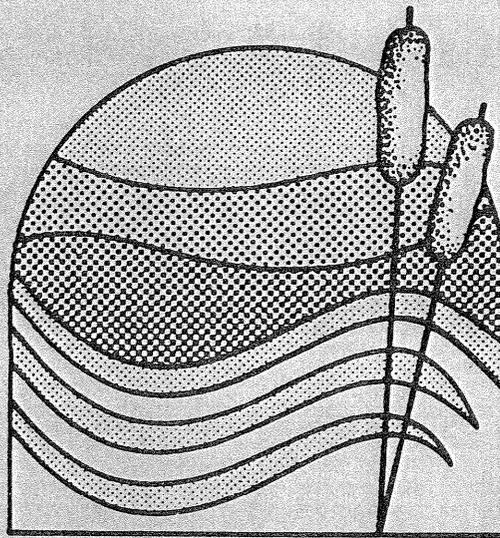


MERRIMACK RIVER GREENWAY AND TRAIL SYSTEM

1990



CONCORD
CONSERVATION
TRUST

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PREFACE

The organization that sponsored this report, the Concord Conservation Trust (CCT), is a private non-profit membership organization under Section 501(c)(3) of the Internal Revenue Code, as amended. It is managed by a volunteer board of directors. Membership is open to anyone interested in the future of Concord and in the wise stewardship of land. At the present time, it is staffed by a part-time Executive Director.

The purpose of CCT is to: 1) acquire, conserve, manage and dispose of land and interests in land within and around the City of Concord in order to protect and preserve wildlife habitat, farm land, forests, wetland and other lands of conservation value; and the natural scenic, recreational, ecological and productive features of these lands for the benefit of the citizens of Concord and the State of New Hampshire; 2) to encourage sound conservation practices with respect to land resources in and around Concord; and 3) to educate the public on matters relating to land use planning for conservation purposes.

The current Board of Directors are: Stephen D. Blackmer, Chairman, Douglas G. Woodward, Vice-Chairman, Sylvia K. Bates, Treasurer, Jan McClure, Secretary, Raymond D'Amante, James DeSouza, John Gfroerer, Stephen Henninger, Frank L'Hommedieu, Josie Manternach, John Teague, and Douglas J. Robinson, Executive Director.

INTRODUCTION

The Concord Conservation Trust (CCT) established a goal of preserving a "greenway" along the Merrimack River within the corporate limits of the City of Concord. The term "greenway" embraces open spaces both natural and man-made -- forest and tree farm, meadow and tilled field, marsh and managed waterfront, pastureland and park. The preservation of such a "greenway" is not intended to connote universal public ownership but rather implies the removal of the right to develop structures and create impervious surfaces. Whether publicly or privately owned, a "greenway" is land that is mandated to remain green!

The CCT established a second goal, that of creating, for the benefit of the general public, a trail system throughout the greenway along the more than fourteen miles of embankments of the Merrimack as it meanders through the City.

As a first step in pursuing its dual goals, the CCT commissioned a study aimed at the preparation of a plan for the greenway and trail system. The Trust's objective is to utilize this plan to pursue the acquisition of rights for both the greenway and trail system, and to guide the location and construction of the trails.

METHODOLOGY

The study undertaken for the CCT was intended to accomplish a number of tasks in relation to the development of a proposal for a Merrimack River Greenway and Trail System. An effort was needed to establish contact, exchange information, promote coordination, and seek assistance from a variety of federal, state, and

local governmental bodies as well as a number of private organizations that had jurisdiction, concerns, or plans for the Merrimack River. The CCT needed others to know of its presence and its goals, and at the same time needed to know what others were doing that might be of mutual interest.

The main focus of the study was to gather pertinent information concerning the river valley's natural resources, property ownership, recreational resources, conservation and scenic resources, and historic and cultural resources. This information was graphically displayed utilizing a base map of the river valley in Concord, with separate maps being prepared for each of the five topics of the study.

The synthesis of this information and its graphic representation provided the basis for the development of the greenway proposal and provided insight for designating potential trail corridors. While bridges were obvious points of river crossing and trail "looping", actual field visits were made for segments of the river valley between bridges on both banks to discern any physical constraints for trail construction as well as any unique features or views that should be included in the trail corridor.

A trail system was laid out throughout the valley on both sides of the river, in an effort to fulfill the CCT's goals as well as those of the New Hampshire Heritage Trail. In the latter case, trail connections were specifically envisioned to provide linkage to Concord's four valley neighbors -- Pembroke, Bow, Boscawen, and Canterbury.

One segment of the trail system was selected as a "demonstration" project - a portion of the system that would be attempted

first, and from which the CCT would learn all of the problems of trail construction and management. This section would become the benchmark by which other portions of the system would be developed. The proposed demonstration trail was field reviewed and documented graphically.

As field work progressed on all aspects of the project, the experience was recorded on slides. The project graphics were also recorded on slides as were several historic maps of the river valley in Concord. A slide show about the Greenway and Trail System has been developed from the resultant library of slides.

This report represents the final element of the study commissioned by the CCT.

THE MERRIMACK RIVER IN CONCORD - HISTORICAL BACKGROUND

Concord has been fortunate that much of the river valley has remained in the agrarian usage first established by the Pennacook Indians, as perpetuated and expanded by the European settlers. Recent archeological excavations have revealed evidence of Indian culture dating back thousands of years. However, the Indians truly had a biodegradable society and lived in environmental peace and harmony with the river and its valley.

In stark contrast to the Indians, the culture of the European settlers has wrought many irreversible changes in the valley over the past 264 years. The initial settlement plan of 1726 had an environmental soundness, however, with houselots laid out along Main Street on the bluff above the intervale. As it was subject to periodic flooding, the intervale was divided into tillage plots assigned to each of the houselots.

Main Street evolved gradually into the commercial center that is now "Downtown", and ferry crossings were replaced with bridges that have led to the present day commercial arteries of Manchester Street and Loudon Road. With the coming of the railroad in and around 1840, most of the tillage lots laid out in the intervale in 1726 were lost to rail yards and ancillary commercial development. The "Historic District" at the northerly terminus of North Main Street and the adjacent farmlands of the Woodman family are all that remain of the original European settlement of this part of the valley.

