

*Master Plan*  
*for the*  
*Greenlawn Cemetery*  
*Salem, Massachusetts*



*Martha Lyon Landscape Architecture, LLC*

*in collaboration with*

*Treesources Consulting*  
*CHA Consulting, Inc.*  
*Fannin-Lehner Preservation Consultants*  
*High Fly Imaging, LLC*

*2022*

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“Let us choose the rudest, roughest, most uncultivable spot, for Death's garden ground;  
and Death shall teach us to beautify it, grave by grave.”

- *Nathaniel Hawthorne, 1852*



*Master Plan*  
for the  
*Greenlawn Cemetery*

*Salem, Massachusetts*

*prepared for the*

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**Christine Lutts**, President, Friends of Greenlawn Cemetery

### **Salem Cemetery Commission:**

Beth Gerard, Chair  
Pat Donahue  
Jen Ratliff  
Anthony O'Donnell

### **Greenlawn Cemetery Master Plan Committee:**

Megan Riccardi, Ward 6 Councilor  
Pat Donahue  
Brittany Dolan  
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Jay Carroll  
Deb Duhammel  
Patti Kelleher  
Christine Lutts  
Rich Stafford

*and...*

residents of Salem past, present and future

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## 1 INTRODUCTION

Greenlawn Cemetery is Salem's largest and only active place of interment, covering 55.8 acres in the City's North End. Established in 1807 as a small burying ground, Greenlawn was transformed in the mid-19<sup>th</sup> century after enlargement and embellishment in the Rural or Garden Cemetery style. Today, the cemetery doubles as a passive recreation site, frequented by neighborhood walkers, dog-owners, and nature-lovers. Visitors treasure Greenlawn for its beauty and solemnity, and for the stories it tells through the thousands of tablets and monuments commemorating individuals associated with 200 years of Salem's history.



*Greenlawn Cemetery as viewed from the west shore of Sargent Pond, looking east towards Harris Circle. The pond is a popular spot for ducks, turtles and other species of wildlife.*

In 2015, the property received recognition for its diverse collection of tree species, through designation as a Level I Arboretum through the ArbNet (Interactive Community of Arboreta) accreditation program, an effort spearheaded by the Friends of Greenlawn Cemetery. Two years later, Greenlawn achieved status on the National Register of Historic Places, cementing the property's significance as an historic resource. Yet despite these honors, Greenlawn suffers from decades of minimal maintenance. The hundreds of trees have received little care, many are diseased or dead, and aggressive less-desirable species have encroached valued ones. An aged drainage system has malfunctioned, resulting in slope erosion, roadway heaving, and poor water quality in the two ponds. Historic structures, including the Dickson Bridge and Steps, and culvert at the cemetery's far north end, stand in deteriorated states. Sales of burial plots have been the primary source of money to care for the landscape, and today Greenlawn is running out of interment space.

To address the cemetery's condition, the Salem Cemetery Commission identified the need develop a long-term plan for Greenlawn, one that would guide future improvements, identify options for expansion, and spell out measures for long-term management and care. In developing this, the City aimed to restore the character and quality of the historic landscape, funding this effort, in part, through the development and sale of new, sensitively designed interment sites. The foregoing *Greenlawn Cemetery Master Plan* is a response to this need.

## PROJECT GOAL

The goal of the *Greenlawn Cemetery Master Plan* project, as defined by the City of Salem, is to develop a long-term plan to make Greenlawn self-sustaining, by making landscape improvements, improving operations and management, and developing options for expansion of interment sites.

## METHOD

To complete the Master Plan, the City hired a team of consultants led by Martha Lyon Landscape Architecture, LLC (MLLA) and including CHA Consulting (civil and structural engineering), Fannin-Lehner Preservation Consultants (stone conservation), and Ben Staples, ISA/Treesources (arboriculture). Mapping was completed by High Fly Imaging. Input throughout the planning process was provided by the Department of Public Works, Cemetery Division, as well as many members of the public, through a set of engagement exercises (discussed in Section 2 of this plan). The consulting team adhered to the following method:

- *Phase 1: Context.* The team established the historic and natural contexts for the cemetery by researching the historical development and natural features of the landscape, establishing historical and natural significance, and identifying features (historic landscape styles and character nodes) to be preserved and enhanced as part of the plan. Phase 1 also included mapping. Using drone technology, the team photographed the landscape and prepared a base map to used in the plan. The map was created in Geographic Information System (GIS) format and converted for AutoCAD (ACAD) format for use by the team.
- *Phases 2 and 3: Landscape and Operations Assessments.* The team assessed the natural and built features of the landscape, as well as cemetery operations. Individual assessment reports were created for the drainage system, historic structures, gravestones (old section only) monuments and, and a portion of the tree population. Each of these reports appears as an appendix to the Master Plan.
- *Phase 4: Recommendations.* Based on the assessment, the team prepared a set of landscape and operations recommendations to be implemented over a minimum of ten years. For each recommendation, the team assigned a priority:



*Phase 2 involved assessing the condition of the ponds and historic structures, including the culvert at the north end.*

- ~ High (implement in 1 to 5 years)
- ~ Medium (implement in 5 to 10 years)
- ~ Low (implement, as opportunity arises, within 10 years)

Recommendations also included nine sites for new interments, and for each site, the team calculated numbers of potential interments, projected revenue amounts to be extracted from sales of the sites, and prepared an opinion of probable cost to develop each site calculated at the planning level.

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- *Phase 5 Final Plan.* The team compiled all components of the plan, including context, assessment and recommendations, into a final Greenlawn Cemetery Master Plan.

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## 2 PUBLIC ENGAGEMENT

Greenlawn is the people's cemetery, established as a place of interment for all Salem residents. Because of this, involvement of local citizens in the development of the master plan was critical to understanding the cemetery's community value, to identifying areas of concern, to setting priorities for addressing these concerns, and to establishing a vision for Greenlawn's future. This vision, developed based on public input, appears in the text box at right.

### A VISION FOR GREENLAWN CEMETERY

*A commemorative landscape that  
preserves the natural world;  
honors those who were once part of  
that world;  
celebrates Salem's history;  
and is welcoming to all*

### ENGAGEMENT PROCESS

To secure public involvement, the project team and Department of Public Works Cemetery Division staff gave several virtual presentations and conducted discussions as outlined below.<sup>1</sup>

#### Master Plan Committee

At the start of the project, Cemetery Division staff identified nine individuals representing cemetery stewards, users, and caretakers to serve on a Master Plan Committee. The group held an initial meeting (November 5, 2020) to help plan the public engagement activities, and second progress meeting mid-way through the process (June 23, 2021). Committee members also participated by joining one or more visioning or roundtable discussions, outlined below.

#### Visioning and Roundtable Discussions

The project team and Cemetery Division staff conducted the following sessions, the formats of which were tailored to each group's specific interests in Greenlawn:

- *Friends of Greenlawn Cemetery (January 26, 2021)*, a group of individuals who have joined the non-profit organization to raise funds, conduct public programs, advance efforts to restore the historic Dickson Chapel, and expand the cemetery's arboretum status;
- *North End Residents (February 2, 2021)*, a group of individuals living in Ward 6 and associating with the cemetery as a neighborhood green space; and
- *City Commissions (February 8, 2021)*, representatives from the Conservation, Historical and Cemetery Commissions who interact with the cemetery in a stewardship capacity.

#### Salem Cemetery Commission

Cemetery staff regularly updated the Salem Cemetery Commission on progress with the master plan at monthly meetings, and the project team made presentations at three Commission meetings, July 21 and October 20, 2021, and January 19, 2022.

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<sup>1</sup> The entire Greenlawn Cemetery Master Plan was developed and finalized during the COVID-19 pandemic, requiring that all public engagement activities, with one exception, be held virtually throughout the process.

## Public Forum

Near the conclusion of the project (November 30, 2021), the project team and Cemetery Division staff held a final forum to present a draft of the plan recommendations. All interested individuals were encouraged to attend.

## ENGAGEMENT RESULTS

A plethora of information emerged from the engagement sessions, information that helped focus the planning process and identify priorities for future improvements. For detailed information about the engagement sessions, including summaries of participants' comments and session presentations, refer to *Appendix D: Public Engagement*. A synthesis of the information appears below.

### VALUE TO THE COMMUNITY

- Salem's history woven into its landscape
- Resting place of family and friends
- Habitat for wildlife
- Function as a public park within the North End neighborhood
- A place to learn/outdoor classroom
- A recognized arboretum
- A democratic place that appeals to a cross-section of the population

### AREAS OF CONCERN

- Broken monuments and stolen pieces of monuments
- Condition of the ponds, including algae bloom, erosion of edges, clogging at the north end (Sargent Pond)
- Lack of aesthetics around the maintenance area
- Degraded condition of roads and paths
- Shortage of staff to properly maintain the landscape
- Lack of available gravesites
- Security, including people entering the cemetery to deposit trash



*The condition of Greenlawn's ponds, including algae bloom, edge erosion and stagnation of water, emerged as an area of major concern to the public.*

### PRIORITIES FOR THE FUTURE

- Increase the workforce to provide better maintenance
- Provide ADA-compliant restrooms
- Increase revenue through grant-writing and expanded interment options

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- Develop a choice of interment types (full-casket, in-ground cremation, columbarium cremation, scattering) and design interment areas to blend with and complement the historic landscape
- Place a greater emphasis on the natural landscape
- Maintain a diversity of trees, especially species that represent the historic landscape

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### 3 HISTORIC, CULTURAL & NATURAL CONTEXTS

Greenlawn Cemetery, dating to 1807, is the newest, largest, and only remaining active public place of interment in Salem. The City maintains four other small colonial style inactive burying grounds, Charter Street (ca. 1637), Broad Street (1855), Friends (1702), and Howard Street (1801), each standing within Salem’s downtown. Greenlawn, by contrast, lies in the City’s far northeastern corner, near the Crane and Danvers Rivers and edged by a residential neighborhood on two sides, and a golf course on the third. Established as a small burying ground serving the sparsely populated north part of Salem, it was nestled, in the early 19<sup>th</sup> century, amongst farms, orchards and horticultural endeavors. The favorable topography and soils supported these operations also provided suitable conditions for burials. As farming declined, the City purchased more land, eventually enlarging the burying ground into a 55.8-acre modern cemetery.

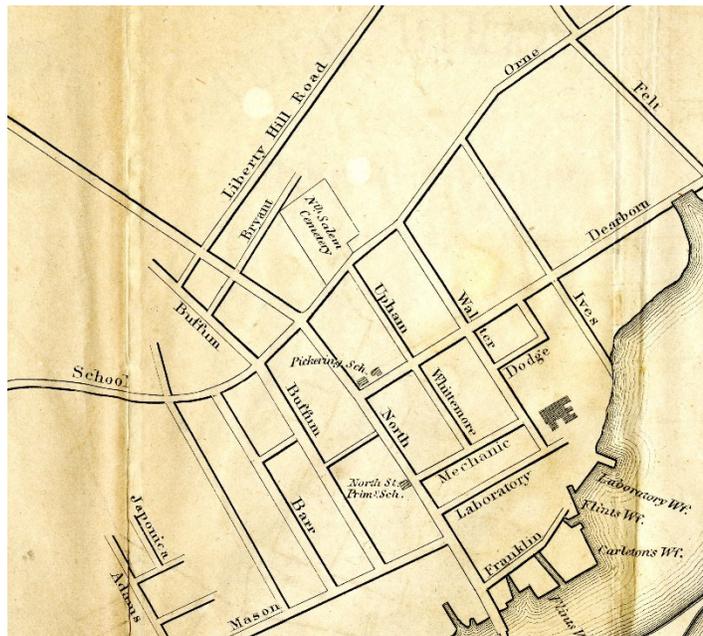
The following chapter of the Master Plan provides an overview of the historic, cultural and natural context in which Greenlawn was founded, enlarged, and remains today. Together with the assessment of existing cemetery conditions, this context provides a foundation for the plan’s recommendations.<sup>1</sup>

#### HISTORIC CONTEXT

##### Beginnings – Colonial Style Burying Ground (1807-1863)

The area that would become home to Greenlawn Cemetery was known, in the 1600s, as Northfields, a rural inland expanse reserved by Salem residents for farming and animal grazing. The Symonds family owned land in the area as early as 1665 and John Symonds allegedly built the first house in North Salem. Beginning in the 1820s, the area developed into a horticultural center, with nursery businesses in operation. Charles Putnam established a rose business on Orne and Appleton Streets, and Robert Manning maintained pomological gardens on Dearborn Street.

The population of Northfields or “North Salem” expanded in conjunction with its growing economy, and in 1807, the Board of Selectmen determined that a new burial ground was needed to serve

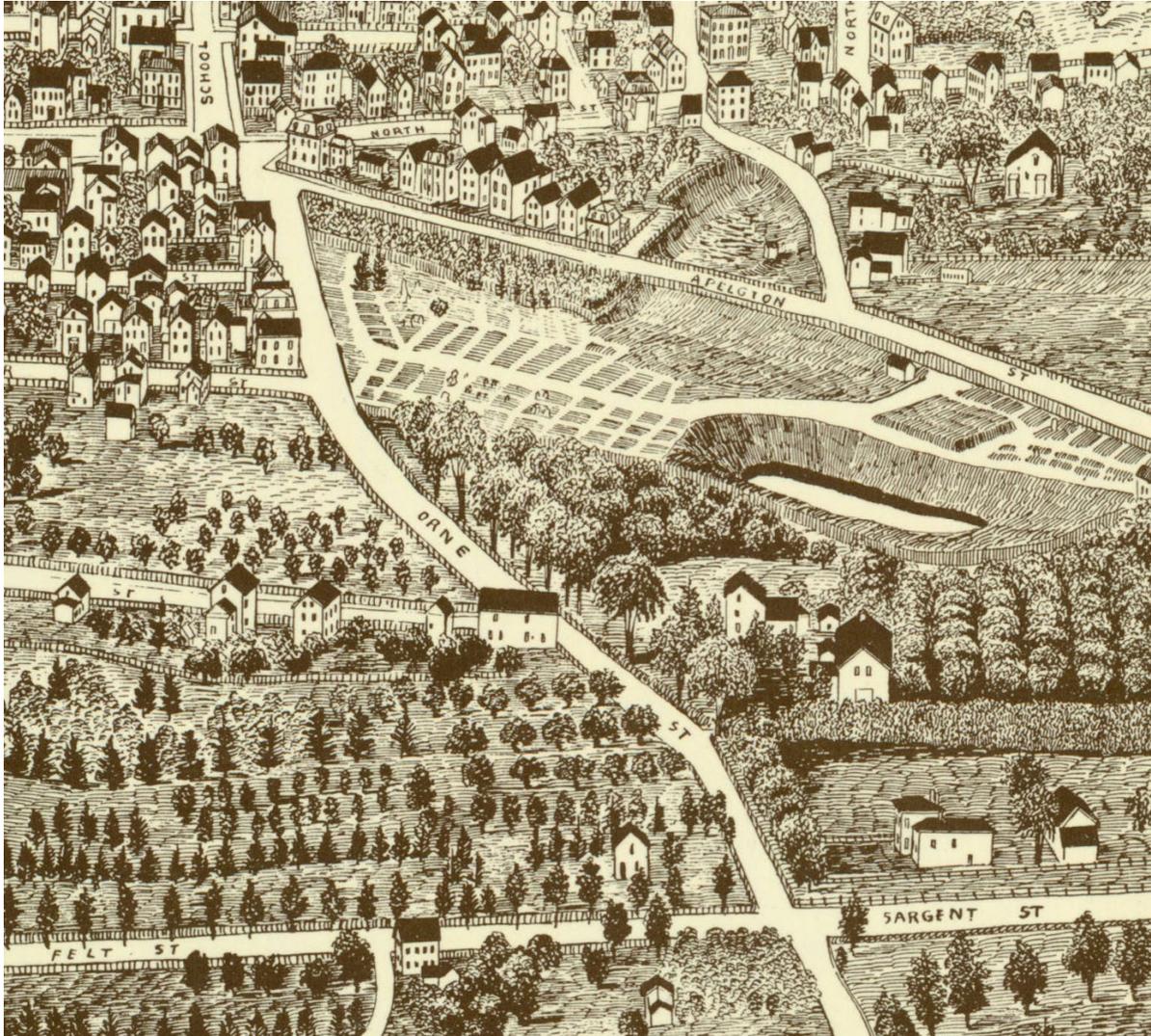


The 1861 Whipple map of Salem depicted the property as the “North Salem Cemetery.” At the time, it was under three acres in size. (Massachusetts State Archives)

<sup>1</sup> Historical and natural resource information for this summary was provided by the National Register of Historic Places Registration Form for Greenlawn Cemetery (2015), the Massachusetts Historical Commission Reconnaissance Survey Town Report for Salem (1985), the Massachusetts State Archives, the Phillips Library of the Peabody Essex Museum, and the City of Salem Open Space and Recreation Plan Update, 2007



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The 1883 bird's eye view of Salem created by L. R. Burleigh depicted the cemetery at the intersection of Orne and Appleton Streets, with the Leavitt and Potter Farms intact (Potter at the corner of Orne and Sargent Streets).

In 1884, the City purchased the former Leavitt farm on the east side of the Putnam Addition, extending from Orne Street to Liberty Hill Avenue and containing a several buildings and an orchard. Civil engineer Henry A. Cook prepared a plan of lots, shaping Greenlawn in the Rural/Garden style. Upgrades included construction of avenues and paths; installation of drainage; enlargement of Fountain Pond and construction of an iron bridge across the pond; removal of orchard trees and planting of new trees; erection of the zinc Soldier's Monument; layout of the Society for Relief of Aged and Destitute Women of Salem lot. The City removed three buildings associated with the previous farms and replaced them with a carriage house, greenhouse and toolshed. The greenhouse was shortly afterwards enlarged, and a new larger greenhouse was added to the cemetery grounds. Other embellishments included the fabrication and installation of cast iron fencing along Orne Avenue, planting of 12,000 flowers and shrubs, and manufacturing of cast iron street signs to mark the cemetery roadways, newly-named after plants. In 1892, work began on the Dickson Chapel and conservatory, a

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gift of Walter Scott Dickson. Designed by Newton, Massachusetts Architect George Meacham, it would become one of Greenlawn's most prominent and beloved features.



