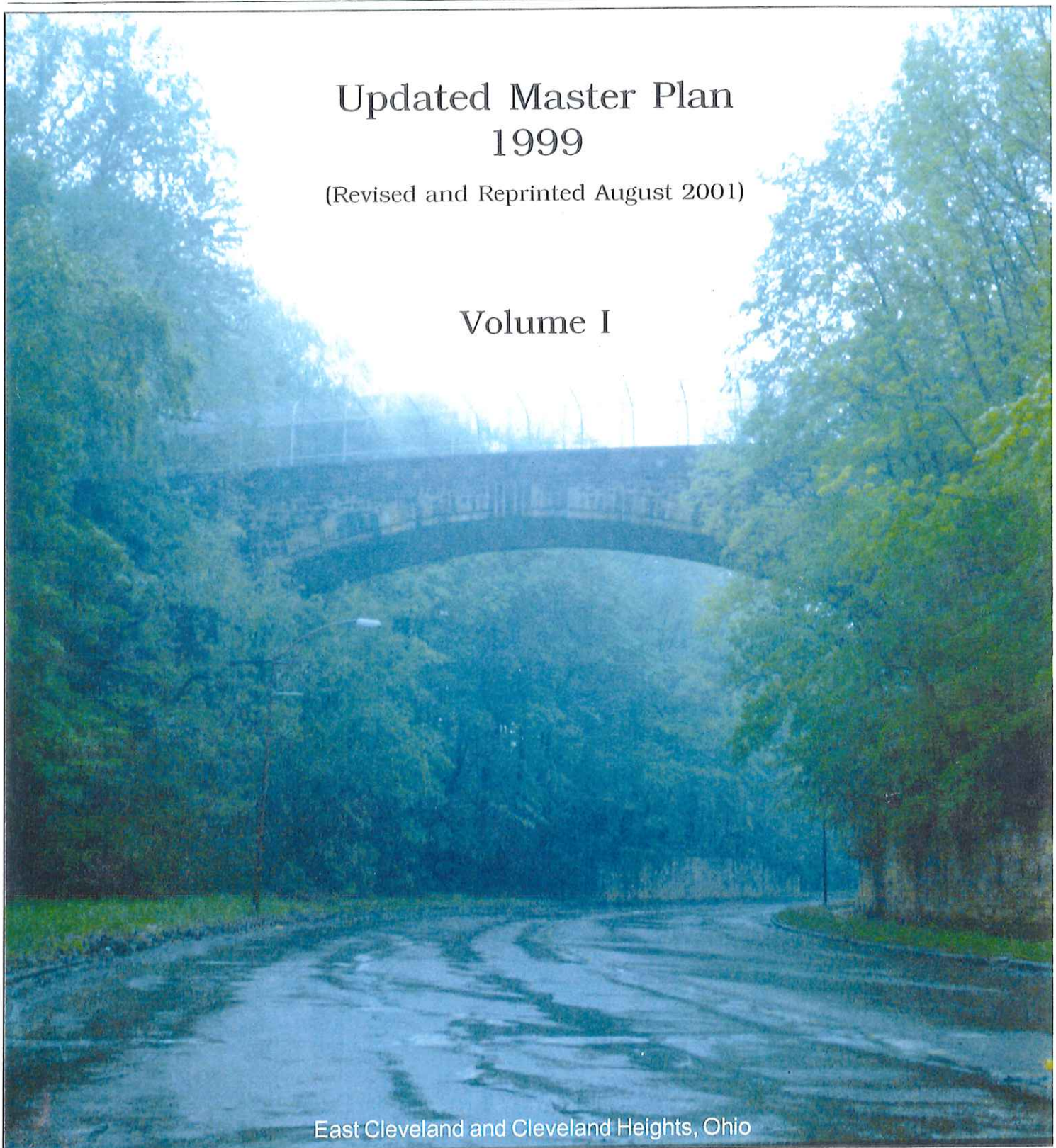
FOREST HILL PARK

Updated Master Plan
1999

(Revised and Reprinted August 2001)

Volume I



East Cleveland and Cleveland Heights, Ohio

Pressley Associates, Inc., *Landscape Architects* ▪ Cambridge, Massachusetts

Forest Hill Park Fact-Finding and Advisory Commission

City of Cleveland Heights *City of East Cleveland*

July 27, 2001

Mr. Edward J. Kelley
Mayor, City of Cleveland Heights
40 Severance Circle
Cleveland Heights, Ohio 44118

Mayor Emmanuel W. Onunwor
The City of East Cleveland
14340 Euclid Avenue
East Cleveland, Ohio 44112

Dear Mayor Kelley and Mayor Onunwor:

The members of the Forest Hill Park Fact-Finding and Advisory Commission wish to congratulate the cities of Cleveland Heights and East Cleveland on the successful completion of the Master Plan Update for Forest Hill Park. The plan prepared by Pressley Associates very carefully documents and protects the significant layers of the park's history, from the Rockefeller estate to the public park designed by A.D. Taylor. While adhering faithfully to the principles of 1938 Master Plan, the document addresses pressing contemporary issues facing the cities in managing the park today. We hope it will also serve as a useful guide for both cities in planning for future development.

Again, we commend your commitment to the preservation of this treasured parkland, made ever more precious as densities increase in the surrounding areas. We hope you will continue to work toward the goal of coordinated management and maintenance in order to enhance the unified appearance of the park as a single, rather than divided, entity.

We look forward to working with you in the years ahead as you implement the recommendations of the Master Plan Update.

Sincerely,

Mary V. Hughes, ASLA
Chair

Bonita Caplan
City of Cleveland Heights

Jeremiah Johnson
City of East Cleveland

FOREST HILL PARK

UPDATED MASTER PLAN
1 9 9 9

(Revised and Reprinted August 2001)

The Forest Hill Park Updated Master Plan 1999 was developed under the administration of the following municipal officials:

The City of East Cleveland, Ohio
Emmanuel W. Onunwor, *Mayor*

The City Council of East Cleveland:

Jeremiah Johnson, President
O. Mays, Vice President
Saratha Goggins
Nathaniel Martin
H. Elizabeth Omar

The City of Cleveland Heights, Ohio
Robert C. Downey, *City Manager*

The City Council of Cleveland Heights:

Edward J. Kelley, *Mayor*
Joanne E. O'Brien, *Vice Mayor*
Bonita W. Caplan
Nancy J. Dietrich
Phyllis L. Evans
Jimmie Hicks, Jr.
Kenneth Montlack

The Forest Hill Park master planning process was overseen by the appointed members of the Forest Hill Park Advisory Commission:

Bonita W. Caplan
City Council
City of Cleveland Heights

Jeremiah Johnson
City Council, President
City of East Cleveland

Mary Hughes, ASLA
University of Virginia
Office of the Architect
Charlottesville, VA

FOREST HILL PARK

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(Revised and Reprinted August 2001)

The Forest Hill Park Updated Master Plan 1999 was prepared by:

Pressley Associates, Inc.
Landscape Architects
Cambridge, Massachusetts

Adachi-Ciuni-Lynn Associates, Inc.
Civil and Structural Engineers
Cleveland, Ohio

Chambers, Murphy & Burge
Restoration Architects
Akron, Ohio

Vanasse Hangen Brustlin, Inc.
Environmental Engineers
Watertown, Massachusetts

Cynthia Zaitzevsky Associates
Historian
Brookline, Massachusetts

August, 2000

In Re: Forest Hill Park "Updated Master Plan, 1999" prepared by Pressley Associates, Inc.

In January-February of 1939 the Cities of East Cleveland and Cleveland Heights and members of the Rockefeller family executed and recorded in Cuyahoga County a "Deed and Inter-Municipal Agreement" which conveys to each of the two Cities the portions of Forest Hill Park which generally are within their corporate boundaries. The Deed incorporates a "Development Plan" for Forest Hill Park dated January, 1938. The Development Plan is explained and illustrated by an accompanying report prepared by A. D. Taylor.[1]

Under the terms of the Deed and Inter-Municipal Agreement, the January, 1938 Development Plan (which is sometimes referred to as the "basic plan") is a "perpetual restriction on the use of the land" and may be "altered, changed or varied" only by a method specifically described in Section 5 of the Deed which involves formal legislative action by the Municipalities and approval by an Advisory Commission specifically created for that purpose. The 1938 Development Plan has been amended several times over the years utilizing the process set forth in Section 5.

The "Updated Master Plan, 1999" prepared by Pressley Associates, Inc. under contract with East Cleveland and Cleveland Heights is designed to be a supplemental update to the 1938 A. D. Taylor report. It does not amend or change the original Deed to the Park and is not an official amendment to the 1938 Development Plan which is incorporated in the Deed since Advisory Commission approval under Section 5 of the Deed has not been sought by either City.

The status, then, of the "Updated Master Plan, 1999" prepared by Pressley Associates, Inc. is that of a guide or reference for the two Municipalities in their consideration of further development, maintenance and management of the Park, but it does not have the force of law. It is anticipated that each Municipality will consult with the Pressley report as well as the Development Plan and seek any necessary approval of the Advisory Commission before making any improvement on park property.

A.R. ABDOULKARIM, Director of Law
City of East Cleveland

JOHN H. GIBBON, Director of Law
City of Cleveland Heights

[1] The A.D. Taylor report which is incorporated into the Deed is dated March 18, 1938. This report differs in some respects from the report by A.D. Taylor which is included in the 101-page hard cover booklet published by the two Cities in 1938. The 1938 Development Plan or "basic plan" referenced in the Deed and Inter-Municipal Agreement is a single page map of the Park indicating land uses. The Deed also contains a number of deed restrictions pertaining to usage of the individual properties which were conveyed to each of the Cities.

FOREST HILL PARK

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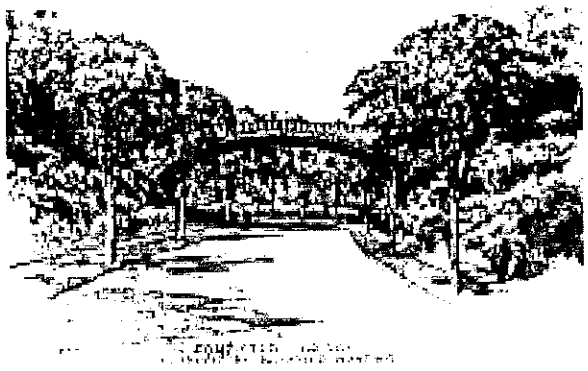


Prepared for

The City of Cleveland Heights, Ohio - Edward J. Kelley, Mayor

The City of East Cleveland, Ohio - Emmanuel W. Onunwor, Mayor

By

Pressley Associates, Inc., Landscape Architects
Cambridge, Massachusetts

TABLE OF CONTENTS

Volume I

TABLE OF CONTENTS

Volume I, Continued

FOREST HILL PARK

Introduction

Row of Maples - Rockefeller Era (Western Reserve Historical Society)

Updated Master Plan

2001

Forest Hill Park was a gift of approximately 235 acres by John D. Rockefeller, Jr. of the family's former estate to the communities of East Cleveland and Cleveland Heights, Ohio. Mr. Rockefeller's vision was to create a park for the people of these communities and metropolitan Cleveland that they would be able to enjoy for all time.

"I am delighted beyond expression, as I know my father would be, in the knowledge that the people of your community and the surrounding country will be able to enjoy for all time, as I did during the happy days of my childhood and youth, the beautiful area comprised within the park." May 18, 1938 letter to Mayor Cain, Cleveland Heights, Ohio from John D. Rockefeller Jr.

In 1938, the master plan entitled Forest Hill Park - A Report on the Proposed Landscape Development was prepared for the City of Cleveland Heights – Frank C. Cain, Mayor and the City of East Cleveland – Charles A. Carran, City Manager by A. D. Taylor, Landscape Architect, Cleveland, Ohio. See Drawing 1, herein, for the 1938 illustrative plan.[1]

The Taylor 1938 Master Plan includes the April 14, 1938, Agreement that each city signed, entitled Agreement Between John D. Rockefeller, Jr. and the Cities of Cleveland Heights and East Cleveland for the Establishment of "Forest Hill Park."[2] Each city passed a resolution in April 1938 to accept Mr. Rockefeller's generous gift and to honor the agreement. Within the John D. Rockefeller, Jr. Agreement there was the establishment of "a permanent and continuing fact-finding and advisory commission." The Advisory Commission was to be composed of representatives from each city and an appointed official from the American Society of Landscape Architects who would act as chairman of the Commission. The Commission was empowered to rule on any proposed "alteration, change or variance in the basic intercity park plan" mentioned in Section 3 of the Agreement. It is interesting to note that A. D. Taylor was Chair of the first Advisory Commission for a number of years and that one of his students, William Strong, succeeded him. The Advisory Commission did not meet between 1975 and 1996, therefore Mary Hughes, the current ASLA Commissioner, is Mr. Strong's successor and only the third person to chair the Advisory Commission.

The "Agreement", Section 5, contained within the 1938 Master Plan is very explicit about approval and adoption of the "basic plan".

"5. That the approval and adoption of the basic plan for the future development and improvement of the intercity park mentioned in Section 3, shall be irrevocable and said plan shall constitute a vested right and easement in the public and a perpetual restriction and limitation on the use of the land and shall not be altered, changed or varied except by the method set forth in this Section 5." p. 97.

The wording within Section 5 of the "Agreement" included in the 1938 Taylor Master Plan establishes the process for altering the "basic plan" as follows:

"If a majority of the commission favorably recommends the proposed plan [proposed by the petitioning municipality or municipalities] or favorably recommends an alternative plan, the legislative body of the petitioning municipality or municipalities may at its or their election consider and act thereon and if adopted the plan recommended by the commission shall be deemed in full force and effect. Except upon such favorable recommendation of such fact-finding and advisory commission so organized, the scope and character of the park as established by the basic plan as now approved shall not be altered, changed or varied; except as provided in said basic plan or as the same may be altered, changed or varied as provided in this section, the scope and character of the park and its improvements and lay-out shall be and remain as now constituted.

If any proposed revision of the plan, considered either directly or indirectly, affects only and solely park property lying exclusively within the limits of one of said municipalities, such one may proceed, independently of the other, with a petitioning resolution, submit the matter to the commission for its investigation and consideration, await the commission's report and, if a revision is recommended by such report, proceed to consider and act thereon. But if any proposed revision of the plan or any recommended alternative revision of the plan at any time evolved by the commission, affects, directly or indirectly, park property lying within the limits of both municipalities, (although wither may proceed with a petitioning resolution and submit the matter to the commission as above provided) no revision recommended by the commission shall in that case be deemed adopted or in force and effect unless both municipalities, independently, concur by ordinance in adopting such recommended revision. In the event of doubt, the commission shall be requested to make a finding as to whether any proposed revision affects both municipalities; and its written finding shall as a matter of contract right determine the eligibility or ineligibility of a given municipality to pass on the matter. No action recommended by the commission shall be considered or acted upon by either of said municipalities in any case except in its entirety and action must be either adopted in its entirety or rejected in its entirety." p. 98.

An issue with the "basic plan" that needs to be understood is that when areas of the Forest Hill Park were developed under Taylor's direction he did not always follow to the letter his illustrative Master Plan

contained within the 1938 document. The as-built condition in these areas, rather than the illustrative plan, should be preserved, restored or rehabilitated.

A.D. Taylor's 1938 Master Plan for Forest Hill Park is a strong design that reflects his social commitment to provide healthful recreation for all people, whether active or passive. Taylor's efforts were directed toward the goal of creating a "peoples' park", a place of refuge and escape from the city and a place to recreate, in that it provides a sylvan world of water, greensward and woods. This is what makes Forest Hill Park a nationally acclaimed park and the best example of the prominent Landscape Architect A. D. Taylor's public work. The Park has continued its life as one of the truly "great parks" of Ohio and, in fact, of the country. The John D. Rockefeller Jr. vision and the A. D. Taylor Master Plan for this park are as valid today as in 1938. Since then there have been changes in people's recreational preferences and use of their leisure time in our constantly more urbanized world, though passive recreational users still dominate. Charles Birnbaum in Landscape Architecture September 1997 p. 93 tells us that:

"Surveys consistently show that more than seventy percent (70%) of the people who use parks today do so for passive recreation."

As a document, the 1938 Taylor Master Plan is very important in that the design and the philosophies that Taylor put forth were far ahead of what was happening nationally. Taylor also recognized the uniqueness of having two communities as custodians of one unified park and the challenges that would be faced. The City of Boston and the Town of Brookline have experienced this same issue with the Emerald Necklace Park System in Massachusetts. The park system, designed by Frederick Law Olmsted Senior in the late 1870's – 1890's, is jointly owned, but separately administered and maintained, by the two municipalities. These municipalities are only now starting to complete joint restoration projects.

The overall objective of the updating of the 1938 A. D. Taylor Master Plan for Forest Hill Park is the continuance of the Taylor Plan. The Updated Taylor Master Plan will develop a long-term framework and improvement program to guide future planning, preservation and action through increased public awareness of the historical and ecological significance of Forest Hill Park and the A .D. Taylor legacy. The updated Master Plan is not intended to replace the A. D. Taylor Master Plan or the "basic plan" as it has been amended over the years; nor does it modify the essence of the Taylor Plan or the essence of the as-built condition during the A .D. Taylor Period 1938-1950. The major goals are to re-establish the unity of design created by Taylor and to insure that the process for approval of modifications to the "basic plan" is followed in the future. These goals can be realized through the correction of dereliction, the establishment of a sound maintenance and management program, the funding of major capital improvement projects. Highest consideration will be given to improvement projects which focus on the preservation of original historical elements or which result in the preservation, restoration, rehabilitation or reconstruction of areas in order to fulfill their historical design intent or use and to restore their appearance to their as-built condition.

Within the 1938 Master Plan Taylor stated that:

"The first objective has been that of procuring a unity of design throughout the entire park. The Development Plan for Forest Hill Park has been prepared with the intent that this park shall represent a unified recreation area to be developed and maintained so far as unity of design is concerned, without specific consideration as to boundary lines between the communities of East Cleveland and Cleveland Heights." p. 17.

Taylor, however, also stated that:

"Park plans ought always to be so studied that it will be possible to make changes of a secondary character in the park, as time develops the need for these changes, without at the same time sacrificing the major and fundamental theme of the general design. Such is the intent in the plans now being presented for Forest Hill Park" p. 17-18.

During the fall of 1997, the Forest Hill Historic Preservation Society prepared a nomination for Forest Hill Park to be listed in the National Register of Historic Places. The nomination proposed two Periods of Significance: 1880 –1917 and 1936 – 1941. The dates of 1936 –1941 cover the preparation of Taylor's Master Plan and the completion of construction of the Park under the Works Progress Administration, but do not include A.D. Taylor's involvement in the Park construction up to 1950 with projects such as the Superior Road Recreation Area. Although the nomination references Taylor's involvement in 1949-1950, his involvement and projects completed or designed during that period are not considered as part of the

Period of Significance. The Updated Master Plan recognizes the Primary Period of Significance as 1938 to 1950, which includes Taylor's continuum of work on projects in fulfillment of his 1938 Master Plan and his involvement in the Park on the Advisory Commission.

The issue of the "unity of the park" is a concern. To quote the State Historic Preservation Officer Amos J. Loveday, Jr. in his letter of on August 3, 1998 to Robert C. Downey, City Manager City of Cleveland Heights, "The National Register listing recognizes the significance of the park as a designed landscape following the plans and design of the nationally acclaimed Landscape Architect, A. D. Taylor." Although the nomination also references the quote above from page 17 of the 1938 Master Plan Report about "unity of design," the nomination proposes the exclusion of portions of the Park from the register nomination. This unity of design is explained with the following statement:

"The nominated property comprises those portions of Forest Hill Park that retain historic integrity. Two areas of the park have been excluded due to incompatible later construction and changes in use."

In the future, the exclusions proposed and accepted in this nomination and the dates of the Primary Period of Significance could be corrected by an amendment to the National Register Form.

Goals and Objectives:

Using the vision of John D. Rockefeller, Jr. and the philosophies set forth by Taylor in his 1938 Master Plan as a starting point, we propose the following goals to serve as guidelines for implementation:

- Promote stewardship of the Park and awareness of the original A. D. Taylor Master Plan (1938) its historical landscape, open space and recreational heritage through education, community participation and advocacy;

- Promote stewardship and preservation of the Rockefeller Period, 1873-1937, historical landscape, open space heritage and extant features through education, community participation and advocacy;

- Recognize the importance of the ecological systems within the Park and promote their stewardship and preservation through community participation, education and advocacy;

- Develop treatment solutions which preserve and respect the Rockefeller Period, as well as the A. D. Taylor Plan's historical landscape features, circulation patterns, uses, and structures which have been determined through historical research and historical documentation to be integral components of the original design intent, use, appearance or as-built condition;

- Develop treatment solutions that preserve and protect important plant and animal communities;

- Develop treatment solutions which enhance public safety and universal accessibility, and improve circulation through the maintenance and improvement of the separation of pedestrian and vehicular systems;

- Minimize alterations and additions which represent significant inconsistencies or diversions from the original design intent, use, appearance and as-built condition while recognizing current community priorities and contemporary needs;

- Develop strategies for connecting the Park to abutting park lands, a step that could lead to the eventual development of a system of parks;

- Provide a framework for on-going management and maintenance of the Park's landscape features, circulation patterns, uses, and structures; and,

- Insure that all proposed modifications to the "basic plan" be reviewed and approved by the Advisory Commission in accordance with the Agreement.

The achievement of the objectives and adherence to the stated goals for the update of the A. D. Taylor 1938 Master Plan involves the consideration of four separate, yet interrelated, areas of research, documentation and analysis:

- History.
- Existing conditions.
- Existing use.
- Existing management and maintenance.

The history of the design and construction of Forest Hill Park, and its position as the best surviving example of a public park landscape of the A. D. Taylor legacy, mandate that Forest Hill Park receive special attention. Existing conditions after 60 years show deterioration and change. Some changes are part of natural processes, such as the aging of forests, while others are induced by human interventions or by neglect. Some design features of the original 1938 Taylor Master Plan were never built, some were built differently than designed and some features were added to the design or modified during Taylor's involvement with the park from 1938 through 1950. A. D. Taylor died on January 8, 1951. According to his biographical minute in Landscape Architecture Magazine, he "continued his practice until his death." Therefore, the Master Plan document of 1938 must be looked at through the lens of its as-built condition through 1950.

While some existing uses are similar to mid-twentieth century uses, others are markedly different. A similarity occurs in that both passive and active activities are provided in a natural setting that continues to stand in striking contrast to the urban development around it. Differences appear due to the changing nature of active recreation and the pressure to add more active recreation in buildings within the Park. Some activities, such as quoits, are no longer known to the general public. Lawn bowling, though active today, caters to a limited portion of the population. Skating in Taylor's day was a winter family outing. Today, figure skating and ice hockey have become popular organized sports requiring very different facilities and have a large following in the community.

Even though populations have not substantially increased in Cleveland Heights and East Cleveland since 1938, there has been an increase in community interest in placing more active recreation in Forest Hill Park. Since the 1950's, this has resulted in the expansion of baseball, softball, football, tennis, and basketball facilities within the Park. Sports such as soccer, virtually unknown in the United States in the 1930's, have become immensely popular. Maintaining physical fitness has become a current preoccupation that has no real equivalent in the past. This has resulted in the development of designated jogging, cycling and exercise courses within our parks and a proliferation of private as well as public health club facilities. Health club facilities are contained within buildings, so parks are under pressure to accept the placement of these buildings within their limits.

While recognizing the interrelationship between historical and existing conditions, uses and maintenance and management issues, it is helpful to separate them and identify individual philosophical approaches for each in order to develop a cohesive Updated Master Plan that addresses the future.

Drawing 1 A. D. Taylor "Development Plan Forest Hill Park" January, 1938
Drawing 2 Updated Master Plan October 1, 1999

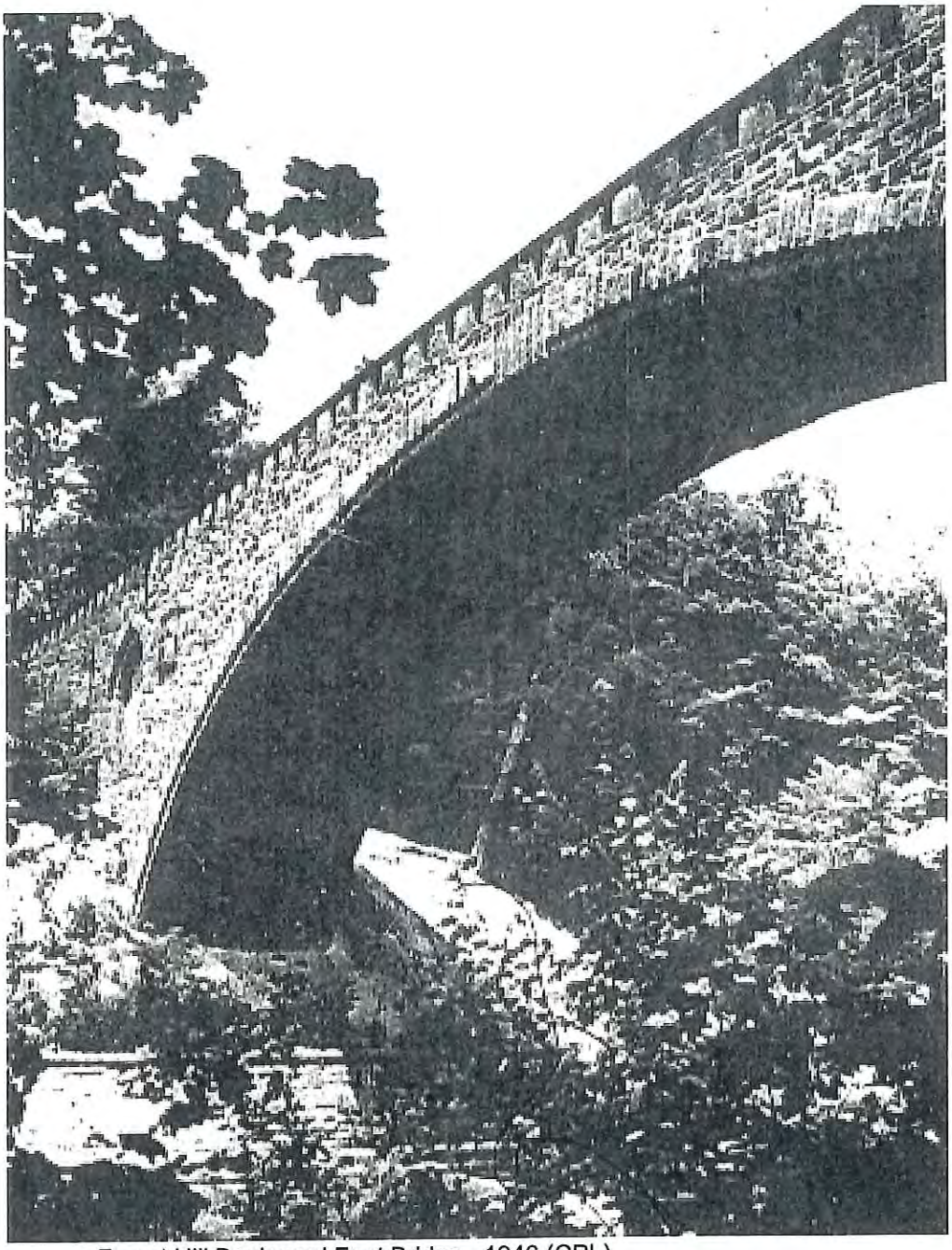
Endnotes

1. The "Deed and Intermunicipal Agreement" recorded in Cuyahoga County incorporates by reference a "Development Plan, Forest Hill Park, East Cleveland and Cleveland Heights, Ohio, January 1938" which is also referred to in the Deed and Intergovernmental Agreement as the "basic plan." The "basic plan" is explained and illustrated by an accompanying report prepared by A.D. Taylor. The term "Master Plan"as used in the report prepared by Pressley Associates refers to the A.D. Taylor report.

2. The "Deed and Intermunicipal Agreement," which was recorded in Cuyahoga County, was executed by the parties in January, 1939. It includes a "Report Accompanying Development Plan of Forest Hill Park" dated March 18, 1938 and prepared by A.D. Taylor which is somewhat different from the Master Plan referred to herein.

FOREST HILL PARK

Historical Research



Forest Hill Boulevard Foot Bridge - 1946 (CPL)

Updated Master Plan

2001

Introduction

The research and documentation of the history of Forest Hill Park established two periods of significance with the Primary Period of Significance being the A. D. Taylor Period, 1938-1950:

Primary Period of Significance 1938-1950: The A. D. Taylor Period
Secondary Period of Significance 1873-1937: The Rockefeller Era

Within his Master Plan, A. D. Taylor provides a brief "History of the Property." He describes the Rockefeller family use and occupation of the property, their preservation of the existing natural features, their development of the site into a family estate and the donation of this property over a period of years to the cities of East Cleveland and Cleveland Heights.

Taylor's concluding paragraph for this chapter expresses what he felt his direction and charge was.

"Forest Hill, however, because of the intrinsic value of its outstanding topography, tree growth, and landscape compositions, remains as a monument to the foresight and the appreciation of Mr. Rockefeller who always conceived this portion of the property as having within it those recreational possibilities so invaluable to community life, and to which perpetual use this area is now dedicated." p. 22.

For the purposes of the Updated Master Plan, the history of Forest Hill Park can be divided into four periods. For the pre-1873 period, before the land was purchased by John D. Rockefeller, Sr., there is minimal information. The Rockefeller Era extends from the 1873 purchase until the gift of the land by John D. Rockefeller, Jr. to the Cities of East Cleveland and Cleveland Heights in 1939. The A.D. Taylor Period begins in 1938 with the publication of A.D. Taylor's Forest Hill Park: A Report on the Proposed Landscape Development. It continues throughout the initial construction of the park, its later development through additional designed elements by A.D. Taylor, and into Taylor's role as a member of the Cleveland Heights Planning Commission (1944-1950). The Modern Period (1951-2001) covers the last half-century of Forest Hill Park's history. The 1873-1937 Rockefeller Era and the 1938-1950 A.D. Taylor Period are presented within this chapter. Refer to the chronology in Appendix I for the pre-1873 and Modern Periods.

1873-1937: The Rockefeller Era

The Rockefeller period of ownership is actually two periods separated by a six-year hiatus. The site was owned and actively operated by John D. Rockefeller, Sr. (hereafter Rockefeller, Sr.) between 1873 and 1917, the year that the house burned. Between 1917 and 1923, Rockefeller, Sr. no longer stayed at the property, but John D. Rockefeller, Jr. (hereafter Rockefeller, Jr.) frequently visited, staying in the guest lodge. In the 15 years between 1923, when Rockefeller, Jr. purchased Forest Hill from his father, and 1938, when the A. D. Taylor Master Plan was prepared, Rockefeller, Jr. considered several options for the ultimate disposition of the entire property. He began by developing the section to the east of Lee Boulevard as a high quality residential subdivision designed by Architect Andrew J. Thomas.

By 1937, Rockefeller, Jr., determined that the other half of the property, which had been landscaped by his father, should be a public park, although certain parcels were given to neighboring institutions. The Park would be a gift to the cities of East Cleveland and Cleveland Heights, although Rockefeller, Jr. decided to donate the money he would otherwise have spent on taxes back to the cities for the purpose of developing and maintaining the Park. He also paid A. D. Taylor for the Master Plan. His involvement did not stop there, however. Once the implementation of the Master Plan was underway, Rockefeller, Jr. was consulted on every point and was sent photographs at regular intervals although his actual visits were infrequent. Nelson A. Rockefeller, later Governor of New York State and Vice-President of the United States, also had a strong interest in landscaping and made sketches and suggestions in the early 1930's. Although the period of Rockefeller ownership ended in 1938, the period of Rockefeller involvement and influence extended from 1873 until at least 1946.

John D. Rockefeller, Sr. and John D. Rockefeller, Jr.

John D. Rockefeller, Sr. was born on July 8, 1839 in Richford, Tioga County, New York, the son of William Avery Rockefeller and Eliza Davidson Rockefeller. He was the eldest of five siblings, one of whom, William D., would later be his business partner. Although Rockefeller, Sr. was to become the wealthiest man in the world, he came from a modest, middle class background. His father, "Bill" Rockefeller, was of many occupations and irregular income. Sometimes, he styled himself a homeopathic physician and once peddled a $25.00 cure for cancer. [1] He was rarely home, but his son later recalled that he had learned a great deal about business from him. [2]

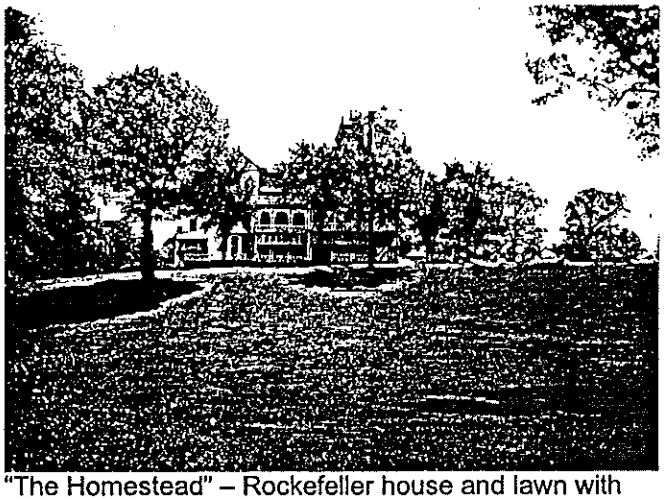
The most important and constant presence in Rockefeller, Sr.'s life was his mother, a deeply religious and rigorously frugal woman. She taught John that "willful waste makes woeful want." [3] The children were paid for chores, and John as a boy ventured into turkey farming. [4] Everything he earned was put into a little blue dish, and, when there were ten pennies in the dish, one of them went to the poor. When the family moved to Owego, New York, John was educated at Owego Academy, the finest secondary school in that part of the state. [5]

As an adult, John was as observant as his mother in following the Baptist faith: he never smoked, drank, swore or danced. On Sunday, he went to church three times, read the Bible and religious books and did not even write personal letters. [6] He disliked ostentation of all kinds—clothing, entertainment, food and, also, in architecture and landscape. On the other hand, as an adult, there was a humorous and light-hearted side to him. He liked swimming, skating, driving and riding horses and playing the organ. What few illnesses he had were treated by alternative medicines such as homeopathy. Once he advised his son John, Jr.: "Osteopathy, osteopathy, osteopathy." [7]

Even as a small child, landscape matters, especially vistas, fascinated him. One day, he told his mother that the view from the dining room window would be much improved if a certain tree were taken down. His mother said that, if he came down before breakfast and chopped down the tree, she was sure that everyone would appreciate the improvement." [8]

When he was still in high school, Rockefeller, Sr. met Laura Celestia Spelman, and, on September 8, 1864, they were married and settled in Cleveland. Eventually, they had five children (one a girl who died at the age of one), including their last-born child and only son, John D. Rockefeller, Jr.

Rockefeller, Sr. had a phenomenally successful business career, which it is unnecessary to relate here. As a young man, he was absorbed by the details of business but later became expert at delegation. Even in the most active periods of his business career, he spent a great deal of time with his children, teaching them to ride and swim. At the age of 55, Rockefeller, Sr. retired and devoted himself to philanthropy, golf and the development of his country properties.

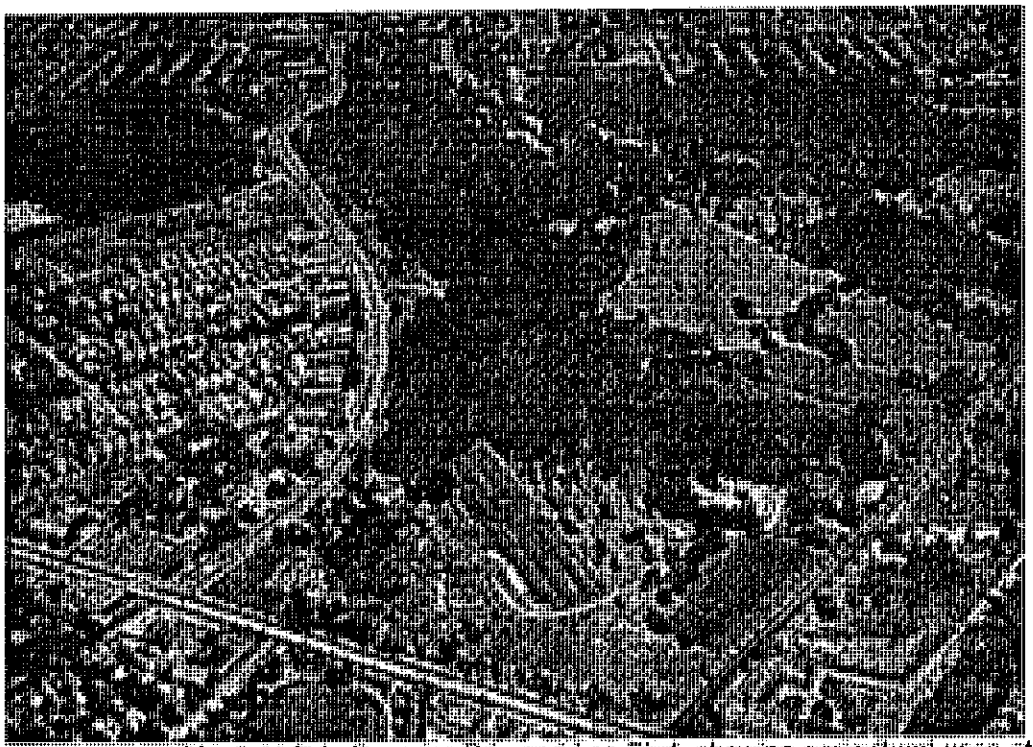


"The Homestead" – Rockefeller house and lawn with specimen trees at Forest Hill (RAC c. 1905).

In the early years of their marriage, the Rockefellers lived in Cleveland year-round, first at a house on Cheshire Street and then a larger more imposing house at 424 Euclid Avenue, where Rockefeller, Sr. also began landscape improvements. [9] In 1873, he purchased 79 acres of land further out on Euclid Avenue in East Cleveland. His initial plan was to create a water-cure establishment, and in 1876, he constructed a building in East Cleveland that was intended as a sanatorium. (The name of the architect is not known.) Because of the depressed financial condition of the early and mid-1870's, the water-cure establishment never came to anything. In the summer of 1877, the building at Forest Hill was run as a private club. By the following fall, the Rockefellers had adopted the property as their own country residence, retaining the building constructed as a sanatorium and calling it "The Homestead." One reason for this decision may have been that, in 1876, Mrs. Rockefeller had been diagnosed with consumption, for which fresh air was the most common prescription. Rockefeller, Sr. continued to buy parcels of land around the core and eventually acquired approximately 700 acres. [10]

Between 1877 and 1883, the Rockefellers maintained the house at 424 Euclid Avenue as their primary residence and spent summers at Forest Hill. Throughout the year, they visited the Homestead every Sunday, bringing in a cold lunch. Eventually, the employees (indoor and outdoor) reached a total of 136. Late in 1883, because New York City was increasingly the center of Rockefeller's business activities, the family moved there, but continued to spend periods in the spring and fall at Forest Hill. They kept the house at 424 Euclid Avenue in repair but never went there, and it was not sold until 1938. [11]

Throughout his life, Rockefeller, Sr. had a great interest in views, as well as in the planning and construction of roads and paths to obtain views and trees and tree management. A lover of native American trees, he used very few imported ones and may have incorporated many of the trees already on the property into his landscape concept for Forest Hill. He appears to have had little interest in horticulture per se, and none of his properties featured ornamental flower beds as part of the landscape, although, at Forest Hill, Mrs. Rockefeller had a flower garden, probably a cutting garden, at some distance from the house.[12] There may have been a farm component at Forest Hill, but, if so, it was a secondary matter and little space was devoted to it. [13] The 1938 aerials illustrated in the Taylor Master Plan, however, indicate either vegetable gardens or perhaps plant nurseries in the Cleveland Heights section of the site.



Aerial view at Mayfield Rd., Superior Rd., and Lee Blvd. showing agricultural uses at Forest Hill (WR 1937).

Forest Hill Park was the first opportunity Rockefeller, Sr. had to carry out his landscape interests on a large scale. By his own account, he designed the landscape himself, beginning almost immediately, even before he had decided to live there, with the roads and the paths. In 1908, he wrote that he had begun laying out the roads at Forest Hill 35 years earlier (i.e., 1873):

"This phrase, 'diligent in business,' reminds me of an old friend of mine in Cleveland who was devoted to his work. I talked to him, and no doubt bored him unspeakably, on my special hobby, which has always been what some people call landscape gardening, but which with me is the art of laying out roads and paths and work of that kind. This friend of thirty-five years ago plainly disapproved of a man in business wasting his time on what he looked upon as mere foolishness.

"One superb spring day I suggested to him that he should spend the afternoon with me (a most unusual and reckless suggestion for a businessman to make in those days) and see some beautiful paths through the woods on my place which I had been planning and had about completed. I went so far as to tell him that I would give him a real treat." [14]

Rockefeller's Cleveland friend refused his invitation, but Rockefeller, Sr. continued, undeterred, to lay out roads and paths, construct bridges and arrange views. Twenty miles of carriage drives were eventually built, and at times, Rockefeller, Sr. supervised 50 or 60 construction workers. To create better views, he moved large trees with such skill that the roots were not damaged. [15]

Carriage drive on Rockefeller Estate at Forest Hill (WR/no date).

In 1892 and 1893, Rockefeller, Sr. asked first the Olmsted firm and then Warren H. Manning, the Olmsted firm's planting specialist, for advice at Forest Hill but did not allow them to implement any designs.[16] Rockefeller Sr.'s 1908-1909 account also described his landscaping at his country place, "Kykuit," in Pocantico Hills (now Sleepy Hollow), New York. It is useful to quote some of this, even though the events described occurred in the early 1890's, because it vividly demonstrates Rockefeller Sr.'s hands-on method of laying out roads and creating views:

"Like my old friend [in Cleveland], others may be surprised at my claim to be an amateur landscape architect in a small way, and my family have been known to employ a great landscape man to make quite sure that I did not ruin the place. The problem was, just where to put the new home in Pocantico Hills, which is now building. I thought I had the advantage of knowing every foot of the land, all the old big trees were personal friends of mine, and with the views at any given point I was perfectly familiar – I had studied them hundreds of times; and after this great landscape architect had laid out his plans and driven his lines of stakes, I asked if I might see what I could do with the job.

"In a few days I had worked out a plan so devised that the roads caught just the best views at just the angles where in driving up the hill you came upon impressive outlooks, and at the ending was the final burst of river, hill, cloud, and great sweep of country to crown the whole; and here I fixed my stakes to show where I suggested that the roads should run, and finally the exact place where the house should be.

"'Look it all over,' I said, 'and decide which plan is best.' It was a proud moment when this real authority accepted my suggestions as bringing out the most favored spots for views and agreed upon the site of the house. How many miles of roads I have laid out in my time, I can hardly compute, but I have often kept at it until I was exhausted. While surveying roads, I have run the lines until darkness made it impossible to see the little stakes and flags." [17]

The "great landscape man' could only have been Frederick Law Olmsted, Sr., who is known to have come to Kykuit just once, although his step-son and partner John Charles Olmsted and Warren H. Manning made numerous visits. [18]

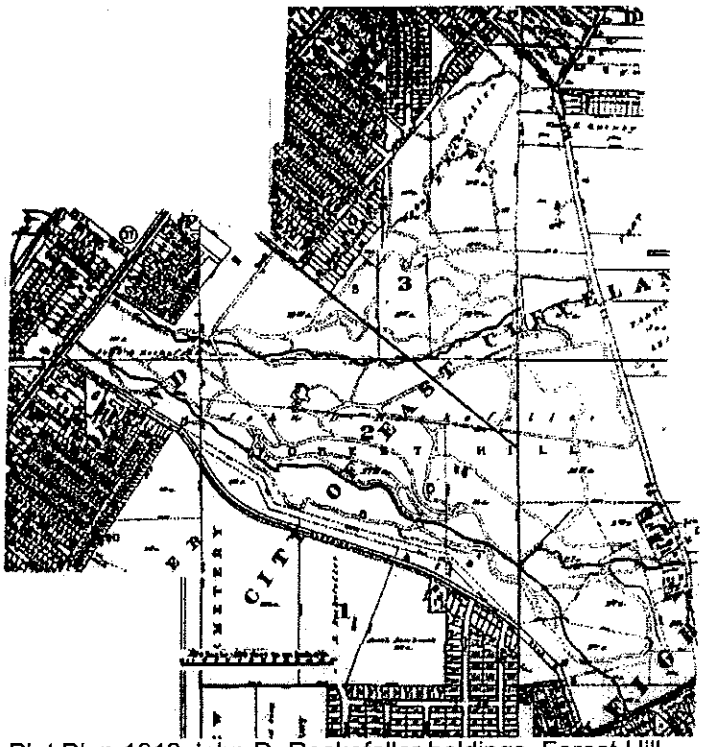
From the beginning of the Rockefellers' residency at Forest Hill, outdoor recreation of many sorts was available: swimming and skating in season on the artificial lakes that Rockefeller, Sr. constructed, as well as boating and horseback riding. Rockefeller, Sr. frequently took the afternoon off from business and joined his children in these activities. He was especially fond of skating, and since he would not allow work to be done on the Sabbath, he frequently rose after midnight on Sunday to supervise laborers flooding the pond for the next day's skating. [19] In addition, Rockefeller, Sr. put in a large oval track for exercising his thoroughbred horses. These improvements were begun early in the family's residency at Forest Hill, but exact dates are not known. Around 1889-1890, a 9-hole golf course was laid out for Rockefeller, Sr. by "experts." [20] Unfortunately, the names of these experts are not recorded.

In the summer of 1890, Rockefeller, Sr. put his son, John D. Rockefeller, Jr., then 16, in charge of the payroll and supervision of work on the estate. Rockefeller, Jr. planned some of the later roads and paths and planted a number of trees. One of his projects was the planting of the maples along the half-mile oval horse track. [21] Just as Rockefeller, Sr. designed roads at Kykuit, Rockefeller, Jr. extended his interest in roads to his other properties, planning an extensive carriage road system at Aerie, his summer place in Seal Harbor, Maine. Ultimately, he donated 50 miles of these carriage roads to the National Park Service for Acadia National Park.

Rockefeller, Sr.'s business practices became the target of several scathing articles by the journalist Ida M. Tarbell. These culminated with her two-part character study of Rockefeller, published in McClure's Magazine in July and August of 1905. As a result, Rockefeller, Sr. was inundated with death threats and hired Pinkerton detectives to protect him. Instead of letting the public roam through the outer grounds at Forest Hill and Kykuit, he took strict security measures. At Forest Hill, he had an eight-foot high iron fence erected, which shut off sections of the grounds. [22]

On March 12, 1915, Laura Spelman Rockefeller died. After her death, Rockefeller, Sr. returned to Forest Hill for two summers. On December 17, 1917, the Homestead was destroyed by fire. Although there was a large guest lodge available, Rockefeller, Sr. never returned to Forest Hill. In 1923, Rockefeller, Jr. purchased the Forest Hill property from his father, then sold some of it for a hospital, a high school and a Masonic hall as well as for the Forest Hill subdivision. He also made some small additional purchases. In 1931, he had the golf course redesigned, probably by his son, Nelson, and tennis courts were put in, both facilities for the use of residents of the subdivision. Nelson Rockefeller also prepared a sketch for moving shrubs and for changes in the paving of the turn around at the Lodge. [23]

Rockefeller Estate Golf Course Hole #2 at Forest Hill (RAC/no date).



Plat Plan 1912 John D. Rockefeller holdings, Forest Hill.

The circulation system created by Rockefeller, Sr. can be seen particularly well on the Pease 1925 Topographical Survey, and also on the 1898, 1912 and 1914 Plat Plans. Rockefeller Sr.'s love of roads and paths caused him to put in an unusually extensive circulation system. Particularly in the area of Dugway Brook, his road crisscrossed the waterway with little bridges so frequently that, on maps, it looks like a braid. Unfortunately, the Pease Survey indicates groups of trees only in the vicinity of the house and in the woods near the quarry, and individual trees are not identified.

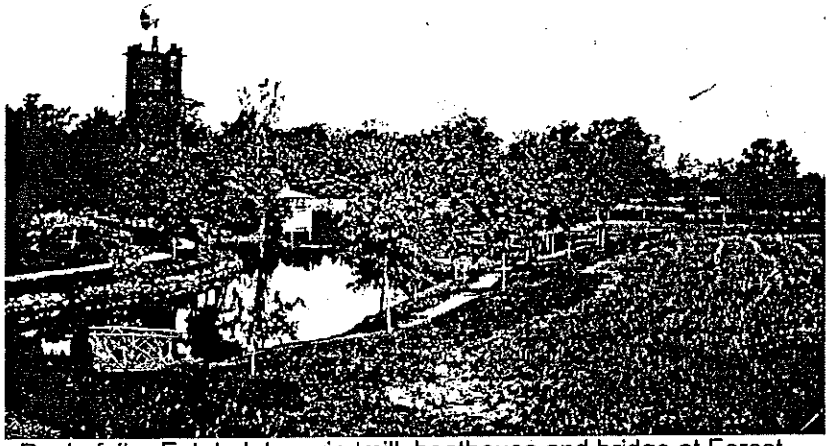
Cutting a road through the estate where John D. Rockefeller once had his home [CPL/1236].

In his 1938 report, A. D. Taylor described a grove of large specimen trees east of the site of the former residence, which consisted primarily of four kinds of native Oaks and an occasional Sourgum and Hard Maple. Some of these had apparently been part of the original hardwood forest. In the Dugway Brook area, there were trees with characteristics of the typical Lowland Forest, merging into the mixed Mesophytic Forest at upper levels. There was also a small grove of Pines, Spruces, and Hemlocks with broadleaf evergreens, planted by Rockefeller, Sr. on the south side of the golf course. [24] In 1943, Rockefeller, Jr. recalled that there had been a large variety of native trees on the property, including many American Chestnuts. It appears that, with the exception of the golf course, Rockefeller, Sr. cleared no forests but simply thinned existing trees.

Dugway Brook on Rockefeller Estate at Forest Hill (WR/no date).

As can be seen in old photographs, the lake was originally larger than it appears on the 1925 Pease Survey and the Existing Conditions aerial in the 1938 Master Plan. Taylor discusses the lake in the 1938 Master Plan:

"The large lake is one of the artificially constructed features now existing on this property. It has a water area of approximately 4.1 acres. Its maximum depth approximates 15 feet. It is bordered on a portion of the south and west sides by a rather massive stone treatment. At one time the lake was much larger, but the construction of the Forest Hill Subdivision storm sewers made it necessary to reduce the size of the lake and to lower the surface." [25]



Rockefeller Estate lake, windmill, boathouse and bridge at Forest Hill (RAC/no date).

John D. Rockefeller, Sr. died on May 23, 1937. Extant character-defining features from the Rockefeller Period, 1873-1937, are illustrated on Drawing 3, and can be compared to the A. D. Taylor 1938 Master Plan, Drawing 1.

1938-1950: The A. D. Taylor Period

Shortly after his father's death John D. Rockefeller, Jr. decided to give 266 acres of his Forest Hill land to the Cities of East Cleveland and Cleveland Heights for a park in memory of his father. He would also pay for studies and a general plan of development by a Landscape Architect.[26]

In 1938, the prominent Cleveland Landscape Architect, Alfred D. Taylor (A. D.), was retained to design a master plan for the development of the Rockefeller property as a public park, see Drawing 1. At the time of the Master Plan, Taylor was President of the American Society of Landscape Architects. Taylor was best known for his development of private grounds and Forest Hill Park survives as his best example of a public park.[27] In addition to the Master Plan, in January and February 1939, Taylor published two articles in Parks and Recreation, which contain some information not in the Master Plan.[28]

Taylor's Master Plan, widely recognized at the time as the best of its type, had as its fundamental hypothesis the concept that the park should preserve the best features of the original Rockefeller estate while also making Forest Hill Park easily accessible to the public and providing additional recreational uses. He saw the site as having the potential to be a rural or "country park" in the lineage of parks by Frederick Law Olmsted and Calvert Vaux. Taylor wrote:

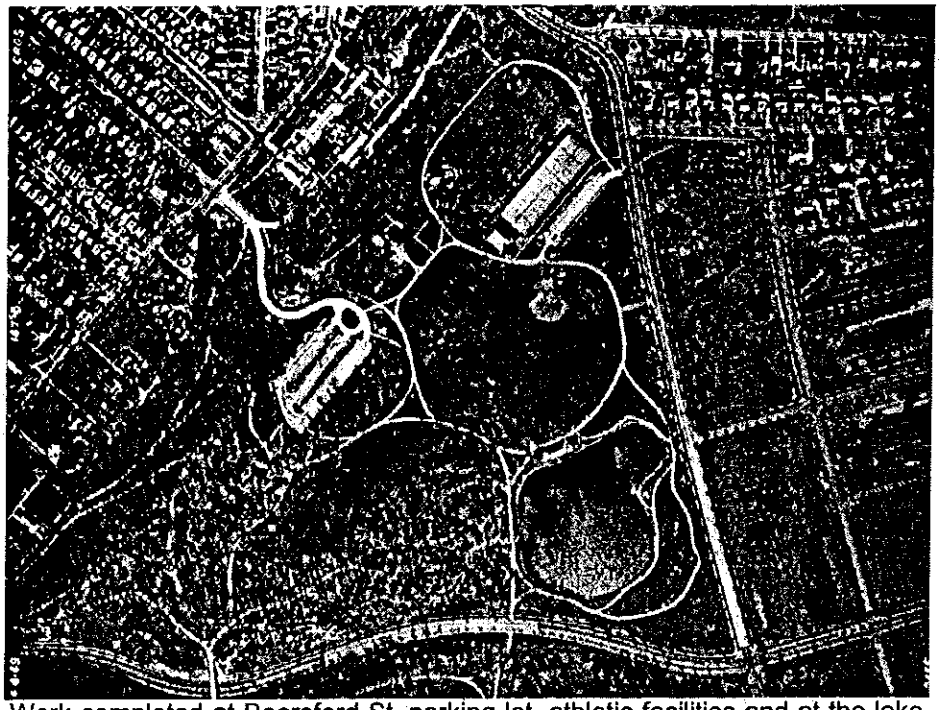
> The original conception of a park in this country was a place where city dwellers could enjoy an idealized rural landscape. Great examples were produced, as is evidenced in Fairmount Park, Philadelphia; Prospect Park, Brooklyn; Central Park, New York; and Franklin Park, Boston. Such parks are possible only where a comparatively large tract of land, having the desired topographical features, existed in one undivided area. It is worthwhile noting that the tract of land to be developed as Forest Hill Park falls into the category of a real park property...[29]

Taylor's first objective was to achieve visual unity of design throughout the entire park, without any consideration of the boundary line between East Cleveland and Cleveland Heights. He banned automobile traffic from Forest Hill Park except for access to his carefully designed parking lots.[30]

The lake under construction, which will cover five acres, doubling the size of the original lake at the Rockefeller Estate (CPL/1939).

