

Pine Grove Cemetery Master Plan

329 Main Street, Salem, New Hampshire

October 2018



Prepared for:
The Town of Salem
33 Geremonty Drive, Salem NH 03079



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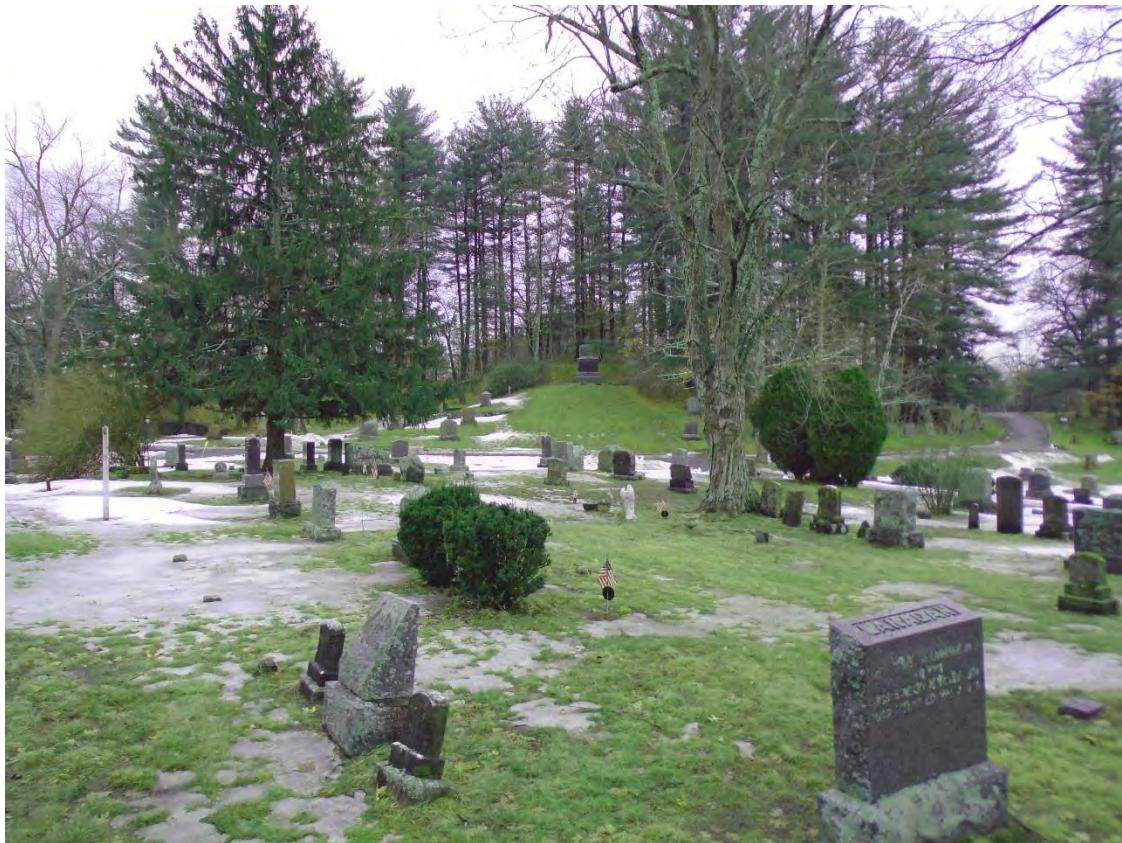
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Full Size Master Plan

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Executive Summary

Pine Grove Cemetery has an opportunity to implement phased improvements and expansions, providing for the residents of Salem and improving the efficiency of operations and maintenance. Implementation of these recommendations will extend the cemetery's operational lifespan from approximately 16 ½ years to an estimated 30 years. Through the establishment of new and varied burial sections such as a columbarium plaza and cremain gardens, alternative burial choices can be made available to residents. Installation of a raised concrete headstone support system in new casketed burial sections will ensure alignment of headstones, provide a defined location for permitted personal ornamentation as well as simplify routine maintenance. Recommendations for modification to current regulations, procedures and maintenance are designed to improve operations and efficiency and provide a consistent, enforceable approach. All recommendations seek to improve the visitor experience, attract new users and streamline maintenance and operations, setting up Pine Grove Cemetery to achieve its goals for many years into the future.



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1. Introduction, Project Goals and Objectives

1.1 Introduction to Pine Grove Cemetery

Established in the 1850's when the Town's original burial ground became full, Pine Grove Cemetery is a traditional public burial ground in the Town of Salem, New Hampshire. The cemetery, located on Main Street and North Main Street, is the largest active cemetery in the Town of Salem. Lacking an initial development plan, or any subsequent planning documents, the cemetery has developed organically over time, and currently accommodates in-ground burials of casketed and cremated remains. Pine Grove Cemetery has an overall rural/parklike character with rolling topography, rock outcrops and wooded areas, and as an older cemetery it has an eclectic collection of varying headstone styles and gravesite treatments.



Aerial Map

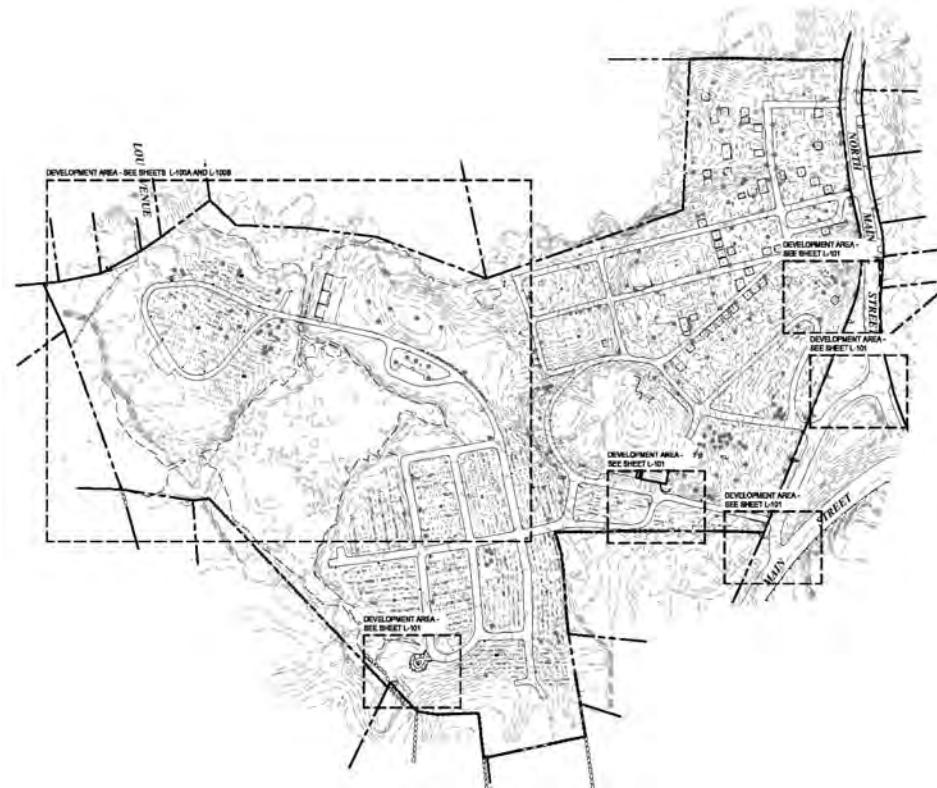
1.2 Project Need

The Town of Salem, as part of their ongoing capital improvement program, identified the Pine Grove Cemetery as needing a master plan. With the rapid depletion of open burial sections, there is a need to develop new burial sections in the near future in order to continue to meet the needs of the residents of Salem. Due to the relatively low inventory, the cemetery currently has a policy of limiting plots sales to the time of need and plots are not sold in advance. By developing a roadmap for burial expansion and future improvements to the grounds and facilities through the master planning process, Pine Grove Cemetery can continue to meet the needs of the residents in both the short- and long-term.

1.3 Project Goals and Objectives

The goals and objectives of the Pine Grove Cemetery master plan include the following:

- Estimate the current operational capacity of the cemetery in open burial sections and explore opportunities to increase this capacity through burial expansion and/or alternative burial methods/standards.
- Develop a clear master plan for the Cemetery's future development and improvement, focusing on the areas of interest identified by the Town.
- Include recommendations for improvement of operations and maintenance strategies.
- Prioritize proposed improvements/development and formulate a phased implementation plan.



2. Existing Conditions and Analysis

Existing natural conditions and built components of a site directly impact and guide the master planning process. By working with existing conditions, challenges can be met and opportunities realized. As an existing facility, Pine Grove Cemetery includes large undeveloped areas as well as built components including numerous burial sections, road network and maintenance facilities. The site also includes several natural factors such as subsurface conditions, topography and surface waters that need to be considered in the placement and layout of new facilities. While a general assessment of the entire cemetery was conducted, particular emphasis was placed on the areas of interest identified by the Town for more detailed investigations. The following paragraphs highlight the primary built components and natural factors that affect the design of potential expansion areas and/or have elements that need to be addressed as part of general cemetery operations and maintenance.

2.1 Built Components

2.1.1 Burials

Burials comprise the majority of the cemetery's developed lands, with over thirty-five burial sections of varying size and number of plots. While there have been variations in plot size and regulations over the years, there have never been varying sized plots designated for burial of cremains. Currently, all burials are in-ground within a standardized 3.5'-wide by 13'-long burial plot, with no above ground burials options available (there are no current columbarium or mausoleum). See section 4 for more detailed discussions regarding burial types, standards and regulations.

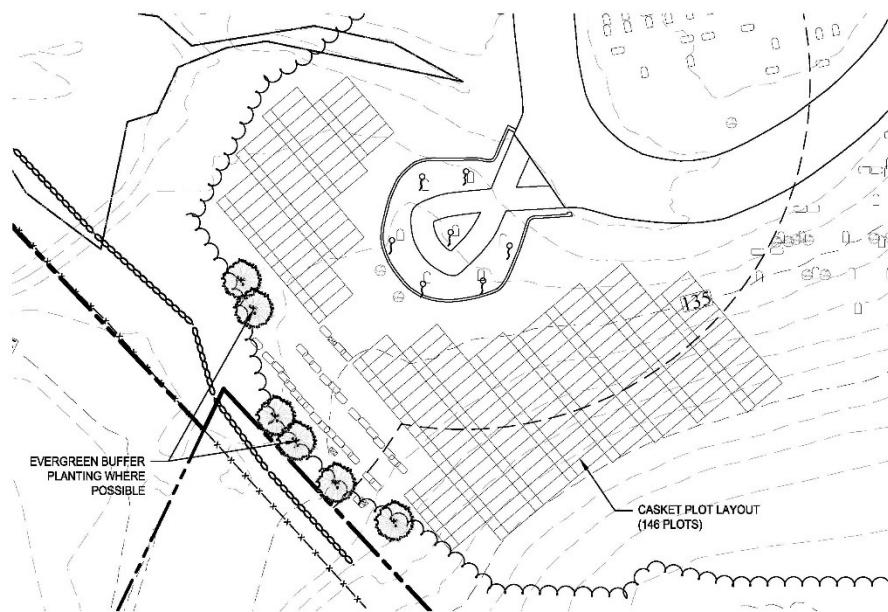


Examples of typical burial plots within newer sections of the cemetery.

Based upon an assessment of the cemetery's current burial areas and open lands, there is space for an estimated 1,825 available plots remaining. Per the cemetery's burial records, an average of 110 burials are conducted each year. At this rate, Pine Grove Cemetery as it exists today has an estimated burial capacity of 16.5 years remaining.

2.1.1.a Veterans Burial Section

A Veterans only burial section and memorial is located in the southwestern portion of the site. This burial section uses the current standard 3.5'-wide by 13'-long burial plot, but utilizes a standardized flush bronze plaque marker that is provided by the Veterans Administration. Due to the generally small area dedicated to this section as well as environmental constraints posed by a wetland area to the northwest and shallow depth to ledge in the southeast, this area was evaluated to determine the estimated burial capacity for future veterans interments. Based upon an anticipated burial layout utilizing the standard burial plot (illustrated below), there is capacity for an estimated 146 additional veterans burials. However, actual capacity may vary based upon actual subsurface conditions encountered in this area. One area of concern is known high groundwater found in the northeaster portion of the section. Plots in this area should be dedicated for the interment of cremated remains only to avoid groundwater issues. Furthermore, in order to maintain continuity with the existing section burials and with the design of traditional State and National veteran burials, the Board of Selectmen determined that standard size burial plots should continue to be utilized for all burials in this area regardless of burial type.



Veterans burial section layout.



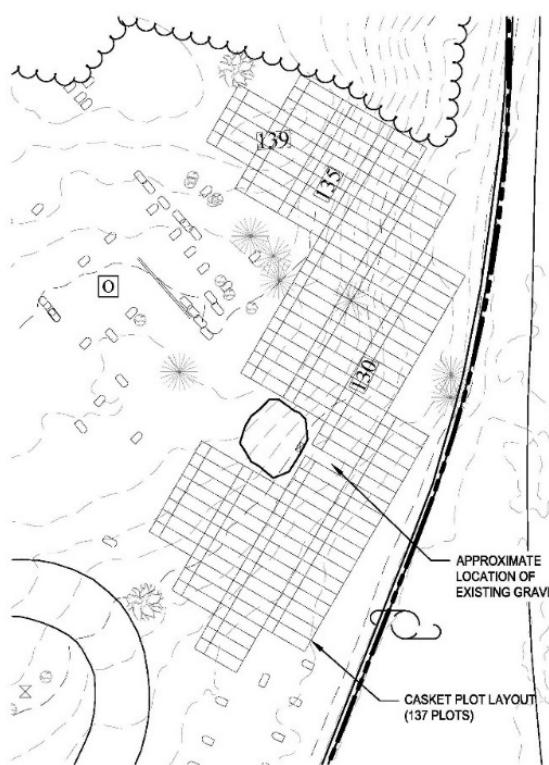
Existing veterans' memorial.



Standard veterans burial marker (partially covered).

2.1.1.b American Legion Burial Section

A small area centered along the cemetery frontage on Main and North Main Streets has been dedicated for an American Legion burial section. This area was previously unused by the cemetery due to shallow depth to ledge and difficulty with burial excavations that had historically been experienced in the area. In exchange for the dedicated burial area, the American Legion will coordinate all excavation and burial activities in this area. This area was evaluated to determine the estimated burial capacity for future American Legion interments. Based upon an anticipated burial layout utilizing the standard burial plot (illustrated below), there is capacity for an estimated 137 burials. However, due to historical experience with shallow ledge in this area as well as steep slopes in the northern portion of this section, actual burial capacity may be significantly less than what is illustrated.



Exposed ledge in the American Legion section.



Steep slope in the American Legion section.

2.1.2 Roadways and Circulation

All visitors currently arrive to the cemetery via vehicles and enter one of the four entries from North Main Street or the loop from Main Street. While roadways throughout the cemetery are generally laid out in a semi- or broken-grid pattern, large areas of the cemetery are isolated from one another due to the need to traverse challenging site features (such as wetlands or steep terrain) and often only have a single road connection between areas. The newest burial sections and expansion areas located in the northwestern part of the site are accessed via a single drive with a loop at its terminus. Many of the existing roads are relatively narrow, and the potential for widening and expanding the roadway network also limited due to close proximity of burials, particularly in the older sections. These narrow roads and isolated pockets of development can be confusing to navigate for visitors. See Section 4 for a full description of circulation master planning recommendations.

The condition of the existing roads varies but are in generally poor to fair condition. Those areas in the worst condition, will require pavement removal, replacement/augmenting of granular subbase, and installation of new pavement surfacing. Other areas may be repaired with a new pavement overlay. See Appendix A-4, “Test Pits Summary and Engineering Narrative” for full description of existing conditions. Based upon discussions with Town and Cemetery staff, no major road repair/ improvement projects have been conducted in several years. General road repairs are conducted with leftover materials from other Town pavement projects as time and materials permit. Due to general age of the roadway network and the incremental and piecemeal approach to maintenance/repair, a more detailed study of the existing road system will need to be conducted in order to determine the actual need and extent of roadway replacement versus repair. This study should include roadway core boring to identify the existing construction of the roadways and ensure that appropriate design recommendation can be made to bring the road system up to current standards.



One of four cemetery entrances.



Example of typical road conditions.

In conjunction with the overall roadway network, there is an existing culverted wetland/ stream crossing that provides the lone access to the extreme western portion of the site. With failing headwalls and deteriorating road surface, the culverted crossing is in very poor condition and needs to be completely replaced.



Representative settlement headwall failure.



Road surface condition over the culverted crossing.

2.1.3 On-site Facilities and Structures

After a fire destroyed the original cemetery office and maintenance garage, a new facility was constructed along the primary cemetery entrance road in the southeast side corner of the property to house maintenance and administration functions. While this is convenient for access, the modest brick building and its service functions are highly visible as visitors enter the site. The facility currently is at capacity with regards to available space, and a temporary storage container has had to be placed adjacent to the building in order meet spatial demands. In addition, the size of the existing garage bays limits the excavation equipment the cemetery can use/purchase to vehicles that can be stored inside when not in use. The steep wooded hillside directly behind and existing burials directly across the entrance drive from the existing building would likely make expansion of the facility in this area very difficult and costly. Furthermore, with limited developable space in other parts of the cemetery coupled with a relatively short estimated operational capacity, investment in a new facility on site would likely be difficult to justify. Based upon discussions with Town and Cemetery staff, the current maintenance and administration building is adequate for the cemetery to continue to provide burial services in the short- and mid-term. The Town can explore the need for facility improvements and/or expansions in greater detail in the future.



Existing administration/maintenance building.



Temporary storage container.

There are open materials storage bins for mulch, soil, etc. located in the northwestern portion of the cemetery. The storage bins are sited in close proximity to active burial areas and is centrally located with regards to the likely cemetery burial expansion areas. However, as with the maintenance and

administration building, this area is highly visible from the roadway accessing burial sections 9A, 9B and 10, and is an aesthetic/ noise concern with regards to the potential nearby burial expansions.



Materials storage area.



View from adjacent developable area.

There are currently no public restrooms nor chapel or other committal service structures on site. Ceremonies are currently conducted graveside and due to the relatively short distance traveled by the majority of visitors to access the cemetery, there is no current need to develop these types of support facilities.

2.1.4 Utilities

Utilities within the developed portions of the cemetery include power, telecommunications, potable water and sanitary sewer service to the administration and maintenance building from Main Street. There are also potable water lines throughout the cemetery that feed spigots and hoses within burial sections for landscape watering and turf establishment on an as needed basis. There is no irrigation on site, and with the exception of the existing culverted wetland/stream crossing there are no stormwater structures or piping. Based upon discussions with the Town and Cemetery staff, current utility infrastructure is adequate for cemetery operations and no major improvements and or expansions are foreseen at this time.



Typical water spigot at burial section.



Water spigot with hose.

2.1.5 Signage

Existing cemetery signage includes limited informational, traffic, regulatory and identification signage. In general, site signage has been installed gradually over time and is not consistent in design, color or style and has not been placed considering overall site consistency. There are also road signs and section markers located throughout the cemetery. However, these signs are generally small in size and can be difficult to locate/read. This is especially true for the section markers which are typically located in the middle of a burial section a significant distance away from the road. These factors can lead to a disjointed and incomplete wayfinding system making standard rules, regulations and codes of conduct difficult to discern as well as making general site navigation difficult and potentially confusing. See section 3 for regulatory signage recommendations and section 4 for overall site signage recommendations.



Existing general informational sign.



Traffic and regulatory signage.



Identification of parking areas.



Typical burial section marker.

2.1.6 Other Site Features

There are numerous rock outcrops throughout the Salem area, and native stone has historically been a prevalent building material in the region. Pine Grove Cemetery is no different, and native stone is well represented in numerous site walls and older benches, headstones and memorials. The cemetery also currently stockpiles stones that are excavated during burials in the area behind the materials storage bins. Continued use of the native stone as a building material throughout future expansion areas should be considered where appropriate.



Typical stone walls along the cemetery frontage.



Historical use of native stone for burial elements.

2.1.6 Adjacent Land Uses

Pine Grove Cemetery is set in an area of mixed uses. To the south and east is a mix of commercial, institutional and residential uses, and to the west and northwest are single family homes. The northern boundary of the site is adjacent to a large undeveloped wetland area. The surrounding land uses do not have a major impact on how the site currently operates and should not have a significant impact on future expansions. However, due to the proximity to residences in the northwest corner of the property, consideration should be given to maintain and/or reinforce a wooded buffer along the property line to provide privacy screening for both cemetery visitors and adjacent land owners.



Adjacent residences visible in winter.

