COMPREHENSIVE PLAN FOR WATERFRONT
DEVELOPMENT - FINAL REPORT
MAINE DEPT OF MARINE RESOURCES
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Final Report

Comprehensive Plan for Waterfront Development

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COASTAL ZONE

INFORMATION CENTER

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Comprehensive Plan for Waterfront Development
Calais, Maine
1987

By adopting this Comprehensive Plan for Waterfront Development, the City of Calais is making a commitment to retain and build on its identity as a river community. The St. Croix River is the central focus of neighboring international communities, St. Stephen, New Brunswick and Calais, Maine. At one time the river provided the food, transportation, and power necessary to build this community and its economy. When Calais was a truly thriving community, the national and local economies were based on the exploitation of natural resources. The present economy is based on technology, information and services. Calais's waterfront has been vacated; the City population is half the size of what it was; and area unemployment remains double the state average.

The river still has the potential of attracting residents and visitors alike to its shores for recreational activities, wildlife observation, relaxation, and appreciation of its beauty. The riverfront, wisely used, is of central importance to the Calais economy and quality of life. Thus the need for a comprehensive plan for the waterfront.

Concept Plan

The development of American cities has traditionally occurred as a direct response to a major physical element. Most thriving communities are identified through associations with their natural environment, for example, coastal, mountain, river, island, and farm communities. The most notable of these communities have all responded in major, as well as subtle, ways physically to its primary natural placement.

Rivers are a dynamic resource and present the strongest physical focus possible of the City along its edge. Historically, cities developed on rivers for transportation. Calais typifies such a city. However, the St. Croix is no typical river, as is evidenced by the governemnt of Maine and New Brunswick agreement to manage it cooperatively as the "St. Croix International Waterway Recreation Area." Although the water-related commerce which helped foster its beginnings no longer exist, Calais remains first and foremost a river city.

The City has in recent years acquired ownership of much of the riverfront properties particularly in the downtown area. This comprehensive plan reflects the future intended for these properties. It provides the City with an opportunity to strengthen its basic image through the use of that space as a natural edge and as a thoroughfare for leisure and recreation-related activities. The simplest, most direct and most cost effective treatment would be to develop this corridor of space as a "greenbelt park" and pedestrian area. This would offer to the community unlimited public access to the water's edge, and incorporate greenspace and leisure activity into the city center itself. The greenbelt

would organize and collect existing activities along its length which are public in nature: the boat ramp, the City wharf and floating docks, the Library, the Tourist Information Center, and auxiliary public functions contained in both buildings (gallaries, meeting spaces, and restroom facilities), and would provide a counterpoint to the present use of Union Street as the City's truck route.

Action Plan

The following summarizes the uses agreed upon for City-owned waterfront properties during the comprehensive planning process. This summary is in essence an Action Plan for the next one to five years. Implementation will be dependent on the availability of funds.

Downtown
(Main Street to, and including, Pike's Park)

This area will remain open and accessible to the public. Additional recreational uses and opportunities will be encouraged. The expanded use of the remaining private commercial buildings relative to the Waterfront Concept Plan will also be encouraged.

Year 1

- Review parking patterns in Pike's Park and recommend improvements.
- Address erosion problems at City Wharf, boat ramp, and parking lot.
- Determine necessary repairs to City Wharf.
- Adopt revisions to the Calais Zoning Ordinance to reflect proposed uses.

Year 2

- Develop interpretive signs and wildflower plantings.
- Add outdoor furniture for picnicking and sitting.
- Paint the old railroad buildings.
- Develop boat mooring plan.
- Begin to implement rehabilitation program for wharf.

Future Years

- Pursue funding for waterfront shelter which would create the fourth gateway.
- Eliminate sewer overflow problems.
- Pave a path for walking, jogging, and bicycling.
- Install lighting.
- Development a Harbor Management and Development Plan as needed.

Railroad Bed - Pike's Park to Elm Street

This property should be cleaned and left accessible to the public.

Year 1:

- Amend zoning ordinance to reflect intent of plan.
- Clean up City-owned property.

Year 2:

- Plant wildflower areas.
- Delineate City property lines.
- Work with private property owners to clean up area.

Future Years:

- Add outdoor furniture.
- Pave path for walking, jogging, and bicycling.

Todd Street to Main Street - Old railroad bed behind Union Street

Year 1:

- Amend zoning ordinance to reflect current and future uses.
- Cooperate with Cooperative Extension Service to continue upgrade of trail.
- Coordinate with Atlantic Salmon Commission to upgrade river access area.
- Provide assistance for clean-up of trail.

Year 2:

- Continue cooperation with community groups to upgrade trail area.

Future Years:

- Develop cooperative arrangement with Salmon Commission to provide parking.
- Pave path for walking, jogging, and bicycling.

Pike's Woods
(area surrounding Route 1 rest area)

This area shall be managed as a special scenic resource because of its old-growth timber and unique views.

Year 1:

- Coordinate with Maine Department of Transportation to upgrade the existing Rest Area.

Year 2:

- Obtain services for preparation of Forest Management Plan to improve views and retain character of the woods.
- Prepare Access Development Plan to river's edge.

Future Years:

- Light Rest Area.
- Implement Forest Management Plan.
- Implement Access Development Plan.

Nash's Lake
(Undeveloped square mile)

This is a unique natural resource for a municipality to own. However, a consensus has not been reached to identify the future use of the area. Therefore, a Task Force should be created to explore the utilization of this property and the implementation of recommendations contained in the existing Forest Management Plan for the property. The Task Force will recommend an action plan for this area.

Riverfront Behind Industrial Park

(Twenty-four undeveloped acres)

There has been no clear concensus on the disposition and/or use of this property. The Planning Board, City Council and staff shall continue to explore possibilities, and develop an action plan in the near future.

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PROJECT COMPLETION REPORT

Calais Comprehensive Waterfront Plan 1987

Hundreds of people have been involved in Calais' waterfront planning process this year. From responding to surveys, attending public hearings, volunteering, providing data and technical and financial assistance, they all deserve credit for which there is no room here.

However, much has been learned and accomplished. Observations of the planning processes' activities follow.

Data Collection: The gathering of an updated comprehensive planning data base provided the City with new insights to trends in our growth. For instance, new tourism data has been collected that shows without a doubt that Calais is the most significant point of tourism expenditures in Washington County. However, most of these tourism expenditures occur as the result of a one day trip to the City. This reinforces a long held general observation that if Calais could get tourists to stop, as opposed to just passing through, the local economy could anticipate a larger influx of tourism revenues. Growth in tourism has been greater than growth in population in recent years.

Although Calais's population is only 4,200, thirty-five thousand people are trade area residents who regularly shop here on a year-round basis.
This is an important selling point to potential businesses that may be tempted to locate here. Another observation was that although Calais is very much north in geographical location, its proximity to the ocean moderates the winter climate similarly to Portland, Maine, yet Calais's short distance from the ocean eliminates the unpleasant, cold, dreary, and foggy summer days experienced by communities directly on the ocean. The data collection process helped us prove many generally held beliefs by backing the beliefs with numbers.

Review of Prior Plans and Studies. As opposed to, please excuse the syntax, letting old plans and studies just sit on the shelf, this most recent planning process reviewed prior plans and studies to learn from our past, and provide continuity in planning for the City's future. We saw how evolutionary a process planning is where objectives and needs of the community evolve to meet the needs of a changing society. Yet, we also saw how steadfast goals can remain in a community plan, even after the passage of one generation to another.

One example is Calais's 1961 Comprehensive Plan that stated the City needs to keep tourists in the community as opposed to letting them pass through. Twenty-five years later, data shows that Calais is still only a one day stop for tourists. By seeing what was, and what was not accomplished from previous plans, this newest set of waterfront plans could develop a set of realistic and reasonable objectives for developing the waterfront.

Review of Approaches Taken in Other Cities. After reviewing the experience of other cities, City staff questioned whether a request for proposals to develop publicly held waterfront properties by private developers would not be a time wasting excercise. Instead entertaining RFP's from private developers, the City allowed public consensus on the use and disposition of publicly held waterfront property develop before deciding whether or not to entertain proposals. In conjunction with letting a consensus develop on use of our shoreland, this review of approaches found that once control is lost of city land it would require a great effort to regain control, and that it is a reasonable expectation that operational costs associated with full-service waterfront recreational facilities could be fully recovered through user fees with little or no objection from local citizens. Therefore, instead of using funds designated to conduct an engineering study for private developers, the funds were used to conduct an engineering study on the condition of the City Pier.

Environmental, Soils, and Flood Hazard Analysis. The most significant finding in our environmental analysis was that our coastal waters are experiencing a resurgance in fisheries, wildlife, and water quality, and that this trend can continue if community growth is well managed. In conducting the soils analysis, the City organized and made available a critical tool in planning for development - comprehensive soils maps. Although some minor errors were found to exist in the current soils maps, it was found that a current re-mapping effort is underway for Washington County and that the City will receive these new maps as soon as they are available. The City will also receive new Flood Hazard Area maps as soon as they are available from the Federal Emergency Management Agency. In reviewing whether the City should request private development proposals for its shore properties, it was found that much of the shore property the City owns is in designated flood zones and by not selling these properties the City was in effect discouraging commercial development in these flood hazard areas.

Survey Analysis of Public Opinion. This instrument was the final determinent in assessing whether a community wide consensus had been reached on several waterfront development issues. The preliminary determinants of community consensus were previous plans and previous surveys, and public hearings held this year. By far the most often repeated finding was the desire to have more public facilities on the waterfront. Although Calais has the highest mil rate in the state, the survey together with the comments made at public hearings revealed that the majority of citizens do not want these public lands sold.

Zoning. The City adopted a new Floodplain Management Ordinance, and rezoned a section of downtown shorefront from Limited Residential use to General Development. Although the City did not overhaul its shoreline zoning ordinance, the planning process did set in motion a comprehensive effort by the Planning Board to re-write the entire zoning and Shoreline Ordinance.

Summary. The proposed intent of this program was achieved. The balancing of commercial, public, and residential demands for shorefront property has been agreed upon. Public City property will be developed for greater public access and use, while the General Development zone has been expanded for greater commercial use, and commercial use bordering City property will be encouraged. The majority of shoreland in Calais remains designated for residential use with appropriate resource-protection districts.

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PHYSICAL DESCRIPTION

The 62 miles of the St. Croix River from Vanceboro to the salt water at Passamaquoddy Bay form an international border between Canada and the United States and are the only boundary waters in Maine that flow directly into the ocean. This situation creates a diversity of resource management complications, as well as cooperative efforts, that are unique to the St. Croix River, and the City of Calais, Maine and other border communities.

The St. Croix drainage is being studied or monitored, by a number of state and federal agencies. On the Canadian side of the border, the North American Salmon Research Center, Huntsman Marine Laboratory, International Atlantic Salmon Foundation, New Brunswick Department of Natural Resources, the Environmental Protection Service of Canada, the Fisheries and Marine Service of the Department of Fisheries and Oceans support or direct ongoing research projects. Many of these agencies are involved in cooperative and coordinated programs that concern fisheries, aquatic, and recreational environments of the St. Croix River. Intensive and specialized studies of the Passamaquoddy Bay area on such topics as producing electricity by tidal power have been written by U.S. and Canadian agencies for over half a century. In addition, the two countries, at federal and local levels, are cooperating on the further development and management of St. Croix Island as an international historic site.

The St. Croix River is the largest river in Washington County, and the sixth largest in Maine, and the easternmost in the United States. Its headwaters are at Monument Brook in Amity, Aroostook County, Maine, and Fosterville, York County, New Brunswick, Canada. It ends at Passamaquoddy Bay, also shared by Canada and the United States.

The St. Croix drainage area is approximately 1,500 square miles. It has an east branch which arises in Washington and Aroostook Counties, Maine, and in York and Charlotte Counties, New Brunswick, Canada. While two large and several small lakes are included in the east branch, it is mostly typical river. Much of the east branch's 644-square-mile drainage is in New Brunswick.

The River's west branch arises in Washington, Hancock, and Penobscot Counties, Maine and consists almost entirely of large lakes separated by short, inundated thoroughfares which create an extremely unique freshwater flowage. Grand Lake Stream is the only remaining major river segment in the west branch's 674 miles of drainage.

These east and west branches unite at Grand Falls Flowage to form the main stem of the St. Croix River which has a drainage area below this confluence of about 150 square miles, much of which is in the City of Calais (eg. Magurewock, Flowed Lands, and Whitlock Mills flowages).

Over 100 lakes and ponds are located in the entire drainage area. These waters have a combined area of over 100,000 acres with individual lakes and ponds ranging in size from less than 5 to over 17,000 surface acres. The main river drops from an elevation of 374 feet at Vanceboro on the east branch to sea level at Calais. The rate of descent throughout this 62 miles of river is approximately 6 feet per mile. There is an average twenty-foot range in tides at Calais, the upper limit of tidal fluctuation on the St. Croix River.

The St. Croix drainage is sparsely populated and undeveloped. Less than 18,000 people live on the watershed, with at least half living in the Calais area. Most of the drainage is a wilderness like area, almost all of the recreational development in the drainage is in the form of privately owned summer cottages or commercially operated fishing camps. Major industrial development is confined to a large pulp and paper mill, a stud mill (sawmill) and affiliated industries below the junction of the east and west branches.

Source: The St. Croix River, Atlantic Sea Run Salmon Commission

ENVIRONMENTAL ANALYSIS

The St. Croix drainage is relatively free of harmful pollutants, it is a Class B1 River as classified by the State of Maine Revised Statutes - (acceptable for recreational purposes, including water contact recreation, for use as potable water supply after adequate treatment, and for a fish and wildlife habitat), but the tidewater section of the river in Calais is classified as SB2 - (suitable for recreational uses, including water contact and fishing, for the harvesting and propagation of shellfish, for a fish and wildlife habitat, and for industrial cooling and process uses). The City of Calais and the Town of Baileyville have sewage treatment plants in operation and being the two largest Maine communities on the river, the operation of these facilities has contributed to a decrease in domestic wastes entering the river since the early 1960's. However, municipal wastes are negligible when compared with the industrial wastes from the mill complexes. Pollution below Woodland in the form of wood chips, sawdust, and other deposits from the wood processing industries have been a major type of pollution for over a century in the river. At many times, the St. Croix River below the Woodland Mill has not provided a minimum of dissolved oxygen due to the oxygen demand of the accumulated woodwaste and chemical materials. Georgia-Pacific Corporation has completed the installation of a pollution control and abatement program and the company will soon be constructing a waste recovery boiler which will further reduce pollution entering the River and the air.

Although industrial loading makes up over 99% of the Biological Oxygen Demand (BOD) of the river segment below the Woodland Mill, the importance of the primary and secondary treatment of sewage originating in the town of Baileyville and the City of Calais cannot be ignored. These municipal facilities can insure a further improvement of the St. Croix River's water quality if they can be upgraded to handle storm overflows and economic growth. These overflows during heavy rains send untreated sewage into the River. Discharges from private septic systems contribute to pollution of the river as does sewage coming from the Canadian side of the river.

Recent research is raising a question as to what impact chlorine leakage from septic tanks has on clam mortality in their larvae stage. Also, as pesticides and herbicides are coming into greater acceptance as viable forest management practices, the likelihood of these toxic pollutants reaching the St. Croix River will be a continuing problem as these techniques accelerate, and the long term effects of their chemical properties remains undetermined. The national stream-quality monitoring network station at Milltown (Calais), Maine has been operated by the USGS (United States Geological Service) since October, 1968. Additional chemical analysis, phytoplankton analysis, and daily extremes and means are available from the United States Environmental Protection Agency and its Canadian counterpart, the Environmental Protection Service, working closely through the auspices of the International Joint Commission.

The River section between Woodland and Calais is no longer masked by a blanket of bark, wood wastes, pulp fibre, ash and sludge. Heavy wastes are no longer being deposited in the river and the natural flushing action of the river flow displaces these deposits seaward. As these wastes are removed and the bottom rubble exposed, there is a major change in the quality of natural habitats occurring in this area of the St. Croix River as evidenced by the Milltown section of the River once again sustaining a warm-water fishery (Smallmouth Bass, Pickerel, Perch, etc,) and again becoming a spawning area for Atlantic Salmon. In previous years these fishes would re-establish their presence and then through waste discharges or overloads of oxygen demand, the fish would die. As well, the lower tidal section of the River is experiencing a similar cleansing action by river and tidal flows as evidenced by sediment depth samples taken by the Army Corps of Engineers in the early 1900's which showed significantly more depth in waste materials on the City's riverbanks then when compared to today's accumulated materials depths.

Therefore, the St. Croix River is experiencing a resurgence to near its former healthy natural state. Once again in Calais, the American Bald Eagles can be seen eyeing the river from their various perches. A dozen osprey at a time can be found feeding over a school of alewives, and simultaneously the Harbor Seals, River Otters, and Striped Bass are snatching a meal from below. On the banks of the river, the softshell clam, mussel, and various snails have re-established their presence as a food source for yet more fish and fowl.

Sources: The St. Croix River, Atlantic Sea Run Salmon Commission; St. Croix River Triangulations & Soundings Chart, 1908, U.S. Army Corps of Engineers; Maine Warden Service

THE FISHERY - PAST TO PRESENT

The earliest dams only partially blocked the river. They were built out from either shore obliquely upstream and did not meet at the center of the river. This opening served as a fish passage and vent for excess flows. While water ran around the open end of these dams, the retained water served as a log holding pond and insured a head of water to power the mills on shore. These low dams may not have been any more of a barrier to fish migrations than the natural barriers at the head of tide and the rapids at Milltown during various water stages. The account of an individual netting from the end of a log jam below the Salmon Falls points to the likelihood that a ledge created the log jam and would have been subject to removal by log drivers. Dynamiting of jam-causing rocks and ledges was a routine practice of the Maine rivermen of that period. The Salmon Falls of this century is undoubtedly much less of a barrier than that which existed in the early 1800's.

In 1825, the Union dam was built in Calais and brought the taking of great quantities of salmon, shad, and gaspereau (alewives) to an end as tidewater structure had no fishway for a number of years. The lack of a fishway at the Union dam virtually destroyed the anadromous fish runs of the St. Croix, and by 1850 the annual salmon run did not exceed 200 fish. In 1869, however, both the Union dam and new dam at Baring were provided with fish passage.

Around 1874, it is reported that a boy of fifteen took 500 salmon at Salmon Falls in a single year, and a man standing on a log jam below the Falls took 118 in one day. Sources indicate dipnetters were able to take daily catches of at least 100 barrels and a single individual would occasionally obtain as many as 50 to 100 or more salmon.

A letter regarding weir-caught fish on the lower St. Croix (Red Beach) during this same period sheds some light on the magnitude of salmon and other fish runs. The weirs were at the same location each year and the principal fish caught were herring, codfish, alewives, salmon, sea-shad (but very few river-shad), blueback herring, and small mackerel. Alewives had increased a hundredfold in 1874 since the fish passages were constructed in 1869, an indication that the fishway construction program of that period had produced results. Recent impoundments above dams have created larger amounts of habitat for the alewife and eel than existed in earlier years. Seasonal rainbow smelt fisheries, both inland and estuarial, are enjoyed by persons fishing Maine and New Brunswick sides of the St. Croix. Conflicting regulations on this and other species are in the process of being coordinated by both government's agencies concerned.

In early times the St. Croix River was considered to be one of the most prolific salmon streams on the Atlantic Coast. This was applicable to both the landlocked and anadromous forms of Salmon, both of which were actively harvested by early Canadians and Americans.

The St. Croix River's West Grand Lake was the original egg source of Salmon that were reared and planted in other Maine lakes. The St. Croix River's salmon population may well represent the oldest self-perpetuating run of Atlantic salmon in the United States.

The St. Croix River is widely known within angling circles and the more familiar sport fishes of Maine are found within the lakes and streams of this drainage. Of equal biological importance but less well known to the angler, are a host of other species of fish. Anadromous and catadromous species present within this river system are important sport and commercial fishes. The term anadromous refers to fish that spawn in fresh water but spend most of their lives in the ocean - while the term catadromous, represented by the eel, refers to fishes that spawn in salt water but live most of their lives in fresh water.

FISH SPECIES

Common Name	Occurrence	Scientific Name
*Sea lamprey	A-F	*Petromyzon marinus*
*American eel	A-F	*Anguilla rostrata*
*Alewife	A-F	*Alosa pseudoharengus*
*American shad	A-F	*Alosa sapidissima*
Atlantic herring	A	*Clupea harengus harengus*
Lake whitefish	F	*Coregonus clupeaformis*
Round whitefish	F	*Prosopium cylindraceum*
*Atlantic salmon; also landlocked salmon	A-F	*Salmo salar*
*Brook trout	A-F	*Salvelinus fontinalis*
Lake trout	F	*Salvelinus namaycush*
*Rainbow smelt	A-F	*Osmerus mordax*
Chain pickerel	F-I-(1800s)	*Esox niger*
Lake chub	F	*Couesius plumbeus*
Golden shiner	F	*Notemigonus crysoleucas*
Bridle shiner	F	*Notropis bifrenatus*
Common shiner	F	*Notropis cornutus*
Blacknose shiner	F	*Notropis heterolepis*
Blacknose dace	F	*Rhinichthys atratulus*
Redbelly dace	F	*Phoxinus eos*
Creek chub	F	*Semotilus atromaculatus*
Fallfish	F	*Semotilus corporalis*
Longnose sucker	F	*Catostomus catostomus*
White sucker	F	*Catostomus commersoni*
Brown bullhead	F	*Ictalurus nebulosus*
Burbot	F	*Lota lota*
*Atlantic tomcod	A-F	*Microgadus tomcod*
Banded killifish	F	*Fundulus diaphanus*
*Mummichog	A-F	*Fundulus heteroclitus*
Fourspine stickleback	F	*Apeltes quadraeus*
*Threespine stickleback	A-F	*Gasterosteus aculeatus*
Ninespine stickleback	A	*Pungitius pungitius*
*White perch	A-F	*Morone americana*
*Striped bass	A	*Morone saxatilis*
Redbreast sunfish	F	*Lepomis auritus*
Pumpkinseed	F	*Lepomis gibbosus*
Smallmouth bass	F-I-(1870s)	*Micropterus dolomieui*
Yellow perch	F	*Perca flavescens*
Bluefish	A	*Pomatomus saltatrix*

A — Atlantic (estuarial or marine)
F — Freshwater
I—Introduction (Approx. date)
* — Denotes anadromous or catadromous species

Source: Atlantic Sea Run Salmon Commission

NASH'S LAKE FISHERY

Fishes

Salmon	Eel
Brook trout (squaretail)	White sucker
Smallmouth bass	Minnows
Chain pickerel	Pumpkinseed sunfish
Smelt	

Physical Characteristics

Area - 627 acres
Maximum depth - 56 feet
Principal Fishery: Salmon, Smallmouth bass

This moderate-sized, irregularly-shaped body of water is located off the beaten track in the Calais area. The shoreline is lightly developed with camps. The principal access road to the lake (not a public road) is in fair condition, and an area by the mouth of the Interval Brook is available for launching small boats.

The lake provides suitable habitat for salmon and management has historically emphasized salmon. Growth rate of salmon declined in the mid to late 1970's, probably as a result of excessive stocking levels. In an effort to improve the growth rate, stocking was eliminated in 1977-78, and smelt eggs were transferred into the lake in the spring of 1980 and 1981. Furthermore, the salmon stocking rate has been reduced in recent years. These steps have contributed to a resurgence in the smelt population, with a corresponding improvement in the salmon fishery. Some 3-pound salmon were caught during the 1983 open-water season. Annual stocking of spring yearling salmon will be required to maintain the fishery at a satisfactory level, although a number of wild salmon are produced each year.

The brook trout fishery has also made a comeback in recent years. A moderate fishery for 9-12 inch trout exists in the winter and spring, with an occasional 15-18 inch squaretail appearing in the catch. The trout fishery is sustained entirely through natural reproduction.

Smallmouth bass are abundant and provide considerable enjoyment for fishermen. Although the lake contains some good-sized bass (a sample of 4 captured by check-netting in 1977 averaged 16.2 inches and 2 lbs. 5 oz. in weight), the overwhelming majority of those caught are in the unattractive 8-10 inch size range. Therefore, there is no size or bag limit on bass since overcrowding of this species reduces the available food source for all fish in the lake.

Source: Machais Field Office, Maine Department of Inland Fisheries and Wildlife

Shellfish Condition

Because of interest in clam population in the historically closed to shellfish harvesting portion of the St. Croix River, sampling programs in Calais have been conducted by the Maine Department of Marine Resources to determine water quality and clam population in this area. The most recent data is from November, 1983. Small clams, about one inch long and sparsely populated, were found in the river up as fart as the St. Croix Club. Green crabs and other marine life were also found this far "up-river." Salinities in this area ranged from ten to seventeen parts per thousand.

Elliot Flats, by the "Old Stone House" has a normal marine population, as would be expected with salinities from twenty four to twenty eight parts per thousand with commercial quantis of clams, between high tide line and the edge of the mud. A large population of stunted probably because of overpopulation and a little below normal salinity. A good population of large periwinkles was also found in this area and at all other stations downriver.

Most of the sampling stations in Calais showed unacceptable levels of fecal coliforms. Therefore, improvements in sewage treatment need to be made before the Calais area can be opened for clam harvesting again.

Source: Maine Department of Marine Resources.

REVIEW OF PRIOR PLANS AND STUDIES

First Comprehensive Plan

In January, 1958, the Calais Planning Board was activated and later in the year the City retained the services of Planning and Renewel Associates of Cambridge, Massachusetts to prepare a Comprehensive Plan for the City of Calais.

Anyone who remembers the Calais of 1960 knows how much the City has changed. The City Zoning Ordinance, sewage treatment plant, the landfill re-located off of the river, numerous public facilities, the downtown revitalization projects, and housing projects have had major impacts. These projects were identified in the first Comprehensive Plan, and many of today's issues were issues then. This first Comprehensive Plan said, "these projects can (not) be done quickly, but like the rest of the planning program, continuous effort should be applied so that steady progress can be shown."

Planning is, however, an evolutionary process and goals, objectives, and the means to achieve them must be identified. For example, a recommendation in the 1961 Comprehensive Plan was that the old delapidated buildings on lower Main Street be torn down and replaced with new buildings. However, the 1980 Comprehensive Plan suggested a Historic Zone to preserve the historic character of these same buildings! A Historic District was created, and by 1986 the area was refurbished with period lighting, brick sidewalks and old-style granite curbing.

The 1961 Plan also pointed out that "much tourist and recreation business passed through Calais. The big job in this field is to develop atractions in Calais in order to get more tourists there and to give the tourist more and better things to do when they get there so they will stay longer." These are the same words Calais people say today, except the context of 'tourist attraction' in the era of the sixties was a showplace of commercial excitement, whereas today's studies by the Maine State Development Office on the appeal of vacation types in Washington County indicate the tourists traveling to Washington County seeks more relaxed activities and new experiences based on the natural attractions.

Another conclusion and recommendation of the 1961 Plan that still holds true today, but with no change in context was, "there is an obvious shortage of outdoor facilities to serve the tourist who so favorably influence the economy of the City and of the area. A particularly desirable addition would be one good swimming area. While this may be costly to develop, it would be well worth the expenditure involved." In the State Comprehensive Outdoor Recreation Plan (SCORP) of 1977, the same conclusion and recommendation for Calais was reached and is expected to be repeated in the 1987 SCORP.

Calais Waterfront Master Plan

In the mid 1970's, the City of Calais formed the Calais Community Development Department. An outgrowth of this department and the City's active Planning Board was the Calais Waterfront Committee to consider uses of the waterfront. R.R. Berman Associates prepared the Calais Waterfront Master Plan which led to many of the waterfront developments that have been accomplished to date. The recommendations to revitalize the waterfront included:

Improve the general visual impression with grading and planting,
Invite use with improved accessiblilty,
Create a space for public gatherings, concerts and festivals,
Create spaces for passive recreation, sitting, picnicking etc,
Tie the entire site together with a recreation link for walking, jogging and skiing which would eventually include the entire Riverfront.

One of the program goals naturally was to stimulate the local economy. This would be done by inviting the tourist to stop and use the waterfront by:

Creating a vistor center for local promotion and information distribution.
Creating a Marina and boat launch for local and tourist use. Including space for touring and fishing charter operations and associated service facilities.
Creating space for restaurants, specialty shops, a farmer's market, and a small tourist related industry.
Considering the possible return of passenger rail service and/or local trolley loop to serve residents and carry tourists between downtown and outlying camping areas.

Another program goal was to reinforce the history of the waterfront. This would be done by

Implementing a "rail meet sail" theme by locating and placing a historic ship and train on the waterfront to act as official focal point to attract attention ,
Developing ship and train museums with related educational facilities,
Highlighting historically significant architecture.

Prior to the development of this comprehensive plan for the waterfront, the Waterfront Committee conducted a citizen survey. One hundred and fifteen responses were included in the survey (with 62% being under the age of 21). The highest response for use of the waterfront was by far for recreational facilities. Commercial and residential usage had very low scores. If there were to be commercial usage of the waterfront, the highest desire was for a restaurant. The most favorable recreation usages were in descending order; a picnic area, a quiet sitting area, a jogging bike trail, and a boat launch.

This plan also developed a conceptual plan for the waterfront from the International Bridge to Elm Street and it included cost and materials estimates for implementation. The six areas for development were:

1. The Steamboat Street Wharf in the vicinity of the International Bridge. Its development cost was approximately $86,000.
2. A Marina between the present Duty-free Retail and the old rail yard. This 1981 cost estimate was $1,400,000.
3. The Old Railroad Yard. This development cost estimate was $583,000.

4. Historic Waterfront from the present Androc Building to the Eastern Maine Electric Cooperative Building. This redevelopment cost estimate was $598,000.
5. Pike's Park which is presently Pike's Park - its redevelopment cost was estimated at $271,000.
6. The Commercial Waterfront from Pike's Park to Elm Street, Redevelopment cost was estimated at $84,000.

The Plan recommended that key development should be undertaken immediately to stimulate awareness of the waterfront's potential and spurn future action. This first step should be highly visible to set a tone and direction for future developments and should invite people to use the area on a regular basis, appreciate its heritage, and participate in its future. The recommendation was to make low-cost improvements to the upper Steamboat Wharf and Marina areas which would radically improve the initial impression of our Waterfront. Planting and grading would make the Steamboat wharf a pleasant place to sit, and soften the view from the bridge. A small marina and boatlaunch could be established which would probably not entail dredging. The second step would be to grade and plant Pike's Park, develop an amphitheatre, and other general improvements. The Plan recommended that Union Street be closed to vehicle traffic for busy parts of the year, and thereby organized markets could use this street to sell their goods in a central visual location unhindered by the downtown traffic. The third step would be to create the recreation link, in essence a pedestrian link which would incorporate the initial phase. The Committee felt it was critical that people would be allowed to move freely throughout the entire site to establish a familiarity with the waterfront. The link could be used for walking, jogging, and skiing on a regular basis by residents and visitors alike, and would add to the vitality of the Waterfront. The preliminary cost estimate for this initial phasing totaled $231,000, which included trees, benches, parking, boatramp, floating docks, an amphitheatre in Pike's Park, a new pier, and a recreational link.

1980 Comprehensive Plan Update

In April of 1979, the Calais Planning Board began working with Washington County Regional Commission to update the City's Comprehensive Plan. The Calais Maine Comprehensive Plan 1980 Update was adopted in mid-1980. This plan contained an edited summary of the recommended phasing for the waterfront from the Waterfront Master Plan by R.R. Berman, Associates, and that fishing and cargo vessels might also be potential users of the waterfront someday.

Development District Master Plan

September, 1982, the architectural engineering firm Webster, Baldwin, Rohman and Day of Bangor, Maine prepared the Calais Development District Master Plan which "outlines a physical framework of concepts and development strategies which will be coordinated to produce maximum benefit to the community."

Their research showed that people moving to Calais are willing to give up their higher paying jobs in trade for fresh air, clean water, open space, beauty and a more relaxed, challenging life style.

In a summary of existing conditions and character of Downtown Calais the plan notes "The railroad lines along the Saint Croix River create a significant barrier to the development of the waterfront as an amenity." The City has since purchased this line and cleared the area. In their estimation of demands for space, they identified a demand for transient accommodations in the downtown. The reasoning was that "the increase in new accommodations has taken place at scattered locations in peripheral areas or on the main approach roads leading into the city. This has resulted in an overemphasis on 'pass through' as compared to 'terminal' business,...at the expense...of the business or visitor with predominantly downtown destinations. Existing businesses will lose the purchases which normally would be made by the tourist and business traveler... and... a downtown Motel Complex could develop in the immediate future, if a first-rate location with riverfront views and a good pedestrian tie-in to the downtown is obtained."

The Master Plan anticipated a demand for marine and boat related facilities in downtown Calais due to rising incomes, increased leisure time, development on the waterfront across the Saint Croix River in Saint Stephen, increased interest in Atlantic Salmon fishing in the Saint Croix, and yacht clubs and summer cruising of boats along the Maine coast, the development of water oriented facilities (i.e., Pike's Park) with a marina with mooring for ships adjacent to the downtown waterfront and the development of a possible motel complex, the Saint Croix River would add to the vitality of the Development District. The Plan anticipated interest and demand for residential units on the waterfront particularly after 1990 or when significant progress was made in redeveloping the riverfront area. The residential units would be planned create a total, protected environment with suitable amenities both on and off site including supporting retail sales and service facilities in the downtown area. The Master Plan identified additional parking needs near the Waterfront at about 160 spaces.

