

A Master Plan for Binney Park

Greenwich, Connecticut



Prepared for the

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Department of Parks and Recreation
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Greenwich, CT 06836-2540*

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2015

ACKNOWLEDGEMENTS

Martha Lyon Landscape Architecture, LLC and CME Associates, Inc./CME Architecture thank the following individuals for their invaluable assistance in the completion of the foregoing Master Plan for Binney Park:

Joseph Siciliano, Director, Town of Greenwich Department of Parks and Recreation
Thomas Greco, Assistant Director, Department of Parks and Recreation
Bruce Spaman, Superintendent of Parks and Trees, Department of Parks and Recreation
Lenore Caserta-McClester, Administrative Assistant, Department of Parks and Recreation
Nancy M. Caplan, Member, Master Plan Committee
Frank O’Gorman, Member, Master Plan Committee
Karen Sadik-Kahn, Member Master Plan Committee
Peter L. Uhry, Member, Master Plan Committee

...and the citizens of Greenwich, past, present, and future.

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2015

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SUMMARY

For decades, Binney Park has been one of Greenwich's most popularly used and beloved open spaces. Located on 31.89 acres in the heart of Old Greenwich, it was the creation of Edwin Binney, a summer resident of the Sound Beach area, who in the late 1920s purchased and donated the land to the town, and designed and supervised the park's construction. Its meandering streams, central pond, curving walkways, specimen trees and shrubs have been backdrops for weddings, birthday parties, athletic events, and community gatherings.



The Binney Park pond, with the Island pavilion, as seen early in the 20th century. Many of the historic plant materials have perished.

As with all historic designed landscapes, upkeep of the park's features has required intensive care on the part of town staff. Dwindling resources, combined with increased use of the park and the effects of recent storms, have complicated the town's ability to provide adequate maintenance. As a result, crews regularly mow lawns but the remaining historic landscape features – the historic trees, pavilions, and other details – have deteriorated. To address this condition, the Greenwich Department of Parks and Recreation commissioned the foregoing master plan.

Goal and Objectives

The master plan's goal is to provide a comprehensive approach to managing the landscape, restoring its historic features, and at the same time acknowledging contemporary uses and anticipating future effects of climate change. Objectives include reviewing the park's history; assessing existing conditions; preparing a set of specific recommendations to be implemented in phases; and developing a management plan for ongoing care.

Process

Work on the master plan spanned approximately seven months. The Department of Parks and Recreation established a seven-member committee to oversee the process, consisting of both town staff and community members. The Historic Landscape Report for Binney Park, completed in 2009, provided historical



A participant in the Binney Park public forum reported on attendees' preferences for improvements.

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information about the park's physical development, with resources supplied by the Historical Society of the Town of Greenwich, Perrot Library, as well as Parks and Recreation Department files. The committee sought input from the public by hosting an evening forum where participants offered ideas and voiced preferences for park improvements. The committee then convened to review recommendations and establish priorities.

Park Area

Binney Park consists of five separate but contiguous sections, all located in the center of Old Greenwich, between Sound Beach Avenue, Arch Street, and the MetroNorth Railroad. The original park, designed and executed by Edwin Binney stood on the ten acres that holds the pond. Shortly after its dedication in 1933, the town purchased ten acres to the south and established the active recreation fields. By the end of the 1930s, two more parcels had been appended, the 1.89 acre Hillside located at the northwest corner and the ten-acre Natural Area located at the northeast corner. The tiny Reading Room, also at the northeast corner, followed. The master plan addresses the landscape of each of these five sections.

Preservation Standards

Binney Park has been recognized by the town as an historic landscape, as evidenced by its inclusion in the 2009 Historic Landscape Report. Therefore, efforts to manage and improve the landscape should adhere to the United States Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. These standards include four treatment options, which may be applied in combination at Binney Park:

- *Preservation*, retaining and stabilizing historic landscape features;
- *Rehabilitation*, altering or adding to historic landscape features to better accommodate contemporary and future uses while, at the same time, maintaining historical integrity;
- *Restoration*, returning existing landscape features to their original form; and
- *Reconstruction*, reintroducing landscape features that have been lost.

Sustainability

The master plan incorporates efforts to address the increasing negative effects of climate change and need to conserve natural resources by including sustainable approaches to preservation and management. Included are recommendations for organic plant maintenance, installation of salt-tolerant and hydrophylic (water-loving) plant species, and use of durable construction methods and materials. The plan also suggests ways of making the park socially sustainable, through engagement of community organizations and volunteers in restoration efforts.

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Summary Recommendations, Implementation & Management

The master plan recommendations divide between “park-wide efforts” such as roads, paths, and site amenities, and “project areas” such as the island, park entrances, and Hillside.

Park-Wide Efforts

- *Park Roadway* - restoring granite paver roadway edges and road surface
- *Crosswalks* - introducing raised crosswalks, constructed of materials that contrast with the road surface, to dually serve as speed humps
- *Parking Areas* - creating defined parking spaces along the park roadway and Arch Street
- *Park Walkway* - extending the existing walkway to connect with and around the southern half of the park
- *Planting* - creating and implementing a comprehensive plan for tree and shrub removal and re-planting throughout the park
- *Signs* - developing a sign program with a unified design including welcome signs, memorial/interpretive signs, trail markers, and plant identification signs
- *Site Amenities* - developing a palette of products and materials for benches, trash receptacles and lighting
- *Monuments and Memorials* - developing a collections policy for memorial donations to the park



Daffodils, planted along the Hillside slopes, illustrate one project completed with volunteer labor. Many more such opportunities for volunteer involvement exist.

Project Areas

- *Southwest Corner* – making cosmetic repairs to the pavilion and upgrading its environs
- *Maintenance Area* – upgrading the road edges, adding organized parking and revising planting along the playing field edge
- *Southeast Edge* – Repairing the southern bridge, creating a walking path on the east side of the stream, cleaning up the stream edges, and re-planting

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- *Club House* – making cosmetic repairs to the building and upgrading its setting, including reconstructing the surrounding walkways to comply with ADA requirements
- *Wesskum Wood Edges* – removing the crabapple orchard and overgrown junipers, replanting with tall shade trees, upgrading the setting for the tennis courts
- *Northeast Lawn/Sound Beach Edge* – upgrading the lawn, removing diseased/dead plant material, re-planting the edge
- *Northwest Lawn/Arch Street Edge* – upgrading the lawn, removing diseased/dead plant material, re-planting the edge
- *Island* – removing diseased/dead plant materials, re-planting, making cosmetic repairs to the pavilion
- *North Pond Edges* – removing turf from pond boulders, re-setting displaced boulders, replanting with hydrophylic herbaceous plants
- *South Pond Edges* – removing turf from pond boulders, re-setting displaced boulders, replanting with hydrophylic herbaceous plants
- *Park Entrances* - removing overgrown plant materials, resetting steps and walls, installing new plantings and signs
- *Reading Room* - extending the walking path along the stream to connect Sound Beach Avenue to Harding Road, removing and managing invasive plant species
- *Natural Area* - better defining the existing pathway and trail markers, upgrading signs, introducing native plant species, extending the concrete sidewalk from the Perrot Library along Harding Road to the west Natural Area entrance
- *Hillside* - selectively clearing trees to provide views to Binney Park from the summit, introducing signs, planting slope stabilizing native plants

An implementation strategy follows the recommendations, defining priorities and assigning approximate costs for each. Highest priority projects addressed one or more of the following areas of critical concern:

- **Improvement of the safety of park users** by creating better organized parking and introducing traffic-calming along perimeter park roads;

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- **Improvement and expansion of the existing pathway system** so that all walkways within the park connect, and that walkways are created where they are missing, including the southeast edge, Arch Street edge, and linking the north and south parts of the park;
- **development and implementation of a comprehensive planting plan**, one that revives historic plantings, removes overgrown plants, and introduces salt-tolerant and moisture-tolerant native plants; and
- **development and implementation of a plan to restore the pond edges**, including re-setting of boulders, re-planting of wetland plants, and adhering to a periodic maintenance plan.

Higher and lower priority projects are listed in the charts at right.

The plan concludes with an approach to long-term landscape management, including guidelines for maintaining each landscape feature.

HIGHER PRIORITY PROJECTS

- Development and implementation of a comprehensive tree and shrub removal and re-planting plan, and turf enhancement of the northern section (Area #9, #10, #6, #7)¹
- Improvements to Wesskum Wood Road edges (Area #5)
- Improvements to park entrances (Area #11)
- Improvements to the Island (Area #8)
- Enhancement of the Hillside (Area #14)
- Expansion of the interior park pathway
- Development and implementation of a palette of materials for park features including walkways, crosswalks, benches, trash receptacles, signs
- Upgrades to the park roadway and surrounding roadways including parking, crosswalks and speed humps

LOWER PRIORITY PROJECTS

- Improvements to the southeast edge (Area #3)
- Improvements to park maintenance area (Area #2)
- Enhancements to the Natural Area (Area #13)
- Improvements to the Southwest Corner (Area #1)
- Improvements to the Club House (Area #4)
- Improvements to the Reading Room (Area #12)
- Development of a collections policy for monuments and memorials and for accepting park donations

SUMMARY



Binney Park Master Plan

INTRODUCTION

Binney Park lies in the heart of Old Greenwich, to the south of the Perrot Library, north of the Metro North railroad, east of Arch Street, and west of Sound Beach Avenue. Established in 1927, it was created by Edwin Binney and his daughters, Mary and Helen, New Yorkers who began summering on Sound Beach in 1889. The low-lying, swampy land had been slated for house lots when the Binneys purchased the property and deeded it to the Town of Greenwich “for park and recreation purposes only.” Edwin Binney conceived the design and supervised its construction, damming streams to create a pond, constructing rustic bridges and pavilions, and adding an array of trees, shrubs and herbaceous perennials. The park officially opened in 1933, just one year before Edwin Binney’s death.



The wood and stone footbridges, shade and flowering trees, and birdlife all add to the beauty of the Binney Park landscape.

Beginning in the early 1930s, the park grew in size to include four additional parcels: the ten-acre active recreation area; the 1.89-acre “Hillside,” located on a steep slope at the park’s northwest corner; and the 10-acre “Natural Area,” adjacent to the northeast corner. A small pocket park wedged between the park and Natural Area, known as the “Reading Room,” was annexed soon afterward. Today, the total parkland, including the Reading Room, exceeds 32 acres, and it has become a beloved feature within the Old Greenwich and Riverside neighborhoods. Residents gather to launch miniature boats at the yearly regatta and watch Fourth of July fireworks. Wedding parties congregate on the rustic stone bridges for photographs, the backdrops filled with colorful flowering trees.

Since the park’s opening in 1933, the Town of Greenwich Parks and Recreation Department has dutifully maintained the landscape, pruning trees and shrubs, repaving walkways, overseeing multiple dredgings of the pond. However, increased use of the park, combined with several recent damaging storms, has led to a slow deterioration of the landscape. Over the past twenty years several municipal and volunteer efforts have attempted to address the park’s condition and plan for its future.¹ Yet none took a comprehensive view and considered all landscape features, assessing them against the park’s history and devising a plan for long term care.

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Binney Park's pedestrian paths, including its bridges, provide ample opportunity for visitors of all ages to access most parts of the landscape.

Master Plan Goals and Objectives

The foregoing Binney Park Master Plan provides a detailed approach to preserving and managing the landscape. Its goal was to develop a long-term plan, one which draws on the park's history, assesses current conditions, and provides specific recommendations and a strategy for implementing them over time. Objectives included:

- Developing a program of improvements to be incorporated into the plan;
- Reviewing the park's history, researched and written as part of the 2009 *Historic Landscape Report* for Binney Park;
- Assessing the park's existing landscape conditions;
- Preparing a set of specific recommendations to be implemented over time; and
- Developing a management plan for ongoing care.

Integral to the process was the involvement of the public in setting priorities for implementing the plan, achieved through a public forum and follow up commentary via social media.

Master Plan Program

At the beginning of the planning project, the master plan committee established the following program of improvements to be incorporated into recommendations:

- An enhanced pond environs that retains the existing array of wildlife and plants;
- Upgraded entrances;
- A view analysis, which studies long views of the park and its features from the various approaches;
- Improved parking, with particular focus on Arch Street and the maintenance building area;

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- A continuous walkway system that connects adjacent neighborhood streets to walkways within the park; provides a pedestrian route for commuters; and better connects the five parts of the park (north end, south end, Hillside, Reading Room and Natural Area)
- Improved and expanded seating areas;
- Accommodations for Recreation Department activities;
- Measures to make the landscape sustainable;
- A management plan; and
- Recommendations organized around “fundable” projects.

A Note About the Binney Park Pond

Citizens of Greenwich have raised concern in recent years about the condition of the Binney Park pond, much of which has focused on siltation and the need for dredging. While the pond is a park centerpiece and significant historic feature, recommendations about sedimentation control and dredging have not been included in this master plan. The town engineering department, with assistance from a consulting engineer, is in the process of identifying long term solutions to this persistent problem, and remediation efforts are planned for the near future. Recommendations of the Master Plan for Binney Park aim to complement the work of the engineering department and their engineering consultants.

ⁱ ENDNOTES: A SUMMARY OF RECENT PLANNING EFFORTS

Binney Park Master Plan, 1996

Developed by the Friends of Binney Park, this plan was intended, in part, to start a dialogue/procedure that will result in a final Master Plan for Binney Park being incorporated in to the Town of Greenwich's Master Plan. At the time, many of the original plantings had reached maturity or had died, altering the look of the park from its original design in the late 1920s. Part of the impetus for the plan was the removal of approximately 150 feet of border hedge, growing along Sound Beach Avenue, along with a major storm that caused significant damage within the park. The Friends saw the need for a plan to guide both maintenance and future development, and outlined ten planning principles:

1. The park combines natural and manicured areas and should be maintained as such. It is not a garden.
2. The age of the tree population should be diversified.
3. The pond edges are particularly important and should receive priority maintenance attention.
4. Open space should be maintained and reclaimed, where appropriate
5. Pathways are particularly important and the plan should include a flexible approach to their location and care
6. Hedges and borders – park edges – are important park features warranting special attention
7. Areas of use should be designated, so that the park's features are acknowledged and preserved
8. Maintenance principles should be designed for each park area
9. Signs should be designed and placed as needed, and should include interpretive information, as well as rules and regulations
10. The local community should be involved in decisions about the park's future

The plan defined and made recommendations for six geographic areas in the park (pond edges, island, passive recreation area, arboretum, active recreation area) as well as the Hillside Annex and Natural Park.

Comments and Observations about Binney Park, 2005

In June of 2005, the Old Greenwich Association, Riverside Association and Old Greenwich Garden Club submitted a summary of observations about the park landscape to the Greenwich Parks and Recreation Department. The summary noted the success of the time capsule planting area, and suggested that more plantings of this type be made. It also urged the department to install better signage at the park entrances, and also at the Hillside Annex and Kitchel Natural Area. Finally, the summary asked the department to focus its attention on the "island" where many wedding photos were staged.

Binney Park Plant Inventory, 2005

In October 2005, Dr. Patrick L. Cooney visited Binney Park as part of the web-based organization NYNJCT Botany and conducted an inventory of plant materials. His list, which appears on the organization's website, included trees, shrubs, vines, herbs and grasses. A reproduction of this list appears in Appendix B of this plan.