2.2 Environmental Components

2.2.1 Topography

Topography on the site generally consists of gentle slopes with large areas of low wetlands. Limited areas of steep slopes occur mainly on the perimeters of the parcel and north of the maintenance area where there is a large wooded hill or knob with significant rock outcropping. Future expansion into gently sloping areas will facilitate development and access, while development of areas located adjacent to steeper slopes may require significant grading. Careful selection of development sites and burial development types will be necessary to preclude excessive fill or excavation requirements.



Typical gently rolling topography.



Typical steep slopes with rock outcropping.

2.2.2 Drainage and Surface Waters

Drainage on the site predominantly occurs by overland flow, with significant infiltration into the soils in areas of gentle terrain with permeable soils. Areas with less permeable soils and flat terrain exhibit standing surface water. Several large wetland areas exist on the site, and are generally located in the western third of the property. The wetlands onsite are contiguous to a large wetland complex extending northward to Widow Harris Brook. The wetlands are identified as Prime Wetlands by the Town of Salem and the Town Plan indicates a 100 foot undisturbed buffer must be maintained around Prime Wetlands except where the buffer is currently disturbed. As expansion plans are developed any proposed development within this 100 foot buffer will need to be reviewed with the Town, and any potential impacts within the wetlands will need to be reviewed with the appropriate Federal and State agencies. However, based upon the site's historical and continued use as a cemetery, restrictions on development within the 100 foot buffer are anticipated to be minimal. Furthermore, future burial expansion areas can be graded to adjacent sloped areas to provide positive site drainage, and unless development results in significant impervious area, stormwater management can likely be adequately addressed using passive or "green" solutions such as swales.



Examples of wetlands found on site.



2.2.3 Subsurface Conditions

Due to the known presence of wetlands and shallow depth to ledge found throughout the cemetery, preliminary test pits were dug to look at existing soil structures and composition, establish the potential depth to high groundwater and identify the presence of rock within the likely burial expansion areas. Each of these factors can directly influence the location and type of burials

developed in specific areas, as well as the detailed design and engineering of footings, foundations and drainage systems.

Soils within the probable expansion areas on the west side of the site consist primarily of sand, loamy sand, gravelly sand, and sandy loam. These soils are typically well drained and have good development potential for burial expansions. The test pit southeast of the materials storage bins (near the existing parking pull-off) revealed a mix of soils, with what appeared to be rocky fill in the upper 3'-4' underlaid by what appeared to be the native soils which had a much richer organic content. Soils within the Veterans include large rocks and nodules of clay and silt which are characteristically poorer draining soils. This is indicative of conditions that have been previously encountered in this area, and while they do not prohibit burials, excavations can be more challenging.

Groundwater levels vary greatly throughout the site, from a depth of a few inches below the surface in the wetland and low to several feet in areas where the more pervious sandy/gravelly soils exist. Test pits dug in the probable expansion area to the west side of the site encountered no groundwater within 6' of the surface. Similarly, the test pit southeast of the materials storage bins (near the existing parking pull-off) encountered no groundwater within 7' of the surface. However, the test pit in the Veterans Section, located in the northeastern portion of the section, found groundwater at a depth of 4'. As previously noted, burials in this area should be dedicated for cremation interments only to avoid ground water issues. The need for subsurface area drainage systems to control groundwater will need to be studied further as individual expansion/improvement project progress through detailed design and engineering.

Existing National Resource Conservation Service (NRCS) soils mapping was reviewed to preliminarily assess the potential for depth to ledge. The soils mapping indicates that the soils types indicative of the easterly two-thirds of the site have a variable depth to ledge from as little as 8" to greater than 67". The majority of this area has already been developed, although the potential development areas located in the area of the existing materials storage bins exhibit these soil types and ledge has been encountered in these areas during previous excavations. The NRCS soil mapping for the remainder of the site indicate no ledge within a depth of 80" of the surface. Within the expansion area to the west side of the site testing confirmed no ledge rock within 6' of the surface. The test pit southeast of the materials storage bins (near the existing parking pull-off) encountered numerous rocks within the suspected fill material, but did not encounter any ledge. Testing in the Veterans section encountered large rocks but no consistent ledge rock. In general, considerations regarding the types of burials appropriate for location in areas of known shallow ledge should be made.

Appendix A-2 for "Site Engineering, Resources and Regulatory Requirements Report" and Appendix A-4 for Test Pits Summary and Engineering Narrative".

2.2.4 Habitat, Wildlife and Vegetation

The existing cemetery has a variety of mature deciduous and evergreen trees placed between burial sections and at burial plots. As is typical, evergreens historically have been a favored planting at cemeteries. The edges of the cemetery along the property lines and within the wetland areas include native mixed hardwood woodland. The western area slated for expansion is partially cleared/open grass with the sloped area along the property line in woodland.



Woodland along the western property boundary.



Typical plant material within burial sections.

A large area north of the cemetery is noted on the NH State Wildlife Action Plan as “highest ranked habitat in the biological region and supporting landscapes”. This Plan also notes a “conservation or public area” in this location. This area appears to partially encroach into the cemetery site in this area. A further review of State sources indicates that there may be species of concern on or adjacent to the cemetery lands and appear to include swamp white oak and a native grass species. The impacts of these habitat and conservation designations on any proposed development in this area will need to be reviewed closely with both State and Town of Salem authorities as the expansion plans advance. Based upon the sources reviewed as part of this master planning effort, no known threatened or endangered wildlife species are found on the site which could impact future development/ improvement activities.

For additional information on existing site conditions, see Appendix A-2, Site Engineering, Resources and Regulatory Requirements Report, Appendix A-3, “Natural Heritage Bureau Letter” and Appendix A-4, Environmental Site Map.

2.2.5 Historical and Archeological Considerations

Due to the location of the cemetery near wetlands and stream systems and the presence of higher, dry terrain adjacent to these features, it is possible that archeologic resources exist on the site. The age and historic nature of the cemetery and the Town of Salem also make it possible that historic sites or features will be present also. As expansion/ development plans are advanced, a review of the site and proposed improvements should be conducted by the NH Division of Historic Resources with a review of the DHR Historic Properties files and submittal of a Request for Project Review Form.

2.2 Opportunities and Constraints

Based on both the existing built environment and natural conditions, Pine Grove Cemetery has several opportunities to expand burial space, improve visitor experience, broaden marketability and alleviate challenges to maintenance and operations within the context of existing constraints. The following Site Analysis exhibit comprehensively illustrates the potential opportunities and constraints associated with the improvement of existing conditions and future expansion of cemetery facilities. The information contained in this exhibit also guided the subsequent development of detailed master plan recommendations, development alternatives and the ultimate preferred master site plan.

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Prepared for:
Town of Salem, NH

Salem Town Hall
33 Geremonty Drive
Salem, NH 03079

Project Title:
**Pine Grove Cemetery
Master Plan**

329 Main Street
Salem, NH 03079

Project No.: 2018016
Design:
Drawn: JDS Chk'd: LTM
Scale: 1" = 100'

Description: Date:

Drawing Title:

Site Analysis

Drawing No.:

G-101



'BALLPARK' BURIAL CAPACITY OF APPROXIMATELY 16.5-YEARS:

1. BURIAL RATE OF APPROXIMATELY 110 BURIALS PER YEAR (BASED UPON APPROXIMATE RATES SINCE 2010)
2. ASSUMES ALL STANDARD 3.5' X 13' BURIAL PLOTS
3. APPROXIMATELY 1,825 PLOTS AVAILABLE
 - 3.1. INCLUDES EXPANSION OF EXISTING BURIAL SECTIONS AND NEW BURIAL SECTIONS
 - 3.2. DOES NOT INCLUDE VETERANS ONLY SECTION
 - 3.3. DOES NOT INCLUDE COLUMBIARIUM OR POTENTIALLY SMALLER CREMAIN ONLY PLOTS

STANDARDS AND GUIDELINES:

1. ADJUST BURIAL FEES TO MORE CLOSELY ALIGN WITH REGIONAL RATES
2. ESTABLISH A DEDICATED PERPETUAL FUND TO PAY FOR ONGOING MAINTENANCE AT ALL CEMETERIES
 - 2.1. A PORTION OF ALL BURIAL FEES SHOULD GO TO THE PERPETUAL FUND
3. CURRENT MEMORIAL STANDARDS ARE LOOSELY ENFORCED AND ALLOW FOR MONUMENTATION THAT IS TOO LARGE FOR THE CEMETERY TO WORK WITH/AROUND
4. CURRENT BURIAL REGULATIONS/ENFORCEMENT ALLOWS FOR EXTENSIVE PLOT ADORNMENT. THIS IS COSTLY FROM A MAINTENANCE PERSPECTIVE AND GENERATES SUBSTANTIAL WASTE
5. LACK OF CLEARLY DISPLAYED REGULATIONS LEADS TO UNDESIRABLE BEHAVIOR/ACTIVITY
6. ESTABLISH AND ENFORCE CLEAR AND CONCISE CEMETERY STANDARDS AND REGULATIONS

BURIALS:

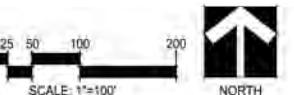
1. DEPTH TO LEDGE AND GROUNDWATER PROHIBIT DOUBLE-DEPTH BURIALS
2. MAINTAIN CURRENT 3.5' X 13' PLOT SIZE FOR STANDARD CASKET BURIALS
3. CONSIDER ESTABLISHMENT OF SMALLER CREMAIN ONLY BURIAL PLOTS
4. ESTABLISH A SCATTERING GARDEN WITH MEMORIALIZATION AS A BURIAL ALTERNATIVE

CIRCULATION AND WAYFINDING:

1. ALL EXISTING ROADWAYS NEED TO BE REPAIRED/REPLACED
2. NARROW ROADWAYS CAN CAUSE VEHICLE CONFLICTS
 - 2.1. CONSIDER PULL-OFF AREAS IN LOCATIONS WITHOUT BURIAL CONFLICTS TO ALLEVIATE CONGESTION AS WELL AS PROVIDE PARKING AREAS
 - 2.2. NEW ROADWAYS SHOULD BE DESIGNED TO INCLUDE PULL-OFF PARKING AREAS
3. THE AGE AND LAYOUT OF THE CEMETERY CAN MAKE NAVIGATION CONFUSING
 - 3.1. DEVELOP AND INSTITUTE A COMPREHENSIVE WAYFINDING SYSTEM
 - 3.2. ESTABLISH ROAD NAMES AND STREET SIGNS
 - 3.3. PROVIDE AN OVERALL CEMETERY DIRECTORY MAP NEAR THE MAIN ENTRANCE
 - 3.4. INSTALL RAISED SECTION MARKERS ALONG THE ROADSIDE
 - 3.5. PROVIDE REGULATORY SIGNAGE
 - 3.6. ENHANCE ENTRY SIGNAGE

NATURAL SITE FEATURES (SEE C-101 FOR MORE INFO.):

1. DELINEATED WETLANDS REQUIRE A 100' UNDISTURBED BUFFER, EXCEPT WHERE THE BUFFER IS CURRENTLY DISTURBED.
2. OUTSIDE OF LEDGE AND WETLAND AREAS, SOILS CONSIST PRIMARILY OF SAND, LOAMY SAND, GRAVELY SAND AND SANDY LOAM. THESE SOILS ARE GENERALLY WELL DRAINING, HOWEVER SOME POTENTIAL DEVELOPMENT AREAS MAY REQUIRE SUBSURFACE DRAINAGE SYSTEMS TO CONTROL GROUNDWATER. ADDITIONAL GEOTECHNICAL STUDIES WILL BE REQUIRED TO IDENTIFY POTENTIAL GROUNDWATER IMPACTS.
3. LEDGE CAN HAVE A VARIABLE DEPTH OF 8' TO GREATER THAN 5'. ADDITIONAL GEOTECHNICAL STUDIES WILL BE REQUIRED TO BETTER UNDERSTAND THE LOCATION OF LEDGE THROUGHOUT PROPOSED DEVELOPMENT AREAS AND POTENTIAL IMPACTS ON DEVELOPMENT.
4. A PORTION OF THE SITE IS LISTED AS 'HIGHEST RANKED HABITAT'. A REQUEST HAS BEEN SUBMITTED TO THE STATE TO CONFIRM AND DEFINE THE POTENTIAL IMPACTS.
5. A HISTORICAL/ARCHEOLOGICAL REVIEW SHOULD BE CONDUCTED TO CONFIRM NO IMPACTS IN POTENTIAL DEVELOPMENT AREAS.
6. ANY DISTURBANCE TO DELINEATED WETLANDS WOULD REQUIRE A FEDERAL WETLANDS PERMIT.



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3 Burial Operations

3.1 Current Burial Operations General

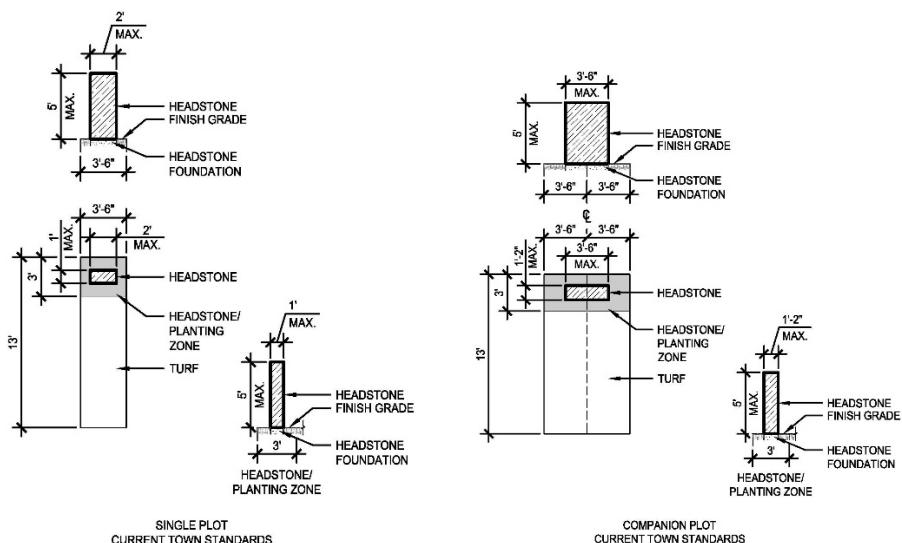
Residents who wish to purchase a plot for burial can find a listing of the cemetery's current fees as well as general rules and regulations on the Town's website, or by visiting the cemetery superintendent's office. Copies of the Town's current fees, rules and regulations are included in Appendix A-9. Current plot purchasing options published by the Town include the option to purchase up to four (4) traditional casket plots or a cremain plot which can accommodate up to four (4) cremated remains. All plots available for purchase are a standard three and one-half feet wide by thirteen feet long (3.5'x13') and includes approximately three feet (3') at the head of the gravesite to accommodate gravesite monumentation and permitted planting. However, due to the current limited availability of active burial space within the cemetery, the Town has limited the purchase of burial plots to a single plot on an as needed basis.

3.2 Current Burial Standards and Recommendations

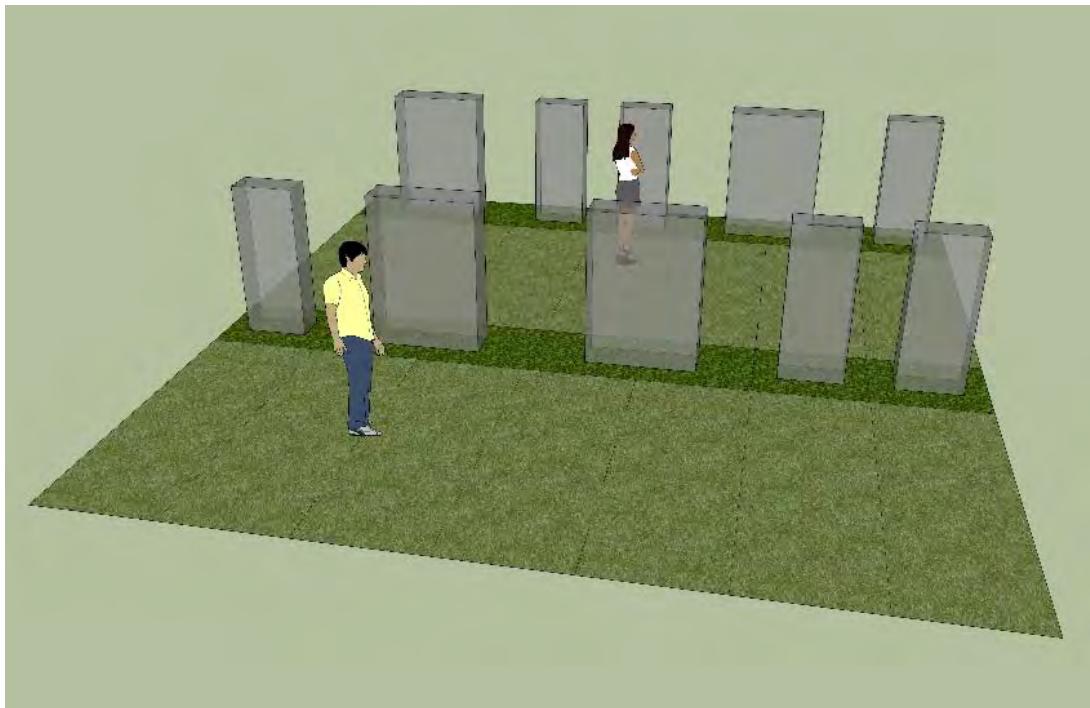
3.2.1 Burial Plots

As would be expected in an established cemetery over one hundred-fifty (150) years old, Pine Grove Cemetery includes a wide variety of plot sizes and configurations largely based upon the common cultural and burial practices at the time of burial. The older portions of the cemetery located in the northeastern corner of the site along N. Main Street has numerous large family plots, typically designed for eight (8) or more burials, while single or companion plots became more prevalent as the cemetery developed and expanded south and west.

Currently, all new gravesite plots are a standard three and one-half feet wide by thirteen feet long (3.5'x13'), regardless of burial type. In addition, due to shallow groundwater and variable ledge encountered throughout the site, all burials are single-depth. Based upon discussions with Town and Cemetery staff, the current standard plot size and single-depth burial appears to function well for traditional casketed burials and will be maintained in future expansion of existing burial sections or any new casketed burial sections.



