

Statement B
INTERFERENCE CONSIDERATIONS
 prepared for
WGBH Educational Foundation
 WGBH (FM) Boston, Massachusetts
 Ch. 209B 21 kW 323 m

WGBH Educational Foundation (“*WEF*”) proposes to side-mount the WGBH transmitting antenna on an existing tower structure, currently employed by various other facilities, as depicted in **Figure 1**. The WGBH antenna will be able to accommodate additional FM stations for use as a common antenna. The use of appropriate combining and isolation equipment with the common antenna is expected to prevent any undesired interaction between the operation of the proposed WGBH and other users of the common facility.

There are numerous proposed or authorized TV and FM facilities within 60 meters and within 10 km of the proposed site, as listed below (according to the Commission’s database). There are no authorized AM broadcast facilities within 3.2 kilometers of the site.

<u>Facility</u>		<u>Channel</u>	<u>City, State</u>	<u>Distance (km)</u>
WGBH-TV	(Lic & CP)	2	Boston, MA	0.00
WBZ-TV	(Lic & APP)	4	Boston, MA	0.00
WCVB-TV	(Lic & APP)	5	Boston, MA	0.00
WHDH-TV	(Lic)	7	Boston, MA	1.70
WMFP-DT	(APP)	18	Lawrence, MA	0.00
WGBH-DT	(APP)	19	Boston, MA	0.00
WCVB-DT	(Lic & APP)	20	Boston, MA	0.00
W24CM	(Lic)	24	Boston, MA	1.12
WFXT (TV)	(Lic)	25	Boston, MA	1.70
WBZ-DT	(CP)	30	Boston, MA	0.00
WFXT-DT	(Lic & APP)	31	Boston, MA	1.70
WPX-DT	(APP)	32	Boston, MA	1.12
WSBK-TV	(Lic)	38	Boston, MA	1.70
WSBK-DT	(APP)	39	Boston, MA	1.70
W40BO	(CP)	40	Boston, MA	1.12
WCEA-LP	(APP)	40	Boston, MA	1.12
WLVI-DT	(APP)	41	Cambridge, MA	1.70
WHDH-DT	(LIC)	42	Boston, MA	1.70
WGBX-DT	(APP)	43	Boston, MA	0.00
WGBX-TV	(Lic & APP)	44	Boston, MA	0.00
W54CN	(Lic)	54	Boston, MA	1.12
WLVI-TV	(Lic)	56	Cambridge, MA	1.70

Statement B
INTERFERENCE CONSIDERATIONS
(page 2 of 2)

<u>Facility</u>	<u>Channel</u>	<u>City, State</u>	<u>Distance (km)</u>
WZBC (FM) (Lic)	212A	Newton, MA	5.78
WBUR-FM (Lic & APP)	215B	Boston, MA	1.12
WZLY (FM) (Lic)	218D	Wellesley, MA	5.97
WBOS (FM) (Lic)	225B	Brookline, MA	1.12
WJMN (FM) (Lic)	233B	Boston, MA	1.12
WBMX (FM) (Lic)	253B	Boston, MA	1.12
WBRF (FM) (Lic)	261D	Waltham, MA	6.76
WCRB (FM) (Lic)	273B	Waltham, MA	0.00
WCRB (FM) (CP) ¹	273B	Waltham, MA	1.12
WODS (FM) (Lic)	277B	Boston, MA	1.12

According to the applicant, no known receiving stations are located nearby. The potential for interference is possible with respect to the facilities listed herein. Due to the frequency separations and distances to most of the facilities involved, however, unresolvable interference is not believed to be likely. *WEF* is aware of its responsibility to correct any interference problems, including receiver-induced intermodulation interference. Mitigative measures may include, but are not limited to, the use of additional filters, traps, and other such devices as appropriate.

The radius of the blanketing contour for a 21 kW effective radiated power FM station extends 1.8 km from the transmitter site, calculated according to the prediction method set forth in §73.318(a). The area encompassed by this distance does contain some residences. While new instances of blanketing interference is not expected (due to much of the same area being encompassed by the blanketing contour of existing stations), *WEF* is aware of and will meet its obligation to remedy complaints of blanketing interference to the extent required by §73.318 of the Commission's rules. Remedial measures may include, but are not limited to, the use of traps, filters, or other appropriate means.

¹WCRB has dismantled its licensed facility and is presently operating with its CP facility, according to representatives of *WEF*.

