

MILL BROOK LINEAR PARK





MIRIAM  
GUTTFREUND  
DE  
LEHRER

TUFTS  
UNIVERSITY

arlington  
conservation  
commission



TABLE OF CONTENTS

Forward . . . . . 1

Introduction . . . . . 1

Mill Brook: A Park . . . . . 4

    Foldout Map

    Illustrations of each section

Legal Tools for Implementation . . . . . 21

Costs: Landscaping and Maintenance . . . . . 24

A Management System . . . . . 26

Work Program . . . . . 28

Bibliography . . . . . 30

## FORWARD

The Mill Brook has been analyzed in numerous reports and on many maps of Arlington generally and of the Mill Brook Valley specifically. Reports on natural resources, transportation and utilities, as well as economics and history are available, all of which include references to Mill Brook. Analysis has been at both the local and regional levels. The afore-mentioned data provides a basis for study of the issues and facts that justify an open space system along the Mill Brook.

One of the first tasks accomplished for the summer study of the Mill Brook was the collection and review of resources that appear in the bibliography at the end of this report. Such a pooling of information has helped in the summer study of the Mill Brook and will continue to help in the implementation of the Mill Brook Linear Park. Case studies were done of Los Angeles' Ferndale Park and San Antonio's Riverwalk, two projects similar to the Mill Brook Linear Park, each having features that parallel strong possibilities for the areas along Mill Brook. A presentation package, consisting of color slides of Ferndale Park and San Antonio's Riverwalk and drawings of the Mill Brook Linear Park concept, has also been developed.

## INTRODUCTION

### OBJECTIVES

The Mill Brook Linear Park concept is not a new one; the 1926 Comprehensive Plan for Arlington recommended that a series of pocket parks be developed along Mill Brook. And in 1928 a study was done for the Arlington Planning Board by Fay, Spofford & Thorndike. This was a detailed comprehensive plan for a Mill Brook Park from the Reservoir to the Mystic Lakes, the object of which was to preserve the brook and provide recreational areas for the citizens of Arlington.

Since 1928 several attempts have been made to keep this idea alive. From 1930 to 1934 acquisitions were made to complete what is now Wellington Park at Mill Brook and Grove Street. In 1969 two acquisitions were considered by the Conservation Commission. One was that land along Mill Brook from Wellington Park to Brattle Street, a link that was not acquired, but was developed by Mill Brook Apartments mostly for parking, shortly thereafter. The other land was acquired and from 1971 to 1973 was developed as Cooke's



Hollow. This was really the first segment in the Mill Brook Linear Park in which the treatment of the brook was not incidental to the landscaping proposals. In fact, at Cooke's Hollow harmony exists among the solutions for hydrology, erosion control and passive recreation. This development was a joint effort by the Arlington Garden Club and the Conservation Commission.

Today we find different degrees of accessibility along the brook, in some areas access is limited due to the heavy industrial, commercial and residential uses near its banks.

The objective of this Mill Brook Linear Park study has been to take the concept and put together an implementation package so that very soon the concept can become a reality. This investigation was pursued not only with an eye towards quality and amenity, but also towards feasibility. With strong community support and town leadership the project can be realized. As becomes evident in this report, the Mill Brook Linear Park has a strong case in qualifying for public funds. What is needed, in addition, is the professional expertise to coordinate, design and implement the project.

#### METHODOLOGY

The first few weeks of the study were spent reviewing materials on the Town of Arlington, especially the Mill Brook Valley, including the Arlington Planning Board records on Mill Brook and a hydrology report. Concentration was on land use patterns, open space policies and management issues relating to recreational facilities.

The following map analyses were completed for those areas within 100 yards of the brook:

1. Brook conditions, i.e. natural embankment, open masonry culvert, closed culvert. (Note about one third of the length of Mill Brook falls in each of these three categories);
2. Land use patterns;
3. Patterns of ownership, i.e. individual-private, corporate, public and semi-public;
4. Pedestrian and vehicular access;



5. Views both along and of the Mill Brook Valley;
6. Built, non-built and parking areas;
7. Open space, recreation areas and environmental conditions (significant landscape features were investigated during field work of the brook);
8. Other areas of special interest, such as historical, commercial and craft activity areas.

From this series of overlays, the possibilities for linking open spaces and activity centers became very clear; still the Mill Brook Linear Park is a very challenging design problem. Based on physical elements as well as land use and management issues, the Linear Park was broken down into smaller divisions. During the investigative and design stages, there was a constant dialogue with members of the Conservation Commission, the Parks and Recreation Commission, the Department of Planning and Community Development and the Department of Properties and Natural Resources; their contributions were invaluable.

There are many funding programs for which the Town of Arlington may apply, therefore costs must be determined. Until dollar figures are available, a project has little or no credibility. After the preliminary design stage, costs were estimated for landscaping the park. How the costs were determined is described in the report.

Lastly, legal issues are discussed and management and implementation guidelines are proposed.



## MILL BROOK: A PARK

The Mill Brook is an asset to the Town of Arlington. It is a natural ecological system whose existence must be recognized and respected. The idea of preserving the Mill Brook in its natural state and developing it for recreation has been a concern among citizens; however, the Brook has been placed in a closed culvert in a number of sections, and in others the area immediately adjacent has been used for parking or storage. The ecology of the Brook has been disregarded by its being littered and contaminated by septic inflows in many places. This often causes unpleasant odors and/or leads to serious flooding problems for roadways and buildings adjacent to the brook. In general, abutters have regarded the brook as a nuisance and not as an amenity.

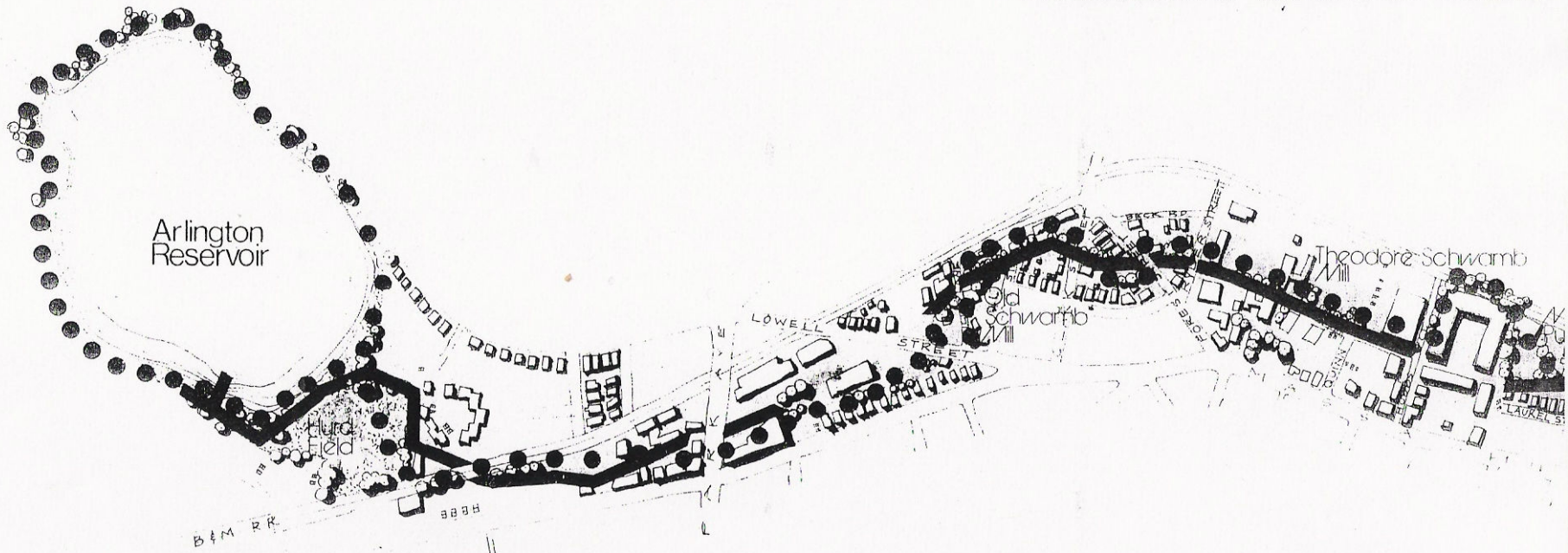
As noted in the Dober report, Arlington Open Space, by normative standards applicable to Arlington (core city, older region, densely populated) the town should have at least 135 acres of additional open space based on standards for outdoor recreation documented by the National Recreation Association, American Public Health Association and the Athletic Institute. Thus, the opportunity to preserve the Mill Brook in its natural state and secure areas for a Linear Park must be considered a pressing issue.

The Mill Brook Linear Park would join existing activity nodes such as schools, recreational areas, commercial and industrial establishments and sitting areas; outdoor commercial plazas, art exhibition areas, restaurants and outdoor cafes would be promoted. By reinforcing this spine, a new dimension of activities will be generated; socially and economically residents and entrepreneurs will benefit.

The plan for the Mill Brook envisions a continuous pedestrian walk, well lighted, maintained and patrolled for the pleasure and safety of all. A bridge crossing would occur where it is necessary for the path to change sides for easier construction and/or better utilization of land. In places where the brook runs under buildings or in deep or covered culverts the path will continue regardless. See foldout map and illustrations on the following pages.



