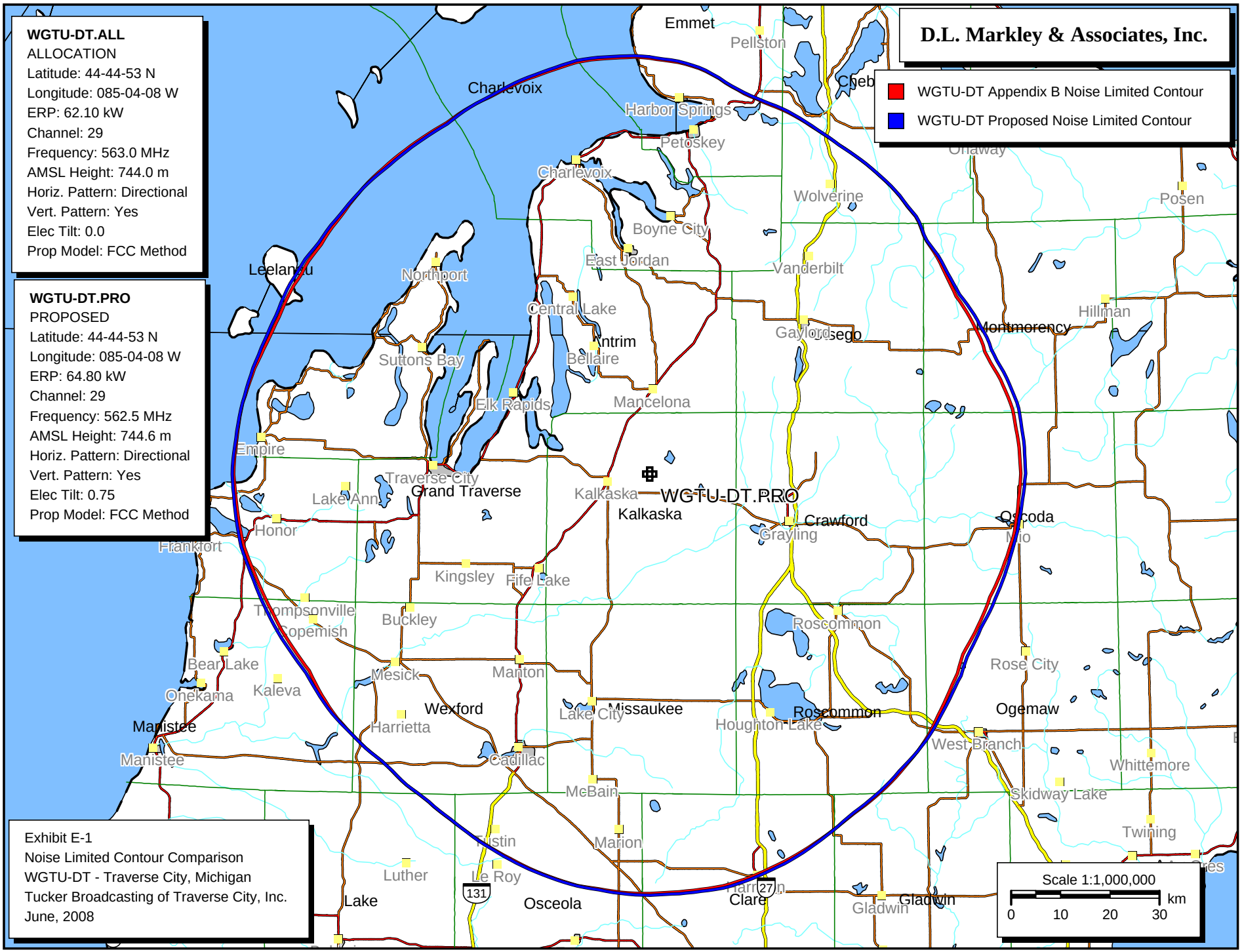

D.L. Markley & Associates, Inc.
WGTU-DT Appendix B Noise Limited Contour
WGTU-DT Proposed Noise Limited Contour
WGTU-DT.ALL
ALLOCATION
Latitude: 44-44-53 N
Longitude: 085-04-08 W
ERP: 62.10 kW
Channel: 29
Frequency: 563.0 MHz
AMSL Height: 744.0 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.0
Prop Model: FCC Method
WGTU-DT.PRO
PROPOSED
Latitude: 44-44-53 N
Longitude: 085-04-08 W
ERP: 64.80 kW
Channel: 29
Frequency: 562.5 MHz
AMSL Height: 744.6 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: FCC Method
WGTU-DT.PRO
Exhibit E-1
Noise Limited Contour Comparison
WGTU-DT - Traverse City, Michigan
Tucker Broadcasting of Traverse City, Inc.
June, 2008
Scale 1:1,000,000
0 10 20 30 km
Emmet
Pellston
Charlevoix
Harbor Springs
Petoskey
Wolverine
Posen
Boyne City
East Jordan
Vanderbilt
Leelanau
Northport
Central Lake
Hillman
Gaylord
Otsego
Montmorency
Antrim
Bellaire
Suttons Bay
Elk Rapids
Mancelona
Empire
Traverse City
Grand Traverse
Kalkaska
Lake Ann
Honor
Crawford
Grayling
Oscoda
Frankfort
Kingsley
Fife Lake
Thompsonville
Copemish
Buckley
Roscommon
Bear Lake
Mesick
Manton
Rose City
Onekama
Kaleva
Wexford
Missaukee
Lake City
Houghton Lake
Ogemaw
Manistee
Harrietta
Cadillac
West Branch
Whittemore
McBain
Skidway Lake
Twining
Marion
Luther
Le Roy
Lake
Osceola
Clare
Gladwin
131
27