In his 1938 Master Plan, Taylor made specific recommendations for many of the landscape features remaining from the Rockefeller ownership. He initially proposed to convert the roads threading in and around Dugway Brook to paths, while eliminating the straight roads that defined the golf course and

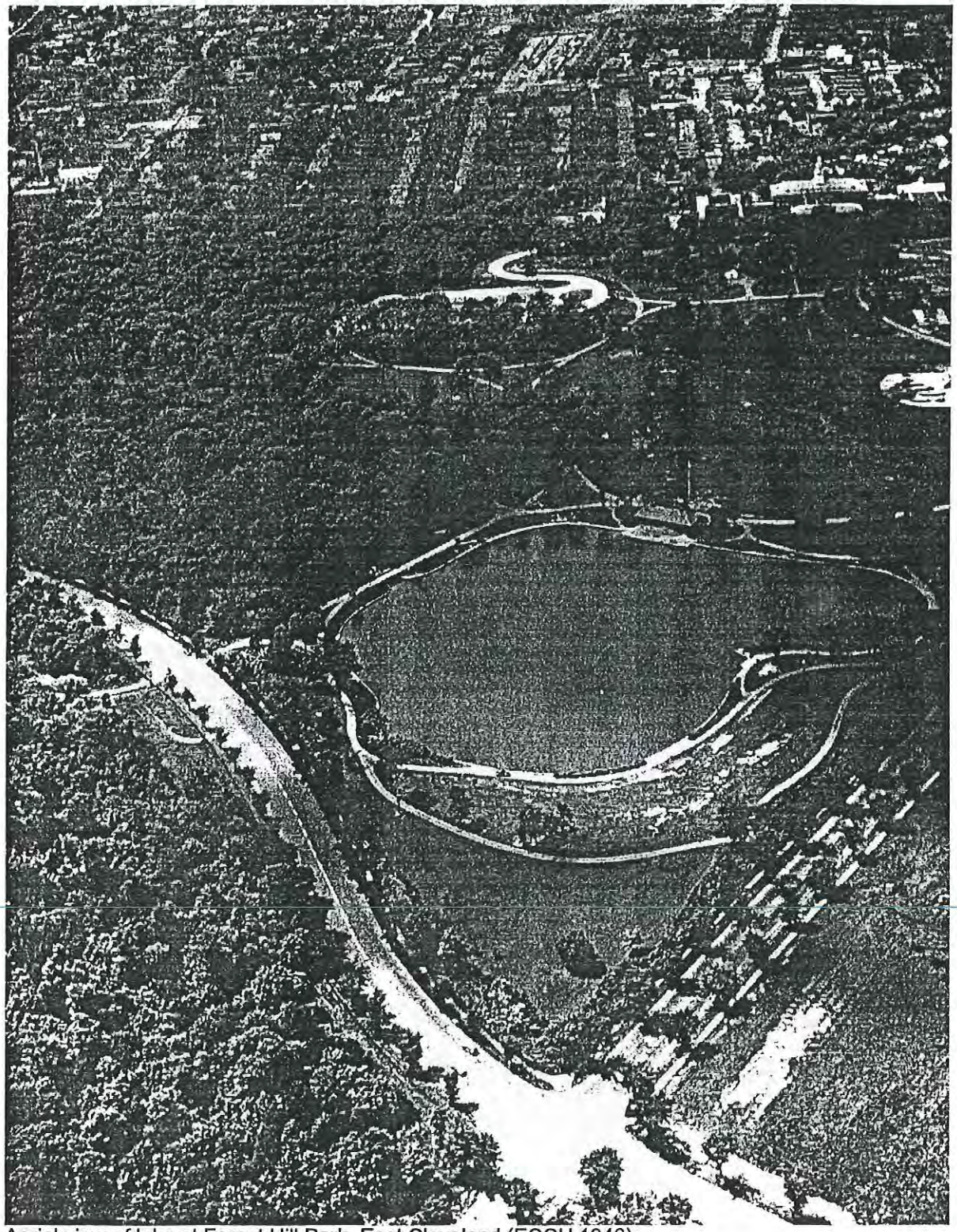
formed the horse track in order to create the new Great Meadow. Some of the Rockefeller bridges over the Dugway Brook were retained, but others had to be redesigned for safety. The masonry walls constructed by Rockefeller, Sr. on either side of the brook also needed to be rebuilt. All of the existing walks and trails, with the exception of those in Taylor's proposed Great Meadow, were to be kept, but most had to be brought to a standard width. Also to be retained was the lake, which Taylor planned to enlarge, restoring the original water elevation.



Work completed at Beersford St. parking lot, athletic facilities and at the lake at Terrace Road, Lee Boulevard, and Forest Hill Boulevard. (CHCH 1949).

Work completed in the Dugway picnic area and Great Meadow at Superior Road. Terrace Road, and Forest Hill Boulevard. (CHCH 1949).

The golf course, on the other hand, had to go, because Taylor felt that the Great Meadow was much more desirable and would serve many more people. The existing tennis courts, which had been built only a few years earlier for the residents of the Forest Hill subdivision, were awkwardly placed for park purposes and were to be taken out and new ones constructed elsewhere. Taylor recommended that a picnic area be developed in the Quarry.[31]



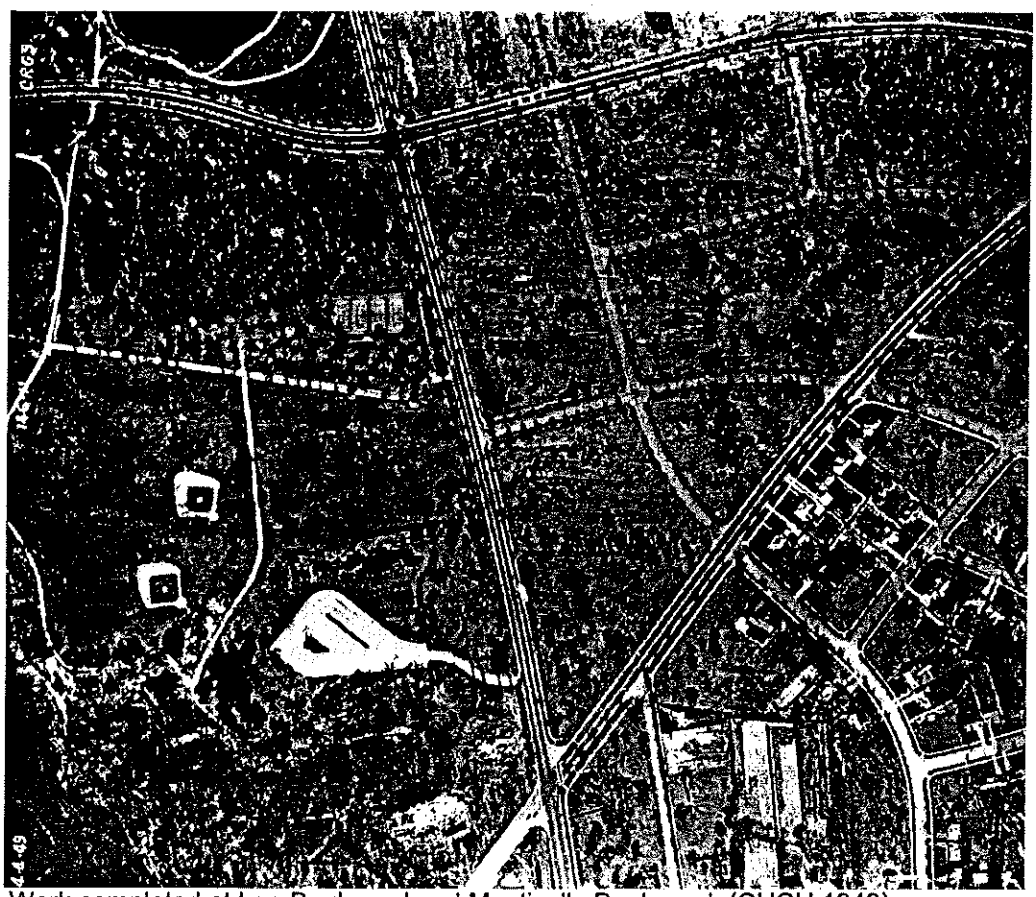
Aerial view of lake at Forest Hill Park, East Cleveland (ECCH 1946).

Work completed at Terrace Road. and Forest Hill Boulevard. at the bowling green, meadow vista, parking at Beersford Street. and the stone foot bridge spanning Forest Hill Boulevard, (CHCH 1949).

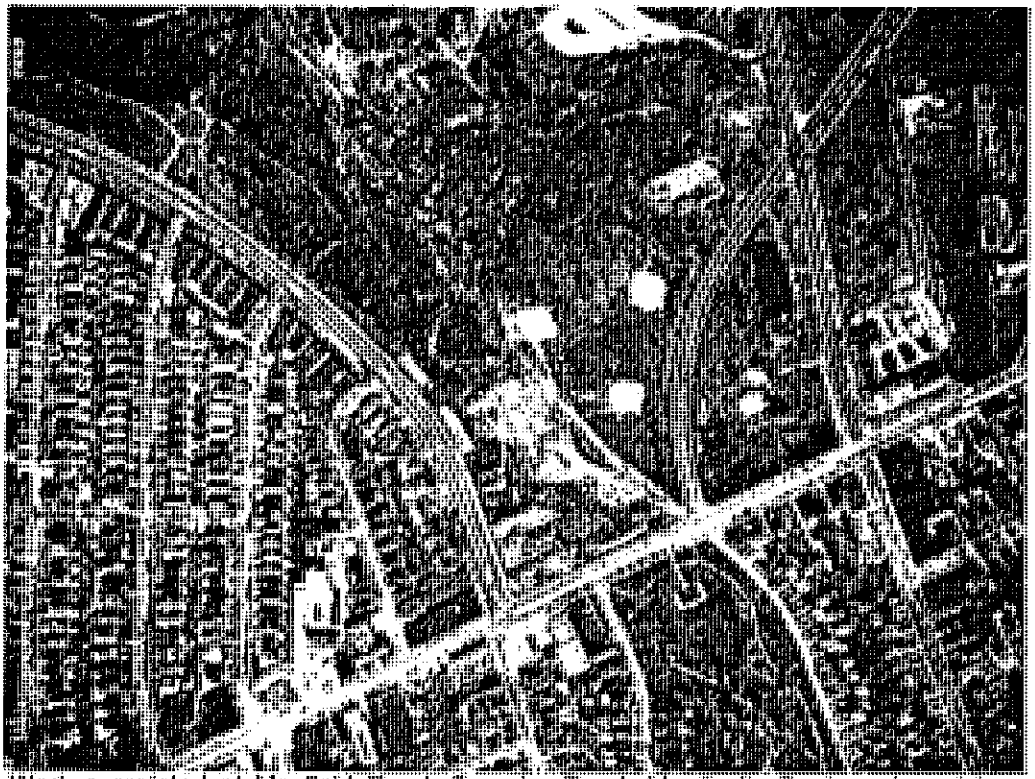
Taylor also recommended that several new features be added: automobile and pedestrian entrances; facilities for several sports, including practice putting greens and two bowling greens; picnic groves; and several shelters, including a Main Pavilion to be built on the site of the former Rockefeller residence. A high-level footbridge would also be constructed over Forest Hill Boulevard. Considerable new planting would be done, but with emphasis on restoring the woodlands. [32]

The deed for the land being donated to East Cleveland and Cleveland Heights includes an "Intermunicipal Agreement" for maintenance of the park and incorporates by reference a Development Plan and report prepared by A.D. Taylor. Forest Hill Park differs from most other city parks in its administration. Instead of being run by a city park commission, each municipality is responsible for development and maintenance of the property within its boundaries but development must be in accord with the Development Plan. The Development Plan may be changed only with the approval of an Advisory Commission. The Commission did not meet between 1975 and 1996. The commission consists of a representative of each city and one appointed by the American Society of Landscape Architects. The ASLA appointed Taylor himself as its first representative on the Commission. [33]

Taylor had a sympathetic ally, Jay Downer, in the implementation of the 1938 Development Plan. Downer, who was Rockefeller, JR.'s personal representative, had been the chief engineer for the Westchester County (New York) Park Commission. All of the construction work at Forest Hill Park was carried out by the Works Progress Administration, one of President Franklin D. Roosevelt's alphabet agencies, as WPA Project No. 1402. [34] A major setback occurred early on when Charles A. Carran, City Manager of East Cleveland, recommended culverting the entire length of the Dugway Brook in that city because of sanitary and safety concerns. Downer was appalled at the suggestion. [35] On the day that A. D. Taylor and John D. Rockefeller, Jr. made a field inspection with Downer, the water was very low and the pollution was especially objectionable. [36] Carran, assisted in his endeavor by an unexpectedly large amount of free concrete and labor available from the WPA, carried the day.

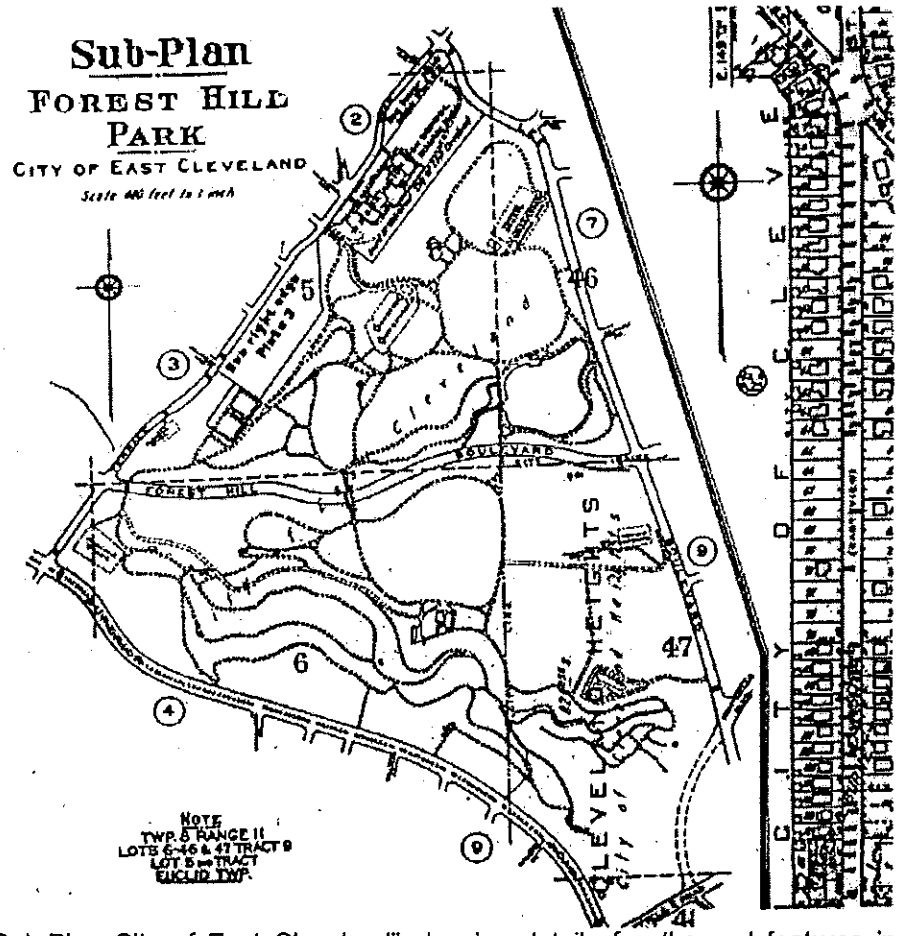


Work completed at Lee Boulevard and Monticello Boulevard. (CHCH 1949).



Work completed at Mayfield Road, Superior Road, Monticello Boulevard, and Lee Boulevard. (CHCH 1949).

Not all of Taylor's recommended structures and recreational facilities were executed immediately, and some were never built. The agreement that the two cities signed did not demand that all recommended features be constructed immediately, but only that once started, they should be carried out according to plan. Obviously, a high priority was the footbridge over Forest Hill Boulevard, which was constructed in 1939-1940 from designs by Wilbur J. Watson, Engineer, with F. R. Walker as Consulting Architect. [37] Although A. D. Taylor had to keep an eagle eye on construction workers to ensure that they consistently matched the stone sample, the bridge, when complete, was a triumph. [38] Not only was the WPA proud of it, but John D. Rockefeller, Jr. – not a man given to hyperbole – when shown a photograph, exclaimed: "This bridge is truly beautiful." [39]



"Sub-Plan City of East Cleveland" showing detail of paths and features in Forest Hill Park in both East Cleveland and Cleveland Heights (ECCH 1941).

A. D. Taylor was a member of the Cleveland Heights Planning Commission from 1944 and so remained in touch with the project almost until his death in January 1951.

Between 1873 and 1951, Forest Hill Park evolved under the guiding hands of John D. Rockefeller, Sr., John D. Rockefeller, Jr., and A. D. Taylor, creating a permanent legacy of landscape beauty and a recreational resource for the citizens of East Cleveland and Cleveland Heights.

The research and documentation of the Rockefeller Period and the A. D. Taylor Period are documented on the following drawings included in the Appendix:

Drawing 3	Historical Mapping for the John D. Rockefeller, Jr. Period - Extant Features 1873-1937
Drawing 4	Historical Mapping for the A. D. Taylor Period - Extant Features 1938-1950
Drawing 5	Significant Views and Viewpoints - A. D. Taylor Period 1938-1950
Drawing 6	Circulation and Parking - A. D. Taylor Period 1938-1950

1. Ron Chernow, Titan: The Life of John D. Rockefeller, Sr. New York: Random House (1998) 6-13, 16-19, 26-30; Clarice Stasz, The Rockefeller Women. New York: St. Martin's Press, 1995, 6-8; Grace Goulder, John D. Rockefeller: The Cleveland Years (Cleveland, Ohio: The Western Reserve Historical Society, 1972), 24.

2. Chernow, Titan, 25-26.

3. Ibid., 10.

4. Stasz, The Rockefeller Women, 11-13.

5. Chernow, Titan, 33-35.

6. Ibid., 18-19, 51-54; Goulder, 28.

7. Letter from John D. Rockefeller, Sr. to John D. Rockefeller, Jr., July 8, 1905. In Joseph W. Ernst, ed., "Dear Father"/"Dear Son": Correspondence of John D. Rockefeller, Jr. New York: Fordham University Press in cooperation with Rockefeller Archive Center, 1994, 23. For Rockefeller, Sr.'s views on health, see also John D. Rockefeller, Sr. to John D. Rockefeller, Jr., November 10, 1925, Ibid., 139-140.

8. John D. Rockefeller, Random Reminiscences of Men and Events (Sleepy Hollow: Sleepy Hollow Press and the Rockefeller Archive Center, 1984), 39. This book is a compilation of articles written by Rockefeller and published in 1908-1909 in The World's Work.

9. Chernow, Titan, 119-121.

10. Ibid., 183. In his Master Plan, A. D. Taylor wrote that the club building was remodeled as a residence for the Rockefeller family in 1880. See A. D. Taylor, Forest Hill Park: A Report on the Proposed Landscape Development, Prepared for the City of Cleveland Heights, Ohio -- Frank C. Cain, Mayor and the City of East Cleveland, Ohio -- Charles A. Carran, City Manager (Cleveland, Ohio, 1938), 20. There seems to be no other record of such a remodeling, and, if it was done, the family had been living in the building for more than two years before making any alterations.

11. Ibid., 184-186.

12. The elaborate gardens designed by Welles Bosworth at Kykuit, begun in 1893 as Rockefeller's country home in Westchester County, Ca., 1907-1910, were undertaken at the instigation of John D. Rockefeller, Jr.

13. Goulder: (John D. Rockefeller: The Cleveland Years, 147) describes a farm at Forest Hill, but it does not appear as such on maps and there are no photographs of it.

14. Rockefeller, Random Reminiscences, 34.

15. Chernow, Titan, 186.

16. Letters in the John D. Rockefeller Letterbooks, Rockefeller Archive Center, Sleepy Hollow, New York.

17. Rockefeller, Random Reminiscences, 36-37.

18. George D. Rogers (a secretary or agent to John D. Rockefeller) to Frederick Law Olmsted, August 16, 1894; John D. Rockefeller to Olmsted, Olmsted and Eliot, November 10th 1894; Rockefeller to Olmsted, Olmsted and Eliot, January 9, 1895; Rogers to Olmsted, Olmsted and Eliot, April 15, 1895; and Rockefeller to Olmsted, Olmsted and Eliot, May 12, 1896; all in the Olmsted Associates Records, B-Files, Library Of Congress, Manuscript Division, filed under Job No.243. The Olmsted firm appears to have ordered some plants for Rockefeller, but Rockefeller was interested only in consultations by

the firm and, after a few years, terminated those.

19. Chernow, Titan, 186, 220. After the move to New York City, Rockefeller created a large rink for skating in a space adjacent to his town house

20. Goulder, John D. Rockefeller: The Cleveland Years, 147.

21. Ann Rockefeller Roberts, Mr. Rockefeller's Roads: The Untold Story of Acadia's Carriage Roads and Their Creator (Camden, Maine: Down East Books, 1990), 13.

22. Chernow, Titan, 501.

23. W. B. Smith to Nelson A. Rockefeller, September 21, 1931, Rockefeller Archive Center.

24. Taylor, Forest Hill Park, 27-28.

25. Taylor, Forest Hill Park, 29.

26. Jay Downer, representing John D. Rockefeller, Jr., to the Hon. Frank C. Cain, Mayor of Cleveland Heights and Mr. Charles A. Carran, City Manager of East Cleveland, July 2, 1937, Rockefeller Archive Center. The gift was widely publicized in the local press. See Cleveland Plain Dealer, July 29, 1937, March 16, 1938, and June 26, 1938.

27. For Taylor, see Jot Carpenter, Entry on Albert Davis in Charles A. Birnbaum and Lisa Crowder, eds., Pioneers of American Landscape Design: An annotated Bibliography (Washington, D. C.: U. S. Department of the Interior, National Park Service Cultural Resources, Preservation Assistance Division, Historic Landscape Initiative, 1993), 121-125. During the Great Depression, in March 1934, Taylor and architect Delos Smith prepared a study (Sketch Study for Proposed Development of Property) for what is the Beltsville Agricultural Research Center, in Beltsville, Maryland, one of his few other nonresidential projects. See Robinson & Associates, Inc. and Rhodeside &. Harwell, Inc. in association with Bernard Johnson Young, Inc., Historic Site Survey, Volume I: Historic Context and Recommendations, Prepared for the United States Department of Agriculture Agricultural Research Service, Preliminary Draft, January 1998.

28. A.D. Taylor, "Forest Hill Park: Rockefeller Estate, an Intercity Park for Cleveland Heights and East Cleveland, Ohio," Parks and Recreation, Vol. 22, no.5 (January 1939), 219-235. In the same month, Taylor published an article on stonework, which has some bearing on the designs for stonework in structures in Forest Hill Park, especially the pedestrian bridge. See A. D. Taylor, L. A., "Stonework for Walls: Some Notes and Details Concerning Textures," Pencil Points, January 1939, 47-56.

29. Taylor, Forest Hill Park, 16.

30. Ibid., 17, 48-49.

31. Ibid., 38-41.

32. Ibid., 41-92.

33. Alfred Geiffert, Jr., Secretary of the American Society of Landscape Architects, to the Mayor of Cleveland Heights, October 5, 1938.

34. The WPA records in the National Archives in Washington, D.C. are incompletely indexed, so little was located in Washington for this project. Most WPA records were maintained in the cities or state where the project was carried out, but none have been found in Cleveland Heights, East. Cleveland, Cleveland or Columbus. However, the National Archives in College Park, Maryland (Archives II) yielded some fine photographs of Forest Hill Park (Still Pictures Division, Record Group 69-NS, Boxes 53 and 54).

35. Jay Downer to John D. Rockefeller, Jr., September 13, 1938, Rockefeller Archive Center.

36. A. D. Taylor to Jay Downer, October 17, 1938, Rockefeller Archive Center.

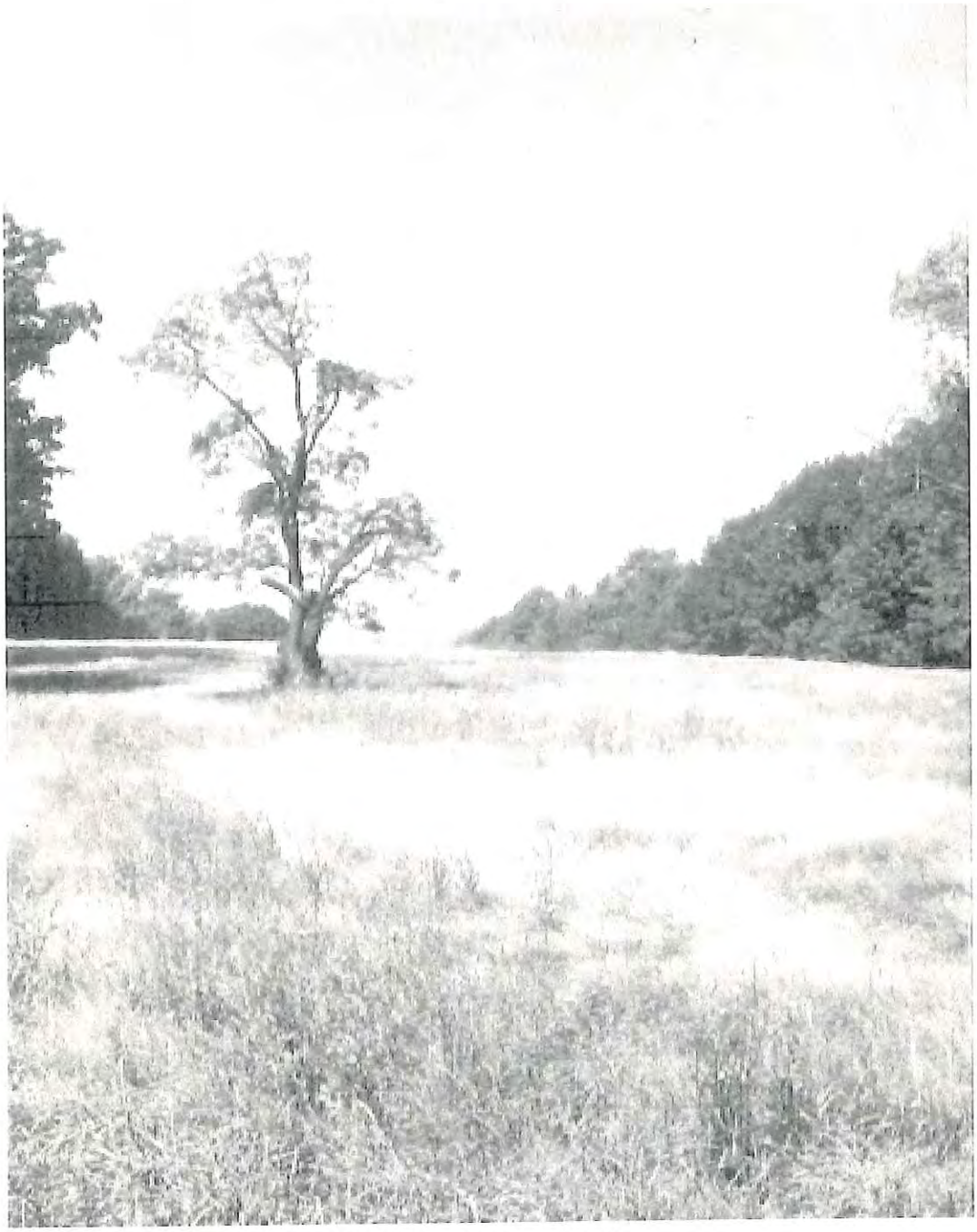
37. William J. Watson to Jay Downer, November 15, 1938, Rockefeller Archive Center.

38. A. D. Taylor to Jay Downer, November 22, 1939, Rockefeller Archive Center.

39. Downer to Carran, reporting on Rockefeller, JR.'s reaction to photographs of the bridge, July 10, 1940, Rockefeller Archive Center.

FOREST HILL PARK

Inventory and Analysis



The Great Meadow (Pressley Associates, 1997)

Updated Master Plan

2001

Introduction

In his introduction to the 1938 Master Plan, A.D. Taylor establishes his concept for the park as a country or suburban park that can remain almost entirely as an idealized rural landscape, while serving the recreation requirements of the public. He recognized that the park "will have an increasing intensity of use as the years go by" so the Master Plan was explicit both in its proportion of active to passive uses and in its placement of these areas within the park. Both protection of the integrity of natural systems and the varying character of passive uses were clearly defined. He recognized "that one seldom finds an area of such size possessing such diversity of topography, abundance, and variety of existing vegetation, and many other natural advantages, located within the metropolitan area of a large city." The forest or woodland, as well as important meadows within the park, established the "Country Park" character of Forest Hill Park. Control of pedestrian and vehicular access and control of movement through the park by vehicles was planned to respect this premise. His first objective was "procuring a unity of design" throughout the entire park without specific consideration as to boundary lines between the communities of East Cleveland and Cleveland Heights.

After sixty years of active use, much of the Forest Hill Park is showing signs of age, change, abuse, benign neglect and deferred maintenance. Some of this is to be expected since ponds and streams silt up, banks erode and trees age. Structural systems also have a limited life. Drainage systems malfunction and drives and walks deteriorate without periodic maintenance attention. Limited-life furnishings, such as lights and benches, need to be part of a planned replacement plan.

The existing conditions have been carefully documented through field surveys done in 1997 and 1998 during the inventory, documentation and analysis process of this study. Documentation in plan form is included, herein. A great range of conditions was found. These included new facilities which, because of age, are in good condition and are essentially sound, walks, waterways, soils and vegetation which are often in an advanced stage of deterioration, degradation, erosion or compaction and decline. These overall conditions cannot be corrected all at once, but a beginning can be made by addressing the most serious conditions which make Forest Hill Park uninviting, inaccessible and suggestive of danger and neglect.

Some adverse conditions, such as upstream discharges into the Dugway Brook, which create pollution, sedimentation and siltation problems, have been created by external changes beyond the park boundaries. These issues, which fall outside the 1999 Updated Master Plan's ability to control and to correct, need to be further defined and studied.

Some of the adverse conditions, which occur within the Park, have been inadvertently created by engineering designs for ballfield expansion and the construction of buildings and supportive parking constructed in the 1970's and 1980's. Resultant storm water runoff and surface drainage design resulted in degradation and deterioration of the steep slopes surrounding the Dugway Valley. Old utility systems have also deteriorated as in the case of the collapse of the outfall from Lee Road into the Dugway. The outfall needs to be rebuilt and the surrounding degraded landscape needs to be restored. The 1999 Updated Master Plan can, and should, play a supporting role by proposing solutions to these drainage problems and establishing guidelines for future development to insure that the landscape is protected and preserved.

Equally important is the stabilization of forested slopes, the removal of invasive vegetation, the reshaping of the lake shoreline, the stabilization of the banks and the removal of siltation and debris from Dugway Brook. These interrelated efforts need to be coordinated, programmed and funded over the next 5 to 10 years.

Technological changes have also affected conditions in the Park, e.g. materials, lights, and structures. Some of these changes have benefits — more durable materials, nighttime use, and additional facilities. Some changes, however, have negative and counter-productive aspects to them. Sidewalks at the Park edge relate to the city streets. Concrete walks within the park integrate the city with the Park in ways that were originally never intended. Use of parkland for other than park use also becomes an issue, as do structures or uses that are non-conforming. Buildings or structures with non-park use (i.e. the Traffic &

Streets Division building near Beersford Street) should be relocated outside the Park. The Beersford maintenance building should have been constructed with compatible materials in a style compatible to the historic structures and should have been sited to blend into the landscape.

The inventory and analysis of existing conditions will help to determine where to begin the preservation, restoration, rehabilitation or reconstruction of park structures and landscapes. We should expect those areas of obvious deterioration and potential public hazard to be addressed first and as expeditiously as possible.

The inventory, documentation and analysis of the existing conditions have been documented in reports and illustrated on drawings. These reports are summarized within this document in Volume I, but are available in their entirety in Volume II.

Reports documenting the inventory, referred to herein, are as follows:

Historical Report:	Cynthia Zaitzevsky Associates, Brookline, MA.
Environmental Report:	Vanassse Hangen Brustlin, Inc., Watertown, MA.
Architectural Report:	Chambers, Murphy & Burge, Akron, Ohio
Civil & Structural Engineering Report:	Adache-Ciuni-Lynn Associates, Inc. Cleveland, Ohio

Drawings illustrating the inventory process and that are included in the Appendix are as follows:

Drawing 7	Existing Views and Viewpoints – August 6, 1999
Drawing 8	Existing Circulation and Parking – August 6, 1999
Drawing 9	Existing Paving and Trails Condition – August 6, 1999
Drawing 10	Cover Type Plan - March 26, 1998
Drawing 11	Areas of Environmental Concern – March 26, 1998
Drawing 12	Existing Utilities – Water Supply and Storm and Sanitary Sewer – August 6, 1999
Drawing 13	Existing Utilities – August 6, 1999
Drawing 14	Existing Erosion – August 6, 1999
Drawing 15	Use Categories - A. D. Taylor Master Plan – 1938
Drawing 16	Use Categories - A. D. Taylor Master Plan As-Built – 1950
Drawing 17	Use Categories - Existing Conditions Plan – August 6, 1999
Drawing 18	Existing Buildings/Structures – August 6, 1999
Drawing 19	Existing Maintenance – August 6, 1999

Timeline Comparison of Existing Uses

Our inventory and analysis of historic, as well as existing, uses are illustrated on Drawings 15, 16, & 17, and are summarized in the following chart:

	1938 Master Plan	As- Built	Existing
Protected Passive Use Areas	108.0 Acres	87.1 Acres	103.5 Acres
Accessible Passive Use Areas	112.2	142.2	112.9
Active Use Areas	20.7	14.5	25.4
Water	4.7	5.5	4.7
Support	14.3	10.2	13.0
Total	**259.9 Acres**	**259.9 Acres**	**259.9 Acres**

Looking at the park as a unified whole, a comparison of Taylor's 1938 Master Plan to the existing 1998 conditions shows that his master plan protected more environmental systems, developed less active recreation and also had fewer support uses, such as parking. Passive and water uses remain nearly equivalent.

Protected	Taylor	108.0 Acres	Water	Existing	4.7 Acres
	Existing	103.5		Taylor	4.7
		4.5 Acres (less today)			0.0 (no change)
Passive	Existing	112.9 Acres	Support	Existing	14.3 Acres
	Taylor	112.2		Taylor	13.0
		0.7 Acres (more today)			1.3 Acres (more today)
Active	Existing	25.4 Acres			
	Taylor	20.7			
		4.7 Acres (more today)			

By 1950, less active recreation had been developed than was proposed in the 1938 Taylor Master Plan. A comparison of the As-Built Conditions in 1950 to the existing 1998 conditions indicates that by 1950, the park, as developed, was utilizing more space for passive recreation and was protecting fewer acres of environmental systems than it did in 1998. The support areas built by 1950 were also fewer than today. With the creation of the island in the lake, there is less water today.

Protected	Existing	103.5 Acres	Water	As-Built	5.5 Acres
	As-Built	87.1 ___		Existing	4.7
		4.5 Acres (more today)			0.8 Acres (less today)
Passive	As-Built	142.2 Acres	Support	Existing	13.0 Acres
	Existing	112.9		As-Built	10.2
		29.3 Acres (less today)			2.8 Acres (more today)
Active	Existing	25.4 Acres			
	As-Built	14.5			
		10.9 Acres (more today)			

Taylor stated:

> " It is necessary to select with great care the forms of recreational activity for which provision is to be made, and to determine the extent to which the otherwise rural landscape shall be sacrificed to the needs of these recreational activities. The ultimate object of the City Park should be that of serving the maximum number of people to the greatest advantage to all concerned, without sacrificing unnecessarily the natural landscape effects." p. 16.

Thus, the approach to contemporary uses should be to accommodate the broadest possible range of uses and users without adversely impacting the park's essential purpose of recreation, refreshment and

relief. There is a mistaken perception that active and passive recreation cannot co–exist and that birders and ballplayers cannot share the same park. Each must compromise and respect and accommodate the other.

Some introduced contemporary uses have superseded historic uses, suggesting the need to change or modify the park to accommodate the community. Some of these uses have strained the notion of calm and tranquility in the park. In declining order of difficulty, these issues include:

- Contemporary surrounding land uses have changed; buildings have become taller and uses have become more commercial.
- Buildings and structures introduced or being proposed for inclusion into the Park have become larger in scale and accommodate uses not included in the 1938 Master Plan.
- Automobiles have adversely affected the original park pathway system with people driving through and dumping debris.
- Organized and institutionalized sports have been introduced into the meadows and mown grass areas and have affected the passive areas of the Park, modifying locations of passive and active areas.
- Physical fitness joggers, bicycle riders, hikers, cross-country skiers and other non-team recreational activities are beginning to affect and impact some of the park trails and paths.
- Special large events can adversely affect the Park if not directed and controlled.
- Access to the Park for evening uses brings its own special requirements and impacts.

Analysis of Existing Conditions and Contemporary Needs and Uses:

Adjacent Land Uses

Land use changes around Forest Hill Park have both positive and negative aspects. The low-rise residential neighborhoods to the North, East and West, as well as the Forest Hill Church on Lee Boulevard, are complementary to the park. Expanded auto-related commercial uses along Mayfield Road, Monticello Boulevard, and the southern end of Superior Road at Mayfield Road, negatively affected the park. Although they afford spectacular views down into the park, the high-rise residential buildings in the immediate area along Superior Boulevard and Terrace Road have broken the skyline and ended the visual separateness of "park and town." To some extent, taller buildings are inevitable, but a proliferation of them would severely compromise the park's rural image, as would increased commercial uses.

Buildings and Structures within the Park

Buildings and structures introduced, or being approved for inclusion into the Park, have become larger in scale to accommodate more users. Architectural design for new buildings should follow the style and/or scale of architectural composition shown in Taylor's sketches as appropriate for Forest Hill Park. Establishment of guidelines for future buildings and structures in the Park is addressed in the Updated Master Plan under Proposed Treatments (pages 31-39, Existing Buildings/Structures). The Updated Master Plan addresses these issues and establishes guidelines that require that new structures be compatible with the existing historical building style and integrity of the historical park.

Current recreation trends also place recreational activities in buildings for the purpose of extending uses during the winter season. Some sports popular today, such as skating and ice hockey, require conditions that need to be contained within buildings to accommodate their mechanical systems requirements. Differences appear due to the changing popularity of any given sport, the introduction of new sports and the elimination of sports. Incorporation of active recreational activities, however, should not exceed the ratios of active to passive uses established by the 1938 Taylor Master Plan. The placement of these activities within the Park should also be taken into consideration. Forest Hill Park's historical importance and the maintenance of its historical integrity, as well as the integrity of existing natural systems, has to be part of the final equation.

The following interpretive charts illustrate the inventory and analysis of vehicular entries, pedestrian entries and parking provided in the 1938 Taylor Master Plan, As-Built by 1950 and Existing Conditions in 1998, see Drawing 20-a, herein.

Vehicular Entry

	Key		Taylor	As-Built	Current
FHB at Dugway Picnic Area	1	EC	yes	yes	yes
FHB at Bowling Green	A	EC	no	no	yes
Terrace at Beersford	2	EC	yes	yes	yes
Lee at Brewster	3	EC	yes	yes	yes
FHB near Lee	B	CH	no	no	yes
Lee between FHB and Burlington	4	CH	yes	no	yes/moved south now maintenance
Lee at Monticello	5	CH	yes	yes	yes
Superior near Mayfield	6	CH	yes	modified yes	modified yes
Superior near Mayfield	7	CH	yes	modified yes	modified yes
Superior near Playground	C	EC	no	yes	yes
East Cleveland			3	4	5
Cleveland Heights			4	3	5

Pedestrian Entry

	Key		Taylor	As-Built	Current
Corner of Superior and Terrace	1	EC	yes	plan exists	no
FHB at Dugway Picnic Area	2	EC	yes	yes	temporary entry
FHB at Bowling Green	3	EC	yes	yes	no
Terrace Road near Belmore	4	EC	no	yes	yes/locations w/steps
Terrace Road at Beersford	5	EC	yes	yes	no
Lee Blvd. at North Parking	6	EC	yes	yes	yes/gate but no actual path
Lee Blvd. at Baseball Field	7	EC	yes	no	no
Lee Blvd. at Lake	8	EC	yes	yes	no
Lee between FHB and Burlington	9	CH	yes	yes	no/moved South now maintenance
Lee at Burlington Road	10	CH	yes	yes	no/gone
Lee near Monticello	11	CH	yes	yes	yes
Monticello North	12	CH	yes	no	no
Monticello South	13	CH	yes	no	yes/new location-now at corner of Monticello & Mayfield
Corner of Mayfield and Superior	14	CH	yes	yes	yes
Superior East End of Playground	15	EC	yes	yes	yes/not in same location
Superior West End of Playground	16	EC	yes	yes	yes/not in same location
Superior East of Coventry	17	EC	yes	yes	no
Superior West of Coventry	18	EC	yes	yes	yes
FHB North	19	EC	yes	yes	yes
FHB South	20	CH	yes	yes	yes
Lee at Glynn	*	EC	no	no	*(heavy desire line)
East Cleveland			12	12	7
Cleveland Heights			7	5	4

Parking Lots

	Key		Taylor	As-Built	Current
Terrace at Beersford	1	EC	yes	yes	yes
Lee at Brewster	2	EC	yes	yes	yes
Between FHB and Burlington	3	CH	yes	no	modified entry at FHB
Lee at Monticello	4	CH	yes	yes	yes/enlarged
Superior Near Mayfield	5	CH	yes	modified entry off Mayfield	entry off Superior
Stables Lot	6	EC	yes	no	no
JDR House Lot	7	EC	yes	no	no
FHP at Dugway Picnic Area	A	EC	no	yes	yes
FHB at Bowling Green	B	EC	no	no	yes
Superior at Playlot	C	EC	no	yes	yes
East Cleveland			4	4	5
Cleveland Heights			3	2	3

Vehicular Access

Vehicular access needs to be controlled. The 1938 Taylor Master Plan did not allow for movement through the Park, except on Forest Hill Boulevard, and did not allow the car beyond controlled parking areas. In order to adhere to Taylor's guidelines:

- Parking lots should not allow vehicular access to citizens beyond the limits of the parking lot.
- Vehicular access should be clearly signed with times of use and detailed restrictions.
- Access by vehicle into the park area should be restricted to maintenance, emergency or police use.
- Off-trail or off-path vehicular movement, even by authorized police and maintenance vehicles, should be discouraged unless it is an emergency.
- Development of a system of gated vehicular entries and bollards at pedestrian entrances should control vehicular access in the future.

Pedestrian Access

Pedestrian access needs to be reassessed in order to respond to current movement patterns and to provide safe, convenient and universally accessible entry to all citizens while following Taylor's guidelines.

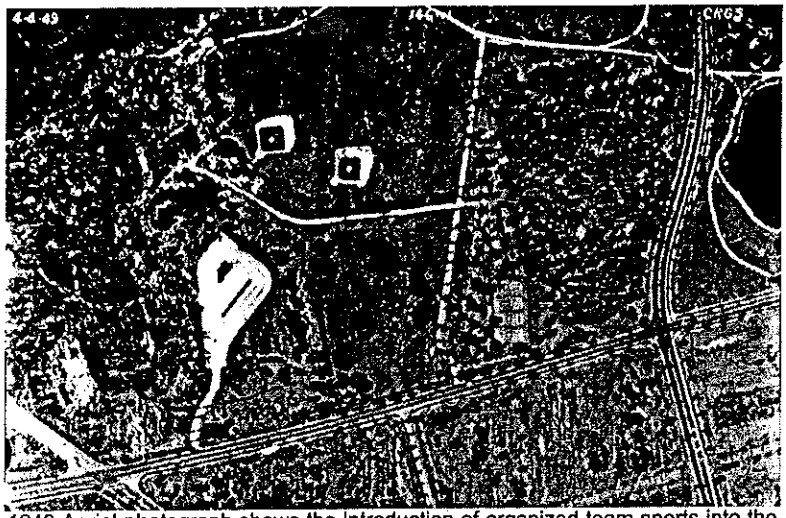
- Pedestrian entries should be signed and a signage map with "you are here" provided.
- Reduction of pedestrian and vehicular conflicts should be a goal, allowing restricted vehicle access into the Park and daily maintenance movement restricted to lower-use times.
- Universal accessibility and safe crosswalks should be a high priority.
- The adding of pedestrian access points should be explored to accommodate new adjacent uses.
- Existing access points that are not important historically should be eliminated if they do not serve the current population movement.
- The original character of the viable historical entrances should be restored.

Organized and Informal Team Sports

Organized and institutionalized sports with high fences, tall lights, bleachers, skinned diamonds, and restricted use alter the pastoral image of the "Country Park." Taylor realized this and designed his park accordingly, designating athletics within contained areas. If one studies his original master plan and then studies the as-built condition, one finds that his 1938 plan was modified during construction. The fields that are in evidence in the 1949 (2 fields), 1952 (1 field) and 1960 (3 fields) air photos were placed in the Great Meadow. Fields placed during Taylor's Period of Significance were not placed directly in the vista of the Great Meadow or Meadow Vista.

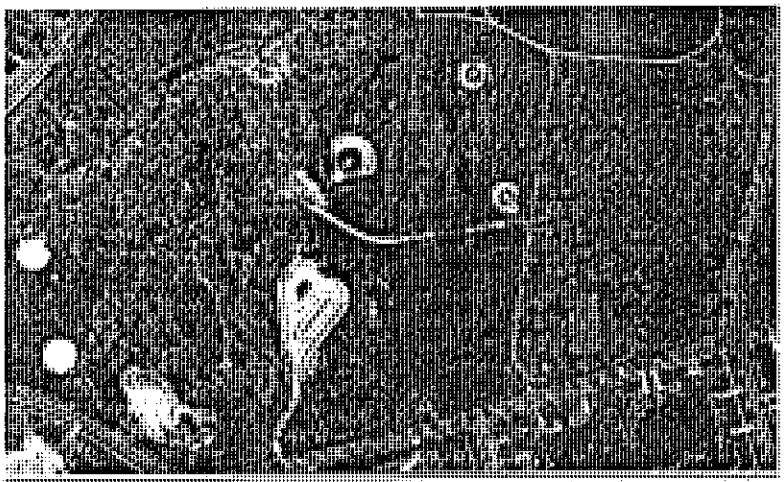
Taylor's 1938 Master Plan is explicit both in its proportion of active to passive uses and in its placement of these areas within the park. Both protection of the integrity of natural systems and the varying character of passive uses are clearly defined. The forest or woodland, as well as the important meadows within the park, establish the "Country Park" character of Forest Hill Park. Maintaining their placement and integrity are of prime importance. The introduction of active uses into important passive areas of the park should be stopped and where and however possible, the impact of past introductions should be remedied and eventually phased-out as new locations in other parks or within Forest Hill Park can accommodate them. If new active recreation is added, informal or multi-use fields that do not contain equipment permanently in place are a good solution. This will allow for their use by the general public, when not being utilized for sports play. As Taylor stated in his 1938 Master Plan:

In order to properly determine the kinds of recreational activities and the extent to which these recreational activities should be developed in different portions of the park, full consideration has been given to the locations and extent of recreational facilities in the territory surrounding Forest Hill Park, p. 44.



1949 Aerial photograph shows the introduction of organized team sports into the Great Meadow, (CHCH).

1962 Aerial photograph showing area burned and the shadow outline of a record in the Great Meadow, (Forest Hill Historic Preservation Society).



1969 Aerial photograph shows the modification and expansion of team sports in the Great Meadow, (CHCH).

Active use areas were very much a part of Taylor's 1938 Master Plan. Analysis indicates that active uses should be retained within designated areas. However, a return to the more pastoral character of the Park and the original integrity of the "Great Meadow" and the "Meadow Vista" should be part of the thinking as these areas are upgraded in the future.

Non-Team Active Recreation

Non-team active recreation is not discussed as an issue in Taylor's 1938 Master Plan, but is very important to the users of today. Non-team active recreational activities such as sledding, jogging, cross-country skiing, bicycling including off-road biking are now popular and are already affecting ecologically sensitive areas, as well as the pedestrian paths and nature trails. Overuse from increased numbers of people wanting to hike the trails may also affect and endanger these steep-sloped, sensitive areas. The interest in reconstructing or rehabilitating the trail system will bring forth issues of accommodating universal accessibility, an issue that the National Park Service is also trying to resolve on all their properties. The goal is to achieve use and enjoyment without sacrificing the natural landscape one has come to experience.

Special Event Uses and Planned or Self-guided Walks

These uses are not discussed as an issue in Taylor's 1938 Master Plan, but are very important to the users of today. Special event uses and planned and self-guided walks are currently occurring, have been encouraged in the recent past, and should continue to occur in the future. If not carefully planned, the special event can impact the Park causing deterioration of the existing landscape and facilities as well as parking and congestion issues for the adjacent property owners. On the positive side, the events bring people to the Park and create a level of information about the Park and comfort in using the Park.

Self-guided or even guided walks involving off-trail, or what amounts to mountain climbing up severe slopes, have in the past impacted ecologically sensitive areas on steeply sloping banks. The beaten trail through vegetation on steep slope leads to erosion of the slope and washouts. The goal should be designated and marked nature trails that are interesting, well maintained, and challenging to the visitor. Off-trail activity should be monitored and controlled.

Lighting of Evening Uses

Evening uses of the Park for sports activities, or special evening events, are not discussed in the Taylor Plan. Whether or not to light, or how much lighting is needed for a "Country Park," is a much-debated issue. Currently, evening use occurs at the Recreational Pavilion in Cleveland Heights and will continue to occur at the proposed community facility, as well as at lighted ball fields and tennis courts in Cleveland Heights and East Cleveland. In the past, lighting of the lake for skating was an issue. Lighting for safety and accessibility should be provided not only for the facilities, but also for adjacent parking lots and path systems that service these areas. Parking lots in more remote areas that do not support evening use should probably not be lighted.

The question is whether lighting should be incorporated into the Park in general, i.e., at paths and entries. Any large ground planted closely in the natural style is very difficult to light sufficiently for safety. This has proved to be substantially correct in other historic country parks and in the nature areas within Cleveland's Metroparks. One view is that it is safe to walk if it is lighted. The other view is that lighting gives a false sense of security and invites the individual into a potentially unsafe situation. Again, a balance needs to be achieved. A lighting study and community discussion of this issue should be planned in the future.

Inventory and analysis of the use categories of the Park have been documented on drawings as follows:

Drawing 15: Use Categories - A. D. Taylor Master Plan – 1938
Drawing 16: Use Categories - A. D. Taylor Master Plan - As-Built – 1950
Drawing 17: Use Categories - Existing Conditions Plan – 1998

Existing Buildings/Structures

A preliminary inspection was conducted on March 6, 1998, and Lauren Burge of Chambers Murphy & Burge prepared a report of the existing conditions. Interior access was not available to all of the buildings; therefore, a second inspection was completed in December 1998.

The structures are divided in three groups according to when they were constructed, see Drawing 18, herein.

- The first group is structures that were built during the **Rockefeller Era (1873-1937).**
- The second group is structures built during the **A. D. Taylor Era (1938-1950).** They were part of the original 1938 Taylor Master Plan and were built during the period Taylor was involved with the Park.
- The third group is structures built within the **Modern Era (1950 to present).** Most of these were not part of the original Master Plan.

