TABLE IV
COMPUTED CONTOUR DATA
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993

Azimuth N °E,T	Height of* Radiation Center Above Average Elevation of Radial 3 to 16 km meters	Effective Radiated Power kW	F(50,10) Computed Distance to Contour 89 dBu km
115	79	50.0	8.1
120	82	50.0	8.3
125	82	50.0	8.3
130	80	50.0	8.2
135	81	50.0	8.3
140	89	50.0	8.7
145	93	50.0	8.8
150	98	50.0	9.1
155	102	50.0	9.3
160	103	50.0	9.3
165	102	50.0	9.3
170	100	50.0	9.2
175	100	50.0	9.2
180	101	50.0	9.2
185	102	50.0	9.3
190	103	50.0	9.4
195	104	50.0	9.4
200	105	50.0	9.4
205	106	50.0	9.5
210	106	50.0	9.5
215	106	50.0	9.5
220	106	50.0	9.5
225	106	50.0	9.5

TABLE IV
COMPUTED CONTOUR DATA
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993

Azimuth N °E,T	Height of* Radiation Center Above Average Elevation of Radial 3 to 16 km meters	Effective Radiated Power kW	F(50,10) Computed Distance to Contour 89 dBu km
230	106	50.0	9.5
235	105	50.0	9.4
240	104	50.0	9.4
245	102	50.0	9.3
250	99	50.0	9.1
255	95	50.0	9.0
260	90	50.0	8.7
265	88	41.3	8.2
270	89	32.8	7.8
275	89	26.1	7.3
280	88	20.7	6.9
285	87	16.4	6.5
290	87	13.1	6.1
295	83	10.4	5.7
300	81	8.2	5.3
305	80	6.6	5.0
310	79	5.2	4.6
315	77	4.2	4.3
320	75	3.6	4.1
325	73	3.0	3.9
330	72	3.0	3.9
335	70	3.0	3.8
340	71	3.0	3.8

TABLE IV
COMPUTED CONTOUR DATA
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993

Azimuth N °E,T	Height of* Radiation Center Above Average Elevation of Radial 3 to 16 km meters	Effective Radiated Power kW	F(50,10) Computed Distance to Contour 89 dBu km
345	73	3.0	3.9
350	76	3.0	3.9
355	77	3.0	4.0

* Based on NGDC 30-second data base.

Channel 219B (91.7 MHz)
Maximum Effective Radiated Power 50 kW (16.99 dBk)
Average Elevation 3 to 16 km 18.4 meters AMSL
Center of Radiation 107 meters
Antenna Height Above Average Terrain 88.6 meters

North Latitude: 38° 19′ 13"
West Longitude: 76° 40′ 10"

TABLE V
COMPUTED CONTOUR DATA
FOR WTVR-TV, CHANNEL 6
RICHMOND, VIRGINIA
MAY 1993

Azimuth N °E,T	Height of* Radiation Center Above Average Elevation of Radial 3 to 16 km meters	Effective Radiated Power kW	F(50,10) Computed Distance to Contour 47 dBu km
0	259	100	99.8
45	279	100	101.7
90	287	100	102.4
135	291	100	102.8
180	269	100	100.8
225	257	100	99.6
270	260	100	99.9
315	249	100	98.8

* Based on NGDC 30-second data base and rounded to nearest meter.

Channel 6 (82-88 MHz)
Maximum Effective Radiated Power 100 kW (20 dBk)
Center of Radiation 320 meters
Antenna Height Above Average Terrain 256 meters

North Latitude: 37° 34′ 00"
West Longitude: 77° 28′ 36"

