

Maine • Coastal

CUTLER HARBOR STUDY

CUTLER, MAINE

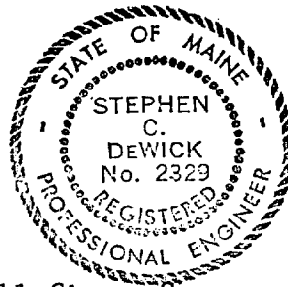
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Kimball Chase Co.
BATH, MAINE

CUTLER HARBOR STUDY

Cutler, Maine

December 1986



Kimball Chase Company, Inc.

Bath, Maine

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Financial assistance for this report was provided by a grant from Maine's Coastal Program, through funding provided by the U.S. Department of Commerce, Office of Ocean & Coastal Resource Management, under the Coastal Zone Management Act of 1972, as

KIMBALL CHASE

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December 18, 1986

Mr. Stillman Fitzhenry
P.O. Box 274
Cutler, Maine 04626

Subject: Cutler Harbor Study Report 85-1248

Dear Mr. Fitzhenry:

In accordance with our Agreement, dated January 21, 1986, we are pleased to submit our Report on the Cutler Harbor Study.

The data upon which this study and its recommendations have been based are the most current available concerning harbor management. The advice and participation by the Harbor Committee and members of your community have been appreciated throughout this study. We have been pleased with the enthusiastic response to the preliminary report and look forward to continuing the recommended project through its remaining phases.

Thank you for selecting Kimball Chase to assist you on this project.

Very truly yours,

Kimball Chase Company, Inc.



Stephen C. DeWick, P.E.
Project Manager

SCD/lmo

Copies to the Town (25)
cc: Lanier C. Greer, WCRPC
Robert Elder, MDOT
Mike Moser, DMR
Robert G. Blakesley, SPO

Table of Contents

<u>Section</u>	<u>Page</u>
1. Summary and Recommendations	1
2. Introduction	3
3. Revitalization and Development Plan .	6
4. Harbor Management Plan	21
5. Environmental Considerations	28
6. Proposed Facilities	32
7. Hatchery Evaluation	39
8. Bibliography	42

List of Tables

1. Commercial Fisheries Landings for Washington County	13
2. Comparison of Fish and Shellfish Landings	14
3. Shellfish Landings by Type, Washington County	14
4. Economic Return for Harbor Area	15
5. Boat Projections	22
6. Preliminary Cost Estimate	33
7. Summary of Employment Impact.....	37

List of Figures

1. County Map	2
2. Area Map	4
3. Study Map	5
4. Harbor Map	18
5. Population Trends	19
6. Machias Seal Island.....	20

7.	Mooring Plan	25
8.	Pole Mooring Detail	26
9.	Mooring Detail	27
10.	Jurisdictional Limits	31
11.	Proposed Pier Elevation	38
12.	Commercial Hatchery	41

Appendices

A.	Project Map	
B.	Draft Harbor Ordinance	
C.	Pier Alternative Plans	
D.	Mooring Plan	
E.	Hatchery Plan	
F.	Draft Environmental Permits Applications	

PROJECT CREDITS

This project has been sponsored by the Town of Cutler, Maine. Administration of the Project has been under the direction of Stillman Fitzhenry and the Harbor Committee. Members of the Harbor Committee included:

Stillman Fitzhenry, Chairman
Ira Beam
Brian Cates
Sterling Fitzhenry
Kenneth Dennison

"Financial assistance for preparation of this document has been provided by a Grant from the office of Coastal Zone Management from the State Planning Office, under the Coastal Zone Management Act of 1972, as amended."

The Cooperation and assistance of the Washington County Regional Planning Commission and Executive Director, Lanier Greer are appreciated.

SECTION 1
Summary and Recommendations

SUMMARY

The Cutler Harbor study has investigated the history and existing conditions at Cutler Harbor and evaluated several options for its future.

The study, in particular, has prepared a revitalization and development plan, based upon the needs and characteristics of Cutler.

Also prepared is the Harbor Management Plan, including a draft harbor ordinance which might be adopted by the Town.

Since most of the recommended facilities impact on the waterfront and intertidal zones, the required permits from State and Federal agencies have been addressed, particularly as they relate to environmental considerations. Also included, has been a preliminary assessment of the environmental impacts associated with the recommended projects during construction and continued operation.

Details concerning a lobster and clam hatchery have been included in the report, as well as a suggested building design.

Figure 1 shows the location of Cutler on the Washington County map.

RECOMMENDATIONS

Based upon the findings of this report the following recommendations are made:

1. The Town adopt a Harbor Ordinance similar to that in Appendix B.
2. The Town construct a public commercial fishing pier as described by Section 6 of this report.
3. The Town authorize \$47,800 for the design of the proposed pier.
4. The Town seek grant assistance for soundings, borings and the design services needed for the proposed pier.
5. The Town apply to the Maine Department of Transportation for construction funds for the proposed pier.
6. The Town take positive steps to guarantee the occupancy and future maintenance of the McGhie building and pier.
7. The Town phase out pole moorings over the next ten (10) year period.

WASHINGTON COUNTY MAP

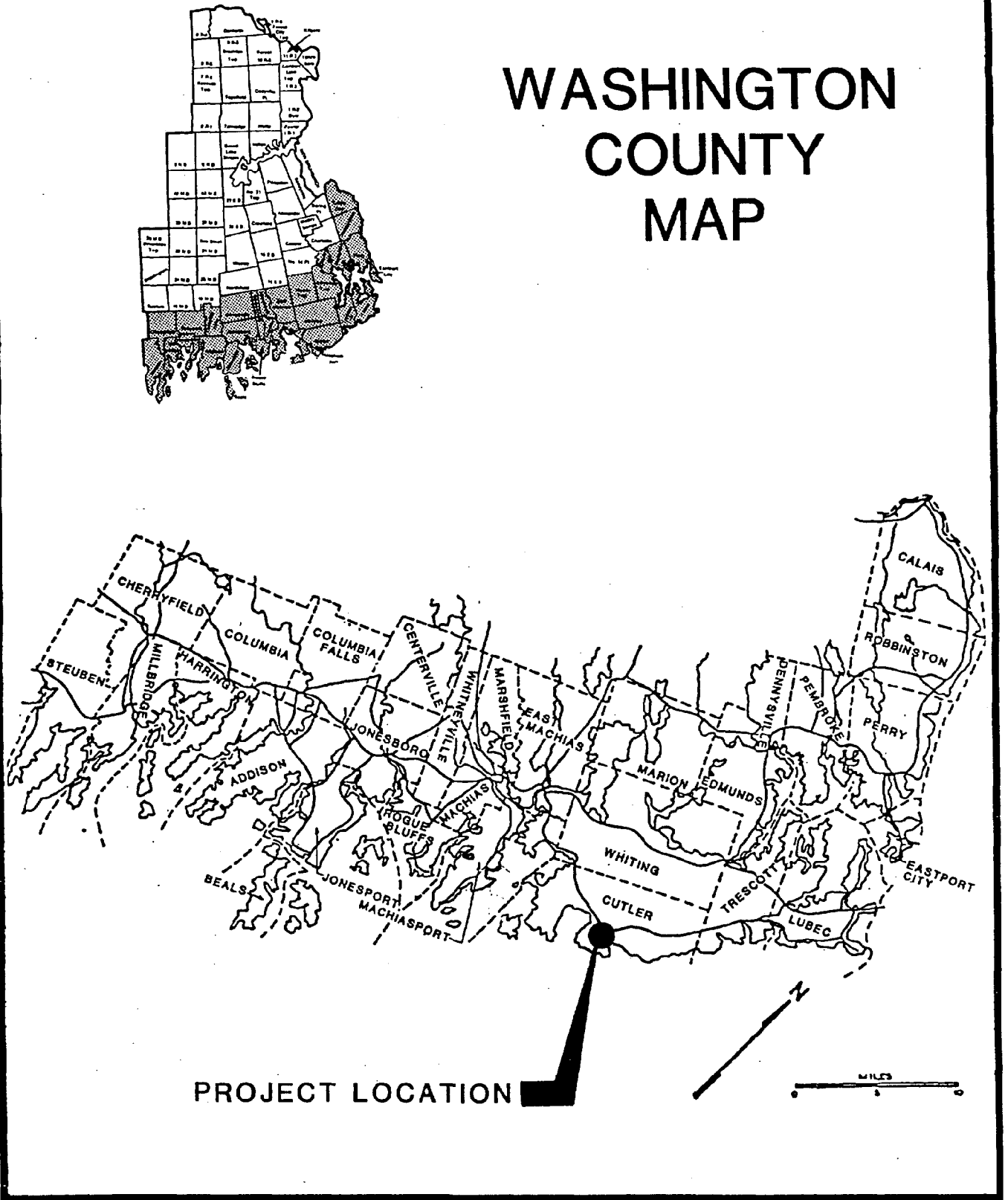


FIGURE 1

SECTION 2 Introduction

Background

Cutler Harbor is physically located at the mid-coast point of the Town. Figure 2 shows Cutler's location relative to Machiasport, which coordinated its Harbor Study with that of Cutler. The harbor has been primarily used as a fishing port by scallop and quahog draggers, as well as lobster boats. The Town's fishing fleet has increased from ten (10) boats in 1975 to thirty-six (36) boats in 1985.

As part of the Cutler Harbor Study, background information was reviewed, which included the following:

- 1974 Comprehensive Plan
- 1979 Updated Comprehensive Plan
- Town Questionnaire of 1979

A complete bibliography is contained in the back of this report.

Figure 3 shows the portion of Cutler which was the focus of this study.

Purpose

The purpose of the Cutler Harbor Study is to evaluate past trends and uses and relate them to future needs. Specifically, the Town of Cutler wishes to expand commercial fishing possibilities, as they relate to a Town pier. A Town pier will allow:

1. Additional pier facilities which are needed, since only three privately owned piers exist in Cutler.
2. More competition among fish wholesalers, thus higher prices for fishermen.
3. A location to load and unload the needed equipment, supplies and catches during all stages of tide and under adverse weather conditions.
4. The possibility to increase groundfish potential by including a site for a small freezer, enabling consolidated pick-ups for regular deliveries to market.
5. Less reliance for fishermen on privately owned piers, thus lowering the cost of supplies.

The following report presents the results of the Cutler Harbor Study.