In the twentieth century, the Interstate Highway system followed the path of the railroad up the river valley. Each of the six interchanges of I-93 has become the focus of development for the surrounding area including Fort Eddy Road, Loudon Road, Manchester Street, Hall Street, the Technical Institute grounds, Locke Road in East Concord, and Whitney Road in Penacook.

Yet with all the changes made to the valley since the year 1726 when the European settlers decided to establish a community in Chief Passaconaway's paradise, there is still much of natural and scenic value that remains both in and around the urbanized areas of Concord. This is a result in part of land ownership patterns with vast acreages under the control of both the State and City governments, and a significant amount in the hands of tenacious and enduring Yankee farmers.

The other key factor in perpetuation of the valley's natural and scenic splendor is the meanderings of the river itself. The river continues to do what it has done since the glaciers receded millenia ago. Spring freshets and fall rains cause flooding during which the current scours one embankment and leaves deposits on

another. In larger floods the river has lopped off curves and bends, straightening its course and leaving behind oxbow ponds. Since 1726, the old West Concord river channel has become a pond as have Fort Eddy and Sugarball Ponds.

Man has tried only a few times to influence the flow and path of the river here in Concord. A canal was begun to bypass Sewalls Falls, but activity ceased with the coming of the railroad. The oxbow at Goodwin's Point was bypassed through the channelization efforts of the Northern Railroad in 1846. Later in the 1800's, the Sewalls Falls and Garvins Falls Dams were constructed for power generation. None of the twentieth century flood control reservoirs were built within Concord, although upstream measures do influence the river as it passes through Concord. In the 1970's, the City of Concord adopted floodplain zoning to help to prevent encroachment in the natural floodwater storage areas along the river.

Within the last five years, a debate raged around the re-establishment of Sewalls Falls Dam as a hydroelectric generating facility. In the midst of the debate, the old dam was breached during a flood, providing a symbolic end to the hydroelectric discussions and ushering in a new era of concern for the preservation of the river. This year, the State of New Hampshire has designated the Merrimack River, as it flows through Concord, as part of the Rivers Management and Protection Program. Legislation is now pending at the national level to confer federal "Wild and Scenic River" status to the Merrimack.

It is in this historic, physical, legal, economic, and environmental setting that CCT finds itself in the waning years of the twentieth century trying to insure that Concord's future generations of the twenty-first century and beyond will be able to experience the river as it is now in 1990, and as it has been experienced since 1726.

THE CONCEPT OF A GREENWAY

"Greenway" has become a popular term to describe a corridor of open space, both public and private, along a feature such as a river or even a highway. Greenways are located near urban or urbanizing areas so that the people who live in these areas can enjoy the open space by driving, boating, or hiking through these greenways. The public portions of greenways often become parks, while the private portions remain in private farm or forest activity, and are for the scenic and visual enjoyment of the public. This concept has been employed in Europe for many years where population densities are at high levels and open spaces have grown more scarce, and hence, more valuable for a variety of public and private purposes. Greenways have been growing in number and popularity in the United States over the past 15 years and were the focus of a report of the Commission on Americans Outdoors appointed by President Reagan in 1985. Today, there are over 250 greenways completed or in progress across the nation from big cities like Denver, Seattle, and San Francisco, to places like Tallahassee, Albany, and even Peoria.

CCT's goal is to seek conservation agreements and easements throughout the Merrimack River Valley in Concord to insure that "green" areas remain just that - that farms continue to be farms, that forest and field be perpetuated for Concord's future generations. This is the concept for the Merrimack River Greenway.

THE MERRIMACK RIVER GREENWAY

The Greenway will be described by reach of the river, from north to south with the flow of the river, starting at the Boscawen town line on Hannah Duston's Island.

Reach 1 The Boscawen/Canterbury town line to the Sewalls Falls Bridge

On the west side of the river, the Greenway extends from the river to Penacook Street, excluding the homes and farm buildings adjacent to the street. The municipal wastewater treatment facility is included in this reach as is a small wetland area donated to the Concord Conservation Commission by Mrs. Florence Randall. The bulk of this section of the Greenway is the pastureland and tillage of the Morrill Family who have operated this farm for most of this century. South of Goodwins Point, the Greenway includes the City's old landfill on Abbott Road and portions of the property of Frederic Rust, now under agreement with the Trust for New Hampshire Lands.

On the east side of the river, the Greenway includes the sod farm on Hannah Duston Drive, and the ravine and outlet of Burnham Brook as it completes its journey to the Merrimack. Below Burnham Brook, steep sandy bluffs rise for most of the distance to the meandering outlet of the flows of Hayward and Hackett Brooks and the brook from Snow Pond. The bluffs, the outlet, and the shoreline to Sewalls Falls Bridge are all part of the Greenway.

Reach 2 Sewalls Falls Bridge to the Interstate 93 Bridge

West of the river, the land ownership is dominated by the City and State. The greenway includes the Beaver Meadow Golf Course,

the Sewalls Falls site, the Morono and Knight parcels under the aegis of the Concord Conservation Commission, and the vast farmlands of the New Hampshire State Prison. A portion of railroad right-of-way, and a wetland associated with the former Rock of Ages Granite processing facility, link the prison lands to the historic farmlands owned by the heirs of the Reverend Timothy Walker.

On the east side of the Merrimack, the Greenway includes lands between I-93 and the river from Sewalls Falls Bridge to the Dam. Below the dam the Greenway follows the bluff line southerly to the broad expanses of the sod farms which stretch southerly to the old Locke Road. The easterly edge of the Greenway follows a ridge line that separates the sod farms and adjacent wetlands from the Keewaydin Industrial Park. South of Locke Road, the Greenway would embrace all the wetlands, farmlands, and forest lands on West Portsmouth Street and on to the river, exclusive only of the existing homes along West Portsmouth Street.

Reach 3 Interstate 93 Bridge to the Interstate
393 Bridge

West of the river, the Greenway includes the floodway areas of the grounds of the Technical Institute as well as the land around Fort Eddy Pond. Bradleys Island, within the river itself and which is part of the Technical Institute's property, is also part of the Greenway.