*The conservatory attached to the Dickson Chapel contained a two-tiered glass roof which remained until it was removed in 1982. The foundation remains. (Collection of the Phillips Library, Peabody Essex Museum)*



*Greenlawn Cemetery as it appeared between 1887 and 1900. The cast iron fence along Orme Street was added in 1887 following the 1884 purchase of a portion of the former Leavitt farm. Photographer: Frank Cousins (Collection of the Phillips Library, Peabody Essex Museum)*

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The 1897 Hopkins map of Salem showed the cemetery with its new official name. The greenhouse/tool shed/carriage house are shown to the east of the Dickson Chapel. The 9-acre Potter Farm remained intact. (Massachusetts State Archives)

**Lawn-Park Cemetery (1901-Mid-1950s)**

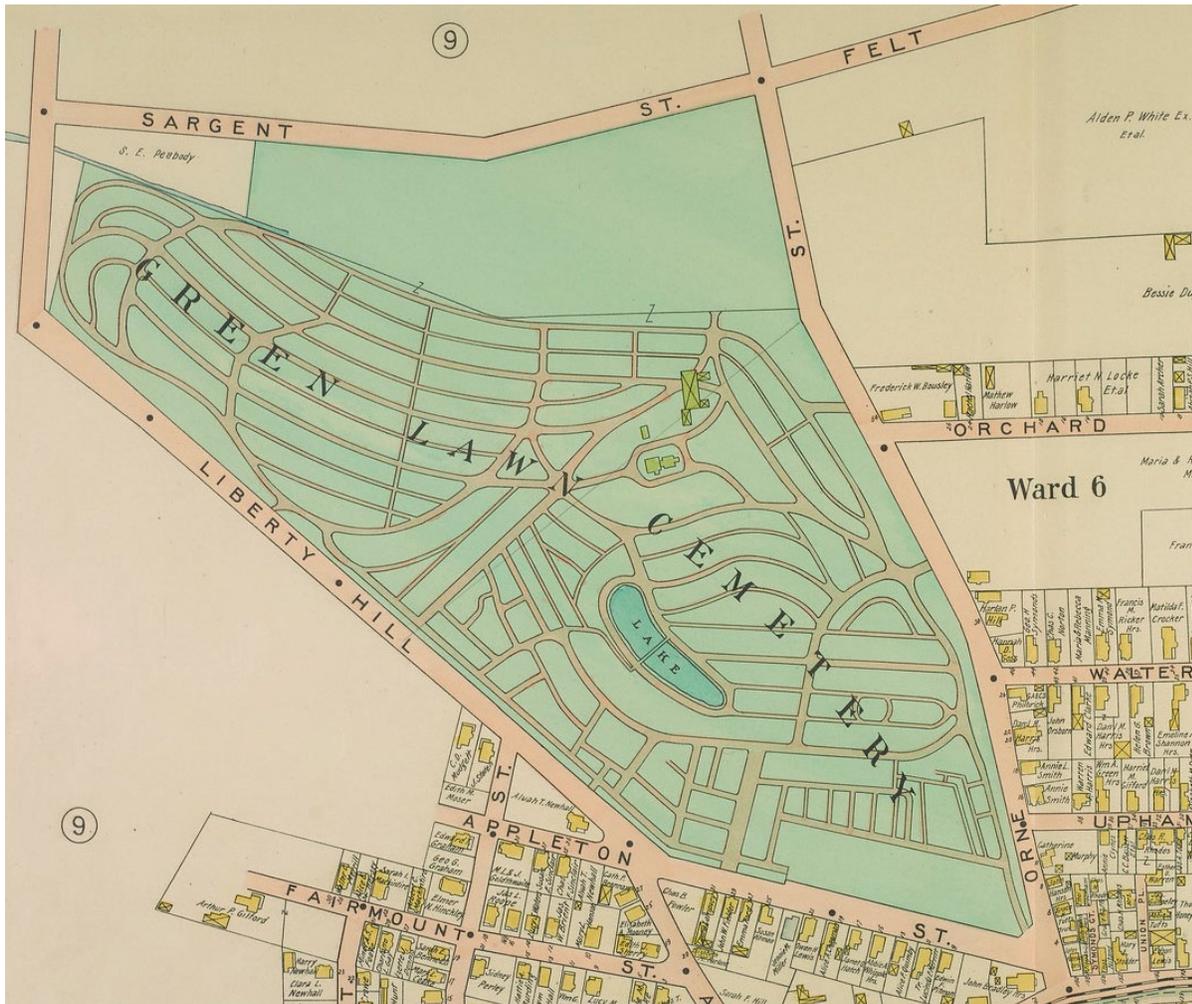
A new style of cemetery design was introduced to Greenlawn in the first half of the 20<sup>th</sup> century that would result in the park-like landscape. The City made three additional purchases of land, nine acres (1901) of the former Potter farm, located at the southeast corner of Sargent and Orne Streets, 1.3 acres (also 1901) at the corner of Orne and Appleton Streets, and in 1935, a small parcel at the northeast corner, bringing the total acreage to 55.8 and filling the area between Orne, Sargent and Appleton Streets, and Liberty Hill Avenue. Greenlawn remains the same size today.

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In conjunction with this expansion, the City created three new entrances, a formal gateway located at the southwest corner, marked by granite gate posts and iron gates (1903); an iron fence and brick pier gateway along Appleton Street (1918). Other improvements during the first decades of the 20<sup>th</sup> century included replacement of the iron bridge across Fountain Pond with a new concrete structure (1928); construction of the Dickson steps leading from the west end of the bridge up a steep slope to



The 'Main Gate' built in 1903 at the corner of Orne and Appleton Streets served as Greenlawn's first formal entrance.



The 1911 Walker Atlas of Salem showed Greenlawn with all but approximately three of its eventual 55.8 acres. Sargent Pond was not created until the 1930s. (Massachusetts State Archives)

the Dickson family plot; removal of all steps and borders marking family plots; leveling and seeding the old section.

A significant change to Greenlawn during this period was the establishment of a Board of Cemetery Commissioners by the City in 1932. Through the efforts of this three-member group, many improvements were made, including the addition of a vehicular gateway at Orne Street marked with brick posts and iron gates (1933), and construction of the cemetery office inside the Orne Street entrance. The office's location near the chapel and greenhouses, created a center of operations for the cemetery. The City engaged crews of WPA workers to assist in many landscape-related efforts, including installation of drains, resurfacing of avenues, layout out of new lots, installation of a water system, replacing the stone beehive in Fountain Pond with a single jet, and creating around planting bed near the office. Perhaps most notable was the transformation of the peat bog at the northeast end into a four-acre waterbody, Sargent Pond.

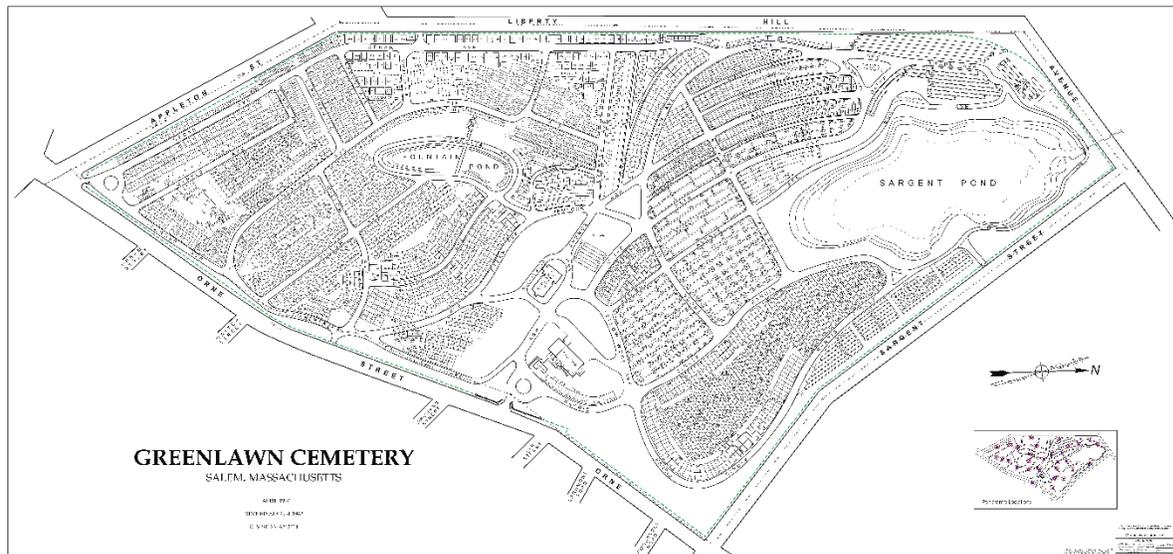
The first half of the twentieth century also brought the transformation of Greenlawn into what would become an arboretum. Nurseryman Harlan P. Kelsey, Salem resident and owner of the East Boxford-

based Kelsey-Highland Nursery offered his expertise. Through a long relationship with the Arnold Arboretum in Jamaica Plain, he traded stock from his nursery for cuttings from the arboretum, and it is possible that some plants from these transactions made their way to Greenlawn. In 1934, Kelsey supervised WPA workers in the planting of hundreds of conifers, evergreens, deciduous trees, flowering trees, deciduous shrubs, broadleaf evergreens, vines and ferns at the cemetery, many of which came from the arboretum. By 1941, the City had hired the cemetery's first arborist, Nathan Clark, who compiled a comprehensive inventory of the trees, shrubs and conifers, broad-leaved evergreens, vines and ground covers growing in the cemetery. Completed in 1943, the compilation includes plants arranged alphabetically according to genus/species, then number and size of each individual plant. In 1946, the Salem Garden Club noted that the cemetery contained 12,000 specimens. In 1948, horticulturist and cemetery commissioner F. Carroll Sargent observed that the WPA-era plantings had become well established.



An 1896 catalogue cover from the Highlands Nursery, owned by Harlan P. Kelsey. Originally based in North Carolina, Kelsey moved to Essex County in 1900 and re-established the operation in East Boxford on 110 acres, naming it the Kelsey-Highland Nursery.

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*The first complete map of Greenlawn showing its fully-plotted 55.8 acres was drawn in 1937, and has been updated twice (1962 and 2004). (City of Salem, Cemetery Division, Department of Public Works)*

#### **Cemetery Decline & Revival (Mid-1950s–Present)**

Following World War II, natural disasters, combined with efforts to “modernize” the cemetery, led to the deterioration of the landscape. In 1954, Hurricane Carol toppled 100 trees and damaged the chapel conservatory. While the glass structure was repaired, it continued to decay, and in 1982, was removed to its foundation. The greenhouses also faced demise, with the larger structure becoming encased with metal siding and translucent panels, and the smaller house being demolished. The City continued to maintain asphalt paving on most of the roads, but both surficial and sub-surface hydrology led to pavement heaving. Decreases in funding to support an adequate level of maintenance contributed to this decline.

Throughout this period however, Greenlawn continued as a popular passive recreation spot for pedestrians, dog-walkers, birdwatchers, and horticulture enthusiasts, many of whom resided in the North Salem (Ward 6) neighborhood. In 2012, a group of individuals concerned about the cemetery’s future formed the Friends of Greenlawn Cemetery to help restore, beautify and maintain the property over the long-term. The group has raised funding to restore the Dickson Chapel and is spearheading efforts to revive the historic plant collection, known as the F. Carroll Sargent Arboretum. One of the Friends’ initial successes was securing accreditation for Greenlawn as a Level I Arboretum through the ArbNet (Interactive Community of Arboreta) accreditation program. As of the writing of this master plan, the Friends are working with faculty and students at Salem State University and staff of the City of Salem to advance the designation to Level Two.<sup>2</sup> Other recent planning efforts aimed at managing Greenlawn’s facilities include an Historic Preservation Maintenance Plan (William Finch, 1998) and Facility Condition Assessment (EMG, 2018), both of which focused on the buildings and landscape structures (bridges, steps, gates).

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<sup>2</sup> According to ArbNet, Level I arboreta are “generally smaller publicly accessible sites with at least 25 species of woody plants, one or a few employees or volunteers, a governing body, and an arboretum plan.”

## CULTURAL CONTEXT

### SETTING

As noted under the Historic Context description, Greenlawn was developed on former farm, pasture and orchard lands in the north part of Salem. Today, the property lies within the North Salem neighborhood, also referred to as Ward Six, a densely built urban area dominated by a mix of residences and businesses. North Street (Route 114), the main road leading to downtown Salem from the north lies to the east, just beyond the intersection of Orne and Appleton Streets and Greenlawn's southwest entry gate. Multi-story residences line Orne, Appleton and Liberty Hill Avenue on the side opposite Greenlawn and intersecting side streets, and the Bates School (elementary) stands across Liberty Hill Avenue near the cemetery's northwest corner.

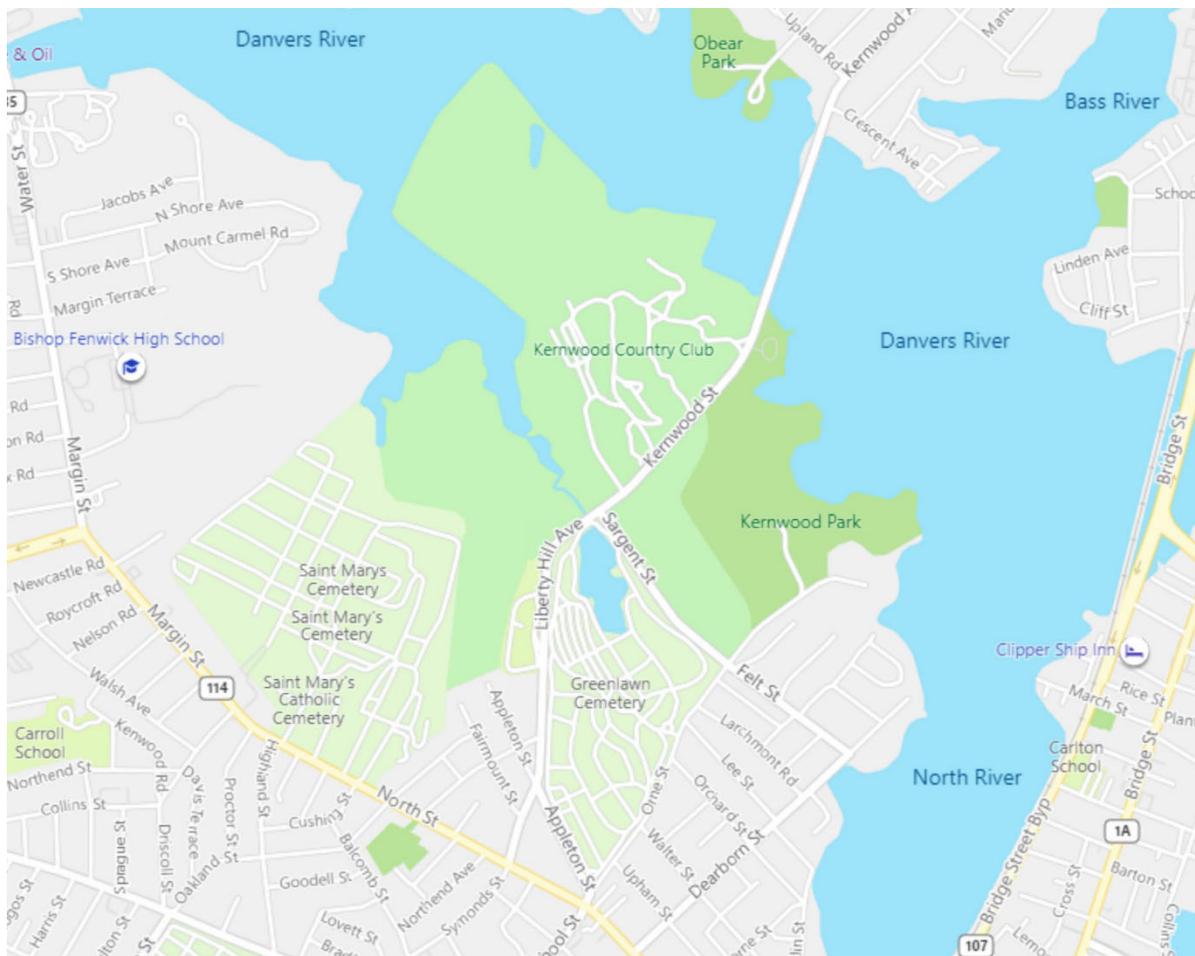


Figure 3.1. Greenlawn Cemetery is part of a group of open spaces in North Salem that comprise over 300 acres of open space for passive and active recreation activities, wildlife habitat, interment, and commemoration.

Greenlawn and adjacent open spaces constitute one of the largest undeveloped areas of Salem. The golf courses of Kernwood Country Club (160.8 acres) stand to the cemetery's north and east on the opposite sides of Liberty Hill Avenue and Sargent Streets; Kernwood Marina and McCabe Park (4.3 acres) lie between country club's east side and the Danvers River; St. Mary's Catholic Cemetery (86.27

acres) lies to the west. Together with Greenlawn, these properties cover over 300 acres and provide expansive space for wildlife habitat and both active and passive recreation.

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## BURIAL & COMMEMORATION

Since Greenlawn's founding in 1807, its primary function is to serve as a place of interment, open to all people, regardless of religious faith, ethnicity, or economic means. It has fulfilled this function mightily throughout its 214-year history. Along its western edge are four "public lots," areas reserved for the indigent, victims of disease, and others unable to pay for private interment. The Brookhouse lot, established for the Society for Relief of Aged and Destitute Women of Salem, provided interment space for residents of the Brookhouse Home. Greenlawn also maintains several sites for veterans' burials, organized according to military conflict, including the Spanish American War, Civil War, World War I, World War II, and most recently, late 20<sup>th</sup> century wars. The cemetery contains over 22,000 burials, with approximately 16,000 predating 1964. Today, Greenlawn is Salem's only active public cemetery, holding both full-casket and cremation forms of interment.



*The lot dedicated to Women of the Brookhouse Home is marked with a boulder containing a simple bronze commemorative plaque.*

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## PUBLIC PROGRAMS

In addition to its primary function as a commemorative space, Greenlawn has developed into a popular passive recreation spot, frequented by pedestrians, dog-walkers, birdwatchers, and nature lovers. Activities associated with plants and wildlife have been organized by the Friends of Greenlawn Cemetery, a non-profit organization established in 2012 to restore, beautify, and maintain Greenlawn through local fundraising and grant applications, and to increase public awareness. In addition to raising funds to restore the Dickson Chapel and helping to obtain Level I certification for the cemetery's F. Carroll Sargent Arboretum, the Friends have written and published guidebooks, conducted tours, and hosted lectures on topics ranging from architecture and art to history and nature.