Exhibit E-2 - Comparison of Proposed and Allocated Noise Limited Service Contours

Azimuth	HAAT in meters	Allocation NL Contour Distance in kilometers	Proposed NL Contour Distance in kilometers	Contour Distance Difference	
				kilometers	miles
0	381.0	83.9	84.2	0.30	0.19
10	352.6	81.0	81.1	0.10	0.06
20	342.9	78.2	78.4	0.20	0.12
30	347.6	76.6	76.6	0.00	0.00
40	358.9	75.8	75.8	0.00	0.00
50	349.3	73.0	73.1	0.10	0.06
60	358.1	71.5	72.2	0.70	0.43
70	363.4	72.0	73.4	1.40	0.87
80	366.8	74.4	75.6	1.20	0.75
90	367.3	74.9	75.8	0.90	0.56
100	368.9	74.4	75.0	0.60	0.37
110	377.5	73.0	74.1	1.10	0.68
120	375.1	72.9	73.9	1.00	0.62
130	386.6	75.9	76.4	0.50	0.31
140	395.1	78.6	78.3	-0.30	-0.19
150	392.7	80.2	80.0	-0.20	-0.12
160	397.1	82.6	83.0	0.40	0.25
170	396.5	84.5	84.9	0.40	0.25
180	392.0	84.7	85.0	0.30	0.19
190	396.0	84.3	84.4	0.10	0.06
200	396.3	82.5	82.8	0.30	0.19
210	385.5	80.5	80.4	-0.10	-0.06
220	379.9	79.4	79.4	0.00	0.00
230	401.6	79.9	79.9	0.00	0.00
240	416.4	79.3	80.1	0.80	0.50
250	430.5	81.0	82.0	1.00	0.62
260	430.1	83.1	83.7	0.60	0.37
270	434.5	83.9	84.2	0.30	0.19
280	435.1	83.3	83.4	0.10	0.06
290	439.7	81.5	82.1	0.60	0.37
300	447.1	81.0	81.9	0.90	0.56
310	423.5	81.1	81.5	0.40	0.25
320	418.9	81.8	81.5	-0.30	-0.19
330	410.4	81.8	81.6	-0.20	-0.12
340	404.4	83.0	83.2	0.20	0.12
350	395.5	84.3	84.7	0.40	0.25

D.L. Markley & Associates, Inc.
Consulting Engineers
2104 West Moss Avenue
Peoria, Illinois 61604