The Master Plan was based on three major strategies: (1) Concentration of Activities; (2) The Public Circulation System; and (3) "Waterfront" to re-establish the link between the heart of the downtown, the Saint Croix, and Pike's Park. This public skeleton would create an impressive image and a functional symbol for the new Calais. The Waterfront marina, recreation link and Pikes Park would be bordered by the library, hotel, museum and the office/retail core. These developments adjacent to the Saint Croix River, would create a sense of arrival at the central focus of Calais.

Their final recomendation was to "Implement Waterfront Improvements," by adjusting the September 1979 R.R. Berman Waterfront Master Plan and to coordinate this development with that of the proposed Hotel Complex.

Governmental Services, Inc. Study

In December of 1983, Govermental Services Incorporated, of Portland, Maine prepared "A Preliminary Assessment of Potential Users of the Calais Industrial Park with Emphasis on Offshore Development Activities". The final report reviewed the potential for Nova Scotia's offshore oil industries utilizing the Calais Industrial Park and concluded that the potential was almost non-existent. However, this consulting firm recommended the most likely avenue to Calais's economic revitilization hinged on the proper development of its waterfront to develop associated recreational and tourism industries while creating a unique environment for people to settle and shop in.

Market Decisions, Inc. Study

In 1983, after previously mentioned plans outlined the benefits of a motel complex, private developer Sidney Unobskey coordinated with the City of Calais and the Maine State Planning Office to undertake a market feasibility study for a hotel complex on Calais's waterfront by Market Decisions, Incorporated of South Portland, Maine. Market Decisions conducted many data analyses of Calais's economic trade area. One was to define the Calais trade area through a license plate survey predicting the statistical frequency of user's residency. In general terms, the trade area includes East Central Washington County and Southwestern New Brunswick. Recommendations made by this study were that:

- the viability of a small commercial shop complex has as much to do with management skill and capitalization as with market conditions

- market conditions in combination with the anchoring affect of the hotel indicate that a mix of shoppers goods and personal service establishments would be feasible

- from a market point of view, a new waterfront hotel of 80 to 100 rooms is feasible at the proposed site (which was present day Pike's Park area) on the condition that

  - it be chain affiliated
  - include an indoor swimming pool and a restaurant
  - be competitively priced with the major facilities in St. John, Fredricton and Bangor
  - undertake an aggressive marketing program to attract weekend trade during the off season, especially among Canadians
  - include a 100 - 150 person function room to attract local functions, annual meetings and similar events
  - be part of the motel project that includes some type of river impoundment to mitigate the expanse of mudflats

If such a facility were constructed and properly carried out, it should be able to achieve a year occupancy rate in excess of 60%. The study indicated that the restaurant was viewed as a central component of the new waterfront hotel. However, a full service marina of the size necessary to be self-supporting was not feasible as part of a proposed waterfront project because of the limited number of registered boats in the area and the costs associated with creation and operation of a profit making marina. A minimal service facility would enhance an overall project and would be warranted on the condition that the project include the afformentioned river impoundment and the marina limited to 15 to 25 slips catering to trade area residents. The research showed no evidence of demand for tourist oriented residential condominium. Condominium development requires a strong destination oriented vacation center which they did not believe existed in Calais, nor likely to be created by any proposed waterfront complex in and of itself.

Mid-Tide Barrage Studies

Pursuant to this feasibility study, Acres America Incorporated of Columbia, Maryland was retained by the City of Calais to outline the process of constructing a river impoundment. Other studies related to the implementation and planning for a mid-tide barrage, (the so called 'river impoundment' recommended by the Hotel Complex Study) were also conducted by Public Works Canada with subcontracts to Jacques Whitford and Maine Test Borings. The mid-tide barrage was considered the avenue to pursue for waterfront development because the underlying premise was that the impediment to waterfront redevelopment was the large tidal range here in Calais. At low tide extensive mudflats are exposed from the high tide shoreline to the low tide river channel (100 to 300 feet away from the shoreline) and these mudflats render the river useless to recreational boating, and are aesthetically unappealing.

The Acres America Study investigated possible solutions to the tidal problems including (1) removing the sediment, (2) cosmetic improvements to the existing banks and mudflats, and (3) the impoundment of water below present mean tide level. After evaluating the three possible solutions with respect to technical feasibility, effectiveness, environmental acceptability and financial feasibility, the conclusion was that the mid-tide barrage was the best alternative. Acres America presented preliminary design parameters for the construction of a barrage, developed rough costs, and identified necessary permits and licensing processes needed to be obtained for implementing the project. The consultant firm Acres America had experience in the development of two similar facilities in Alaska.

Further studies and reports were prepared for this proposed project for the Economic Development Administration and Canadian agencies. Costs of the studies were shared by the two countries and their municipalities. The most significant consideration for implementation would be the potential increase of pollution in the river in the City of Calais by up to 67% if a mid-tide barrage were to be built, notwithstanding that the pollution would remain near the surface of the river due to the salinity of the water. Additionally, the impact of sediment removal and displacement on water quality is undetermined as is the impact of the barrage opening on boat passage to the impoundment at various tide levels.

Nash's Lake Forest Management Plan

In December of 1981, the City of Calais entered into a Cooperative Forest Management Agreement with the St. Croix Pulpwood Company, a division of the Georgia-Pacific Corporation's Woodland (Baileyville), Maine Division to help the City with the management of its square mile of undeveloped property surrounding the Northwestern portion of Nash's Lake. This agreement provides that Georgia Pacific would provide information regarding incentive programs, forestry practices, forestry laws, related data and give forest management advice consistent with our objectives relative to management planning, silvicultural practices and harvesting. In addition, they will give priority to the City, at existing prices, when the company is purchasing stumpage.

In return, the City agreed to give St. Croix Pulpwood Company the right to first refusal on the purchase, at existing prices, of the crops of trees produced on this City property and follow accepted forest management practices. The agreement can be revised upon the mutual consent of both parties, or it can be terminated with 30 day notice from either party.

Richard Miles, Cooperative Forester for the Company, prepared a Forest Management Plan for the City by December, 1982 which contained a comprehensive analysis of the forest. The following is a summary of the Forest Management Plan.

The major tree growth on this property is Poplar (Trembling and Largetooth). Because there are few systems of harvest that can be applied to this intolerant poplar species (except heavy dependence on herbicide), a silvicultural system of clearcutting is recommended.

There are two options for managing the poplar; one for fiber production, the other for watershed and wildlife management. As a municipal property, it should be managed to produce a variety of uses. Managing for watershed protection and wildlife improvement is recommended.

The overstory of the various timber types are the same age as a result of the massive forest fire that occurred in the early 1930's. The Poplar is rapidly becoming mature as poplar is a short lived species, seldom reaching over 60 years on sites such as this and the average age is now 40-50 years. Poplar is very intolerant of shade and regenerates heavily from root suckers, stump sprouts and seed. A system of clearcutting is mandatory.

To produce good wildlife habitat a diversity of age classes is desirable and can be best accomplished via a system of partial clear cutting. This can be done either by cutting small blocks (square or rectangular) or by cutting alternate strips, a system currently being successfully applied on the Moosehorn National Refuge property adjacent to this woodlot.

To produce a volume of wood sufficient to cover initial road costs, Mile recommended removing 1/3 of the total volume by alternate strip clearcutting in the first cutting cycle (Cut 100 foot wide strips and leave 200 foot strips). These strips would ideally be aligned in an East and West direction to provide the greatest amount of light to promote suckering. Successive strips would be cut at 10 year intervals.

Access - The woodlot has no good access except over privately owned land. Several possibilities exist to construct roads onto the property, though some of these routes of construction would be very expensive. Once access is gained to the property approximately 3 miles of road would be required to effectively manage the whole lot. A summer road system would cost in excess of $30,000 though perhaps one mile of summer access road would be sufficient - other roads could be of winter type.

Harvesting Contractors - Removal of only 1/3 of existing volume may be a major obstacle in obtaining a reliable contractor that is full equipped for full tree chipping of hardwoods. A contract would likely be more enticing to a contactor if provision is made to have him conduct the harvests in 10 and 20 years.

Variables of Tree Growth and Terrain - Due to variation in soil depth and quality there is a significant variance of wood volume from one timber type to another. Density of growth is pretty much the same but average diameter varies from 4 inches D.B.H. (diameter at breast height). Areas with lower average diameter require the same cutting recommendation, however will be much less economical (to contractors) for harvesting. This factor and the tremendous variation in operability due to rocky terrain in some areas will very likely have a strong influence on the stumpage price obainable - if small diameter stands and rocky ground areas are to be harvested.

Layout of Clearcut Strips - Rough rocky ground will require something other than perfectly uniform strip layout. Instead of strips all running east and west their locations will vary with slope, terrain, and road location.

Areas with Species Other than Intolerant Hardwoods - Some timber types may require special considerations as to harvest techniques. Those with maple, ash, and good quality birch may require techniques other than strip cutting. This is particularly true of areas which contain dense, good quality white pine regeneration. Areas such as these should receive added consideration during the strip layout process. Mechanical harvest systems can be employed to leave pine regeneration or to selectively cut where more valuable species of hardwood exist.

REVIEW OF APPROACHES TAKEN IN OTHER CITIES

Belfast

Similar to Calais's downtown waterfront, Belfast's waterfront was almost exclusively an industrial working waterfront. In the early 1980's, the Diamond Match Company went out of business in Belfast and put it waterfront facility out to bid. A local poultry company purchased the property, and the following year the poultry company went out of business too. Then the Belfast Railroad Company, which was partly owned by the City of Belfast, bought this waterfront property. At that time, the City began an effort to plan for its waterfront with the assistance of planning grants and committee work by local citizens.

The first task they identified and undertook was to clean up the waterfront. The City received a Waterfront Action Grant to construct a breakwater and a boating facility and tied this into an overall downtown revitalization strategy which eventually won CDBG grant funds. After the remainder of the railroad company's stock was sold to the City of Belfast, the City had almost exclusive control of their downtown waterfront and they therefore reconsidered their efforts on developing the waterfront.

The city council was divided between developing the waterfront commercially or retaining it for open space. Through public hearings, initial reaction felt was that the public wanted open space and access to the waterfront. But given the situation of extremely high unemployment and a lack of tax base, the City requested proposals for development on the waterfront. Included in these RFPs was the condition that the developer provide for public access to the waterfront.

Three development companies prepared proposals for the Belfast waterfront. Two of the development companies proposals centered or housing for the waterfront. The housing was expensive and densely compacted while not providing much access to the waterfront for the public. It was also oriented in such a way that the housing looked away from the "ugly industrial waterfront", and this orientation left little of the good view for the public.

The response that the City worked most closely with was a proposal from Baldacci Associates of Bangor. Baldacci's proposal included housing, shops and a marina; and asked the City to discontinue railroad service through the waterfront. A reaction to the proposal was mixed. One complaint was the downtown merchants who felt the new complex on the waterfront would take business away from them. From a design stand point, the city felt that the Baldacci proposal had too many things proposed in a small area and therefore overcrowded waterfront, and there was only restricted and limited public access. At public hearings there was a substantial outcry that access and use of the waterfront would be virtually eliminated with this development. Even though the development had the potential of creating employment and tax base, the proposal was not accepted. Unfortunately, Baldacci Associates spent a great deal of time and money preparing their proposal and in the end felt used.

Now on the Belfast waterfront, there is parking, a limited commercial development in the form of a restaurant converted from an old industrial building, and open pedestrian space. It is an airy feeling on the waterfront which is enjoyed by the citizens and visitors alike. Pleasure and working craft moor offshore of the public area and there are boats in the new privately developed marina. In talking to the citizens of Belfast, it is apparent they enjoy the vistas and the Maine character of their "public waterfront".

Waterfront development has helped the economy of Belfast. In the four year period from 1982 to 1986, Belfast experienced a 19% increase in restaurant and lodging expenditures, the fourth highest in the State, surpassed only by suburban Portland, Lincoln, and Livermore Falls economic summary areas. Restaurant and loging expenditures for the year 1985 and 1986 increased by 33% over 1985, again the fourth highest in the State surpassed only by Sebago Lake, with 35%; Kennebunk with 36% and Machias with 66%. The Machias increase in expenditures is a one time phenomenon because this increase was due to the "Ultrapower Plant" construction project. Subcontractors filled the Machias area motels during the off-season and these construction workers tended to eat out because they could not cook in their rooms. A similar phenomenon can be expected to occur in Calais with the Recovery Boiler construction project at the Woodland Mill. Also significant to consider in Belfast's resurgence and associated increase in expenditures for its local economy was that its Chamber of Commerce became more active and hired a part-time director. The Chamber dogedly pursued the USS Katahdin to utilize their waterfront. When the ship came, it attracted additional out of state and instate tourists. The Chamber also actively pursued the acquisition of spare information kiosks that were lying unused in State warehouses in Augusta.

Bangor

Bangor is now in phase three of a five year plan for revitalizing its waterfront. Bangor also had a primarily industrial waterfront. As in other Maine cities, these industries vacated the waterfront as local economies changed. The first phase of the plan was to identify and inventory what was on the waterfront. The second phase, they contracted a consulting firm from Boston to prepare some preliminary concept plans. Now in phase three, they have retained the services of Webster, Baldwin, Rohman, Day & Czarniecki and are in the process of negotiating the acquisition of additional land on the waterfront, while also developing public facilities and working with private interests to develop commerical aspects. Public facilities which have been developed to date are moorings and a floating dock.

The City is seeking a mix for its three mile long downtown waterfront of housing, shops, public facilities and light industry. Their waterfront redevelopment plan is much more complicated than the City of Calais's. Calais already owns the controlling parcels of land on its downtown waterfront, while Bangor will be tied up in negotiations, funding, and acquisitions for the next several years. Additionally, Bangor does not have a fund budgeted for this redevelopment plan. The funds needed to purchase property and finance other development will be found and expended as they proceed.

Gray

Wilke's Public Beach

Unlike our Nash's Lake, the town of Gray's Wilke's Beach, was already developed when the town acquired it. It was owned and operated by the local Kiwanis Club, then sold to the town several years ago. Since that time the town has contracted out a concession stand to operate at this site. This person pays ten dollars per month for the rights to use this concession stand.

Since the town acquired the beach, they have upgraded the facilities somewhat by providing a boatramp, five small picnic tables, and some general grounds maintenance improvements, and replaced the existing out-house with portable toilets. The beach operates from approximately June 29th to Labor Day and is primarily used by local residents. To recover operating costs, there is a two dollar a day parking fee, and/or a fifteen dollar season pass charge. There are virtually no objections to these fees. Half of the users are season pass people. These fees recover all costs expended in operating this public facility.

Costs incurred in operating the beach are the hiring of three beach attendents during the summer who clean the park, collect the fees, and supervise the activities. Also hired, for a few days at the beginning of the season, is a crew of high school teenagers to clean up the area before the season starts. Since the attendens work only four hours each day in varying shifts, and the total cost for hiring the high school crew is $500.00, the fees collected return income to the town's General Fund. The recreation director is planning to expand the facility and fully expects to generate substantially more income for the town by doing so. They plan to possibly operate the concession stand themselves and/or work out a more profitable lease arrangement.

The recreation department conducts several activities at this facility such as swimming lessons and ice skating during the winter.

Calais 1987 Waterfront Opinion Survey

Summary

In late 1986, Calais received a Coastal Planning Grant funded by the United States Department of Commerce to prepare a plan for its waterfront. Several studies over the years have indicated our waterfront, if developed properly, is a key to improving the City's economy. The first step in preparing this plan was to conduct a public opinion survey widely distributed to Calais residents to see how City-owned waterfront property should be improved for access, commercial use, recreation, and for preserving open space. This citizen input was very important because people are more likely to fill out a survey than attend a public hearing.

1,100 surveys were mailed out, and 220 were returned, or, one out of five people who received a survey completed it. The survey questions were selected from previous surveys done by the Calais Chamber of Commerce, Community Development Department, and Waterfront Committee, as well as ideas generated by previous Waterfront and Master Plans, developers, consultants, citizens, and public meetings. Some questions, such as whether or not "it is important to protect wildlife" or "should we sell Pike's Woods?" were selected because it was assumed they would generate a strong negative (sell the woods) or positive (protect the wildlife) response and a measure of accuracy for the rest of the questions could be compared to these strongest responses.

The survey provides opinions of what the City should and should not do with its waterfront properties, and plans can be made to meet the expressed ideas of the community as a whole. The favorable responses for more public facilities and access, as well as passive and active recreation areas replicate previous survey results. The survey results are important to set the goals, objectives, and priorities for the waterfront and to develop action plans for future projects.

The Top Ten Things Calais Shouldn't Do....

- Sell Pike's Woods
- Sell the square-mile on Nash's lake to a large developer.
- Cut the square mile on Nash's Lake just for the wood.
- Sell the 24 acres behind the Industrial Park.
- Allow private investors to determine what development takes place on the River.
- Dam the river for better boating at a cost of $20-$30 million dollars.
- Sell the Industrial Park property to an RV Park developer.
- Develop the property behind the Industrial Park for farming.
- Give the property behind the Industrial Park to attract companies so they can have it for an employee recreation area.

o Sell the river property behind Union Street.

The Top Ten Things Calais Should Do...

o Protect our wildlife

o Try to develop year-round jobs.

o Clean up and beautify the City's Waterfront.

o Keep a view of the River from the downtown.

o Let the community groups run beautification projects on the River.

o Stick with a waterfront zoning plan.

o Develop more public access to the River for passive recreation.

o Put up picnic tables by the rapids.

o Have more boating, fishing, and picnicking facilities on the River.

o Pave a path for walking, jogging, and bicycling on the River.

Methodology

There are two things to look at in interpreting this survey: 1) the "Average Response" (of Native, Recent, & Summer Residents) and 2) the "Overall Score". Each question was scored individually. If a person answered "yes", the question got 10 points; "uncertain" five points; "no" 0 points; if they did not answer that question, the computer could not use that person for that question. Through the demographics section of the survey, the three resident groups were filtered and calculated separately. The computer then calculated an "Average Response" for each question which was scored from 0 to 10. If a question scored 2.1, this would indicate that 2 out of 10 people would probably say yes and 8 would say no. If a question scored 9.1, 9 people would say yes, and 1 would say no. The closer that score is to 5 means there is no clear concensus or feeling on that question. Then two statistical methods called crosstabbing and standard deviation were used to find and correct any human errors.

The questions were then ranked using the "Overall Rank". The highest ranked question had the most support. The lowest numbers had the most opposition. However, only individually answered questions received scores. If many people chose not to answer a question, that question ranked low as an important issue to most people surveyed since they tended not to show strong feelings either way.

Overall Rank #		Native Resident's Average Response	Recent Resident's Average Response	Summer Resident's Average Response	Overall Score
	GENERAL STATEMENTS				
#1	It is important we protect our wildlife. (Eagles, Loons, etc.)	10.0	10.0	9.5	1865
#2	We should concentrate on attracting and developing year-round jobs.	9.1	9.0	9.2	1705

Overall Rank #		Native Resident's Average Response	Recent Resident's Average Response	Summer Resident's Average Response	Overall Score
#6	We should adopt a zoning plan for the waterfront and stick with it.	9.4	9.7	8.0	1640
#7	There should be more places along the river where we can relax and not worry if we're trespassing.	8.9	8.5	8.7	1600
#14	Real estate developments on the river should not block our normal River view.	8.6	8.0	8.3	1405
#18	We should attract whatever development we can to our Waterfront to create jobs and attract tourists.	6.7	6.7	6.7	1305
#19	It would bother me to see too many sub-divisions and commercial developments on the St. Croix River.	7.7	7.3	7.0	1290
#25	Calais has a better quality of life than most towns/cities its size.	6.6	6.4	6.7	1180

A. Downtown/Pike's Park to Main

Overall Rank #		Native Resident's Average Response	Recent Resident's Average Response	Summer Resident's Average Response	Overall Score
#4	Being able to see the River from Downtown makes Calais attractive.	9.3	9.0	8.6	1665
#8	We should clean up the waterfront, landscape, and paint the old steel railroad buildings right away.	9.1	8.7	8.8	1580
#9	More boating, fishing, and picnicking facilities are important.	8.3	7.9	8.5	1540
#12	We should put lights on the Downtown Waterfront.	8.1	7.7	7.8	1475
#13	We should develop a historic theme or style for the waterfront.	8.0	7.3	8.5	1410
#16	I would ride a tour boat if available.	7.0	6.8	7.0	1350
#17	We should build a granite ledge to protect our waterfront properties.	7.0	6.6	6.0	1315
#21	We should expand the available parking.	6.8	5.7	6.2	1285
#22	A marina is a good idea.	7.4	7.3	6.5	1255
#24	A restaurant on the City Wharf is a good idea.	7.1	6.3	6.6	1225
#28	We should fill in the mudflats between the old piers.	6.3	5.5	7.5	1120
#29	The Farmer's Market should be near the River.	6.0	5.6	5.9	1090
#31	A concession stand, or vendors, near Pike's Park is a good idea.	4.6	4.3	4.3	960
#32	We should dredge the river for better boating.	5.0	4.3	3.4	945
#41	It's worth $20-30 million dollars to dam the River for better boating.	3.3	3.4	3.3	605
#42	Private investment should determine what development takes place.	2.5	2.1	2.1	585

The Old Railroad Bed from Todd Street to Main Street
(Riverfront behind Union Street)

Overall Rank #		Native Resident's Average Response	Recent Resident's Average Response	Summer Resident's Average Response	Overall Score
#5	Let the 4-H, Garden Club, or other groups build gardens and put up small signs about the plants, tides, a history of Calais.	8.7	8.6	8.6	1655
#10:	Pave a path so people can walk, jog, or bicyle.	8.6	8.1	7.9	1505
#11	Put up picnic tables by the rapids.	8.4	8.0	7.8	1495
#23	Build stairs to the River.	7.9	7.9	6.5	1235
#36	See if we can sell any of it.	3.5	3.5	3.2	805

C: The Railroad Bed from Pike's Park to Elm Street
(behind the St. Croix Club, etc.)

#3	Continue the paved path/park idea & clean up the junk-yard.	9.3	9.0	8.9	1695
#33	Offer it to developers if they buy the land around it.	3.3	4.0	4.0	840

D: The 24 Waterfront Acres behind the Industrial Park

#27	Build a rest area for Route 9 travellers with picnicking and fishing space for us.	6.7	6.2	5.9	1160
#30	Lease it to a campground/RV park developer.	5.8	5.7	5.7	1000
#37	Use it to attract businesses by letting the companies have it for an employee recreation area.	3.6	3.0	3.5	735
#38:	Encourage some farming on it.	4.2	3.4	3.9	720
#39	Encourage some housing on it.	3.8	3.6	3.9	720
#40:	Sell it to a campground/RV park developer.	3.0	2.9	3.5	615
#43	Sell it.	3.2	2.7	2.7	575

E: The Undeveloped Square mile on Nash's Lake

#26	City park with canoe/sailboat rentals, beach, camps, and campsites.	6.4	7.6	7.1	1175
#34	Have some year-round housing someday.	4.5	5.2	5.7	815
#35	Give to the State to turn into a park.	4.9	5.2	4.4	805
#44	Cut for the wood.	2.7	2.6	2.6	400
#45:	Sold to a large development company.	1.9	2.2	2.2	345

F: The Route 1 Rest Area on the way to Red Beach
(Part of Pike's Woods)

#15	Put up signs and pictures about the ship traffic that used to pass "The Old Lighthouse".	8.1	7.8	7.8	1395
#20	Expand the rest area.	6.9	6.8	6.7	1285

Overall Rank #		Native Resident's Average Response	Recent Resident's Average Response	Summer Resident's Average Response	Overall Score
#46	Sell the rest of the woods.	0.8	0.6	0.8	275

Where Respondents Live

	Percent
Uptown	38
Milltown	20
Union Street	07
Main Street	16
Red Beach	10
Bog Brook	05

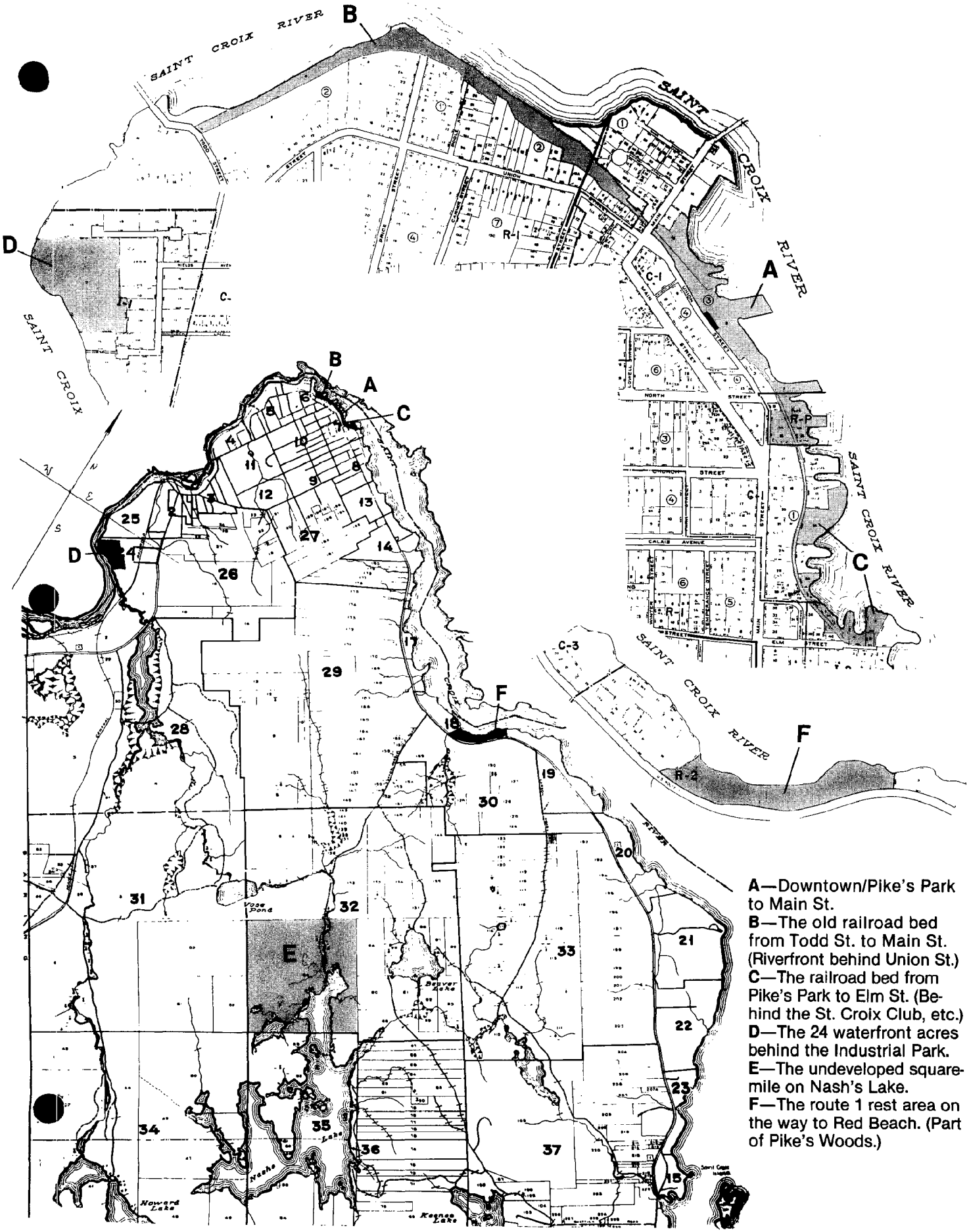
Residency Characteristics

	Percent
Native	67
Recent	22
Summer	07
Visitor	04

	Percent
Gender	
Male	63
Female	37

When asked what recreational activities they did on the St. Croix River, respondents answered as follows:

	Percent
Power Boat	39
Sail Boat	19
Fish for Salmon	30
Fish for Striped Bass	39
Go to Pike's Park	55
Drive along River for the View	69
Picnic/Lunch/BBQ	52
Canoe/Kayak	20
Bird/Wildlife Watching	40
Use the Boat Ramp	33
Would use the Floating Dock	25



A—Downtown/Pike's Park to Main St.
B—The old railroad bed from Todd St. to Main St. (Riverfront behind Union St.)
C—The railroad bed from Pike's Park to Elm St. (Behind the St. Croix Club, etc.)
D—The 24 waterfront acres behind the Industrial Park.
E—The undeveloped square-mile on Nash's Lake.
F—The route 1 rest area on the way to Red Beach. (Part of Pike's Woods.)

CITY BUILDING
Box 413
Calais, Maine 04619

Address Correction Requested

BULK RATE
U. S. POSTAGE
PAID
PERMIT NO. 13
CALAIS, ME

COMMENTS RECEIVED
ON THE
1987 CALAIS WATERFRONT OPINION SURVEY

NASH'S LAKE

You should also save some space, one area, and have that put up for sale some future time when someone would like to own lake property and build individually, not a contractor. Say a person who would like to buy an acre or two.

Preserve Nash's Lake area for swimming and recreation for local people as public beaches are almost non-existant. Keep an eye on the future and don't jump without sufficient planning and zoning, and stick with it. We need an overall plan of development re: business, recreation etc.and establish realistic annual studies towards reaching this goal. We can't do everything overnight but accomplishing a little regularly will eventually see a finished picture.

We have excellent winter recreation here, with the exception of skiing. Any possibility of Mt. Seeall, near the City's Nash's Lake property, being developed for skiing? Winter tourism, as well as summer should be encouraged. That beautiful area of Nash's Lake could easily be over-developed, especially if only used in the summer.

I placed YES to cut wood at Nash's Lake; BUT, believe it should be cruised by the U of M Forestry to see what the City really has. Then, see if the U of M people would come up with a plan to harvest and still maintain a growing crop. The City could bid out the trees to be harvested. Sooner or later the City will have to build a road. Why not a rough one to remove the harvest by the bidder? The City can control the building of the right -of-way. Looking to the future until it can be developed as a recreation area plus City leased land control housing.

I was born in Calais and lived there until I was married in 1940. I visit every summer and care deeply wabout what happens there. Keep whatever water-fornt property Calais owns for all the residents to enjoy. I've spent lots of time at Nash's Lake and think it's one of the best places in the world - so peaceful and unspoiled. Don't let developers get in there and change it. There's a St. Croix River here too - separating Minnesota and Wisconsin. It's been designated a "Wild River" and has certain environmental rgulations. So take care of your St. Croix, too.

These comments have been typed in haste. As a former resident and a future resident, I am very interested in what takes place in the City. As a current Nash's Lake camp owner, I am enviromentally and financially interested in what is planned for the Nash's Lake area.

A research of historical records of City Council meetings of 20-25 years ago may reveal much information concerning a proposal at that time to sell the square mile block. It may have been found at that time that is was not possible to dipose of the square mile block. In any case, after several meetings and much heated discussion, it was decided not to sell the square mile block at that time. Francis Brown, City Attorney, may have some records or time estimate of this discussion or Phil Manship may have detailed information.

This area has several controversial aspects to the survey questions. First there should be a legal research by the City attorney as to the possible uses and what the proposed proceeds from those uses can be used for. This is the last square mile block that the City owns. There is or was a state law that mandated that all towns reserve one squar mile block the proceeds and/or income from it would be used to support of schools. Ture we now spend much more than any revenue that could be gleaned from these lots; however, the law may still be on the books and even if permission from the court to sell this block as some towns have in the past, the proceeds may have to be invested in perpetuity exclusively for the use of the school system.
Another consideration is that the City receives a considerable amount of taxes from lots and camps around Nash's Lake with no expenditures for any services of any type. If anything happens to the dam that is on the City square mile block all these camps and lots would be valueless and thereby the City will lose revenue in hand for revenue anticipated.
A lot of this land is swampy marsh land that is part of a large drainage system that runs to the river; therefore considerable investigation and thought will have to be given to the extent and type of development that can take place in this area.
Hunting is stil enjoyed by many citizens and is a source of income for other citizens. We cannot develop every inch of land in the township and still expect to have any available wilderness, game, sports, or recreational areas for the people of the City. This is the last block left. The federal government could seal the whole Moosehorn REfuge tomorrow to an industrial developer if congress needed the funds then there would be very little undeveloped land for miles. Nash's Lake is a small lake. It can stand some more development without loosing its value but it may have to be carefully controlled and by the City maintaining the square mile block, it can be influencial in controlling that development and assuring its assets are used properly.

PUBLIC PROPERTY & FACILITIES

Maintain what we have so we don't fall behind and lose ground.

Next week have a survey for our streets.

I would rather have safe decent streets to get to our waterfront.

I would suggest that persons responsbiel for this questionaire take a ride over every road in Town and then decide where the loose change left over from parking lots should be spent.

Clean up the waterfront and make it useful for recreation and possibly some minor recreation related business (marina, eating & relaxing).

Develop the area from Todd Street to the Indian Rock primarily for salmon fishing. Always remember Mr. Rickett and Mr. Tracy fishing this stretch of water and getting salmon. The granite blocks placed by the railroad should not be in too bad a shape. Clean the slope to the river and still have the path on the old railroad bed. Picnic tables at the foot of Todd Street. Below Indian Rock at Sandy Shore, there should be enough room for a couple of "Toad Stool" picnic shelters. Ferry Point at the Falls should have room for several "Toad Stoll" picnic tables. Also, there could be a path from Ferry Point to the railroad bed.

If the terrain wasn't so different at the foot of Todd Street, it would be a good place for a boat launching ramp. At the end of tide water, somewhere in the area of the old fishway.

I would like to see all mentioned properties developed but not by real estate and commercial enterprizers. I feel the taxpayi public should have free access to rivers, forests, lakes of public owned properties. Revenues should be obtained from other services and not by an entry fee to those recreation areas.