East of the river, the fields adjacent to the river, most of which are owned by the Society for the Protection of New Hampshire Forests, together with the Society's headquarters atop the bluff, anchor the Greenway which continues along the bluffs and includes the Sugarball farmland and Sugarball Pond below the bluffs adjacent to I-393.

Reach 4 Interstate 393 Bridge to the Bridge Street Bridge

The State and the City own all of the land within the Greenway on the eastern bank of the river between the State office park on Hazen Drive and the Everett Arena and the fire training site on Loudon Road.

West of the river, other than the old City "stump dump", all of the property is privately owned, principally in commercial usage along Fort Eddy Road. The Greenway is limited in this area to the Floodway which forms a green fringe along the rear portions of these commercial properties.

Reach 5 Bridge Street Bridge to the Manchester Street Bridge

All of the land between I-93 and the river is part of the Greenway on the west side of the river. This entire area is in public ownership, under the control of the City and the State. On the eastern shore, the Greenway includes the vast agricultural acreage operated by the Bartlett family, as well as the bluffs that rise above these fields. Southerly of the agricultural lands, the City owns a stretch of wetlands below the old landfill on Old Turnpike Road, which leads to Terrill Park just north of the Manchester Street Bridge.

Reach 6 Manchester Street Bridge to the Confluence with the Soucook River

On the west side of the river, there is but a fringe of trees between the automobile junk yards that line Basin Street and the river itself. The only substantial acreage to be included in the Greenway north of the Bow townline is the floodway portion of the site of the municipal wastewater treatment plant on Hall Street.

East of the river there is also a fringe of trees along the bank from the bridge to a point southerly of the old drive-in theater site. Below that point, there is an area of former pastureland bordered by the sandy bluffs that comes to a dramatic hairpin bend in the river where the bluffs drop directly into the water. Atop the bluffs at this bend is the Passaconaway Club which is a vantage point for a vista of this reach of the river valley. All of the land southerly of this point to the Soucook River belongs to Public Service of New Hampshire and the Greenway would include the land from the top of the bluffs to the river.

THE CONCEPT OF CONCORD'S RIVER TRAIL SYSTEM

There are many issues to be addressed and resolved in planning for a trail system. Such issues include the type of trail both in terms of users and surfacing materials, the desired route of a trail, points of access to the trail system, the features of the community other than the river that should be part of the trail experience, and the development of a management system to provide for the maintenance of the trail once it is constructed.

The trail system envisioned by CCT is one that would provide maximum accessibility and utility to the citizens of Concord, from the very young to the senior citizens. That is not to say that the trail is limited to use by Concord citizens, for it will be open to the general public of New Hampshire and all tourists and visitors to New Hampshire. But there are intended to be features that are of special interest and benefit to Concord's citizens, and that will proudly display Concord to its visitors.

While it is physically and financially impossible to make the entire trail accessible to the handicapped, it is intended that certain segments of the trail be barrier free to allow everyone a chance to experience the river valley.

Hiking and cross-country skiing are the principal types of trail use that are contemplated with bicycling on "mountain" bikes a possibility at least on portions of the trail. Motorized vehicles of any kind are not to be allowed on the trail which may have to incorporate certain physical elements designed to impede such motorized vehicles. To facilitate the desired use, a path or so-called "treadway" of the trail will be of gravel with occasional wooden plank surfaces to cross streams or wet areas. Asphalt pavement would be utilized in rare and isolated instances, perhaps only to facilitate handicapped accessibility where necessary.

Trails are desired on both banks of the river with as many points of crossing as are available via existing bridges. To the greatest extent possible, the trail corridors are intended to be in fields and forests along the river or on the bluffs above the river, with streets and roads being utilized only where absolutely necessary for continuity. The general presumption is that segments of the trail system would be utilized on a "day trip" basis with hikers seeking to travel within a day from point A to point B, or alternatively, traveling in a loop to return to their point of departure. The extended "through" hiking, similar to that which occurs on the Appalachian Trail, may occur along the Heritage Trail, but at the present time, there are no plans for shelters or campgrounds to facilitate that kind of hiking.

With trails on both banks of the fourteen miles of river passing through Concord, a number of access points or "trailheads" are needed to serve both the Concord neighborhoods as well as the

visiting public. Sites adjacent to bridge crossings are desirable because there is an ability to choose which side of the river to hike on and there is an ability to achieve a loop by hiking to the next bridge crossing and returning on the opposite side. Obviously, some parking facilities are the minimum necessity for an access point. Trash receptacles, restrooms, picnic areas, boat ramps, and bike racks are all desirable additional features.

Historic and cultural resources that are in proximity to the river should be integrated into the trail system either as trailheads or as destination points for side trails. Major cultural facilities with substantial parking lots are natural points of access to the trails, while a group of historic buildings and markers provides an interesting side trail, with a theme in contrast to the dominant environmental motif of the main trail system. Existing parks and boat ramps are other features to be linked by the trail.

Once the trail has been designed and constructed, there is a need for a well conceived management plan that makes provision for things as mundane as litter collection, to something less common such as a major flood that destroys a section of the trail. A system is needed to allocate responsibilities to various agencies and volunteer groups who will respond to specified circumstances. It is intended that all trail users have, to the greatest extent possible, a positive experience on the trail, and one simple way to help insure this is to provide a well maintained trail.

RELATIONSHIP TO THE NEW HAMPSHIRE HERITAGE TRAIL

The New Hampshire Heritage Trail, as proposed by Governor Gregg and affirmed by the Legislature, will stretch some 230 miles from the Massachusetts border to Canada following the Merrimack and Pemigewasset Rivers to Franconia Notch and on to the Connecticut River and Lakes. Intended to be much like the Appalachian Trail, it will pass through urban and rural areas of the State, with each community along the way participating in the planning and development of the Trail within its municipal limits. Each community must coordinate its efforts with its neighboring towns to insure continuity of the Trail.

The Heritage Trail will be principally for hiking, cross-country skiing, and mountain biking. Trail coordination and assistance is being provided by the New Hampshire Division of Recreation and Parks with a helping hand from the National Park Service and the Appalachian Mountain Club. Some portions of the Trail have been completed by the New Hampshire Conservation Corps but most sections are expected to be constructed by local volunteers and community groups.