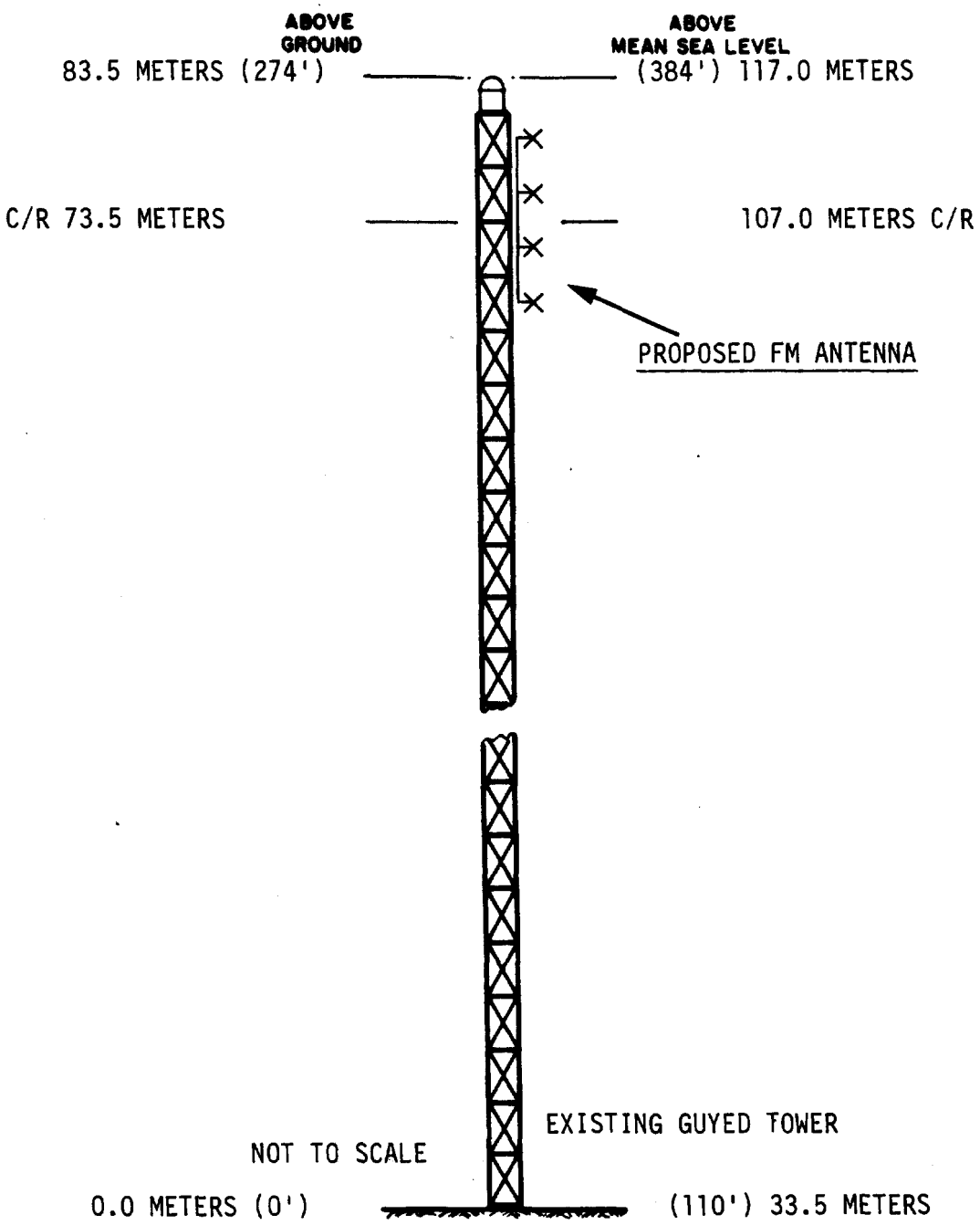


EXHIBIT E-1
VERTICAL SKETCH
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, DC