Existing Burial Plot Layout

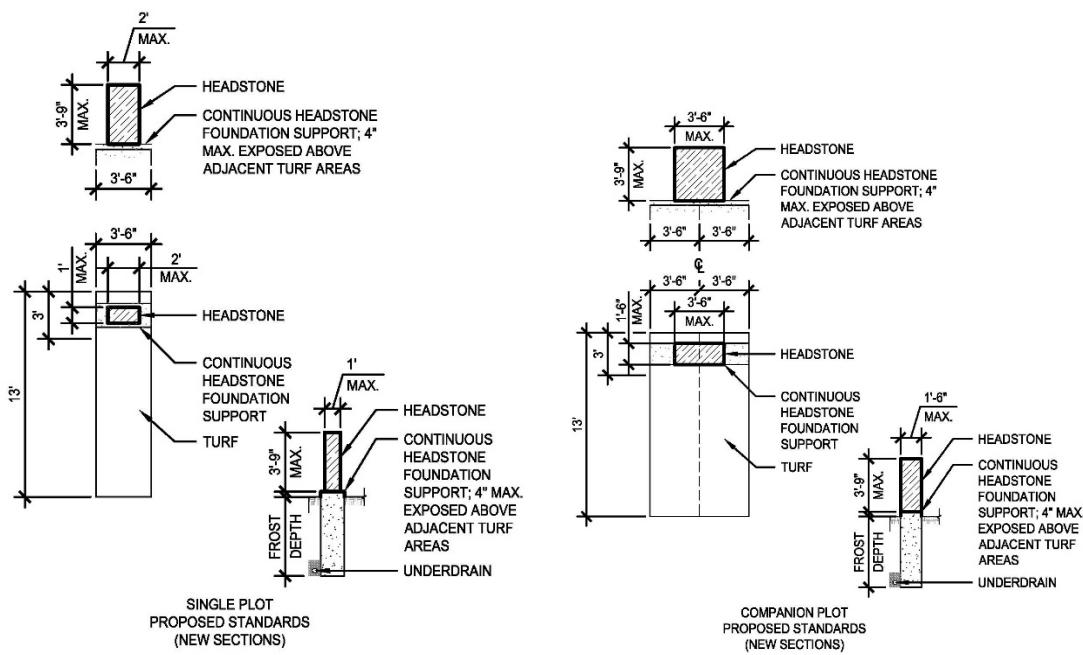


Existing Burial Plot Layout

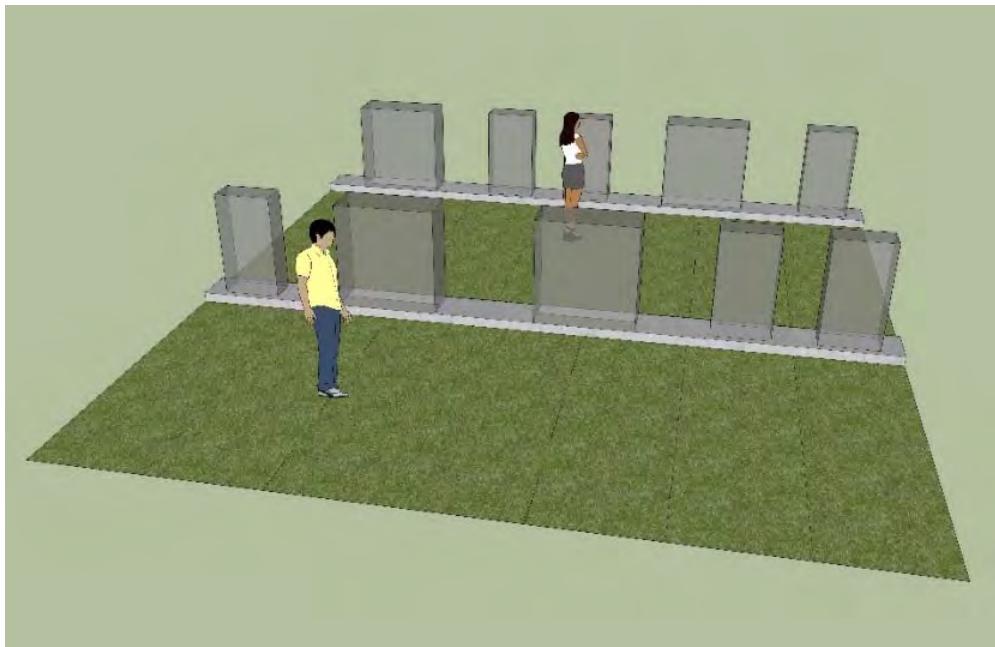
As previously noted, the Town has limited the purchase of burial plots to a single plot on an as needed basis. While stemming purely from a position of necessity to maintain ongoing burial services for Town residents, the restriction of plot purchases a single plot on an as needed basis has several unintentional benefits from an operational standpoint. Burials are conducted sequentially along burial rows which reduces difficulties of working around existing plots and headstones, and once a burial row is completed there is no need to go back for additional interments as there are no companion plots (with the exception of the interment of cremated remains within an existing plot which does not require the same burial equipment as a casketed burial). This sequential process also provides the cemetery staff flexibility in areas with shallow ledge, as a plot can simply be moved over one or two spaces should ledge be encountered without impacting the location or rights of others to subsequent burial plots. However, from a marketing perspective, denying prospective buyers the option of having spouses or family members in adjacent plots may be a negative factor for many families. Based upon the cemetery's variable subsurface conditions and current limitations of burial equipment, it is currently recommended that the Town continue to maintain the current practice of selling single casketed burial plots on an as needed basis moving forward, and the option for pre-sale of companion plots at the time of initial need can be re-evaluated by Town should demand or enhanced burial capabilities warrant it. Should the Town desire to include the purchase of companion plots now or in the future, recommendations for appropriate standards and regulations will be included in this master plan report.

3.2.2 Burial Expansion Opportunities

Building upon the standard casketed burial plot, it is recommended that any new casketed burial section include an elevated concrete headstone support system. Set below frost depth and extending approximately 4" above adjacent finished grades, the concrete headstone support system would run the entire length of each burial row and provides a consistent baseline for plot layouts, headstone alignment and serves as the headstone foundation. The elevated support system can simplify maintenance in the new burial sections as a mower or trimmer can be run directly along the concrete creating a consistent clean edge and minimizing potential impacts to the headstones themselves. Establishment of this system in new sections also provides the opportunity to introduce updated gravesite regulations to address some of the unwanted and sometimes excessive personal gravesite adornment seen in some of the existing sections. For example; the establishment of any plant material can be prohibited, and adornment could be limited to a single vase/urn (of a specified size) placed on the concrete headstone support system adjacent to the headstone for the display of real or artificial flowers. Due to the variable subsurface conditions throughout the cemetery, additional geotechnical investigations and drainage of the support system itself may need to be considered further to verify the feasibility of this proposed system.



Recommended Casketed Plot Layout With Headstone Support.

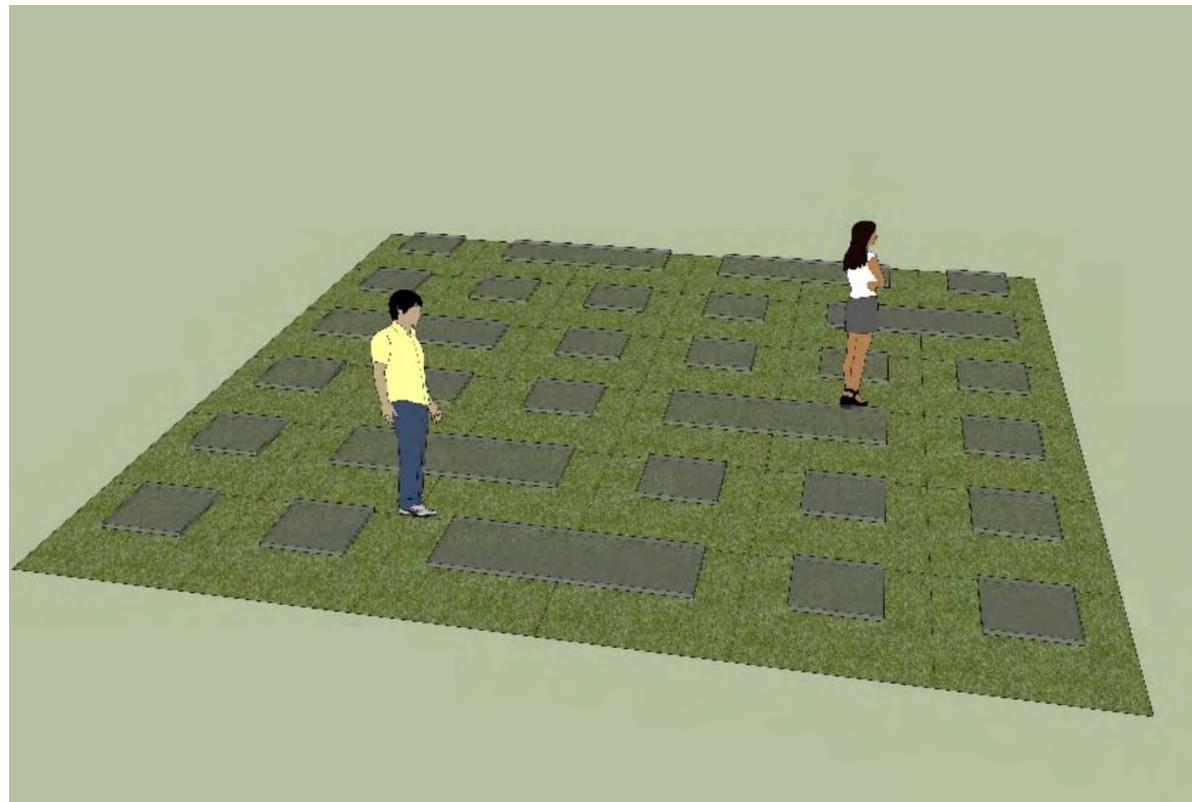
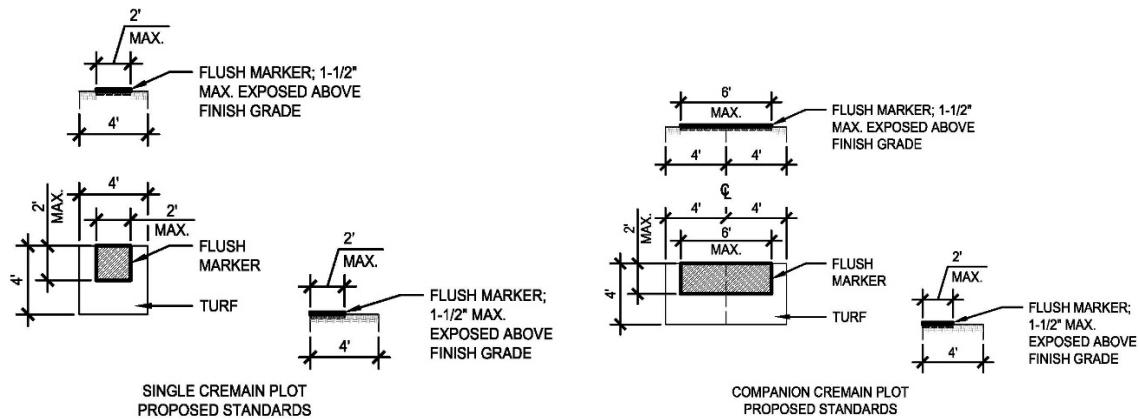


Recommended Casketed Plot Layout with Headstone Support

Over the last century, national burial trends have slowly shifted from traditional casketed burial towards cremation. According to the Cremation Association of North America, over 50% of individuals are choosing cremation (~51.6% as of 2017), and this trend is forecasted to continue into the future (~57.8% by 2022). In addition to providing ongoing access to traditional casketed burial plots, it is recommended that the Town establish new cremation burial options to better align with current burial trends. In doing so, the cemetery will be able to provide greater consumer choice to meet varying market preferences and price points, as well as provide increased burial efficiency which can extend the operational life of the cemetery. Based upon the 10-year burial summary for Pine Grove Cemetery provided by the Town (below), current burial trends at the cemetery appear to align with the national trends and reinforce the need to provide appropriate burial options for this growing segment of the population. To capitalize on the growing desire for cremation burial it is recommended the Town establish dedicated cremation burial sections, columbaria walls and a scattering garden. By providing varied burial options it is an opportunity to increase use of the cemetery and attract new customers.

YEAR	CASKETED BURIALS	CREMATED BURIALS	PLOTS SOLD
2017	55	52	54
2016	74	51	54
2015	45	46	69
2014	61	47	56
2013	66	31	52
2012	67	42	60
2011	80	41	87
2010	71	40	93
2009	83	42	66
2008	71	36	75
TOTALS	673	428	666

Burial sections dedicated for the interment of cremated remains often consist of smaller plots sized for interment of urns rather than using full size plots required to accommodate a casket. This smaller plot size can greatly increase burial efficiency within a cemetery and can potentially open areas for burial that were previously unsuited for development. In newly proposed cremain only sections at Pine Grove Cemetery, it is recommended that the Town establish four-foot square (4'x4') cremain plots which can accommodate up to two (2) inurnments. The Town could also establish a cremation companion plot which would simply be two (2) adjacent four-foot square plots. The companion plots could accommodate as many as six (6) inurnments.



Recommended Cremain Plot Layout

A columbarium is a wall (either interior or exterior) with built-in niches for the respectful placement of funerary urns. While columbaria typically have higher upfront development costs when compared to traditional burials, these above ground structures are an effective and efficient way to accommodate the maximum number of cremated burials within the smallest area. As with dedicated cremation burial sections, the use of columbaria can greatly increase burial efficiency within a cemetery and can potentially open areas for burial that were previously unsuited for development. The size, shape and configuration of columbaria walls is almost limitless and costs can vary widely depending upon materials, finishes and construction methods required.

Premanufactured or stock columbarium units are available and are typically cheaper than a custom designed installation, however the design flexibility tends to be more limited and long-term quality can be an issue as premanufactured units tend to utilize thinner and less durable materials than a custom columbarium. Based upon discussions with Town and Cemetery staff, it is recommended that the Town pursue the design and installation of custom columbaria walls. This will allow the Town to create a unique and long-lasting installation that seamlessly fits within the Salem vernacular.



Examples of Pre-Fabricated Columbaria



Examples of Custom Built Columbaria

Due to less intensive interment procedures for cremated remains, the introduction of cremain only burial sections as well as columbaria walls provide an opportunity for plot/niche pre-sales in these sections. This would allow families and loved-ones to reserve burial spaces adjacent to each other as well as provide the Town with a means of pre-funding future expansions, particularly for the installation of columbarium walls.

A scattering garden is a designated area for the scattering of cremated remains and can be located in a natural area or within a formalized garden. These areas are typically accompanied by a memorial monument or plaque where the names of individuals scattered there can be displayed for remembrance. A scattering garden can also provide those with limited financial resources an opportunity to be laid to rest in the cemetery, as only a nominal fee is typically charged for the scattering of ashes. It is recommended the centrally located rocky and wooded hill behind the existing maintenance building be formally dedicated as a scattering garden. This will provide a picturesque natural setting for the scattering of ashes while also providing an opportunity for the cemetery generate income in an otherwise undevelopable area of the cemetery.



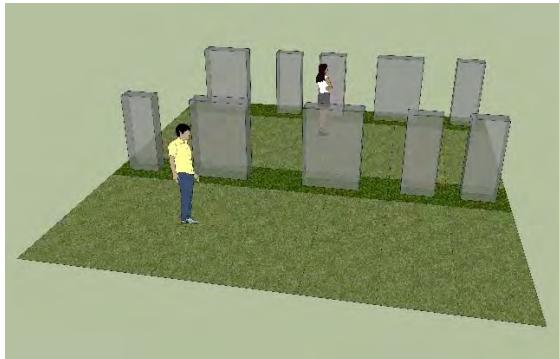
Scattering Garden Examples

3.2.3 Headstone Regulations

Current headstone regulations allow gravesite monuments of 2'-wide by 5'-high and 1'-deep for a single plot headstone, or 3'-6"-wide by 5'-high and 1'-2"-deep for a companion plot headstone which spans two (2) standard plots. (As previously noted, the Town has limited the purchase of burial plots to a single plot and therefore companion plot headstones are not currently being installed within the cemetery.) These headstone regulations were evaluated in the context of current industry standards as well as current and recommended burial plot standards to determine if any modifications to the standards and regulations should be implemented. See section 3.2.1 for standard sizing details.

Based upon discussions with the Town and Cemetery staff, the main concern with current headstone regulations is the allowable height of 5'. While few monuments of this size are installed at the cemetery (particularly in newer burial sections), at this height the headstone can become an impediment to the cemetery's existing excavation equipment when working on adjacent gravesites. Occasionally these headstones need to be moved temporarily to provide adequate access, a

laborious and time-consuming effort that can result in unintended damages which the cemetery becomes responsible for. Therefore, there is a consensus to reduce the overall height of allowable headstones. Current industry standards for upright gravesite monuments typically fall within 2'-wide by 3'-9"-high and 1'-deep for a single plot headstone, or 3'-6"-wide by 3'-9"-high and 1'-6"-deep for a companion plot headstone. These industry standard dimensions appear to be consistent with the vast majority of headstones being installed in the newer/active burial sections of the cemetery. It is recommended the Town adopt the above mentioned industry standard headstone sizes for single and companion plot upright gravesite monuments. These new standards would be applicable for all casketed burial plots.

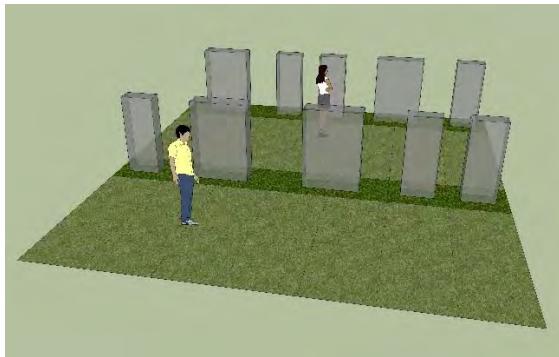


Existing Headstone Standards



Proposed Casket Headstone Standards

Due to increased burial density in proposed dedicated cremain only burial sections that is created by the smaller plot size (4'-square), separate headstone standards need to be established specifically for these areas. In general, the installation of upright gravesite monuments at this density can appear cluttered and poses numerous challenges from a grounds maintenance perspective. It is recommended that flush or ground markers be required in the cremain only burial sections. Flush markers will provide the opportunity for memorialization while maintaining the natural appearance of the cemetery grounds, and the markers can be set at a height where standard mowing equipment can pass over them for ease of maintenance. Flush markers with maximum dimensions of 2'-square for a single plot headstone or 2'-wide by 6'-long for a companion plot headstone are recommended, and markers should be set no more than 1-1/2" above adjacent finished grade. Furthermore, flush markers should be located at the 'head' of the gravesite to allow easy burial of second interments without necessitating the removal and reinstallation of the marker.



Existing Headstone Standards



Proposed Cremain Headstone Standards

There was also discussion regarding the complete standardization of gravesite monument sizes and materials, providing a uniform look across entire burial sections similar to many National and State Veterans Cemeteries. There is currently an eclectic nature to the monumentation that has developed over the life of the cemetery, and it was determined that an individuals' ability to personalize their headstone within the cemetery's size requirements was important. Therefore, forcing the standardization of headstones would likely be unpopular at this time, however it is something that could be considered in the future, particularly if the Town were to begin development of a new cemetery site.

3.3 Current Cemetery Rules and Regulations, and Recommendations

In addition to established rules and regulations pertaining to burials and headstones which were discussed in the previous section, the cemetery has general rules of conduct and regulations covering placement of plantings and decorations at individual gravesites. As previously noted, the cemetery's current general rules and regulations can be found on the Town's website or by visiting the cemetery superintendent's office. Rules and regulations are not currently posted in the cemetery with the exception of minor signage stating the prohibition of animals within the cemetery. The lack of clearly displayed rules and regulations has resulted in a proliferation of undesirable practices, as well as makes it difficult for Cemetery staff to enforce components of the regulations.

Posting rules and regulations within the cemetery, preferably shortly after entering the cemetery, will aid visitors in understanding what is permitted and what standards of behavior is expected. Signage, prominently placed and designed for consistency with the overall site signage vocabulary, will clearly and simply provide the necessary information. The following is typical visitor information signed at Department of Veterans Affairs cemeteries:

We welcome you to these hallowed grounds. To preserve the dignity, beauty and serenity of the cemetery, we ask you to observe our cemetery restrictions. Thank you for your cooperation.

The following activities are prohibited:

- Any form of sports or recreation, including but not limited to jogging, bicycling, skating and picnicking.
- Public gathering of a partisan nature.
- Littering of grounds.
- Cutting, breaking or injuring trees, shrubs, grass or other plantings.
- Allowing pets to run loose.
- Boisterous actions.
- No fire arms.

It is recommended that the Town incorporate their standard rules of conduct, with any desired updates, into a sign similar to the example above for installation at all entrances to the cemetery.

Of particular concern to the Town and Cemetery staff is the current practice of excessive gravesite landscaping and adornment. Current cemetery regulations permit landscaping within a 3' zone at the 'head' of the gravesite (adjacent to the headstone), and limit plant materials to herbaceous annuals and perennials unless approved by the cemetery superintendent. However, many

individuals never request approval of plant materials prior to installation and have installed numerous woody shrubs and small trees. While well intentioned and initially attractive, these plant materials often grow larger than anticipated and outlive the maintenance period of those who installed them. Ultimately these plant materials become long-term maintenance issues for cemetery staff and can cause damage to adjacent and nearby headstones.



Examples of Inappropriate Landscaping Adjacent to Burials.

Similarly, current cemetery regulations address the material adornment of gravesites, including prohibition of gravesite enclosures and glass containers, as well as limiting the number and type of containers for floral displays. However, it is common practice to include placement of statues, windchimes, solar lighting, balloons and other durable and non-durable materials at an individual gravesite. Concerns with these types of practices are mainly focused on maintenance and safety issues. Durable and non-durable items can make area maintenance difficult and more time consuming while also being a hazard to equipment and maintenance staff safety if objects unintentionally struck. Non-durable items are also often easily disturbed by adverse weather and deteriorate over time (such as deflated mylar balloons which have ended up in nearby trees and remain there for years).



Example of Excessive Gravesite Adornment.

In general, the excessive adornment of individual gravesites can also be perceived by some as unsightly and undesirable, and unbefitting of a cemetery.