42° 22' 30" 42° 22' 30"

316

317

318 12' 30"

319

320

FIGURE 2 PROPOSED TRANSMITTER SITE

prepared February 2000 for
WGBH Educational Foundation
WGBH(FM) Boston, Massachusetts

Ch. 209B 21kW 323 m

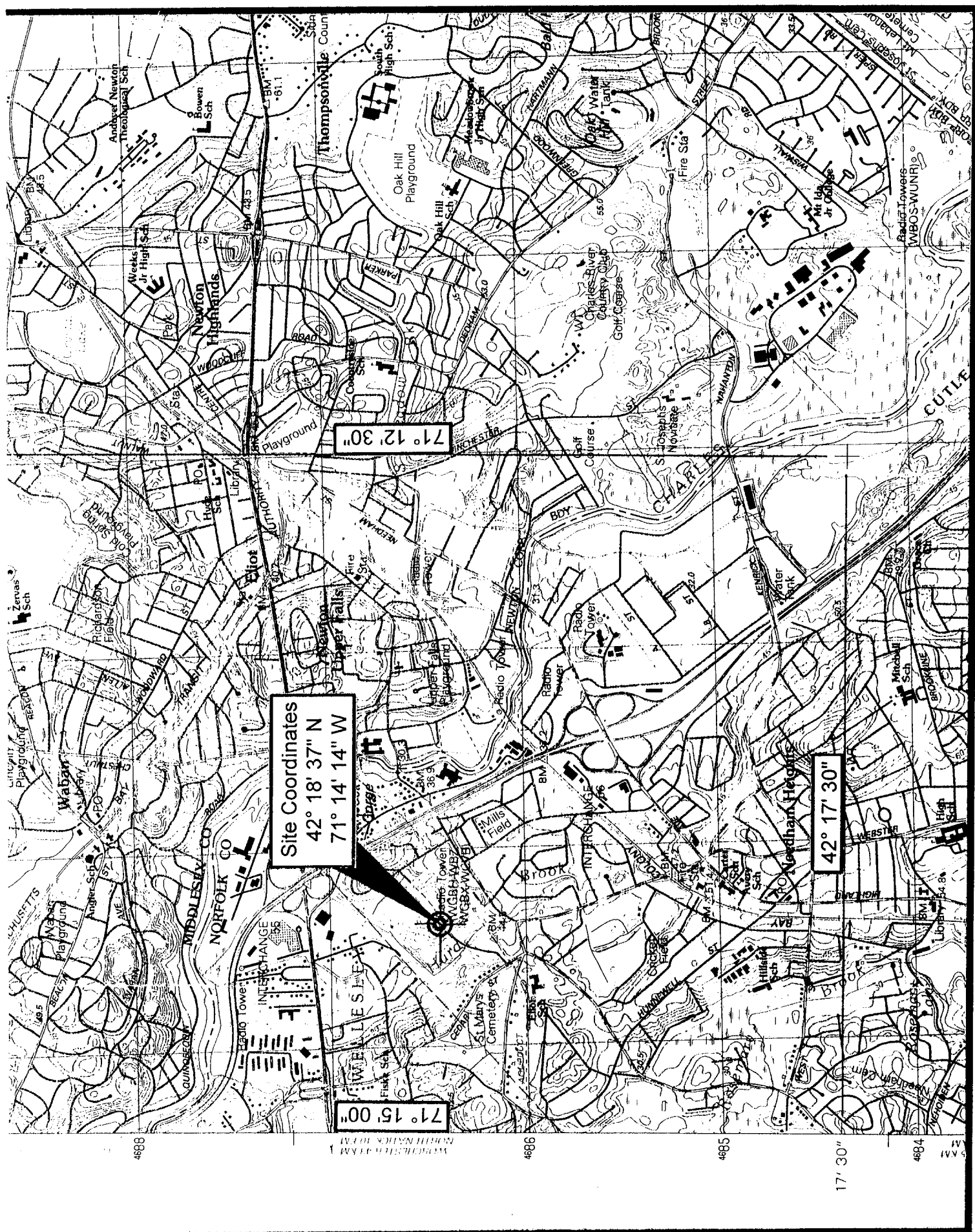
Cavell, Mertz and Davis, Inc.
Fairfax, Virginia

Contour Interval 3 Meters

Boston South, Massachusetts
7.5 x 15 Minute Series (Topographic)

KILOMETERS 1 0 5 1
MILES 1 0 5 1

Be 42° 20' 00"



Site Coordinates
42° 18' 37" N
71° 14' 14" W

71° 12' 30"