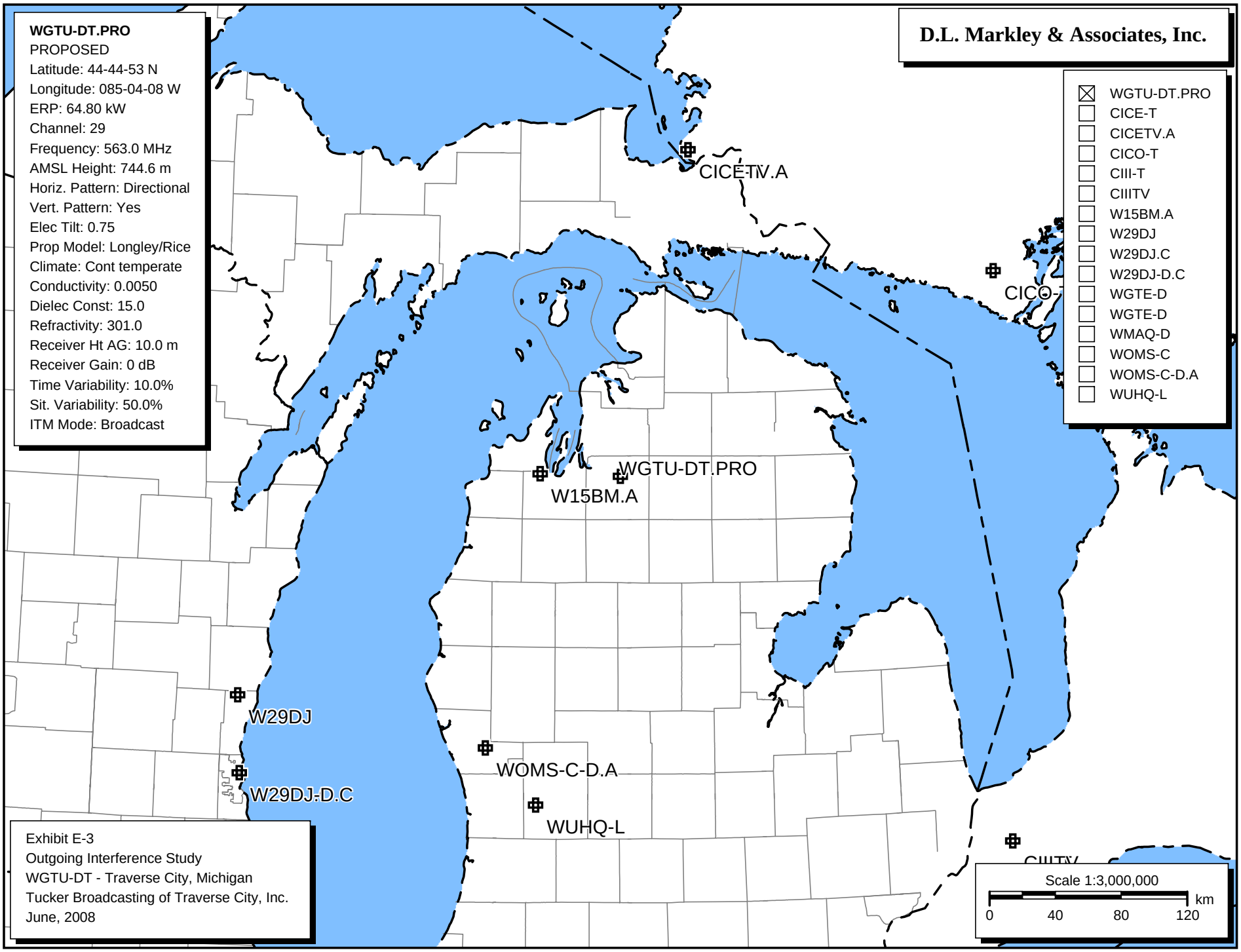

WGTU-DT.PRO
PROPOSED
Latitude: 44-44-53 N
Longitude: 085-04-08 W
ERP: 64.80 kW
Channel: 29
Frequency: 563.0 MHz
AMSL Height: 744.6 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
D.L. Markley & Associates, Inc.
WGTU-DT.PRO
CICE-T
CICETV.A
CICO-T
CIII-T
CIIITV
W15BM.A
W29DJ
W29DJ.C
W29DJ-D.C
WGTE-D
WGTE-D
WMAQ-D
WOMS-C
WOMS-C-D.A
WUHQ-L
CICETV.A
WGTU-DT.PRO
W15BM.A
W29DJ
W29DJ-D.C
WOMS-C-D.A
WUHQ-L
Exhibit E-3
Outgoing Interference Study
WGTU-DT - Traverse City, Michigan
Tucker Broadcasting of Traverse City, Inc.
June, 2008
Scale 1:3,000,000
0
40
80
120
km

Exhibit E-4
Outgoing Interference Population Report
Based on Proposed WGTU-DT Facilities.

WGTU-DT.PRO (29) Traverse City, MI - PROPOSED
Broadcast Type: Digital Service: V
Lat: 44-44-53 N Lng: 085-04-08 W ERP: 64.8 kW AMSL: 744.6 m
TV Outgoing Interference Study
Signal Resolution: 2.0 km
Consider NTSC Taboo: Yes
KWX error points are considered to
     be interference free coverage.
Default # of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
LR Profile Spacing Increment: 1.0 km
Masked interference points are being
     counted as interference.
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 6/19/2008
TV Database Date: 6/19/2008

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Stations Considered:

Call Letters	City	State	Dist	Bear
CICE-T (29)	Prince Township	ON	202.0	11.7
CICETV.A (29N)	Prince Township	ON	202.0	11.7
CICO-T (29)	West Bay	ON	257.9	61.1
CIII-T (29+)	Sarnia-Oil Springs	ON	324.5	132.9
CIIITV (29+)	Sarnia-oil Springs	ON	324.5	132.9
W15BM.A (15Z)	Traverse City	MI	48.6	271.8
W29DJ (29Z)	Sheboygan	WI	266.9	240.3
W29DJ.C (29-)	Sheboygan	WI	292.4	232.1
W29DJ-D.C (29)	Sheboygan	WI	292.4	232.1
WGTE-D (29)	Toledo	OH	368.2	158.3
WGTE-D (29)	TOLEDO	OH	368.1	158.3
WMAQ-D (29)	Chicago	IL	380.7	214.0
WOMS-C (29+)	Muskegon	MI	183.8	206.4
WOMS-C-D.A (29)	Muskegon	MI	183.8	206.4
WUHQ-L (29Z)	Grand Rapids	MI	205.6	194.5

Call	Area	HUnits	Contour	Masked Ix	Unmasked Ix	%
CICE-T (29)	0.0	0	0	0	0	0.0

CICETV.A (29N)	0.0	0	0	0	0	0.0
CICO-T (29)	0.0	0	0	0	0	0.0
CIII-T (29+)	0.0	0	143,842	0	0	0.0
CIIITV (29+)	0.0	0	225,401	0	0	0.0
W15BM.A (15Z)	0.0	0	111,501	0	0	0.0
W29DJ (29Z)	0.0	0	33,563	0	0	0.0
W29DJ.C (29-)	0.0	0	1,320,664	0	0	0.0
W29DJ-D.C (29)	0.0	0	1,523,543	0	0	0.0
WGTE-D (29)	0.0	0	2,186,473	0	0	0.0
WGTE-D (29)	0.0	0	2,198,700	0	0	0.0
WMAQ-D (29)	0.0	0	9,447,691	0	0	0.0
WOMS-C (29+)	0.0	0	106,065	0	0	0.0
WOMS-C-D.A (29)	0.0	0	103,272	0	0	0.0
WUHQ-L (29Z)	0.0	0	472,490	0	0	0.0