In order to evaluate architecture, we use the three criteria defined by a 1st century B. C. Roman named Vitruvius. In his ten books on architecture, *De Architectura*, Vitruvius defines the principle elements of architecture: *Beauty, Structure and Function.* All architecture contains these elements in varying degrees. Therefore, each structure in Forest Hill Park was evaluated for its aesthetic qualities, its structural condition, and its ability to be functional, either for its original use or a proposed use.

The Rockefeller Era (1873-1937)

The Rockefeller Bridge – 19th Century Structure (There are no drawings available.)

One of the few surviving structures from the Rockefeller estate is the Carriage Bridge. This natural arch bridge is made of coarsed rough-faced stone, with the sizes of the stones being somewhat regular. The original roadbed was probably gravel or paving stone.

The capstones of the rail walls have an accumulation of moss and algae. While this growth cannot be completely avoided due to the dense woods surrounding the bridge, it can be controlled and managed. Mortar joints will be investigated further under Proposed Treatments. There are some signs of water and erosion problems near the base.

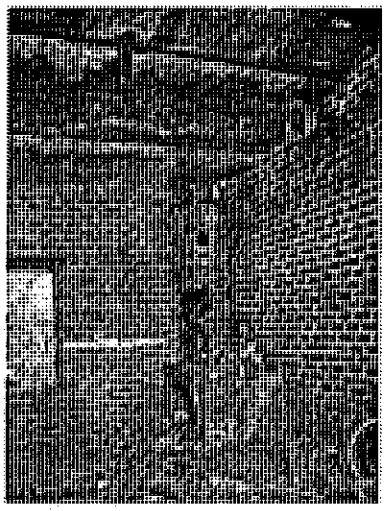
The Rockefeller Bridge 1998.

The Stable Ruins (no date determined, no drawings available)

The Stable Ruins are the remains of a brick and wood structure dating from the Rockefeller Era. The remnants include the rear wall of the structure, some brick paving, and a small brick shed. The wall is of oversize brick, roughly three feet high. A few wood framing members remain bolted to the top of the wall, indicating that the structure may have been wood above. At the end of the wall is a small shed structure, entirely of the same type of brick, with a reinforced concrete roof structure. The shed structure probably served as a tack room or farrier's room. There is a small stove in the corner of the room, which may have been used for heating shoes for fitting. In the opposite corner, an iron tie ring is mounted to the wall. Overhead is a system of pulleys that should be preserved and further investigation done to determine its purpose. The shed structure had wood windows, only the frames remain.

This structure could be used for its interpretive interest. The wall and the shed are in sound condition, though some re-pointing and repair is needed. Wood or metal grille work could be added to the door and windows of the shed so that the structure can be secured while allowing views into it. The shed structure needs a new roof over the concrete deck. We are uncertain what the original material would have been.

With some careful tree trimming, there are opportunities for views to the Dugway Area behind the stables. The rear wall of the stables provides a natural railing for the overlook.



The A. D. Taylor Period (1938-1950)

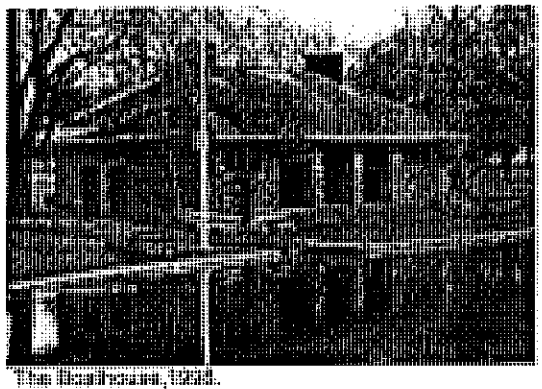
One of the most delightful aspects of the park buildings of the A. D. Taylor Period is their integration into the landscape. Careful consideration of the overall forms, materials, and placement of the buildings, ensured that these structures were an integral part in the overall appearance of the Park. The forms are low and horizontal; the overall scale of the structures is de-emphasized. The materials used on the exterior are primarily natural materials, mostly stone and wood. The size of the individual stone units and the wood timbers is massive. Although many of these structures have not been in use for years, they appear to be in sound condition. The quality of the original materials adds to their value. The durability of the stone, the interior glazed block and the steel doors, windows and shutters, has contributed to the longevity of these buildings. All of these structures should be preserved, maintained, and used.

The roofing material needs further investigation. From the ground, it appears to be natural slate. However, the original drawings indicate that it may be a manufactured composite material. Often these types of manufactured slates contain asbestos. While it is not recommended that the roofing be removed, it is important to identify the contents of the material. This will insure that workers and the public can be protected when the roofs are repaired.

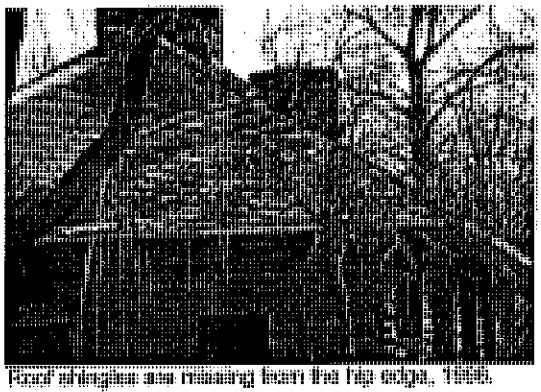
Boathouse (Drawings are dated 6/24/39 and are located in the East Cleveland Archives. They are on A. D. Taylor's title block and were drawn by C. L. K.)

The overall layout of the Boathouse is two solid blocks connected by an open porch. The porch fulfills functional uses, both as a shelter and as a gateway from one area to another. The Boathouse serves as a "gateway" in that it frames the view from the lawn to the lake. The original plan for the building includes two toilet rooms, with a heating room dividing them in the east block of the building. The west block contains a concession stand, the electrical transformer room, the electrical distribution room, and the Boatman's Room. The Boatman's Room floor elevation is two feet below the other rooms. It is accessed from the lakeside of the building, which is lower than the lawn side. A porch connects the two enclosed blocks. The porch has two fireplaces, one at each end.

The building is in very good condition. The stone work is sound, except for minimal damage to the fireplaces. The stone is random ashlar dressed in a hammered rough rock face. A few of the roof shingles are missing from one of the hip ridges. There is also algae growing on the roof slates in this area. The original copper roof ventilator has been replaced, as has the flashing. There is a weeping willow tree near the building that has dropped a large number of leaves and twigs into the roof gutters. As part of routine maintenance, the gutters should be cleaned out in late fall after the tree has lost all of its leaves. It was noted that there are no downspouts on the building.



The Boathouse, 1998.



Roof shingles are missing from the hip edge, 1998.

Lawn Bowling Pavilion (Drawings are dated 1/10/40 and are located in the East Cleveland Archives. They are on A. D. Taylor's title block and were drawn by R. M. W.)

Like the Boathouse, the Lawn Bowling Pavilion is two solid forms connected by an open porch and a single hip roof. In this case, the porch area provides an elevated observation platform for spectators. The original plan for the building includes four toilet rooms, two that were accessible outside of the fenced-in lawn area. It also contained a locker room attached to one of the men's rooms. A custodian/storage room is opposite the locker room. The porch has one fireplace.

The building is similar in material to the boathouse, and is in very good condition. The original copper roof vent is still in place, as well as the flashing. The gutters and downspouts appear to be new, and are good matches to the original drawings.

Lawn Bowling Pavilion 1998.

Meadow Vista Area Comfort Station (Drawings are dated 2/10/40 and are located in the East Cleveland Archives. They are on A. D. Taylor's title block and were drawn by R. M. W.)

The Meadow Area Comfort Station is labeled Floor Plan "A" on the original drawings. It is of the same materials as the boathouse. It has an entrance on each end for a toilet room, and a center door on the front for a custodial and storage space. There is access to piping in this space as well. The original drawings call for a copper louvered dormer over the center door. This was not executed; instead, a copper ridge ventilator was installed over each restroom. The roof has heavy accumulations of moss. The building is in a heavily wooded area, and the biological growth should be routinely cleaned from the structure to prevent damage. The building was designed to function without gutters and downspouts. It still has its original steel doors and window shutters. They are in good condition and appear to be vandal resistant. The building has been subject to a minor amount of graffiti. Care should always be taken when cleaning a historic structure, as many cleaning agents or anti-graffiti coatings can damage masonry.

The original drawings indicate steel and brass signs. They are either missing or were never installed as intended. A carved wood beam sign was also shown on the original drawings. This sign read "FOREST HILL PARK" and was supported on wood corbels on the front of the building. It does not appear that this sign was ever installed.

This structure is not in use because of problems with piping and maintenance of the plumbing. The toilet rooms have sufficient space to make them accessible to persons with disabilities.

Meadow Area Comfort Station, 1994

Heavy accumulations of moss, 1994.

Dugway Area Comfort Station (Drawings are dated 10/21/39 and are located in the East Cleveland Archives. They are on A. D. Taylor's title block and were drawn by R. M. W.)

This Dugway Comfort Station is labeled Floor Plan "B" on the original drawings. It is of the same materials as the boathouse. It has an entrance on each end of the front for toilet rooms, and a center door for custodial and storage space. There is access to piping in this space as well. This building's roof and copper ventilator have been badly damaged. This damage appears to have been caused by a tree or large branch falling on the structure. The building was designed to function without gutters and downspouts. It still has its original steel doors and window shutter which are in fair condition. The building has been subject to a great deal of graffiti. Care should always be taken when cleaning a historic structure, as many cleaning agents or anti-graffiti coatings can damage masonry.

This structure is not in use because of problems with piping and maintenance of the plumbing. With a small amount of modification the toilet rooms have sufficient space to make them accessible to persons with disabilities.

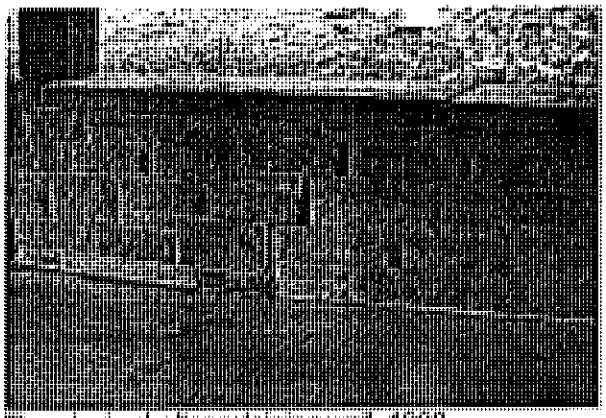

Dugway Area Comfort Station, 1998.


The roof has been badly damaged, 1998.

Dugway Shelter (There are no drawings available.)

The Dugway Shelter is completely wood except for the stone retaining wall at the rear of the building. The retaining wall (that is in urgent need of repair) is meant to hold the hill away from the shelter. The original design drawings that were found in the East Cleveland Archives at City Hall showed a wonderful stone structure with battered walls and a great fireplace. The actual structure built was of a different design and no drawings have been located for the shelter as it was built. The change in design from an all stone structure to a wood structure with a stone retaining wall was most likely the result of budget restrictions. The heavy timber columns were hewn originally, thereby differentiating them from the few pieces that have been replaced. The composite shingles have been replaced by contemporary asphalt shingles. The shelter, however different from other structures, retains the charm of the A. D. Taylor buildings. The building's placement in the hillside and its relationship to the meadow emphasize the design and planning indicative of the original 1938 Taylor Master Plan.


The Dugway Shelter, 1998.

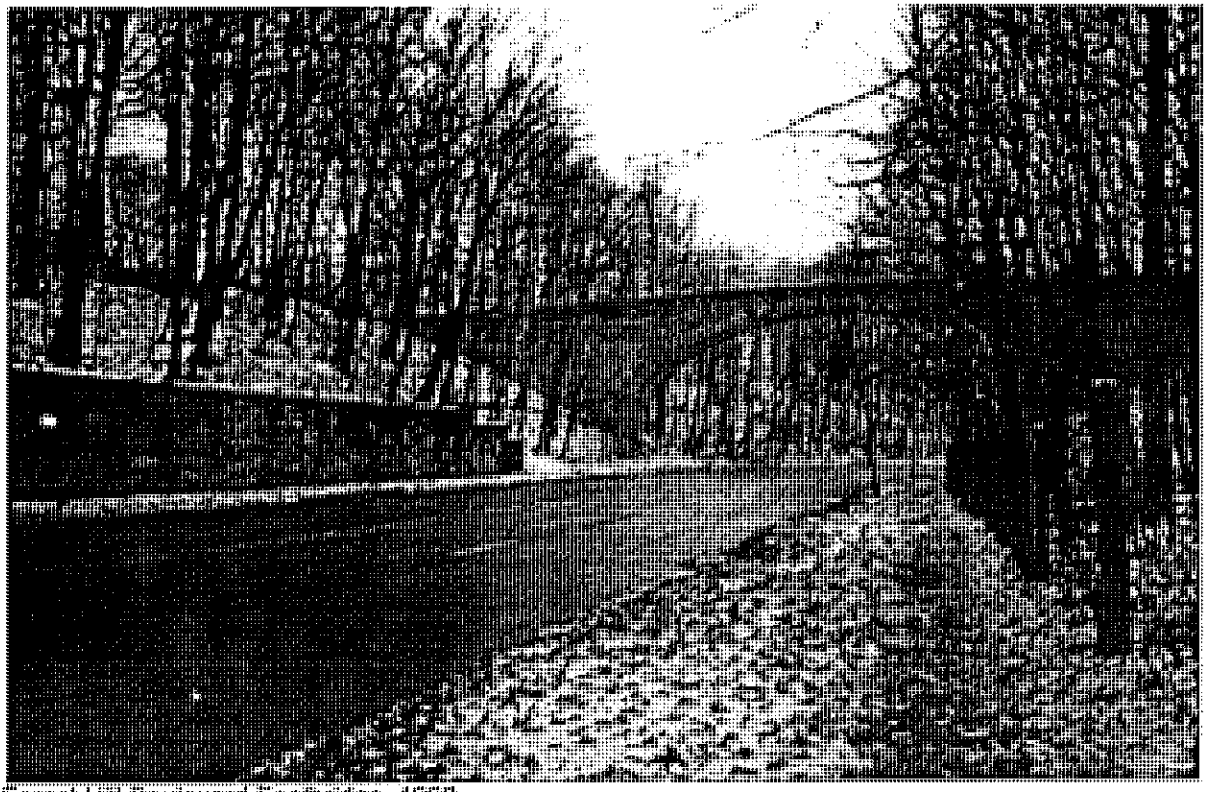

The picnic shelter retaining wall, 1998.

Forest Hill Boulevard Footbridge (Drawings are dated 5/3/39 and are located in the East Cleveland Archives. They were done in conjunction with Wilbur J. Watson, Engineer, and F. R. Walker, Collaborating Architect.)

The "basket handle" arch (semi-elliptical) bridge appears asymmetrical, as the slopes of the banks are different. This bridge spans Forest Hill Boulevard and carries only pedestrians. A planting area and a stone rail that gently curves to its cylindrical terminus edges the walkway. The rail is a stone corbel, projecting from the face of the broken random ashlar fieldstone. The stone is rockface except at the arch where a hammered rough rock face stone was used.

Today, a contemporary chain link fence, undoubtedly to protect automobiles from falling objects and to protect people from becoming falling objects, covers the bridge. Dark color paint could add to the life of this fence and would make it less obtrusive on the landscape. Routine masonry maintenance using

correct historic mortar type and inspection to assess the condition of the original drainage system are necessary.



Forest Hill Boulevard Footbridge, 1998.

Comfort Station / Transformer (There are no drawings available, but it appears to have been built in the 1940s.)

The wood structure has very wide exposure clapboard siding, exaggerating its diminutive scale. The stone wall enclosing its front garden is only eighteen inches high and the large trees behind the building give the structure a "playhouse" feeling. It was originally used as a toilet building, and now is used as a transformer building. Its current use can be maintained, however, new doors should be placed in the door openings and closed shutters should be placed in the window openings to improve the appearance of this handsome building. (A sign should be placed on the structure warning of its contents.) This building is a transition building from the A. D. Taylor era to the Modern era and has some of the same romantic qualities as the older structures.

Comfort Station/Transformer, 1998.

1950 to Present — The Modern Period

Electric Utility House (There are no drawings available.)

This ranch style house was probably built in the 1950s, since it appears in a 1960 aerial photograph of the site. Whether or not it had a park function originally has not been determined. It currently serves as the Traffic and Street Light Maintenance Center for the City of East Cleveland. It is less than an ideal type of structure for a maintenance facility, and currently does not serve a park purpose. Future plans should strongly consider relocating the utility to a more suitable structure and demolishing the building.

Electric Utility House, 1996.

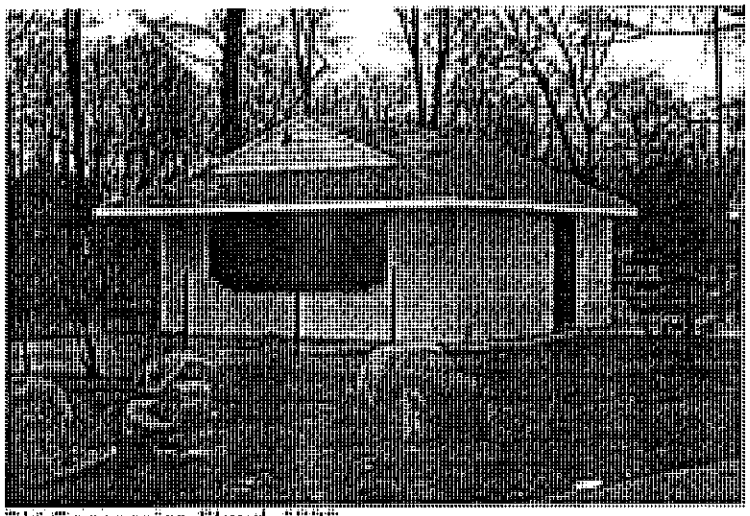
Storage Building (There are no drawings available.)

This building serves as a storage and maintenance facility. It is a concrete block structure constructed after 1960. There are a number of structural cracks visible in the masonry. The building has been repaired where a truck apparently drove into the rear wall. Access inside the building was not available at

the time of inspection. This building should be considered for replacement as part of a comprehensive maintenance plan for the Park.

Old Concession Stand (There are no drawings available.)

This building is a painted block structure with little architectural character. It is currently used for storage. As part of an overall plan this structure should be removed or replaced if the storage space is required.



Old Concession Stand, 1996.

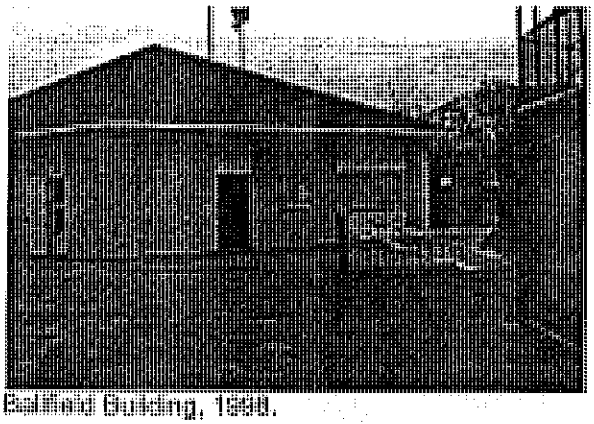
Comfort Station, 1998.

Comfort Station (There are no drawings available.)

This structure is concrete block on the interior to a height of about eight feet. It has a wood frame structure above this height. The exterior is clad in wood lap siding. The entrance to the women's toilet is on the backside of the structure. Several people have expressed that the remoteness of the entrance is a safety concern. Some modifications could be made on a short-term basis to alleviate this problem.

Picnic Shelters and Ballfield Concession Building/Comfort Facility [Picnic shelter drawings are dated August, 1988 by Blunden and Barclay and comfort station drawings are dated 1984 by Dickson and Dickson. (CHCH)]

These buildings are relatively new and are in good condition. They are mostly concrete block structures with concrete columns. The block and the columns are coated with a synthetic stucco system, commonly known by the trade name Dryvit. They lack the sense of scale and relationship to the landscape that the A. D. Taylor Era buildings have. Future structures should use materials of the A.D. Taylor era and that lend a similar scale to the building. For example, individual blocks of stone, or other masonry, or even lap siding, add interest and texture to a surface as opposed to mass areas of concrete or stucco. Placement of the building is also an important part of the overall design of the landscape.



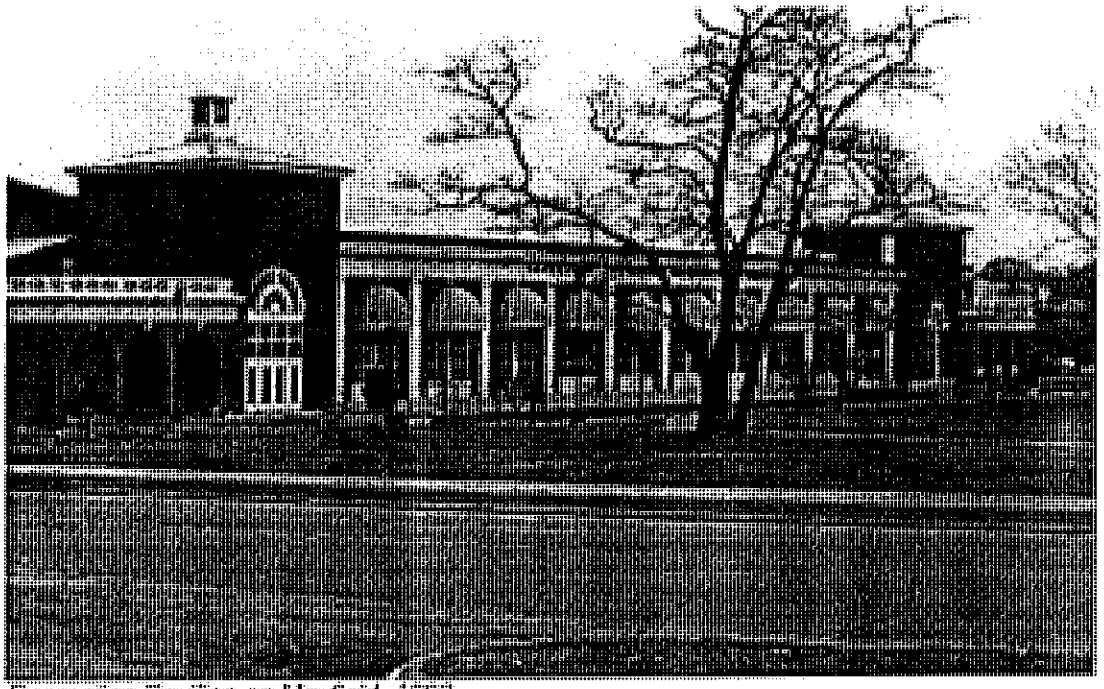
Ballfield Building, 1998.

Picnic Shelters, 1998.

Recreation Pavilion and Community Building (The structure was designed and built in 1968-1969. Drawings are available in the Cleveland Heights Archives dated November 3, 1968.)

This structure is now under construction and will be completed Fall 2001. At the time of the inventory and analysis, it was inspected for exterior conditions only. Use and function within the structure are not

covered as part of this report. This brick structure is in good condition with a few minor defects. These defects include gutters and downspouts with holes in them, and missing trim elements.



Recreation Pavilion on Mayfield, 1998.

The existing buildings and structures are documented on the following drawing, found in the Appendix:

Drawing 18 Existing Buildings/Structures - 1998

Existing Environmental Issues/Flora and Fauna

A field investigation was conducted on March 3rd and 4th, 1998. The purpose of the field investigation was to document the existing environmental conditions within Forest Hill Park, with particular emphasis on characterizing plant communities, including an inventory of species to the extent possible within schedule constraints, identifying and characterizing wildlife habitats, and evaluating existing environmental problem areas.

The following is a summary of a report prepared by Lisa Stanley of Vanasse Hangen Brustlin, Inc. Environmental Consultants that presents the results of VHB's field investigations:

- Discussion of the ecology and forest history of Forest Hill Park;
- Characterization of the plant community types found within the Park;
- A summary of wildlife observed during the site visit and the wildlife the Park is likely to support; and
- Discussion of the environmental problems observed during the site visit.

The "Environmental Report" dated March 1998 is available in its entirety in Volume II of this document. The existing environmental issues are documented on the following drawings incorporated, herein:

Drawing 9 Cover Type Plan – 1998
Drawing 10 Areas of Environmental Concern - 1998

Existing Civil Engineering Issues/Drainage/Erosion

A preliminary inspection was conducted in November, 1997 and a report recording the existing civil engineering issues and the existing drainage and erosion conditions was prepared by Adache-Ciuni-Lynn Associates, Inc. the Civil Engineering Consultants. The "Site Conditions" report, dated December 1997 is available in its entirety in Volume II of this document.

The existing conditions are reported as taken from existing plans showing the park amenities, infrastructure and utilities. Field visits were made to verify structures and their general location. Photographs were taken to show key elements within the Park and to identify lesser-known items. The information was documented for reporting purposes.

The existing civil engineering issues and the existing drainage and erosion conditions are documented on the following drawings incorporated, herein:

Drawing 12 Existing Utilities – Water Supply and Storm and Sanitary Sewer – 1998
Drawing 14 Existing Erosion - 1998

Existing Mechanical Services/Water Supply/Water/Sewer

A preliminary inspection was conducted in November 1997 by Adache-Ciuni-Lynn Associates, Inc. the Mechanical Engineering Consultants who prepared a report recording the existing mechanical services including water supply, and storm and sanitary sewer conditions. The "Site Conditions" report, dated December 1997 is available in its entirety in Volume II of this document.

The existing conditions are reported as taken from existing plans showing the park amenities, infrastructure and utilities. Field visits were made to verify structures and their general location. Photographs were taken to show key elements within the Park and to identify lesser-known items. The information was documented for reporting purposes.

The existing mechanical services including water supply, and storm and sanitary sewer conditions are documented on the following drawing incorporated, herein:

Drawing 12 Existing Utilities – Water Supply and Storm and Sanitary Sewer – 1998

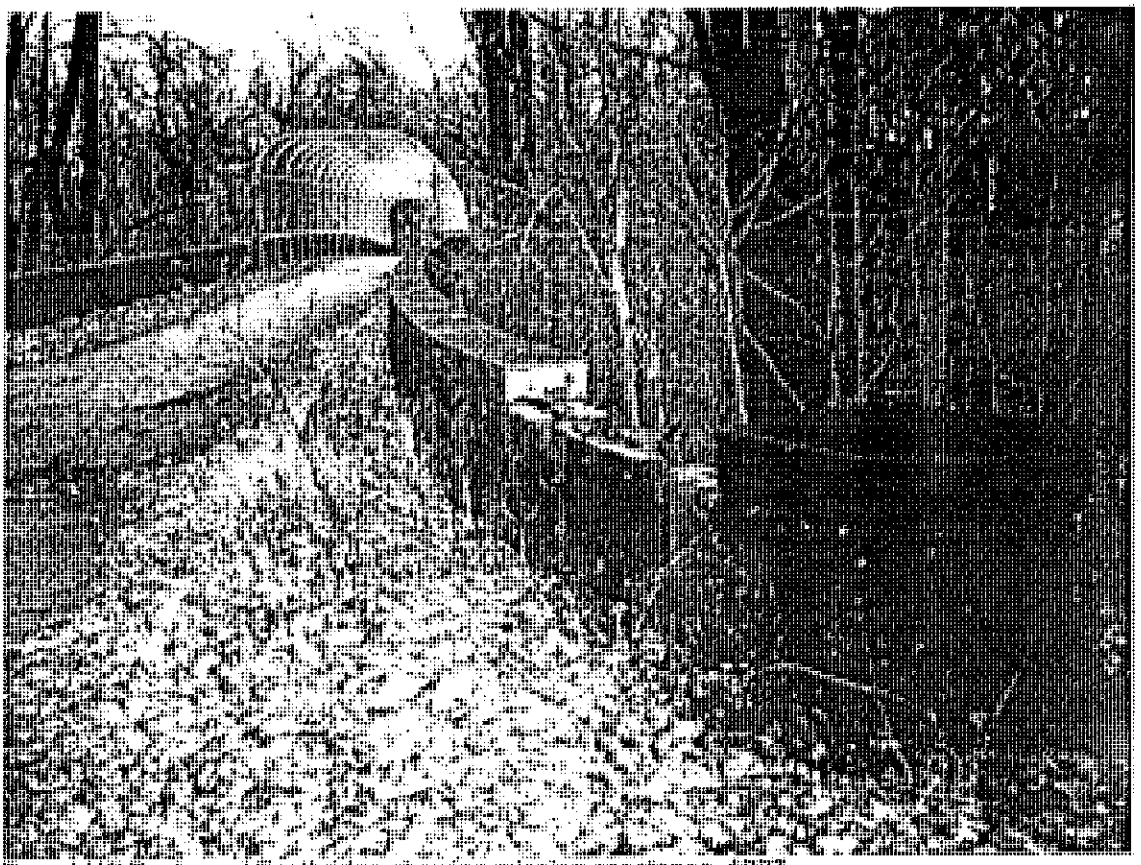
Existing Structural Conditions

A preliminary inspection was conducted in November 1997 by Adache-Ciuni-Lynn Associates, Inc., the Structural Engineering Consultants, who prepared a report recording the existing structural conditions. The "Site Conditions" report, dated December 1997 is available in its entirety in Volume II of this document.

The existing conditions are reported as taken from existing plans showing the park amenities, infrastructure and utilities. Field visits were made to verify structures and their general location. Photographs were taken to show key elements within the Park and to identify lesser-known items. The information was documented for reporting purposes.

The existing structures are documented on the following drawing incorporated, herein:

Drawing 18 Existing Buildings/Structures - 1998



Forest Hill Boulevard Footbridge showing missing capstones, 1997.

Existing Management and Maintenance

In 1998 when the inventory was documented, the separation of maintenance had resulted in different levels of maintenance effort, with Cleveland Heights generally performing more, and East Cleveland less, park upkeep. However, during the period of the preparation of the 1999 Updated Master Plan, East Cleveland markedly increased maintenance. East Cleveland has a facility within the Park at Beersford Street, but Cleveland Heights does not. The real issue, however, is not too little or too much maintenance, but the type of maintenance. In some cases too much maintenance or the reduction of shrub areas to allow for easier maintenance has resulted in the loss of vegetative buffers and the conversion of these areas into mown lawn, thus changing the original design intent and the character of the Park. In other cases, the lack of maintenance at the forest edge has allowed its encroachment into areas of open meadow or open lawn, thus diminishing the total amount of open space in the Park.

In 1998 during the inventory, dumping and removal of trash and debris in the Park was a major issue. Misuse and abuse had been serious in the past. With the changing perception of the Park as being on the way to recovery, increased use, along with improved management and maintenance, should discourage such negative perceptions and resulting abuses. Even maintenance crews should not be allowed to pile debris such as leaves or trash. All material should be removed daily from the site or composted on site in a contained designated area for reuse. Infield mix or similar maintenance material should not be disposed of in wooded areas or at the edges of the forest.

Clean up of the debris area in the old Rockefeller stable area was cooperatively completed by both cities during the summer of 1998.

Existing maintenance of the Park has been documented on the following drawing:

Drawing 19 Existing Maintenance –1998.

Rockefeller stable area after clean-up, summer 1998

Summary of Inventory and Analysis

Given the four bodies of information — History, Existing Conditions, Existing Use, and Management and Maintenance — and their complex interrelationships, there will be cases in which the facts correlate e.g., a historic feature can be repaired to serve a current use in ways that will reduce future maintenance costs. There will be many more cases in which the facts contradict and some tough choices will have to be made.

To aid in arriving at these decisions, the Forest Hill Park 1999 Updated Master Plan should be guided by the following philosophical approaches:

Preserve historical fabric and ecological systems including:
- structures
- character-defining features
- rare plant species

Restore historical fabric and ecological systems including:
- structures
- character defining features
- sensitive historical restoration
- sympathetic ecological restoration.

Repair or rehabilitate obvious dereliction especially where:
- Real or perceived hazard to public security exists.
- Extant historical features could be lost unless further deterioration is arrested.
- Hazard to ecological conditions exists.
- Improvement is highly visible.
- The public's enjoyment of the Park would be increased.
- Existing utility systems are in poor condition or nonfunctional.

Resolve to the extent possible, the major issues having long term impacts on the Park's future well being such as:
- Maintain the historical and ecological integrity of the Park.
- Maintain the ratio of passive to active space.
- Mitigate the intrusion or impact of abutting land uses.
- Control and provide safe vehicular and pedestrian access.
- Prevent dumping.
- Develop good storm water management policies.
- Improve water quality.

Recognize the need for a coordinated management and maintenance approach to:
- Develop a joint Maintenance and Management Agreement between the two cities.
- Develop joint guidelines for maintenance and management of the Park.
- Equalize management and maintenance throughout the Park.
- Supplement the resources of the Cities of East Cleveland and Cleveland Heights with volunteer groups.
- Increase security throughout the Park.
- Create historical, cultural, ecological and educational programs.
- Maintain a balance between active and passive uses in the Park consistent with the Taylor 1938 Master Plan and the 1950 Taylor as-built condition.

A series of Community Meetings held during 1997, 1998 & 1999 have provided a wealth of information. The community raised many constructive issues and concerns.

FOREST HILL PARK

Proposed Treatments

Meadow Vista (Pressley Associates, 1997)

Updated Master Plan

2001

Introduction

During the documentation of the history and the existing condition of the Park, we were able to identify features that are extant from both of the two Periods of Significance, see Drawings 3 and 4. The integrity of these features and their contribution to the Forest Hill Park 1999 Updated Master Plan will be a prime consideration as we explore proposed treatments. First, however, we need to define the various choices of treatments for historical cultural sites as defined by The Secretary of the Interior's Standards with Guidelines for the Treatment of Cultural Landscapes, 1995, herein after referred to as the National Park Service Standards. These are the standards currently in use. The National Park Service (NPS) definitions for treatment of historical cultural landscapes are as follows:

> Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.
>
> Restoration is defined as the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate with a restoration project.
>
> Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features which convey its historical, cultural or architectural values.
>
> Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

The application of these National Park Service treatment terms will include review and approval by the Advisory Commission, if required by the Agreement, and input from the public, as well as the administrations and staff of both Cleveland Heights and East Cleveland. Applying these terms to Forest Hill Park, we should expect that

There are many situations where **preservation** should be the desired treatment. Preservation should be considered where:

- Clear documentation of design intent of the 1938 Taylor Master Plan exists.
- Clear documentation that another design solution was not built during the Taylor Period (1938-1950), therefore superseding the original 1938 Master Plan.
- The preservation treatment has Advisory Commission approval, if required by the Agreement.

There are situations where **restoration** should be attempted and is justifiable. Restoration should be considered where:

- Clear documentation of design intent of the 1938 Taylor Master Plan exists.
- Clear documentation that another design solution was not built during the Taylor Period (1938-1950), therefore superseding the original 1938 Master Plan.
- The restoration treatment has Advisory Commission approval, if required by the Agreement.

There are situations where **rehabilitation** is the only practicable and acceptable option. Rehabilitation should be considered where:

- Conditions are so changed from the original that either preservation or restoration is impossible, impractical or unjustified.
- None of the previous criteria under preservation or restoration are substantially met.
- The rehabilitation can be done in ways that are not out of character or incongruous with Taylor's historic character and intent and can be done in the spirit of the original 1938 Master Plan.
- The rehabilitation treatment has Advisory Commission approval, if required by the Agreement.

There are a few situations where **reconstruction** is the only practicable option. Reconstruction should be considered where:

- Conditions are so changed from the original that either preservation, restoration or rehabilitation are impossible or impractical.
- The reconstruction is of major historical or ecological importance to the character and intent of the overall design of Forest Hill Park.
- The reconstruction treatment has Advisory Commission approval, if required by the Agreement.

In order for the 1999 Updated Master Plan for Forest Hill Park to be successful, a philosophy that recognizes the importance of the Park as a historic park has to be embraced. In the course of this endeavor, this philosophy should consider the following issues:

- Foster greater appreciation of Forest Hill Park as a historic park: Venerable and venerated public landscapes demand higher levels of understanding, public awareness and sympathetic treatment than other recreational grounds. The Cities of East Cleveland and Cleveland Heights recognized this in selecting a landscape consultant team experienced in historic park master planning. This study confirms the very high regard that A. D. Taylor held for Forest Hill Park and its very special place in the historic park movement in this country.

- Understand the primary role of the landscape architect: A. D. Taylor was instrumental in coordinating engineering, architecture, planning and horticulture in creating Forest Hill Park, and in doing so, helped define the role of the profession of landscape architecture in the design of public parks in Cleveland. It is appropriate that landscape architects should lead the professional team in developing a plan for its preservation, rehabilitation, restoration or reconstruction and it is imperative that the American Society of Landscape Architects position on the Advisory Commission be preserved. It is also important to acknowledge that Taylor's involvement with the park did not end with the publishing of the 1938 Master Plan. He stayed involved in the execution of the plan and on the Advisory Commission. The as-built plan between 1938 and 1950 did not always follow the 1938 Master Plan (Drawing 1, herein).

- Respect the value, natural environment and use of the park system: A. D. Taylor's skillfully designed Forest Hill Park was to read as a "natural" environment within and as a refuge from the city. Every effort should be made to enhance the environmental aspects of the Park. Special attention should also be paid to the recommendations for the protection and enhancement of the environment during the preservation process.

- Foster a new generation of park managers: Historic parks require management structures and maintenance staffs with greater skills in the handling of historic naturalistic landscapes. The appointment of Park Administrators and "Hort" crews in New York City's Central Park, Prospect Park and Riverside Drive Park is evidence of emerging trends. More demands are imposed on the park administrators to address contemporary needs in historically sensitive ways, for example, to evaluate original planting plans and plant lists in the light of authenticity, public safety, maintenance and cost.

- Unify and coordinate management: In the case of Forest Hill Park, the coordination of Cleveland Heights, East Cleveland and the Advisory Commission, as well as concerned citizen and volunteer groups poses a special challenge. The success of this 1999 Updated Master Plan depends on

ongoing coordination of capital projects and maintenance. Proposals for combined grant applications should also be considered.

- Institutionalize public/private partnerships: Municipal government must continue to be responsible for certain park services and improvements. However, as the economic climate of the 1990s has shown, the private sector should continue to be encouraged to play an expanded role. This role, however, needs to be clearly defined.

- Be aware of outside impacts on parks: Parks are subject to external events and are inseparable from the city or districts of which they are a part. Forest Hill Park is no exception, having been continuously affected by events outside its boundaries. Upstream watersheds created flood conditions and pollution. Regional traffic has impacted the streets that bound the Park. High buildings have broken the tree canopy line. These changes which threaten the future of the Park must be recognized and strenuous efforts made to control them.

- Renew emphasis on passive park use: The Park was designed for a broad range of both passive and active uses. Studies of public parklands have found that passive uses are still the predominant public activities in the parks. Passive uses must continue to be a priority, but the balance of active use and passive use was also crucial to A. D. Taylor's design for Forest Hill Park.

- Respond to contemporary uses: One of the most difficult tasks facing the preservationists of historic parks is to serve present and future generations of users while maintaining the integrity of the historic design. New uses should be considered in light of Forest Hill Park's historic integrity and should be accommodated in ways that do not violate original design intent. The siting of new facilities, their space-taking and visual impacts, their form and materials all need to be considered with a sensitivity to the original scenic intent and landscape character of the Park.

- De-privatize public grounds: Forest Hill Park was meant for all. Traditionally in this country passive parkland has been taken over for single use recreational use by a few users at the expense of the majority of passive users. A.D. Taylor established a ratio of passive open space to active organized sport user space in his 1938 Master Plan for Forest Hill Park. Not maintaining the ratio is contrary to A. D. Taylor's original design intent.

- Access for All: Special efforts must provide for the young, disabled and elderly. It is crucial that the parks be accessible to all those individuals who wish to visit and engage in appropriate park activity.

- Hold the line on the automobile: Public parks in general are subject to assaults from the automobile. In the past, park edges have been taken for parking in a limited way. The Taylor design accommodated parking throughout the Park in a non-obtrusive manner and controlled automobile movement through the Park. Any future planning should emphasize and recommend holding the line on further incursions of the automobile into the Park.

- Expand park programming: A key to the future use, interest and support of Forest Hill Park is the expansion of park programs - information, exhibits, events, tours, public relations and education. Programming reinforces existing constituencies and establishes new ones. Programming is also the key to rehabilitating currently unused buildings, such as the restrooms and the boathouse. Park programming can reinforce capital outlays, security, park use, advocacy and stewardship.

Just as the building of the Park was one of the largest public parks projects undertaken by both Cleveland Heights and East Cleveland, its preservation, restoration, rehabilitation and/ or reconstruction can be considered no less of an endeavor. Serious problems, such as erosion and water quality, which can undermine the entire Park, will require the cooperative dedication of all involved municipal agencies, citizen groups and individuals to resolve. Recommendations for further investigation, resolution and funding of major projects within the scope of the Updated Master Plan should be diligently pursued.

The following treatment recommendations are based on our inventory, documentation and analysis of Forest Hill Park and input gathered from meetings with the communities. Meetings have included a

series of public meetings with the communities of East Cleveland and Cleveland Heights, meetings with both cities' Councilpersons, meetings with staff from both cities and Advisory Commission meetings. We have broken down the recommendations into a series of issues as follows:

Lake and Boathouse at Forest Hill Park, 1997

Drawings illustrating proposed treatments and that are included in the Appendix are as follows:

Drawing 20-a	Updated Master Plan 1999 – Parkways, Entrances, and Parking Treatment
Drawing 20-b	Updated Master Plan 1999 – Stone Walls, Fencing, and Pedestrian Entrances
Drawing 21	Updated Master Plan 1999 – Drainage and Erosion Treatment
Drawing 22	Updated Master Plan 1999 – Bicycle Circulation
Drawing 23	Updated Master Plan 1999 – Maintenance
Drawing 24	Updated Master Plan 1999 – Treatment Recommendations by Zone

Access / Circulation / Parking / Security

Proposed Treatments Guided by Taylor's 1938 Master Plan

- The preservation, restoration, rehabilitation, or reconstruction of the Taylor 1938 Master Plan pedestrian system, including both paths and trails within the park and sidewalks that surround the perimeter, provided that individual paths still meet current movement patterns;
- The preservation, restoration, rehabilitation, or reconstruction of the Taylor 1938 Master Plan parking areas and entry drives to meet contemporary needs and movement while respecting historical integrity;
- The portions of the pedestrian and vehicular systems, and entry points that have been introduced since Taylor's involvement in the Park, should be rehabilitated to conform to his design guidelines if they meet current movement patterns;
- Circulation elements that have been lost from the Primary or Secondary Periods of Significance should be restored if they meet current movement patterns or are part of the reconstruction of an historic feature;
- Contemporary "desire lines" of movement that respect the historical design should be taken into consideration and new paths or entries should be added if they respect overall historical integrity;
- Establishing a system of gates, bollards or other barriers to control the movement of the car into Forest Hill Park while allowing for Police or Park Ranger surveillance and controlled access for maintenance vehicles;
- Establishing one continuous system of walks within Forest Hill Park that are designed with sufficient cross section to meet the requirements of a "small" service vehicle;
- Restoring the perimeter fence to control pedestrian and vehicular access points in order to control dumping and movement up and down steep slopes in the short term but, introducing the three-foot-high wall recommended by Taylor if and when funding permits,
- Insuring safe universal accessibility within and into the Park, while preserving important historical park features and the historical integrity of the Park design as well as providing protective methodologies at steep slopes and bridges; and
- Establishing a bicycling system for the Park on both the perimeter and within the Park.

In the 1938 Master Plan, when writing about entrances into Forest Hill Park, Taylor stated that

"The perimeter of Forest Hill Park approximates three miles. In view of the fact that this park will be surrounded on all sides by an intensive residential and apartment house development, it is most essential that access to the Park be provided at a number of convenient locations. Six permanent automobile entrances are therefore recommended as indicated on the Development Plan." p. 46.

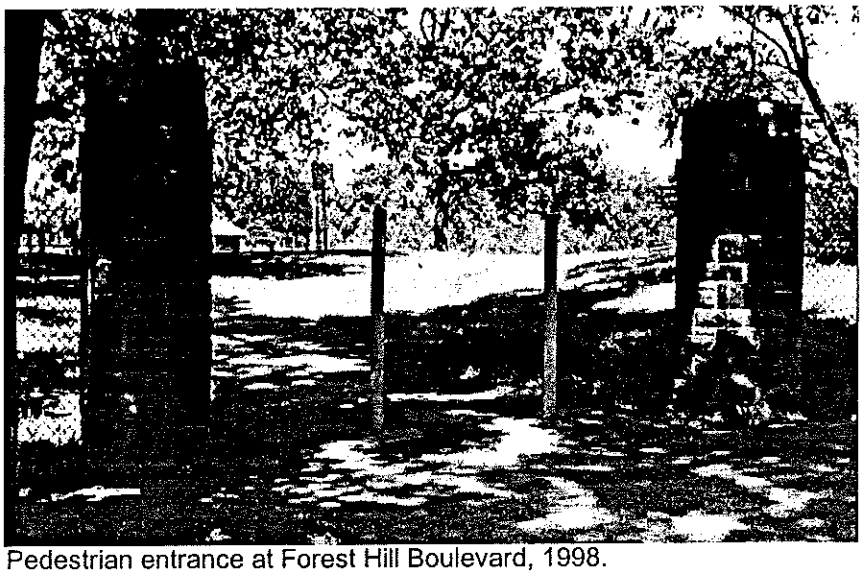
Today we have nine vehicular entries. Taylor also stated that:

"All vehicular entrances should be defined by appropriate entrance piers, especially as and when the recommendation that the park boundary be defined by a low stone masonry wall becomes a reality," p. 46-47 and "In addition to the vehicular entrances, which will at the same time provide access for pedestrians, there are approximately fourteen pedestrian entrances." p. 48. (Today we have eleven pedestrian entrances.)

Circulation was a key issue in the historic A. D. Taylor park and continues to be critical for today's users. Taylor was concerned about the automobile's effect on parks. Taylor stated in the 1938 Master Plan that:

" The decision to eliminate automobile traffic from Forest Hill Park, except so far as automobile roads are necessary to provide access to properly located parking areas, may seem to many a radical innovation; but in the future the wisdom of this decision will be evident." p. 17. He also stated that his concern was "for youngsters' safety while recreating in the park." p. 17.

Providing varied circulation experiences was of prime importance. To this end, Taylor defined in the 1938 Master Plan two types of "pedestrian ways" and specified the surfacing that was appropriate to each.



Pedestrian entrance at Forest Hill Boulevard, 1998.

"A major portion of the use of any large park depends upon the utility and beauty of its trail system. Generally speaking, there are two types of pedestrian ways, the first of value chiefly as a way to travel between two points; the second, scenic trail, walked purely as a recreation, not as a means to an end, but an end in itself. Economy of park design demands a continual combination of the two ideas. Naturalists tired of city blocks will find in Forest Hill Park's trail system a four-hour walk beside Dugway Brook, under fine old forest trees, over meadows and green lawn with never a retraced step. On the other hand, a person entering at any major entrance will be able to walk to any other entrance with a minimum of effort and a maximum of scenic beauty en route" p. 52.

"It so happens that a considerable portion of the system of existing gravel drives, originally located to take maximum advantage of the interesting landscape compositions on this estate, is in an ideal location to meet the requirements for proposed walks and trails, the major portion of which should be of gravel, especially through the wooded Dugway Brook Valley. It may be desirable in the future to construct many of the more intensively used walks with a bituminous macadam or some similar surface." p. 52.

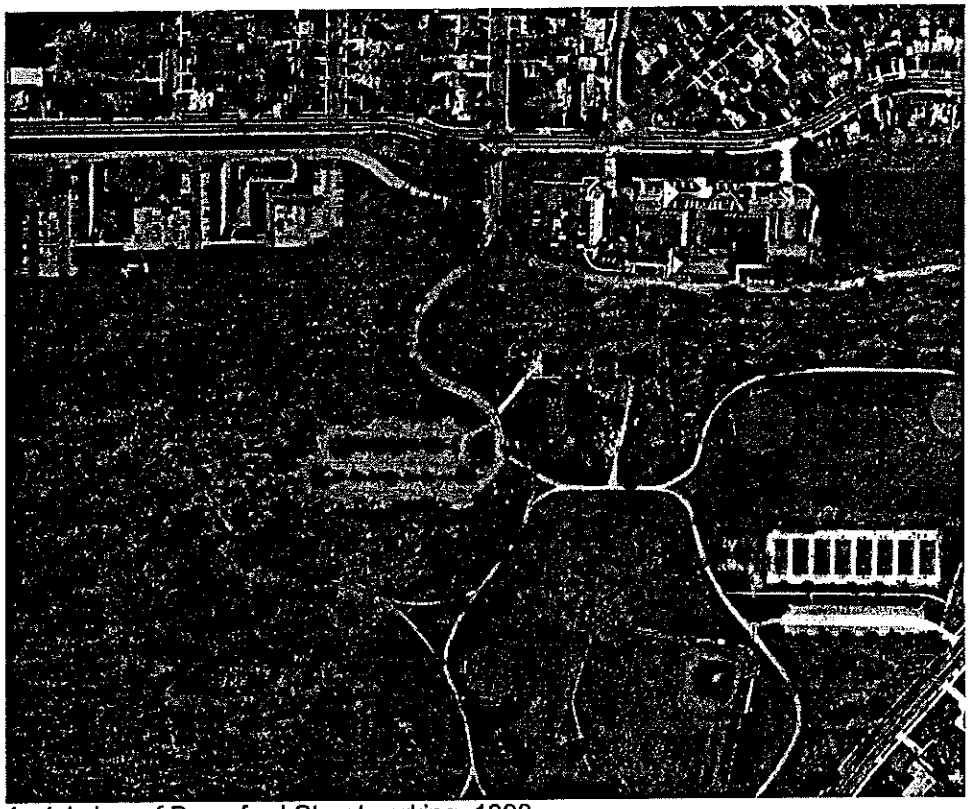
Parking facilities, entrance roads into parking and the location and distribution of parking facilities within the Park were also a concern to Taylor. In the 1938 Master Plan he stated that:

Scenic trail at the Dugway Brook, 1998.

View within the Great Meadow showing pedestrian path, 1998.

"It is quite essential in Forest Hill Park that adequate parking facilities to the extent practicable, be provided in various parts of the park so that the general area may be conveniently accessible to the maximum number of people. This is especially true because of the fact that no parking should be permitted along the roadways leading to the parking areas and also because of the restrictions imposed upon the development of roads for automobile traffic within the park.

Park and recreation areas have "peak days" during certain holidays and on special occasions, when no normal parking facilities can be expected to accommodate the maximum number of automobiles in which people drive to the park. On such occasions the bordering highways must provide parking space for a considerable portion of the visitors. During the remaining days of the summer months, the parking facilities should meet all normal requirements." p. 48.



Aerial view of Beersford Street parking, 1998.

Taylor designed parking areas that were landscaped with major street trees and were well sited in the landscape. They were located with easy access for both passive and active users. The Beersford parking area is terraced and topographic mounding reduces its intrusion on the landscape. In the 1938 Master Plan, Taylor provided an estimated 775 parking spaces based on the assumption that only 30 percent of the persons coming to the Park would come in automobiles, but states that:

"It is difficult to determine at this time the extent to which parking facilities must be provided to meet the demands of the public in another 25 to 50 years." p. 48.

Forest Hill Park's access points, circulation network and parking accommodations are mostly extant from the Primary Period of Significance but, in many areas, their conditions range from fair to poor. The Rockefeller carriage roads and stone arch bridge are in poor condition. Roads into parking lots, as well as the parking areas need repair. Some parking areas do not have curbing. In others, curbing is set too low, or the curbing is in poor condition. Some walks and trails have been abandoned for many years and the condition of park paths range from good to poor. City sidewalks that are on the perimeter of the Park and the sidewalk on the north side of Forest Hill Boulevard are in good to poor condition, while the Forest Hill Boulevard sidewalk is covered with leaf debris. Sidewalks are not continuous at the perimeter.

There also exist interruptions in the circulation system, which should be rectified. Dumping on trails or deterioration of paving surfaces causes interruptions in movement. Some walks and trails have been abandoned and some new "desire lines" have become beaten paths. Dumping disturbs the trail from the Bowling Green up to the Meadow Vista along Forest Hill Boulevard. Due to lack of use, the path between the Bowling Green area and the Beersford entry and parking area is gone. The circulation system at the stables is gone due to a combination of dumping and fire. Many of the original 1938 Master Plan buildings and structures were never built, thus eliminating these destinations and circulation to them. Many of the smaller park "pleasure destinations" such as shelters, restrooms, the boathouse, and the Bowling Green pavilion give meaning and purpose to movement through the Park. Unfortunately, many have been abandoned, are in need of repair, or are not universally accessible. Security and street frontage, even in Taylor's time, was an issue, and, in the 1938 Master Plan he proposed two alternatives:

"Two alternatives present themselves for the development of street frontage of the Park: open or accessible treatment, and defined or limited entrance treatment. Modern design for sizeable park areas tends to the latter for several reasons. The unified effect created by a boundary wall is very important. Such definition of in-town parkland is desirable from a psychological point of view. It creates a feeling of value and respect for that which lies within and at the same time stresses the extent of the park to those passing by. Indirectly such treatment is also a benefit to the interior of the park. Where seen, it offers a barrier to those disturbing factors from which the park is a refuge, but more important still, it protects the plant growth along the boundaries, allowing completely natural conditions which soon provide a screen of green against all outside intrusion with a resultant feeling of increased and boundless space. It is recommended that eventually the entire street frontage of park be defined with a masonry wall to a height approximately three feet, which will not obstruct visibility but which will serve merely as a dignified and friendly statement that within lies Forest Hill Park. Where in contact with private property, the existing fence should be maintained and hidden by a screen planting shrubbery." p. 80-81.

