Sterling Communications, Inc.

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This ENGINEERING STATEMENT is prepared for

Pine Tree Broadcasting, LLC

WRMO 84096 Milbridge, ME

Introduction:

This statement is being prepared on behalf of Pine Tree Broadcasting, LLC (PTB) in support of the minor change to the licensed facilities for WRMO (Facility ID 84096. Milbridge, Maine, Ch. 229, 93.7 MHz). The instant application is proposing the following changes to the technical specifications: increase of ERP from 22.5 kW to 27.0 kW, and a new directional antenna pattern.

Background:

PTB proposed an antenna location in application (BPH-20110805ABT) that did not meet the required §73.207 distance separation towards WCTB, channel 228, Fairfield, Maine and WARX, Channel 230, Lewiston, Maine. In the application PTB requested the use of §73.215 contour protection and demonstrated the proper compliance towards WCTB, and WARX maximum class facilities. The Commission authorized WRMO to broadcast with an ERP of 22.5 kilowatts with a RCAGL of 109 meters.

Proposed Technical Parameters:

The new proposed operation of WRMO will remain at the existing transmitter site authorized in PTB's license, but will increase the effective radiated power to 27.0

kilowatts at a radiation center above ground level of 109 meters with a height above average terrain of 204 meters on channel 229 (93.7 MHz)and will change the Directional Antenna pattern used by WRMO.

Figure 1 of this exhibit provides the §73.207 distance separation to the surrounding FM stations. The proposed site does not meet the required §73.207 distance separation towards WCTB, channel 228, Fairfield, Maine or WARX, Channel 230, Lewiston, Maine. The required distance between the stations is set forth in Figure 1.

Figure 2 of this exhibit shows that the proposed WRMO facilities comply with §73.315 of the Commissions rules providing the 70 dBu contour over the entire principal community of Milbridge, ME.

In order to avoid interference to WTCB, the applicant is proposing to use §73.215 contour protection. Figure 3 of this exhibit shows the predicted overlap contours for WTCB, WARX and the proposed facilities for WRMO pursuant to §73.215 contour protection methodology. The contours of WCTB are based on Maximum class C3 facilities. The contours of WARX are based on Maximum Class B facilities. Figure 3 demonstrates there will be no prohibited overlap between the proposed parameters for WRMO and existing contours of WARX, pursuant to the Commission's predictive contour protection rules. However, Figure 3 of this exhibit shows predicted contour overlap between the proposed parameters or WRMO and the existing predicted contours of WCTB. Figure 4 of this exhibit provides a detailed view of the contour overlap with WCTB from WRMO, using the FCC's predictive contour methods under §73.215. Figure 4 shows that, using the FCC predicted Contour overlap method, there is interference to a total of 74,973 persons within an area 966.38 square kilometers.

Detailed Interference Study; Longley Rice Method; Request for Waiver:
The Commission's acceptance of alternative propagation methods to predict interference requires an applicant proposing such alternative methods to demonstrate that the terrain varies widely from that on which the FCC curves (and its predicted overlap analysis) were based. Figures 5 – 7 demonstrate that significant terrain exists between WRMO and WTCB. Accordingly, the Longley-Rice interference study undertaken as an alternative interference analysis to the Commission's predictive methodology should be permitted. The Longley-Rice analysis demonstrates that there is no actual prohibited interference between the WRMO and WTCB contours.

Figures 5 through 7 show the terrain profiles between WTCB and the proposed facilities of WRMO between the beginning of the contour overlap at azimuth from WRMO of 311.28 degrees true north, the middle of the overlap at 281.59 degrees, and the end of the overlap at 235.77 degrees. In this case, it is clear that the terrain is more rugged than that which was envisioned in the Commission's standard curves. It is clear that the terrain obstruction caused by the intervening mountains significantly limits radio propagation predicted by the FCC methodology.

Figure 8 shows the results of the Longley-Rice contour analysis used to calculate the contours for WRMO and WCTB at the §73.215 maximum class facilities. Figure 8 demonstrates that the 48 dBu interference contour for WTCB falls well short of the standard 54 dBu protected Contour of WRMO. The Longley-Rice study thus demonstrates that there will be no prohibited interference to either population or area in the predicted contour overlap area.