Housing Units Population

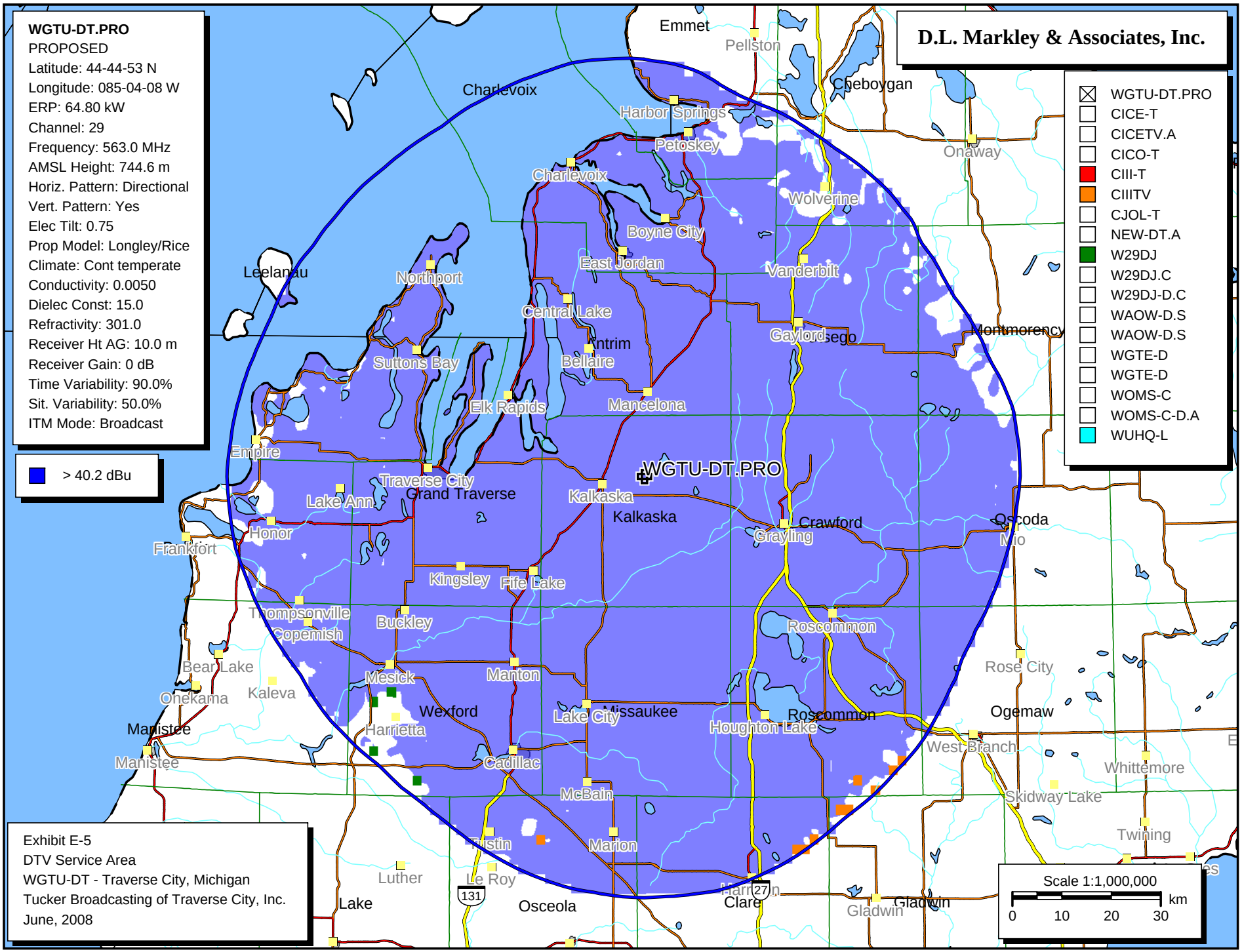

WGTU-DT.PRO
PROPOSED
Latitude: 44-44-53 N
Longitude: 085-04-08 W
ERP: 64.80 kW
Channel: 29
Frequency: 563.0 MHz
AMSL Height: 744.6 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
> 40.2 dBu
D.L. Markley & Associates, Inc.
WGTU-DT.PRO
CICE-T
CICETV.A
CICO-T
CIII-T
CIIITV
CJOL-T
NEW-DT.A
W29DJ
W29DJ.C
W29DJ-D.C
WAOW-D.S
WAOW-D.S
WGTE-D
WGTE-D
WOMS-C
WOMS-C-D.A
WUHQ-L
Emmet
Pellston
Cheboygan
Charlevoix
Harbor Springs
Petoskey
Onaway
Charlevoix
Wolverine
Boyne City
East Jordan
Vanderbilt
Leelanau
Northport
Central Lake
Gaylord
Montmorency
Antrim
Bellaire
Suttons Bay
Elk Rapids
Mancelona
Empire
WGTU-DT.PRO
Traverse City
Grand Traverse
Kalkaska
Lake Ann
Kalkaska
Crawford
Grayling
Oscoda
Honor
Frankfort
Kingsley
Fife Lake
Thompsonville
Buckley
Copemish
Roscommon
Bear Lake
Rose City
Mesick
Manton
Onekama
Kaleva
Wexford
Missaukee
Lake City
Roscommon
Houghton Lake
Ogemaw
Manistee
Harrietta
Manistee
West Branch
Cadillac
Whittemore
McBain
Skidway Lake
Twining
Marion
Luther
Le Roy
Lake
Osceola
Clare
Gladwin
Exhibit E-5
DTV Service Area
WGTU-DT - Traverse City, Michigan
Tucker Broadcasting of Traverse City, Inc.
June, 2008
Scale 1:1,000,000
km
0
10
20
30

Exhibit E-6
DTV Service Area Tabulation and Summary of Population and Interference
Based on Proposed WGTU-DT Facilities.