Granite ledges should be built only in certain places. Equally so, some of the mud flats can be graveled, a bit at a time until you have a sandy area.

*"I think the Pike's Woods and Bog Brook area could be a pleasant Park or recreational area.

I would strongly prefer to see the natural state of the riverfront maintained particulary right in Town. This would give tourists and residents alike a chance to enjoy the magical charm of the tides and wildlife, picnic benches, walkways, bike paths, salmon fishing, historic displays, floating ramps and docks are my idea of good investments. A tour boat is another possibility and secondly some river moorings and possibly a marina.
A high priority which would require little capital outlay, which possibly could be accomplished with volunteer labor would be to clean up what we have on the riverfront and maybe get a better idea of how it could be used. If this were accomplished this Spring, the use of the riverfront could be tied in to the annual 4th of July celebration and International Festival-get the people used to using the riverfront and then poll the public as to what more they want. REST ROOMS are a big item too!

Calais has a unique opportunity to plan the rehabilitation and development of its waterfront with a minimum of ownership problems since it owns and controls most of the development area now. Commercial development will occur if the public areas are planned and developed carefully to create an attractive setting. The density of use must be kept down in the areas close to the riverbank to preserve the view. The tidal barrage while desirable is probably not feasible now for reasons of cost and some predicatable opposition.
Our waterfront will be easier to retain as a park and recration area than St. Stephen's where parking for the business zone was a necessity. We can add some parking while keeping the former railroad right-of-way for a park and recreation area.
Visibility from Main Street to the River is important. The view must remain largely an open one with careful landscaping.

All of the streets in Calais should be paved! Also there should be continous lights the length of South Street and a walk-way. More Restaurants. More recreation. Gyms, bowling, rollerskating, ice-skating, dances, poolhall, pinball, swimming pool should be bigger, trees.

Thank you for sending the Opinion Survey to use. While we eventually intend to live at Fox Point and enjoy our own waterfront, I do feel that the immediate City of Calais should retain its "identity" and provide access to the waterfront for its residents without creating an artificial waterfront to promote tourism. The idea most appealing to us it to clean up the areas in question and leave the space as a park without any commercial development or costly environmental changes such as river fills or ledges. This will create a natural setting which most visitors today are seeking. The commercial interests of Main Street and North Street will provide refreshments for the visitors.

All our shoreline needs is cleaning up. Remove the junk. Cut the grass. People traveling thru Calais see Main Street - not the River.

I believe Calais should have more recreational areas for the public and a clean as well as safe waterfront area.
Business development is okay as long as it doesn't interfere with boating and facilities for the general public.

The river view looking at the St. Stephen shoreline is pleasing. It's clean - no trash. That is the kind of view Calais's shoreline should present to St. Stephen.

All City owned land should not be sold. It should be leased only, therefore, the city would have control. Fees could be adjusted to the income generated, squeeze not tightly, more breathing, more expansion, more fees.

Many other towns and cities encourage snowmobiling into motels and stores and eating places. There are grants avilable which the City has to apply for, the snowmobile club can't do it but can help.
Atlantic Salmon fishing attracts big business.

I am quite sure Mr. Pike gave the picnic area acreage to Calais with the understanding or stipulation that "none of the stately trees" be removed. Perhaps I am not so good for your survey since I am prejudiced. I don't want development of any kind actually. I have listened to the leaders in Calais for years harp on getting tourists and development here and that it would equal less property taxes. It came -- the tourists and developments are increasing each year and still our taxes go up. It's a lot of hogwash to say this benefits Calais rsidents. Simply makes more demands for service, therefore more taxes, a never ending cycle.

We would do better to keep the place clean and not try to build a lot of things for tourists whose main ideas is to get through and arrive at their destination in the shortest time.
Further considering the horrendous disgraceful condition of most of the streets in the City, I think repairing them should be a much higher priority. Being the "Pothole Capital" of Eastern Maine is nothing to be proud of.

*I think we have plenty of parking in Calais. The mudflats might be a feeding area for ducks if planted. (Eelgrass/Zostera Marina is a marine plant that tends to make mudflats firmer for walking and harbors additional aquatic life that bare mudflats do not), Editorial comment.

These seem to be admirable things to do but should only be done if a careful study is made, it is included as part of the overall waterfront plan and the funds necessary for the projects are available and will bring a substnatial return on the dollar. The facilities at the present park have on occasions been full.

It is wonderful to consider development of Calais, but like everything else one of our most important natural resources is going downhill fast. Of course most people do not realize it or do not want to face it. We are losing a good many of our young people to booze and drugs and most of the town's people do not even realize what is going on. We need more things for our young people. The recreation center is wonderful for those who enjoy sports but not all are interested. There are only a few who can really play. It's time we all took a long hard look at ourselves and our future-our children. If we have no interest and don't want to get involved, what good is development of Calais. Our next generation won't even care or be able to look after what we worked so hard for.

MID-TIDE BARRAGE

The Dam across the river Downriver below the golf course would be wonderful, but it should be planned for future and always kept on the back burner--till the other areas are developed more.

A dam across the river will make it one big cess pool. It wil not be fit for boating or anything else. No one with any sense is going to come to the St. Croix and Passamaquoddy Bay for boating. There are hundreds of places on the Maine coast that are closer to the rest of the country and are far safer for boating. This is one of the most dangerous sections for boating by those who do not know the tides and currents. We would be ill advised to encourage people to try it.

Our waterfront is useless until the barrage is developed, then the property value will rise and the city can receive fair prices and acquire solid/good construction in that area.

20 million for a dam --What a joke!

OUR LOCAL ECONOMY

*We need to attract industrial jobs, not these minimum wage fast food jobs, etc. Instead of wasting the taxpayers money on unrealistic downtown designs, attract some good paying jobs so our young people will stick around.

The City of Calais' most important produce is the TOURIST. The city should utilize this prouct as it wil create seasonal jobs. This will lead to year round jobs. Everyone must learn to crawl before they walk. Not everyone likes the tourist, but we must smile and bear.

*A well planned, creative and attractive development for Calais and its waterfront will suit it best and go a long way towards helping this community realize its potential.

If you are a tourist or traveler (as I was for many years), there is nothing in this Town to stop for. There are no sidewalk benches, there are no souvenir shops, there are no tee-shirt shops, there are no local craft places, there is nothing to attract a traveler.

Attract more business to the area.

We need an overall plan of development re: business and recreation, etc. and establish realistic annual strides toward reaching this goal. We can't do everything overnight but accomplishing a little regularly will eventually see a finished picture.

If a developer should want to build a motel for example (1) The City should determine that a motel/hotel is needed and (2) Citizens of the community (taxpayers) who own and run a motel/hotel in Calais should have input and perhaps an option to build a motel on the site -- assuming it is City property. I forsee a substantial Atlantic Salmon Run during the 1990's-2000 and development above the International Bridge should take this into consideration.

There's no doubt that it would improve the looks of Calais to have the waterfront cleaned up. But there's no sense in spending a lot to make it fancy on the theory that such a change will mean that tourists going through will decide to stay instead. We are on the path of those who drive to the Maritimes for their vacations. They are in a hurry to get there and they are in a hurry to get home when their vacations are nearly over. No amoiunt of expensive changes here wil induce them to stay around. That is not the way people plan their vacations.

Thought should be given to the land at the Industrial Park to be used toward revenue producing properties or business to help fund the development areas.

We have built a tourist information center that is off the beaten path. It's nice, but what a waste. After a tourist gets his information, he gets back in his car and leaves, because there isn't even a vendor to buy a hot dog from.

If this development as mentioned througout the qustionnaire will provide some economic growth for Calais in particular and Washington County in general, GO FOR IT. But if this development will add more pollution to the St. Croix River, NO GO. I have seen the St. Croix transformed from a beautiful clean river, teeming with fish and fowl, to its present state of contamination which has been caused by the Georgia Pacific mill in Woodland. Also, G.P. is responsible for emitting the foul odors we experience on numerous occasions. Georgia Pacific is probably the number one employer in the Calais area and has provided Calais with some economic relief. But we paid a price for this relief in the form of water and air pollution. Any new industries must have built-in safeguards and guarantees that will keep our little corner of Maine clean and beautiful.

Do you have any ideas the profit that is made in souvenir shops and small specialized eating places? If in doubt, walk through Bar Harbor in the summer or San Francisco's Fisherman's wharf any time of the year. People on vacation want to spend money, why can't we give them a place to do it?

Nothing will improve life in Calais until better communications with the outside. Better radio, TV, Highway (Route 9 is now known as "Highway to Horror") Need airport for private and medium size commercial planes.
Radio reception needs to be improved -- our WQDY glares forth raucous music hour after hour, never classical or semi-classical. They have captive audiences feed us what they want, not what listeners want.
Then to buy a suit of clothes in Calais. Of course not much need for one except for funerals.

I feel we must attract more businesses to our area.
L.L. Bean would put Calais on the map. Why not puruse them! I realize transportation would be a hardship, but why not make them an offer. Certainly have the land to attract them along with Canadian business because of our area.

COMMENTS ON THE SURVEY QUESTIONS

Some of these questions I would have to know more about the circumstances involved in straight no or yes answers, therefore the 'undecided' answers.

(Real estate developments on the river should not block our normal view of the River) -- This question is ambiguous and should have been posed differently. Real Estate Developers Should Not Block View of River. A simple yes or no can give different meanings.

Wait for plan to be developed and fully discussed. However plan should have stipulations included for all areas of the waterfront that would preclude unwanted situations and basic standards of site preparation, construction standards, and maintenance standards in the various areas.

Objections to Recent and Native Residency classifications.

Why is "Union St." singled out? Aren't we "Uptown" or are we still considered "slums."

(left "vendor" question blank) If done in good taste.

Am not familiar with the area.

*Why should we even share an opinion survey with Canadians? What input did we have in their waterfront, who's money goes into the works, REALLY!!

This form seemed to want yes or no answers to questions requiring at least a paragraph. With simple answers to these questions, the true thoughts of the masses answering could be overexpressed or underexpressed by those analyzing the results.
Yes or no or may be answers should require yes or no questions or an opportunity to alter question, it would seem.

Too general a question. Calais? or the Calais-St. Stephen metropolitan area? This is a question that should be addressed economicaly and socially as part of this planning to try to insure that unnecessary duplication of funds for program and facilities simply because an international border divides the total municipality. Real efforts must be made to encourage all groups and ages to interact co-operatively in whatever interest them on either side of the border. "Most" a definitive word - most Wash Co., Maine, New England, U.S.A.

Naturally this is a qualified NO. In relation to the subject of this survey - the waterfront - No we should not line the waterfront with polluting chemical plants just to have year round jobs. Yes we should make every effort to acquire full-time year round jobs but balanced against the most valuable economic and aesthetic use - currently and in the future.

SPECIAL INTERESTS

I am totally against any development on the river front because some manager that come to Calais to work seem to use this as means of publicity when they leave our area to go to other jobs. As these people do not stay in our city over 3-5 years, they are not too concerned about our roads etc. A good example of this is having Mr. "B", have our old Post Office torn down so he could start on his plans and what he is going to build, where are you now Mr. "B"?

Stop spending on all these hair-brained schemes to benefit a few.

Tearing down the old Post Office certainly didn't help the looks of Main St. It was a crime to destroy a beautifiul old building and replace it with a little parking lot.

*Make sure end use benefits all Calais citizens, and not just those with special interests, i.e. boat owners.

*Why should you consider the input of Canadians, they dont' pay 30 mils. Don't confine possible development to local interests, so far they haven't come through. So far the biggest blunder was to raze the Old Post Office. Let's not duplicate that effort for a deceptive developer. It's time for developers to use their money, not the taxpayer's money.

I represent the Frank N. Beckett Center run by Washington County Association for Retarded Citizens. As the agency owns two parcels of land on the river in the areas of Eaton Street, we are very interested in being informed of the possible developments.

GENERAL COMMENTS

The waterfront is a valuable asset to the appearance of the City. Little has been done to enhance it over a period of manyyears. Any changes should be carefully and intelligently considered. An emphasis on the history of the waterfront and shipbuilding would be fine but the waterfront ought to remain uncluttered and open. It is a shame that the City found it necessary to go against the wishes of the population and raze the old post office building. It could have had so many uses in good development of the waterfront. No finer building stood in the City and such a building will never be replaced. I wonder at the value of these surveys given the fact that the City has disregarded its citizen's opinions in the past. I do hope the improvements to the waterfront will be thought of more fully than those to the Library. Any citizen who cherished visits to that facility cannot but feel a loss at the use of the magnificent original building for only children who cannot nearly appreciate its interior arcitectural beauty. Also any development of the waterfront should consider the wildlife and water fowl. Making the waterfront cleaner and more attractive with the possibility of gardens or pathways and with careful consideration of all environmental impacts that any development might have should be the highest priority. Calais has many beautiful and old buildings and much history. These things should be carefully guarded.

*I'm afraid if signs and pictures were put up that it would be a waste of time and money, they would be destroyed by vandals.

*The river is a tremendous asset to the community and everything should be done to protect it.

- have lived in many parts of this country and when I returned, I've been appalled by the condition this City is in. Also I feel that there has been a great waste of money going on.

Many ideas are good. Financial costs wil be determining factor as we all know.

Although New York City is my birthplace and primary residence, I have strong ties in the Red Beach area. My father, his 8 brothers and two sisters, were born in Red Beach. My Grandfather captained his own vessel that plied the St. Croix River and the surrounding waterways. I had the good fortune of attending the one room school house that was located on the Shattuck road for my first two years of formal schooling. I own a home in Red Beach that I will be retiring to in a few years.

The City by all means MUST adopt a zoning plan for the waterfront, good or bad, and stay with it. Also it should develop a plan for development for the other areas and stick with it. So people will be unhappy, it will be useless to try and satisfy everyone. Only the overally benefits to the WHOLE City at large should be considered.

I have been a summer residen for 34 years and call it my second home. I love Calais and the people there who are friendly, neighborly and always willing to help. Calais has improved greatly over the years and can be a wonderful city. I hope that many of these questions can be worked out to make it more beautiful.

In 1930's, fished St. Croix above Milltown Bridge to Baring for bass, pickeral, yeallow perch, chubbs, hornpout, eels and occasional brook trout was landed. Fished Salmon Falls to Cove for sea smelts, salmon and striped bass. Canoeing and boating also above Milltown.

All of these answers are qualified by the factors of economics and by the tenets set down in a master plan that can be developed and presented and sold on its merit to the citizens of the City of Calais after honest, fair and open discussion with the stipulation to the public that the pklan will not be changed or circumvented without a complete review and/or revision of the whole plan in a forum sililar to the prcedures adopted in the orginal plan.
Little or no financial expenditues or other actions should be taken until the plan is developed and approved unless it is to correct an unsafe, unhealthy or clearly detrimental situation which would normally come under the judgment of the City council anyway. With the caveat that serious consideration be given to situations whereby services may be available in geographic or time frames that could entail considerable economic ssvings for the future, such as use of Workfare personnel with small expenditure for material or laying lighting cables in a trench being dug for water for sewerage facilities, etc.

Again all these answers are qualified --all these things would be as good as Mom's apple pie but they should be thrashed out in a public forum to see if they are economicaly feasible and civically viable. Stairs may be a potential safety hazard. Lack of sufficent parking or access may not be worth the effort or funds expended. Adequate policing may be a problem. In relation to selling any of this section of the river or any portion of the river within the boundries of the city, I have a suggestion. This Todd Street - Union Street riverfront could possibly encompass valuable salmon fishing sites or pools - it also used to be a popular public sea smelting area. I suggest that the expertise of a noted salmon fisherman and a Calais Citizen be enlisted to survey and plan to preserve, reserve and protect any and all fishing sites (pools) and access there to for both the taxpayers of Calais, visitors, and commercial entrepreneuers along the otal riverfront from Baring to Robbinston as an integral portion of the master plan. This to me is an extremely important evaluation and I believe Dr. William Gould could be a valuable asset and source of information in protecting the City assets and future potential of the river.

RECORD OF MEETING

PUBIC HEARING

1987

COASTAL PLANNING GRANT

(March 5, 1987)

Called to order at 7:30 p.m. by Mayor Drew Case.

In attendance were: Mayor Case
Councillor DelMonaco
Councillor Jackson
Councillor Brogan
Councillor Cashwell
Alexander Tompa, Planning Board
Walter Ford, Planning Board
Nancy H. Orr, City Manager
Edmund Lindemanis, Administrative Assistant
Douglas Jackson
Brand Livingstone
Greta May Johnson
Marion Holgren
Theresa Plagonia
James Boehm
Mr. & Mrs. Earle Jensen
Cynthia Mingo
Bruce Kyle
Arthur Mingo
and a few citizens who did not sign in

Mayor Case had opening statements regarding the need to set future directions for Calais, and that he hoped more joint Public Hearing/Council/Planning Board meetings would be held in the future.

Nancy Orr, City Manager, and Edmund Lindemanis, Administrative Assistant, gave a brief summary on the City's coastal planning effort, and what had been accomplished to date. The Mayor then opened the meeting up to public comments.

Mr. Jensen discussed the importance of keeping water-views from existing downtown properties from being blocked out in the future by multi-story condominium developments. He indicated people had purchased existing buildings in town expressly for the purpose of converting spaces into apartments with water-views, and that it would be unfair if new buildings were erected that blocked these views.

Mr. Arthur Mingo, owner of Keene's Lake Campground, indicated he thought it would be unfair of the City to partake in developing another campground because he felt it would undermine his existing business.

Mr. Doug Jackson said he was against spending any federal, state, or local tax dollars on the waterfront and that we had higher priorities in fixing our streets. He didn't think developing the riverfront was the answer to our economic problem. Additionally, the river is too dangerous a waterway to develop as a recreation attraction.

Ms. Theresa Plagonia said she thought the new floating dock was a good development for the waterfront and that she and several other people regularly power boat on the river and did not find it dangerous.

Mr. Brand Livingstone was a former Waterfront Committee Member in the late 1970's and spent several minutes discussing their previous efforts and what developments had taken place as a result of their work. He displayed the concept plan this group had created and compared it to what had actually happened. He said, "A plan is something you have in the back of your mind so you can change it." Regarding the deep mud on the banks of the river, he said, "the mud built Calais" and rather than be ashamed of its appearance, we should tell people our history of how the cud cushioned the bottoms of lumber ships during low tide and that this was why Calais became a significant shipping center. He suggested we create a marine display area on the ground (park-level) floor of the Tourist Information Center; that the Mid-tide Barrage is not necessary, or cost effective; and that we should balance commercial developments with public access.

Ms. Greta May Johnson suggested we should create more parking and things for tourists to do on the waterfront as part of a short-term plan.

Councillor Cashwell thought we should obtain copies of the New Brunswick Department of Tourism assessment of tourism and recreational needs. He suggested we take steps immediately on the waterfront such as a general beautification project. This lead several participants to agree tohold a Waterfront Clean-up Day this spring. Mr. Cashwell also discussed the increased salmon fishery that had been created on the river where none had been for several decades, and how this situation wassimilar to Bangor's where now the salmon fisherman expenditures had added to the local economy. He also discussed how our river's salmon fishery was naturally regenerating unlike Bangor's where stocking is continually required.

Councillor Jackson felt that private investment should determine the development of the waterfront, and that City tax dollars shoul dnot be spent on its development. He suggested that the City wharf be offered for sale and that possibly a restaurant or similar development thereafter would take place. He also felt that if boaters desired moorings on the river, that they should bear the burden of installing them. He suggested the old railroad bed could be converted to a street.

Mr. Tompa discussed the need for tourist attractions to provide activity for the City's guests. He suggested a diving bell off the City wharf.

Mr. Kim Boehm of the Milltown section of Calais spoke at some length on the need for public access to the waterfront, the need for passive recreational facilities such as picnic tables, and the significant potential of the salmon fishery. His concern was the quality of life we have.

Mr. Kyle, a recently arrived resident, explained how his family had travelled the U.S. & Canada and why they had picked Calais to settle in. The reason was the unique quality of urban services and a natural waterfront. He emplored us to keep things as natural as we can.

Through out the meeting, citizens and officials contributed to discussion. The meeting was adjourned at approximately 9:40 p.m.

RECORD OF MEETING

CITY OF CALAIS

COASTAL PLANNING GRANT

PUBLIC HEARING

April 30, 1987

Attendees: Mayor Case
Councillor Brogan
Councillor Cashwell
Councillor Jackson

Chairman Stover, Planning Board
Mr. Alexander Tompa, Planning Board
Mr. Merrill Sabattus, Planning Board
Mr. Peter DelMonaco, Planning Board
Ms. Christine Littrell, Planning Board

Bob O'Toole, Commander, USCG (ret.)
Brand Livingstone
Greta May Johnson
Bruce Kyle, Bangor Daily News
Jerry Nason, St. Croix Courier
Doug Mullen,
Ken Beland (Atlantic Sea Run Salmon Commission)
Louis Bernardini
Paul Spurning
Mr. & Mrs. Earle Jensen
Ken Clark
James Kelley, Sr.
Doug Jackson
Nancy Orr, City Manager
Edmund Lindemanis, Administrative Assistant
James "Kim" Boehms
plus a few citizens who arrived late or did not sign in

Meeting held at Calais Senior Citizens Center.

Mayor Case called the meeting to order at 7:35 p.m. and made welcoming and opening remarks.

City Manager Orr then gave a brief overview of the Waterfront Opinion Survey results and highlighted certain responses that appeared to be significant for our planning efforts. She indicated the survey as it was so far analyzed did not cast anything in concrete and that is one of the reasons for the Public Hearing. She then asked to hear opinions from the audience.

Councillor Brogan read a letter from one of the City's church ministers. He expressed his desire to see a museum, marina, and other public facilities developed.

Commander Bob O'Toole, U.S.C.G. (retired) introduced himself as a new member in the community. He expressed his desire to see a museum created in the bottom of the Tourist Information Center with a diorama of Calais's waterfront in the 1850 to 1870 period when the clipper ships were being built here and tons of lumber was being loaded onto yet other types of watercraft. Later in the meeting, Cmdr. O'Toole shared his experiences of seeing other

communities around the United States develop their waterfronts. He said that several communities had seen significant tourist and recreational industry develop from the creation of one small recreation waterfront facility such as our floating dock, while also making other "minimal" improvements.

Several citizens and board members discussed the structure of the parties responsible for the operation of the Tourist Information Center. Historical Society members indicated they would like to open and operate a display this summer if possible.

the City Manager then introduced Mr. Ken Beland, St. Croix Biologist, Atlantic Sea Run Salmon Commission. He said that the river has a potential run of 2-5 thousand fish, and that a run of 2 thousand is required to perpetuate the fishery. Presently there is a run of approximately 350 fish, and that in 1980 there was a run of 80 fish. He expects a run of one thousand fish in the very near future, and at this point, a "consumptive fishery" may be permitted. He discussed and explained several details and particulars of this river's fishery management and development. He also discussed what property the Commission owns on the river, and how it literally links up with the City's riverfront property. He then discussed the experience the Commission has with developing public/private partnerships in creating public access on salmon rivers, and the potential for doing it here. An advantage he outlined in these partnerships is the maintenance burden would be shared by groups interested in maintaining access, while also letting the public at large utilize the facilities. The public then asked several questions about the salmon fishery. Of particular interest was a qustion regarding putting lights on the downtown waterfront, and if this development would interfere with the salmon in any way. The reply was "no". A question regarding the impact of the proposed Mid-tide Barrage was asked, where he replied the project could be engineered without much difficulty for fish passage, but that the environmental engineerng would be extremely difficult because of upstream discharges and water clarity. When askedwhat he would recommend for the property between the International Bridge and the Milltown Dam, he recommended keeping it a "green area".

Mr. Louis Bernardini asked to formally put forward a proposal. He proposed that the City fill in between the City wharf and Ammex piers to create a prime area for retail space with a walkway on its river-edge. The City would thereafter lease the space, thereby retaining control of the land.

Mr. Mullen then discussed the difficulty in obtaining the required permits for this type of activity on coastal lands.

Councillor Cashwell discussed several items including: Belfast's waterfront planning effort that involved request for proposals from developers; environmental impact statements completed for the City in the 1970's; and the boating industry which he termed the "Waterborn Winnebago Crowd." Regarding the RFP's from developers, the City Manager replied that the City will be doing this process as part of the work program that was included in the coastal planning grant contract.

Mr. Livingstone thought that after the floating dock is in, and being used more, that tours down the river may start because of the interest tour operators in Eastport have in expanding their operations.

Ms. Johnson thought we should keep our waterfront natural, and that we should think of our tides and mud as a great natural asset, rather than a hinderance to developing tourism. Many people travel to the Maritimes expressly for the purpose of witnessing the great tidal fluctuations and that if we made it more readily know that we have these similarly great fluctuations, that more tourists would stop in our City.

Mr. Tompa thought we should "copy Canada" in developing our waterfront, i.e., the granite lined shorefront, and parking.

An unidentified citizen discused Pike's Woods Rest Area. She thought we should cut back the trees again because they have grown up so the "Old Lighthouse" is not visible anymore.

Mr. James Kelley, Sr., discussed the survey and said there should have been some question(s) directed at the potential impct of some million dollar investment on the waterfrnt affecting local property taxes, and if this would have affected responses regarding future development of the waterfront.

Mr. DelMonaco replied that our existing sewer treatment plant cannot handle the discharges that are being currently created, that we are in the process of planning to solve our existing problems, and that such large developments would require an equal amount of infrastructure investment.

The discussion then centered on the Nash's Lake property with Mr. Mullen pointing out that even though the survey indicated that people didn't think that the wood should be cut, the wood was 30-40 year growth, and that it should be cut for good forestry management. Further disucssion on the Lake centered on the ownership of the dam (city-owned), and the liability thereby created in case it were to break.

Councillor Jackson requested that any plans we consider for the waterfront include not only development costs, but also projected operating and maintenance costs for the future. He thought the survey showed the citizens want to move in the right cost effective direction in that they seemed to shy away from big ticket, expensive projects for the waterfront. Discussion then focused on public/private partnerships on the waterfront with the waterfront clean-up day being discussed again.

The Mayor called for adjournment at 9:00 p.m.

Waterfront Public Hearing

June 18, 1987

7:30 P.M.

The Calais City Council and Planning Board wishes to receive comments on the proposed waterfront plan at a public hearing, in the City Building Council Chambers on Church Street.

The plan centers around City owned waterfront properties and recommends

Downtown Area: Be cleaned, open, and accessible while upgrading riverfront recreation facilities. A limited commercial area is considered.

Nash's Lake: Explore methods to improve public access to the lake.

Route 1 Rest Area: Pursue an upgrading and expansion.

24 Acres Behind Industrial Park: Consider a local lease for commercial overnight RV camping with public access to the river for recreation.

Old Railroad Bed from Todd to Main St: Upgrade riverwalk area.

ALL CONCERNED CITIZENS ARE URGED TO ATTEND.

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June 18, 1987

7:30 P. M.

The Calais City Council and Planning Board wishes to receive comments on the proposed waterfront plan at a public hearing, in the City Building Council Chambers on Church Street.

The plan centers around City owned waterfront properties and recommends

DOWNTOWN AREA: Be cleaned, open, and accessible while upgrading riverfront recreation facilities. A limited commercial area is considered.

NASH'S LAKE: Explore methods to improve public access to the lake.

ROUTE 1 REST AREA: Pursue an upgrading and expansion.

24 ACRES BEHIND INDUSTRIAL PARK: Consider a local lease for commercial overnight RV camping with public access to the river for recreation.

OLD RAILROAD BED FROM TODD TO MAIN ST.: Upgrade riverwalk areas.

All Concerned Citizens Are Urged To Attend.

CALAIS WATERFRONT PROJECT

DOWNTOWN AREA

QA 13 ARCHITECTS
EASTPORT MAINE

JULY 15, 1987

QA 13
ARCHITECTS

The urban environment in a natural landscape

The development of most American cities has traditionally occurred as a direct response to a major physical element of the landscape. Whether it be for reasons of discovery of an indigenous resource found in that landscape, or a commerce appropriate to that locale, there has always been a close correlation between a settlement's origins and its immediate landscape, and we identify most of our thriving communities through such associations with the natural environment. We have, for example, coastal, mountain, river, and island communities. There exist many forms, each for different reasons, yet the most notable of these communities have all responded in major (and subtle) ways physically to its primary natural placement.

The physical image of the City of Calais

Rivers are a dynamic resource and present one of the strongest physical focuses for any city growing up along its edge. Historically, cities developed on rivers for their use as a major thoroughfare for that city's economy. Calais, and its initial growth typified such a response to its locale, and although the water-related commerce which had once helped foster its beginnings no longer exist, and the St. Croix River, as a viable concourse for the passage of people and goods has been replaced with alternate means of transport, Calais remains first and foremost a river city; its growth patterns still respond to that articulate edge created by the river, and that edge remains a viable physical component of this city's fabric. Furthermore, as one enters the center of Calais one's first and lasting impression is its coexistence with, and interdependence with the river. It is this physical interrelationship which, logically, should be reinforced and maintained.

Given present growth patterns within the city, given some of the underlying principles of the downtown revitalization program, given

17 BOYNTON STREET EASTPORT MAINE 04631 207 853 4887

present zoning regulations, and given an ever heightening awareness of the fragile nature of our environment, it would be inappropriate to reactivate this waterfront with further construction within 75'-0" of the river's edge.

The reintroduction of open, green space into the city's fabric

At present there exists a thin layer of space along the river's edge as it meanders through the city's neighborhoods. This space, and in particular, that area between the International Bridge and the Calais Free Library, although undeveloped and indistinct at the moment, provides the city with a rare opportunity to strengthen its basic image through the use of that space as a natural edge and as a thoroughfare for leisure and recreation-related activities. Although a variety of activities come to mind in an attempt to reutilize and reincorporate this edge into the city's fabric, the simplest and most direct treatment would be to envision this corridor of space as a "greenbelt park", and pedestrian promenade, offering to the community unlimited public access to the water's edge, and reinforcing the incorporation of publicly accessible greenspace and leisure activity into the city center itself, a need identified and successfully initiated in the downtown revitalization program. This concept also has the advantage of accomplishing, with a minimum of means, other tasks as well;

It would organize and collect existing activities along its length which are public in nature, the boat ramp, the pier, the Library, the Tourist Center, and those auxiliary public functions contained in both buildings such as galleries, meeting spaces, restroom facilities, while simultaneously encouraging the inclusion of other activities not yet perceived.

It would provide a visual counterpoint to the present use of Union Street as a major vehicular route, and provide a "soft" natural context from which the urban environment rises above and beyond it.

It would integrate fragments of the city which exist at present along the river's edge into a coherent image and articulate the edge from end to end, reinforcing a sense of arrival into the city's center from the boundary with Canada, from route 1 in the opposite direction, and from the hill down into the center along North Street.

These three major access points are, to varying degrees, "gateways" to the city and can be perceived as such. There is, however, a potential fourth "gateway" which could occur across the river thereby linking Calais and St. Stephen as brethren cities and linking them both in turn to the river.

Program

The following objectives were defined and integrated into a coherent concept:

improve public access to the waterfront.

stimulate pedestrian and recreational use.

create spaces for public gatherings, passive and active recreation, and for educational purposes.

link all activity with a pedestrian promenade.

The attached conceptual plans and perspectives outline the major components of this proposal as follows:

Concept

River trail-

This trail reinforces public access to the waterfront area and is the major conduit for pedestrians, joggers, bicyclers, and skiiers, running the length of the river in the downtown area and linking various activities along its length which are public in nature. Major access points occur at Pikes Park, and at a point just before the entrance to the International Bridge, with minor access points occurring in places already established or implied within the city's downtown fabric. At points along this trail are three overlooks, open areas with park benches and interpretive signs describing the St. Croix River and its history, and the flora and fauna which inhabit the river and river's edge. Street lamps along this trail would encourage evening use of this area. Extension of this trail to Elm Street in one direction, and to the upper falls of the St. Croix would greatly enhance the urban environment and encourage recreational activities in spaces segregated from vehicular circulation.

Within the downtown area, this trail would link three nodes of activity:

Node "A"

1. Rivergate Shelter - a new open, covered structure at the pier, complimenting the present gazebo across the river in St. Stephen in style. This structure can be used as a focus for public gatherings, as well as shelter from inclement weather.
2. Pike's Park ------- increase present grass area including additional benches and new tree plantings; reorganize and increase parking for cars, and for boat trailers using the present boat ramp.

3. Tourist Information Center - encourage use of lower level spaces of present building for civic functions, film and lecture series.

4. Calais Free Library -------- encourage use of lower level spaces for exhibitions, club meetings, etc.

general - minor improvements should be implemented to the existing pier, including some erosion control along the river.

Node "B"

5. Hinson Building -------- a significant historic structure to the downtown area, and should be repaired and maintained. Encourage use of lower level of present building for a restaurant, bicycle rental shop, etc.

6. Open Space Plaza ------- a large, paved open space with flags and flagpoles outlining its perimeter, and with park benches for relaxation and passive recreation.

