

Site *New Bedford*  
File *17.7.5-*  
*51939*

102. DMF, 07/29/81  
"Analytic Chemistry Report";  
PCB Analysis of Lobsters.
103. DMF, 07/11/80  
"Analytic Chemistry Report";  
PCB Analysis of Flounder, Fluke,  
Tautog, Scup and Lobster.
104. DMF, 10/08/76  
"Analytic Chemistry Report";  
PCB Analysis of Quahogs from the  
Apponogansett River Area.
105. DMF, 10/25/76  
"Analytic Chemistry Report";  
PCB Analysis of Quahogs from the  
Apponogansett River Area.
106. DMF, 10/25/76  
"Analytic Chemistry Report";  
PCB Analysis of Apponogansett River Basin Samples.
107. DMF, 10/29/76  
"Analytic Chemistry Report";  
PCB Analysis of Apponogansett River Basin Samples.
108. DMF, 11/1/76  
"Analytical Chemistry Report";  
PCB Analysis of Appogansett River Basin Samples.
109. DMF, 09/24/76  
"Analytic Chemistry Report";  
PCB Analysis of Apponogansett River Basin Samples.
111. DMF, 04/16/82  
"Analytic Chemistry Report";  
PCB Analysis of New Bedford Lobsters.
112. Caproni, Elise (MDPH), 11/09/82  
Letter to Metcalf & Eddy (R. J. Reimold).
113. Geotechnical Engineers, Inc., 08/13/82  
"Dredging of PCB - Contaminated Sediments New  
Bedford Harbor/Acushnet River Estuary, MA",  
Draft Report prepared for New England Governors  
Conference, Inc.
114. Dunn, Dennis, R. (USEPA), 10/05/82  
Memorandum for the Record;  
"New Bedford Sewer Study - PCB Results".

Ref. 102

4

Request By: P. G. Coates

Date: July 15, 1981

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Lobsters (New Bedford)

Analysis For: PCB's

Methods Used: G. C. - E. C.

collected 7/17/81

No. of Analyses: 8

Results:	FDA Code #	PCB (ppm wet wt.) as 1254	INTL No.
p415	81-253-946	2.4	2.8** 427A
p416	81-253-947	7.2	427A
p417	81-253-948	8.8	427A
p418	81-253-949	1.5	" "
p419	81-253-950	8.3	1711
p420	81-253-951	4.0	427A
p421	81-253-952	2.5	" "
p422	81-253-953	1.7	1.6** 427A

Comments: Cat Cove Marine Laboratory results

\*\* repeat duplicate determinations

\* average of duplicate determinations

Split ... FL

Date: July 29, 1981

Bill Lane and Paul Geoghegan  
Chemist

Ref: 103  
page 1 of 2

5

Request by: W. Leigh Bridges

Date: 6/10/80

Collected

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Flounder, Fluke, Tautog, Scup, Lobster

Analysis for: PCB's

Methods Used: G.C. (E.C.)

No. of analyses: 25 (see attached sheets)

Result:	Lab No.	Specimen	Location	PCB's (ppm) wet wt.
✓	P273	WIN winter flounder	Q-80-1	3.80
✓	P274	PDE fluke	EEE-80-1	0.3-
	P275	TGN tautog	I-80-1	0.8-
✓	P276	PAN winter flounder	AAA-80-1	1.4
✓	P277	PAN winter flounder	AAA-80-2	1.00
✓	P278	PAN winter flounder	LL-80-1	0.20
✓	P279	TGN tautog	LL-80-2	0.20
✓	P280	PDE fluke	DDD-80-1	4.00
✓	P281	SCU scup	AAA-80-3	0.00

11/11/80  
310  
300

Copy sent to Jack Fiske for the attention of Drew Koles

reported

Timothy J. ... and William ...

EFF # 103  
page 2 of 2

#1

Request By: W. Leigh Bridges

Date: 6/10/80

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Flounder, fluke, tautog, scup, lobster

Analysis For: PCB's

Methods Used: G.C. - (E.C.)