WGTU-DT.PRO (29) Traverse City, MI - PROPOSED
Broadcast Type: Digital Service: V
Lat: 44-44-53 N Lng: 085-04-08 W ERP: 64.8 kW AMSL: 744.6 m
TV Incoming Interference Study
Interference Considered Within: FCC Contour: 40.233 dBu
Signal Resolution: 2.0 km
LR Profile Spacing Increment: 1.0 km
Consider NTSC Taboo: Yes
KWX error points are considered to
     be interference free coverage.
# of radials computed for protected contour: 360
Threshold for reception: 40.2327
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 6/19/2008
TV Database Date: 6/19/2008

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 337,005.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
CIII-T (29+)	126	193	0.057	31.61
CIIITV (29+)	162	273	0.081	35.12
W29DJ (29Z)	54	87	0.026	14.02
WUHQ-L (29Z)	68	86	0.026	7.03

Masking Summary:

	Total Interference		Unique Interference	
Call Letters	Population	%	Population	%
CIII-T (29+)	193	0.057	0	0.000
CIIITV (29+)	273	0.081	80	0.024
W29DJ (29Z)	87	0.026	87	0.026
WUHQ-L (29Z)	86	0.026	0	0.000

Stations considered which do not cause interference:

     CICE-T (29)
     CICETV.A (29N)
     CICO-T (29)
     CJOL-T (29)
     NEW-DT.A (29Z)
     W29DJ.C (29-)

W29DJ-D.C (29)
WAOW-D.S (29)
WAOW-D.S (29)
WGTE-D (29)
WGTE-D (29)
WOMS-C (29+)
WOMS-C-D.A (29)

Call Letters	City	State	Dist	Bear
CICE-T (29)	Prince Township	ON	202.0	11.7
CICETV.A (29N)	Prince Township	ON	202.0	11.7
CICO-T (29)	West Bay	ON	257.9	61.1
CIII-T (29+)	Sarnia-Oil Springs	ON	324.5	132.9
CIIITV (29+)	Sarnia-oil Springs	ON	324.5	132.9
CJOL-T (29)	Hawk Junction	ON	373.2	5.8
NEW-DT.A (29Z)	Blind River	ON	230.0	45.3
W29DJ (29Z)	Sheboygan	WI	266.9	240.3
W29DJ.C (29-)	Sheboygan	WI	292.4	232.1
W29DJ-D.C (29)	Sheboygan	WI	292.4	232.1
WAOW-D.S (29)	Wausau	WI	365.9	274.6
WAOW-D.S (29)	Wausau	WI	365.9	274.6
WGTE-D (29)	Toledo	OH	368.2	158.3
WGTE-D (29)	TOLEDO	OH	368.1	158.3
WOMS-C (29+)	Muskegon	MI	183.8	206.4
WOMS-C-D.A (29)	Muskegon	MI	183.8	206.4
WUHQ-L (29Z)	Grand Rapids	MI	205.6	194.5

Totals for WGTU-DT.PRO (29)

Calculation Area Population:	336,894	(20037.4	sq. km)
Not Affected by Terrain Loss:	332,845	(19526.6	sq. km)
Total NTSC Interference:	360	(49.1	sq. km)
DTV Only Interference:	0	(-0.0	sq. km)
Total DTV Interference:	0	(0.0	sq. km)
Interfered Population:	360	(49.1	sq. km)
Interference Free:	332,485	(19477.5	sq. km)
Percent Interference:	0.11		
Terrain Blocked Population:	4,049	(510.8	sq. km)
Contour Area Population:	337,005		

Interference Free Breakdown:

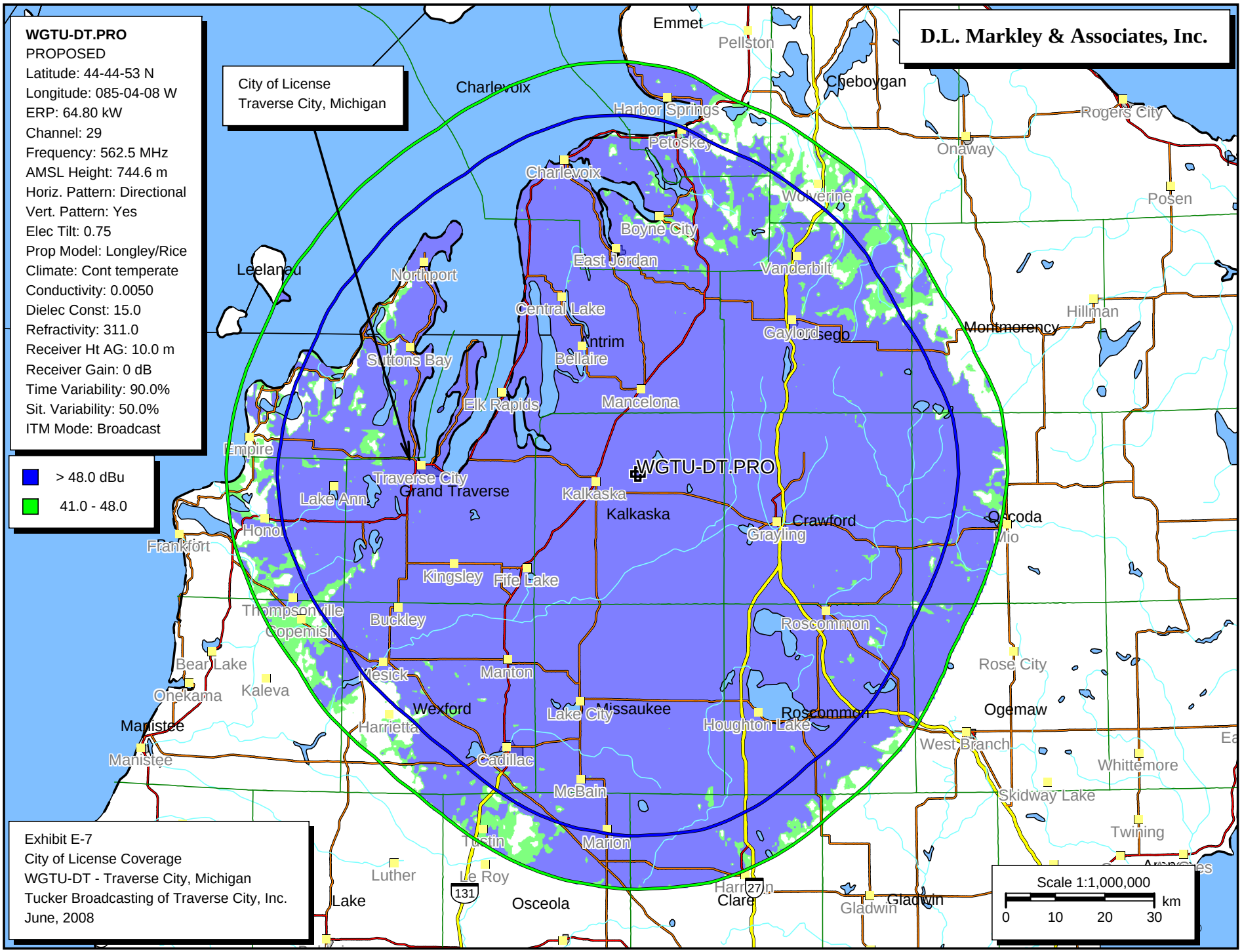
White:	318,928	(95.9%)
Black:	1,018	(0.3%)