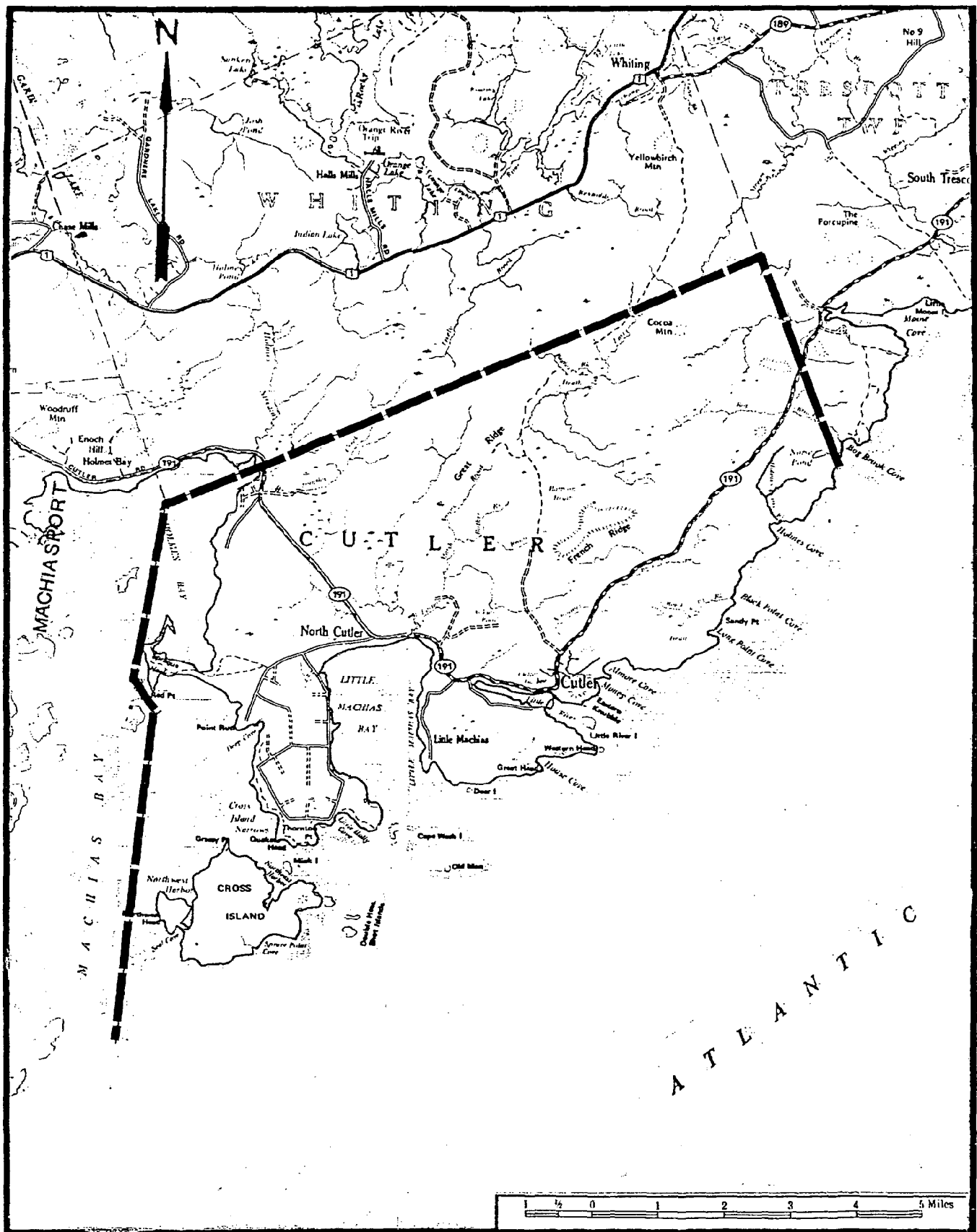


FIGURE 2

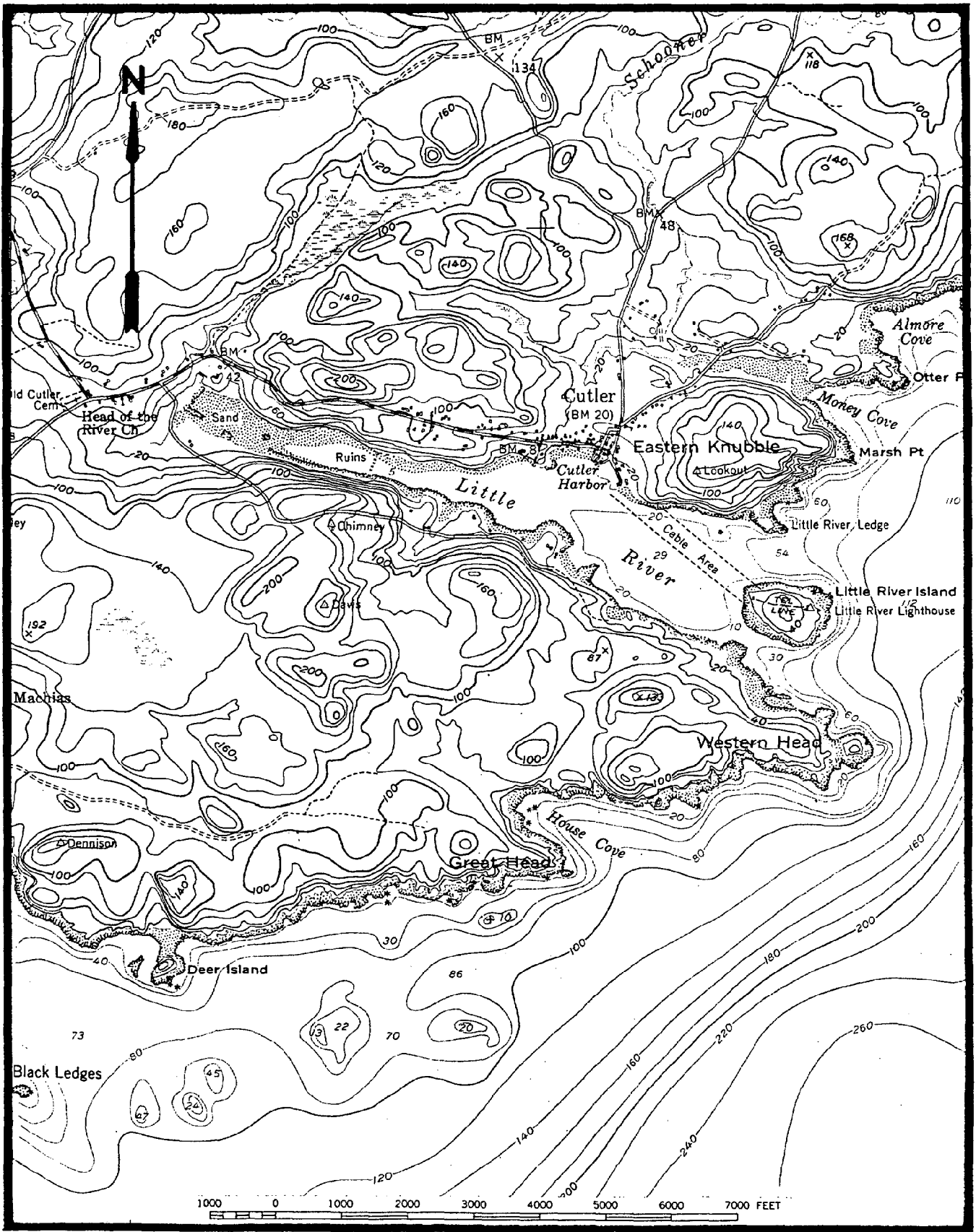


FIGURE 3

SECTION 3 Revitalization and Development Plan

Objectives of the Revitalization and Development Plan

The Revitalization and Development Plan is intended to be used as a framework for the Town's decisions regarding waterfront areas and facilities to be improved or developed. The plan will cover the feasibility and market studies for expanded harbor activities, including groundfish utilization, and servicing of cruise and pleasure boats; a recommended economic development and marketing strategy; real estate values and an evaluation of the need and feasibility of harbor dredging.

An assessment of the impact of the proposals on the environment and the preliminary cost estimates for a public pier are discussed in Sections 5 and 6, respectively.

Harbor Vicinity

Cutler Harbor is located at the midpoint of the Town's coast. This is clearly shown earlier in the report by Figure 2. The Town of Cutler covers 46.6 square miles and is located in the southeast portion of Washington County.

Harbor History

Cutler's harbor has had a rich history in fishing. The present day situation and history of the harbor is best presented by this quote from a local resident:

"I have watched the ups and downs of the fishing industry over the years. When I was a boy there were six full length wharves that extended to low water or beyond and several small ones that could be used at high tide. These wharves were all owned and operated by local people and gave the fishermen some sense of independence. Today, there are three usable wharves left and only one of these is owned by a resident of Cutler and he is about ready to retire. This leaves the fishermen with a very uncertain future."

Waterfront Area and Facilities

Figure 4 is a tracing from the 1979 aerial survey by Aerial Survey, Inc., which shows Cutler Harbor. Shown on the figure, are the present harbor activities which are primarily related to fishing and other prominent buildings. Also shown are some property lines, as taken from the Town's tax maps for this area.

On the approach to Cutler's harbor, along Route 191, one passes a single story white building. This building, designated number 1 on Figure 5, houses the Cutler Town Office, the Town library and the lobster hatchery. The library and Town office occupy the first floor with the lobster hatchery located in the basement. A detailed discussion of the hatchery process and a preliminary design for a hatchery building appear in Section 7 of this report. Parking at this facility is currently adequate and there is room for expansion if necessary.

Located on the western end of the harbor is Corbett's Wharf. Gasoline and diesel fuel are both available at the wharf. Corbett's wharf is also the only wharf in Cutler Harbor which is owned by a Cutler resident.

Further into the village area, is the Village Store (Number 4). The village store sells most grocery items which would be needed by the pleasure boater.

Prominently located in the village area of Cutler is a large, two and one-half story building. This building, designated Number 5, constructed on piles, was once a store, but in recent years has been vacant. Discussions with local residents indicate that the bottom floor of the building may flood at times when a high tide and a storm occur simultaneously. The location and the building show great potential for a marine oriented use although deed restrictions might not allow such a use.

Because of its central location, the building detracts from the community's economic atmosphere. The Town might approach the owner concerning modifications of the deed restrictions to allow compatible uses. These might include:

- A marine specialty supply store.
- A small grocery and seafood store.
- A bed and breakfast type inn.
- A historical society building.
- A restaurant.

The building should be evaluated for its structural integrity prior to any major undertaking. The condition of the piles upon which the building sits is particularly important, since replacement could be costly and difficult. Without use, this building will continue to deteriorate and ultimately be demolished.

Located adjacent to the McGhie Building is the McGhie pier (Number 6). The McGhie Pier is a small wooden pier which sees limited use, although Captain Barna Norton uses the pier for the loading and unloading of passengers. Although the McGhie build-

ing is for sale, discussion with Shepard's , "Select Properties of Machias", has revealed that the McGhie pier is not for sale.

Just east of the McGhie pier is the A.M. Look Wharf (Number 7). The Look Wharf sells both gasoline and diesel fuel. Access to the water is very difficult at the Look Wharf at low tide, as it is at all the piers in Cutler.

Economic Development and Marketing

The economic development of harbor area will depend upon two (2) deciding factors. First, and most importantly, is the decision by the community on whether they wish to maintain the existing character of the village while improving the facilities needed for their commercial fisherman. Second, does the Town wish to integrate recreational and other types of activities with commercial fishing?

1. Growth Pattern

An evaluation of the past population trends for the Town of Cutler has been made and future projections to the year 2020 have been completed. Figure 5 illustrates the increase in population expected, which should exceed 900 by the year 2020. This represents an increase of 25% in population while boat projections show a 65% increase over the next 15 year period.

2. Potential Activities

Potential activities for the future will involve tourist boat trips and cruising pleasure boats. There is a possibility that groundfish utilization may take place, but it is thought that competition from Canadian sources currently makes this unattractive. Several on-site surveys of the Cutler Harbor Waterfront were conducted and the results indicate that major focus of future activities should be near the downtown area. While substantial amounts of waterfront are available on the south side of the harbor, access to this area is hampered by the steep hillside.

The key issue to be addressed for any future activities, is parking. Parking spaces will be needed for fishing, tour boats or pleasure crafts. The downtown area does not currently offer an area large enough for parking to serve any of the future activities. It is suggested that a parking area maintained by the Town be established near the Town Office to serve this function.

The above issues are discussed in detail below:

- A) Tour Boat - One of the area's most unusual attractions is Machias Seal Island. While supporting colonies of Common and Arctic Terns, Razorbills, and Leach's Storm Petrels, the island supports an established colony of Atlantic Puffins. Boat trips to Machias Seal Island, which lies ten (10) miles south out to sea from Cutler, are usually arranged from Jonesport, Maine. A detailed discussion of Machias Seal Island and its bird colonies is contained in the book, "A Birder's Guide to the Coast of Maine". Chapter 18 of the book describes Machias Seal Island which has served as a Canadian Lighthouse since 1832. The optimum time for visiting Machias Seal Island begins in mid-June, runs through August. Figure 6 shows the relationship of Machias Seal Island to Cutler Harbor. The Birder's Guide to the Coast of Maine mentions accommodations for visitors to Machias Seal Island as "a few motels, open year-round in Machias and Lubec. The closest campgrounds are in Jonesboro and on Campobello Island in New Brunswick". There is obviously a need for expanded accommodations as interest in visiting Machias Seal Island increases.

Captain Barna Norton of Jonesport is reported in the book to make trips out of Cutler and sometimes Jonesport every day during the summer. These trips leave at 7:00 a.m. in the morning and return by noon. Traveling time to the island is reported to be approximately one (1) hour.

Contacted by telephone, Captain Norton indicated that he uses McGhie's Wharf when operating out of Cutler Harbor. Captain Norton currently has a 40 foot excursion boat which carries thirty (30) passengers. Passengers usually park along Main Street or in Corbett's yard. He is currently making one (1) trip daily, usually a total of sixty to eighty (60-80) trips per year, depending upon weather. Last year Captain Norton purchased the larger 40 foot boat. He now plans to use the 36 foot boat in conducting whale watching tours. It will be operated by his son. Needs for future excursion boats mentioned by Captain Norton include a dock facility extending to low water, parking facilities and an improved boat ramp.

Discussions with tour boat operators along the coast of Maine indicate the need for basic facilities and nearby support establishments. These requirements include the following:

- Dockage for all stages of tide.
- Five to eight feet of depth at low tide, next to the dock.
- Calm waters most of the time in the vicinity of the dock.
- Electrical power of 110 volts for small boats and 440 volts for large boats.
- Floats and a ramp leading to a pier or land.
- Ticket booth.
- Adequate parking.
- Maximum visibility to customers.
- A class "A" restaurant near or within sight of the dock.

With an increase in tourism to the Washington County area, and the increase in environmental concerns, it is felt that the need for another tour boat will be realized by the year 2000. A tour boat could be used for whale watching, sight seeing and/or day trips to Machias Seal Island. As estimated in Table 4, an additional tour boat would have an economic return to the area of up to \$70,000 per year.

- B) Pleasure Boats - The bible of cruising pleasure boat owners is A Cruising Guide to the New England Coast. The book was first published in 1938 by Robert F. Duncan. Subsequent updates were made in 1946, 1952, 1955, 1961, 1965, 1967, 1968, 1972, 1978, 1979, and 1983. The book is currently authored by Roger F. Duncan of East Boothbay, Maine and John P. Ware. Cutler, Maine (13327 302) is discussed in Part 2 of the publication in Chapter XII, - "Schoodic Point to West Quoddy Head". Highlights of the book's discussion on Cutler indicate it to be the last port in the United States for those cruising to the eastward. While not truly the last port in the State of Maine, the cost line from Cutler east has a strong "Canadian Flavor". Accommodations in Cutler Harbor listed in the "Cruising Guide" include gasoline, diesel fuel, ice, milk and fresh water. Fresh water is quite hard and the book recommends traveling inland on the Machias Road to obtain soft water from a roadside spring.

Accommodations and facilities which should be provided if Cutler is to truly serve cruising pleasure boats would include the following:

- Good supply of high quality drinking water.
- Block ice.
- Showers.
- Laundromat
- Gasoline and diesel fuels.
- Marine supplies and charts.
- Six (6) guest moorings.

C) Groundfish - According to Department of Marine Resources (DMR) records, 80% of all groundfish in the State of Maine is landed in Cumberland and Knox Counties, generally south of Rockland, Maine. Some of the hurdles to be overcome if Washington County is to serve the groundfish market will include the following:

- Distance from fresh fish distribution centers.
- The reluctance to accept frozen fish into the groundfish market.
- The possibility of importing Canadian whole fish to supplement fluctuations in local fish.
- Fluctuations in groundfish landings due to the weather conditions.

DMR did indicate that groundfish is being successfully landed in Stuben and the newly opened Passamaquoddy Fillet Plant. The success of both operations should be monitored by the Harbor Committee. Additionally, the Portland Fish Pier will be a pilot project for the use of Canadian whole fish to supplement the local supply of groundfish, when the supply does not meet the demand.

Groundfish landed in Cutler could also be used to supplement local groundfish at the Portland Fish Pier. Groundfish could be temporarily stored in a refrigeration truck until an adequate load could be delivered to the marketplace. In order to be ultimately successful, an on-site refrigeration system would probably be necessary. The success of groundfishing in Cutler would rely on a commitment by fishermen, because fish markets require a steady source of product.

The Boothbay Harbor Fishermen's Cooperative has been experiencing some problems which relate to management and lack of commitment by local fishermen, small catches associated with short trips and the need to combine different kinds of fish in order to obtain the volume needed. The Boothbay Harbor situation will also need to be monitored by the Harbor Committee.

Groundfishing can only be looked upon as a source of income for a limited number of fisherman, or as a source of supplemental income for other fisherman due to limited natural resources. The limited natural resources can be attributed to the recent boundary dispute with Canada. During the boundary dispute, very lucrative fishing waters were taken away from American fisherman. This action caused large, sophisticated American fishing vessels to fish in a smaller coastal area, thus depleting these waters of groundfish at a faster rate than would have occurred before the boundary dispute.

With the addition of a new town pier, and related facilities, Cutler would be able to increase its share of the shellfish and groundfish landed in Washington County. The commercial fisheries landings for Washington County, as reported by the Resource Statistics Division of the National Marine Fishery's Service, are shown in Table 1. The landing report also indicates the dollars associated with each category. While finfish accounts for nearly twice the pounds of shellfish landed, it accounts for less than 10% of the total dollars realized. Table 2 shows a comparison of fish to shell fish as reported through December 1985. The addition of groundfishing and the expansion of the current fishing industry, would create new jobs and add needed income to the area.