In conjunction with posting the standard rules of conduct as discussed above, posting rules and regulations regarding gravesite landscaping and adornment will aid visitors in understanding what is permitted. This signage should also address enforcement and clearly note that non-permitted items will be removed. The following is typical floral regulations signed at Department of Veterans Affairs cemeteries, which also addresses gravesite adornment and enforcement:

VA Standard Floral Regulations

- The department of Veterans Affairs does not permit adornments that are considered offensive, inconsistent with the dignity of the cemetery or considered hazardous to cemetery personnel or visitors.
- Fresh cut flowers may be placed on graves at any time.
- Artificial flowers may be placed on graves only during the period of October through March. Artificial flowers and potted plants will be permitted on graves only during the period of ten days before and ten days after both Easter and Memorial Day.
- Christmas wreaths or grave blankets are permitted on graves during the Christmas season and will be removed no later than January 20. Grave floral blankets may not be larger than two feet by three feet.
- Floral items will be removed from gravesites and disposed of by cemetery personnel when they become withered, faded or otherwise unsightly, or when it becomes necessary to facilitate cemetery operations such as mowing, interments or any renovations.
- Permanent plantings will not be permitted on graves at any times.
- Statues, vigil lights, breakable objects of any nature, and similar commemorative items are not permitted on graves at any time. Cemetery Personnel will remove from the gravesites these and other hazardous objects.
- Floral items and other types of decorations will not be secured to the headstones or niche covers.

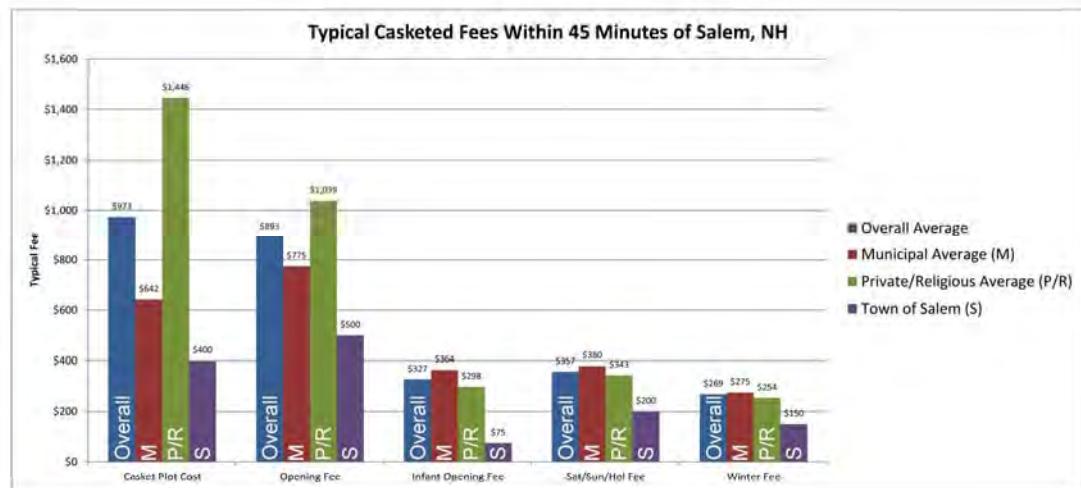
It is recommended that the Town incorporate their landscaping and adornment regulations, with any desired updates, into a sign similar to the example above for installation adjacent to the visitor information signage recommend throughout the cemetery.

Ultimately, enforcement of established rules and regulations is a vital part of compliance. In order to eliminate many of the unpermitted activities which have become pervasive, cemetery staff will need to be diligent with enforcement moving forward. This includes informing individuals of the rules and regulations at the time of plot purchase and burial, clearly displayed signage throughout the cemetery, as well as the regular elimination of non-permitted gravesite landscaping and adornments. The enforcement effort also extends beyond the “boots on the ground” individuals and includes Town Staff and the Board of Selectmen who need to be diligent in supporting cemetery staff with enforcement of the regulations.

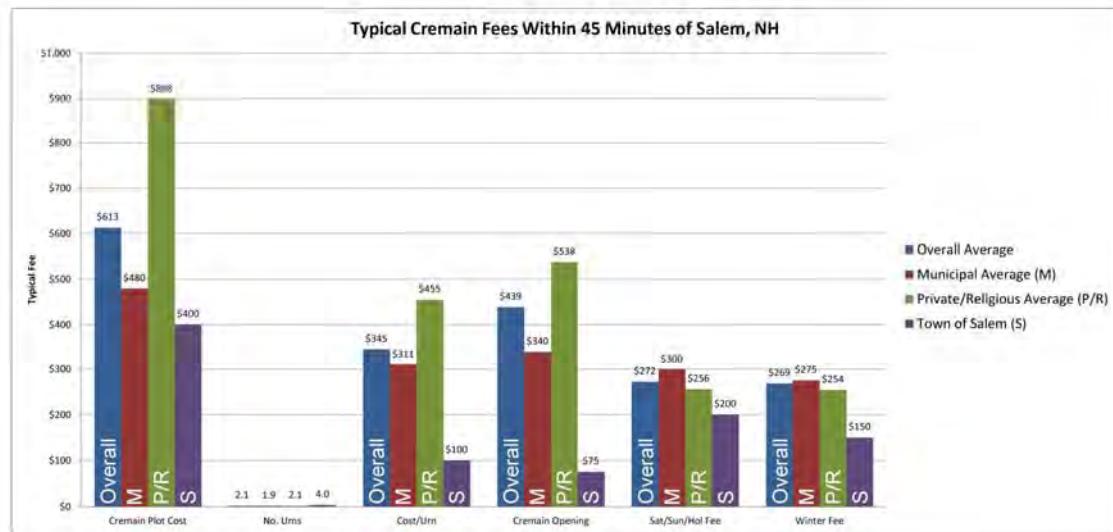
3.4 Current Cemetery Fees and Recommendations

Cemeteries typically fund all, or at least a portion of, daily operating costs, capital improvement projects and perpetual maintenance with fees that are collected from plots sales and interment services. It is important to regularly evaluate these fees to ensure that funding is balanced with actual operating costs, and to ensure that the fees are aligned with an ever-evolving market. To evaluate the Town’s current cemetery fee structure as well as assess how fees should be structured for new burial types (such as cremain only burials or columbarium niche interments), a survey of

burial fee rates for comparable cemeteries within a 45-minute radius of Salem was performed and is summarized in Appendix A-5, "Burial Fee Spreadsheets and Background Data". This included an assessment of municipal and private or religious cemeteries. In general, and as illustrated in the charts below, the Salem's current fees are significantly lower than other cemeteries in the region.



Note: Saturday, Sunday, holiday and winter opening fees are in addition to standard opening fees.



Note: Saturday, Sunday, holiday and winter opening fees are in addition to standard opening fees.

It is recommended the Town utilize the information provided in this assessment to re-evaluate the current cemetery fee structure and pursue the opportunity to better align the fees with the actual burial costs while considering the fees charged by similar nearby cemeteries and municipalities. Considerations for fee adjustments should also be balanced with cemetery development and improvement costs. Based on the preferred master plan and associated opinion of probable costs outlined in this report, the Department of Municipal Services should make a final fee structure recommendation to the Board of Selectmen for their consideration and adoption.

Currently, burial fees alone do not fully support operations and maintenance of Pine Grove cemetery, and the Town of Salem subsidizes the facility through the general fund. Even with adjustments to the Town's current cemetery fee structure, it is unlikely that fees will be able to cover all operating and maintenance costs based upon the typical fees seen in the region. Establishment of a perpetual care fund can be an avenue to long-term cemetery self-sufficiency. With a perpetual care fund, a portion of all burial fees is set aside and income from the fund's pooled assets are devoted to maintenance of the cemetery. It is recommended that the Town further evaluate the establishment of a perpetual care fund for consideration.

3.5 Other Burial Operation Considerations and Recommendations

Infill and Unused Plots

As is typical of older cemeteries, there are potentially many existing burial plots that remain vacant and unused, particularly in older sections of the cemetery. These plots may have been purchased years ago and the family no longer intends to use the plot, or the purchaser may have been buried elsewhere. The State of New Hampshire has established laws (NH Title XXVI Chapter 289 Section 289:18) regulating the process for burial space forfeiture and reclamation that may be an avenue to resell unused plots that were purchased many years ago. Additionally, NH state law requires that a reference to this procedure be included in all plot sale agreements if it is not already. It is recommended that the Town further considers pursuit of reclaiming unused plots where appropriate to maximize the burial capacity of the cemetery. At a minimum the town should consider language within any plot pre-sale agreement regarding the reclamation of the plot if it goes unused for a specified period of time.

Residency Requirements

Current regulations require residency in the Town of Salem to be eligible for burial in Pine Grove Cemetery. This policy was implemented to limit the use of the cemetery to residents who support the maintenance and operations of the cemetery through their local taxes. There is concern with the strict interpretation of this requirement as it excludes prior residents who may have long standing ties with the community who retired or are in a nursing home and now live elsewhere, or those who live part of the year in Salem, and part time in another location. In order to accommodate prior residents and people with a strong connection to Salem, this report recommends further study on potential adjustment to the residency requirement regulation to include people who have previously lived in Salem for some specified period of time, but who currently are not residents. The revised regulations should also define if a person who lives in the town part of the year, but whose legal mailing address is elsewhere, is eligible for burial.

Burial Grid Monuments

It is recommended that the cemetery install surveyed burial grid monuments in all new in ground burials sections as well as expansion of existing sections. Use of burial grid monuments will aid in accurate burial layout and efficiency of burial operations.



Example of Burial Grid Monument

3.6 Cemetery Record Keeping and Recommendations

Currently, the records of plots purchased, interments performed, burial layouts, etc. are kept in a hard-copy card file at the cemetery maintenance office. While the cemetery staff has been diligent in keeping accurate records over the years, the current record keeping system is outdated and vulnerable to data loss. In fact, some burial records were lost when the original cemetery maintenance office experienced a catastrophic fire. Recently telecommunications service was extended to the maintenance office, providing the opportunity to modernize and digitize record cemetery record keeping. Options for digital record keeping were investigated and are summarized in Appendix A-7, “Cemetery Mapping and Record Software Company Summary Chart”. As noted in the summary chart, there are multiple options available and software can be customized to the needs of a particular cemetery. The Department of Municipal Services should conduct further research including contacting potential providers and evaluating the products available. The Department of Municipal Services should then make a final recommendation on the product/provider that best meets the current and future needs of the cemetery to the Board of Selectmen for consideration.

4 Master Plan

4.2 Alternative Site Design Concepts

Based upon findings of the existing conditions assessments and the initial burial operations recommendations discussed previously, two master plan development concepts focusing on the future expansion areas were developed and presented to the Board of Selectmen at a design workshop on July 9, 2018 for consideration and discussion. During the workshop, there was a consensus the ultimate master plan should include:

- Expansion of existing burial sections 9A and 10.
- Development of a new casketed burial section with exposed concrete headstone support system.
- Establishment of dedicated cremain burial sections.
- Development of a columbarium plaza.
- Establishment of a scattering garden.
- Reconfiguration of the existing material storage bin area.
- Development of a new roadway connection between section J and the proposed cremain burial sections.
- Roadway repairs and reconstruction.
- Cemetery entry enhancements and realignment of the entry road; and
- Signage improvements.

4.2 Proposed Master Site Plan

Based upon the outcomes of that design workshop, a preferred master Site Plan was created and will serve as the roadmap for future cemetery development. The plans, sketches and ideas presented in this master plan are conceptual and based on the information available at the time of preparation. As the various improvement projects are selected for phased implementation, additional work will be required including:

- Geotechnical evaluation, borings and recommendations for footing design at columbarium and headstone support system.
- Permitting related to wetland or wetland buffer infringement.
- Evaluation and permitting related to natural heritage and species protection.
- Permitting related to soil erosion control during construction.
- Detailing and design with associated engineering for various project components.

The following master Site Plan illustrates the proposed long-term development program for Pine Grove Cemetery, and highlights the expansion of existing burial sections, creation of new burial sections, roadway expansions and improvements as well as the reconfiguration of the existing materials storage bins. Implementation of this proposed plan has the potential to extend the operation life of Pine Grove Cemetery from an estimated 16.5-years up to 30-years or more. In addition to the master Site Plan, several other key recommendations/ design consideration are presented and discussed in further detail in the section.

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Prepared for:
Town of Salem, NH
Salem Town Hall
33 Geremonty Drive
Salem, NH 03079

BURIAL SUMMARY

BURIAL TYPE	CASKET PLOT	CREMAIN PLOT	NICHE	TOTAL
NEW SECTIONS	815	1442	840	3097
EXPANSION AREAS	290	-	-	290
TOTAL	1105	1442	840	3387



Project Title:
**Pine Grove Cemetery
Master Plan**

329 Main Street
Salem, NH 03079

Project No.: 2018016
Design:
Drawn: JEB Chkd: LTM
Scale: 1" = 40'

Description: Date:

Drawing Title:

SITE PLAN

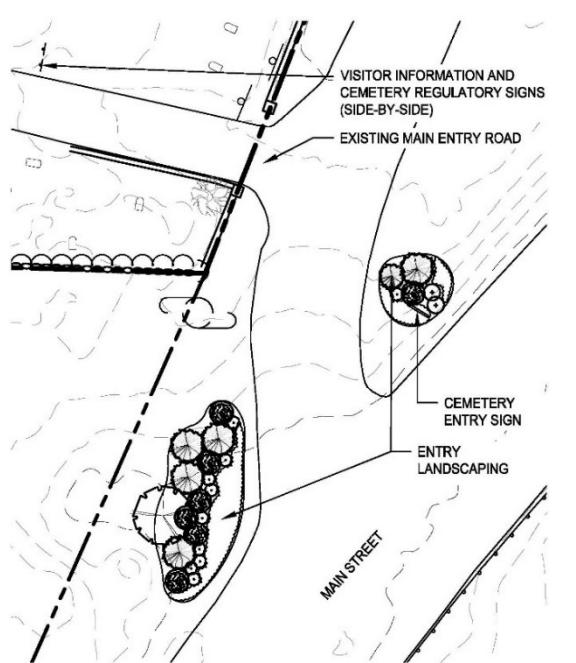
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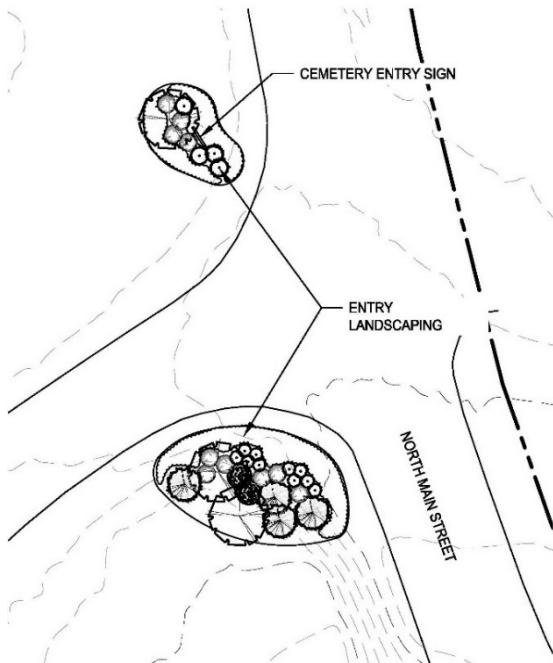
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4.2.1 Cemetery Entrance Enhancements

Currently the primary cemetery entrance is set back from the main road at the intersection of Main and North Main Streets, and there is no signage at the main road to identify the cemetery. There is a cemetery identification sign at the main cemetery entrance road, but this sign is small and not readily visible from the main road. This can make it difficult for visitors to locate the cemetery who are not familiar with the area. It is recommended that new identification signage be located along both Main and North Main Streets, and that these signs be accompanied by ornamental landscaping beds on either side of the loop road. This will clearly identify the location of the cemetery and serve as an attractive gateway into the cemetery. Specific design of the proposed identification signage should be coordinated with the Town's signage standards. The below graphics illustrate prototypical layouts and potential character of the proposed cemetery entrance enhancements.



Entrance at Main Street.



Entrance at North Main Street.



CHARACTER EXAMPLE

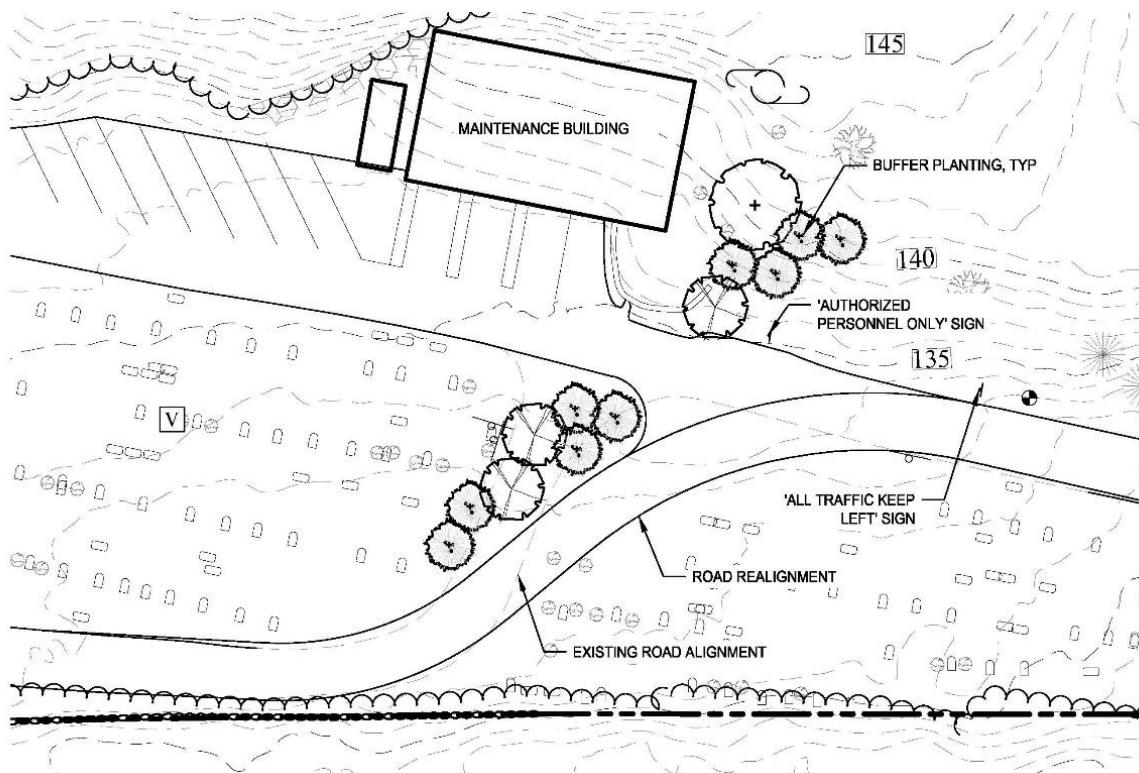


CHARACTER EXAMPLE

Potential character examples of proposed identification signage and landscape treatments.

4.2.2 Circulation Improvements

As noted in section 2 of this report, the high visibility location of maintenance/ administration building along the primary cemetery entrance drive is not ideal. To mitigate the visual intrusion of these service function to the greatest extent possible, it is recommended that the primary entrance drive be realigned slightly to direct all visitor traffic to the roadway further to the south as illustrated below. The existing connection to the maintenance/ administration building can then be signed 'Authorized Personnel Only'. Dense landscape screening should also be installed to reinforce the new visitor circulation pattern and screen the building from the entrance drive as much as possible. Realignment of the entry road



Proposed entrance drive realignment.

Due to the difficulties navigating the narrow and sometimes confusing road network, it is recommended that the Town consider establishing a one-way in and out loop from the primary entrance drive, around the central wooded hill/ knob and back out towards Main Street (illustrated below). The establishment of this one-way in and out loop would alleviate congestion issues posed by the narrow roadways (which cannot be widened without relocating existing gravesites) and would clearly establish a primary cemetery entrance and exit. Supporting cemetery signage could also then be concentrated in a single location along the primary entrance drive. However, in order for the one-way in and out loop to work, and new roadway connection between existing burial section J and the proposed cremain garden section would need to be provided to allow visitors to navigate between the older sections located in the northeastern portion of the site and newer burial sections and proposed expansion areas to the west (see the master Site Plan in this section for the proposed location and alignment of this road connection).



Circulation Recommendation - One-Way Loop.

In addition to the primary circulation improvements, it is recommended that the Town conduct a detailed study to establish a cemetery roadway improvement and long-term maintenance program. This study should include a series of roadway core borings throughout the cemetery to determine the actual extent of needed pavement repairs and/or replacement.

Finally, the master Site Plan indicates the location of some potential future road connections. This includes and expansion of burial section 8 and completion of the roadway grid in this area, as well as a potential connection from the western road loop to the south connecting to the adjacent school district property (identified as a potential long-term expansion for the cemetery if the property could be acquired). The challenges with construction of these roadway, including ownership and permitting for construction adjacent to or within the wetlands, do not make them realistic development targets in the short-term, but should be re-evaluated in the future. Therefore, development/ improvements in these areas should be mindful to keep options open for the future by reserving sufficient open space for potential roadway connection long-term.