The trail system planned by CCT for the Merrimack River Valley in Concord is designed to fulfill the goals of the Heritage Trail. Options have been devised to provide linkage to Concord's neighbors to the north and south, although the actual coordination with the representatives of those four communities remains to be accomplished. The plan has been presented to the Heritage Trail Advisory Committee, and the National Park Service has agreed to provide technical assistance to CCT. Ultimately, CCT will have to nominate all or portions of its trail system to the Heritage Trail Advisory Committee to gain official designation as part of the Heritage Trail.

THE MERRIMACK RIVER TRAIL SYSTEM

The trail system will be described as the Greenway was, by reach of the river, from north to south.

Reach 1 The Boscawen/Canterbury town line to the Sewalls Falls Bridge

The "park 'n ride" lot off of Route 4 in Boscawen provides an access point and trailhead for this reach of the river. An existing path leads to the Hannah Duston monument on an island at the confluence of the Contoocook River with the Merrimack. A foot bridge is strapped to the side of the railroad bridge to reach the island but there is no such additional foot bridge to reach the Penacook shoreline from the island. Ideally, another foot bridge could be strapped to the railroad trestle connecting to Penacook, or if the railroad is to be abandoned, a subject now under consideration, the trestle itself could be converted to a foot bridge. At present, a hiker would have to follow East Street from Route 4 into Penacook bearing south and east on Bridge Street and Merrimack Street to reach Penacook Street at the point where the rail line crosses from Hannah Duston's Island.

There are two potential trail connections from this point to the Sewalls Falls Bridge. The most direct route would be southerly along the railroad tracks which could be accomplished through either the aforementioned abandonment of the rail line or by obtaining trail rights along a proposed sewer easement that the City is now pursuing to pipe the effluent from the Penacook Treatment plant to the Concord sewer system at Sewalls Falls Road.

The alternative to a trail along the tracks is to follow Penacook Street southerly to Abbott Road, turning easterly on Abbott Road and entering the old City landfill that is scheduled to become a park. The City land abuts property being acquired by the Trust for New Hampshire Lands so that, ideally, the trail would continue through this parcel along Goodwins Point and the main stream of the river to Sewalls Falls Road at the Bridge. The steep slope between the old landfill and Goodwins Point may force the trail back on to Abbott Road and Manor Road to negotiate the grade change. This trail option allows for access to and from Rolfe Park off of Penacook Street, and brings the hiker past a cluster of homes of historic architectural significance on Penacook Street near Rolfe Street.

A trail on the east side of the river in this reach would begin at the same parking lot on Route 4 with the trail following the sidewalk easterly across the bridge to Hannah Duston Drive and southerly and easterly along Hannah Duston Drive to its present end at Burnham Brook. There are several houses of historic architectural significance along Hannah Duston Drive. The remains of the old Hannah Duston road form a reasonable path southerly across the brook and along the top of the bluffs. At some point in the not too distant future, Whitney Road may be extended southerly in this area and the trail can follow along the shoulder of the road. At a point where the old Hannah Duston Drive swings easterly and disappears in the I-93 right-of-way, the trail would stay close to the top of the bluff above the river, descending to the shoreline at the outlet of Hayward Brook. The trail would then follow the brook easterly to the

future alignment of Whitney Road and stay on the road southerly past the Concord Monitor to Sewalls Falls Road.

Reach 2 Sewalls Falls Bridge to the Interstate
93 Bridge

The Sewalls Falls site, now under the aegis of the State of New Hampshire Fish and Game Department, will be another point of access or trailhead. N.H. Fish and Game intends to locate a parking area immediately south of the bridge where an informal parking area now exists. A current footpath is to be improved to trail status southerly through the state land to the site of the dam and powerhouse where another access point and parking lot are proposed off of Second Street. There is access along this entire area to and from Beaver Meadow Golf Course which is a wintertime cross-country skiing center. There is also adjacent to the end of Second Street an archeological site relating to the Indian culture which flourished for centuries in Concord prior to the coming of the European settlers.

Southerly of Second Street, the trail has two optional paths around the Old West Concord River Channel. North and west of the Channel are lands of the City, the Morono Conservation Area, and the Knight parcel, and easterly of the Channel is Sewalls Island which is the northerly end of the N.H. State Prison farmlands. While it may be some time before arrangements can be made for a public trail on the prison property, ultimately a trail is desirable for the entire length of the prison farmlands beginning at Sewalls Island and running southerly, utilizing one of the existing underpasses to get under the railroad and out to the river's edge until wetlands force the trail back to the edge

of the railroad right-of-way. After a short section between the railroad and the river, the trail would enter the historic farmlands of the Woodman family, heirs of the Reverend Timothy Walker. The City's interceptor sewer easement makes a good trail bed on causeways across Horseshoe Pond and across Horseshoe Island to Commercial Street. At this point, a hiker could turn westerly and enter Concord's Historic District at a point adjacent to the Pierce Manse. The Historic District can also serve as another trailhead. The trail on the westerly side of the river in this reach finishes its journey on Commercial Street and Fan Road crossing over I-93 to the McAuliffe Planetarium on the campus of the N.H. Technical Institute.

East of the river, in Reach 2, the trail would follow an existing gravel road along the bluffs southerly of Sewalls Falls Road to a point near the dam, descending the bluffs below the dam to the sod farm northerly of the Old Locke Road. At the road, the trail can split, with one branch following the old road past the remnants of the canal begun and abandoned in the 1830's, out to the present Locke road and the East Concord Interchange of I-93. The other trail option at Locke Road would continue southerly along the river to West Portsmouth Street and along West Portsmouth Street to the interchange. In times of low water, it may be possible to enter the boat ramp area off of West Portsmouth Street and follow the shoreline under the railroad bridge and the I-93 bridge to reach East Concord.

Reach 3 I-93 Bridge to the I-393 Bridge

West of the river, the entire trail is on the campus of the N.H. Technical Institute, with the Institute and the Planetarium both being points of access. The Planetarium, particularly, is a focal point as it sits astride a major point of north/south, east/west circulation in the trail system. From the path to the I-93 bridge over the river the trail would stay near the river, although there are wetlands in the northerly part of the campus. There is also an internal path through the campus to allow for a loop within this reach.