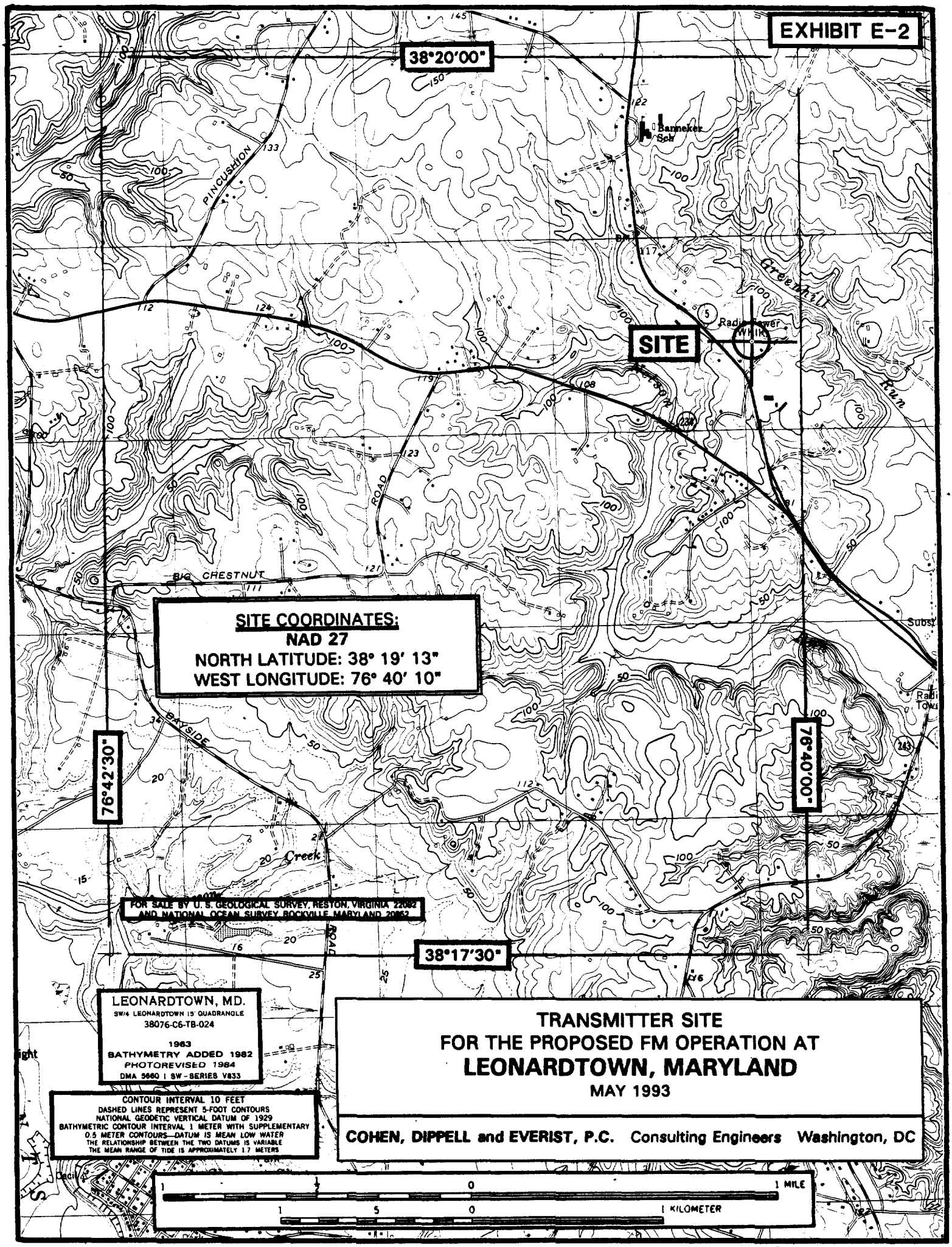


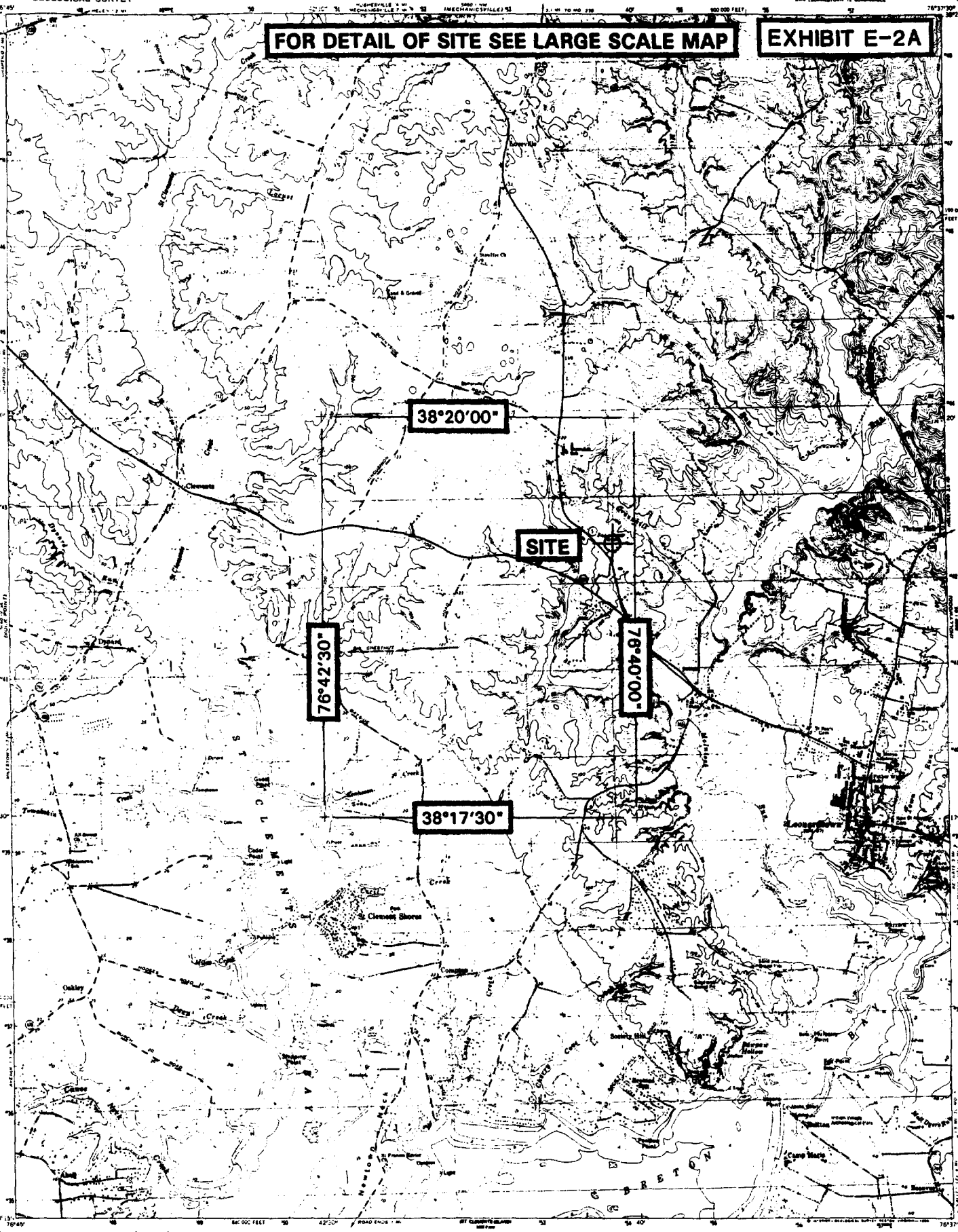
EXHIBIT E-2
38°20'00"
SITE
Banneker Sch
PINCUSHION
Greenhill
Run
BIG CHESTNUT
ROAD
BAYSIDE
Creek
Subst
76°42'30"
76°40'00"
38°17'30"
SITE COORDINATES:
NAD 27
NORTH LATITUDE: 38° 19' 13"
WEST LONGITUDE: 76° 40' 10"
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SURVEY, ROCKVILLE, MARYLAND 20852
LEONARDTOWN, MD.
SW/4 LEONARDTOWN 15' QUADRANGLE
38076-C6-TB-024
1963
BATHYMETRY ADDED 1982
PHOTOREVISED 1984
DMA 5660 I SW-SERIES V833
CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVAL 1 METER WITH SUPPLEMENTARY
0.5 METER CONTOURS—DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1.7 METERS
TRANSMITTER SITE
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993
COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, DC
1 0 1 MILE
1 5 0 1 KILOMETER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