Conclusion:
PTB respectfully request that, if the Commission deems a waiver of 73.215 necessary to a grant of this application, that such a waiver be granted. The current WRMO licensed facilities provide a service to 54,693 persons with a total

area of 9,690 square kilometers. The proposed parameters provide a service to 157,031 persons with a total area of 12,257.1 square kilometers. If the Commission grants this application and waiver request, the proposed facilities will provide a total gain in service to 102,338 persons and to an area of 2567.1 square kilometers within the primary 54 dBu contour. The above Longley-Rice calculation demonstrates that significant terrain exists between the facilities of WTCB and the proposed facilities of WRMO, and that no prohibited interference will actually occur in the predicted overlap area. The instant application would provide a significant increase in population and area covered by WRMO while providing no prohibited interference to WCTB. Such gains are clearly in the public interest, and warrant grant of a waiver, as necessary, and this application.

Respectfully,

Danny Langston
Technical Consultant
November 7, 2012
DAL/aml

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Figure 1
WRMO
Pine Tree Broadcasting, LLC
§73.207 Separations
Milbridge, Maine

Search of Channel 229 (93.7 MHz Class B) at 44-38-33.0 N, 68-10-18.0 W.

CALL	CITY	ST	CHN	CL	DIST(km)	SEP(km)	BRNG	CLEARANCE
WCTB*	FAIRFIELD	ME	228	C3	121.07	145.00	276.0	-23.9
WARX*	LEWISTON	ME	230	B	157.53	169.00	250.0	-11.5
WRFR-LP	ROCKLAND	ME	227	LP100	95.46	67.00	232.0	28.5