Table 1

NATIONAL MARINE FISHERY SERVICE
RESOURCE STATISTICS DIVISION

DATE OF RUN 2/28/86
PAGE 12

PRELIMINARY COMMERCIAL FISHERY LANDINGS BY REGION, STATE AND COUNTY (CUM-RUN 3)									
	1982 THRU DEC		1983 THRU DEC		1984 THRU DEC		1985 THRU DEC		
	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS	
New England Region									
Maine									
Washington									
Alwives	57,050	4,475	36,400	2,800	66,500	5,100	67,340	4,810	
Anglerfish	23,882	14,544	20,473	11,844	15,166	11,061	17,483	13,409	
Bluefish, Unc	44	8	-	-	-	-	10	1	
Cod, At, Lg	21,664	7,041	32,490	10,377	68,237	15,181	80,298	24,503	
Cod, At, Mkt	239,599	62,058	476,054	121,094	428,835	112,870	272,913	87,092	
Cod, At, Scrod	3,525	956	2,378	531	7,839	2,502	12,848	4,314	
Cusk	2,359	404	1,951	372	2,142	478	4,521	817	
Eels, Common	21,516	18,179	8,400	6,300	-	-	3,320	2,656	
Flounder, At, Blackback, Lg	52,118	22,284	31,977	13,817	11,022	5,328	6,537	3,786	
Flounder, At, Blackback, Md	10,890	3,517	15,876	4,842	-	-	653	404	
Flounder, At, Blackback, Sm	170,472	72,034	108,906	56,408	2,890	922	1,738	779	
Flounder, At, Dab, Sea, Lg	64,923	21,527	39,348	12,033	37,779	25,253	27,461	23,698	
Flounder, At, Dab, Sea, Sm	77,912	50,599	74,853	59,083	16,826	6,054	13,762	5,955	
Flounder, At, Dab, Sea, Unc	15,413	7,383	21,156	10,721	-	-	1,355	474	
Flounder, At, Dab, Sea, Md	2,317	993	4,069	1,611	-	-	4,696	3,177	
Flounder, At, Gray Sole, Lg	6,698	3,980	10,883	6,081	52,060	47,940	25,897	30,932	
Flounder, At, Gray Sole, Sm	-	-	482	232	20,877	10,053	19,304	9,581	
Flounder, At, Gray Sole, Med	338,539	46,889	291,881	37,549	-	-	10,075	7,956	
Flounder, At, Yellowtail, Lg	4,042	6,142	7,911	16,895	-	-	-	-	
Haddock, Lg	12,925,710	733,091	4,750,200	263,758	795	437	-	-	
Hake, At, White, Unc	530	201	-	-	3,165	2,587	2,158	1,744	
Halibut, At & Pa	3,579	760	4,289	1,121	391,320	48,696	336,999	46,285	
Herring, At, Sea	237,652	39,815	556,150	76,873	5,735	9,890	2,699	4,892	
Mackerel, At	5,110	1,062	13,915	4,583	8,756,910	477,901	7,656,346	466,331	
Ocean Perch, At	375	93	1,081	69	-	-	266	66	
Pollock, At & Pa, Unc	107	22	210	87	2,655	780	6,115	2,267	
Sharks, Unc	72,245	8,393	802	80	300,488	44,823	409,124	64,730	
Suckers	30,147	4,174	20,785	3,395	9,741	3,276	11,566	6,534	
Wolfish, At	-	-	-	-	-	-	9,997	1,803	
TOTAL FISH	14,388,418	1,130,624	6,532,930	722,556	10,210,782	832,880	9,006,591	819,606	

Table 2
Comparison of Fish and Shellfish
Washington County Landings

Year	Fish		Shellfish*	
	Pounds	Dollars	Pounds	Dollars
1982	14,388,418	1,130,624	5,772,410	9,908,229
1983	6,532,920	722,556	5,953,000	12,217,510
1984	10,210,782	832,880	6,095,348	15,693,703
1985	9,006,591	819,606	4,953,019	12,697,721

* Quahogs not included.

Economic Data and Projections

Based upon information provided by the Town of Cutler, the current value of products from the commercial fishing industry is as follows:

	Volume	Pounds	Dollars
Quahogs -	7,000 bushels	420,000*	\$ 112,000
Lobsters -	120,000 pounds	120,000	270,000
Clams -	10,768 bushels	646,080*	409,184
Misc. -			200,000
Total:			\$ 991,184

* Based upon 60 lbs. per bushel

The above figures for Cutler can be compared with those in Table 3 for Washington County and the northeast.

Table 3
Shellfish Landings by Type
Washington County
(All Figures in Millions)

Year	Lobsters		Clams		Mussels		Periwinkles		Scallops	
	Lbs.	Dollars	Lbs.	Dollars	Lbs.	Dollars	Lbs.	Dollars	Lbs.	Dollars
1982	2.3	5.2	1.6	2.5	1.1	0.3	.02	.04	0.2	0.8
1983	2.1	5.0	1.5	2.7	1.3	0.4	.04	.07	0.5	2.5
1984	1.8	4.5	2.4	5.3	0.6	0.2	.02	.03	0.7	4.5
1985	1.7	3.8	2.1	5.2	0.2	0.1	.01	.02	.04	2.4

Shellfish Landings
(All Figures in Millions)

Year	Northeast		Maine		Washington County	
	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
1958	-	21.3	-	8.3	-	-
1960	-	27.7	-	13.4	-	-
1965	-	35.9	-	16.9	-	-
1982	-	-	-	-	5.77	9.9
1983	-	-	-	76.6	5.95	12.2
1984	-	-	-	78.3	6.10	15.7
1985	-	-	-	-	4.95	12.7

Future sources of revenue, not currently realized, will include tour boats and docking facilities for pleasure boats. Table 4 below shows the projected revenue from both commercial and public recreational activities for Cutler Harbor, based upon the estimated capacity of the harbor.

Table 4
Economic Return From Harbor Area

Activity	Unit Cost	1986		2000	
		Units	Annual Return	Units	Annual Return
Moorings	\$ 5/yr.	43	\$ 215	71	\$ 355
Slips	\$30/ft./yr.	0	0	250	7,500
Fuel					
Gas	\$.86/gal.	50,000	43,000	80,000	68,800
Diesel	\$.65/gal.	25,000	16,250	41,000	26,650
Repairs					
Power	\$500/yr.	3	1,500	4	2,000
Sail	\$350/yr.	4	1,400	7	2,450
Commercial	\$1,000/yr.	36	36,000	60	60,000
Parts & Materials					
Power	\$1,500/yr.	3	4,500	4	6,000
Sail	\$1,000/yr.	4	4,000	7	7,000
Commercial	\$1,500/yr.	36	54,000	60	90,000
Secondary Return					
From Boating/					
Cruising	\$15/day/per.	480	7,200	1,000	15,000
Excursion Boats	\$35/person	1600	56,000	4,000	140,000
	Total:		\$ 224,065		\$425,755

Survey of Sites For Public Use

Sites available for public use have been narrowed to the following:

1. Property behind the Town Office comprised of ten (10) acres.
2. Property owned by Stillman Fitzhenry, comprised of two (2) acres.
3. Property formerly and currently owned by Mr. Malcolm McGhie comprised of an abandoned store and pier.
4. Property owned by Jasper Cates, comprised of less than one (1) acre.

Details surrounding each site are discussed below and their locations are shown on Figure 4.

The property behind the Town Office could be used for a parking area or for the site of a hatchery building. The idea of building the Town pier behind the Town Office was deemed undesirable due to the large drop to the water.

The idea for building or expanding the pier on the property owned by Malcolm McGhie was abandoned when it was learned that the pier was not for sale along with the building.

After local concern was voiced for the usefulness of the sand beach area, as a boat maintenance area, the proposal for the Town pier extending from the property owned by Stillman Fitzhenry was eliminated.

The property owned by Jasper Cates offers an ideal location for the public pier. Although no parking is available on site, it is felt that adequate parking can be provided for within walking distance.

Additional Studies

Additional studies are recommended to supplement and carry out this Harbor Study. These include:

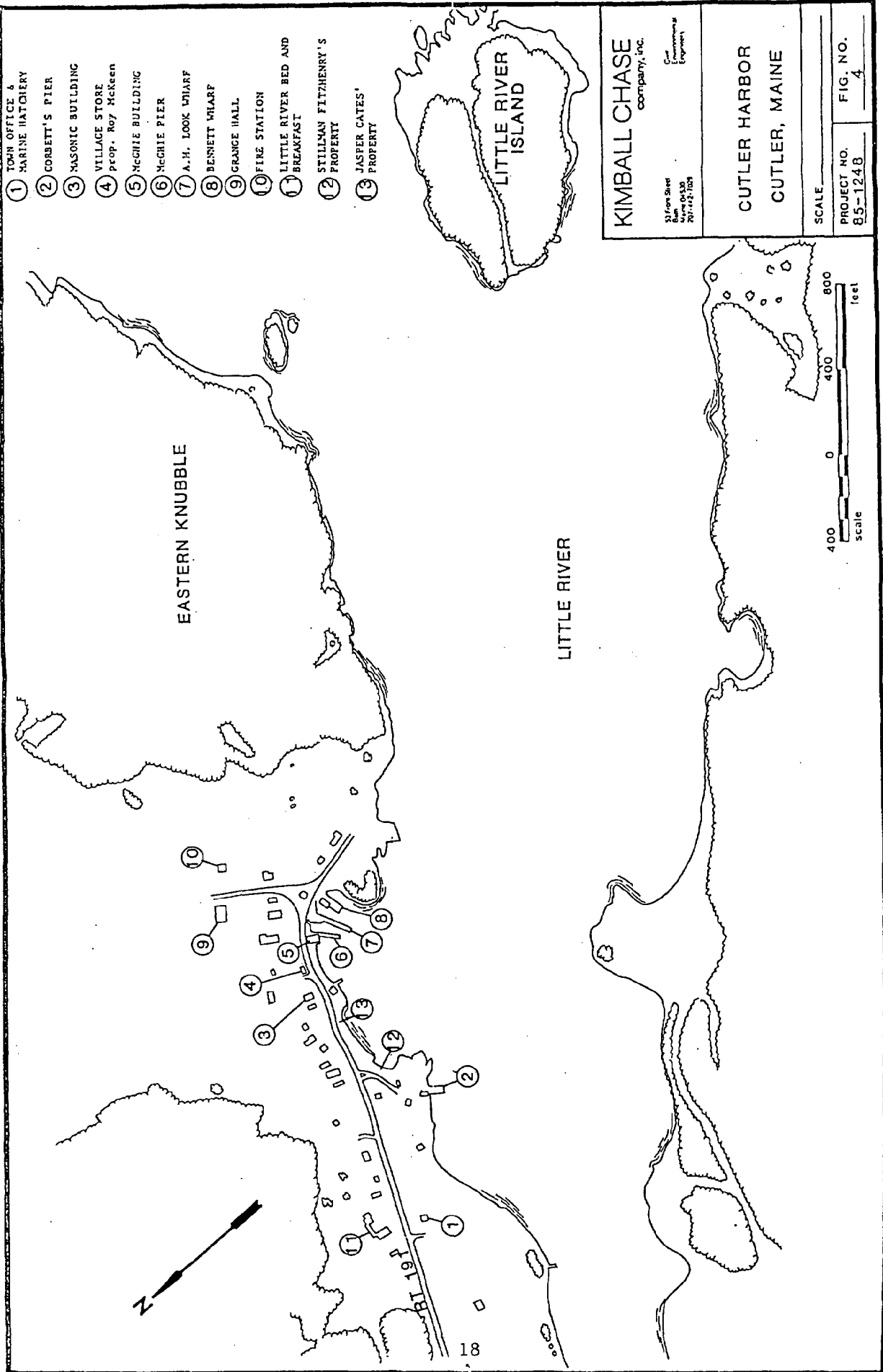
- A Corps of Engineering condition survey for dredging.
- A study to determine the water supply and wastewater disposal needs of the village.
- A detailed evaluation of potential parking areas.

Marketing of Cutler Harbor

The duties of the Harbor Committee should address both the Harbor and waterfront, and the name of the committee might be revised in

the future to reflect its waterfront involvement. Duties of the Harbor and Waterfront Committee should include, but not be limited to, the following:

- Review and periodic update of Harbor Ordinance.
- Review and periodic update of the job description for Harbor Master.
- Preparation and distribution of informational material to commercial fishermen concerning harbor activities. This informational material could include notices of up-coming Harbor Committee meetings and their purpose, information on dates of Department of Marine Resources hearings and other information pertinent to commercial fisherman.
- Preparation and distribution of information and material relating to recreational boating interests. This information could be a small pamphlet prepared by the Town for distribution to recreational boaters, stating where and when they can get supplies such as water and food while in Cutler.
- Coordination of activities with State and Federal agencies, such as the Department of Environmental Protection, Maine Department of Transportation, Corps of Engineers, and U.S. Coast Guard, and the Department of Marine Resources.
- Additional contacts should be developed with shellfish and finfish markets, particularly at the Portland Fish Pier.
- An updated description of the Harbor should be sent to the New England Cruising Guide, periodically, to insure current information for pleasure boaters.
- Develop a pier management plan.
- Work as an information gathering body for the Corps of Engineers.



CUTLER, MAINE

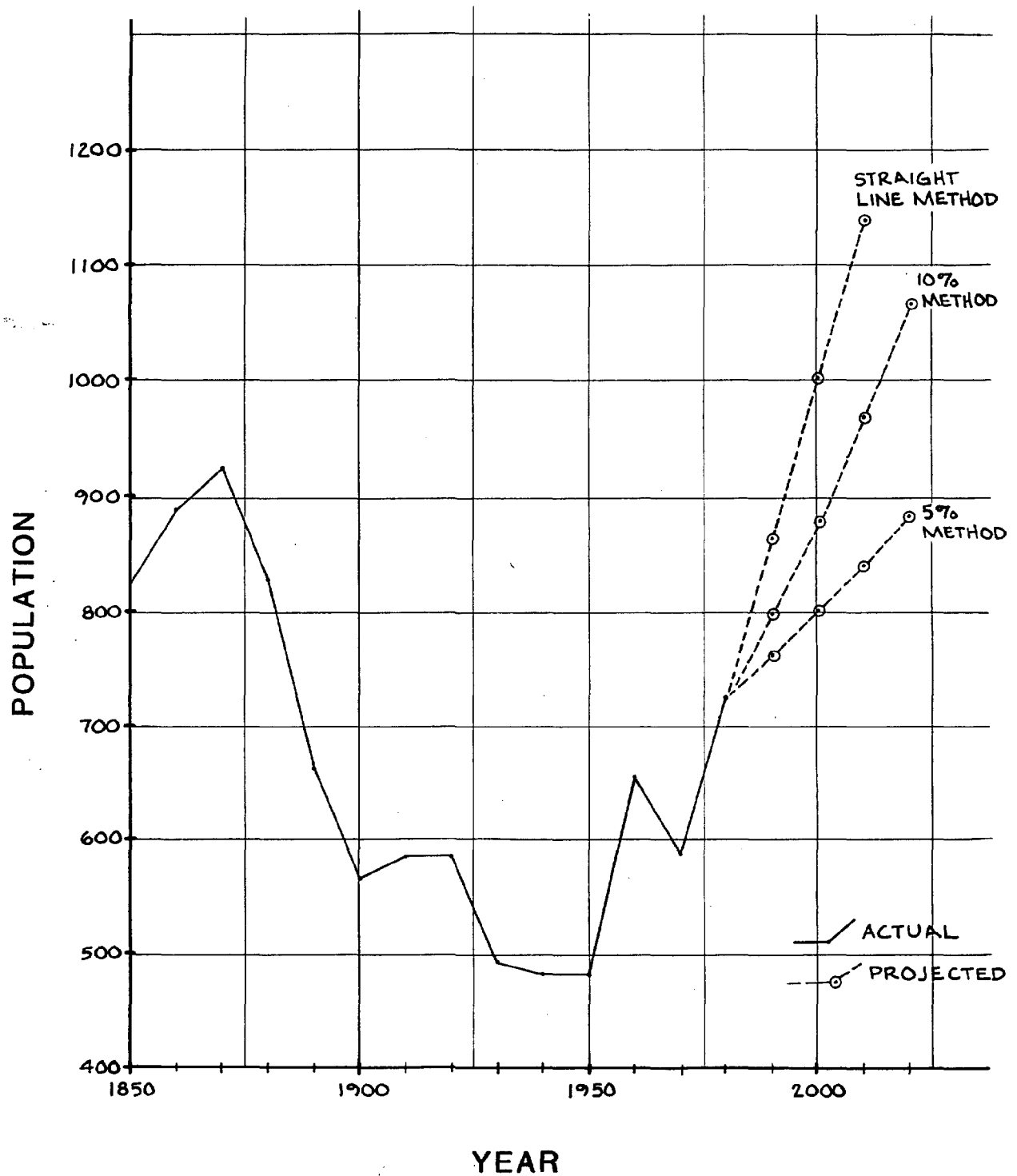


FIGURE 5.