42° 17' 30"

71° 15' 00"

17' 30"

Vermont, New Hampshire,
Rhode Island, Connecticut
and Massachusetts
1:1,000,000

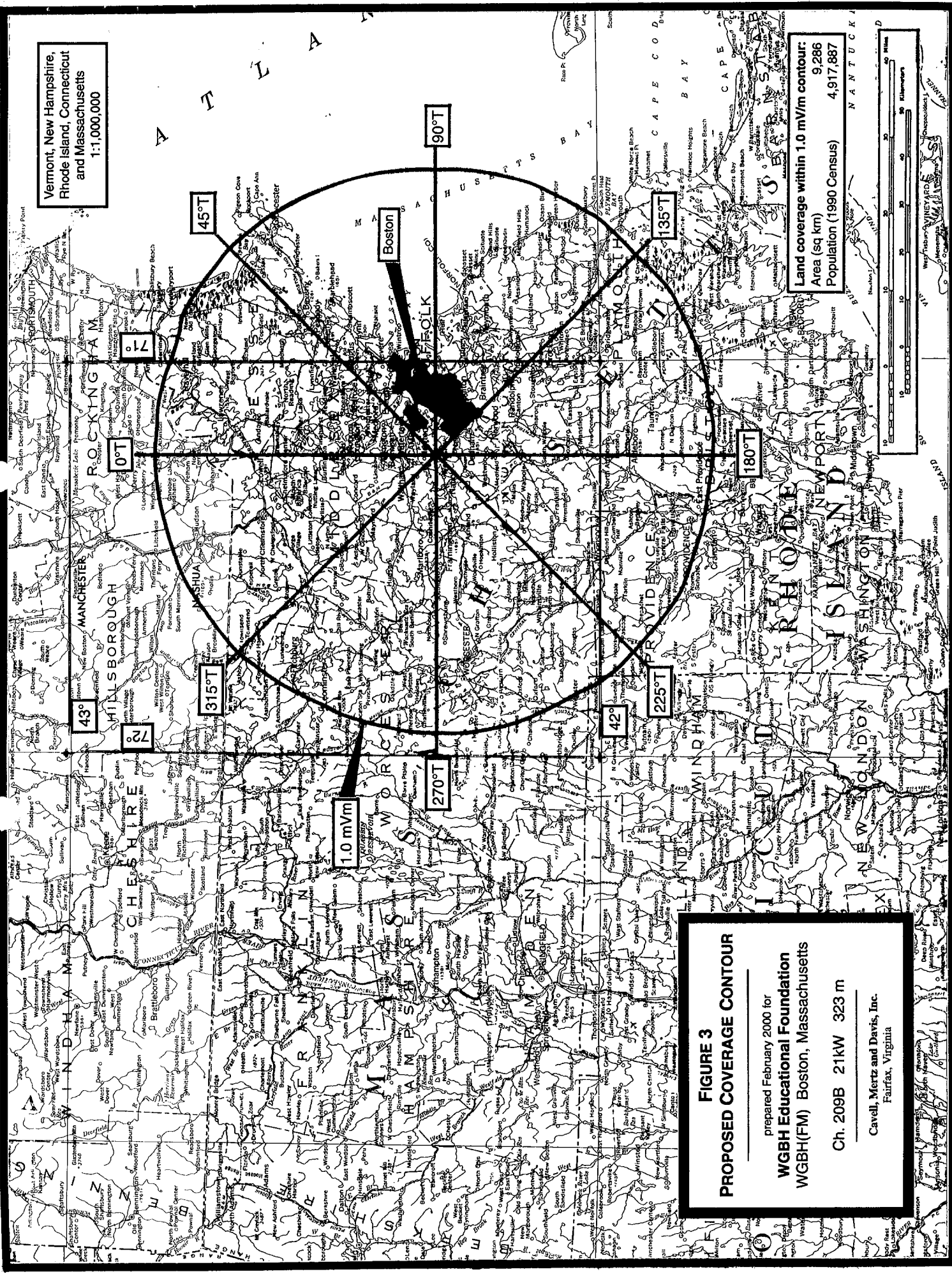
Land coverage within 1.0 mV/m contour:
Area (sq km) 9,286
Population (1990 Census) 4,917,887

