Wyman Park Dell
Master Plan

Wyman Park Dell Master Plan

June 2006

Wyman Park Dell Master Plan Steering Committee

Mahan Rykiel Associates
Biohabitats
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www.wymanparkdell.org

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PART 4: APPENDICES

PART 1: EXECUTIVE SUMMARY

I. OVERVIEW

Mahan Rykiel Associates was retained by the Wyman Park Dell Master Plan Steering Committee to prepare a long-range master plan for Wyman Park Dell. The Steering Committee is comprised of partners that include Friends of Wyman Park Dell, Baltimore City Department of Recreation and Parks, Baltimore City Department of Planning, Friends of Maryland's Olmsted Parks and Landscapes, Charles Village Civic Association, the Remington Neighborhood Alliance, Johns Hopkins University and the Baltimore Museum of Art. The master plan was made possible by funding by many of these partners, supplemented by grants from the Goldseker Foundation and The Baltimore Community Foundation.

The Steering Committee was formed in 2004 through the initiative of the Friends of Wyman Park Dell (FWPD) as long-time stewards of the park. Wyman Park Dell is a 13 acre park located in the Charles Village and Remington neighborhoods of North Baltimore. The "Dell" is a cornerstone for the entire Wyman Park system and is a vital open space resource for the adjacent communities, institutions and all of Baltimore City.

The purpose of the master plan is to provide a tool for FWPD and the City to protect the park and guide park enhancements over the next fifteen years or longer. Because the master plan is far-reaching, this report identifies individual projects that could be implemented incrementally as funds become available and project "cheerleaders" emerge.

The process for the master plan included an assessment of the park, development of alternatives and stakeholder leadership interviews and three "town hall meetings" to get input on the plan and planning process.

The master plan places special emphasis on the fact that this is an historic Olmsted Brothers park which retains much of its integrity from the original 1911 design. However, the manner in which citizens use cities and parks is quite different today than it was nearly 100 years ago when the Olmsted plan was developed. To that end, the principles of Crime Prevention Through Environmental Design, CPTED were incorporated in the plan to make the park more visible and inviting to appropriate park activity.

There are several guiding principles that helped to define the framework for the master plan:

1. *The Dell is part of the larger Wyman Park open space system.*

2. *The overall design integrity of a well-defined lower lawn defined by vegetated slopes must be maintained.*

3. *To be successful, the Dell must accommodate a broad range of activities and feel safe for all ages.*

4. *Visibility of the park— both literally and figuratively – must be enhanced.*

5. *The Dell must be recognized as a valuable city-wide resource in addition to a neighborhood resource.*

6. *The long-term sustainability of the park's habitat and vegetation, particularly its tree canopy, mustl be ensured throught a tree/vegetation replacement strategy.*

7. *The park must be managed and protected.*

II. MASTER PLAN

General Enhancements

Throughout the park, a number of general improvements are needed: signage that is well-placed and designed to be visually unobtrusive; new park furniture (benches, trash receptacles, bike racks and dog bag dispensers); electrical and water hookups in key locations for events; and supplemental tree plantings using predominantly native species.

The Dell is generally comprised of an *upper park* and a *lower park* but is further subdivided into areas with their own distinct character, challenges and opportunities. Therefore, the final master plan is divided into these sub areas with recommendations for each. Below is a summary of the key recommendations for each area as illustrated in *Exhibit A, Illustrative Master Plan and Exhibit B, North Entrance Sketch:*

The Lower Lawn

The lawn is the signature of the Dell. Its sweeping, open character will be preserved and enhanced. Drainage will be improved and the turf stabilized. A temporary stage site is planned adjacent to the stone wall at the base of the slope in front of the BMA. Here, electrical and water hookups (discreetly located) will be provided to facilitate concerts and performances. The lawn and gentle slope on the east side offer a natural amphitheatre seating area to view performances on a temporary stage. This east slope area will be designated a "dog free zone." Dog owners will be encouraged to walk their dogs on the pathways and lower lawn. The stone wall surrounding much of the lower lawn is in poor repair and will be reconstructed in the drywall manner to improve drainage control of the slopes.

Wooded Slopes

The wooded slopes will be protected and enhanced to increase the biodiversity of the park and to address erosion problems. A few new pathways will be added creating linkages from Art Museum Drive to the lower lawn in areas that are currently acting as cut-throughs and causing some of the erosion problems. One path will be in the approximate location of one originally planned as part of the

Olmsted plan. Sledding routes on the east slope near the playground will be protected, but fenced off during non-winter months to encourage the reestablishment of native groundcovers. Invasive plant materials will continue to be removed and replaced with native groundcovers and understory plantings. In some areas, particularly at entrances to the lower lawn, plantings will be restricted to low groundcovers and high canopied trees to allow views into and out of the lower lawn. *Refer to Exhibit C, Planting Zones Diagram.*

Union Monument Plateau

This area is located at the southeastern corner of the park. Key features will include a broad promenade that can accommodate benches for people-watching, chess tables and space for vendors during events such as the Charles Village Festival. The promenade will follow the alignment of the roadway *sweep* that will be eliminated as part of the Charles Street Reconstruction. In addition, this area will accommodate an expanded playground and other programmed activities. This is one of the few areas in the Dell that can accommodate structures (such as playground equipment) while not detracting from the overall visual integrity of the park. Special lighting will illuminate the Union Monument at night, and a new pathway will provide better access to the lower lawn. Many understory trees that block views into the lower lawn from this area will be removed and replaced by taller canopy trees. In addition, most of this plateau will be enclosed by a 4' ornamental fence to create a safe and dog-free zone for children and adults alike, much like that in Federal Hill Park.

West Gateway

The southwestern corner of the park will include an enhanced entrance to the lower lawn, with opened sight lines and an accessible ramp to accommodate seniors and those with disabilities. The plan recommends eliminating the broad roadway sweep linking 29th Street and Howard Street by changing the geometry of the roadway and enhancing the parking area to discourage high speed *cut through* traffic which creates a barrier between the Dell and the triangle across from Wyman House. This recommendation, however, will be studied further with the community, institutions and the Transportation Department. Regardless of what happens with the "sweep," a pronounced pedestrian crossing from the triangle through the parking area will be provided to make the Dell more accesisble to seniors living in Wyman House. In addition, a seating area/shade garden within the triangle is also planned to serve the seniors living in Wyman House.