Unfortunately, the three-foot-high perimeter wall was never built. Instead, a concrete post with metal fabric fence, which was probably installed during the Rockefeller Period, is still in place around the East Cleveland boundary. This fence has been in place since before 1949, as evidenced in the historical aerial photographs. There is further evidence that the fence along Forest Hill Boulevard was in place since it appears twice in the 1938 Master Plan on pages 85 and 89. Reproduced, herein, from the Taylor Master Plan is the photo of the fence with a corresponding sketch by Taylor showing plantings and the proposed three-foot high wall. Today, the fence, generally in poor to fair condition, is still in place on both sides of Forest Hill Boulevard, as well as along most of the perimeter of the East Cleveland portion of the park. Photographs of the 1949 period do not show fencing surrounding the Cleveland Heights portion. Several pedestrian piers are still in place, but no vehicular piers, if ever built, remain.

Whether to encircle the Park perimeter with a fence, a wall or perhaps a combination of both will be a continually debated issue. It is an important and critical issue. In order to protect the Park, security in the form of vehicular gates, bollards at pedestrian entrances, and a combination of low wall and/or fencing,

Low stone perimeter wall at Franklin Park in Boston, Massachusetts acts as both a retaining and free standing feature.

needs to be considered in order to control movement into the Park. This will aid in the control of dumping, protection of plant growth, protection of steep slopes from erosion, and will provide the unified effect desired by Taylor in the 1938 Master Plan. The actual materials and design of the wall, fencing, vehicular gate, bollard system and entry piers should respect, and reflect, the historical character of the Park and Taylor's original design.

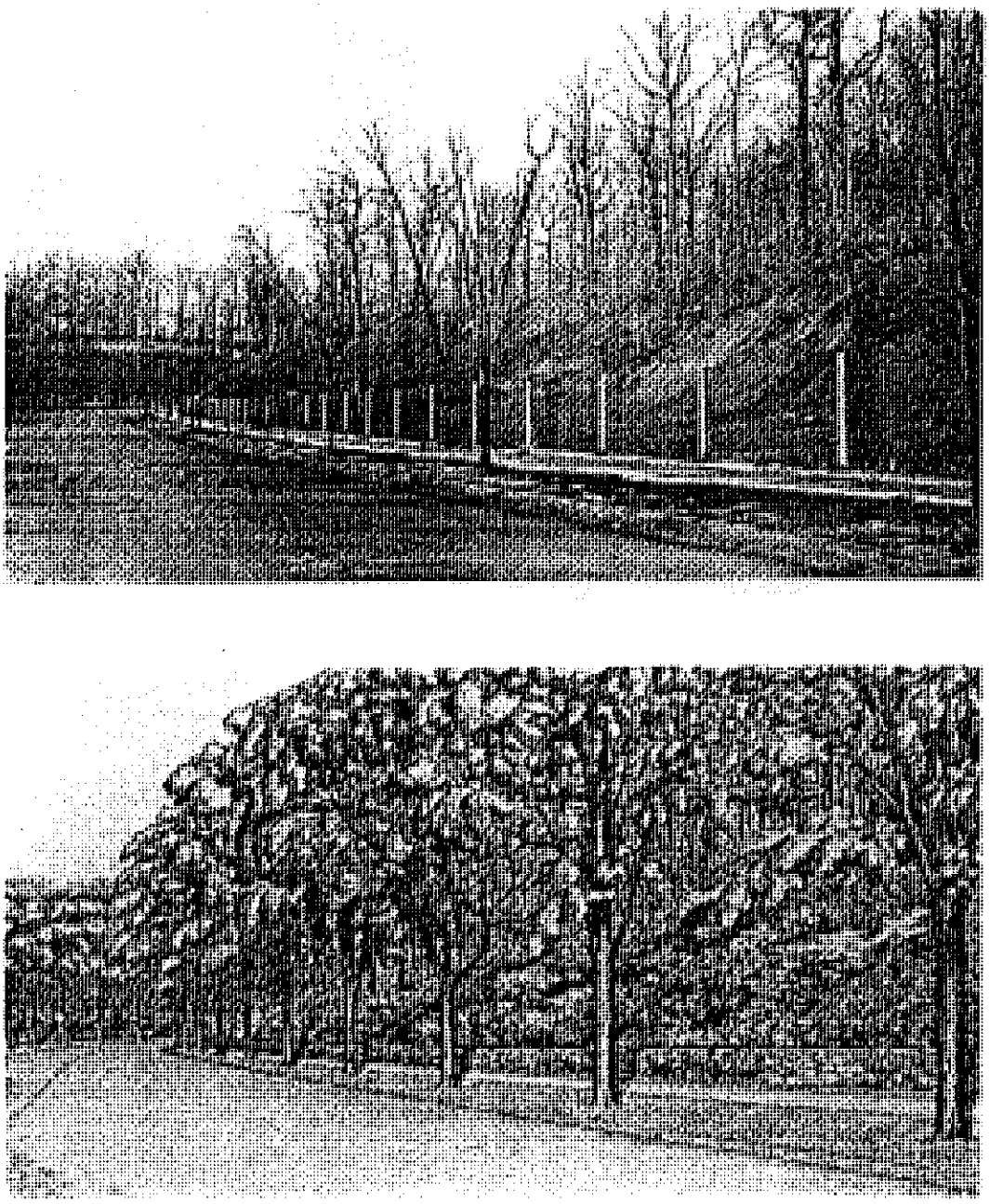
Taylor was also concerned with maintenance accessibility of the site. He states in the 1938 Master Plan that:

"In order to properly maintain this park, it is essential that all portions be readily accessible to a small service truck. It is therefore recommended that at least one continuous system of walks be designed of sufficient width to meet the requirements of a service truck." p. 53.

Impacts on the Park and its pedestrians systems by daily maintenance trucks designated for trash pick-up need to be controlled. The size of the trucks and the depths and widths of pavements required to accommodate them need to be addressed. This is a serious issue that has a devastating effect and costs many dollars annually in path repair. It also results in major compaction and is a major cause of the daily destruction of the park landscape.

The development of a nature trail system was a part of Taylor's program for the Park. He states in the 1938 Master Plan that:

"The development of nature trails, to the extent that such educational features are practicable in Forest Hill Park, should be given most serious consideration. This park provides an easily accessible area for this purpose and will be an invaluable asset to the natural science departments of adjoining school districts. In connection with these trails, a uniform and scientifically correct system of plant labelling is important in order that plant lovers, who come into this property with its many unusual species and varieties, may procure the maximum enjoyment." p. 53.



"Proposed Wall and Planting on North Side of Forest Hill Boulevard" The photograph at the top shows the condition of the existing embankment along north side of Boulevard. The sketch at the bottom shows proposed improvement after further grading, planting and construction of boundary wall of stone masonry is completed." Forest Hill Park Master Plan A Report, 1938, A. D. Taylor, p. 89.

The proposal for the trail system, as well as a bicycle system, is discussed under Passive and Active Recreation Uses, herein. The trail system is also discussed under Environmental Issues / Flora and Fauna, herein.

Drawings illustrating proposals and that are included in the Appendix are as follows:

Drawing 20-a Updated Master Plan 1999 - Parkways, Entrances, and Parking Treatment
Drawing 20-b Updated Master Plan 1999 - Stone Walls, Fencing, and Pedestrian Entrances

Environmental Issues / Flora and Fauna

Proposed Treatments Guided by Taylor's 1938 Master Plan

Restoration of Disturbed Areas:

- Remove dumped materials at various locations (trash, household debris, cut wood, construction debris). Restore ground contours utilizing erosion control to protect adjacent areas
- Determine appropriate reuse of area.
- Design and implement vegetative cover and stabilization in response to the programmed use.

Control and elimination of invasive plant species:

- Remove invasive plant species such as Japanese Knotweed, Tree-of-heaven, Buckthorn, Phragmites, Japanese Barberry, etc.
- Identify and mark areas where control is needed.
- Control all above ground stems by cutting and treating with direct non-spray herbicides. If herbicides are not permitted, roots of shrubs will be completely removed to eighteen inches and trees to three feet. Removal shall be repeated for a minimum of three years or until the invasive species is under control. Grub and remove rhizomes and rootstock of herbaceous species; monitor and treat resprouts with herbicide. If herbicides are not permitted, plants roots will be removed as completely as possible. Removal shall be repeated for a minimum of three years or until the invasive species is under control.

Restoration of eroded channels and banks:

- Use vegetative and bio-engineering practices as a first methodology whenever possible to stabilize banks and eroded areas. Species planted should be native sustainable species that would naturally occur within the streamside ecosystem of Cuyahoga County.
- If other engineering solutions are required in addition to the above then appropriate stabilization and buffering with native streamside association plants should be included in the design solution to blend the manmade into the native plant landscape.

Protection of critical habitats and rare species:

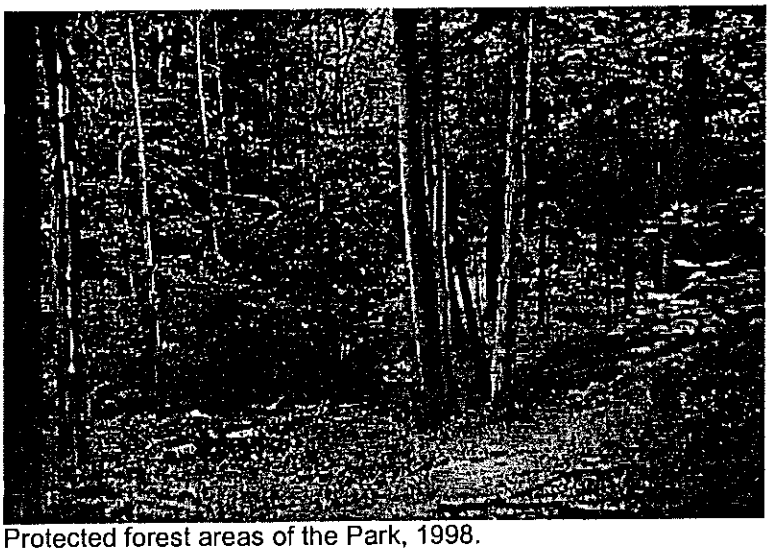
- Critical areas include the knoll north of the Cleveland Heights Recreation Pavilion, the Bloodroot massing at Superior Boulevard and the open area northwest of the Forest Hill Boulevard Footbridge. The Forest Hill Boulevard site limits will be inconspicuously marked for permanent reference and sufficient buffer distances should be established to protect habitat.
- Woody debris present in these areas, if removed, will be carefully removed.
- Minimum, if any, alteration of vegetation or terrain will be allowed in these areas.
- Location of the existing circulation systems should be studied and should be altered to buffer habitats if the historical integrity is not impacted.
- These areas will require management and maintenance, however, to control ecological succession which, if left uncontrolled, would eventually result in alteration or loss of rare species populations and critical habitats. i.e., rare sedges could be shaded out by forest canopy growth.

Protection of old growth forest areas:

- Forested areas of the Park, which include relatively undisturbed plateau, slope and terrace communities, are potentially old growth (pre-settlement) forest and should be developed into areas of substantial ecological significance. Large standing dead trees provide excellent habitat for a large population of woodpeckers and raptors and are important to the biological diversity of the region. However, dead or dying trees that are creating health safety hazards along forest edges adjacent to open space and along trails or paths should be removed. Refer to Maintenance and Management for Forest, herein.
- Minimal, if any, alteration of terrain should be allowed in these areas. However, the forest should be managed and maintained on a 10-year cycle, if it is to remain a vital ecosystem. A high priority should be the removal of invasive species and the careful restoration of existing trails with sufficient buffers to protect rare species. Trail restoration should be worked into the phasing. Refer to Maintenance and Management for Forest, herein.

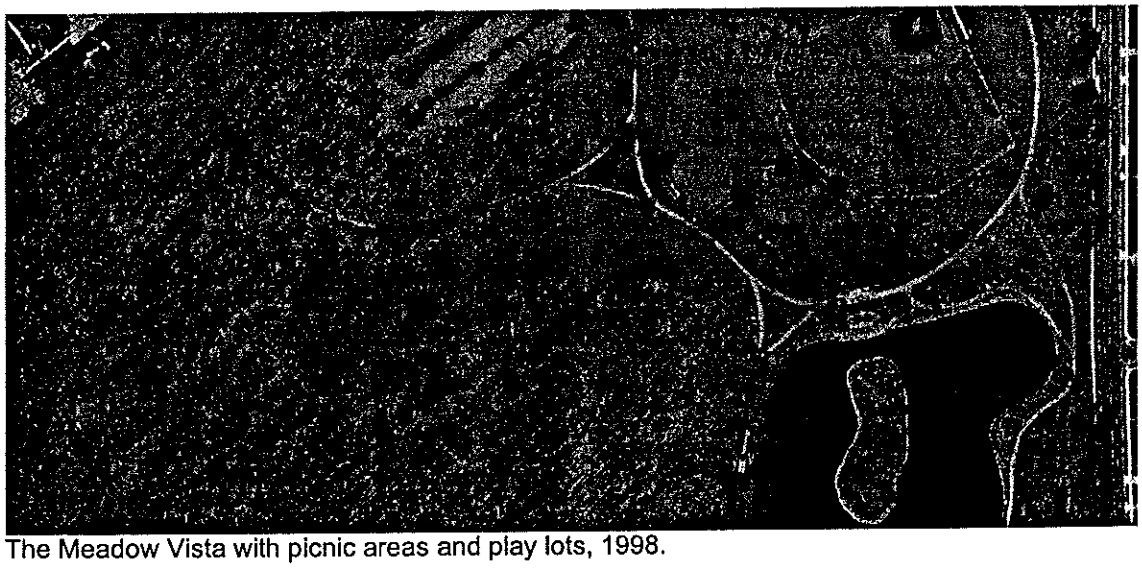
Of the approximately 242 vegetated acres in the Park today, about 104 acres (or about 42%) are protected forest, about 113 acres are passive parklands, picnic areas or meadows (or about 47%) and about 25 acres (or about 10%) are active recreation grass.

Protected forest areas of the Park, which include relatively undisturbed plateau, slope and terrace communities, are potentially old growth (pre-settlement) forest and of substantial ecological significance. Taylor recognizes their ecological value, but also acknowledges that these natural areas could provide visual screens or buffers to more intensively developed areas or could protect the very steep slopes of the ravines. They provide the picturesque wild areas of the "Country Park."



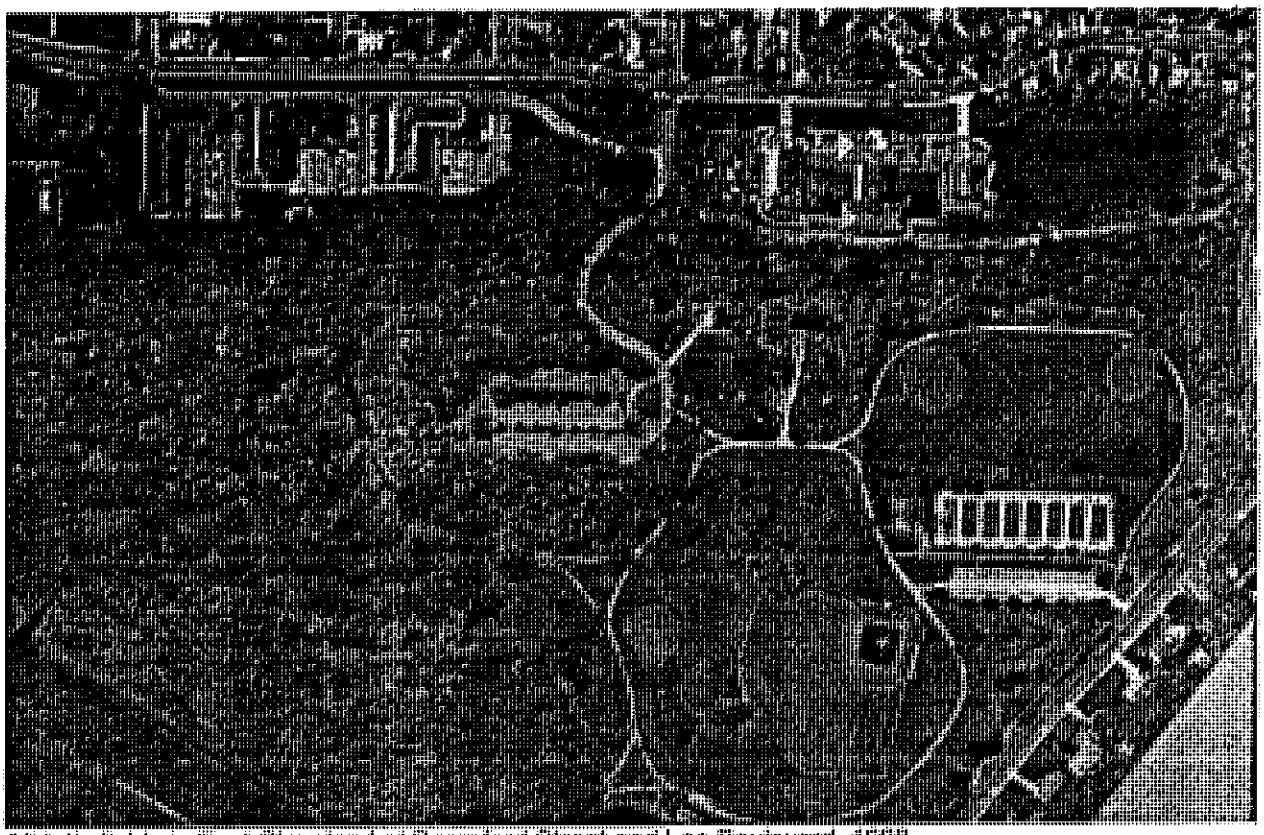
Protected forest areas of the Park, 1998.

The "parklands" provide passive areas for picnics, walking, or informal play and are characterized by either trees over meadow or trees over large areas of mown grass. They contribute to the pastoral quality that makes Forest Hill Park a "Country Park."



The Meadow Vista with picnic areas and play lots, 1998.

The recreation or active sports use areas, which occupy the smallest percentage of open space, are characterized by large areas of mown grass or by paved surfaces for these activities. They are high maintenance areas and have specific requirements including seating for viewing, fences for containment and night lighting to extend their hours of use.



Athletic fields in East Cleveland at Doncaster Street and Lee Boulevard, 1938

Taylor was concerned about the balance of these three areas – protected forest, parkland and active recreation – and their relationship to native flora and fauna. We continue to be concerned about this balance. He states in his 1938 Master Plan that

"Passive recreation comes not only from enjoyment of the landscape compositions, the study of the interesting types of trees, and other vegetation, but also from the study and enjoyment of birds and animal life which it is possible to preserve in Forest Hill Park. The opportunities for such study will be an important asset in a park of this size, and in order that it may be developed to its maximum value, adequate protection must be provided to encourage native flora and fauna." p. 44.

Another issue is the introduction of fast-growing, invasive species such as stands of Japanese Knotweed, Tree-of Heaven, Phragmites, English Ivy, Japanese Barberry or Common Buckthorn that have become rampant in parts of the forest and woodlands. Areas disturbed by dumping, filling or overuse of portions of the site have allowed for invasion. Many of these species come into these disturbed areas early in the succession and reduce diversity of species, if left uncontrolled. Improved maintenance practices and expeditious repair of eroded or disturbed areas would reduce the opportunity for invasion. Of course, not allowing the abuse should be the first line of defense.

In the 1938 Master Plan, Taylor discusses the "natural vegetation" and recognizes that cutting and planting had modified much of the Park. The site of the former residence was modified saving better specimens of forest trees and introducing exotic species.

"The principal features of the natural vegetation on that part of Forest Hill Park lying south of Forest Hill Boulevard are the grove of large old specimen trees which are located east of the site of the former Rockefeller residence, and the hardwood forest in the ravine through which Dugway Brook is flowing. ' p. 27.

"The forest growth in the Dugway Brook Valley has most of the characteristics of the typical Lowland Forest, merging into the Mixed Mesophytic Forest at the upper levels. It has been much modified by cutting and planting, so that its present outstanding characteristic is a profuse and handsome herbaceous growth which is unusually noteworthy in late summer and early autumn." p. 26-27.

"The largest remaining area of woods, located immediately south of Forest Hill Boulevard and immediately west of Lee Boulevard, consisting to a great extent of Beech and Maple, has in recent years been very badly damaged by wind-storms, and for that reason is not worth preserving as a woodland." P. 27

In the 1938 Master Plan, Taylor does not discuss rare species as a topic, nor does he discuss protecting specific plant associations or creating buffers of protection for the rare species within the Park. Specific tree species are mentioned, but not the associated shrub or herbaceous layers for these wooded areas.

The National Register Nomination, prepared by Carol Poh Miller, emphasizes the historical importance of the natural systems of the Park and explicitly defines, in modern terms, the issue of rare and endangered species and their location as described by Dr. George Wilder as follows:

"In addition to old-growth forest, Forest Hill Park contains habitats that support diverse plant life, including several plants that are on the Ohio endangered species list. Dr. George Wilder, a botanist and professor of biology at Cleveland State University, has identified approximately 450 plants within the park, noting the presence of two especially rich plant habitats. One is the promontory above the confluence of the north and south branches of Dugway Brook. There, Withrod (Viburnum cassinoides) and Common Hairgrass (Deschampsia flexuosa) can be found; both plants are rare in Cuyahoga County, and here the latter plant is believed to be found only in Forest Hill Park. A relatively pristine natural area, the promontory is also home to White Goldenrod (Solidago bicolor), Mapleleaf Viburnum (Viburnum acerifolium), Lowbush Blueberry (Vaccinium vacillans), and Canada Hawkweed (Hieracium canadense). The latter plant is listed as threatened by the Ohio Department of Natural Resources. Notable trees in this location include, among others, Shadbush (Amelanchier arborea), Hemlock, Yellow Birch, and White Oak (Quercus alba). Another notable plant habitat is found along the northern edge of an area today known as the Meadow Vista, where Withrod, Canada Hawkweed, Zig-Zag Goldenrod (Solidago flesicaulis), Largeleaf Aster (Aster macrophyllus), and diverse other species mingle beneath a thick forest of Scarlet, Black and Chestnut Oaks."

The 1999 Updated Master Plan recognizes that our approach to protection of ecosystems and the legislation that has been passed since 1938 is more sophisticated in preventing impacts on, or destruction of, natural systems that were allowed in the past. Complying with universal accessible legislation could also impact these natural areas. A balance of accessibility and destruction of what one has come to observe will need resolution. The "best practices" of today should become our goal. Impacts on natural systems, such as dumping and filling in the Park, should be prevented and, if they occur, should be removed and remedied as soon as possible. Acting quickly and decisively is important. This has been illustrated effectively with the policy of immediately removing graffiti.

Overuse of our natural areas and the desire for off-trail sports will be issues that need to be faced. Protection of rare and endangered species and their respective ecosystems, such as the old growth forest, should be a major concern when restoring original trail systems or when adding to the trail system. Many people who want to enjoy nature find the idea of control a difficult concept, and they feel that they are not experiencing nature if they feel controlled. It is not the individual, but the excessive movement of numbers of people over and over again, which, if not monitored and regulated, could endanger these areas and destroy the natural landscape they came to experience. Possible solutions could include paths that allow ample buffer for sensitive areas, and signage to alert the public to stay on the paths. Perhaps restricting the time of year one can utilize an area would aid in preservation and conservation. In any case, educating the public about the fragility of these areas is of prime importance.

The Dugway Brook and the Lake are both vital environmental features and are extremely sensitive to urbanization, overuse, and natural forces. The riparian zones within the Park should be protected and existing streambanks need to be stabilized and revegetated with native species. The repairs should look as natural as possible. This will require employing the highest-quality bioengineering techniques after the banks are stabilized with "best engineering practices." The Lake, which is a built feature, should be restored in accordance with the Taylor planting plans and the edge treatment and species of plants should reflect its park-like character. The original Taylor planting plan is available for this area. The Dugway Brook should be revegetated with native species that are consistent with the plant associates of the major tree canopy. These plantings need to be not only native and have root systems that stabilize the banks, but also need to be sustainable.

All work in the riparian zones should conform to the "best engineering practices" and to the requirements of Rainwater and Land Development Ohio's Standards for Stormwater Management Land Development and Urban Stream Protection, latest edition. At the same time, however, the fact that Forest Hill Park is an important historic park should be included in the equation when decisions that might impact the historic character of the Park are considered.

Planting

Proposed Treatments

The 'Planting' section in the 1938 Taylor Master Plan provides the following general planting guidelines for the proposed development of the Park. We propose to follow these same treatments today.

"In general, the planting program in Forest Hill Park should be directed to accomplish the following purposes:

1. Restore the woodlands, wherever necessary.
2. Place specimen trees where needed about the Great Meadow and other open areas.
3. Plant appropriately about buildings and entrances.
4. Produce a screen planting in selected places about the boundaries of the park, especially where parking areas are near the streets.
5. Plant eroded slopes and fresh cut banks.
6. Face down woodlands where a view is not desired into them.
7. Generally produce an effect of richness, dignity and luxuriance in the park by means of the proper arrangement of foliage." p.86-87.

The northern end of the Great Meadow site of the Rockefeller home, 1997.

In 1938, protection of plant associations and existing fauna were part of the design vocabulary, but the term sustainable landscapes was not. The management of vegetation in public parks to encourage regeneration is also a relatively new development. Prospect Park in Brooklyn, New York has had a management program for their woodlands for at least eight years. Wetlands in 1938 were not regulated as they are today and all upland drainage was allowed to drain to the "natural drainage valleys" or was actually piped to the edge and discharged down the slope, thus disturbing vegetated slopes.

Restoring the "woodlands" (Taylor's term), or what we call "forests" today, relies more on encouraging regeneration than on the planting of native trees and shrubs within these areas to restore or repair. Repair and replanting of eroded slopes in forest areas will, however, be done with new plantings or cuttings and will be a high to medium priority. The native plant association should be respected when under-planting these slopes and native flora and fauna should be reintroduced. The forests, which are protected areas, should have trails through them. Also, it will be necessary to control off-trail degradation.

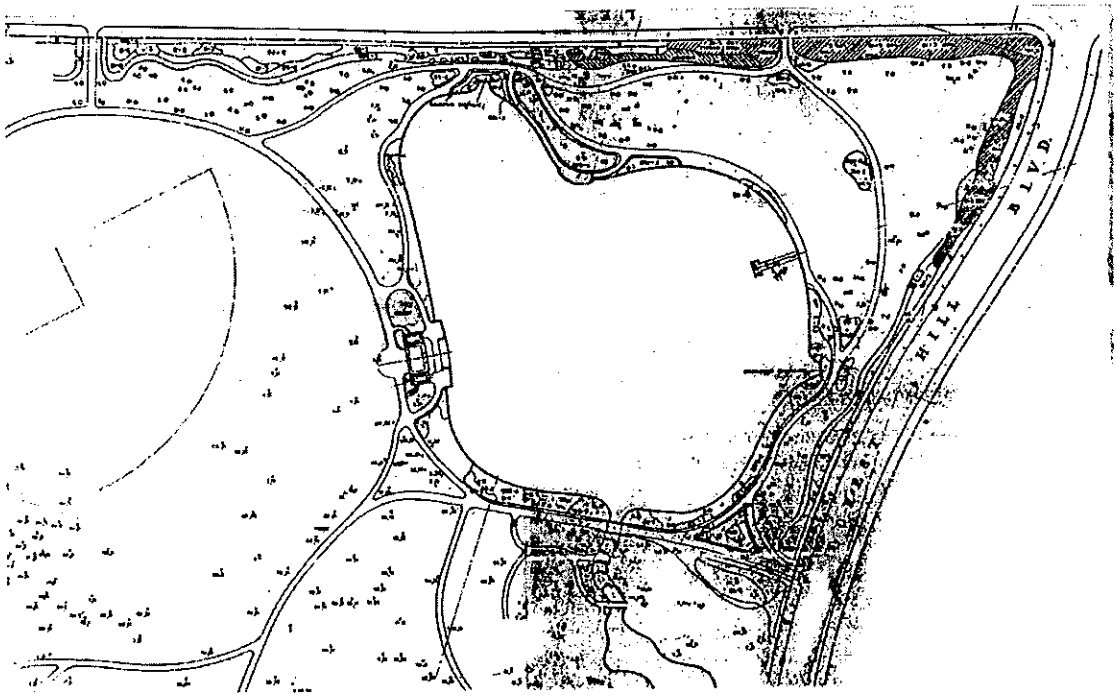
The areas we call "woodlands" are controlled and maintained areas. They are a "naturalized" landscape and will have replacement plantings of native trees and shrubs. We do expect pedestrian movement and passive use, such as picnicking, within and adjacent to these areas.

Within the open meadows, we propose maintaining and defining the tree canopy by replanting or under-planting to maintain clumps of trees and individual specimens. Encroachment of the forest and woodlands into the meadows is a problem, especially at the Meadow Vista. So in the Meadow Vista we are proposing the removal of trees to reestablish the edge condition of 1938-1950. To a much lesser extent, this will be required in the Great Meadow. Invasive species such as the Tree-of-Heaven and the extensive growth in the stable area should be removed. The 1999 Updated Master Plan shows the stable and adjacent dump area that was removed in 1998 as an extension of the great Meadow with meadow grass and major tree planting and the introduction of picnic tables on the edges. In both meadow areas, large trees in good health within these designated removal areas will be retained. This will maintain the meadow character but, they should be replaced with the same species as they die. All trees in the meadows should have botanical labels.

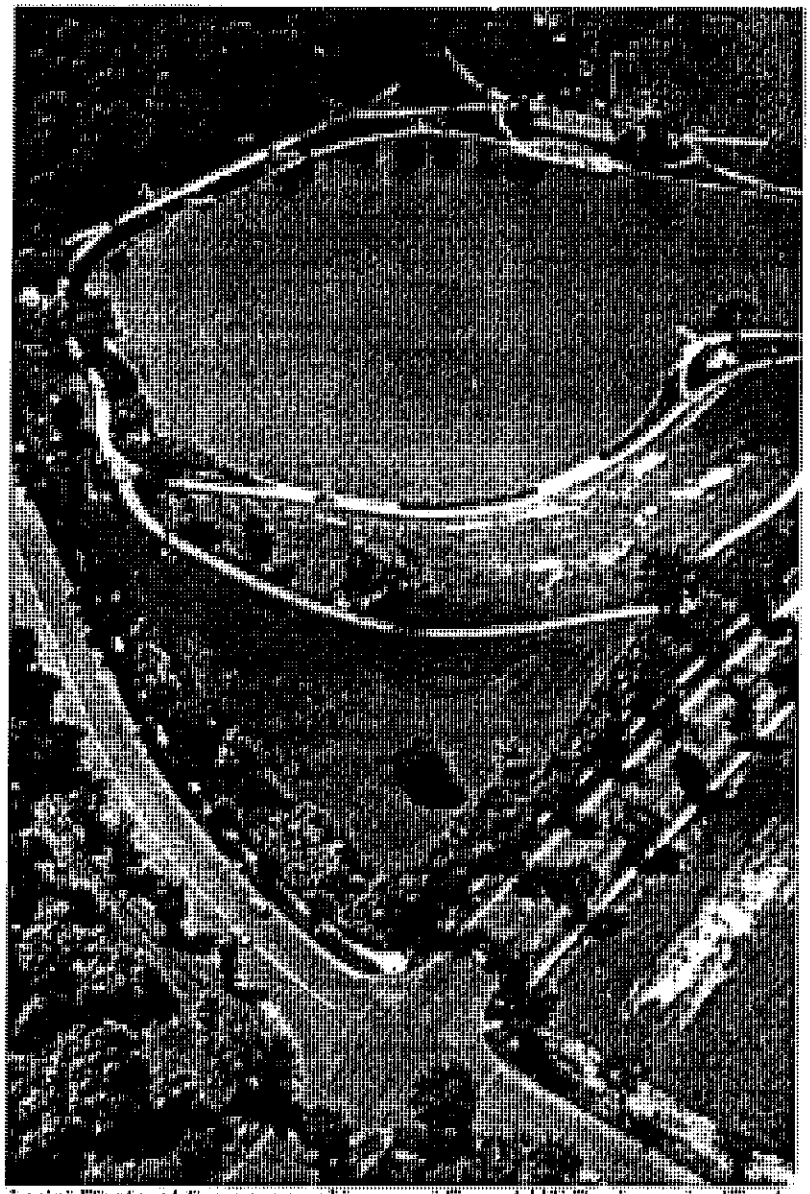
The greatest loss since Taylor's 1938 Master Plan, however, has not been in the meadow, forest or woodlands, but in the boundary planting consisting of trees above shrub buffers and street tree planting. In the 1938 Master Plan Taylor describes them as follows.

"A boundary planting should be planned generally for the entire perimeter of the park. This would not necessarily take form of a continuous belt of planting nor should it cut off views into or out of the park, except to a limited extent, where parking areas are adjacent to street." p. 84-85.

Buffer plantings and street tree plantings shown on the Taylor Master Plan have aged, been lost or in some cases, were never planted. These plantings were important in the development of both the "Country Park" and the urban edge. In addition to defining the park boundaries, the buffer plantings protect the native flora and fauna within the Park, control movement and protect the slopes from erosion. In many instances, A .D. Taylor's intended screening of the street edges, parking areas, and neighboring buildings have been modified or compromised. The framing of views into the Park has also been lost. Much remedial work on the buffers is necessary. In areas such as the lake, we have historical photographs and planting plans that will allow for restoration of the Taylor planting design of this important buffer planting.



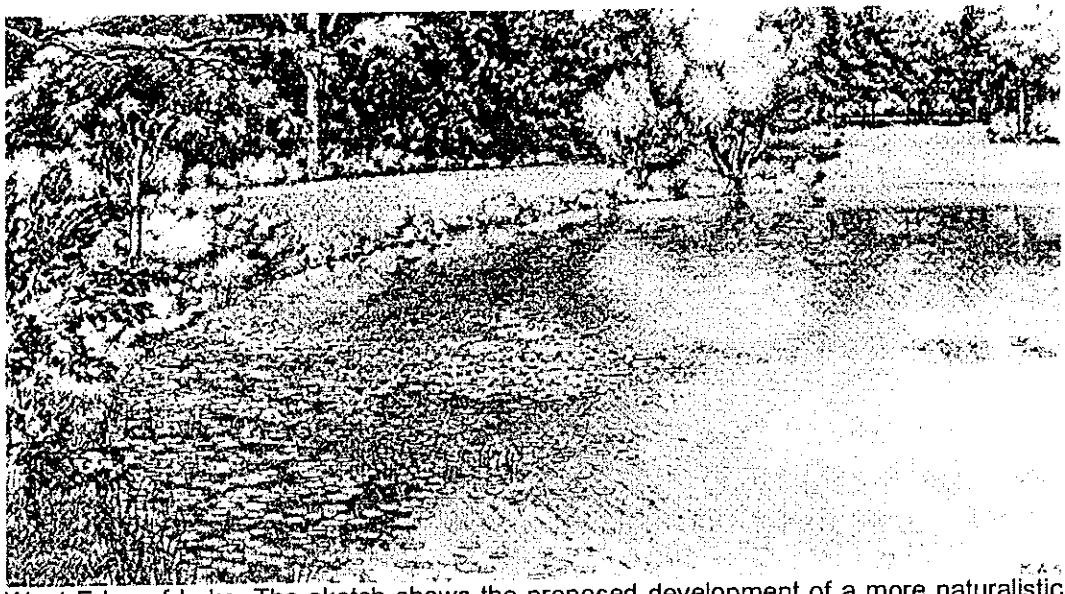
"Planting Plan for Lake Area C Portion of Lee Road" c. 1949 scale 1"=50", Drawing. No. 1157-111by A. D. Taylor. (East Cleveland Archives)



Aerial Photo at the corner of Lee and Forest Hill Boulevards. (East Cleveland Archives, c. 1946)

In many instances, A .D. Taylor's intended scenic effects within the Park have been modified or compromised. Views of the bridges are obscured by uncontrolled growth, the framing of vistas within the park has been lost and the screening of active recreation and parking areas is no longer effective. One of the major effects on the "Country Park" character in both the Meadow Vista and Great Meadow has been the placement of sports fields within the historically significant views. In the case of the Great Meadow, the lower portion has been given over totally to athletic uses. This has altered the pastoral impact of the "Country Park."

Taylor directed the planting of buffers to separate uses. These plantings have either died or have been removed on the East Cleveland side and may never have actually been planted on the Cleveland Heights side. The buffers, however, are an important part of the character of a park of the 1930s-1950s. From the late 1950s through the 1970s, many shrub plantings were removed in parks and on college campuses throughout the country in the name of security. Taylor was concerned about this as well when he stated:

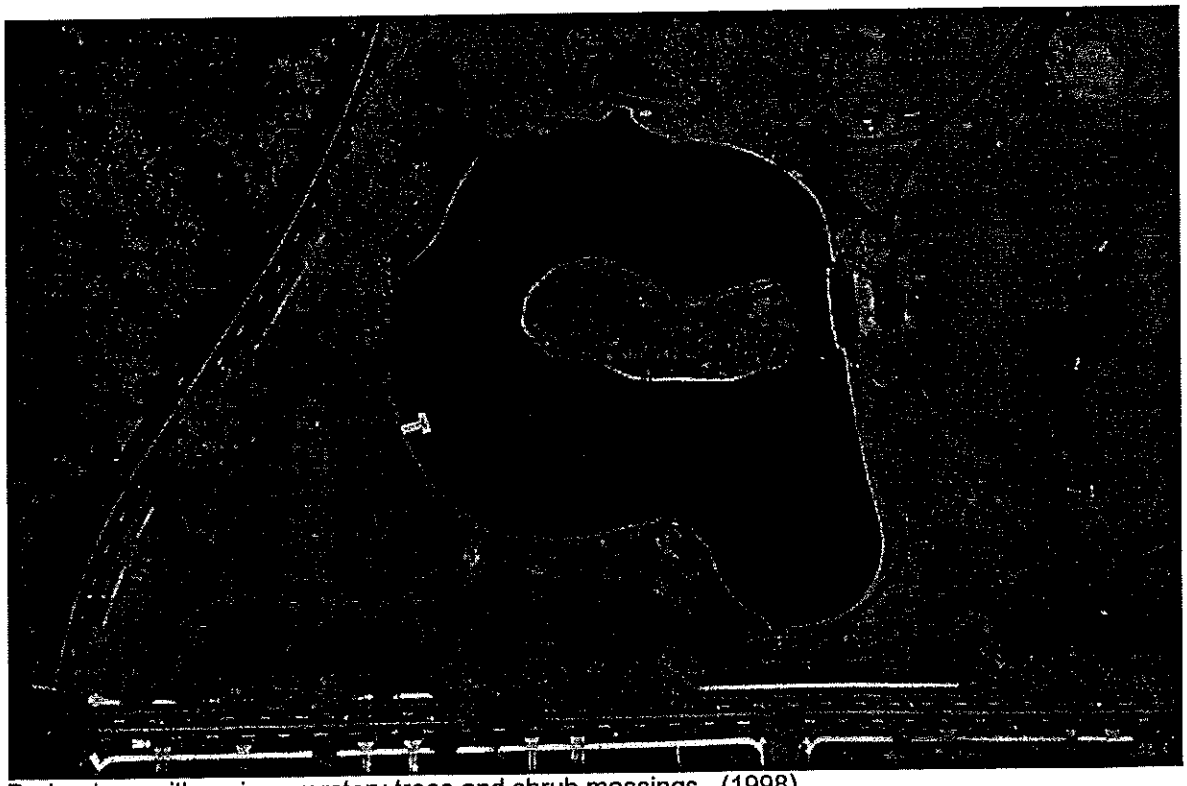


West Edge of Lake. The sketch shows the proposed development of a more naturalistic and informal shore line created through the removal of the stone retaining wall, regrading and planting of this area (A.D Taylor Master Plan, 1938, p. 75).

"Great care should be exercised especially when planning for the location of shrub masses, that the vegetation does not obstruct views that are essential to the proper policing of the park. Plants should not be planted so closely together, for the sake of immediate effect, that a large portion will have to be removed in the near future to prevent overcrowding." p.86

One final thought on Taylor's proposed planting should still be the guideline today:

"The general effect desired in the planting of the park should be one of richness, dignity and luxuriance produced by means of the proper selection and arrangement of different kinds of plants. To this end all horticultural or exotic plants such as weeping trees, cut leaved, purple- or golden-leaved trees or shrubs should be used with great restraint, if at all. Only those plants which are most likely to succeed should be planted in conspicuous places or in large quantities." p. 85.



Park edges with major overstory trees and shrub massings. (1998).

Building Treatment, Rehabilitation, and Restoration

In the 1938 Master Plan, Taylor explains the need for well-designed structures throughout the Park:

"The development of Forest Hill Park requires that consideration be given to the location, type and use of numerous structures to meet the recreation requirements of the public." p. 62.

"The type of architectural composition shown in these sketches seems to be appropriate for this kind of a park development and should be adopted unless there is some very strong reason for the adoption of another style of architecture. The final size, detailed design, specific location and grading for each of these proposed structures should be determined through further detailed studies." p. 66.

"A modern 'intown' park, such as Forest Hill Park is destined to be in the years to come, cannot adequately serve the public unless these structures, appropriately designed to meet the requirements of practical use, are provided." p. 66.

The buildings proposed in the Taylor 1938 Master Plan include the following:

- Main pavilion – located on the site of the former Rockefeller residence.
- Two shelters at the top of the slope along Superior Road overlooking the Dugway Valley.
- Shelter at the south side of the Great Meadow overlooking the Dugway Valley.
- Field house at the south end of Forest Hill Park at recreation area.
- Overlook shelter at the south end of the Meadow Vista.
- Bath house at the swimming pool for both the pool and athletic field use.
- Boat house overlooking the lake.
- Gate lodge at Forest Hill Boulevard and Terrace Street.
- Service building group.
- Small shelters overlooking the Dugway Valley.
- Comfort facilities to be provided at the bath house, boat house, overlook shelter at meadow, the main pavilion, the field house, the service group and in comfort stations scattered through the Dugway Valley.

With Taylor's 1938 Master Plan as a guideline, we propose:

- Preserve, restore, or rehabilitate historic buildings and structures if this can be achieved at reasonable cost, if they confer public benefit and if they have a specific use;
- Develop guidelines for the future design and construction of new buildings and structures that are proposed to be added to the Park;
- Improvement of universal accessibility into buildings and structures while preserving the important historical integrity of their design.

OVERLOOK SHELTER NEAR NORTH END OF HIGH LEVEL FOOT BRIDGE

The photograph at the top shows the existing woods on the site of the Overlook Shelter at the extreme southwest end of the Meadow Vista. The sketch at the bottom shows the suggested shelter which commands a view to the west and southwest toward the lake, and also to the northeast across the Meadow Vista. (See sketch on Page 45.)

"Overlook Shelter Near North End of High Level Foot Bridge."
(A.D. Taylor Master Plan, 1938 p. 65)

Roofing Materials

Many of the historic structures in Forest Hill Park have a composite shingle roof. Composite shingles are generally made up of cementitious materials and are manufactured to look like other roofing materials, such as slate. In the earlier part of this century many cementitious products contained asbestos. The shingles should be sampled and tested for hazardous materials. Should they be found to contain asbestos, a determination must be made on how to best maintain, repair and replace (if necessary) the roofs. The texture and pattern of the shingles are a part of the overall design of the structures. All efforts should be made to maintain as much of the original materials as possible. This must be balanced with public health and safety. It may or may not be necessary to abate the shingles. Regulations have changed in recent years, with some materials it may be better to leave them in place rather to remove them. Removal can sometimes make the risk of exposure greater, by releasing small particles that would otherwise be encapsulated within the material. If it is determined that the roof must be removed, they should be replaced with materials that match the originals in size, shape, color and texture.

Gutters and Downspouts

Some of the historic buildings in Forest Hill Park, such as the comfort stations, were designed to function without gutters. Other buildings, like the boathouse and the lawn bowling pavilion, were originally designed and built with copper gutters and downspouts. Some downspouts are missing. Missing elements should be replaced with copper to match the originals in size and shape.

Buildings without gutters are generally designed with large eave overhangs from which water falls to a ground drainage system. It is important to provide and maintain these systems since they help in keeping water away from the building, and deter "rising damp" in masonry walls.

Stone Masonry

Stone masonry on these buildings is primarily of rock-faced, random ashlar sandstone. The Forest Hills Boulevard Bridge has some tooled surface stone on the bridge railing. Tooling and other methods of dressing stone help to create a harder and more weather resistant surface.

There are a number of important issues with regard to the treatment of masonry. The first is cleaning. Always use the gentlest means possible. The primary goal of masonry cleaning is to remove large accumulations of dirt, stains, graffiti, and accumulations of algae, moss and lichen. It is not necessary to make the building look new, by means of abrasive or harsh cleaning. Test patches of cleaning methods should always be done in an inconspicuous place. Test areas should be masked off by means of a template so that any damage caused by the cleaning method can be readily observed. Start with clear water at low pressure and move up to chemical methods until a desired level of cleanliness is achieved. Graffiti can often be removed by means of poultice. Abrasive methods such as sandblasting should never be used. They can cause extensive damage to the dressed surface of the stone, and accelerate deterioration.

It is not necessary to repoint an entire structure if the mortar is sound. Only joints that are open, or those having deteriorated mortar, should be repointed. Chisels and proper pointing tools should be used exclusively. Never use saws to remove mortar as they damage the adjacent edges of the masonry.

Repointing mortars should always match the original in type and strength. Using a mortar "stronger" than the masonry unit can cause damage. During freeze/thaw cycles, both the masonry and the mortar expand and contract. If the mortar is higher in compressive strength than the stone or brick, the stress of the expansion will be transferred to the stone or brick. These types of stresses usually result in cracking or spalling of the masonry surface.

Clear sealants should not be used on any masonry type. Newer types of clear sealants such as silane and siloxane are being sold as "completely" vapor permeable, and are therefore safe to use. This is misleading. While they are a great improvement over clear sealants of the past, they cannot prevent the entry of water through breaches such as hairline cracks or through rising damp so water can still enter the

masonry during cooler temperatures, during fall or early spring. Under cooler conditions, the water cannot vaporize and aspirate through the coating so the water is trapped in the masonry, and, should freezing temperatures follow, spalling and cracking of the masonry will occur. Many of the building industry technical associations, such as the Masonry Institute and the Brick Institute, concur that clear sealants should not be used in climates subject to freeze thaw cycles.

Glazed Unit Masonry

Glazed unit masonry is used on the interior of a number of the toilet rooms. This is a highly durable and readily cleanable material. This manufactured product has been and continues to be a commonly specified product where durability is required. The units are fired clay masonry with a vitrified glaze on one side. The glazed face becomes the interior finish. Although it was not possible to inspect the interior of the structure, common defects are, poor patches, heavy impact damage, damage due to improper mounting of toilet room fixtures and accessories, and minor surface crazing of the glazed finish. Replacement units are readily available, though often the exact color is difficult to match because of the nature of the fired product. The same cautions apply to cleaning and repointing of glazed unit masonry as to other masonry types.

Wood

Wood is used primarily on the roof structures of the buildings at Forest Hill Park. Wide wood trims, exposed eaves, and heavy timber framing all contribute to the character of the buildings. In some locations, such as the large columns in the Dugway Area Shelter, the wood is cut to give the appearance of hewn timbers. This rusticated appearance was popular, especially in recreational buildings, during the first half of the twentieth century.

Most of the wood on the structures is in sound condition. In general, repair, rather than replacement, should be done. Where replacement is required, the replacement wood should match the original in species. Some of the timbers in the Dugway Shelter have been replaced with members that are sawn rather than hewn timber. A few angle braces are missing. These should be replaced with new timbers with the correct tooling marks. Analysis should be done to determine the historical paint scheme.

Never use abrasive methods to remove dirt or paint on wood. Methods such as sand blasting damage wood and destroy the intended finish texture.

Steel Doors and Windows

The steel doors and windows are in fair to good condition. Most of the problems with them are due to rusting hinges. The rusting causes the doors and shutters to fall out of alignment and not close properly. All hardware should be cleaned, adjusted, and replaced as necessary. The doors, windows, and shutters should be scraped, cleaned of rust, and then primed and repainted. Analysis should be done to determine the historical paint scheme.

Electrical and Mechanical Systems

It was not possible to inspect the mechanical and electrical systems during the site visit. We understand from staff that many of the historic structures do not have working plumbing systems.

General

For all materials, the Secretary of the Interior's Standard of Rehabilitation should be followed. For decades, these common sense guidelines have been the national standard for preserving historic structures. They are as follows:

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

- The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

- Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

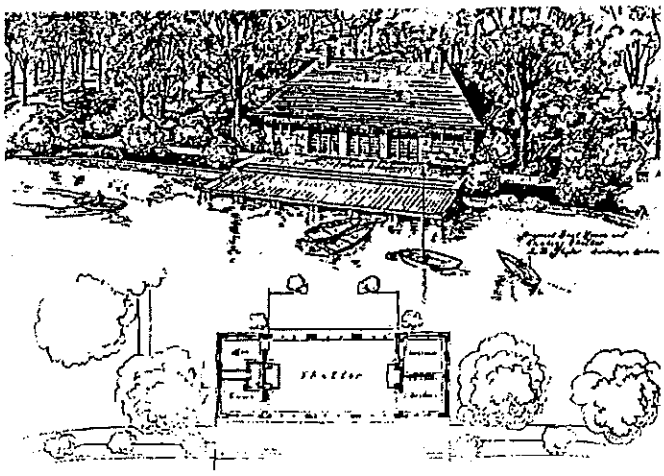
- Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

- Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



BOAT HOUSE AND SKATING SHELTER

The development of the lake to provide increased facilities for boating and skating makes desirable an adequate structure for a boat house in summer and a skating shelter in winter. The proposed structure may be entirely open, or closed to form an attractive room heated by a fireplace at either end, as desired for warm or cold weather use.

"Boat House and Skating Shelter." (A. D. Taylor Master Plan, 1938 p. 73)

Design Guidelines for New Construction of Buildings

In 1935, a National Park Service publication entitled Park Structures (C. Wirth, Washington, D.C.: US Dept. of the Interior NPS, 1935) outlined the features that made for successful park building design. The Rustic Style endorsed by this publication was widely popular in the 1930's. In a time of disappearing frontier in this nation, the design of parks and park structures attempted to recreate the values of pioneer life for an increasingly urban population. In Park Structures the recommended design features included horizontal lines and low pitch roofs, natural materials and colors. Browns and warm weathered grays were recommended in order to blend with the colors of a wooded setting. The Rustic Style was used extensively for park structures through both the Works Progress Administration (known as the Work Projects Administration after 1939) and the Civilian Conservation Corps.

The original A.D. Taylor structures found in Forest Hill Park are excellent examples of the Rustic Style. They make use of natural materials, stone and wood. The overall forms are low and horizontal. They do however, express a level of sophistication in the way the materials are used. Appropriate to their urban setting, they are a step up from the standard materials used in most Rustic Style park structures. The rock faced random ashlar pattern of the stone in lieu of random rubble, and the use of hewn timber instead of peeled logs, are both examples of an upgrade in the use of the materials. They are, nonetheless, a part of the Rustic movement in park structures.

When adding new structures to an existing context, it is important to have a clear understanding of the architectural precedents. While new structures can be objects of their own time, they should adhere to the design objectives developed originally by A.D. Taylor, and the Rustic Style. As with most design guidelines, the following outline moves from the overall to the specific.

Building Placement

It is imperative that the building placement be one of the most important design considerations in the Park. A. D. Taylor's masterful placement of buildings within the context of the overall landscape must be highly respected and imitated. He uses three types of building placement.

The building as "gateway"
As seen in the Boathouse the building's placement between the water's edge and the fields beyond helps to frame the views from the field to the lake. It also creates a formal gate from one area of the Park to the other.

The building at the edge of an open space
As seen in the Dugway Area Shelter and the Dugway Area Comfort Station, these structures are, by virtue of their placement, deferential to the recreation area they serve. They are closely set against the wooded hillside at the edge of the open recreation field.

The building in the woods
An example of this kind of placement is the Meadow Vista Comfort Station. The surrounding trees, diminish the structure's impact on the landscape and dwarf its low horizontal structure.

It is important to note that A.D. Taylor never made the buildings or structures focal points within the open spaces of Forest Hill Park. This example should be followed.