SECTION 4
Harbor Management Plan

Objectives of the Harbor Management Plan

The Harbor Management Plan is intended to serve as a framework for the Town's decisions on harbor issues. This policy framework can be used by the Harbor Committee and the Board of Selectmen to evaluate desirability and impact on individual programs and regulations as they relate to the harbor and to the Town as a whole. The plan attempts to relate the major elements of harbor use in a way that will produce a coordinated view of what the Cutler harbor of the future should be. The Harbor Management Plan is similar to a Town's Comprehensive Plan. It describes the goals of how the harbor should be managed. The goals of the Harbor Management Plan are to provide for:

- The orderly development of the harbor.
- A safe harbor during storms.
- Adequate clearances for navigation and moorings.
- Promotion of existing activities and their improvement.
- The marine supply needs of all boaters.

The Harbor Management Plan will be administered by the Cutler Harbor Committee and enforced by the Harbor Master. Figure 7 shows the overall limits of Cutler Harbor, with the proposed lines which outline the Harbor Channel and mooring areas.

The Harbor Ordinance (See Appendix B) provides the rules and regulations by which the Harbor Management Plan is implemented. The key aspects of the Harbor Ordinance include:

- A clear and concise definition of all terms.
- Designation of all channels and passageways.
- A designation of the anchorage.
- A mooring plan.
- Standards for moorings.

Harbor Capacity

The water area, at low tide, suitable for anchorage and channels is estimated to be 38 acres. If properly managed and controlled, this area will serve the needs of Cutler for many years. In determining harbor capacity, future projections have been made for the number of boats based upon past records. The fishing fleet in Cutler has grown significantly in the past eleven (11) years. This is reflected in Table 5 below, which also shows boat projections.

Table 5
Boat Projections

<u>Year</u>	<u>Total No. of Boats</u>	<u>Commercial Boats</u>	<u>Pleasure Boats</u>
1975	12	10	2
1986	43	36	7
1990	51	43	8
1995	61	51	10
2000	71	60	11

Harbor Growth

As shown by Table 5, the boats using Cutler's harbor may increase by 65% by the year 2,000. The anchorage available is estimated at 38 acres. The anchorage will be at capacity by the year 1990, if current mooring methods are used. It is recommended that pole moorings be phased out and replaced with alternate methods of mooring over the next ten (10) year period. Alternate methods of moorings include slips and mooring floats. These methods of mooring boats will be required if projections are realized.

Careful monitoring of Harbor development will be required.

Harbor Issues

Based upon a review of activities in other Maine Harbors, the following specific criteria are suggested for each of the issues discussed:

- A. Clearances - There shall be a minimum clearance of ten (10) feet from any moored or docked boat, channel line, and mooring area.
- B. The Harbor Committee shall maintain a mooring plan. Standards for moorings shall include the following, which reflect the relationship between boat length and mooring weight. Also, each mooring shall be properly equipped with the necessary hardware, chains, buoy and pickup buoy.

Figure 8 shows the existing "pole" moorings which will need to be replaced with chain moorings (Fig. 9) due to restricted space.

- C. Floats - All floats shall be approved for construction and location by the Harbor Committee. Maximum length of a single float shall not exceed twenty (20) feet. The maximum width shall not exceed ten (10) feet. All floats shall be equipped with proper flotation.
- D. Speeds - The maximum speed within the Harbor limits shall not exceed 5 knots (6 miles per hour).
- E. Fees - The following fee schedule is proposed for docking and mooring facilities in Cutler Harbor:
 - 1. Mooring Fees \$15.00 per year
 - 2. Float Registration Fees \$10.00 per year
 - 3. Docking Fees at Public Piers & Slips \$30.00/ft per year
- F. Maintenance - The maintenance of all floats and moorings shall be the responsibility of the owner. All moorings shall be annually approved by the Harbor Master and at his direction the boat or flotation owner or his agent shall make necessary repairs or replacements to all parts thereof in such time as the Harbor Master deems necessary for the safety of the craft or others adjacent to it.

Mooring Plan

While Figure 7 shows the general areas and channels in Cutler Harbor. Appendix C contains a detailed Mooring Plan with locations and bearings shown.

The layout and location of the moorings and channels may be accomplished with electronic navigation equipment available on many of the fishing boats. The Harbor Master plans to utilize the LORAN System. This system, as the name implies, is a Long Range Aid to Navigation providing transmissions from which data can be obtained with a special shipborne receiver for reference to "latticed" charts. Each pair of stations transmits synchronized radio pulses with a fixed delay between the Master and Secondary transmission. The shipborne receiver measures the "time difference" being drawn on the chart as a hyperbolic pattern of position lines. A fix is obtained by measuring the delay of a second pair providing a second position line with a suitable angle of cut in the area.

Many of the 1200 series coastal charts have LORAN Lines overprinted thereon and tables for each pair are available so that a user can layout lines on any chart within a range of that pair.

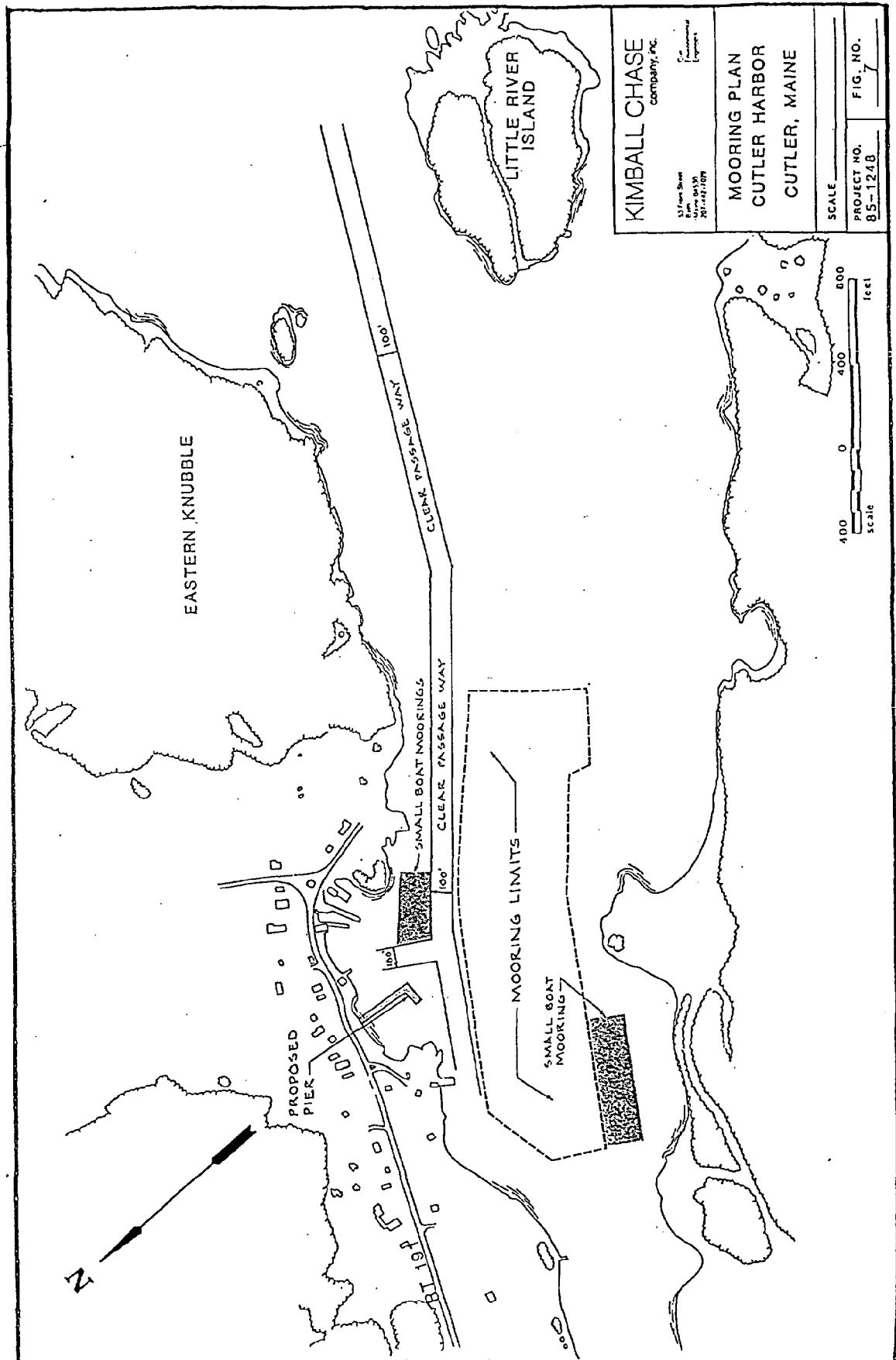
The LORAN A System has been phased out and replaced with the LORAN C System. The LORAN C System provides greatly increased accuracy at longer ranges with fully automatic receivers. If the receiver has previously been used in the area and a fix at a known location obtained, the time difference correlations from this fix can be applied to obtain 50' to 100' accuracy for other locations.

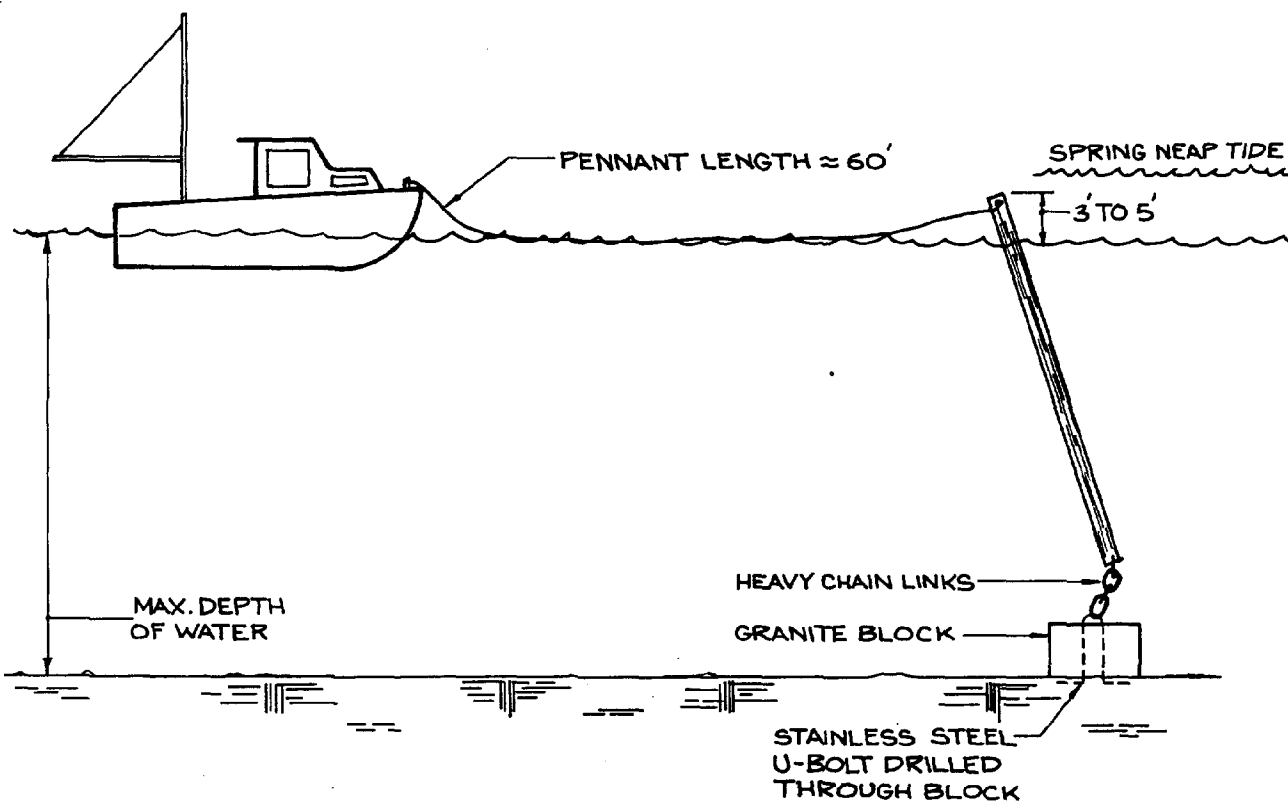
Capital Improvements

The major capital improvement to Cutler Harbor will be a public pier. The ultimate facility will include a boat launching ramp, parking lots, boat maintenance area and a freezer for groundfish. These facilities are discussed in Section 6.

The following facilities are presented in the order by which they might be completed by a capital improvement program, covering the next 8 year period.