Survey on Binney Park, 2006

In 2006, the Old Greenwich Association retained a marketing research company, Research USA, to complete a survey of the park, with the goal of better understanding the park's users and opinions. Specifically, the survey explored:

- How frequently the park was visited and used
- What areas of the park were most used
- How the park was most used
- What families liked most about the park
- How the park could be improved
- Who used the park

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- Overall demographic characteristics of users

Residents of Old Greenwich and Riverside participated in the survey, which was conducted using a written questionnaire, with a 14% return (2,935 questionnaires distributed/416 returned). The following conclusions were drawn from the tabulation of survey responses:

- The pond area was visited more frequently by families than the active recreation area
- A majority of park use was for walking, viewing fireworks, and attending concerts
- Most respondents identified the park's beauty, peaceful setting, and close proximity as its most likeable features
- Respondents believe the most important improvements would be geese control, an increase of flower plantings, and better care of trees and shrubs
- Other items of note were the need for dredging the pond, cleaning up goose waste, and cleaning the playground area.
- The greatest number of park users included both male and female heads of households.

Binney Park Lighting Design, 2008

In 2008 the firm of Thornton Tomasetti, Inc. prepared a layout and details for new pole lighting at Binney Park. The lights contrasted in style to those seen in historic images, but matched the lighting at the Perrot Library.

Hillside Annex Daffodil Project, 2009

In the summer of 2009 a group of volunteers gathered to create "a big display of daffodils" along the north slope of the Hillside Annex between Arch Street and Lockwood Road. The group began by clearing small trees and shrubs, and then in the fall, planted daffodil bulbs.

Binney Park Traffic Calming Petition, 2009

A group of concerned citizens petitioned the Town to establish traffic calming devices on the roadway at the south end of the park by the workmen's shed and the playground located to the west of the shed. The petition resulted in the installation of speed bumps in these areas.

Hendrie Avenue/Arch Street Triangle Project, 2010

In the spring of 2010, Boy Scout Endy R. Anderson proposed developing a planted area in the small triangle formed by the intersection of Hendrie Avenue and Arch Street.

Hillside Annex Trail Project, 2011

In the summer of 2011, volunteers worked with local Boy Scouts to upgrade the trail system on the Hillside Annex. Tasks included tree clearing, improvements to drainage, upgrading of steps.

Friends of Binney Park, Binney Park Survey, 2011

The Friends of Binney Park initiated a survey of residents who use the park, and the survey summary indicated the following interests:

- Dredging the pond
- Planting more shrubs, adding more seasonal plantings, replacing lost trees
- Improving control of traffic with speed bumps and restricting Arch Street parking.

Bridge Inventory and Evaluation, Bridge No. 056-019 Wesskum Road Over Binney Park Brook, 2013

This routine field and underwater inspection of the vehicular bridge carrying Wesskum Road across Binney Park Brook was completed in September of 2013 by Prime AE. The engineer found the structure to be in satisfactory condition, with transverse cracks visible in the bituminous pavement on both approaches. Recommendations for repair included sealing cracks in the approaches and patching spall and hollow areas on the concrete bridge slab.

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Binney Park Pond Sediment Transport Study, 2014

Completed by CDM Smith, this study investigated the sources and quantities of sediment loading within Cider Mill Brook, the watercourse that feeds Binney Park's pond. The brook consists of two branches, a main branch, located in Greenwich and feeding the pond from the northwest, and an easterly branch, originating in Stamford and feeding the pond from the northeast. The pond had been dredged twice within the last 40 years - in 1979 and again in 1997, and the study's purpose was to find ways of mitigating scour and erosion, so that re-sedimentation of the pond does not occur again so soon. The study identified areas of erosion and scour and proposed measures for controlling both. Sediment basins constructed upstream of the pond (in the Reading Room and at the park's northwest corner) will capture a majority of the material. Bank stabilization downstream of Interstate 95 will further the effort to control erosion.

THE HISTORICAL DEVELOPMENT OF BINNEY PARK

Before 1927

Land that would become Binney Park covered 20 acres in Old Greenwich, just north of the Boston and Maine Railroad. The marshy flood-plained area contained two tidal streams that converged and wound their way to Greenwich Cove, filled with native water-loving species of plants. Mrs. L. V. Lockwood, a resident of nearby Riverside, recalled that many species of plants flourished in the marshy area, including wood anemone, rue anemone, adders tongue lily, Deutaria, meadowrue, violets, buttercups, wild clematis, woodbine, all growing along an old stone wall. Along the brook



The Brook House in the late 1800s, located on the site of the Perrot Library at the north end of Binney Park. Courtesy of the Historical Society of the Town of Greenwich.

edges grew Iris, pickerel weed, water plantain, cardinal flower, and loosestrife. In the meadow grew eupatorium, meadowrue, Turk's cap lily, daisies, Osmunda fern, sensitive fern, hayscented fern, and Cimicifuga. The park land contained a sandy upland area, where foxglove, Gerardia, Campion, meadow sweet, sunflower, snakeroot and wood lily grew.

The area had been slated for house lots. Mary Binney Davey and Helen Binney Kitchel, daughters of Edwin Binney, had the idea of converting it to a park and convinced their father to purchase the land, and then donate it to the town. The Binney family had come to the Sound Beach area as summer dwellers in 1889 and Edwin Binney built a small cottage along the beach for his family to use as an alternative to their New York residence. Binney, a member of the firm Binney & Smith, manufacturers of "lamp black," had retired to Indio, Florida by 1927, but retained an interest in the natural resources of the Sound Beach area. The land for the park was owned by George Boles and Binney paid \$30,000 for the 10 acres. The deed stated that the land was to be used "for park and recreation purposes only."



Binney Park under construction, c. 1930. Courtesy of the Historical Society of the Town of Greenwich.

1928 - 1937

Design and construction of Binney Park commenced in 1928, with Edwin Binney supervising, and design advice and construction oversight provided by Binney's son-in-law, James A. G. Davey of the Davey Tree Company. The contractor was John Hansen, and construction took over four years.

THE HISTORICAL DEVELOPMENT OF BINNEY PARK

Binney planned for the streams to be dammed to create two small “lakes,” and for many trees to be planted. He insisted that the pond be dug to a shallow depth to assure safety of its users, and the dredge material used to create higher turfed areas. The edges of the pond were to be planted with flowering shrubs and visitors would traverse the landscape via a series of meandering walkways. Landscape details were to include foot bridges and road bridges, and a stone shelter near the lake to “tame” life. A January 1928 newspaper article claimed that “*when the landscaping is finished, the new park will present a marvel of scenic grandeur and beauty unsurpassed anywhere in the United States.*” The total cost of development was thought to be approximately \$100,000, paid by Mr. Binney.



Binney Park under construction, c. 1930. Courtesy of the Historical Society of the Town of Greenwich.

Work continued into 1930 and 1931. The Town built a road to connect Arch Street (on the west side) to Sound Beach Avenue (on the east side), along the then southern edge of the park, and the Town installed a fountain. In 1931, C. K. and J. C. Plume, nurserymen of New Canaan, provided a tree and shrub list for planting at Binney Park. Species included pin oak, sourgum, red maple, paper birch, silver olive, Clethera, winterberry, bayberry, spicebush, dogwood, hawthorn, American ash, Forsythia, holly, Hydrangea, witch hazel and many other species. Also in that year, the Town appropriated \$12,000 for additional fill for the park, and twelve ornamental lights were installed, each extending from an arm attached to a cedar pole. The Town also erected the large flag pole, set in a circular seat of Quincy granite. Swimming at the newly established lakes was forbidden that year because the water was found to be highly polluted from manufacturing plants upstream in Stamford.

Binney Park was officially dedicated on September 25, 1933. The Town Report noted that it was a “model of landscape architecture...a source of the greatest pride and happiness to the people in Old Greenwich. It will endure forever as the memorial to a man beloved in the community and town in which he lived.”

The next year, Greenwich acquired an additional acres abutting Binney Park to the south from Cyrus Miller to add an active recreation area (bringing the total land to 20 acres). Funds to purchase this land had been set aside in 1928 because it was viewed as a “wasteland between the park and

Work continued into 1930 and 1931. The Town built a road to connect Arch Street (on the west side) to Sound Beach Avenue (on the east side), along the then southern edge of the park, and the Town installed a fountain. In 1931, C. K. and J. C. Plume, nurserymen of New Canaan, provided a tree and shrub list for planting at Binney Park. Species included pin oak, sourgum, red maple, paper birch, silver olive, Clethera, winterberry, bayberry,



The new pond, stone arch bridge, and shelter at Binney Park, around the time of the park's completion. Courtesy of the Historical Society of the Town of Greenwich.

THE HISTORICAL DEVELOPMENT OF BINNEY PARK

railroad tracks.” The Boys’ Club was meeting in the Binney Memorial Parish House. The Town installed new swing frames, one junior baseball diamond, and one senior baseball diamond. The Town also graded and surfaced the cross-road, completed the summerhouse, and built a stone wall from the railroad to the dam. At the end of 1934, Edwin Binney died.

Greenwich continued to enhance the park throughout the 1930s, building on Edwin Binney’s vision. Between 1935 and 1938, the Town added two new tennis courts, laid out and fenced a football field, added swings, constructed a basketball backstop, and established a softball diamond. In 1937, a skating and hockey rink was installed.



The tennis courts at Binney Park, c. 1935. Photo courtesy of the Historical Society of the Town of Greenwich.

1938 - 1950

In 1938, at the notion of Helen Kitchel Binney and her mother, Alice Stead Binney, the Town acquired 1.89 acres in the west side of Sound Beach Avenue as an annex to Binney Park. It was known as the “Arch Street Annex” or “Hillside Annex.” Hillside Annex was described in the Town Report as a sliver of land on the western side Sound Beach Avenue from the northern end of the park. On it, the Town had created a series of woodland paths, constructed steps, and planted Rhododendron, mountain laurel and dogwood. Look-out points and vistas were created and future plans included facilities for picnicking.



A map of Binney Park in 1938 from the Atlas of Greenwich, Stamford, Darien & New Canaan, Conn., Franklin Survey Company.

The next year, Helen and her mother, along with Dan Everett Waid (architect and designer of the Perrot Library) purchased a 10-acre parcel on Harding Road (part of the former Laddin’s Rock Farm) near Binney Park, to be used as a “Natural Park.” The Parks Department noted that the Natural Park would serve as a sanctuary for birds and plants and for the use and enjoyment of the public. Apple trees, wildflowers and other native New England flora would be allowed to grow freely. Initial work in the park consisted of a general clean-up, establishment of trails, and planting of large native

THE HISTORICAL DEVELOPMENT OF BINNEY PARK

plant materials. With these additions, the parkland in this area of Old Greenwich exceeded 30 acres.

In the 1940s Greenwich's Division of Parks and Trees established a vision for management of all the town parks, drawing on the natural amenities of the Greenwich landscape as inspiration. In the Town Annual Report from that year, the Division noted that the parks "should be made to excel in the art of garden and landscape design which will afford a living example stressing the importance and desirability of preserving and emphasizing rather than transforming the different types of natural scenery." They proposed making the parks into arboreta, and creating garden centers, or nurseries at each. This vision was executed at Binney Park by setting out numerous small native plants, shrubs and trees in naturalistic groups.



A hand-colored photograph of Binney Park, c. 1940. Courtesy of the Historical Society of the Town of Greenwich.

The Town continued to maintain and improve Binney Park throughout the 1940s. Tennis courts were re-surfaced and footbridges repaired and repainted. Town crews thinned plant material, removing dead or weak species, and replacing them. The Town reached completion of an equipment storage building, installed drainage in the ballfield area, and dredged the pond in the water inlet area. The Town also completed work on the dam at the water inlet area of the pond, its purpose to collect water-borne pond silt by settlement in the still-water basin,

delaying silting up in the main lake. By 1950, invasive plant species had begun to infiltrate the Natural Park, requiring Town crews to remove scrub trees and vines that were choking out desirable plant material.

1950 – Present

Over the last 60 years, the Town has continued to make additions to an upgrade the condition of facilities at Binney Park. Some of the efforts have included the dedication of Memorial Rock (1955), installation of a new backstop (1958), construction of a drinking fountain (1960), resurfacing of tennis courts (1963), and improving the play area (1971).

Erosion of the pond banks had proved to be a problem from the earliest days of the park. In 1952, Town crews worked to line the lake banks to prevent erosion, placing large stones as rip-rap and removing shoreline debris. Three years later, the Town cleaned and dredged the ponds. Flooding continued, particularly during coastal storms and high tides. In 1975, a footbridge was washed out in a flood and soon replaced.

THE HISTORICAL DEVELOPMENT OF BINNEY PARK

Between 1996 and 2008, several attempts were made to create long-range plans and mobilize volunteer efforts to upgrade the landscape at Binney Park, and as a result, several improvements were made. These plans and efforts are discussed under “Summary of Recent Planning Efforts,” below.

PERIOD of HISTORICAL SIGNIFICANCE

Binney Park’s *Period of Historical Significance* spans the years 1933 to the present. During these eight decades, the park was established and developed, according to the vision of its donor, Edwin Binney. The town has taken great care to preserve the park’s historic features, most of which still remain. Future efforts to preserve the landscape should continue this tradition of respect for Binney Park’s founder.

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LANDSCAPE ASSESSMENT

The following assessment of the Binney Park landscape documents the existing natural, built and functional features, and analyzes their condition. Together with the *Historical Development*, the assessment provides a basis for the master plan recommendations and management plan.

Context

Binney Park lies on a 32.22 acre l-shaped piece of land in the easternmost part of Greenwich ~ Old Greenwich. Its land divides into five sections: a ten-acre active recreation area, a ten-acre passive recreation area, a 1.89 acre “Hillside Annex (located in the northwest corner),” a on-third-acre “Reading Room (located in the northeast corner),” and a 10-acre “Natural Park” extending eastward from its northeast corner. Its boundaries include Sound Beach Avenue to the east and Arch Street to the west, with the Metro North railroad tracks spanning the south side.

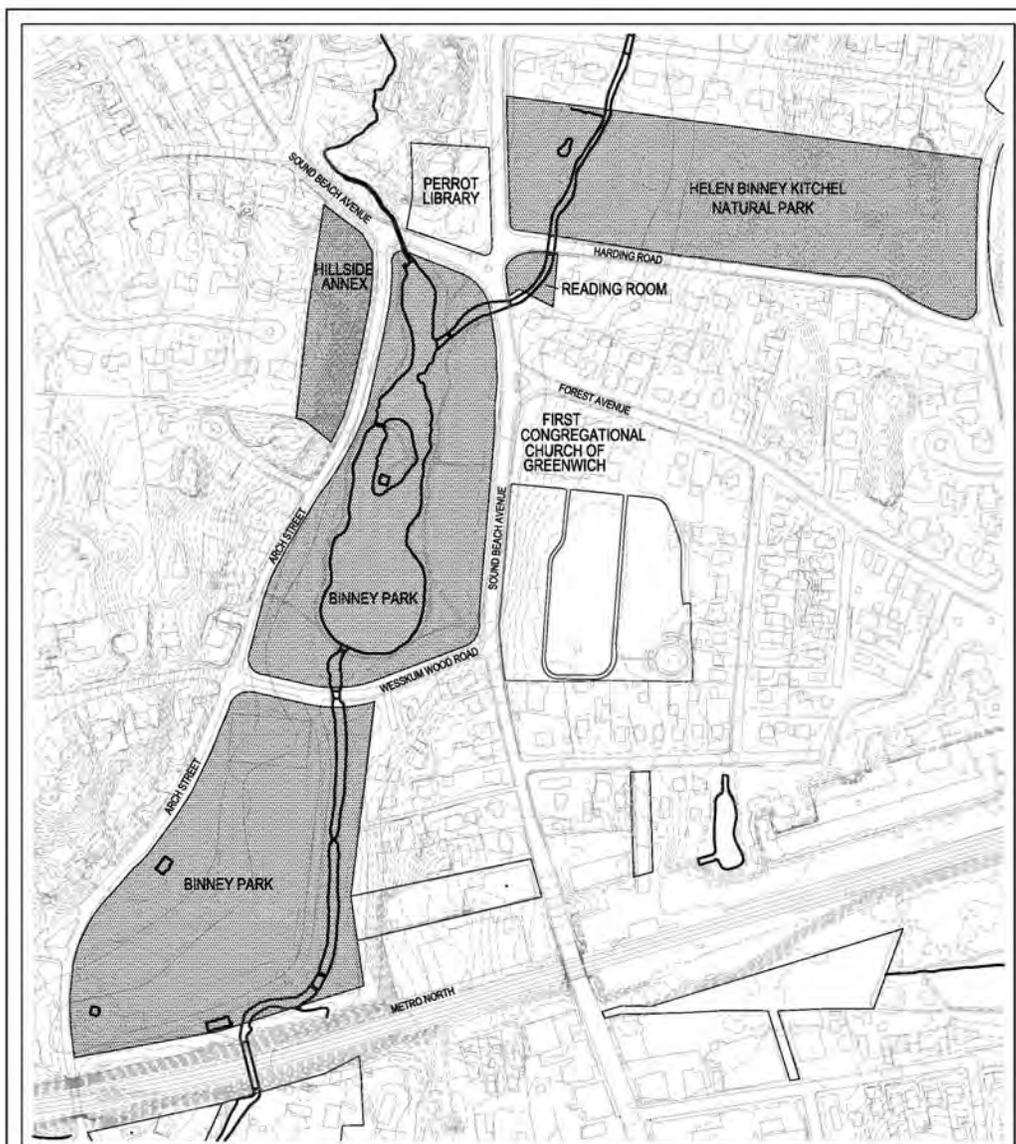


A view Binney Park taken from Wesskum Wood Road, looking north. Residential neighborhoods surround much of the parkland.