Figure 2
Pine Tree Broadcasting, LLC
Community Coverage
Milbridge, Maine

State Borders City Borders Lat/Lon Grid

Map Scale: 1:446289 1 cm = 4.46 km V|H Size: 80.41 x 80.14 km

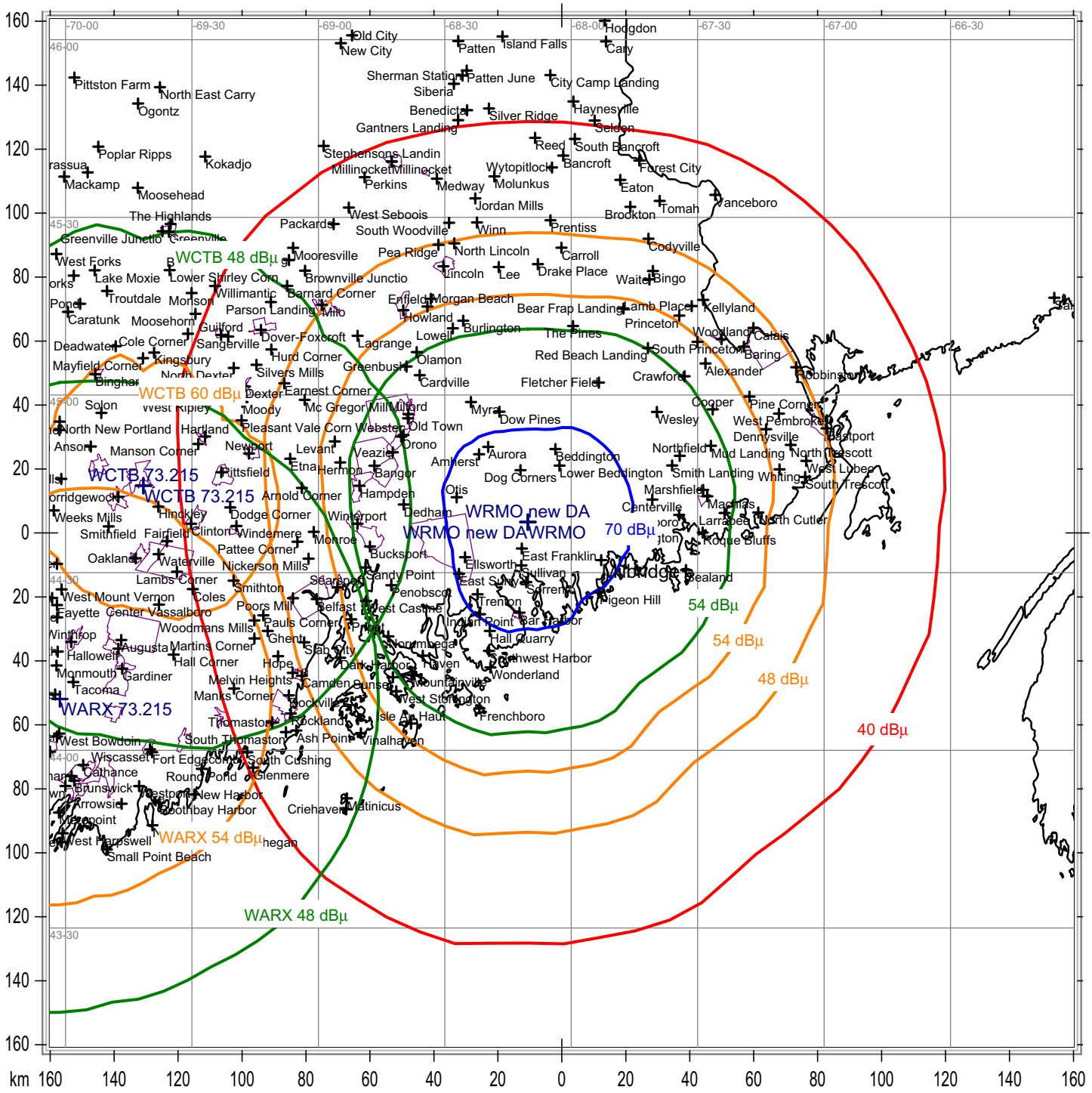


Figure 3
Pine Tree Broadcasting, LLC
§73.215 contour Protection
Milbridge, Maine

State Borders City Borders Lat/Lon Grid