No. of Analyses: 25 (see attached sheets)

Results:	Lab No.	Specimen	Location	PCB's (ppm) wet wt.	
	P282	scup	DDO-80-2	0.04	303 ✓
	P283	fourspot flounder	AAA-80-4	0.78	300 ✓
	P284	winter flounder 129M	FFF-80-1	5.91	275 ✓
	P285	lobster	WW-80-1	5.97	1704 ✓
	P286	lobster	WW-80-2	3.91	361 ✓
	P287	lobster	ZZ-80-1	3.36	373 ✓
	P288	lobster	SS-80-1	7.40	60 ✓
	P289	lobster	SS-80-2	2.29	
	P290	lobster	SS-80-3	4.56	31 ✓

Remarks: Copy sent to Jack Fiske for the attention of Drew Kolek

7/1/80

Timothy Cunningham and Willie

Analyst

REF: 1041

6

Request By: H. Leitch Bridges

Date: October 8, 1976  
Sept 24, 1976

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Quahogs from the Apponogansett River Area

Analysis For: PCB ~~ppm~~

Methods Used: G.C.

No. of Analyses: Five

Results:	Sample	PCB (ppm) Dry Wt.	Wet Wt.	1114
✓	D-1	1.32	0.20	475 ✓
✓	D-2	1.33	0.17	460 + 400 ✓
✓	D-3	3.38	0.47	470 + 470 ✓
✓	NB-5	3.29	0.41	470 + 470 ✓
✓	F-6	2.35	0.32	38-57 ✓

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

October 8, 1976

John Der Hovanesian, Jr.

Date: \_\_\_\_\_

Chemist

RF-105

Request By: W. Leigh

Date: September 24, 1976

ANALYTICAL CHEMISTRY REPORT

Sample Name or Code: Quahog from the Abnongansett River Basin

Analysis For: PCB

Methods Used: G.C.

No. of Analyses: Three

Results:	Sample	PCB (ppm) Dry Wt.	Wet Wt.	MIC No
✓	NB-1	9.49	1.30	48-A ✓
✓	NB-4	11.1	1.81	57-A ✓
✓	NB-6	3.08	0.44	57-A ✓
✓ DAM	Winter Blackback flounder*	24.7	6.00	70-A ✓

Comments: \*from New Bedford harbor, Popes Island area.

Date: October 14, 1976

John Der Hovanesian, Jr.

Chemist

460650  
033675

REF  
106

Request By: W. Ligon Edges

Date: September 24, 1976

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Apponogansett River Basin Samples

Analysis For: PCB

Methods Used: G.C.

No. of Analyses: 4

Results:	Sample	PCB (ppm)		
		Dry Wt. :	Wet Wt.	
TCN ✓	tautog SS-1*	5.57	1.18	1075 ✓
SED ✓	F-1	6.96	0.71	1075 ✓
✓	F-2	17.6	3.51	55 ✓
✓	F-5	0.41	0.06	57-A ✓

Apponogansett River Basin

4606 -- 4607  
0336 -- 0337

Comments: \*muscle

Date: October 25, 1976

John Der Hovanesian, Jr.  
Joseph E. Pelczarski

Chemist

RIF 107

Request By: W. Leigh Bridges

Date: September 24, 1976

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Apponogansett River Basin Samples

Analysis For: PCB

Methods Used: G. C.

No. of Analyses: four

Results:	Sample	PCB (ppm)		M.F. No.
		Dry Wt.	Wet Wt.	
	Blue claw crab*	29.5	5.57	74-A ✓
	F-4	0.44	0.06	75-A ✓
	FS-4	0.20	0.16	67A-69A ✓
	✓NBS-2	17.7	15.0	65A-60B ✓

Comments: \*from Popes Island, New Bedford Harbor; two crabs--single sample.

Date: October 29, 1976

John Der Hovanesian, Jr.  
Joseph E. Pelczarski  
Chemist

REF 108

Request By: W. Leitch Bridges

Date: September 24, 1976

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Apponogansett River Basin Samples

Analysis For: PCB

Methods Used: G.C.

No. of Analyses: \_\_\_\_\_

Results:	Sample	PCB (ppm)		M.I. No
		Dry Wt.	Wet Wt.	
150 29	✓ NBS-1	84.5	34.8	SAH + 59E
157 60	✓ FS-1	88.0	28.7	SAH + 60E
157 37	✓ FS-2	23.0	10.5	SAH + 17P
157 31P	✓ NBHB*	0.48	0.19	1-29-A

Comments: Report #6 (final)  
\*New Bedford Harbor Hurricane Barrier - East  
Sample container for the sample - New Bedford Harbor Hurricane  
Barrier - West - broke.