The ten-acre Natural Park is bounded by Laddins Rock Road on the west, Brown House Road on the east, and Harding Road on the south. Wesskum Wood Road runs east to west through the park, bisecting the passive and active recreation sections. The character of the park edges is as follows:

- Residential neighborhoods line the east and west sides of the park’s main twenty-acre section, and surround all sides of the Hillside Annex and Natural Park. These neighborhoods feature one-family homes nestled into wooded lots and complement the park’s historic character. The First Congregational Church of Greenwich and accompanying cemetery lie across Sound Beach Avenue on the park’s east side. Binney Park retains several large coniferous trees along its west side, screening the park from adjacent streets. However, several of these trees have died, leaving holes in the screen.
- The Perrot Library stands on the north side. Its lush front lawn is shaded by mature trees, and both features complement the quiet park setting.
- Lining the south side are the Metro North railroad tracks. Elevated above the grade of the park, noise and bustle of this busy transportation line detracts from the park’s otherwise serene setting.

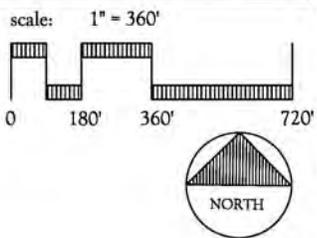
LANDSCAPE ASSESSMENT



BINNEY PARK MASTER PLAN
Greenwich, Connecticut

EXISTING CONDITIONS
2015

MARTHA LYON LANDSCAPE ARCHITECTURE, LLC
CME ASSOCIATES, INC.



LANDSCAPE ASSESSMENT

Topography & Water

Originally a swamp, Binney Park was constructed largely from fill, and the resulting topography across most of the landscape is nearly flat. The Hillside Annex contrasts with the park's main sections, Natural Park and Reading Room by providing steep and physically challenging terrain. The differing landforms are as follows:

- The twenty-acre main sections consist of nearly flat slopes surrounding a pond and abutting the stream flowing southward out from the pond. These areas, along with a small island located in the middle of the pond, are easily navigable by users with all levels of physical abilities.
- The slope of the Reading Room, abutting the main sections on the northeast corner, is also nearly flat. Laddins Brook, one of the streams that feeds the park's pond flows along the east and south sides of the Reading Room, creating depressed topography on these edges.
- The Natural Park, forming an "I" with the main sections' northeast corner, features more undulating topography, although it is, for the most part, level. Similar to the park's main sections, the terrain of this area presents few obstacles to users with many levels of physical abilities. Laddins Brook flows north to south through the western end of the Natural Park, creating a natural depression.
- The Hillside Annex, abutting the main sections' northwest corner, contains extremely steep topography, making navigation for even the most fit of users, difficult. A group of volunteers, with support from the Binney Park staff, recently constructed stone entrances at two locations, wood timber steps and cleared footpaths, increasing accessibility to the area. Despite these improvements, the Annex remains steep and rugged in spots.

Views

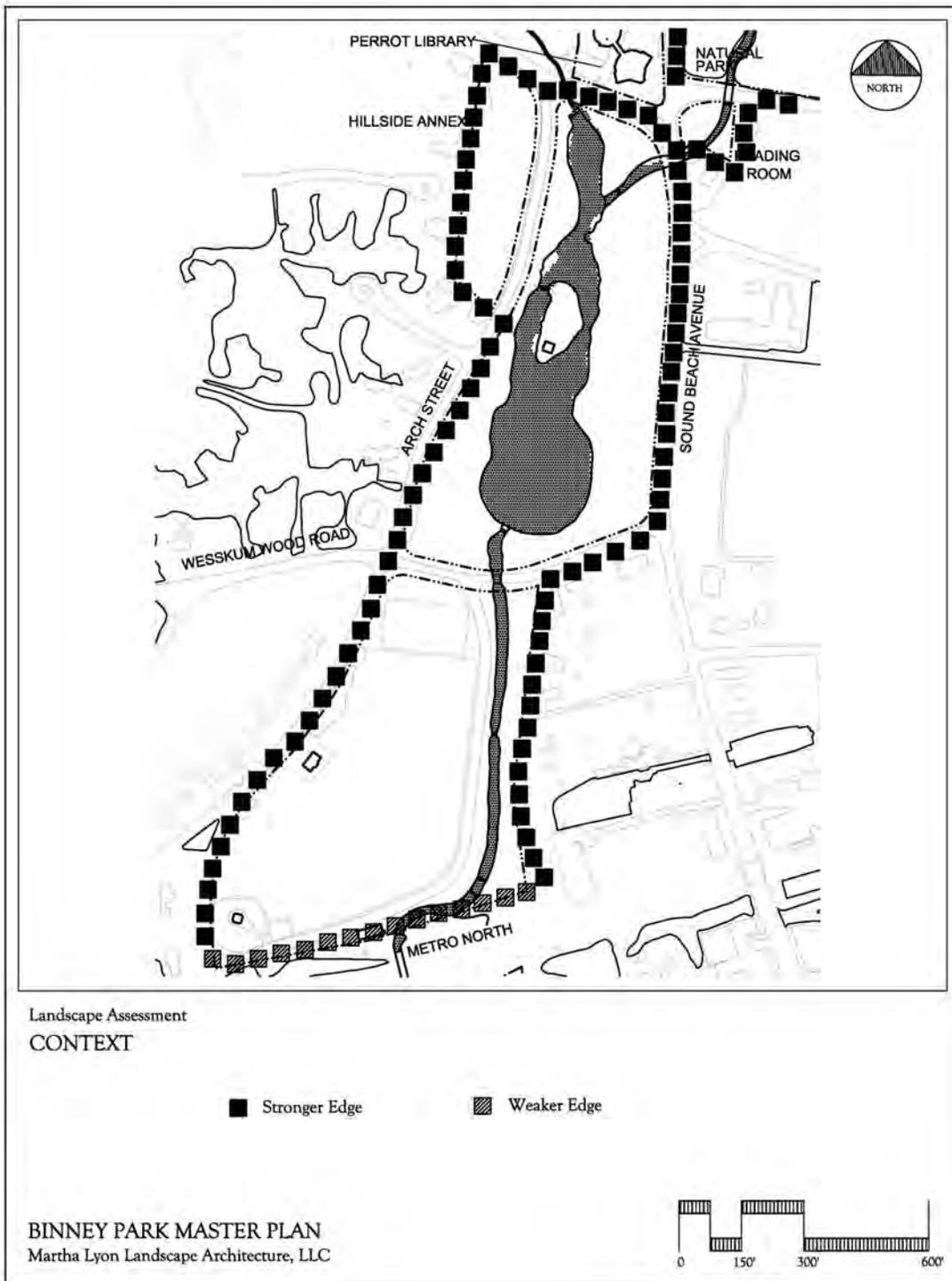
As mentioned under *Topography*, Binney Park is nearly flat, and as a result few long vistas are possible from either the outside looking inward, or the inside looking out. Despite the lack of promontories, Binney Park does provide several opportunities for mid-range and more intimate views, as follows:

- Visitors to the park from the north enjoy long views across the landscape when approaching the northwest corner from Sound Beach Avenue, and at the Perrot Library circle.

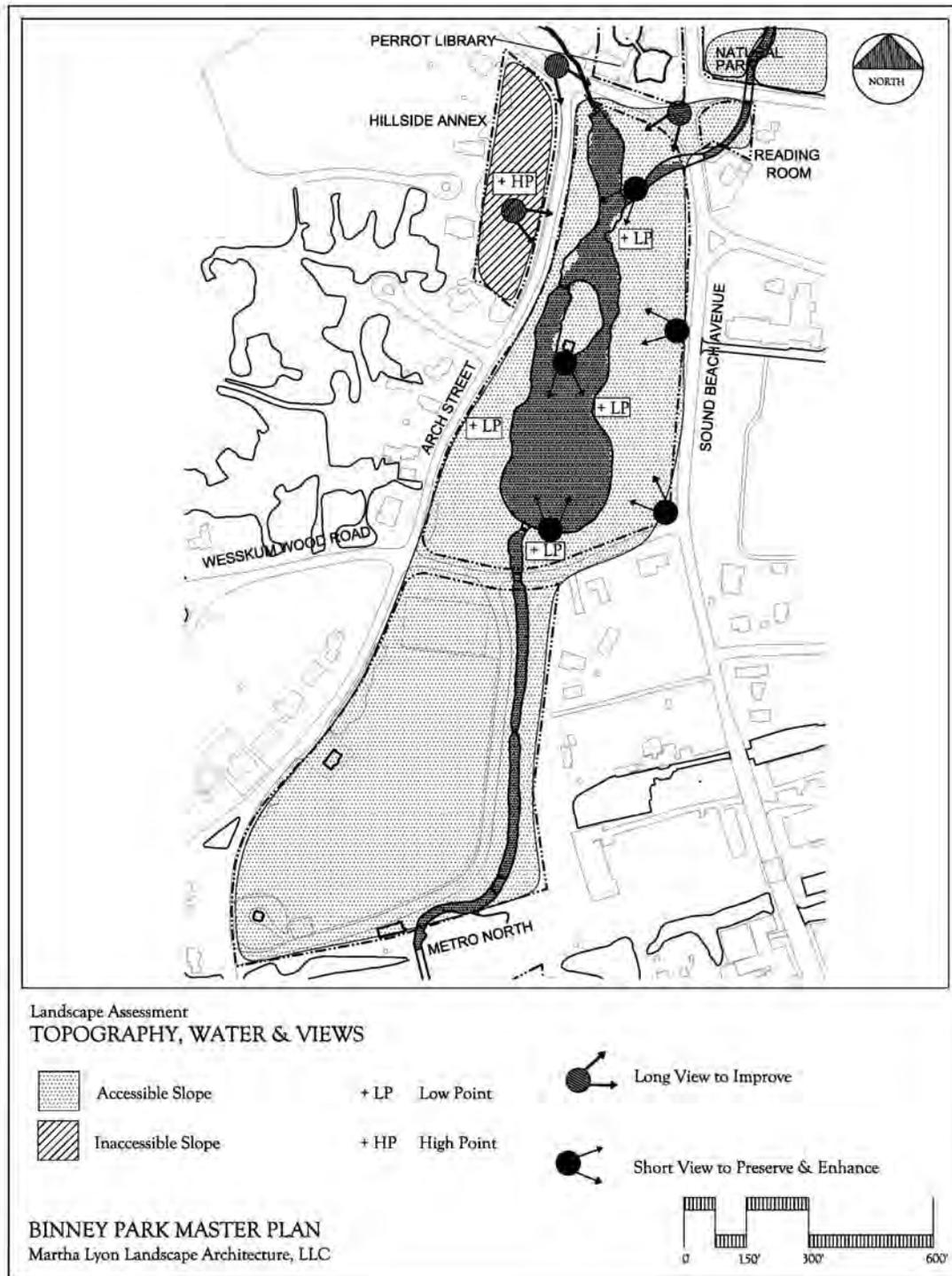


Views across Binney Park include its several stone-arched bridges, which date to the earliest years of the park.

LANDSCAPE ASSESSMENT



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- Mid-range views are possible from the pond edges and island, looking across the water. Many wedding parties visit the island and pose for photographs against the backdrop of water and flowering trees and shrubs.
- The Hillside Annex offers the possibility of long views, but dense deciduous tree growth on the slopes obstructs views into the park.

Entrances, Circulation & Parking

Visitors to the park arriving by car typically enter via Wesskum Wood Road, while pedestrians enter the park on foot via one of its several gateways, as follows:

- Drivers turn southward off Wesskum Wood Road onto the park road that lines the eastern edge. Binney Park does not have a formal “vehicular gate,” and this short roadway is the only vehicular route within the park.
- Parking is allowed along the sides of the park roadway, and the number of spaces is limited. The pavement does not contain striping or organized parking stalls.
- Many drivers use the park roadway as a cut-through, connecting Sound Beach Avenue (leading northward from the park) to Arch Street (leading southward from the park and passing under the Metro North railroad tracks). Drivers speed along this roadway, conflicting with the many pedestrians who use the route as a walking loop.
- While the formal entrance to Binney Park lies along Sound Beach Avenue (across from the island and church/cemetery entrance), pedestrians may also enter via gateways located at the northwest, northeast, southeast and southwest corners of the pond area (north half of the main section). From here they can stroll on the network of bituminous walkways that loop the pond and connect to the island, crossing over stone and wooden bridges.
- The walkway network leads from the park’s northeast corner across Sound Beach Avenue to the Reading Room. Here, the walk rims the edge of the park, allowing pedestrians access from two sides (north and west).
- The southern half of the main section does not contain formal entrances and pedestrian ways, although wooden bridges traverse the stream at two points, allowing visitors to cross over to the east side of the stream. This area is heavily used by dogs and their owners.
- Circulation through the Natural Park is roughly defined. A formal entrance to the Natural Park, marked with a carved wooden sign and boulders, stands along Harding Road. Invasive plants have obscured the trails, posing difficulties to hikers and bird-watchers.

LANDSCAPE ASSESSMENT

- Entry into the Hillside Annex is via two sets of rustic stone steps located in two spots along Arch Street, and a unpaved footpath leads hikers to the summit. This path is both rugged and steep.

