



Tree Management Plan Proposed Recommendations - 10/1/16

Mount Hope Cemetery (Rochester NY)

Below is a list of 14 recommendations proposed for the tree management plan currently under development for Mount Hope Cemetery (MHC). These are submitted *in brief form* for review, and meant to convey *concepts only* at this stage. Also note that these recommendations will be sorted and prioritized into long and short term goals (they are in no particular order currently).

We recommend the following:

1. Enhance Existing Cyclical Tree Care Program. An eight-year care cycle, as is currently in place at MHC, is a desirable time period in which to generally keep trees vital and safe. However, other landscape management needs of the cemetery as identified in the recent cemetery master plan (**MP**) and Cultural Landscape Report (**CLR**) could be addressed on the same rotation during these preventive tree maintenance operations. This could include work to address invasives, installation of buffer plantings, maintenance of views, clearance of monuments, and tasks related to specific needs and higher care afforded to historic trees (i.e. fertilization, cabling and bracing, core aeration, and insect and disease control applications, etc.). Examples will be provided in the plan.

2. Inspect/Monitor Historic Trees Annually. Historic trees comprise over 10% of the landscape tree population, define the character of MHC, are part of the cemetery's cultural history, and contribute to the financial stability of cemetery operations revenue. High-value assets such as these warrant a detailed annual inspection to proactively revealing potential problems, and can result in cost-effective actions that reduce risk and increase tree longevity.

3. Create a Position for a Dedicated Cemetery Arborist. Aside from an annual overall risk check, each cemetery tree currently only effectively receives a professional evaluation by the city arborist once every eight years and after perhaps after storm events. Proactive landscape tree management, especially historic tree management, requires an experienced certified arborist available on a regular basis to perform tree condition monitoring as well as other tasks critical to the success of Mt. Hope Cemetery's urban forest. A number of options can be considered here, including funding another city arborist (either full time or part time) dedicated to MHC, or sharing a dedicated arborist position with

Riverside or other city asset in need. Or if hiring is not realistic, this role could be filled in by a qualified urban forestry consultant on an as-needed basis. Cost ranges will be provided in the plan.

4. Formalize a Structure for Spending Decisions on Tree Care vs. Removal. The decision whether to remove a mature tree or invest more maintenance funds is a difficult one for any landscape manager. However, rational decisions can be made if a variety of factors are taken into thoughtful consideration, such as historic value, current risk level, condition of the tree, the location of the tree (highly visible or not), function (framing a view, shading a building, etc.), and benefits provided by the tree. When considering a number of variables, a “cost-benefit” analysis can be done resulting in a defensible decision. This system should be compatible with the city’s policy as defined in the Forestry Administrative and Technical Services Manual and should be documented and maintained in MHC records. A recommended decision structure will be provided in the plan.

5. Formalize a Tree Succession Strategy. In an active cemetery landscape, tree succession will only happen with purposeful planning and planting. Considering the age of many of MHC’s trees, storm events, climate change, and future development and improvements, tree loss is inevitable. A tree succession strategy should be developed to keep the tree population and its many benefits sustainable. Using inventory data, on-the-ground observations, and goals/objectives defined in the CLR & MP, this strategy will include a species list and recommended structure for installation work to maintain/restore historical integrity, achieve Arboretum Level II status, and bringing the overall species distribution within the cemetery to recommended standards. Details on the recommended succession strategy will be provided in the plan.

6. Reinvigorate the MHC Historic Tree Program. The historic trees are as intrinsically linked to MHC’s past and future as are the people laid to rest there. Without these venerable trees, MHC would be an entirely different place. A program directed at the promotion of these trees is highly useful for overall cemetery promotion, but also for conveying the value of MHC as an asset of city and obtaining funding for future projects and tree care. Work could include updating the brochure with current photographs and information about the most well-known and interesting historic trees, investigating potential state or national champion status, utilize a historic tree walk app that brings together the locations, photographs, species, facts, and historic descriptions and updating/completing plaques for historic trees. This work can be done to include local historical groups and/or local businesses (particularly ones established in Rochester over 100 years ago) or other donors to “adopt” a historic tree to help fund its preservation.