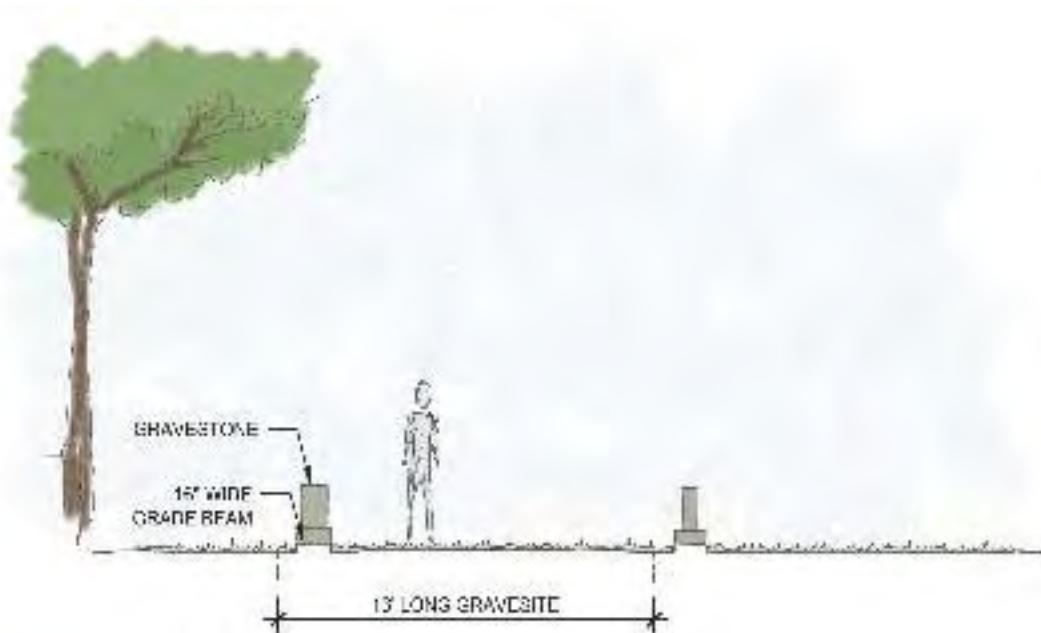
4.2.3 Burial Improvements

Casketed Burial Sections

Building upon ongoing cemetery development in the western portion of the property, it is recommended that existing sections 9A and 10 be expanded to “complete” these sections, maximizing utilization of developable lands in these areas. As these are expansions of existing burial

sections, it is recommended that the current burial standards and regulations be grandfathered into ongoing burials in these sections.

Newly proposed burial standards and regulations will be implemented with the establishment of a new casketed burial section at the extreme western end of the site. This new burial section will also include the proposed exposed concrete headstone support system. The sketch below illustrates the character intent of the new casketed burial section with exposed headstone support system.

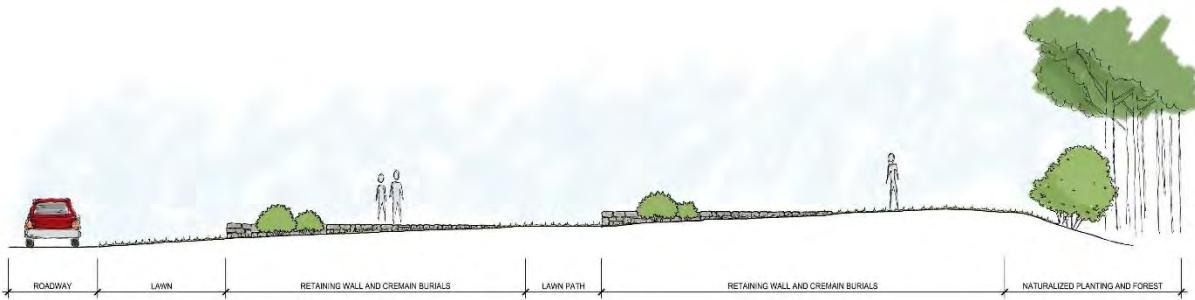


Character of burial section with exposed headstone support system.

Dedicated Cremain Burial Sections

As discussed in section 3 of this report, it is recommended that a number of alternative dedicated cremain burial sections be established to respond to current burial trends seen at Pine Grove Cemetery and throughout the country, as well as to provide for a more sufficient utilization of the limited developable lands that remain. Due subsurface conditions which makes traditional casketed burials difficult, these dedicated cremain burial sections are clustered in the area of the materials storage bins between existing sections 2/4 and 9A/10. This includes in-ground cremain burial sections as well as the establishment of a columbarium plaza.

In addition to simply providing new in-ground cremain burial sections with small plot sizes and flush markers as recommended in section 3 of this report, the Town has the opportunity further make these sites attractive to prospective buyers through additional ornamentation. This ornamentation can provide a unique “garden” experience and should include native stone walls and ornamental landscaping, and could also grow to include other elements such as statuary if deemed acceptable in the future. This ornamentation serves multiple functions. From a functional standpoint, the proposed stone walls along the roadway provide a barrier to vehicles from entering the burial areas (particularly with the use of flush markers), and the development of walled terraces on the eastern side of the burial area alleviate issues shallow ledge in this area. From a marketing standpoint, this ornamentation can help drive initial buy-in to these new sections where there may otherwise be some reluctance due to this being a new type of burial at the cemetery.



Character of Terraced Cremain "Garden" Burial Section.



Examples of In-ground Cremain Burial Sections With Additional Ornamentation.

Establishment of a new columbaria plaza with custom columbaria walls is recommended to provide an above-ground interment option at the cemetery. The plaza will include the phased installation of multiple freestanding walls, with a quality of craftsmanship comparable to that found at State and National veterans cemeteries. Due to the significant upfront development costs, columbarium walls should be double-sided to maximize efficiency and installed in phases. The Town should also consider making the pre-sale of niches available as a way to raise upfront development costs for the installation of the columbarium walls. Furthermore, the phased installation of the walls will allow the Town flexibility in future cemetery development should they find that niches are not desirable enough to residents to warrant further development of the plaza.



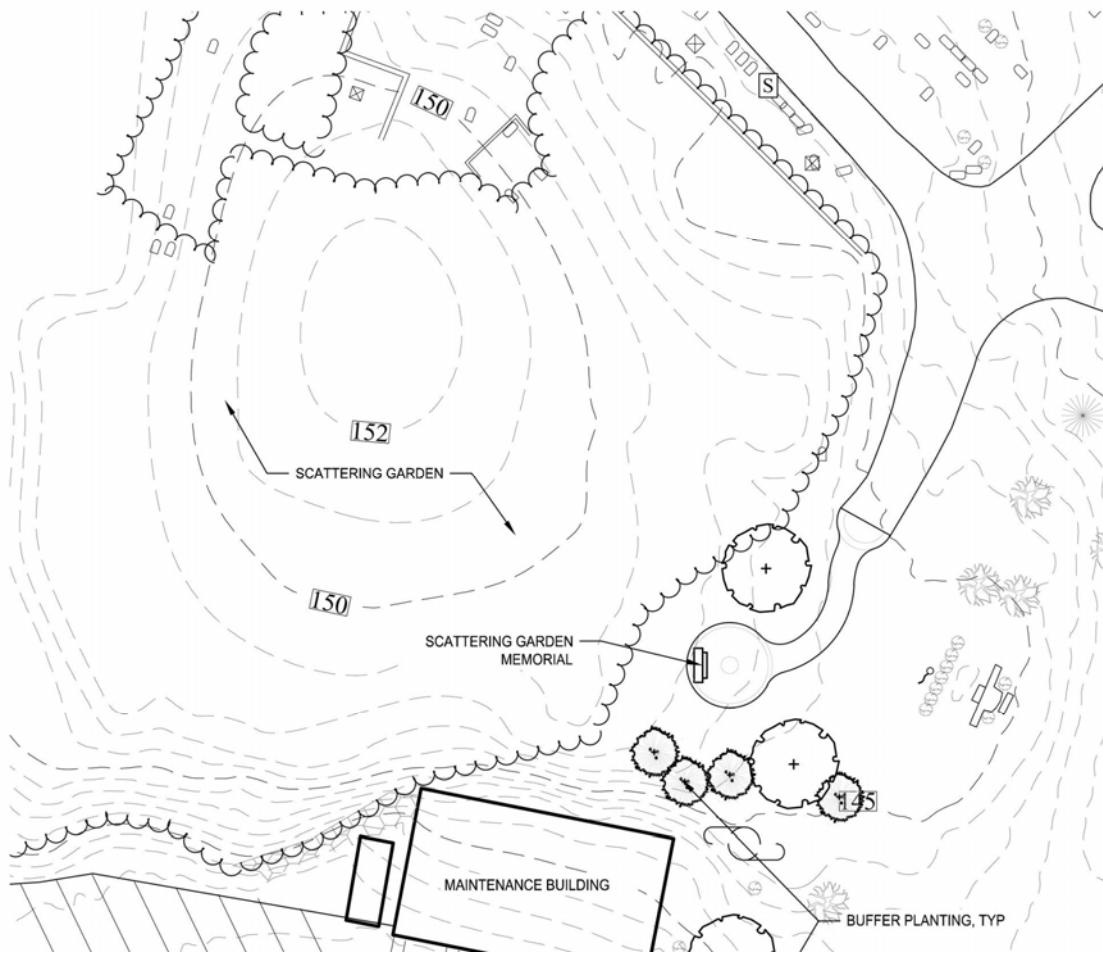
Columbaria at the New Hampshire State Veterans Cemetery in Boscawen.



Proposed Columbaria Plaza Character Sketches.

Due to the high density of burials and potential for numerous visitors at any given time, the plaza also includes a dedicated parking pull-off to provide off-street parking in this area and alleviate congestion on the main cemetery road.

As noted in section 3 of this report, establishment of a scattering garden on the steep hillside north of the existing maintenance/ administration building is recommended to provide an additional burial option at the cemetery and to make use of this otherwise undevelopable land.



Proposed Scattering Garden.

4.2.4 Materials Storage Bin Reorientation

As discussed in section 2 of this report, the current location and orientation of the material storage bins is not ideal, as it is highly visible from the adjacent cemetery road and proposed future burial sections. These bins are critical to the overall function of the cemetery but impacts to visitors and adjacent burial sections can be mitigated by reorienting the facility and tucking back to the existing woodline as shown on the master Site Plan. This would narrow the facility's exposure along the cemetery road to the width of a drive, and dense buffer plantings are recommended to establish further visual screening from the road and adjacent burial areas.

4.2.5 Wayfinding and Signage

In addition to the proposed improvements outlined above, it is recommended that the Town develop a comprehensive wayfinding and signage plan or strategy for Pine Grove Cemetery. This would establish a unified hierarchy of signage with a consistent visual character that addresses the needed wayfinding and regulatory signage discussed in sections 2 and 3 of this report while reinforcing an overall cemetery identity. Adherence to the comprehensive wayfinding and signage plan will ensure visual consistency and ease of visitor navigation throughout the cemetery for years to come.



Example of a comprehensive wayfinding signage family developed for New York State Parks.

As a starting point, it is recommended that the Town look at established signage standards and guidelines developed by the Department of Veterans Affairs (VA) for use in national veterans cemeteries. At a minimum, Pine Grove Cemetery signage components should include the following:

Road and Traffic Signage

Establishment of street names and standard traffic signage will greatly improve navigation and safety within the existing cemetery road network. As an initial step, the Department of Municipal Services will develop a street naming strategy for consideration of the Board of Selectmen.



Example of standard VA road and traffic signage.

Regulatory Signage

As noted in sections 2 and 3 of this report, posting visitor information and regulatory signage within the cemetery will aid visitors in understanding what is permitted and what standards of behavior are expected. This signage shall be placed in prominent locations, visible to all visitors entering the cemetery. While regulatory signage often outlines the 'don'ts' of behavior within the cemetery, language can and should be welcoming to visitors, stress the sanctity of the site and explain that regulations are to protect the nature of the facility.



Examples of standard VA regulatory signage posted at their public information centers.

Directory and Directional Signage

Directory and directional signage provide clear visual cues to direct visitors throughout a site. Directory signage is often located near a cemetery entrance along with visitor information and regulatory signage, and often provides a graphic representation of the overall site so that visitors can orient themselves to the site, where they are, and where they need to go. Directional signage is often placed throughout a site at major decision making points, such as road intersections, to assist visitors navigate where they need to go.



Examples of regulatory signage posted at various State veterans cemeteries.



Typical VA directional signage.

Burial Section Markers

As noted in section 2 of this report, the existing burial section markers located throughout the cemetery are somewhat small (stenciled on 4"x4" wood posts) and typically located in the middle of a burial area far from the road. This can make it difficult to locate and read the markers as an individual is driving through the cemetery looking for a specific burial section. It is recommended that the Town consider adopting new burial section marker standards that are similar to those used at numerous State and National veterans cemeteries. These markers are typically made of stone for durability and placed at either end of a burial section close to the road edge for easy visibility from a vehicle window.



Examples of various burial section markers located in State and National veterans cemeteries.

4.3 Opinion of Probable Development Costs

In conjunction with the master Site Plan, an opinion of probable development cost (OPDC) was developed to provide an initial estimate of development costs for implementation of the proposed cemetery improvements. The OPDC is grouped by major development projects, such as 'Entry Drive Realignment', and is based upon typical construction costs for similar work seen at other cemeteries. This OPDC does not include soft costs such as design and engineering costs, permitting fees or contractor mobilization. Actual development costs will vary based upon final design/

engineering and market variables encountered at the time of development. The Town can utilize this estimate for developing a short- and long-term funding strategy for improvements. Below is a summary of the OPDC.

		<i>Expansions & Renovations (2018 Dollars)</i>
Item #	Item/Remarks	Costs
A	Site Infrastructure Improvements	Subtotal: \$ 79,020
B	Entry Drive Realignment	Subtotal: \$ 29,447
C	Reconfiguration of Existing Materials Storage Bins	Subtotal: \$ 41,605
D	Cemetery Entrance Enhancements	Subtotal: \$ 14,745
E	Burial Improvements in Existing Sections to be Expanded	Subtotal: \$ 15,819
F	New Cremain Scattering Garden	Subtotal: \$ 13,600
G	New Casketed Burial Section	Subtotal: \$ 256,566
H	New Cremain Burial Section	Subtotal: \$ 98,120
I	New Cremain Garden Burial Section	Subtotal: \$ 131,493
J	New Columbaria Plaza (Custom Wall Design and Fabrication)	Subtotal: \$ 468,171
Master Plan Subtotal		\$ 1,148,585
Totals:		

See Appendix A-6 for a more detailed Opinion of Probable Cost Worksheets

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4.4 Implementation and Phasing

As previously eluded to, it is anticipated the recommended cemetery improvements outlined in this report will be implemented incrementally as demand and funding dictate. In addition to being practical from a logistical and financial standpoint, the phased implementation of the master plan components will provide the Town flexibility down the road to re-evaluate the plan and make adjustments to meet changing or unforeseen conditions. Based upon current cemetery burials and depletion rates, the OPDC and discussions with Town and Cemetery staff, the following graphic illustrates the proposed phased development for the cemetery burial expansion areas. Each proposed development phase provides an estimated burial capacity to meet burial needs for 5-years based upon current burial rates and the mix of burial types. As mentioned above, phasing or burial mix may need to change in the future to meet actual trends and demand in Salem. Other non-burial improvement projects, such as cemetery entrance enhancements or reorientation of the materials storage bins, can be completed at any time as resources allow and are not identified for development within a specific phase.

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The LA GROUP

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People. Purpose. Place.

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Prepared for:
Town of Salem, NH
Salem Town Hall
33 Geremonty Drive
Salem, NH 03079

Project Title:
**Pine Grove Cemetery
Master Plan**

329 Main Street
Salem, NH 03079

Project No.: 2018016
Design:
Drawn: JEB Chk'd: LTM
Scale: 1" = 40'

Description: Date

Drawing Title

PHASING PLAN

Drawing No.

L-101



5 Other Considerations

As the Town moves forward with the implementation of this master plan, it is anticipated that development of expansion areas may require additional site investigations and/or permitting efforts in order to ensure that the detailed design and engineering of various master plan components meet local, state and federal codes/regulations. For example, depending upon the nature and extent of development, additional permitting may include but is not limited to:

- **Federal**
Wetlands Permit
- **State**
Alteration of Terrain Permit
Stormwater Permit
Possible Clearance from Division of Historic Resources
Possible clearance from Natural Resources Bureau
Possible clearance from NH Fish and Game
- **Local**
Planning Commission
Conservation Commission

Appendix A-1

Survey

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SYMBOL LEGEND

APPROXIMATE BOUNDARY

TAX

TAX
LC

SALEM

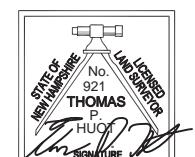
LOCUS M

NOT TO SCALE

NOTES

1. OWNERS OF RECORD:

TAX MAP 75 LOT 2193
TOWN OF SALEM
33 GEREMONTY DRIVE
SALEM, NH 03079
BK: 1678 PG: 0249
2. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF THE SUBJECT PARCEL AND THE IMPROVEMENTS THEREON.
3. NO BOUNDARY DETERMINATION WAS MADE WITH THIS SURVEY. PROPERTY LINES SHOWN HEREON ARE APPROXIMATE, DERIVED FROM RECORD DEEDS, PHYSICAL EVIDENCE, AND THE TOWN OF SALEM TAX MAPS.
4. THIS PLAN REPRESENTS EXISTING CONDITIONS, BOUNDARY EVIDENCE, AND MONUMENTATION AS OBSERVED DURING A SURVEY BY THIS OFFICE IN JUNE & JULY 2017.
5. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN THE 1% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE. MAP NUMBER 33015C0562E. EFFECTIVE DATE MAY 17, 2005.
6. ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THIS OFFICE HAS NOT LOCATED ANY UNDERGROUND UTILITIES. ALWAYS CALL DIG SAFE TO MARK OUT UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION ACTIVITIES.
7. HORIZONTAL DATUM IS NH STATE PLANE COORDINATES. VERTICAL DATUM IS NGVD '29.
8. TOPOGRAPHIC DATA SHOWN HEREON WAS PROVIDED TO THIS OFFICE BY COMPREHENSIVE ENVIRONMENTAL INC.. THIS OFFICE DOES NOT CERTIFY THE ACCURACY OF THIS TOPOGRAPHIC DATA



SCALE: 1"=40'

40' 0 20' 40' 80' 16'

GRAPHIC SCALE

EXISTING CONDITIONS PLAN

**TAX MAP 75 LOT 2193
PINE GROVE CEMETERY**

TINE GROVE CEMETERY
PREPARED FOR:

THE TOWN OF SALEM

LOCATED AT:
237 MAIN STREET

327 MAIN STREET
SALEM, NEW HAMPSHIRE

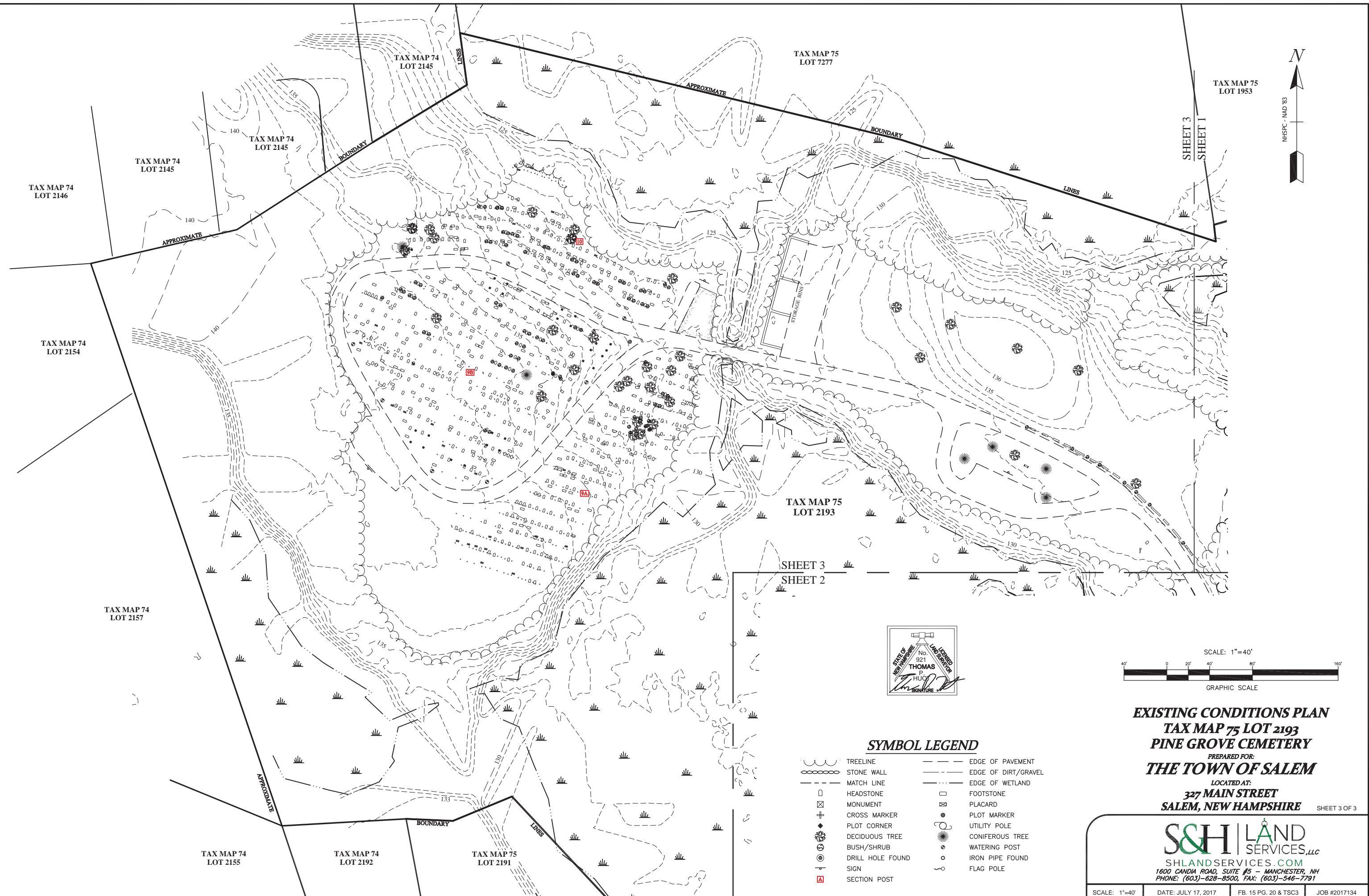
SALEM, NEW HAMPSHIRE

SHEET 1 OF 3

The logo for S&H Land Services, LLC. It features the letters 'S&H' in a large, bold, black serif font. To the right of a vertical line, the word 'LAND' is written in a large, green, sans-serif font. Below 'LAND', the words 'SERVICES, LLC' are written in a smaller, green, sans-serif font. Below the main logo, the website 'SHLANDSERVICES.COM' is written in a smaller, green, sans-serif font. At the bottom, the address '20 CANDIA ROAD, SUITE 45 - MANCHESTER, NH' is written in a smaller, black, sans-serif font.