7.5 MINUTE SERIES (TOPOGRAPHIC - BATHYMETRIC)

FOR DETAIL OF SITE SEE LARGE SCALE MAP

EXHIBIT E-2A



Mapped, edited, and published by the Geological Survey and the National Ocean Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1961. Field checked 1963

Bathymetry compiled by the National Ocean Survey from hydrographic surveys. This information is not intended for navigational purposes

Mean low water (shallow) line and mean high water (heavy solid) line compiled by NOS from hydrographic surveys. Approximate shoreline (edge of vegetation) shown by light solid line

Polyconic projection. 10,000 foot grid ticks based on Maryland coordinate system

10,000-meter Universal Transverse Mercator grid, zone 18

1927 North American Datum

To place on the projected North American Datum 1983 move the projection lines 9 meters south and 27 meters west as shown by dashed corner ticks

Fine red dashed lines indicate selected lance and field lines where geodetic control is shown on aerial photographs. This information is contributed

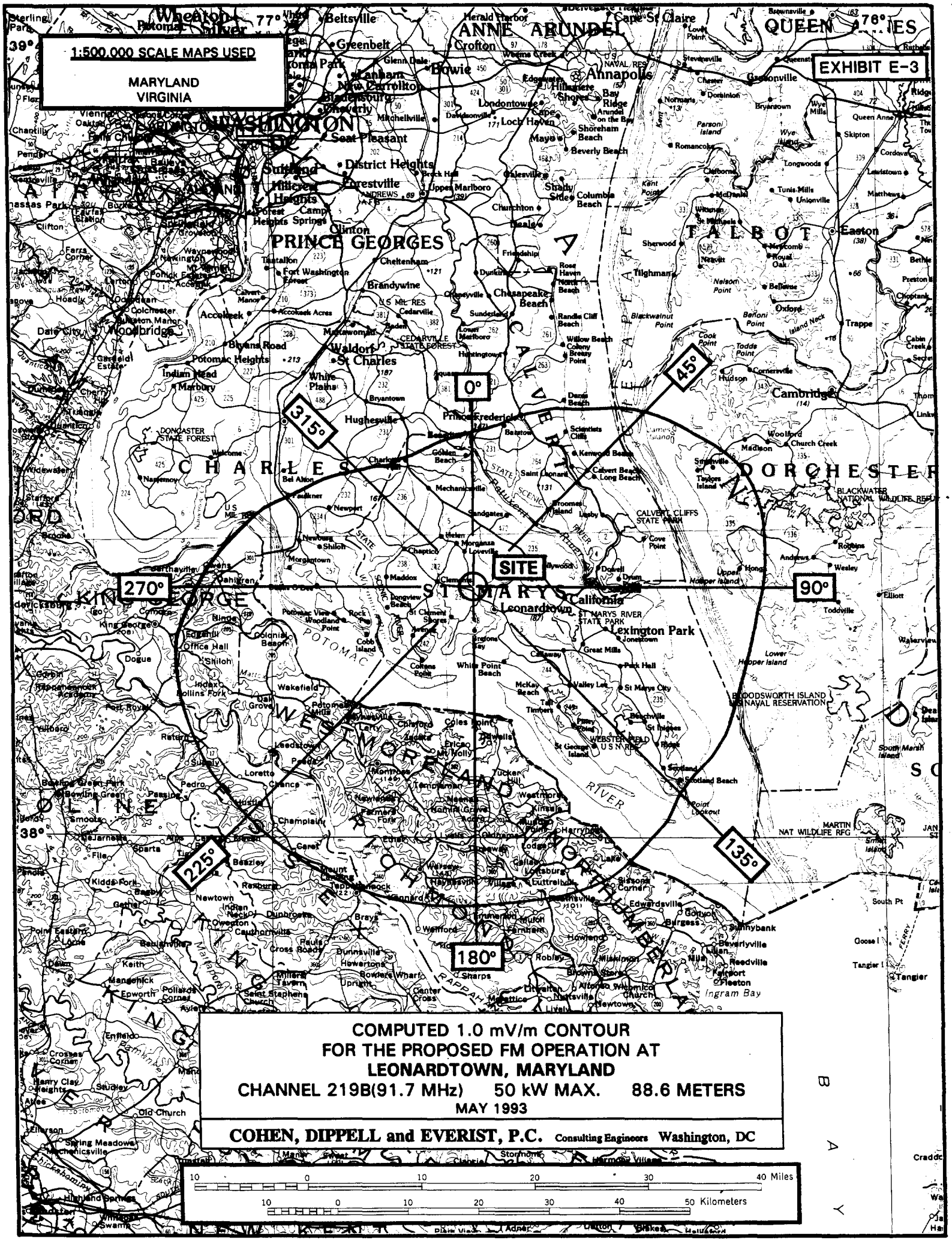
NATIONAL OCEAN SURVEY
HYDROGRAPHIC SURVEY INDEX