*The Kentucky Warbler, a migratory songbird, was spotted near Fountain Pond in 2019 and attracted the attention of many birders.*

## NATURAL CONTEXT

**Geology.** Two general types of surficial geology underlie most of Salem, glacial till or bedrock, and deposits of sand and gravel. The former characterizes the southwestern half of the City and Salem Neck, where rock out cropping appears in the Gallows Hill, Willows, Forest River Park, and Winter Island areas. Downtown Salem and a portion of North Salem, including Greenlawn Cemetery, sit on deposits of marine clay and sand. These deposits were formed when the glacier retreated 12,000 years ago and the sea level briefly transgressed inland.<sup>3</sup>

**Soils.** Two soil series, Hinckley (gravelly sandy loam) and Gloucester (glacial till) dominate in Salem, with lesser volumes of silt loam and fine sandy loam, peat and muck or meadow. Greenlawn, which lies on former farmland and filled peat bog, consists of largely of silt loam of the Boxford, Merrimac and Woodbridge series, as shown in Figure 3.1 and outlined as follows:

- Western edge along Liberty Hill Street - Merrimac fine sandy loam, 8 - 15% slopes (254C on soils map, Figure XX)
- Center spine of cemetery - Boxford silt loam, 3 to 8% slopes (220B)
- South edge along Orne Street - Merrimac fine sandy loam, 3 - 8% slopes (254B0)
- Far eastern edge - Woodbridge fine sandy loam, 3 - 8% slopes (310B)

**Topography.** Slopes across Greenlawn include level to moderately sloping knolls and terraces rolling from the west, south and east to a low point at Sargent Pond. The oldest portions, dating to the early 1800s, are generally flat. Areas developed during the mid to late 19th century around Fountain Pond and near the veterans' lots, undulate across steeper slopes. The newest sections, closer to the eastern edge and around Sargent Pond, span gentle slopes. The two ponds, both manmade, are fed by the City's stormwater system, which flows northward through a piped network through Fountain Pond (0.2 acres) and Sargent Pond (4.0 acres), and outflows at the cemetery's north end, eventually reaching the Crane River and Atlantic Ocean.



*Gently rolling slopes descend from Liberty Hill Avenue eastward toward the center of Greenlawn, reaching a low point at Sargent Pond.*

**Plant Communities.** As noted earlier in this chapter, land in the north part of Salem was utilized in the 1600s for farming and grazing, and into the early 19<sup>th</sup> century for horticultural operations and cultivation of fruit orchards. Established on land that supported rose-growing and nursery businesses, Greenlawn for decades had few trees; photographs of the cemetery in the 1880s show a landscape devoid of trees. The efforts of Harlan Kelsey and WPA crews in the 1930s, as well as that of long-time

<sup>3</sup> Salem Open Space and Recreation Plan Update, 2007, 35

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Figure 3.2, Soil Map of Greenlawn Cemetery. The property consists of silt loam and fine sandy loam. (Natural Resource Conservation Service, <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>)

cemetery superintendent F. Carroll Sargent to plant hundreds of trees, shrubs, vines and ferns across Greenlawn resulted in a forested landscape, much of which remains to this day.

- *Arboretum Species.* The F. Carroll Sargent Arboretum, accredited by Arbnet as a Level I collection, contains 25 tree species, including katsuratree, dogwood, persimmon, sourwood, beech oak, ginkgo, tuliptree, fringetree, cedar-of-Lebanon, and larch. A complete list of the 25 species appears in *Appendix F* of this plan.
- *Wetland Species.* Sargent Pond also contains wetland species around its edges, including cattail (*Typha*).
- *Pollinator Species.* The Friends of Greenlawn Cemetery have established a garden at the far north end of Sargent Pond through which several pollinator species have been added to the cemetery landscape. A complete listing of the garden’s plant material, including native shrubs, herbaceous perennials and groundcovers, is found in *Appendix F* this plan.
- *Invasive Species.* Several non-native, noxious species have emerged, especially around Sargent Pond, and species once considered to be specimens, such as Norway maples, are scattered throughout.

**Wildlife.** Greenlawn has become known as a haven for several species of wildlife, both as a wildlife corridor (together with adjacent St. Mary’s Cemetery and Kernwood Country Club) and migratory stop on the Atlantic flyway. Painted turtles, mallard ducks, Canada geese frequent Sargent Pond. As of the writing of this master plan, 146 species of birds have been sighted at Greenlawn (documented on the website [ebird.org](http://ebird.org), where the cemetery is listed as a “hotspot”).<sup>4</sup>



*Painted turtles, sunning themselves on a tree branch in Sargent Pond. Greenlawn provides habitat for several species of wildlife and is a migratory stop on the Atlantic flyway.*

#### **Scenic Resource/Unique**

**Environment.** In its 2007 Open Space and Recreation Plan Update, Salem identified the far north area of the City, including Kernwood Country Club and Greenlawn Cemetery as a “Scenic Resource/Unique Environment.” This designation places Greenlawn among a list of natural and historic landscapes within the City, that are both attractive and provide scenic views.

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<sup>4</sup> <https://ebird.org/hotspot/L1010609?yr=all>

## SIGNIFICANT HISTORIC, CULTURAL & NATURAL FEATURES

**Topography.** As discussed earlier in this chapter, slopes across Greenlawn's 55.8 acres roll from the west, south and east to a low point at Sargent Pond. The oldest portions, dating to the early 1800s, are generally flat. Areas developed during the mid to late 19<sup>th</sup> century, around Fountain Pond and near the cemetery's high point (G. A. R. Lot), undulate across steeper slopes. The newest sections, closer to the eastern edge and around Sargent Pond, span gentle slopes. The result is a varied landform, composed of both natural and manmade topography, and one of Greenlawn's most striking features.

**Avenue and Path Network.** Unlike most cemeteries dating to the early-mid 19<sup>th</sup> century, Greenlawn's burial sections are unnumbered and unnamed. Instead, their location is designated by their surrounding avenues and grassy paths. In the 1880s, the City named each of these after an individual plant (common name) and marked them with a cast iron sign, approximately 90 of which remain. Layout of this network largely responds to Greenlawn's natural topography.

**Old Burying Ground and Public Lots.** Established near the intersection of Orne and Appleton Streets and today bounded by Myrtle, Chestnut and Rose Avenues, this 2.5-acre area is the original burying ground set aside for the residents of North Salem (or Northfields) in 1807. It contains the graves of many settlers of North Salem, including the Symonds family. The larger cemetery, named Greenlawn in the late 1800s, eventually enveloped the Old Burying Ground. Along the west side of this area are two "public lots," sections set aside by the City in the early to mid-19<sup>th</sup> century for burial of the indigent, victims of epidemics, accident victims, children, and others unable to pay for private burials. These graves are marked by concrete cylinders with tops containing a grave number, flush with the grade. Two additional public lots were established later in the 19<sup>th</sup> century, nearer the cemetery's geographic center.

**Cemetery Fence.** Erected in the 1880s, the iron picket fence lining portions of Appleton and Orne Streets is one of the cemetery's oldest intact landscape features. It contains the original Orne Street Gate, located at the intersection of Orne Street and Filbert Avenue, and erected in 1887.

**Appleton/Orne Street Gate.** Located at the intersection of Appleton and Orne Streets marking the cemetery's southwest corner, the stone and iron gate was erected in 1903 following the purchase of the "Putnam Addition." It provided both pedestrian and vehicular access into the cemetery through a formal entryway.

**Orne Street Gate/Cemetery Office Environs.** Designed in the 1930s by the Boston architectural firm of Smith & Walker, these features mark the main entrance to Greenlawn. Both were deliberately located near the cemetery's center of operations. The gate (1934) consists of brick walls and columns, with cast-stone caps and orbs atop the columns, connecting to iron picket fencing edging the cemetery perimeter. Several mature trees frame the office (1933), and the center of the circular entry drive contains several species of shrubs.

**Dickson Chapel Environs.** Designed by George F. Meacham and constructed in 1894, the chapel has become a cemetery landmark. It stands atop a knoll near Greenlawn's geographic center, with landform dropping from the chapel westward, northward and eastward. A significant feature of the structure is the foundation of the 35-by-50-foot conservatory that extended from the south side of the building. Thomas W. Weathered & Sons of New York is credited with its construction. Originally filled with tropical and other unusual plants, two miniature goldfish ponds, the foundation of this glass

structure was edged with slate stones. Henry Ross and his assistant, Nils Mason, designed the planting and interior layout.

**Fountain Pond, Dickson Bridge and Steps.** The creation of the smaller Greenlawn pond, “Fountain Pond,” was made possible in 1864-1865 when the City purchased land owned by Charles Putnam. The southwest end of the pond was excavated first, only to be enlarged within a few years and ornamented with an iron footbridge spanning the widest point. In 1928 this structure was replaced by the concrete Dickson Bridge, which leads to a set of concrete steps (1929), the Dickson Steps, ascending the west slope of the pond. The Dickson plot stands at the top of the steps. In the 1930s, the pond’s original field stone fountain was replaced with a single spray.

**Veterans’ Areas.** Greenlawn contains six areas set aside for veterans, as follows.

- *International Order of Oddfellows Lot and Monument.* Established in 1868, this area located to the east of Willow Avenue contains a granite orb marker set in 1884.
- *Sons of Veterans Civil War Monument and Environs (G. A. R. Lot).* Located near the cemetery’s west edge on the slope above Fountain Pond, this 8,000 square foot lot was established in the 1860s. The white bronze (zinc) pedestal containing a figure of a Union soldier, erected in the 1880s, marks its center and 168 flush marble grave markers surround the monument. It stands at the cemetery’s highest point.
- *Spanish American War Lot.* Located on the slope below the Civil War monument, this small lot contains 39 marble tablets marking the graves of Salem’s Spanish American War veterans. The uniformly dimensioned markers are arranged in rows stepping down the slope, to the Brookhouse lot (see below).
- *American Legion/World War I Lot.* This oval-shaped area lies between Oak and Pine Paths and contains 80 small white marble stones.
- *World War II Lot.* Located between Heath and Lotus Paths, this area contains 256 marble gravestones dating to the 1940s and beyond.
- *Late 20<sup>th</sup> Century Conflicts.* A new area established in 1993 on the north slope below the Dickson Chapel. The site is marked with a flagpole, and a flush bronze plaque marks each grave.

**Women of Brookhouse Lot (Society for Relief of Aged and Destitute Women of Salem Lot) and Monument.** This small burial area located on the north slope of Fountain Pond contains the graves of individuals who resided at Brookhouse Home, a Salem-based organization established in 1861 for elderly women and operated by the Association for the Relief of Aged Women. Each grave is marked by a rounded-top tablet and the markers stand in even rows. Near the south end of the lot, overlooking the pond, is a boulder containing a bronze commemorative plaque, set in 1899.

**Sargent Pond and Sargent Pond Bridge.** Originally a peat bog on land known as the “Leavitt Farm,” this four-acre water body located at the cemetery’s northern end was dug in the 1930s by crews of the Works Progress Administration. Fed by water flowing through the cemetery via a subsurface system, its outlet at the northern end leads into the Crane River, and eventually meeting the Atlantic Ocean. A stone and concrete bridge, constructed in 1943, allows pedestrians to cross over the outlet (culvert).

**F. Carroll Sargent Arboretum.** As noted earlier in this chapter, Salem State University, the Friends of Greenlawn Cemetery and City of Salem have secured accreditation for the property as a Level I Arboretum, a designation awarded to publicly accessible sites with at least 25 species of woody plants. Some of the species in the arboretum may date to the 1930s, when Harlan Kelsey supervised WPA workers in the planting of hundreds of trees, shrubs, vines and ferns. The arboretum has been named for F. Carroll Sargent, horticulturist and superintendent of Greenlawn for several decades in the mid-20<sup>th</sup> century.

## LANDSCAPE CHARACTER

Greenlawn's landscape speaks to its 214-year history as a public place of interment, open to all citizens and providing special commemoration to those who have served in the armed services, as well as others of little or no means. Developed in increments, its acreage displays several cemetery styles, each reflecting a distinct period in history and approach to interment. As the cemetery evolved, character "nodes" emerged – sites within the larger property that provide a function, hold an important feature, or commemorate a specific group of individuals. The cemetery also contains the remains of many citizens of note – people who, by themselves, contributed to the founding and growth of the City of Salem. These styles, zones and gravesites together define the character of Greenlawn Cemetery.

## HISTORIC LANDSCAPE STYLES

As summarized earlier in this chapter, the Greenwood Cemetery landscape as it appears today developed over the course of approximately fifty years, beginning in 1807 with the initial set-aside of 2.5 acres and expanding through multiple additions, to 55.8 acres in 1935. Nearly all of the acreage has been either filled with burials or plotted and pre-sold for future interments. The property reflects distinct historic landscape styles, as follows:

### **Colonial Burying Ground – Approximately 2-3 Acres**

Before the 1830s, interments filled burial grounds or burying yards – unplotted sites without roads or paths that held single graves arranged in random rows. Greenlawn's oldest section, located near the southwest corner between Chestnut and Myrtle Streets, and known as the Old or North Burying Ground, reflects this style.

### **Rural or Garden Cemetery – Approximately 41 Acres**

In 1864-65 Salem purchased thirteen acres and 20 years later added 28 acres, both acquisitions remnants of farming and horticultural operations. The North Burying Ground was renamed Greenlawn Cemetery and laid out in the mid-19th century style of American cemetery design, known as "rural" or "garden," this land would form the cemetery's core. This style responded to the land's natural features, with road systems following the natural contours of the land and low points exaggerated to create water features. Family plots, surrounded by hefty enclosures and marked with central monuments were also features of the rural or garden style. Land to the west of Rosebud Avenue and excepting the Old Burying Ground, exhibits this style.

### **Lawn Cemetery – Approximately 11-12 Acres**

By the early 1900s when Salem purchased the final acreage for Greenlawn, attitudes toward burial had shifted in America. The landscape continued to be planned and plots sold to families, however interest

Greenlawn Cemetery Master Plan  
Salem, Massachusetts

Legend

-  Colonial Burial Ground
-  Rural/Victorian Cemetery
-  Lawn/Park Cemetery
-  Landscape Character Node

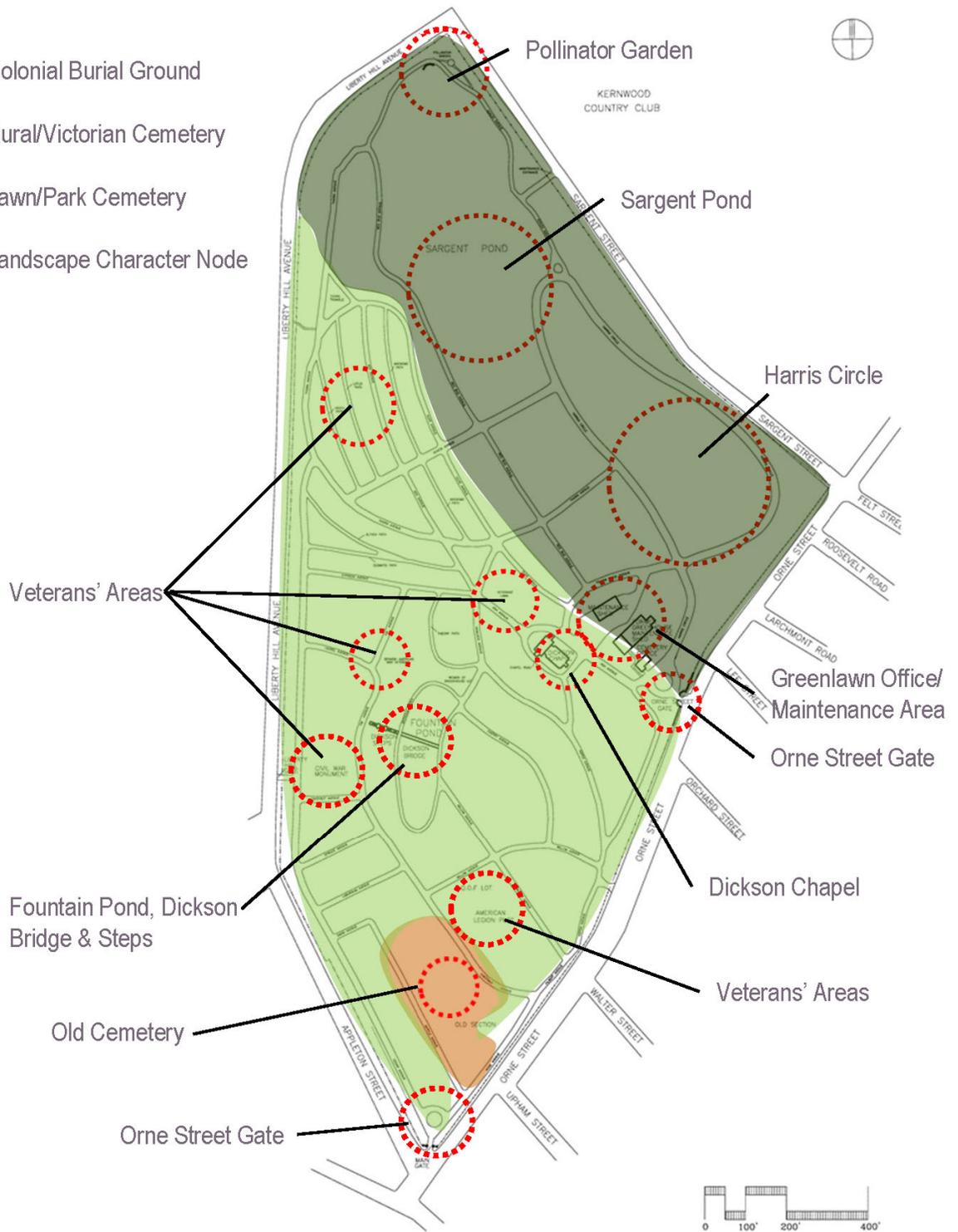


Figure 3.1. Greenlawn’s historic cemetery styles and “character nodes.”

in plot embellishment in the form of large monuments and prominent enclosures began to wane. This new, more democratic style became known as the “lawn cemetery,” one typified by straighter roads, standard 30” height monuments, and gravesite plantings. Land to the east of Rosebud Avenue, including all of Harris Circle, reflects this style.

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## LANDSCAPE CHARACTER NODES

**Orne and Appleton Street Gate.** Erected in 1903, this gate was the Greenlawn’s first grand entrance, predating the Orne Street gate by 30 years. It provides a portal into the cemetery’s oldest sections and is used by both pedestrians and vehicles.

**Old Burying Ground.** Dating to 1807, this small area located between Chestnut and Myrtle Avenues contains the graves of North Salem’s early settlers, including members of the Symonds family. The first known interment at Greenlawn took place on this site.

**Orne Street Gate.** Established in 1934, this feature marks the cemetery’s main entrance, welcoming visitors into the cemetery, ushering them to the Greenlawn office, guiding them into the larger landscape.

**Greenlawn Office/Maintenance Area.** The 1934 office and its two maintenance buildings form the cemetery’s center of operations. A circular drive leads from the Orne Street Gate to the office, and continues northward to access both maintenance facilities. Cemetery staff park vehicles near the buildings, and equipment is stored in the vicinity.