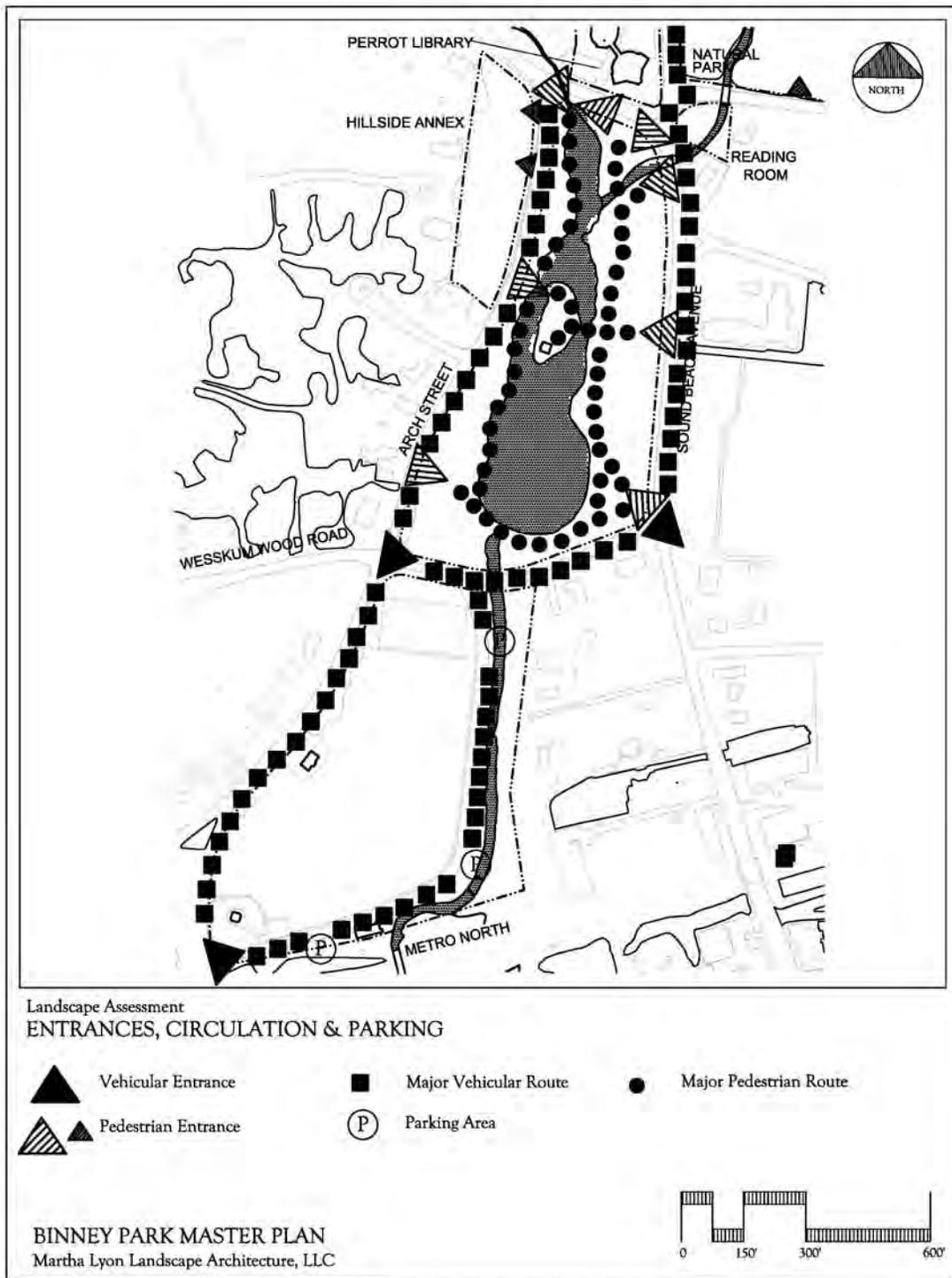
Vegetation

Binney Park is known throughout Greenwich for its spectacular flowering trees and shrubs, and towering mature specimens. Of the 48 known species original planted at the park, only nine remain, including five evergreen tree species, two deciduous tree species, one shrub, and two herbaceous species.¹ Because the area suffers from regular flooding, water-loving plants have thrived, while others have struggled. The five park sections contain four general plant communities:

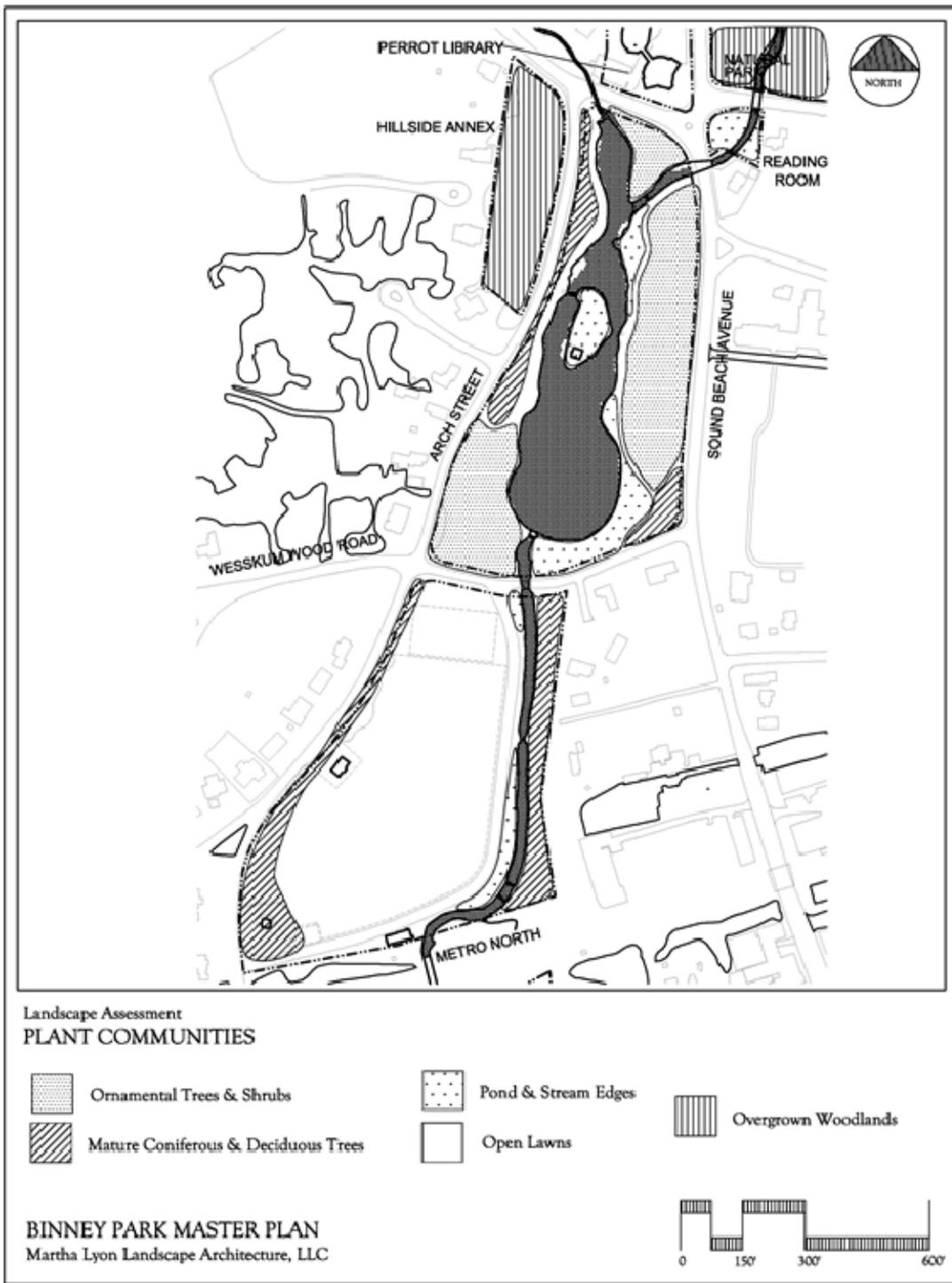
- *Mature Coniferous and Deciduous Trees.* These stand largely at the main sections' edges, giving the landscape an intimate sense of scale. Species include white pine, oak, blue spruce, and tulip trees.
- *Ornamental Trees & Shrubs.* The interior of the park's main sections feature many species of flowering trees and shrubs and some specimen trees. Most are concentrated around the pond, but several stand along the stream flowing through the southern section. Species include willows, spruces, junipers, paper birches.
- *Pond and Stream Edges.* The town has introduced boulders along the sides of the pond and stream edges to help prevent collapse during flooding. In and amongst these boulders and along the banks are water-loving herbaceous perennials, including Iris. A colony of Phragmites has emerged at the far southern end of the park along the stream edge, and Polygonum cuspidata has invaded the stream edge in the Reading Room.
- *Natural Woodlands.* As mentioned under *Topography and Circulation*, the Hillside Annex and Natural Park have been allowed to develop in their natural states without intervention such as thinning and invasive species control. The Hillside originally contained native and non-native shrubs, and while some can be spotted among the woodlands, most have perished. Characteristics of both areas include mature deciduous trees, thick understory, and brambly shrubs and ground covers.

¹ The 1931 plant list and 2005 plant inventory appear in Appendix B of this plan.

LANDSCAPE ASSESSMENT



LANDSCAPE ASSESSMENT



Structural Elements & Recreation Features

Planned as a public recreation site, Binney Park contains three **historic buildings** to support passive and active recreation activities, as follows:²



The hexagonal-shaped pavilion, located in the southwest corner, is one of three historic stone buildings at Binney Park.

- *Southwest Pavilion.* This octagonal-shaped, open-air structure sits atop a shaded knoll at the park's far southwest corner. Materials used in its construction include granite (knee walls and columns), slate (roof), bluestone (sills), copper (roof cap), and wood (roof framing, soffits and trim). The ceiling has been plastered and painted. Overall the structure appears to be in good condition, with only minor cosmetic repairs required. These include replacing damaged roof shingles, repointing and cleaning granite, repairing and/or replacing bluestone sills, and repainting wood trim.
- *Club House.* This 20' by 40' rectangular building stands along the park's western edge, near the ballfields, and serves as a storage and toilet facility for the active recreation (southern half) area of the park. Materials used in its construction include granite (body), slate (roof), and wood (soffits, fascia and trim). Similar to the southwest pavilion, this structure is in good condition, with only cosmetic repairs required. These include replacing damaged roof shingles, repointing of granite mortar joints, and repainting some of the wood trim.
- *Island Pavilion.* This 20' by 20' square open-air structure sits at the pond's edge on the island. Materials include granite (knee walls, columns and floor; both fieldstone and cut stone), slate (roof), wood (roof framing) and stucco (chimney and fireplace). Repairs include re-roofing, repointing, parging of stucco, and cleaning of roof underside.

Binney Park's **stone and wooden bridges** are some of the landscape's most striking and memorable features.³

- *Stone Arch Bridges.* The park contains three stone arch bridges, two carrying pedestrians across the pond, and a third carrying vehicles over Wesskum Wood Road. The structural assessment concluded that in general, each bridge is in very good condition, with only minor need for repointing of mortar joints. Efflorescence is also visible on the underside

² For more detailed information about the condition of Binney Park's buildings, refer to the *Architectural Assessment*, found in Appendix D of this plan.

³ For more detailed information about the bridges, culvert and stone wall, refer to the *Engineering Assessment*, found in Appendix C of this plan.

of each bridge, an indication that water is migrating through the pavement on top of each structure, which over the long term, can lead to deterioration.

- *Wood Timber Pedestrian Bridges.*⁴ The park contains four wood timber pedestrian bridges, two of which are aging. One spans the stream in the southern half of the park, along the east side, and provide a means for pedestrians – principally dog-walkers – to cross over to the east side of the stream. This bridge is in fair condition, with significant sagging and scouring of the ground around the abutments. The other bridge stands over the outflow stream from the pond and appears in very good condition with no sign of settlement. Cosmetic repairs, including painting and replacement of rotted deck boards, will improve this bridge’s condition.

Two other prominent **structural elements** are the culvert end walls at the Sound Beach Avenue bridge (northwest end of the park), and the stone wall adjacent to the stream near the maintenance shed. Their condition is as follows:

- *Culvert Head and End Walls.* These cut mortared stone walls line the stream edges where water flows into Binney Park, and serve as a head and two ends to the culvert. The mortar joints have deteriorated in many places and many stones have loosened, suggesting that significant water is infiltrating. The walls are topped with concrete caps, and one has cracked. The mortar is in need of repair, and long term the tops of the walls should be waterproofed to prevent further infiltration of moisture.
- *Wall at Outflow (near Maintenance Area).* This cut mortared stone wall separates the outflow stream from the adjacent roadway and maintenance area. It is not structural. It appears to be in good condition with only minor staining, efflorescence, and lichen growth, and some scouring on the rear side. Long term, the wall should be repointed, and any loose or missing stones should be reset or replaced.

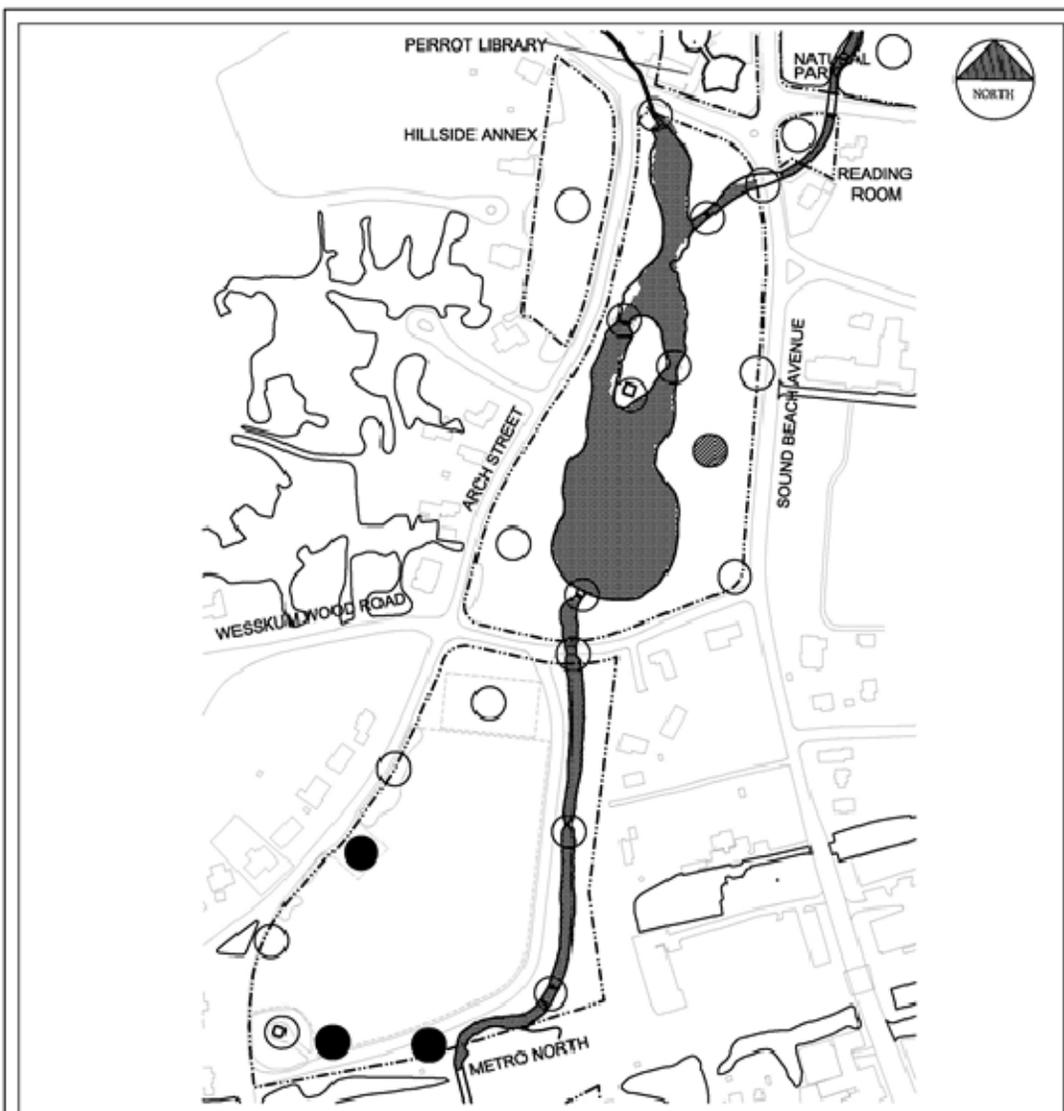
Recreation features include three baseball diamonds, four tennis courts, a playground, and a soccer field. Skating was, until recently, permitted on the pond during the winter, and a regatta of miniature boats takes place each fall.