Date: November 1, 1976

John Der Hovanesian, Jr.  
Joseph E. Pelczarski  
 Chemist

Ref 109

Request By: W. Leigh Bridges

Date: September 24, 1976

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: Apponogansett River Basin Samples

Analysis For: PCB

Methods Used: G.C.

No. of Analyses: 5

Results:	Sample	Dry Wt.	PCB (ppm)	Wet Wt.	
✓	Scup NB-4*	26.6		6.11	MFL 150
✓	Scup SS-1*	43.2		11.4	73-A ✓
✓	NB-2	2.78		0.35	41-A ✓
✓	NB-3	5.37		0.72	58-A ✓
	Fish homogenate**	14.8		3.28	

Comments: \*Whole Fish

\*\*composite of all fish samples (for EPA comparative study)

Date: October 18, 1976

John Der Hovanesian, Jr.  
Joseph E. Pelczarski  
Chemist

Ref # 111

Request By: W. L. Bridges  
Collected Date: 3/15/82

ANALYTIC CHEMISTRY REPORT

Sample Name or Code: New Bedford Lobsters

Analysis For: PCB

Methods Used: G.C. - (E.C.)

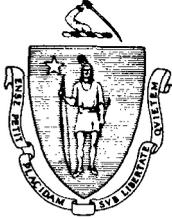
No. of Analyses: 9

Results:	FIELD SAMPLE NUMBER	Lob No.	P.C.B. in ppm (wet weight)		
713	YY-82-1	P527	0.5	4501 - 032437	11-7 11-28 ✓
	YY-82-4	P526	0.3	"	1829 ✓
	YY-82-3	P525	0.8	"	1820 ✓
	YY-82-2	P528	3.2	"	1821 ✓
250	TT-82-1	P529	3.1	034250	1822 ✓
251	KKK-82-1	P523	0.7	460260 034230	1823 ✓
	KKK-82-2	P527 + 524	1.3	"	1824 ✓
	KKK-82-3	P521	1.2	"	1825 ✓
	KKK-82-4	P522	2.4	"	1826 ✓

Comments: PCB as Arochlor 1254

Date: 4/16/82

Paul Geoghegan  
Chemist



# The Commonwealth of Massachusetts

## Department of Public Health

600 Washington Street

Boston 02111

Alfred L. Frechette, M.D., M.P.H.  
Commissioner

November 29, 1982

Metcalfe & Eddie, Inc.	
FILE	5091
DEC 1 1982	
RECD TO	ACK BY
BY	DATE

Mr. Robert J. Reimold, Ph.D.  
Metcalfe & Eddie Inc.  
50 Staniford Street  
Boston, MA 02114

Dear Mr. Reimold:

This letter is in response to your communication of November 9, 1982 requesting information on PCB analysis of lobster samples taken from the New Bedford Harbor area.

The requested information is as follows:

FDA #	State #	Collected by	Date Collected	PCB-PPM
79-106-178	HH-79-1	Tom Petelle	8/14/79	12.4
79-106-179	HH-79-2	Tom Petelle	8/14/79	11.6
79-106-180	T-79-1	Tom Petelle	8/ 8/79	68.2
79-106-181	S-79-2	Tom Petelle	8/ 8/79	15.4
79-106-183	G-79-3	Tom Petelle	8/16/79	30.3
79-106-184	Q-79-4	Tom Petelle	8/16/79	31.1
79-106-185	Q-79-5	Tom Petelle	8/16/79	29.6
79-106-186	M-79-6	Tom Petelle	8/16/79	63.4
79-106-187	M-79-7	Tom Petelle	8/16/79	37.4
79-106-189	M-79-2	Tom Petelle	8/16/79	23.8

If we can be of further assistance in this matter, please let us know.