SHLANDSERVICES.COM
1600 CANDIA ROAD, SUITE #5 - MANCHESTER, NH
PHONE: (603)-628-8500, FAX: (603)-546-7791

2022 SUMMER ISSUE 2022



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Appendix A-2

Site Engineering, Resources and Regulatory Requirements Report

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Pine Grove Cemetery

Salem, NH

Initial Site Engineering, Resources and Regulatory Requirements Review

An initial site engineering, environmental/cultural resources and regulatory requirements review was accomplished to identify potential conditions that would control development on the cemetery parcel. The results of that review are discussed in the following paragraphs. Refer to the attached plan C-101 that depicts soils, wetlands, and natural/cultural features on the site and G-101 that identifies areas initially proposed for possible development.

Topography

Topography on the site generally consists of gentle slopes with large areas of low wetlands and limited areas of steep slopes, mainly on the perimeters of the parcel and north of the maintenance area. The potential development areas indicated on G-101 located adjacent to steeper slopes will require significant grading to develop the site or to provide access. Other potential development areas present gentle grades that would facilitate development and site access. Careful selection of development sites, and burial development types, will be necessary to preclude excessive fill or excavation-requirements.

Drainage

Drainage on the site predominantly occurs by overland flow, with significant infiltration into the soils in areas of gentle terrain with permeable soils. Areas with less permeable soils and flat terrain exhibit standing surface water. The potential development sites identified can be graded to adjacent sloped areas to provide positive site drainage. Unless site development results in significant pervious area, stormwater management should be adequately addressed by using green solutions such as swales.

Subsurface Conditions

Soils

Soils on the site consist primarily of sand, loamy sand, gravelly sand, and sandy loam, although the wetland areas on the site contain mucky peat to a depth of 25" underlain by sand. Development in areas with the sandy/loamy/gravelly soils would have good potential for development; whereas the soils in wetland areas would be difficult to develop. The proposed connector road to Section 10 would require major excavation and road base construction work.

Groundwater

Groundwater levels will vary from a depth of a few inches below the surface in the wetland areas (Freetown, Pipestone and Swansea) and lower lying lands adjacent to wetlands and drainage areas, to several feet in the areas where the more pervious soils exist. Subsurface area drainage systems will be required to control groundwater in areas proposed for excavations below the surface if they are in, or in the vicinity of, the Freetown, Pipestone or Swansea soils units.

Ledge

Existing National Resource Conservation Service (NRCS) soils mapping was reviewed to preliminarily assess the potential for depth to ledge.

The Chatfield-Hollis-Canton Complex (140B) soils are mapped on the easterly two-thirds of the site. This soil mapping unit indicates the presence of ledge at a variable depth of 8" to greater than 67". The majority of this area has already been developed, although three new potential development areas have been identified in the northwest part of this soil type. Two other areas at the southwest part of this soil type are indicated as not suitable for burial due to ledge on the Site Analysis Plan G-101. These are assumed to be noted as such based on field observations.

The NRCS soil mapping units for the remainder of the site indicate no ledge within a depth of 80 inches.

The NRCS soils mapping is only a general indication of ledge conditions in an overall area; it is necessary to use this as a general planning tool, and site-specific test pit information is necessary to define ledge conditions at any proposed development site.

Environmental/Cultural Resources

Wetlands

Several wetland areas exist on the site, with a large central wetland in the western section of the property. The wetlands on-site are contiguous to a large wetland complex extending northward to Widow Harris Brook. The wetlands are identified as Prime Wetlands by the Town of Salem and the Town Plan indicates a 100 foot undisturbed buffer must be maintained around Prime Wetlands except where the buffer is currently disturbed.

It is possible that the Town buffer will restrict development on sites adjacent to wetland areas. Any proposed development in, or within, 100 feet of wetlands should be reviewed with the Town, and any impacts within the wetlands should be reviewed with Federal and State agencies early in the planning effort.

Historic/Archeologic.

Due to the location of the cemetery near wetlands and stream systems, and the presence of higher, dry terrain adjacent to these features, it is possible that archeologic resources exist on the site. Due to the historic nature of the cemetery and the Town of Salem, it is possible that historic sites or features will be present also.

A review of the site and proposed improvements should be conducted by the NH Division of Historic Resources by review of the DHR Historic Properties files and submittal of a Request For Project Review Form.

Habitat and Conservation Areas

A large area north of the cemetery is noted on the NH State Wildlife Action Plan as Highest Ranked Habitat in The Biological Region, and Supporting Landscapes. This Plan also notes a Conservation or Public Area in this location. Both the Highest Ranked Habitat and the Conservation or Public Area map appear to cover part of the cemetery site in this area. This area of the cemetery is also identified as a potential development area. The impacts of these habitat and conservation designations on any proposed development in this area should be reviewed closely with both State and Town of Salem authorities.

A review of State sources indicates that there may be species of concern on or adjacent to the cemetery lands. We have submitted a formal request to the State to confirm and define this possible presence.

Regulatory Requirements

It is anticipated that development of the project may require the following Local, State and Federal permits and approvals, depending on the location and extent of the proposed improvements

Federal

Wetlands Permit

State

Alteration of Terrain Permit

Stormwater Permit

Possible Clearance from Division of Historic Resources

Possible clearance from Natural Resources Bureau

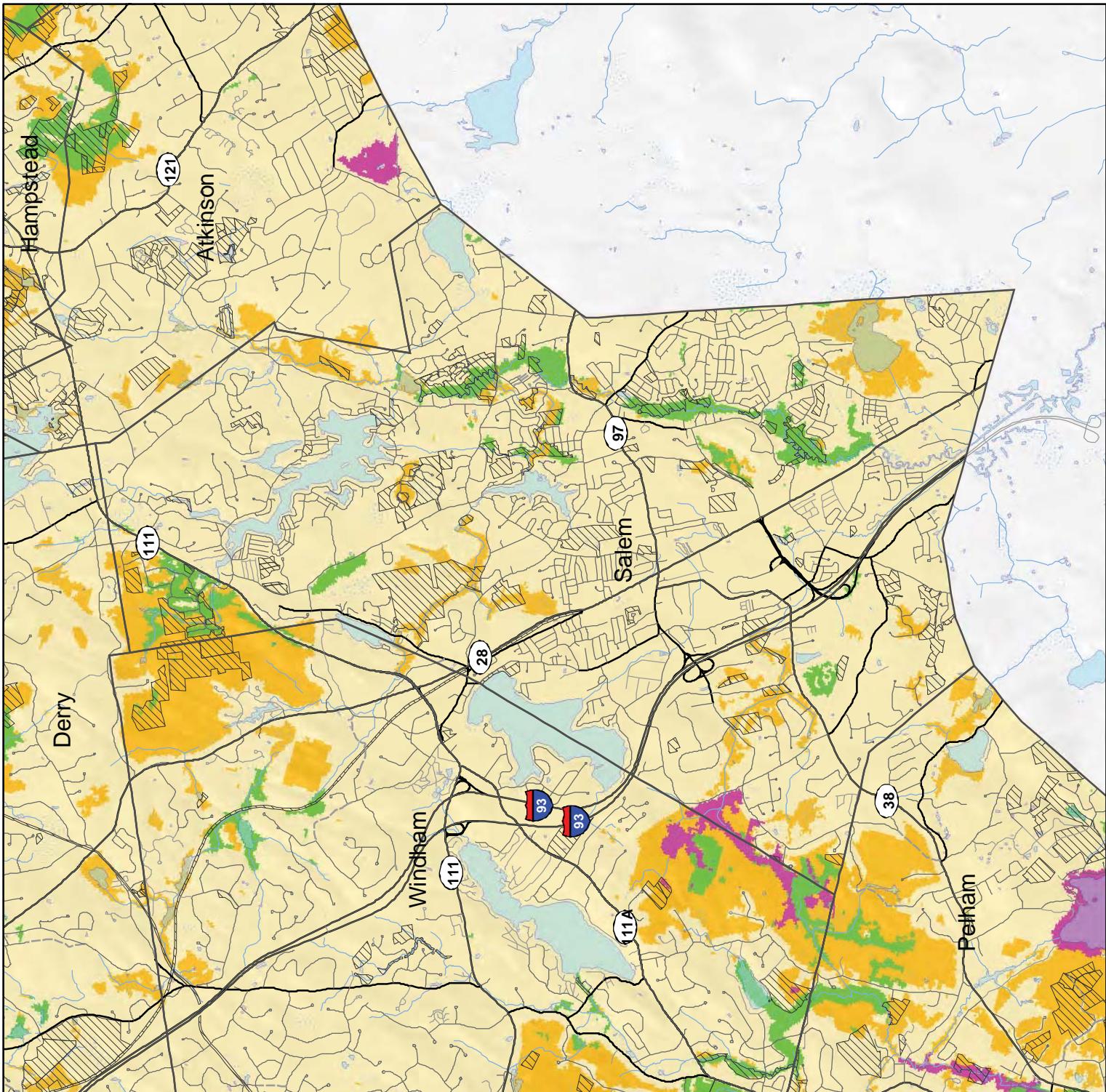
Possible clearance from NH Fish and Game

Local

Planning Commission

Conservation Commission





2015 HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

Highest Ranked Habitat in New Hampshire

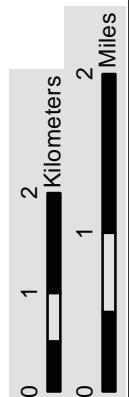
Highest Ranked Habitat in the Biological Region

Biological region = TNC ecoregional subsection for terrestrial habitats or Aquatic Resource Mitigation region for wetlands and floodplain forest.

Supporting Landscapes

Conservation or public

Base map data provided by NH GRANIT (2015)
Not intended for legal use.



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Appendix A-3
Natural Heritage Bureau Letter

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Memo**NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER**

To: Charlotte Brodie, DuBois & King, Inc.
P.O. Box 1257
Williston, VT 05495

From: Amy Lamb, NH Natural Heritage Bureau
Date: 3/27/2018 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB18-0892
Town: Salem
Description: Expand existing cemetery to allow for more plots.

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: Please provide more information about the extent and location of wetland impacts.

Natural Community

Swamp white oak floodplain forest^{*}

	State ¹	Federal	Notes
	--	--	Threats are primarily changes to the hydrology of the river, land conversion and fragmentation, introduction of invasive species, and increased input of nutrients and pollutants.
	T	--	This species occurs in sandplains, disturbed openings, dry forests, and thin woods. Threats would include direct destruction of the plants or major alterations in their habitat.

Plant species

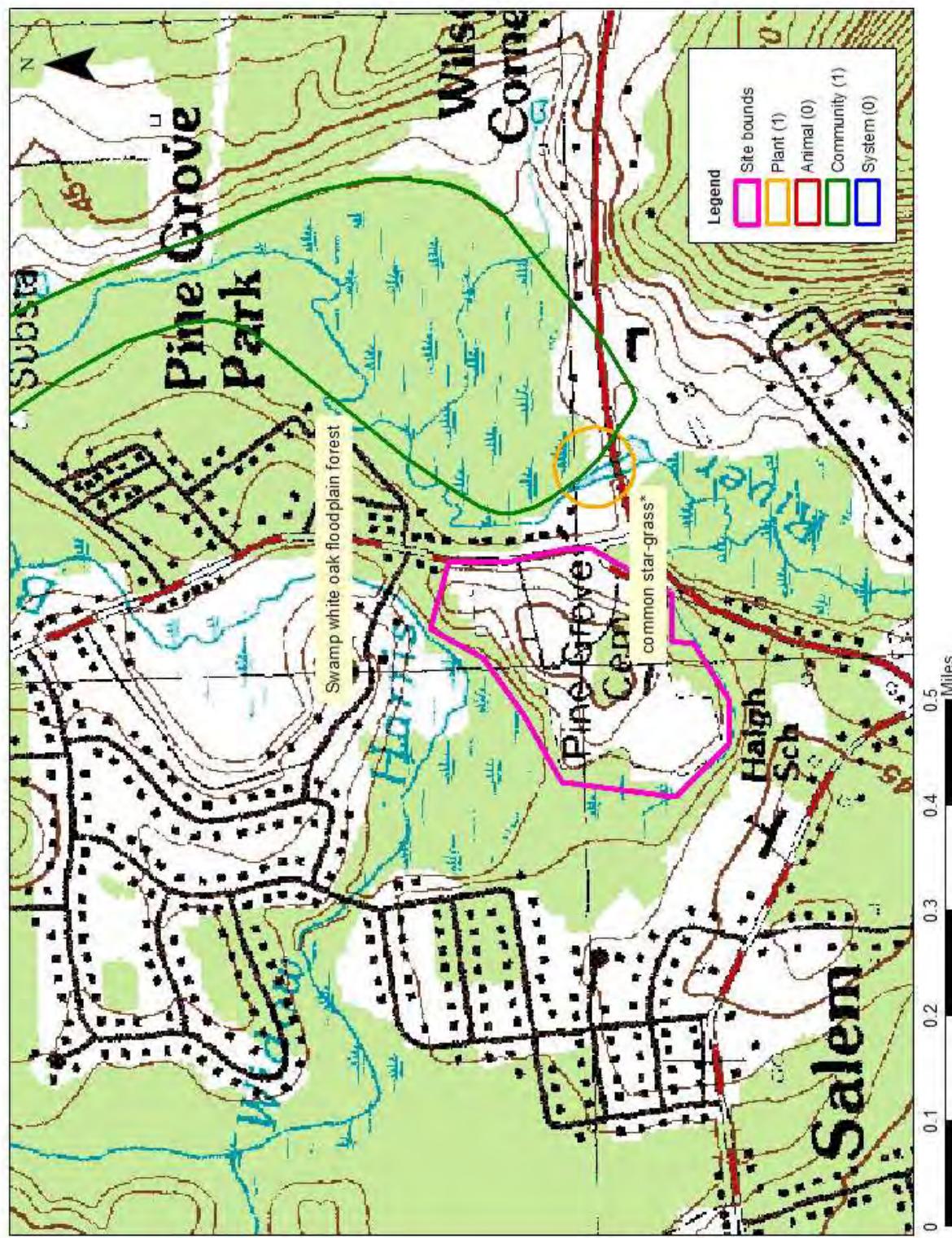
common star-grass (*Hypoxis hirsuta*)*

	State ¹	Federal	Notes
	T	--	

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "—" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

NHB18-0892



New Hampshire Natural Heritage Bureau - Community Record

Swamp white oak floodplain forest

Legal Status	Conservation Status
Federal: Not listed	Global: Not ranked (need more information)
State: Not listed	State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Historical records only - current condition unknown.

Comments on Rank:

Detailed Description: 1992: See general description.

General Area: 1992: This forest has an unusual association on *Quercus bicolor* and *Acer rubrum*. Some trees as large as 38" dbh were observed. It is unusual to find *Q. bicolor* of this size and quantity in NH. Shrub spp. include: *Cornus amomum*, *Viburnum recognitum*, and *Ilex verticillata*. Herbaceous spp. were fairly sparse. The ground in many places was more typically covered with mosses and other bryophytes.

General Comments:

Management

Comments:

Location

Survey Site Name: Spicket River by Town Farm Road

Managed By: Captains Village

County: Rockingham

Town(s): Salem

Size: 116.2 acres

Elevation: 120 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Spicket River by Town Farm Road.

Dates documented

First reported: 1992

Last reported: 1992

New Hampshire Natural Heritage Bureau - Plant Record
common star-grass (*Hypoxis hirsuta*)

Legal Status	Conservation Status
Federal: Not listed	Global: Demonstrably widespread, abundant, and secure
State: Listed Threatened	State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Historical records only - current condition unknown.

Comments on Rank:

Detailed Description: 1995: Searched for but not found. 1958: Hodgdon and Harris specimen at NH, accession #22604. Label data: "Common...with Angelica, Potentilla fruticosa, and Sisyrinchium angustifolium."

General Area:

General Comments: 1995: A complete search of this area failed in finding one plant at any stage of development.

Management

Comments:

Location

Survey Site Name: Spickett River (Salem)

Managed By: Spicket River Parcel @ Route 97

County: Rockingham

Town(s): Salem

Size: 2.8 acres

Elevation: 110 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: From Salem, go north on Rte 97. Site is in swale at Rte 97 road intersection north of Spicketts Hill.

Dates documented

First reported: 1958

Last reported: 1958-06-26

Appendix A-4
Test Pits Summary and Engineering Narrative

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Pine Grove Cemetery, Salem NH
Site Visit Narrative
6/6/18

I conducted a site visit to the Pine Grove Cemetery on June 6, 2018, and met Mr. Rich Houle and Mr. Greg Wholly. The purpose of the visit was to:

1. Conduct limited test pitting to preliminarily assess subsurface conditions for initial Master Planning purposes
2. Observe existing roadway conditions to assess needs for, and methods of, repair
3. Observe the culvert crossing at the entry of Section 9 and 10 to assess needs for, and methods of, repair

Results of the site visit are discussed below. Please refer to the plans that depict information as discussed below and additional notes on site visit observations.

Subsurface Conditions

Six test pits were accomplished to a depth of 6 feet. The test pits were located in the areas where the master plan anticipated casket burials, as subsurface conditions would be most critical where full-depth burials were proposed. The American Legion area was not test pitted, as discussions with Rich and a site walk of the area indicated that ledge is either at the surface or shallow in most areas of this site. Also, access, steep grades and small size would reduce developable areas. In general, these conditions would probably preclude use of the site for casket burials. Agreements with the Legion regarding use of this area may also control development.

Four test pits located in the Section 9/10 area that is proposed for casket burials showed very good soil conditions (fine to medium sand), no ledge to depth, no groundwater to depth and no rocks. These areas appear favorable for casket burial.