Landscape Details

- Binney Park retains many of its historic features that contribute to its historic character. They include the pavilions and club house, stone bridges, stone stream edges, granite edgestones along the park roadway, boulders lining Arch Street, wooden bridges, gateways to the park, flagpole, monuments to several prominent Old Greenwich citizens, pavilions, mature trees, ornamental trees, and system of pedestrian pathways.
- Historical research showed that nearly all of Binney Park’s original features remain, with the exception of the walkway along the southeast edge of the park property, and tree and

⁴ The park also contains two new wood timber bridges and because their construction was recently completed, they were not included in this assessment.

LANDSCAPE ASSESSMENT



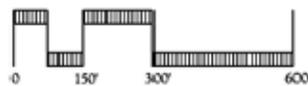
Landscape Assessment
LANDSCAPE DETAILS

○ Extant Historic Feature

◐ Missing Historic Feature

● Contemporary Feature

BINNEY PARK MASTER PLAN
Martha Lyon Landscape Architecture, LLC



LANDSCAPE ASSESSMENT

shrub species that have died, largely because of the seasonally wet and saline ground conditions. Also, the original light fixtures, consisting of hewn cedar poles and tear-drop luminaires, have been replaced with a modern lantern style, to match those at the adjacent Perrot Library. These serve the dual purpose of illuminating the park and providing staging for annual holiday light displays.

- New features in Binney Park include the park maintenance building, playground and concrete walkways surrounding the restroom building.

Preliminary Master Plan Recommendations

The following are preliminary recommendations for measures to be taken by the Town of Greenwich to preserve, restore, reconstruct, and/or rehabilitate Binney Park:

- Establish a palette of materials to be used for the park landscape including walkway surfaces, roadway edging, benches, lighting and other amenities.
- Complete a comprehensive inventory, assessment and management guidelines for the existing trees, shrubs, bulbs and seasonal plantings at Binney Park, and compare the inventory with those species recorded by Helen Binney Kitchel in her scrapbook (Historical Society of Greenwich). From this inventory, the town should develop a long-term plan for restoring the original plantings. Consideration should be made for the ability of the plants to withstand periodic wet and saline conditions. Include recommendations for coordinating colors for seasonal plantings, and approaches to proper pruning of trees and shrubs.
- Consider creating an arboretum at Binney Park, marking the tree and shrub species, developing an inventory and guidebook, and sponsoring education programs around the arboretum theme. Consider establishing a rose garden as part of the arboretum, to be located away from a flood-prone area (such as the tennis court area).
- Develop a long range plan for the Natural Area, based on the original vision of Helen Binney Kitchel to see this spot as a location for native plant species and a haven for a diversity of wildlife, especially birds. Connect the Natural Area to Laddins Rock Sanctuary and Rosa Hartman Park through a system of marked trails.
- Work with the Binney Park community to develop a “collections policy” for donations of plants



The roadway along the park's eastern edge is a cut-through for non-park users. Traffic-calming measures have helped control the speed of this traffic and minimize vehicular-pedestrian conflicts. Additional traffic-calming devices can help further this effort.

LANDSCAPE ASSESSMENT

and/or placement of monuments.

- Consider introducing walkways in the southern half of the “main section,” provide a safe surface and route for pedestrians separate from vehicular traffic.
- Consider introducing traffic-calming techniques for the roadway, encouraging drivers to travel slowly through and around the park.
- Create a long term plan for the rehabilitation of the Hillside Annex – one that restores the viewing spots and native plant materials.
- Develop a long term plan for rehabilitating the Reading Room, including control of invasive plant species.

RECOMMENDATIONS

The following are specific recommendations for improving the landscape at historic Binney Park. The Town of Greenwich Parks and Recreation Department should strive as much as possible to maintain the landscape in keeping with what is known about Edwin Binney's original concept for the park, created in the years 1929-1931. The recommendations reflect this thinking by proposing a series of fourteen projects that (1) preserve and enhance existing historic features and (2) accommodate modern features needed to address contemporary and future park needs. The recommendations include both park-wide systems such as roads, paths, and site amenities, as well as area-specific projects.

Sustainability at Binney Park

Growing world-wide concern about the negative effects of climate change and the conservation of natural resources has prompted many communities to adopt both environmental and social sustainability as a long term goal. Greenwich has participated in this movement through several efforts, including planning for increased coastal flooding and implementing organic methods of lawn maintenance. Future improvements to Binney Park should, where possible, incorporate sustainable practices and the foregoing recommendations have been developed with these practices in mind. General sustainable practices include:

- Controlling sedimentation upstream of the pond, to reduce the need for future dredgings;¹
- Implementing organic maintenance of park lawns;
- Altering the topography, where appropriate, to protect trees and shrubs from the effects of salt water;
- Using durable materials for site amenities (benches, trash receptacles) and constructing site features (bridges and paths), and re-use existing materials where possible.
- Employing durable construction methods;
- Engaging volunteers, as individuals or in groups, to lend a hand in the park's upkeep, and to develop and sustain a healthy social relationship between the park and its users.

Park-Wide Improvements

Park Road

The park roadway extends from Wesskum Wood Road southward towards the southern end of the park, where it takes a ninety degree turn westward and exits on to Arch Street. At one time, granite pavers (aka "Belgian Block") stood along the edges, creating a clear delineation between the pavement and adjacent lawns. Most of these pavers have been obscured through

¹ As of the writing of this plan, the town had commissioned a study of erosion and sedimentation upstream of the Binney Park pond. Efforts to remedy erosion and sedimentation problems and minimize the need for future dredgings are included in the recommendations of this engineering study, [Binney Park Sediment Transport Study](#), CDM Smith, 2014.

RECOMMENDATIONS



Park-wide improvements proposed for Binney Park

RECOMMENDATIONS

multiple applications of overlay pavement, which over time, has buried the stones. These stones should be unearthed, cleaned, and reset along the roadway edges.

Traffic Calming: Speed Humps

Several speed bumps have been placed along the park roadway and these have proven to slow moving vehicles. Additional humps should be placed in the following locations, each coordinated with crosswalks (see description below):

- Arch Street, at the intersection of Pell Place
- Wesskum Wood Road, between the north and south sections of the park
- Park Roadway, coordinated with crosswalks



Granite edge stones were once installed to rim the park roadway. Today, many of these have been obscured by overlay pavement.

The design of these humps should complement the historic character of Binney Park and meld with the design of parking spaces. Use of flush granite edging, together with a contrasting pavement material, will help the look of these features.

Crosswalks

Crosswalks over the roads surrounding the park play a critical role in the safety of park users. To better mark the crosswalks, the town should construct substantial crossings consisting of flush granite edging and a pavement that contrasts with bituminous asphalt. By slightly raising the crosswalks and creating speed humps, the town will slow traffic, making more secure environment for pedestrians.



A speed hump, constructed of slightly raised flush granite edging and brick pavement slows vehicles at road crossings.

Parking Areas

The park's fields are heavily used by sports teams and demand for parking associated with these events is significant. To neatly accommodate vehicles around the southern end of the park, the town should construct a formal "parking lane," edged with flush granite pavers as a way of delineating parking spaces. This application can be used for parallel parking (along Arch Street and the park roadway) as well as diagonal (recommended for the area at the park's far southern end, opposite the maintenance building).

RECOMMENDATIONS



Two options for defining parking areas include installing flush granite pavers to create a dividing line between the street and parallel parking area.

Walkways

Binney Park's pathways are popular exercise routes for people of all ages, from nannies strolling babies to elderly men, seeking to maintain their fitness levels. The town should invest in both the care of existing walkways, and create new ones, as follows:

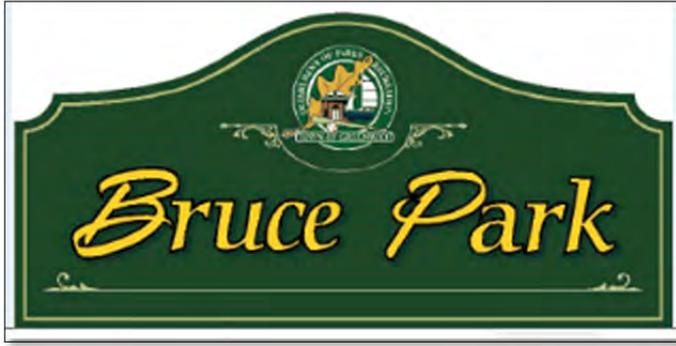
- Consider expanding the pathway system to include the following additional routes:
 - a perimeter pathway around the southern end of the park,
 - a connecting pathway leading across the footbridges to the east side of the stream
 - a perimeter pathway along the length of Arch Street
- Construct the pathways using a substantial base of compacted gravel (8" - 12") and extend this base at least 12" on either side of the pathway to reinforce the edges.
- Properly grade the edges of the pathways so that they are flush with the pavement.

Plantings

As noted throughout the foregoing recommendations, the town should strive as much as possible to restore the original plantings specified for the park when it was constructed in the late 1920s-early 1930s. A list of these plants appears in *Appendix B*. Plants that have been designated as invasive should not be reintroduced. Similarly, plants with sensitivity to saline conditions should be avoided. Whenever possible, the town should plant native species. A list of salt-tolerant and moisture-tolerant species appropriate for use in Binney Park accompanies the 1931 plant list in *Appendix B*.

RECOMMENDATIONS

Given that the original plant list included an array of trees, shrubs, vines, and perennials, the revival of this list – through new plantings within the park – positions Binney to become an arboretum. By providing labels on the various species (see signs, below), the town can establish a formal “collection” on which to build over many years.



The design for Binney Park signs should be coordinated with Greenwich's other historic park signs, and scaled appropriately for the intended locations.

Signs

As mentioned throughout the foregoing recommendations, Binney Park lacks several types of signage that, if introduced, would make the landscape more welcoming and help users better understand its history and natural assets. Signs should be professionally designed and constructed with a coordinated set of materials, colors, etc., and should coordinate with other signs placed in Greenwich's historic parks. The types

of signs needed for Binney Park include:

- Welcome signs, located at each park entrance, the Hillside and the Natural Area, listing park hours, rules of conduct, and briefly outlining the park's history.
- Interpretive signs, located at key locations, noting views, special flora and fauna, etc.
- Plant identification signs, located on plants throughout the park, listing botanical and common names.
- Trail markers, located throughout the Natural Area and Hillside, guiding hikers through woodland trails.

Benches and Trash Receptacles

The town has installed wood slat (teak or ipe) benches and trash receptacles throughout the park, and they have, for the most part, endured. Most of the benches have been set on concrete slabs. In the long term, the town should consider introducing iron-frame benches and trash receptacles, which will require less frequent replacement. These should be installed on a solid base, such as bituminous (to match the pathway material) or granite pavers.

Lights

The town installed new lighting at Binney Park in 2008, a lantern-style luminaire affixed to a 12' high pole. This style contrasts with the original lighting,



Binney Park, ca. 1940. The teardrop style luminaire, affixed to a rough-hewn wood pole arm, were installed throughout. Photo courtesy of the Historical Society of Greenwich.

RECOMMENDATIONS

shown in historic photographs, of a tear-drop style luminaire atop a wood pole. Should the 2008 fixtures need replacing, the town should consider installing new lights of that more closely match the original style (shown in the photograph at right), or coordinating the lights with plans for illumination in adjacent Old Greenwich.

Monuments and Memorials

The town does not maintain a collections policy for the addition of memorials to the park and as a result, several monuments have been placed throughout the landscape. Because Binney Park is a recreation site, and not a cemetery, memorials should come in the form of donations of items such as trees, shrubs, and benches. To ensure that such measures are taken in the future, the town should develop a formal collections policy and program for gifting plants and site amenities to the park. This policy should be coordinated with established town-wide donations policies.

Area Improvement Projects

Fourteen projects have been arranged by geographic area, and all involve physical treatment of the landscape. The plan on the next page illustrates locations of the fourteen “area improvement projects.”

Area 1: Southwest Corner

This shady area located in the park’s far southwest corner contains an eight-sided stone pavilion, located atop a small knoll. Surrounding the structure are mature Canadian hemlocks, oaks and white pines introduction of new plantings, chosen from the original Binney Park plant list (*Appendix B*) above an understory of mature rhododendron and spiraea shrubs. The hemlocks have been infested with Woolly Adelgid and appear to be in decline, and the shrubs have become overgrown and have lost their original form. A stepping stone walkway leads from the park roadway up the south side of the knoll. A children’s play area surrounded by a grove of dawn redwood trees, stands adjacent to the knoll.



The stone pavilion is located atop a wooded knoll. Currently the site is not accessible to persons with disabilities.

Scope of Work

- Prepare a topographic survey of the site, including locations of all vegetation, contours at 1’-0” intervals, and spot elevations around the building and along the pathway
- Prepare a design and construction documents (drawings and specifications) for the landscape surrounding the pavilion that includes:
 - removal the diseased hemlocks and selectively clear/prune the oaks and white pines
 - pruning the rhododendrons, and to the extent possible, the spiraea
 - creation of an ADA-compliant pathway or pathways leading from the park roadway to the top of the knoll

RECOMMENDATIONS



Area improvement projects for Binney Park.

RECOMMENDATIONS

- Restore the pavilion structure per the recommendations of the *Engineering Assessment (Appendix C)* and *Architectural Assessment (refer to Appendix D)*
- Upgrade the existing chain link fence surrounding the play area, using a black material to make the structure less visible in the landscape
- Construct the improvements according to the drawings and specifications

Area 2: Park Maintenance Area Environs

The Town of Greenwich has placed the maintenance area at the far southern end of the park, along the outside of the park roadway. Included in this area are a one-story maintenance building with garage; small parking area located to the west of the building; plantings of crabapple trees, evenly-spaced along the north side of the park roadway edge. Also within the



The park maintenance area, located at the far southern end, is visually separated from the park by a row of crabapple trees only.

environs is the stone wall adjacent to the stream, located on the east side of the maintenance area. Town crews carefully tend this area, making it appear neat and tidy. However, because it is separated from the remainder of the park by the crabapple trees only, it is somewhat of a visual intrusion on the historic character of the park. Visitors park along this edge in undesignated parking spaces, partly on the roadway, partly on the lawn.

Scope of Work

- Remove the crabapple trees and relocate them to another part of the town
- Create diagonal parking along the north or south edge, edged with granite pavers set into the pavement to delineate the parking area
- Create additional parking spots to the west of the maintenance building
- Reserve the far western edge for plant storage/nursery use
- Plant dense canopied trees along the northern edge of the roadway area
- Upgrade the condition of the speed hump by edging and surfacing it with flush granite pavers
- In the long term, repoint and replace missing stones in the stone wall per the recommendations of the *Engineering Assessment (Appendix C)*

Area 3: Southeast Edge

The southeast edge lies along the east side of the park roadway, and is longitudinally bisected by the stream (outflow from the Binney Park pond). An old galvanized steel chain 4' high chain link fence separates this area from the abutting residences to the east. Several species of trees and shrubs dot the stream edges, including spruce, pin oak, white pine, crabapples, white

RECOMMENDATIONS

birch, and juniper. Lack of a stabilizing material, such as boulders or woody plants, has resulted in erosion of the stream edge. Pedestrians may cross over the stream in two locations via wooden foot bridges, a new structure located at the northern end, and an older structure at the southern end, each providing a pleasing decorative element at the park's southern end. The area lacks pathways leading to and from these bridges, and contains no other site amenities (benches) and because of this, visitors are deterred from walking and sitting along this edge. Overgrown evergreen shrubs (juniper or cedar) stand on either side of the bridge (at the abutments).