<u>Year</u>	<u>Activity</u>	<u>Cost</u>
1986	Marine Hatchery Equipment	\$ 50,000
1987	Marine Hatchery Building Design	12,000
	Marine Hatchery Building Construction	150,000
	Public Pier Soundings & Preliminary Design	20,000
1988	Final Design of Public Pier	30,000
	Pier Funding by MDOT	
	Environmental Permits for Public Pier	5,000
1989	Construction of Public Pier	570,000
1990	Construction of Boat Launching Ramp	12,000
	Design and Permitting (If Required) of Parking Facility	4,000
1991	Design and Permitting of Boat Repair Area	20,000
	Construction of Parking Facilities	20,000
1992	Construction of Boat Repair Area	108,000
1993	Design of Freezer Facility	4,000
1994	Construction and Installation of Freezer	40,000





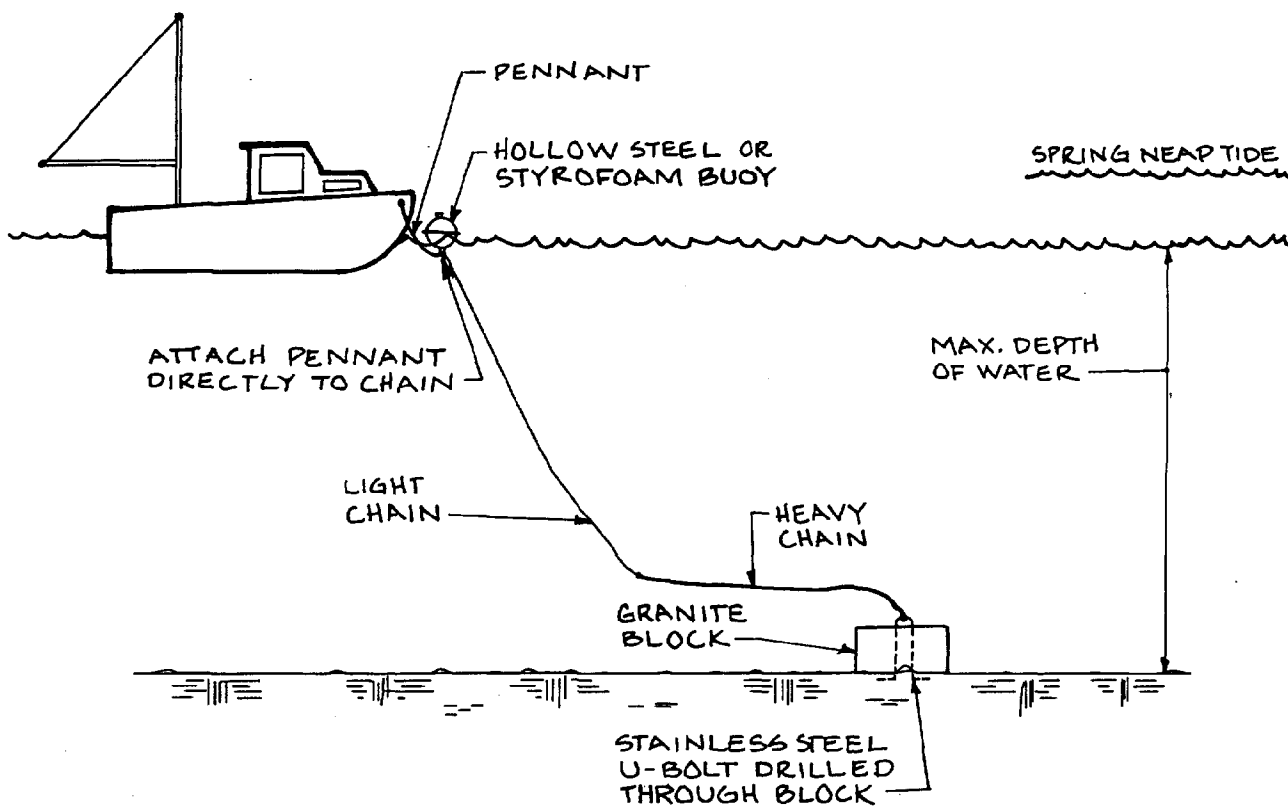
NOTE:
POLE LENGTH REQUIRED IS MAXIMUM
DEPTH OF WATER PLUS 5 FEET

POLE MOORING DETAIL

KIMBALL CHASE COMPANY INC.

53 Front Street
Bath, Maine 04530

Figure 8



NOTE:
 CHAIN LENGTH REQUIRED IS A 3 TO 1 SCOPE
 OF WATER DEPTH AT MEAN HIGH WATER;
 IF WATER DEPTH IS 20' THE CHAIN SHOULD
 BE AT LEAST 60' LONG.

MOORING DETAIL

KIMBALL CHASE COMPANY INC.

53 Front Street
 Bath, Maine 04530

Figure 9

SECTION 5

ENVIRONMENTAL CONSIDERATIONS

The environmental impacts resulting from any waterfront or harbor development must be reviewed and approved by State and Federal agencies. The two primary agencies involved include the Department of Environmental Protection, U.S. Army Corps of Engineers. While both of these agencies allow maintenance of existing facilities, total replacement or construction of new facilities require extensive permits and detail applications to obtain them.

Draft Environmental Permit Applications are contained in Appendix F.

Also involved in addressing environmental considerations will be the Bureau of Public Lands, which leases all submerged land for the State of Maine, as well as, the Department of Marine Resources, which reviews all marine activities. Construction resulting in navigational impact will require U.S. Coast Guard permits.

JURISDICTIONAL LIMITS

The jurisdictional limits of the various agencies involved with addressing environmental issues can be confusing. The limits are best depicted by Figure 10. This Figure shows the shoreland zoning which was State mandated to be adopted by all Maine communities within two hundred and fifty feet of normal high water. In this zone, local ordinances apply as well as DEP's Bureau of Land Quality Control requirements. From normal high water and beyond the DEP's Wetlands Alteration Law is in effect. Below normal low water the Bureau of Public Land's administers the Submerged Lands Regulations.

The Corps of Engineers jurisdiction begins at annual high water and extends beyond mean low water to the 3-mile limit.

The distinction between "normal", "mean", "annual high" and "flooding" due to storms, are important when addressing issues of setbacks and filling.

PRELIMINARY ENVIRONMENTAL ASSESSMENT

Project Description

The Cutler public pier will provide the Town a pier which will be usable at all stages of tide. It is designed to provide a boost to the economic growth of the fishing industry. The proposed pier will provide for a location to load and unload the needed

equipment during all stages of the tide and under all weather conditions, which is presently difficult to accomplish. The pier will extend 300 feet into the harbor and will require some filling at the shoreline.

Air Quality

The construction and operation of the proposed pier will have virtually no effect on the Town's air quality.

Solid Waste Disposal

The proposed pier will not have any additional impact on or disrupt the present solid waste disposal system. Construction refuse could be accommodated at the Town's solid waste disposal site. Solid waste disposal will cause no adverse effects on the environment.

Water Quality

Impacts to water quality will be limited to minor siltation associated with landside construction and the driving of piles.

Minor impacts can be expected from periodic swabbing of the pier and boat decks.

A pumpout facility for pleasure boat holding tanks is not planned. Processing of catches are not expected to result from the pier or associated activities.

Wetlands

The filling of wetlands will not be required for the pier itself. The construction of the boat maintenance area and freezer area will require the filling of wetlands. This filling will impact marine life in the area of fill and require additional environmental permits. Marine life that could be effected by the construction of the boat maintenance area and freezer area include clams, mussels, sandworms, bloodworms and crabs.

Erosion/Siltation

Minor erosion and siltation can be expected by the sitework construction of the pier accessway, boat maintenance area and freezer area. Proper construction procedures will minimize the effect of erosion/siltation on the environment.

Traffic

During construction, traffic will increase due to the workmen's vehicles and the delivery of materials. Once complete, increased traffic will be expected as use of the harbor grows and more fishermen use the pier.

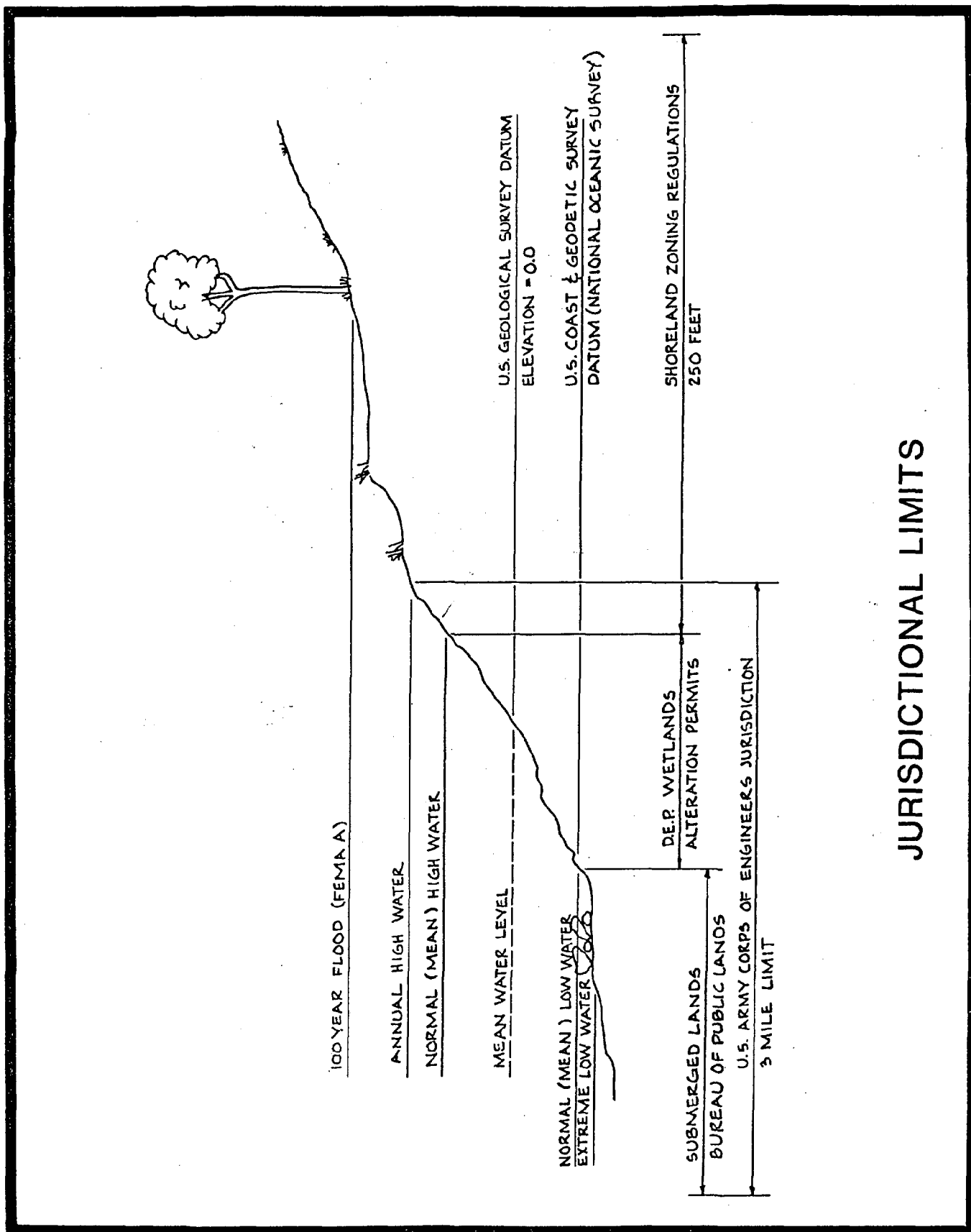
Historical/Archaeological

There will be no impacts on historical/archaeological areas.

AGENCY CONTACTS

Points of contact at each agency are listed below:

1. Department of Environmental Protection
Bureau of Land Quality Control
Division of Licensing and Enforcement
State House
Augusta, Maine 04333 - (207) 289-2111
Attn: David Studer
2. U.S. Army Corps of Engineers
Maine Field Office
Room 209
Federal Building
410 Western Avenue
Augusta, Maine 04330 - (207) 622-8246
Attn: Jay Clement
3. Bureau of Public Lands
Department of Conservation
State House
Augusta, Maine 04333 - (207) 289-3061
Attn: Carol Holden
4. Department of Marine Resources
Bureau of Marine Development
State House Station 21
Augusta, Maine 04333 - (207) 289-2291
Attn: Michael Moser or Lorraine Stubbs
5. Malcolm Richards, Area Biologist
P.O. Box 21
West Sullivan, Maine 04689 - (207) 422-3934



JURISDICTIONAL LIMITS

FIGURE 10

KIMBALL CHASE

company, inc

SECTION 6 Proposed Facilities

General

Cutler Harbor has experienced a fourfold increase in its fishing fleet in the last ten (10) years, while docking space has actually decreased. Currently, town residents and fishermen rely on two (2) privately owned wharves which make operations difficult, which will stymie future growth. In addition, due to increased fishing pressures, the trend is to fish further offshore, thus larger vessels are being utilized, which puts more demand on the existing facilities.

In addition to commercial fishing, Cutler Harbor also has the potential for increased tour boat activity. Presently, boat trips are offered to the bird sanctuary on Machias Seal Island, but the potential for more trips and future growth is also being stymied by the inadequate docking and support facilities.

It is important to note that a new public pier and other facilities should not be placed in competition with existing piers. It is not expected to sell fuel, supplies, or bait, unless needed and approved by the Town of Cutler. The purpose of the pier is to provide additional off loading capabilities and a facility available to all fishermen to repair and maintain their boats.

1. PUBLIC PIER

Pier Alternatives

Several waterfront areas on Cutler Harbor have been investigated as possible sites for a public pier. Factors affecting the location and size of the public pier include:

- Location in regards to needed supplies (i.e. fuel, etc.)
- Availability of parking
- Depth of water at low tide
- Access to public roadway
- Minimal environmental impact
- Present and future berthing needs
- Boat maintenance area
- Potential for increased pleasure and tour boats

Through site investigations including topographic surveys, and conversations with Town officials, it has been determined that the best suitable location for a public pier is adjacent to Sand Beach. Two (2) alternative pier layouts and three (3) cost estimates have been prepared.

Selected Alternative 1 consists of a three hundred (300) foot long "L-shaped" pier with three (3) attached floats for loading and unloading cargo, and for short-term maintenance. This layout consists of a wooden deck, treated timber piles, oak fender piles, a stairway, railings, hoists, and necessary utilities. The associated utilities include electricity, a welding outlet, and water supply. This layout also includes reconstruction of the existing boat ramp which is accessed from Route 191. The total estimated cost for the entire facility is \$611,400. A detailed breakdown of the costs associated with this proposed layout is shown in Table 6. A site plan depicting the proposed pier layout is shown in Appendix C (See Figure 11 for pier elevation view).

Table 6
Preliminary Cost Estimate
Alternative 1

Pier:		
3" Decking, Piles, Joists, Etc.	11,100 sf @ \$35/sf	\$388,500
Hand Railing	250 lf @ \$15/lf	3,800
Stairway	- Lump Sum	5,000
3-10'x20' Floats	@ \$18/sf	10,800
Hoists	2 ea. @ \$5,000/ea.	10,000
Power	- Lump Sum	10,000
Water	- Lump Sum	10,000
Oak Fender Piles	60 - 40' piles @ \$10/lf	24,000
3" Wave Suppressor Plank	1,000 sf @ \$10	10,000
Pier Access:		
Concrete Retaining Wall		
- Footings	25 cy @ \$200/cy	5,000
- Walls	21 cy @ \$300/cy	6,300
Granular Fill	50 cy @ \$5/cy	300
Gravel Subbase	25 cy @ \$9/cy	200
Hot Bituminous Pavement Type-B	7 tons @ \$35/ton	300
Hot Bituminous Pavement Type-C	5 tons @ \$35/ton	200
Boat Ramp:		
Gravel Subbase	50 cy @ \$9/cy	500
Hot Bituminous Pavement Type-B	11 tons @ \$35/ton	400
Hot Bituminous Pavement Type-C	8 tons @ \$35/ton	300
Precast Boat Launch Ramp	- Lump Sum	11,000
Permits	- Lump Sum	5,000
Soundings	- Lump Sum	1,000
Borings	- Lump Sum	6,100
Land Acquisition	- Lump Sum	10,000
Subtotal:		\$518,700
Contingency:		52,000
Engineering:		40,700
Total:		\$611,400

Alternative 2 consists of a public pier located parallel to the ledge point on the southern portion of Sand Beach. This pier facility is similar to Alternative 1, with the exception of an expanded deck on the pier to accommodate parking. This layout also includes reconstruction of the existing boat ramp. The total estimated cost of this facility is \$782,100. The site plan depicting the layout of this facility is shown in Appendix C.

Alternative 3 is located in the same position as Alternative 1. The size of these alternatives are also the same. Alternative 3 varies from Alternative 1 by the use of concrete filled steel piles and a concrete deck. This layout also includes reconstruction of the existing boat ramp. The total estimated cost of this facility is \$677,400.