Very truly yours,

*George M. Barlow, P.E.*  
for Elise Comproni  
Chief, Environmental Health Hygiene Branch

267  
97

EC/bj

Ref #114

MEMORANDUM FOR THE RECORD

BY: Dennis R. Dunn, Senior Sanitary Engineer, Technical Services Branch

DATE: October 5, 1982

RE: New Bedford Sewer Study - PCB Results

METCALF & EDDY, INC.	
FILE	SUBJ.
JAN 6 1982	
REFD TO	ACK. BY
ANS. BY	NOTED

Background

*10 days JUNE 16-25*

During the weeks of June 14 through June 25, 1982 an intensive sewer sampling program was conducted in New Bedford, Massachusetts. The survey was designed to identify all sources of polychlorinated biphenyls (PCB's) to the municipal wastewater treatment facility or to eliminate those areas within the city which were not yet investigated. Grab samples were collected at eighteen locations every three hours for 2, 5-day periods yielding forty samples per composite. Additional composites were collected at both the New Bedford WWTP and Fairhaven WWTP during the same period. These samples were collected with ISCO Automatic samplers equipped with Teflon tubing and glass carboys. All samples were acidified with sulfuric acid to preserve oil and grease before being composited.

Analyses were performed by Versar, Inc. under contract to U.S. EPA.

Results

Small levels of PCB's were found to exist at station 4 in the New Bedford Industrial Park at the north end of the city with aroclor 1248 being the only blend recorded. This aroclor was also found at stations 5, 6, 8, and 14 which receive diluted wastewater from the industrial park via the Church Street collector and the main interceptor. Samples collected near the municipal landfill and below Aerovox and Acushnet capacitors were free of PCB's except for a small trace of aroclor 1248 (1 ppb) found at station 2 the second week. The area around Cornell Dubilier was not as fortunate. PCB's were found in concentrations ranging from twenty-three(23) parts per billion to one hundred and twenty (120) ppb (aroclor 1242 and 1254) at stations 15, 16, and 16A which are located directly in front of the building on East Rodney French Boulevard near the seawall. These concentrations are then heavily diluted before reaching the municipal treatment facility due to an open tide gate at station 16A. At low tide all wastewater flows east to the outer harbor. During high tide the entire sewer line floods and appears to dilute PCB's which are sent to the wastewater treatment plant. Evidence is found in the concentrations recorded at the plant which range from five to ten parts per billion and at the Cove Road pump house (station 12, 5 ppb both weeks, aroclor 1242 and 1254) which receives the Cornell Dubilier flows.

Additional samples showed small levels of aroclor 1254 at station 17 (source unknown) and no trace of PCB's at the Fairhaven WWTP.

As the data clearly indicate the only area of major concern in the New Bedford sewer system is the area around Cornell Dubilier.

DD/dg

NEW BEDFORD SEWER SYSTEM

PCB's

<u>STATION</u> <u>NUMBER</u>	<sup>M+E</sup> <u>SAMPLE</u> <u>NUMBER</u>	<u>DATE</u>	<u>CONCENTRATION</u> <u>PARTS/BILLION</u>	<u>AROCLOR</u>	<u>COMMENTS</u>
1	1387 90718	6/14-19/82	<1	--	water
	1388 90798	6/20-25/82	<1	--	water
2	1389 90719	6/14-19/82	<1	--	water <i>Below Survey</i>
	1390 90799	6/20-25/82	1	1248 422	water
3	1391 90720	6/14-19/82	<1	--	water <i>above Survey</i>
	1392 90800	6/20-25/82	<1	--	water
4	1393 90721	6/14-19/82	2	1248	water
	1394 90801	6/20-25/82	4	1248	water
5	1395 90722	6/14-19/82	2	1248	water
	1396 90802	6/20-25/82	3	1248	water
6	1397 90723	6/14-19/82	1	1248	water
	1398 90803	6/20-25/82	3	1248	water
7	1399 90724	6/14-19/82	<1	--	water
	1400 90804	6/20-25/82	<1	--	water
8	1401 90725	6/14-19/82	1	1248	water
	1402 90805	6/20-25/82	3	1248	water
9	1403 90726	6/14-19/82	<1	--	water
	1404 90806	6/20-25/82	<1	--	water
10	1405 90727	6/14-19/82	<1	--	water
	1406 90807	6/20-25/82	<1	--	water
11	1407 90728	6/14-19/82	<1	--	water
	1408 90808	6/20-25/82	<1	--	water
12	1409 90729	6/14-19/82	5	1242+1254 431	water
	1410 90809	6/20-25/82	5	1242+1254	water
13	1411 90730	6/14-19/82	<1	--	water
	1412 90810	6/20-25/82	<1	--	water
14	1413 90731	6/14-19/82	<1	--	water
	1240 90811 ✓	6/20-25/82	2	1248	water
15	1241 90732 ✓	6/14-19/82	23	1242+1254	water
	(238A-1)				
	1242 90812 ✓	6/20-25/82	67	1242+1254	water
16	1243 90733 ✓	6/14-19/82	99	1242+1254	water
	(238A-2) ✓				
	1244 90813	6/20-25/82	120	1242+1254	water - in front of CDE
16A	1245 90734 ✓	6/14-19/82	85	1242+1254	water
	(238A-3)				
	1246 90814 (238A-7) ✓	6/20-25/82	71	1242+1254	water
17	1247 90735 (238A-4) ✓	6/14-19/82	2	1254 423	water
	1248 90815 (238A-8) ✓	6/20-25/82	3	1254	water