Hispanic:	4,173	(1.3%)
Native American:	3,753	(1.1%)
Asian:	1,053	(0.3%)
Pacific Islander:	105	(0.0%)
Mixed Race:	3,299	(1.0%)
Other:	156	(0.0%)
Total:	332,485	

	Housing Units	Population	% of County
Michigan			
Antrim County			
County Pop	15,090	23,110	
WGTU-DT.PRO (29)	15,090	23,110	
Ix Free	15,090	23,110	100.00
Benzie County			
County Pop	10,312	15,998	
WGTU-DT.PRO (29)	5,861	10,506	
Ix Free	5,861	10,506	100.00
Charlevoix County			
County Pop	15,370	26,090	
WGTU-DT.PRO (29)	14,628	25,538	
Ix Free	14,628	25,538	100.00
Cheboygan County			
County Pop	16,583	26,448	
WGTU-DT.PRO (29)	1,447	2,163	
Ix Free	1,447	2,163	100.00
Clare County			
County Pop	22,229	31,252	
WGTU-DT.PRO (29)	8,845	10,530	
CIII-T (29+)	97	145	1.38
CIIITV (29+)	97	145	1.38
WUHQ-L (29Z)	39	38	0.36
Ix Free	8,748	10,385	98.62
Crawford County			
County Pop	10,042	14,273	
WGTU-DT.PRO (29)	10,042	14,273	
Ix Free	10,042	14,273	100.00
Emmet County			
County Pop	18,554	31,437	
WGTU-DT.PRO (29)	12,557	21,069	
Ix Free	12,557	21,069	100.00
Gladwin County			
County Pop	16,828	26,023	
WGTU-DT.PRO (29)	84	118	
CIII-T (29+)	0	0	0.00
CIIITV (29+)	0	0	0.00
Ix Free	84	118	100.00
Grand Traverse County			

County Pop	34,842	77,654	
WGTU-DT.PRO (29)	34,842	77,654	
Ix Free	34,842	77,654	100.00
Kalkaska County			
County Pop	10,822	16,571	
WGTU-DT.PRO (29)	10,822	16,571	
Ix Free	10,822	16,571	100.00
Lake County			
County Pop	13,498	11,333	
WGTU-DT.PRO (29)	20	39	
Ix Free	20	39	100.00
Leelanau County			
County Pop	13,297	21,119	
WGTU-DT.PRO (29)	12,687	20,590	
Ix Free	12,687	20,590	100.00
Manistee County			
County Pop	14,272	24,527	
WGTU-DT.PRO (29)	1,070	1,619	
Ix Free	1,070	1,619	100.00
Missaukee County			
County Pop	8,621	14,478	
WGTU-DT.PRO (29)	8,621	14,478	
Ix Free	8,621	14,478	100.00
Montmorency County			
County Pop	9,238	10,315	
WGTU-DT.PRO (29)	3,232	3,390	
Ix Free	3,232	3,390	100.00
Ogemaw County			
County Pop	15,404	21,645	
WGTU-DT.PRO (29)	567	483	
Ix Free	567	483	100.00
Osceola County			
County Pop	12,853	23,197	
WGTU-DT.PRO (29)	4,187	7,053	
CIIITV (29+)	36	80	1.13
Ix Free	4,151	6,973	98.87
Oscoda County			
County Pop	8,690	9,418	
WGTU-DT.PRO (29)	5,341	5,550	
Ix Free	5,341	5,550	100.00
Otsego County			
County Pop	13,375	23,301	
WGTU-DT.PRO (29)	13,372	23,301	
Ix Free	13,372	23,301	100.00
Roscommon County			
County Pop	23,109	25,469	
WGTU-DT.PRO (29)	22,980	25,346	
CIII-T (29+)	29	48	0.19
CIIITV (29+)	29	48	0.19
WUHQ-L (29Z)	29	48	0.19
Ix Free	22,951	25,298	99.81
Wexford County			