Two test pits were accomplished in the area designated for Veterans burials. The test pit on the west side of this site included flowing groundwater at a depth of 4 feet, large rocks (up to 4 feet in dimension), and nodules of clay and silt. This area would present difficult conditions for casket burials. The test pit on the east side of the site displayed no ground water and medium sand to depth, with numerous rocks with a diameter of 1' +/- encountered. This area would present difficult excavation conditions for casket burials due to the presence of the rocks.

Discussions with Rich and Greg indicated that several areas of the cemetery had been filled/regraded for expansion of burial areas over the many years the cemetery has been in use. This can result in locally variable subsurface conditions. Also, many areas of the existing developed cemetery, especially the older areas, have large boulders and high groundwater conditions.

Roadway Conditions

The roads in the cemetery are typical of municipal cemetery developments, where low usage, limited funding and challenging grades and subsurface conditions result in a roadway system with limited pavement and granular base and limited roadway drainage swales /structures. The pavement is repaired and overlaid as necessary for maintaining a trafficable surface.

The older sections of the cemetery have numerous areas where the pavement surface is severely displaced and broken due to poor subsurface conditions, lack of pavement base and poor roadway drainage. The newer sections of the cemetery have serviceable roads with few areas of distressed pavement. Some have had recent overlays.

We would recommend areas of displaced pavement be repaired with pavement removal, installation of a granular base, minor regrading to establish drainage adjacent to the pavement, and repaving. Areas within the newer sections of the cemetery that have less severe displacement and cracking could be repaired with an overlay without installation of base material.

A ride-through indicated that an allowance for approximately 500 feet of roadway repair for displaced pavement would be recommended; with an allowance for an additional 500 feet for pavement overlay without addition of new base or regrading. This allowance and specific areas to be repaired should be reviewed during a subsequent detailed site walk of the roads with cemetery management.

Culver Crossing

The culvert crossing at the entry of Sections 9 and 10 was reviewed to assess current conditions and recommendations for repair/replacement. The culvert is a 36" CMP installed at a shallow depth with laid up concrete slab headwalls. The culvert is approximately half-full of sediment, and appears to be in poor condition with visible rust. The culvert should be replaced with a new culvert of similar size but with increased length to allow for rip-rap reinforced roadway side slopes instead of headwalls.

Miscellaneous

Rich and Greg provide valuable insights into the operation of the cemetery that would be beneficial in preparing a Master Plan. The details are not provided in this narrative, but included:

- Area-specific input on groundwater, soils, boulders, and surface drainage
- Impacts of subsurface conditions relative to burial types and number of graves in a given plot
- Historical development that may have resulted in regrading/fill areas
- Operations during burials

Additional details on these items could be provided by discussions with Rich or me.



The LA Group
Engineering, Architecture, and Land Development Services

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New York State Education Law
Article 87, Section 220(6)

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Prepared for:
Town of Salem, NH
Salem Town Hall
31 Germanton Drive
Salem, NH 03079

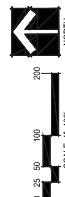
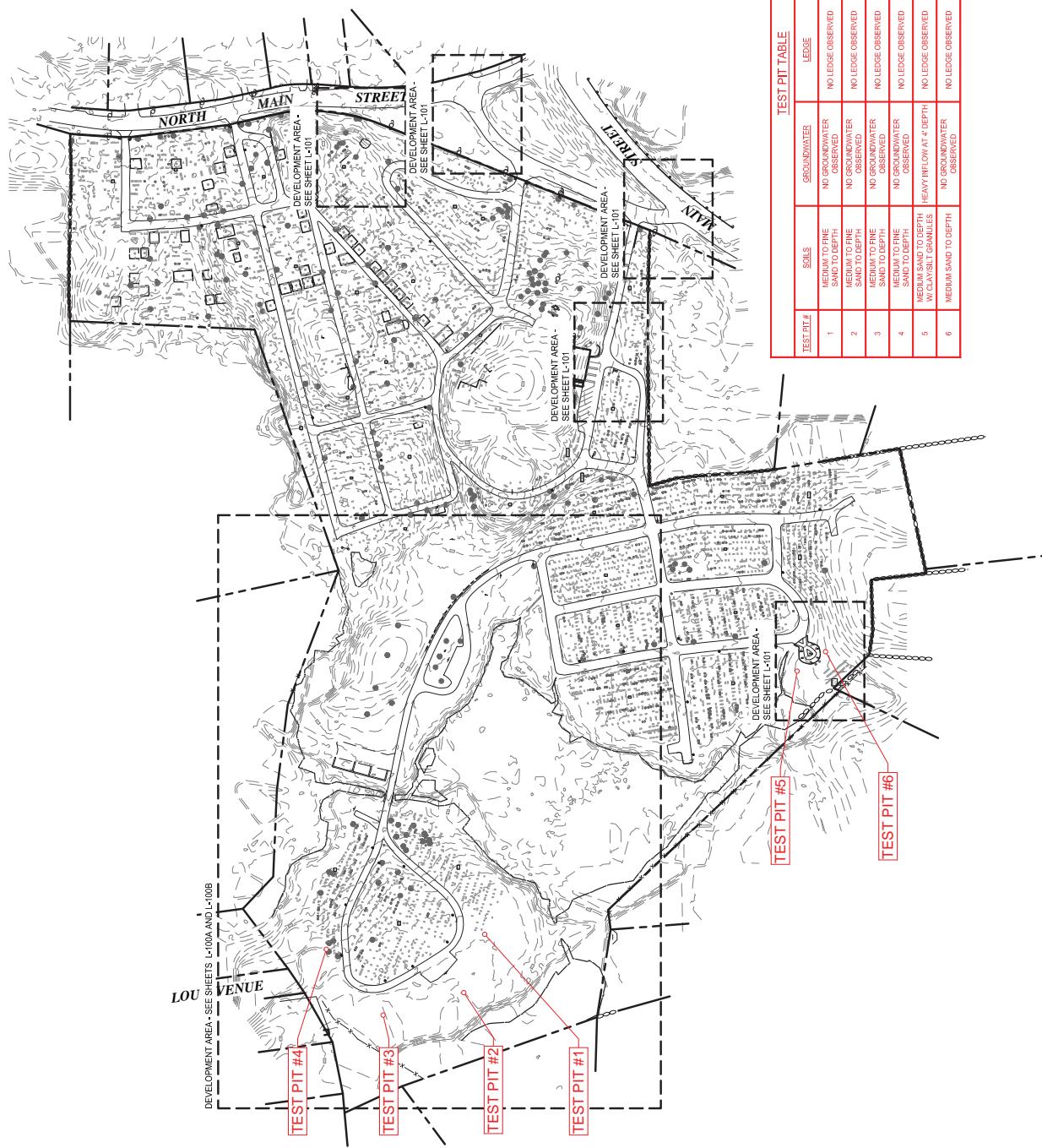
Project Title:
Pine Grove Cemetery
Master Plan

329 Main Street
Salem, NH 03079

Project No.: 2018016
Design: JDS
Drawn: 1-10-18
Scale: 1" = 100'
Description:
Date:

Drawing No.:
Key Plan

Drawing No.:
G-100





Unlawful alterations or additions to this
plan are subject to criminal and civil
penalties under the New York State Education Law
and the State Cemetery Act.

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Prepared for:
Town of Salem, NH
Salem Town Hall
33 Germanton Drive
Salem, NH 03079

Project Name:
Pine Grove Cemetery
Master Plan

329 Main Street
Salem, NH 03079

Project No.: 2018016
Design: JLB
Drawn: CHG
Scale: 1:20
Description: Date:

Drawing No.:
L-101
SITE PLAN
ENLARGEMENTS

Drawing No.:
L-101

Scale: 1:20

LEGION AREA

GRAVE LAYOUT

Scale: 1:20

ENTRY SIGN & PLANTING @ MAIN STREET

Scale: 1:20

ENTRY SIGN & PLANTING @ N. MAIN STREET

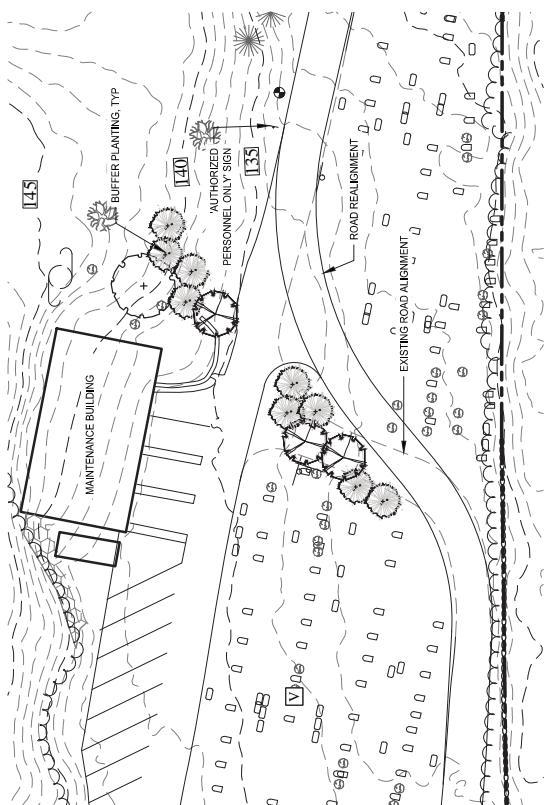
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VETERANS AREA

GRAVE LAYOUT

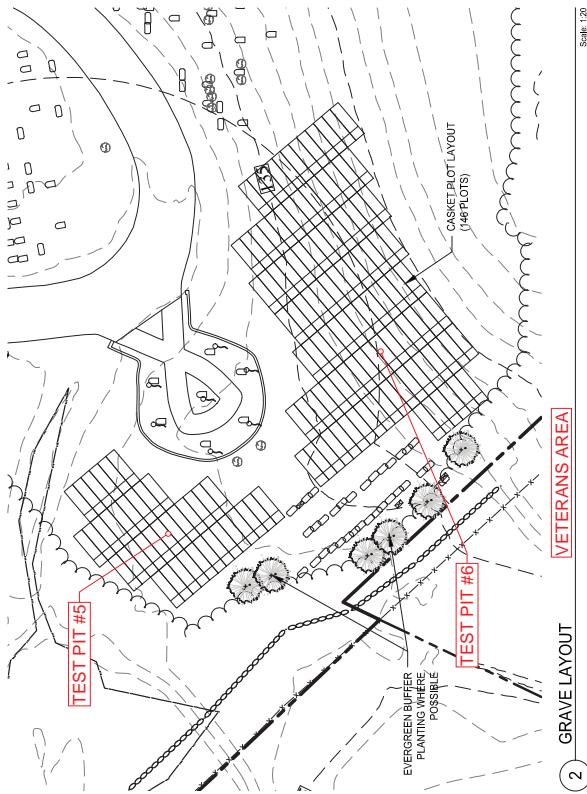
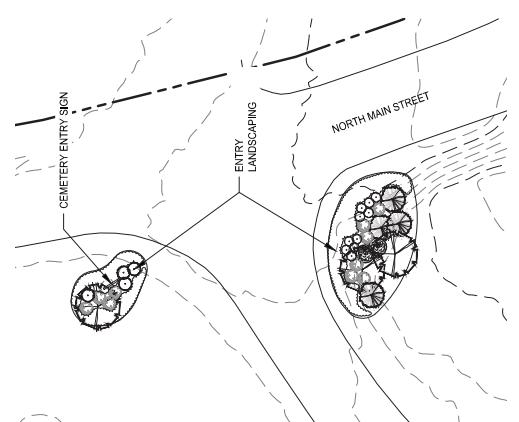
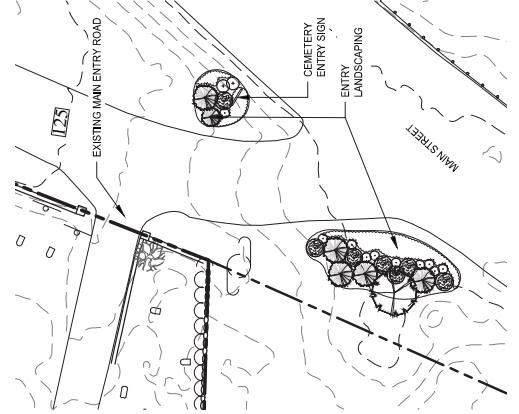
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ENTRY SIGN & PLANTING



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ENTRY SIGN & PLANTING



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Appendix A-5
Burial Fee Spreadsheets and Background Data

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Pine Grove Cemetery Master Plan

Salem, NH

Assessment of Typical Cemetery Fees within 45 Minute Radius of Salem, NH¹

Cemetery	Cemetery Type ²	Casketed Burial Fees				Cremain Burial Fees				Other Fees Winter Fee ³
		Casket Plot Cost	Opening Fee	Infant Opening Fee	Sat/Sun/Hol Fee ³	Cremain Plot Cost	No. Urns Per Plot	Cost/Urn	Cremain Opening	
New Hampshire										
Atkinson Atkinson	M	\$225	\$500		\$100	\$225	4	\$56	\$300	\$200
Longmeadow Auburn	M	\$600	\$600	\$600		\$600	2	\$300	\$300	
Village Auburn	M	\$600	\$600	\$600		\$600	2	\$300	\$300	
Holbrook ⁴ Canida	M	\$200				\$100	2	\$50		
Great Hill Chester	M	\$500	\$700	\$700		\$500	4	\$125	\$100	
Concord Concord	M	\$960	\$655		\$280	\$500	2	\$250	\$265	\$115
Forest Hill Derry	M	\$725	\$525		\$200	\$400	1	\$400	\$200	\$175
Prospect Hill ⁴ Epping	M	\$600				\$600	3	\$200		
Exeter Exeter	P	\$935	\$1,000	\$1,000	\$350	\$935	2	\$468	\$350	\$100
Pillsbury ⁴ Londonderry	M	\$500				\$500	4	\$125		
Mount Calvary Manchester	R	\$1,215	\$1,115		\$413	\$1,430	2	\$715	\$525	\$463
Pine Grove Manchester	M	\$900	\$650	\$375	\$325	\$650	2	\$325	\$450	\$225
Edgewood Nashua	M	\$800	\$600	\$50	\$250	\$900	2	\$450	\$250	\$150
Woodlawn Nashua	M	\$800	\$675	\$100	\$200	\$400	1	\$400	\$250	\$150
Gibson Pelham	M	\$400	\$500	\$400	\$400	\$250	2	\$125	\$250	\$150
Calvary Portsmouth	R	\$1,000	\$600	\$170	\$150	\$750	2	\$375	\$300	\$100
St. Mary's Portsmouth	R	\$1,000	\$600	\$170	\$150	\$750	2	\$375	\$300	\$100
Hillside ⁴ Seabrook	M	\$200				\$200	6	\$33		
New Plains ⁴ Windham	M	\$200				\$200	1	\$200		
Overall Average:		\$651	\$666	\$417	\$256	\$552	2.4	\$277	\$296	\$175
Municipal Average:		\$547	\$601	\$404	\$251	\$442	2.5	\$223	\$267	\$166
Private/Religious Average:		\$1,038	\$829	\$447	\$266	\$966	2.0	\$483	\$369	\$191
Town of Salem:		\$400	\$500	\$75	\$200	\$400	4	\$100	\$75	\$200
Massachusetts										
Union/Mt. Prospect ⁴ Amesbury	M	\$500				\$150	1	\$150		
Spring Grove Andover	M	\$800	\$700	\$150	\$425	\$270	1	\$270	\$300	\$200
Bellevue Lawrence	M	\$950	\$1,000	\$500	\$450	\$950	2	\$475	\$490	\$450
Holy Sepulchre ⁵ Lawrence	R	\$3,500	\$1,200		\$200	\$1,000	2	\$500	\$1,200	\$200
St. Mary Lawrence	R	\$910	\$1,095	\$150	\$485	\$420	2	\$210	\$530	\$485
Multiple (6) Lowell	M	\$700	\$1,150		\$650	\$700	1	\$700	\$450	\$650
Lowell Cemetery Lowell	P	\$1,200	\$1,450	\$150	\$500	\$1,200	4	\$300	\$550	\$300
St. Patrick Lowell	R	\$1,810	\$1,250		\$500	\$700	1	\$700	\$550	\$300
Overall Average:		\$1,296	\$1,121	\$238	\$459	\$674	1.8	\$413	\$581	\$369
Municipal Average:		\$738	\$950	\$325	\$508	\$518	1.3	\$399	\$413	\$433
Private/Religious Average:		\$1,855	\$1,249	\$150	\$421	\$830	2.3	\$428	\$708	\$321
Town of Salem:		\$400	\$500	\$75	\$200	\$400	4	\$100	\$75	\$200
Combined Averages										
Combined Overall Average:		\$973	\$893	\$327	\$357	\$613	2.1	\$345	\$439	\$272
Combined Municipal Average:		\$642	\$775	\$364	\$380	\$480	1.9	\$311	\$340	\$300
Combined Private/Religious		\$1,446	\$1,039	\$298	\$343	\$898	2.1	\$455	\$538	\$256
Town of Salem:		\$400	\$500	\$75	\$200	\$400	4	\$100	\$75	\$200

Notes:

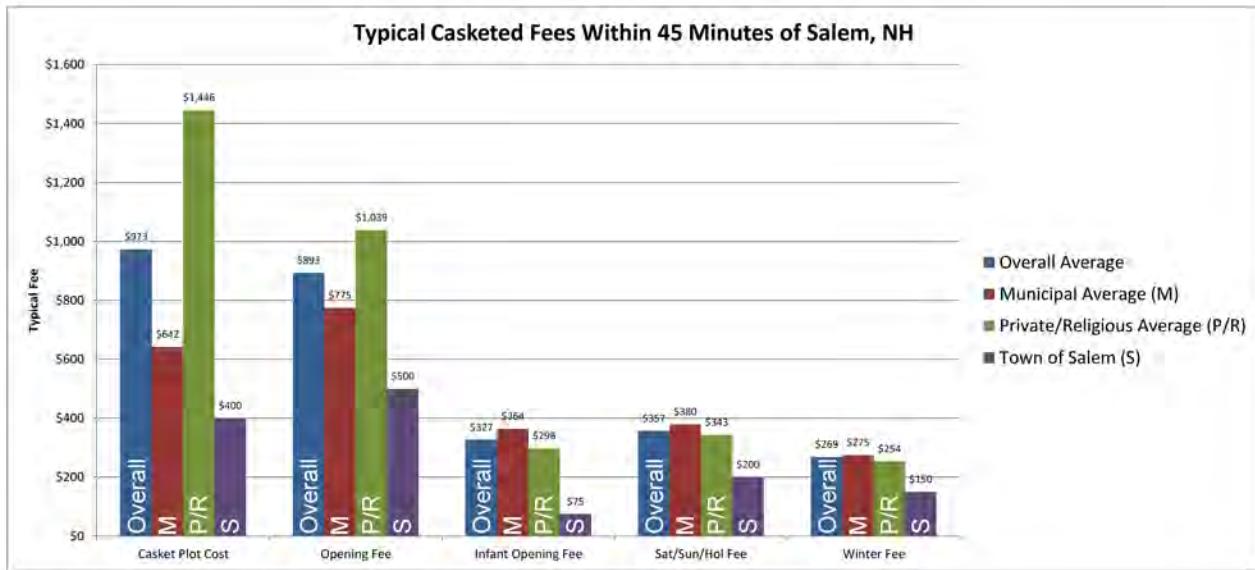
1 Data provided is a combination of information gathered from a 2016 survey conducted by the New Hampshire Cemetery Association and from websites of individual cemeteries/municipalities listed.