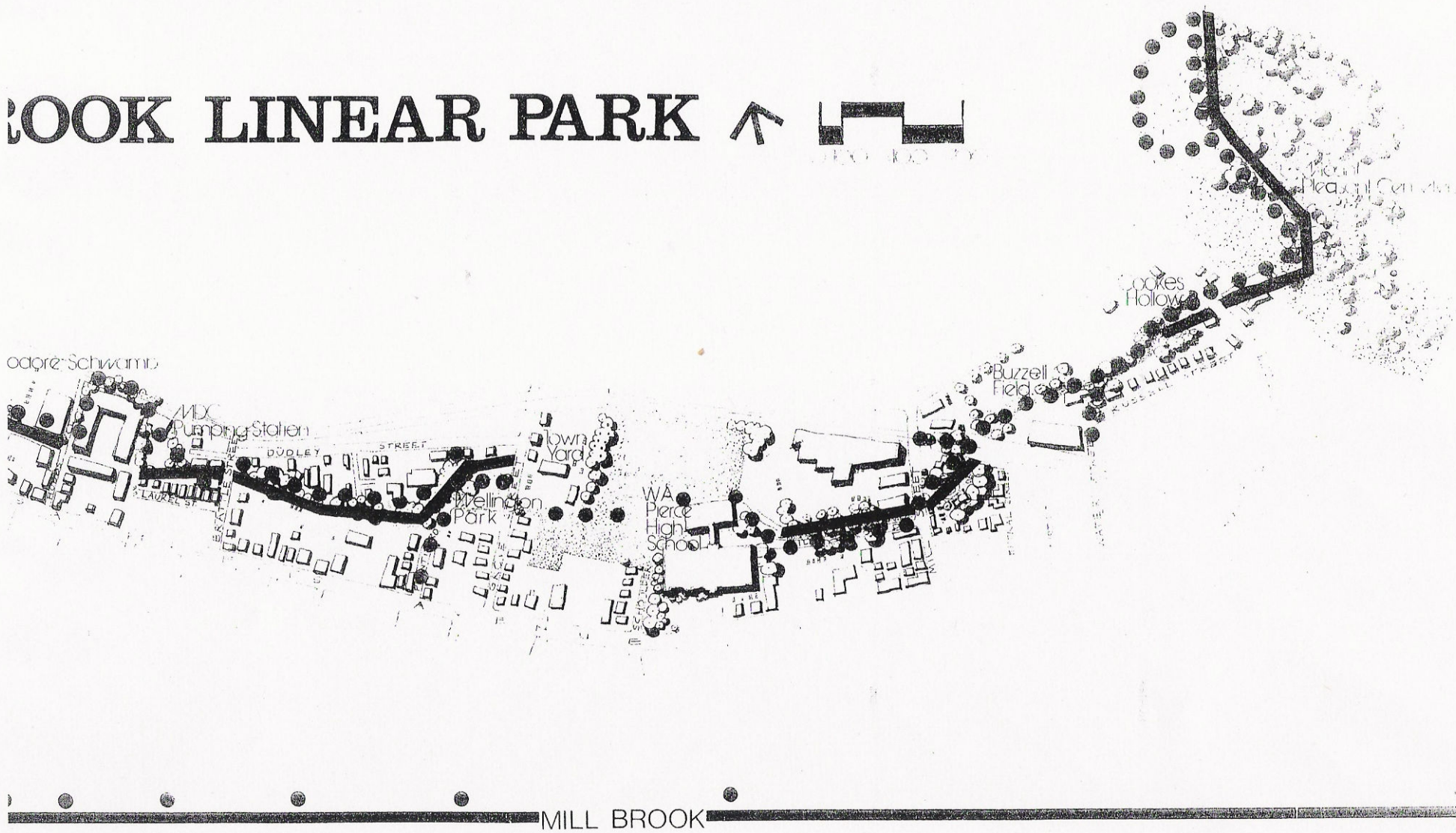
# MILL BROOK





Lower  
Mystic  
Lake

# LOOK LINEAR PARK



odgre:SchwamD

MDC  
Pumping Station

LAUREL ST

DUDLEY STREET

Wellington  
Park

Town  
Yard

WA  
Pierce  
High  
School

Buzzell  
Field

Lookes  
Hollow

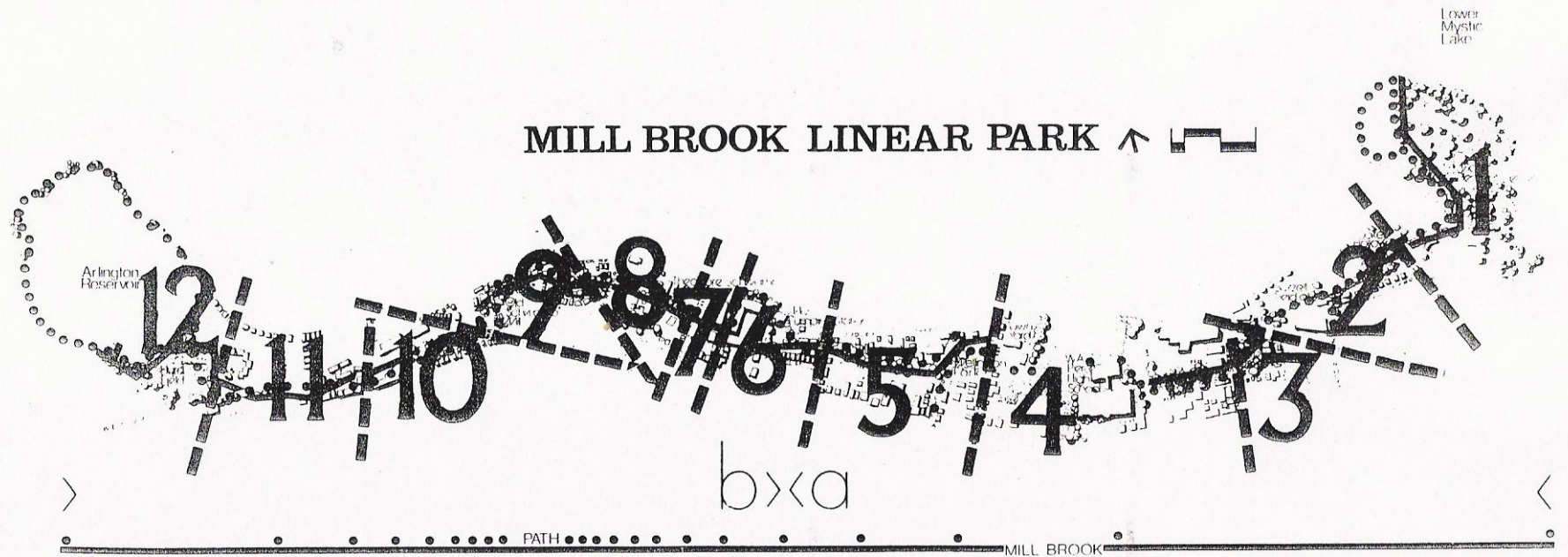
North  
Mystic  
Center

MILL BROOK



Hobbs Court to Quinn Road .7  
 Quinn Road to Forest Street .8  
 Forest to Lowell Street .9

Cemetery and Meadowbrook Park .1  
 Mystic Street through Buzzell Field .2  
 Adamian Property .3



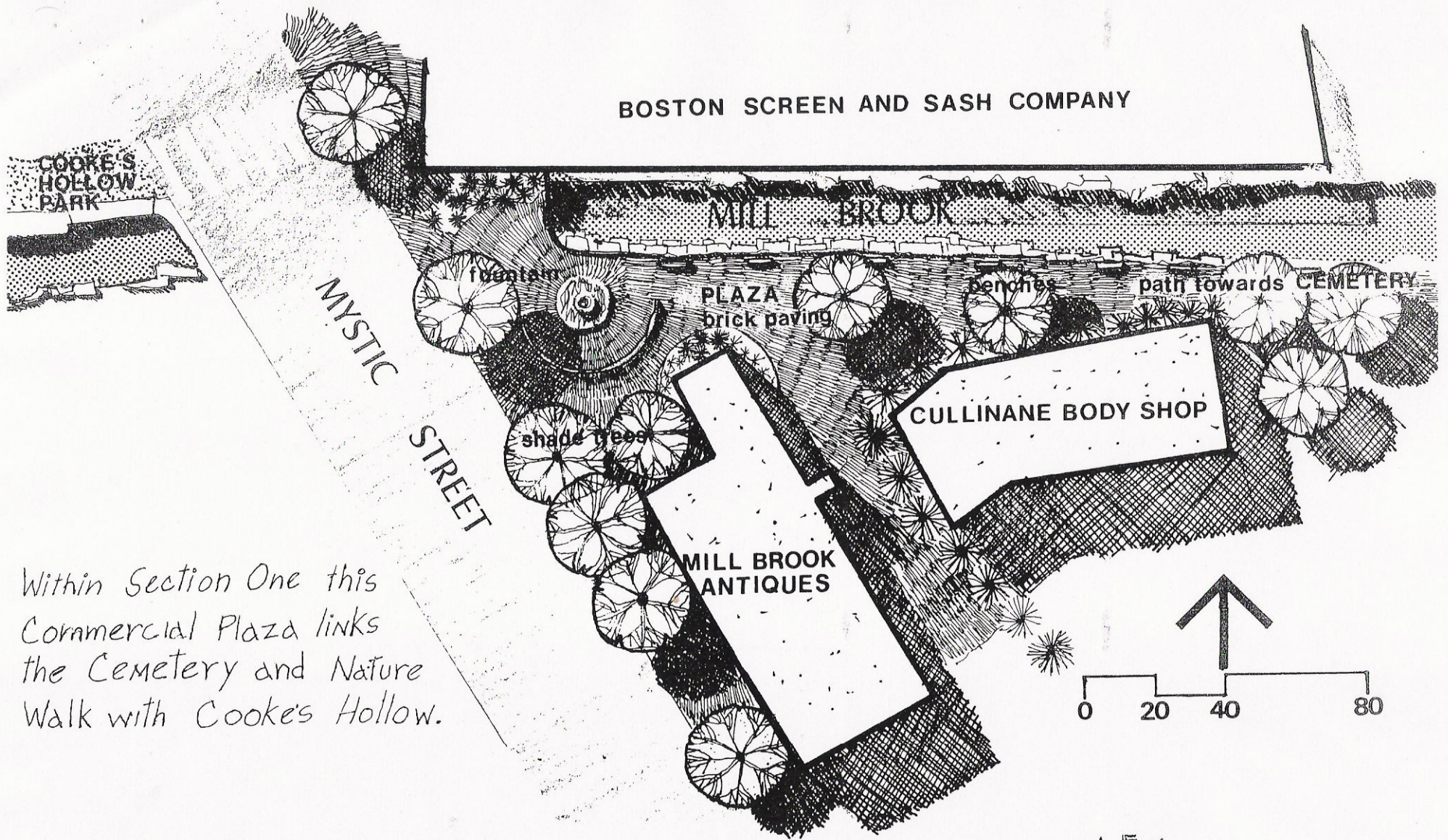
Lowell Street to Park Avenue .10  
 Park Avenue to Hurd Field .11  
 Hurd Field and Reservoir .12