Map Scale: 1:1785156 1 cm = 17.85 km V|H Size: 321.62 x 320.55 km

Detailed View of Overlap with WCTB Max Facilitys

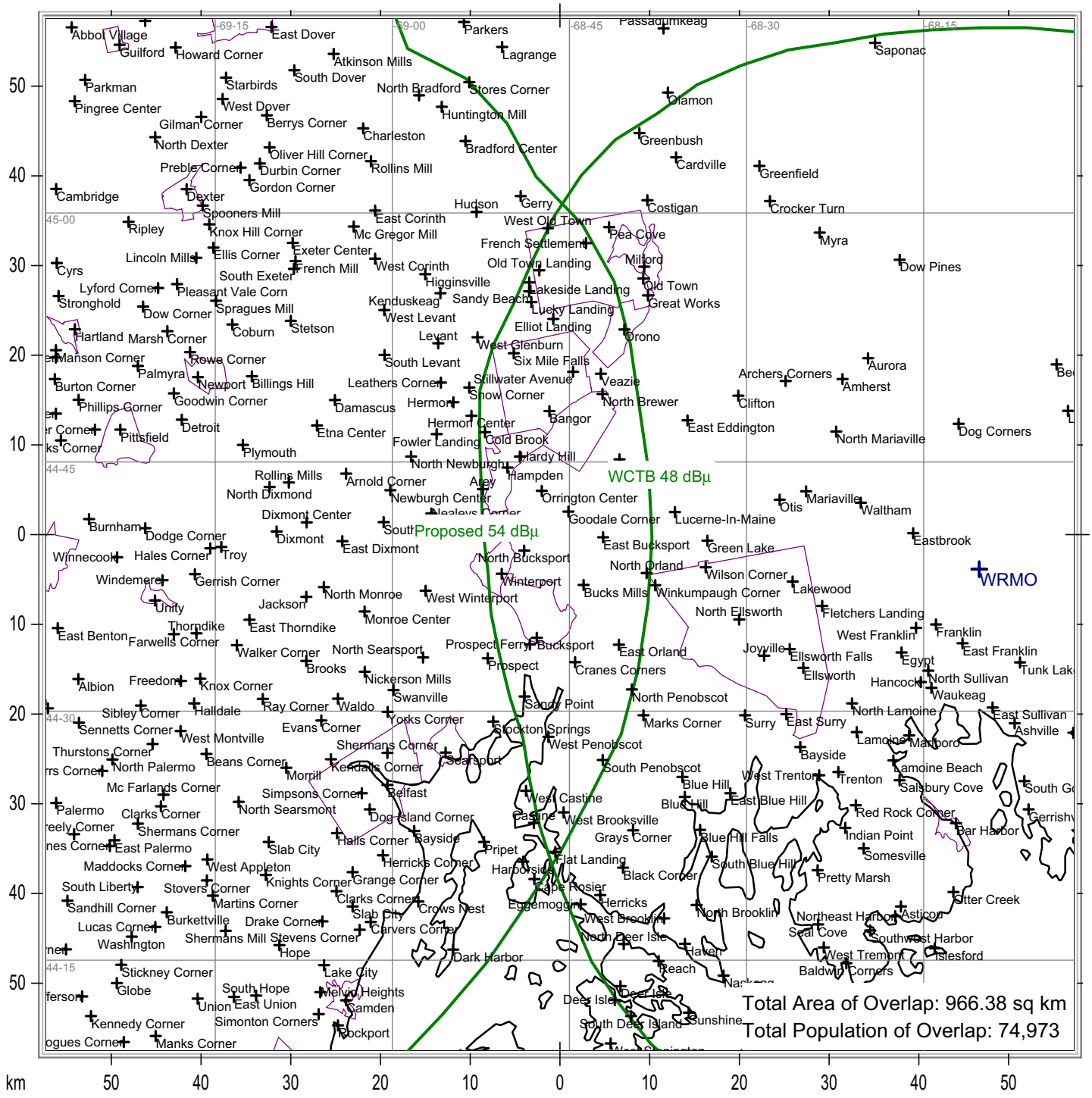
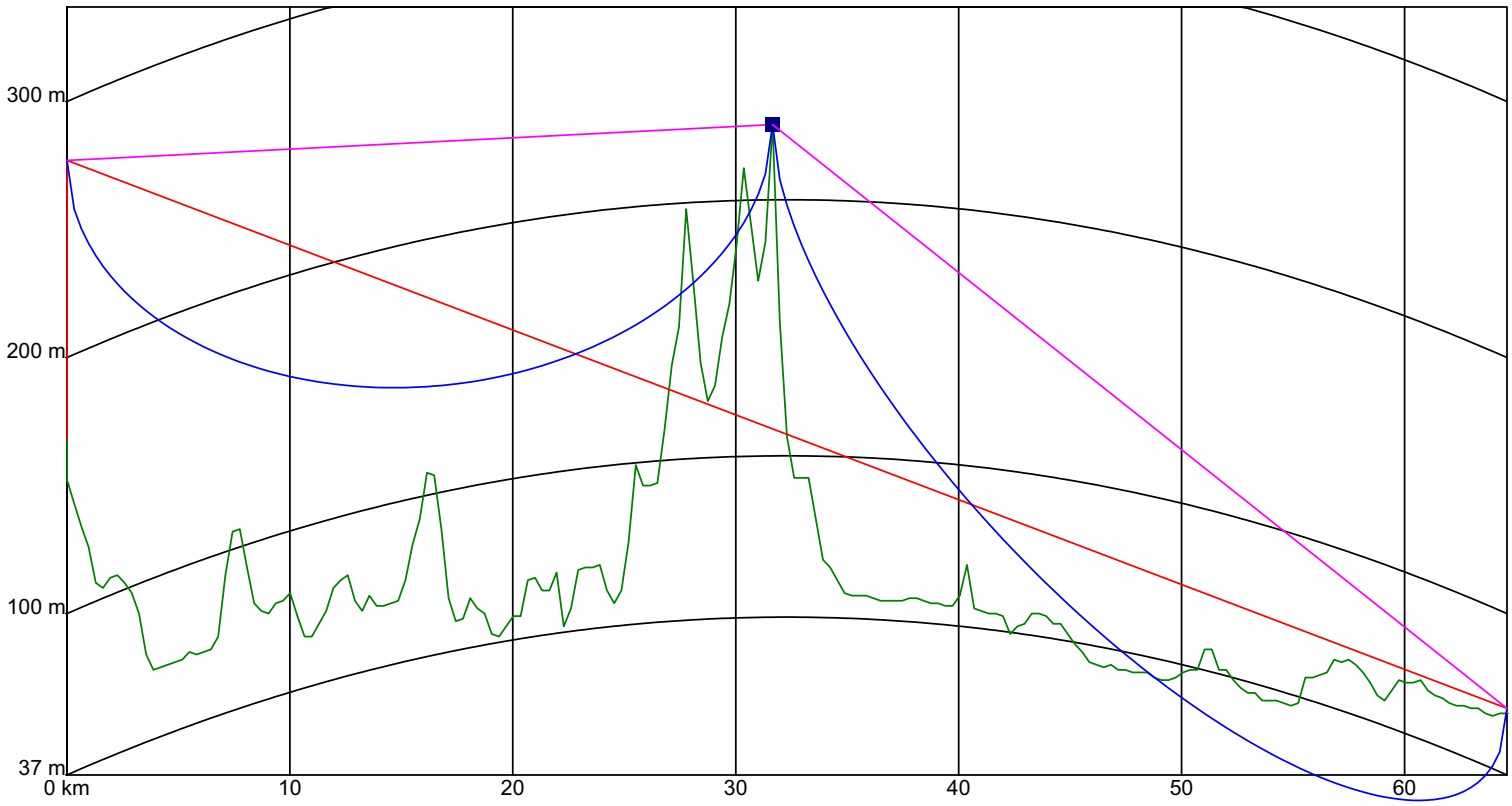