2 M = Municipal Cemetery; P = Private Cemetery; and R = Religious Cemetery.

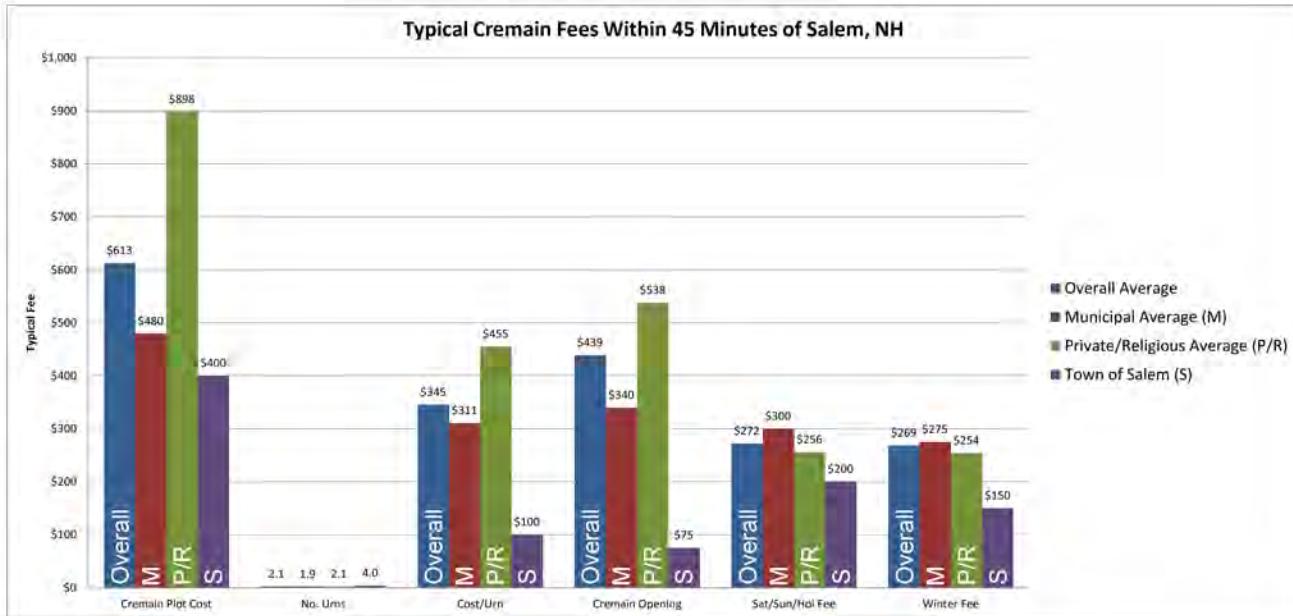
3 Saturday, Sunday, holiday and winter opening fees are in addition to regular opening fees.

4 Burial openings and interments are conducted by a third party, with fees paid directly to the third party.

5 Casketed plots sold as companion plots only.



Note: Saturday, Sunday, holiday and winter opening fees are in addition to standard opening fees.



Note: Saturday, Sunday, holiday and winter opening fees are in addition to standard opening fees.

Appendix A-6

Opinion of Probable Development Cost Worksheets

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Pine Grove Cemetery - Salem, NH

Submitted by: The LA Group

Preferred Master Plan

Conceptual Ballpark Opinion of Probable Development Costs

Item #	Item/Remarks	Unit	Unit Cost	Expansions & Renovations (2018 Dollars)	
				Quantity	Costs
A	Site Infrastructure Improvements				
1	Existing Roadway Reconstruction; assumes full-depth reconstruction of bituminous asphalt paving	LF	\$ 42.86	500	\$ 21,430.00
2	Existing Roadway Restoration; assumes 4"-depth mill & repaving of bituminous asphalt paving	LF	\$ 3.90	500	\$ 1,950.00
3	Existing Roadway Widening; assumes and average widening of 6' of bituminous asphalt paving and includes base	SY	\$ 36.00	405	\$ 14,580.00
4	Existing Stream Crossing Reconstruction; assumes HDPE culvert and rip-rap armored embankment with decorative wooden guardrail, and includes demolition and removal of existing metal culvert, wooden guard rail and headwalls	LS	\$ 6,300.00	1	\$ 6,300.00
5	New Roadway Construction; assumes 12" stone base course, 3" bituminous base course and 1 1/2" bituminous wearing course	SY	\$ 36.00	810	\$ 29,160.00
6	New Stream Crossing Reconstruction; assumes HDPE culvert and rip-rap armored embankment with decorative wooden guardrail (road pvtm is separate)	LS	\$ 5,600.00	1	\$ 5,600.00
	Subtotal:				\$ 79,020.00
B	Entry Drive Realignment				
1	Demolition; includes demo, removal and restoration of existing paving areas	SY	\$ 42.86	310	\$ 13,286.60
2	New Roadway Construction; assumes 12" stone base course, 3" bituminous base course and 1 1/2" bituminous wearing course	SY	\$ 36.00	335	\$ 12,060.00
3	Landscape Screening of Maintenance Building; assumes mixture of evergreen & deciduous trees. Small size.	LS	\$ 4,100.00	1	\$ 4,100.00
	Subtotal:				\$ 29,446.60
C	Reconfiguration of Existing Materials Storage Bins				
1	Demolition; includes demo and removal of existing paving	SY	\$ 42.86	56	\$ 2,400.16
2	Heavy-Duty Asphalt Paving; assumes 12" stone base course, 3" bituminous base course and 1 1/2" bituminous wearing course	SY	\$ 36.00	850	\$ 30,600.00
3	Reconfigured Concrete Block Stoage Bins; assumes reuse of existing concrete blocks	LS	\$ 5.00	1	\$ 5.00
4	Landscape Screening; assumes coniferous trees	LS	\$ 8,600.00	1	\$ 8,600.00
	Subtotal:				\$ 41,605.16
D	Cemetery Entrance Enhancements				
1	Clearing & Grubbing	AC	\$ 16,500.00	0.06	\$ 990.00
2	Topsoil & Soil Amendments	CY	\$ 7.10	50	\$ 355.00
3	Decorative Landscaping; assumes ornamental shrubs and small trees	LS	\$ 11,000.00	1	\$ 11,000.00
4	New Entry Sign; assumes carved wooden sign on a stone base	EA	\$ 1,200.00	2	\$ 2,400.00
	Subtotal:				\$ 14,745.00
E	Burial Improvements in Existing Sections to be Expanded				
1	Clearing & Grubbing for Expansion of Existing Burial Areas	AC	\$ 16,500.00	0.35	\$ 5,775.00
2	Fine Grading & Turf Seeding	SF	\$ 0.42	15,200	\$ 6,384.00
3	Burial Grid Monuments	EA	\$ 305.00	12	\$ 3,660.00
	Subtotal:				\$ 15,819.00
F	New Cremain Scattering Garden				
1	Decorative Designation Plaque; assumes bronze, mount on existing stone)	EA	\$ 3,800.00	1	\$ 3,800.00
2	Walk / Plaza Paving; 5" thick plain concrete paving & 6" gran. base	SF	\$ 8.00	600	\$ 4,800.00
	Optional Memorial Wall with Bronze Inscription Plaques; assumes prefabricated construction	LS	\$ 2,500.00	1	\$ 2,500.00
3	Optional Memorial Wall Concrete Footing & Foundation	LS	\$ 2,500.00	1	\$ 2,500.00
4	Decorative Landscaping; assumes deciduous, ornamental trees & shrubs	LS	\$ 2,000.00	1	\$ 2,000.00
	Subtotal:				\$ 13,600.00
G	New Casketed Burial Section				
1	Clearing & Grubbing	AC	\$ 16,500.00	1	\$ 16,500.00
2	Grading; on-site cut placed as fill	CY	\$ 10.19	1,265	\$ 12,890.35
3	Concrete Headstone Support System; includes underdrain	LF	\$ 70.00	2,850	\$ 199,500.00
4	New Parking Area; assumes full-depth construction bituminous asphalt paving	SY	\$ 36.00	165	\$ 5,940.00
5	Burial Grid Monuments	EA	\$ 305.00	8	\$ 2,440.00
6	Flower Watering Station; match existing (hose bib assembly)	EA	\$ 1,000.00	1	\$ 1,000.00
7	Fine Grading & Turf Seeding	SF	\$ 0.42	43,560	\$ 18,295.20
	Subtotal:				\$ 256,565.55
H	New Cremain Burial Section				
1	New Parking Area; assumes full-depth construction bituminous asphalt paving	SY	\$ 36.00	130	\$ 4,680.00
2	Burial Grid Monuments	EA	\$ 305.00	8	\$ 2,440.00
3	Flower Watering Station; match existing (hose bib assembly)	EA	\$ 1,000.00	1	\$ 1,000.00
4	Dry-laid Stone Walls; assumes average height of 3'	LF	\$ 300.00	300	\$ 90,000.00
	Subtotal:				\$ 98,120.00

Pine Grove Cemetery - Salem, NH
 Submitted by: The LA Group
 Preferred Master Plan
 Conceptual Ballpark Opinion of Probable Development Costs

Expansions & Renovations (2018 Dollars)					
Item #	Item/Remarks	Unit	Unit Cost	Quantity	Costs
I	New Cremain Garden Burial Section				
1	Grading; on-site cut placed as fill	CY	\$ 10.19	1,175	\$ 11,973.25
2	Grading; import and compaction of off-site fill material	CY	\$ 30.00	150	\$ 4,500.00
3	Dry-laid Stone Walls; assumes average height of 3'	LF	\$ 300.00	325	\$ 97,500.00
4	Burial Grid Monuments	EA	\$ 305.00	16	\$ 4,880.00
5	Flower Watering Station; match existing (hose bib assembly)	EA	\$ 1,000.00	1	\$ 1,000.00
6	Decorative Landscaping; assumes deciduous, ornamental trees & shrubs	LS	\$ 4,500.00	1	\$ 4,500.00
7	Fine Grading & Turf Seeding	SF	\$ 0.42	17,000	\$ 7,140.00
	Subtotal:				\$ 131,493.25
J	New Columbaria Plaza (Custom Wall Design and Fabrication)				
1	Clearing & Grubbing	AC	\$ 16,500.00	0.35	\$ 5,775.00
2	Fine Grading	SF	\$ 0.27	14,105	\$ 3,808.35
3	Precast Concrete Niches; assumes 4-niche high double-sided units and includes material, delivery, installation and staining	EA	\$ 155.00	840	\$ 130,200.00
4	Concrete Wall Footings, Foundations and Piers; includes formwork and reinforcement, excavatiu& granular base	LS	\$ 20,000.00	1.00	\$ 20,000.00
5	Niche Covers; assumes granite and include material, delivery and installation	EA	\$ 100.00	840	\$ 84,000.00
6	Stainless Steel Hardware; includes brackets, anchors, rosettes and tamper-proof fasteners	EA	\$ 17.00	840	\$ 14,280.00
7	Stone Masonry Veneer; assumes granite	SF	\$ 76.00	1,000	\$ 76,000.00
8	Cut Limestone Stone Caps	SF	\$ 166.00	450	\$ 74,700.00
9	Cast Metal Row and Column Letters and Numbers; assumes powder coated aluminum	EA	\$ 76.00	36	\$ 2,736.00
10	Stone ID Panels; assumes granite	EA	\$ 276.00	6	\$ 1,656.00
11	Cast Metal Wall ID Numbers; assumes powder coated aluminum	EA	\$ 118.00	6	\$ 708.00
12	Pea Gravel Strip with Underdrain	LF	\$ 21.00	130	\$ 2,730.00
13	Plaza Paving; 5" thick plain concrete paving & 6" gran. base	SF	\$ 8.00	3,000	\$ 24,000.00
14	New Vehicle Pull-Off & Parking Area; assumes full-depth construction bituminous asphalt paving	SY	\$ 36.00	585	\$ 21,060.00
15	Flower Watering Station; to match existing (hose bib assembly)	EA	\$ 1,000.00	1	\$ 1,000.00
16	Decorative Landscaping; assumes ornamental trees, shrubs and perennials	LS	\$ 5,000.00	1	\$ 5,000.00
17	Turf Seeding	SF	\$ 0.15	3,450	\$ 517.50
	Subtotal:				\$ 468,170.85
	Master Plan Subtotal Totals:				\$ 1,148,585.41

Notes/Assumptions:

- * This estimate does not include soft costs (permitting, design and engineering, contractor overhead and profit, other site development costs (erosion and sedimentation controls and mobilization/staging) or contingencies.
- ** This estimate assumes that all work will be completed by a third party contractor, and does not account for any potential in-house or in-kind services that may be completed by the Town staff.

Optional Wayfinding & Signage Improvements

Item #	Item/Remarks	Unit	Unit Cost
K	Wayfinding & Signage		
1	New Street Signs; assumes readily available aluminum signage system	EA	\$ 675
2	New Section Markers; assumes stone	EA	\$ 575
3	New Cemetery Directory Signage; assumes readily available aluminum signage system with full color vinyl decal	EA	\$ 2,500
4	New Regulatory Signage; assumes readily available aluminum signage system	EA	\$ 2,000
5	Miscellaneous Directional/Regulatory Signage; assumes readily available aluminum signage system	EA	\$ 675

Notes/Assumptions:

- * These unit costs are provided for reference only. It is recommended that a comprehensive wayfinding and signage plan be prepared for the cemetery
- ** These unit costs do not include soft costs, other site development costs or contingencies.

Appendix A-7

Cemetery Mapping and Record Software Company Summary Chart

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Cemetery Mapping and Record Software Companies

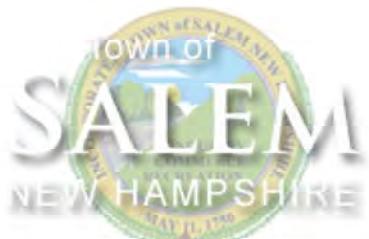
Manufacturer	Contact info Website Address Contact Person	What's Available What do they Provide Do they do GPS/GIS mapping to gather data?	Process Info Available System Requirements	Available Support Services	Cost Info
CMIS Cemetery Management Software	https://www.cimsicemeterysoftware.com/ creator: Ramaker & Associates, Inc. 955 Community Drive Sauk City, WI 53583 1-800-332-7532	Various software options including mapping and record keeping https://www.cimsicemeterysoftware.com/software_overview Offers website design services.	Product info/demo: https://www.cimsicemeterysoftware.com/presentation System requirements to operate the software https://www.cimsicemeterysoftware.com/system_requirements	Annual maintenance and tech support available for an annual fee	On Line Proposal Request Form Order form for basic modules available on website. This includes costs for license and set up, annual maintenance & tech support, etc. for each software option. Website includes request a quote form. Fees are based on size/number of burials in the cemetery.
Legacy Mark	http://www.legacymark.com/ 284 Overhill Drive Chambersburg, PA 17202 1-800-444-9260	Cemetery Office Management module http://www.legacymark.com/cemetery_software_management.asp Mapping module - GIS mapping system to produce an on screen map with data base. Legacy Mark performs the map building. Option for Accounts Receivable module.	System uses Microsoft development Studio for products. Software demo package available upon request.	Option to have them set up system and train staff is available. Option for them to do all the data entry. Support Center available.	Software includes request a quote form. Fees are based on size/number of burials in the cemetery.
Cemsites	http://cemsites.com 3358 Pittsburgh Road Perryopolis, PA 15473 1-877-783-9266	Offers website design services. Core Bundle program designed for small cemeteries. Includes record management, marker manager organizer – see pdf.	Can schedule a free demonstration	Software training available Technical assistance – a manager is assigned to the cemetery to assist	Pricing based on implementation and includes a monthly fee. Can request a quote
Cemetery Management Database	http://www.cemeterydatabase.com/ PO Box 8 Cosmos, MN 56228 320-877-7408	Customized Modules available Migrating data – they offer service to migrate other electronic data into their system, or if no electronic data available will transition handwritten filing systems to their software. Didn't see mention of GIS capability for picking up headstones.	Grave Mapping: 1. Plot mapping, record and website link available – “Dashboard” 2. “Walk to Site” software available to find specific grave. 3. virtual tours option Finance Module available.	Three programs designed by size of cemetery Programs are shipped on CD's and installs on Microsoft Windows 7, 8, 8.1 or 10. Required 512 MB RAM and 50 MB hard disk space Demos no longer available.	Service options include options to purchase: -per incident -3 month support -6 month support Support conducted via email though a designated technical

		Mapping done from paper maps, aerial views or pictures. No GIS capability. Maps appear to be black and white (not color coded). CM2700 – up to 100,000 and can be over multiple cemeteries or that quantity per cemetery.	Appears with use of excel spreadsheets, data is static and not interactive with maps and other components.	support location. Onsite training for program implementation is available.
MBS Memorial Business Systems	www.memorialbusinesssystems.com 1889 General George Patton Drive Ste. 400 Franklin, TN 37067 615-373-0110	Packages include: Nexus 4 – designed for combination cemetery and funeral home use Nexus Express – for small cemeteries that don't need financial or accounting features of Nexus 4. See PDF. MBS Report Writer IMAP – GIS based mapping. See PDF. DeedIt! – prints deeds for plot sales Blaze (tracks cremation process) and TRACS (fiscal info for funeral homes) these add on programs not applicable. Option to be part of webCemeteries.com data base. This is a historic data base with idea that leveraging the historic resource is a marketing tool.	Microsoft Partner MBS either imports existing data or scans cards and documents into their system.	Training is included with each new contract. Additional classes are also available on an as needed basis. Participation in webCemeteries.com is \$1,800/year. Need to contact them for pricing.
Pontem Software	www.pontem.com 215 Dexter Road Eaton Rapids, MI 48827 Sales: 888-742-2378 Support: 888-237-8531	Cemetery Management Software options: Cemetery Manager GIS or standard mapping available Online/Cloud record backup	System requirements: Windows 7 or Professional, Screen resolution of 1024x768, Memory/RAM 4GB, Hard Disk – 2 GB free space, high speed internet access	On line training and support available. Scaled or tiered pricing. Submit request for proposal.
Plotbox	http://plotbox.io/ 200 Portland Street Boston MA 02114 (also have offices in San Francisco and Ireland) 857-301-7810	Mobile Applications and Kiosk Information System also available. Probably not applicable here. Software options: Data migration Mapping – several options including drones, cadd, etc. see pdf. Record management Accounting	Can request a demo Training and support available. Various packages and plans available.	Caters to public sector clients.

Appendix A-8

Existing Cemetery Regulations

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Published on *Salem NH* (<http://www.townofsalemnh.org>)

[Home](#) > [Departments](#) > Cemeteries > Cemeteries

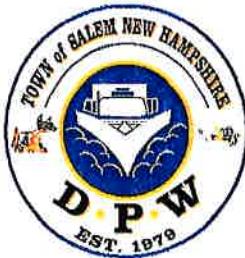
Cemeteries

Cemetery Guidelines

- **General Rules:** Drive only on roads and at a rate of speed not to exceed 10 MPH. Dogs are not allowed to run at large. Do not walk on grass, trespass upon lots or grounds or commit any nuisance. Do not pick flowers, either wild or cultivated. No bicycle riding, horseback riding, motorcycles, trail bikes, skate boards or other such equipment allowed.
- **Neglect:** If the owner of a lot neglects to maintain the lot, and the condition detracts from the appearance of the Cemetery, the Superintendent may have the lot placed in order.
- **Plantings:** The planting of evergreens or shrubs is subject to the approval of the Superintendent. No rose bushes, trees or hedges are permitted.
- **Monuments:** Only one central monument may be placed upon a lot. Its location and the building of the foundation; therefore, shall be under the direction of the Superintendent. All grave markers and cornerstones must be set flush to the ground. All monuments must have a foundation.
- **Foundations:** Foundations for monuments and headstones will be constructed under the supervision of the Superintendent. This should be on written order from dealers who furnish monuments.
- **Urns, Receptacles, etc.:** Urns and receptacles for flowers will be inverted when not in use. If permitted to become unsightly, or if not in proper use, they will be removed. Flowers will be removed when they become unsightly. Urns must be removed when a central monument is installed, as the same area is reserved for one or the other. The Cemetery is not responsible for damage or theft of urns, shrubs, wreaths, receptacles or baskets.
- **Glass Containers:** The use of glass containers is not permitted, as they present a danger to employees.
- **Number of Containers:** The placing of flower pots and containers on lots isn't permitted. These should be placed in a large urn or one container for the general appearance of the Cemetery, and to keep the grass from drying out. The planting of flowers is only permitted in front of the stone, all other digging, sod removal, etc. is not permitted

- **Enclosures:** No lot shall be enclosed by any fence, railing, wall , hedge, ditch or embankment.

Source URL: <http://www.townofsalemnh.org/cemeteries>



SALEM PUBLIC WORKS DEPARTMENT

December 12, 2017

RE: Scheduling of Burials in the Town of Salem, NH

Dear Funeral Directors and Staff,

Please be advised that the following rules must be adhered to before a funeral is scheduled with the Town of Salem, NH.

- A request must be made **72 hours** prior to the scheduling of the funeral.
- **Do not** finalize plans for the funeral before talking to the Cemetery Foreman; (example scheduling church, placing notice in newspaper, confirming with family, etc.)
- Effective December 1st, the winter rate is **\$150** in addition to the normal charges.
- We are extremely busy during the winter months and we will schedule your funeral when the time permits. The Cemetery staff in addition to the Cemetery is also responsible for the care and maintenance of all Town parks and properties and are also required to plow during storms, they do not just handle the Cemetery, therefore staff is limited
- Winter storms take priority over funerals.

Please feel free to contact the Cemetery Foreman if you have any questions. We appreciate you adhering to these rules. Failure to do so, could result in your burial not being granted for the time you arranged without scheduling with us first.

Sincerely,


Dave Wholley,
Deputy Director
Department of Public Works

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