High School Property .4  
 Grove to Brattle Street .5  
 Brattle to Hobbs Court .6

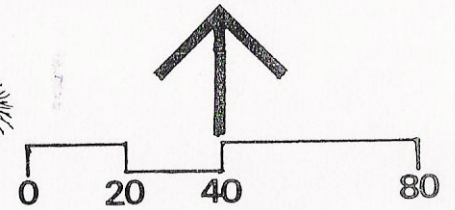


BOSTON SCREEN AND SASH COMPANY

COOKE'S HOLLOW PARK

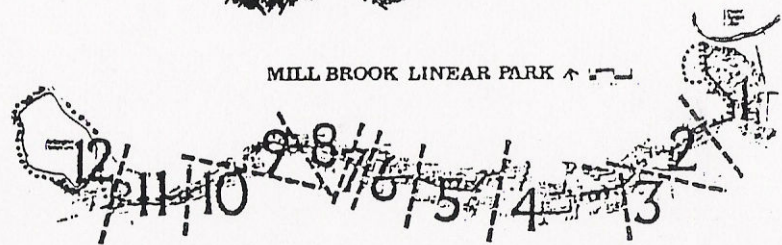


*Within Section One this Commercial Plaza links the Cemetery and Nature Walk with Cooke's Hollow.*



MILL BROOK LINEAR PARK

CEMETERY



1



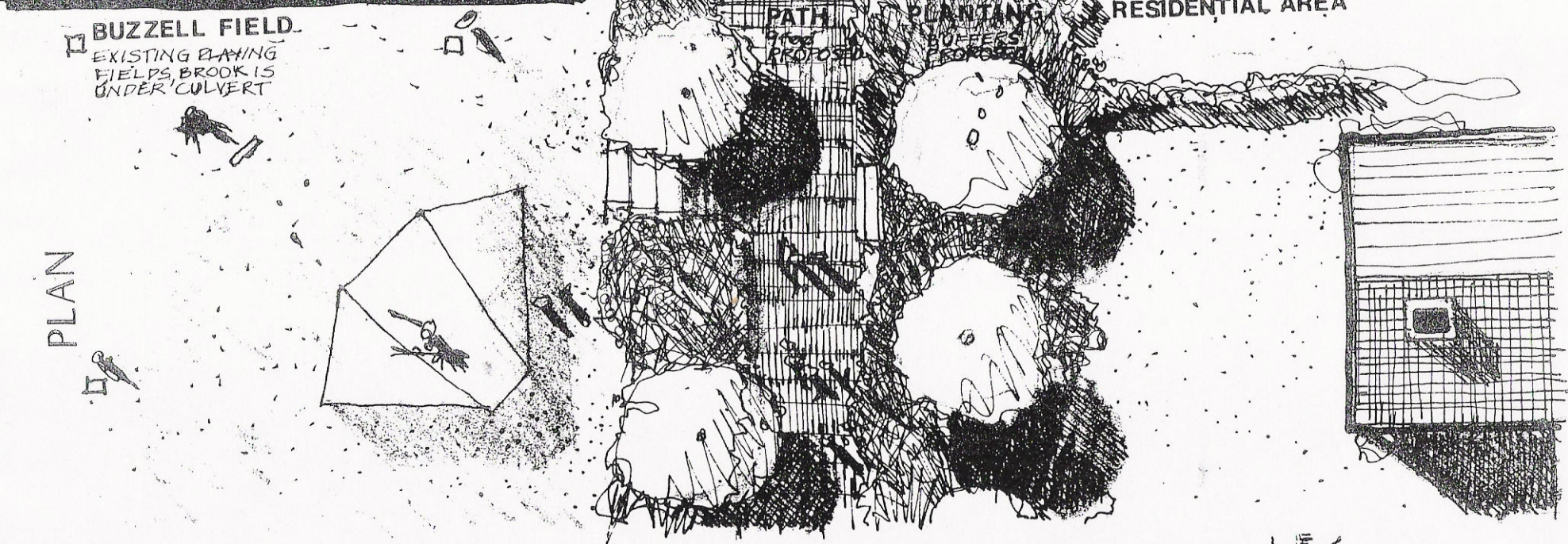
SECTION



BUZZELL FIELD  
EXISTING PLAYING  
FIELDS BROOK IS  
UNDER CULVERT

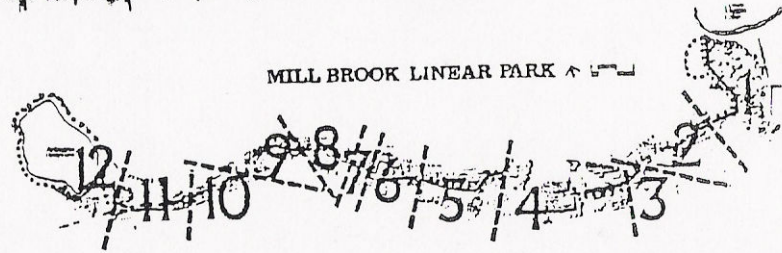
PATH  
PROPOSED  
PLANTING  
PROPOSED  
RESIDENTIAL AREA

PLAN



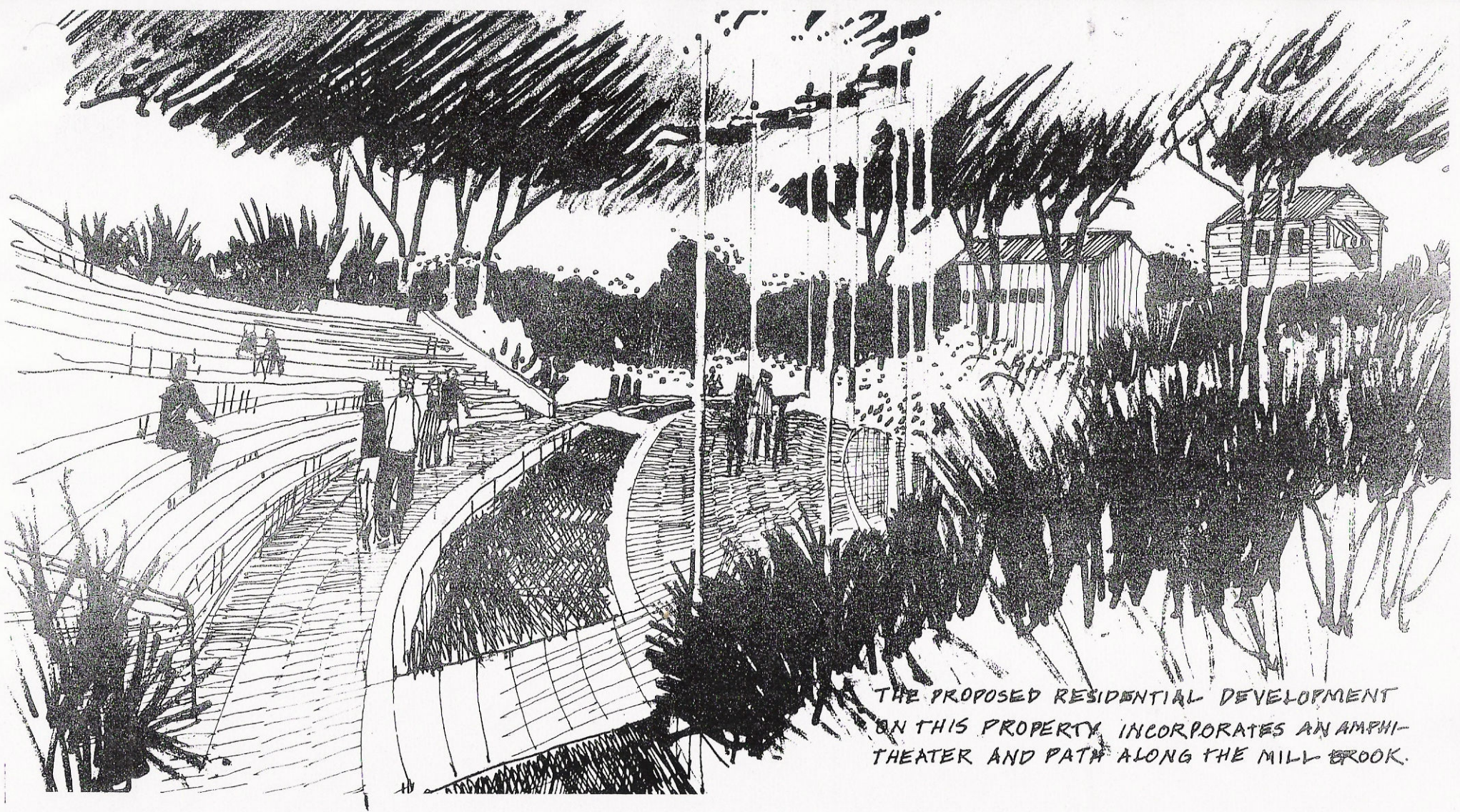
MYSTIC STREET to  
BUZZELL FIELD

MILL BROOK LINEAR PARK



2

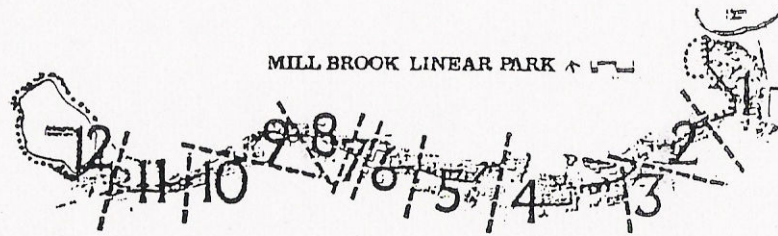




THE PROPOSED RESIDENTIAL DEVELOPMENT  
ON THIS PROPERTY INCORPORATES AN AMPHI-  
THEATER AND PATH ALONG THE MILL BROOK.