Figure 4
Pine Tree Broadcasting, LLC
Proposed Overlap with WCTB
Milbridge, Maine

State Borders City Borders Lat/Lon Grid

Map Scale: 1:638461 1 cm = 6.38 km V|H Size: 115.03 x 114.65 km

Figure 5 311.28 degree Path Profile



WRMO

Lat:	44-38-33.0 N
Lon:	68-10-18.0 W
AMSL:	168 m
Tower AGL:	109 m

Receiver 1

Lat:	45-01-27.0 N
Lon:	68-47-21.9 W
AMSL:	61 m
Tower AGL:	2 m

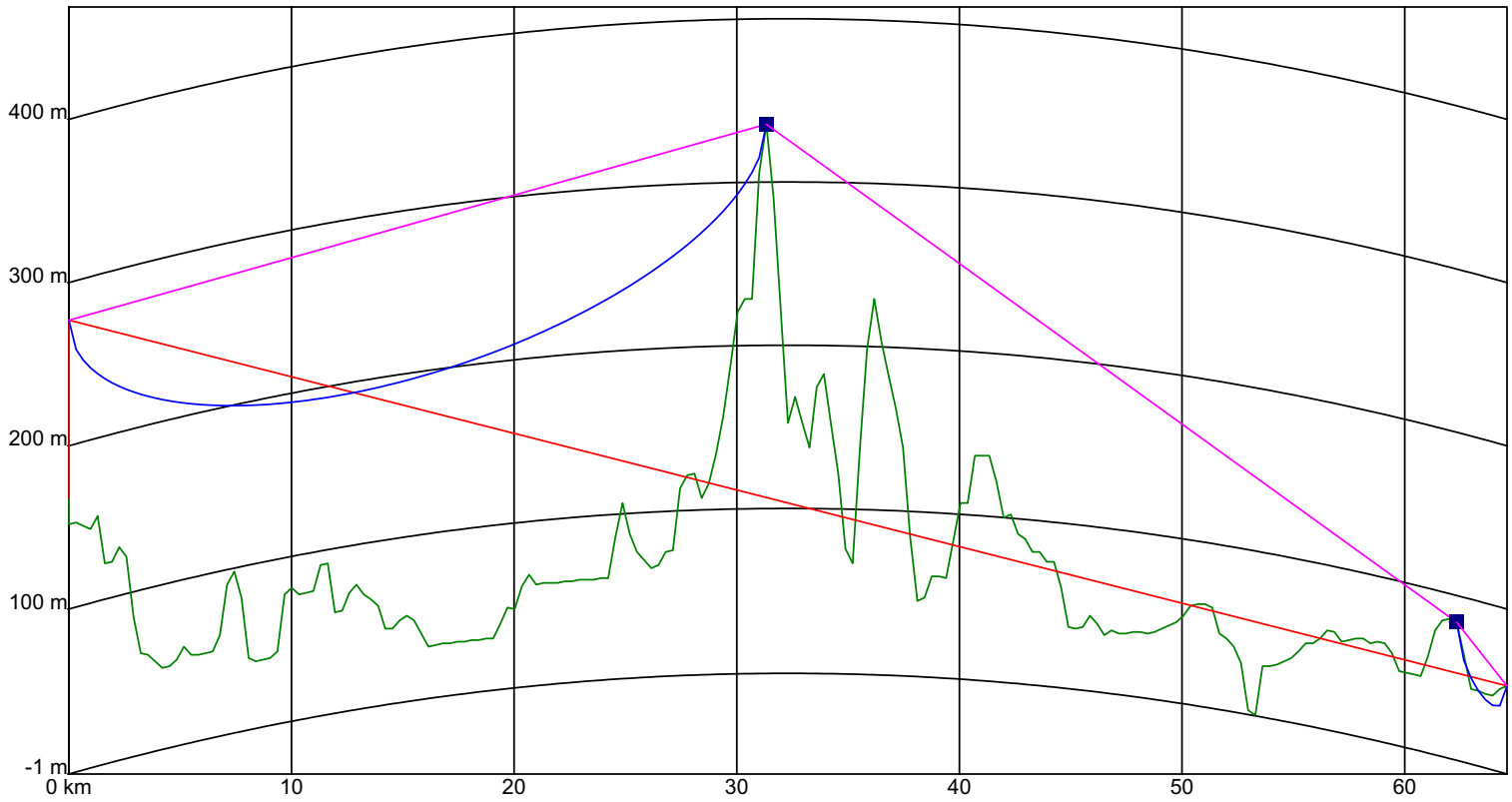
Profile Info

Distance:	64.60 Km
Bearing:	311.28 deg
# of points	200
K value:	1.330
Frequency:	93.7000
Clearance:	0.6