West Crescent

This is the parkland separated from the rest of the park by Howard Street. Enhancements to this area include the widening of the sidewalk along Howard Street and Wyman Park Drive, removal of the spur road at the northern end of the crescent and supplemental tree plantings to provide replacement canopy for the aging trees. The feasibility of creating a traffic circle at the intersection of

Wyman Park Drive/Howard Street and Art Museum Drive to provide safer pedestrian and vehicular movement may be studied in more detail and vetted with the community and Department of Transportation.

Lee & Jackson Plateau

Similar to the Union Plateau, the Jackson & Lee Monument area could accommodate some additional activities such as horse shoes for the seniors living in Wyman House. The plan also calls for interpretation of the monument, special lighting to illuminate the monument, ADA access to the monument and native groundcover plantings to replace the lawn which is struggling beneath the tree canopies. Supplemental tree planting will provide replacement canopy for many of the maturing trees in this area.

Art Museum Drive Frontage

The relationship between the BMA and the Dell will be enhanced along Art Museum Drive with the addition of an overlook opposite the original main entrance of the BMA. This will engage more visitors to the museum with the Dell. Direct access will be provided in a series of paths that lead out from this overlook. In addition, the open slope and vista in front of the BMA will be enhanced and stabilized with native meadow grasses and groundcovers.

Charles Street Frontage

The Charles Street frontage and the intersection of Charles Street and Art Museum Drive provide some of the most exciting opportunities for the Dell. Planting low native shrubs and groundcovers will allow sweeping views to the Lower Lawn from Charles Street. The plan proposes a major new entrance, opposite 31st Street, coupled with a new pavilion that provides refreshments and outdoor seating at street level, and park operations and restroom facilities on the lower level. Cities worldwide have recognized the importance of the availability of refreshments in a park and their role in attracting positive park activity. This frontage is one area of the Dell that can feasibly accommodate the activity and be economically viable. The pavilion would be on grade with the Charles Street commercial area thus avoiding conflict with the Dell's overall integrity.

III. IMPLEMENTATION

While the Wyman Park Dell Master Plan is complete, its implementation will take many years. Implementation requires phases for various projects and will depend not only on the stewardship of the Friends of Wyman Park Dell, the Baltimore City Departments of Recreation and Parks and Planning, but also on the partnerships already developed with Charles Village, Remington, the Baltimore Museum of Art, Johns Hopkins University and many others.

Project priorities will vary depending on available funding and the efforts of project "champions"— the key stakeholders most interested in implementing a particular project. However, some early priorities should be considered, as successful completion of these will help to change perceptions of the park, increase the number of park stakeholders, help maintain momentum for future improvement projects and help build credibility for all of the park support groups.

Critical first steps should include changing perceptions of the park by focusing on park edges and other critical elements, defining ways to improve park management, establishing "replacement trees" for the mature canopy areas, removing invasive species and promoting the park and the master plan. Priorities to consider include the following:

1. *Begin planting program to secure future of large, canopy trees.*
2. *Develop an invasive plant management strategy.*
3. *Stabilize eroding slopes with plantings.*
4. *Provide drain for wet area in Lower Lawn.*
5. *Repair walks and steps with temporary or permanent treatment, depending on context within master plan.*
6. *Repair stone wall.*
7. *Widen existing sidewalk along West Crescent*
8. *Design and construct gathering area/shade garden in West Gateway area.*
9. *Design and fence the Union Monument Plateau area.*
10. *Develop comprehensive sign system.*
11. *Develop bench, tree and garden sponsorship program and corresponding fund-raising campaign.*
12. *Formalize organization of Steering Committee partnerships.*
13. *Participate each year in Baltimore City C.I.P. planning process.*
14. *Work with Baltimore City Planning Department to ensure that Dell is protected as a park.*
15. *Develop events program.*
16. *Celebrate each success.*

ALTERNATE WEST GATEWAY PLAN:
Maintain Existing Road Configuration (Enhanced Pedestrian Crossings)

LEGEND

A. NORTH ENTRANCE, PAVILION & RAMP (Includes Lower Level Restrooms and Storage)
B. ORNAMENTAL STEEL RAILING WITH STONE PIERS
C. WYMAN PARK DELL SIGN
D. ART MUSEUM DRIVE NORTH ENTRANCE & PATH
E. PARK OVERLOOK
F. HILLSIDE MEADOW
G. TEMPORARY STAGE SITE
H. PROPOSED WOODLAND PATHS/CONNECTION TO PARK OVERLOOK
I. RECONSTRUCT STONE WALL
J. PROPOSED PATH TO LOWER LAWN
K. ART MUSEUM DRIVE REPLACEMENT TREES
L. LEE & JACKSON MONUMENT INTERPRETATION & SEATING AREA
M. EXPANDED SOUTHWEST ENTRANCE & RAMP
N. RECONFIGURED PARKING & ENHANCED PEDESTRIAN CONNECTION (Dependent on Future Study - See Alternate Plan)
0. SEATING AREA & SHADE GARDEN
P. PROMENADE WITH BENCHES & GAME TABLES (Staging Area for Festivals)
Q. RECLAIMED LAWN (Charles Street Reconstruction)
R. PICNIC AREA & EXPANDED PLAYGROUND
S. FUTURE PLAY AREA/ACTIVITY EXPANSION
T. PROPOSED PATH
U. UNION MONUMENT AREA ORNAMENTAL FENCING (42" Height, No Dog Zone)
V. REPLACE UNDERSTORY TREES WITH SHADE TREES
W. EXPANDED 30th STREET ENTRANCE
X. DOG FREE ZONE (Amphitheater Slope)
Y. SELECTED THINNING OF CHARLES STREET EDGE
Z. ADDITIONAL CROSSINGS AT 30th/31st STREET (To be explored as part of Charles Street Reconstruction Project)
AA. PROPOSED PATHS
BB. REMOVE ASPHALT ROAD
CC. EXPANDED 5-FOOT CONCRETE SIDEWALK
DD. MAINTAIN SLEDDING ROUTES
EE. CLEAR VISIBILITY AT ENTRANCES