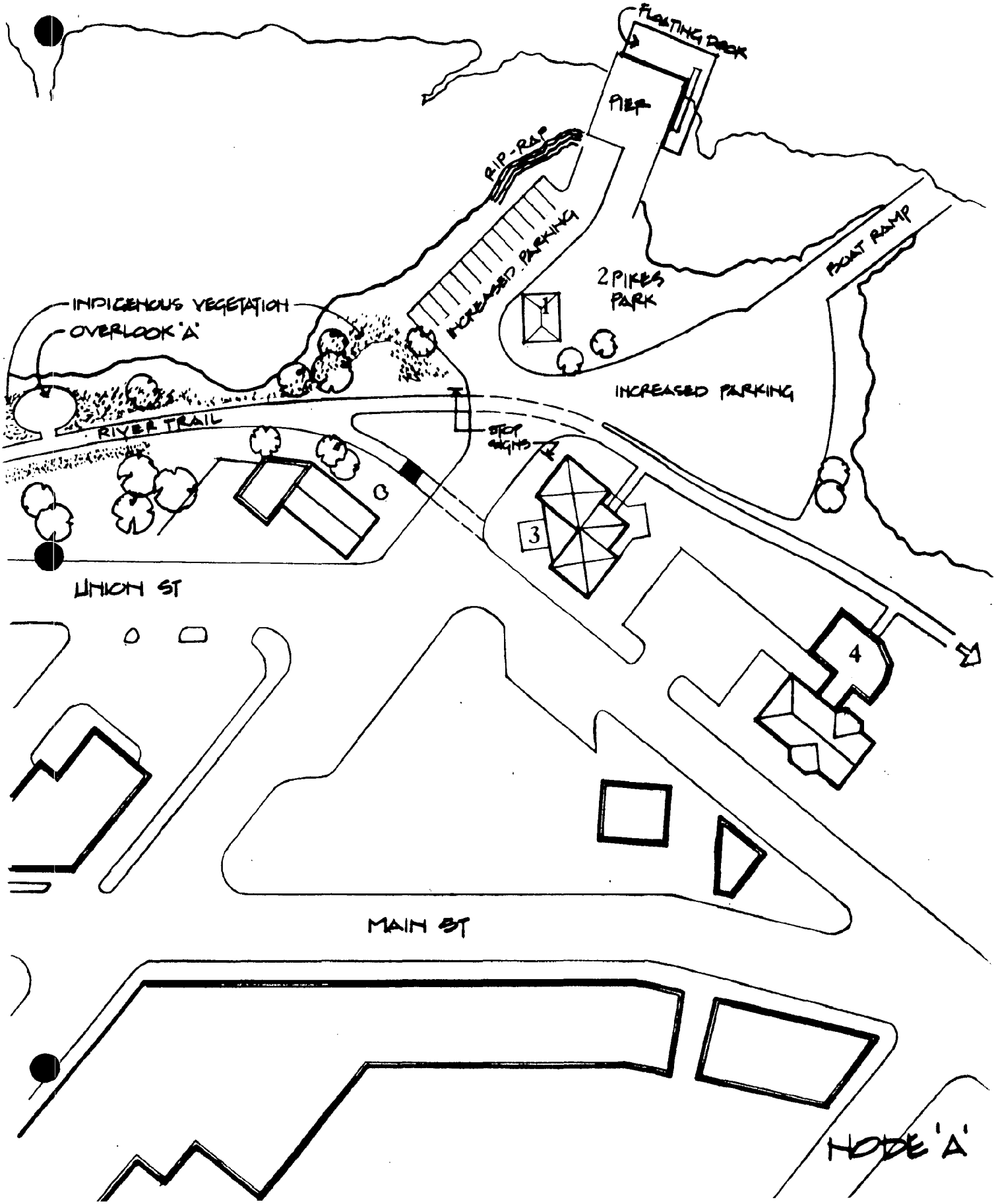
7. Upper Level Seating ---- additional seating for unobstructed views of the river and river activities, with benches, game tables, and additional plantings of trees and indigenous growth. New ramp construction for access by the handicapped.

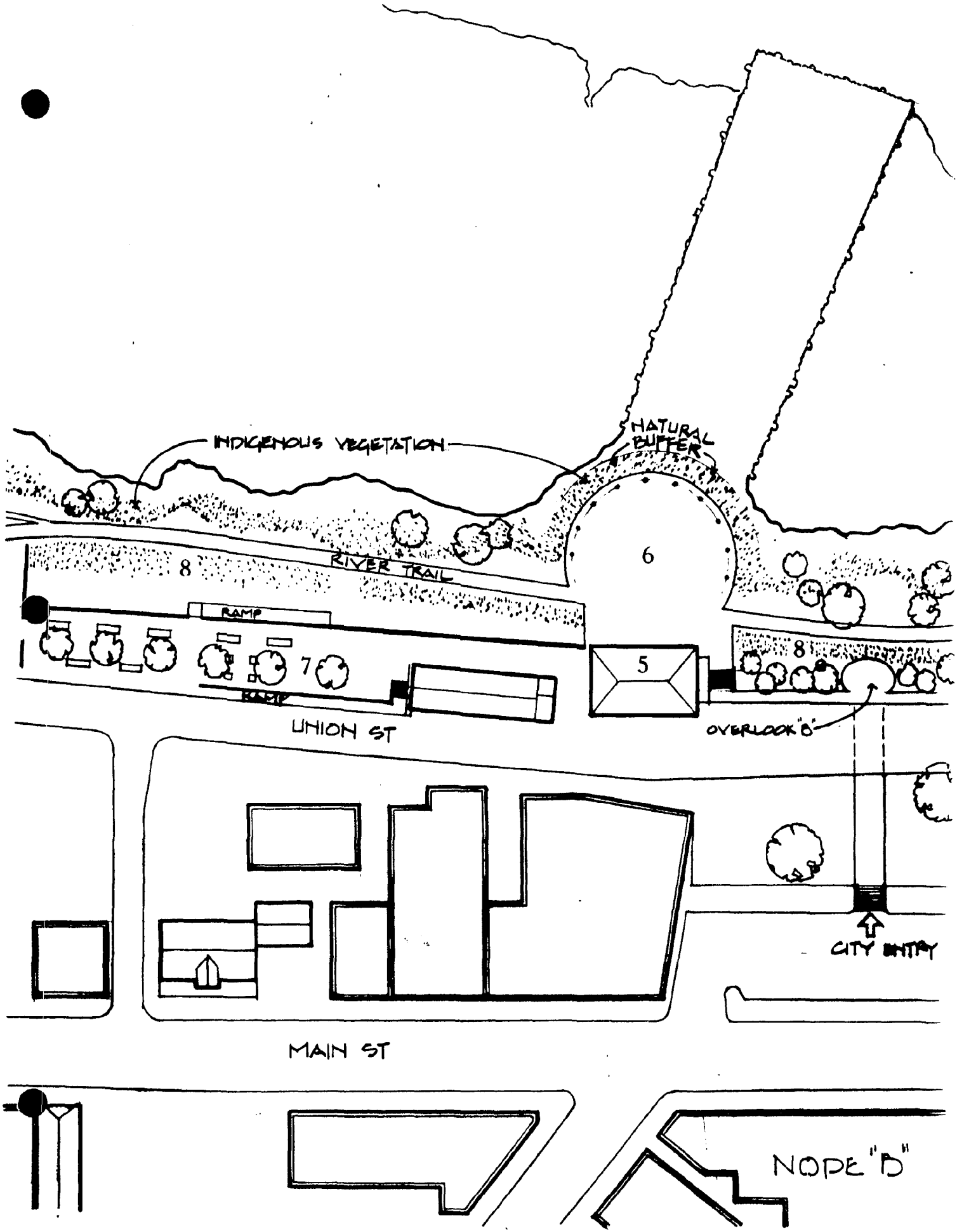
8. Flower Gardens --------- two areas set aside for use by garden clubs.

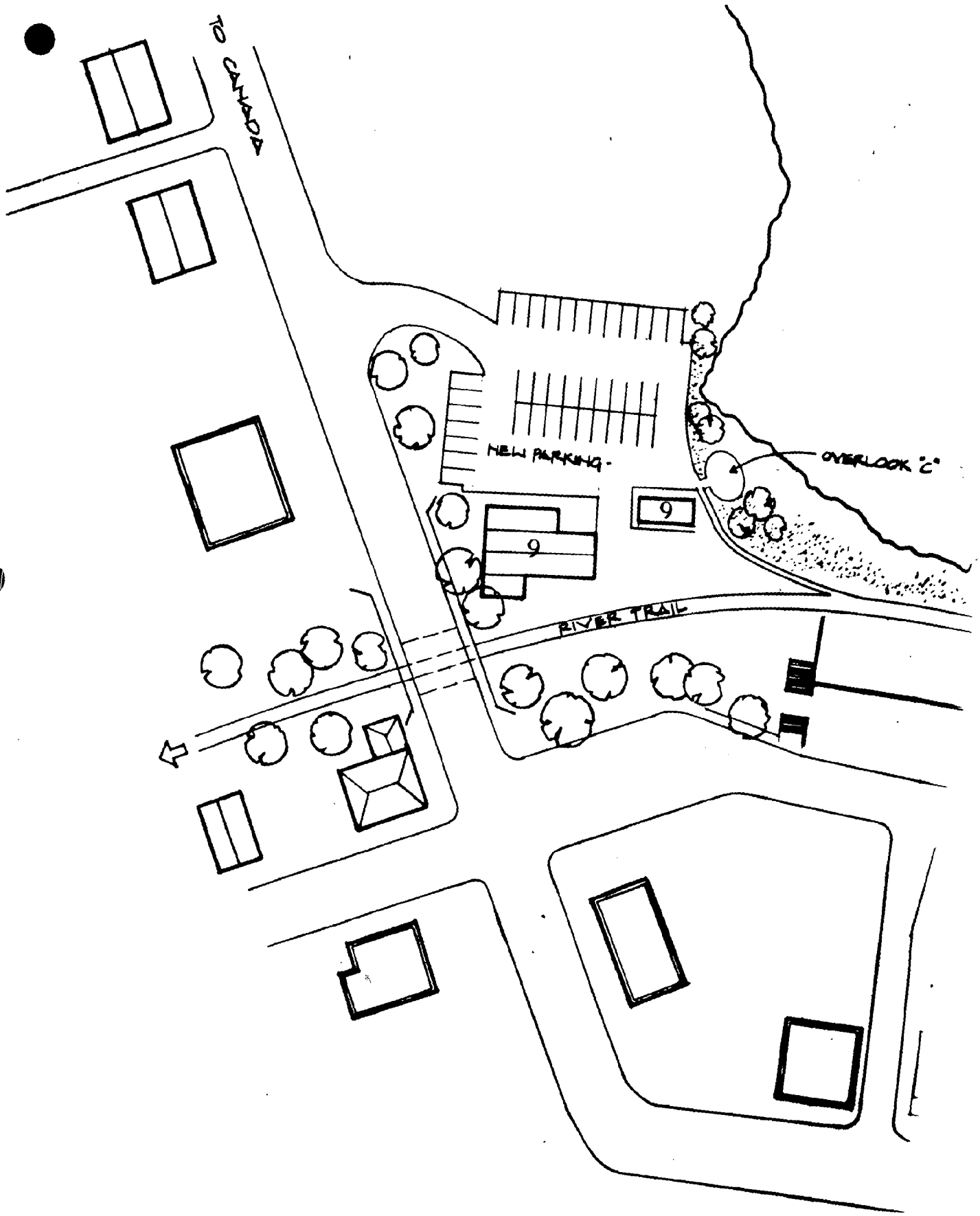
Node "C"

9. Existing City Buildings -Salthouse and maintenance shed should be painted.

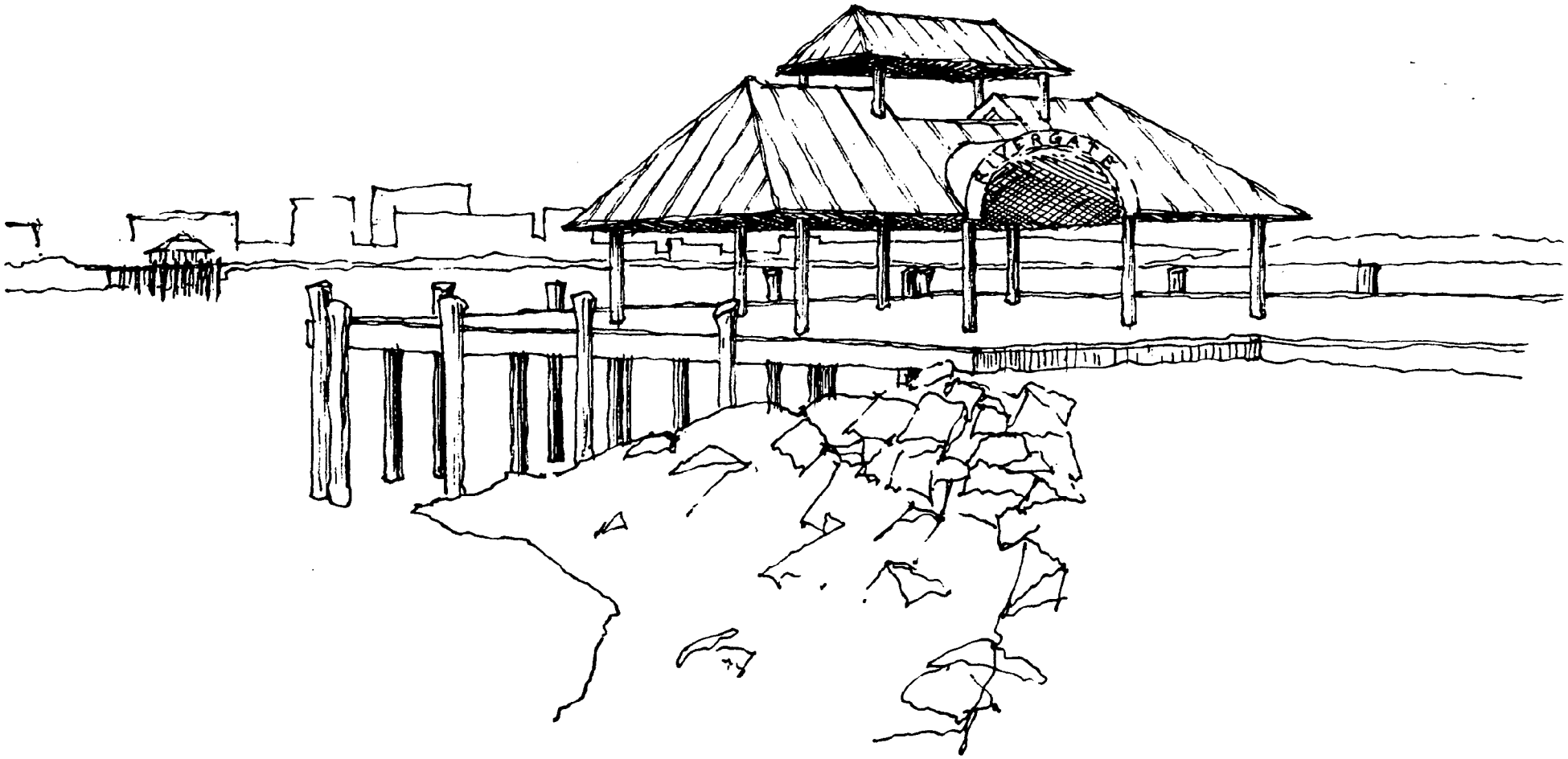
\+ New Parking Area ------- on designated city land. Total increase in parking for downtown area = 49 spaces. This area can be used for flea, and farmer's markets on weekends.


FLOATING DOCK
PIER
RIP-RAP
INCREASED PARKING
2 PIKES PARK
BOAT RAMP
INDIGENOUS VEGETATION
OVERLOOK 'A'
INCREASED PARKING
RIVER TRAIL
STOP SIGNS
UNION ST
MAIN ST
NODE 'A'
1
2
3
4

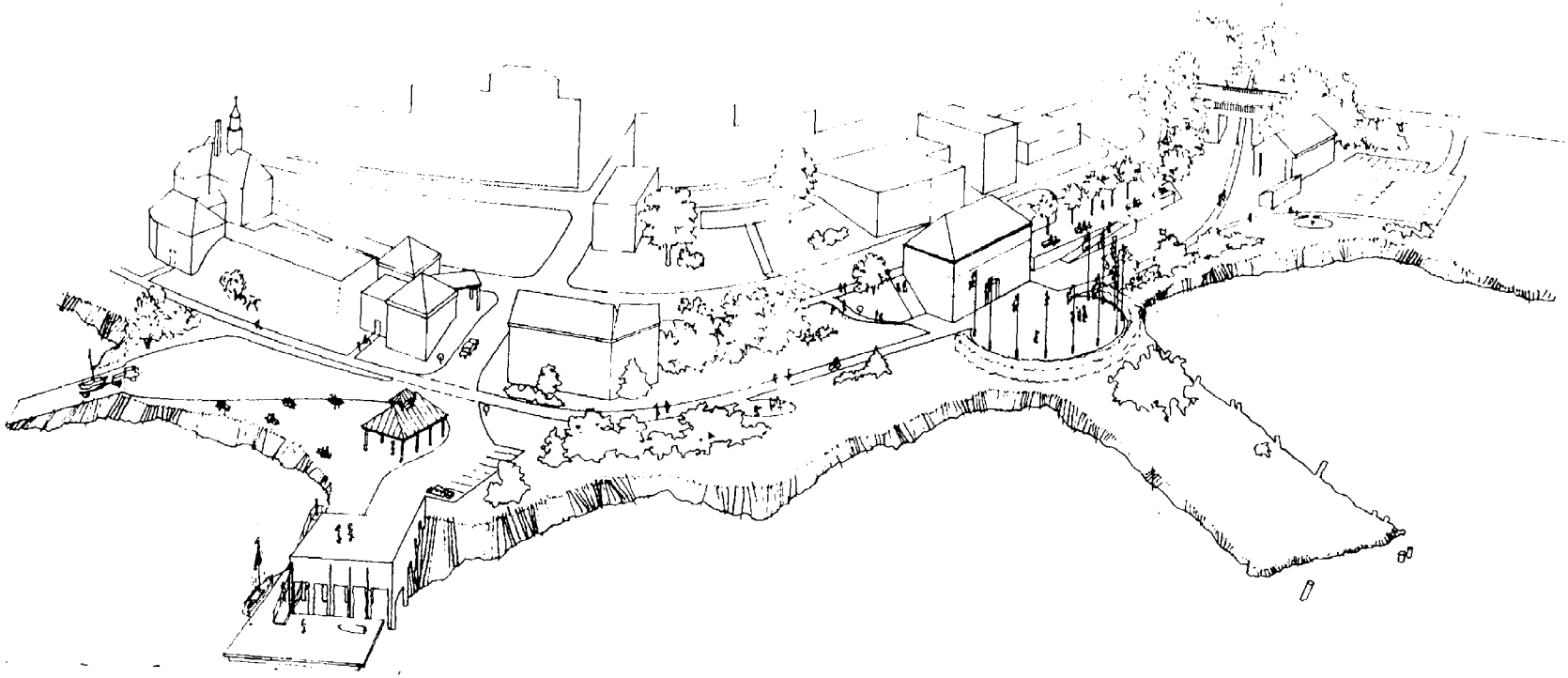

INDIGENOUS VEGETATION
NATURAL BUFFER
RIVER TRAIL
8
6
RAMP
7
RAMP
5
8
UNION ST
OVERLOOK "B"
CITY ENTRY
MAIN ST
NODE "D"



NODE "C"



Pier Shelter



CALAIS WATERFRONT

Index O

Soils Analysis

Soil is the upper layer of the earth's surface. It is made up of mineral and organic materials which support plant growth. Knowledge of soil characteristics such as drainage, depth, slope, and texture can assist in land mamagement and planning for many activities. Soil influencing the location of development activities in Calais.

Soils are usually classisfied in series. A given soils series defined by the United States Department of Agriculture's Soil & Conservation Service (nearest field office: Machias, 255-3995), has a distinctive set of characteristics such as color, texture, thickness, and drainage which set it apart from all other soils series. These characteristics are determined by the initial material in which the soil has developed, the climate and native vegetation of the area, the topography, and the length of time since soil formation started. Soils series can be further subdivided into types on the basis of surface texture characteristics (such as sandy loam or silt loam) and phases, on the basis of some important deviation (such as slope or stoniness).

Other soil properties, such as coarse fragments, potential shrink-swell, and alkalinity or acidity, are also important factors to consider for various land uses. A detailed soil survey, showing soil units down to 3-5 acres in size is available for the Calais area at the City Building on Church Street. These surveys are called "Medium-Intensity Soil Surveys." They are sufficiently accurate for community planning and agricultural and timber production planning.

Calais has soils that are mostly of the Marlow-Peru-Lyman group. Marlow soils are deep, well-drained soils, often with hardpan substratum. Above the hardpan, permeability is moderate. Peru soils are seasonally wet sandy soils in firm glacial till. They are moderately well-drained and cover bedrock by at least four feet. Lyman soils cover the bedrock by only 9-10 inches and have a rapid permeability.

Sources: Maines's Coast Special Considerations for the Municipal Planning Process, 1976 Maine State Planning Office.

The St. Croix River, 1982, Atlantic Sea Run Salmon Commission.

Washington County Soil and Conservaton Service, United States Department of Agriculture.

RECORD OF MEETING

Friday, May 8, 1987

Edmund Lindemanis, Administrative Assistant, City of Calais

with

Greg Rebman, District Conservationist

(Washington County Soil & Conservation Service)

United States Department of Agriculture

Because of recent flood damage in Maine, Ed Snowe, our consulting engineer with the Calais riverfront work measure, was not able to attend this meeting. Greg and I toured the waterfront area in Pike's Park to inspect the severe erosion problems occurring there.

The first area we inspected was the City Wharf. Since my inspection of this facility with Tom Sweetser last summer, there had been additional erosion damage at this public facility. Greg Rebman suggested that we immediately place some diversionary structure at the end of the access road to the City wharf and divert the runoff into the mudflats. He indicated it is quite possible that the crib work on both sides of the City wharf could give way and fall into the river at any time. This shoring and crib work is being undermined every day by tidal and river current activity, as well as the runoff coming from the aforementioned access road. There is an old storm line running

out to the river underneath the City wharf and this may also be contributing to erosion here.

Another recommendation Greg made was that as soon as possible we place mixed size fill around the City wharf to curb runoff erosion and ensure bank stability. The access area to the City wharf has been severely undermined this winter. It is an extemely dangerous situation for pedestrians because of the loose nature of the gravel, the severe dropoff to the crib work, and the exposed hardware protruding from the shoring members.

An issue to consider in the diversionary construction at the end of the parking lot is whether we want vehicle access to the City wharf in the future. The easiest and least costly method would be to construct a structure similar to a speed bump. This would divert the water on to the mudflats, but its height would prevent vehicles from accessing the City wharf. Therefore if vehicle access was to be desired, more expensive culvert type diversionary construction would need to take place.

The next site we inspected was the boat ramp. Greg offered to come by this summer and survey this site so we can properly place erosion prevention work. It is necessary that we immediately place some fill and/or straw bales at the head of the boat ramp to keep the water runoff from undermining this public boating facility. This facility has also had more erosion damage over the winter since my inspection last summer. It would be an extremely simple task to place straw bales here, especially when compared to the task we will have to fund if we do nothing now.

A permanent diversionary construction will be required at the head of the boat ramp and rock work will need to be placed here. An issue is whether we can tie this in to the boat ramp facility. As this rock fill would end below the high water mark, a permit would be required from the Department of Environmental Protection and Bureau of Public Lands. If we plan this properly, we can do this work as a maintenance activity, thereby avoiding the need for a permit. Similarly, the fill we need to place at the City wharf could definitely be considered maintenance work and therefore would not require a permit.

The next site we inspected was the Todd Street access to the end of the riverfront park. This road access has some slope to it which during storms creates runoff problems. It is recommended we take some activity at this site also before more severe erosion takes place. Also at this site inspection, we considered possible areas for parking. There seems to be some easily developable parking spaces for four or five vehicles.

Greg Rebman took a note of the Unobskey parking lot. He offered some assistance on this area also. He indicated that much soil would be running off this bare parking lot into our storm lines, and Jon Carman of John Fancy, Inc. confirmed this later. He gave me a soil analysis kit and suggested that I take some soil samples and send the results to him, and that he could provide a seed mixture specifically designed for this type of poor soil. We could then plant this area and eliminate this soil from running off into our sewer lines, and reverse the unsightliness of this area. If we could obtain the cooperation of the property owner and rope off some of the area so these hybrid seed

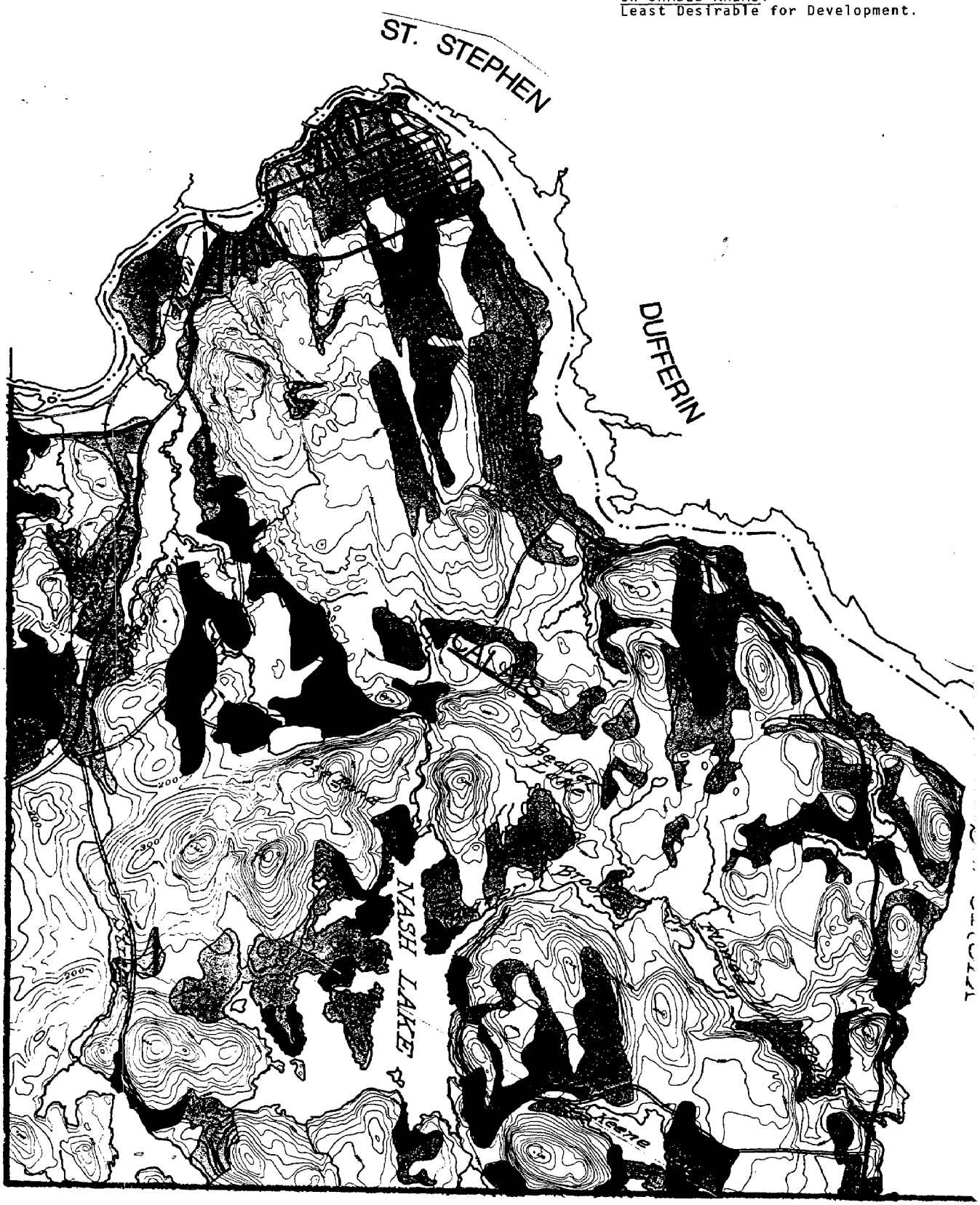
mixtures could take root, we could this summer eliminate substantial amounts of soil running off into our sewer system, clogging our lines, and decreasing flow capacity.

Other than these problems, our riverfront park area is in very good shape for soil stability. There are some minor problem areas that can be easily addressed by small work crews such as the Maine Conservation Corp or the 4-H Club. We have good vegetation for soil stability on our riverfront. It is recommended we not eliminate any of this vegetation without proper planning and consultation.

DARK SHADED AREAS:
Soil Very Suitable for Development.

LIGHTLY SHADED AREAS:
Soil Suitable for Development.

UN-SHADED AREAS:
Least Desirable for Development.



RECONNAISSANCE

SURFICIAL GEOLOGY MAP
OF
CALAIS, MAINE
N4500–W6715/15

OPEN FILE REPORT
BY

HAROLD W. BORNS, JR.

BUREAU OF GEOLOGY
DEPARTMENT OF CONSERVATION
AUGUSTA, MAINE 04330
1974

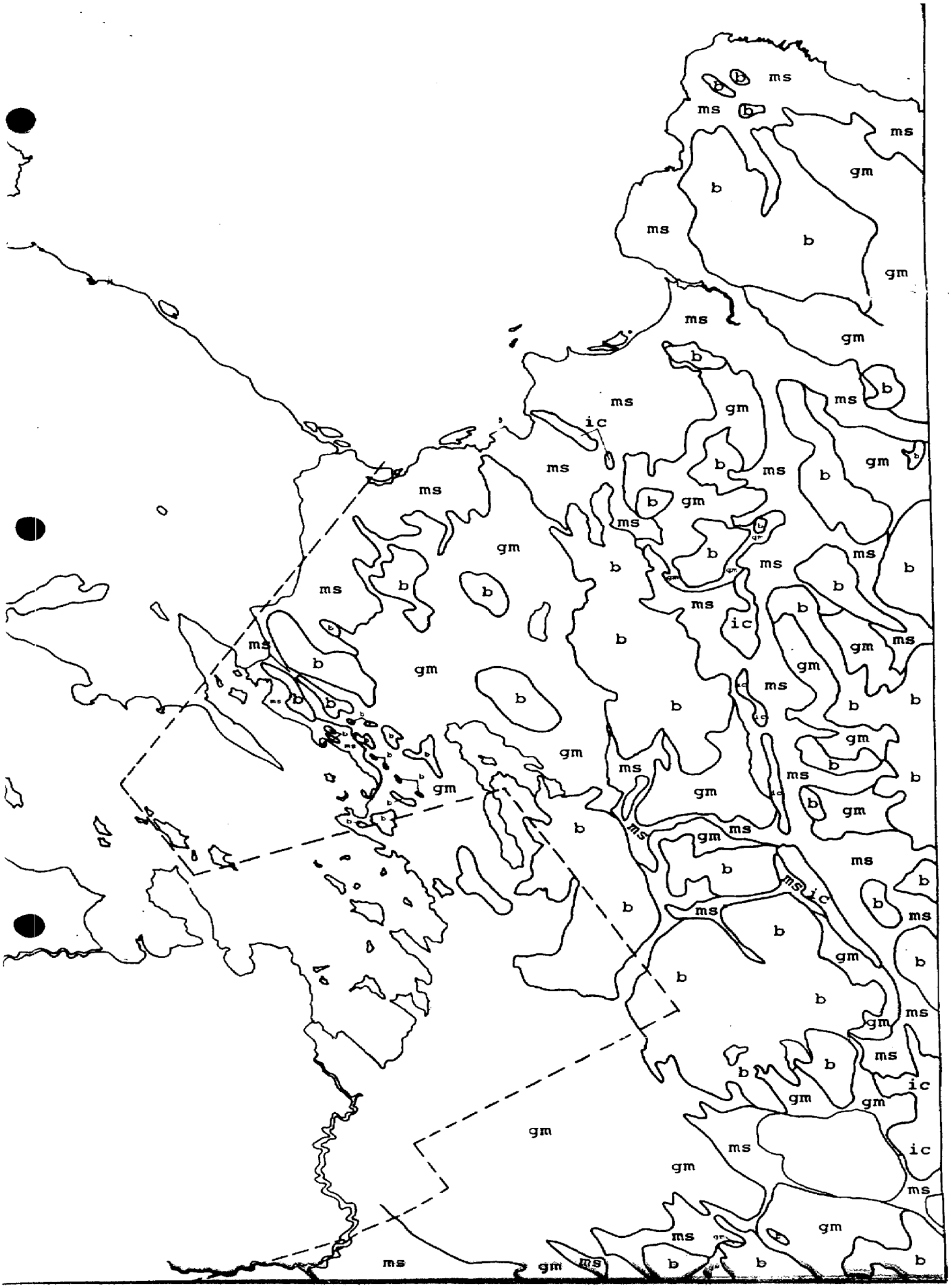
Financial assistance provided by
the U.S. Department of Commerce,
Office of Coastal Zone Management,
through the State Planning Office,
Coastal Planning Program.