The southeast edge features a lawn bisected by a stream. While bridges extend across the stream, the lack pathways leading to and from the bridges makes access difficult.

Scope of Work

- Introduce boulders and/or woody plant material to the edges of the stream to stabilize the banks and add color and texture
- Plant evergreen shrubs or low trees along the eastern property line to screen the chain link fence and views into the neighbors' yards
- Create walking paths connected to both sides of the bridges to promote pedestrian use of the east side of the stream
- Provide benches along the paths
- Repaint the southernmost wood pedestrian bridge per the recommendations of the *Engineering Assessment (Appendix C)*

Area 4: Club House Area

The park's historic club house and its environs stand along the southwestern edge, just north of the southwest pavilion (Area 1). The 1930's era stone building provides restrooms to users of the sports fields and tennis courts filling the park's southern end. Poured concrete walkways surround the building, bringing visitors from Arch Street (on the west side) around to the fields (on the east side). Pavement on the east side widens to provide a patio, with a flagstone paver edge. Several of the flagstones have cracked. The concrete is in good-fair condition, however lack of proper grading along the north and south sides has created a several-inch reveal on the concrete (resulting in a step-down on to adjacent grades). Mature beech and oak trees stand along the north side, and a row of crabapple trees lines Arch Street, near the building entrance. The trunk of one beech



Concrete walkways and a patio surround the stone club house building. Uneven grading around the pavement edges results in a "drop off" between the pavement and adjoining turf.

RECOMMENDATIONS

appears seriously damaged. A make-shift pull-off area in front of the building provides parking for a few cars, and boulders have been placed along Arch Street to prevent additional cars from parking on the lawn.

Scope of Work

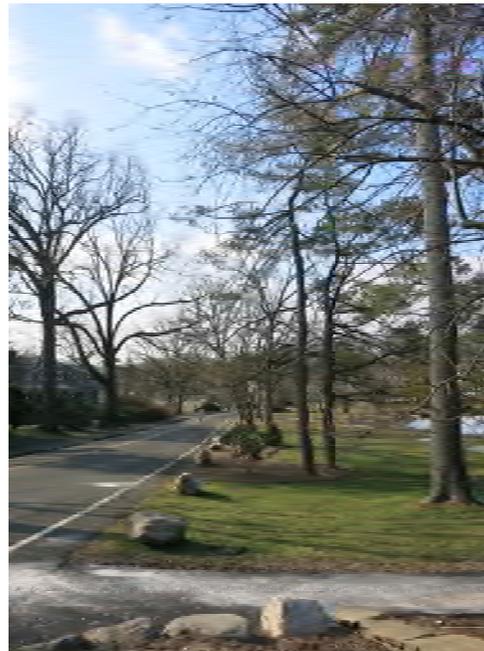
- Prepare a topographic survey of the site, including locations of all vegetation, contours at 1'-0" intervals, and spot elevations around the building and along the pathway
- Prepare a design and construction documents (drawings and specifications) for the landscape surrounding the pavilion that includes:
 - Reconstructing the pavement and re-grading the area surrounding the building to improve the walkway appearance and correct the reveal at the pavement edges
 - Installing a more historically compatible material, such as granite pavers set on a flexible base
 - Expanding the patio area to provide space for gatherings/concessions
 - Upgrading the pull-off parking area to include a granite block edge and flush granite block pavers to delineate the parking area
 - Creating a speed hump on Arch Street aligned with the club house entrance/entry walk
 - Pruning the existing beech and oak, and replace the damaged beech with another of the same species; plant a matching tree on the opposite side of the club house.
 - Repainting the roof structure according to the recommendations of the *Engineering Assessment (Appendix C)* and *Architectural Assessment (Appendix D)*
- Construct the improvements according to the drawings and specifications

Area 5: Wesskum Wood Edges

Wesskum Wood Road crosses through the center of Binney Park, making it a prominent feature meriting particular attention. The north side forms the southern edge of the park's passive northern half, and contains two distinct visual features. On the east side grows a stand of mature white pines and oaks, and the grand height of these trees provides a strong street edge, perfectly complementing the park. On the west is an orchard-type planting, consisting of an evenly-spaced grid of crabapple trees. The low height and full habit of these trees is not suitable as a street edge planting and their scale conflicts with the park's character.

Scope of Work

- Continue to prune, feed and provide additional care, as needed, to the pines and oaks on the east side, and replace trees with



The eastern end of Wesskum Wood Road features mature tall evergreen and deciduous trees that form a strong visual edge to the park.

RECOMMENDATIONS

- like species and/or evergreen and deciduous tree species included on the original Binney Park plant list (refer to *Appendix B*) as they die out.
- Remove the crabapple orchard on the west side and replace with pines and oaks to match those on the east side.

Area 6: Northeast Lawn and Sound Beach Edge

This long stretch along the northeast edge separates the park from the busy Sound Beach Avenue, a main thoroughfare into the center of Old Greenwich. The edge contains three park entrances, located at the northeast corner, at the center (across from the First Congregational Church of Greenwich), and at the southeast corner. Each entrance is discussed under Area 11, Park Entrances, below. Plantings of deciduous and evergreen trees and shrub masses extend along the full length of the edge, including white pines, a spruce, several species of small flowering trees, and juniper, azalea, and holly shrubs. A massing of ericaceous shrubs stands near the southern end. Overall, the planting lacks a strong theme.



The Arch Street edge is defined, in part, by the topography rising steeply upward along the west side. Tall shade trees further inforce this strong edge.



The Sound Beach Avenue edge features an assortment of pines and spruces and several small flowering trees, planted above beds of shrubs. The edge lacks a strong visual theme.

Scope of Work

- Continue to prune, feed and provide additional care to the existing pines and replace trees as they mature and die
- Remove the massings of shrubs
- Introduce new plantings of tall trees to form a strong street edge, including evergreen and deciduous trees from original Binney Park plant list (*Appendix B*)
- Back-plant (plant behind) the tall trees with flowering trees from the Binney Park plant list
- Maintain the lawn as open turf mixed with perennial ground covers

Area 7: Northwest Lawn and Arch Street Edge

The Arch Street edge is a similarly long stretch, extending the full length of the west side of the park. The topography on the west side across Arch Street from the park slopes dramatically

RECOMMENDATIONS

upward, and this forms a strong natural edge. Several mature species of shade trees stand within the park along Arch Street, including oaks, spruces, and a dawn redwood, provide a bold edge.

Scope of Work

- Continue to prune, feed and provide additional care to the existing pines and replace trees as they mature and die
- Introduce new plantings of tall trees to form a strong street edge, including evergreen and deciduous trees from original Binney Park plant list (*Appendix B*)
- Maintain the lawn as open turf mixed with perennial ground covers

Area 8: Island

This small kidney-shaped area has long been a favorite of park users. Located between the north and south pond, it is connected to the park via bituminous walkways leading across two stone foot bridges, located on its northeast and northwest sides. Its central feature – a stone pavilion – stands near the island’s southern end. Open air on three sides, the building’s columns frame views to the north, east, and south. Several species of trees, shrubs, and herbaceous perennials grow on the island, including oaks, spruces, red maple, birch, and juniper/cedar. A single Cryptomeria has been planted near the island’s center. Several of the trees appear to be in declining health with broken limbs and/or damaged trunks. Large masses of overgrown evergreens (juniper/cedar) stand at either side of each bridge, obstructing pedestrians’ access to this beloved spot.



The Binney Park island is one of the park’s most beloved features. The grounds appear somewhat worn.

Scope of Work

- Prepare a design and construction documents (drawings and specifications) for the island’s landscape that includes:
 - removal of trees that are in poor condition removal the diseased hemlocks and selective clearing/pruning the oaks and white pines
 - removal of masses of juniper/cedar from the bridge abutments
 - upgrades to the pavilion environs, including the seating area
 - new plantings of trees and shrubs selected from the original Binney Park plant list (*Appendix B*)
 - restoration of the pavilion per the recommendations of the *Engineering Assessment (Appendix C)* and *Architectural Assessment (Appendix D)*
 - restoration of the stone arch bridges leading to the island per the recommendations of the *Engineering Assessment (Appendix C)*
- Construct the improvements according to the drawings and specifications

RECOMMENDATIONS

Area 9: North Pond Edges

The original design for the Binney Park ponds included granite boulders lining the edges, presumably to prevent erosion. Flowering shrubs were introduced to provide color and texture. Today, while these boulders remain largely in place, many have slipped into the pond and/or are obscured by turf which has grown to cover portions of them. Only a handful of flowering shrubs remains. The lack of vegetation growing along the edges encourages the influx of geese; without the obstruction of trees or shrubs, the birds have a clear area in which to land. The town has planted a mix of deciduous and evergreen trees along the streams feeding into the north side of the pond. Some of these, including willows, are in poor condition, and others, including crabapples, were not included in the original Binney Park plant list.



The north pond edges were originally lined with boulders, placed to control erosion and provide a decorative border. Today many of the stones have slipped into the pond, and others are obscured with turf.

Scope of Work

- Gradually remove trees that are in decline and/or were not part of the original plant list; species include willows and crabapples.

Following dredging operations:

- Remove turf growing over tops of boulders to expose the stone
- Reset boulders that have slipped into the pond; replace any missing boulders
- Reintroduce pond edge plantings of shrubs and perennials, per the original Binney Park plant list (*Appendix B*)

Area 10: South Pond Edges

Similar to the north pond, the south pond was originally lined with granite boulders to prevent bank erosion. Today, many of the boulders have slipped and others are obscured – either partially or fully – by turf. Vegetation nearby is completely absent from much of the edges, except for mature oaks growing along the east (two trees) and west (one tree) sides, and two planted memorials (Dorothy Hamill and War Memorial) on the east side. The Town



Similar to the north pond, the south pond edges originally contained boulders that are now obscured or out of place. The lack of vegetation around the edges allows geese a clear landing area.

RECOMMENDATIONS

has planted crabapple trees near the east side along the perimeter walkway. The lack of vegetation provides an open invitation for geese to gather, which they do, en masse. A wooden footbridge, located at the far southern end, allows pedestrians to pass over the outflow stream, and this structure is in good condition, needing only minor cosmetic repairs.

Scope of Work

Following dredging operations:

- Remove turf growing over tops of boulders to expose the stone
- Reset boulders that have slipped into the pond; replace any missing boulders
- Reintroduce pond edge plantings of shrubs and perennials, per the original Binney Park plant list (*Appendix B*)
- Repair the wooden footbridge per the recommendations of the *Engineering Assessment* (*Appendix C*)

Area 11: Park Entrances

Visitors may enter the park on foot at four access points, at the northeast corner, at the northwest corner, along Sound Beach Avenue across from the Congregational Church, and at the southeast corner. While each entrance has its own distinctive character, they all share common features, and the Town should take this into account when making improvements.

A: Northeast Corner. This prominent entrance stands at the intersections of Sound Beach Avenue, Harding Road, and Laddins Rock Road. Here, two walkways begin on either side of a stone bridge abutment, and follow along the stream into the park. The area contains no signs, however the park landscape is clearly visible from this corner. Once lined with boulders, the stream edges have deteriorated, with some stones having slipped into the stream bed and others are missing altogether. A large oak shade both walkways, and a shrubs masses line the westernmost walkway. The area contains no signs.

Scope of Work

- Clean litter and debris from stream bed
- Reset and replace boulders that have slipped or gone missing
- Install welcome sign (see *Park-Wide Projects*, discussed later in this section)

B: Northwest Corner. This entrance is frequented by visitors arriving on foot from the west and also from parking spaces at the Perrot Library. A pair of walkways leads into the park from the corner of Arch Street and Sound Beach Avenue on either side of a mortared cut stone culvert (containing the stream feeding the pond). Once lined with boulders, the stream edges have



The northwest park entrance brings visitors into the park alongside a stone culvert, lined with yews.

RECOMMENDATIONS

deteriorated, with some stones having slipped into the stream bed and others are missing altogether. Yews have been planted along the culvert edge, presumably to prevent visitors from falling into the stream. A barberry hedge rims the northern park edge adjacent to the east side of the culvert. The area contains no signs.

Scope of Work

- Clean litter and debris from stream bed
- Reset and replace boulders that have slipped or gone missing
- Prepare specifications for repair the stone culvert per the recommendations of the *Engineering Assessment (Appendix C)*
- Repair the stone culvert
- Remove the yew and barberry hedges and replace with plants specified in the original Binney Park plant list (*Appendix B*)
- Install welcome sign (see *Park-Wide Projects*, discussed later in this section)

C: Sound Beach (Across from Congregational Church). This small side entrance links the Congregational Church to the park, with the entrance aligned with the church's front door. A pair of mortared cut stone columns flanks the entrance and surrounding the columns are masses of clipped junipers and yews. Historically, a pair of blue spruce trees stood inside the park on either side of the entrance, however only one (on the south side) remains.



The Sound Beach Avenue entrance, located across from the Congregational Church, provides a direct link between the church and park.

Scope of Work

- Remove the remaining blue spruce and replace it with a matching pair, located in the same spot
- Remove the junipers and yews and replace them with plants specified in the original Binney Park plant list (*Appendix B*)
- Install a welcome sign (see *Park-Wide Projects*, discussed later in this section)

RECOMMENDATIONS

D: Southeast Corner. This entrance lies at the corner of Sound Beach Avenue and Wesskum Wood road and is marked by a flight of concrete steps set into mortared stone cheek walls, allowing visitors to descend into the park from the east side. At the bottom of the steps, a bituminous pathway leads into the park and the flagpole area. A secondary pathway located to the west of the steps leads from Wesskum Wood Road, joining the other pathway at the flagpole area. To the north of the steps, along the park edge, is the time capsule, surrounded by ericaceous plants and shaded by a mature oak tree. The steps are in good condition and the plantings have become overgrown. The area contains no signs.



The southeast entrance features concrete steps set into mortared stone cheek walls.

The steps are in good condition and the plantings have become overgrown. The area contains no signs.

Scope of Work

- Prune and thin the ericaceous plantings to improve visibility of the time capsule
- Replace the concrete steps with granite treads
- Install a welcome sign (see *Park-Wide Projects*, discussed later in this section)

Area 12: Reading Room²

This small, low-lying parcel provides a connection between the park and Helen Binney Kitchel Natural Area, located to the north and east of the park. It stands at the intersection of Harding Road and Sound Beach Avenue, adjacent to a heavily-travelled rotary. The stream feeding the Binney Park pond flows along the east and south sides of the Reading Room, and the remnants of a bituminous walkway lead visitors through the site along the stream edge. A few trees grow near the exterior edges, and a mass of *Polygonum* (Japanese knotweed) has infiltrated the stream edges. The area contains two stone benches, but is not signed.



The Reading Room, located at the corner of Sound Beach Avenue and Harding Road, provides a connection between the park and Natural Area.

² The Town of Greenwich has indicated that a portion of the Reading Room may be taken to create a more sizeable rotary at the Sound Beach Avenue/Harding Road/Laddins Rock Road intersection. The Parks and Recreation Department should participate in discussions about the planning for this, and suggest way the character of the Reading Room could be retained, while at the same time helping to solve traffic flow problems.