**Dickson Chapel.** This 1893 structure is Greenlawn’s crown jewel, standing atop a knoll looking west and northward over both ponds. The foundation of its conservatory extends off the south side and a version of the conservatory garden, housed within the foundation, remains with pathways and plantings.

**Fountain Pond/Dickson Bridge & Steps.** Created from a natural depression in the 1880s, Fountain Pond lies in the Dell between the Dickson Chapel (to the southeast) and the Veterans’ Area (to the northwest). The concrete Dickson Bridge, constructed in 1928, spans the center of the pond and leads to the Dickson Steps, built in the same year. The steps lead up the pond’s west slope to the cemetery’s highest point. Magnolia Path, a narrow, paved road, circles the pond.

**Veterans’ Areas.** Bounded by Laurel, Fir, Spruce and Cedar Avenues near the cemetery’s west edge, this area contains the remains of many individuals associated with Civil War, as well as the Civil War Monument.

**Sargent Pond.** Encompassing nearly four acres at Greenlawn’s northern end, Sargent Pond was dug from a peat bog by crews of the WPA in the 1930s. It has become one of Greenlawn’s most beloved features, with Azalea Path and Red Bud Avenue circling around the east and west sides.

**Pollinator Garden.** Recently established at the north end of Sargent Pond, this shrub and herbaceous perennial garden provides a spot for pedestrians to pause, rest, and look southward across the pond.

Concrete paving covers a pathway through the garden, leading to a circular gathering space with seating.

**Harris Circle.** Created after 1935 and the final purchases of land, Harris Circle is Greenlawn's newest and most active place of interment. The 3.6-acre area is rimmed by a paved roadway and standard 30" height granite markers fill the center of the circle.

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## GRAVESITES OF NOTE

The City of Salem and Friends of Greenlawn Cemetery have identified the following individual gravesites as of particular importance to Salem's history.

**Walter Scott Dickson** (d. 1900), Salem businessman and philanthropist; chapel benefactor.

**Reverend Jacob Stroyer** (d. 1908), former South Carolina slave wounded at Fort Sumter by Union bombardment, preacher in the African Methodist Episcopal Church in Newport, Rhode Island and pastor of the Salem Colored Mission for 25 years.

**Kate Tannatt Woods** (d. 1910), journalist, editor, author, and Civil War nurse.

**Sgt. Philius J. Verrette** (d. 1909), World War II veteran, recipient of Silver and Bronze Stars and a Purple Heart.

**John Phillip Riley** (d. 1950), USN, Spanish-American War veteran, recipient of the Congressional Medal of Honor.

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## CONCLUSIONS AND PRELIMINARY RECOMMENDATIONS

Much of Greenlawn Cemetery's significance is drawn from its historic, cultural, and natural contexts. Its history documents the story of North Salem as it developed from pastureland, into nursery land, into urban residential community, and as the neighborhood's only public open space, Greenlawn has become a popular passive recreation site, frequented by dog-walkers, nature-lovers, and pedestrians. The design of Greenlawn's landscape reflects three distinct historic cemetery styles, and several spots or "nodes" within the landscape, as well as gravesites of individuals of particular importance to Salem, add to its character. All merit long term protection.

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## PRELIMINARY RECOMMENDATIONS

The following preliminary recommendations related to Greenlawn's historic, cultural and natural contexts are integrated into the overall master plan recommendations, discussed in *Section 6* of this plan. When making improvements to the landscape:

- Respect the historic landscape styles;

*Greenlawn Cemetery Master Plan  
Salem, Massachusetts*

- Place higher priority on significant historic, cultural and natural features and landscape character nodes;
- Closely monitor the condition of and conserve, as required, gravesites of note.

## 4 LANDSCAPE ASSESSMENT

This chapter of the master plan documents and analyzes the condition of Greenlawn Cemetery's natural (topography, hydrology, plant communities), built (perimeter fencing, entry gates, roads and paths, bridges and steps, gravestones and significant monuments), and functional features (views, circulation, parking). The chapter also explores options for expansion of interment areas within the existing cemetery acreage. It concludes with a set of preliminary recommendations to be included in Section 6 of the plan, *Recommendations*. Note that for many features, detailed assessments have been prepared by members of the consulting team, summaries of which appear below. Full reports can be found in the appendices of this plan.

### EDGES & VIEWS

#### EDGES

The appearance of Greenlawn Cemetery from the surrounding streets matters, as it provides an impression of how well the City cares for its public landscapes. Two-way streets rim all sides of Greenlawn; Orne and Sargent to the east, and Appleton and Liberty Hill to the west and north. At certain times of day, some of these carry heavy traffic loads, particularly Sargent and Liberty Hill. Sidewalks line the Orne Street edge, as well as the Appleton Street/Liberty Hill Avenue edges (up to the Bates Elementary School). To soften the edges and create a sense of privacy within the cemetery, the City has enclosed the property with fencing along the outer property edges. Two types of fencing exist:

- *Picket Style Ornamental Iron*, (approximately 2,770 LF), measuring five feet in height, extends along portions of Orne Street (west of the Orne Street gate), all of Appleton Street, and a portion of Liberty Hill Avenue (up to opposite Clematis Path). In general, this fencing is in good condition with most of the wrought-iron pickets and cast-iron posts intact.
- *Chain Link* (approximately 3,430 LF), measuring five feet in height, edges the remainder of Liberty Hill and Orne, and all of Sargent Street. While its condition appears to be stable, its utilitarian feel conflicts with the cemetery's history and natural beauty.



The west cemetery edge along Appleton Street and a portion of Liberty Hill Avenue is lined with an ornamental iron fence.

Along all edges, inside the fence, the City has planted trees and flowering shrubs (mostly Forsythia) to further reinforce the cemetery's edges.

## VIEWS

Views into and out of the cemetery correspond to the edges and vary depending on the season. Passersby by on the surrounding streets in summer, either in a vehicle or on foot, can glimpse the cemetery through breaks in the perimeter shrubbery and trees, however the dense growth of these plants limits the range of these views. An exception to this is northeast edge along Orne Street, where a lack of plantings allows some views in and across the cemetery to Harris Circle. In winter, without leaves on the shrubs and trees, these views open up to passersby, allowing longer vistas over the landscape. Views from inside the cemetery out to the surrounding streets and neighborhoods are similarly blocked by vegetation during summer and more open in winter. The aging chain link fence along the Orne Street edge compromises views of the historic homes in the neighborhood across the street.



*Chain link fencing lines the north portion of the Orne Street edge but without additional screening, views are possible of the adjacent neighborhood.*

Visitors to the cemetery enjoy many long views across the landscape, taking in its historic features and natural beauty. The most outstanding of these are from high points looking down and from the edges of the two ponds, looking across. These include:

- From the Main Gate (Orne and Appleton Streets) looking into the cemetery's oldest sections;
- From the Orne Street Gate, looking into and towards the cemetery office;
- From the American Legion plot looking northward over Fountain Pond;
- From the cemetery high point with the Civil War monument and Dickson family plot looking southeastward over and across Fountain Pond;
- From the south end of the Dickson Bridge, looking across the bridge to the Dickson Steps;
- From the Dickson Chapel's north lawn looking westward across the oldest sections and Fountain Pond and northward across Sargent Pond;
- From the south edge of Fountain Pond looking northward toward the Women of Brookhouse lot;
- From all edges of Sargent Pond looking across the water.

Less pleasing views include those of the maintenance area (inside the Orne Street gate) and leaf and grave spoil deposit area on the west side of Sargent Pond. The lack of screening of the maintenance area's utilitarian features, including maintenance vehicles, concrete crypt liners, and maintenance tools detracts from views of the adjacent cemetery office and historic Dickson Chapel. Volunteer trees and a steep slope block some views of the leaf and grave spoil deposits, however many pedestrians view this area on walks around Sargent Pond.

Greenlawn Cemetery Master Plan  
Salem, Massachusetts

Legend

-  Picket Style Ornamental Iron Fence
-  5' Height Chain Link Fence
-  Pleasing View to Enhance
-  Less-Pleasing View to Screen



Figure 4.1. Edges of Greenlawn Cemetery and views into, out of, and across the cemetery landscape.

Many longer views into and across the cemetery are obstructed by the low canopies of the many shade trees as well as dense and overgrown shrubs. Removal of lower limbs and thinning (or removal) of overgrown shrubs will open views and result in a less cluttered appearance, in addition to easing maintenance tasks, and reducing the threat of damage caused by falling branches.

## ENTRANCES, CIRCULATION, ROADWAYS, PARKING & ADA COMPLIANCE

### ENTRANCES

The City maintains five vehicular entrances, four of which were designed to be used by visitors and the fifth intended for maintenance vehicles only, as follows:

- The 1903 **Main Gate**, located at the cemetery's southwest corner, allows both vehicles and pedestrians to pass through. The gate is composed of two large granite block posts flanked by two smaller granite block posts, all topped with polished granite orbs. Double-leaf wrought iron gates connect to the two larger posts marking the vehicular way, while single-leaf wrought iron gates secure the pedestrian ways. The western pedestrian gate remains open to visitors, however the eastern gate has been closed and the walkway leading through it, removed. The Main Gate is used by visitors driving and walking to the cemetery, as well as funeral corteges.

- The 1933 **Orne Street Gate**, located off Orne Street between Orchard and Lee Streets, leads directly to the cemetery office and maintenance area and serves as a principal cemetery entrance. This structure consists of a pair of mortared brick piers setback from the street, with matching brick walls extending outward towards the street from the piers in a semi-circular shape. A second set of brick piers stands at the street edge, connecting to straight brick walls extend north and south along Orne Street. These walls terminate at a third set of brick piers. Cast stone caps cover the walls and piers, and cast stone orbs top the piers, and double-leaf wrought iron gates span the entry drive. The Orne Street gate is heavily used by all visitors to the cemetery, including pedestrians, cemetery staff and maintenance crews, and funeral corteges (as an exit).



*The Orne Street Gate, built in 1933, welcomes visitors into the cemetery and its main area of operations.*

- The **Old Orne Street Gate**, located along Orne Street between Orchard and Walter Streets, leads visitors into the cemetery opposite Willow Avenue, the American Legion lot and the cemetery's oldest section. Structure consists of a pair of granite piers, topped with spear-shaped granite finials supporting a double-leaf wrought iron gate. The City has locked the gate leaves and does not permit vehicles or pedestrians to enter at this location.

Greenlawn Cemetery Master Plan  
Salem, Massachusetts



Figure 4.2. Entrances, circulation, parking and accessible slopes.

- The **Liberty Hill Gate**, located near the intersection of Appleton Street and Liberty Hill Avenue, leads visitors into the cemetery near the Civil War Monument. This structure consists of a pair of mortared brick piers connected by a double-leaf wrought iron gate, similar in design to the Orne Street Gate. Cast stone caps and orbs top the piers. The City has locked the gate leaves and does not permit vehicles or pedestrians to enter at this location.
- The fifth vehicular gate, the **cemetery maintenance entrance**, stands along Sargent Street near the intersection with Liberty Hill Avenue and is marked by an opening in the chain link fence. While officially limited to maintenance vehicle use only, the gate is not patrolled, and non-cemetery staff use it to access the area around the east side of Sargent Pond.

Pedestrians may use the Main and Orne Street gates, but also may access the cemetery via three other entrances:

- **Orne Street pedestrian gate**, adjacent to and extending from the south end of the Orne Street Gate, marked by a cast iron posts and single-leaf wrought iron gate;
- **Liberty Hill gate**, adjacent to the south end of the Liberty Hill Gate, created after a section of iron fencing was removed, making an opening and connecting to a gravel and stepping-stone walk; and
- **Bates School gate**, located along Liberty Hill Avenue across from the school and leading into the cemetery near the intersection of Thorn Avenue and Heath Path, marked by a single-leaf gate in the chain link fence. An inscribed brick walkway leads from the gate into the cemetery.



*An informal pedestrian gate stands alongside the Liberty Hill Gate. Its gravel and stepping stone pathway leading into the cemetery does not meet ADA guidelines.*

The large number of entrances the Greenlawn makes the property highly accessible to the public, creating an amenity for the neighborhood, but the number also increases cemetery maintenance and compromises security. If open for public use, gates must remain stable and pavements underneath them must comply with the ADA, and the multiple entry and exit points complicate staff efforts to control unwanted visitors and uses.

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## CIRCULATION

Once inside the cemetery, visitors may follow approximately four miles of paved roadways weaving throughout the property. Visitors coming to gravesites located in Greenlawn's older sections access these areas via secondary roads, however most visitors enter through the Main and Orne Street Gates and once inside the cemetery follow two main routes:

- Entering through the Main Gate, and proceeding northward along Cedar Avenue, veering left onto Aspen Avenue and snaking northward to Sargent Pond, looping around the east side of Harris Circle, and exiting via the cemetery office. As most new interments take place in the Harris Circle area, this is the most frequently follow route taken by funeral corteges.
- Entering through the Orne Street Gate, and proceeding northward on Ash Avenue inside the gate, past the maintenance area and Dickson Chapel and at the base of the Chapel slope, turning right or left to visit either Sargent or Fountain Ponds.



*Pedestrians walk along the flatter areas of the cemetery, such as Rose Avenue along the Orne Street edge.*

Greenlawn does not contain a separate system of pathways reserved for pedestrians and as a result, walkers, joggers, and dog-walkers share the roadways with vehicles. This creates conflict, particularly when interment services are underway and exercisers pass by on nearby toads. The City has closed most of Azalea and Rose Bud Avenues circling around the north side of Sargent Pond, but this route remains open to pedestrians.

## ROADWAY CONDITIONS

Greenlawn's roadways connect the property to surrounding streets, rim and define interment areas, and outline the two ponds. A subbase of macadam (oil and stone) and overlay of bituminous pavement have been used to construct these, and the macadam appears to be stable and in good condition with little settling or rutting. Condition of the overlay ranges from minimal cracking to complete deterioration. In some spots, the bituminous has worn away, leaving the macadam exposed. Frost heaving (due to accumulation of water under the pavement) and roots from large trees have further compromised the pavement in several areas. To address these problems and ensure a longer life to the roadways, the City can take several measures:



*Bituminous pavement throughout the cemetery shows signs of water build up resulting and cracks and failure.*

- Prevent water from ponding on or infiltrating the roadway;
- Replace the bituminous overlay paving;

- Fully reconstruct roads where the road subbase has deteriorated; and/or
- Remove infrequently used roadways and replace them with turf and/or new interment sites

For more detailed information about roadway conditions, refer to the *Engineering Assessment* report, found in *Appendix B*.

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## PARKING

Aside from a few parallel parking spaces at the circular drive by the cemetery office, Greenlawn does not contain designated parking spaces for visitors. As noted in the discussion on *Views*, cemetery staff park in an unscreened area between the office and maintenance sheds. Visitors must pull up along the avenue edges and this results in wearing of lawns and erosion of pavement edges. Notably worn and/or eroded areas are along the east edge of Fountain Pond and south edge of Sargent Pond, as well as the Dickson Chapel environs. These spots, located within “*Landscape Character Nodes*,” detract from the cemetery’s beauty and convey an impression of neglect.



*Vehicles congregate around the maintenance area in paved areas, but the cemetery does not contain a parking area or areas for visitors.*

The City has not developed rules or regulations for parking throughout the cemetery and has not created a visitor parking area, as a result, drivers park where they please. The addition of a parking area or areas, coupled with individual, signed parking spots and “no parking” signs is one approach to accommodating vehicles on the cemetery grounds. Moving visitor parking to parallel spots along Orne and Appleton Streets would also help remedy the negative effects of cars parking on cemetery grounds.

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## ADA COMPLIANCE

As noted in *Section 3* of the plan, the topography of Greenlawn Cemetery consists of high points and low points with rolling slopes in between. Level areas, those with slopes of 5% or less, extend along most edges of the property, allowing access to persons with all levels of physical ability. The flat terrain of low-lying areas, including the perimeters of both ponds, is easily navigable by most visitors. Roads connecting the edges and ponds, however, largely exceed 5% grade, making movement between the two more taxing. The poor pavement conditions of many cemetery roads, discussed above, adds to navigation difficulties. The exception to this is Harris Circle, which follows gently sloping terrain and allows visitors to reach Sargent Pond and travel across to Fountain Pond across nearly level grades.

The cemetery does not contain an established route, marked with signs, to guide persons with physical disabilities through the landscape. The addition of such an amenity would open the cemetery to a broader group of visitors and more comfortably accommodate those with physical disabilities.



## TREE HEALTH

To assess the overall health of the tree population at Greenlawn, the project team examined 311 trees, located in eight locations throughout the cemetery. The trees represent a sample of the entire population, which exceeds 600, and the sample locations match those designated as potential areas for development of new interment sites (discussed at the end of this section). Figure 4.3 locates the eight locations (lettered A through H). In each of the areas, the team identified the individual tree species and its diameter at breast-height (DBH); assigned a condition value of good, good-to-fair, fair, fair-to-poor or poor; made notes about the condition and recommended an action for care. The following is a summary of observations:

*The pollinator garden, located at the north end of Sargent Pond, includes an ADA-compliant pathway.*

- Trees range in size from 6” to 46” in DBH, with a majority falling between 18” and 30”.
- While some of the trees may be up to 150 years old, most are 75 years old or less.
- The largest trees areas where they do not have to compete for nutrients or sunlight, such as the edges of cemetery avenues.
- Forty-four known genii were identified in the sample; Acer was the most prevalent, followed by Quercus and Thuja. Native species, including Amelanchier, Nyssa and Larix appear throughout.
- Of the 311 trees, 24.4% appear in good condition; 19% are poor and should be removed; and the remaining 56.6% are somewhere in between. The healthiest genii include oaks, cedars, lindens, and some of the more reliant maple species. The least healthy genii include hemlock and ash.
- Masses of volunteer trees have invaded several areas, creating overcrowded conditions and preventing growth of desirable species. Norway maples and cork trees are dominant among these invasive species.