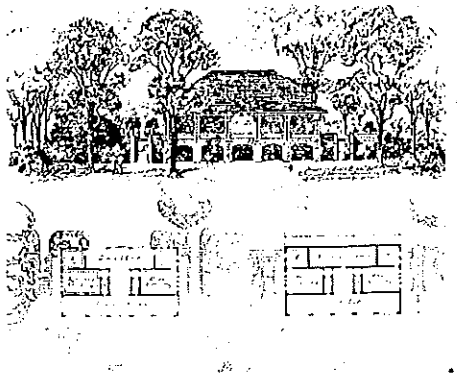
Building Form and Plan

A design standard in keeping with the Rustic Style structures found in Forest Hill Park, would include long, low, horizontal forms with low pitched hipped roofs. Care should be taken to avoid the common mistake of matching the roof pitch precisely and ignoring the rest of the building proportions. With any new construction, the building use will have an impact on the plan configuration, height of spaces, and overall form. These must be carefully planned and adjusted in order to maintain the standard set by the existing park structures.

Two types of plan are found in the existing structures. The first is the T-shaped plans found in the comfort stations. These structures are basic rectangles in plan with one center-projecting bay. The second plan type is two enclosed forms connected by an open porch. This is found in both the boathouse and the lawn bowling pavilion. It is reminiscent of the "dog trot" form found in 18th and 19th century log structures. When the program use for the new construction is suitable these forms should be utilized.

Fenestration Patterns

The size, shape, and placement of windows (fenestration) are one of the most character defining elements of architectural style. The existing structures at Forest Hill Park have mostly small "punched" openings. The existing ratio of opening area to wall area should be respected when planning new structures. Large expanses of glass and "ribbon windows" should be avoided.



COMBINATION RECREATIONAL SHELTER AND FIELD HOUSE

This structure located at the north end of the recreational field will provide for rest rooms, dressing rooms and concession facilities. It will be an important adjunct to the general recreational field and to the play area. The north side of the building will be designed, as shown in the sketch, to provide locker room facilities for boys and girls engaging in organized recreation on the play field. The entrance to the field house from the south side will be on an upper level, thus providing an overlook balcony from which to observe the activities of the youngsters on the play area and to enjoy the views into the wooded portion of the park looking to the north and west.

"Combination Recreational Shelter and Field House." (A.D. Taylor Master Plan, 1938 p. 67)

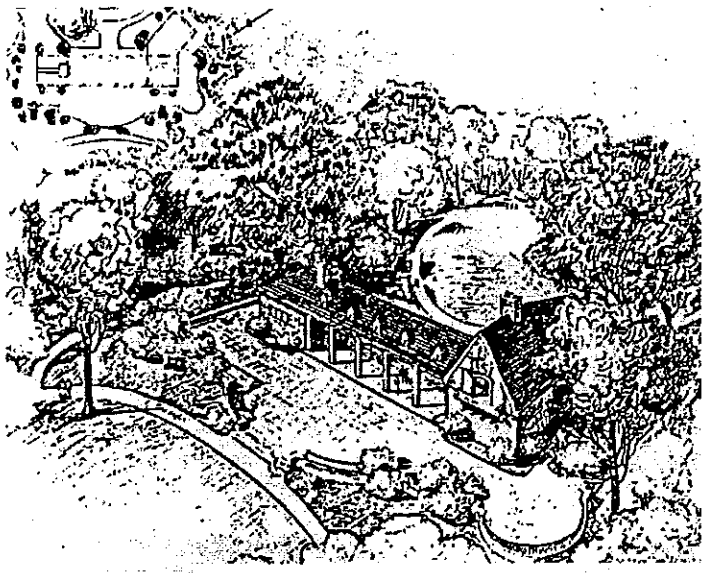
Building Materials

The original materials used on the Forest Hill Park buildings were of exceptionally high quality and durability. In today's construction, one does not often see all stone buildings in parks. Costs of such high quality materials are often prohibitive. Nonetheless, an effort should be made to use the same types of materials. If budgets become a problem, we can take cues from the Dugway Area Shelter. This building was originally designed to be an all stone structure. It was constructed of wood with a low stone wall on one side. This was the likely result of budget problems.

In general, the exterior building materials should be of natural materials. Wood and stone are the preferred materials. They should also have a similar level of texture and pattern to the original structures. For example, there is a fairly consistent use of random rock faced ashlar stone existing in the Park that sets a distinct standard for new stone work. Wood used also has particular texture. Some recommendations may be made for hewn timber columns, or for siding that has a distinctive texture such as board and batten. Materials should be of reasonable size units relative to the scale of the structure.

Material	Uses
Stone	Exterior wall veneer, or veneer of foundation walls where exposed above grade, or in a manner to convey a "base," columns, landscape features.
Wood	Exterior walls, columns, exposed roof structures, windows, doors, and railings.
Brick	Brick is not one of the original materials used in the Park. It is not recommended, except under special conditions, and then only in combination with stone.
Decorative or Standard Concrete Block	Should not be allowed in exterior applications.

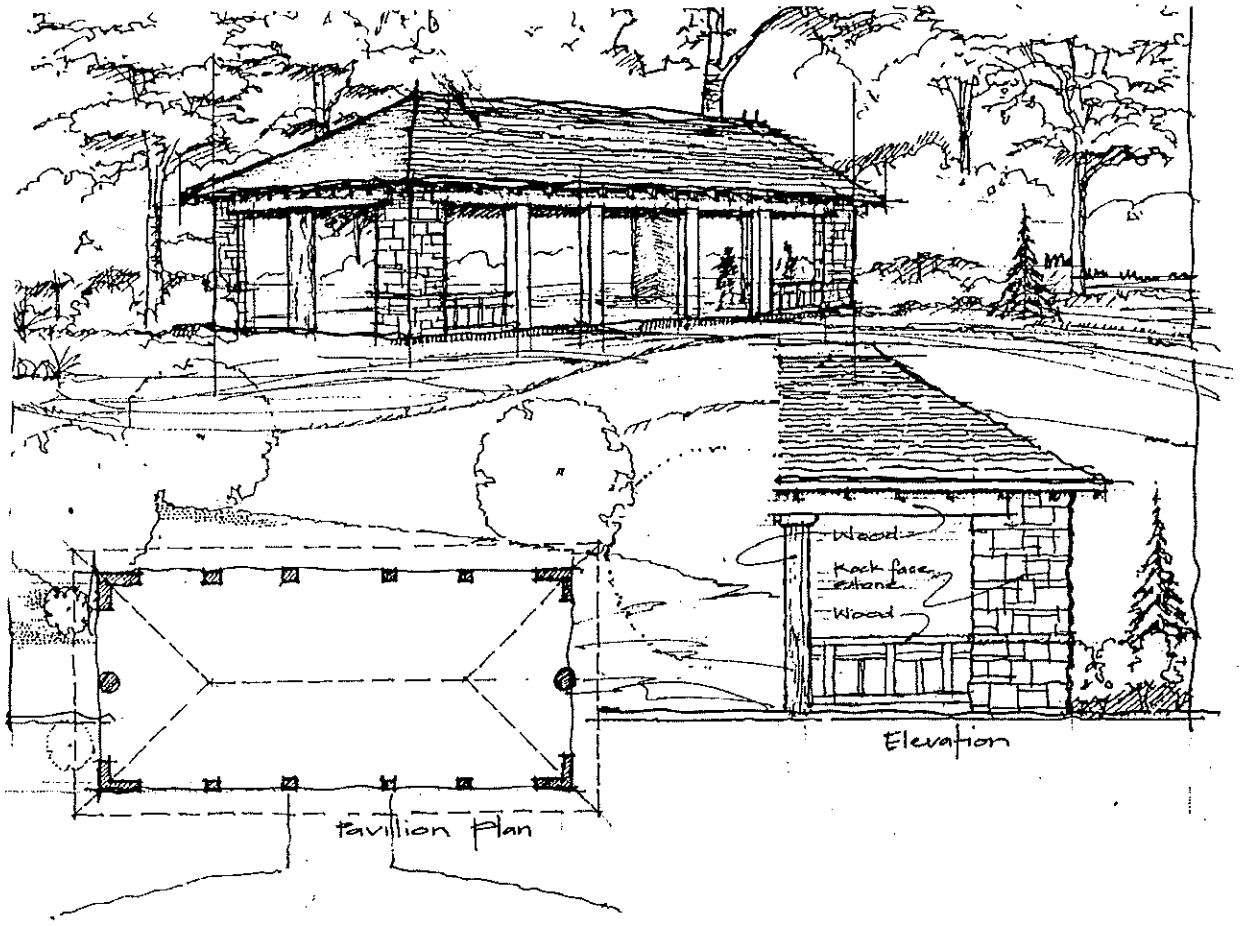
Synthetic Stucco (Dryvit)	Should not be allowed.
Vinyl or Aluminum Siding	Should not be allowed.
Steel or Composites	Only allowed for doors under special conditions.
Steel	Only allowed for windows under special conditions.
Vinyl windows	Should not be allowed.
Aluminum Windows	Only allowed under special conditions.
Slate Roofing	Allowed.
Composite Roofing (Imitation Slate)	Allowed.
Wood Roof Shingles	Allowed.
Asphalt Shingles	Not Recommended.



WEST FRONT OF MAIN PAVILION

This Pavilion or Recreational Shelter located on the site of the former Rockefeller residence commands a broad view overlooking a portion of the city toward the lake to the north and west, and also a long vista through the large trees across the Great Meadow to the east and southeast. Comfort station facilities are located in the north end, and the south end provides for a restaurant concession so essential to a large park of this kind. The terrace is surrounded by a wrought iron rail which causes the minimum interference with the view. Provision is made to enclose the open part of the shelter during the winter months so that the pavilion may be used by groups during the winter.

"West Front of Main Pavilion" (A.D. Taylor Master Plan, 1938 p. 63).



Sketch of proposed pavilion (Chambers, Murphy & Burge, 1999).

Civil Engineering Issues/ Drainage/Erosion

In the 1938 Master Plan, Taylor locates existing storm sewers, sanitary sewers, water lines, electric lines and telephone cables, and gas wells, but tells us that:

"None of the problems concerning utilities have been studied beyond the point where a general conclusion could be reached on a basis of which general recommendations for future procedure in solving these problems might be made." p. 77-78.

"The installation of utilities involves sanitary and storm sewers, water lines, and wires for power and lighting." p. 78.

It is interesting to note what Taylor has to say in the 1938 Master Plan about the natural drainage basins:

"There are two natural drainage basins on Forest Hill Park, (a) the valley through which Dugway Brook flows and (b) the valley through which Forest Hill Boulevard has been constructed. The latter area, formerly drained by a substantial creek, is now drained by a 60-inch pipe." p. 30.

"When Forest Hill Boulevard was constructed, several catch basins and inlets were installed on the property to take care of the drainage problems created by the new road." p. 30-31.

In Taylor's discussion of the surface and subsurface water issues in the 1938 Master Plan he tells us that:

"It is recommended that a detailed drainage plan be completed at an early date, especially for that portion of the property north of Forest Hill Boulevard on which little if any drainage has been installed. In order to provide satisfactory surface conditions and make the use of these areas practical for recreational activities, such drainage is imperative." p. 78.

In the 1938 Master Plan, Taylor specifically mentions the Meadow Vista, the athletic field at the end of the Meadow Vista and the need to develop new drainage lines for both surface and subsurface drainage for the individual recreation and parking areas throughout the Park. Drainage and surface water conditions have not changed appreciably since 1938. Surface drainage still moves to the natural drainage valleys, and subsoil drainage conditions are still "not so good." In the 1938 Master Plan, Taylor states that:

"Water often stands for a considerable length of time near the surface of the ground because the type and texture of the subsoil is such that an abnormal amount of ground water is retained in the soil. The installation of adequate underdrainage is essential, if proper growing conditions are to exist and if the proposed open areas are to be made available for normal recreational use." p. 25.

The Taylor designed parking lot adjacent to the Dugway off Lee Boulevard in Cleveland Heights was designed with a drainage system that day-lighted pipes at the crest of steep slopes adjacent to the Dugway Valley. In addition, the new parking lot that can be entered from Forest Hill Boulevard was constructed without a storm drainage system, and the surface drainage currently floods down onto the boulevard. The four ball fields constructed in the Great Meadow were designed and constructed in 1988 and are additionally causing major erosion problems. The drainage system constructed for the fields is a swale encircling the facility that collects all surface drainage and then pipes it to the top of the slopes of the Dugway Valley. The pipes are then day-lighted and have caused major erosion of the slopes. Since soil permeability in Forest Hill Park is poor, water stands in the swale.

What has also changed the nature of drainage in the area since 1938 is increased development in areas surrounding the Park. This has increased the amount of paved surface. Thus, more developed adjacent uses and streets with storm sewers now discharge into the Dugway Brook with increased volume and velocity causing erosion and threatening plant species.

Adache-Ciuni-Lynn Associates, Inc. the Civil Engineers have prepared two reports. The first dated December 1997 "Civil and Structural Site Conditions" records the existing site conditions. The second, dated April 1998, "Preliminary Master Plan Civil and Structural Elements- Treatment Options/Priorities/Preliminary Cost Estimates" analyzes the existing conditions and recommends treatment options, sets priorities and provides preliminary costs. Refer to Volume II of the Updated Master Plan for the full reports.

The Civil Engineering reports catalog and inventory the following:

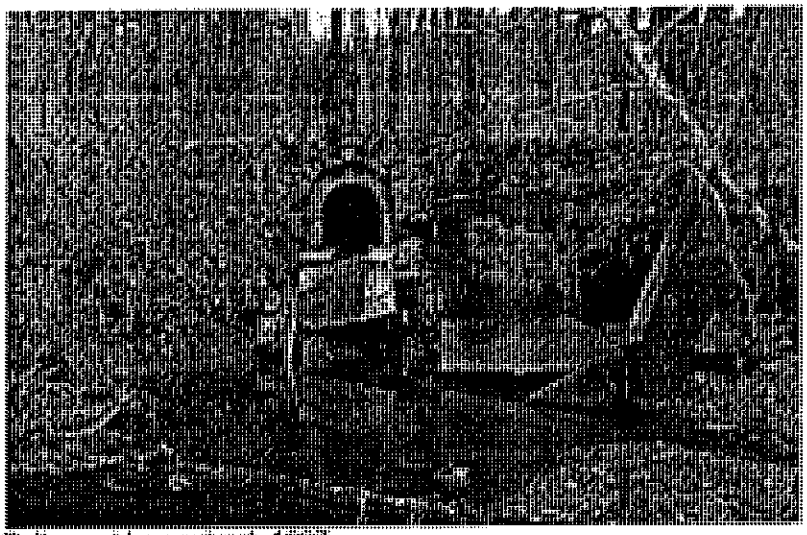
- Storm Water/Drainage
- Erosion

- Structures
- Utilities;(Water, Sewer and Electric

After considering all of the repairs and treatment options described in the Reports and the issues we feel need to be addressed, we have categorized them into three groups of priority. The first priority group consists of those items requiring **urgent** attention. This urgency may be due to a safety concern or to a concern that, if left unrepaired, additional damage or deterioration will occur in the near future. The second priority group requires **immediate** attention and consists of those items that are recommended for repair within the next three to five years, or as soon as funding is available. The third priority group require **future** attention and consist of those items which should be repaired or restored over the long term so that the Park can have the appearance and serve the functions for which it was originally designed, but are again dependent on funding availability.

First Priority

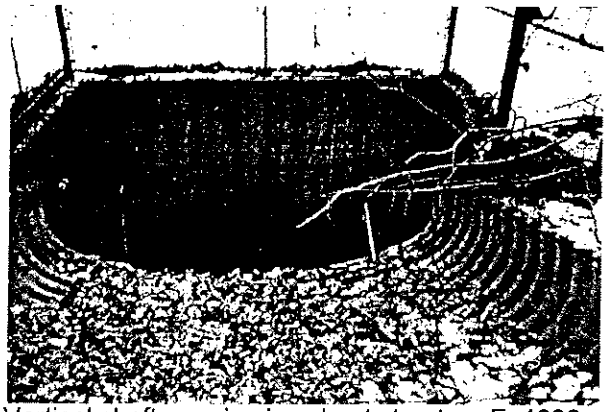
- The most critical item requiring immediate attention is the 72" reinforced concrete box culvert emptying into Dugway Brook near the intersection of Lee Road and Monticello Boulevard. The structural failure of this culvert will continue and will cause even more erosion if left unchecked. The 5' x 5' concrete horseshoe arch culvert adjacent to the 72" box must also be repaired, before it experiences the same structural failure.



Collapsed box culvert, 1997.

- A critical safety issue is involved regarding the vertical shaft opening into the 14' x 8' box culvert, and at the vertical shaft opening at culvert Structure 'E', illustrated herein. Refer to Drawing 12, herein, for location. Steel bar grates should be installed over this opening immediately for protection of public.

- Numerous areas of erosion were found, primarily at the outlets of storm water pipes. Refer to Drawing 14, herein. Each of these areas of erosion should be repaired with one of the following options. Which option is chosen would depend on the specific conditions and the cost effectiveness of the treatment, but in all cases the best engineering practices, the historic significance of the site and the ecological benefit gained need to be considered.



Vertical shaft opening in culvert structure E, 1998, needs protective grate.

1. The pipe should not be day-lighted into the landscape, but should be redesigned and incorporated into an underground system that is taken to the storm system of an adjacent street or adjacent existing underground culvert or pipe. The existing bank should be refilled, stabilized, and re-vegetated.

2. Extending the pipe further down the slope to outlet directly into a natural drainage channel, which would require excavation, a lengthy run of pipe in most cases and construction of a headwall with erosion protection at the outlet. Refilling of eroded areas and vegetating to stabilize the slopes would also be required

3. Rebuilding of the pipes and/or adding headwalls as necessary allowing pipes to just daylight. This would also require refilling the eroded area, excavating a defined channel down the natural drainage channel, placing rock channel protection in the new channel to resist future erosion and vegetating the banks to blend the rock channel into the landscape.

Erosion from grass swale at Cleveland Heights play fields, 1998.

From an engineering standpoint, the first option is preferred because it provides a long-term solution to the erosion problems. The third option also provides a long-term solution, but it is probably more costly and will disturb the natural park environment in order to accomplish it and will require continued surveillance and maintenance. The second option is less costly in the near term, but will require continued maintenance or erosion will continue unless a budget for annual maintenance efforts is put in place.

Regardless of the option chosen, all fallen trees and other debris must be removed from the drainage channels and all will require regrading and re-vegetation of current erosion.

Second Priority

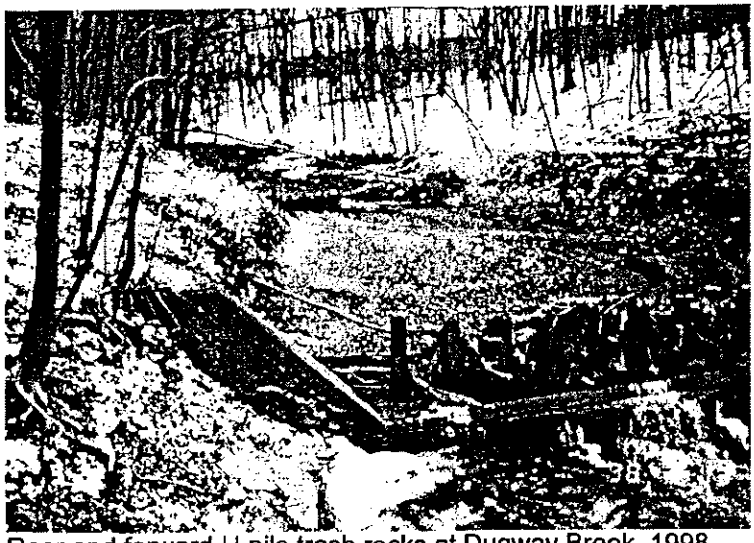
- The construction of a storm drainage system for the Cleveland Heights' parking lot entered from Forest Hill Boulevard will reduce runoff onto Forest Hill Boulevard. Storm drainage system should not be installed unless curbing can also be installed.

- The cleaning of the lake outlet channel below the stone stepped spillway, lining it with rock channel protection at each end, and planting utilizing bio-engineering methods between rock facing will retard future erosion.

- The stream erosion downstream of Culvert Structures – "C" should be repaired. Refer to Drawing 12, herein. Without a detailed hydraulic analysis, we assume that a gabion mat at the outlet will suffice, along with rock channel protection along the stream bottom and banks for several hundred feet. Further study and utilization of best engineering practices should be employed.

- The trash racks just upstream of the inlet to the 14' x 8' box culvert should be cleaned of all debris and sediment and then inspected for structural damage. If any structural damage is found, repairs should then be made, as needed, to restore their integrity. Further study and utilization of best engineering practices should be employed.

Stone stepped spillway at Lake, 1998.



Rear and forward H-pile trash racks at Dugway Brook, 1998.

Third Priority

- The vertical cracks in the headwalls of Culvert A and Culvert B refer to Drawing 12, herein should be repaired by tuck-pointing. Refer to Drawing 12, herein.

- The drainage swale surrounding the four ball fields in the Great Meadow should be redesigned even before the fields are reoriented. The entire system should be an underground one, not only because of standing water issues, but more importantly because of the moated aspect that it creates.

- Drainage low points at paths and roads throughout the Park should be studied and corrected when other construction occurs in these areas, or, if serious and other work is not planned within the year, they should be corrected sooner. The drainage problem north of the boathouse that was caused by repaving the path without accomodation drainage runoff is a good example.

With Taylor's 1938 Master Plan as a guideline, we propose:

- All existing drainage systems should be repaired, rehabilitated or rebuilt if they are not functioning well.
- Serious drainage low points at paths and roads throughout the Park should be studied and corrected as soon as possible.
- All storm drainage pipes that are presently day lighting into the Dugway Valley should be repaired, rehabilitated or rebuilt.
- Redesigning existing underground storm drainage systems on parking lots as required to reduce flooding and runoff issues.
- Designing underground storm drainage systems for all parking lots that do not have systems.
- All erosion should be corrected by determining and solving its cause and then regrading and revegetating as required to correct erosion.
- The Lake outlet and spillway and the Dugway Brook trash rack should be cleaned of all debris and sediment and then rehabilitated. In order to maintain them they should be cleaned of all debris and sediment after each major storm event. Debris and sediment should be removed and disposed of off-site.
- Constructing a storm drainage system for the parking lot and its drive off Forest Hill Boulevard in Cleveland Heights.

Drawing 21 Updated Master Plan 1999 – Drainage and Erosion Treatment, herein, lists the proposed treatments by Zone.

All Civil Engineering work including correction of drainage systems and erosion areas should conform to the best engineering practices as set forth in Rainwater and Land Development, the State of Ohio's Standards for Stormwater Management Land Development and Urban Stream Protection, latest edition. The fact that Forest Hill Park is an important historic park should be taken into consideration when determining the best engineering solutions.

Refer to drawings, herein, as follows:

Drawing 12 Existing Utilities - Water and Sewer- 1998
Drawing 14 Existing Erosion-1998
Drawing 21 Updated Master Plan 1999- Drainage and Erosion Treatment

Mechanical Services/Water/Sewer

Adache-Ciuni-Lynn Associates, Inc., the Civil and Mechanical Engineers, have prepared two reports. The first dated December 1997 "Civil and Structural Site Conditions" records the existing site conditions. The second, dated April 1998, "Preliminary Master Plan Civil and Structural Elements - Treatment Options/Priorities/Preliminary Cost Estimates" analyzes the existing conditions and recommends treatment options, sets priorities and provides preliminary costs. Refer to Volume II of the Updated Master Plan for the full reports.

East Cleveland (Water)

The Park does contain potable water services in areas where patrons frequently enjoy activities. In the City of East Cleveland, water service is provided into the Park from several locations. At Terrace Road and Beersford Road, a six (6") inch waterline feeds an area up to, and including, the basketball and tennis courts, the baseball and football fields, the comfort station and boathouse. Water fountain service is located at the baseball diamonds and outside the tennis courts. However, water fountain units are no longer connected to these services and are, therefore, inoperable. Several fire hydrants are provided in this service area and are assumed to be active and function adequately.

Water service is provided off Lee Road near Brewster Road where an eight (8") inch waterline is capped at the Lee Road parking area entrance. This service was installed as part of the new eight (8") inch waterline, constructed on Lee Road in 1995.

Inoperable water fountain, 1997.

A water service is provided into the lower valley from a ten (10") inch connection near Terrace Road and Superior Boulevard. This waterline feeds the picnic shelter and lower Dugway Valley comfort station. Although water fountain service is provided, the fountain units are no longer connected.

Finally, water service is provided off Superior Road near Glenmont Road. According to the East Cleveland Water Department (ECWD) this service is not functional and may contain asbestos piping that

collapsed several years ago. This service fed an area from the lower valley comfort station up to and including the garage ruins, the stone arch bridge (Rockefeller bridge), the stone arch footbridge, and up to the East Cleveland/Cleveland Heights border.

Water meters for the Park are located at Terrace Road and Beersford Street, at Terrace Road and Belmore Road, at Superior Boulevard and Eddington Road, and at Superior Boulevard and Glenmont Road.

East Cleveland (Sewer)

According to record drawings sewer service is provided throughout the Park's numerous activity venues. The basketball and tennis courts and the baseball and football fields are all underdrained to collector sewers. The collector sewer outlet into a mainline combined sewer that drains toward Terrace Road. Similarly, parking areas have catch basins that drain to collector sewers which outlet either to combined sewers or Culvert Structure – "E" (refer to Drawing 12, herein) in the lower valley. Field drains are provided in the picnic and lawn bowling area which also drain to collector storm sewers.

Sanitary sewers are provided at comfort stations which outlet into either sanitary sewer collectors or combined sewers. The actual condition of these sewers must be field verified and surveyed to determine their actual condition and location.

In 1996-1997, the Northeast Ohio Sewer District Interceptor Project was under construction. This is a regional agency created to deal with the issue that all greater Cleveland sewers connect into one another. The agency was created by a federal court order, which gave it jurisdiction over sanitary sewers for all the member communities. The work site is located at the corner of Terrace Road and Superior Boulevard with a temporary construction staging area within the Park at Terrace Road and Forest Hill Boulevard. The City of East Cleveland approved the project; but, the Forest Hill Park Advisory Commission was not convened and, therefore, did not approve the taking of parkland for the sewer project or for the temporary staging area. A similar project is planned at the corner of Forest Hill Boulevard, Lee Boulevard and Glynn Road. The parkland at Terrace Road that was utilized for the staging area has not been returned to its in kind condition nor has mitigation occurred or been planned other than the improvements shown, herein. In addition, the Dugway picnic area parking and the vehicular and pedestrian entry into the Park have been impacted by the work. This raises the serious issue of establishing an approval process for work planned by outside public agencies, or authorities, to be carried on in Forest Hill Park or that could adversely impact the Park. Also, the issue of mitigation and reconstruction of impacts and disturbance should be well thought out and commitments made by the agency before approvals are given by the city (or cities) and the Advisory Commission.

Cleveland Heights (Water)

The City of Cleveland Heights does contain potable water services in areas where patrons enjoy activities. Water service is provided to the Recreation Pavilion on Mayfield Road, the recreation building located in the center of the four (4) baseball fields in the Great Meadow and the comfort stations near the picnic shelters and tennis courts. However, record drawings verifying their location must be researched further.

In addition, according to a 1984 unofficial sketch obtained from the Cleveland Heights Water Department (CHWD), a two (2") inch water service tap is shown connecting off the existing twelve (12") inch waterline on Lee Boulevard at Burlington Road. However, the reliability of this sketch cannot be verified.

Cleveland Heights (Sewer)

Record drawings were found showing catch basins and sewers in the parking lot near Monticello Boulevard, however, record drawings were not available for other parking lots so they must be researched further. If record drawings cannot be found, a detailed survey must be done to identify and locate the sewer system.

Electrical Services/Lighting

Adache-Ciuni-Lynn Associates, Inc., the electrical engineers, has prepared two reports. The first dated December 1997 "Civil and Structural Site Conditions" records the existing site conditions. The second, dated April 1998, "Preliminary Master Plan Civil and Structural Elements - Treatment Options/Priorities/Preliminary Cost Estimates" analyzes the existing conditions and recommends treatment options, sets priorities and provides preliminary costs.

East Cleveland – Electrical Services

In the City of East Cleveland electrical power is provided to Forest Hill Park from two (2) separate locations. According to the East Cleveland Electrical Department (ECED), power is fed from a manhole off Lee Boulevard near Brewster Road where conduit runs behind the tennis courts and junctions at the transformer pole located near the storage building. A junction box is located adjacent to the transformer pole. Three separate conduits are fed from the junction box into the storage building, the field office building and the tower building. In addition, power is fed to the boathouse from a manhole located near 2133 Lee Boulevard. Electrical power is then fed from the boathouse to the traffic light at the corner of Forest Hill Boulevard and Lee Boulevard.

Cleveland Heights – Electrical Services

In the City of Cleveland Heights electrical power is provided to Forest Hill Park for the Recreation Pavilion, the athletic fields and recreation building in the Great Meadow and restroom facilities. Record drawings showing the locations of these provisions were not available and must be researched further.

Lighting in the Forest Hill Park

Lighting of the Park was as interesting and as debated an issue in Taylor's time as it is today. Several points Taylor makes in his report have application today:

"Modern park lighting is in its essence the common sense of using light where it will do the most good. By far the larger area of any naturalistic park is not adapted to and does not call for night lighting, since the greater portion of its area has strictly daytime use. Yet there are such areas as soft ball fields, tennis courts, bowling greens, quoits areas, a lake and a swimming pool which by reason of their concentrated recreational use are definitely subjects for careful lighting study". p. 80.

"Walks leading to illuminated areas in the interior of the park should also be lighted." p. 80.

"In all lighting design there is a specific intensity of light that is in definite relationship to the use of the area. Any attempt to dilute this intensity of light to serve a greater area defeats the purpose of the original lighting." p. 86.

With Taylor's 1938 Master Plan as a guideline, we propose the following:

- Lighting should be an important component in any planned capital improvements and should be improved as required on a project by project basis.
- Perimeter lighting for the Park should be considered as an independent project. A study of the light levels currently provided, and the condition of existing fixtures and their continuity, should be conducted.
- Lighting should ordinarily be confined to the perimeter of the Park except at active recreational areas that have evening events such as ball fields, tennis courts and skating rinks. Therefore, lighting should be limited to parking lots and specific routes and destinations where nighttime uses occur.
- Do not incorporate lighting into the naturalistic areas.

Structural Engineering

Adache-Ciuni-Lynn Associates, Inc., the Civil and Structural Engineers, have prepared two reports. The first, dated December 1997 "Civil and Structural Site Conditions," records the existing site conditions. The second, dated April 1998, "Preliminary Master Plan Civil and Structural Elements - Treatment Options/Priorities/Preliminary Cost Estimates," analyzes the existing conditions and recommends treatment options, sets priorities and provides preliminary costs.

After considering all of the repairs and treatment options described in the previous reports we have categorized them into three groups of priority. The first priority group consists of those items requiring **urgent** attention. This urgency may be due to a safety concern or to a concern that, if left unrepaired, additional damage or deterioration will occur in the near future. The second priority group requires **immediate** attention and consists of those items that are recommended for repair within the next three to five years, or as soon as funding is available. The third priority group requires **future** attention and consists of those items which should be repaired or restored over the long term so that the Park can have the appearance, and serve the functions for which, it was originally designed. This group, again, would be dependent on funding availability.

With Taylor's 1938 Master Plan as a guideline, we propose:

First Priority

- The overhead footbridge at Forest Hill Boulevard is one of the outstanding features of the Park. It is in good condition and with minimal effort can remain that way for a long time. Five repair items are mentioned in the Site Conditions Report (December 1997) to resist future deterioration while two of these items will minimize water infiltration and are urgent.

    1. Sealing the expansion joints at each abutment.
    2. Cleaning and sealing of the gutters.

- The Rockefeller Stone Arch Carriage Drive Bridge above the lower valley of the Dugway Brook is in poor condition, but it is one of the major features still extant from the Rockefeller Period. No construction plans were found for this bridge, but it is presumed to be a true stone arch, rather than a stone-faced concrete arch. It is probably earth-filled between spandrel walls, above the arch. Water seeping through the pavement and the earth fill tends to find its way between the stone joints. Freezing and thawing of this water adds to the breakup and disintegration of the joints as well as the stones themselves.

  This type of structure is noted for arch spreading - the tendency for the structure to split down the middle. This can be due to the outward pressure of the earth fill, exacerbated by the freezing and thawing of the water within the fill. This arch spreading is typically repaired by installing steel bars across the arch, either above the arch through the fill or below it, exposed to view which is less desirable. The bars have plates or large washers held on by tightening nuts on the threaded ends of the bars.

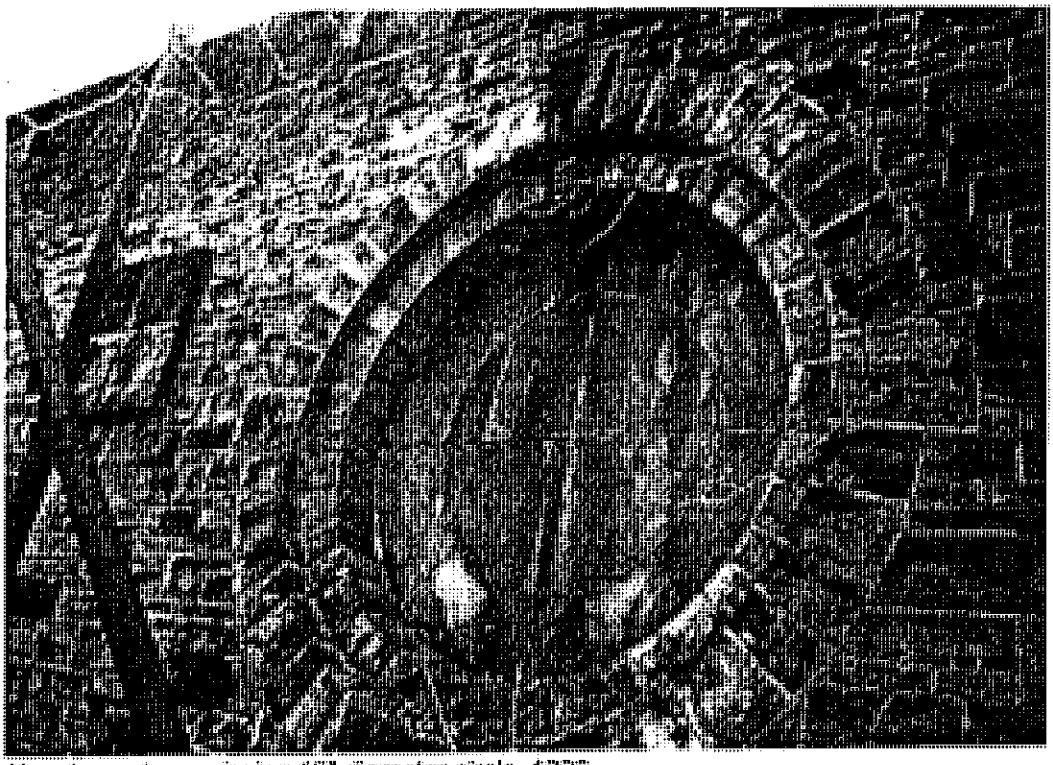
  This bridge in its present state will continue to deteriorate, but it will probably stand for many years to come. To restore it to good condition will require extensive and costly work. In the 1999 Updated Master Plan, we are proposing that the carriage drive become a pedestrian path and, therefore, not have regular vehicular traffic, although we believe maintenance vehicles are utilizing it today and will continue to do so. Two urgent items that are first priorities and will minimize water infiltration and further deterioration are

    1. Sealing the surface of the bridge from further water penetration by placing a bituminous concrete resurfacing course and sealing at the junction of the pavement and the bridge abutment.
    2. Cleaning and sealing of the gutters and cleaning of the drainage structures.

Second Priority

- The overhead footbridge at Forest Hill Boulevard has immediate repair issues including:

    1. Replacing the three missing keystones at the recessed circles,
    2. Repairing the parapet wall,
    3. Replacing missing stone caps at the southeast end,
    4. Patching spalled concrete areas on the underside of the arch, and
    5. Nominal tuck-pointing of the mortar joints.



Keystone stone missing 16" diameter circle, 1998.

- The Rockefeller Stone Arch Bridge should either be restored to good condition or it should be stabilized and used only as a footbridge or maintained as an artifact. The bridge should be evaluated thoroughly from several viewpoints and a decision made regarding its future. Its historic significance, aesthetic value, function and repair cost must all be considered. If it is determined to restore this bridge, we recommend the following for complete restoration:

    1. Removing the existing pavement and placing a new reinforced concrete pavement with sealed joints to minimize water intrusion. This surface could be an exposed aggregate concrete.
    2. Installing new steel bars to supplement those already in place to resist spreading of the arch. Bars should be above the arch through the fill.
    3. Removing and replacing all deteriorated stones and brick patches with new sandstone and brick. This includes the spandrel walls, the arch ring and the parapets.

  Restoration of the bridge is an expensive operation since it is very labor intensive and will require skilled stonemasons, but it is an important extant feature of Forest Hill Park. We recommend, therefore, that the bridge be restored. If, however, it is determined by the City of East Cleveland and the Advisory Commission that restoration is not cost effective, then the bridge could either be left as is to continue deteriorating, or only 1. and 2. above could be accomplished to stabilize the bridge. If

stabilization or allowing it to deteriorate are chosen, the bridge should be inspected periodically by a Structural Engineer to assure safety to park users. It would eventually require razing if left untouched.

Stone Arch Bridge was part of the Rockefeller Carriage Drive, 1998.

Stone Arch Bridge – disintegrating stone blocks and brick packing spalled areas, 1998.

Third Priority

- The stone-faced concrete retaining walls along Forest Hill Boulevard near the overhead footbridge are in generally good condition, but some minor tuck-pointing is required. All trees immediately behind and within eight feet of these walls should be removed since the root structure of large trees can exert major forces on the walls causing damage or even failure.

Stone masonry retaining walls at Forest Hill Boulevard at footbridge, 1998.

- The two stone gate columns at the trail entrance to the Great Meadow, the two at the entrance to the Lake at Forest Hill Boulevard and the two at the trail entrance to the Dugway Valley at Superior Boulevard should be repaired by resetting and replacing stones and capstones as required.

Stone gate column located at Forest Hill Boulevard, 1998.

- The stone steps at the trail from Superior Boulevard to the Dugway Valley are in poor condition and should be repaired by resetting and replacing stones as required to have a continuous stair width. Handrails should be added to meet accessibility codes.

- The stone terrace walls along the walking trails in the lower valley of the Dugway Brook are in good to fair condition. They are generally built of stacked stone without mortar. The two stacked stone walls along Dugway Brook near the baseball fields, constructed of brick and stone are in fair condition. All walls should be repaired by resetting and replacing stones and/or brick as required. Adjacent embankment areas should be regraded and re-vegetated to stabilize banks. Also, all trees immediately behind and within five feet of these walls should be removed.

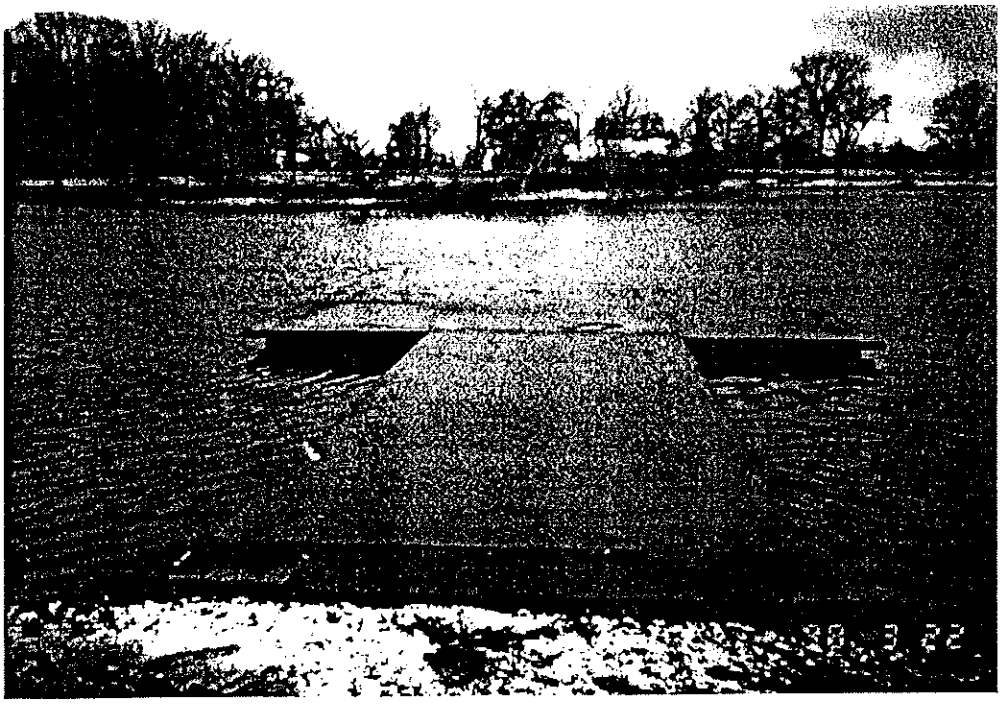
Stone steps at the trail from Superior Boulevard to the Dugway Valley picnic area, 1998.

- The stacked stone walls near the Dugway Brook parking lot and along the Rockefeller carriage road are stacked stone without mortar and are in good to fair condition. They should be repaired by resetting and replacing stones as required. Adjacent embankment areas should be regraded and re-

vegetated to stabilize banks. Also, all trees immediately behind and within five feet of these walls should be removed.

Stone terrace retaining wall at carriage drive, 1998.

- The concrete slab dock spans across rectangular concrete beams, which bear on rectangular concrete columns that are assumed to be supported by the lake bottom. The depth of the columns could not be determined. The slab has some noticeable spalling and cracked concrete, but, in general, the slab appears to be in fair condition. On occasion the lake water level will rise up to the top of the perimeter concrete walls. This occurrence does cause localized erosion.



Concrete slab dock at Lake, 1998.

Passive and Active Recreational Uses

Urban and country park user surveys conducted on other major parks have proven the overriding public preference for passive and unstructured uses such as strolling, picnicking, sunning, free play, people watching, scenic enjoyment, and nature appreciation.

During the Community Meetings the passive users of the Park were equally as organized as the active recreation users and both presented in a unified way their point of view. It is interesting to note that right from the start, A. D. Taylor's Plan for Forest Hill Park called for a balance of passive and active uses with a percentage of active recreation set within a country park.

Taylor wrote that:

"Because of the fact that the extreme portions of this park are in different communities, each with its respective concentrated recreation requirements, consideration to the extent practicable, has been given to the development of recreational facilities to meet, in each city, the requirements of the local population living within reasonable distance of each of the respective portions of the Park." p. 17

To serve all, Taylor designed for multiple uses, both active and passive, in Forest Hill Park. In Taylor's time these were strolling, picnicking, both passive and active boating, fishing, playing baseball, football and basketball, attending events, picnicking, skating and sledding in winter, carriage driving, viewing, etc. Active recreation occurred out of doors and not in buildings. The genius of the historic design was to provide for these various activities, by separating and combining them, in ways that could engage many people without losing the Park's tranquil image. To A. D. Taylor, diverse active recreation such as baseball, softball, football, quoits, lawn bowling, tennis, and skating, had to be accommodated within an overall pastoral and picturesque landscape - a spacious natural work of trees, lawn and water within his country park.

Taylor stated:

" It is necessary to select with great care the forms of recreational activity for which provision is to be made, and to determine the extent to which the otherwise rural landscape shall be sacrificed to the needs of these recreational activities. The ultimate object of the city park should be that of serving the maximum number of people to the greatest advantage to all concerned, without sacrificing unnecessarily the natural landscape effects." p. 16.

This, then, should be the approach to active and passive uses to accommodate the broadest possible range of uses and users without adversely impacting the Park's essential proportions of active and passive recreation.

Analysis of the active use areas supports maintaining the proportion of active to passive and retaining the original locations. Popularity of activities has changed, so modifications to accommodate these changes should be considered. What is critical to the plan is that to the extent possible the integrity of the pastoral character of the Park should be re-established, if not by total removal of these facilities, then by:

- Modifying the sports facilities by removing or reducing associated fencing and lighting especially at non-permit facilities;
- Re-siting the fields, fences, lights, etc. out of the view of the large and small meadow vistas by using the woodland and forested edges to act as backdrops and by using black fencing.

Interestingly, Taylor recognized that peak attendance would put pressure on the open meadows to be used for recreation. He wrote that:

"An effort has been made to include in Forest Hill Park, provision for all of the recreational activities which under normal conditions would be required by children and their parents. Not only have the recreational activities of the summer season been considered; but provision has also been made for skiing, coasting and skating during the winter months. The same problem prevails with the facilities required for recreational activities as with parking facilities. Forest Hill Park so conveniently located, cannot be expected to fulfill all of the requirements for active recreational facilities during the pleasant week-ends and on holidays when the park is receiving a peak attendance. It would be wasteful to provide for such requirements because the added maintenance for these facilities, used only during days of peak attendance, would be abnormal. It is quite important, in view of all the natural topographical assets of this property, that the space allotted for active recreation should not interfere to an unwarranted extent with the scenic beauty of the open meadows, nor damage unnecessarily the established vegetation on the wooded slopes and in the valley. These active recreational facilities have been carefully planned in order to procure a general and desirable distribution throughout the extent of the park and in order to incur a minimum of expense for construction and maintenance.

Because of the demand for baseball field facilities in East Cleveland and Cleveland Heights, provision has been made for two regulation ball fields, one in the Cleveland Heights area at the south end of the park and one in the East Cleveland area at the north end of the park. Space has also been set aside for soft ball. On days of peak attendance, however, soft ball may also be played upon meadow areas not specifically designated for other purposes." p. 53-55.

Siting of ballfields within a meadow vista, Daisy Field at Olmsted Park, Boston, MA., 1996.

Active special event uses and planned and self-guided walks that are not team sports should be encouraged within the Forest Hill Park guidelines and, in particular, are an important opportunity for developing a program of park and community events with educational, ecological and historical emphasis that encourage active recreation.

- The development of a program of educational walks or events that emphasize the historic and ecological values of the Park are also important to educate the next generation of park users.
- Only through understanding and appreciation can these values be carried into the next generation and the next century of park use thus developing an ethic of stewardship for our parks.
- Signage that allows for self guided historic or nature walks, as well as walk leaflets that are available at the beginning of these walks, will add much to the users experience in the Park. They will also encourage greater use and develop an understanding of the value of the ecological landscape the user is experiencing.

Active use of the Park for nature walks and the establishment of a Nature Center modeled on the Shaker Lakes Nature Center was discussed during the public meetings and in letters commenting on the master plan. The activity and the opportunity for education are very important, but the addition of another

building into the Park does not seem advisable. The Updated Master Plan, therefore, recommends that a Forest Hill Park Nature Center be included in future park programming, but that this program should be incorporated into existing facilities, or planned facilities such as the Community Center.

Creating a bicycling path that connects Forest Hill Park to abutting parklands is also critical to the eventual development of a system of parks within East Cleveland and Cleveland Heights. This is an important part of the open space vision for the future as well as a form of active recreation that again is not a team sport. Today grants from state highway departments under the Transportation Equity Act for the 21st Century (TEA-21) encourage commuter and recreational biking on city streets and in association with parks. We recommend having two systems for biking, one within the Park (recreational) and one on the street (commuter and recreational connection of parks). Accommodating and planning for these uses is part of the treatment options of the Updated Master Plan. Refer to Drawing 22 Bicycle Circulation for proposed layout.

Bicycle riding should be accommodated within the Park and at the perimeter.

Active recreation in the form of team sports needs to be maintained and, as in the 1938 Taylor Master Plan, each city should have facilities that meet their needs. The Updated Master Plan recommends treatments for each of these areas (See Zone 6, 8 & 12 Plans, herein). In East Cleveland, adding a track around a combined soccer and football field, adding a batting cage and adding a restroom/concession building in the athletic zone will provide much needed sports activities while remaining with the proportion of active use space of the Taylor Master Plan. One ballfield is reoriented to restore the Meadow Vista view and the basketball and tennis courts are rehabilitated. The maintenance yard is modified to accommodate these uses and the Electrical Utility Building is relocated outside the Park. At the playground on Superior Road, restoration of a ballfield, basketball court and play lot is the recommended treatment. New play lots in the Dugway and Meadow Vista picnic areas are also recommended.

During the Community Meetings three options were discussed for the ballfields in the Great Meadow:

- no change,
- complete removal of the sports facility, or
- a compromise plan reorienting the fields, reducing their number from four to three, removing fencing and the building, and sodding the infields.

The compromise that permits continued active recreational use while regaining the unity of the meadow aesthetically is the treatment we propose. The Updated Master Plan, therefore, shows ball fields in the Great Meadow reduced by one, the fields reoriented, the infields sodded and fencing minimized (See

Zone 8 Plan, herein). The goal is to afford the opportunity for passive use of the area when not in use by ball players and to remove fences and reorient cages to restore the original meadow views. The treatment for the baseball building is to remove it, as well as the existing restrooms adjacent to the tennis courts, and to construct one new centrally located restroom/concession building meeting the new building guidelines established, herein. The new building should be located to serve the entire athletic area, not just the ballfields, and its design and scale should be carefully considered. The recommended treatment for the multi-purpose field, play lot and tennis facility is to retain or rehabilitate them. The multi-purpose field also needs to remain uncluttered, undefined and unfenced to retain the original meadow view.

Water Features

Dugway Brook

The Dugway Brook was a major concern to Taylor in terms of engineering, ecology, health and aesthetics. In the 1938 Master Plan, he is concerned about its tendency to flood and the issues of pollution.

"The development of the residential areas to the south and east has made it difficult to determine the exact drainage basin from which water now finds its way into this brook. The development, with its attendant construction of streets facilitating the rapid accumulation of storm water and to some extent of sewage, has greatly changed the rate of discharge and the condition of water in the brook. A sudden shower in some part of this drainage area, perhaps not noticeable from Forest Hill Park, may create a flood condition of unexpected proportions in the brook channel. A crest of water, sometimes approximating three feet in depth, may accumulate without warning in the channel of the brook, and therefore make the brook bed a decidedly dangerous spot for children." p. 72.

"Moreover, in times of normal flow the high temperature of the water accumulated from such areas is a powerful stimulus to the excessive growth of colon bacteria already present in large numbers due to the direct runoff collected from polluted areas. There is, therefore, every reason to make the stream bed rather inaccessible to children." p. 72.

Taylor's proposal, however, was to "maintain the brook as an open channel through a portion of its length between the upper and the lower boundaries of Forest Hill Park." He viewed it as a necessity that portions of the brook would have to be confined in order to allow for development of the Park near Mayfield Road, Lee Boulevard and Terrace Road. His solution for the pollution was interesting.

"If the water in this stream continues to be polluted, it may be desirable to by-pass the entire stream flow of polluted water, thus creating a dry stream bed in some sections of the existing brook during that part of the summer when there is a minimum flow and a resulting maximum percentage of pollution from street wash which finds its way into this stream. An attractive water effect will thus be preserved at times of normal rain." p. 73.

Following is a summary of other recommendations from the Taylor plan, pages 72-74:

- Erosion of embankments: Construct new stone masonry walls and repair existing Rockefeller walls; clothe walls in planting.
- Existing carriage roads and bridges: Use roads and bridges as foot trails through the valley; repair and reconstruct bridges as required; incorporate guardrails.
- Existing slope erosion caused by storm water discharge: Repair and extend water drains confining water in definite channels; protect slopes against further damage.
- Encroachment of exposed section of sanitary sewer: Construct a footbridge to conceal it.

The original intention of Taylor's 1938 Master Plan was to retain the brook as an open channel. A major setback occurred early in the project when Charles A. Carran, City Manager of East Cleveland, recommended culverting the entire length of Dugway Brook in that city because of sanitary and safety concerns. Jay Downer, JDR, Jr's representative and an engineer, was appalled at the suggestion. Unfortunately, on the day that A. D. Taylor and JDR, Jr. made a field inspection with Jay Downer, the water was very low and the pollution was especially objectionable. Carran, assisted in his endeavor by an unexpectedly large amount of free concrete and labor available from the WPA, carried the day.

An East Cleveland cost estimate for park development, dated April 23, 1937, with the handwritten name J.C. Jones, shows a future cost of $100,000 to put the brook into a culvert to reduce pollution.