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT 2 FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVAL 1 METER WITH SUPPLEMENTARY 0.5 METER CONTOURS—DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1.7 METERS

ROAD CLASSIFICATION
Heavy-duty — Light duty
Medium duty — Unimproved dirt
State Route

BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL HYDROGRAPHIC

LEONARDTOWN, MD.
38076-C8-TB-024
1963

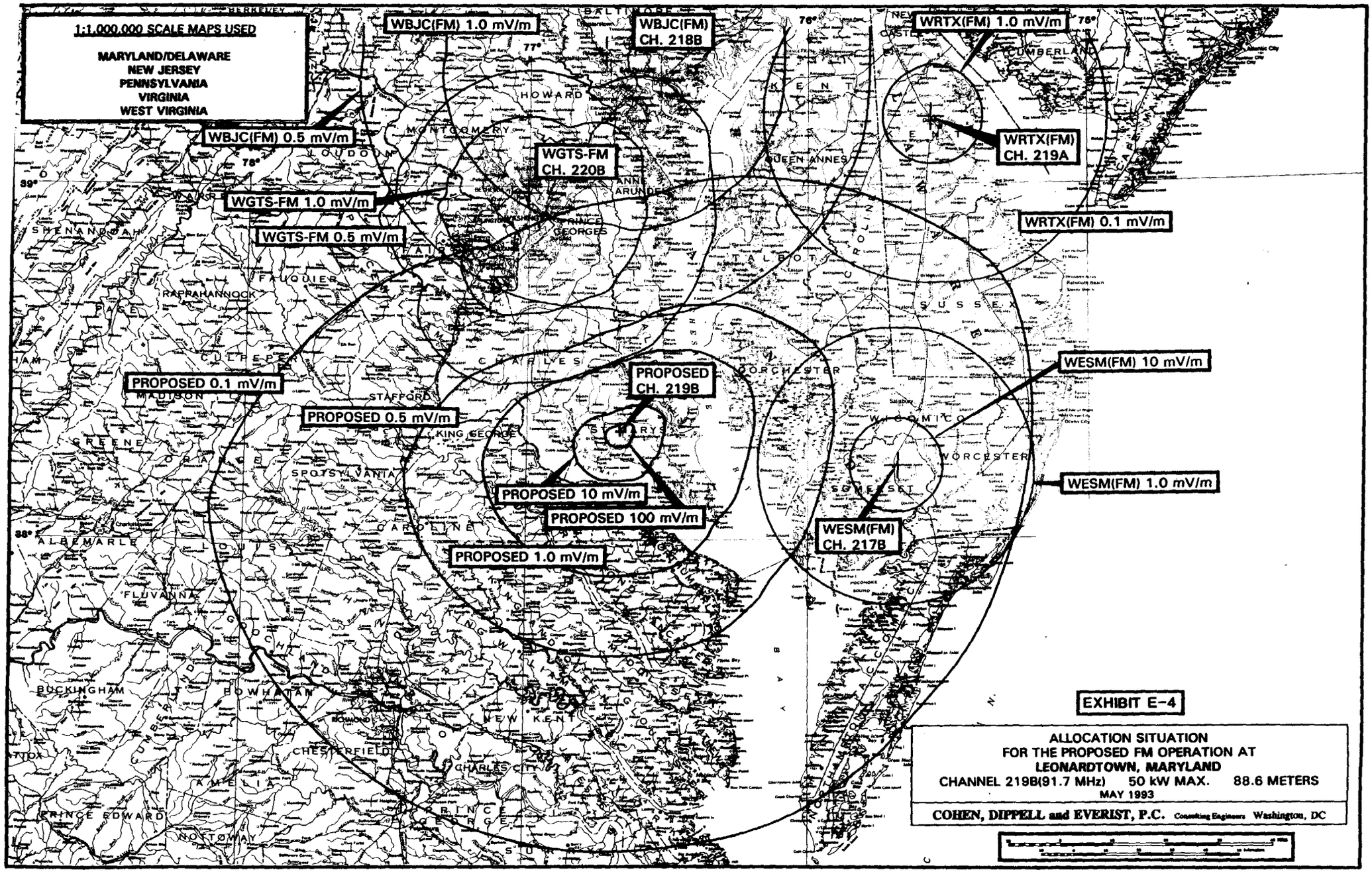


COMPUTED 1.0 mV/m CONTOUR
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
CHANNEL 219B(91.7 MHz) 50 kW MAX. 88.6 METERS
MAY 1993

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, DC

10 0 10 20 30 40 Miles

10 0 10 20 30 40 50 Kilometers


1:1,000,000 SCALE MAPS USED
MARYLAND/DELAWARE
NEW JERSEY
PENNSYLVANIA
VIRGINIA
WEST VIRGINIA
WBJC(FM) 1.0 mV/m
WBJC(FM) CH. 218B