The assessment revealed that Greenlawn’s trees have received little or no care over the last several decades and as a result, many specimens have weakened and/or have become diseased. Recommendations for improving and managing the tree population in the future include:

- Completing the assessment to include all trees;

Legend

- A** Althea & Clematis Paths, Hemlock/Ash/Thorn Triangle
- B** Burke Lot
- C** West Chapel Slope
- D** Heath & Lotus Paths, Thorn/Hickory/Olive Triangle
- E** Olive & Anemone Paths
- F** Fountain Pond West Edge
- G** Sargent Pond West Edge
- H** Sargent Pond Overlook

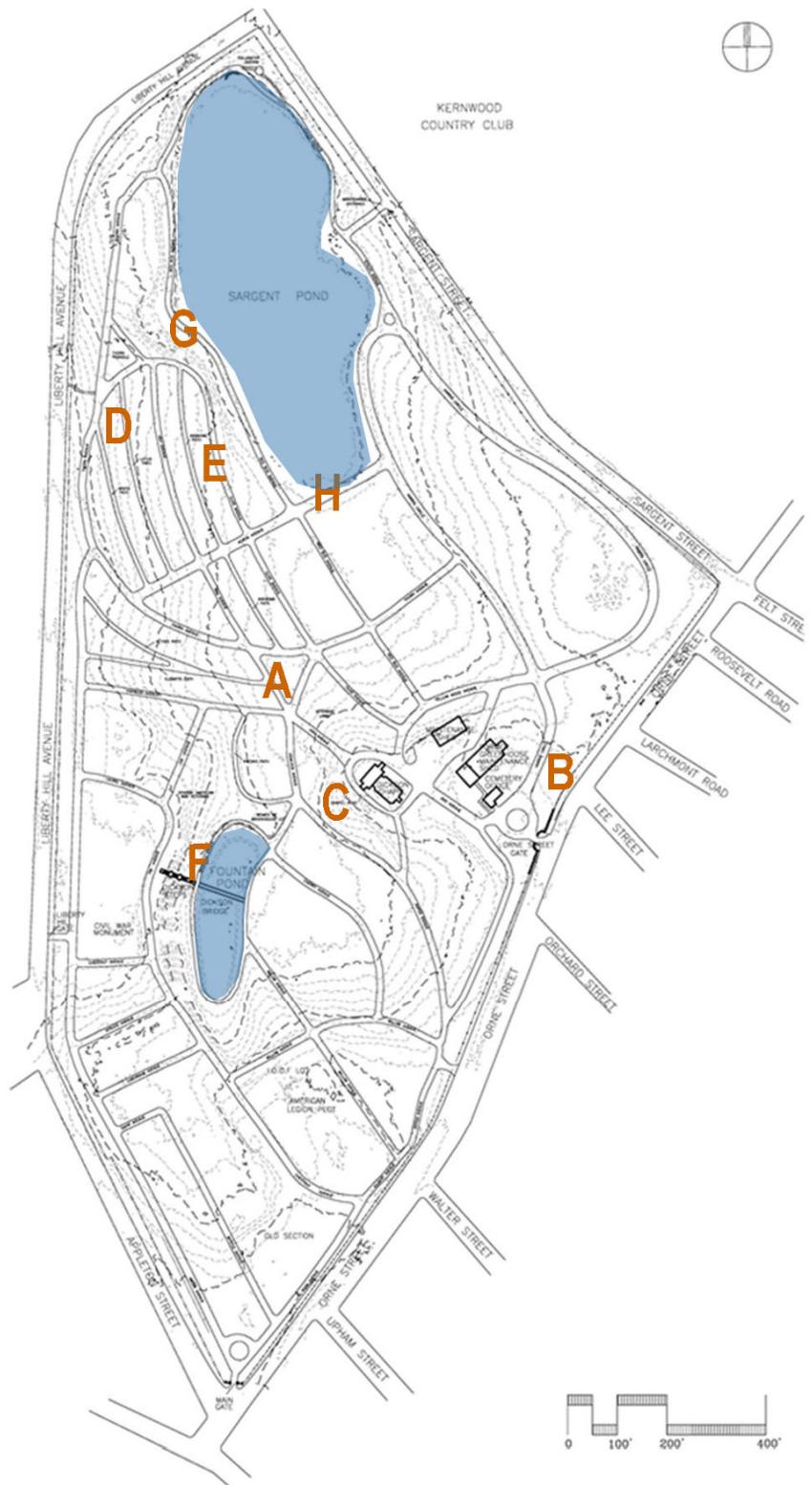


Figure 4.3. Tree Health Assessment locations.

- Removing diseased and dying trees (approximately 1/5 of the tree population)
- Introducing new trees that are less susceptible to the effects of climate change, and limiting replanting of trees that are native to New England and vulnerable to climate-change induced threats;
- Retaining the most desirable specimens when introducing new interment areas, in other words, designing new interment areas around the most desirable trees.

For more detailed information about the tree health assessment, including condition maps and a spreadsheet listing all data collected through the assessment, refer to *Appendix A: Tree Health Assessment*.

## DRAINAGE & LANDSCAPE STRUCTURES

### DRAINAGE

An extensive drainage network, consisting of catch basins, yard drains, manholes, and pipes, underlies Greenlawn, collects surface water and channel it into one or both cemetery ponds. The drainage structures appear to be in fair condition, with most catch basins and yard drains filled with sediment and leaves. In several areas, catch basin grates stand above the pavement, causing runoff to bypass the structure and go uncollected. Further impacting the system is the presence of street drainage, entering the cemetery from Appleton and Sargent Streets. At Appleton Street, a breached retaining wall (missing cap), malfunctioning catch basin and compacted low point on the road shoulder allow stormwater to pour into the cemetery, creating a channel and eroding the slope at the south end of Fountain Pond. Stormwater runoff from Kernwood Country Club, piped under Sargent Street, discharges into Sargent Pond. The latter system appears to be functioning.



*Build up of debris in the culvert at the north end of Sargent Pond has led to failure of the culvert headwall.*

To remedy the stormwater overflow from Appleton Street, the City should repair the system along Appleton Street, and within the cemetery clean out grates, structures, and pipes and use video technology to determine whether the piping system has deteriorated.

Greenlawn Cemetery Master Plan  
Salem, Massachusetts

Legend



Drainage Failure Area



Main Drainage Pipe/Outflow



Compromised Historic Structure

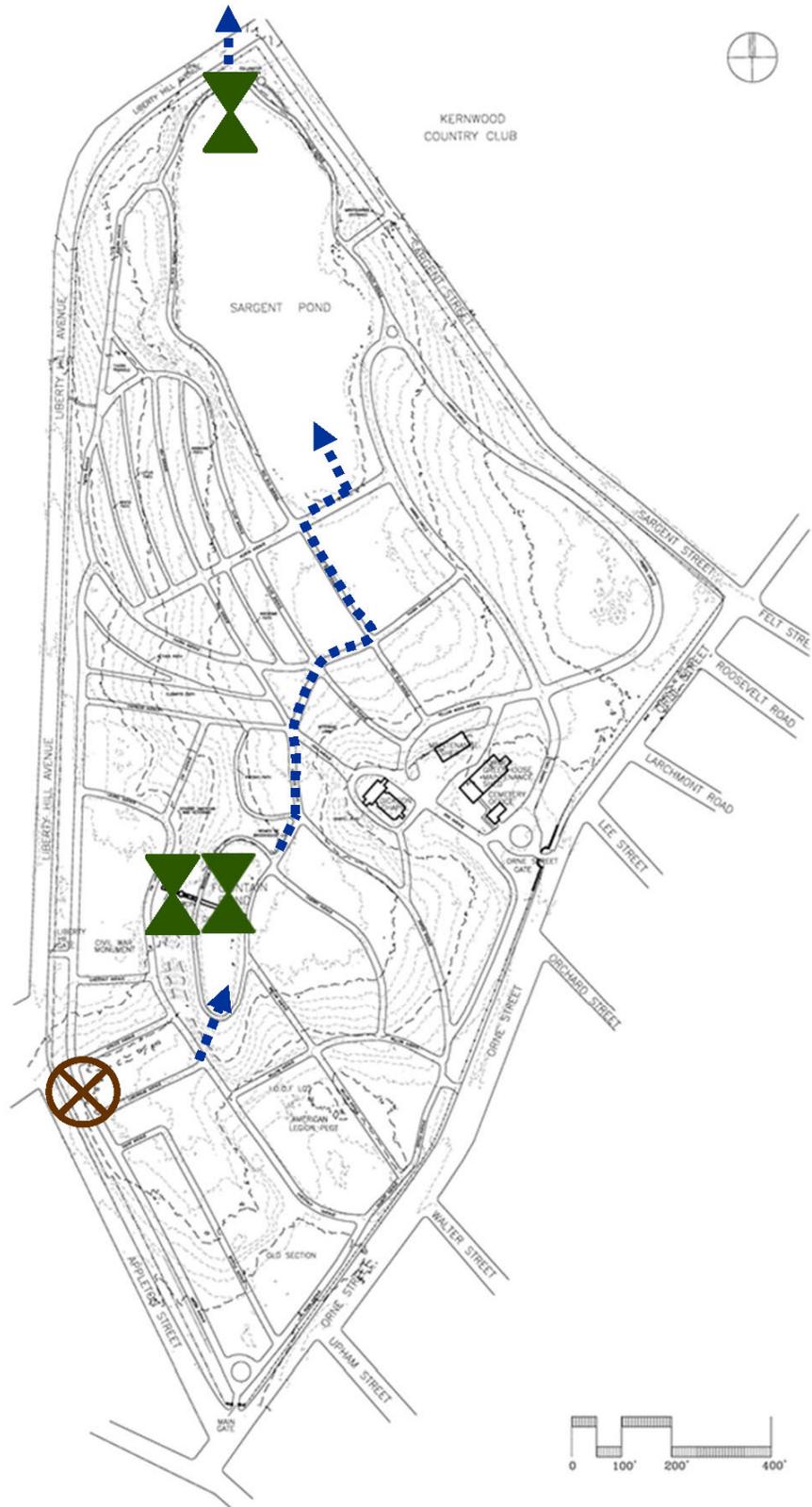


Figure 4.4. Cemetery drainage system and historic landscape structures locations.

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## LANDSCAPE STRUCTURES

Several landscape structures contribute to Greenlawn's historic character; a detailed analysis of their condition appears in the *Engineering Assessment* report found in *Appendix B*. In summary, the structures' condition, as well as preliminary recommendations for repairs, are as follows:

- The 1928 **Dickson Bridge**, constructed of concrete and steel, spans Fountain Pond. The concrete has begun to spall and crack in several locations, caused in part by the build-up of debris underneath the bridge deck. The spalling has led to delamination of concrete from the steel reinforcement, however the concrete piers supporting the arches appear to be in adequate condition. The bronze plaque affixed to the inside of the north parapet wall has corroded and warped. Recommended repairs include cleaning the concrete structure and opening clogged weepholes, repairing underside arches, and resetting the approach slabs flush with the bridge deck.



*Build up of debris under the Dickson Bridge deck has resulted in spalling, cracking and delamination of the concrete.*

- The 1929 **Dickson Steps**, also constructed of concrete, ascend the west slope above Fountain Pond, leading to the Dickson family plot. Steps, soffit footwalls and platforms have cracked and spalled, with the more severe deterioration present on the south footwall. Previous repairs to several concrete steps have delaminated, indicating repair failure. The north footwall has separated from the abutting steps in several locations. Drainage devices, such as weepholes, are not present, suggesting that water has accumulated around the staircase, possibly contributing to its failure. The most serious condition lies with the oval landings, where they overhang the adjacent slopes. Attempts to shore up these platforms with stones have failed, leading to cracks. Recommended repairs to the structure include resetting the landings' base stones, patching cracks, and resetting the north footwall, in addition to overall cleaning and removal of debris.
- The low, cut **stone retaining wall**, lining a portion of Appleton Street supports the cemetery's wrought and cast-iron fence. While this wall appears stable, its cap is missing, allowing excess stormwater from Appleton Street to drain over the wall into the cemetery. The water has eroded the grout between the stones, leaving significant gaps. If left open, the gap will continue to allow water to infiltrate, furthering erosion problems already present in the cemetery. The cap stone should be replaced and the wall regouted, and the connection of the fence post to the wall restored.

- The **Sargent Pond culvert** runs underneath Liberty Hill Avenue, connecting the cemetery drainage system to the Crane River. The structure consists of a concrete pipe culvert and stone inlet structure comprised of two cut and mortared stone retaining walls, a concrete headwall, an inner stone chamber, and a steel stringer supporting the deck of the inner chamber. As with the other landscape structures, debris has been allowed to accumulate on both sides of the culvert, as well as inside. Mortar between the cut granite stones has eroded and the blocks have shifted, and the concrete capstones have spalled. The inner stone chamber has been significantly damaged, with many stones having dislodged from the wall, leaving voids and allowing water to penetrate the wall. Given the seriousness of this condition, no vehicles should be permitted to cross the culvert until structural repairs are made. A more detailed structural analysis should be conducted to uncover any invisible deficiencies, but minimally, repairs should include replacing missing inner chamber stones, repointing all members of the structure, and repairing spalled parapet walls.

## POND QUALITY

Stormwater, collected through the drainage system discussed above, supplies both Fountain and Sargent Ponds, with the former feeding the latter via the piped network. Sargent then drains to a culvert leading under Liberty Hill Avenue, entering the Crane River (and eventually, Atlantic Ocean) at Peter's Point. Nutrients, likely derived from duck use of the ponds, as well as fertilizers from Kernwood Country Club, and leaf matter storage associated with Sargent Pond, result in significant growth of vegetation during summer months. To improve water quality, the City can take several measures:



*The build up of leaf matter along the west side of Sargent Pond may be contributing to the high levels of phosphorus in the pond, resulting in algal growth.*

- Clean debris, especially leaves, from the drainage devices;
- Install a hydrodynamic separator (oil particle separator) at Appleton Street to remove oils and sediment from roadway runoff before it enters the cemetery's system;
- Relocate the leaf matter storage away from Sargent Pond; and
- Remove woody brush from the pond edges to promote growth of grasses.

For more detailed information about pond conditions and recommendations for improvements, refer to the *Drainage and Roadway Review* report, found in *Appendix B*.

## GRAVESTONES & SIGNIFICANT MONUMENTS

The condition of grave markers, whether small individual tablets or large monuments, is another visual indication of how well the City is maintaining the cemetery. Dirty, tilting, broken, and/or fallen markers suggest neglect, while those in clean, plumb condition convey a commitment to care. Greenlawn contains thousands of monuments and markers dating from the early 1800s through 2021, many of which are in excellent condition, however many older stones have deteriorated.

To get a general sense of the older stones' condition and identify typical conservation problems, the master plan consulting team studied a 107-stone sample located in the "Old Section," near the southwest corner in the vicinity of Rose, Myrtle, Poplar and Cedar Avenues. In addition to these, the team assessed Greenlawn's significant monuments including those listed in the Data Sheet of the National Register Nomination Form as well as those identified by the Friends on Greenlawn Cemetery for inclusion on the group's interpretive map.



*Many of the gravestones in the "Old Section" exhibit multiple types of deterioration, including breaks in the stone and build up of biological growth on the stone surfaces.*

Most of the markers are made of marble, and the natural weathering process has obscured many of the names on the stones. Many exhibit several types of damage, including:

- Fallen and broken
- Tilted and loose on base
- Fallen and sunken
- Sunken, tilted and loose on pins

Those with complex problems will require complicated repairs employing multiple procedures. A broken stone, for example, may involve six procedures: excavation, cleaning, resetting the base and bottom fragment, drilling and pinning top fragment to bottom fragment, and infilling the break. For more detailed information about the gravestones and significant monuments, refer to *Appendix C* of this plan.

## LANDSCAPE DETAILS

In addition to the landscape structures, trees, gravestones and significant monuments, several details punctuate the cemetery grounds. These have both positive and negative effects on the visual character.

## SIGNS

The City has placed many different types of signs around the cemetery, each with a different purpose. **Bronze plaques**, appended to landscape structures, mark the Main Gate, Dickson Bridge, Dickson Steps. **Cast iron signs** mounted on poles stand at intersections, marking the cemetery avenues and paths, and also locating burial sections (Greenlawn's burial areas are not otherwise numbered or named). A wooden kiosk, containing a cemetery map, orients visitors to Greenlawn's notable gravesites. Metal tags have been appended to the trunks of trees. Sandwich boards, alerting visitors to interment services taking place on the grounds are placed at the two vehicular entrances. A wooden sign, placed near the west edge of Sargent Pond asks visitors to refrain from fishing, and another near the south end asks people not to feed the ducks. Cemetery regulations appear on metal signs appended to wooden signs of varying heights. While each sign provides important information, the lack of a program with a hierarchy of signs made from the same materials and in a consistent design creates has led to a visual cluttering of the landscape and confusion for cemetery visitors. The relatively low cost of developing such a program and replacing the existing signs can make a significant impact on Greenlawn's visual character.



*Multiple sizes and styles of signs have been placed throughout the cemetery, created without a coordinated sign program, resulting in a visually cluttered appearance.*

## BENCHES

Greenlawn provides few spots for visitors to sit other than on a rundown double-seated, steel frame/wood-slat bench, located at the south end of Sargent Pond. A few other granite benches mark gravesites, but otherwise, no public accommodations are made. By providing spots for pausing, resting and reflecting, the City can enhance public enjoyment of the cemetery. Benches should be made of durable material and limited to a single style.



*With the exception of a double wide bench at the south end of Sargent Pond, Greenlawn contains few places for visitors to sit, rest and reflect.*

## GARDENS

The cemetery maintains plantings of shrubs, perennials and annuals at the major entrances, and the pollinator garden, maintained by the Friends of Greenlawn Cemetery lies near the

north end of Sargent Pond. These features add personal and lively touches to the landscape, and provide a way for volunteers to engage with the property, and should be retained, if possible.

## FUTURE EXPANSION

Nearly all of the available interment sites across Greenlawn’s 55.8-acres have been sold, and just one small area, located east of the cemetery office and known as the Burke Lot, remains undeveloped and unplotted. Rather than closing Greenlawn once all sites are full, the City can expand interment sites within the existing historic landscape, with the development of alternative types of burials, including in-ground cremation, columbarium cremation, and scattering of cremated remains. Possible sites include under-used roadways, edges of the ponds, interstices of roadways (triangles). Development of each site will require full environmental assessment, prior to determining feasibility. The following is a preliminary list of nine potential interment areas:

Site #	Location	Interment Type(s)
A	Althea & Clematis Paths, Hemlock/Ash/Thorn Triangle	In-ground Cremation Columbarium
B	Burke Lot	Full-Casket Burials (single or double-depth)
C	West Chapel Slope (includes Ash and Aspen Avenue edges)	Columbaria In-ground Cremation Scattering
D	Heath and Lotus Paths, Thorn/Hickory/Olive Triangle	Full-Casket Burials Columbarium
E	Olive and Anemone Paths	Full-Casket Burials
F	West Edge of Fountain Pond	In-ground Cremation
G	West Edge of Sargent Pond	Columbarium In-ground Cremation
H	Sargent Pond Overlook	Scattering
I	Pollinator Garden	Scattering

The nine sites could yield the following number of new interments, depending on the final design of each:<sup>1</sup>

In-ground Full-Casket:	695
Columbarium Niches (cremated remains):	1,560
In-ground Cremation:	1,170
Scattering:	Unlimited

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<sup>1</sup> Columbarium totals are based on walls measuring 5’ in height and 30’ in length; full-casket burials are based on 4’ x 10’ plots. Additional full-casket burials may be possible if soils allow for double-depth crypts.