ADAMIAN  
PROPERTY

MILL BROOK LINEAR PARK



3

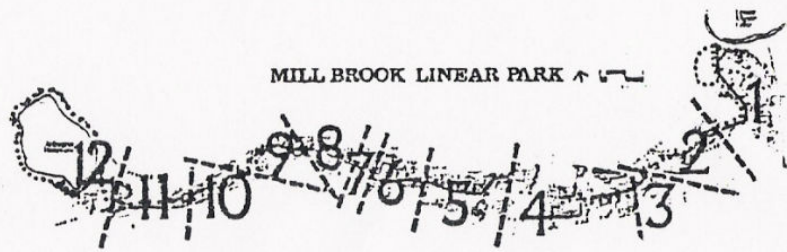




IN ORDER TO FACILITATE ACCESS  
TO THIS ACTIVITY CENTER THE  
SIDEWALK IS EXTENDED, PLANTING  
AND LIGHTING PROVIDED BETWEEN  
MILL BROOK DRIVE AND THE MILL BROOK.

VIEW: ARLINGTON HIGH SCHOOL

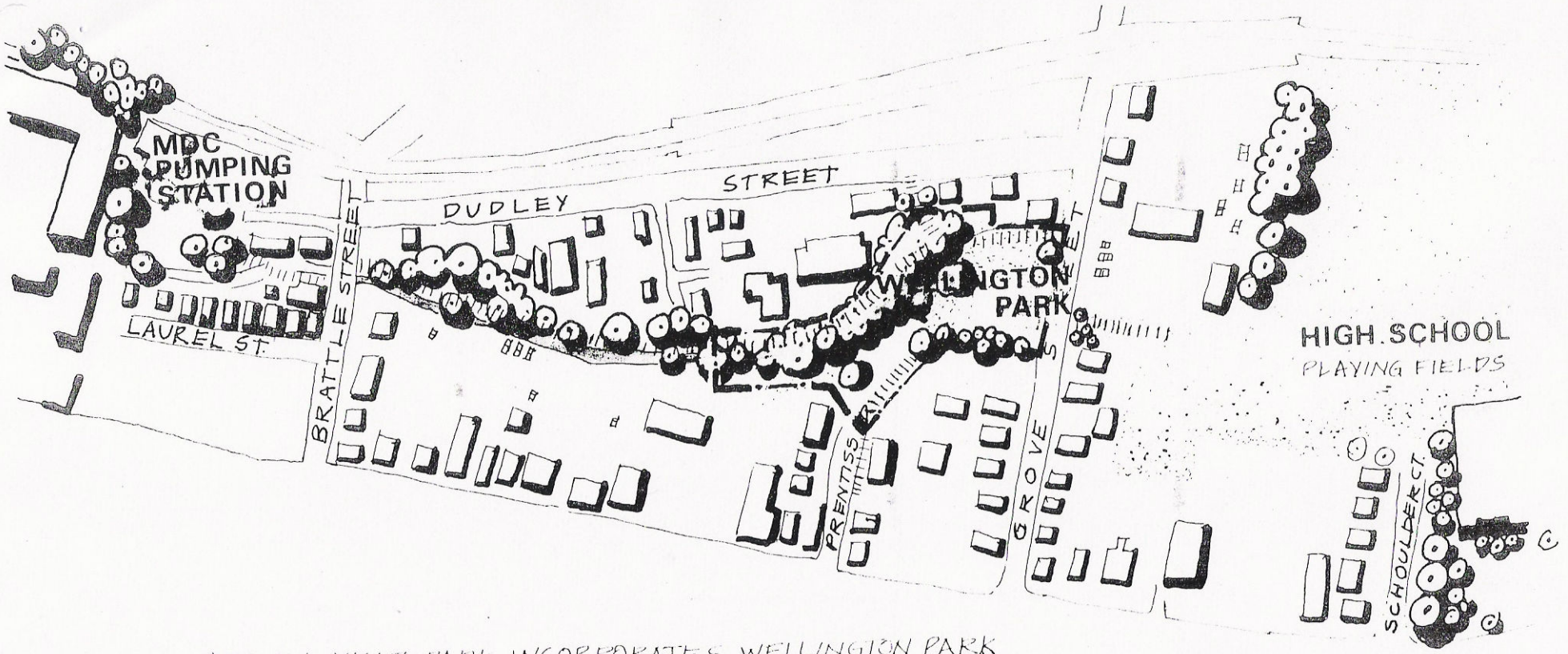
MILL BROOK LINEAR PARK



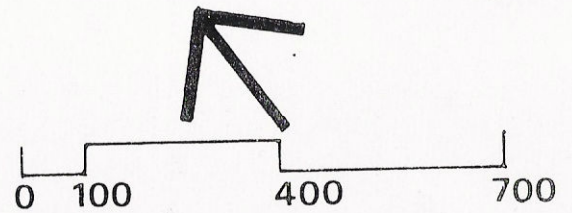
HIGH SCHOOL

4

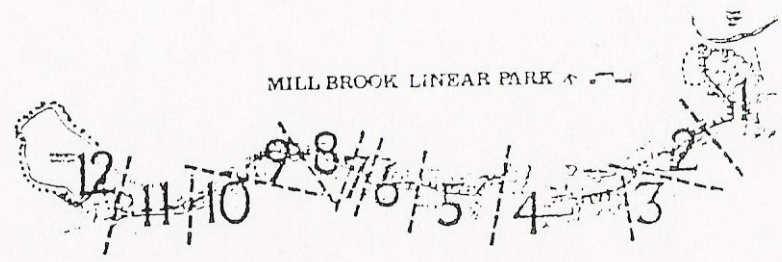




THE MILL BROOK LINEAR PARK INCORPORATES WELLINGTON PARK AND THE PATH CONTINUES ALONG THE NORTH SIDE OF THE BROOK TO BRATTLE STREET