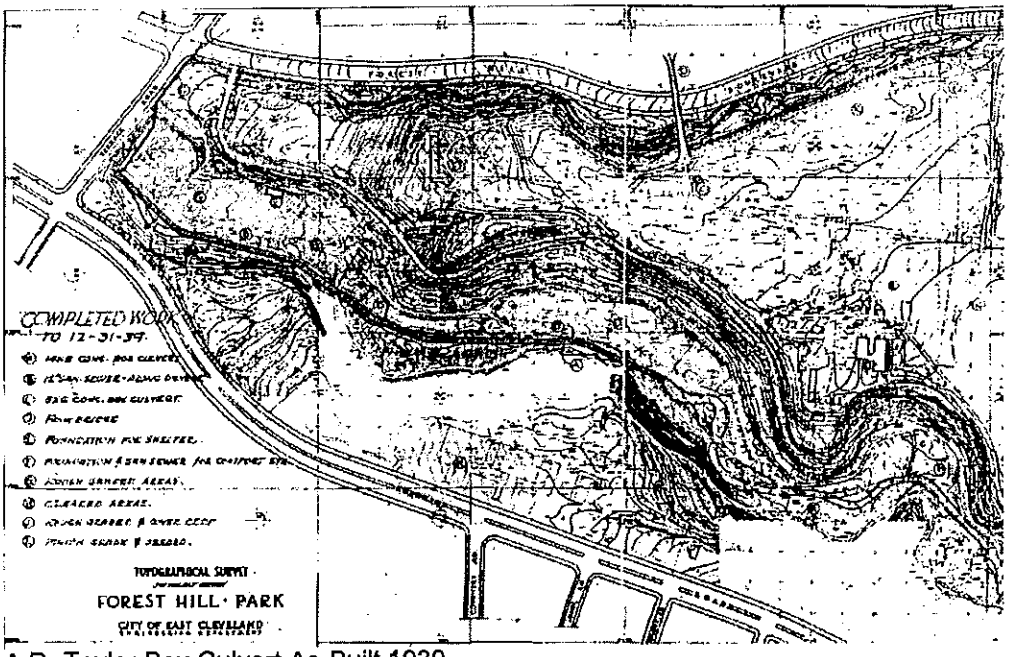
The Dugway Brook in the Upper Valley is still an open channel and is a vital environmental feature that is extremely sensitive to urbanization, overuse and natural forces. Experts in this field tell us that erosion is a natural process that occurs when forces of flowing water exceed the ability of the soil and vegetation to hold the banks in place. The natural rate of erosion varies due to stream size, the amount and character of the vegetative cover and the soil type of the stream bank. The ability of a stream to erode is a function of velocity, flow depth and slope. Human disturbances of this zone and increased magnitude and frequency of runoff from our urban watershed impact these natural systems.

The riparian zones within the Park should be protected and the existing stream banks of the Dugway stabilized and revegetated with native species. The repairs in the Dugway Brook should look as natural

as possible and the best bioengineering technology should be employed after the banks are stabilized with "best engineering practices."
Protection of riparian zones and stabilization measures work either by reducing the force of flowing water or by increasing the resistance of the bank to erosion or by a combination of both. Employing soil bioengineering technologies that employ the use of woody vegetation can slow flow velocities and thereby reduce erosive forces. Choosing native species of plants that have dense root mass and are deep rooting species will increase resistance to erosion. In his 1938 Master Plan Taylor also proposes the construction of new stone masonry walls and repair of existing to control erosion. This method should also be considered when appropriate.

"It is recommended that, in those places along Dugway Brook where the water has caused abnormal erosion of embankments, new stone masonry walls of appropriate design be constructed, and the existing walls properly repaired. The interesting character of the existing stream bed should not be disturbed to any greater extent than is necessary in the construction of the proposed protecting walls." p. 73-74.

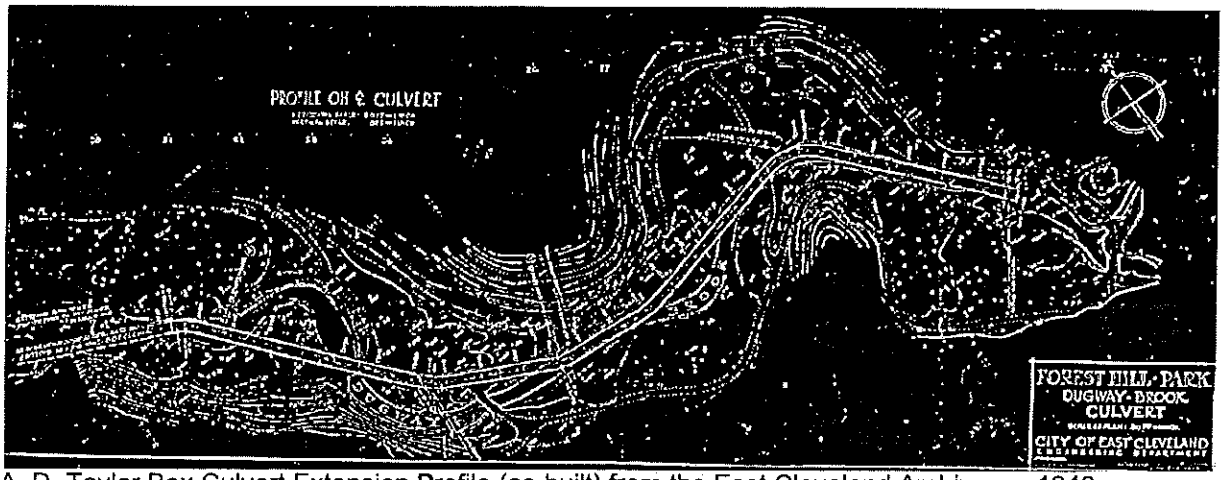

Dugway Brook stream erosion undercutting of banks, 1998.



A.D. Taylor Box Culvert As-Built 1939

An important issue to be addressed in the Dugway Valley is whether to remove the accumulated fill in the Dugway Valley placed there in 1993-94. The second issue to be addressed is whether to recommend opening up a portion, or all, of the Dugway Valley Brook channel which was placed in a culvert in 1939-40. These are both very difficult issues from a cost point of view. The question remains: are the costs too high for the public recreational use or ecological benefits gained? Issues of public safety from

flooding and pollution raised by Taylor in his 1938 Master Plan need to be taken into account, although more recent improvements upstream at Lakeview Cemetery have reduced some of these issues and should be further investigated.



A. D. Taylor Box Culvert Extension Profile (as-built) from the East Cleveland Archives c. 1940.

Three alternative scenarios seem possible. All three alternatives should be given consideration and should be studied further. The final decision should not be just a cost solution, but should really look to the highest and best use of the open space for all park users.

- Opening up either all, or a portion of, the channel and reconstructing the Dugway Valley Brook.
- Dugway Brook remains in the culvert, but the 1993-94 filling is removed and the landscape is rehabilitated to a productive new use or uses.
- Accept the damage that has been done and rehabilitate the area to a productive new use or uses.

Determining the highest and best use for this area also needs to consider certain issues.

- The site is isolated in a deep valley with vehicular access only possible through the Dugway Picnic Area or from the Rockefeller Carriage Road. The first access is more desirable for vehicles, because the Rockefeller Bridge is not structurally sound for vehicles.
- Pedestrian access is universally accessible only from the Dugway Picnic Area, and not from either the middle or upper Dugway Valley.
- The potential for flooding within the Dugway Valley needs further study and documentation, but a contingency plan of how flooding will be handled should also be studied.
- Reclamation of watersheds and the opening of stream channels are viewed nationally as being of high importance for improving our environment. Maintaining this option in the Updated Master Plan is important and prudent.
- Any work in this area will need to go through environmental approvals. Since toxic materials could endanger users of the other proposed uses, testing should be done, regardless.

Treatment plans divide the Dugway Valley into three zones as follows:

- Zone 1 the Dugway Picnic Area (East Cleveland)
- Zone 2 the Lower Dugway Valley (East Cleveland)
- Zone 3 the Upper Dugway Valley (Cleveland Heights)

The Zone 1 Treatment Plan shows expanding the picnic area to the east as far as the dam (filled area and the overflow). This will double the amount of area available for picnicking and would include meadow planting, removal of trees, retaining of specimen trees and developing a path system and picnicking areas. We do not feel it is advisable to open the Dugway Brook in this area because of the issues of potential flooding and safety during major storms.

The Zone 2 Treatment Plans illustrate two possible solutions. The first leaves the fill and the Dugway Brook in the culvert and recommends reforestation, meadow planting and developing a nature trail. The second removes the fill and opens up the Dugway Brook channel reconstructing the brook, developing a trail and adding a bridge crossing. The dam and the overflow remain in place to contain and control the water during flooding. In either case the Dugway Valley will become two experiences: one the picnic/play lot /country park experience and the other the forest/nature trail/riparian zone experience.

Dugway Brook and nature trail area, 1938.

The Lake

The lake, which is a manmade feature, should be restored in accordance with the Taylor planting plans. The edge treatment and species of plants should reflect its original park-like character. Taylor was very clear in his 1938 Master Plan on the importance of the lake and the desired character, water depth and edge treatment for the lake. He proposed removal of the stone retaining wall of the Rockefeller Era and regrading and planting of the bank to achieve a "more naturalistic and informal shoreline."

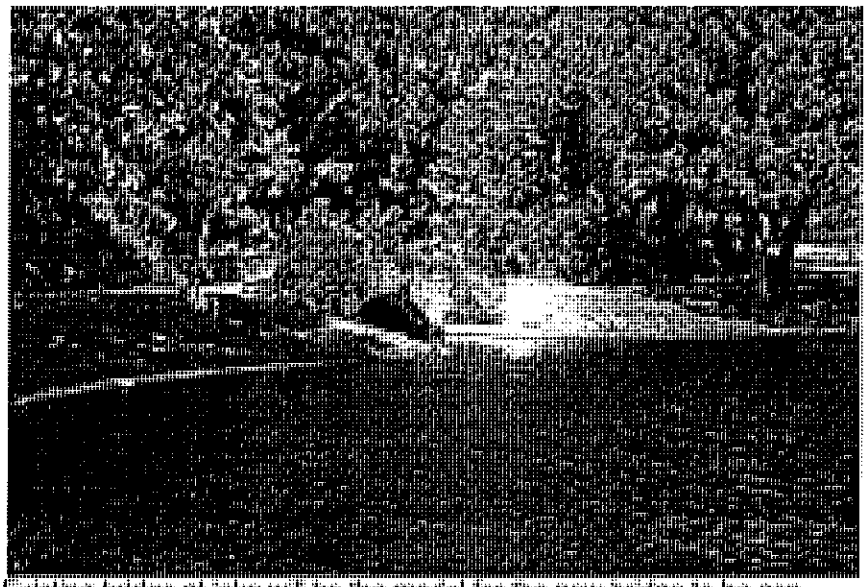
Taylor's re-design of the Rockefeller Era Lake raised the water level three feet and increased its area by twenty percent in order to accommodate skating and boating, neither of which activity occurs today. The proposed structure to be developed on the north side of the lake was to be a boathouse and was also to accommodate skaters. The maximum depth was not to exceed 3 to 3 ½' feet and Taylor recommended that the lake never be used for swimming, because of sanitary hazards. The lake outlet was to be designed as a naturalistic stone masonry spillway, which still exists today.

The original Taylor design illustrates an island in the lake reached by a bridge. During Taylor's time this was not constructed, but today we have an island without attachment to the shore and in a very different design placement, size and configuration. Removing this island and reconstructing it in conformance with the Taylor design should be considered not only from the perspective of continuum, but also from a cost point of view. Treatment Plans in this zone illustrate two possible solutions:

- one removes the existing island and reconstructs the island in the Taylor position complete with bridge;
- one modifies the existing island by reducing its size and distance from the Boathouse.

In either case, the island is revegetated with wetland species attractive, in terms of food and shelter, to bird life and the shoreline of the lake is returned to its planted informal shoreline. Refer to Civil Engineering Issues/Drainage/Erosion for discussion of the inlets.

View of the lake and existing island, 1998.



Existing bridge at lake will be the model for the new bridge to be constructed to the island, 1998.

All work within the riparian zones should conform to the best engineering practices and to the requirements of Rainwater and Land Development the State of Ohio's Standards for Stormwater Management Land Development and Urban Stream Protection, latest edition. At the same time, however, the fact that this is an important historic park should be included in the equation when decisions that might impact the historic character of the Park are considered.

The Dugway Brook and the Lake are both vital environmental features and are extremely sensitive to urbanization, overuse, and natural forces. The riparian zones within the Park should be protected and existing streambanks need to be stabilized and revegetated with native species. The repairs in the Dugway Brook should look as natural as possible and the best bio-engineering techniques should be employed after the banks are stabilized with the best engineering practices. The Lake, which is a built feature, should be restored in accordance with the Taylor planting plans and the edge treatment and species of plants should reflect its park-like character. The original Taylor planting plan and plant lists are available for this area.

Furnishings and Signage

Technological change and changes in materials can be seen in the Park. These changes can have profound effects. Some of these changes have benefits since they provide more durable materials. Yet many changes have negative effects and are counter-productive. Concrete walks bring the city into the Park in ways never originally intended, and, recycled plastic benches, though more vandal resistant, are not consistent with the aesthetic of a historic park.

Taylor's approach to technology is instructive. He used the best technical means available at the time, but always in the service of the overall design intent. Nevertheless, technology was subservient to the scenic qualities and character of the site.

A similar approach makes sense for today. By gradually phasing out "city" materials from the Park's interior and considering facilities and site furnishings in terms of their visual impact and historical appropriateness for the Park's mix of pastoral and active recreational uses, the character and the integrity of the Park can be reinforced. All park furnishings (such as water fountains, benches, trash receptacles, lights, signage and telephones) or addition of new facilities should be coordinated throughout the Park, with allowance for variations to suit individual conditions. Both their selection and their siting should be sensitive to historic and scenic values.

Taylor does not appear to have selected a palette of furnishings for the Park. He does mention pendent lights, but not benches, trash receptacles, water fountains, etc. Our research in the East Cleveland Archives has turned up drawings for picnic tables and "stoves" which are in the style of the state park systems and the CCC and WPA work of the Depression Era. Since we do not have a vocabulary of furnishings designed by A. D. Taylor, a consistent palette of furnishings should be developed jointly by both cities to create the unity of design that Taylor strove for.

Pages 95 through 100 show several examples of site furnishings, lighting, features, and signage that would be appropriate for use within Forest Hill Park. These examples are based upon our research and knowledge of the palette of materials that are historically appropriate for the Park.

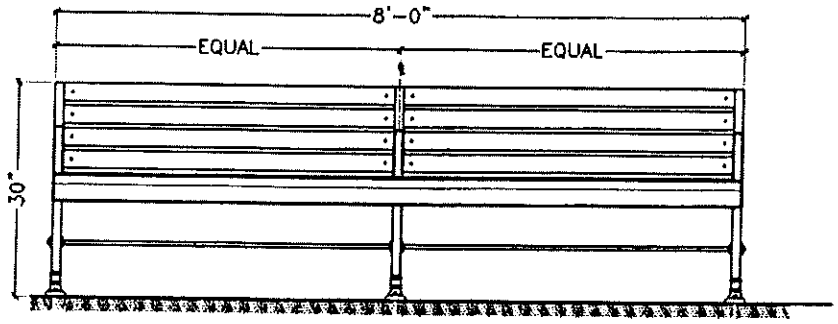
The wood and metal style bench on page 143, is sensitive to the Park's historic qualities while still durable to withstand considerable use. Trash receptacles and picnic tables should be compatible with the bench and should be constructed of strong and durable materials, as well. Grills should be placed in all designated picnic areas. Bicycle racks should be placed in appropriate locations throughout the Park, particularly beside recreational areas.

Light posts and fixtures should reflect the historic character of Forest Hill Park. Pendent-style fixtures (as mentioned by Taylor and illustrated on page 85 of his Master Plan) mounted on green-painted poles, between 20 and 24 feet high, are an ideal type of light for use along Forest Hill Boulevard and within the parking lots. Taylor did not propose pedestrian lighting within the Park. Acorn-style lights, between 10 and 14 feet high, have been successfully used in historic parks around the country for pedestrian applications.

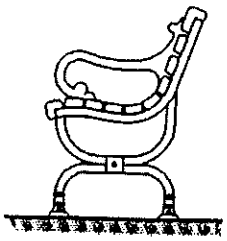
Low stone walls (pages 98-99) can be constructed at the pedestrian entrances into the Park. The walls, along with shrub plantings and the stone piers, can create attractive pedestrian access points. Several of the historic stone piers in the Park can be restored and new stone piers to match the historic piers can be constructed at the pedestrian entrances. In association with these walls and piers, a new fence, a low, three-foot-high, wall or a combination of low wall and fence should be placed around the perimeter of the Park. We are suggesting a permafused black vinyl chain link fence, preferably with 3"' – 4" square posts topped with a decorative finial be used along both sides of Forest Hill Boulevard, along Superior Boulevard at the top of the Dugway Valley and along Terrace Road. The fence would discourage movement into these sensitive areas. Along Lee Boulevard, Monticello Boulevard and Mayfield Road a low wall or a combination of low wall and fence would also be appropriate. At the corners of Forest Hill Boulevard at both Terrace Road and Lee Boulevard the low wall or a combination of low wall and fence would also be appropriate.

At all of the parking lots within the Park, vehicular entrance gates (page 97) can be installed to limit vehicular access into the Park after closing time. Taylor, in the 1938 Master Plan, does not mention development of a signage package. A uniform system of signage agreed on by both cities would enhance and emphasize park unity. Signage should consist of signs for entries, regulations, direction, interpretation, information and education. We propose a metal signage system that is historical in character and is mounted on a metal pole. This style of signage was used both in the United States and Europe in the early public parks. The signage should not be modern in style nor should it be too monumental in scale.

Refer to page 98 for the current signage system in the Emerald Necklace Park System located in Boston and Brookline, Massachusetts with wording adapted for Forest Hill Park. This system of signage was jointly designed for both communities and was installed throughout the system.

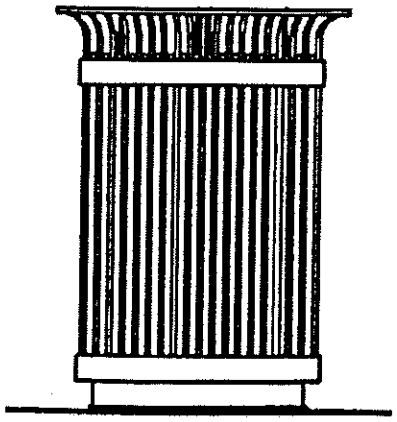


Front Elevation

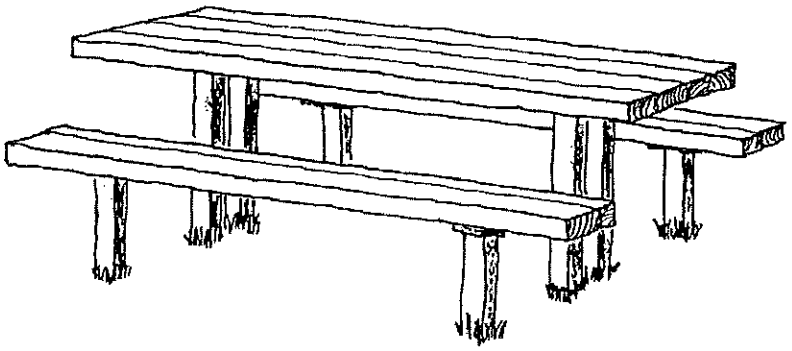


Section

Wood and Metal Style Bench Detail

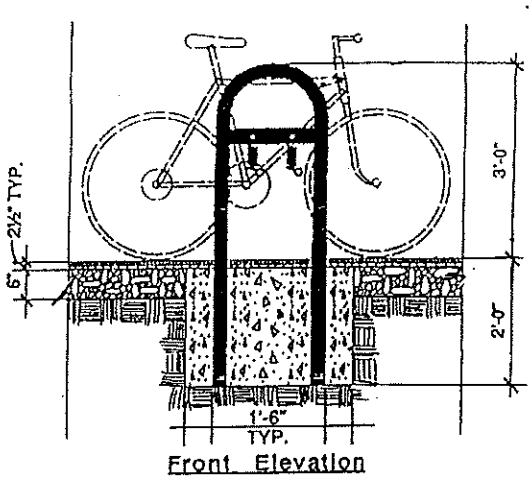


Steel Trash Receptacle

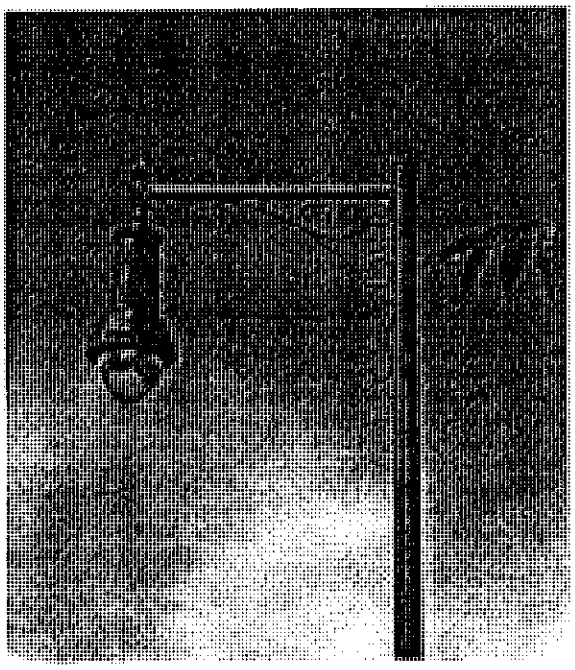


Picnic Table

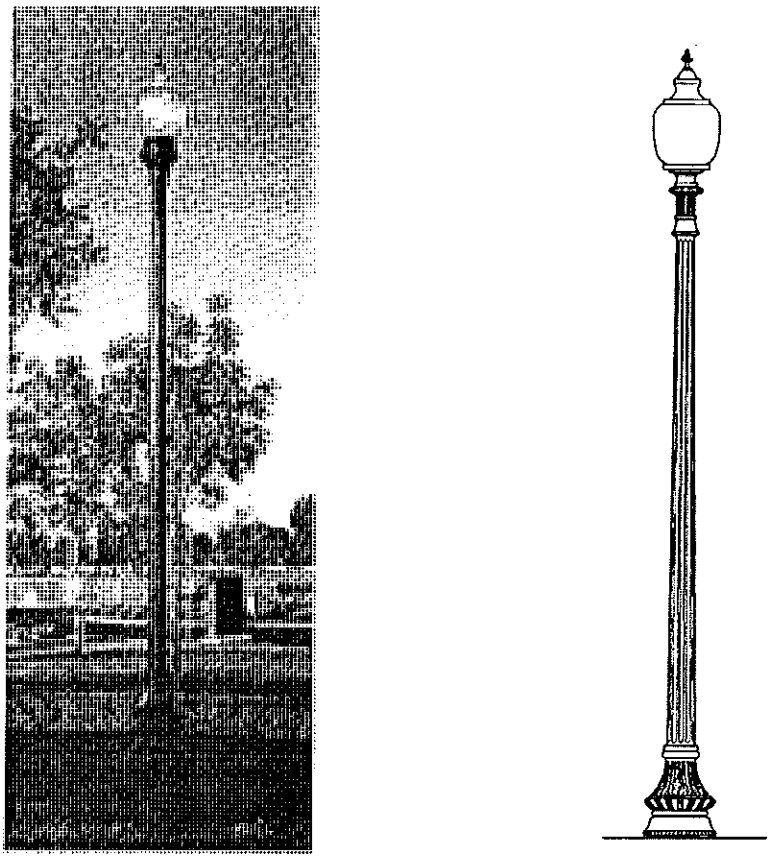
Grill



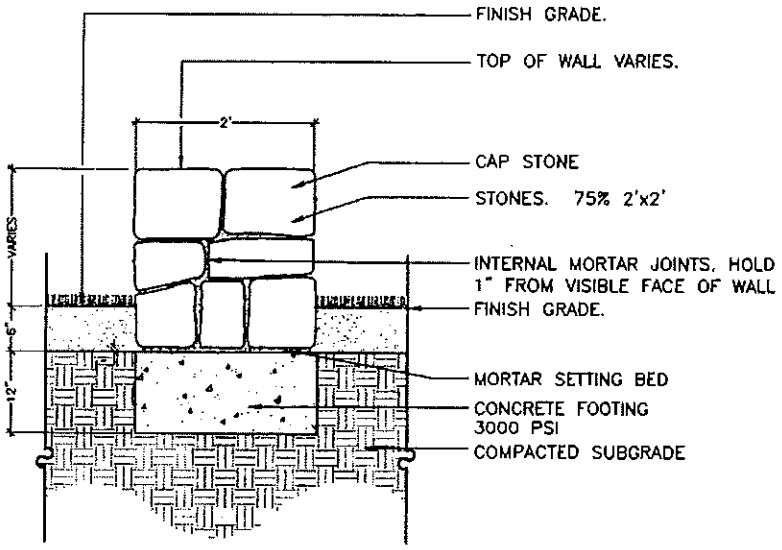
Bicycle Rack Detail



A light like this pendent-style light can be placed along Forest Hill Boulevard and along all perimeter streets as well as within the parking lots



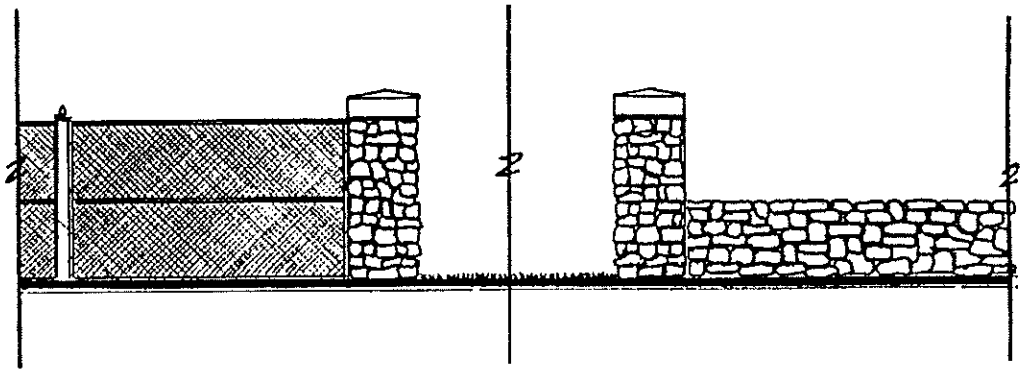
An acorn-style pedestrian light for use along pathways within the Park



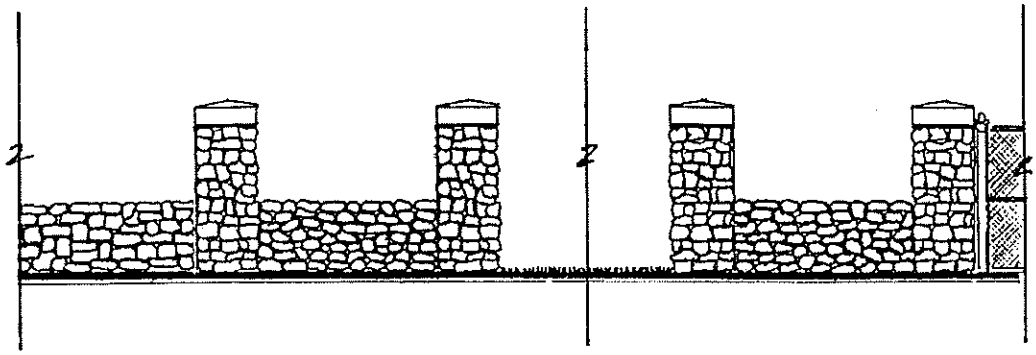
NOTE: ALL STONES TO MATCH IN COLOR, SIZE AND GENERAL CHARACTER. FILL JOINTS ON TOP OF WALL TO INSURE POSITIVE DRAINAGE OFF TOP OF WALL.

Stone Wall Detail

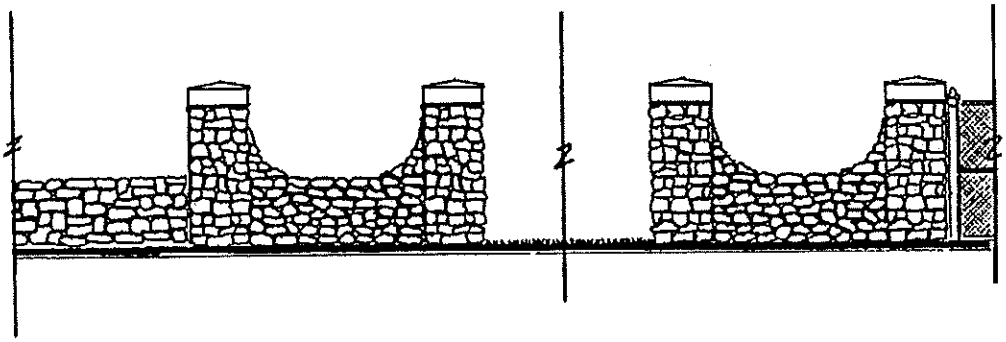
Following are stone wall, pier, and fence treatment options for pedestrian entrances:



Stone Piers meeting Chain Link Fence and Stone Wall

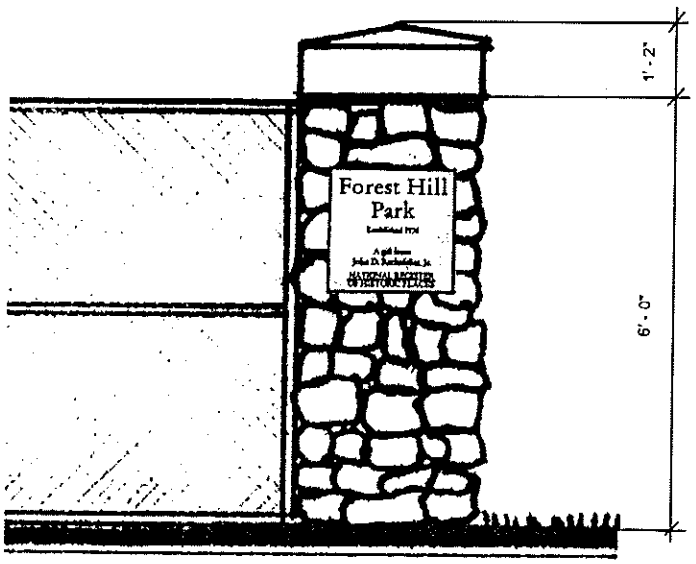


Optional Stone Pier Treatment meeting Chain Link Fence and Stone Wall



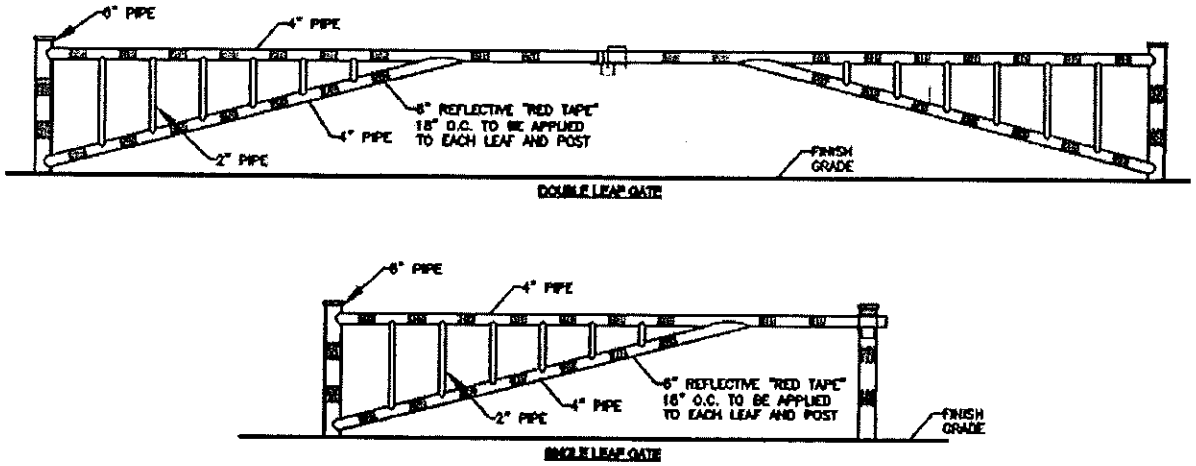
Optional Stone Pier Treatment meeting Chain Link Fence and Stone Wall

Stone Piers and Planting at Pedestrian Entrance Areas



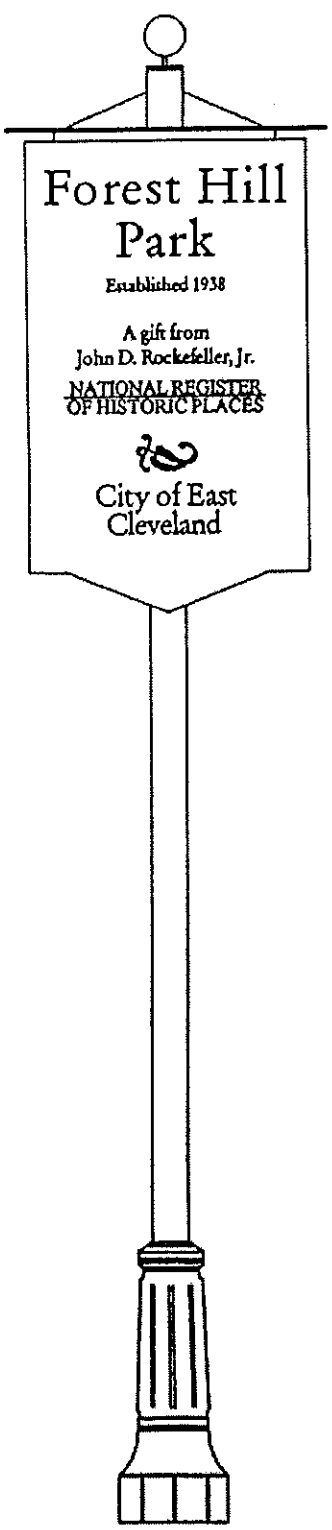
Entrance Pier with Plaque

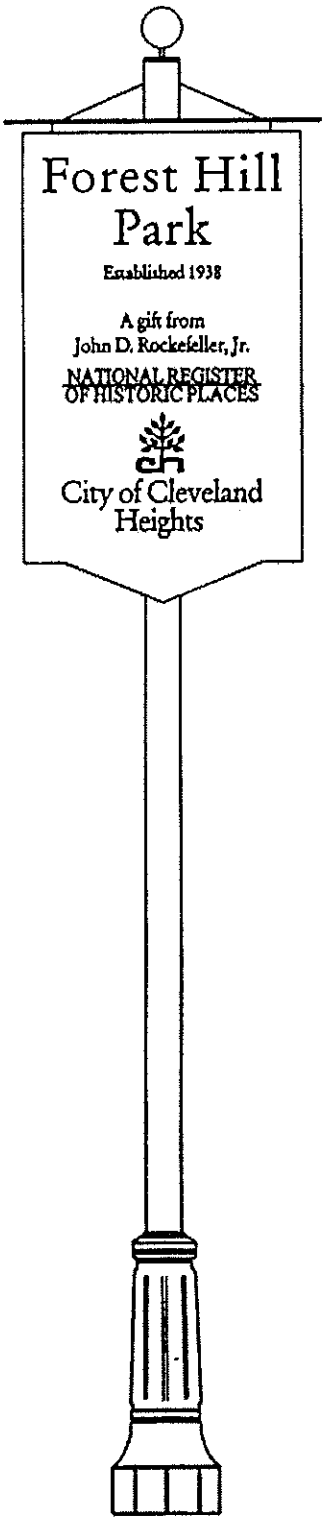
Note: For plan views of fence treatment options for pedestrian entrances, refer to the following drawings under Treatment Recommendations: Dugway Picnic Area Entrance Z-1 Det., Cleveland Heights Recreational Area Entrance Z-8 Det., and Boathouse and Lake Area Entrance Z-11 Det.



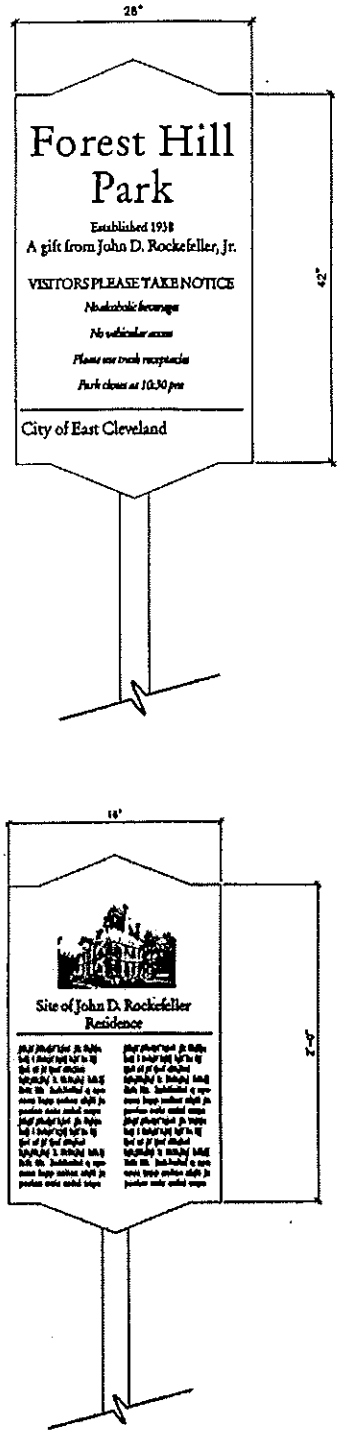
Vehicular Entrance Gates Detail

Below is an example of a uniform signage system similar to that currently in the Emerald Necklace Park System in Boston and Brookline, Massachusetts.





Entrance Signs
(Option: City of East Cleveland and City of Cleveland Heights on one sign)



Pedestrian Sign (Above)
Historical Marker (Below)

Maintenance and Management

General Discussion

Maintenance and management concerns were voiced at Forest Hill Park Advisory Commission hearings and at community meetings. The master planning process has provided an opportunity to evaluate the level of existing management and maintenance and to understand the current maintenance activities, standards and operations. Management of recreational activities and community events is better defined than management of the passive uses of the Park.

Frederick Law Olmsted proposed park managers, park regulations and a work order system for Central Park in 1860. The Park Administrators, Urban Rangers, Park Enforcement Patrols and Horticultural Crews reestablished in the New York City parks since 1980 are the 20th century equivalent of his proposal. They have proven in Central Park to be needed as an essential accompaniment to Central Park's current Master Plan. The Emerald Necklace Park System in Boston has instituted similar management and maintenance proposals with equal success for its current Master Plan. Both Ranger systems have increased in size and have expanded their programs available to the public. Both programs have nature and historic walks led by the rangers as well as community event days with ranger presence.

Unique to Cleveland is the subdivision of a major park, such as Forest Hill Park, between two cities - East Cleveland and Cleveland Heights. Also unique to this park was the establishment, within the John D. Rockefeller, Jr. terms of the gift, of the Advisory Commission. The Commission, composed of representatives from each city and an appointed official from the American Society of Landscape Architects, was empowered to rule on proposed changes to the "basic plan."

From the onset, the Park has been managed independently by each city. The 1938 Taylor Master Plan did not discuss the future management of the Park, except at one point mention is made of the location of an office for the park superintendent.

"The ultimate location for the office of the park superintendent might well be in connection with the bath house, the main pavilion, or the gate lodge at Forest Hill Boulevard." p. 68.

Each city has also maintained their portion of the Park independently in the past. The 1938 Taylor Master Plan expresses the need for a central maintenance facility and tells us the most logical location for the facility "is in connection with his central parking area on the south side of the Great Meadow" which was the site of the original Rockefeller stable. Taylor did not recommend retaining the stables, except as temporary storage, but did recommend retaining one of Rockefeller's service buildings "now used as a garage and machine shop or tool house" as it may be used to excellent advantage as a part of the permanent group. In the 1938 Master Plan Taylor expresses his concern:

"It is quite essential that for Forest Hill Park in general, there be an adequate service building group, somewhat centrally located, meeting the requirements of a working center in connection with further maintenance and development programs." p. 68.

Neither the central parking area nor the central maintenance facility or the superintendent's headquarters was ever constructed. Being a realist, Taylor does recognize in the 1938 Master Plan that:
"During the years that this park continues under the joint ownership of East Cleveland and Cleveland Heights, and the respective portions of the Park are definitely maintained by each municipality according to the boundary lines now defining each respective municipal ownership, the service building facilities from which to operate and maintain the south portion of the park may be provided from the existing Cumberland Park area south of Mayfield." p. 68.

Initial Areas of Concern during the Inventory Process:

- The first and obvious concern is the absence of a coordinated maintenance and management focus for the Park. Consequently, East Cleveland and Cleveland Heights have come to feel the effects of their divergent management objectives, maintenance standards, maintenance resources, and technical solutions to maintenance problems.

  In practice, these manifest themselves as differences in user activities, in frequency of grass cutting, frequency of trash pick-up, use of voluntary labor and in various other ways. East Cleveland has a

facility on site accessible from Beersford Street, but Cleveland Heights does not have one on site. The real issue, however, is not too little or too much, but the consistency and quality of maintenance. In some cases, too much maintenance has resulted in the loss of vegetative buffers and the turning of these areas into mown lawn thus changing the original design intent and the character of the Park. Equally, the lack of maintenance of the forest edge has allowed its growth into previous open areas, thus reducing the ratio of forest to open meadow.

- The second concern is securing sufficient maintenance funds and establishing a yearly budget for maintenance. Cities across the country have not received the funding necessary to maintain their parks. Money and grants are available for capital improvements, but not to maintain. Consequently, when infusions of funds have occurred, they have been spent to deal with "crisis" conditions, or are used for one time capital improvements to address a particular feature or possible danger. Unfortunately, this approach does not address the larger, long-term problem of establishing maintenance continuity over time.

- The third area of concern is the resources available to hire and train the skilled and sensitive horticulturists, arborists, ecologists and landscape architects needed to maintain historic naturalistic landscapes or maintenance staff to maintain quality state of the art active recreational uses. The technical problems associated with improved maintenance are relatively straightforward to solve. However, improved technical operation requires an enthusiastic, well-trained staff with continual in-service training and strong knowledgeable leadership. This area of concern has been conscientiously addressed by both cities since the inventory phase.

- Finally, there is the concern that a plan be put in place which will coordinate the efforts of East Cleveland, Cleveland Heights and private interest groups into a concerted operation. The kind of cooperation and coordination required has been demonstrated already with the remediation of debris removal in the Park. Removal was considered a high priority, since misuse and abuse have been serious in the past. With both cities' changing perception of Forest Hill Park as being on the way to recovery, use of the Park was increased and management and maintenance was improved. These factors were recognized as a way to discourage the negative perception of neglect. This new and positive perception has been so important, and such a high priority for both cities, that a major cooperative clean up of the debris area in the old Rockefeller stable area was completed during the summer of 1998.

Our analysis of the need for a long-term maintenance and management plan leads us to recommend three possible future approaches.

- Each city continues to maintain and manage their portion independently, but a regular schedule of meetings of the service directors and an annual meeting of the Mayors/City Manager is established. Cooperative projects would be encouraged.
- Both cities meet jointly to oversee maintenance and management of the Park, but each city funds and performs their tasks independently. Cooperative projects would be encouraged.

- Maintenance and management is performed by a joint entity, which could be a private entity, funded by both cities and it controls performance of the tasks.

The Updated Master Plan recommendation is the first approach: meetings of the service directors on a regular schedule and an annual meeting of the mayors/city manager, but maintenance operations and management of the two cities remain independent.

The range of tasks that the cities could address might include:

- Determine the location and size of maintenance facilities;
- Establish maintenance zones;
- Develop maintenance priorities between and within zones;
- Develop priorities for cyclical maintenance programs within maintenance zones;

- Determine the size and types of maintenance equipment to be utilized in an effort to reduce damage to path systems and the landscape in general;
- Develop methods of composting and the determine the location of composting areas;
- Develop methods of maintenance with minimum impact on natural systems;
- Develop coordinated maintenance plans for areas such as the Great Meadow, which are jointly owned.

For example, within these tasks the location, size and composition of the maintenance site and facility could be addressed. Several approaches seem possible:

- Each city establishes a maintenance area/facility independently within the Park.
- Each city establishes a maintenance area/ facility independently outside the park boundaries.
- A joint maintenance area/facility on site as originally proposed on Taylor's plan.
- A joint maintenance area/facility off site.
- Maintaining the status quo.

Coordinated management and planning is also essential to ensure unity of design and management approach. For example within the management and planning tasks the following might be included:

- Develop consistent furnishings such as trash receptacles, benches, picnic tables etc.
- Develop consistent signage systems.
- Develop consistent materials for trails, roads, fencing and other systems that link all areas of the Park.
- Develop joint planning, design and construction improvements for jointly owned areas such as the Great Meadow or the Dugway Valley.
- Develop a coordinated plan for emergency access routes throughout the Park.

Summary of Recommendations for Maintenance and Management

- The establishment of a coordinated management and maintenance focus for the Park. Each city continues to maintain and manage its portion independently, but a regular schedule of meetings of the service directors and an annual meeting of the mayors/city manager is established.
- The provision over time of adequate annual maintenance funds on some pro rata basis, including possible cost and equipment sharing where appropriate.
- The coordination of annual maintenance programs throughout the Park.
- The creation of Urban Rangers, Park Enforcement Patrols and Horticultural Crews with educational programs for the latter.
- The coordination of a plan for emergency access routes throughout the Park.
- The encouragement of local user and volunteer participation in fundraising and maintenance.
- The beginning of a program to rid the Park of invasive species such as Japanese knotweed and buckthorn in the forest understory and other woody species that have overrun the Park.
- The removal of dead and dangerous trees within the parkland and woodland and the development of tree surgery program to make the remaining specimens safe.
- The improvement of water quality to the extent it can be addressed by sound maintenance practices.
- The consideration of utilizing more cost-effective maintenance approaches such as the use of non-toxic chemicals for weed control.
- The systematic composting of vegetative waste and then the reuse of composted waste on or off site. Composted material could be available to the community and each year excess compost material should be removed off site.
- The policy should be that no dumping or piling of debris would be allowed even by maintenance crews. All non-vegetative material should be removed daily off site. Vegetative material should be deposited at the designated compost area.
- Maintaining diversity of plant species, but limiting the introduction of exotic species by utilizing sustainable native species. Respect the ecological associations of plants in the forest, wetland and meadow areas with sound maintenance practices. The exception would be replacement of exotic species planted during the Rockefeller Era.

Maintenance of Vegetation

Forest

Forested areas of the Park, which include relatively undisturbed plateau, slope, and terrace communities, are potentially old growth (pre-settlement) forest and of substantial ecological significance. Large standing dead trees provide excellent habitat for a large population of woodpeckers and raptors, and are important to the biological diversity of the region.

Forests will be maintained and managed as natural areas and serve to provide a visual screen or buffer to more intensively used areas or to protect very steep slopes. No alteration of the terrain will be allowed in these areas, except for the repair of erosion areas and the removal of invasive weed species. Healthy older trees will be retained, but fallen trees will also need to be retained. These areas are important natural laboratories for understanding the processes of change in undisturbed forest ecosystems.

In selected areas, however, trails move through the forest and paved paths move along the forest edge. Use will accordingly be low key, comprising limited informal walking, photography, education and interpretation and the study of natural history. Removal of dangerous branches or dying trees at the edge of forest areas that are close to paths, fences, buildings, bridges, etc., thus creating a potential danger to the public or important features within the Park, will be necessary. The Forest areas should, however, be considered protected areas and overuse, especially off-trail, should be discouraged and controlled. Although a balance of use and protection is important, developing a mechanism for restricting use in any given area and closing an area off to allow for regeneration is important. The public needs to understand what is being accomplished by restricting use and allowing for regeneration, so signage explaining the process is important.

In Forest Hill Park the forest cover can be subdivided into three categories of forest:

- Forested plateau
- Slope community
- Stream terrace

Refer to Drawing 10, "Figure 1 Cover Type Plan," for location of these categories and for rare and endangered species locations.

All Forest areas are low-key areas, they will require a low level of maintenance, but a high level of skill for management and implementation of work. The objective in the forest area is to sustain a continuous tree cover with areas being regenerated naturally so both the canopy and understory will be managed on a ten-year cycle. This means that in practice the area of forest will be divided into compartments so that, during the ten-year cycles, each area will be worked once.

Since the forest goes through various stages in a cycle of natural regeneration and recognizing that all stages in the cycle are currently present within the Park, management and maintenance will work with and preserve this natural cycle. Invasive plant materials will be controlled by cutting, grubbing out rootstock, and/or herbicide control on an annual basis with longer term total removal or shading out of this material as a goal. All rare and endangered species will be protected and sustained. Leaf fall will not be removed from these areas, nor will the normal trees downed during the stages in the cycle of natural regeneration. If no regeneration of desirable species is found, we will plant to enrich the area as necessary.

Working with the cycle

- *Mature forest:* Minimal light reaches the forest floor and the canopy is complete and fully stocked. Ground and shrub layer is minimal, but there may be grass or other low herbaceous material.
- *Natural regeneration occurring in a gap:* Seed from surrounding trees is continuously germinating, but now root competition and light conditions are such that the tree seedlings can survive, because a gap has opened in the canopy.

- *The gap is enlarged through time:* The gap enlarges naturally and original regeneration thins naturally and is now approaching the lower canopy. New regeneration is occurring at the edge of the old gap.
- *The regeneration has now filled the gap:* Regeneration reaches the canopy layer having been thinned out progressively. The more recent regeneration around the edge is now in danger of being suppressed and needs to be liberated to continue the cycle.
- *The old gap is now the new canopy:* The cycle begins again and new gaps are created by the death of old canopy trees.

Realizing that the old growth forest is worth preserving and protecting for its value as a historical record of the past and as a natural laboratory, we propose protecting it, but also managing it to ensure its continued existence. The goal of the Maintenance and Management Master Plan is to maintain and manage the quality of the forest ecosystem for future generations to also enjoy.

In several Forest areas adjacent to picnic areas and paths, the Forest has over time grown into these areas, thus, reducing the amount of open land. It, therefore, may be a necessary and desirable goal to regain the original open space by cutting back the forest or by converting the Forest category into the Woodland category through management. An issue to consider, however, is if any rare or endangered species are present. This would allow for more accessible acreage for community use and/or for the restoration of the original proportion of forested space to open space in the Park. Inspect trees within 30 feet of paths, fences, buildings, etc. that could create a danger or cause damage to existing features or structures. Remove any dangerous branches or trees.

Maintenance operations

Since much of the Forest category is unique in that it is older growth forest, we will retain these good older trees to maintain the forest's character and important value as an old growth stand. Ideally, the forest trees should be of all ages with every stage present from recently planted or regenerated to the over mature.

Annually:

- Remove all litter within 15 feet of the edge of the forest areas in one operation in early spring. If the material is not diseased, chip and remove material to city's composting area or spread on site if material is not excessive.
- If forest edge is grass, mow edges, to a width between 5 feet and 10 feet, one (1) to six (6) times per year. Remove all cuttings to city's composting area.
- Control or eliminate invasive plant materials such as Japanese Knotweed, Tree- of -Heaven, Japanese Barberry, Phragmities, etc. Annual monitoring and control of this material is a necessary priority. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

On a 10-Year Cycle:

- All areas in the Forest category will be divided into compartments and will be managed on a ten (10) year cycle. Each year work shall be undertaken in one tenth of the compartments so that during the ten-year cycle each area will be worked once.
- Thin to remove damaged or dying trees, which will allow enough light for small pockets of natural regeneration to occur. Where regeneration is already occurring, thin to allow enough light to release the regeneration. Elsewhere undertake a general light crown thinning. Chip and remove material to city's composting area, if not diseased.
- In areas of regeneration, space and select the favored trees. Allow shrub species to remain where they do not interfere with the selected tree species.
- If no regeneration of desirable species is found, plant to enrich the area as necessary.

Woodland — Trees over Constant Ground Layer

While the forest is a protected natural dynamic system, this landscape category attempts to maintain the appearance of a forest or natural wood while allowing for more access off paths or for activities such as picnicking at the edge. The woodland includes only non-old growth areas that have been previously disturbed. These areas function as buffers rather than protected natural areas and are ideally not on slopes. They should be actively managed areas. The canopy will be more or less continuous, though there may be significant gaps.

Ideally, the trees should be of all ages with every stage present from recently planted to over mature. Currently many of the areas tend to have even aged trees, being, in nearly all cases maturing to over mature. It will take a while to bring age diversity into the canopy layer but it should be a long-term goal. As in the case of the Forest areas, all areas in the Woodland category will be divided into compartments and managed on a 10-year cycle. Each year inspection and work will be undertaken in one tenth of the compartments, so that, during the ten- year cycles each area will be worked once.

In several of the Forest areas adjacent to picnic areas and paths, the Forest has, over time, grown into these areas, thus reducing the amount of open land or land designated for activity. It, therefore, may be a necessary and desirable goal to regain the original open space by cutting back the forest or by converting the Forest category into the Woodland category through management. An issue to consider, however, is if there are any rare or endangered species present. This would allow for more accessible acreage for community use and/or for the restoration of the original proportion of wooded or forested space to open space in the Park.

Canopy maintenance

Annually:

- Inspect all trees and note and remove any dangerous trees or branches. Chip and remove all material from site to city's composting area.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

On a 10 -Year Cycle:

- Remove damaged, diseased and dead trees, chip and remove cuttings from site to city's composting area, but do not mix with other materials. Diseased materials shall be separated and processed separately.

Ground layer maintenance

Annually:

- Collect litter from around edge area once a month from April to October.
- Collect litter and downed trees or branches from whole area in early spring and late autumn, but do not remove leaf fall.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

On a 5 -Year Cycle:

- Over-plant with canopy species to reduce sunlight to the invasive species.
- If regeneration of desirable species is not found, plant to enrich the area as necessary.

On a 20 Year Cycle:

- Cut back naturalistic shrubs to ground level, replant any gaps. Chip and spread cuttings, unless diseased or too extensive to spread. If volume is too great, remove to city's composting area.