RECOMMENDATIONS

Scope of Work

- Continue to apply mechanical and chemical methods of controlling the Polyganum
- Construct a more substantial pathway through the site, connecting Sound Beach Avenue to Harding Road, along the stream edge
- Continue to maintain the trees
- Install an identification sign (see *Park-Wide Projects*, discussed later in this section)

Area 13: Natural Area

This 10-acre area located to the northeast of Binney Park has been set aside as a nature preserve and since its establishment in 1939, has been maintained as such.

Entrances, with interpretive and directional signage, have been established at the east and west ends of the area along Harding Road, and an informally blazed trail leads visitors through the preserve along a loop. Inside the preserve, visitors pass by native plants including American beeches, sweetgums, hollies and bull briars. The area includes a significant wetland at the western end, and rock outcropping near the eastern end. Parking along Harding Road is limited to a few cars, and the lack of a crosswalk and sidewalk leading from the Perrot Library across Laddins Rock Road makes navigation to the trailheads on foot very difficult.



Interpretive signs at the Natural Area provide visitors with a history, trail map, and information about local flora.

Scope of Work

- Construct a sidewalk along the north side of Harding Road, leading from the Perrot Library, across Laddins Rock Road, to allow visitors a safer access route.
- Enhance the existing native plant palette within the preserve with additional natives including both upland and wetland species
- Provide more interpretive signs discussing flora, fauna and birds

Area 14: Hillside

This 1.89 acre parcel, located across Arch Street from the park's northwest corner, offers visitors the opportunity to hike up to a high point and view the park from above through a bird's eye. A group of volunteers, with support from the Binney Park staff, has constructed two entrances, both from Arch Street, taking visitors up steps and a series of



Stone steps at the Hillside lead hikers up steep slopes to an overlook area where views of the park are possible.

RECOMMENDATIONS

switchbacks to resting spots. In winter, views of the park are possible through the leafless trees, but in warmer months these views are obstructed. Several types of construction materials have been used to build the steps and trail edges, including concrete, boulders and wood timbers. A portion of the trail located at the far southern end has eroded, obstructing navigation of the full loop. The area contains no signs.

Scope of Work

- Select one palette of materials to use throughout the area for steps and trail edging, boulders and flat stones provide the most durable, long-lasting application. Implement this palette as repairs and replacement of existing materials are needed.
- Selectively clear the woodlands and viewing spots to open vistas across the park landscape
- Introduce slope-stabilizing native plants, including azaleas, rhododendrons, viburnums and ferns
- Provide benches at high points and resting spots
- Provide signs marking the entrances, showing trail lengths, illustrating the view from the high points, and warning neighbors about spreading debris in the western edge of the Hillside

IMPLEMENTATION

This section provides a strategy for implementing the master plan recommendations. The strategy places the recommendations in order of priority, and assigns each a budget.

Implementation Priorities

Several factors influenced the setting of priorities for making improvements within the landscape, including opportunities for funding, chances of engaging volunteer labor, potential for strong visual impact, and input from concerned and interested citizens. Each factor is discussed below.

- *Funding Opportunities.* Several opportunities to raise funds for specific efforts from both public and private sources gave some projects higher priorities. Several private donations had been made for park upgrades before the master planning process began. The town, through the Parks and Recreation Department, could request funding for specific projects through its capital budget process.
- *Volunteer Opportunities.* Several citizens expressed interest in volunteering their time on improvement efforts, including planting and trail-building, and these projects received higher priority.
- *Visual Impact.* Some projects were determined to have large visual impact, or “curb appeal.” These also received higher priority.
- *Public Input.* Lastly, concerned and interested citizens voiced preferences for park improvements, and the projects reflecting these preferences received higher priority.³



A participant in the Binney Park public forum presented a summary of priorities for improving the park landscape.

The synthesis of these factors showed that the highest priority projects would aim to accomplish the following:

- **improve the safety of park users** by creating better organized parking and introducing traffic-calming along perimeter park roads;

³ To understand citizens' interests and to establish priorities for implementing the master plan, the Parks and Recreation Department hosted a public forum. Nearly 70 individuals attended the evening event and several others responded via e-mail. Those attending participated in a public interest exercise where they identified likes and dislikes, and suggested improvements. A detailed report of this event, including a priority ranking of the improvement projects, appears in *Appendix E* of this plan.

IMPLEMENTATION

- **improve and expand the existing pathway system** so that all walkways within the park connect, and that walkways are created where they are missing, including the southeast edge, Arch Street edge, and linking the north and south parts of the park;
- **develop and implement a comprehensive planting plan**, one that revives historic plantings, removes overgrown plants, and introduces salt-tolerant native plants; and
- **develop and implement a plan to restore the pond edges**, including re-setting of boulders, re-planting of wetland plants, and adhering to a periodic maintenance plan.

Implementation Partners

Several civic-minded non-profit organizations based in and around Old Greenwich and Riverside should be engaged to help with restoration and long term maintenance of Binney Park on a volunteer basis. They include:

- *Friends of Binney Park*. Revived in 2014, this volunteer organization of approximately 50 members was formed to serve as an advocate for the park, its care, and use.
- *Garden Club of Old Greenwich*. Founded in 1924, this organization “promotes gardening, community and spirit,” and has, over its long history, completed several landscape restoration projects.
- *Riverside Garden Club*. This organization retains, as part of its purpose, goals of encouraging conservation and civic planning, and supporting community

HIGHER PRIORITY PROJECTS

- Development and implementation of a comprehensive tree and shrub removal and re-planting plan, and turf enhancement of the northern section (Area #9, #10, #6, #7)¹
- Improvements to Wesskum Wood Road edges (Area #5)
- Improvements to park entrances (Area #11)
- Improvements to the Island (Area #8)
- Enhancement of the Hillside (Area #14)
- Expansion of the interior park pathway
- Development and implementation of a palette of materials for park features including walkways, crosswalks, benches, trash receptacles, signs
- Upgrades to the park roadway and surrounding roadways including parking, crosswalks and speed humps

LOWER PRIORITY PROJECTS

- Improvements to the southeast edge (Area #3)
- Improvements to park maintenance area (Area #2)
- Enhancements to the Natural Area (Area #13)
- Improvements to the Southwest Corner (Area #1)
- Improvements to the Club House (Area #4)
- Improvements to the Reading Room (Area #12)
- Development of a collections policy for monuments and memorials and for accepting park donations

IMPLEMENTATION

beautification projects.

- *Junior League of Greenwich.* This organization of women promotes volunteerism though, among other activities, community improvement projects.
- *Greenwich Scouting.* An umbrella organization for the Cub Scouts and Boy Scouts, Greenwich Scouting manages Good Turn for Greenwich, a scout-based program dedicated to improving local issues including public parks and open spaces.
- *Greenwich Tree Conservancy.* This non-profit was established to enhance the tree resources of Greenwich, and serves as an advocate for the protection and replanting of trees throughout the community.

Budget Projections

The following list assigns a preliminary cost to each of the park-wide improvements and project areas. Note that the cost figures are merely projections, intended as guidelines for the Town of Greenwich in setting budgeting and fundraising goals. All figures are based on 2015 construction industry rates and in the future should be adjusted yearly for inflation.

Park Wide Improvements

Park Road:

\$6.00/SF

Costs include milling of existing roadway surface, cleaning and resetting of granite edge stones, speed hump construction, roadway repaving.

Parking Area:

\$1,500/space

Costs include installation of parking lane demarcation (flush granite edging),

Walkway Extension:

\$3.50/SF

Costs include pathway design (layout and details), pathway construction (2-1/2" bituminous asphalt on 6" gravel base) of an extension to the existing system that focuses on the linking the north and south sides of the park, and provides greater access to the west side (southern half of the park)

Crosswalks:

\$50/SF

Costs include construction of flush granite edging and special paving (such as asphalt pavers).

Comprehensive Planting Plan:

\$25,000

IMPLEMENTATION

Costs include a detailed planting plan for the entire park, drawing on species included in the original plant list and augmented with species tolerant of salty and wet conditions. (Note: costs for new plantings have been incorporated into the project area budgets, above.)

Signs:

\$25,000

Costs include design and fabrication of signs. Installation costs have been included in the project area budgets, above.

Benches and Trash Receptacles:

\$750/Bench; \$500/Trash Receptacle

Costs include paving (bench and receptacle pads), benches, trash receptacles, installation.

Lights:

\$5,000 per fixture (pole and luminaire)

Costs include design, light fixtures, and installation.

Project Areas

Area 1: Southwest Corner:

\$67,800 - \$77,970

Costs include survey preparation, design and construction documents, tree removal, shrub pruning, pathway construction, planting, pavilion restoration, play area fencing.

Area 2: Park Maintenance Area:

\$82,000 - \$94,300

Costs include tree removal/relocation, upgraded pavement (parking spaces and speed humps), tree planting, stone wall repair and repointing.

Area 3: Southeast Edge:

\$80,000 - \$92,000*

Costs include stream bank stabilization (boulders and plants), tree/shrub planting, walking path construction, benches, repair of one wood pedestrian bridge. *Note: For complete replacement of the south bridge, add \$50,000.

Area 4: Club House Area:

\$46,800 - \$53,820

Costs include survey preparation, design and construction documents, re-grading and pavement reconstruction, upgraded pavement (parking spaces and speed humps), tree pruning and planting, repainting of club house roof.

Area 5: Wesskum Wood North Edge:

\$25,000 - \$28,750*

IMPLEMENTATION

Costs include care of existing trees, new tree planting, tree removal (orchard), and bridge repainting . **Note: for complete replacement of the bridge, add \$50,000.*

Area 6: Northeast Lawn and Sound Beach Edge:

\$50,000 - \$57,500

Costs include care of existing trees, removal of shrub masses, new tree plantings.

Area 7: Northwest Lawn and Arch Street Edge: \$50,000 - \$57,500

Costs include care of existing trees, removal of shrub masses, new tree plantings.

Area 8: Island:

\$133,500 - \$153,525*

Costs include survey preparation, design and construction documents, tree and shrub removal, regrading around pavilion, tree and shrub planting, pavilion and stone arch bridges (2) restoration. **Note: figure does not include re-sealing of the bridges to prevent water infiltration. To include this cost, add approximately \$100,000.*

Areas 9 and 10: North and South Pond Edges:

\$56,000 - \$64,400

Costs include tree removal, turf removal (on boulders), boulder resetting, pond edge plantings, repair of one wood footbridge (South Pond)

Area 11: Park Entrances:

*A: Northwest Corner: \$5,000 - \$30,000**

B: North and Northeast Corner: \$3,000

C: Sound Beach Avenue (across from church) \$2,500

D: Sound Beach/Wesskum Wood Corner: \$10,000

Costs include litter and debris removal, tree and shrub removal, shrub pruning, boulder resetting, stone culvert repair (including engineering and specifications), step replacement, sign installation. **Note: \$30,000 includes \$25,000 to seal the culvert headwall.*

Area 12: Reading Room:

\$5,000 - \$6,000

Costs include mowing and herbicide application, pathway construction, sign installation.

Area 13: Natural Area:

\$32,000 – \$36,800

Costs include sidewalk construction, shrub and herbaceous planting, sign installation.

Area 14: Hillside: \$25,000 - \$28,750

Costs include design of steps and pathways (details), clearing, bench installation, sign installation.

IMPLEMENTATION

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This section of the plan will help the Town of Greenwich care for the Binney Park landscape. It includes strategies for the care of plants (trees, shrubs and turf), structures (steps and buildings), and pavement. By following these strategies, town employees and volunteers will help ensure the long term health and beauty of some of Greenwich's most prominent historic landscapes.

Management Log

Before the Town begins management of the park's landscapes, staff should set up a "management log," or ongoing written record of inspections, repairs, and introductions of new features listed by date. The log should include methods and materials employed, as well as names and contact information for any specialists employed in each park's care. The log should be stored, in both electronic and manual format, in a secure location within the Division of Parks and Trees.

EXISTING PLANTS

Trees

As noted in several places in this report, trees greatly impact the park's appearance, with mature trees and tree stands playing dominant roles. To maintain the trees' health the Town should adhere to the measures that follow. For treatment of individual trees, the Town should consult a Connecticut Certified Arborist.

General Tree Management Guidelines

1. Test the park soil for quality in relationship to the mature tree population. The test will detect any soil deficiencies, and determine a remedy for correcting them.
2. Provide and install cables. These will help stabilize any weakly-joined tree limbs.
3. Treat trees with a systemic insecticide to minimize stress caused by leaf-feeding pests.
4. Prune trees, removing all dead wood greater than 1/2" in diameter.
5. Create rings of mulch around the base of each tree, as wide as possible and up to the diameter of the tree crown.
6. Where soil has built up at the base of trees, remove enough to expose the root collar.
7. Remove any dead trees.

Turf

The following fertilizing and mowing guidelines will help maintain the turf areas, promoting a lush, green appearance and healthier, longer living plants.

1. Fertilize sparingly, as too much fertilizer can cause grass to grow too rapidly, requiring more mowing and making the plants more susceptible to disease. Not enough fertilizer can result in weaker plants that are more susceptible to disease or stress brought on by drought.
2. Apply fertilizer three times per year - around Memorial Day and Labor Day, and finally, around Halloween.
3. Do NOT fertilize in mid-summer. At this time of year, roots have become dormant. Fertilizer will cause the leaves to grow, making the plants less tolerant of drought, heat and disease.
4. Follow these fertilizing instructions:
 - *Memorial Day* - apply 1 pound of Nitrogen per 1,000 sf (with 50% of Nitrogen slow-release). Use an N:P:K Ratio of 14-14-14.
 - *Labor Day* - apply 2 pounds of Nitrogen per 1,000 sf (with 50% of Nitrogen slow-release). Use an N:P:K Ratio of 14-14-14.
 - *Halloween* - apply 1 pound of Nitrogen per 1,000 sf (with 75% of Nitrogen slow-release). Use an N:P:K Ratio of 28-3-9.
5. When mowing, remove no more than one-third of the height of the turf at one time, always leaving twice as much leaf height as is cut.
6. The best level for mown grass is 2 ½ inches, with 2 to 3 ½ inches the range.
7. It is best to mow lawns on an as-needed basis, not on a regular schedule, such as once per week.
8. When mowing around historic features, such as stone walls and bridges, the town should avoid contact between the equipment and stones. Weed-whackers should be used sparingly, and preferably not at all.

Exotic Invasive Plants

Invasive plants are non-native species that were introduced to the United States by horticulturists as ornamental or exotic plants. They quickly adapted to the growing conditions of U.S. climates, and spread, overtaking and crowding out native species. Invasive plants are difficult to control and must be monitored closely to prevent them from eliminating other more desirable plant species. The four historic parks contain several invasive species, including

MANAGING THE BINNEY PARK LANDSCAPE

Norway maple (*Acer platanoides*), Purple Loosestrife (*Lythrum salicaria*), and Japanese Knotweed (*Polygonum cuspidata*). The following are general measures for controlling these species.



Norway Maple (Acer platanoides)

Norway maple is native to Europe and Western Asia, and was introduced in the United States as an ornamental landscape plant. It reproduces prolifically in forests, fields, and other natural habitats, forming dense, shady stands and displacing native trees and shrubs. The tree has smooth, grey bark that becomes furrowed with age, and its leaves are dark green. The leaves have little or no fall color, which is one of the easiest ways of distinguishing it from the brilliant orange-colored sugar maple.

Norway maples spread by sending their mature fruits, or “samaras” through the wind. Small seedlings may be uprooted from the ground by hand, and small and large trees can be cut to the ground level. An application of glyphosate (Roundup) or triclopyr (Garlon 3A or Garlon 4) herbicide can also help control. The best means of control, however, is simply not planting them.