Wyman Park Dell *Master Plan*

Exhibit A: Illustrative Master Plan

Scale: 1"=50'
0' 25' 50' 100' 150'
North

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Exhibit B: North Entrance Perspective Sketch

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LEGEND: Planting Zones

A. WOODED SLOPES
(*Naturalistic Planting for Erosion Control, Wildlife & Buffer)*

A1.TRANSITIONAL VERTICAL STRUCTURE
(*Lower-branched Understory for Meadow Foraging Birds)*

A2. BERRY-BEARING TREES AND SHRUBS
(*Berry-bearing Plants to Attract Birds)*

B. LOW WOODED SLOPES
(*High Canopy Trees, Low Growing Shrubs and Groundcovers within Important View Corridors*)

C. WOODLAND EDGE GROUNDCOVER
(*Naturalistic Groundcovers and Low Shrubs for Slope Stabilization in Shade)*

D. ORNAMENTAL GROUNDCOVER
(*Low-growing Substitute for Lawn in Areas of Deep Shade*)

E. ORNAMENTAL PLANTINGS
(*Low, Flowering Shrubs, Groundcover, Seasonal Color and Bulbs at Entrances and around Monuments)*

F. HILLSIDE MEADOW
(*Meadow Grasses and Flowering Shrubs on Hillside*)

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Exhibit C: Planting Zones Diagram

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PART 2: INTRODUCTION, BACKGROUND AND ASSESSMENT

I. INTRODUCTION

A. Overview

Mahan Rykiel Associates was retained by the Wyman Park Dell Master Plan Steering Committee to prepare a long-range master plan for Wyman Park Dell. The Steering Committee is comprised of partners that include Friends of Wyman Park Dell, Baltimore City Department of Recreation and Parks, Baltimore City Department of Planning, Friends of Maryland's Olmsted Parks and Landscapes, Charles Village Civic Association, the Remington Neighborhood Alliance, Johns Hopkins University and the Baltimore Museum of Art. The master plan was made possible by funding by many of these partners, supplemented by grants from the Goldseker Foundation and The Baltimore Community Foundation.

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The purpose of the master plan is to provide a tool for FWPD and the City to protect the park and guide park enhancements over the next fifteen years or longer. Because the master plan is far-reaching, this report identifies individual projects that could be implemented incrementally as funds become available and project "cheerleaders" emerge.

While the master plan should be the foundation upon which any improvements are planned, it is not intended that this document be inflexible. As goals and surrounding influences change over the years, modifications to the master plan may also be necessary. It is important, however, to respect the inherent principles and concepts of the master plan.

B. Process

Identifying the Need: The Friends of Wyman Park Dell has been the steward of the park since the group's inception in 1984 and has been responsible for numerous enhancement projects in the Dell. In 2001, FWPD began exploring the idea of a master plan to better guide its efforts. In 2004, FWPD garnered the support of local partners and established the Wyman Park Dell Master Plan Steering Committee. The Master Plan Steering Committee solicited proposals from four landscape architecture firms in Winter of 2005, interviewed two firms and selected Mahan Rykiel Associates in April 2005. The Mahan Rykiel team included RK&K, Biohabitats and GWWO.

Park Assessment: The project team began the process by conducting an assessment of the park, visiting it at various times during the day, during the week and during the seasons. In addition to observing how the park is being used, the

team analyzed it in terms of environmental and physical characteristics including vegetation, habitat, erosion, lighting and park elements (walks, walls, furniture, etc.).

Stakeholder Interviews: Concurrent with the park assessment, the project team interviewed a series of stakeholders and leaders within the community. Some of these stakeholders were recognized leaders of official organizations while others were identified as leaders because of their passion and involvement with the Dell and other community issues. A list of stakeholders can be found in *Appendix A, Stakeholder List and Input.*

Town Hall Meeting #1: Following stakeholder interviews and park assessment, the project team conducted a town hall meeting open to the community in September 2005. The meeting was held at the Baltimore Museum of Art (BMA) and was advertised on the park website, through community newsletters and on temporary sign panels constructed in two locations in the Dell. The primary intent of this meeting was to introduce the master plan process and to garner input from the community as to concerns, opportunities and expectations.

Questionnaire: Following Town Hall Meeting #1, there was a significant amount of interest in having additional opportunities to provide input and to provide an opportunity for those who were unable to attend the September town hall meeting. A questionnaire was developed and made available to the communities and approximately 44 were returned.

Town Hall Meeting #2: Based on the assessment and input from the community, the team presented an analysis of the park along with three alternative scenarios for incorporating ideas and presented this in December 2005 at Saints Philip and James Church. Following the presentation, the attendees discussed and evaluated the alternatives and identified preferred elements from each concept. Following the meeting, a few additional ideas, suggestions and concerns were forwarded to the project team via email correspondence.

Town Hall Meeting #3: Based on input at the second town hall meeting, the team prepared a draft plan which incorporated the preferred elements from each concept and presented it in a third public meeting in March, 2006 at the BMA.

Town Hall Meeting #4: Following minor modifications to the draft plan based on comments from the March meeting, the final plan was presented in an open house format in June 2006 at the BMA.

Final Report: Following presentation of the final plan, the project team summarized the recommendations of the master plan into this final report. The master plan report will be a tool available for the Steering Committee, FWPD and the Department of Recreation and Parks to implement the master plan.

Website: The FWPD website, www.WymanParkDell.org, was used throughout the process to communicate meeting dates, share notes from the Town Hall Meetings, post PowerPoint presentations and post the final plan.