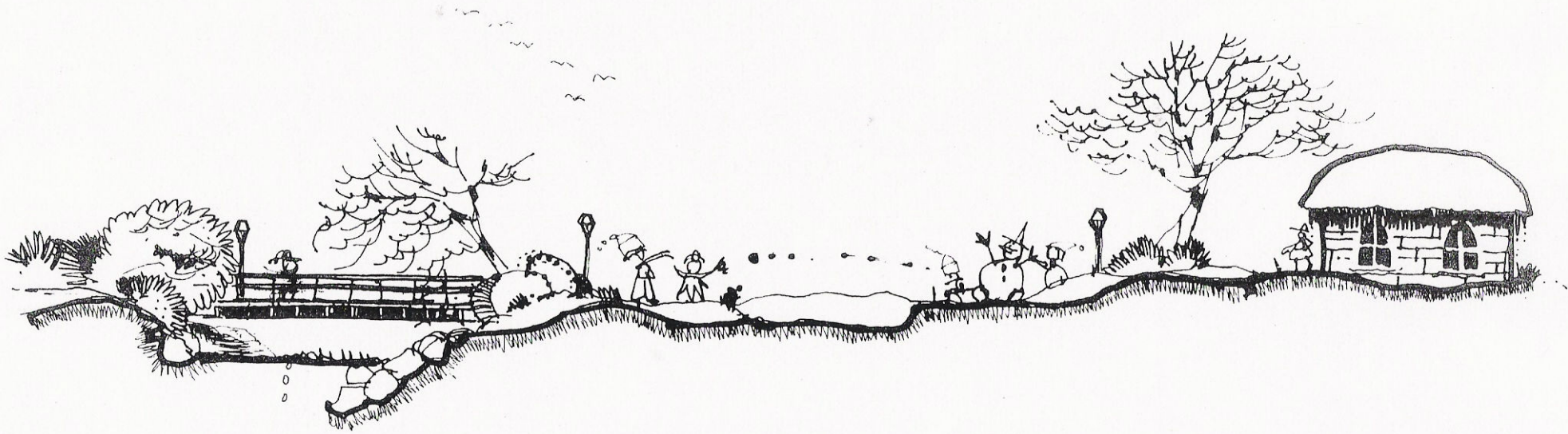


WELLINGTON  
PARK



5



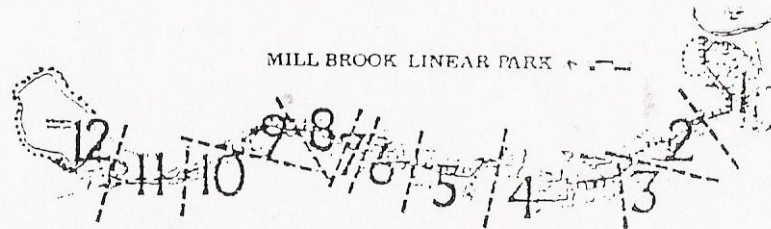


MILL BROOK  
PEDESTRIAN  
BRIDGE  
PROPOSED

PLAYING  
FIELD  
PROPOSED

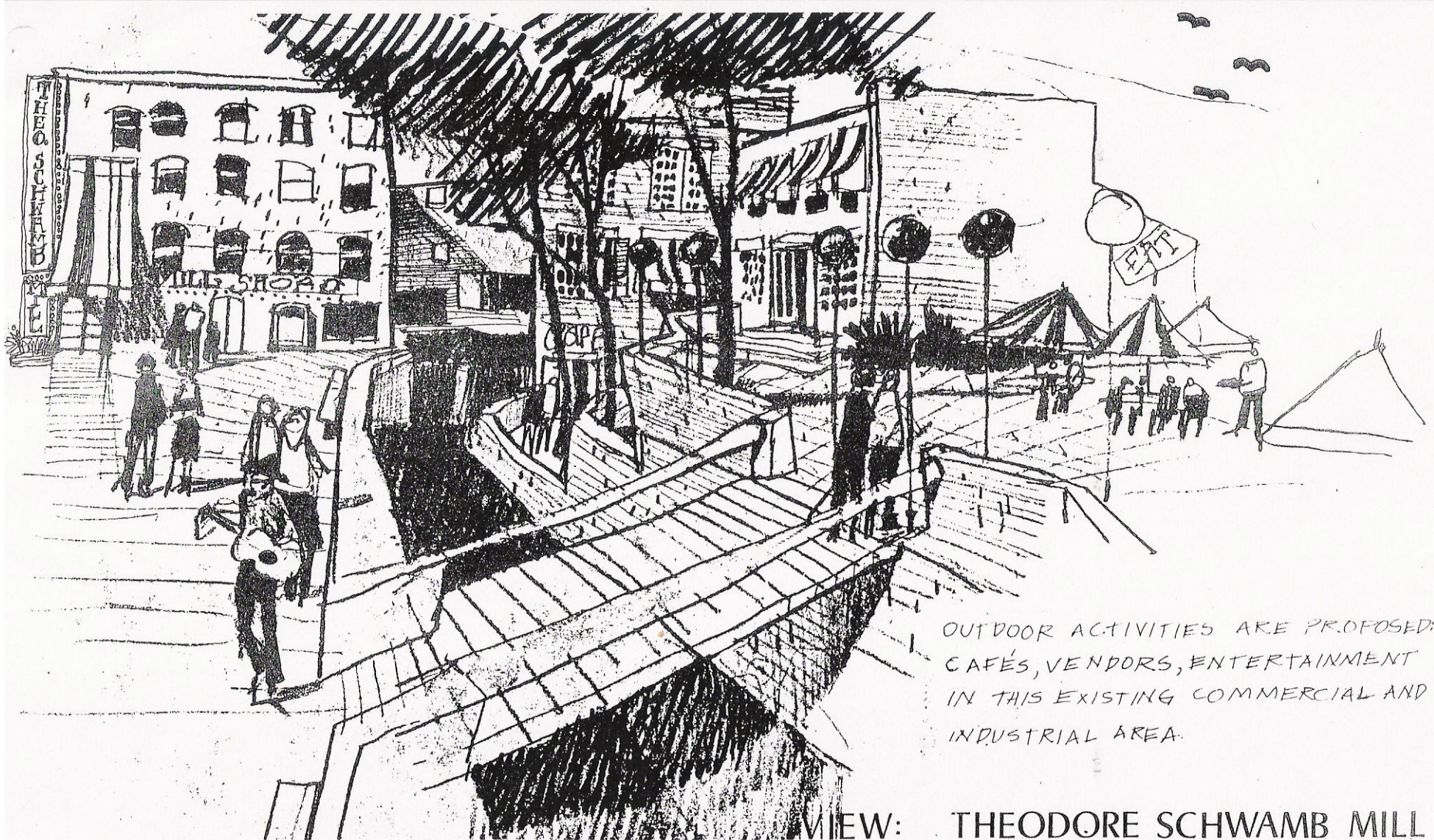
MDC PUMPING  
STATION

PUMPING  
STATION



6

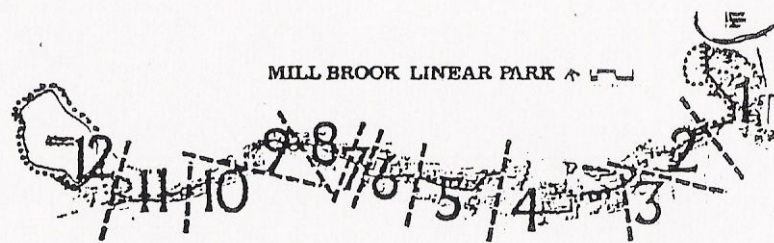




OUTDOOR ACTIVITIES ARE PROPOSED:  
CAFÉS, VENDORS, ENTERTAINMENT  
IN THIS EXISTING COMMERCIAL AND  
INDUSTRIAL AREA.