WRTX(FM) 1.0 mV/m
WBJC(FM) 0.5 mV/m
WRTX(FM) CH. 219A
WGTS-FM CH. 220B
WGTS-FM 1.0 mV/m
WGTS-FM 0.5 mV/m
WRTX(FM) 0.1 mV/m
PROPOSED 0.1 mV/m
PROPOSED CH. 219B
WESM(FM) 10 mV/m
PROPOSED 0.5 mV/m
PROPOSED 10 mV/m
PROPOSED 100 mV/m
WESM(FM) 1.0 mV/m
WESM(FM) CH. 217B
PROPOSED 1.0 mV/m
HOWARD
MONTGOMERY
LOUDOUN
QUEEN ANNES
ANNE ARUNDEL
PRINCE GEORGES
FAUQUIER
RAPPAHANNOCK
CULPEPER
CHARLES
DORCHESTER
STAFFORD
KING GEORGE
ST. MARYS
WICOMICO
WORCESTER
SOMERSET
SUSSEX
SPOTSYLVANIA
CAROLINE
ALBEMARLE
FLUVANNA
BUCKINGHAM
POWHATAN
NEW KENT
CHESTERFIELD
CHARLES CITY
AMELIA
PRINCE EDWARD
NOTTOWAY
PRINCE GEORGE
SURRY
CUMBERLAND
KENT
TALBOT
EXHIBIT E-4
ALLOCATION SITUATION
FOR THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
CHANNEL 219B(91.7 MHz) 50 kW MAX. 88.6 METERS
MAY 1993
COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, DC