Losses

Base Loss:	144.3 dB
Fade Margin:	N/A
Diffraction:	24.8 dB
Fresnel:	11.3 dB

Figure 6 281.59 degree Path Profile



WRMO

Lat:	44-38-33.0 N
Lon:	68-10-18.0 W
AMSL:	168 m
Tower AGL:	109 m

Receiver 2

Lat:	44-45-23.1 N
Lon:	68-58-23.6 W
AMSL:	51 m
Tower AGL:	2 m

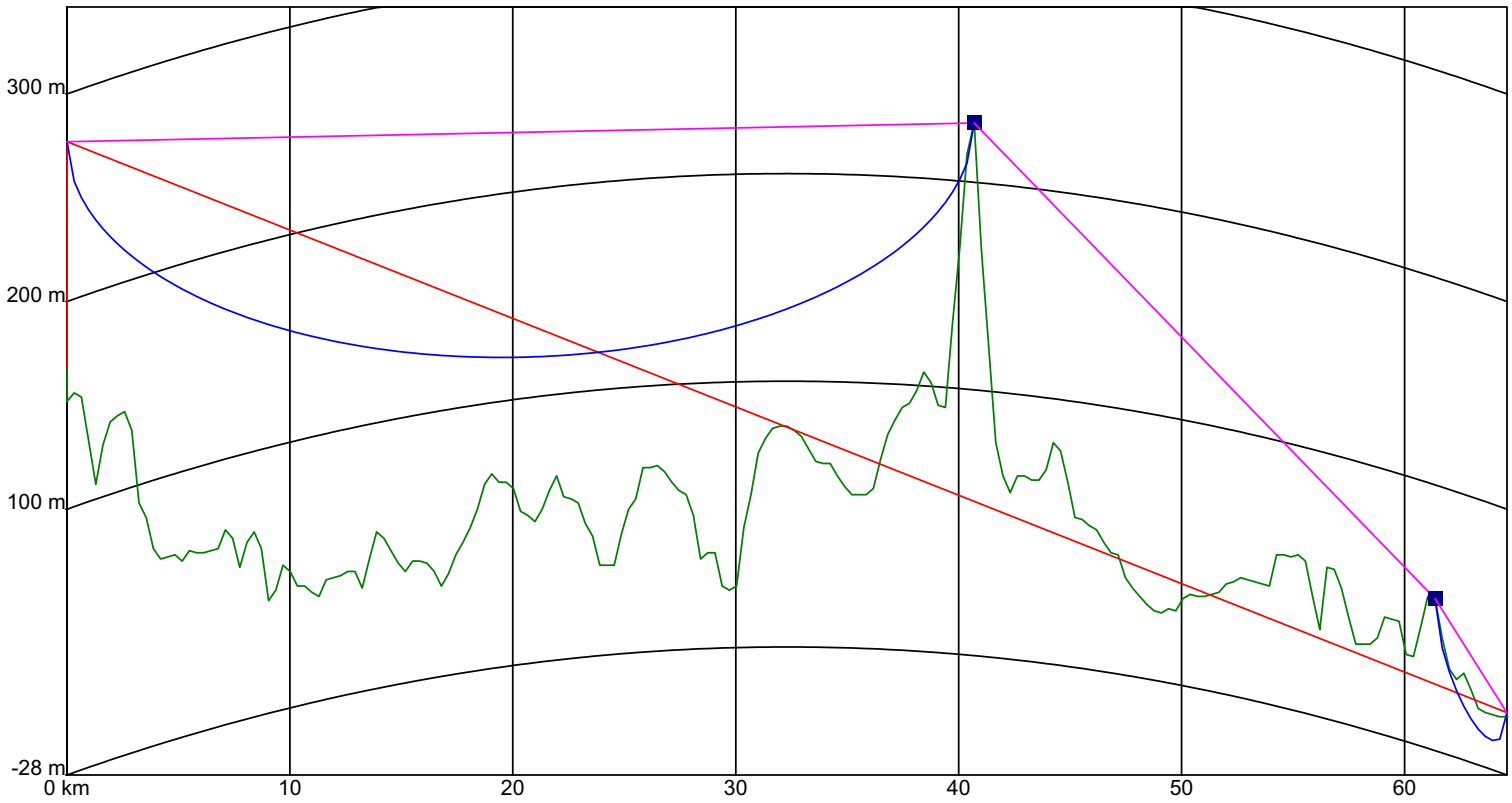
Profile Info

Distance:	64.60 Km
Bearing:	281.59 deg
# of points	200
K value:	1.330
Frequency:	93.7000
Clearance:	0.6

Losses

Base Loss:	144.3 dB
Fade Margin:	N/A
Diffraction:	22.5 dB
Fresnel:	10.7 dB

Figure 7 235.77 degree Path Profile



WRMO

Lat:	44-38-33.0 N
Lon:	68-10-18.0 W
AMSL:	168 m
Tower AGL:	109 m

Receiver 3

Lat:	44-18-49.2 N
Lon:	68-50-35.0 W
AMSL:	0 m
Tower AGL:	2 m

Profile Info

Distance:	64.60 Km
Bearing:	235.77 deg
# of points	200
K value:	1.330
Frequency:	93.7000
Clearance:	0.6