East of the river the trail would enter the premises of the Society for the Protection of New Hampshire Forests off of Portsmouth Street adjacent to Mill Brook. There is an option for connecting to a local historic trail of buildings, sites and markers in East Concord Village. Both Merrill Park and the SPNHF Conservation Center can function as trailheads.

The trail can loop through the SPNHF property but must return to Portsmouth Street at the Society's main entry and then follow Portsmouth Street and East Side Drive to I-393. There are some good views of the valley from these bluffs although there is no public vantage point. A side trip can be made down West Sugarball Road and, although there are no public lands and no trail connections to be physically achieved, there is one of the oldest residential structures in Concord at the end of the public roadway.

Reach 4 I-393 Bridge to the Bridge Street Bridge

With no pedestrian connection available on the I-393 bridge, the trails on both sides continue on. West of the river, the

trail will enter the old City "stump dump" and follow the river's edge behind the commercial activity on Fort Eddy Road to Bridge Street.

East of the river, the trail will follow the top of the bluff through the State office complex on Hazen Drive, dropping down to Loudon Road adjacent to the Everett Arena, another major access point for the trail system.

Reach 5 Bridge Street Bridge to the Manchester Street Bridge

West of the river, adjacent to Bridge Street, the trail would fall along the edge of I-93, at the river's shoreline. Moving southerly, the trail would enter a parcel long held by the City for a river front park. This parcel actually runs beneath the westerly span of the Manchester Street bridge.

East of the river, there are no readily apparent options for a continuous trail connection other than Airport Road and Old Turnpike Road that lead to Rotary and Terrill Parks, just north of the Manchester Street bridge. These parks are access points and trailheads for this reach. Further field reconnaissance of this reach is needed.

Reach 6 Manchester Street Bridge to the Confluence of the Soucook River

West of the river, the trail would emerge from under the Manchester Street Bridge and continue down Basin Street and Hall Street to the Bow town line. Only the City owned peninsula below the Hall Street treatment plant holds potential for access to, and recreation along the river.

East of the river, there is potential for the trail to run along the edge of the river below Garvins Falls Road, but this

will be something of a loop, returning northerly to achieve the grade change to get up to Garvins Falls Road. The trail would follow Garvins Falls Road past the Passaconaway Club to the P.S.N.H. land, utilizing existing power line rights-of-way to descend toward the river in the area of Garvins Falls Dam. An old railroad bed makes a good treadway southerly toward the area known as White Gate, and on to the Soucook River. A connection to Pembroke remains to be identified.

**DIRECTION FOR FUTURE ACTIONS TO FULFILL AND SUSTAIN
THE MERRIMACK RIVER GREENWAY AND TRAIL SYSTEM**

Both the Greenway and Trail System will require a major effort by CCT in the area of acquisition of land and rights in land. While some initial contact has been made with land owners, land values and landowner attitudes will make this a slow and cautious process. However, the rights obtained in this process are the foundation of this entire plan, and therefore, the time invested is well spent.

For the Greenway in particular, once rights in land have been acquired, for those rights in the form of easements, a monitoring system will be needed to assure that any violations of the easements are detected quickly and remedial action is taken.

While the acquisition process is on-going, there is a need for vigilance with regard to attempts to develop within the Greenway. Not all landowners care about the long term preservation of their land, and politicians are often more interested in immediate expansion of the tax base as opposed to protection of a priceless natural and historic resource. CCT must be ready to respond quickly and effectively to proposals for rezoning and variances.

With regard to the Trail System, it has been recommended that a specific segment of trail be identified and fully developed as a "demonstration" trail for the entire system. The dual benefits of this proposal are that CCT will be able to learn about trail maintenance and operations from this "demonstration" trail, and that landowners in other parts of the proposed trail system will have a chance to observe the trail in operation and CCT's response to operational problems. This process will establish a solid foundation and basis for the development of the entire trail system.

At the demonstration trail stage, CCT will have to develop a trail maintenance system to deal with everything from trash removal to trail repair. Ideally, some portions of the trail will be turned over to other agencies or organizations for maintenance, but CCT will remain the principal coordinating group for the system within Concord. In some cases, CCT may need to advocate for legislative assistance such as increased penalties for illegal refuse dumping.

Finally, to accomplish the Greenway and Trail System, CCT will have to pursue fundraising and grantsmanship. Even if all property rights were to be donated, funding is needed for surveying, title searches, and the like. The monitoring of protected land may be accomplished through volunteer efforts but enforcement could require costly litigation as may any environmental defense efforts. Ultimately, some property acquisitions will have to be by purchase, although perhaps at a discounted or bargain price. For all these purposes, fundraising will be vital to the success of the Greenway and Trail System.

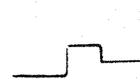
MAPS OF THE GREENWAY AND TRAIL SYSTEM BY REACH