Legend

- A** Althea & Clematis Paths, Hemlock/Ash/Thorn Triangle
- B** Burke Lot
- C** West Chapel Slope
- D** Heath & Lotus Paths, Thorn/Hickory/Olive Triangle
- E** Olive & Anemone Paths
- F** Fountain Pond West Edge
- G** Sargent Pond West Edge
- H** Sargent Pond Overlook
- I** Pollinator Garden

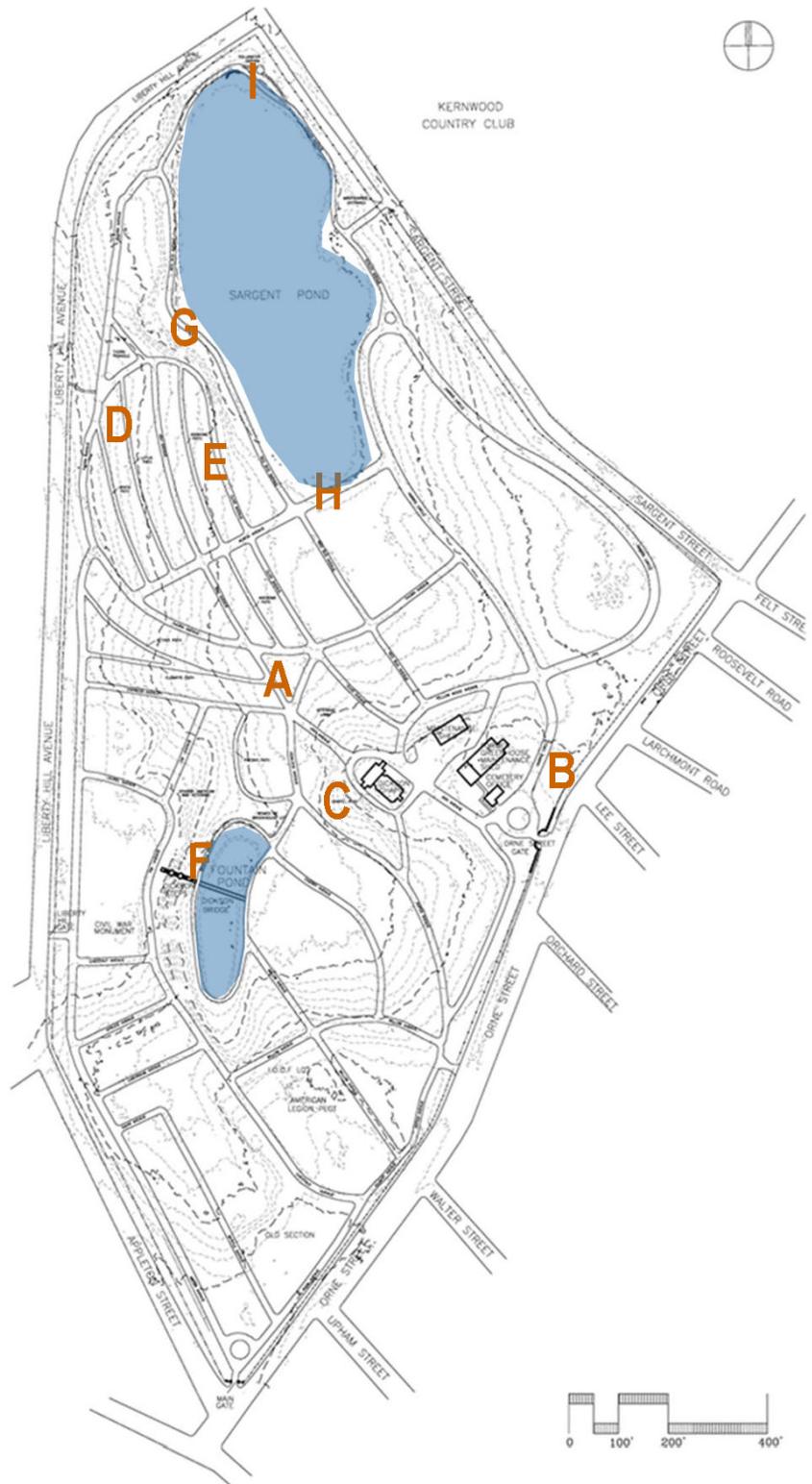


Figure 4.5. Proposed locations for interment expansion.

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Legend

-  Columbarium Wall (Niches)
-  In-ground Full Casket Burial
-  In-ground Full Casket Burial
-  In-ground Cremation Burial
-  Scattering Garden Path



Figure 4.6. Interment types proposed for each expansion area.

## CONCLUSIONS AND PRELIMINARY RECOMMENDATIONS

The condition of Greenlawn's landscape has admirably withstood heavy use by funeral corteges, interment attendees, dog-walkers, bird-watchers, and the many others who use its roads for passive recreation. Most of the upgrades will require minor effort and may be phased over several years. The need for additional interment space poses the greatest challenge, and fortunately opportunities exist for introducing new sites within the existing landscape.

### PRELIMINARY RECOMMENDATIONS

The following preliminary recommendations are based on the landscape assessment and are integrated into the overall master plan recommendations, discussed in *Section 6* of this plan. Note that they do not appear in order of urgency or importance.

#### Edges

- Remove the existing chain link fencing and replace as follows:
  - ~ Install steel picket fencing, designed to match the historic wrought iron fencing, along the east end of the Orne Street edge
  - ~ Install black vinyl-coated chain link fencing in place of chain link along Liberty Hill Avenue and Sargent Street
- Selectively remove shrubbery from inside the fence to allow more views into the cemetery;

#### Views

- Selectively remove the lower limbs of shade trees (up to 15' above ground) to open long views across the cemetery;
- Screen the maintenance area with evergreens to block views of equipment, crypt liners and other "behind-the-scenes" objects;

#### Entrances, Circulation, Parking & ADA Compliance

- Evaluate the efficacy of the many entrances and the capacity of cemetery crews to maintain use of these; close those entrances that are difficult to monitor;
- Establish a main vehicular route to be followed by visitors and direct drivers to use this route;
- Define and mark an ADA-compliant route to be used by persons of all levels of physical ability;
- Implement the measures defined in the Engineering Assessment to upgrade cemetery pavement, including removing pavement on infrequently used roads;
- Establish a designated parking area or areas for visitors, either inside the cemetery or on adjacent streets;

#### Drainage & Structures

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- Address stormwater system deficiencies per the recommendations of the Engineering Assessment, beginning with clearing debris from existing drains and pipes (this includes repairing the system along Appleton Street);
- Stabilize the cemetery's historic landscape structures, including the Dickson Bridge, Dickson Steps, and Sargent Pond culvert per the recommendations of the Engineering Assessment, beginning with repair of the culvert;
- Devise an alternative solution and/or identify an alternative location for deposit of leaf matter to help mitigate water quality issues associated with Sargent Pond;

**Trees**

- Conduct an assessment of the remaining 300+ trees;
- Integrate assessment data into the City's Geographic Information System;
- Remove diseased and dying trees (approximately 1/5 of the tree population);
- Introduce new trees that are less susceptible to the effects of climate change, and limit replanting of trees that are native to New England and vulnerable to climate-change induced threats;
- Retain the most desirable specimens when introducing new interment areas, by designing these areas to incorporate the most desirable trees;
- Continue to collaborate with the Friends of Greenlawn Cemetery and Salem State University on development of the F. Carroll Sargent Arboretum and additional arboretum designations.

**Gravestones**

- Treat the 107 gravestones identified in the Gravestone & Significant Monument Assessment as requiring conservation;

**Landscape Details**

- Develop a program to place signs throughout the cemetery, including welcome, orientation (including cemetery rules and regulation), street/path, parking, and plant identification;
- Identify a model and installation detail of benches to be placed throughout the cemetery;
- Continue to maintain seasonal plant beds at the major entrances and in the pollinator garden;

**Expansion**

- Develop a phased approach to introducing new interment sites, based on demand and the City's ability to finance design, construction, and marketing of the sites.

*Greenlawn Cemetery Master Plan  
Salem, Massachusetts*

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## 5 OPERATIONS ASSESSMENT

The following section of the Greenlawn Cemetery Master Plan examines cemetery operations, including existing regulations, security issues, management structure, financing, partnerships and historic designations, and makes preliminary recommendations for updates, amendments, and revised approaches.

### EXISTING CEMETERY REGULATIONS

The City of Salem's Ordinances pertaining to regulation of cemeteries appear in Chapter 16 of the Code of Ordinances, City of Salem, Massachusetts, and are organized around three articles, (I) In General, (II) Board of Cemetery Commissioners and (III) Greenlawn Cemetery. The City adopted nearly all cemetery ordinances in 1973, with the exception of the 2015 ordinance prohibiting fishing in Greenlawn's ponds. Each ordinance generally follows to the provisions of M. G. L. Chapter 114 governing cemeteries.

In the fifty years since the adoption of Chapter 16, many more burials have been added and the use of Greenlawn for activities other than interment has expanded. While most of the Ordinances still apply, several could be modified to help better manage the cemetery (number of Ordinance appears in parentheses):

- **Hours of Operation (Section 16-5).** Currently, Greenlawn remains open for visitors during the hours between sunset and sunrise, as much as 15 ½ hours per day. In June, around the longest days of the year, sunrise in Salem can take place as early as 5:00 a.m. and sunset as late as 8:30 p.m. Massachusetts General Law states that all tax-exempt cemeteries shall remain open eleven hours per day, between 8:00 a.m. and sunset and from June through September from 8:00 a.m. until 7:00 p.m.<sup>1</sup> Per Massachusetts General Law, the City has the option of reducing the number of visitation hours and locking the gates at closing time, to help better control visitation after hours.
- **Control of Dogs (Sections 16-6 and 16-98).** Currently, the City of Salem Ordinance allows dogs at Greenlawn if on leash (Section 16-98), and the Cemetery Division

### REGULATIONS ASSESSMENT SUMMARY

- Greenlawn's existing visitation hours extend beyond those defined by M. G. L. 114 and could be shortened to better manage access, especially in the evening
- Use of the cemetery for dog-walking has significantly increased and cemetery crews cannot keep up with clean-up of dog waste; Chapter 16 of the City Ordinances does not address dog waste.
- Burial type has been approximately two-thirds traditional burial and one-third cremation, lagging behind the national trend; options for cremation are currently limited to single and two-grave lots (in-ground); cremation is becoming more popular
- The definition of "residency" in relationship to eligibility for grave purchase is not clearly defined in Chapter 16 of the City Ordinances
- Plot owners (families of) are responsible for gravestone care; this policy has resulted in deterioration of some markers
- While Greenlawn has been heavily vandalized, many cemetery ordinances – some of which carry violation fines – are regularly ignored

<sup>1</sup> M.G.L. Chapter 114, Section 42A, Visitation Hours of Cemeteries, "[n]o cemetery...shall be closed for visitation between the hours of eight o'clock antemeridian and sunset, except during the months of June, July, August and September when such cemeteries shall remain open until the hour of seven o'clock post meridian..."

further this by stating (on the City website) that “dogs must be kept on leash, walked on paved surfaces and kept off of graves at all times.” The Ordinance does not address dog waste. While Massachusetts General Law does not specifically regulate access to municipal cemeteries by dogs, Chapter 114 does state that passage through a cemetery from one point to another must take place on defined ways, paths and walks, with the exception of individuals attending interment services or visiting a grave.<sup>2</sup> The law permits the City to fine those individuals violating this clause. Fines for violating Massachusetts law and the City’s Code of Ordinances have not been instituted and both remain options for controlling inappropriate use of the cemetery grounds by dogs and their owners.

- **Planting within the Cemetery (Sections 16-68 and 16-108).** The City’s Code of Ordinances includes a “Form of Deed” for lots in Greenlawn, and within this form, a provision states that no tree shrub or plant shall be set out or cultivated in or upon said lot except by consent of the Board of Cemetery Commissioners or other person in charge of the cemetery. Regardless of this policy, many plantings have been added to newer gravesites, located mostly in the Harris Circle area. As these plantings (herbaceous perennials and shrubs) expand in size, they present maintenance challenges to cemetery crews. Opportunity exists to amend the Form of Deed to specifically prohibit the planting of trees and shrubs.<sup>3</sup>
  
- **Ornamentation of Gravesites (Section 16-68).** The City’s Code of Ordinances does not permit lot owners to install fencing, curbing or other enclosures, and prohibits setting out plants or flowers anywhere except within the area immediately adjacent to headstones or monuments. Non-biodegradable objects, such as pinwheels, balloons, solar lights, hanging plants are also not allowed, and the Cemetery Commission reserves the right to remove such objects with the provision that they be stockpiled for 21 days so that lot owners can retrieve them. This policy creates another maintenance challenge for cemetery crews tasked with collecting the objects. And because Greenlawn has limited storage space, stockpiling takes place behind the cemetery office in the maintenance area, creating an unsightly heap visible to visitors. Opportunity exists to amend the Ordinances to prohibit the placement of non-biodegradable objects to ornament graves.<sup>4</sup>
  
- **Speed Limits on Cemetery Avenues (Section 16-109).** The City’s Code of Ordinances states that no vehicle shall be driven in Greenlawn Cemetery at a rate faster than 15 miles per hour. The Cemetery Division has set this limit at 10 miles per hour (City website). (Massachusetts General Law does not regulate speed limits within municipal cemeteries.) For clarity, the City should standardize this rate at 10 miles per hour every place the regulation appears.
  
- **Sales of Burial Sites.** The National Funeral Directors Association (NFDA) tracks rates of cremation and traditional burial nation-wide and produces a report every five years. Data from 2010 through 2021 show a shift away from traditional burial (53.3% in 2010 to 36.6% in 2021) and towards cremation burial (40.4% in 2021 to 57.5% in 2021). Burials at Greenlawn lag behind national trends, with approximately two-thirds traditional burials and one-third cremation burials, however, over the past two years, the cremations have nearly equaled traditional burial, as exhibited in the following table:

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<sup>2</sup> Chapter 14, Section 42.

<sup>3</sup> Massachusetts General Law does not regulate planting within municipal cemeteries.

<sup>4</sup> Ibid.

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<b>Burial Form</b>	<b>2010-2016<sup>5</sup></b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Traditional	522	70	50	69	1,054
Cremation	368	48	56	65	597
<b>Total</b>	<b>890</b>	<b>118</b>	<b>106</b>	<b>134</b>	<b>1,651</b>

*Burial trends at Greenlawn Cemetery, 2010 – 2020.*

Burial at Greenlawn is reserved for Salem residents and qualified former Salem residents only, although this policy is not part of the City of Salem Code of Ordinances. To be grandfathered as a “former” resident a person must have proof of having resided in Salem for a minimum of one full year and moved from Salem with the last five (5) years. Pre-purchase at Greenlawn is not allowed and purchasers must obtain the grave lot offered to them by cemetery staff.

Currently, Greenlawn offers only in-ground interment, taking one of three forms:

- ~ Single lots, traditional (full-casket) - one interment
- ~ Two-interment lots, traditional - two interments
- ~ Single lots, cremation urns - up to four interments

Greenlawn does not currently provide options for mausoleum, columbarium, ossuary, scattering, or green burial. To prepare for a growing demand for cremation burial, the City should explore alternative approaches, including columbaria, in-ground urn burial, and scattering.

- **Care of Gravesites.** City Ordinances do not specify responsibility for care of lots, however, tradition holds that lot owners assume responsibility for care of headstones, while perpetual care funds (discussed below) cover costs associated with the cemetery grounds such as mowing of lawns, trimming/removing trees, and repaving roads. For clarity, the City should institute a policy regarding care of stones and adopt guidelines for care to advise lot owners.
- **Re-use of Un-Used Gravesites.** MGL Chapter 114 permits a municipality to take over the ownership of an unoccupied grave unless 75 years have elapsed after sale of the lot, and the lot owner cannot be located.<sup>6</sup> City of Salem Ordinances do not specifically address the reclaiming and selling of unused gravesites, and Salem has not engaged in the process of locating and re-selling gravesites that have gone un-used for 75 years or more. While un-used graves could potentially expand interment options, reclamation of un-used graves, particularly in the oldest sections of Greenlawn, poses the following difficulties:
  - ~ Many families that originally owned lots in the oldest sections have not lived in Salem for many generations, and family members are hard to find;
  - ~ Locations of un-used graves are hard to locate, as areas that appear “open,” may actually contain unmarked graves;
  - ~ Dimensions of lots in the old sections are smaller than contemporary dimensions, making it difficult to install crypt liners.

Opportunity exists to adopt an ordinance regarding re-use of un-used graves in the oldest section.

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<sup>5</sup> Data for 2017 is unavailable.

<sup>6</sup> Chapter 114, Section 10A. The municipality must request and receive the consent of a relative or descendant of the descendent occupying the grave

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## SECURITY

The City of Salem has been fortunate in that Greenlawn has suffered little vandalism or delinquent activity over its long history. However, several minor incidents related to security have occurred in recent years. These fall into two general categories:

- **Violation of cemetery policies.** Such violations include those punishable with a fine and/or jail sentence, as described in the City Ordinances. These include:
  - ~ Injuring a gravestone or monument
  - ~ Injuring a cemetery structure
  - ~ Entering the cemetery after hours (dawn to sundown)
  - ~ Violating rules and regulations of the Board of Cemetery Commissioners
  - ~ Fishing in either pond

### SECURITY ASSESSMENT SUMMARY

- Past security breaches include violation of cemetery policies and police-involved incidents, including theft and defacement of public property, and harassment of staff
- Behaviors not permitted on the cemetery grounds should be posted in several locations throughout the cemetery
- Securing the cemetery gates after hours may reduce violations of some cemetery policies

The most frequent security violations involve the failure of dog-owners to bag and remove waste from the cemetery grounds, and visitation after the cemetery is closed. Unlike the four other City cemeteries where dogs are prohibited per City Ordinance, canines are allowed at Greenlawn if leashed, as mentioned earlier in this section. Failure to remove waste has become increasingly problematic, creating a public health concern. Similarly, visitation after sundown, also discussed earlier, is a violation of cemetery ordinance as well as state law.

- **Police-involved incidents.** Such incidents include those where the Salem Police are called to the scene and subsequently file a police report. Over the past two years, such incidents have included:
  - ~ theft of a trailer and hand-held equipment;
  - ~ dumping of trash during the day;
  - ~ verbal harassment of staff;
  - ~ collision of vehicles with the perimeter fencing and entry gates

To minimize future violations, the City should continue to post the information about prohibited behavior, along with the fines associated with such behavior, in several locations, as well as reducing hours of visitation and securing the gates when not open.