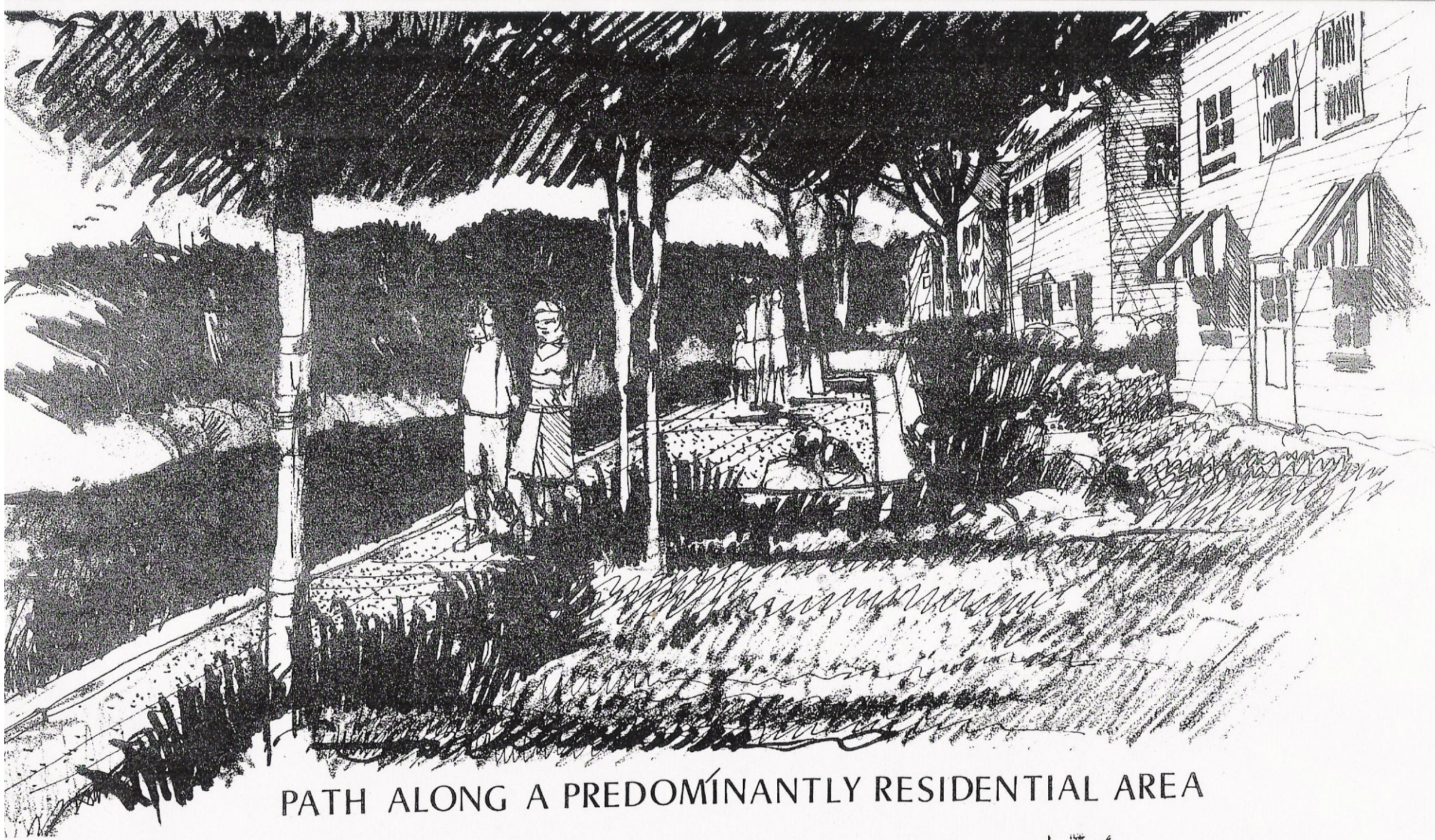
VIEW: THEODORE SCHWAMB MILL

HOBBS COURT to  
FOREST STREET



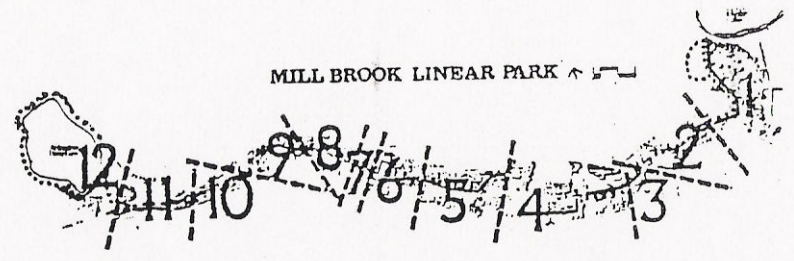
7-8



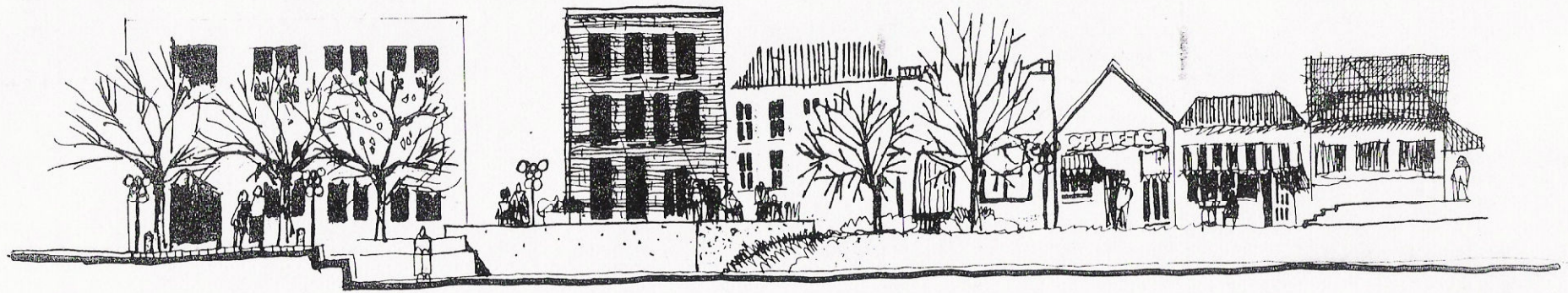


PATH ALONG A PREDOMINANTLY RESIDENTIAL AREA

FOREST to  
LOWELL STREETS



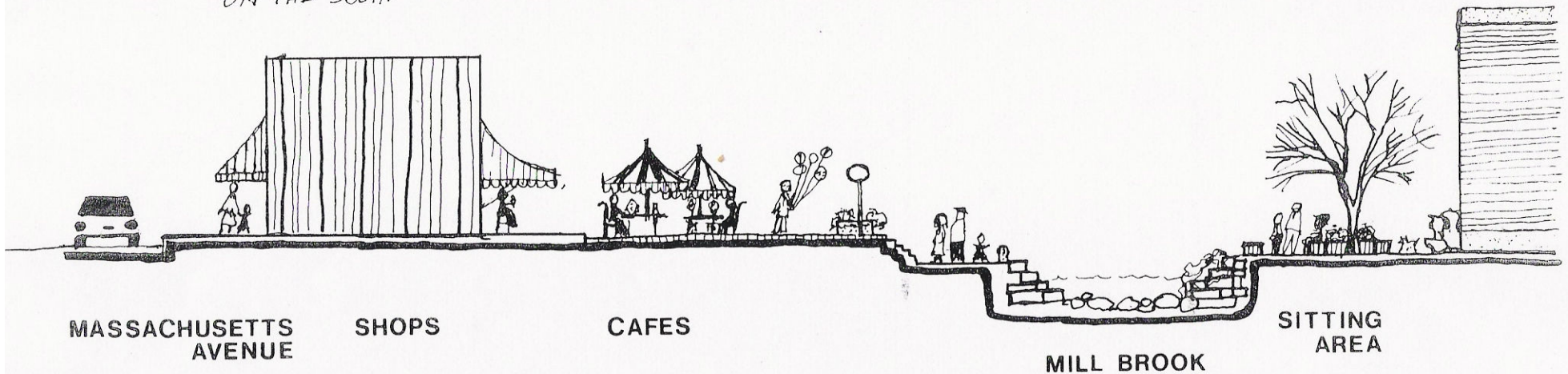




**EXISTING BUILDINGS**  
 BUILDINGS FACE THE MILL  
 BROOK ON THE NORTH AND  
 MASSACHUSETTS AVENUE  
 ON THE SOUTH

**PLAZA**  
 OVERLOOKING  
 THE MILL BROOK

**WALK WAY**  
 ALONG THE  
 MILL BROOK



**MASSACHUSETTS  
 AVENUE**

**SHOPS**

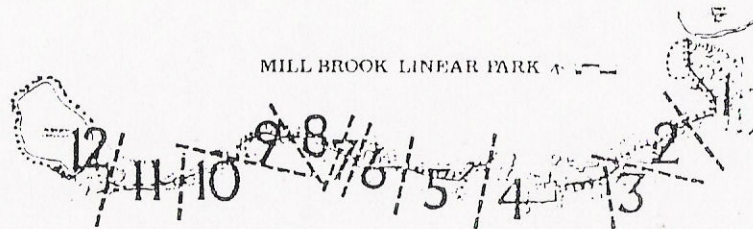
**CAFES**

**MILL BROOK**

**SITTING  
 AREA**

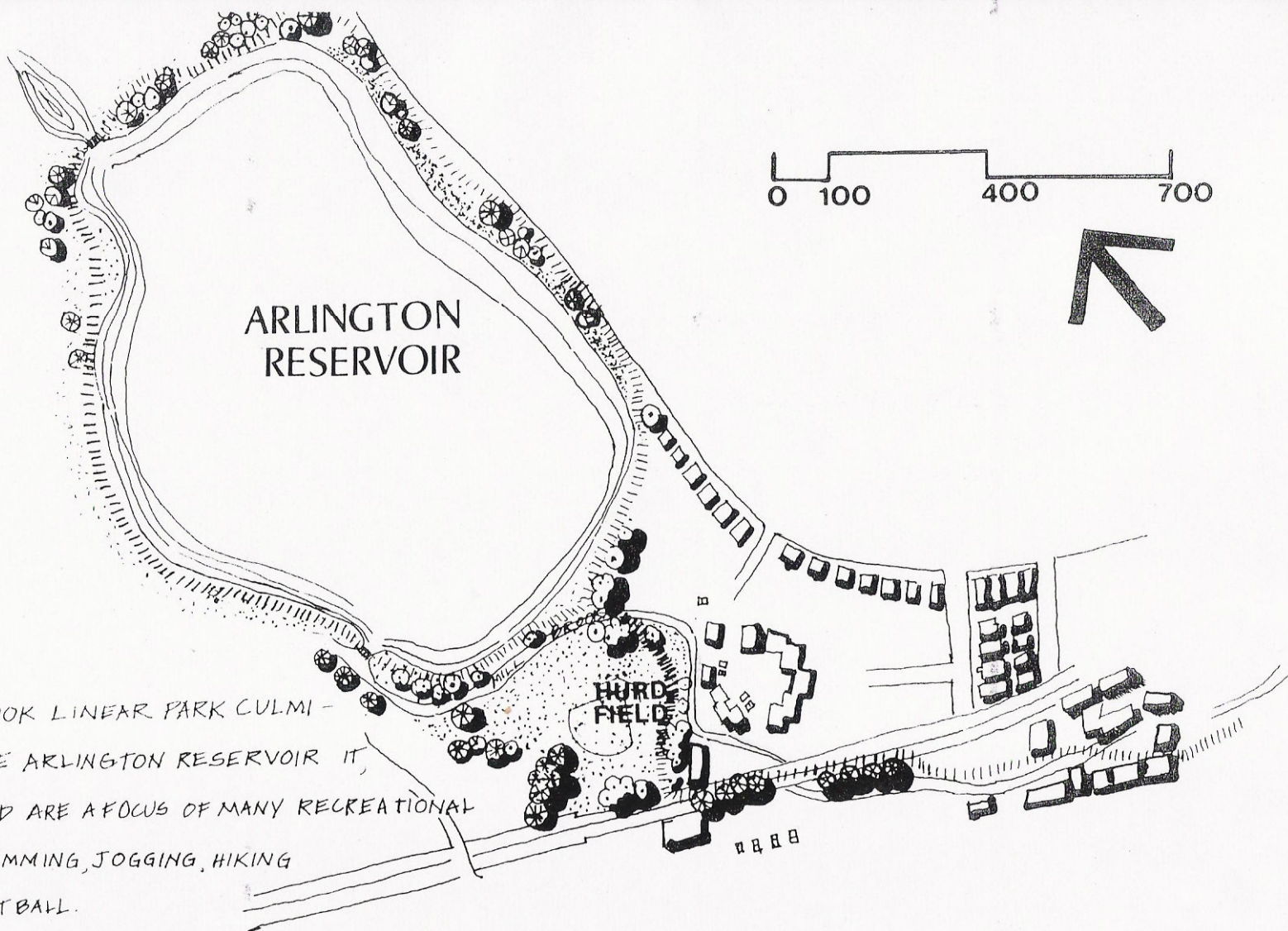
LOWELL STREET to  
 HURD FIELD

MILL BROOK LINEAR PARK



10-11

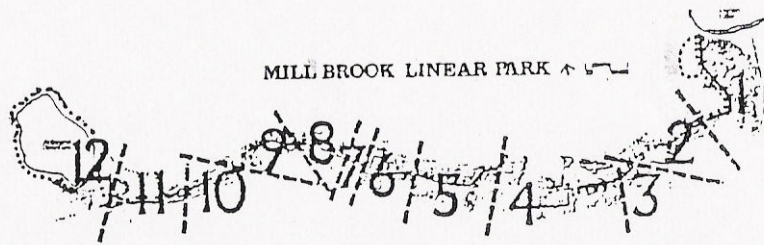




THE MILL BROOK LINEAR PARK CULMINATES AT THE ARLINGTON RESERVOIR IT, AND HURD FIELD ARE A FOCUS OF MANY RECREATIONAL ACTIVITIES: SWIMMING, JOGGING, HIKING, PICNICKING, SOFTBALL.

MILL BROOK LINEAR PARK

RESERVOIR



12



A relative degree of control will be needed by the town over areas along the brook as well as over the brook itself. The exact width of the area under such control should vary depending on the specific conditions, present land use, pattern of ownership, slope, vegetation and other natural characteristics where the brook is channeled between stone walls the narrowest path condition might be six feet in width. Where the brook is flowing between natural banks the narrowest allowable width of land for the path would be ten feet with a more desirable minimum between fifteen or twenty feet. Conditions along the brook vary considerably and the amount of land necessary must be adjusted for specific conditions.

River generated parks have been very successful in many cities. Examples are the San Antonio, Texas Riverwalk and the Los Angeles, California Ferndale Park. Both of these were built with public funds although in San Antonio there has also been private investment. Certain elements of the management system and funding procedures of the aforementioned parks have been incorporated into the proposal for the Mill Brook Linear Park.

Cooperation with local and regional agencies is important for a project to be successful. Thus, careful consideration has been given to a recent regional report. In the 1976 Regional Open Space Plan, the Metropolitan Area Planning Council (MAPC) suggests a number of criteria that a project should meet in order to be classified as worthy of implementation. In measuring the Mill Brook project against these criteria, it is interesting to note that it scores high in every one.

#### Regional versus Local

--Is the area of regional or local significance or both?

The Mill Brook is a relatively central spine running from the west to east of Arlington close to Massachusetts Avenue and many of Arlington's active commercial and recreational areas. The brook is a significant element in the Mystic River Watershed.

#### Linkages

--Can the proposal be linked with other local and/or regional open areas?

The Mill Brook Linear Park will connect with the M.D.C.'s Mystic River and Alewife Brook Reservations to the east; and may one day be connected to the Great Meadows in Lexington, 183 acres under the jurisdiction of Arlington's Board of Selectmen.



### Development Pressure

--Is the proposed open space/recreation area in imminent danger of diversion to other land uses?