Purple Loosestrife (Lythrum salicaria)

Purple Loosestrife is an erect, perennial herb, introduced in the United States in the 1800s for medicinal and ornamental purposes. Its stem is square and its lance-shaped, stalkless leaves are opposite or whorled. It produces deep magenta-colored flower spikes through much of the summer. It infiltrates both fresh water wetlands as well as tidal and non-tidal marshes.

Control of Purple Loosestrife may be implemented by hand pulling small plants before seeds set, or treating with glyphosate (Rodeo for wetlands). Herbicides should be applied late in the season when plants are preparing for dormancy. Biological control, using insect species approved by the US Department of Agriculture – the root-mining weevil, leaf-feeding beetles, and flower-feeding beetles. For more information about use of biological control measures, contact the Connecticut Department of Agriculture.

Japanese Knotweed (Polygonum cuspidata)

Native to eastern Asia, Japanese Knotweed grows along the stream bank in the Reading Room (between the park and Natural Area). The plant arrived in North America late in the 19th century and was used for ornamental purposes. It spreads aggressively by seed and rhizome – runners that can extend up to fifteen to eighteen feet underground. To date, no definitive means of control exists, except for complete removal of the plants and their rhizome network.

The key to managing Japanese Knotweed is persistent and continual treatment. If the town finds that the plant colony and its rhizome network are too large to remove, staff should control it through *cutting* and *application of an herbicide*. Staff should *cut* the stalks at least three times per season, before the plants mature and produce flowers. Staff should also apply an *herbicide*, such as glyphosate, immediately after the stalks have been cut, and preferably in the fall, when the plant is fueling growth of the rhizomes.



NEW PLANTS

Historical research conducted for each of the parks revealed some of the historic plant species originally installed in each. When introducing new trees and shrubs, the town should consult this research and draw from it as much is possible.

New Trees & Shrubs

Specifications for planting new trees and shrubs should be included in all relevant landscape preservation projects, conducted in the future at the parks. All planting should adhere to these specifications unless otherwise approved by the landscape architect. In summary, newly planted trees are unlikely to survive if they do not receive special care and attention, particularly in the first few years after planting. In general, adhere to the following care guidelines:

- Plant in the spring or fall, and never during the heat of summer.
- Hire a landscape contracting company to plant trees and shrubs. Trees and shrubs that are planted correctly will be far more likely to survive and thrive. The contractor should guarantee all trees and shrubs for one year after planting. However, *the guarantee is valid only if the plants have been properly cared for.*
- If staking new trees is necessary, be sure to remove stakes and guy-wires within one year of planting. If the trees appear to need some kind of individual protection because of their location, build a simple fence rather than leaving the guy-wires on. Wires can damage and will eventually kill the tree if left in place too long.
- Provide the trees and shrubs with at least one inch of water each week. This water can be supplied by rainfall or by supplemental watering. Spreading one inch of water using a hose attached to an exterior water spigot takes approximately two-three hours. Water must soak deep into the soil to encourage good root growth and overall plant health. Adjust the flow of water so it has time to sink into the ground, reducing the pressure if

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small “rivers” develop. The water should sink into the ground around the tree or shrub, rather than flowing away.

- If drought dominates the fall, be sure to water trees and shrubs well before the ground freezes, protecting the plants from entering winter in dry soil.
- Mulch plants to help control weeds and keep moisture in the soil (and maintain a neat appearance in the landscape). Use composted pine bark mulch that has been aged a minimum of three months. Apply the mulch to a depth no greater than three inches. Each spring, fluff the existing mulch and add more, as needed. Keep mulch away from the stems or trunks of trees and shrubs, and off shrub branches (to minimize decay and prevent insect infestations).
- Prune trees and shrubs to enhance their natural form and appearance, and to help maintain their health. Enlist the expertise of a professional or person trained in proper pruning practices. Prune only by hand (never use electric pruners). Prune broken branches immediately to prevent disease.

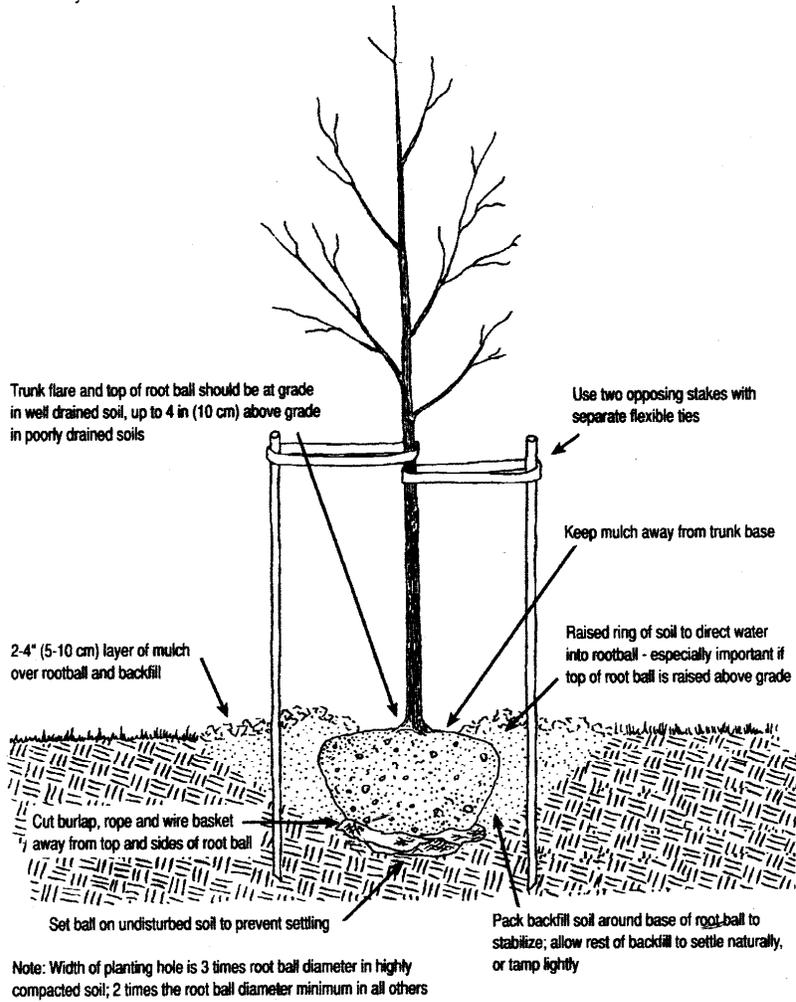
New Turf Areas

When patching turf outside of athletic field areas, the town should adhere to the following measures to help insure long-lived, healthy lawn areas:

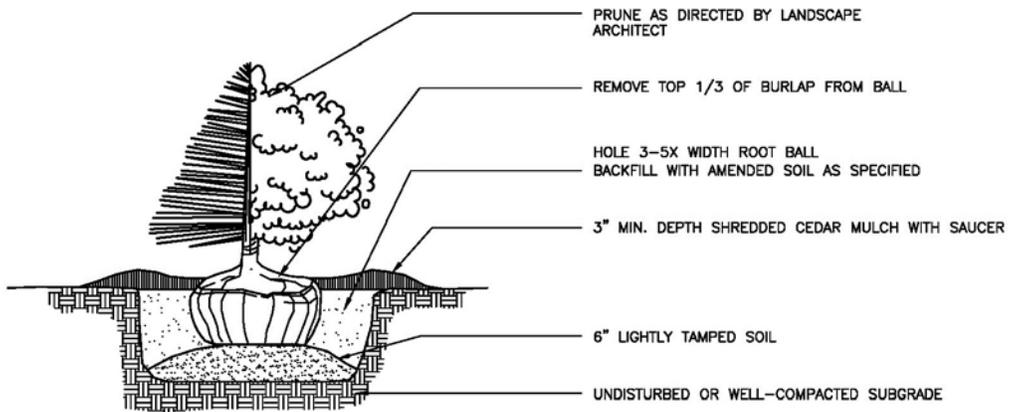
1. A seed mixture, consisting of Kentucky bluegrasses, fine fescues and perennial ryes is best, as it minimizes the amount of mowing (each grows at a different rate) and provides a consistent green appearance. Using a mix will avoid the problems arising from monocultural plantings. A local seed market will offer mixes appropriate for the Greenwich area.
2. Once applied, seed should be covered with straw mulch. Hay should be avoided as it encourages weed growth.
3. The seeded area should be watered as frequently as possible to encourage germination (approximately once inch of rainwater per week).
4. Do not use herbicides to control weeds when the turf is becoming established.
5. Once the turf is established, remove the straw mulch and follow the instructions listed above for ongoing management.

Planting Methods

When introducing new trees to each of the existing communities, the town should adhere to industry standards for planting. At a minimum, the town should follow the recommendations included following planting detail.



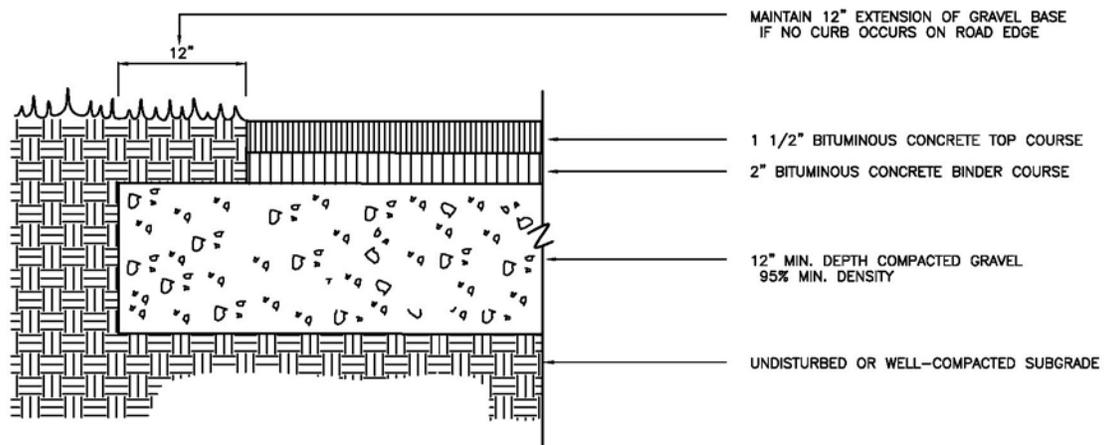
Tree Planting Detail. Source: University of Connecticut Cooperative Extension Service.



Shrub Planting Detail. Source: Martha Lyon Landscape Architecture, LLC.

ROADWAYS & PATHS

The town should inspect the paved roadways and paths yearly, looking for damage from frost heaves or vehicle tires. If the routes require patching, they should be repaired to maintain an even, unblemished appearance. The following detail illustrates the ideal method of constructing pedestrian walkways using bituminous asphalt. A 12" compacted gravel edge will help stabilize the walkways by supporting the weight of maintenance vehicles, such as snowplows.



Bituminous Walkway Detail. Source: Martha Lyon Landscape Architecture, LLC.

STRUCTURES

The town should inspect the park's structures (steps, walls, bridges and buildings) yearly, looking for dislodged stones, cracked mortar, dirt and graffiti. Major repairs should be made by qualified professionals only.

Yearly Cleaning

To prevent build up of dirt and grime on the granite buildings, steps, and the pond/stream edge boulders, the town should wash the surface yearly with a low-pressure application of water (less than 250 psi).

Graffiti Removal

Graffiti should be removed with solutions approved by the *National Park Service Preservation Brief 38, Removing Graffiti from Historic Masonry*. In particular, the town should adhere to the following guidelines:

- Identify the material used to make the graffiti. Most often, vandals employ spray paint (polyurethane, lacquer, enamel), brush-applied paints (oil and synthetic resins

including vinyl, acrylic, acetate, methacrylate, or alkyd), permanent and water-soluble felt markers, ballpoint pens, chalk, graphic and colored pencils, pastels, wax and oil crayons, liquid shoe polish, and lipstick.

- Identify the substrate material of the object containing the graffiti. Masonries are porous materials, making them sensitive to abrasion.
- Consult a historic masonry specialist before attempting to remove the graffiti. Specialists should maintain membership in the American Institute for Conservation (AIC), and perform all work in accordance with the AIC Code of Ethics and Standards of Practice. These individuals will assess the porosity of the substrate material and propose the best removal method. Methods include employing poultice (an absorbent material mixed with a cleaning solution and applied in the form of a paste), water and detergent, organic solvents, alkaline compounds, bleaches, mechanical treatment, and laser cleaning. The method should be tested on a small, obscure area of the graffiti-ed object prior to proceeding with removal.*
- Where appropriate, apply an anti-graffiti coating to the vandalized object. Such coatings can help facilitate easier removal of graffiti, but they do not prevent graffiti from occurring. Some are permanent, and others must be re-applied once the graffiti has been removed. Because the coatings can seal the object, they can lead to water build-up and eventual water-related deterioration.

In addition, the town can take the following measures to minimize the occurrence of graffiti:

- Remove graffiti immediately after it occurs. Studies have shown that graffiti that remains on objects attracts more graffiti, complicating the problem. Graffitiists gravitate and return to sites where their work will remain for longer periods of time.
- Perform regular maintenance throughout the park, including tree care, brush and understory removal, mowing and road maintenance. Well-maintained landscapes draw far fewer vandals than do poorly maintained ones.
- Install improved lighting and motion sensitive lighting in areas where graffiti has occurred in the past.
- Implement programs and activities that draw people in large numbers to the park at all times of year. Vandals are less likely to attack landscapes that are being watched.



Snowy Egrets are one of the species of waterfowl that frequent the pond at Binney Park. Several methods are possible for controlling the size of population of these, geese and ducks.

WATERFOWL

Many communities throughout the U.S. struggle with the control of unwanted waterfowl in public parks, cemeteries, and other landscapes. The following control methods for geese, ducks and other waterfowl have been tested by other municipalities, and are possibilities for the Town of Greenwich and Binney Park.

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- *Altering the Habitat.* Reduce grassy expanses by planting trees and shrubs and, where desirable, establish large ground cover areas in place of manicured lawns. Leave an apron of shrubs (6' to 10') around ponds or approaching bodies of water. Shrub areas around bodies of water make access to ponds difficult for waterfowl. This strategy discourages the birds and encourages them to relocate. If this method is chosen, the town should introduce signs informing the public of the control measure.
- *Encouraging the Waterfowl to Feed from Nature.* Feeding wild fowl promotes a dependency on humans and creates problems for them. Wild animals should be free to be wild and encouraged to migrate. Most humans do not provide the right nutritional balance when they feed waterfowl at our ponds and lakes. In public areas, appropriate signage that explains why feeding is discouraged could be part of a campaign to get people to stop feeding and domesticating waterfowl.
- *Installing Mechanical Barriers.* Tall grass and appropriate shrubs should serve as natural barriers. Natural barriers and habitat alteration should be tried and their results analyzed before employing any mechanical barriers.
- *Employing Scarecrows.* This method can be done easily and without reservation. The town should be careful to have some limb of the scarecrow move, as experience has shown that some motion is necessary to deter waterfowl.
- *Applying Chemical Repellants.* While much has been made of these commercial products and while they may be effective within certain parameters, there could be other environmental impacts that are potentially negative or insufficiently researched. Chemical repellants are relatively expensive and last only until the first rainfall, and runoff poses environmental impacts.
- *Introducing Setters, Retrievers or Border Collies.* Dogs are most effective in the autumn during migration by harassing the waterfowl and thereby discouraging them from settling in for the winter. In the spring, dogs (particularly collies) have been used to prevent waterfowl from developing nesting sites. Although expensive, this method of waterfowl control can be effective, primarily a short-term or temporary measure.

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