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## MANAGEMENT STRUCTURE & CAPACITY

The management of Greenlawn Cemetery is the responsibility of two entities, a citizen-based Commission and a City department, as follows:

- **Board of Cemetery Commissioners.** This five-member Commission regulates the City's five public cemeteries, including Greenlawn. The mayor appoints the members and appointments are confirmed by the City Council. Terms last three years, with at least one member being appointed annually to avoid multiple concurrent Commission vacancies. The City Ordinances state that the board shall consist of (1) a funeral director currently engaged in business in the City; (2) a florist or

horticulturist who resides in the City; and (3) a resident of Salem's Ward Six. The two remaining member represent the City's general population. In addition to ensuring that Massachusetts General Laws and cemetery ordinances and policies are followed, the commissioners have sole care, superintendence and management of Greenlawn, and oversee the work of cemetery staff. The commissioners also oversee the care of lots and have the ability to expend funds reserved for this purpose.

- **Department of Public Services, Cemetery Division.** Day-to-day management of Greenlawn, including selling of lots, arranging for funerals, and maintaining burial records, as well as managing upkeep of the grounds, is the job of the Cemetery Division of Salem's Department of Public Works. Administrative staff consists of a full-time superintendent in charge of all five of the City's public cemeteries, and one part-time administrative assistant devoted entirely to Greenlawn. Grounds maintenance consists of five full-time crew members and three part-time seasonal workers, and these individuals perform maintenance tasks at all five cemeteries. A contracted landscape service mows lawns at all cemeteries except Greenlawn.

**MANAGEMENT ASSESSMENT  
SUMMARY**

- Management of Greenlawn is overseen by the Board of Cemetery Commissioners and Cemetery Division of the Department of Public Services
- The current make-up of the Cemetery Commission does not reflect contemporary and future cemetery needs
- Maintenance capacity is limited by the number and expertise of workers

While the Cemetery Commissioners and Cemetery Division ably tend the City's five cemeteries, several factors restrain efforts to better manage the properties, and Greenlawn in particular:

- The requirement to include a funeral director and florist/horticulturist on the Commission and involved in policy-making decisions, while logical fifty years ago, seems less relevant today and could be perceived as a conflict of interest. The cemetery staff maintains regular communications with funeral homes and florists throughout the region through the multiple 21<sup>st</sup> century means available. Expertise of individuals with finance, history, and landscape architecture backgrounds may be more in step with current and future cemetery needs.
- While the current level of staffing closely matches that of other cemeteries of comparable size in the region, it is inadequate to care for five cemeteries. Greenlawn alone covers over 55.8 acres with over 600 trees, thousands of monuments, over four miles of roadway, two ponds and two historic buildings. Each of these features requires ongoing maintenance. And although each of the four other Salem cemeteries is small in size, the fragility of the historic gravestones, aging walls, and mature trees requires more fine-tuned care, placing further demand on the small crew. To address this ongoing maintenance challenge, the City should work towards increasing staffing capacity.

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**FINANCING**

Four sources provide financial support for operations at Greenlawn:

- **Gravesite Sales and Services.** Currently, in-ground burial lots, or full-casket gravesites, are the only option for individuals seeking interment at Greenlawn. Lot owners may use the lots for traditional or cremation burial. On average, the City earns over \$50,000 in lot sales each year at Greenlawn and burial services (opening/burial) generate an additional \$90,000 in revenue.<sup>7</sup> Compared with the other cemeteries of similar size in Essex County municipalities with comparable populations, lot and opening pricing at Greenlawn is slightly above median for single graves, and below median for two-grave lots<sup>8</sup>:

Service	Greenlawn Single-Grave	Essex County Median Single-Grave	Greenlawn Two-Grave	Essex County Median Two-Grave
Lot Sale	\$950.00	\$910.00	\$1,900.00	\$2,400.00
Opening	\$850.00	\$875.00	\$1,700.00	\$1,750.00
Total	\$1,800.00	\$1785.00	\$3,600.00	\$4,150.00

The median price of a **cremation urn burial** (opening) in Essex County is \$400.00 compared with \$450.00 at Greenlawn. Total cost of cremation depends on the cost of lots and the number of cremations allowed per lot (ranging from 1 to 5 per single grave and 4 to 12 in two-grave lots).

- **Trust (Perpetual Care) Funds.** A portion of each lot purchase is reserved for perpetual care of the cemetery landscape. Begun in 1861 and expanded into the 20<sup>th</sup> century to include one general perpetual care fund and ten individual funds, this source provides a continual revenue through investment of the funds and yearly expenditures of approximately 3.5% of interest only. The general fund may be used for expenditures associated with all five public cemeteries whereas some of the individual funds are reserved for specific purposes, such as maintenance of the Dickson Chapel. At the close of FY 2021 (June 30, 2021), the Cemetery Perpetual Care Fund's value exceeded \$3.3 million and generated nearly \$300,000 in annual interest. The composite value of cemetery-related funds exceeded \$5.3 million, generating over \$650,000 in annual interest.<sup>9</sup> The amount of money available to spend on cemetery care and improvements (3.5% of interest) will fluctuate each year depending on market value of the funds.
- **City General Fund.** In the past, the City has funded, through the Department of Public Works budget, \$3,800 for the cemetery.
- **Grants.** The City has had some success raising additional funds for specific projects through various grant programs. The Massachusetts Historical Commission has supported restoration of the Dickson Chapel through its Massachusetts Preservation Projects Fund, as well as nomination of Greenlawn Cemetery to the National Register of Historic Places through its Survey and Planning

**FINANCING ASSESSMENT SUMMARY**

- Several sources provide financial support for operations at Greenlawn, including lot and opening sales, trust funds, the City's general fund, and grants.
- Opportunity exists to raise additional revenue by increasing the price of lot and opening sales; securing additional grants; and constructing revenue-producing interment options.

<sup>7</sup> Figures based on a ten-year average from 2010 through 2020 (and not including 2017).

<sup>8</sup> Detailed breakdown of pricing at Essex County cemeteries appears at the end of this section.

<sup>9</sup> Several funds are earmarked for cemeteries other than Greenlawn.

Grant Program. The cemetery's status on the National Register makes it eligible for additional MHC funding, and potential exists to expand fundraising through other sources.

Opportunities exist to broaden financial support for Greenlawn through several avenues:

- **Increase the prices of both lot sales and opening** to make Greenlawn competitive with other public cemeteries in the Essex County/North Shore region;
- **Conduct a yearly review of trust fund performance**, comparing it to the major indices, and make adjustments, as advisable;
- **Pursue more grants through MHC and other preservation-focused funding sources** such as Save America's Treasures (National Park Service), the Essex National Heritage Commission, and Salem's Community Preservation Act; and
- **Introduce new interment sites** that will result in net revenue for the cemetery.

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## PARTNERS AND VOLUNTEERS

**Existing Partners.** Efforts to care for and broaden interest and understanding in Greenlawn have been recently enhanced by several partners and volunteers:

- **Friends of Greenlawn Cemetery.** As discussed in Section 3 of the Master Plan, this 501(c)(3) organization formed in 2012 to support (1) restoration of the historic Dickson Chapel and (2) seek and secure recognition of the tree community at Greenlawn. A volunteer-run entity, the Friends manage a Facebook page, have published guidebooks and hosts tours focusing on trees and cemetery history. It is through the work of the Friends that Salem was able to secure Level I Arboretum certification for what has become known as the "F. Carroll Sargent Arboretum."
- **Salem State University.** Through the Department of Biology at Salem State, Greenlawn has become a learning laboratory for students in the natural sciences. Faculty conduct field trips and hold outdoor classes at the cemetery, using the plant population as a teaching tool. The University has partnered with the Friends in an effort to complete an inventory of all trees and shrubs at the cemetery. The work is ongoing.
- **Preserving Salem.** In an effort to broaden public understanding of and appreciation for the Salem's historic resources, the City and Salem Historical Commission have created a website specifically dedicated to preservation. This site presents information on Salem's local historic districts, highlights Salem's historic assets, and features examples of outstanding public and private initiatives to protect, preserve and promote the City's irreplaceable historic resources. Preserving Salem has adopted Greenlawn as one of the City's treasured assets.

Opportunities exist for strengthening existing partnerships, in addition to fostering new ones:

- **Memorandum of Understanding.** Currently the City and Friends of Greenlawn Cemetery do not have an official Memorandum of Understanding (MOU) articulating the role of the two entities in cemetery use and operations, and at times, the lack of such a mutually-accepted document can lead

to conflict. By working together to draft and adopt such a document, both entities can achieve greater respect for one another's responsibility in protecting Greenlawn over the long term.

- **Expanded Friends Group Programs.** Part of the MOU should include a clear definition of the types of programming possible at Greenlawn, taking into account the property's primary purpose to provide interment space for Salem residents. Any type of program or activity that conflicts with this purpose should be prohibited, however education programming may be encouraged.
- **Network with other Cemeteries.** Several entities exist in the state and New England region to network with other cemetery professionals, to learn more about pricing, financing, alternative forms of burial, and coordination with non-profit friends group organizations. The New England Cemetery Association and Association for Gravestone Studies are two such organizations.

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## NON-INTERMENT USES

As previously noted in several sections of this plan, the Greenlawn Cemetery landscape has become an increasingly popular spot for non-interment uses, including running, walking, dog-walking, and upon occasion, fishing in Sargent Pond. At times, these activities have conflicted with cemetery operations, especially interment services which largely take place in the Harris Circle area. As the City invests in the creation of more interment areas, and these areas are constructed across the cemetery, burial services will no longer be concentrated in one area. Non-interment uses, such as active recreation and dog-walking may need to be limited to hours when burials do not take place, or altogether prohibited. This does not mean that the public cannot frequent the grounds. Such activities as passive recreation (walking), outdoor classrooms, and interpretive tours can still take place, however the City may need to regulate the times when these activities can happen.

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## HISTORIC DESIGNATIONS

In 2015, Greenlawn Cemetery achieved listing as an individual resource on the **National Register of Historic Places**. While this designation is honorary and does not protect the cemetery from physical alteration, it does pave the way for Salem to pursue grant funding for preservation efforts in the landscape. The Dickson Chapel has received some state funding (through MHC), but with the completion of this Master Plan and identification of preservation-related needs in the Master Plan recommendations (Section 6), the City will be well-positioned to apply for additional funds.

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## PRELIMINARY OPERATIONS RECOMMENDATIONS

- Revise visitation hours to bring them in line with Massachusetts General Law (8:00 a.m. until sunset and 8:00 a.m. to 7:00 p.m. from June through September).
- Update the City Ordinance to impose a fine on dog owners who do not remove dog waste from the premises.
- Update the City Ordinance to prohibit plantings of herbaceous perennials and shrubs on graves.

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- Standardize the cemetery speed limit to 10 MPH.
- Establish a City Ordinance that addresses (defines) residency related to interment at Greenlawn.
- Update the City Ordinance to affirm that lot owners are responsible for care of headstones.
- Establish a City Ordinance that prohibits interment in un-used, sold gravesites in the oldest sections of Greenlawn.
- Consider a reconfiguration of Cemetery Commission membership, eliminating the requirement to include representation from a funeral director and a florist.
- Establish a staffing level needed to adequately care for Greenlawn.
- Increase the cost of lots and openings to bring Greenlawn in line with pricing at other area cemeteries.
- Conduct a yearly review of trust fund performance.
- Pursue additional grants for preservation-related activities.
- Introduce new revenue-generating interment sites.
- Develop a Memorandum of Understanding between the City and Friends of Greenlawn Cemetery.
- Take advantage of networking opportunities with other cemeteries in the region.
- Establish a policy/ordinance addressing non-interment uses of the Greenlawn landscape.

**POLICY COMPARISONS**

Policy	Central Cemetery Beverly	Woodbrook Cemetery Woburn	Waterside Cemetery Marblehead	Spring Grove Cemetery Andover	Greenlawn Cemetery Salem
<b>REGULATION OF CEMETERY GROUNDS</b>					
<b>Hours Open to the Public</b>	No policy-assume according to MGL Ch. 114	Dawn to dusk, 365 days per year	No policy-assume according to MGL Ch. 114	Sunrise to sunset	Sunrise to sunset
<b>Control of Dogs</b>	Prohibited in all Beverly cemeteries, including Central	Prohibited with the exception of guide dogs	Prohibited in all Marblehead cemeteries, including Waterside	Permitted on-leash only	Permitted on-leash only
<b>Planting at Gravesites</b>	Annuals planted within 12 inches of an upright marker	Small gardens permitted within 12 inches of front of upright marker	Small flower beds in front of upright markers within 12 inches	No policy	No policy
<b>Ornamentation of Gravesites</b>	Eternal flames are permitted, plastic ornamentation is not permitted	Potted plants, fresh flowers, baskets, cemetery logs, wreaths, evergreen sprays allowed on holiday; flags are allowed at veterans' graves. No other type of ornamentation is allowed	On veterans' graves fresh flowers and greens, and holiday decorations (5 days before, 5 days after) are permitted; artificial ornamentation prohibited on all graves	Allowed. Maintenance crews may remove ornaments at any time	Allowed. City crews may remove ornaments at any time
<b>Speed Limits on Cemetery Avenues</b>	No policy	No policy	15 MPH	10 MPH	10-15 MPH
<b>Parking</b>	No policy	No policy	Allowed for visitation or interment services only	No policy	On pavement only (not on grass)
<b>Recreational Use</b>	Prohibited. City policy states that cemeteries are "first and foremost Memorial Parks," and "any use of the cemeteries which might disrupt the quiet contemplation or otherwise is inconsistent with the peace and tranquility which cemeteries represent will not be tolerated."	Prohibited. Recreational activities and vehicles (bicycles, mini-bikes, skateboards, snowmobiles, etc.) are not allowed. City Policy states, "[t]he facility is designed and managed as a respectful, contemplative memorial space for those interred here and for the families and friends who visit their loved ones."	Active recreation prohibited; passive recreation such as walking and nature observation allowed.	Prohibited. "Conduct that disturbs the tranquility of others is prohibited."	Allowed.

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POLICY COMPARISONS

Policy	Central Cemetery Beverly	Woodbrook Cemetery Woburn	Waterside Cemetery Marblehead	Spring Grove Cemetery Andover	Greenlawn Cemetery Salem
<b>SALES OF GRAVESITES</b>					
<b>Eligible Lot Owner</b>	Limited to residents/taxpayers only	Limited to Woburn residents and former residents only	Limited to Marblehead taxpayers of five years or more who pay taxes on the property in which they reside	Limited to Andover residents only	Limited to Salem residents: persons who have resided in Salem for one full year and moved from Salem within the past five years (to be grandfathered)
<b>Perpetual Care</b>	?	Yes	Yes	Yes	Yes
<b>Marker Sizes</b>	Regulated	Not regulated	Regulated	Regulated	Not regulated
<b>Reuse of Graves</b>	Yes, after 50 years of non-use	No policy	No policy	Cemetery lots may be repurchased	No
<b>CEMETERY MANAGEMENT</b>					
<b>Yearly Budget</b>	\$225,000 (for all 3 public cemeteries)	\$45,000 + staffing (salaries)	\$23,000 + staffing (salaries)		
<b>Source(s) of Revenue</b>	Trust General Fund Gravesite Sales	Trust Funds Gravesite Sales	Trust Funds Gravesites Sales General Fund		General Fund Trust Funds Gravesite Sales Grants
<b>Administration</b>	1 Full-time Administrator	1 Full-time Administrator	1 Full-time Administrator 1 Full-time Clerk		Full-time Superintendent; Part-time administrative assistant
<b>Number of FT Maintenance Staff</b>	None	4	4		5
<b>Number of PT Maintenance Staff</b>	None	4	3		3
<b>Contracted Labor</b>	All maintenance work is contracted out, including grave associated tasks and landscape maintenance (including tree work and once-per-year clean up.	Annual contract for mowing and seasonal clean up	No		No

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Cemetery Grave Price Comparison  
2021

**INTERMENT** Essex County

	<b>Andover</b> Spring Grove Cemetery	<b>Beverly</b> Beverly Farms Cemetery Central Cemetery North Beverly Cemetery	<b>Danvers</b> Walnut Grove Cemetery	<b>Essex</b> Spring Street Cemetery Beechbrook Cemetery	<b>Ipswich</b> many small cemeteries	<b>Lawrence</b> Bellevue Cemetery	<b>Lynn *</b> (&non-residents) Pine Grove Cemetery	<b>Methuen</b> Elmwood Cemetery	<b>Peabody</b> Cedar Grove Cemetery Oak Grove Cemetery	<b>Salem</b> Greenlawn Cemetery	<b>Wenham</b>
population	33,000	43,000	27,000	3,500	13,000	80,000	94,000	50,000	53,000	45,000	5,000
acres	33	4,35,18	22	8,12.5	20	79	250	29	23,5	33	
<b>Single Grave</b>		1+4 urns	1+4 urns	1+2 urns	1+3 urns	1+2 urns		1+4 urns	1+3 urns		
Lot	\$800	\$700	\$1,200	\$800	\$800	\$940	\$1,000	\$820	\$1,000	\$950	\$1,000
Opening	\$700	\$700	\$1,100	\$650	\$700	\$1,100	\$1,000	\$850	\$1,000	\$850	\$850
Vault install						\$150	\$600				
Total **	\$1,500	\$1,400	\$2,300	\$1,450	\$1,500	\$2,040	\$2,600	\$1,670	\$2,000	\$1,800	\$1,850
<b>Multiple Grave</b>	2	2	2	2+4 urns		2+4 urns	2	2	2+6 urns	2	
Lot	\$1,600	\$1,700	\$2,400	\$3,200		\$1,840	\$2,800	\$1,640	\$2,000	\$1,900	
Opening	\$1,400	\$1,400	\$2,200	\$1,300		\$2,200	\$2,000	\$1,700	\$2,000	\$1,700	
Vault install						\$300	\$1,200				
Total ***	\$3,000	\$3,100	\$4,600	\$4,500		\$4,340	\$6,000	\$3,340	\$4,000	\$3,600	
average	\$1,500	\$1,550	\$2,300	\$2,250		\$2,170	\$3,000	\$1,670	\$2,000	\$1,800	
<b>Green Burial</b>											
<b>Other</b>											

\*\* Cost is for burial only (does not include any urns in same lot)

\*\*\* Assumes two openings at 2021 rates, no urns

Vault or crypt liner typically furnished by funeral home. Cost varies. Some cemeteries provide liner.