In recent years, some residential and industrial developments have been insensitive to the Mill Brook and the open space existing along its banks. If there had been a comprehensive plan for the Mill Brook Linear Park before this, these developments could have been planned so as to take advantage of this natural asset. Apartment dwellers could have been some of the first to enjoy the beauty of the Mill Brook by strolling along its banks and industrial workers could have dined along the Mill Brook during their lunch hour. This can still happen in many areas along the brook today. Development of a Mill Brook Linear Park can preserve many areas for open space/recreation use that would otherwise go to uses that could be accommodated elsewhere. (The illustrations give an idea of the types of activities that may occur in each of the sections.)

### Unique Natural Characteristics

--Is the area under consideration a unique, or part of a unique, natural feature of the region?

A part of the Mystic River watershed, the Mill Brook drains most of the Town of Arlington and most of East Lexington, as it has for centuries. The Brook is a unique feature in the hilly region of Arlington.

### Access

--Is the area under consideration easily accessible? Is it accessible by more than one mode of access?

The brook and Massachusetts Avenue form the spine of the Mill Brook Valley relatively centralized in the Town of Arlington. The brook has pedestrian and vehicular accessibility.

### Urban Location

--Is the proposed project in an urban and densely settled portion of the region?

The Mill Brook parallels Massachusetts Avenue, the commercial corridor, and there are industrial (including craft) uses along the brook. The Mill Brook Valley is one of the most densely populated areas in Arlington.



### Historic Value

--Does the area under consideration have any buildings or sites of local, state or national historic interest?

In the mid-1630's, Captain Cooke's gristmill was built near Mystic Street at the location that is now Cooke's Hollow Park. This was the first water-powered gristmill in the United States. Other mills were built along the brook; one that survives is the Old Schwamb Mill at 17 Mill Lane. There are many buildings of historical and architectural significance in the Mill Brook Valley; several structures are on the National Historic Register and applications are being prepared for others.

### Water Resources

--Does the proposal have any relevance to the quantity and quality of fresh water supplies?

The Mill Brook is in the Mystic River watershed. It drains to the Lower Mystic Lake. Under Section 208 studies (EPA Act of 1972), it is likely that this body of water and the Mystic River downstream will be targetted for Grade B water quality (swimming quality). Currently the brook does not meet this standard having coliform counts in the range of 50,000 to 100,000/100 ml. (Grade B is up to 1,000 colonies per 100 ml). Correction of point source effluents along the brook (some in presently culverted areas that may be removed as the brook is opened) should bring the brook to the desired Grade B standard.

### Vegetation

--Does the proposal affect any vegetation grouping that is particularly attractive, ecologically valuable or unique?

There is much important flora and fauna along the Mill Brook; field work revealed many mature and varied trees in the vicinity.

### Wildlife

--Does the proposal affect significant wildlife habitats or populations of wildlife?

The proposal would preserve wildlife habitats along the Arlington Reservoir and Meadowbrook Park which may otherwise be threatened by insensitive development.



### Consistent with Other Plans

--Is the proposal consistent with local, regional and state plans for open space and recreation?

The proposal is consistent with local plans to provide more public open space and link existing open space/recreation areas. The Mill Brook Linear Park proposal has been recognized by the MAPC and will link with the M.D.C. regional Mystic Rivier Reservation.

### Cost and Benefit

--Are the benefits to be derived from the proposal consistent with the total expenditure?

Yes, since there would be significant benefits to the general public, as well as private benefits at commercial and craft centers along the Linear Park.

### Maintenance

--Can the proposal be properly managed?

Yes, more detailed information appears later in this report.

The Mill Brook Linear Park is truly a high priority for meeting local as well as regional needs, as is proven when measured by the guidelines of the MAPC, an important regional agency.



## LEGAL TOOLS FOR IMPLEMENTATION

This section highlights the legal regulations that exist to carry out this project. The land along the brook is in the hands of both private individuals and public institutions, therefore, different regulations will apply in a different set of circumstances.

### National Register of Historic Places

National Historic Preservation Act of 1966; 80 Stat. 915-6 United States Code 470

Under this program the National Park Service can make funds available for the restoration and protection of significant, historical, archeological, architectural and cultural sites. (i.e. The Theodore Schwamb Mill and the Old Schwamb Mill)

### Eminent Domain

Taking land requires a two thirds vote of the town meeting as well as an appropriation. If land can not be purchased or otherwise taken the Selectmen may decide to use eminent domain.

### Conservation Restriction Act

Chapter 184, Sections 31-33

A conservation restriction or easement is a written agreement between a property owner and a governmental or private agency by which the owner agrees to restrict development on his land in specified ways. Conservation restrictions vary widely. They may be purchased or granted through a gift. The owner of land subject to conservation restriction has all the rights and benefits of ownership consistent with the terms of the restriction. The restriction does not transfer title of the land nor does it dispossess the owner. It can be made binding on all future owners of land. (This is applicable to every section of the plan.) A conservation restriction often qualifies a property owner for certain income, death and real estate tax advantages while still permitting his use of the land for purposes consistent with the restriction. Properties under conservation restriction may be reassessed if there are limitations on development or on uses in determining fair market values.



Planned Unit Development - Cluster Zoning  
Chapter 808 of the Acts of 1975

The basic idea behind cluster zoning is to create a more attractive environment by permitting a developer to erect houses on smaller lots than the ordinance normally requires, provided that the remaining land is permanently preserved for its natural beauty and recreational values as neighborhood open space. (i.e. The Adamian Property)

Historic Districts  
General Laws Chapter 40C

This legislation authorizes cities and towns to establish historic districts to protect historic sites and areas of their setting. Rigorous controls can be imposed over an area as to preserve or enhance its historic character. (i.e. The Theodore Schwamb Mill, the Old Schwamb Mill and other areas in the Mill Brook Valley)

Scenic Rivers Act  
General Laws Chapter 21, Section 17B

This act empowers the state to restrict or prohibit dredging, filling or otherwise altering or polluting scenic and recreational rivers in the Commonwealth. The restrictions also include contiguous land up to 100 yards on each side of the river or stream banks. (This is applicable to the whole brook.) It is clear that legal means exist to implement the Mill Brook Linear Park and the public funding programs mentioned earlier are delineated in the next section.

Methods of Acquisition  
Land and Water Conservation Fund Act of 1965; Public Law 89-578 78 State 897

Administered by the United States Department of Interior, the Bureau of Outdoor Recreation, the fund allocates money to communities and political subdivisions for planning, acquisition and development of public outdoor recreation areas. Under this act, local agencies may be reimbursed up to 50 percent of the town's costs of purchasing land.



Massachusetts Self-Help Program - General Laws Chapter 132A, Section 11.

This program offers towns and cities with Conservation Commissions up to 50 percent reimbursement for the cost of land purchased or developed for conservation or passive outdoor recreation. The Bureau of Outdoor Recreation's Land and Water Conservation Fund and the State's Self-Help Program may be applied together. In that case, a community may receive up to 75 percent reimbursement for the cost of purchasing and developing land.

Revenue Sharing - Public Law 92-572, Acts of 1972.

Open Space/recreation lands can be purchased with community funds received through the federal government's revenue sharing program.

Gifts

Upon approval of the town meeting, gifts of land are accepted by the town, except that the Conservation Commission may receive gifts of land just by approval of the Board of Selectmen.



## COSTS: LANDSCAPING AND MAINTENANCE

In order to have an idea of the funds that will have to be sought for the project, a preliminary estimate was prepared. The estimate was based on figures prepared by the firm of Carol Johnson and Associates on square foot costs for a variety of projects completed in Boston by different firms in the years 1974, 1975 and 1976. Inflation factors have been added according to the project's year completion. Information provided by the Engineering and Properties and Natural Resources Departments of the Town of Arlington as well as cost estimating catalogues were used to compliment Johnson's costs where it was felt that elements particular to the Mill Brook Project had not been included.

Maintenance costs are part of any plan. Here maintenance costs have been estimated according to the figures in the 1976-1977 Arlington Town Budget Report provided by the Department of Properties and Natural Resources. It is evident that costs presented here are subject to change due to inflation factors and possibly as detailed designs are completed.

Security costs as well as land costs have not been included. One can assume land costs would be minimal, because in some areas land may have an easement, and because the project is highly attractive for both private cooperation and investment as well as government funding. In order for the project to become a realistic endeavor, it has been divided into twelve sections. These criteria were used to make the subdivisions: existing land use, property lines, and natural characteristics. Two major divisions are Division A to the east from the cemetery to Brattle Street and Division B to the west from Brattle Street to the Reservoir (see foldout map). An analysis of the patterns of ownership and existing land use indicates that sections within Division A would be the easiest to implement. Here one finds a series of open areas: the cemetery, Meadowbrook Park Conservation Area, Cooke's Hollow, playgrounds and unbuilt areas. Division B has a greater number of properties under separate ownership, has a lower percentage of public properties than Division A and a relatively intense land use.

Division A has been divided into five sections and Division B into seven sections. Each one of these sections could be implemented independent of the other if the opportunity presents itself. A certain flexibility is necessary since action will depend on political and economic factors. The goal is to keep the project alive. Importance must be given to the link between the two ends of town, but not at the exclusion of the smaller activity centers that exist and will be generated along the Mill Brook Linear Park.



SECTIONS	Total Area in Square Feet	Landscaping Costs Per Square Foot/19	Total Land- Scaping Costs	Maintenance Costs Per Acre	Total Main- tenance Costs (F.Y. 76)
<u>Division A</u>					
1. Cemetery/Meadowbrook Park	11,000	13.75/1.80	119,800	1443	363
2. Mystic St. thru Buzzell Field	33,000	1.80	59,400	1443	1089
3. Adamian Property	44,800	13.75	627,200	2885	2957
4. High School Property	32,800	1.80	59,040	1443	1082
5. Grove Street to Brattle Street	12,300	10.60	130,380	1443	406
<u>Division B</u>					
6. Brattle Street to Hobbs Court	84,000	13.75	1,196,800	2885	5544
7. Hobbs Court to Quinn Road	7,200	1.80	12,960	1443	238
8. Quinn Road to Forest Street	41,600	13.75/1.80	342,460	2885	2746
9. Forest Street to Lowell Street	12,600	1.80	22,680	1443	416
10. Lowell Street to Park Avenue	27,000	1.80	48,600	1443	891
11. Park Avenue to Hurd Field	10,200	1.80	18,360	1443	337
12. Hurd Field and Reservoir	24,000	1.80	43,200	1443*	792
GRAND TOTAL	340,500		2,680,880		16,861**

\*Costs p/sq.ft. .035 for low maintenance areas and .066 for high maintenance

\*\*In FY 76 total Arlington Dept. of Properties and Natural Resources open space maintenance costs were \$800,123



## A MANAGEMENT SYSTEM

The foregoing proposal for the Mill Brook Linear Park illustrates that the organization of effort and investment is now the important issue. The project requires a considerable organizational effort; a rational, comprehensive strategy is needed. It will require the commitment and action of numerous institutions, agencies and individuals functioning with a sense of common purpose with a great degree of coordination.