EXPLANATION *

MAP SYMBOL	GEOLOGIC UNIT (MAP UNIT)	SURFACE EXPRESSION	MATERIALS
a	Recent Alluvium (includes floodplain sediments, swamps, and coastal sediments)	Generally flat (floodplains and beaches) or occupying depressions (swamps)	Variable. Sand and silt with organic matter (floodplains), predominantly organic (swamps and coastal marshes), predominantly sand (beaches)
ms	Marine Sediments (clay, sand)	Blanket deposit; surface topography controlled by underlying topography. Thick in valleys where it often produces flat surface.	Variable. Mostly silty clay, but locally interbedded with gravel or grading upward into sand. Generally impermeable, poorly-drained.
l	Lake-Bottom Sediments	Blanket deposit; surface topography controlled by underlying topography. Thick in valleys where it often produces flat surface.	Clay, silt, fine sand. Generally impermeable to slightly permeable, moderately well-drained to poorly-drained.
o	Outwash	Local flat-topped delta surfaces. More commonly confined to valleys of major rivers as terraces above present floodplain.	Well-sorted and stratified sand and gravel. Predominantly sand in coastal counties; coarse sand and gravel inland toward valley heads. Permeable, well-drained.
ic	Ice-Contact Stratified Drift (includes kames, kame complexes, kame deltas, eskers)	Variable. Isolated conical hills (kames); hummocky, comprised of hills (kames) and depressions (kettles); flat-topped with local depressions (kame deltas); [redacted]	Gravel, sand and gravel, sand. Generally poorly-sorted with contorted bedding, some till. Kame deltas well-sorted sand and gravel in distal portions. [redacted], moderately well-drained to well drained
m	End moraine (includes stratified moraines, washboard moraines)	Arcuate ridges, generally convex southward; 5-75 ft. high, 25-500 ft. wide, up to 3mi. long.	Variable. Small (washboard) moraines consist of till; larger (stratified) moraines are mostly poorly-sorted ice-contact sand and gravel, some till. Slightly permeable to permeable, moderately well drained to well drained.
gm	Ground Moraine	Blanket Deposit; surface topography controlled by underlying bedrock, locally drumlinoid.	Till-mixture of boulders, sand, silt, and clay. Above marine limit-compact, fissile, below marine limit-sandy, less compact, non-fissil boulder concentration at surface. Impermeable to slightly permeable; moderately well-drained to poorly-drained.
b	Bedrock (includes areas of thin cover)		
	Drumlin		
	Ice-Marginal Channel		
	Glacial Meltwater Spillway		
	Limit of Marine Submergence (established, inferred) Area above limit of Marine Submergence		
N 10° W	Striations and Related Small scale Indicators of Direction of Ice Flow.		
	Terrace Scarp Delineating Delta Front		
	Ice-contact position		
	Kettle		

* Geoffrey W. Smith, 1974

ms
gm
b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WASHINGTON COUNTY, MAINE

SOIL LEGEND

NUMERICAL LISTING

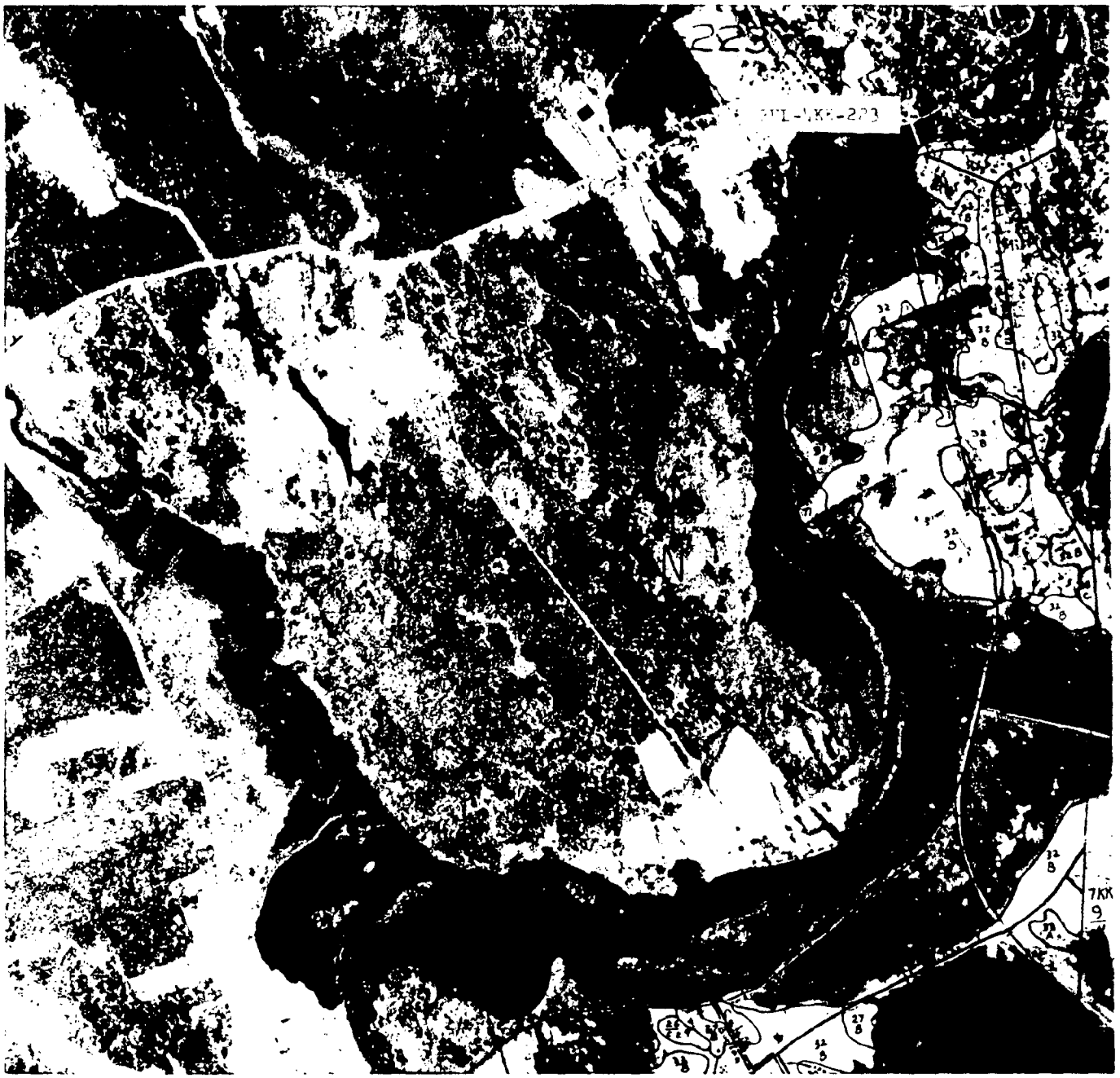
MAP SYMBOL	MAP UNIT NAME
2A	Lovewell silt loam
3A	Charles silt loam
4A	Medomak silt loam
7A	Au Gres loamy sand
9C	Beaches
9G	Waskish and Sebago soils
9M	Terric Borosaprists, ponded
9P	Saprists and Hemists soils
9RC	Schoodic-Rock outcrop complex, 0 to 15 percent slopes
9RE	Schoodic-Rock outcrop complex, 15 to 60 percent slopes
9T	Typic Sulfihemists, frequently flooded
9X1	Cut and fill land
15B	Stetson sandy loam, 3 to 8 percent slopes
16B	Adams loamy sand, 3 to 8 percent slopes
16C	Adams loamy sand, 8 to 15 percent slopes
17B	Allagash fine sandy loam, 3 to 8 percent slopes
20B	Colton sandy loam, 0 to 8 percent slopes
20C	Colton sandy loam, 8 to 15 percent slopes
20E	Colton sandy loam, 15 to 45 percent slopes
21B	Colton sandy loam, 3 to 8 percent slopes, very stony
21C	Colton sandy loam, 8 to 15 percent slopes, very stony
21E	Colton sandy loam, 15 to 45 percent slopes, very stony
21VC	Colton sandy loam, 0 to 15 percent slopes, extremely stony
23B	Duane sandy loam, 0 to 8 percent slopes
24A	Moosilauke sandy loam
25A	Searsport mucky peat
26C2	Melrose fine sandy loam, 8 to 15 percent slopes, eroded
26XC	Salmon very fine sandy loam, 8 to 15 percent slopes
27B	Elmwood fine sandy loam, 3 to 8 percent slopes
27C	Elmwood fine sandy loam, 8 to 15 percent slopes
27XB	Nicholville very fine sandy loam, 3 to 8 percent slopes
27XC	Nicholville very fine sandy loam, 8 to 15 percent slopes

MAP SYMBOL	MAP UNIT NAME
28A	Swanton fine sandy loam
30D2	Buxton silt loam, 15 to 25 percent slopes
30E2	Buxton silt loam, 25 to 45 percent slopes
31B	Buxton silt loam, 3 to 8 percent slopes, very stony
31C	Buxton silt loam, 8 to 15 percent slopes, very stony
32B	Buxton silt loam, 3 to 8 percent slopes
32C2	Buxton silt loam, 8 to 15 percent slopes
33A	Scantic silt loam, 0 to 3 percent slopes
33B	Scantic silt loam, 3 to 8 percent slopes
34A	Biddeford mucky peat
35A	Scantic silt loam, very stony
38B	Marlow fine sandy loam, 3 to 8 percent slopes
38C	Marlow fine sandy loam, 8 to 15 percent slopes
39B	Marlow fine sandy loam, 3 to 8 percent slopes, very stony
39C	Marlow fine sandy loam, 8 to 15 percent slopes, very stony
39D	Marlow fine sandy loam, 15 to 25 percent slopes, very stony
39VC	Marlow fine sandy loam, 8 to 15 percent slopes, extremely stony
39VE	Marlow fine sandy loam, 15 to 60 percent slopes, extremely stony
40B	Thorndike-Winnecook complex, 3 to 8 percent slopes
40C	Thorndike-Winnecook complex, 8 to 15 percent slopes
41B	Thorndike silt loam, 3 to 8 percent slopes, very rocky
41C	Thorndike silt loam, 8 to 15 percent slopes, very rocky
41E	Thorndike silt loam, 15 to 45 percent slopes, very rocky
46B	Monarda silt loam, 3 to 8 percent slopes
48B	Monarda silt loam, 3 to 8 percent slopes, very stony
50B	Canaan sandy loam, 3 to 8 percent slopes
50C	Canaan sandy loam, 8 to 15 percent slopes
51C	Canaan sandy loam, 0 to 15 percent slopes, very rocky
51E	Canaan sandy loam, 15 to 45 percent slopes, very rocky
52B	Hermon sandy loam, 3 to 8 percent slopes
52C	Hermon sandy loam, 8 to 15 percent slopes
53B	Hermon sandy loam, 3 to 8 percent slopes, very stony
53C	Hermon sandy loam, 8 to 15 percent slopes, very stony
53D	Hermon sandy loam, 15 to 25 percent slopes, very stony
53VC	Hermon sandy loam, 8 to 15 percent slopes, extremely stony
53VE	Hermon sandy loam, 15 to 60 percent slopes, extremely stony
54B	Waumbek sandy loam, 3 to 8 percent slopes
54C	Waumbek sandy loam, 8 to 15 percent slopes
55B	Waumbek sandy loam, 3 to 8 percent slopes, very stony
55C	Waumbek sandy loam, 8 to 15 percent slopes, very stony

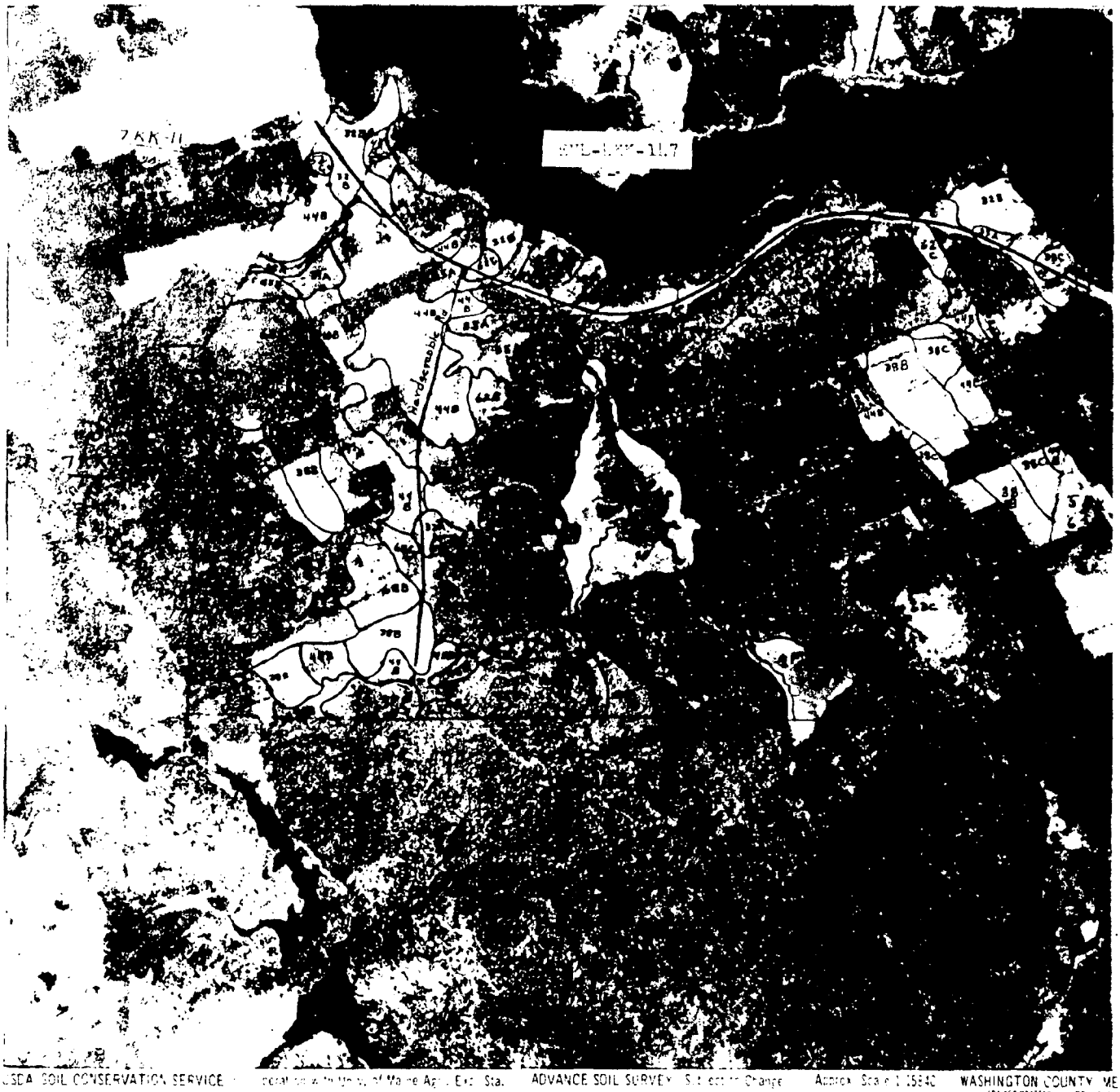
Washington County

Numerical Listing

MAP SYMBOL	MAP UNIT NAME
56B	Lyme loam 3 to 8 percent slopes
58B	Lyme loam, 3 to 8 percent slopes, very stony
58X	Aquepts
62B	Tunbridge-Lyman complex, 3 to 8 percent slopes
62C	Tunbridge-Lyman complex, 8 to 15 percent slopes
63C	Lyman-Rock outcrop complex, 0 to 15 percent slopes
63E	Lyman-Rock outcrop complex, 15 to 60 percent slopes
64B	Berkshire fine sandy loam, 3 to 8 percent slopes
64C	Berkshire fine sandy loam, 8 to 15 percent slopes
65B	Berkshire fine sandy loam, 3 to 8 percent slopes, very stony
65C	Berkshire fine sandy loam, 8 to 15 percent slopes, very stony
65D	Berkshire fine sandy loam, 15 to 25 percent slopes, very stony
71B	Peru fine sandy loam, 3 to 8 percent slopes, very stony
71C	Peru fine sandy loam, 8 to 15 percent slopes, very stony
72B	Peru fine sandy loam, 3 to 8 percent slopes
72C	Peru fine sandy loam, 8 to 15 percent slopes
73B	Brayton fine sandy loam, 3 to 8 percent slopes, very stony
74B	Brayton fine sandy loam, 3 to 8 percent slopes
141B	Perham silt loam, 3 to 8 percent slopes, stony
141C	Perham silt loam, 8 to 20 percent slopes, stony
142B2	Perham silt loam, 3 to 8 percent slopes, eroded
142C2	Perham silt loam, 8 to 15 percent slopes, eroded
142D2	Perham silt loam, 15 to 25 percent slopes, eroded
145B	Daigle silt loam, 3 to 8 percent slopes, very stony
145C	Daigle silt loam, 8 to 15 percent slopes, very stony
146B	Daigle silt loam, 3 to 8 percent slopes
146C	Daigle silt loam, 8 to 15 percent slopes
163C	Lyman-Tunbridge-Rock outcrop complex, 0 to 15 percent slopes
163E	Lyman-Tunbridge-Rock outcrop complex, 15 to 60 percent slopes
650B	Berkshire fine sandy loam, 0 to 8 percent slopes, rubbly
650C	Berkshire fine sandy loam, 8 to 15 percent slopes, rubbly
650D	Berkshire fine sandy loam, 15 to 25 percent slopes, rubbly
710B	Peru fine sandy loam, 0 to 8 percent slopes, rubbly
710C	Peru fine sandy loam, 8 to 15 percent slopes, rubbly



USDA SOIL CONSERVATION SERVICE in cooperation with Univ. of Maine Agr. Exp. Sta. ADVANCE SOIL SURVEY Subject to Change Approx. Scale 1:15840 WASHINGTON COUNTY, ME



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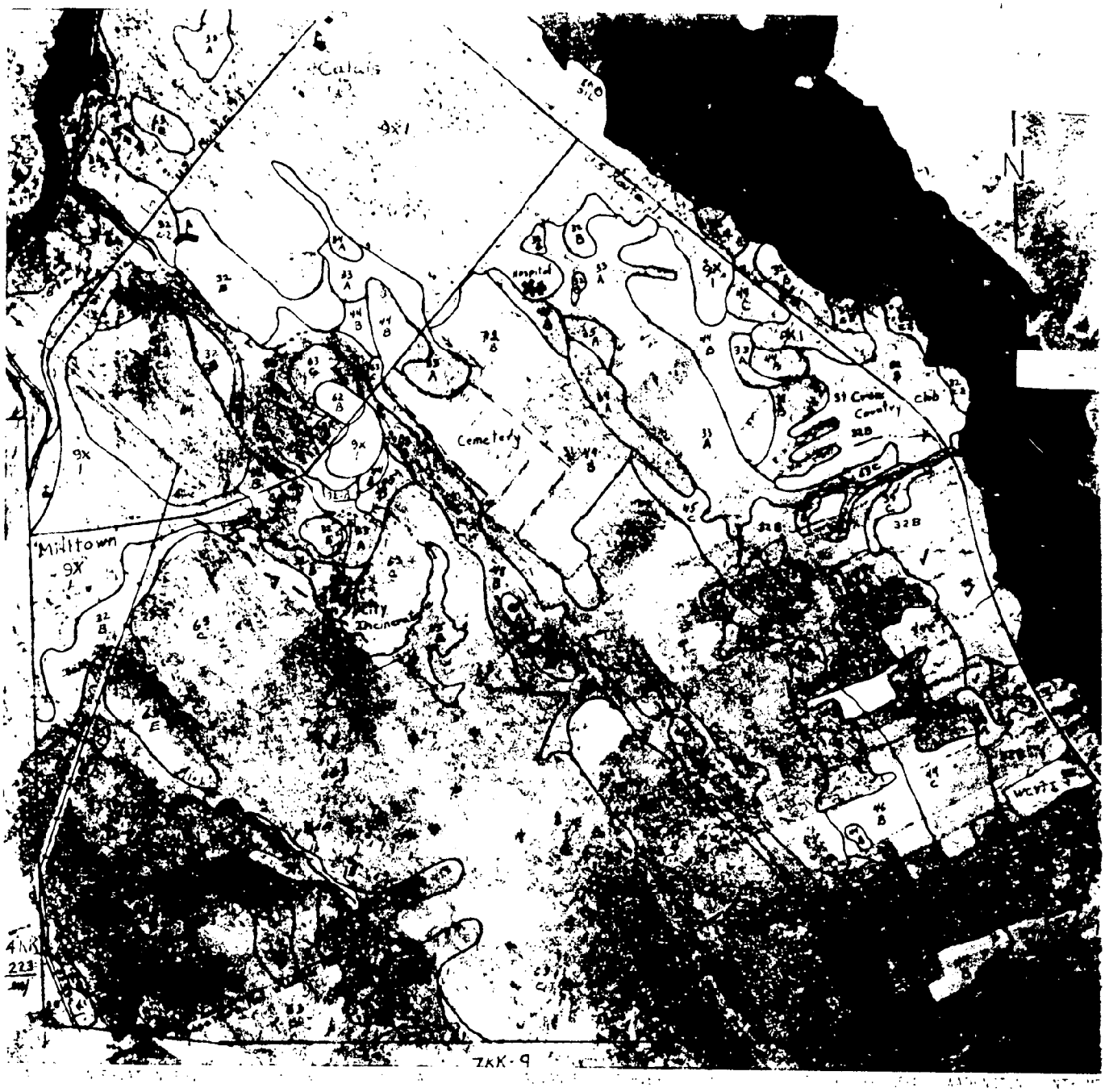
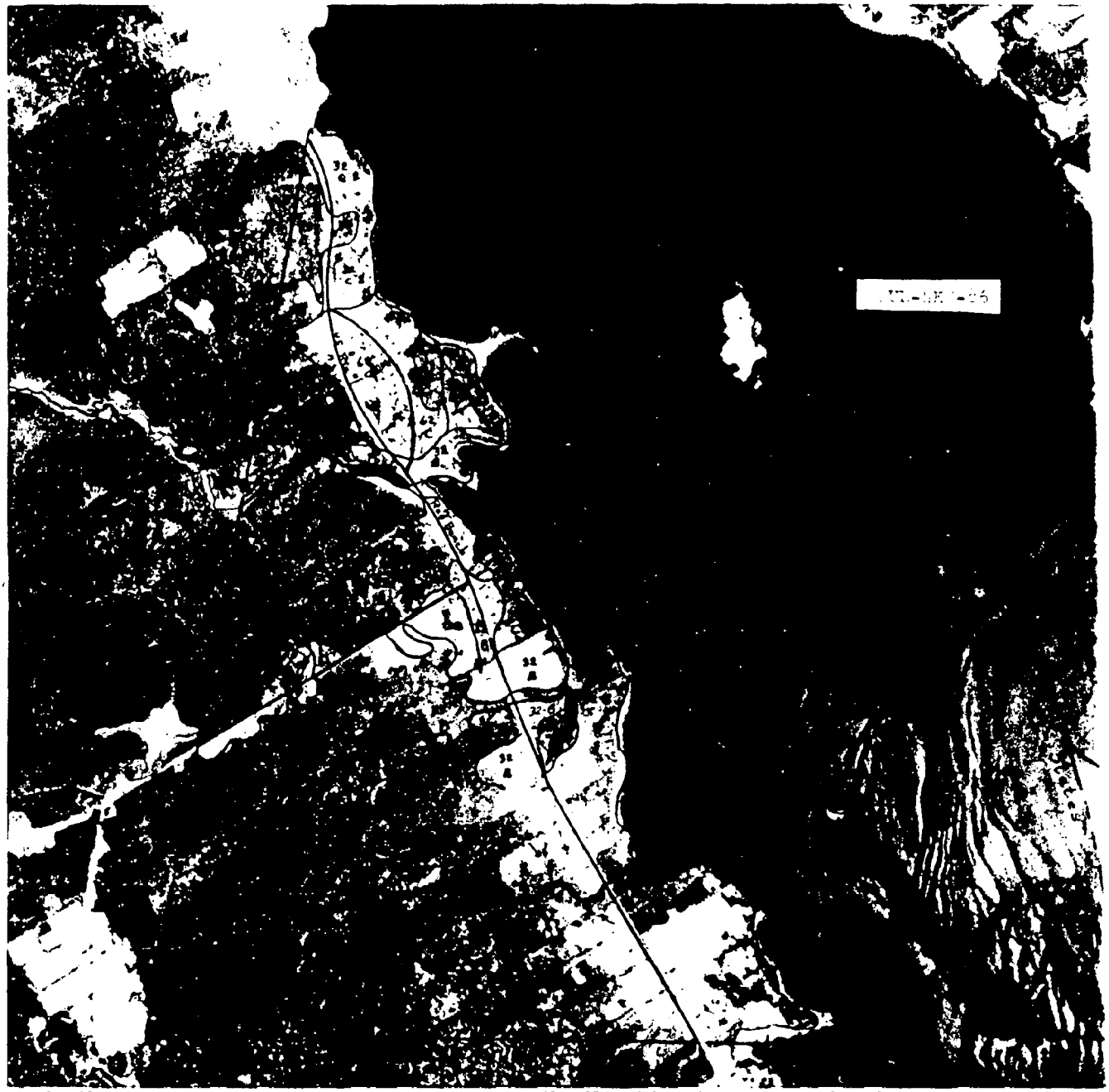

Calais
9X1
Hospital
Cemetery
St Croix Country Club
Milltown
9X
City Incinerator
N
ZKK-9



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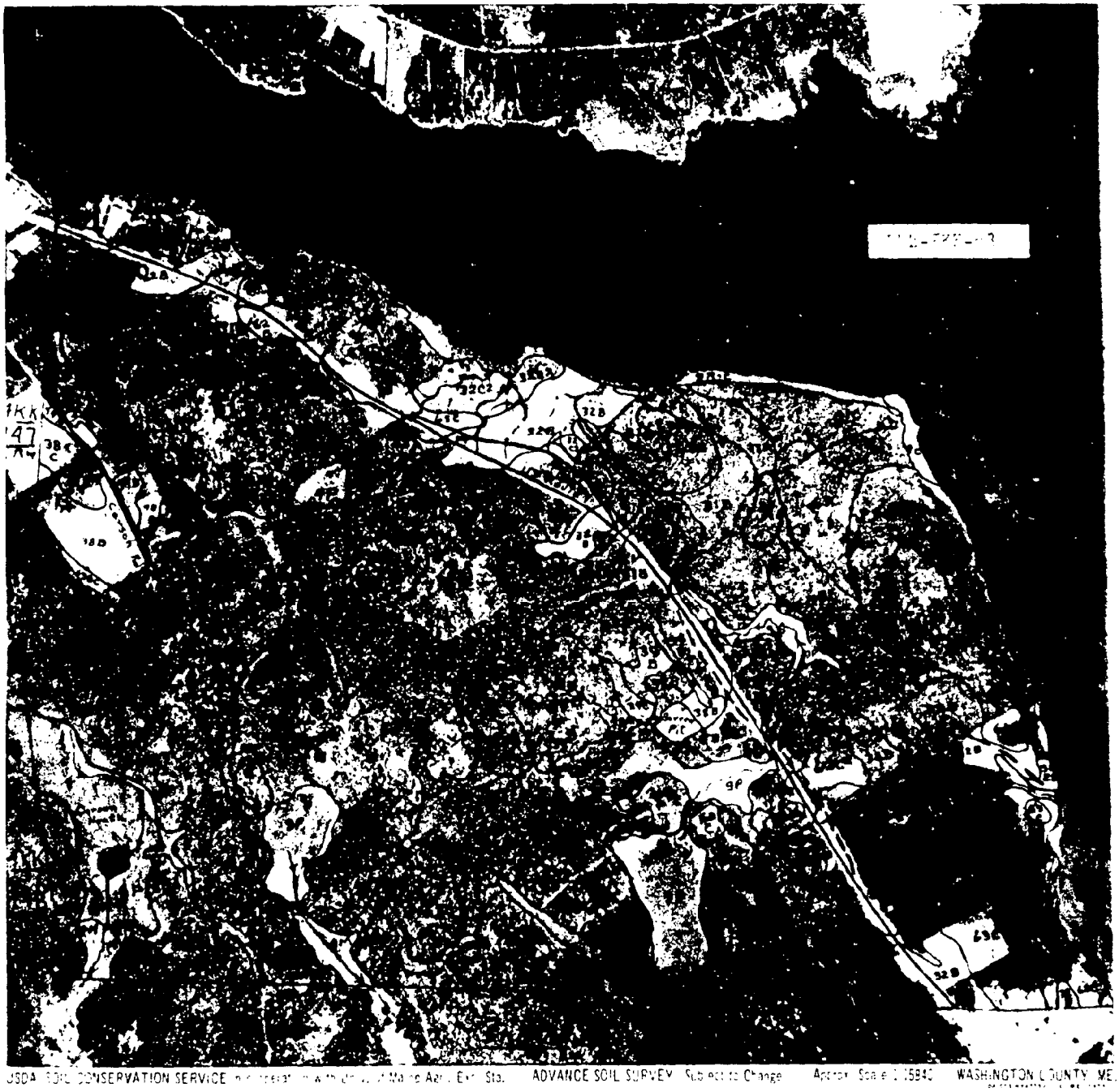

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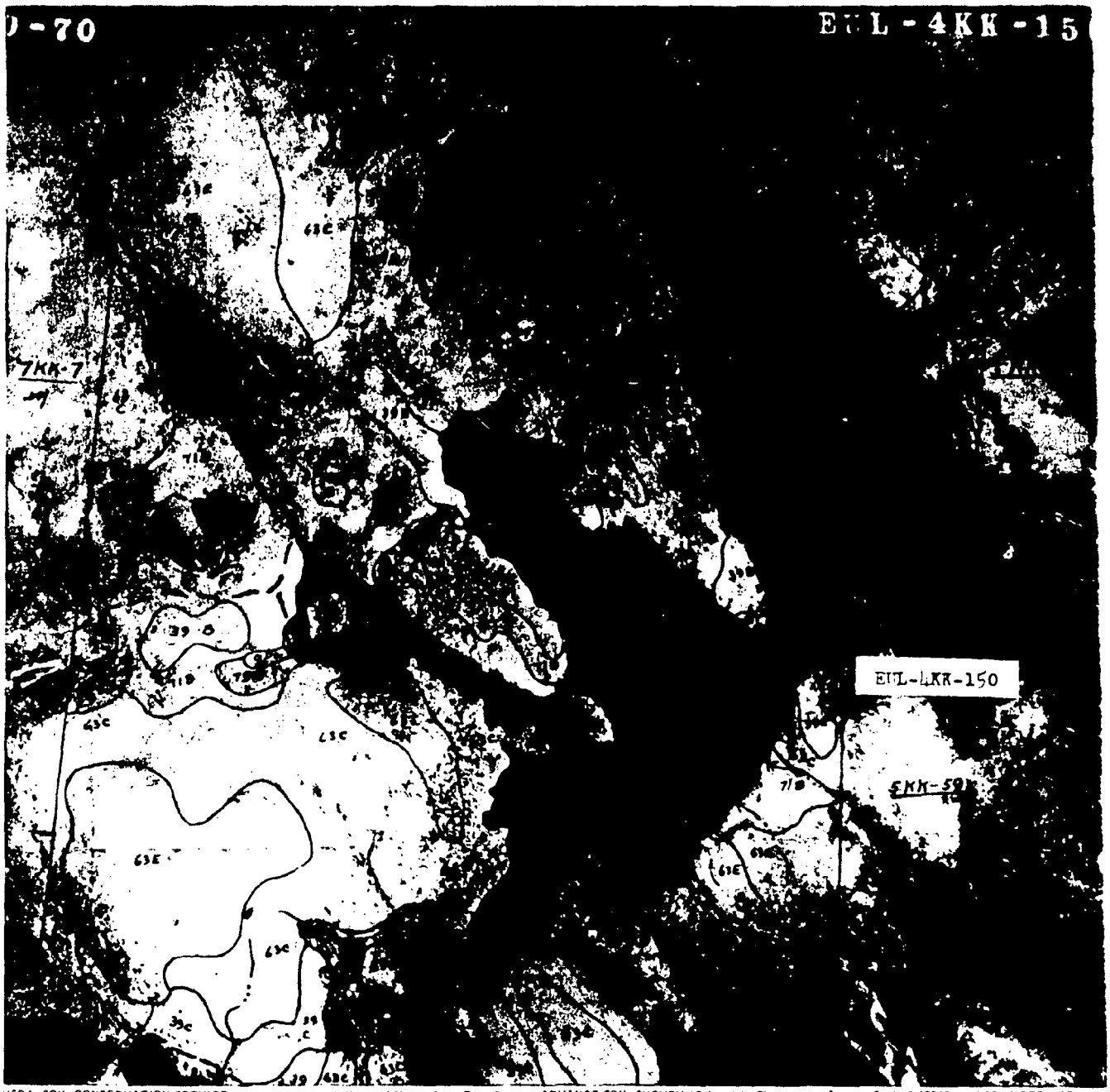

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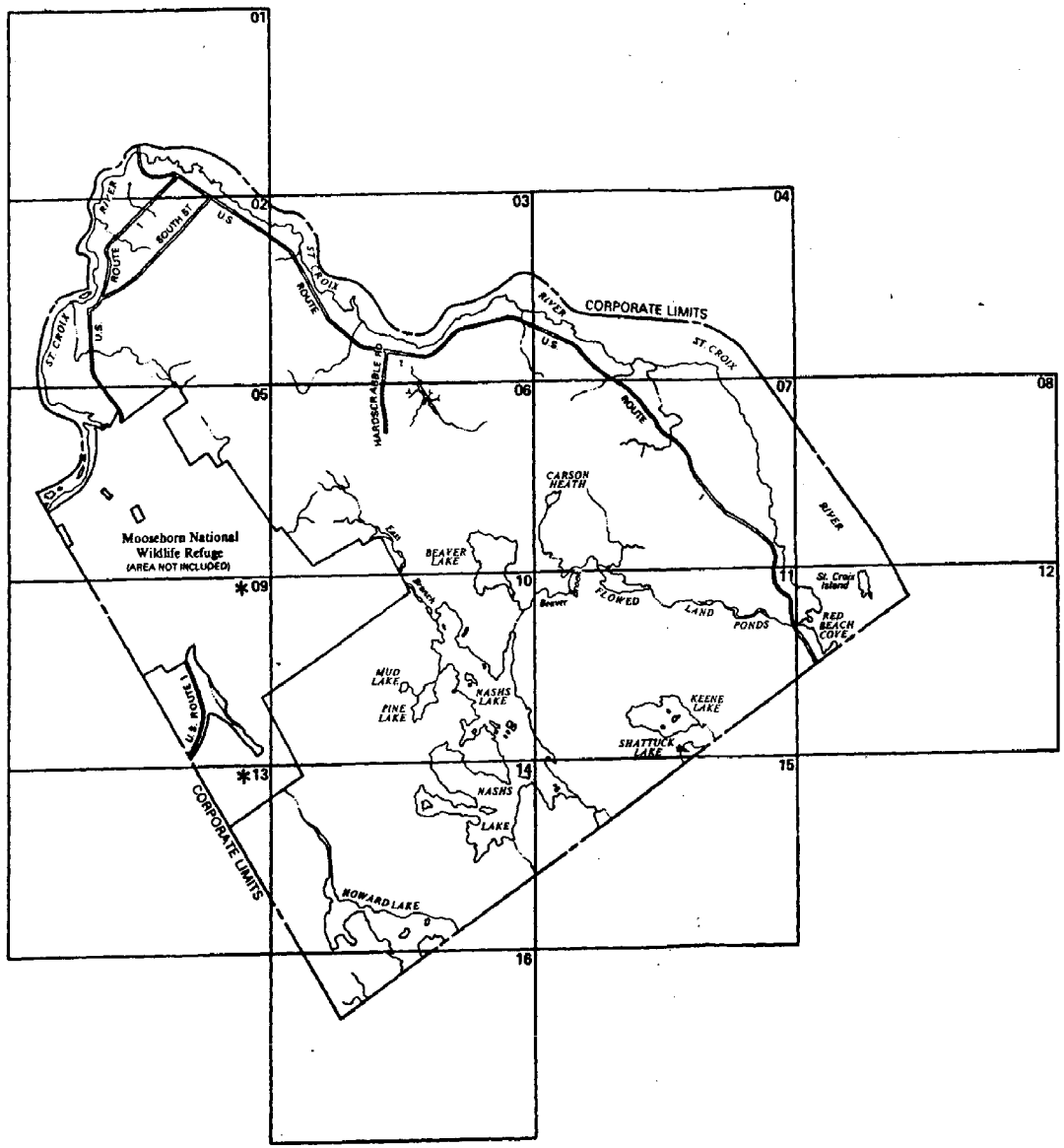


*NOT PRINTED (NO SPECIAL FLOOD HAZARD AREA)

LEGEND

SPECIAL FLOOD HAZARD AREA WITH DATE OF IDENTIFICATION — ZONE A DATE

Note: These maps may not include all Special Flood Hazard Areas in the community. After a more detailed study, the Special Flood Hazard Areas shown on these maps may be modified, and other areas added.