7. Make Case for and Get More Funding. Currently there is an admitted and great need for more dedicated tree management funding for MHC, as well as a need for the funding to be steady and reliable. Beyond the “catch-up” projects needed, there are ambitious plans for restoring the landscape as laid out in the MP & CLR. While staff and supporters recognize the critical lack of funding, others in the community likely do not. We will analyze budget shortfalls, justify the need, set program priorities, and effectively communicate the gaps in funding. This information can then be used externally to a

wide regional, and even national, audience to appeal for funding. Funding needs and suggestions for partners and sources will be provided in the plan.

8. Engage the Public to Support Tree Care and Planting. Citizens' view of MHC are critical as they are voters, can talk directly to elected officials, have access to their own money and resources, and benefit from the trees and landscape in MHC. It is critical to actively engage the citizens of Rochester and Monroe County in the future of MHC's urban forest. Ideas for public engagement will be provided in the plan.

9. Include the Value and Needs of MHC's Trees into the City Comprehensive Plan. As the city is currently in the process of updating its comprehensive plan, now is the time to make sure MHC and its urban forest is acknowledged and recognized - both as an existing asset and the existing shortage of resources. The updated plan, Rochester 4.0 - Our Neighborhoods, Our Future, seeks to establish a cohesive vision that will serve as the roadmap to guide the city for years to come, with an overall time frame of 10 years. MHC and its urban forest needs to be part of the city's vision of the future - even if only acknowledged as part of the overall urban forest. Every effort should be made to bring information about tree benefits and management needed to the table at public meetings since Rochester 4.0 will be a primary tool used to help promote the city, inform policy decisions and prioritize city investments. Given the history of the trees and the longevity of trees, MHC's urban forest is the "poster child" for Rochester 4.0 slogan --- "Our future is as bright as our past". Points of connection between MHC and Rochester 4.0 will be provided in the plan.

10. Prioritize and Professionalize Tree Preservation and Protection During Construction. The MP (Chapter 15 Site Design Guidelines) specifically recommends needed infrastructure improvements, such as road reconstruction and closures, installing steps on slopes, and creating new walkways. There may also be future utility repair or improvement, ADA compliance, and other hardscape projects within the grounds of MHC that could negatively impact trees. Equal to providing timely maintenance and plant health care, one of the most critical actions a grounds manager can take to preserve trees is to prevent them from being damaged by construction. This concept will be discussed further in the plan.

11. Institute a Young Tree Care Program. The young tree population in MHC is likely to grow in numbers given a renewed emphasis on successional tree planting. Getting trees purchased and planted is the "easy" part; keeping them well tended until they are established is the challenge. Professional, proactive landscape managers will not allow additional tree planting unless there is a sufficient amount of funding for maintenance and a detailed program for what and when maintenance will occur and who will do the work. This concept will be discussed further in the plan.

12. Further Evaluate Structural and Vegetative Solutions to Erosion. As the name implies, Mount Hope Cemetery, especially the north section, is built on hilly topography and thus subject to erosion. While vegetation can be an effective natural solution to prevent erosion on steep slopes, MHC has areas where human use, rainfall, and invasive plants are exacerbating erosion issues. Although tree planting and removal of invasives in certain areas may help alleviate some of the erosion problems, the

extremely steep slopes in MHC (especially along roads) cannot depend solely on trees as a solution. These issues warrant further exploration with a structural and soil engineer.

13. Perform Woodland Restoration and Management. The woodland massings are part of the ecological and cultural history of the cemetery. As original features and assets of the grounds, the remnant forested areas need to be preserved and maintained. Utilize traditional forest management techniques, like “timber stand improvement” to restore the vitality of the woodlands. Activities include removal of invasive trees and plants, selective removal of poor quality trees to allow desirable trees to thrive, and removal of vines. Through woodland and natural areas management ideas include become an Audubon Certified Sanctuary, adding trails, and more. This concept will be discussed further in the plan.

14. Create a Training Program for Staff and Volunteers. The work involved in tree care, tree planting, invasive plant control, and habitat restoration has to be performed by trained, knowledgeable persons. MHC should have a comprehensive, ongoing, and consistent training program for both staff and volunteers. A quality training program is essential for keeping workers on the grounds safe, efficient in their work, and motivated about learning new skills. Training does more than just educate workers. Training supports professional development and job advancement of the staff, and positively influences attitudes and behaviors of volunteers. This concept will be discussed further in the plan.