### The Need for Coordinated Implementation

If the project is to be feasible, simultaneous action in a number of areas will be required. For example, the recreation objectives cannot be attained unless steps are taken in the area of public safety; commercial activities must be promoted and design criteria must be developed. There, some mechanism is needed to assure that implementation efforts are coordinated.

### The Need for Focus

Public agencies operating with limited resources are subject to many pressures and counter-pressures concerning allocation of their time and funds. Without some mechanism for according the project the priority and attention necessary to get the job done and for securing from public agencies and private interests the same priority, the efforts will dissipate. Creating a management system with responsible people concentrating their energy and concern on the Mill Brook Project would provide that focus.

### The Need for Continuity

The private sector has to have assurance from the public sector on its commitment to the project. Having a permanent managerial system would demonstrate that commitment.

### The Need for Continuing Planning

Development concepts have been produced but they have to be developed in further detail.



## The Need for Design Control

The project will be funded mostly by public funds. A management system should establish standards and review procedures for both public and private capital investments.

## Organizational Principles

A "management unit" should seek to consolidate the functions of existing agencies while respecting their legal autonomy. Coordination is best attained when the unit responsible for coordination is not at the same time responsible for implementing part of the total program. Thus an implementing "unit" should not be assigned the coordination function. Interagency effort, if it is to succeed, needs a full-time staff.



## WORK PROGRAM

A commission should be formed to lead the Mill Brook Linear Park Project. This commission would be comprised of people from the Parks and Recreation Commission, the Department of Planning and Community Development, the Conservation Commission, the Department of Properties and Natural Resources, the Arlington Garden Club, the Chamber of Commerce, and other related institutions. Two staff members should be given the responsibility - one for coordinating the different agencies and the second person should be in charge of the implementation procedures.

The following actions should be considered to be immediate:

- Autumn 1977 town commitment to an eight year program must be ensured. This would entail a yearly allocation of funds for the completion of the project.
- A topographic survey must be made.
- A professional firm must be contracted to develop the detailed design of the first section and within the same year construction should be planned.
- The Town Manager should be authorized to apply for local, state and federal funds.
- A campaign to make the public aware of the project must be undertaken.
- A study on the water quality of the brook and related bodies of water must be undertaken. Any proposals to clean the reservoir and eliminate the point sources of pollution must be implemented.



This study was funded through Tufts University by the Office of Education of the United States Department of Health, Education and Welfare under the Special Community Service and Continuing Education Program - Environmental Advocacy Grant. The candidates chose a project of their interest. I chose to work for the Arlington Conservation Commission. My headquarters were within the Arlington Planning and Community Development Department; Kevin Doyle, Junior Planner, cooperated with me; Alan McClennen, Director of the Department, critiqued our work often and provided many constructive insights along the way. Many people were helpful in providing us with information including members of the Engineering Department, Department of Properties and Natural Resources, as well as the Conservation Commission and the Recreational Facilities Committee. Michael Lehrer cooperated with me on the final report which was funded by the Conservation Commission.

September, 1976



## BIBLIOGRAPHY

### Articles

"In Arlington, They've Brought the Town Brook Back to Life," Hotton, Peter C., The Boston Sunday Globe, p. A49, January 16, 1972.

"Work Begins at Cooke's Hollow," The Arlington Advocate, p. 3, September 30, 1971.

### Books and Pamphlets

Arlington Conservation Association, "An Open Space Program for the Town of Arlington," Arlington, Mass., November, 1972.

Arlington Conservation Commission, "The Conservation Plan for Arlington," Arlington, Mass., July, 1967.

Arlington Department of Human Resources, Arlington Information Directory, AID, Arlington, Mass., December, 1975.

Arlington Historical Commission, Mill Brook Valley, A Historical and Architectural Survey, Arlington, Mass., 1976.

Arlington Planning Board, "A Preliminary Investigation of the Conditions and Possible Improvement of Mill or Sucker Brook," Arlington, Mass., March 12, 1929.

Arlington Planning Board, "Proposed Mill Brook Parkway," Arlington, Mass., circa 1934.

Arlington Planning Board, "Towards an Urban Beautification Policy for the Town of Arlington, Massachusetts," 1966.

Arlington Recreation Facilities Committee, "Report, Proposed Outline," January 2, 1973.

Arlington Recreation Facilities Committee, "Report to the Town Manager," April, 1973.



H.U.D., Urban Recreation, Washington, D.C., 1975.

Lustgarten, David and Young, Jane, Conservation Planning: An Analysis, June, 1973.

Maguire, Inc., Mill Brook Hydrological Flood Plain Study for the Town of Arlington, Massachusetts, Waltham, Mass., 1974.

Massachusetts, Commonwealth of, Department of Commerce et al, Soils and Their Interpretations for Various Uses, Town of Hanover, Plymouth County, Massachusetts.

Metropolitan Area Planning Council, Open Space and Recreation Plan and Program for Metropolitan Boston, Volume I, September, 1975.

Metropolitan Area Planning Council, The 1976 Regional Open Space Plan, Volume I, July, 1976.

National Recreation and Park Association, Open Spcae and Recreation Opportunity in America's Inner Cities, Virginia, 1974.

Peskin, Sarah, Guiding Growth and Change, Lincoln, Mass., 1976.

Radcliffe Institute Seminars in Landscape Architecture, Landscape Design Studio, "Arlington Reservoir, Preliminary Site Development Study," May, 1976.

Smith, Dan, Jr., Bikeways State of the Art, Virginia, 1974.

Tandy, Cliff, Ed., Handbook of Urban Landscape, New York, 1974.

U.S.D.A., Soil Conservation Service, Guidelines for Soil and Water Conservation in Urbanizing Areas of Massachusetts, Amherst, Mass., April, 1975.

Zion, Robert L., Trees for Architecture and the Landscape, New York, 1968.



## Maps

Adams, H.S., Map of the Town of Arlington, Massachusetts, Showing Sewerage System as designed by George A. Kimball, C.E., July, 1895.

Arlington Cemetery Commission, Site Plan, Mt. Pleasant Cemetery, Arlington, Mass.

Arlington Conservation Commission, Site along Mill Brook just off Mystic Street (now Cooke's Hollow), 1969.

Arlington Conservation Commission, Site between Wellington Park and Brattle Street (now Mill Brook Apartments) along Mill Brook, 1969.

Arlington Conservation Commission and Arlington Department of Planning, Mill Brook Linear Park Study Analyses, Summer, 1976.

Arlington Department of Planning and Arlington Redevelopment Board, Zoning Map for the Town of Arlington, Massachusetts, May, 1976.

Arlington Department of Planning and Arlington Redevelopment Board, Floodplain and Wetland Overlay for the Zoning Map of the Town of Arlington, Massachusetts, August, 1975.

C.B.I.-Adamian, Site Plan-Brookside Common (at Mill Street and the B. & M. Right-of Way).

E.R.A.M. Project #1810-A1-44, Mill Brook Parkway, September 20, 1934.

Feldman, Inc., Site Plans-Mill Brook Apartments, 1971-1972.

Gutfreund, Miriam, Mill Brook Field Work and Rendering of Possibilities along Mill Brook (Path and Landscaping), Summer, 1976.

Keane, James M., Town Engineer, Plan Showing Proposed Grading at Wellington Park, May 8, 1940.



Maguire, Inc., Mill Brook Hydrological Study, 1974.

Mason & Frey, Cooke's Hollow, Arlington, Massachusetts, March 27, 1972.

Mason & Frey, Cooke's Hollow, Memorial Key Plan, October 10, 1974.

Mason & Frey, Cooke's Hollow, Phase One, August 27, 1971.

Mason & Frey, Cooke's Hollow, Phase Two, October 10, 1973.

Mason & Frey, Cooke's Hollow Sign, April 30, 1973.

Mason & Frey, Proposed Mill Brook Linear Park (Mill Street to Mystic Street), circa 1970.

M.D.C. Sewerage Division, Plan of Land in Arlington, December 3, 1972.

Rich, Lang, Cote, Architects, Additions and Alterations to Arlington High School (Architectural Plans L1 to L10), December 18, 1974.

Rich, Lang, Cote, Architects, Mill Brook Relocation Study at Arlington High School, September 26, 1974.

#### Miscellaneous Documents

Arlington Conservation Commission, correspondence of and to concerning the Mill Brook culvert at Arlington High School and land acquisitions there, mid-1970's in connection with Arlington High School additions and alterations plans.

Arlington Planning Board, correspondence and studies on the Mill Brook, 1928 to 1934.

Frost & Higgins, Landscape Contractor, Burlington, Mass., contract for landscape work at Cook's Hollow.

M.A.P.C., 208 Water Quality Project, literature from meeting at Fox Library, Arlington, Mass., June 14, 1976.



Photographic Sources

Arlington Conservation Commission, late 1960's to mid-1970's.

Arlington Department of Planning and Community Development, mid-1970's.

Arlington Garden Club, early 1960's.

Doyle, Kevin W., Summer, 1976.

Lehrer, Michael and Miriam, Summer, 1976

Mason & Frey, late 1960's to early 1970's.

Radcliffe Institute, photos of work on Mill Brook and Great Meadows, circa 1969.