One major advantage of the selected plan, Alternative 1, is the ability to preserve Sand Beach for use as a location for on-shore maintenance. Alternative 2 would greatly reduce the potential of Sand Beach for this needed activity. Another advantage of the selected plan is that a wooden pier can be repaired locally, while a concrete and steel pier would have to be repaired by specialized contractors.

Pier Berthing Capacity

Space has been provided for berthing at the new pier for boats to unload their catch. Berthing requirements have been based upon the number of boats served each day and the time needed to unload their catch. It is known that unloading of quahogs may take up to two (2) hours, while lobsters can be unloaded in one half hour. The number of berths at the new pier will be 7 or 8, depending upon boat length.

Funding Sources

Planning Grants and Action Grants are available from the State Planning Office. Planning Grants, for planning and design, are limited to \$20,000. Action Grants, for construction, are limited to \$50,000 per project. These grants are for waterfront related projects.

Construction Grants will be available from the Maine Department of Transportation through the Ports and Marine Transportation Division. The State's participation may be up to 75%.

Construction Material and Design Loads

A. Timber Piles

Timber piles shall conform to ASTM D 25, Class B or better. Treated marine piling shall bear AWPI Quality Mark MP-2. Preferable species are Southern Pine or Douglas Fir, which

shall be seasoned prior to treatment. Cut ends shall be treated by puddling with creosote or coating tops of piles with pitch, with or without sheet metal covers.

B. Timber Framing

Substructure timbers shall be creosote treated, with only seasoned timber to be used for framing. Minimum dimension shall be three (3) inches in and below splash zone, and two (2) inches above splash zone. Retention and penetration of creosote shall conform to requirements of AWP C-18. Preferable species are Southern Pine and Douglas Fir. Bolt spacing shall not be less than six (6) inches center to center and not less than 2-1/2 inches from edge or 4 inches from end of the timber.

C. Deck Framing and Bracing

Timber in deck structure shall conform to the "Design Values for Wood Construction" and the "National Design Specification for Wood Construction", latest edition, as published by the National Forest Products Association. Timber shall be pressure treated. Treads and runway wearing surfaces shall be resistant to wear, preferably oak or maple. Dimensions shall be a maximum of 12 inches wide and a minimum of 3 inches thick. Provide a minimum clearance of 3/8 inches between treads, attached to planks with drive screws or a minimum of twenty (20) penny nails. Maintain a minimum of 3/8 inch clearance between planks, a minimum of 12 inches wide, attached to stringers or nailers with drive screws or minimum of twenty (20) penny nails.

D. Hardware and Fittings

All hardware and fittings shall be galvanized. The minimum diameter of bolts shall be 1 inch and the minimum thickness of metal shall be 1/2 inch in or below splash zone. The minimum diameter of bolts shall be 3/4 inch, and the minimum thickness of metal shall be 3/8 inch above the splash zone.

E. Design Loads

Dead loads shall be estimated by the actual weights of the materials used. Live loads shall be the greatest load produced by the intended use and occupancy, but not less than five hundred (500) pounds per square foot for general cargo handling areas. The following loads shall be considered, but not limited to: truck loads, impact from berthing ships, forces from moored ships, winds on the pier, ice and currents, earth pressures, tidal lag, and seismic forces.

The basic allowable stresses for timber piles shall be determined in accordance with the standard for "Establishing Design Stresses in Round Timber Piles", ASTM D-2899. Safe column loads for unsupported piles shall be determined from column formulas contained in the "National Design Specification for Stress-Grade Lumber and its Fastenings", by the National Forest Products Associations.

2. Boat Launching Ramp

Upgrading of the boat launching ramp will consist of repositioning, fine grading, and paving the existing boat ramp. Precast concrete planks will be placed across the loose sandy beach area to the hard packed soil in order to facilitate driving. The upgrading of the boat launching ramp is estimated to cost \$12,000.

3. Parking

Since no single site is available to accommodate the parking needs of the fishermen using the public pier, several small areas could be developed. Roadside parking and a parking lot beside the Masonic Hall could be developed for a cost of \$24,000.

4. Boat Maintenance and Freezer Areas

Construction of the boat maintenance area will consist of a 225 foot long retaining wall, granular fill and a 100 long foot marine railway. The cost of this facility will be \$128,000, which is not included in overall pier costs. This cost does not include the cradle and the motor house needed to haul boats up the railway.

5. Freezer

A freezer would be constructed on a portion of the land made available by the building of a retaining wall and fill for the boat maintenance and freezer area. The freezer would be large enough to hold fish until a sizeable quantity of fish could be shipped to market. The cost of the freezer facility would be \$40,000.

Benefits of a Public Pier

Neither an extensive cost/benefit analysis nor harbor economic impact study are within the scope of this study. Instead, qualitative descriptions of probable economic benefits, including direct savings or revenues and employment impacts are offered. A comprehensive cost/benefit analysis of a project compares the future project costs with the direct benefits resulting from the project over the economic life of the investment. Project costs consist of initial outlays, operating and maintenance costs and normal replacement costs. Project benefits for a pier

reflect only direct benefits or savings to the persons using the pier. Typical direct benefits include savings in loading and unloading times and revenues that would be lost without a new facility.

Harbor activities also provide employment generation which is very important to the economy and people of Cutler and Down East Maine. The following summary provides employment impact information created by a public pier in Cutler.

Table 7
SUMMARY OF EMPLOYMENT IMPACT

<u>YEAR</u>	<u>NEW FULL-TIME JOBS*</u>
1987	1
1995	18
2000	30

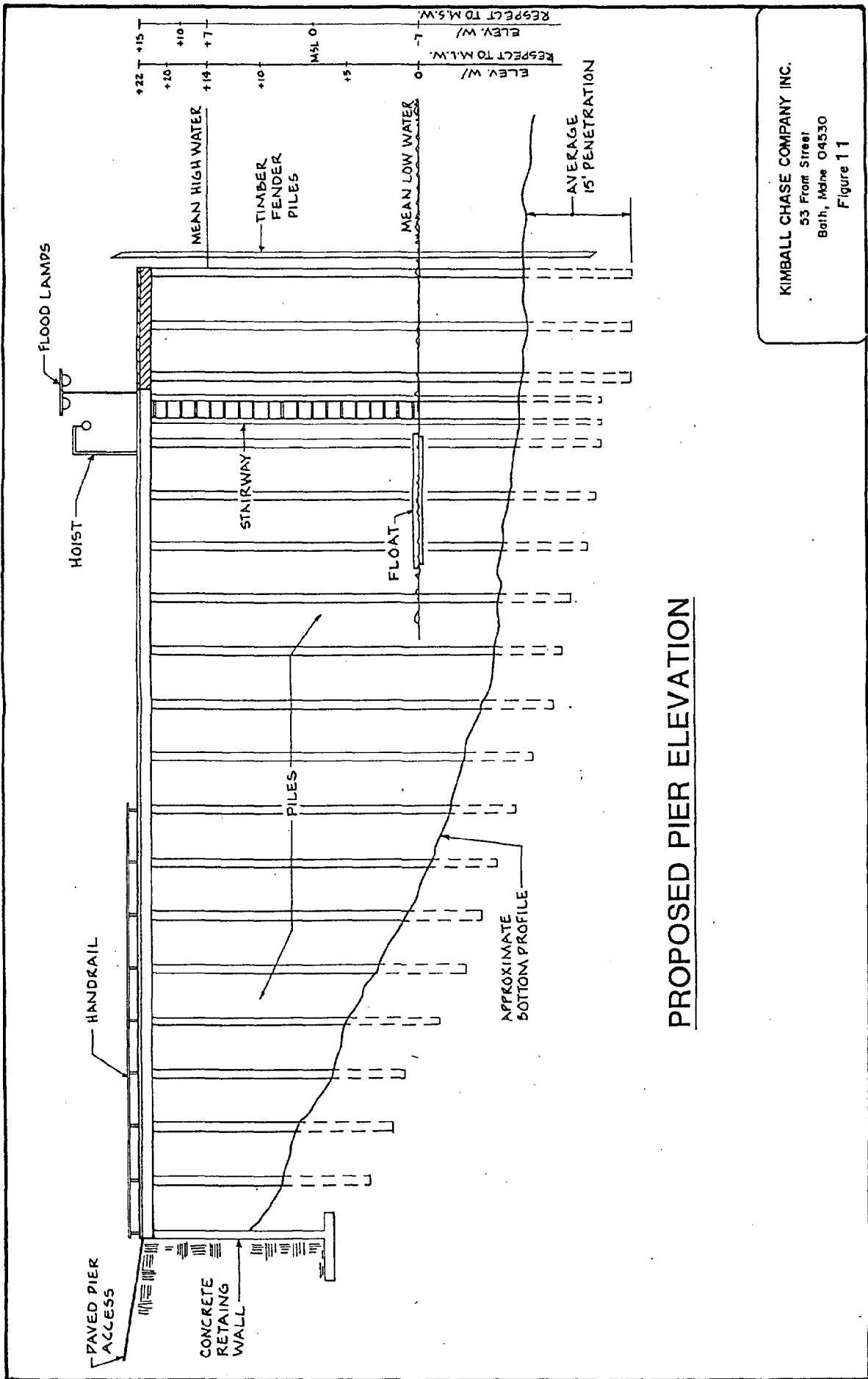
*In Reference to 1986 Employment Figures. New full-time jobs based upon 1.25 jobs for every new boat added.

These full-time job equivalent positions do not include temporary employment caused by port construction activities, but do include jobs in the following categories:

- Fishermen.
- Marine Services: Fuel, supplies, equipment, bait, repairs, storage, etc.
- Trucking.
- Financial services to fisherman and insurance for vessels.

Project Costs

Project costs were developed based upon several sources. Land acquisition costs were estimated from values reported by the Action Agency Real Estate Office in Machias. Borings were quoted by Maine Test Borings, Inc. in Bangor. Soundings and permits have been estimated from previous projects now completed.



PROPOSED PIER ELEVATION

KIMBALL CHASE COMPANY INC.
 53 From Street
 Bath, Maine 04530
 Figure 11

SECTION 7

HATCHERY EVALUATION

Samuel R. Chapman, Aquaculture Specialist, Maine Advisory Program, University of Maine has been involved for a number of years with hatchery programs for clams and lobsters. Mr. Chapman has been most helpful in assisting the Town of Cutler with the establishment of its marine hatchery facility located in the basement of the Town Office. Dedication of the facility took place on April 16, 1986. The philosophy behind the hatchery is that man will be returning something that he has always taken from the sea. This idea is similar to the State of Maine Fresh Water Fish Stocking Program. Since its establishment, the hatchery has stocked nearly 2,000 stage four lobsters. There are currently 100,000 lobsters in the hatchery.

Hatchery Process

The hatchery process involves the procurement of egg laden females. Each brooder lays between 6,000 and 50,000 eggs. Most "counters" (legal sized females) will carry 20-30,000 eggs. The eggs, as they become detached from the female, are free floating in the spawning tanks and are approximately the size of a pin head. The juvenile lobsters are separated from the adults as tank water overflows to a succeeding tank by a one half inch overflow pipe. Separation of the juveniles from adult lobsters is required to avoid cannibalism which is associated with this species. The juveniles proceed through four stages, at which time claws have developed. Stage four lobsters are then released to the marine environment for their remaining growth cycle.

Hatchery Facility

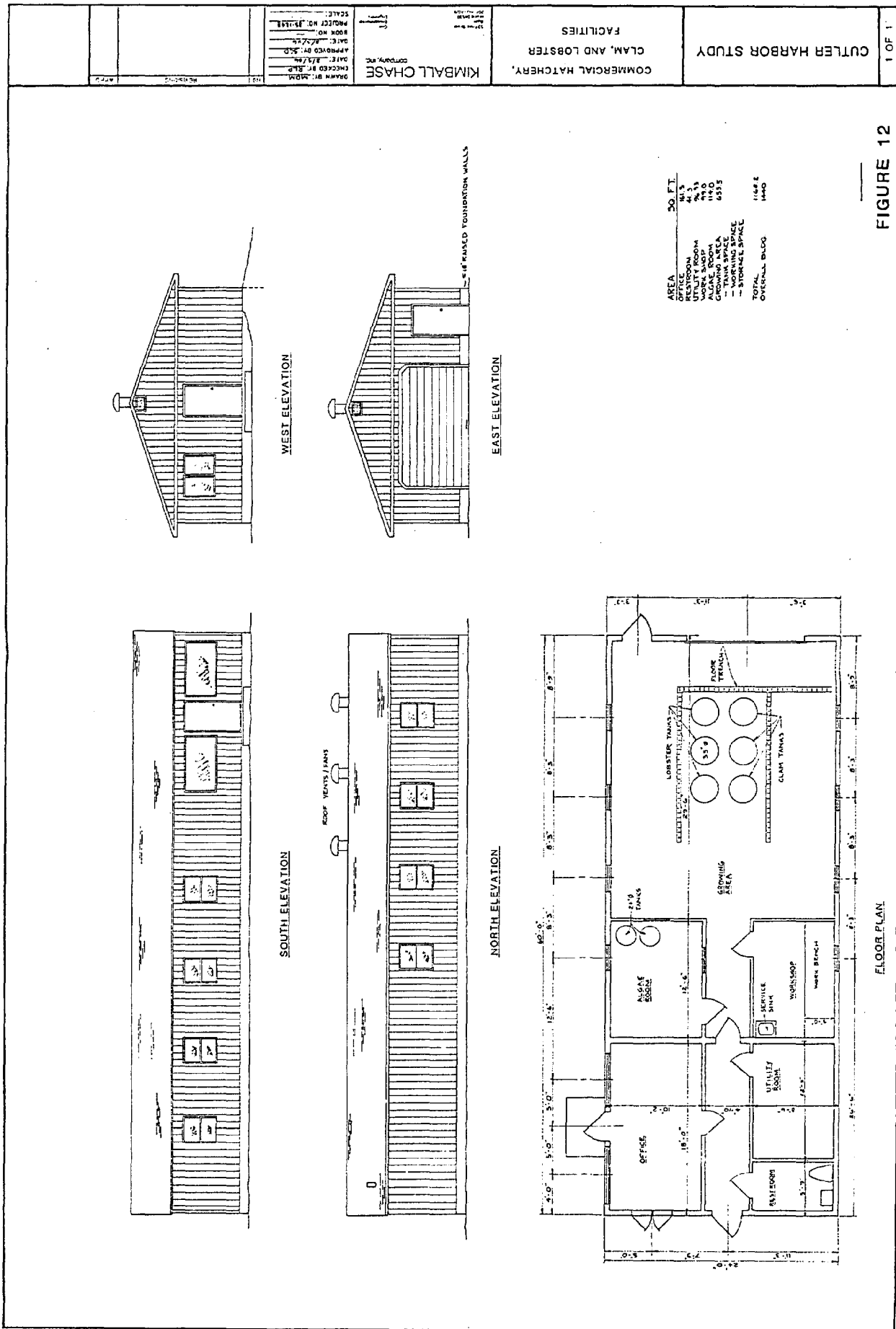
Although the current marine hatchery is located in the basement of the Town Office, plans call for a larger facility if the trial project is successful. Figure 12 shows the plan and elevation views of a single story hatchery building, and the areas in which specific parts of the hatchery process are contained. The estimated design and construction costs of the hatchery building are \$12,000 and \$150,000, respectively. Some of the design criteria important in a hatchery building include the following:

1. Concrete floors for water splash and ease of clean up.
2. Floor slopes ranging from one quarter to one eighth inch per foot.
3. Lighting 25% higher than normal.
4. PVC piping.