KEY FOR ALL MAPS

Scale

1:1500

Property Lines



Greenway

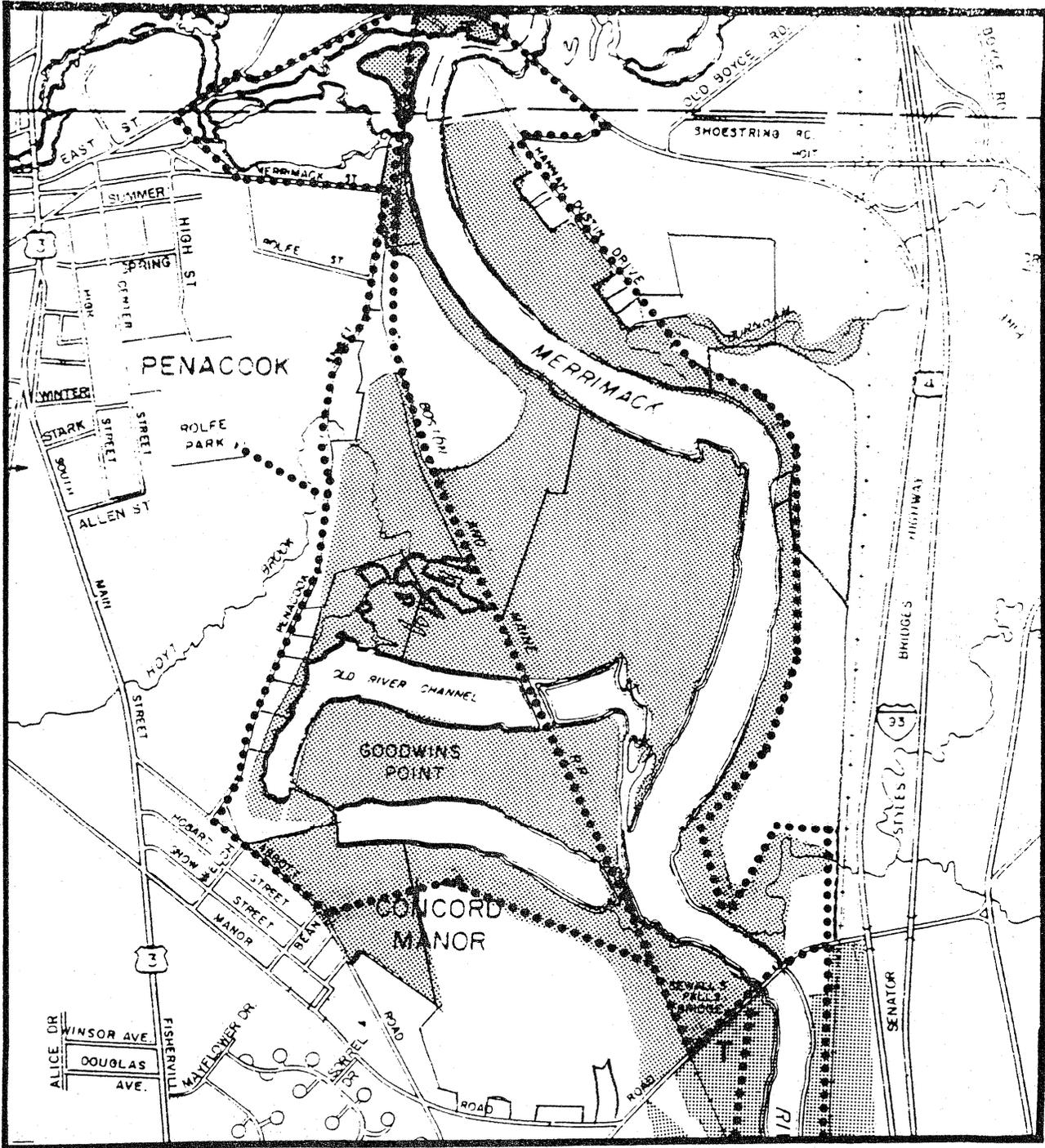


Trail

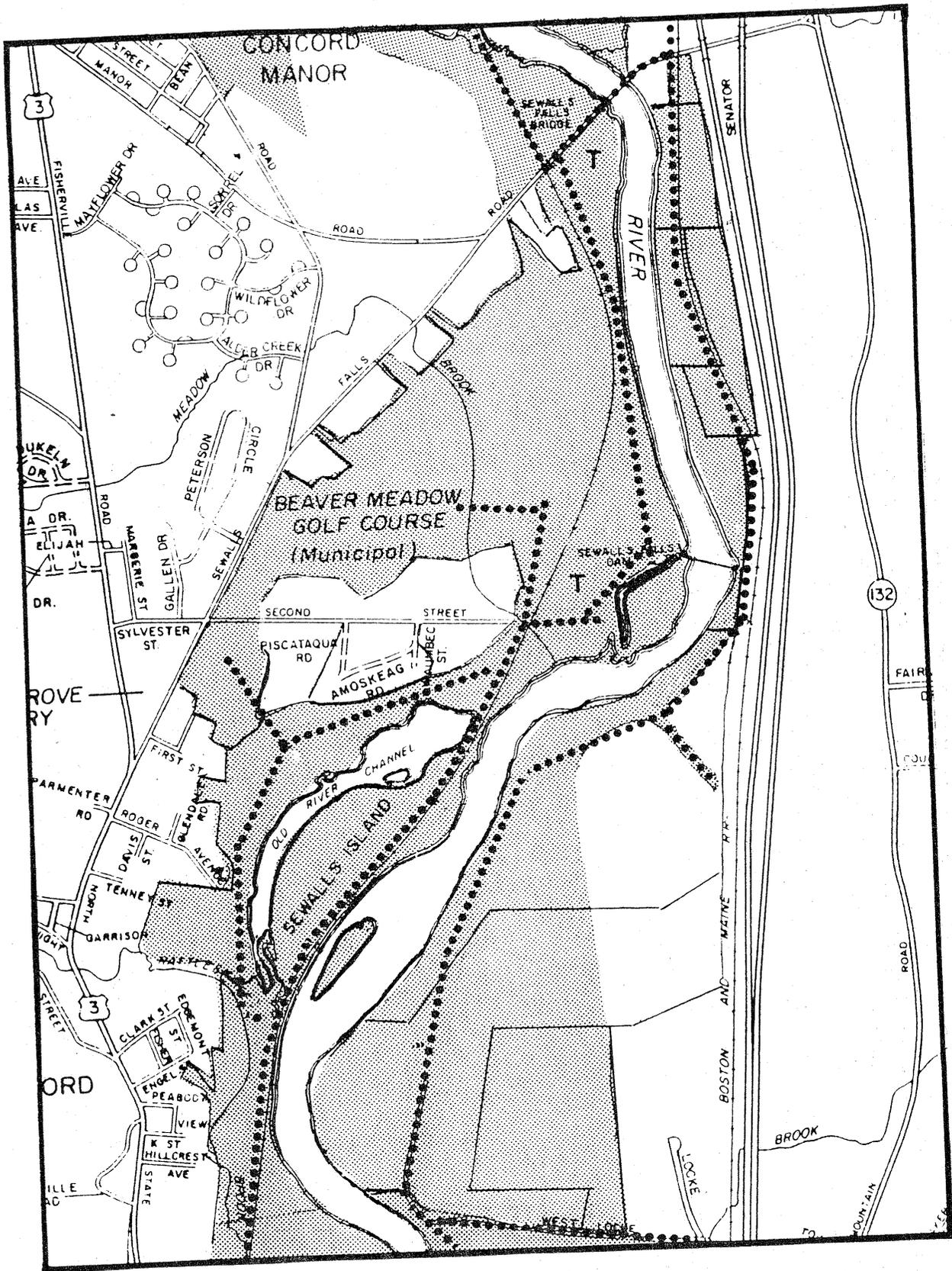