**CREMATION** Essex County

	<b>Andover</b> Spring Grove Cemetery	<b>Beverly</b> Beverly Farms Cemetery Central Cemetery North Beverly Cemetery	<b>Danvers</b> Walnut Grove Cemetery	<b>Essex</b> Spring Street Cemetery Beechbrook Cemetery	<b>Ipswich</b> many small cemeteries	<b>Lawrence</b> Bellevue Cemetery	<b>Lynn</b> Pine Grove Cemetery	<b>Methuen</b> Elmwood Cemetery	<b>Peabody</b> Cedar Grove Cemetery Oak Grove Cemetery	<b>Salem</b> Greenlawn Cemetery	<b>Wenham</b>
Open	\$300	\$250	\$500	\$250	\$300	\$490	\$500	\$550	\$500	\$450	\$400
<b>Scattering</b>											
<b>Urn burial area</b>			\$1,000					\$1,020	\$1,000	\$1,400	
<b>Urns in graves</b>											
<b>Single lot</b>											
# of urns	1	2	5	3	4	2	4	4	4	4	1
one lot	\$270	\$500	\$1,200	\$800	\$800	\$940	\$500	\$820	\$1,000	\$950	\$500
Total		\$1,000	\$3,700	\$1,550		\$1,920	\$2,500	\$3,020	\$3,000	\$2,750	\$900
average		\$500	\$740	\$517		\$960	\$625	\$755	\$750	\$688	\$900
<b>Multiple lot</b>											
# of urns		6		12		4	6		6		
family lot		\$900		\$3,200		\$1,800	\$650		\$5,000		
Total, family		\$2,400		\$6,200		\$3,760	\$3,650		\$8,000		
average		\$400		\$517		\$940	\$608		\$1,333		
<b>Columbarium</b>		considering	3 flat walls			considering	column				
One			\$2,700								
One (fits 2)			\$2,700				\$2,250				

Cremation cost not included.

## 6 RECOMMENDATIONS

The following section organizes the landscape, operations, management and expansion recommendations into matrix to assist the City in implementing the master plan over the long term. The recommendations are based on the results of (1) engagement activities conducted with the citizens of Salem throughout the master planning process (summarized in Section 2 of the master plan); (2) research about the cemetery's historical development and the landscape's historical significance (Section 3); (3) the assessment of existing cemetery landscape conditions (Section 4); and (4) the review of cemetery operations (Section 5).

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### IMPLEMENTATION PRIORITIES

The matrix defines each recommendation and establishes a priority for implementation, assigned as follows:

- **High** – an action that will stabilize the cemetery landscape and protect it from imminent deterioration, and should be addressed within **1 to 5 years**
- **Medium** – an action that will upgrade the condition of the landscape and improve visitor experience, to be undertaken within **5 to 10 years**
- **Low** – an action that will provide additional amenities, to be undertaken as opportunities arise, within **10 or more years**

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### IMPLEMENTATION CAPACITY

As discussed in Section 5, Greenlawn has limited staff resources; care is managed by a full-time superintendent, part-time administrator, and small grounds crew, and an all-volunteer Cemetery Commission oversees City ordinances and policies pertaining to cemetery operations. The staffing required to complete many of the recommendations exceeds that of the current level, and capacity to implement the recommendations will depend on the City's ability to finance increased staffing levels and to hire outside consultants and contractors, as needed.

**LANDSCAPE RECOMMENDATIONS**

<b>Recommendation</b>	<b>Priority</b>
<b>Cemetery Edges</b>	
Remove existing chain link fence along Orne Street; replace with steel picket to match existing historic wrought iron fencing	Medium
Remove existing chain link fencing along Liberty Hill Avenue and Sargent Street; replace with black vinyl-coated chain link fencing	Low
Selectively remove shrubbery from inside perimeter fence along Appleton and Sargent Streets to open views	Medium
<b>Views</b>	
Remove lower limbs of shade trees to open long views across the cemetery	Low
Screen the maintenance area with fencing and beefy evergreens to block views of equipment, crypt liners and other “behind the scenes” objects [illustrated in Figure 6.1 (11 x 17” fold-out drawing)]	Medium
<b>Entrances, Circulation, Parking</b>	
Close the entrance off Sargent Street to non-official vehicles	High
Establish a main vehicular route to be used by visitors and interment corteges; upgrade the quality of the pavement by replacing the existing bituminous overlay paving and where needed reconstructing the road to a full depth	Medium
Designate parking spots along Orne and Appleton Streets for cemetery visitors	Medium
Create parking area (minimum 8 spaces with 1 HP space) inside the cemetery along Aspen Avenue; establish a walkway leading from this parking area to the cemetery office (illustrated in Figure 6.1)	Low
<b>Drainage System</b>	
Repair existing collapsed drainage system along Appleton Street	High
Clear debris from catch basins, drains, drainage pipes, and pond outlets	High
Reset catch basin and yard drain inlets so that rim elevations are lower than finished grades	High
Video drainage piping system to establish/confirm path of water flowing through the cemetery and replace pipe sections as required.	High
<b>Cemetery Ponds</b>	
Remove sediment at leaf debris from Fountain Pond to restore depth and flow	High

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Recommendation	Priority
Install a hydrodynamic separator (oil/particle separator) upgrade of the Fountain Pond inlet	High
Repair/remove open piping leading into Sargent Pond; provide riprap to protect the outlet of this pipe	Medium
Remove woody brush from shorelines of both ponds	Medium
<b>Landscape Structures</b>	
Repoint the culvert at the north end of Sargent Pond: <ul style="list-style-type: none"> <li>▪ Clean debris from inlet and outlet sides of culvert</li> <li>▪ Dewater inlet structure to assess extent of damage</li> <li>▪ Replace missing stones and align remaining stones</li> <li>▪ Repoint grout</li> <li>▪ Repair headrails</li> </ul>	High
Reconstruct Appleton Street Retaining Wall: <ul style="list-style-type: none"> <li>▪ Replace missing tops stones</li> <li>▪ Repair and add grout in damaged sections</li> <li>▪ Repair fence post connections to piers</li> <li>▪ Re-set posts stabilizing the fence between posts/piers</li> </ul>	High
Stabilize Dickson Bridge: <ul style="list-style-type: none"> <li>▪ Clean bridge deck surface and weep holes</li> <li>▪ Repair underside of arches; clean surface and restore cover over exposed re-bar</li> <li>▪ Reset west approach slab to be flush with the bridge deck</li> </ul>	High
Stabilize the Dickson Steps: <ul style="list-style-type: none"> <li>▪ Repair/reset stones under overhangs</li> <li>▪ Fully patch flexure cracks</li> <li>▪ Repair voids in landings</li> <li>▪ Reset north footwall</li> <li>▪ Remove debris built up around the steps</li> </ul>	Medium
<b>Trees</b>	
Assess the remaining 50% of cemetery trees not included in the Tree Health Assessment	Medium
Gather GPS coordinates for all trees in the assessments and enter the coordinates and other data into the City's GIS database	Medium
Establish a yearly budget line item for tree removal, and focusing on the densest areas first, initiate tree removal on a yearly basis	High
Develop a list of trees to be added to the cemetery, as part of expansion site development as well as overall replanting	Medium

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Recommendation	Priority
<b>Gravestones and Monuments</b>	
Treat the stones identified in the Gravestone and Monument Assessment as in urgent need (priority 1) for conservation treatment	High
Treat the stones identified in the Gravestone and Monument Assessment as less urgent need (priority 2) for conservation treatment	Medium
<b>Landscape Accessories</b>	
Develop a sign program for placement throughout the cemetery, including hiring a professional graphic designer to prepare a sign concept, fabricating the signs, and placing them throughout the cemetery	Medium
Initiate a program to replace the missing cast iron avenue and path markers	Medium
Identify a manufacturer and model of bench to be installed through the cemetery	Medium
<b>Cemetery Gardens</b>	
Continue to install seasonal plantings at the Appleton Street gate	High
Continue to install seasonal shade garden plantings at the Orne Street gate	High
Enhance plantings at the pollinator garden by adding more herbaceous perennials and shrubs	Low

**OPERATIONS RECOMMENDATIONS**

Recommendation	Priority
<b>City Ordinance Changes</b>	
Impose a fine on dog owners who do not remove dog waste	High
Prohibit plantings of herbaceous perennials and shrubs on graves	Medium
Address (define) residency related to interment at Greenlawn	High
Affirm that lot owners are responsible for care of headstones	Medium
Prohibit interment in un-used, sold gravesites in the oldest sections of Greenlawn	Medium
<b>Cemetery Policy Amendments</b>	
Revise visitation hours to bring them in line with Massachusetts General Law (8:00 a.m. until sunset and 8:00 a.m. to 7:00 p.m. from June through September)	High
Standardize the cemetery speed limit to 10 miles per hour	High
Establish a policy addressing non-interment uses of the Greenlawn landscape	High
Develop a Memorandum of Understanding between the City and Friends of Greenlawn Cemetery	High
<b>Stewardship Adjustments</b>	
Consider a reconfiguration of cemetery commission membership, eliminating the requirement to include representation from a funeral director and a florist (also an ordinance change)	Medium
Establish a staffing level needed to adequately care for Greenlawn	High
Take advantage of networking opportunities with other cemeteries in the region	Medium
<b>Financing Opportunities</b>	
Increase the cost of lots and openings to bring Greenlawn in line with pricing at other area cemeteries in Essex County; adjust pricing as needed to allow for development of new interment sites	High
Conduct a yearly review of trust fund performance	Medium
Pursue additional grants for preservation-related activities	Medium
Introduce new revenue-generating interment sites	High

## LANDSCAPE MANAGEMENT RECOMMENDATIONS

On a regular basis, cemetery staff should undertake the following management tasks and as required, engage a professional or professionals to assist in repairs and maintenance:

- Inspect perimeter fences yearly for signs of damage and make required repairs
- Lock cemetery gates (vehicular and pedestrian) during hours when the cemetery is closed
- Clean catch basins, inlets, outflows, bridges and culverts of organic matter and litter to promote proper operation of stormwater system
- Inspect road pavement for signs of heaving pavement, new development of low points, and or recession from drainage structure rims and make required repairs
- Inspect trees for signs of damage, disease or death; remove damaged or dead limbs as well as diseased or dead trees
- Inspect monuments and gravestones for signs of vandalism or deterioration (cracking, breaking, leaning, falling)
- Maintain seasonal beds at entrances and at the pollinator garden

## EXPANSION RECOMMENDATIONS

The following recommendations pertain to the proposed nine expansion sites, A through I, identified in Section 4 of the plan. For each site, a concept has been developed along with projections of development costs and potential revenue. The concepts illustrate the potential of each site to offer full-casket, in-ground cremation, columbarium (for cremated remains), and/or scattering forms of interment. As development of each site proceeds, concepts will likely be scaled and/or modified to align with the level of funding available to construct the sites. Illustrations of sites A through F appear in Figures 6.2 through 6.6 (11" x 17" fold-out drawings of this section).

The projected costs of developing each site have been calculated at the **planning level**, with the intent of providing estimates for the purposes of budgeting and fundraising. All projections are based on current (2021) construction industry pricing and will need to be adjusted accordingly as the sites are further developed. Potential revenue to be yielded through sales of interment spaces at each site is based on existing (2021) pricing for full-casket burial sites at Greenlawn. Note that the Operations Recommendations, outlined earlier in this section, propose an increase in current pricing to match average pricing in public cemeteries throughout Essex County.

### AREA A: ALTHEA & CLEMATIS PATHS, HEMLOCK-ASH-THORN TRIANGLE

#### Concept

#### ALTHEA & CLEMATIS PATHS

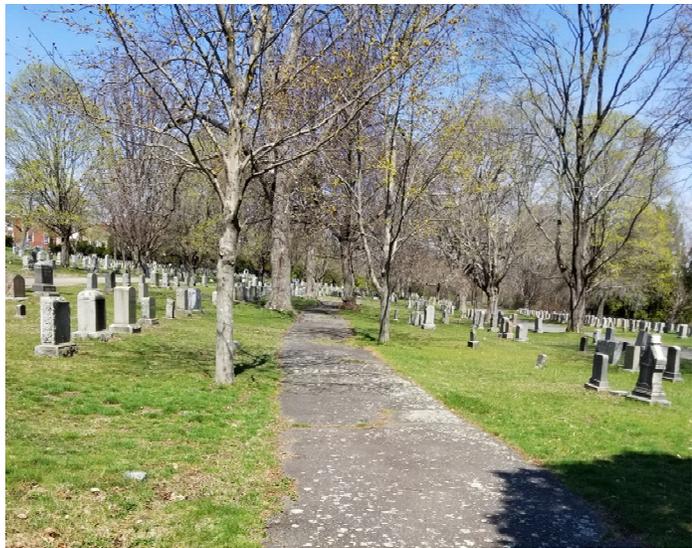
- Paths converted to 4' width pedestrian path
- In-ground urn burial plots on both sides of path, except under the canopy of existing trees to remain
- Urn plot measures 2' X 2'
- Total of 600 urn plots

#### THORN TRIANGLE

- Ash Avenue becomes pedestrian path between Thorn Avenue and Cypress Avenue
- Columbarium wall also defines edge of gathering space
- Total of 120 niches in columbarium wall, each accommodates 2 urns
- Planting in Hemlock-Ash-Thorn Triangle creates a contemplative space
- Seating provided for visitors

#### Projected Development Cost:

\$600,000 - \$650,000



*Clematis Path, taken from the east end, looking west.*

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AREA B: BURKE LOT

**Concept**

- All trees determined "Good" are saved; many "Fair" trees remain
- Additional 10' buffer on inside of perimeter fence is planted to increase privacy and block headlights
- Full-casket plot is 4' X 10'
- Total of 335 plots (670 double depth)

**Projected Development Cost:**  
\$750,000 - \$800,000



*The Burke Lot, taken from the east end, looking west.*

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AREA C: WEST CHAPEL SLOPE

**Concept**

- Up to three columbarium structures (walls) curving along base of slope holding as many as 1,200 niches for cremated remains
- Full-casket burials (up to 66) or in-ground cremation burials along Aspen Avenue
- Full-casket plot is 4' X 10'
- Unlimited scattering sites along garden path

**Projected Development Cost:**  
\$960,000 - \$1,100,000



*The west slope below the Dickson Chapel, taken from the north end of Aspen Avenue, facing south.*

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AREA D: HEATH & LOTUS PATHS/ THORN-HICKORY-OLIVE TRIANGLE

**Concept**

**HEATH & LOTUS PATHS**

- 4' X 10' casket plots in Heath and Lotus roadbed locations
- 4' wide pedestrian path replaces roadway
- Gaps where existing tree is in good or fair/condition
- 148 full-casket plots

**THORN-HICKORY-OLIVE TRIANGLE**

- Hickory Avenue (connector avenue between Thorn and Olive Avenues) becomes pedestrian path
- Columbarium wall also defines edge of gathering space
- Total of 120 niches in columbarium wall, each niche accommodates 2 urns
- Planting in triangle creates a contemplative space
- Seating provided for visitors



*Lotus Path, taken from the south end looking north.*

**Projected Development Cost:**

\$665,000 - \$715,000

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AREA E: OLIVE & ANEMONE PATHS

**Concept**

- 4' wide pedestrian path replaces roadway
- 4' X 10' full casket burial plots in Olive and Anemone roadbed locations
- Gaps where existing tree is in good or fair/condition
- 212 full-casket plots

**Projected Development Cost:**

\$700,000 - \$750,000



*Olive and Anemone Paths taken from the southwest side looking northeast.*

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AREA F: FOUNTAIN POND (WEST EDGE)

**Concept**

- Magnolia Avenue becomes a pedestrian path
- 220 in-ground cremation burials placed along outer edge of path
- Planted slopes cleared of volunteer and invasive growth and re-planted

**Projected Development Cost:**  
\$500,000 - \$550,000



*The west edge of Fountain Pond, taken from the pond's east side, facing west.*

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AREA G: SARGENT POND (WEST EDGE)

**Concept**

- Area cleared of leaf debris and fair/poor trees removed from pond edges and slope
- Red Bud Avenue narrowed to 6' to accommodate service vehicles, but to be used primarily as a pedestrian path
- 350 in-ground cremation plots placed on the west side of the path
- Columbarium wall holding 120 niches (accommodating 2 urns) located at existing curve in the road, overlooking Sargent Pond

**Projected Development Cost:**  
\$570,000 - \$620,000



*Red Bud Avenue, taken from the southern end, facing north.*

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AREA H: SARGENT POND OVERLOOK

**Concept**

- Garden space created by clearing existing pond edge, establishing a gathering space with pathways leading to the space
- Scattering along the garden paths

**Projected Development Cost:**  
\$200,000 - \$250,000



*The Sargent Pond overlook area (foreground), looking northward across the pond.*

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AREA I: POLLINATOR GARDEN

**Concept**

- Existing garden enhanced with additional pollinator species along path
- Scattering along path

**Projected Development Cost:**  
To be determined.



*The Greenlawn Cemetery Pollinator Garden, taken from the south end of the garden, looking north*

Greenlawn Cemetery Master Plan  
Salem, Massachusetts

EXPANSION EXPENSE & REVENUE SUMMARY

Site	Development Cost	Number of Interments	Projected Revenue
A-Althea-Clematis Paths/Hemlock-Ash- Thorn Triangle	\$600,000 - \$650,000	600 in-Ground Cremation Burials	\$429,000
		120 Columbarium Niches	\$300,000
B-Burke Lot	\$750,000 - \$800,000	335 Double-Depth Full Casket Plots	\$956,425
C-West Chapel Slope	\$960,000 - \$1,100,000	1,200 Columbarium Niches	\$3,000,000
		66 Double-Depth Full Casket Plots	\$188,430
		Unlimited Scattering	Unlimited
D-Heath-Lotus Paths/Thorn-Hickory- Olive Triangle	\$665,000 - \$715,000	148 Double-Depth Full Casket Plots	\$422,540
		120 Columbarium Niches	\$300,000
E-Olive-Anemone Paths	\$700,000 - \$750,000	212 Double-Depth Full Casket Plots	\$605,260
F-Fountain Pond	\$500,000 - \$550,000	220 In-Ground Cremation Burials	\$157,300
G-Sargent Pond	\$570,000 - \$620,000	120 Columbarium Niches	\$300,000
		350 In-Ground Cremation Burials	\$250,250
H-Sargent Pond Overlook	\$200,000 - \$250,000	Unlimited Scattering	Unlimited
I- Pollinator Garden	To Be Determined (Planting Only)	Unlimited Scattering	Unlimited

**Interment Site Prices (based on Essex County Average):**

Full-Casket Burial: \$2,855/Site (includes two openings)

In-Ground Cremation; \$715.00/Site

Columbarium Niche for Cremated Remains: \$2,500/Niche (accommodating 2 urns)