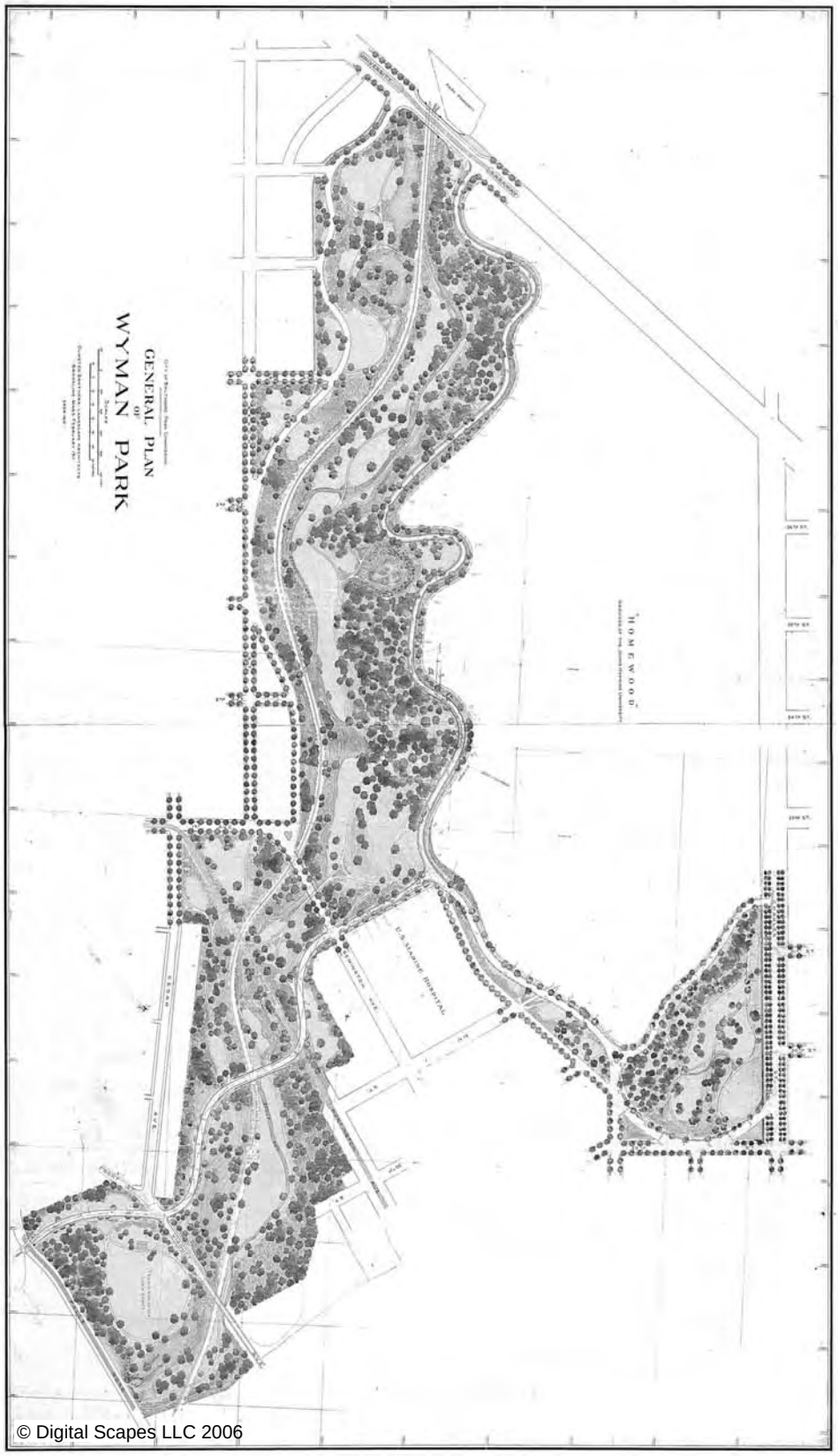
II. BACKGROUND

A. Historic Overview

According to the Friends of Maryland's Olmsted Parks and Landscape Archives, the Wyman Park Dell is one part of a larger Wyman Park "system" and is representative of one of the earliest initiatives associated with the implementation of the 1904 *Report Upon the Development of Public Grounds for Greater Baltimore* by the Olmsted Brothers. Upon the completion of the report, the development of Wyman Park was already underway as the Wyman Brothers dedicated their estate to public uses. The center of the estate that included Homewood House became the new campus of the Johns Hopkins University; the trustees of the university gave the remainder of the estate to the City as a public park. The largest portion of the park includes the Stony Run stream valley on the west side of the JHU campus, while the other section (now the Wyman Park Dell) included a part of the Sumwalt's Run stream valley on the south side of the JHU campus.

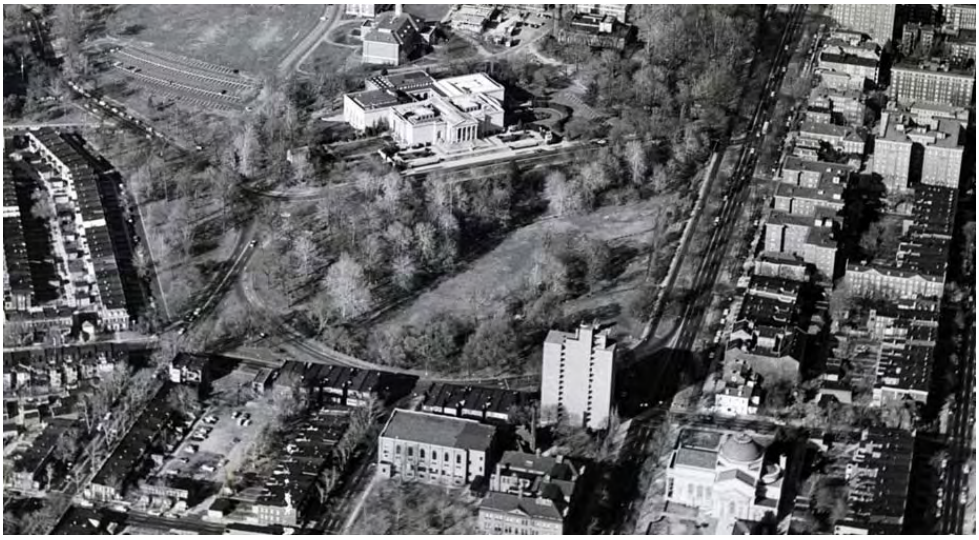
The Olmsted Brothers viewed the larger section of Wyman Park as a natural stream valley reservation, with informal pathways (never realized) blending with the landscape. The Dell, on the other hand, was treated as a more manipulated space. This was because of its relatively small size and its location in a rapidly urbanizing section of the City. In addition, because of the extension of adjacent roadways, this section of Sumwalt's Run was an isolated remnant of the original stream valley, no longer connected to the overall stream system. Sewer and storm drain infrastructure also required the stream valley floor to be covered, thus creating the lower lawn area today. The Dell ultimately became a showpiece for Olmsted's signature pastoral park based on a sweeping unobstructed lawn with a strong enclosure that provided a respite from the surrounding urban environment.