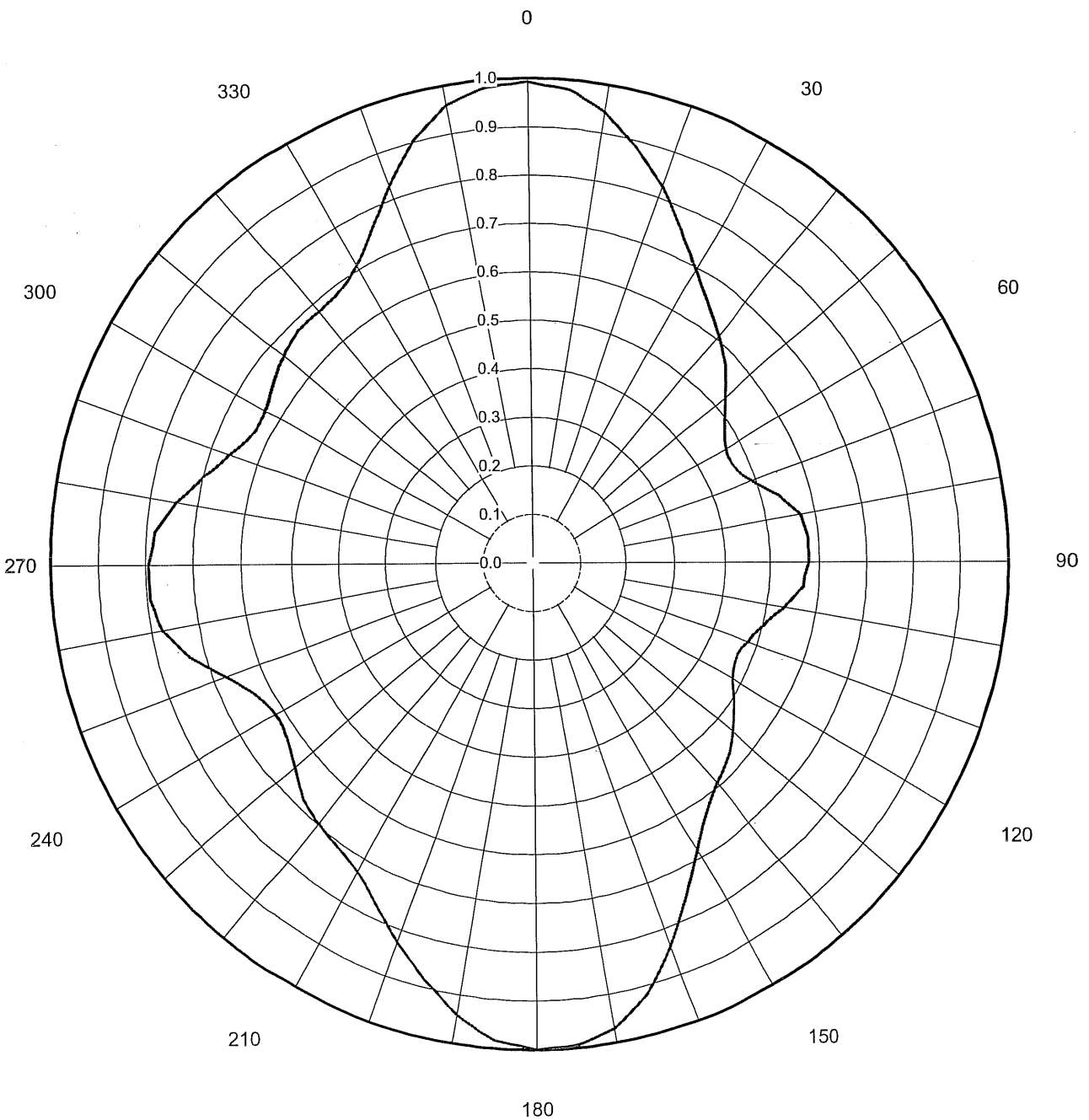
County Pop	14,872	30,484	
WGTU-DT.PRO (29)	13,984	29,464	
W29DJ (29Z)	54	87	0.30
Ix Free	13,930	29,377	99.70


WGTU-DT.PRO
PROPOSED
Latitude: 44-44-53 N
Longitude: 085-04-08 W
ERP: 64.80 kW
Channel: 29
Frequency: 562.5 MHz
AMSL Height: 744.6 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
> 48.0 dBu
41.0 - 48.0
City of License
Traverse City, Michigan
D.L. Markley & Associates, Inc.
WGTU-DT.PRO
Exhibit E-7
City of License Coverage
WGTU-DT - Traverse City, Michigan
Tucker Broadcasting of Traverse City, Inc.
June, 2008
Scale 1:1,000,000
0 10 20 30 km
Emmet
Pellston
Cheboygan
Charlevoix
Harbor Springs
Petoskey
Rogers City
Onaway
Wolverine
Posen
Boyne City
East Jordan
Vanderbilt
Leelanau
Northport
Central Lake
Hillman
Montmorency
Gaylord
Antrim
Bellaire
Suttons Bay
Elk Rapids
Mancelona
Empire
Traverse City
Grand Traverse
Lake Ann
Kalkaska
Crawford
Grayling
Oscoda
Mio
Frankfort
Kingsley
Fife Lake
Thompsonville
Buckley
Roscommon
Copemish
Bear Lake
Onekama
Kaleva
Manton
Rose City
Wexford
Lake City
Missaukee
Houghton Lake
Ogemaw
Manistee
Harrietta
West Branch
Cadillac
Whittemore
McBain
Skidway Lake
Twining
Marion
Luther
Le Roy
Lake
Osceola
Clare
Gladwin
131
27

