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City Cemeteries Phase 1 Study

City Council Presentation

2/20/14

Beechwood Cemetery

Maplewood Cemetery

Introduction

Status of CJT Final Phase 1 Planning Study

- Coulter Jewell Thames (CJT) and subconsultants have spent many months investigating and documenting conditions in the cemeteries
- Phase I Study is now complete

Executive Summary and Review of Findings

Problems at each of the two cemeteries are similar:

- Failing stormwater systems and roads
- Buildings in need of upgrades
- Lack of adequate storage/maintenance facilities
- General physical experience needs improvement

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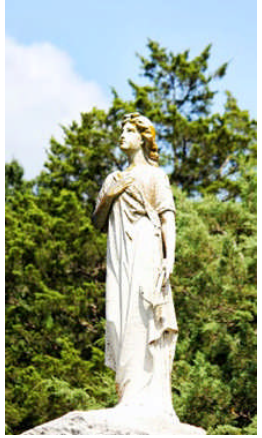

Background

Project Instigation

- CJT led investigations and analysis of existing conditions and needs at the two cemeteries.

Status of CJT Final Phase 1 Planning Study

- 2013 Phase 1 Planning Study completed in February 2014.

  The study focuses on:
  - Investigation and analysis of facility and site issues
  - Prioritization of recommended improvements
  - Concept plans
  - Cost estimates

Team

- Landscape architects
- Architects
- Civil and structural engineers
- Hazardous material inspector
- Underground pipe camera crews

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Maplewood Cemetery

c.1920

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Maplewood Cemetery

2013

Methodology

Investigation and Analysis

- Extensive investigation phase
- Deficiency lists compiled
- Recommendations for solutions
- Priority ranking for repair, replacement, and/or improvement

Cost Estimates

- A recommended scope of work for each improvement
- Cost estimate assigned to each item
- Cost estimates based on 2013 construction estimates
- Includes contractor mobilization, general conditions

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Findings

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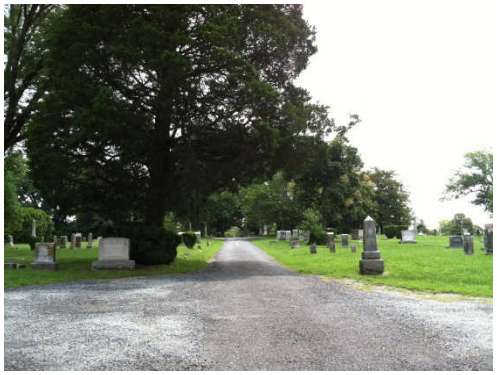
Basic Numbers

- Cemeteries have been established and under the care of the City of Durham since 1872 (Maplewood) and 1924 (Beechwood)
- Land area for the two cemeteries totals 143.5 acres, 100 acres are active
- 5.5 miles of driveways/roads within the two facilities
- Responsibility for road and storm infrastructure maintenance has fallen into a gray area
- Buildings are over 50 years old
- On average there are 340 burials a year



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Prioritization Methodology

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Each recommended improvement was assigned a priority ranking based on the following:

1 – Public Safety/Code Compliance/ADA Compliance

Ensures public safety and compliance with codes

2 – Deferred Maintenance/Aging Systems

Improvements to systems and equipment in danger of failure that could impact facility operations

3 – Building and System Upgrades to Improve Operations

Work that would improve facility operations, energy efficiency, and effectiveness

4 – Exterior and Interior Refurbishment

General aesthetic improvements

5 – Functional Changes

Changes in how the facility is used

Priority 1 and 2 Recommendations

Beechwood Cemetery

- Repair/replace failing roadways
- Repair/replace failing storm drain systems
- Provide a central covered pavilion for non-graveside services
- Contain soil storage and implement erosion control protocol
- Accessibility upgrades
- Improve safety of ingress and egress

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Priority 1 and 2 Recommendations

Maplewood Cemetery

- Repair/replace failing roadways
- Repair eroded burial areas
- Repair/replace failing storm drainage systems
- Repair/replace failing retaining walls
- Demolish condemned building
- Repair remaining buildings
- Contain soil storage and implement erosion control protocol
- Repair/replace damaged concrete walkways
- Accessibility upgrades
- Improve safety of ingress and egress
- Improve after hours security

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Priority 3, 4, and 5 Recommendations

Beechwood Cemetery

- Add parking at Office
- Add trash and soil storage facility
- Screen operations facilities from the public parts of the cemetery
- Improve signage within cemetery
- Improve entry signage and entry experience
- Improve the visitor experience- add seating, shade, and water
- Add perimeter landscape screening
- Add columbarium space

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Priority 3, 4, and 5 Recommendations

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Maplewood Cemetery

- Add parking at Office
- Renovate the office for accessibility compliance
- Add maintenance and repair building, and outdoor storage
- Separate and screen operations facilities from the public parts of the cemetery
- Site drainage improvements
- Improve entry signage and entry experience
- Improve the visitor experience - add seating, shade, and water
- Provide pavilion for non-graveside services
- Add columbarium space

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Beechwood Cemetery Cost Estimate

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Priority Ranking	Cost Estimate
1. Public Safety/Code Compliance	$ 338,950
2. Deferred Maintenance	$ 305,000
3. Building System Upgrades	$ 125,000
4. Refurbishment/aesthetic Improvements	$ 70,000
5. Functional Changes	$ 93,000
Total	**$ 931,950**

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Maplewood Cemetery Cost Estimate

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Priority Ranking	Cost Estimate
1.Public Safety/Code Compliance	$ 1,416,000
2. Deferred Maintenance	$ 2,000,000
3. Building System Upgrades	$ 358,500
4. Refurbishment/aesthetic Improvements	$ 492,000
5. Functional Changes	$ 525,000
Total	**$ 4,791,500**

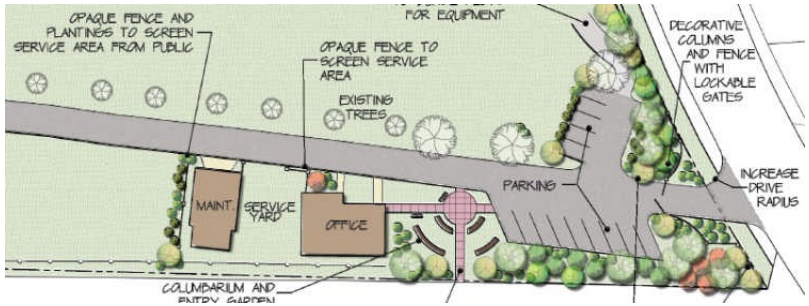
Recommendations

Identify Funding Source for Priority 1 Items

- Initiate design and construction for Priority 1 projects – both cemeteries
- Initiate design and construction of security gates at Maplewood

Budget and Plan for Priority 2-5 Repairs

- Multi-year plan to deal with Priority 2-5 repairs/upgrades and to spread the cost over multiple years

Initiate Ongoing Maintenance and Preventative Protocols

- Establish maintenance / preventative maintenance / staffing / operations protocols and operating budgets to address maintenance needs