

Bartlett Tree Experts Case Study: The Emerald Necklace Conservancy

PROJECT SUMMARY

Client: Kyle Zick Landscape Architecture, Inc.
The Emerald Necklace Conservancy

Location: The Emerald Necklace park system,
Boston, MA area

Client & Property Needs:

- Information to Better Inform New Master Plan
- Tree Inventory and Assessment
- Plan to Identify and Reduce Tree Risk
- Tree Population Characteristics

Return on Investment:

- Estimated \$67,730,872 Asset
- Inventory and Assessment of 7,000 Trees
- Removal of 264 Hazardous Trees
- Information for Fundraising Events
- \$1.5 Million Investment in Tree Management

Project Narrative

The Emerald Necklace is a historic park system that was designed by Frederick Law Olmsted. The park is located within portions of the city of Boston, MA, the town of Brookline, MA, and property maintained by the Department of Conservation and Recreation. The park system includes street trees, trees in medians, open-grown park trees, and trees in natural and wooded areas ranging from newly planted to over-mature in age. The group that oversees the park is the Emerald Necklace Conservancy in Boston, MA. The conservancy is a private non-profit stewardship organization that was founded to maintain, restore, and protect the historic Emerald Necklace park system. In 2013, Kyle Zick Landscape Architecture, Inc. (KZLA) was hired to assist the Emerald Necklace Conservancy in a large-scale master plan for the park system. KZLA's approach to the master plan was to first conduct a tree inventory and assessment throughout the park to determine what trees were there, what condition they were in, and determine tree risk and recommended mitigation to better inform the new master plan. KZLA decided to partner with Bartlett Tree Experts and have the Bartlett Inventory Solutions team conduct an initial tree inventory and assessment throughout the park system.

Inventory Project & Results

In fall of 2013, the tree inventory process started with numerous meetings with members from all parties involved to customize the entire inventory approach. The inventory was completed in early winter of 2013 with 7,000 trees being inventoried and assessed for a cost of \$80,000. The asset value for the 7,000 trees was estimated to be \$67,730,872. Approximately 12% of the population was determined to be in need of removal, 14% of the population received risk ratings of Extreme, High, or Moderate, and 64% of the population was in less than good health. The inventory also resulted in 113 tree species being identified throughout the park system. Thirty-four specimen trees (unique species or specimen size) were also identified.

Return on Investment

Since completion of the inventory, the findings and recommendations have been used to assist in fundraising and tree management efforts. The investment into tree management has totaled \$1.5 million. To date, 264 hazardous trees have been removed, therefore increasing safety throughout the park system. Approximately 1,700 trees have been able to be pruned, increasing safety and the overall condition throughout the park system. Tree health improvement projects have started with 70 trees having had soil remediation take place, aimed at reducing soil compaction, correcting soil nutrient issues, and improving overall soil condition to promote root growth. New planting projects have also started to a sum of \$190,000, helping to aid the Emerald Necklace Conservancy in establishing a new tree canopy that will help mitigate tree loss due to necessary removals. Overall, the tree inventory, assessment, and management recommendations provided Kyle Zick Landscape Architecture, Inc. with the basic information needed to develop a well-informed master plan, and helped create an easy to follow plan for the Emerald Necklace Conservancy to reduce risk and improve overall tree health throughout the park system.

"I have hired Bartlett Tree Experts repeatedly (for projects that range from safety tree pruning, tree planting to soil remediation and soil rehabilitation) because the level of quality personalized service I consistently receive is outstanding and because the work that they have done for the Conservancy and continue to do for us, is based on solid ground breaking science driven by the extensive and in-depth research the company independently does and its unrelenting commitment to excellence in the field. Basically, this is a reliable, dependable, trustworthy and highly competent company."

**- Ray Oladapo-Johnson, Director of Park Operations,
Emerald Necklace Conservancy**