Proposal Number	**DCA-10026**	Revision:	**2**
Date	**04-Nov-02**		
Call Letters	**WGTU**	Channel	**29**
Location	**Kalkaska, MI**		
Customer	**Central Michigan University**		
Antenna Type	**TUF-P4-12/48H-1**		

AZIMUTH PATTERN

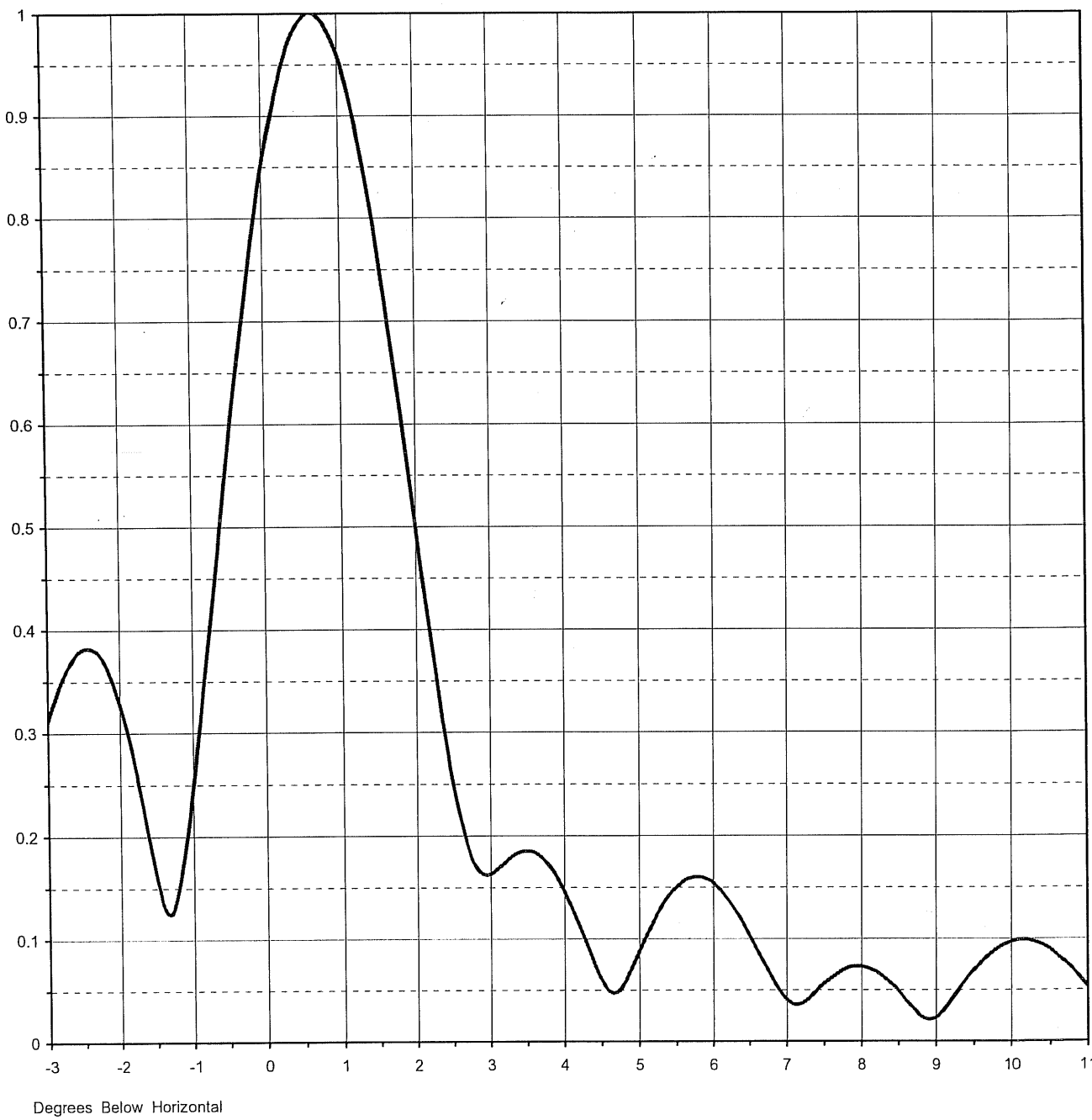
Gain	**1.92**	**(2.84 dB)**	
Calculated / Measured	**Calculated**		
Frequency	**563.00 MHz**		
Drawing #	**TUF-P4-563_2**		



Proposal Number	**DCA-10026**	Revision:	**2**
Date	**04-Nov-02**		
Call Letters	**WGTU**	Channel	**29**
Location	**Kalkaska, MI**		
Customer	**Central Michigan University**		
Antenna Type	**TUF-P4-12/48H-1**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**25.00 (13.98 dB)**	Beam Tilt	**0.75 deg**
RMS Gain at Horizontal	**18.10 (12.58 dB)**	Frequency	**563.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**12U250070**



Proposal Number	**DCA-10026**	Revision:	**2**
Date	**04-Nov-02**		
Call Letters	**WGTU**	Channel	**29**
Location	**Kalkaska, MI**		
Customer	**Central Michigan University**		
Antenna Type	**TUF-P4-12/48H-1**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**25.00 (13.98 dB)**	Beam Tilt	**0.75 deg**
RMS Gain at Horizontal	**18.10 (12.58 dB)**	Frequency	**563.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**12U250070-90**