New Bedford Sewer System - PCB's (Continued)

<u>STATION NUMBER</u>	<u>SAMPLE NUMBER</u>	<u>DATE</u>	<u>CONCENTRATION PARTS/BILLION</u>	<u>AROCLOR</u>	<u>COMMENTS</u>
M+E No.					
<u>New Bedford WWTP</u> ↓					
Influent	124990716	6/14-19/82	5	1242+1254 <sup>431</sup>	water
	125090794 (238A-5)	6/20-25/82	7	1242+1254	water
Effluent	125190717	6/14-19/82	6	1248 <sup>422</sup>	water
	125290795 (238A-6)	6/20-25/82	10	1242+1254	water
Sludge	1253 90793	6/21/82	<1ppm	—	sludge
<u>Fairhaven WWTP</u>					
Influent	125490714	6/14-19/82	<1	—	water
	125590796	6/20-25/82	<1	—	water
Effluent	125690715	6/14-19/82	<1	—	water
	125790797	6/20-25/82	<1	—	water

1982

NEW BEDFORD SEWER SURVEY STATION LOCATION

STATION NO.

LOCATION

- 1 Manhole on Acushnet Street just south of the intersection with Wamsutta.
- 2 Manhole on Belleville Ave. in front of the pumping station (main interceptor below Aerovox)
- 3 Manhole at the intersection of Belleville Ave. and Howard Ave. (Main Interceptor above Aerovox)
- 4 Manhole on Duchaine Blvd. in New Bedford Industrial Park
- 5 Manhole on Worcester Road (Church Street collector)
- 6 Manhole on Coffin Ave. at intersection with Brook St. (Church St. collector below Chamberlain MFG. and above Sawyer St. collector tie in)
- 7 Manhole on Nauset Street at the junction of Nauset and Hathaway Road (below town landfill in Sawyer St. collector)
- 8 Manhole on Purchase St. at junction with County St. (main interceptor includes both Sawyer St. and Church St. collectors)
- 9 Manhole at intersection of Pleasant St. and Willis St. (Willis St. collector)
- 10 Manhole on Grape St. between West and Alec Streets (Grape St. collector, west side of New Bedford)
- 11 Manhole on Cove Rd. at intersection with Norwell St. (Cove Rd. collector, mostly flow from Dartmouth)
- 12 Manhole on Sidewalk in front of Cove Rd. pumping station (includes Cove Rd. collector and flows from Cornell Dubilier)
- 13 Manhole on Rivet St. between Hall and Crapo Streets (Includes Grape St. collector, Liberty St. collector, and Tripps Brook collector)
- 14 Manhole on Second St. at intersection with Rivet St. (main interceptor)
- 15 Manhole near seawall off East Rodney French Blvd. between David and Ruth Streets (below Cornell Dubilier)

STATION NO.