Parkland

While the Forest and Woodland are managed natural systems, the various sub groups in the Parkland landscape category all attempt to hold a particular type of ground layer under a maturing tree canopy rather than allowing succession. They are a manmade and man controlled "naturalized" landscape. Treatment of the tree canopy is common to all sub groups. The canopy at maturity will be more or less continuous (though there may be significant gaps) with a density of trees up to 40 per acre. Ideally the trees should be of all ages with every stage present from recently planted to over mature. Currently many of the areas tend to have even aged trees, being, in nearly all cases maturing to over mature. It will take a while to bring age diversity naturally into the canopy layer and may require planting to accomplish, but it should be a long-term goal.

As in the case of the Forest and Woodland areas, all areas in the Parkland category will be divided into compartments and managed on a 10-year cycle. Each year, work will be undertaken in one tenth of the compartments, so that, during the ten-year cycle each area will be worked once. Within the Parkland category there are five categories that are differentiated by the choice of understory layer. These categories are:

- Trees over grass/meadow – large open areas
- Trees over grass – narrow areas
- Trees over naturalistic shrubs
- Trees over ornamental shrubs
- Trees over groundcover

Canopy maintenance

Annually:

- Inspect all trees and note and remove any dangerous trees or branches. Chip and remove cuttings to city's composting area.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

On a 10 -Year Cycle:

- Remove damaged, diseased and dead trees, chip and remove cuttings from site to city's composting area. Separate out diseased material and dispose of separately.
- Plant new trees of the same species and variety in the same location as removed trees.
- Prune and shape trees as necessary depending on condition and location, chip and remove cuttings from site to city's composting area.

Trees over Grass/Meadow – Large Open Areas

Rough mown grass under trees or meadow grass under trees on gently rolling topography characterizes this category. It is a pleasant open area for sitting in, informal picnicking or walking through. There are good examples of this landscape type, particularly around the lake and in the Great Meadow. The nature of the topography is critical, as the grass must be capable of being

mown. The actual frequency of mowing will depend on the thickness of soil cover and the density of the tree canopy, as well as whether a meadow or rough mown grass look is appropriate for the uses planned. In addition, this landscape type will require a structured replanting program in order to maintain the ratio of trees to grass. Individual trees should be allowed to grow naturally and, if it is characteristic of the species, trees should be allowed to branch to the ground. The canopy trees will be spaced far enough apart to permit the use of large sized mowing machinery. It is also possible, though rare, for small isolated clumps of shrubs to appear within this landscape type. For meadow areas it may not even be necessary to mow more than once a year. Refer to Meadows for mown meadow grass. Equally, this landscape type requires an undulation in topography to prevent the areas becoming too expansive and to add character. Mowing at least once per year will also prevent invasion by woody species or weed species.

Ground layer maintenance

Annually:

- For mown lawn, mow using wide area reel cutters or ride on triples between one (1) and six (6) times per year. Keep the grass to between two (2) and four (4) inches in length.
- For meadow areas, mow with wide area reel cutters or ride on triples one (1) to three (3) times per year depending on whether flower color is desired. Refer to Meadows, herein.
- Collect litter prior to each grass cut and once during the early spring. In areas of reduced grass cutting frequency, collect the litter at least once a month between April and October inclusive. In certain areas where parkland surrounds, or is part of, a park entrance, a higher frequency of litter picking may need to be adopted.
- Rake up and collect leaf fall once or twice per year; remove to city's composting area.

On a 3 -year cycle for mown grass only:

- Test the soil and fertilize and lime as recommended by soil analysis.
- Loam and re-seed major bare areas.

Trees Over Grass – Narrow Areas

These are special areas, but are actually found throughout the Park. They are similar to two types of Grass: High Maintenance Grass – Amenity Areas and High Maintenance Grass – Small Areas. The current category, however, is distinct from the latter two in that it usually occurs in very narrow strips on the edge of the Park or on the urban side of the parkways. Typically it has trees at a regular forty (40') foot spacing. Mowing is usually with small machinery, though when the trees are mature and canopy closure is complete, the frequency of mowing required is very low. Conversely, in newly planted areas the frequency of mowing is very high. The former case can be likened to parkland and the latter to narrow grass areas, with various shades of maintenance in between. They are formal spaces and should have a high level and standard of maintenance.

Ground layer maintenance

Annually:

- Collect litter prior to every grass cutting during April to October and once per month during winter.
- Mow using a pedestrian mower six (6) to twenty-four (24) times per year depending on grass growth and density of tree cover.
- Rake up leaf fall and collect once or twice per year, remove to city's composting area.
- Aerate the turf as necessary.
- Loam and re-seed and/or re-sod any bare areas in both spring and fall.

- Apply fertilizer a minimum of once during spring.

Trees Over Naturalistic Shrubs

These areas are naturalized areas that are controlled by man. The canopy will be less continuous and will be regenerated by planting new specimen trees. The understory will be comprised of a shrub layer from which naturally regenerating tree species are removed on a regular basis and which will be regenerated by planting new shrubs. The shrubs will be allowed to achieve their natural form, but will be cut back to ground level on a periodic basis. The shrubs will not be pruned and species will be chosen (either selected from natural regeneration or planted) that will flourish in the particular site and light conditions and will grow to the desired height without requiring yearly pruning or shaping.

Typically, this landscape type is found around entrances when surrounded by forest or as park buffer plantings adjacent to city streets. This category can also be found on steep banks where Parkland or Trees Over Grass/Meadow would be the natural choice, but the topography makes mowing impossible. In these cases the shrub species would be low in habit in order to permit views through the tree canopy and over the shrub layer. The line between low growing shrubs and ground cover is a blurred one and, at the margin, there is little distinction between this landscape category and Trees Over Groundcover.

Ground layer maintenance

Annually:

- Collect litter from around edge of area once per week April through October and once per month from November through March.
- Collect litter from whole area in early spring and again in late autumn.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to City's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

On a 3-Year Cycle:

- Prune to maintain natural character of the species of shrub. Shape should remain natural so they should not be sheared or shaped into little balls. Chip and remove cuttings from site to city's composting area.
- Fertilize in spring.

On a 20-Year Cycle:

- Heavily prune and shape naturalistic shrubs, and replant any gaps. Shape should remain natural so they should not be sheared or shaped into little balls. Chip and spread cuttings, unless diseased or too extensive to spread. If volume is too great, remove to city's composting area. Separate out diseased material and dispose of separately

Trees Over Ornamental Shrubs

This landscape category is identical to the previous category except in the species selection of the shrub layer. Typically this type is found in more formal entrance situations or at building entrances. The shrub species, however, will be kept in a naturalistic form, but will be pruned on a regular basis and, in general, the maintenance will be of a high level.

Reduction or elimination of this category will be a goal, since category trees over naturalistic shrubs will work as well and maintain the naturalistic character of the A. D. Taylor design.

Ground layer maintenance

Annually:

- Collect litter from around edge of area once per week April through October and once per month from November through March.
- Collect litter from whole area in early spring and again in late fall.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.
- Prune according to the species of shrub (this may not be required every year). Chip and remove cuttings to city's composting area.
- Fertilize in spring.

Trees Over Groundcover

This type of ground layer is very limited in the Park, but can be found on steep banks. The category should be considered instead of shrubs if it is important to retain a view under a tree canopy or to hold excessively steep banks. The maintenance will be identical to the naturalistic shrubs except that, for most species of groundcover, it will not be necessary to heavily prune back once every 20 years.

Ground layer maintenance

Annually:

- If located in a prominent formal location, collect litter from whole area once per month from April through October.
- If located in an isolated naturalistic area, collect litter from whole area only in early spring and late fall.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide. Remove from site to City's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

Grass

A large portion of the open space of the Park has grass as the surface cover. Generally speaking the less tree cover over the grass the more light and moisture it will receive and the more frequently it will require mowing in order to maintain a given length of grass. The required length of grass will depend on the desired use of the space and the actual climatic conditions experienced. Thus sports turf areas which will sustain heavy levels of use will require a much higher level of maintenance than will mown grass areas under trees. Equally, in periods of drought, grass will be cut less frequently. Frequency of fertilization, aeration, topdressing and overseeding, etc. will again depend on the desired use of the space and actual climatic conditions experienced. Sports turf will require a higher level of maintenance, as will amenity areas.

The size of the area is the final factor influencing maintenance requirements. Large areas, free from obstructions can accommodate large, efficient grass cutting machinery. Small areas with mowing obstructions such as lights, signs, benches, trash receptacles and trees will be mown by smaller, slower equipment such as ride-on triples, pedestrian walk-behinds or fly-mows.

Watering of mown areas with irrigation systems, hose bibs, water cannon, etc. could be considered, but sustainability should remain a goal.

Litter pick-up in Grass areas should be once per month from April through October for most grass categories. Special litter pick-up will be required after any special events, which may be held on these areas.

Within the Grass category at Forest Hill Park, there are five categories that are differentiated by the frequency of mowing, the intensity of use and size. These categories are:

- Meadows
- Low maintenance mown grass – large areas
- High maintenance grass – sports use
- High maintenance grass – amenity areas
- High maintenance grass – small areas

Meadows

Meadows will provide a low-key contrast to the other more maintained grass areas of the Park. They will be pleasant areas to walk informally through and could have spectacular floral colors at certain times of year. The idea is to gradually reduce the fertility of the meadow area. Reducing fertility will encourage annual and perennial flowering species at the expense of the ranker grasses. To achieve the best effect the cut would be made in late May/June after the spring flowers have bloomed.

Ideally, this would be a low fertility system with the grass clippings removed. Typically, raking and carting away, baling and carting away, or by blowing the clippings into a trailer using a forage harvester would do this. Clippings should be removed to the city composting area. If it is anticipated that this style of maintenance may cause problems, an alternative approach is simply to mow meadow areas, two times per year; in Spring after spring flowers have bloomed and in late Fall after summer and fall species have bloomed. This process will give a meadow 'feel' to the area, but is unlikely to increase the proportion of flowering plants and may in fact result in their loss. It is important to maintain these areas as a contrast to the mown lawn or low maintenance mown grass if the original intent of the 1938 Taylor Master Plan of views and vistas down through a meadow are the desired goal.

Maintenance operations will be either:

Annually:

- Collect litter prior to each grass cutting. Cut grass once per year.
- Remove cuttings by hand, bale or harvester.
- Collect litter once per month from April through October.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide, if permitted or repeat grubbing and removal until controlled. Remove from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

Or:

- Collect litter prior to each grass cutting. Cut grass two times per year.
- Collect litter once per month from April through October.
- Remove invasive species; grub and remove rhizomes and rootstock; monitor and treat resprouts with herbicide, if permitted, or repeat grubbing and removal until controlled. Remove material from site to city's composting area, but do not mix with other materials. Invasive materials shall be separated and processed separately.

Low Maintenance Grass – Large Areas

Mown low maintenance grass will provide a more manicured look than the meadow, but will also provide pleasant areas to walk through informally. This grassland category also occurs under the

Parkland Category as Trees Over Mown Grass, and has already been described, under Parkland. Essentially it occurs as open areas with limited tree cover, but adjacent to Parkland. These areas receive a low level of maintenance, but have the appearance of a mown grass.

Maintenance operations

Annually:

- Collect litter prior to each grass cutting.
- Mow using tractor mounted flail or ride on triples six (6) to eight (8) times per year
- Collect litter once per month from April through October.

On a 3-Year Cycle:

- Apply fertilizer in spring.
- Apply lime as recommended by soil test to maintain the correct soil pH.
- Re-seed any bare areas in early fall.

High Maintenance Grass – Sports Use

These are specific areas — the ball fields, soccer fields and multi-purpose sports fields in both East Cleveland and Cleveland Heights. Maintenance inputs will be high, reflecting the high level of use the areas will receive. The Updated Master Plan has recommended the installation of turf in the infields. In addition to vegetative maintenance, ballfield infield mix should be rehabilitated each spring. Infield mix material removed during rehabilitation should not be dumped in piles at the Forest, Woodland or Parkland edge creating unsightly piles. The material could be used for fill, but its placement as fill should be determined prior to the rehabilitation effort or it should be removed from the Park.

The bowling greens are also high maintenance turf. The species of grass and the mowing height of the grass to be maintained on the greens will also require special maintenance. Currently this area is maintained by the Lawn Bowling Association. We recommend that this arrangement continue since they are doing a good job and due to the more specialized nature of the care the greens require.

Maintenance operations

- Collect litter (prior to every grass cutting) once per week during April through October. Special litter pick-up will be required after any special sports events held in these areas.
- Mow using tractor drawn reel cutters or similar for eighteen (18) to twenty-six (26) times per year.
- Rake up leaf fall and collect twice per year and deliver to the city's composting area.
- Aerate the turf with a core slicer or similar once per year.
- Re-seed or re-sod any bare areas at the end of the season. Slice seeding should also be considered as the method of reseeding.
- Test soil for pH once per year.
- Apply lime as recommended by soil test to maintain the correct soil pH.
- Apply fertilizer once in spring and once in early fall.
- Apply a top dressing of sand/loam in the fall.

High Maintenance Grass – Amenity Areas

These areas are principally located at the Recreational Pavilion on Mayfield Road. The areas will be cut the same way as sports turf, but as use will be considerably less the level of turf care will be correspondingly lower.

Maintenance operations

Annually:

- Cut using tractor drawn reel cutters or similar eighteen (18) to twenty-six (26) times per year.
- Rake up leaves and collect them once per year.
- Collect litter (prior to every grass cutting) once per month during April through October. Special litter pick-up will be required after any special events, which may be held on these areas.
- Re-seed or re-sod any bare areas in early fall.
- Test soil pH once a year.
- Apply lime as required by soil test to maintain the correct soil pH.
- Apply fertilizer once in spring.
- Aerate the turf as necessary.

High Maintenance Grass – Small Areas

Areas of this category are usually long and thin and are typically found around the streets. At the margins, the difference between this category and Parkland - Trees Over Grass - Narrow Areas, is slight. The intention of this category is to achieve well-maintained grass, but it is very much a feature of the category for the grass to be dotted with occasional trees. Because of the thin obstructions, these areas will be mown by smaller scale equipment.

Maintenance operations

The annual maintenance operations will be identical to large areas of amenity grass, except that the unit costs will be higher as smaller scale less efficient equipment will be used.
Annually:

- Cut, using pedestrian mower, eighteen (18) to twenty-six (26) times per year, depending on grass growth.
- Rake up leaves and collect them once or twice per year; remove from site to city's composting area.
- Collect litter (prior to every grass cutting) once per week during April through October.
- Re-seed or re-sod any bare areas in early fall.
- Test soil pH once a year.
- Apply lime as required by soil test to maintain the correct soil pH.
- Apply fertilizer once in spring.
- Aerate the turf as necessary.

Maintenance of Park Structures

Maintenance Issues were briefly reviewed with staff from both Cleveland Heights and East Cleveland. Cleveland Heights employs a year round maintenance staff. Duties of this staff include other facilities besides those within Forest Hill Park. Operations are headquartered off site. East Cleveland employs seasonal maintenance staff specifically for Forest Hill Park. Operations are headquartered at the maintenance building in the Park.

Having two different maintenance programs for the Park has obvious drawbacks. Each system employed by the cities has its own set of pros and cons. While it may be difficult in terms of expenditures to combine the maintenance programs, it is imperative that there be a common set of standards. A comprehensive plan for ongoing maintenance of Park structures and buildings needs to be developed. A carefully designed system could be implemented by both cities to provide a consistent level of care for the structures. It may be wise to set up a special endowment fund for the maintenance of the historic structures.

The following should be included in a successful Maintenance Plan:

- Inspection Forms - Organized by location, material and item.
- Work Scheduling Forms - A work order system for screening and authorizing job requests. This also controls workload planning, coordination of trades, estimated time allowances.
- Maintenance Cycles - Establishes cycles of inspection as well as maintenance.
- Quantity Survey - For cost estimating, and budget control.
- Maintenance Treatment Specifications - Specific maintenance treatments for all materials.
- Maintenance Records - Kept as both hard and electronic copies.

FOREST HILL PARK

Action Plan

The Dugway Brook (Pressley Associates, 1997)

Updated Master Plan

2001

Setting Priorities

The 1938 Taylor Master Plan not only established the design and uses of Forest Hill Park, it also established guidelines, policies and standards to be followed then and into the future. It is important to return to Taylor's 1938 Master Plan as a basic "blueprint," since it charted the first and subsequent steps in carrying out the development of the Park, which the cities of Cleveland Heights and East Cleveland agreed to implement when signing the deed. Without the 1938 Master Plan, it would have been difficult, if not impossible, to maintain the continuity and consistency over the several years of its development (1938-1950) under Taylor's guidance. Many separate projects were required to complete the As-built Plan.

A plan of action for the implementation of the Forest Hill Park Updated Master Plan must proceed in phases. First phase projects should recognize and correct major issues of physical deterioration and hazards, and consider critical public needs. The later phases should include those landscape projects requiring inter-agency funding and participation.

In setting priorities and phases for implementation of the Updated Master Plan, we should be guided by:

- The obligation to save historical fabric and structures before they are beyond help;
- The obligation to preserve ecological habitats and plant associations;
- The need to rectify obvious dereliction;
- The desire to respond to community preferences if not in conflict with historical or ecological priorities;
- The recognition of ongoing management and maintenance capabilities; and
- The funding sources available.

In other words, not all improvements can be carried out simultaneously or need to happen immediately. Facilities that are currently functioning well will reach the end of their life and will then require repair or rehabilitation; they may even be phased out or redesigned. As an example, active recreation areas tend to require rehabilitation within 15 to 20 years, depending on the quality of maintenance they receive. When active recreation areas reach this point, their design and placement within the Park, and even their continued use, should respond to the 1999 Updated Master Plan.

Criteria for Setting Priorities

The urgent tasks about which there is a consensus of agreement during the master planning process should be initiated first, the next should follow, and the working out and development of mid- to long-term recommendations should be acted upon in a timely manner. With this in mind, we have structured definition of the priorities into three categories – First, Second and Third Priorities, which can be defined as follows:

First Priorities – Issues are classified urgent issues if they are life threatening and need to be corrected within one year and if left uncorrected any one of the following situations are encountered:

- The situation could physically endanger the general public.
- The situation could lead to a permanent loss of important historical fabric if not corrected.
- The situation could lead to the permanent loss of or is life threatening to important ecological fabric.
- The security of the Park is in question, and is judged to lead to accelerated loss of important historic fabric or natural systems
- The funding sources are available.

Second Priorities – An existing condition is classified as requiring immediate attention if it can be delayed for at least ten to fifteen years and if any one of the following situations are encountered:

- The security of the Park is in question, but is not judged to lead to accelerated loss of important historic fabric or natural systems.
- Lack of repair or attention to a particular item would accelerate damage and lead to far more extensive costs.
- The life of the item is not expected to exceed three to five years in its present state.
- Lack of repair or replacement detracted significantly from the Park's appearance.
- Lack of preservation, restoration, or rehabilitation could lead to some loss of historic detail or integrity.
- The current use or design layout is no longer judged appropriate in the Park and a consensus has been reached to redesign the item or to replace it.
- The project needs to be a joint project between the two cities, but this will not cause a delay in its scheduling and funding.
- Funding does not appear to be available sooner.

Third Priorities – Cosmetic repairs or other projects that can be delayed until capital improvement funds or grants are secured are classified in this category:

- The project is cosmetic in nature and does not impact historical fabric.
- The project is cosmetic in nature and does not impact ecological conditions.
- The project needs to be delayed until the successful completion of an earlier project.
- Action can be delayed until the use or facility reaches the end of its life and can be phased out or redesigned in accordance with the Updated Master Plan.
- The project needs to be a joint project between the two cities and this will cause a delay in its scheduling and funding.
- Funding does not appear to be available sooner.

It is, therefore, necessary to prioritize recommendations between higher priorities, including Urgent Action Projects, Immediate Projects and Future Projects that are long-term projects, usually involving either inter-agency coordination, greater study, funding and joint agreements.

Available funding sources will dictate the type of project they will fund and often have time limits on when funds are available and the percentage of matching monies required. Targeting a particular source, or sources, could lead to moving an item to an earlier, or later, priority category.

The Updated Master Plan will provide not only project priorities to define the first and subsequent phases of construction, but will also propose whether areas and/or features should be preserved, rehabilitated, restored and/or reconstructed, or, for that matter, even removed. All of these factors will also affect the cost of insuring the continuation of the integrity of this important A. D. Taylor legacy.

The Updated Master Plan would also like to recommend the following list of short-term projects that the cities can undertake immediately. These include the following:

- Tree pruning and maintenance for diseases and pests.
- Clearing of debris and dumping.
- Stabilization (not restoration) of structures.
- Resurfacing of existing roads and paths in kind.

Prioritization of Construction Phasing

First Priority

- *Security and safety measures*
  - Install steel bar grid over vertical shaft opening of Lower Dugway Valley box culvert.
  - Provide vehicular entrance gates and bollards at all parking lots.
  - Rehabilitate existing comfort stations or provide temporary facilities throughout site; All should be universally accessible.
  - Stabilize stable ruin until final solution (completed 1999).
  - Repair site from impact of Northeast Ohio Regional Sewer District Project.
  - Rehabilitate or construct new fencing.
  - Provide pedestrian access and crosswalks.
  - Repair existing lighting.

- *Ecological*
  - Protect endangered species.
  - Control invasive vegetative material endangering important ecological systems.

- *Historical*
  - Stabilize and protect the Rockefeller Bridge.

- *Erosion and drainage*
  - Reconstruct 72" box culvert and horseshoe arch culvert in Upper Dugway Valley (Completed December 2000).
  - Reconstruct drainage system in Cleveland Heights Recreational Area.
  - Correct erosion at storm water outlets in Dugway Valley.
  - Repair stream erosion in Lower Dugway Valley.
  - Clean and line lake outlet channel below the stone stepped spillway.
  - Clean trash racks and stabilize and revegetate banks.
  - Repair headwalls of culverts.
  - Construct drainage systems in parking lots with no systems.

- *Maintenance*
  - Improve level of existing maintenance; prune vegetation for public safety.
  - Clean-up remaining debris areas.

Second Priority

- *Restoration, rehabilitation, and new construction*
  - Restore historic structures, artifacts or ruins within historical guidelines.
  - Restore Forest Hill Blvd. Footbridge.
  - Restore retaining walls along Forest Hill Blvd.
  - Restore stacked stone and brick walls along Dugway Brook.
  - Restore the Great Meadow pedestrian entrance piers and other historic entry piers.
  - Restore historic plantings as part of project.
  - Rehabilitate modern era buildings and structures.
  - Rehabilitate and reconstruct parking lots and their drainage systems.
  - Complete restoration of the Rockefeller Bridge.
  - Rehabilitate existing path systems.
  - Construct new pedestrian entrances and corresponding paths (two at Forest Hill Blvd. and one at Terrace and Superior Roads).
  - Develop a coordinated signage system including trail markers and directional signage.
  - Develop coordinated site furnishings.
  - Develop a coordinated perimeter control system for the Park to include fencing, low walls, vehicular entry gates and pedestrian entries.

- Provide bikeway system.
-

Third Priority

- *Replacement, construction, and minor restoration*
  - Replace four fields and field house in Cleveland Heights with three fields and new concession/restroom facility.
  - Reorient East Cleveland softball field.
  - Construct new track, ball fields, and batting cage in East Cleveland; rehabilitate existing athletic facilities.
  - Reconfigure island in lake.

Suggested Further Actions or Studies

- Initiate, as a matter of the highest urgency, a comprehensive drainage and erosion control plan.
- Develop uniform park policies, regulations, and standards to guide maintenance and management decisions.
- Develop new park programs for historic facilities and rehabilitating these facilities to accommodate such activities.
- Introduce signage system marking the nature trails.
- Integrate historic landscape and ecological concerns into future projects and reach conclusions about the best technical solutions consistent with park values.
- Conduct an outreach program for corporate support and private donations for the restoration and maintenance of the Park.
- Develop a vocabulary of historically sensitive park furnishings and signage.
- Undertake traffic studies in support of the bikeway system recommended.
- Complete interim at-grade improvements for better linkages between and access to the Park.
- Conduct the necessary feasibility studies to achieve the major long range goal of reclaiming the Dugway Brook.

Plans and Cost Estimates

The Updated Master Plan divides Forest Hill Park into treatment recommendation zones, shown below with summary cost estimate information:

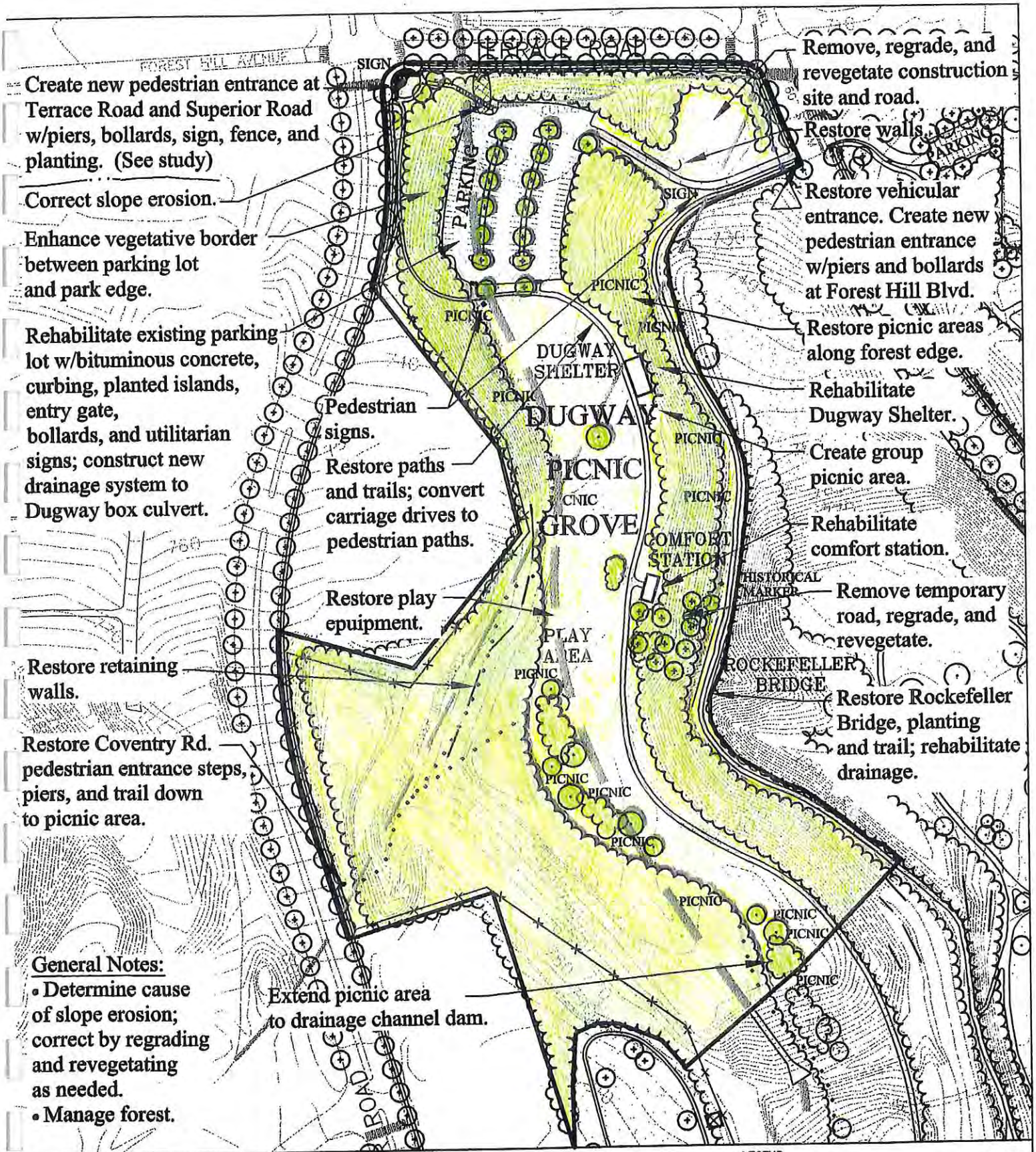
Zone 1	Dugway Picnic Grove – East Cleveland	$1,367,611.30
Zone 2	Lower Dugway Valley – East Cleveland	$901,490.30
Zone 2	Alternate Lower Dugway Valley – East Cleveland	$1,342,000.00
Zone 3	Upper Dugway Valley – Cleveland Heights	$1,166,873.40
Zone 3	Alternate Upper Dugway Valley – Cleveland Heights	$224,400.00
Zone 4	Superior Road Overlook – East Cleveland	$220,293.70
Zone 5	Superior Road Play Area – East Cleveland	$804,983.30
Zone 6	Community Facility Areas – Cleveland Heights	In Construction
Zone 7	Great Meadow – East Cleveland	$371,135.60
Zone 8	Recreational Area – Cleveland Heights	$3,127,315.40
Zone 9	Bowling Green Area – East Cleveland	$697,320.80
Zone 10	Meadow Vista – East Cleveland	$637,329.00
Zone 11	Boathouse and Lake Area – East Cleveland	$1,216,067.60
Zone 11	Alternate Boathouse and Lake Area – East Cleveland	Not estimated
Zone 12	Recreational Area – East Cleveland	$4,519,321.40
Perimeter	Both	$5,648,850.90

The proposed projects delineated in the Updated Master Plan Zone Plans are conceptual and so their scope of work and estimates of construction costs are conceptual as well. A cost estimate is not included for Zone 6, the Community Facility Area, since the project was in the design phase in 1999 and was to begin construction in late 1999 or 2000. A cost estimate is not included for the Alternate Option Study for Zone 11. The removal of the island in the lake and construction of a new island with bridge crossing, as shown on the A. D. Taylor Plan, was proposed. However, neither the construction documents nor final as-built design during Taylor's period included a bridge or an island in the lake.

The scope of work and costs for each zone will require refinement during programming and design development as individual projects are defined and funded. A 10% contingency has been included for unknown conditions and the estimates assume the work will be contracted out through the public bid process. The estimated construction costs are based on 1999 bid pricing and are exclusive of administration costs or professional design fees.

ZONE ONE - Dugway Picnic Area

A.	Demolition & Site Preparation		$25,836.00
B.	Paving & Curbing		$336,329.00
	Pedestrian Circulation	$148,713.00	
	Vehicular Circulation and Parking	$187,616.00	
C.	Site Furniture & Amenities		$86,050.00
D.	Buildings & Structures		$438,600.00
E.	Recreational Facilities		$82,000.00
F.	Grading		$104,800.00
G.	Drainage		$20,000.00
H.	Lawns & Planting		$149,668.00
	SUB-TOTAL		$1,243,283.00
	Contingency (10%)		$124,328.30
TOTAL			**$1,367,611.30**



General Notes:

- Determine cause of slope erosion; correct by regrading and revegetating as needed.
- Manage forest.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Dugway Picnic Grove - Zone One (1) Z-1

Legend

Zone Boundary Line; Concrete Box Culvert; Perimeter Fencing; Vehicular Gate; Crosswalk; Bollard; Steps; Slope Erosion

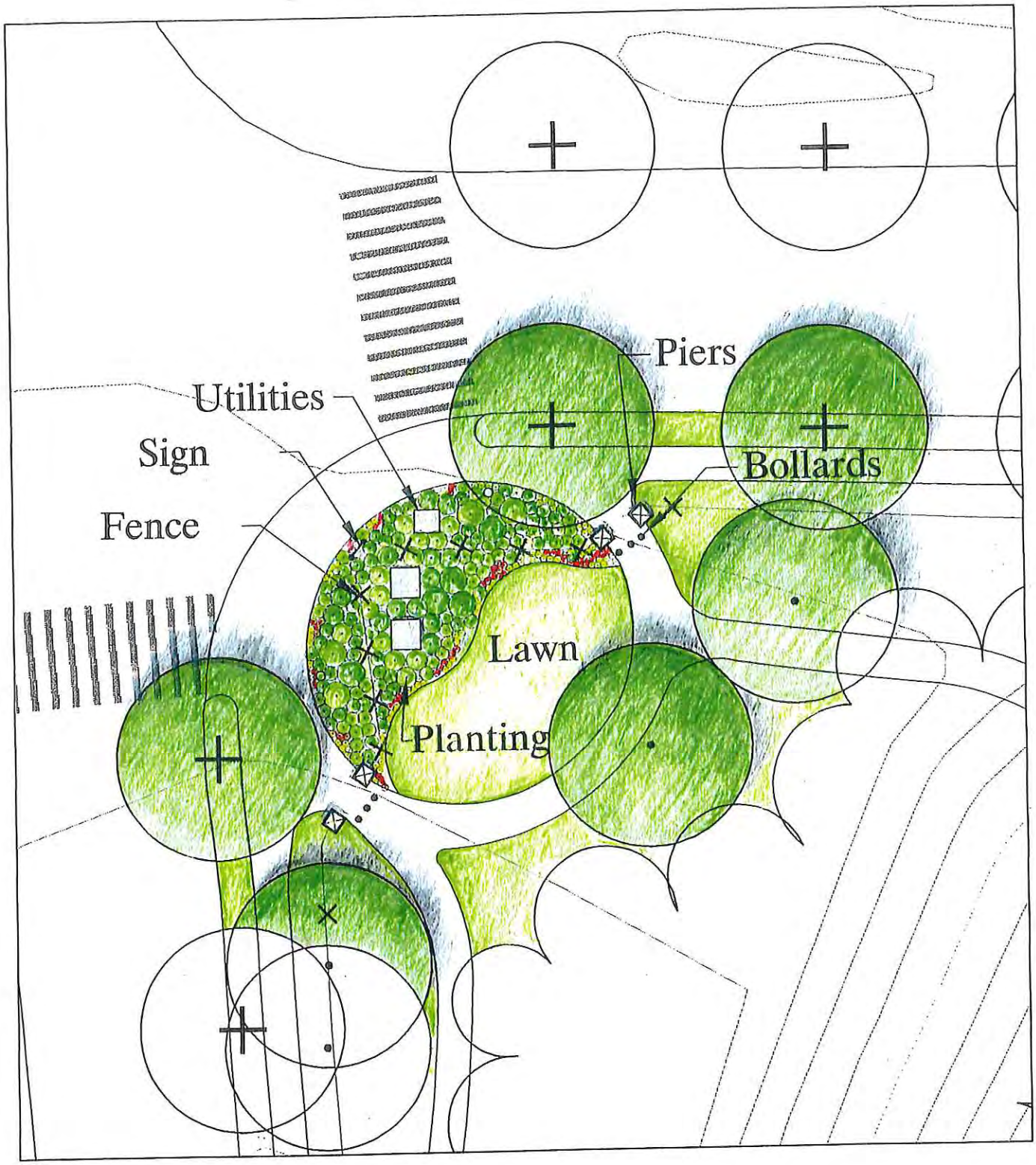
Pressley

Scale: 1" = 200'
6 August 1999

LEGEND

WOODLAND EDGE		WATER	
TREES		PICNIC SHELTER	
PEDESTRIAN PATHWAY		REST ROOM OR CONCESSION FACILITY	
VEHICULAR DRIVE		BOLLARDS	
NATURE TRAILS/ DESIRE LINES		VEHICULAR GATE	
RECREATIONAL AREAS		PERIMETER FENCING	
WALL		FENCE	
CULVERT			
LIGHT			
ATHLETIC LIGHT TOWER			

Z-1



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Dugway Picnic Area Entrance

Legend

- Perimeter Fencing
- Bollard
- Bench
- Stone Pier
- Sign

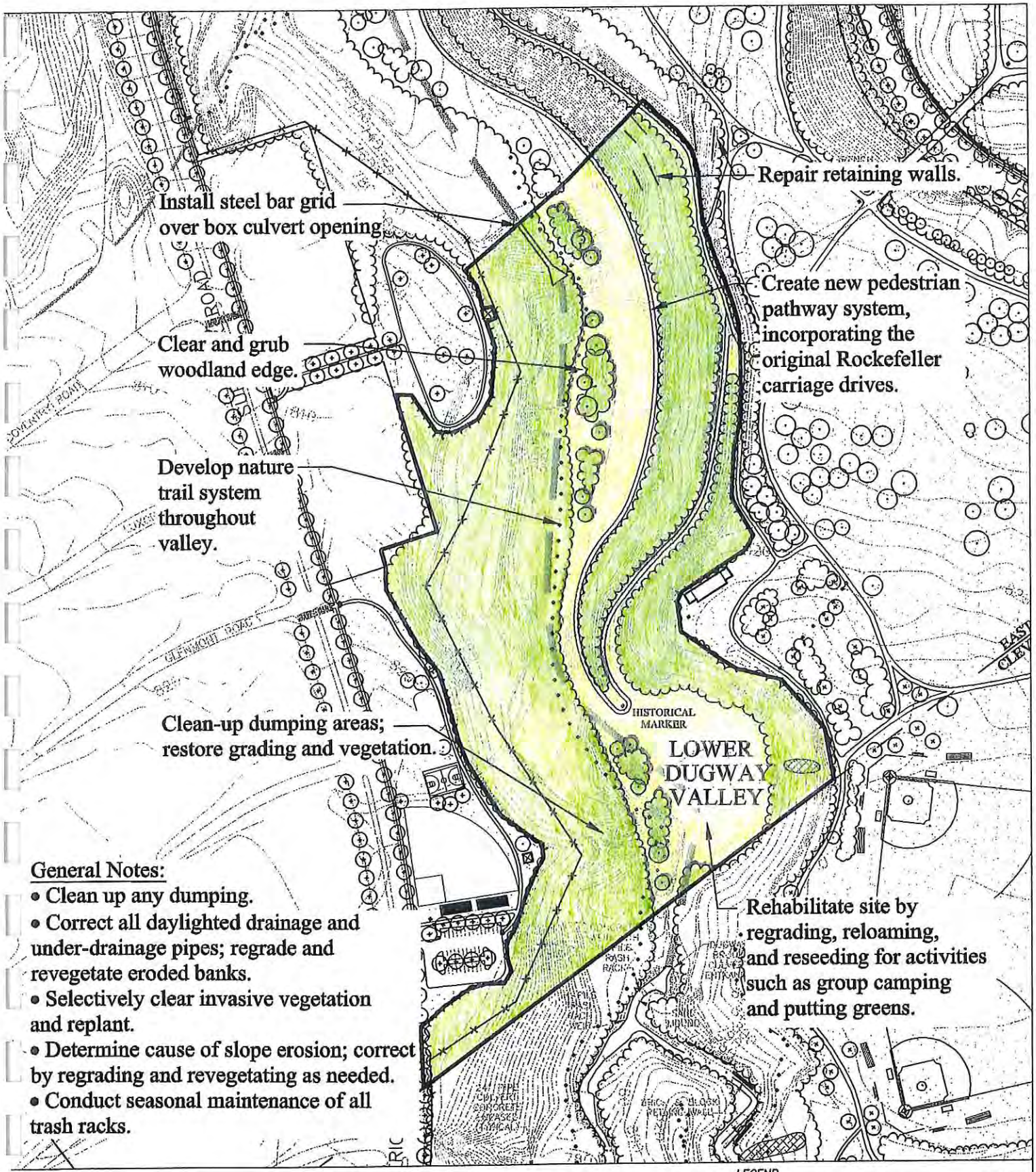
Pressley Associates, Inc.

Scale: 1" = 20'
4 November 1998

LEGEND					
WOODLAND EDGE			WATER		
TREES			PICNIC SHELTER		
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		
WALL			FENCE		
CULVERT					
LIGHT					
ATHLETIC LIGHT TOWER					

ZONE TWO - Lower Dugway Valley

A.	Demolition & Site Preparation		$39,050.00
B.	Paving & Curbing		$80,525.00
	Pedestrian Circulation	$80,525.00	
	Vehicular Circulation and Parking	$0.00	
C.	Site Furniture & Amenities		$2,000.00
D.	Buildings & Structures		$0.00
E.	Recreational Facilities		$0.00
F.	Grading		$504,438.00
G.	Drainage		$50,000.00
H.	Lawns & Planting		$143,450.00
	SUB-TOTAL		$819,463.00
	Contingency (10%)		$81,946.30
TOTAL			**$901,409.30**



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Lower Dugway Valley - Zone Two (2) Z-2

Legend

Zone Boundary Line | Perimeter Fencing | Crosswalk | Steps
Concrete Box Culvert | Vehicular Gate | Bollard | Slope Erosion

Pressley

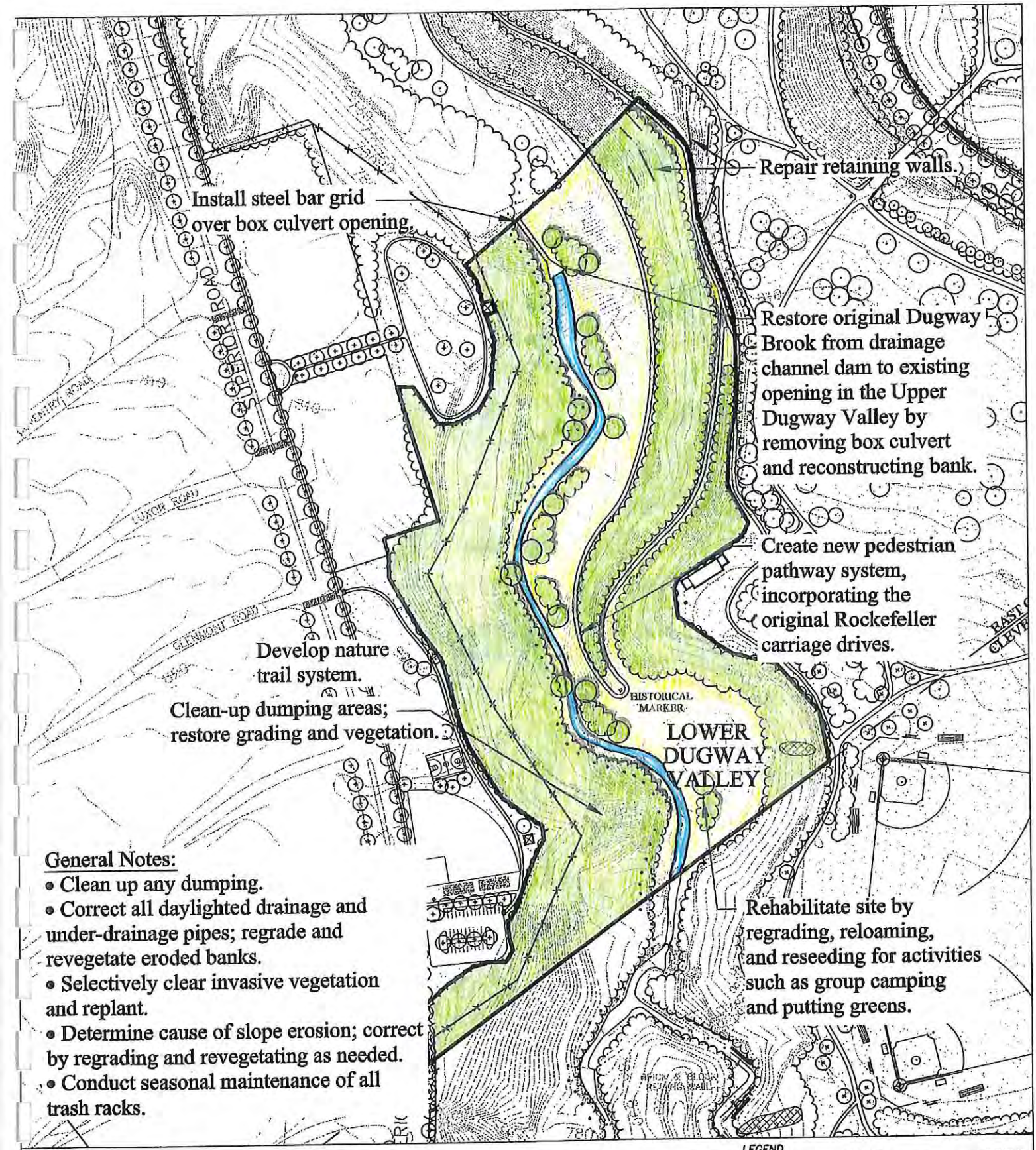
Scale: 1" = 250'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		▯
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		⊷
RECREATIONAL AREAS			PERIMETER FENCING		⊣⊢
WALL			FENCE	⊷	
CULVERT					
LIGHT	•				
ATHLETIC LIGHT TOWER	⊷				

Z-2

ZONE TWO ALTERNATE - Lower Dugway Valley

Demolition of Culvert and Restoration of Dugway Brook	$1,220,000.00
Continency (10%)	$122,000.00
TOTAL	$1,342,000.00



General Notes:

- Clean up any dumping.
- Correct all daylighted drainage and under-drainage pipes; regrade and revegetate eroded banks.
- Selectively clear invasive vegetation and replant.
- Determine cause of slope erosion; correct by regrading and revegetating as needed.
- Conduct seasonal maintenance of all trash racks.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Lower Dugway Valley - Zone Two (2) Alternate Solution Z-2

Legend

- Zone Boundary Line
- Concrete Box Culvert
- Perimeter Fencing
- Vehicular Gate
- Crosswalk
- Bollard
- Steps
- Slope Erosion

Pressley

Scale: 1" = 250'
6 August 1999

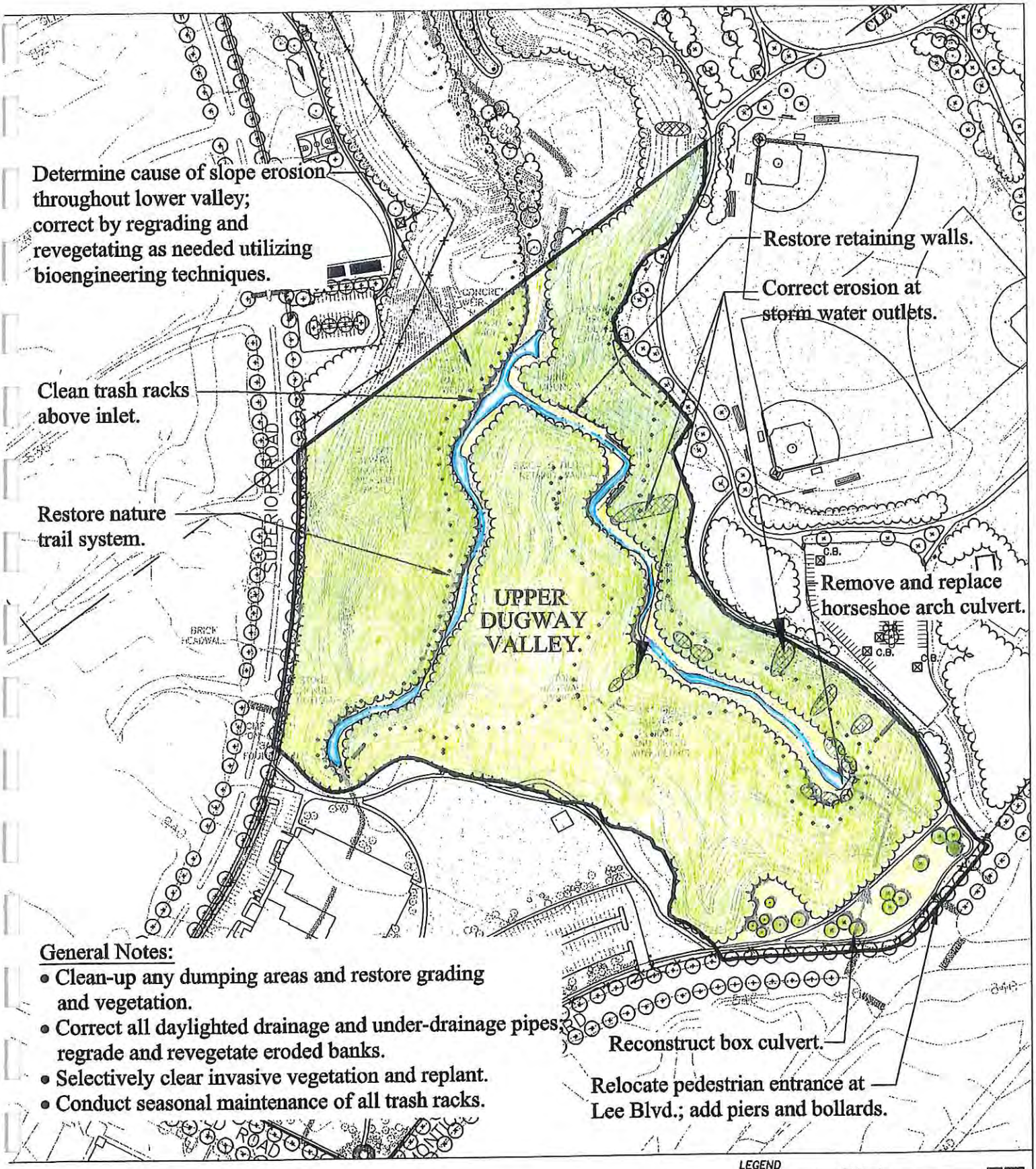
LEGEND

WOODLAND EDGE			WATER		
TREES	⊙	⊛	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		
WALL			FENCE		
CULVERT					
LIGHT	*				
ATHLETIC LIGHT TOWER					

Z-2 Alt.