Trailhead

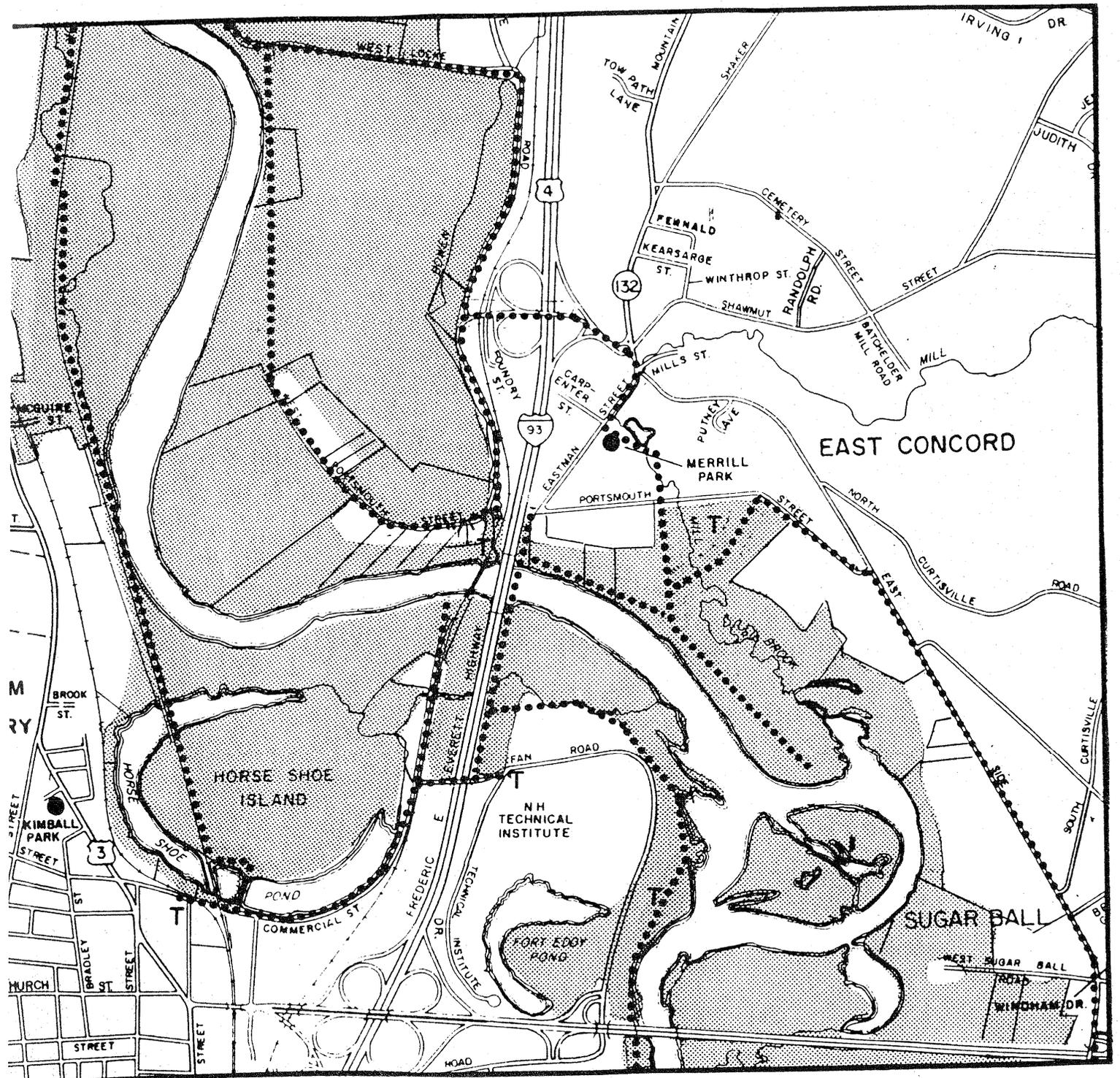
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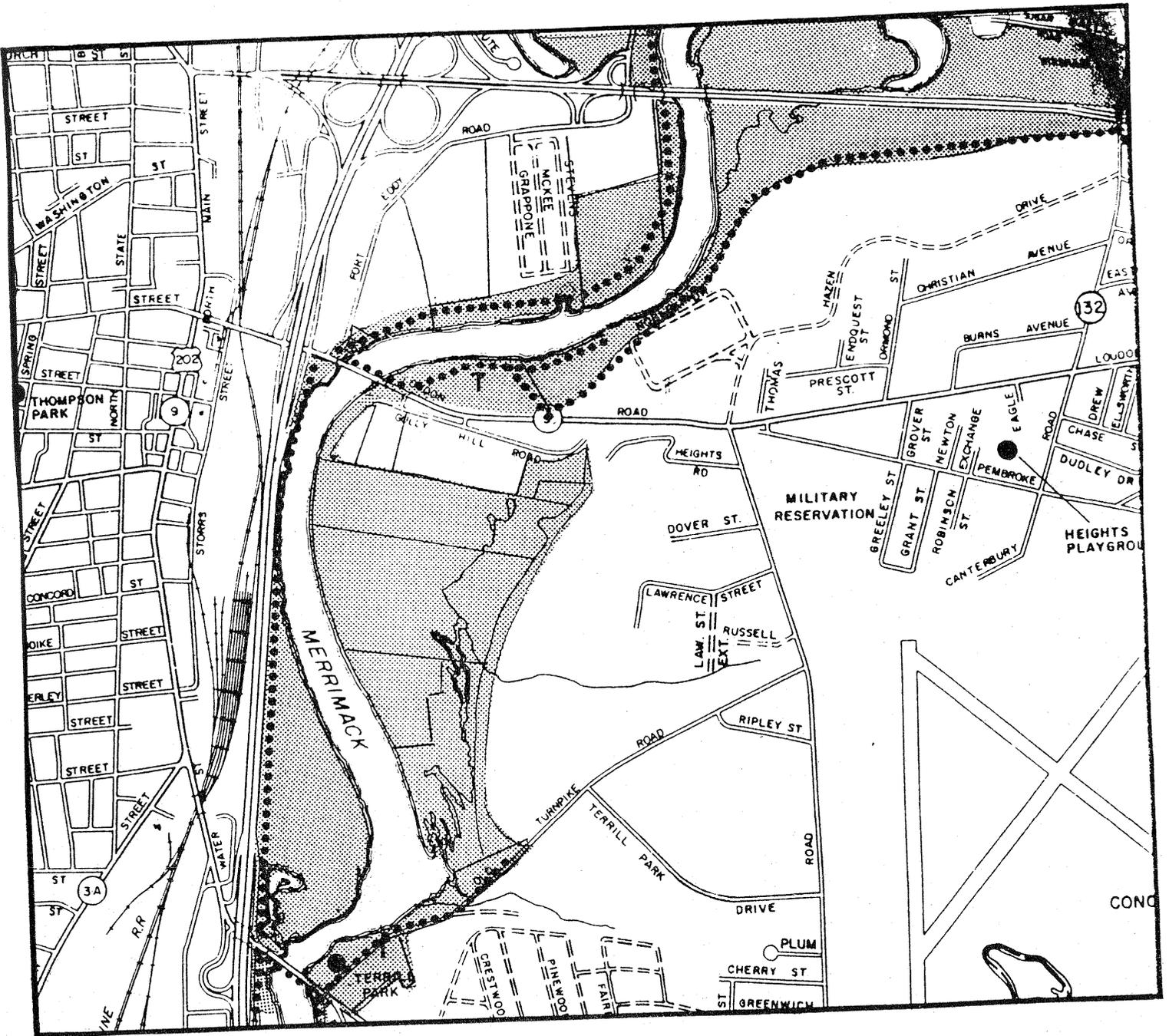
REACH 1