CONSULT NFIA SERVICING COMPANY OR LOCAL INSURANCE AGENT OR BROKER TO DETERMINE IF PROPERTIES IN THIS COMMUNITY ARE ELIGIBLE FOR FLOOD INSURANCE.

INITIAL IDENTIFICATION DATE:

JUNE 28, 1974

REVISION DATES:

10/8/76: SHOW CURVELINEAR BOUNDARY, ADD SFHA, REDUCE SFHA, CHANGE COMMUNITY BOUNDARY.

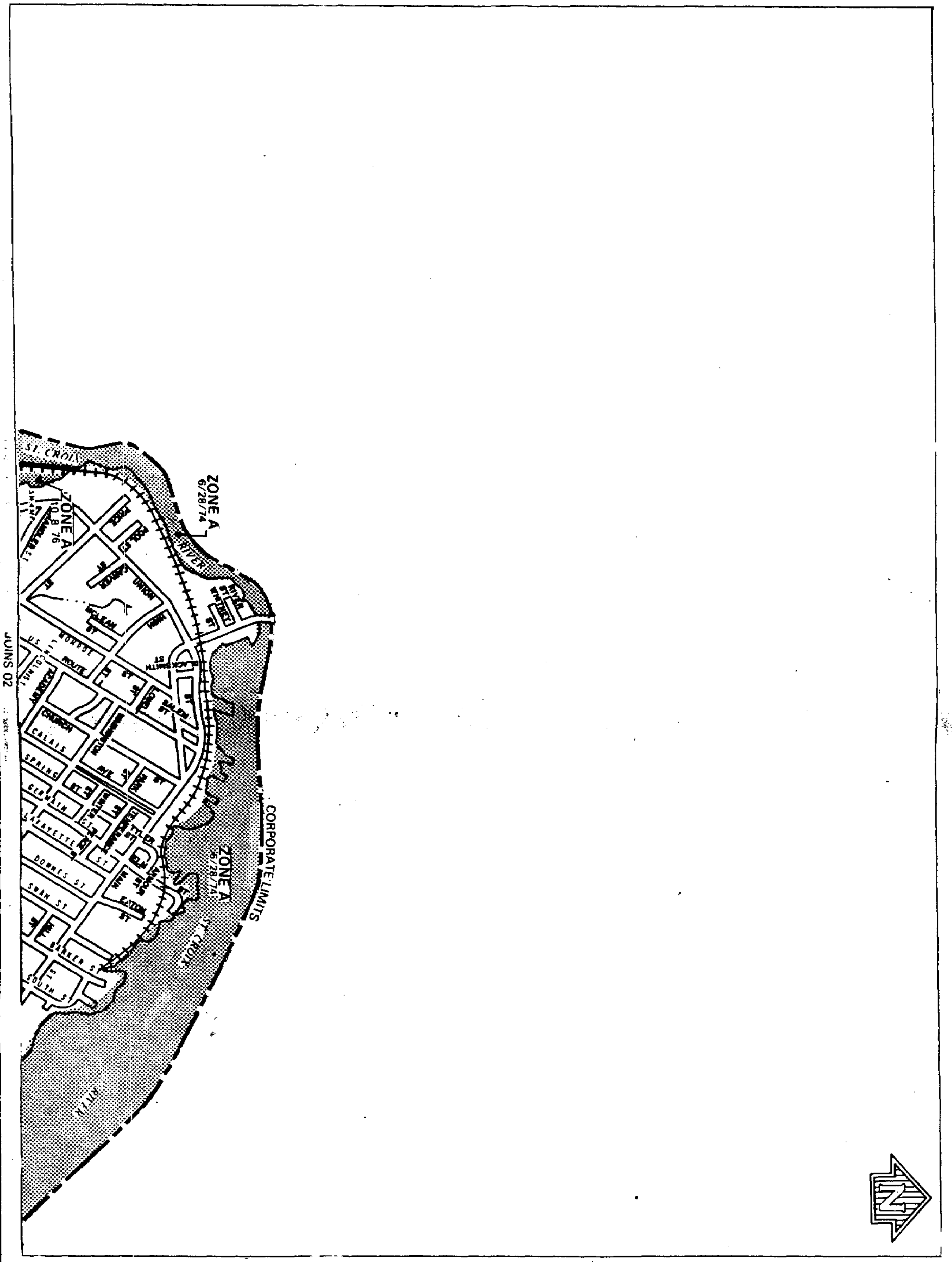
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

FLOOD HAZARD BOUNDARY MAP H - 01-16

MAP INDEX

CITY OF CALAIS, ME
(WASHINGTON CO.)

COMMUNITY NO. 230134A



01

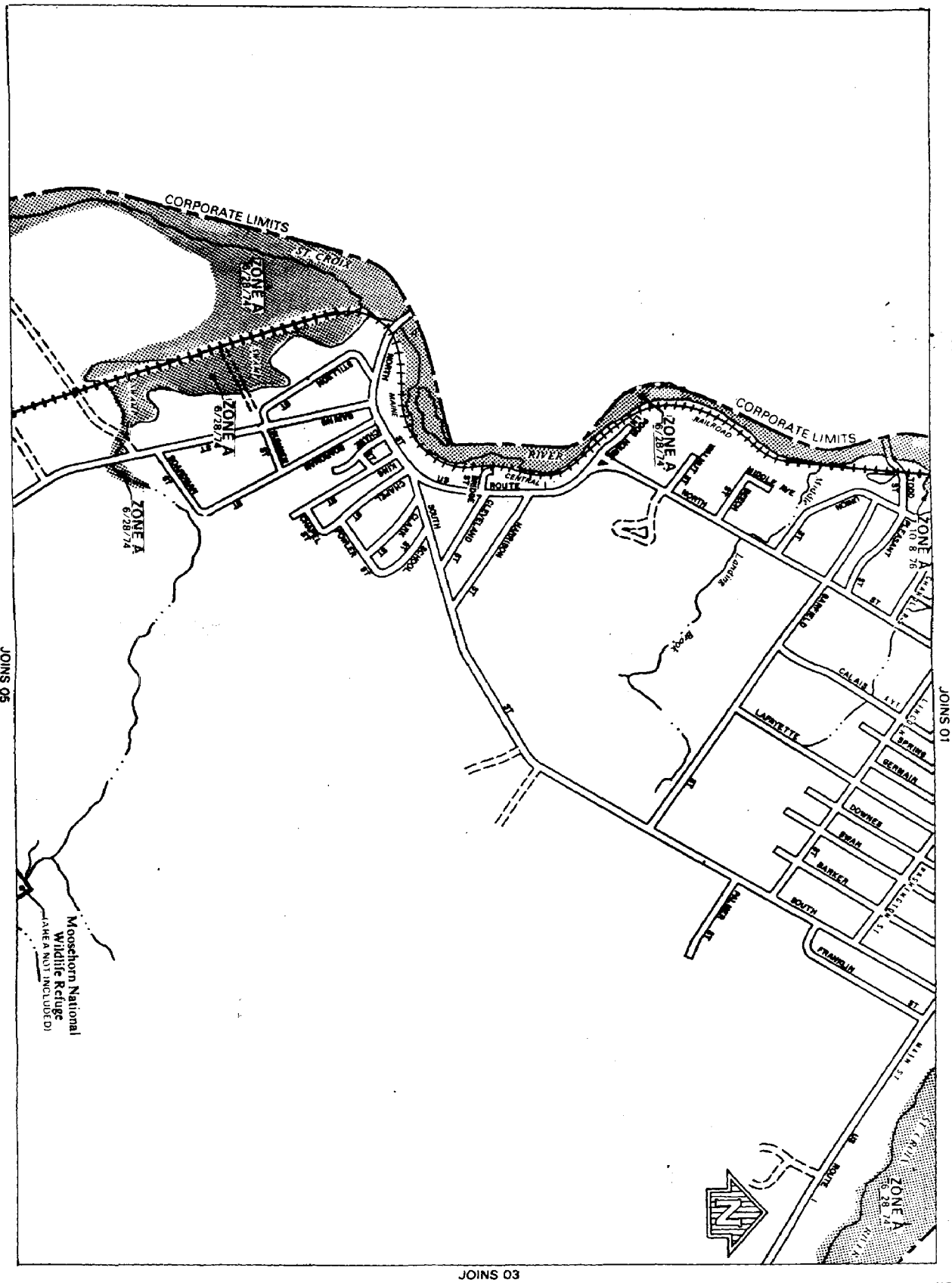
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
1000 0 1000 2000 3000 FEET

FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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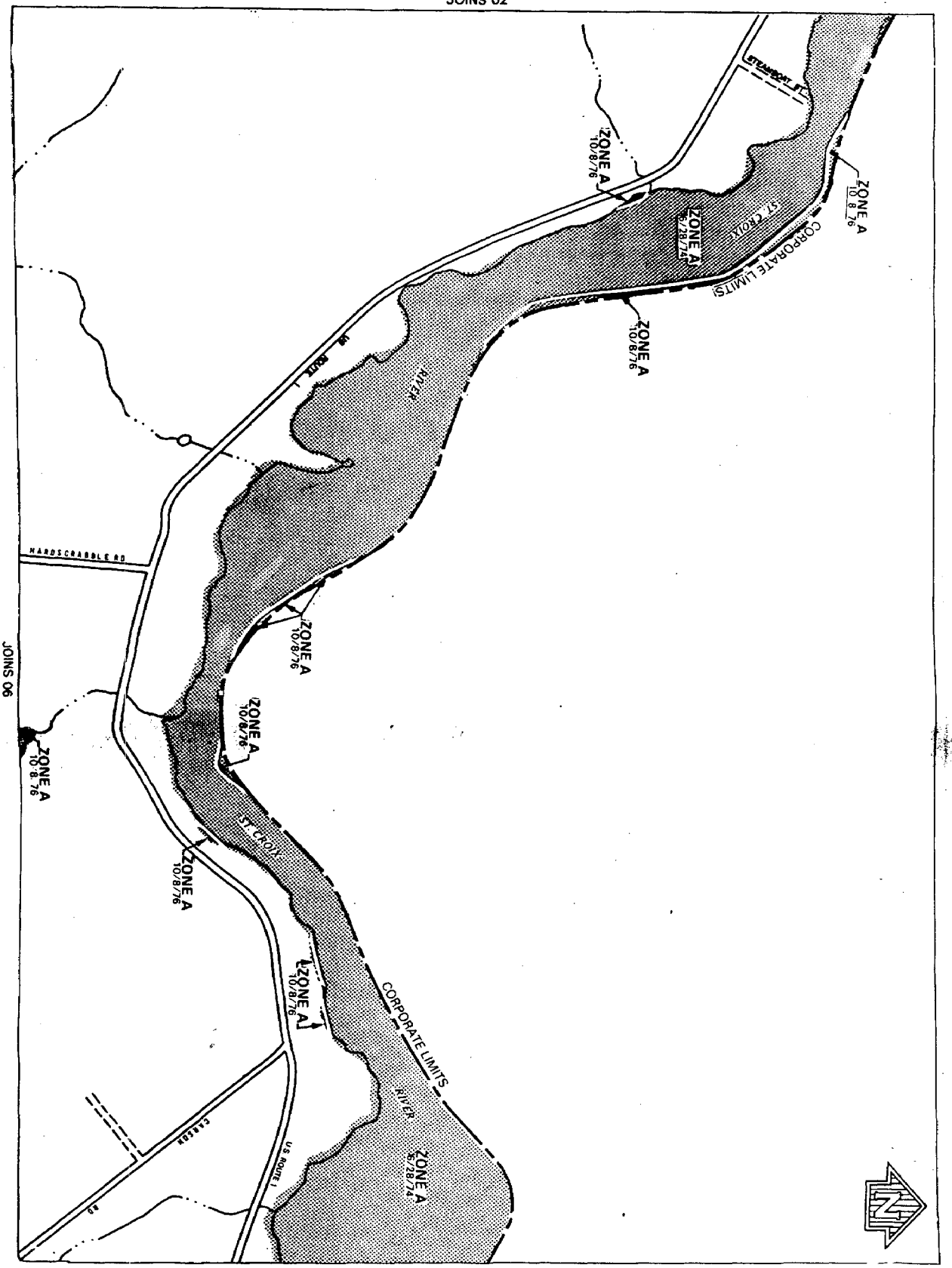
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

02



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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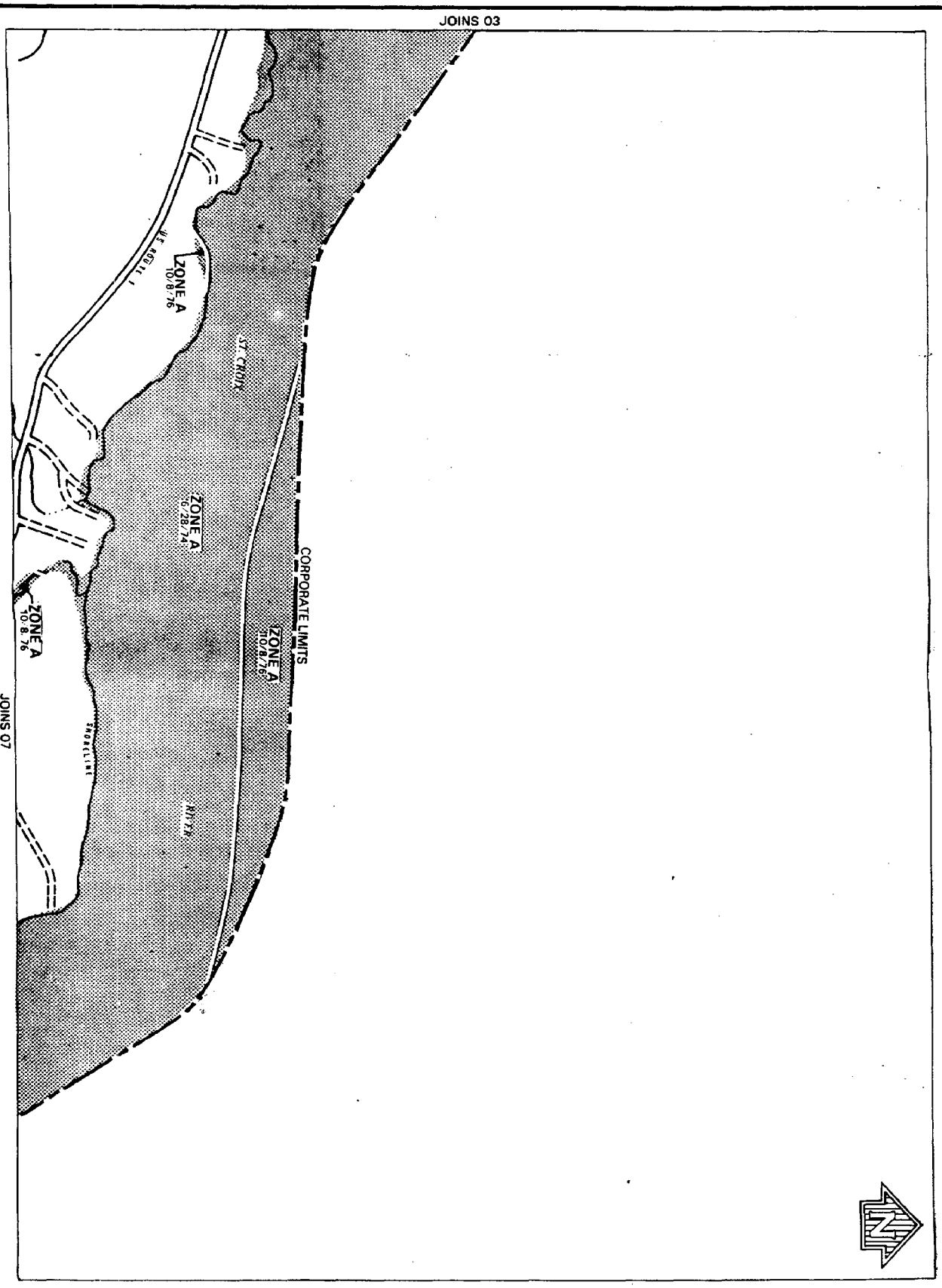
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

03



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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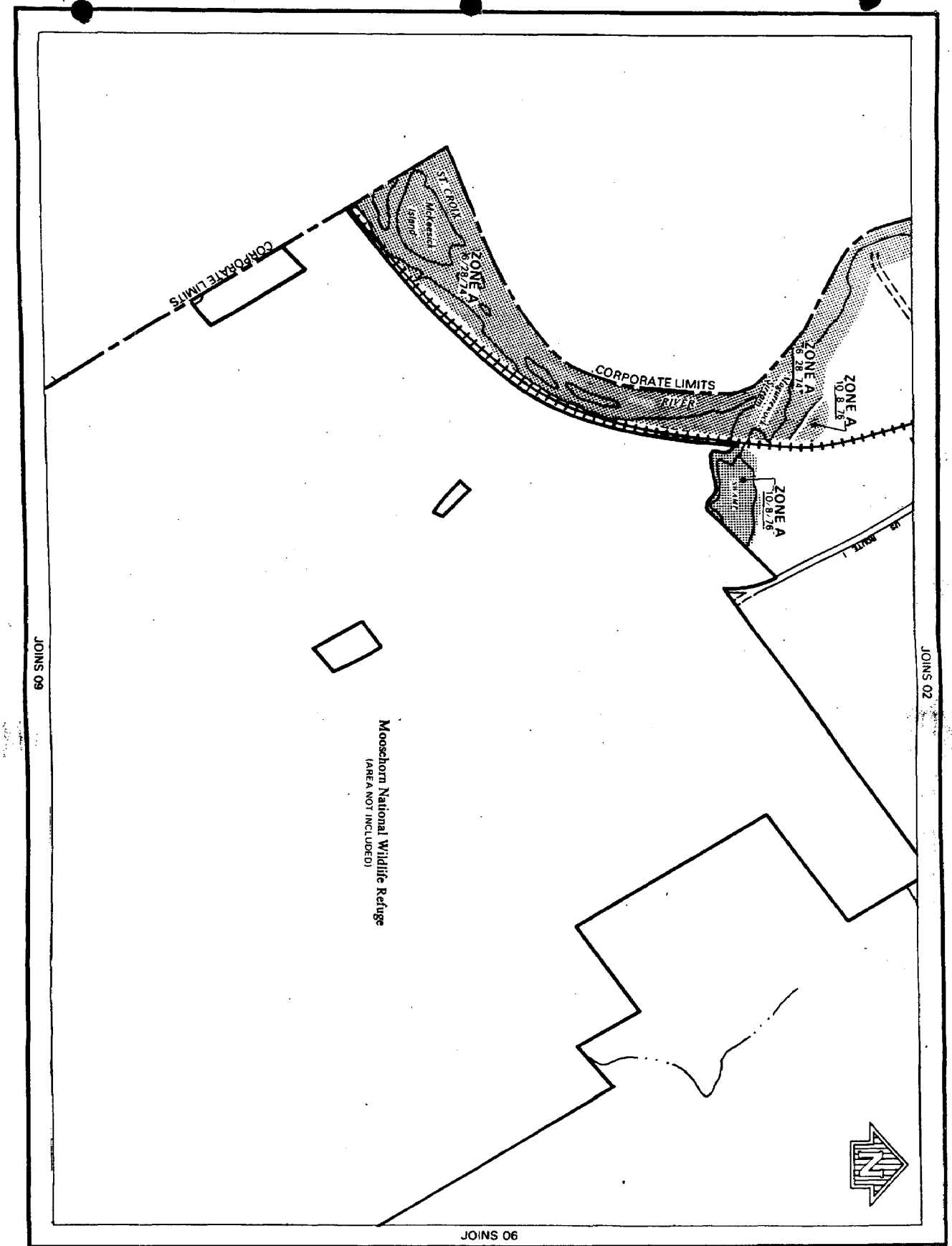
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

04



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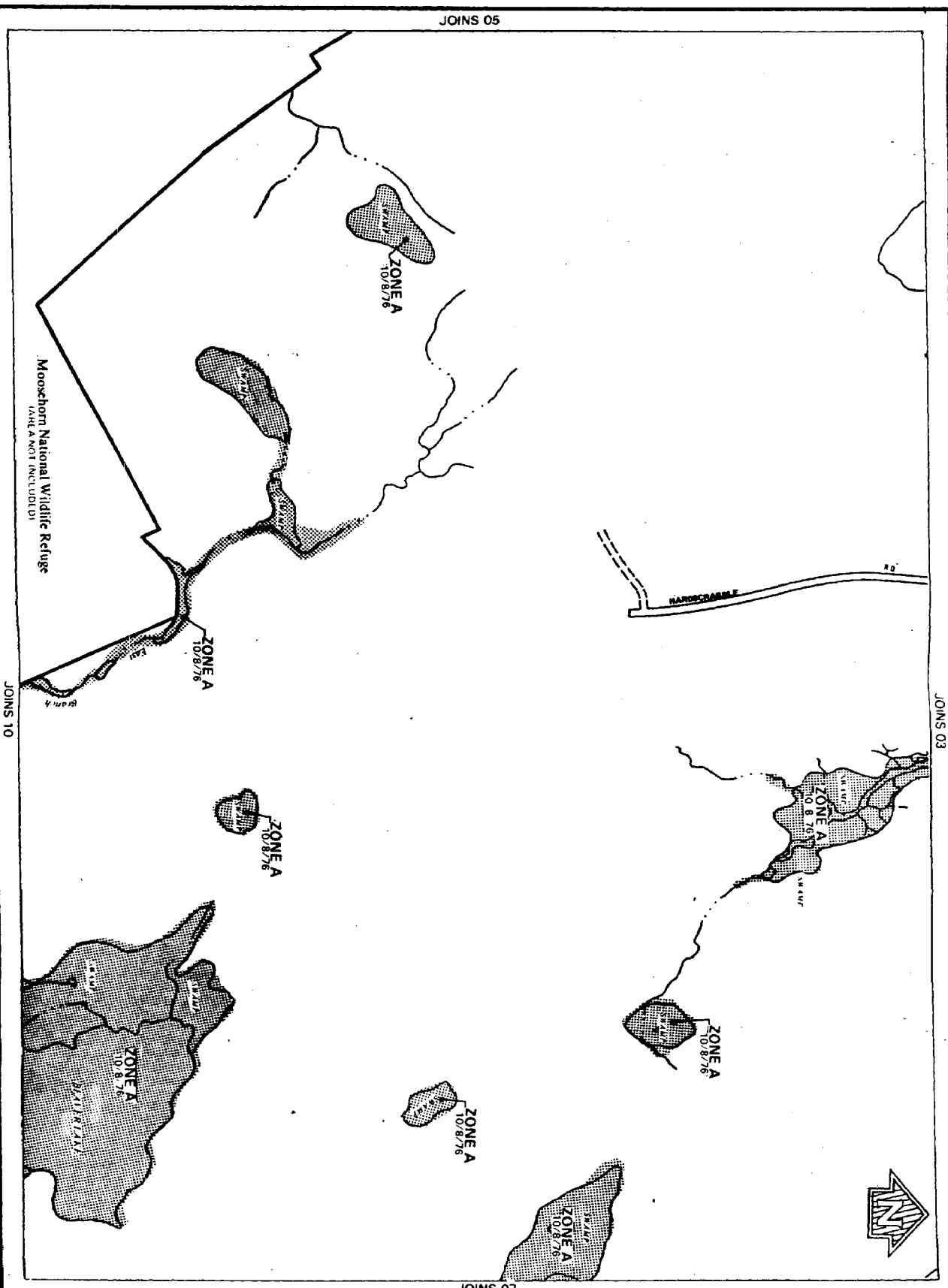
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO)

APPROXIMATE SCALE
1000 0 1000 2000

FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

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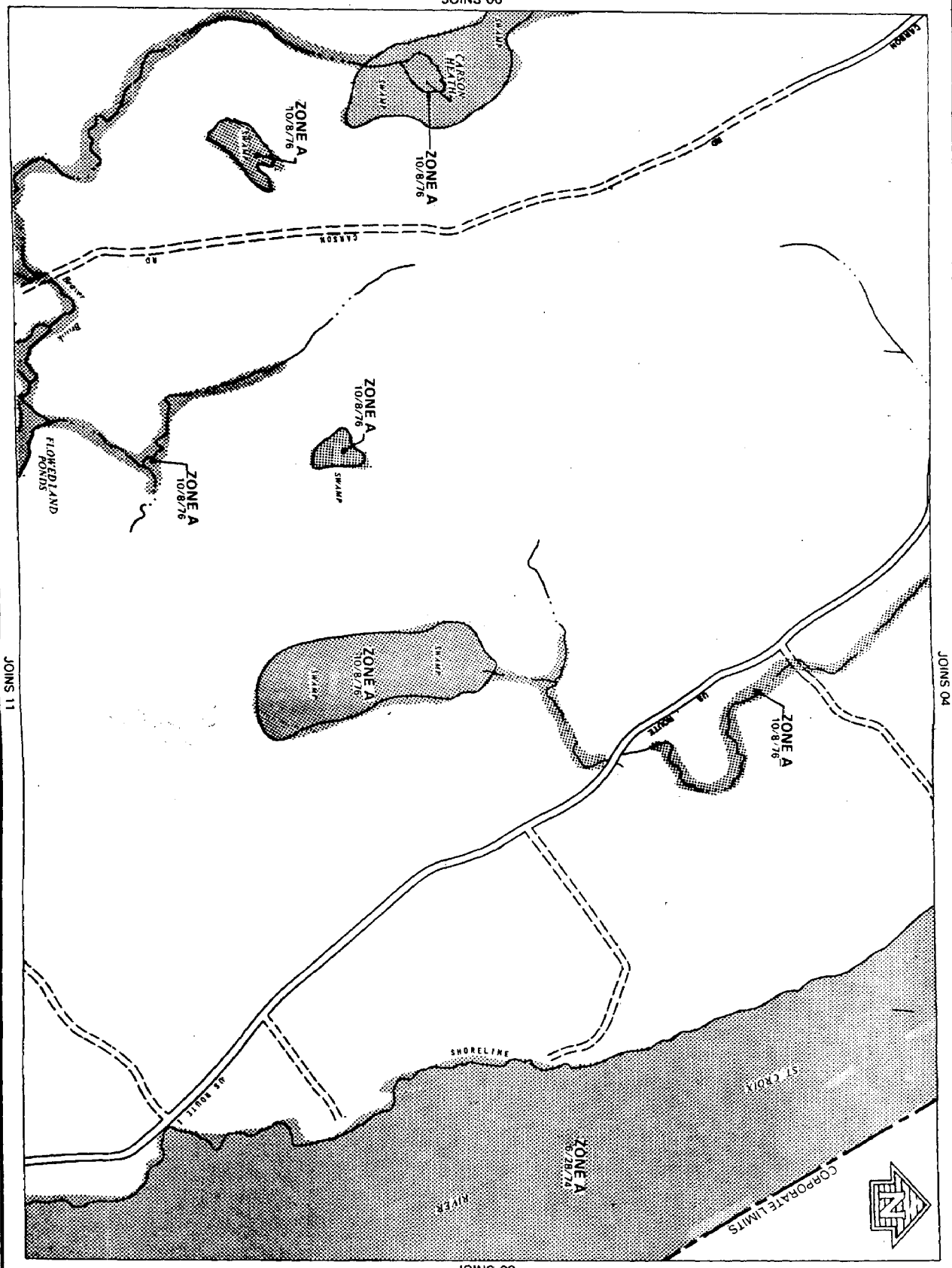

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME.
(WASHINGTON CO.)