LOCATION

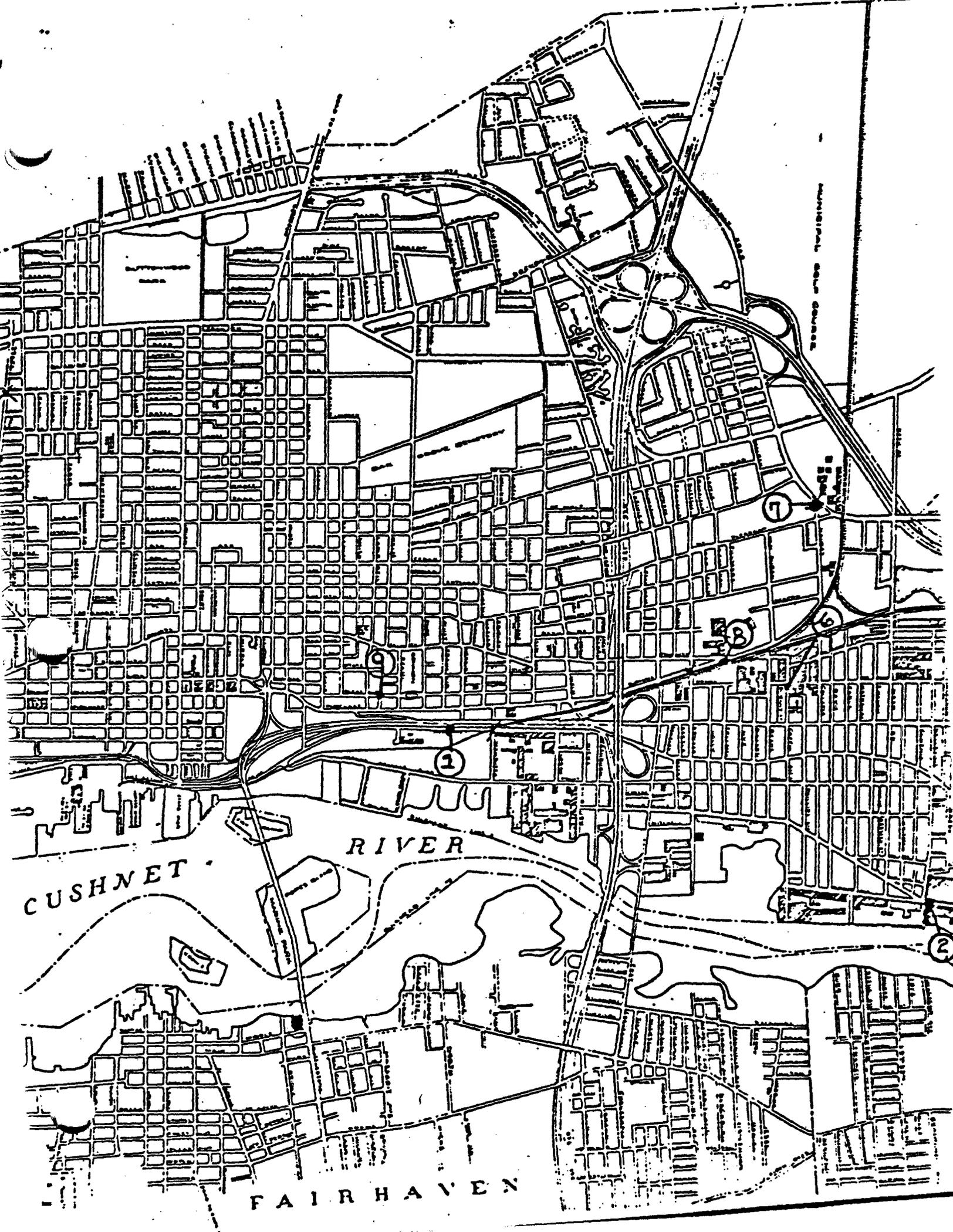
16 + 16A.

Manholes near seawall off East Rodney French Blvd.  
directly across from Cornell Dubilier (possible CSO)

17

Manhole on east end of Rodney Street (above Cornell Dubilier)

DD/dg



MUNICIPAL GOV. BLDG.