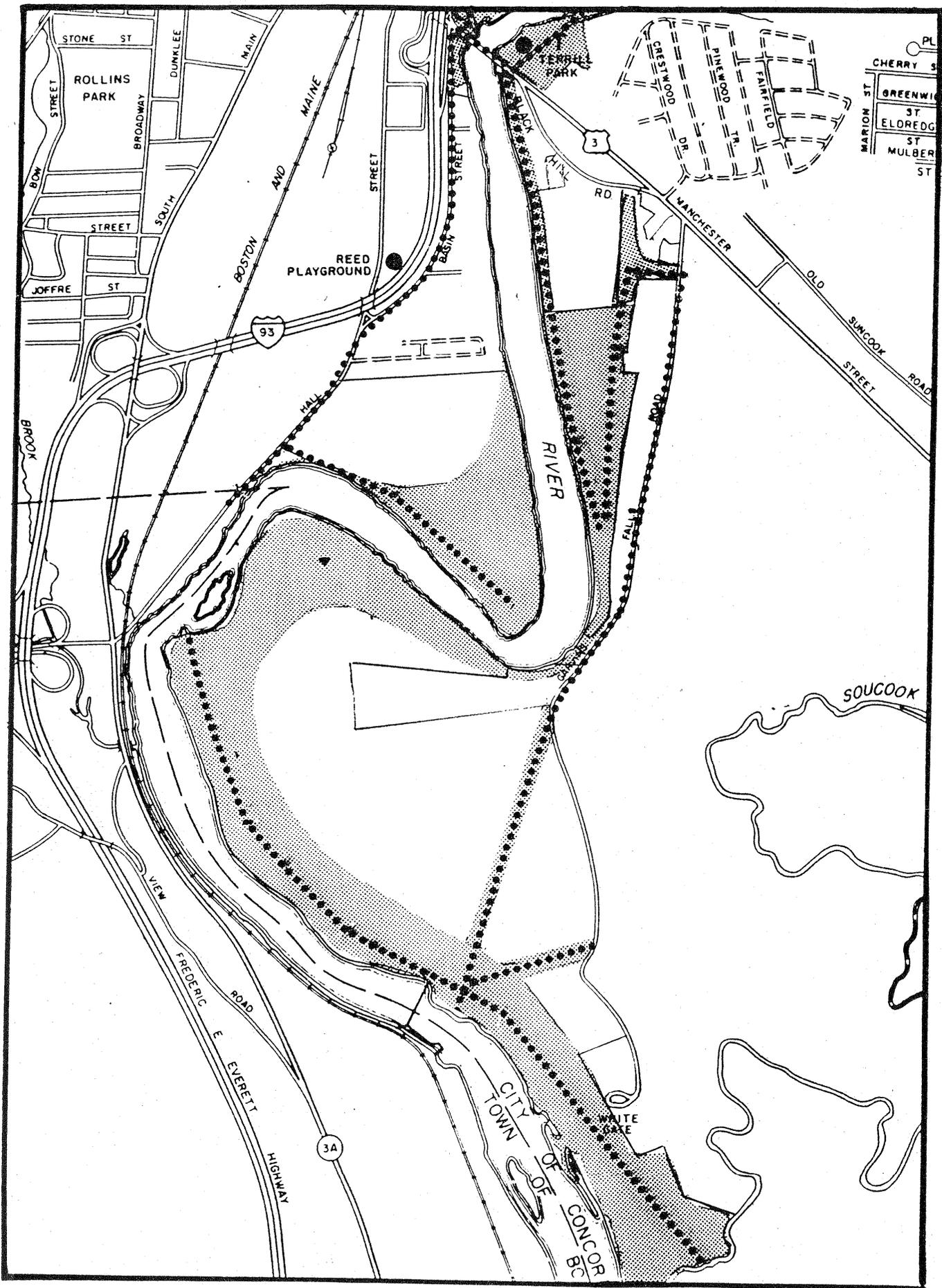
REACH 2 (partial)



REACH 2 (partial) & REACH 3



REACH 4 & REACH 5



REACH 6

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