APPROXIMATE SCALE
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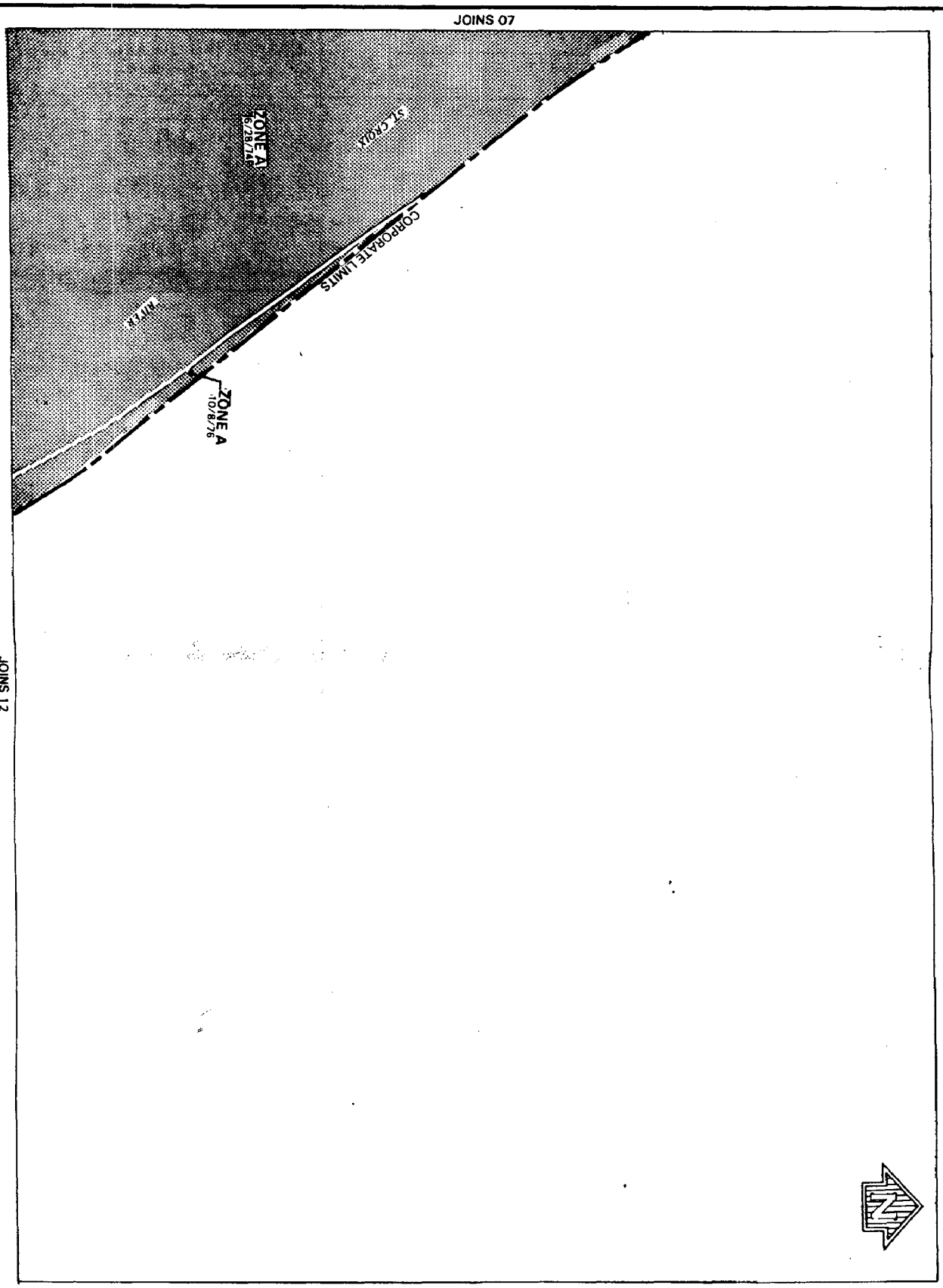
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76



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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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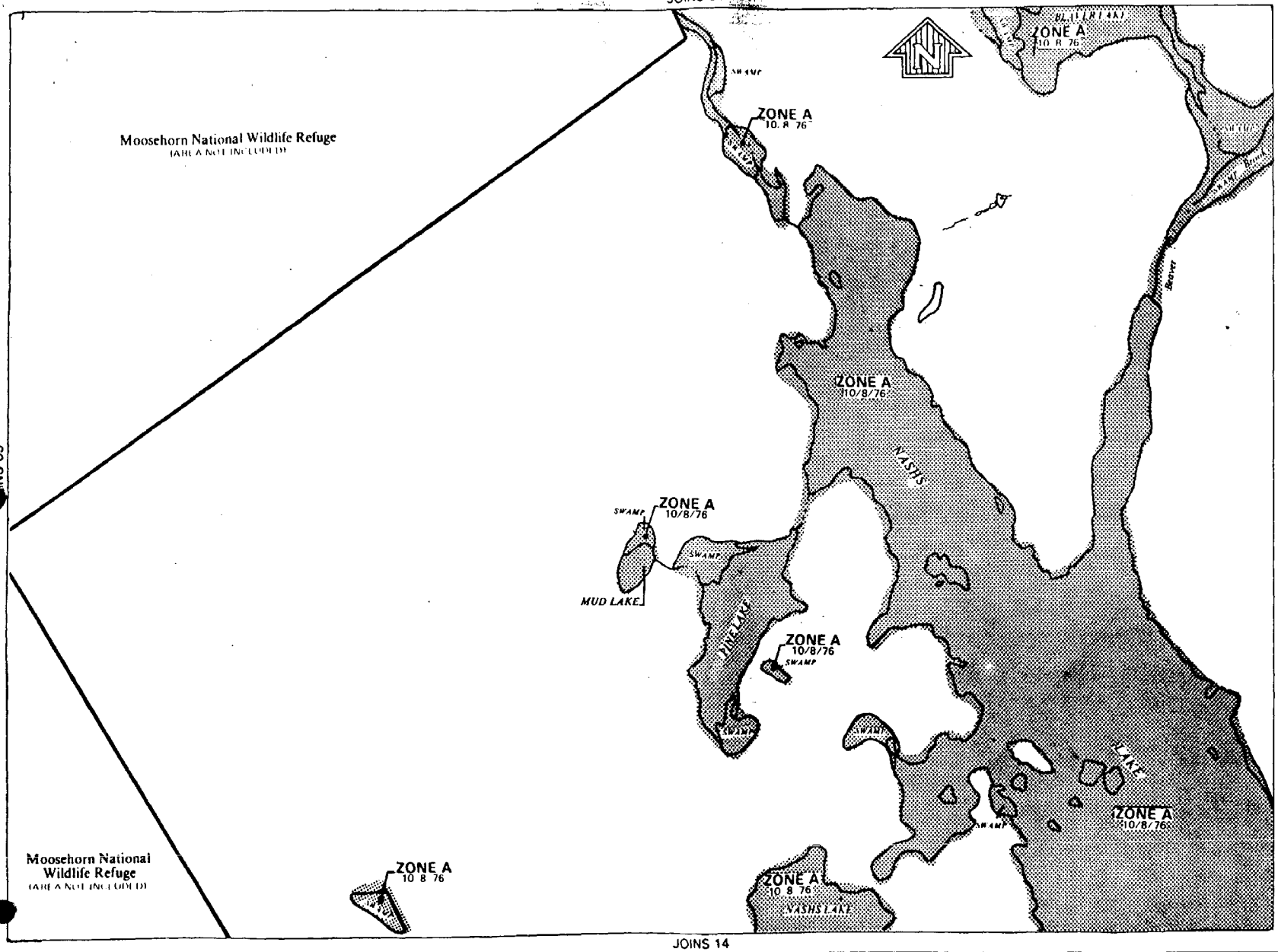
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76



APPROXIMATE SCALE
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MAP REVISED
10/8/76

FLOOD HAZARD BOUNDARY MAP

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

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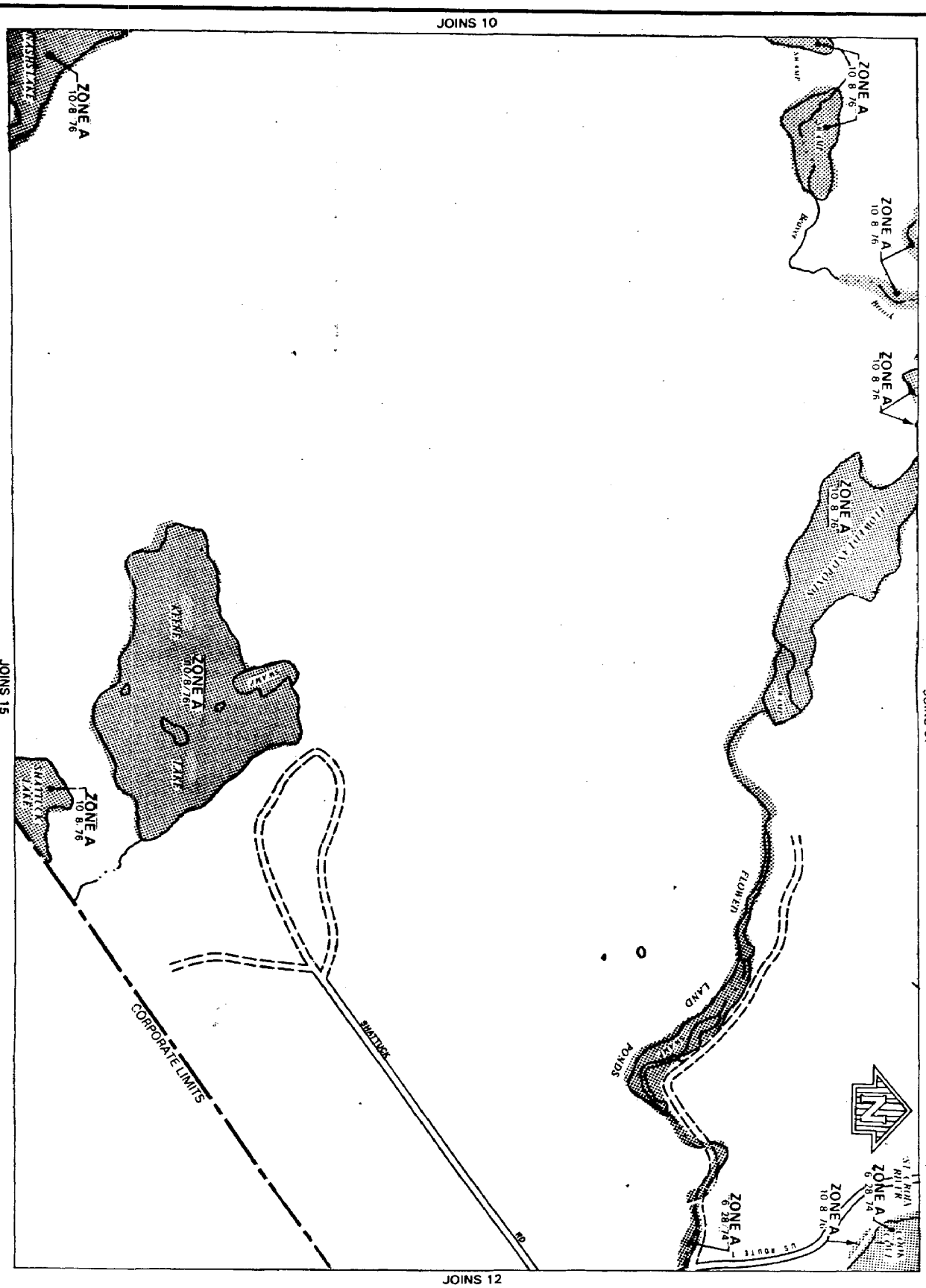

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

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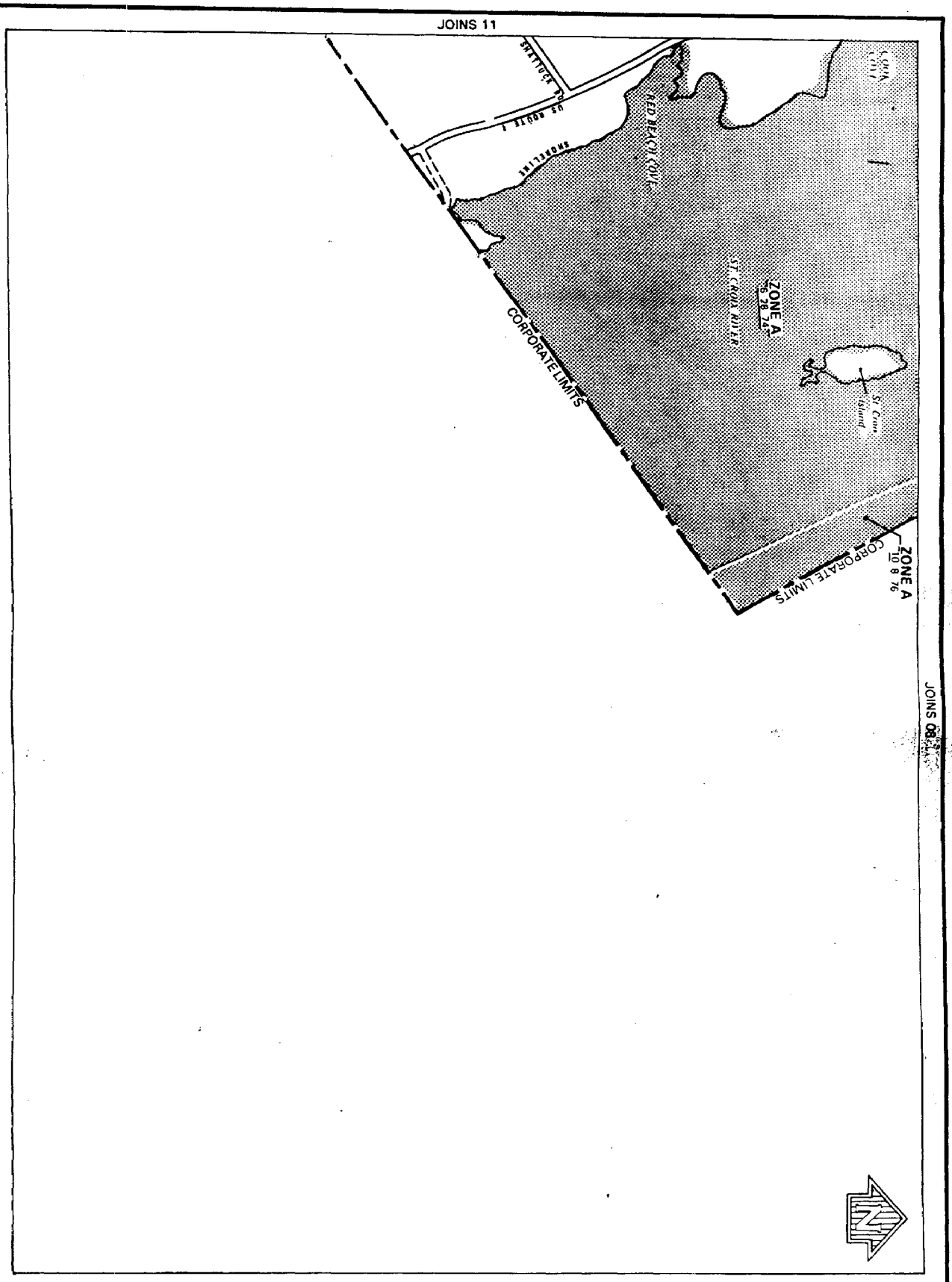

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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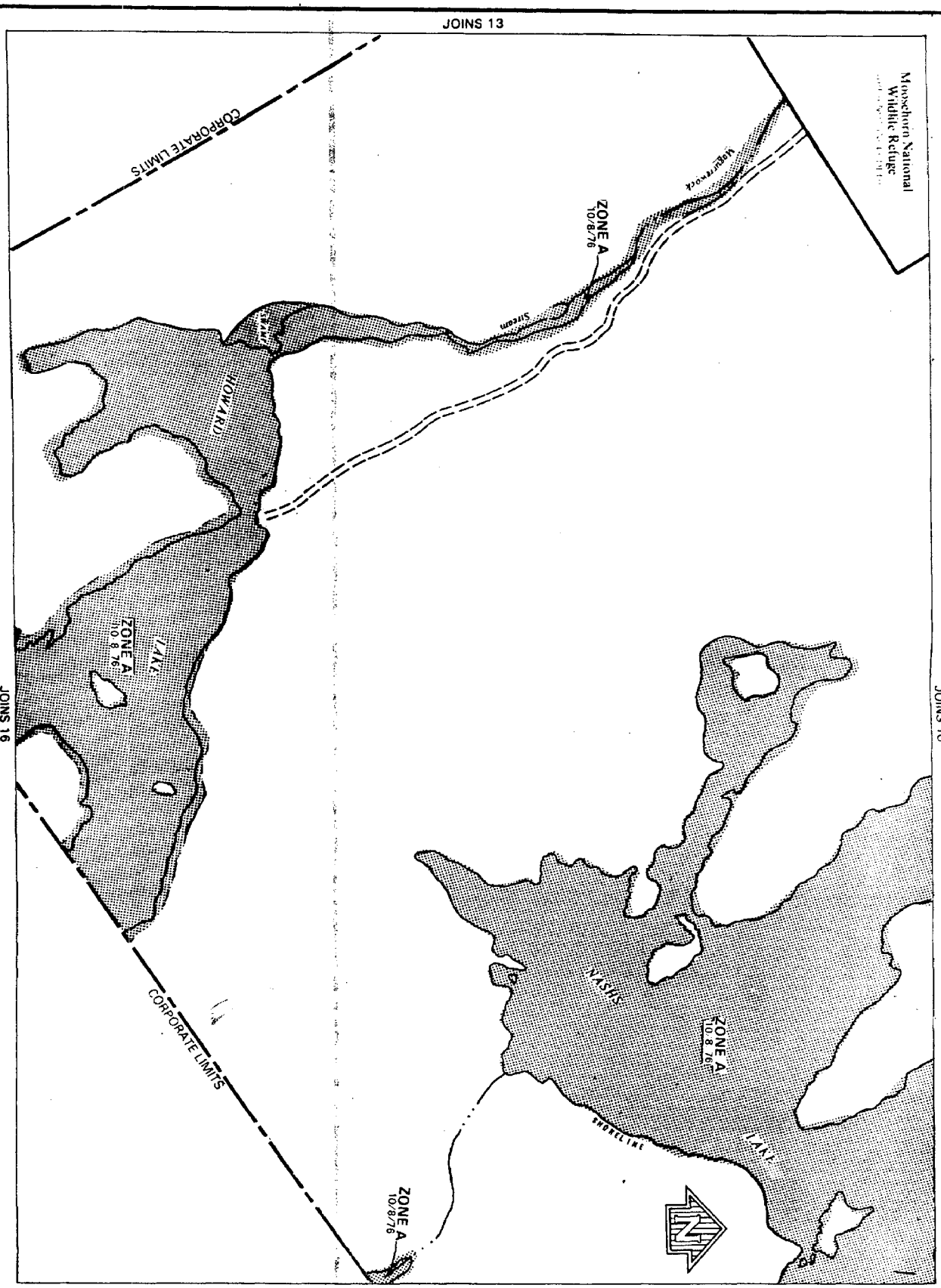
FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
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FLOOD HAZARD BOUNDARY MAP

MAP REVISED 10/8/76

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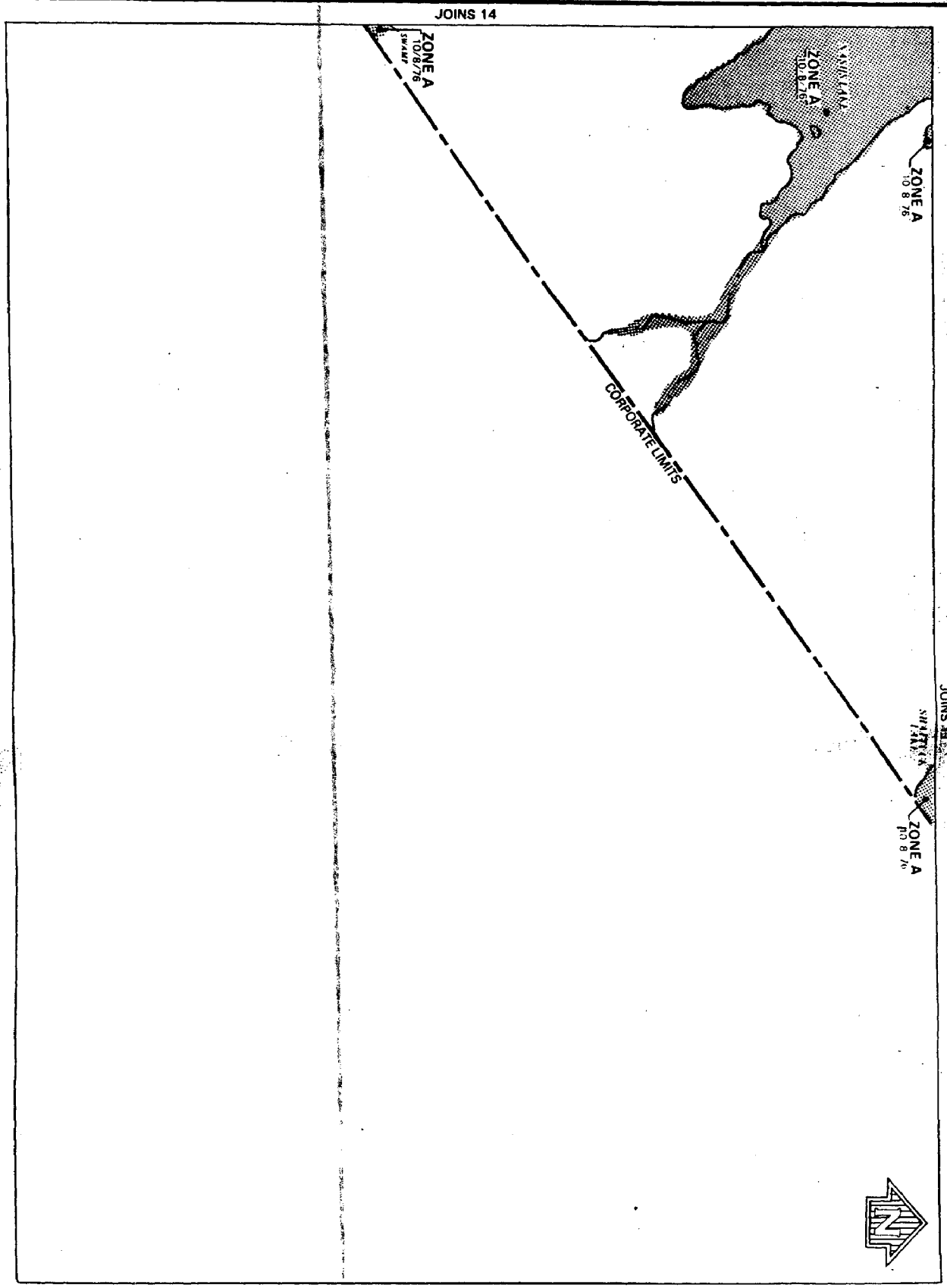
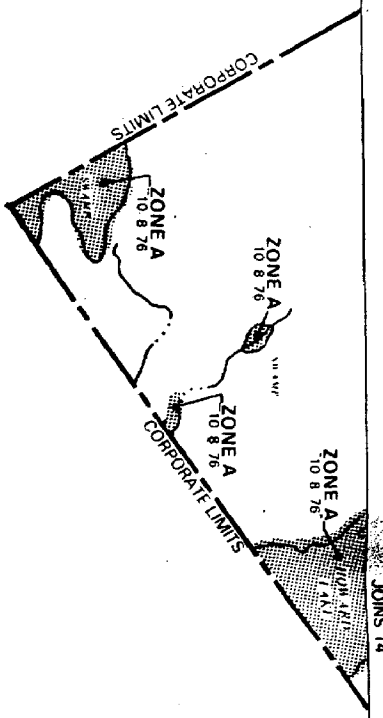


15	DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Federal Insurance Administration **CITY OF CALAIS, ME** (WASHINGTON CO.)	APPROXIMATE SCALE 1000 0 1000 2000 **FLOOD HAZARD BOUNDARY MAP**	MAP REVISED 10/8/76



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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CITY OF CALAIS, ME
(WASHINGTON CO.)

APPROXIMATE SCALE
1000 0 1000 2000

FLOOD HAZARD BOUNDARY MAP

MAP REVISED
10/8/76

Index E

CALAIS CITY COUNCIL
April 9, 1987

re: 1) Floodplain Ordinance
2) Community Development

The first Regular Monthly Meeting of the Calais City Council was held this date in the Council Chambers of the Calais City Building, Church Street, Calais, at 7:30 p.m.

Present was Mayor Case presiding over Councillors Brogan, Cashwell, Clark, Jackson and Dineen.

It was moved by Councillor Dineen, seconded by Councillor Cashwell and unanimously voted that the Minutes of the Previous Meeting be approved as presented.

It was moved by Councillor Clark, seconded by Councillor Jackson and unanimously voted that the Monthly Departmental Reports be approved as presented. Recognition was given to the three-month work program given by the Public Works Department.

Councillor Brogan then reviewed the Monthly Treasurer's Warrants. It was moved by Councillor Brogan, seconded by Councillor Dineen and unanimously voted that the Monthly Treasurer's Warrants be approved in the amount of $621,541.28.

On the motion by Councillor Clark and second by Councillor Jackson it was unanimously voted that the Chase Fund for the month of April, 1987 be approved in the amount of $470.00.

At this time the Mayor called for Public Hearings on the following liqour license application renewal requests:

-- Tinker Co., Inc., Townhouse Restaurant, Main Street and
-- Richard Jacques/Daniel Sullivan, Bottling Plant, Inc., North Street

There being no public concern voiced, it was moved by Councillor Cashwell, seconded by Councillor Jackson and unanimously voted that these two application renewals be approved.

The Mayor then called for a Public Hearing to be held regarding the Emergency Amendment to the Calais Traffic Control Ordinance passed by the City Council on March 26, 1987. There being no public concern voiced, it was moved by Councillor Clark, seconded by Councillor Brogan and unanimously voted that the following Amendment be made to the Calais Traffic Control Ordinance, Section 4-811 :

E. North Street from Lincoln Street to Garfield Street on both sides.

The Mayor then called for a Public Hearing to be held on a proposed amendment to the Calais Zoning Ordinance. There being no public concern voiced, it was moved by Councillor Clark, seconded by Councillor Brogan and unanimously voted that the following sentence be deleted from Article III, Section 2-311 of the Calais Zoning Ordinance:

At least one of the five members of the Board of Appeals shall be a member of the Planning Board.

It was noted that the current representative from the Planning Board, Alexander Tompa, will be asked to remain on the Board of Appeals as a private citizen until a replacement may be found for him.

Councillor DelMonaco entered the meeting at 7:39 p.m.

The Mayor then called for a Public Hearing to be held on a Proposed Floodplain Management Program. After discussion it was moved by Councillor Cashwell, seconded by Councillor Dineen and unanimously voted that the following Floodplain Management Ordinance for the City of Calais, Maine have passage:

It was moved by Councillor DelMonaco, seconded by Councillor Dineen and unanimously voted that the following Perpetual Care Applications be approved:

-- Roger Ivey Lot by Roger Ivey and
-- Charles K. Scott Lot by Charles K. Scott.

The City Clerk then opened one bid received for the reconstruction and repair to the Calais Bandstand located in the Memorial Park on Main Street. The bid was as follows:

County Construction	Alternate	I	$9,400.00
Calais, Maine		II	9,800.00
		III	9,400.00

Alternate III was based upon Belgrade novelty tongue and groove siding.

The Mayor then read a letter attached to the bid form relating to the method proposed for protecting the existing structure. The City Manager, after Council discussion, recommended that she be authorized to enter into a contract with County Construction for the reconstruction of the bandstand, the price not to exceed $9,400.00. The City Manager will, with input from the architect who wrote the specifications for the reconstruction, determine which alternate siding material and method will be utilized. It was moved by Councillor Cashwell, seconded by Councillor Brogan and unanimously voted that the City Manager's recommendation be approved, with the funds for the project to come from the fire insurance settlement, the Public Buildings -- Other Public Buildings Account, and any balance remaining from Contingency.

There were no requests from the public present to speak regarding any of the listed agenda items at this time.

The City Manager then reported on her discussions with the two remaining members of the Citizens Cemetery Committee regarding the need for this Committee to continue to function. After discussion, it was moved by Councillor Dineen and seconded by Councillor DelMonaco that the Committee be dissolved, but that input from the two citizen members be encouraged by the Council Cemetery Committee. Voting in favor of the motion were Councillors CLark, Jackson, Dineen and Brogan. Voting in opposition was Councillor Cashwell. Motion carries.

It was moved by Councillor Cashwell, seconded by Councillor Jackson and unanimously voted that John W. Smith JR and Michael Cole be appointed School District Trustees for three-year terms.

The City Manager then discussed a Property Committee meeting held Tuesday, April 7, 1987. It was the concensus of the members present that the former Eldon and Walter Vail properties on Main Street not be advertised for sale for a few months, and that, when bids are accepted, a minimum bid be stated, with no restrictions on the use of the property be placed on the bid form. No Council action was required at this time.

The City Manager discussed a proposed change to the existing speed limit on North Street. It was the recommendation of the Police Chief that the speed limit on North Street from North Street Extended to Main Street be designated as a 25 mile-per-hour speed limit zone. After discussion it was moved by Councillor Clark, seconded by Councillor Brogan and unanimouly voted that the City request that the Maine Department of Transportation designate North Street from North Street Extended to Main Street as a 25 mile-per-hour speed limit zone. Discussion was also held regarding the speed limit on South Street. This will be discussed further at the April 23, 1987 City Council meeting.

The City Manager then discussed progress to date on her review of the need for a cable television franchise ordinance. The City Solicitor discussed some of the problems that may arise should such an ordinance be passed. Councillor Jackson wished to go on record as being opposed to this form of regulation and to referring this matter to Council Committee. The matter was referred to the Council Economic Development Committee for further review.

It was moved by Councillor DelMonaco and unanimously voted that the Calais Recreation Department be authorized to hold its annual Walkathon on Saturday, May 30, 1987.

It was moved by Councillor DelMonaco, seconded by Councillor Jackson and unanimously voted that the American Legion Auxiliary of Sherman Brothers Post No. 3 be authorized to distribute poppies on Friday, May 15 and Saturday, May 16, 1987.

The City Manager then discussed her recommendations regarding the planting of street shade trees being purchased from Parklands Grounds and Gardens of Belfast, Maine. She recommended that six be planted in the Calais Cemetery, that ten be reserved for citizen requests, and that the remaining be split between Main Street from Church Street to South Street and North Street from Washington Street to Garfield Street. It was the concensus of the Council to allow the City Manager to determine the placing of the trees, with some concern being given regarding the number of trees that were to be placed in the Calais Cemetery. The City Manager also noted that Thomas DiCenzo Inc. will be replacing two dead trees in the Uptown Project Area, with the City being responsible for the planting of the same.

The City Manager then introduced a tentative fiscal 87-88 Budget schedule. The first two weeks of dates will be advertised, with meetings being scheduled from 7:30 p.m. to 9:30 p.m.

It was moved by Councillor Clark, seconded by Councillor Dineen and unanimously voted that the following Resolution be passed:

Other items discussed with no Council action being taken at this time included:

--Junk yards in unauthorized area of Calais;
--Condition of pavement on North Street;
--Any possible grant proposals that may be available for Calais in the near future;
--Commendation to the Public Works Department for street cleaning;
--Joint Calais/St. Stephen Committee meeting scheduled for April 27, 1987;
--City Controller interviews on April 16, 1987;
--Economic Development Task Force meeting on April 29, 1987, at the University of Maine at Machias;
--Availability of five abandoned puppies;
--Availability of copies of the Proposed fiscal 87-88 Budget for the general public; and
--Water hazard on Lafayette Street near the Boy Scout Hall.

There being no further business to come before the Council, it was moved by Councillor Clark, seconded by Councillor Dineen, and unanimously voted that this meeting be adjourned at 8:57 p.m.

ATTEST: Theresa L. Ramsey
Theresa L. Ramsey, City Clerk

CALAIS
maine

RESOLUTION

WHEREAS, the week of April 11th to April 18th is being designated nationwide as Community Development Week;

WHEREAS, the City of Calais has long been committed to community development efforts including revitalizing the downtown area, rehabilitating housing, waterfront development and creating jobs, through, among others, the Community Development Block Program, Housing and Urban Development programs, and the Economic Development Administration, private funding and city funds;

WHEREAS, these efforts have enabled Calais to substantially improve its quality of life, to involve citizens in the community planning process, and to develop public and private partnerships for the benefit of the entire community;

NOW THEREFORE,

Be it resolved by the Calais City Council that the week of April 11, 1987 is designated as Community Development Week in Calais and will be observed by reflecting on our past accomplishments and planning for future efforts.

Adopted this 9th day of April
in the Year 1987

Drew Case

Drew Case, Mayor

MINUTES
PLANNING BOARD MEETING
SEPTEMBER 14, 1987

Members present: Chairman Lee Stover, Walter Ford, Merrill Sabattus, Christine Littrell, Alex Tompa. Sam Pickering was present as a non-voting alternate. Absent: Peter DelMonaco.

Chairman Lee Stover called the meeting to order at 7:05 p.m.

Walter Ford moved to approve the minutes of the August 11th meeting, August 20th special meeting, and September 2nd special meeting. Merrill Sabattus seconded the motion, voted unanimously.

A Public Hearing on recreational camper vehicles in a C-2 zone as a special exception was opened at 7:14 p.m. John Chambers spoke about his interest in having an RV camping area on his property on North Street to provide for overnight hookups and a small souvenir shop. There was considerable discussion about the State regulations, Maine Department of Transportation regulations, and other issues. The public hearing was closed at 7:55 p.m. After discussion, it was moved to table this matter and over the course of the next few work sessions, make it a priority to work out language and prepare a recommendation. Motion was made by Walter Ford and seconded by Christine Littrell. Voting in favor were Merrill Sabattus, Lee Stover, Christine Littrell, and Walter Ford. Voting in opposition was Alex Tompa. Motion carries.

There was no old business.

Under new business, the first item was the election of a Chairman for a term of one year. Christine Littrell nominated Lee Stover. Walter Ford seconded the motion, voted unanimous.

There was no one representing the tenant for the old A & P to present the site plans for approval and for approval of the change of use. Leonard Scott spoke briefly to the issue as a contractor involved. Christine Littrell moved to table to site plan approval until a representative could be present, Merrill Sabattus seconded the motion and it was voted unanimously.

Leonard Scott spoke to the change of use to the Ross Brothers gift shop on Main Street to a real estate office. There will be no structural changes and minimal interior changes. Merrill Sabattus moved to approve the site plans for a real estate office, Alex Tompa seconded the motion, and it was voted unanimously.

Larry Molholland and Greg Carter presented the site plans for the Hardwicke expansion on Map 6, Block 3, Lot 1A. Planning Board review and approval of the expansion is contingent on approval by the Calais City Council at a special council meeting on October 1st of the amendment to the Shoreland Zoning Ordinance. Walter Ford moved to grant site plan approval pending City Council approval of the Shoreland Zoning Amendment, Alex Tompa seconded the motion, and it was voted unanimously.

There being no one present to present site plans for a restaurant in the building presently used for Sew-Fun, Merrill Sabattus moved to table the item, Walter Ford seconded, and it was voted unanimously.

Mr. Cole presented site plans for replacement of the windows on the second floor of "On the Corner" and for boarding up some of those windows. Walter Ford moved approval of the site plans as presented, Merrill Sabattus seconded the motion and it was voted unanimously.

The City Manager raised the question of the official business directory signs on the corner of Washington and North Street in terms of whether the Planning Board wanted to establish a limitation on the numbers of signs. Christine Littrell moved that the Planning Board adopt a policy that it should be limited to four signs on each of the existing sign posts. Walter Ford seconded the motion and it was voted unanimously.

At 8:40 Lee Stover declared a five minute recess.

At 8:45, the meeting was called back to order. The City Manager presented the Comprehensive and Action Plans for the waterfront area. These plans are the result of work done under the Coastal Planning Grant and represent the concensus of proposed uses developed through a survey of Calais citizens and a series of public hearings. Christine Littrell moved that the Planning Board approve the plans for the waterfront as presented. Walter Ford seconded the motion and it was voted unanimously.

The City Manager presented the proposed Waterfront Action Grant for erosion control measures in Pike's Park. Merrill Sabattus moved that the Planning Board endorse the grant application. Walter Ford seconded the motion. It was voted unanimously.

Merrill Sabattus moved adjournment at 9:45. Walter Ford seconded the motion. It was voted unanimously.

ATTEST Nancy H Orr

Nancy H. Orr, City Manager
and Acting Secretary

CALAIS CITY COUNCIL
October 1, 1987

A Special Meeting of the Calais City Council was held this date in the Council Chambers of the City Building, Church Street, Calais, at 7:30 p.m.

Present was Mayor Case presiding over Councillors Brogan, Cassidy, Cline and Dineen.