Losses

Base Loss:	144.3 dB
Fade Margin:	N/A
Diffraction:	34.7 dB
Fresnel:	11.4 dB

WCTB Longley-Rice Contour 73.215 Max Class

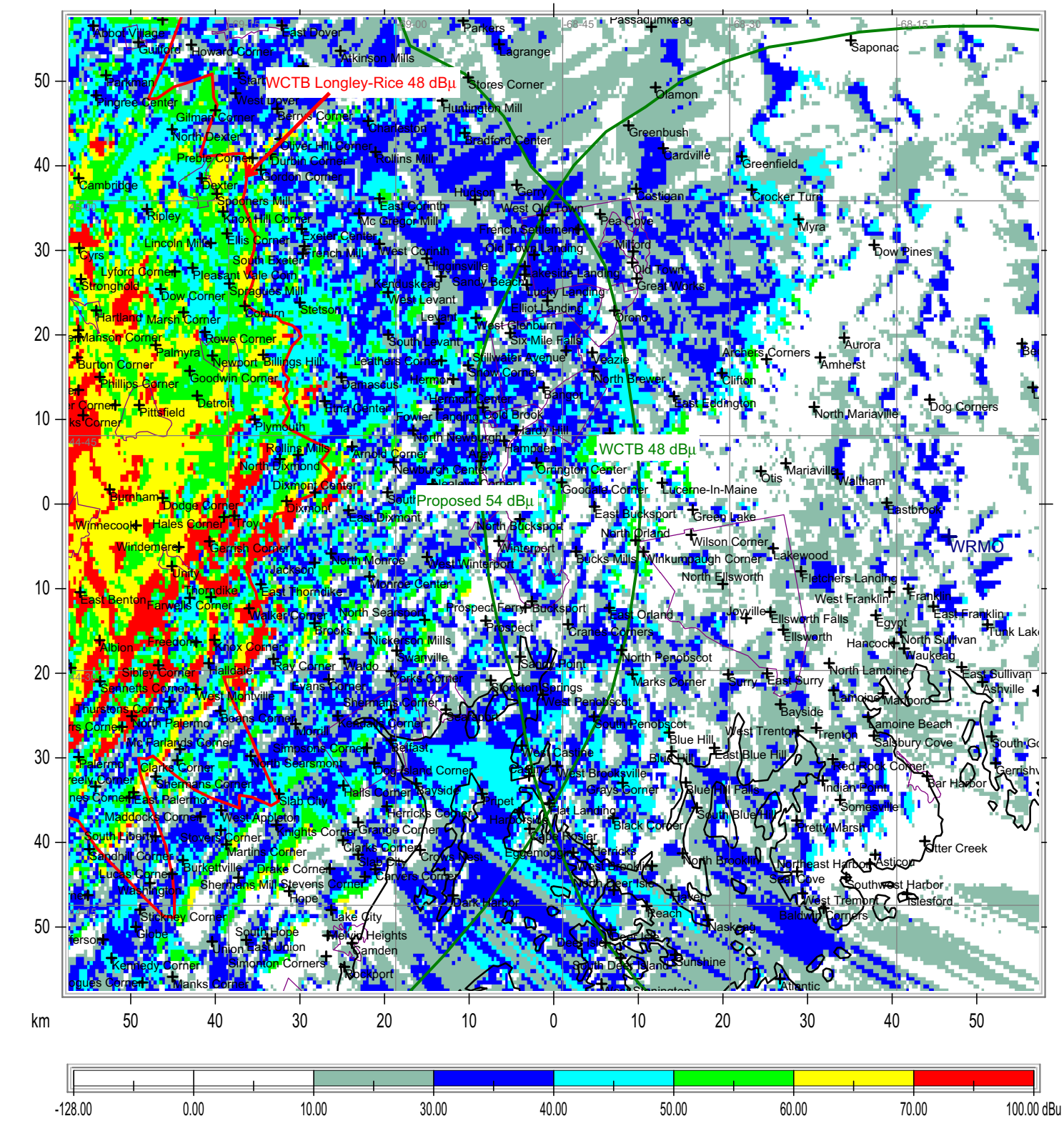


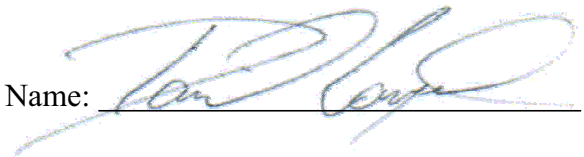
Figure 8
Pine Tree Broadcasting, LLC
WCTB Longley-Rice Contour
Milbridge, Maine

State Borders City Borders Lat/Lon Grid

Map Scale: 1:638461 1 cm = 6.38 km V|H Size: 115.03 x 114.65 km

CERTIFICATION

I, Danny Langston, hereby certify that I am a technical consultant with Sterling Communications, Inc., that I have prepared the foregoing Technical Statement and Exhibits on behalf of Pine Tree Broadcasting, LLC, and that the foregoing Statement and Exhibits and true and correct, to the best of my knowledge and information.

Name: 

Title: Chief Engineer