Over the years, the Dell has remarkably maintained its overall structure and integrity, however some development activity has altered its form. The construction of the BMA and the corresponding "raising" of Art Museum Drive in the 1920's truncated the northern entrance to the Dell, creating an awkward relationship with the adjacent streets. However, the Dell matured in the 1930's with a lower lawn defined by valley walls that were wooded in some areas but nonetheless offered significant views from Charles Street. After many decades, the wooded areas became overgrown in many places and obscured views into the Dell. Thanks to recent efforts of the FWPD, the Department of Recreation and Parks and many volunteers, including those associated with two sequential Jim Rouse Days of Community Service, many improvements have been made related to lighting, cleanup and the addition of features such as a playground and new tree planting.

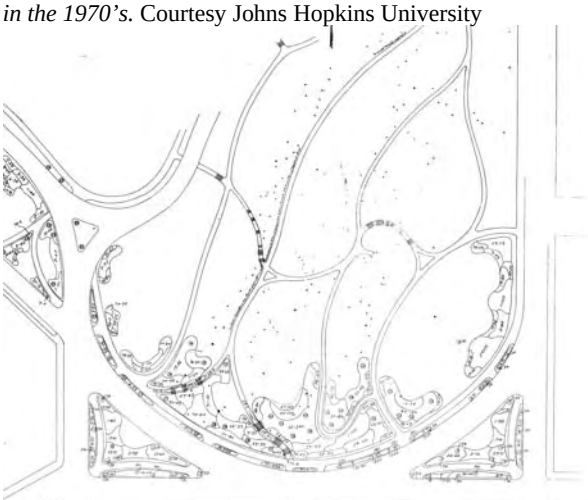


Olmsted Brothers' 1911 Master Plan for Wyman Park, showing the Dell in context with the greater park. Courtesy of Friends of Maryland's Olmsted Parks and Landscapes Archives

Aerial view of the Dell around, circa 1933. Courtesy Friends of Maryland's Olmsted Parks and Landscapes Archives



Aerial view of the Dell in the 1970's. Courtesy Johns Hopkins University



Detail showing original pathways. Courtesy Friends of Maryland's Olmsted Parks and Landscapes.

B. Olmsted Philosophy and Design Principles

As a foundation for this master plan, it is important to understand the Olmsted philosophy and design characteristics and how they related to the Dell. Following are some of the fundamental design principles and characteristics:

Principles:

1. The landscape can improve the quality of life in a city.
2. Parks should be beneficial and accessible to all citizens of all walks of life.
3. "Picturesque" and "pastoral" landscapes should be used to contrast the surrounding harsh city.
4. It is essential to recognize the natural character of the site and respect the "spirit of place."

Design Characteristics:

1. Use landscape to achieve harmony, tranquility and calmness.
2. Create mystery with deep shadows and the play of light.
3. Achieve a richness of foliage.
4. Establish rolling meadows with scattered shade trees.
5. Align paths to follow the natural contour of the land.
6. Avoid plantings and statuary that draw too much attention to themselves and create distractions.

C. Crime Prevention Through Environmental Design

The manner in which people use parks is quite different than it was early in the last century when the Wyman Park Dell was established as a park. Today, safety and the perception of safety are very important considerations in whether or not people feel comfortable using a park. The master plan analysis and recommendations, therefore, take into consideration the principles of CPTED or Crime Prevention Through Environmental Design. According to the National Crime Prevention Council, the basis of CPTED is that criminal activity and behavior can be controlled through the design of the physical environment. It includes three primary elements:

Territoriality – "People have an innate desire to protect or defend space which they occupy." This is done by:

- Improving the appearance of the environment
- Subdividing large areas into smaller areas that can be "claimed"
- Personalizing the environment
- Creating, maintaining and programing activity areas
- Designing facilities for various age groups
- Initiating neighborhood watch programs
- Establishing beautification programs

Natural Surveillance – "For people to take action to defend property or to prevent crime, they must be able to see illegal acts taking place."
This is done by:

- Improving lighting
- Removing blind spots and visual obstructions
- Adding windows and front porches to buildings (or taking advantage of views to adjacent windows and porches)
- Locating vulnerable elements near those which are actively used
- Training individuals in crime reporting
- Controling growth of landscape

Access Control – "Access control helps to increase the risks perceived by offenders by restricting their movement and placing them under surveillance." This is done by:

- Reducing the number of entrances to private areas
- Fencing-off problem areas
- Locating vulnerable areas near sources of natural surveillance

D. Park Users

In developing the master plan, it was important to consider that the most successful parks appeal to a broad variety of people and are, therefore, used throughout the day in all seasons. It is also important to note that there are two types of park users; "Destination Users" who specifically seek out the park to use and enjoy and "Incidental Users" who use the park passively while engaged in other activities. The existing user groups for the Dell are identified below.