5. Oil fired heat.
6. Sanitation considerations from one stage of the hatchery process to another.
7. PVC molded valves.
8. Provisions for adequate ventilation during the summer, as well as Venetian blinds to control sunlight.
9. A good supply of clean salt water.
10. Assurance that no copper, zinc or brass fittings come in contact with the hatchery water.
11. Retractable electrical receptacles of waterproof variety.
12. All wiring to be of black rubber.
13. Waterproof electrical switches.
14. Adequate air compressors with backup and insurance that air supply will not be interrupted.
15. Stand-by generator.

Hatchery Operation

The operation of the hatchery begins in February and ends in October. It is a seven (7) day a week operation requiring approximately two (2) people. The water supply required for a typical hatchery ranges between 100 to 200 gallons per minute. Tank requirements for lobsters are based upon 8,000 to 10,000 lobsters per 240 gallons. If clams are to be raised, 1.5 to 2 million clams require 120 gallons.



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APPENDIX A



APPENDIX B

HARBOR RULES & REGULATIONS

ARTICLE I

Section 101 TITLE

This ordinance shall be known and may be cited as the "Harbor Rules and Regulations" of the Town of Cutler, Maine.

Section 102 DEFINITIONS

- A. "Anchor" shall mean any appliance used by a craft for anchoring purposes and which appliance is carried aboard such craft when under way as regular equipment.
- B. "Channels" shall mean the following:
 - 1. Navigational Channel is a 200-foot wide channel from ... The Navigational Channel terminates 100 feet from the existing piers and floats on the shore of Cutler Harbor.
 - 2. Access Channels are those channels which commence from the Navigational Channel and are designated on the Mooring Map of Cutler Harbor.
- C. "Craft" shall mean and include every description of watercraft, including boats of all kinds, seaplanes, and floats, used or capable of being used for any purpose on water.
- D. "Harbor Master" shall mean the Harbor Master annually appointed by the Selectmen and any deputy appointed by him. The Harbor Master shall be invested with police powers.
- E. "Harbor Patrol Boat" shall mean any vessel or vessels owned or used by the Town and operated by the Harbor Master.
- F. "Little River" shall mean the entire navigable portion of the Little River located within the boundaries of the Town of Cutler.
- G. "Mooring" shall mean any appliance used by a craft for anchoring purposes and which appliance is not carried aboard such craft when under way as regular equipment.
- H. "Inner Harbor" shall mean all of the tidal water inside and north of a line drawn on the Mooring Map.
- I. "Riparian Owner" shall mean the owner of land or an interest in land in Cutler Harbor to high water mark or low water mark.

ARTICLE II

Section 101 HARBOR MASTER

101.1 The Harbor Master shall be appointed by the Board of Selectmen in accordance with the Cutler Council-Manager Charter and Title 38, Section 1, Maine Revised Statutes as amended.

101.2 The Harbor Master shall enforce all ordinances, rules and regulations, Maine State Statutes and Federal regulations applicable to the Little River.

101.3 The Harbor Master shall designate mooring spaces in accordance with Title 30, Sections 2 through 6, Maine Revised Statutes, as amended, and shall maintain a plot plan of the anchorage area indicating locations of moorings, size of boats, and areas to be used as waterways. A copy of this map will be kept on file at the Town Office.

101.4 All moorings shall conform to the following minimum specifications:

<u>Boat Length</u>	<u>Mushroom Anchor</u>	<u>Reinforced Concrete Block</u>	<u>Grant Block</u>
Up to 20'	75 lbs.	1500 lbs.	1500 lbs.
21' - 25'	100 lbs.	2000 lbs.	2000 lbs.
26' - 30'	150 lbs.	2500 lbs.	2500 lbs.
31' and over	200 lbs.	3000 lbs.	3000 lbs.

101.5 Mooring chain shall be no less than 3/8" in size and at least 60' but not more than 80' in length. All moorings shall use at least one swivel and a white floatation buoy large enough to support the chain. All floatation buoys will be marked with the number assigned to the owner by the town. Pickup buoys will be secured to each mooring with pennant no more than twice the length of the freeboard at the bow of the boat. Pennants made of floating line shall not be used.

101.6 All moorings shall be approved at least once each year by the Harbor Master and at his direction the boat or floatation owner or his agent shall make necessary repairs or replacements to all parts thereof in such time as the Harbor Master deems necessary for the safety of the craft or others adjacent to it.

101.7 The Harbor Master, by direction of the Board of Selectmen, may deny the placement or use of a mooring or the use of the town-owned dock or floats if in the judgment of the Harbor Master and the Board of Selectmen, the boat, float or vessel is:

1. Structurally unsafe.
2. Emanating obnoxious fumes, oils or any other substance detrimental to the safety or comfort of others, including the pollution of its waters, shores and

flats.

3. Too large for dock, float, or mooring area.
4. A hazard to navigation.

101.8 No boat, float or mooring shall be abandoned or left to disintegrate in any part of the Little River.

101.9 Registration: Each mooring placed within the anchorage area shall be registered annually with the Town of Cutler, prior to March First of each year, and a registration fee, in accordance with the following schedule shall be paid to the town at the time of registration. The application and registration forms are attached to this ordinance. For the purposes of this section, the term "resident" shall include owners of real property subject to taxation in the Town of Cutler or a registered voter in the town.

1. Resident: \$5.00 for the first mooring; additional moorings \$40.00 each.
2. Commercial Boat Yards: \$5.00 for the first mooring; additional moorings \$40.00 each.
3. Non-Residents: \$50.00; over twenty feet \$50.00 plus \$1.00 per running foot; Skiffs - \$40.00

ARTICLE III

Section 101 PUBLIC WHARVES, DOCKS, PIERS AND FLOATS

101.1 No person shall tie up vessels or boats, of any description, to public facilities more than thirty minutes except with special permission granted by the Harbor Master.

101.2 No person shall place or deposit on public facilities any fish or lobster bait, except for immediate delivery to boats ready to receive same.

101.3 No person shall place or maintain, on public facilities, barrels, boxes, gear, traps, pots or any other equipment for a longer period than is reasonable necessary for the prompt loading or unloading of same.

ARTICLE IV

Section 101 ANCHORAGE

101.1 No boat or vessel shall travel more than five (5) knots (6 miles per hour) when approaching the anchorage, through the anchorage, or near the docks or floats.

101.2 No person shall dump or cause to be deposited into the waters of Little River or upon adjacent public lands any bait, garbage, offal, waste or rubbish.

101.3 No fishing shanties or other structures shall be put on the Little River without registering with an official of the Town of Cutler, and, after receiving a permit, painting his designated number, his name and address in letters not less than two inches in size on his structures. This must be done within seven (7) days of receiving his permit. Violators of this provision shall have their structures removed by the town at the owner's expense.

All structures must be removed from the river and from the town property by March 15th or at the discretion of the Harbor Master, or they will be removed by the town. Violators of this paragraph will be subject to a fine in accordance with Section V of this ordinance.

ARTICLE V

Section 101 PENALTY

Whosoever violates any provision of this Ordinance, neglects or refuses to obey the provisions of this ordinance, shall be deemed guilty of a misdemeanor and, upon conviction shall be punished by a fine of not more than fifty dollars (\$50). Each day that such violation exists shall constitute a separate offense.

DRAFT

APPLICATION FOR BOAT MOORING
LOCATION IN CUTLER HARBOR

TO: Harbor Master, Town of Cutler, Maine Date: _____

FROM: _____
(Print Name) (Address)

Please consider my request for:

1. New Mooring Location () at _____ part of the harbor.
2. Old Mooring Relocation () from _____ part of the harbor,
to _____ part of the harbor.

This mooring will be used Year Round (), Summer Only () for

the boat: NAME: _____ NUMBER: _____

Length overall: _____ Beam: _____ Draft: _____

Type of mooring that I plan to use:

Granite (), Weight _____#, Mushroom (), Weight _____#,

Other _____ Size of Chain _____ Length of Chain _____

Size of Pennant _____ Length of Pennant _____

Type of Marker: Log ()

Buoy ()

Signed: _____

Note: The Town of Cutler plans to discontinue pole moorings by 1995. If this is an application for an existing mooring relocation, please consider this goal.

Form 1986

DRAFT

PERMIT FOR BOAT MOORING LOCATION

From: Harbor Master, Town of Cutler, Maine

To: _____ Address: _____

Permission is granted to you to set _____ boat mooring of the following type and size:

TYPE _____ WEIGHT _____ SIZE OF CHAIN _____
LENGTH OF CHAIN _____ SIZE OF PENNANT _____
LENGTH OF PENNANT _____.

Location of mooring to be at _____

I, the undersigned, agree to supply adequate mooring gear of not less than what is set forth in this permit and also to maintain my mooring as set forth by Town Ordinances and States Statutes that apply. It is further noted that each mooring owner is to have two (2) markers, one to be painted and installed on the mooring by no later than June 15th of each year; the other to be taken ashore and dried, painted and installed the following year. In the event of transfer, sale or discontinuance of the mooring, the Harbor Master will be given notice of the same.

SIGNED: _____
Owner

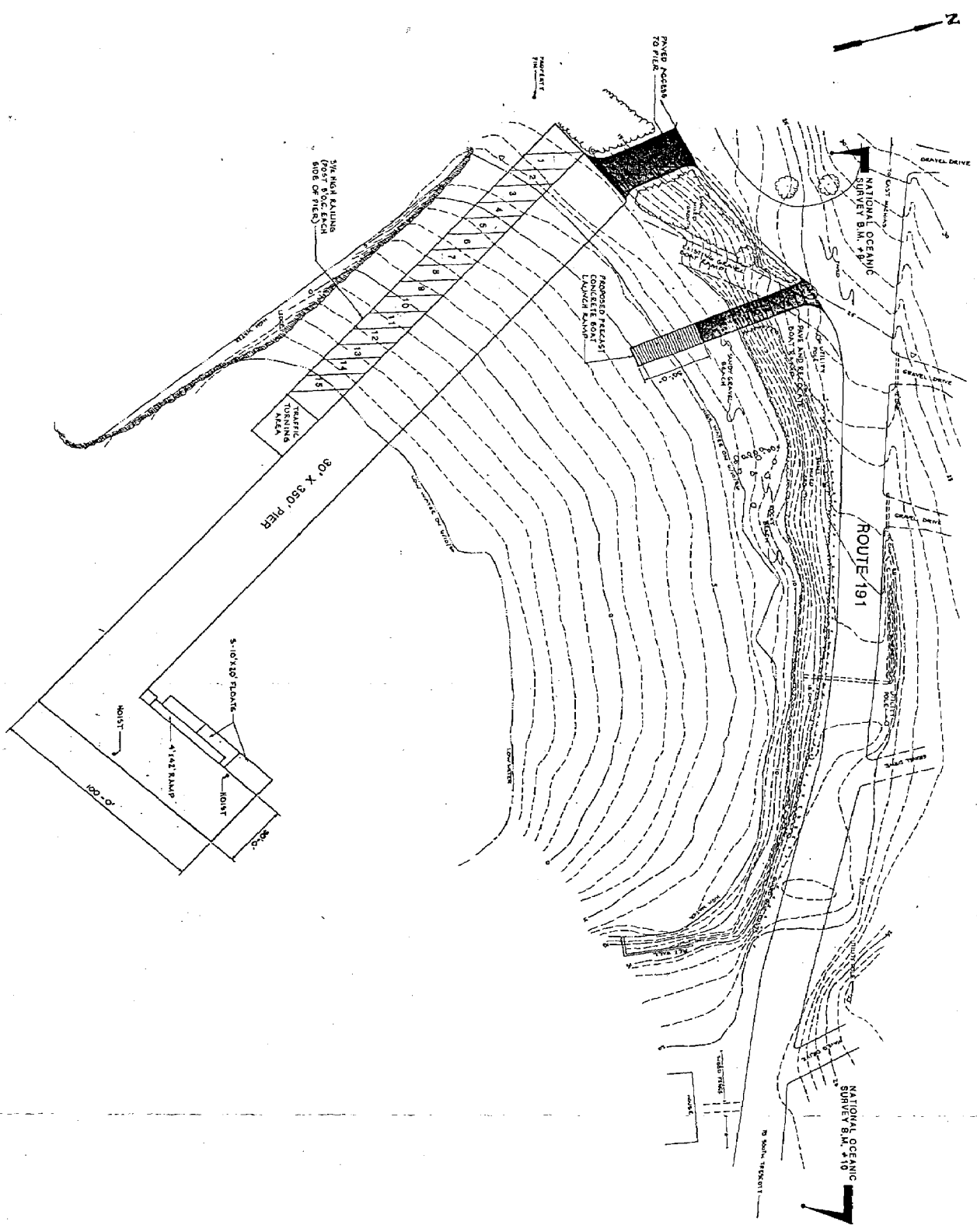
Permit granted and issued by _____ Date: _____
Harbor Master

Form 1986

APPENDIX C

KIMBALL CHASE COMPANY, INC. 1000 Main Street Portland, ME 04101 TEL: 865-1234 FAX: 865-5678		CUTLER HARBOR STUDY CUTLER, MAINE		SITE PLAN ALTERNATE 1	
DRAWN BY: JMM, E.S. CHECKED BY: JMM DATE: 6-18-84 APPROVED BY: JMM PROJECT NO.: 82-124B BOOK NO.: SCALE:		NATIONAL OCEANIC SURVEY B.M. #10 NATIONAL OCEANIC SURVEY B.M. #8 ROUTE 191 MARINE RAILWAY 30' X 300' PIER 5' X 10' FLOATS STAIRWAY SUPPORT PILES HOIST ORANGE PILES 200'			