The purpose of this meeting was to conduct a public hearing to consider an amendment to the Shoreline Zoning Ordinance which would rezone the property between Main Street and the St. Croix River from the former railroad bed to the bridge (Map 6, Block 3, Lot 1, 1A, 1C and 1D) from limited residential and recreational use to general development use.

After a brief discussion, it was moved by Councillor Cassidy, seconded by Councillor Cline and unanimously voted to pass this amendment.

There being no further business to come before the Council, it was moved by Councillor Dineen to adjourn this meeting at 7:37 p.m. this was seconded by Councillor Cline and voted all in favor.

ATTEST: Theresa M Porter
Theresa M Porter, Clerk Pro Tempore

CALAIS CITY COUNCIL
October 8, 1987

The first Regular Monthly Meeting of the Calais City Council was held this date in the Council Chambers of the City Building, Church Street, Calais, at 7:30 p.m.

Present was Mayor Case presiding over Councillors Brogan, Cassidy, Cline and Dineen.

It was moved by Councillor Dineen, seconded by Councillor Cline and unanimously voted that the Minutes of the Previous Meetings be approved as presented.

On the motion by Councillor Cline and second by Councillor Dineen it was unanimously voted that the Monthly Departmental Reports be approved as presented.

Councillor Brogan then reviewed the monthly expenditures.

Councillor DelMonaco entered the Meeting at 7:37 p.m.

It was moved by Councillor Brogan, seconded by Councillor Dineen and unanimously voted that the Monthly Treasurer's Warrants be approved in the amount of $582,616.08.

It was moved by Councillor Dineen, seconded by Councillor Cline and unanimously voted that the Chase Fund be approved in the amount of $440.00 for the month of October, 1987.

At this time the Mayor called for a Public Hearing to be held on the following liqour license application renewals:

The Bottling Plant, Inc., 35 North Street and
The Schooner, Inc., 187 Main Street.

There being no public concern voiced, it was moved by Councillor Cline, seconded by Councillor DelMonaco and unanimously voted that these application renewals be approved.

The Mayor then asked if anyone in the audience wished permission to speak on any of the listed agenda items. No requests were made.

The City Councillors then discussed the reconsideration of the action taken at the September 24, 1987 City Council meeting regarding the requested zone change on lower Garfield Street that would re-zone Map 5 Block 9 Lot 15 from C-2 to R-4 and Lots 16, 17, 18, 19, 20, 21, and 1 from R-1 to R-4. It was moved by Councillor Cassidy, seconded by Councillor Cline and unanimously voted that this matter be tabled until the first City Council meeting which is attended by all Councillors.

The City Manager then discussed a draft Comprehensive Plan for the Waterfront of Calais. After discussion it was moved by Councillor Brogan, seconded by Councillor Cline and unanimously voted that the plan be adopted as presented with the qualification that this approval does not lock the City into doing particular projects in subsequent years.

The City Manager then requested that she have authorization to purchase coal as needed for the Calais City Building from Foremost Coal of Conway, New Hampshire, the quoted price being $128.00 per ton. After discussion, it was moved by Councillor Cline, seconded by Councillor Dineen and unanimously voted that this authorization be granted.

The City Manager then reviewed her request for authorization to have the 930 Loader evaluated and tuned up by Jordan Milton Machinery, Inc., the cost of $1,100.00 to be charged to the Outside Labor and Parts Account of the Mechanical Maintenance budget. During discussion Councillor Cassidy noted that perhaps the Washington County Vocational Technical Institute in Calais could assist the City in similar projects in the future. It was moved by Councillor Dineen, seconded by Councillor Cline and unanimously voted that this authorization be granted.

The City Manager then recommended that she be authorized to accept a settlement of $3,100.00 from the Maine Municipal Association Risk Pool for the 1982 S-10 Water Department pick-up truck that was stolen and damaged earlier this year. She noted that with the $1,000.00 deduction, the actual amount to be returned to the City would be $2,100.00. After discussion it was moved by Councillor Cline, seconded by Councillor Dineen and unanimously voted that the City Manager be authorized to accept the settlement and to turn over the vehicle to the appraiser to sell for salvage.

The City Manager then requested authorization to go out for bid for a truck for the Water Department. She recommended that bids are sought on both full-size and light-duty trucks and that both 1987 and 1988 model years be considered, with the determination of the size and year of the truck to be purchased to be made once the bids are received and reviewed. After discussion it was moved by Councillor DelMonaco, seconded by Councillor Cline and unanimously voted that this recommendation be approved.

It was moved by Councillor Cassidy, seconded by Councillor Cline and unanimously voted that the Knights of Columbus be authorized to conduct a Tootsie Roll Sale in the downtown area of the City on Saturday, October 10, 1987.

It was moved by Councillor DelMonaco, seconded by Councillor Brogan and unanimously voted that Saturday, October 17, 1987 be declared Barbara's International School of Dance Day.

Other items discussed with no action being taken at this time included:

--Draft City Annual Report to be presented to the City Council at October 22, 1987 meeting;

--Plugged sewer on Barker Street caused by grease;
--Code Enforcement Officer investigating junk yard on St. Croix Drive;
--Steamboat Street sewer project update;
--Application from Thomas Dicenzo Inc. for an inert fill site being reviewed by the Calais Planning Board in near future;
--Discussion regarding plans by Sidney Unobskey regarding his parking lot and the sidewalk in front of the former A&P store;
--Dead elm trees; and
--Need for lighting between Restaurant Angleholm and Coastal Glass on Main Street and need for replacement lighting in other parts of the City.

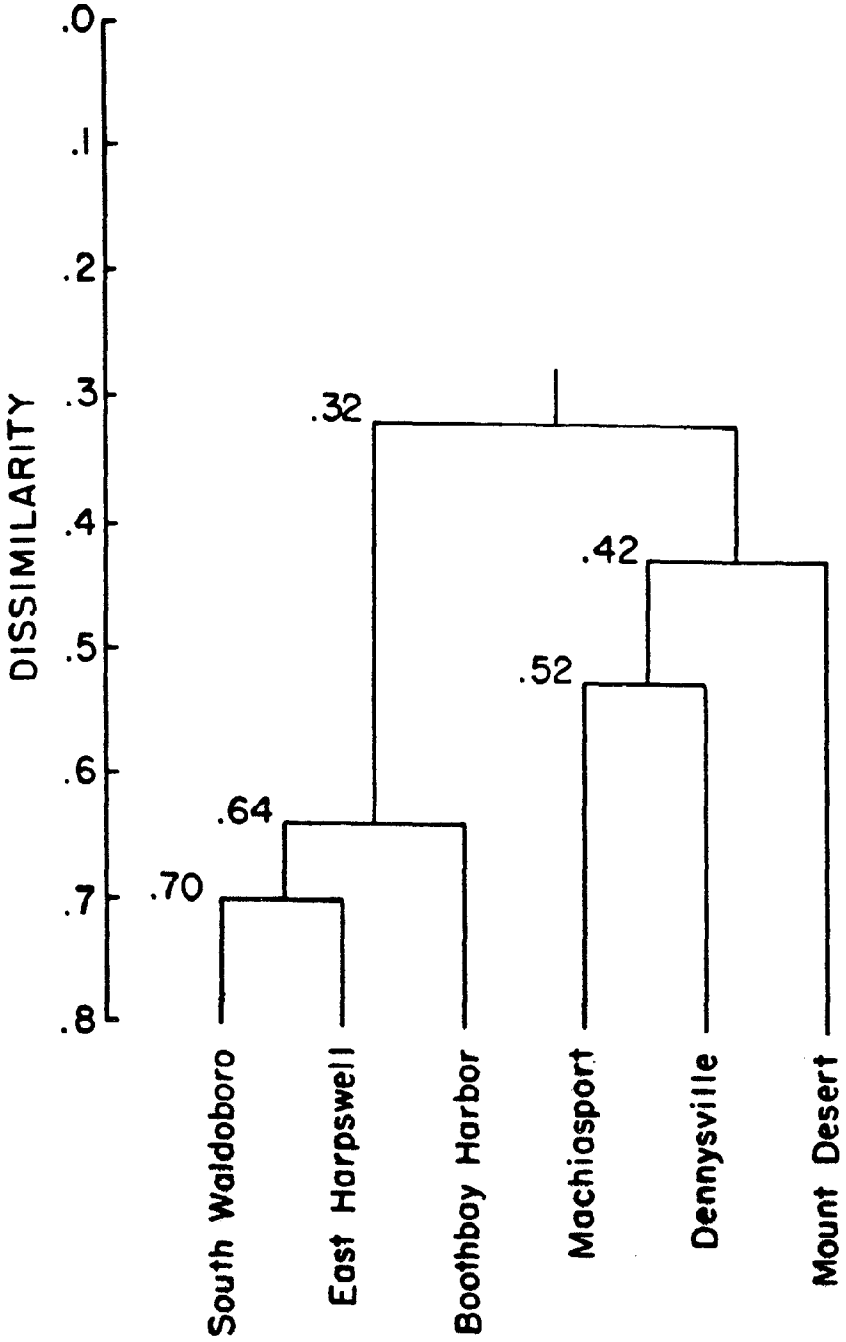
At this time it was moved by Councillor Cline, seconded by Councillor Dineen and unanimously voted that the City Council retire into Executive Session to discuss non-union wage issues after a five-minute recess. Executive Session commenced at 8:23 p.m.

Open Session resumed at 8:35 p.m.

It was moved by Councillor Brogan and seconded by Councillor Cline that the additional changes to the non-union wage package for fiscal 1987-1988 be approved as presented. Voting in favor of the motion were Councillors Brogan, DelMonaco, Cassidy and Cline. Voting in opposition was Councillor Dineen. Motion carries.

There being no further business to come before the Council, it was moved by Councillor Cline, seconded by Councillor Cassidy and unanimously voted that this Meeting be adjourned at 8:37 p.m.

ATTEST: Theresa L. Ramsey
Theresa L. Ramsey, City Clerk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Boothbay Harbor
Machiasport
Dennysville
Mount Desert

Kimball
Chase

PRELIMINARY ENGINEERING EVALUATION
OF THE CALAIS CITY WHARF
CALAIS, MAINE

OCTOBER 1987

KIMBALL CHASE COMPANY, INC.

BATH, MAINE

Kimball Chase

53 Front Street
Bath
Maine
04530
(207) 442-7029
(207) 443-1361

October 23, 1987

Ms. Nancy H. Orr, City Manager
City Building
P.O. Box 413
Calais, Maine 04619

Subject: Preliminary Engineering Evaluation of the Calais City Wharf Calais, Maine 87-2002

Dear Ms. Orr:

In accordance with our agreement dated September 14, 1987, we are pleased to submit our Preliminary Engineering Evaluation of the Calais City Wharf. The data upon which this study and its recommendations have been based were obtained during the site visit of September 21, 1987.

We have been pleased to undertake this Preliminary Engineering Evaluation and look forward to continuing the recommended project throughout its remaining phases.

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

Sincerely,

Kimball Chase Company, Inc.

Stephen C. DeWick, P.E.
Project Manager

SCD/rld
Enclosures (12)

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SECTION 1

SUMMARY & RECOMMENDATIONS

Summary

The existing Calais City Wharf is located on the St. Croix River, approximately one half mile downstream of the which bridge connects Calais to St. Stephen, New Brunswick. (Figure 1) The average annual tide range at this location is twenty (20) feet. The original wharf was constructed in the 1800's, was replaced in the 1960's, and had an addition constructed to it in 1979. The wharf is currently used by pleasure boaters and an occasional fisherman.

On September 21, 1987, Kimball Chase Company, Inc. conducted a condition survey for the City Wharf. During the condition survey it was determined that the existing City Wharf is in poor condition. All wooden members are showing signs of deterioration, especially the decking, evident by where the backhoe broke through, and the piles, which are becoming punky and soft (easily penetrated).

Recommendations

The following recommendations are based upon the site inspection of September 21, 1987:

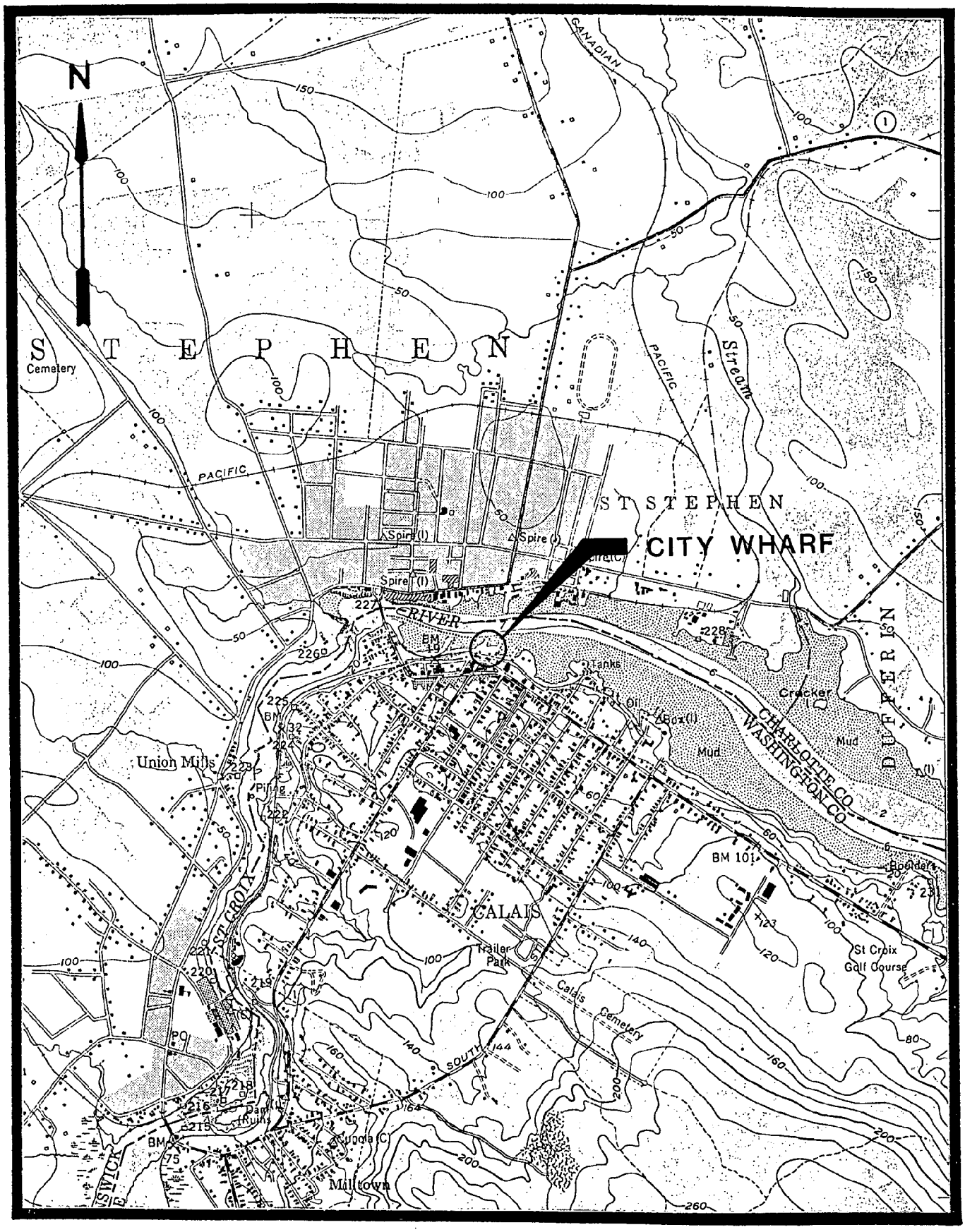
1. The failed wooden retaining wall should be removed and replaced with a granite block type retaining wall.

2. Vehicular traffic should be prohibited from using the wharf.

3. The upriver side slope should be stabilized with a riprap and filter fabric system, as discussed in Section 4.

4. The City should begin to examine the possible funding sources for the replacement of the wharf.

5. The next phase of borings, survey and final design should be started as soon as $15,000 can be raised to cover these costs.



CITY MAP
FIGURE 1

Kimball Chase
53 Front Street
Bath, ME 04530

SECTION 2

INTRODUCTION

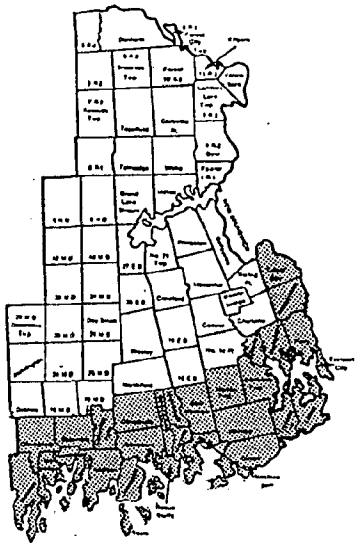
Project Area

Calais is a coastal City, located on the St. Croix River, with a population of 4,260 people. The City of Calais covers approximately 36 square miles, with 13 miles of waterfront. Situated in the eastern portion of Washington County, Calais is the gateway to St. Stephen, New Brunswick and the Maritime Provinces of Canada. (Figure 2)

Purpose

In August 1987, the City of Calais obtained a grant from the State Planning Office to begin preparing a Pier Rehabilitation Plan. In September of 1987, the City of Calais hired Kimball Chase Company, Inc. to do a preliminary evaluation of the wharf.

The purpose of this evaluation is to examine the existing condition of the City wharf, make recommendations for rehabilitation, and prepare preliminary cost estimates for the work involved with rehabilitation.



WASHINGTON COUNTY MAP

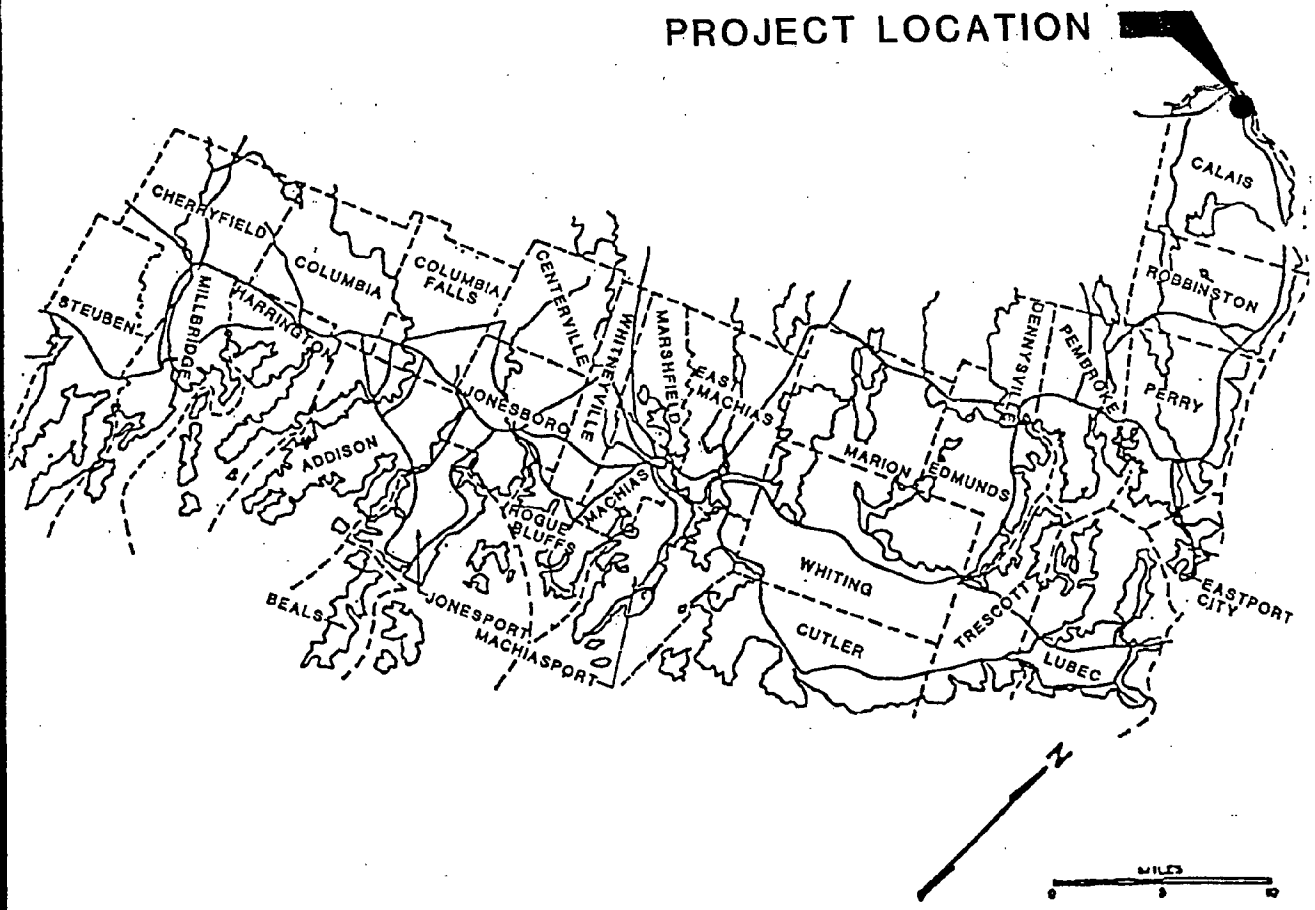


FIGURE 2

Kimball Chase
53 Front Street
Bath, ME 04530

SECTION 3

ENGINEERING ASSESSMENT OF EXISTING PIER

An inspection of the Calais City Wharf was made on September 21, 1987 by David B. Kinney, Project Engineer, and Richard Bourget, Engineering Technician, of Kimball Chase Company, Inc. After a cursory review with Ed Lindemanis, Calais' Administrative Assistant, an indepth condition survey was performed. This condition survey was started by inspecting the deck and other topside facilities, while the tide was high (10:06 a.m.), and working underneath the wharf during low tide (4:23 p.m.). The tide range on this day was 18.2 feet.

Data from the National Oceanic and Atmospheric Administration's publication, Tide Tables 1987, indicate that the average annual tide range for Calais is 20.0 feet, while the annual high tide is 22.8 feet.

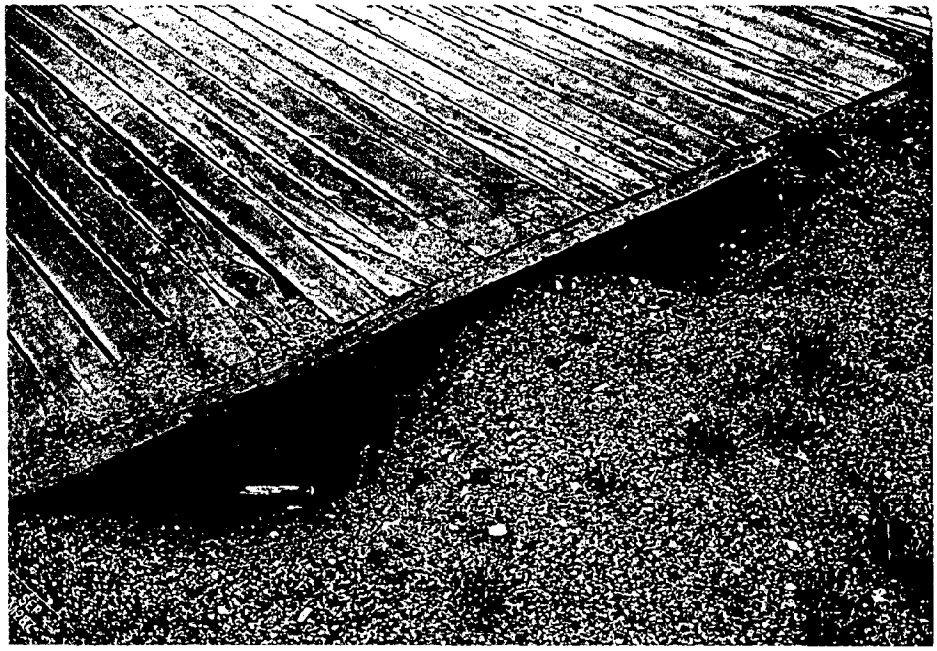
The Calais City Wharf was expanded in 1979 to its existing 93' x 42', "L" shaped size. The existing wharf is a combination of a wooden cribwork facility and a wooden pile supported structure.

The cribwork portion of the existing wharf is in poor condition. The wooden members are experiencing deterioration due their exposure to a continuous wetting and drying cycle. During the change of tides and with rain water penetration, much of the fine material is washed from the cribwork area (Photo A). Photo B shows the fine material being washed from cribwork during a change in tides. The top three (3) foot section of the wall on the western side of the cribwork structure is experiencing an outward lean that could lead, without preventative measures, to complete failure (Photo C).

The existing pile supported portion of the wharf is currently in poor condition. All wooden members and pilings in this portion of the pier are experiencing deterioration due to natural causes, including tidal action, ice, and rain.

Deterioration in the 3" decking is evident by viewing the hole, which is covered by a piece of particle board (Photo D), that occurred when a backhoe drove on the decking. Because of the serious deterioration of the decking, vehicular traffic should not be allowed on the wood deck portion of the wharf.

Where the wharf connects to shore there is an area of gravel fill (Photo E). This fill is held in place on the eastern side by a wooden retaining wall (Photo F) and by a rock slope on the western side (Photo G).



A

Typical Erosion in Cribwork Area

B

Fine Material (Appearing as
Cloudy Water) Being Washed
From Cribwork During Tide Change

C

Cribwork

D

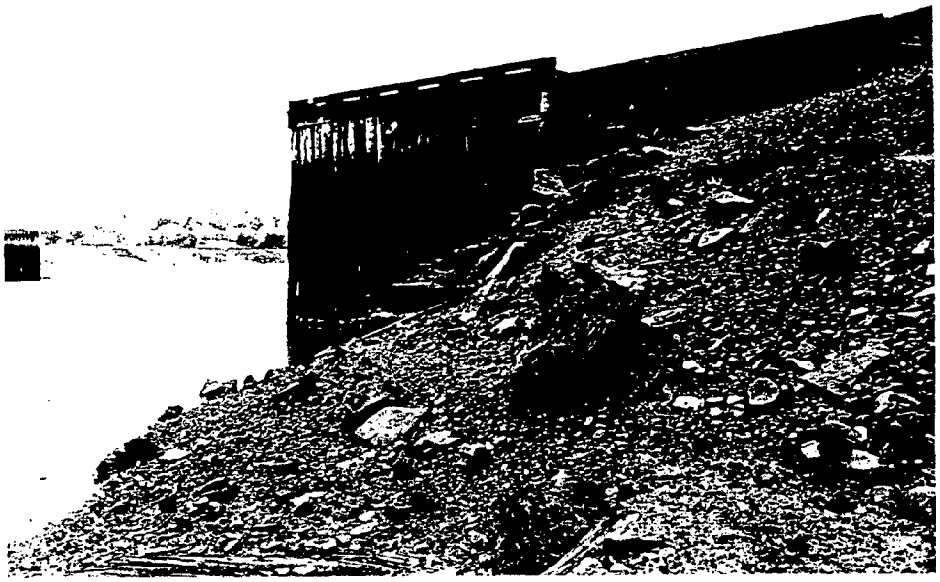
Hole in Deck (Covered
by Particle Board)

E

Gravel Fill Area

F

Wooden Retaining Wall



G

Rock Slope

H

Rock Slope

The wooden retaining wall is constructed of logs laid lengthwise, spiked to one another and is supported by a vertical pile at each end. This wall has failed with its face tipping outwards and several logs, loose or removed from the wall (Photo F).

The side slope, which protects the western side of the wharf, is showing signs of erosion along the top portion of the slope. The bottom portion of the slope is all rock rubble and appears unchanged (Photo H).

SECTION 4

PRELIMINARY DESIGN & COST ESTIMATES

General

The existing City wharf is in poor condition but with several minor changes, it can be made a more stable facility.

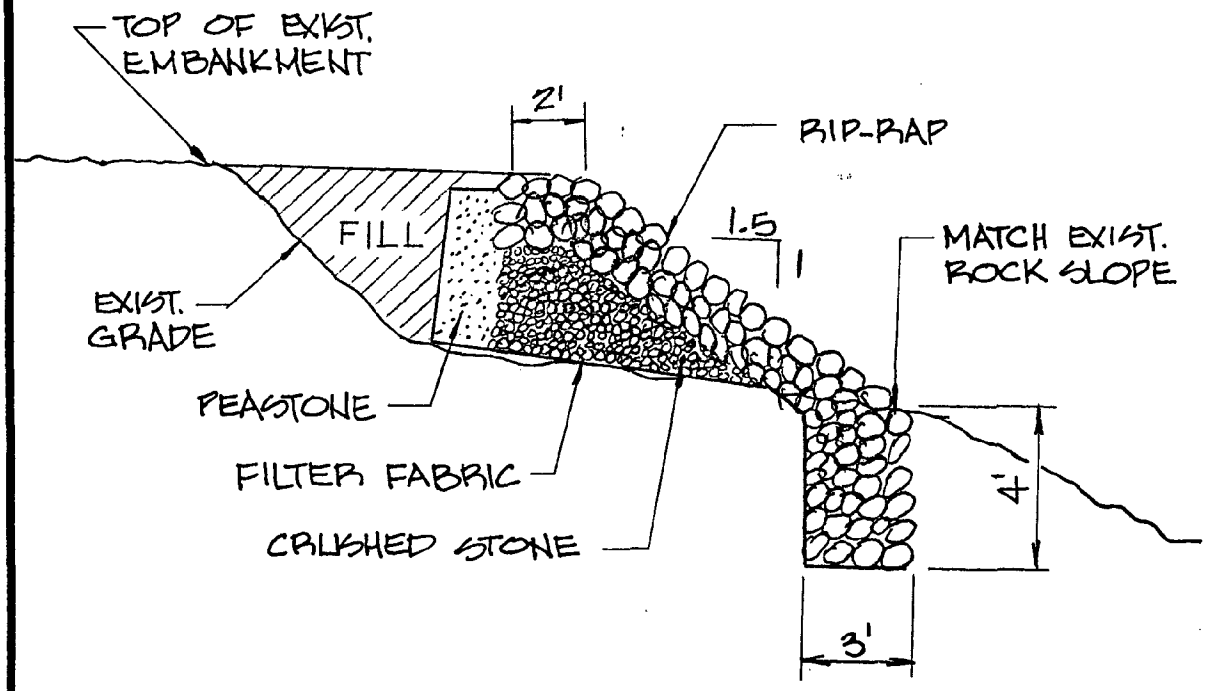
Intermediary Rehabilitation

The existing cribwork portion of the pier can be temporarily rehabilitated with the installation of a filter fabric on the inner face of the cribwork and with the repair of the western wall. The installation of a filter fabric along the inner face of the cribwork would prevent the fine material from being washed out, but would not prevent water from passing through. The filter fabric would be installed by excavating a trench along the fill side of the cribwork, tacking the filter fabric to the wooden cribwork, and then backfilling with the excavated material. While the filter fabric is being installed, the upper portion of the western wall should be repaired. This repair would consist of removing the existing three (3) rows of 8 x 10 timbers, driving piles between the existing piles, and placing three (3) new rows of 8 x 10 timbers behind the new piles, in the same vertical alignment with the rest of the cribwork. The costs associated with the installation of the filter fabric, wall repair and engineering would total $9,500.

The pile supported section of the wharf cannot be temporarily rehabilitated. This section would have to be totally rebuilt at the same time because all of the existing members are deteriorating at approximately the same rate, and to do any work in the intermediary period would not be beneficial.

In the gravel fill area, between the City wharf and the shore, the existing wood retaining wall should be removed and replaced. It can be replaced with several different types of retaining walls, one being a wooden wall of similar construction to the existing wall, a concrete retaining wall, or a granite block type retaining wall. The costs for these items are presented in the option section on the following page.

On the western side of the shore, adjacent to the City wharf, the side slope should be reconstructed using a riprapped slope backed with filter fabric and suitable fill material (Figure 3). The cost of shore stabilization is estimated to be $3,500.



TYPICAL RIPRAPPED SLOPE

FIGURE 3

Kimball Chase
53 Front Street
Bath, ME 04530

Total Rehabilitation

Total rehabilitation would be realized if the entire structure was to be removed and replaced. Total replacement of the existing City wharf, including shore stabilization and engineering would cost $338,000.

The following is a detailed breakdown of the costs associated with the removal of the existing wharf and the replacement with a similar structure:

Table 1
Basic Project Cost

Item	Cost
Piles	$ 28,000
Lumber (Including Deck, Cross Members, Cribwork)	138,500
Hardware	18,000
Misc. Excavation & Fill	500
Filter Fabric	500
Demolition	$ 55,400
Subtotal:	$ 240,900
Contingency (15%):	36,100
Engineering:	24,000
DEP & Army Corps of Engineer Permits:	5,000
TOTAL:	$ 306,000

Table 2
Additional Option Cost

Options:

Retaining Wall		$ 28,500
Granite Block	25,000	
Concrete	18,400	
Wood	9,400	
Engineering	3,500	
Slope Stabilization		3,500
TOTAL (Including Options):		$ 338,000

Table 3
Engineering Costs

Borings	$ 5,000
Survey	2,000
Final Design	8,000
Bidding	2,000
Construction Administration	2,000
Inspection	5,000
TOTAL:	$ 24,000

SECTION 5

EXISTING PIER PLANS

The enclosed plans show the existing conditions of the City Wharf. These plans are based upon the site inspection of September 21, 1987. Sheet 1 of the plans shows the existing site as well as a pile plan. The pile plan shows the location of 144 piles and their cross braces. Sheet 2 presents four cross-sectional views, drawn through key locations in the wharf, cribwork and wooden retaining wall.

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