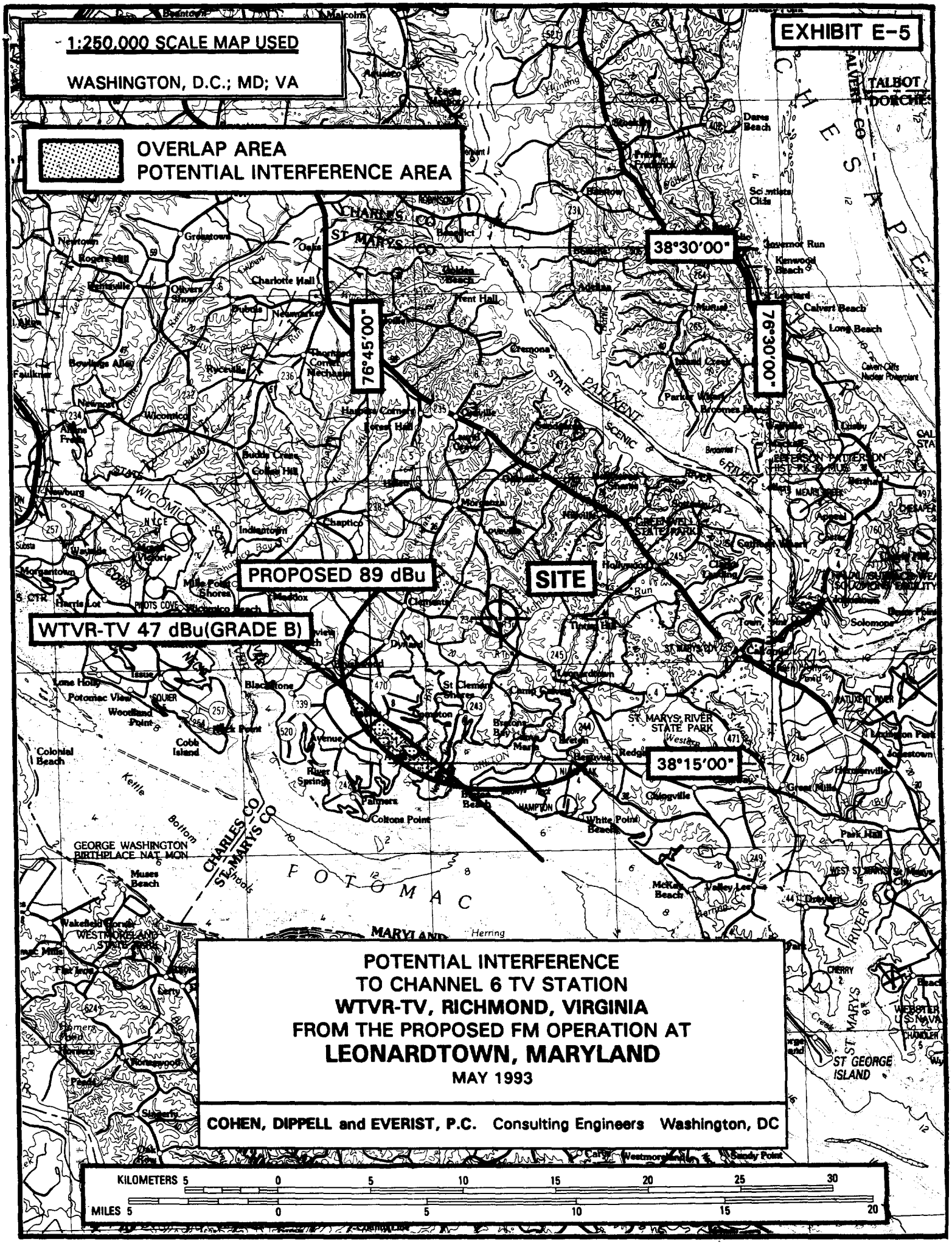


EXHIBIT E-5
1:250,000 SCALE MAP USED
WASHINGTON, D.C.; MD; VA
OVERLAP AREA
POTENTIAL INTERFERENCE AREA
38°30'00"
76°45'00"
76°30'00"
38°15'00"
PROPOSED 89 dBu
SITE
WTVR-TV 47 dBu(GRADE B)
CHARLES CO
ST MARYS CO
TALBOT
DORCHES
CHESAPEAKE
POTOMAC
PATUXENT
RIVER
STATE
SCENIC
GREENWELL STATE PARK
ST MARYS RIVER STATE PARK
GEORGE WASHINGTON BIRTHPLACE NAT MON
WESTMORELAND STATE PARK
MARYLAND
ST GEORGE ISLAND
POTENTIAL INTERFERENCE
TO CHANNEL 6 TV STATION
WTVR-TV, RICHMOND, VIRGINIA
FROM THE PROPOSED FM OPERATION AT
LEONARDTOWN, MARYLAND
MAY 1993
COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, DC
KILOMETERS 5 0 5 10 15 20 25 30
MILES 5 0 5 10 15 20