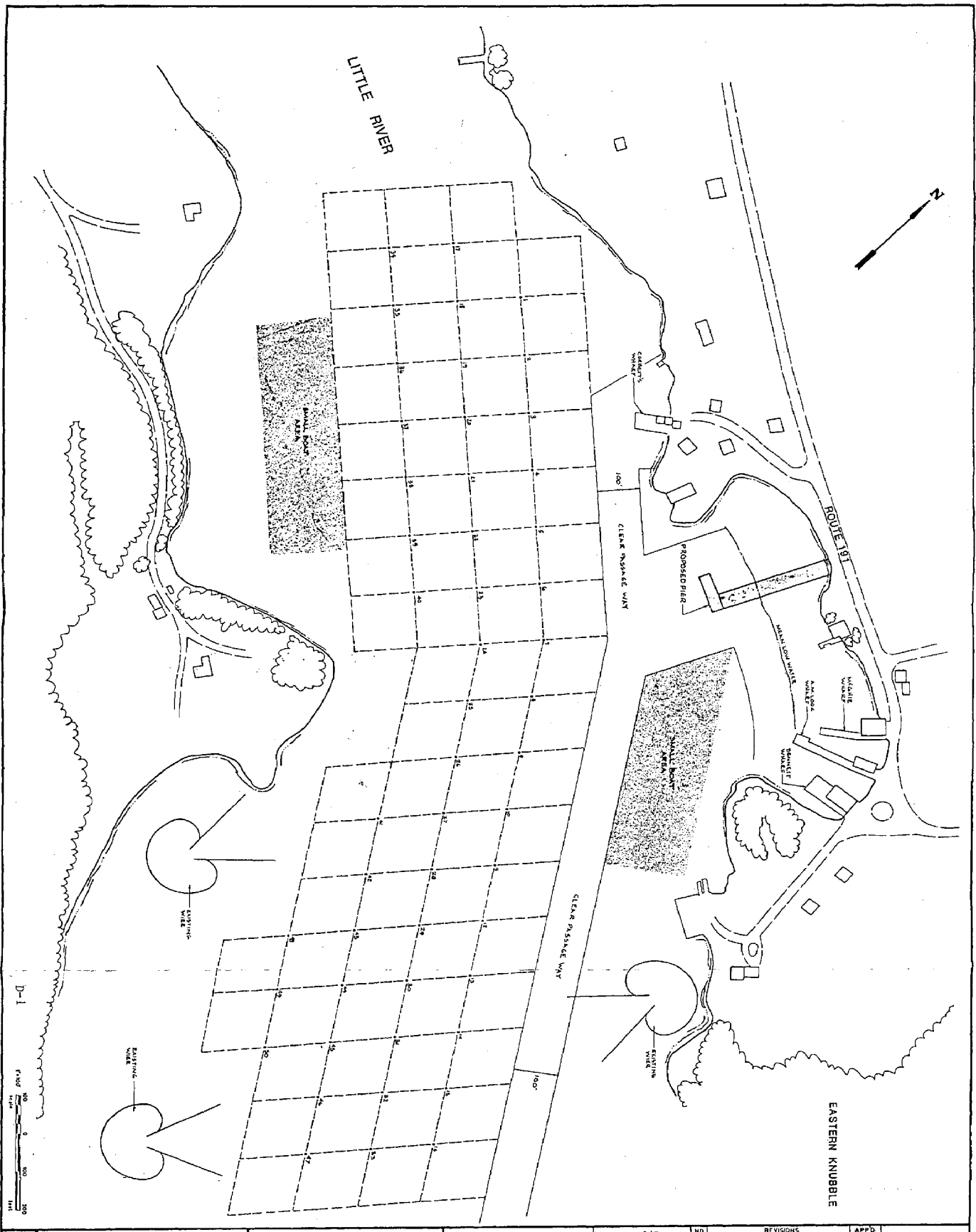


C-2 1"=40'

<p>SITE PLAN ALTERNATE II</p>	<p>CUTLER HARBOR STUDY CUTLER, MAINE</p>	<p>KIMBALL CHASE company, inc.</p>	<p>DRAWN BY: MCM, CSD CHECKED BY: SLP DATE: 6-18-84 APPROVED BY: SCD DATE: BOOK NO: PROJECT NO: 85-124B SCALE:</p>	<p>NO REVISIONS</p>	<p>APPD</p>
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APPENDIX D

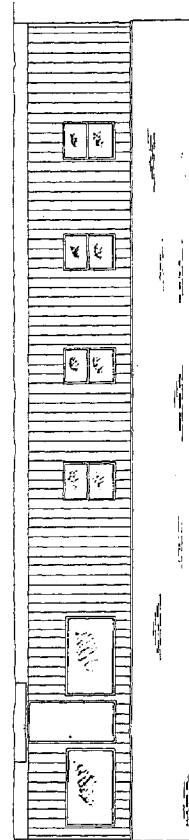


D-1

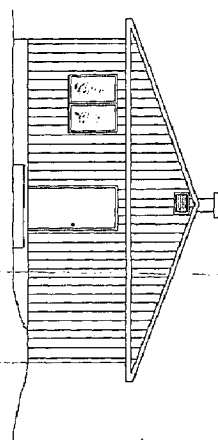


POLE MOORING LAYOUT	CUTLER HARBOR STUDY CUTLER, MAINE	KIMBALL CHASE company, inc. 33 Front Street Brewster, MA 01935 201-443-1094	DRAWN BY: CJD CHECKED BY: JDP DATE: 7/21/06 APPROVED BY: SCD DATE: _____ BOOK NO: _____ PROJECT NO: 05-1246 SCALE: _____	REVISIONS		APPD SCD	
				1	WIERS, PASSAGE WAY, SMALL BOAT AREAS / MOORINGS 8-27-06		

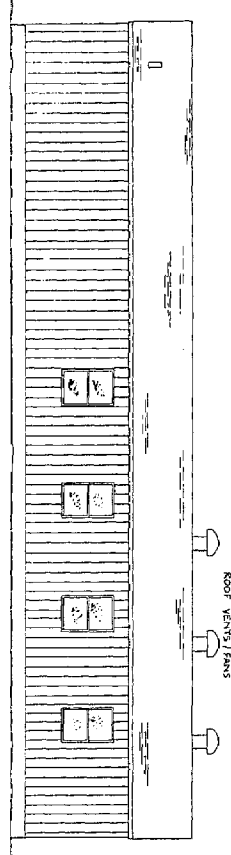
APPENDIX E



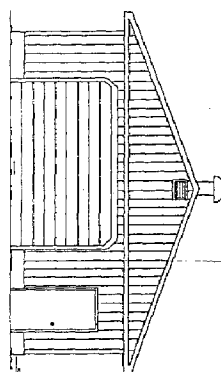
SOUTH ELEVATION



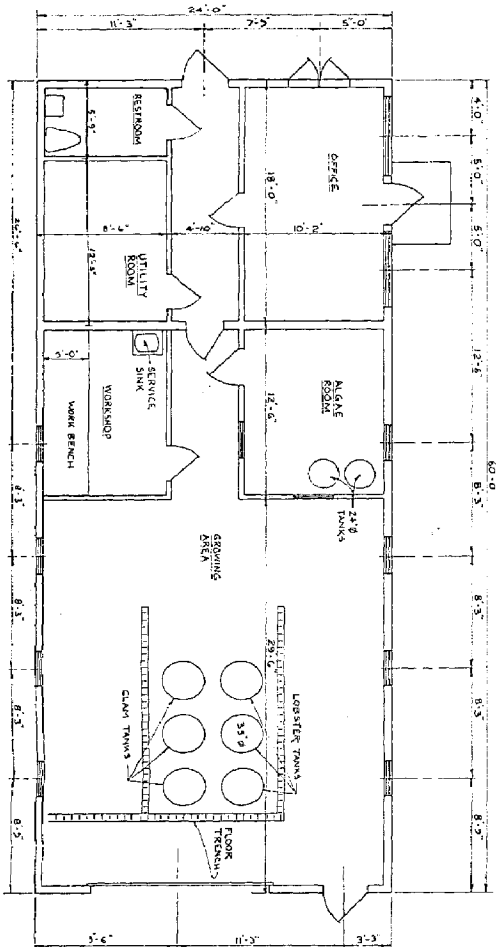
WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION



FLOOR PLAN

AREA	SQ. FT.
OFFICE	16.5
RESTROOM	8.3
UTILITY ROOM	7.0
WORK BENCH	17.0
LOBBY	11.0
CLAM TANKS	65.5
TOTAL	114.2
ORIGINAL BUILD	144.0

E-1

CUTLER HARBOR STUDY

COMMERCIAL HATCHERY,
CLAM, AND LOBSTER
FACILITIES

KIMBALL CHASE
Company, Inc.

DRAWN BY: JMD
CHECKED BY: JLP
DATE: 2/5/85
APPROVED BY: JMD
DATE: 2/5/85
BOOK NO.:
PROJECT NO.: 85-1142
SCALE:

1 OF 1



APPENDIX F

DRAFT

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0702-0036
Expires 30 June 1986

The Department of the Army permit program is authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine, Protection, Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

1. APPLICATION NUMBER (To be assigned by Corps)

3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT

Stillman Fitzhenry, Harbor Master
P.O. Box 274

Cutler, Maine 04626

Telephone no. during business hours

A/C (207) 259-3961 (Residence)

A/C (207) 259-3693 (Office)

2. NAME AND ADDRESS OF APPLICANT

Town of Cutler

Town Office

Cutler, Maine 04626

Telephone no. during business hours

A/C (207) 259-3961 (Residence)

A/C (207) 259-3693 (Office)

Statement of Authorization: I hereby designate and authorize _____

to act in my behalf as my

agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.

SIGNATURE OF APPLICANT

DATE

4. DETAILED DESCRIPTION OF PROPOSED ACTIVITY

4a. ACTIVITY

Construction of "L" shaped public fish pier, access road and support utilities. Facility will include floats and nearby boat launching ramp.

4b. PURPOSE

Load, unloading and serving of forty-five (45) fishing boats.

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC., WHOSE PROPERTY ALSO ADJOINS THE WATERWAY

WATERBODY AND LOCATION ON WATERBODY WHERE ACTIVITY EXISTS OR IS PROPOSED

Little River (Cutler Harbor)

7. LOCATION ON LAND WHERE ACTIVITY EXISTS OR IS PROPOSED

ADDRESS:

Route 191

STREET, ROAD, ROUTE OR OTHER DESCRIPTIVE LOCATION

Washington

Maine

04626

COUNTY

STATE

ZIP CODE

Town of Cutler

LOCAL GOVERNING BODY WITH JURISDICTION OVER SITE

Is any portion of the activity for which authorization is sought now complete? ☐ YES ☒ NO

If answer is "Yes" give reasons, month and year the activity was completed. Indicate the existing work on the drawings.

9. List all approvals or certifications and denials received from other federal, interstate, state or local agencies for any structures, construction, discharges or other activities described in this application.

ISSUING AGENCY	TYPE APPROVAL	IDENTIFICATION NO.	DATE OF APPLICATION	DATE OF APPROVAL	DATE OF DENIAL
Maine DEP	Wetlands	N/A			
Town Plannning Board	Site Plan	N/A			
Town	Building Permit	N/A			
Maine BPL	Submerged Lease	N/A			

10. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in Block 3 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

DRAFT

Maine Department of Environmental Protection
Bureau of Land Quality Control
State House
Augusta, Maine 04333
Telephone: 289-2111

Application No. _____
(To be filled in by DEP)

**APPLICATION FOR WETLANDS ALTERATION PERMIT
(38 MRSA § 474)
AND
WATER QUALITY CERTIFICATION
(P.L. 92-500)**

DATE STAMP
(To be filled in by DEP)

PLEASE TYPE OR PRINT

Name of Applicant: Town of Cutler

Address: Town Office, Cutler, Maine 04626

Telephone Number: 259-3693

Local Contact or Agent (Name & Tel. No.): Stillman Fitzhenry
Harbor Master
259-3961

LOCATION OF ACTIVITY

Street or Route No.: 191

Municipality or Township: Cutler

County: Washington

By signing this application the applicant certifies that he has (1) published the public notice once in a newspaper circulated in the area where the project is located, (2) sent a copy of the notice form to the owners of property abutting the land upon which the project is located, (3) sent a copy of the public notice form to the chief municipal officer and chairman of the municipal planning board, and (4) sent a duplicate of this application to the municipal office.

DATE: _____

Signature of Applicant

TITLE: Harbor Master

(If other than applicant, attach letter of agent authorization)

CHECK YOUR APPLICATION. BE SURE THAT ALL INFORMATION REQUESTED IS SUBMITTED, ALL QUESTIONS THAT ARE PERTINENT ARE ANSWERED AND THAT THE DIAGRAM IS COMPLETE AND SPECIFIC (BE SURE TO INCLUDE ALL DIMENSIONS).

IF ANY INFORMATION IS MISSING YOUR APPLICATION WILL BE RETURNED TO YOU.

(Revised 6/79)

Wetland Application Instructions

With this application the applicant must:

1. Obtain the appropriate USGS topographic map (available at most sporting goods, book, hardware, stationery stores, etc.). Indicate the location of your project on the map, and attach it to the application.
2. Provide one photograph of the wetland area involved.
3. Publish a copy of the Notice (last page of this application) in the legal notice section of a newspaper circulated in the area where the project is located.
4. Send a copy of the NOTICE form attached to this application to the owners of property abutting the land upon which the project is located. Their names and addresses can be obtained from town tax maps or local public officials.

Set forth below the names of the abutting property owners:

NAME	ADDRESS
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. Send a copy of this application, together with all exhibits, to the municipal offices. If the land does not lie within an organized municipality, the applicant shall send a copy of this application, together with exhibits, to the office of the County Commissioners. The applicant shall also send a copy of the NOTICE attached to this application to the Chairman of the Planning Board, if any, and the chief municipal officer, if any.
6. Attach copy of deed, lease, purchase agreement, or other legal document establishing title, right or interest of applicant in the site.
7. If the applicant is a corporation attach a certificate of good standing from the Secretary of State of Maine.

Check below any other permits required for the project. Indicate with an asterisk (*) those permits already obtained.

U.S. Army Corps of Engineers (Tidal Waters) ☐

Waste Discharge (DEP) ☐

Other (Explain) ☐ _____

PROJECT SUMMARY—WETLANDS ACT & CERTIFICATION

TO BE FILLED IN BY DEP

Applicant: _____

City/Town: _____ County: _____

Name of Project: _____

Project No.: _____

1. Description of Project: _____

2. Length of shoreline on the coastal wetland owned or controlled by the applicant.

3. Indicate nature of shoreline and tidal area (grassy, mud, rock, etc.)

4. Actual physical dimensions of project:

For the purposes of this application wetlands is defined as all area seaward of the debris line left by normal storm flowage. Please refer all dimensions to this mark.

Length out into wetland: _____

Width along shore: _____

Height: _____

5. Description of present use of the wetland: _____

6. Description of present use of the adjacent wetland: _____

7. List equipment to be used in construction of the project: _____

8. If this project is part of a larger project describe below:

9. If dredging or filling indicate number of cubic yards: _____

10. Indicate location for deposition of dredged material: _____

11. Is this project to be located within a coastal sand dune system? ☐ YES ☐ NO

If YES, what are the actual physical dimensions of the project that will involve the coastal sand dune system? _____

12. How far away is the harbor line from the farthest extension of the proposed project into the wetland? _____

13. Is this project associated with a commercial enterprise? (Please check one) ☐ YES ☐ NO

If you have checked YES you must contact the Bureau of Public Lands to negotiate a lease to use the public lands involved. Action will not be taken on your proposal by this Department until we receive a copy of the signed lease from the Bureau of Public Lands. They can be contacted at:

Bureau of Public Lands
Dept. of Conservation, Station 22
State House
Augusta, ME. 04333

Tel. 289-3061

NOTE: A bulk sediment analysis of the dredged material indicating heavy metals and oil and grease may be necessary for projects involving dredging of large amounts in areas of known contamination.

NOAA COASTAL SERVICES CTR LIBRARY



3 6668 14112850 6