Destination Users
- Dog owners
- People seeking relaxation
- Informal ball and Frisbee games
- Playground users
- Monument / history enthusiasts
- Wildlife / nature enthusiasts
- Walkers
- Picnic goers
- Festival/event attendees

Incidental Users
- Motorists and pedestrians on adjacent streets
- Pedestrians en route to other destinations via the Dell
- Visitors on their way from parking spaces adjacent to the Dell to the BMA and its sculpture gardens, JHU, surrounding restaurants and to residents who live near the Dell.
- Residents and employees who view and enjoy the Dell from surrounding homes and places of employment

E. Summary of Stakeholder Input

The master plan takes into consideration input that was garnered from various stakeholders and community members throughout the process in a series of stakeholder interviews and "town hall meetings". This input was also conveyed to community representatives on the Master Plan Steering Committee. Through this process, the design team heard ideas and concerns that ranged from a desire to leave the park as it is, to major changes with lots of new "stuff." While there were many common ideas and themes, there were also many opposing ideas such as "dogs vs. no dogs." All of the input was carefully considered using discussions with the Master Plan Steering Committee and the design team's professional judgment to create a balance that would appeal to as many stakeholders as possible while maintaining the integrity of the park.

A detailed list of participants including the Master Plan Steering Committee, stakeholder interviewees and community participants at the town hall meetings is included in *Appendix A, StakeholderList and Input*. In addition, notes from the town hall meetings and questionnaires are also included.

Below is a summary of the Key Ideas from Town Hall Meeting #1 and the questionaires, listed in order of importance:

Town Hall Meeting #1

Assets

- Overall park design integrity (bowl shape, central open lawn, separation of use areas, original pathway design, "oasis in the city")
- Biodiversity: diversity of tree species and wildlife

Liabilities

- Dogs off-leash / lack of designated dog area
- Lack of caretaker or park manager
- Obstructed views from Charles Street
- Poor maintenance (general neglect, limited number of trash receptacles)

Opportunities

- Events (movies, flea market, concerts, "Shakespeare in the Park")
- Water feature or attraction
- Rebuilding of stone walls
- Removal of "spur" road at the northern portion of the West Crescent

Threats

- Lack of historic designation
- Lack of funding for maintenance
- Pre-existing plans (traffic circle at Art Museum Drive and Wyman Park Drive, changes to "sweep" at 29th Street and Howard Street)
- Not honoring design integrity and Olmsted legacy

Questionnaires –Key Ideas

- Maintain integrity of park and qualities as an oasis
- Improve maintenance
- Un-leashed dogs *are* a problem – need designated dog area or dog hours
- Un-leashed dogs *are not* a problem – dog owners are an important user group who activate the park in early mornings and evenings when others aren't in the park
- Need to address safety
- Need to provide more opportunities for events
- Maximize diversity of uses (expand playground, keep sledding, provide interpretation, accommodate seniors, provide picnic opportunities, provide areas for non-dog lovers).
- Open up some blocked views
- Improve park management

III. PARK ASSESSMENT

A. General Assessment

Thanks to many efforts on the part of the Friends of Wyman Park Dell and the Department of Recreation and Parks, the Dell has improved as a public park dramatically over the past twenty years and offers many assets to the surrounding community and institutions, as well as Baltimore City as a whole. Still, many of the parks greatest assets are also its greatest liabilities. Perhaps this was best described by stakeholder Joe Rexing when he shared, *"The best thing about the Dell is that it is sunken and enclosed by woods. The worst thing about the Dell is that it is sunken and enclosed by woods."*

A specific assessment of each area of the park is provided in Part 3 of this report; however, key highlights are described below.

- The Dell is divided into an "upper park" and "lower park." The upper park relates more to the surrounding community and uses while the lower park functions as an oasis, separated from the surroundings.
- The overall integrity of the Dell is quite simply defined by the broad sweeping lower lawn and the wooded slopes that enclose the lawn.
- The gentle curve in the lower lawn provides a sense of mystery and, from some perspectives, gives the impression that the park continues on for a much greater distance than it actually does.
- The primary entrance into the Dell (Charles Street and Art Museum Drive) is, unfortunately, the least attractive space in the park. In addition, the odors from the sewer, the overgrown vegetation and the placement of transformers make this the least welcoming area of the park. It is also the area where the most dramatic views of the lawn could be had….if they weren't blocked by vegetation.
- A variety of spaces is found throughout the Dell and accommodates different activities and offers the potential for an even greater amount of activities. The playground for children and the lower lawn area for dog-walkers are the most successful.
- Because of the Dell's topography, it is rarely used as a "cut-through" for people using the surrounding streets to get from one destination to another.
- Visibility to the lower lawn is obscured most of the year because of overgrown vegetation. As a result, many people do not know the Dell exists or feel uncomfortable using the Dell because it is perceived to be unsafe.

- Much of the park's infrastructure (walls, steps, baths, furniture) is in poor repair.
- The playground is well-sited and is a good example of how elements can be added to the Dell without detracting from its overall integrity.
- Tree replacement efforts in recent years have wisely concentrated on oaks, maples and other native species. There are several Japanese Pagoda Trees (Sophora japonica) in the lower lawn area that are not appropriate trees in terms of character and image. Similarly, some understory trees are poorly

located and contribute to blocking important views. A detailed assessment of trees and other ecological factors is described below.

B. Ecological Assessment

As part of the park assessment, the design team assessed significant trees, invasive species, habitat and soil erosion. Following is a summary of each assessment.

Significant Tree Assessment - Summary

The woodland cover in Wyman Park Dell is characterized as a Piedmont/Coastal Plain Mixed Oak-Beech Forest. Typical habitats are dry, usually north-facing bluffs, and steep ravine slopes with acidic, nutrient-poor soils. Plant communities in this group usually contain fewer moisture loving plants and a greater abundance of drought tolerant heaths like blueberry (*Vaccinium* sp.) and holly (*Ilex opaca*). Following is a description of ideal reference conditions and the conditions at the Dell:

Canopy: The ideal canopy predominantly includes American beech (*Fagus grandifolia*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*) and tulip poplar (*Liriodendron tulipifera*), most of which are present in the Dell. There are many mature and over-mature beech and white oak that are 18”-24”+ in diameter at breast height (dbh) showing signs of decline (ie: dead and dying main limbs, discolored leaves, heavy fruiting and/or root suckering). Some younger white oaks have been planted, however, as part of the Joseph Beuys program.

Approximately 160 trees in the Dell were loosely assessed in terms of caliper size (trunk size), species and overall health. A tree matrix is provided in *Appendix B, Ecological Assessment (Significant Tree Summary)*. Of the total trees assessed, approximately 10% are in excellent health, 44% in very good health, 24% in good health, 13% in fair condition and 9% in poor condition.