ZONE THREE - Upper Dugway Valley

A.	Demolition & Site Preparation		$39,875.00
B.	Paving & Curbing		$41,700.00
	Pedestrian Circulation	$41,700.00	
	Vehicular Circulation and Parking	$0.00	
C.	Site Furniture & Amenities		$4,750.00
D.	Buildings & Structures		$28,000.00
E.	Recreational Facilities		$0.00
F.	Grading		$504,439.00
G.	Drainage		$156,600.00
H.	Lawns & Planting		$285,430.00
	SUB-TOTAL		$1,060,794.00
	Contingency (10%)		$106,079.40
BASE TOTAL			**$1,166,873.40**
ADD ALTERNATE:	Demolition of Culvert and Restoration of Dugway Brook		$204,000.00
	Contingency (10%)		$20,400.00
ALTERNATE TOTAL			**$224,400.00**
TOTAL INCLUDING ALTERNATE			**$1,391,273.40**



General Notes:

- Clean-up any dumping areas and restore grading and vegetation.
- Correct all daylighted drainage and under-drainage pipes; regrade and revegetate eroded banks.
- Selectively clear invasive vegetation and replant.
- Conduct seasonal maintenance of all trash racks.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Upper Dugway Valley - Zone Three (3) Z-3

Legend

Zone Boundary Line; Perimeter Fencing; Crosswalk; Steps

Concrete Box Culvert; Vehicular Gate; Bollard; Slope Erosion

Pressley

Scale: 1" = 250'
6 August 1999

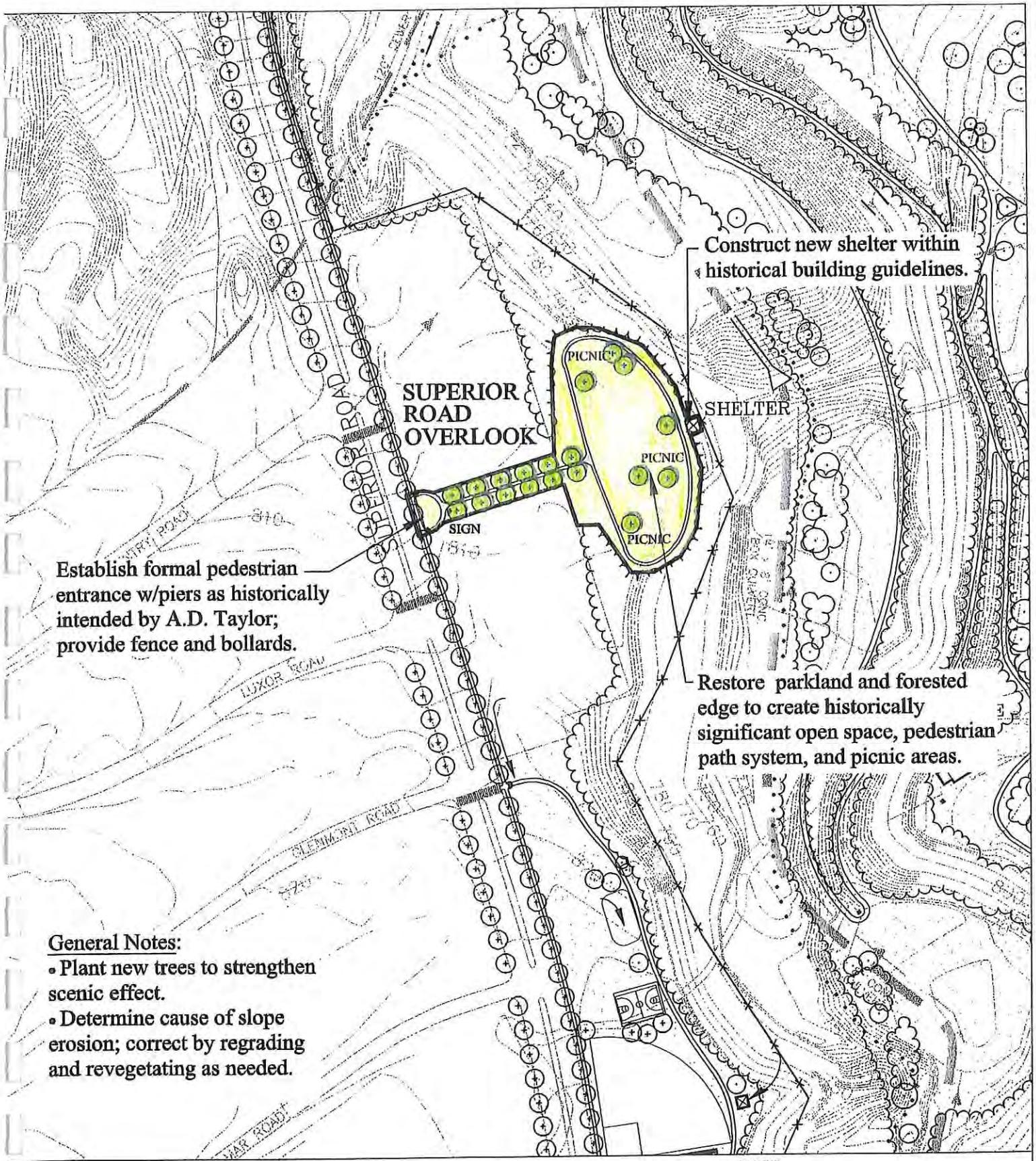
LEGEND

WOODLAND EDGE		WATER	
TREES	PICNIC SHELTER		
PEDESTRIAN PATHWAY		REST ROOM OR CONCESSION FACILITY	
VEHICULAR DRIVE		BOLLARDS	
NATURE TRAILS/ DESIRE LINES		VEHICULAR GATE	
RECREATIONAL AREAS		PERIMETER FENCING	
WALL		FENCE	
CULVERT			
LIGHT			
ATHLETIC LIGHT TOWER			

Z-3

ZONE FOUR - Superior Road Overlook

A.	Demolition & Site Preparation		$8,899.00
B.	Paving & Curbing		$19,554.00
	Pedestrian Circulation	$19,554.00	
	Vehicular Circulation and Parking	$0.00	
C.	Site Furniture & Amenities		$15,500.00
D.	Buildings & Structures		$100,000.00
E.	Recreational Facilities		$0.00
F.	Grading (Allowance)		$6,000.00
G.	Drainage		$0.00
H.	Lawns & Planting		$56,314.00
	SUB-TOTAL		$206,267.00
	Contingency (10%)		$20,626.70
TOTAL			**$226,893.70**



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Superior Road Overlook - Zone Four (4) Z-4

Legend

Zone Boundary Line | Perimeter Fencing | Crosswalk | Steps
Concrete Box Culvert | Vehicular Gate | Bollard | Slope Erosion

Pressley

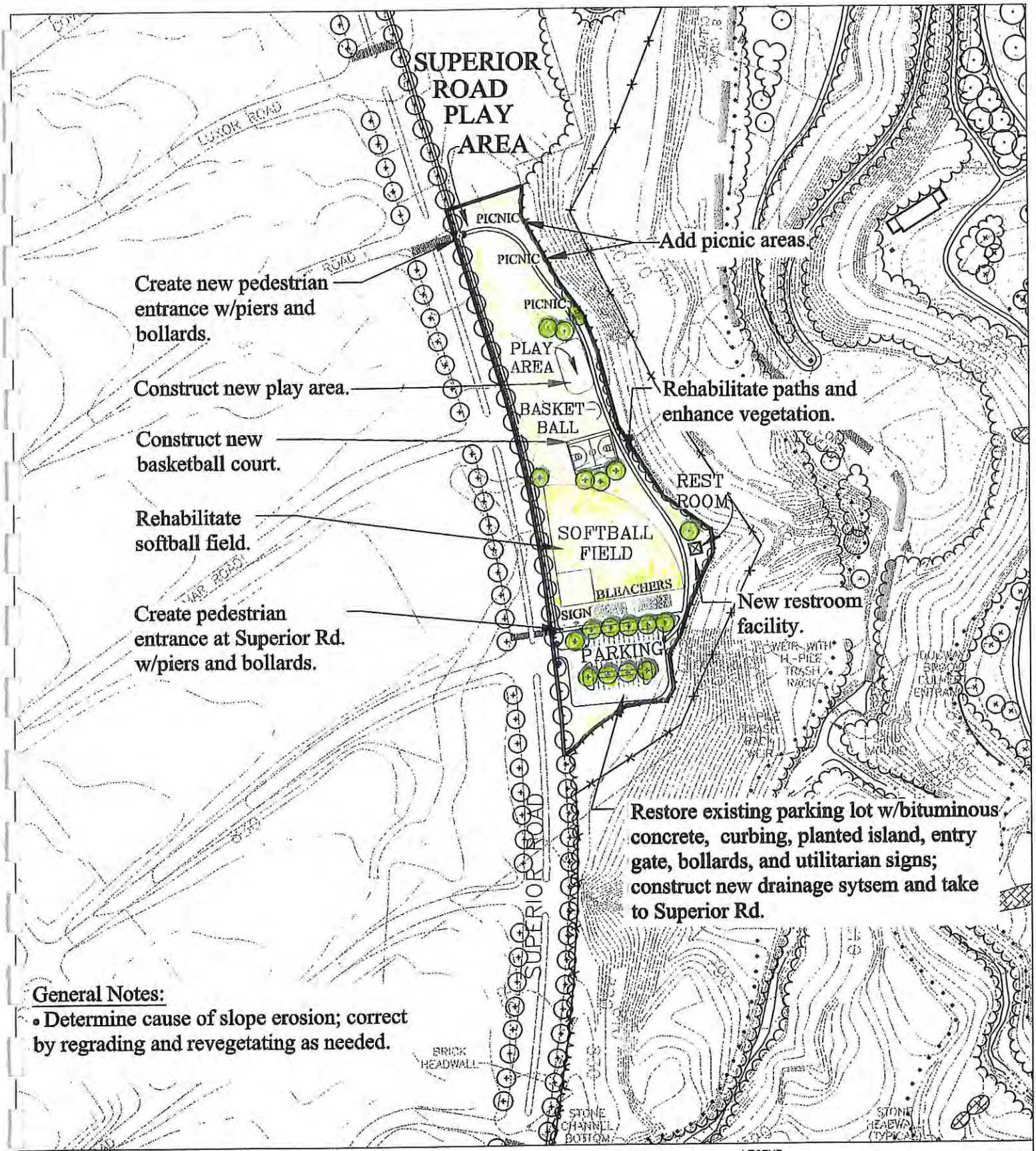
Scale: 1" = 200'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		⟷
RECREATIONAL AREAS			PERIMETER FENCING		⊢⊣
WALL			FENCE	⊷	
CULVERT					
LIGHT	*				
ATHLETIC LIGHT TOWER	⊷				

Z-4

ZONE FIVE - Superior Road Play Area

A.	Demolition & Site Preparation		$16,711.00
B.	Paving & Curbing		$107,292.00
	Pedestrian Circulation	$22,510.00	
	Vehicular Circulation and Parking	$84,782.00	
C.	Site Furniture & Amenities		$22,550.00
D.	Buildings & Structures		$182,000.00
E.	Recreational Facilities		$332,000.00
F.	Grading (Allowance)		$20,000.00
G.	Drainage		$10,000.00
H.	Lawns & Planting		$61,250.00
SUB-TOTAL			$751,803.00
Contingency (10%)			$75,180.30
TOTAL			**$826,983.30**



General Notes:

- Determine cause of slope erosion; correct by regrading and revegetating as needed.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Superior Road Play Area - Zone Five (5) Z-5

Legend

Zone Boundary Line | Perimeter Fencing | Crosswalk | Steps
Concrete Box Culvert | Vehicular Gate | Bollard | Slope Erosion

Pressley

Scale: 1" = 200'
6 August 1999

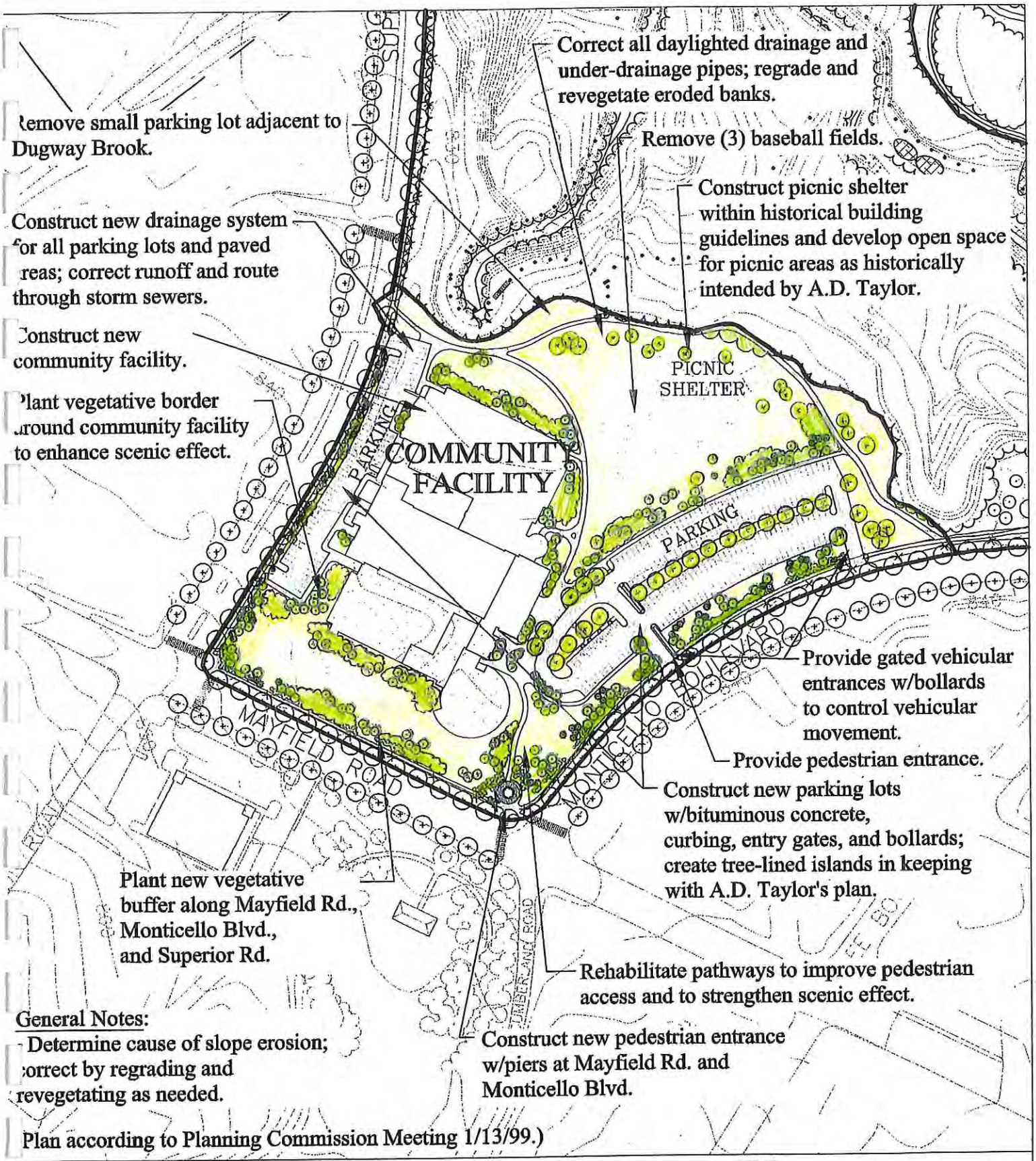
LEGEND

WOODLAND EDGE		WATER	
TREES	PICNIC SHELTER		
PEDESTRIAN PATHWAY	REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE	BOLLARDS		
NATURE TRAILS/ DESIRE LINES	VEHICULAR GATE		
RECREATIONAL AREAS	PERIMETER FENCING		
WALL	FENCE		
CULVERT			
LIGHT			
ATHLETIC LIGHT TOWER			

Z-5

ZONE SIX – Community Facility Area

A cost estimate is not included for Zone 6 because the project was in the design phase in 1999. It is currently in construction.



General Notes:

- Determine cause of slope erosion; correct by regrading and revegetating as needed.

Plan according to Planning Commission Meeting 1/13/99.)

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Community Facility Area - Zone Six (6) Z-6

Legend

Zone Boundary Line | Perimeter Fencing | Crosswalk | Steps
Concrete Box Culvert | Vehicular Gate | Bollard | Slope Erosion

LEGEND

WOODLAND EDGE		WATER	
TREES	PICNIC SHELTER		
PEDESTRIAN PATHWAY	REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE	BOLLARDS		
NATURE TRAILS/ DESIRE LINES	VEHICULAR GATE		
RECREATIONAL AREAS	PERIMETER FENCING		
WALL	FENCE		
CULVERT			
LIGHT			
ATHLETIC LIGHT TOWER			

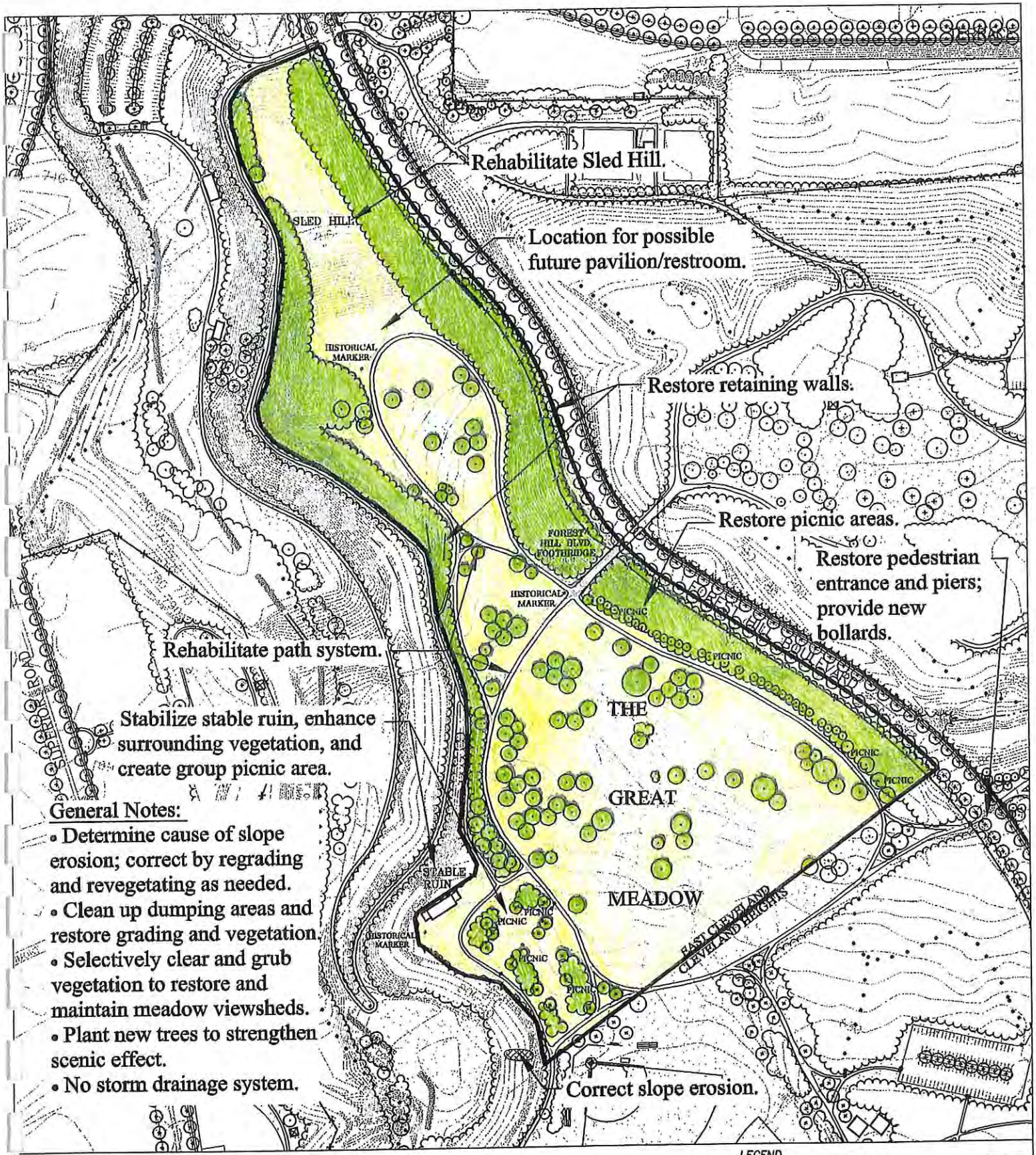
Pressley

Scale: 1" = 200'
6 August 1999

Z-6

ZONE SEVEN - Great Meadow

A.	Demolition & Site Preparation		$49,668.00
B.	Paving & Curbing		$67,320.00
	Pedestrian Circulation	$67,320.00	
	Vehicular Circulation and Parking	$0.00	
C.	Site Furniture & Amenities		$27,800.00
D.	Buildings & Structures		$31,800.00
E.	Recreational Facilities		$0.00
F.	Grading		$77,801.00
G.	Drainage		$0.00
H.	Lawns & Planting		$83,007.00
SUB-TOTAL			$337,396.00
Contingency (10%)			$33,739.60
TOTAL			**$371,135.60**



General Notes:

- Determine cause of slope erosion; correct by regrading and revegetating as needed.
- Clean up dumping areas and restore grading and vegetation.
- Selectively clear and grub vegetation to restore and maintain meadow viewsheds.
- Plant new trees to strengthen scenic effect.
- No storm drainage system.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Great Meadow - Zone Seven (7) Z-7

Legend

- Zone Boundary Line
- Concrete Box Culvert
- Perimeter Fencing
- Vehicular Gate
- Crosswalk
- Bollard
- Steps
- Slope Erosion

Pressley

Scale: 1" = 300'
6 August 1999

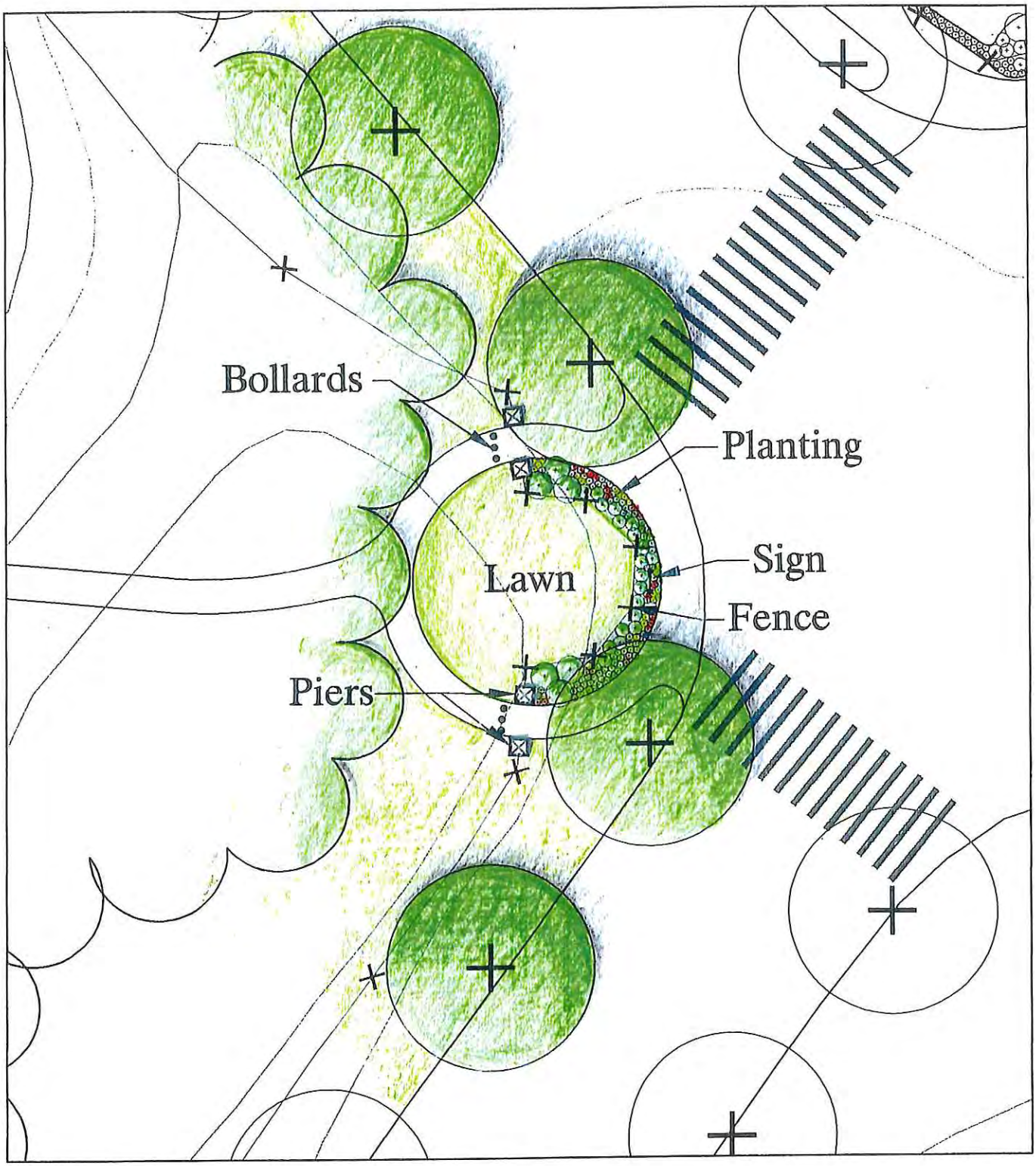
LEGEND

WOODLAND EDGE			WATER		
TREES	⊙	⊛	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		⟷
RECREATIONAL AREAS			PERIMETER FENCING		⟷
WALL			FENCE	⟷	
CULVERT					
LIGHT	*				
ATHLETIC LIGHT TOWER	⟷				

Z-7

ZONE EIGHT - Cleveland Heights Recreational Area

A.	Demolition & Site Preparation		$93,622.00
B.	Paving & Curbing		$411,589.00
	Pedestrian Circulation	$266,694.00	
	Vehicular Circulation and Parking	$144,895.00	
C.	Site Furniture & Amenities		$40,850.00
D.	Buildings & Structures		$405,120.00
E.	Recreational Facilities		$802,800.00
F.	Grading		$81,360.00
G.	Drainage		$10,000.00
H.	Lawns & Planting		$997,673.00
	SUB-TOTAL		$2,843,014.00
	Contingency (10%)		$284,301.40
TOTAL			**$3,127,315.40**



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Cleveland Heights Recreational Area Entrance

Legend

- Perimeter Fencing
- Bollard
- Bench
- Stone Pier
- Sign

Pressley

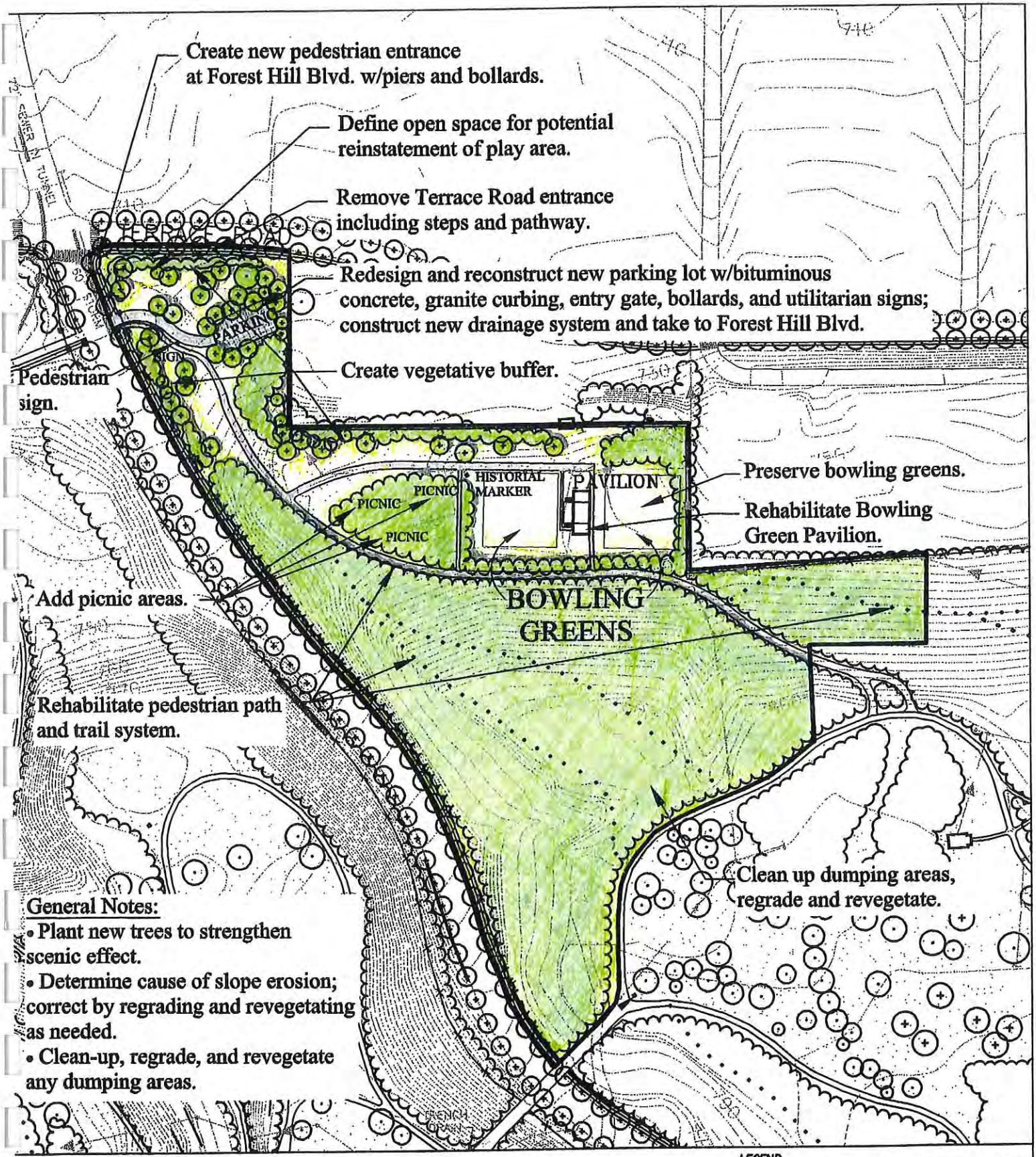
Scale: 1" = 20'
17 November 1998

LEGEND

WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		
WALL			FENCE		
CULVERT					
LIGHT	•				
ATHLETIC LIGHT TOWER					

ZONE NINE - Bowling Green Area

A.	Demolition & Site Preparation		$167,988.00
B.	Paving & Curbing		$61,280.00
	Pedestrian Circulation	$29,966.00	
	Vehicular Circulation and Parking	$31,314.00	
C.	Site Furniture & Amenities		$25,650.00
D.	Buildings & Structures		$138,000.00
E.	Recreational Facilities		$0.00
F.	Grading		$65,560.00
G.	Drainage		$5,000.00
H.	Lawns & Planting		$170,450.00
	SUB-TOTAL		$633,928.00
	Contingency (10%)		$63,392.80
TOTAL			**$697,320.80**



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Bowling Green Area - Zone Nine (9) Z-9

Legend

Zone Boundary Line · Perimeter Fencing · Crosswalk · Steps

Concrete Box Culvert · Vehicular Gate · Bollard · Slope Erosion

Pressley

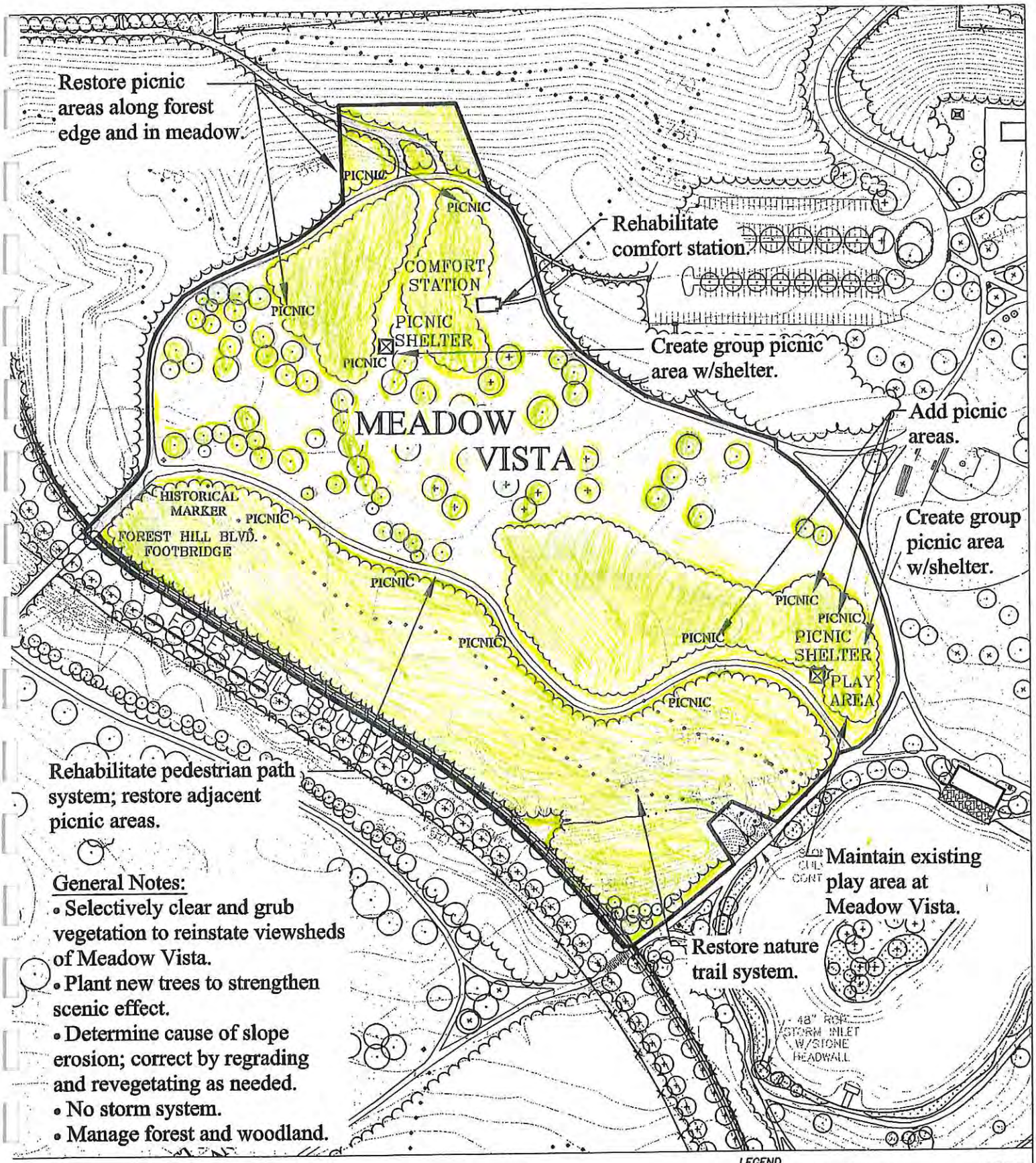
Scale: 1" = 200'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES		⊙	PICNIC SHELTER		
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		
WALL			FENCE		
CULVERT					
LIGHT					
ATHLETIC LIGHT TOWER					

Z-9

ZONE TEN - Meadow Vista

A.	Demolition & Site Preparation		$36,725.00
B.	Paving & Curbing		$31,215.00
	Pedestrian Circulation	$31,215.00	
C.	Site Furniture & Amenities		$51,400.00
D.	Buildings & Structures		$332,000.00
E.	Recreational Facilities		$82,000.00
F.	Grading		$0.00
G.	Drainage		$0.00
H.	Lawns & Planting		$46,050.00
	SUB-TOTAL		$579,390.00
	Contingency (10%)		$57,939.00
TOTAL			**$637,329.00**



General Notes:

- Selectively clear and grub vegetation to reinstate viewsheds of Meadow Vista.
- Plant new trees to strengthen scenic effect.
- Determine cause of slope erosion; correct by regrading and revegetating as needed.
- No storm system.
- Manage forest and woodland.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Meadow Vista - Zone Ten (10) Z-10

Legend

Zone Boundary Line · Perimeter Fencing · Crosswalk · Steps
Concrete Box Culvert · Vehicular Gate · Bollard · Slope Erosion

Pressley

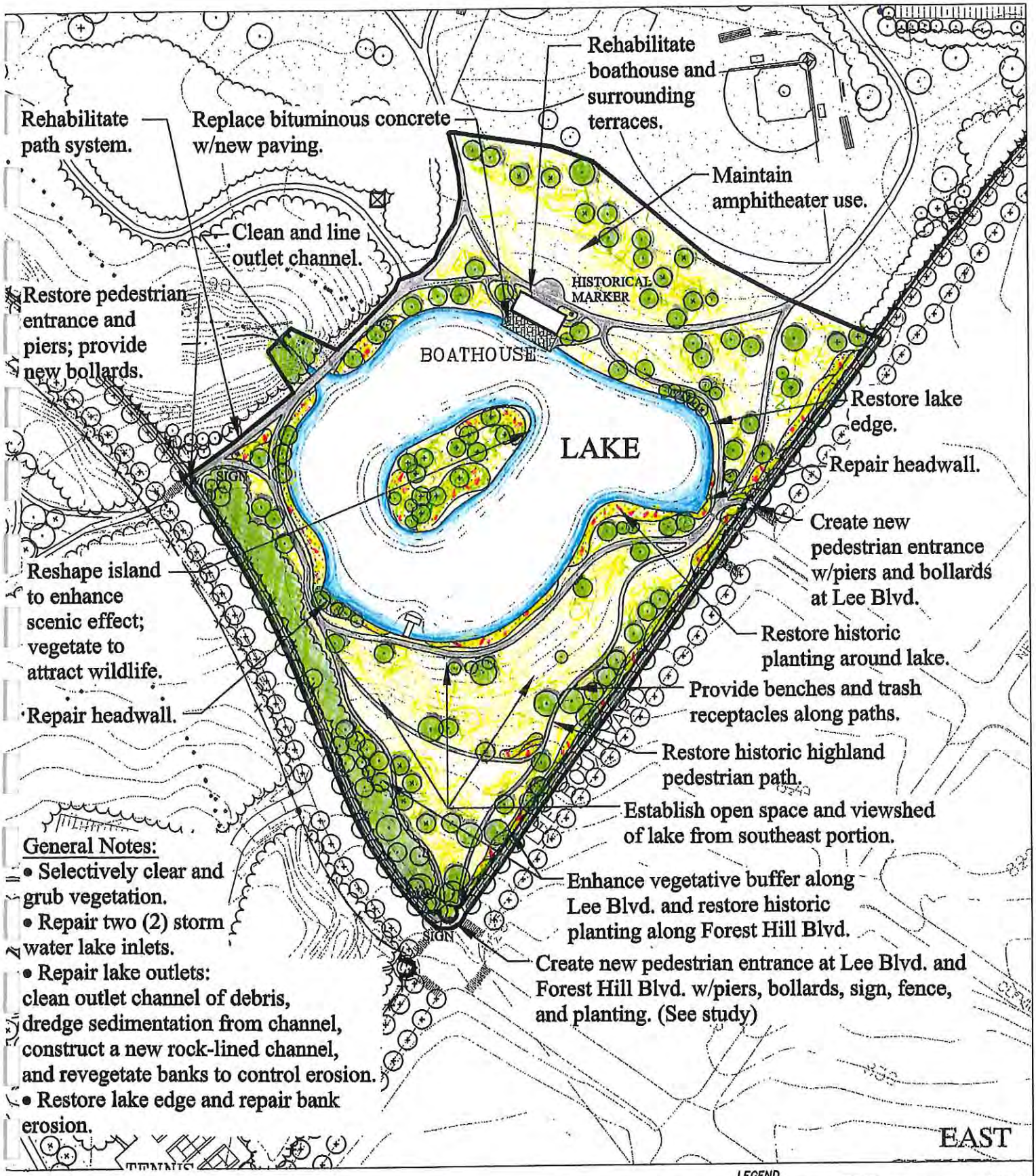
Scale: 1" = 200'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		+++
WALL			FENCE		
CULVERT					
LIGHT	*				
ATHLETIC LIGHT TOWER					

Z-10

ZONE ELEVEN - Boathouse and Lake Area

A.	Demolition & Site Preparation		$12,100.00
B.	Paving & Curbing		$138,553.00
	Pedestrian Circulation	$62,841.00	
	Boathouse Unit Pavers	$75,712.00	
C.	Site Furniture & Amenities		$34,200.00
D.	Buildings & Structures		$381,700.00
E.	Recreational Facilities		$0.00
F.	Grading		$66,120.00
G.	Drainage		$9,500.00
H.	Lawns & Planting		$463,343.00
	SUB-TOTAL		$1,105,516.00
	Contingency (10%)		$110,551.60
TOTAL			**$1,216,067.60**



General Notes:

- Selectively clear and grub vegetation.
- Repair two (2) storm water lake inlets.
- Repair lake outlets: clean outlet channel of debris, dredge sedimentation from channel, construct a new rock-lined channel, and revegetate banks to control erosion.
- Restore lake edge and repair bank erosion.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Boathouse and Lake Area - Zone Eleven (11) Z-11

Legend

Zone Boundary Line | Perimeter Fencing | Crosswalk | Steps
Concrete Box Culvert | Vehicular Gate | Bollard | Slope Erosion

Pressley Associates, Inc.

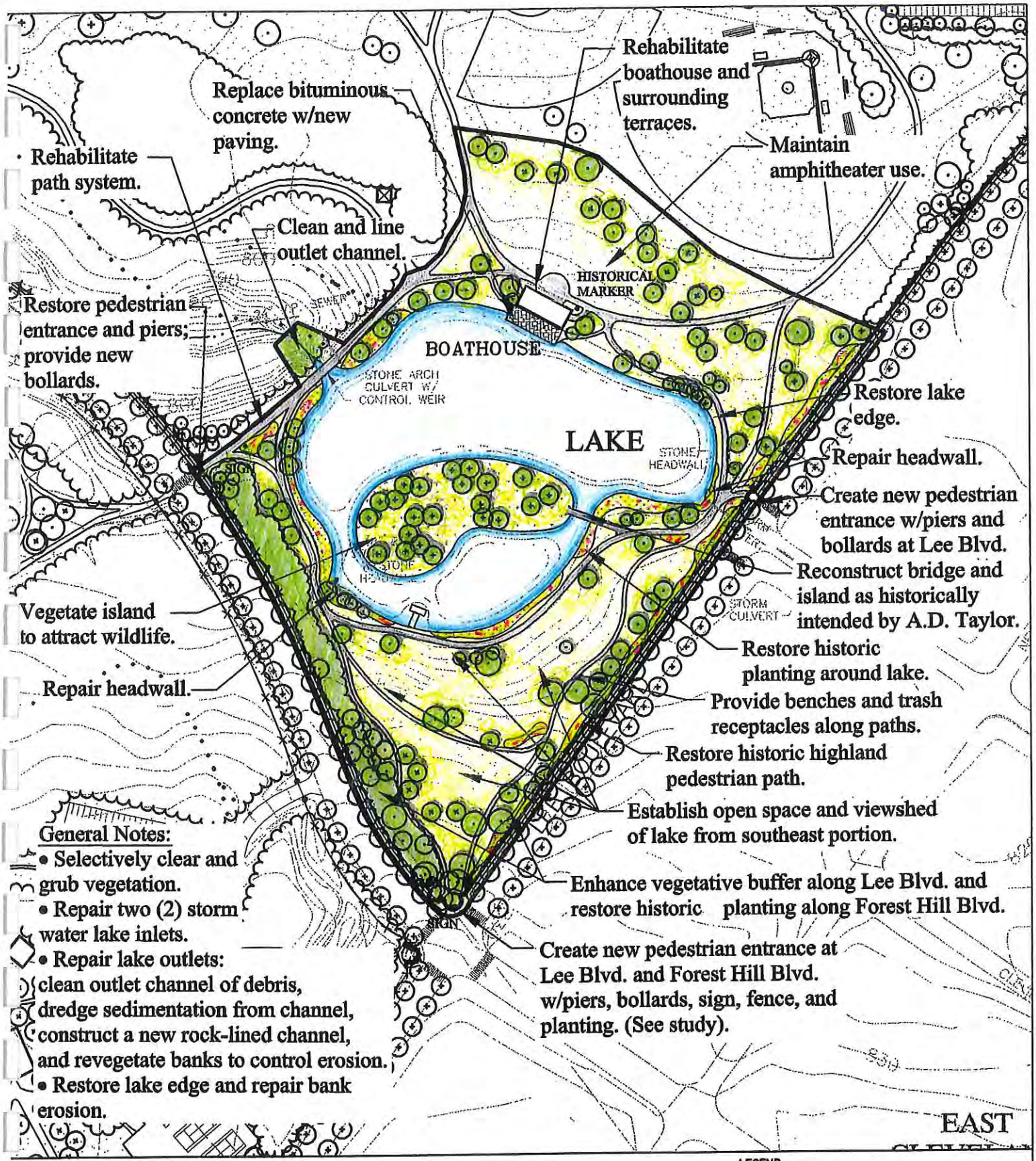
Scale: 1" = 200'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		
RECREATIONAL AREAS			PERIMETER FENCING		
WALL			FENCE		
CULVERT					
LIGHT	*				
ATHLETIC LIGHT TOWER					

Z-11

ZONE ELEVEN ALTERNATE – Boathouse and Lake Area

A cost estimate is not included for this option. Neither the construction documents nor final as-built design during Taylor's period included a bridge or an island in the lake.



General Notes:

- Selectively clear and grub vegetation.
- Repair two (2) storm water lake inlets.
- Repair lake outlets: clean outlet channel of debris, dredge sedimentation from channel, construct a new rock-lined channel, and revegetate banks to control erosion.
- Restore lake edge and repair bank erosion.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Boathouse and Lake Area, A.D. Taylor Island - Zone Eleven (11) Z-11

Legend

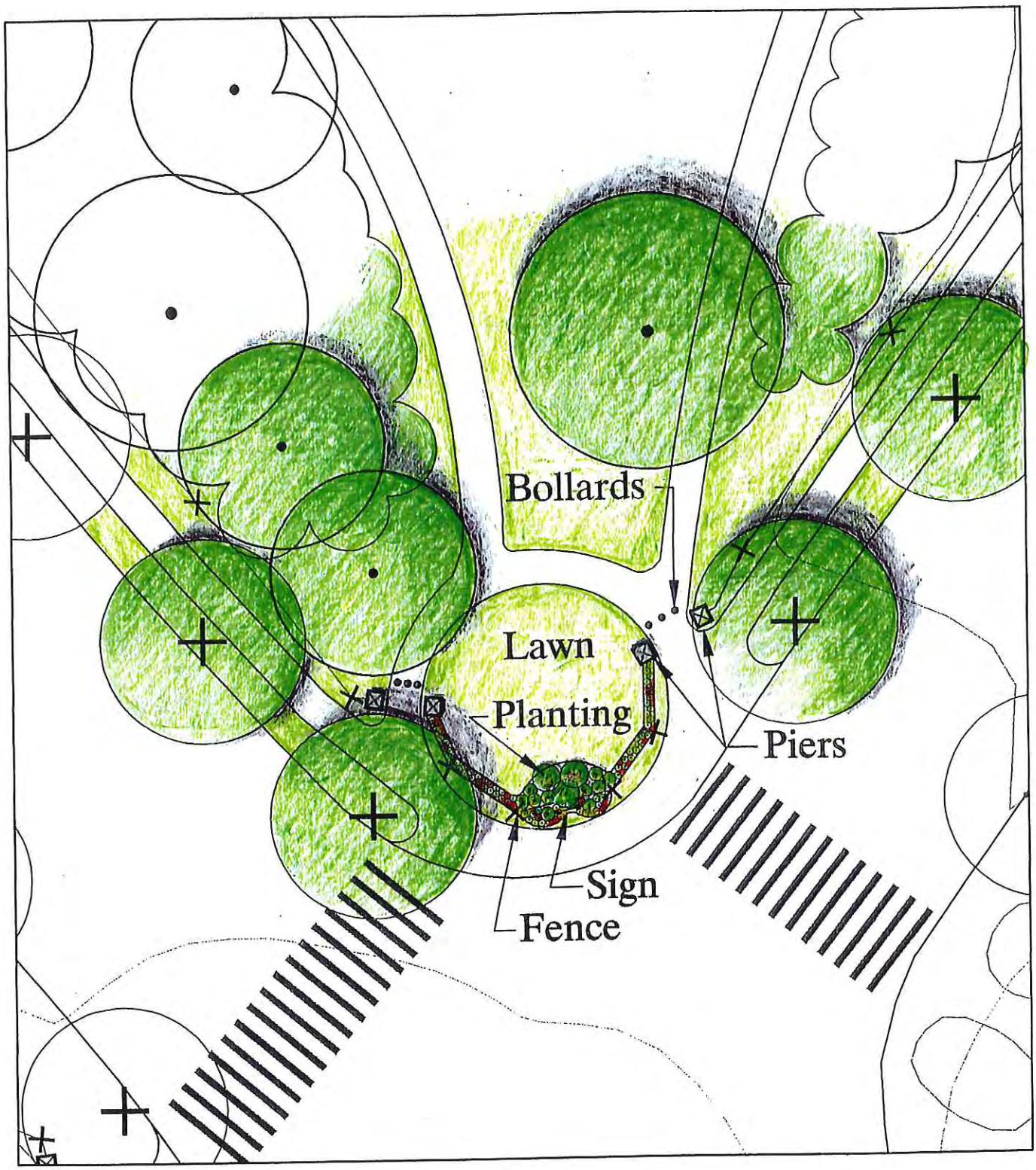
Zone Boundary Line; Concrete Box Culvert; Perimeter Fencing; Vehicular Gate; Crosswalk; Bollard; Steps; Slope Erosion

LEGEND			
WOODLAND EDGE			WATER
TREES			PICNIC SHELTER
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY
VEHICULAR DRIVE			BOLLARDS
NATURE TRAILS/ DEBRIS LINES			VEHICULAR GATE
RECREATIONAL AREAS			PERIMETER FENCING
WALL			FENCE
CULVERT			
LIGHT			
ATHLETIC LIGHT TOWER			

Pressley

Scale: 1" = 200'
6 August 1999

Z-11 Alt.



Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

Boathouse and Lake Area Entrance

Legend

- Perimeter Fencing
- Bollard
- Bench
- Stone Pier
- Sign

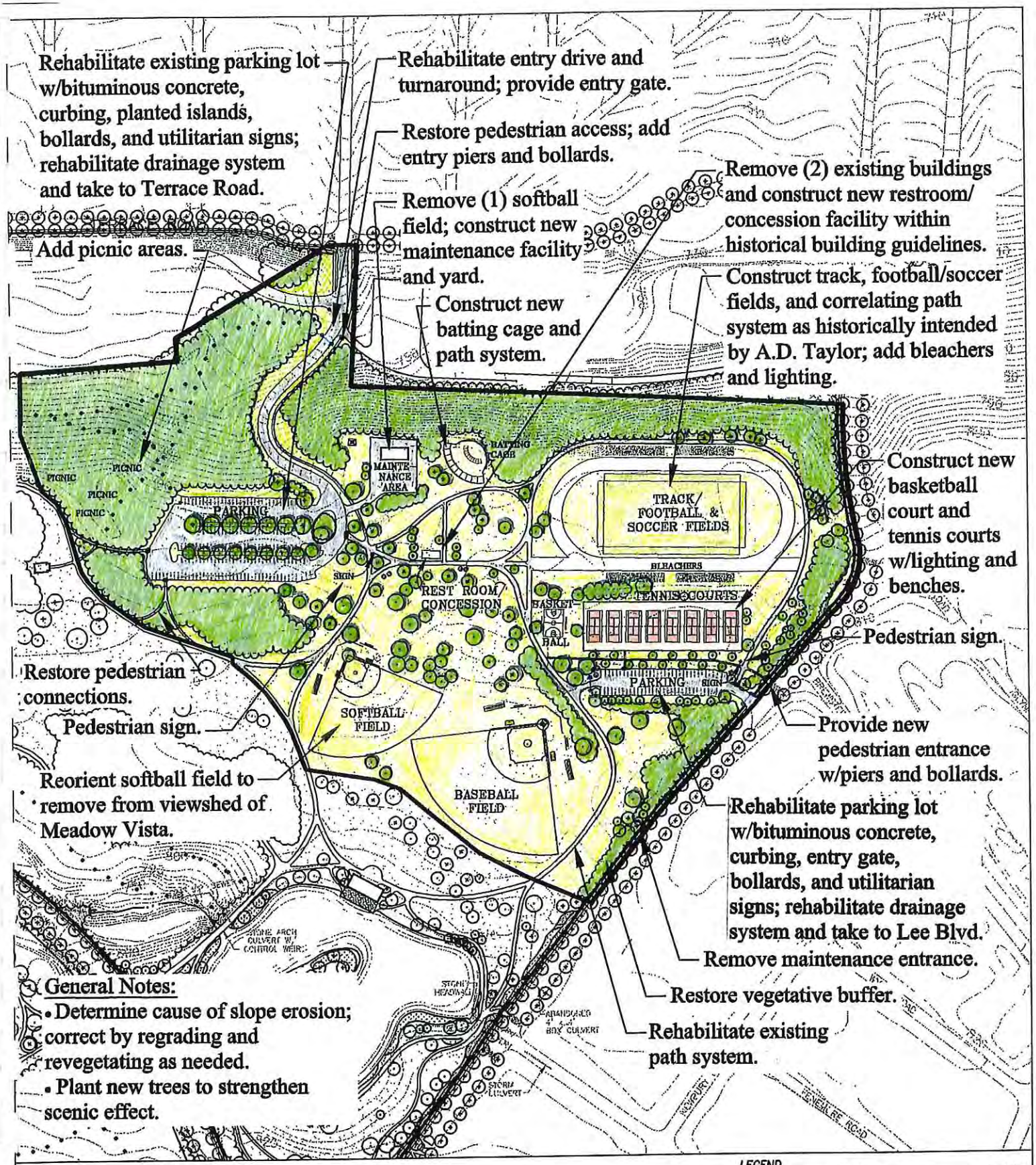
Pressley

Scale: 1" = 20'
17 November 1998

LEGEND			
WOODLAND EDGE		WATER	
TREES	⊙	PICNIC SHELTER	⊠
PEDESTRIAN PATHWAY		REST ROOM OR CONCESSION FACILITY	
VEHICULAR DRIVE		BOLLARDS	•••
NATURE TRAILS/ DESIRE LINES		VEHICULAR GATE	⊷
RECREATIONAL AREAS		PERIMETER FENCING	+++
WALL		FENCE	⊷
CULVERT			
LIGHT	*		
ATHLETIC LIGHT TOWER	⊶		

ZONE TWELVE - East Cleveland Recreational Area

A.	Demolition & Site Preparation		$97,255.00
B.	Paving & Curbing		$464,476.00
	Pedestrian Circulation	$63,546.00	
	Vehicular Circulation and Parking	$400,930.00	
C.	Site Furniture & Amenities		$57,050.00
D.	Buildings & Structures		$740,000.00
E.	Recreational Facilities		$2,391,660.00
F.	Grading		$118,075.00
G.	Drainage		$7,500.00
H.	Lawns & Planting		$232,458.00
SUB-TOTAL			$4,108,474.00
Contingency (10%)			$410,847.40
TOTAL			**$4,519,321.40**



General Notes:

- Determine cause of slope erosion; correct by regrading and revegetating as needed.
- Plant new trees to strengthen scenic effect.

Forest Hill Park, East Cleveland and Cleveland Heights, Ohio

East Cleveland Recreational Area - Zone Twelve (12) Z-12

Legend

Zone Boundary Line; Concrete Box Culvert; Perimeter Fencing; Vehicular Gate; Crosswalk; Bollard; Steps; Slope Erosion

Pressley

Scale: 1" = 200'
6 August 1999

LEGEND					
WOODLAND EDGE			WATER		
TREES	⊙	⊙	PICNIC SHELTER		⊠
PEDESTRIAN PATHWAY			REST ROOM OR CONCESSION FACILITY		
VEHICULAR DRIVE			BOLLARDS		•••
NATURE TRAILS/ DESIRE LINES			VEHICULAR GATE		⊷
RECREATIONAL AREAS			PERIMETER FENCING		+++
WALL			FENCE	⊷	
CULVERT					
LIGHT	•				
ATHLETIC LIGHT TOWER	⊷				

Z-12

PERIMETER - Parkways and Forest Hill Boulevard

A.	Demolition & Site Preparation	$250,109.00
B.	Paving & Curbing	$300,000.00
C.	Site Furniture, Amenities and Lighting	$3,217,757.00
D.	Buildings & Structures	$250,000.00
E.	Recreational Facilities	$0.00
F.	Grading	$0.00
G.	Drainage	$0.00
H.	Lawns & Planting	$1,097,295.00
I.	Bikeway System	$20,340.00
SUB-TOTAL		$5,135,319.00
Contingency (10%)		$513,531.90
TOTAL		**$5,648,850.90**

Refer to Drawing 20-b in the Appendix for stone walls, fencing, and pedestrian entrances. Refer to Drawing 22 for perimeter street tree planting and Forest Hill Boulevard footbridge restoration.