Rte. 157

RIVER

CUSHNET

FAIRHAVEN

9

1

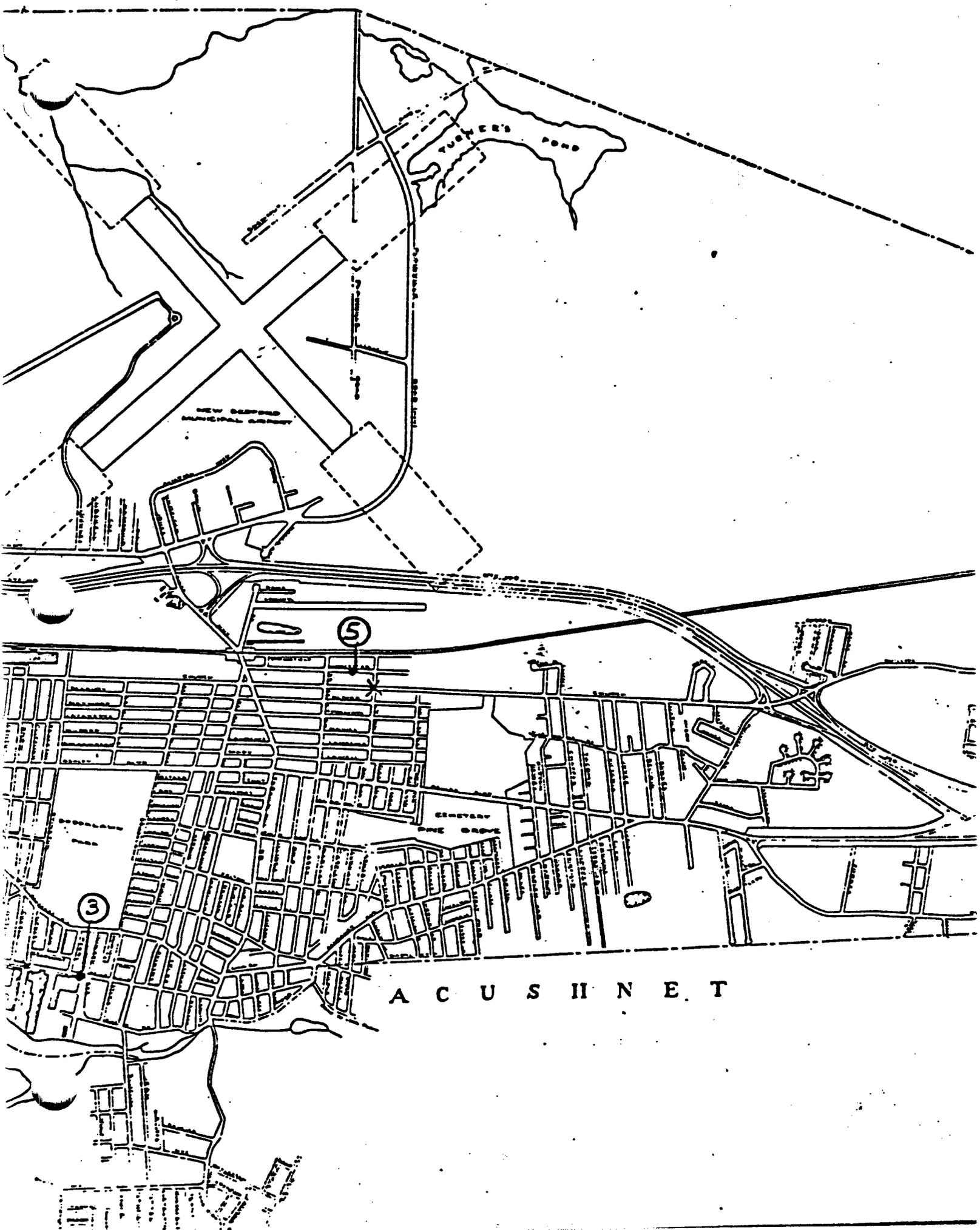
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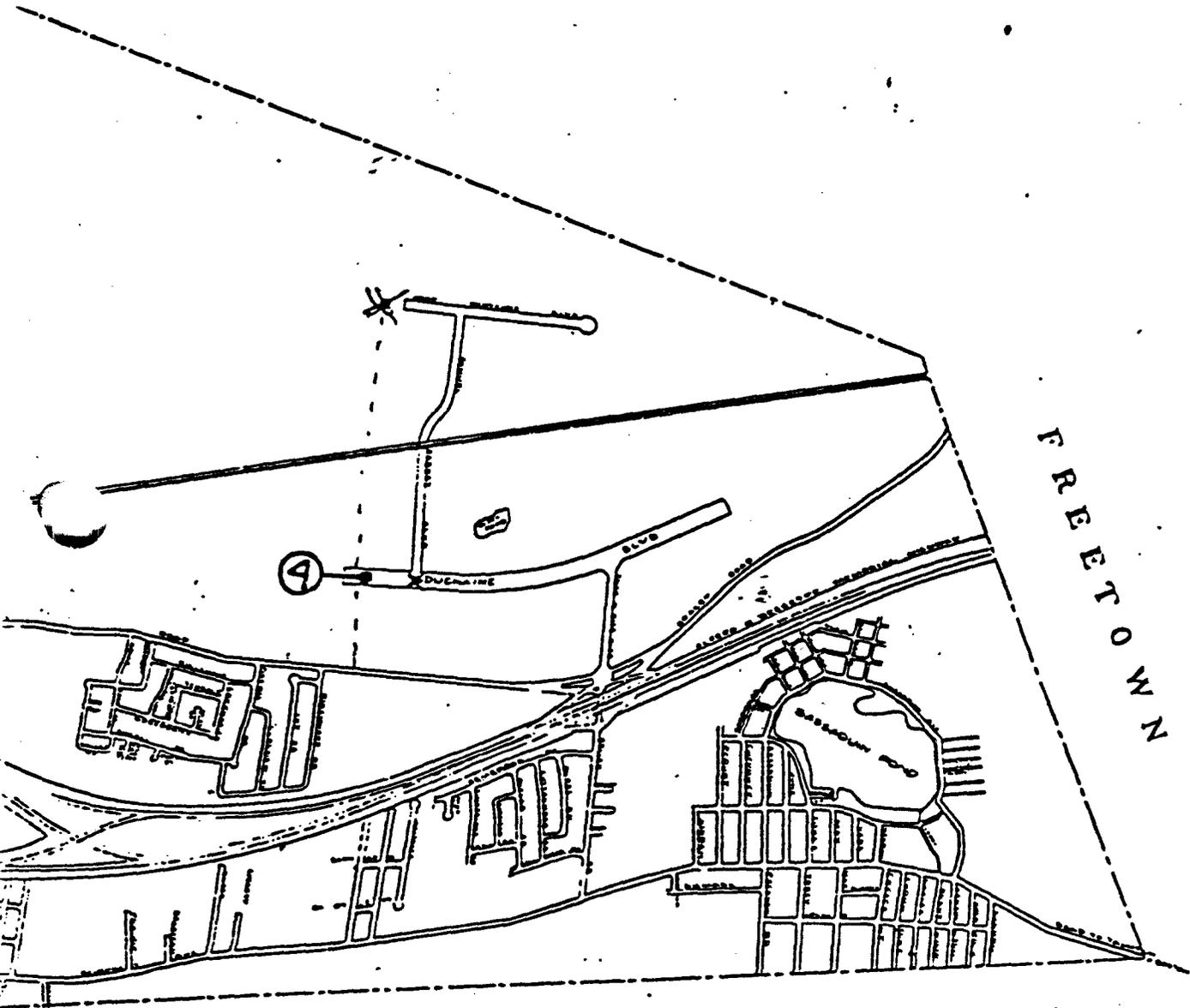
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3

T M O U T H

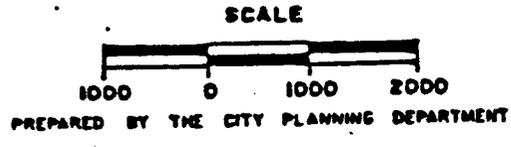
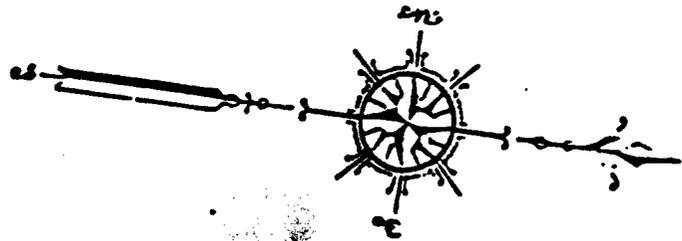


A C U S H N E T



FREETOWN

CITY OF  
**NEW BEDFORD**  
BRISTOL COUNTY  
MASSACHUSETTS



MAY 1978