Sub-Canopy: The ideal sub-canopy predominantly includes red maple (*Acer rubrum*) and American holly (*Ilex opaca*). While a few red maple are present, there are not many, and there do not appear to be any American hollies. There are some areas of ash and beech regeneration and eastern redbud (*Cercis canadensis*) is present throughout. However, most of the sub-canopy consists of invasive species, described below.

Shrub Layer: The ideal shrub layer includes low-bush blueberry (*Vaccinium pallidum*), maple-leaved viburnum (*Viburnum acerifolium*), and mountain laurel (*Kalmia latifolia*). Some of these species are present in the Dell, however, the majority of the shrub layer is comprised of invasive species.

Herbaceous Layer: The ideal herbaceous layer includes Christmas fern (*Polystichum acrostichoides*) and Virginia creeper (*Parthenocissus quinquefolia*). Again, these are present in limited areas within the Dell.

With the ideal forest conditions described above, one could expect the following wildlife:

Mammals: Eastern chipmunk, gray squirrel, Eastern cottontail, white-footed mouse, woodland vole and red fox.

Canopy Nesting Birds: blue jay, Cooper's hawk, broad-winged hawk, Eastern wood-peewee, blue-gray gnatcatcher, Acadian flycatcher, red-eyed vireo and scarlet tanager.
Trunk Nesting Birds: great crested flycathcher, Carolina chickadee, tufted titmouse, downey woodpecker, hairy woodpecker, pileated woodpecker, white-breasted nuthatch and northern "yellow-shafted" Flicker.

Aged Tree Replacement and Forest Plantings

Typically, as forest trees age, seedlings from the understory serve as a source of the next generation of overstory trees. The Dell woodland areas have some seedling regeneration but it is mostly comprised of species differing from the overstory. The Del is generally deficient in desirable tree replacements. Planting desirable tree replacements should be a major focus of future efforts.

Planting efforts should also focus on creating a "transitional" vertical structure by providing understory trees in key locations, such as near woodland edges. The lower-branched understory trees provide perching habitats for meadow-foraging birds. Woodland edges should also be enhanced with berry-bearing shrubs to attract birds and denser shrubs should be used on the lower slopes so that visibility to the lawn area from above is not obscured.

An approach to aged tree replacement is described in detail in *Appendix B, Ecological Assessment (Aged Tree Replacement).*

Invasive Plant Species

Invasive plants are prolific throughout Wyman Park Dell and are primarily located throughout the wooded slopes. Predominant invasive species include the following:

- bush honeysuckle *(Lonicera sp.)*
- English ivy *(Hedera helix)*
- white mulberry *(Morus alba)*
- paper mulberry *(Broussonetia papyrifera)*
- tree-of-heaven *(Ailanthus altissima)*
- princess tree *(Paulownia tomentosa)*
- privet *(Ligustrum sp.)*

The most significant invasive species are the white mulberry and paper mulberry. The environmental and physical impact of the white mulberry includes the following:

- Displaces native vegetation by forming a monoculture threatening biodiversity and native ecosystem stability.
- Readily invades disturbed sites, roadsides and fencerows.
- Negatively impacts wildlife dependent on native vegetation for forage, nesting and cover.
- Berries litter sidewalks
- Possibly hybridizing with and transmitting a root disease to the native red mulberry (*Morus rubra*).

The environmental and physical impact of the paper mulberry includes the following:

- Non-native, exotic plant (from Asia) without natural insects or disease to keep its growth in check
- Exhibits aggressive growth and quickly invades disturbed lands, displacing native plants.
- Forms monocultures that threaten local biodiversity and ecosystem stability.
- Its range is widespread and is found growing from uplands to lowlands.
- Negatively impacts wildlife dependent on native vegetation for forage, nesting and cover.
- Shallow root system making them susceptible to blow-over during high winds.

While significant volunteer efforts have been made over the past several years to remove invasive species, efforts have not always included a replacement program of native or "desirable" species. As a result, the sudden exposure to sunlight (by removing invasive species) has provided ideal growing conditions for additional invasive species. An approach to invasive species management is described in *Appendix B, Ecological Assessment (Invasive Species Management).*

Slope Erosion

There are several isolated areas of surface erosion associated with steep slopes, compaction and devegetation due to pedestrian traffic. The primary areas include the southeastern corner of the Dell, just to the west of the playground and on the western slope between the upper and lower parks. In many cases, pedestrian traffic occurs along "desire lines" where paved pathways are absent. A natural solution would be to provide pathways in some of these areas. Erosion also occurs in the vicinity of the Lee and Jackson Monument. While the slopes are fairly gentle here, there is too much shade to establish grass beneath the tree canopy, often resulting in bare soils. Planting shade tolerant groundcovers and shrubs would alleviate this condition.

Soil erosion can also be found along walkways and steps that abut steep slopes. Planting native shrubs and groundcover would provide soil-binding roots to help stabilize soils.

C. Lighting Analysis

While it is generally not the policy of the Department of Recreation and Parks to illuminate parks, pedestrian-scaled lighting has been added to the Dell in recent years because it is a small park which had been acting as a location for prostitution, drug use and "cover" for criminals who committed crimes in the adjacent areas. As part of the master plan effort, the design team observed existing lighting conditions in December, 2005. The full memorandum is included in *Appendix C, Lighting Analysis* and a summary of the conclusions is outlined below.

Existing Lighting Conditions – Conclusions

A field survey of the existing lighting conditions at Wyman Park Dell was conducted on December 7, 2005 beginning at 7:25 PM and ending at 9:00 PM. Light readings were taken at multiple locations throughout the park.

Lighting in the vicinity of the intersection of Art Museum Drive and Charles Street is, for the most part, adequate. It is important to note that this area benefits from lighting on the adjacent roadway; if the area were to be redesigned, the impact of the roadway luminaries would not be considered in accordance with IES (Illuminating Engineering Society of North America) recommended practice. Illumination levels for the remainder of the park are below standard recommendations. The western path of the Dell (located near the Lee and Jackson Monument) was not evaluated due to the number of fixtures that were not functional. Overall, an increase in horizontal and vertical illuminance is suggested.