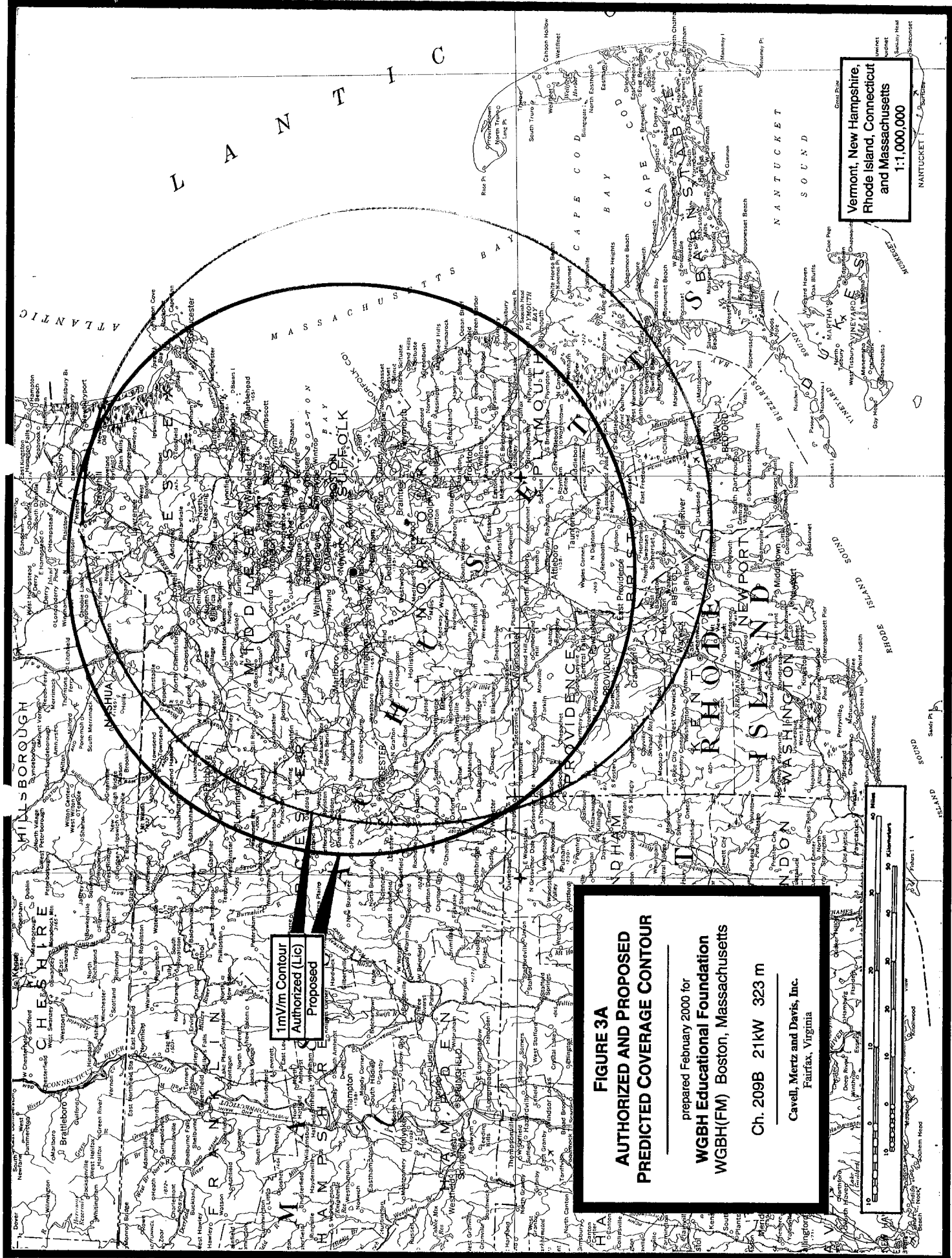
FIGURE 3
PROPOSED COVERAGE CONTOUR

prepared February 2000 for
WGBH Educational Foundation
WGBH(FM) Boston, Massachusetts

Ch. 209B 21kW 323 m

Cavell, Mertz and Davis, Inc.
Fairfax, Virginia





1mV/m Contour
Authorized (Lic)
Proposed

FIGURE 3A
AUTHORIZED AND PROPOSED
PREDICTED COVERAGE CONTOUR

prepared February 2000 for
WGBH Educational Foundation
WGBH(FM) Boston, Massachusetts

Ch. 209B 21kW 323 m

Cavell, Mertz and Davis, Inc.
Fairfax, Virginia

Vermont, New Hampshire,
Rhode Island, Connecticut
and Massachusetts
1:1,000,000