As noted in the graphic in *Appendix C*, there are multiple fixtures in the park that are not functioning. Additionally, some fixtures have cracked globes and there are several types of globes (wide acorn globe and tall/narrow acorn globe). Based on IES recommendations and other project experience, the following lighting is recommended:

- Average horizontal illuminance – ranging between .6 and .8 foot fc (foot candles) with higher levels at the entrances to the Dell. The increased average illuminance will benefit pedestrian safety and encourage increased use of the facility in the evening hours.

- Uniformity Ratio (average-to-minimum) is not to exceed 5.0:1 to match existing conditions.

- Vertical Illuminance - .3 fc to .5 fc, depending on community input. It is important to note that the type of optics selected for the luminaire is critical to obtaining sufficient vertical illuminance. Cutoff fixtures (no light above the plane of the luminaire) are dark sky friendly and may minimize perceived "glare", however, they are not pedestrian friendly for this type of park setting. With cutoff fixtures, it is difficult to obtain vertical illuminance results greater than 0.1 fc. A luminaire with some

component of up-lighting, such as the existing pathway luminaries, is desirable.

It may also be beneficial to consider the installation of a vandal resistant globe.

As improvements are made to the Dell as described in this master plan, these recommendations should be considered on a project by project basis, particularly at park entrances and near steps.

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PART 3: MASTER PLAN

IV. MASTER PLAN

Based on the stakeholder input and park assessment, the design team prepared three alternative concepts for the park development. Because several areas of the park were appropriate for several different functions or program elements, the alternatives illustrated advantages and disadvantages of locating each of these elements in different areas. The alternatives were reviewed with the community and preferred elements of each plan were selected to be included in the master plan described in this section.

A. Guiding Principles

There are several guiding principles that helped to define the framework for the master plan:

1. The Dell is part of the larger Wyman Park open space system.
2. The overall design integrity of a well-defined lower lawn bordered by vegetated slopes must be maintained.
3. To be successful, the Dell must accommodate a broad range of activities and feel safe for all ages.
4. Visibility of the park— both literally and figuratively – must be enhanced.
5. The Dell must be recognized as a valuable city-wide resource in addition to a neighborhood resource.
6. The long term sustainability of the park's habitat and vegetation, particularly its tree canopy, will be ensured throught a tree/vegetation replacement strategy.
7. The park must be managed and protected.

Using these principles, the project team prepared three alternatives as described and illustrated in *Appendix D, Master Plan Alternatives,* to illustrate several different options, each with advantages and disadvantages.

The alternatives also illustrated that some desired program element locations remained consistent from one concept to the other, primarily because there is only one logical location for them. Additionally, no alternative could accommodate all of the desired program elements because the park does not yield enough acreage to do this. Consequently, some elements would need to be eliminated or reduced in scope.

Based on all of the alternatives, the project team and stakeholders reached consensus on preferred elements from each alternative and recognized that in order to accommodate some preferences, some sacrifices would need to be made. The resulting master plan approach is described on the following pages.

B. Master Plan Description

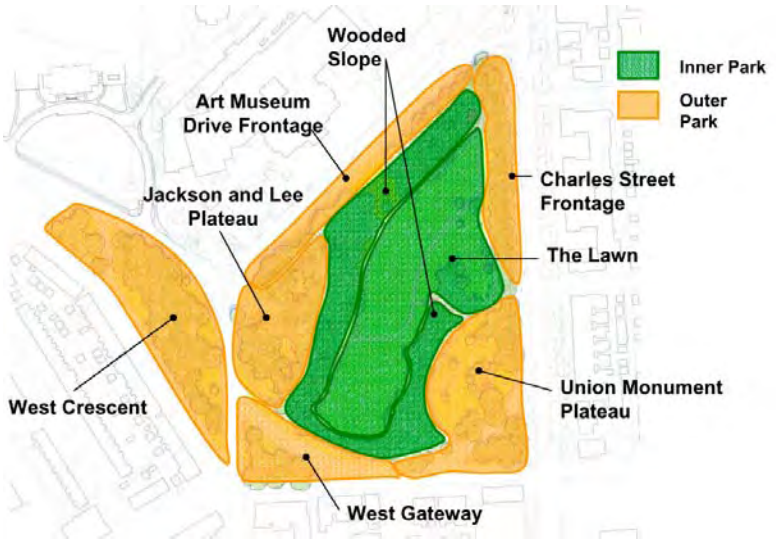
While the master plan reflects many changes, the overall structure and organization of the park remains as it currently exists, only enhanced. An

exception to this is that the Master Plan recommends removing the existing restroom structure which has many problems associated with it. It would be replaced with a new pavilion that would be part of a new park entrance near the intersections of Art Museum Drive, Charles Street and 31st Street. The entrance would include a more welcoming staircase into the park, along with an accessible ramp for visitors with disabilities. Some of the slope area would be cleared of invasive species and re-planted with low growing native shrubs and overstory trees to open up views into the lawn from this area. The most significant feature would be the pavilion that would serve as a gathering place, a place to get refreshments to enjoy in the park and a facility for park storage, restrooms and a park manager's office. This combination of features would provide much-needed activity and a reason to linger in the park, but more importantly, would address many of the concerns with this corner of the park related to obscured visibility, perceived safety problems and a generally unwelcoming "front door" as described in the assessment.

The master plan is divided into 8 project areas which are identified below and described in detail on the following pages. Because the master plan will be implemented over many years, it is important to identify separate implementation projects, both large and small, that can be implemented individually. It is important, however, to understand how each of these projects relates to other projects within the park so the detail design can respond to the whole. The full master plan is illustrated in *Exhibit A, Illustrative Master Plan* which is included in the Executive Summary.

C. Master Plan Areas

Each master plan project area is outlined in the following section in terms of assessment, overall description, design intent, project components, critical considerations and project budget. A detailed construction budget for each project area is included in *Appendix E, Project Construction Budgets.* The budgets provided are for master planning purposes. Construction and project costs may vary depending on project timing and whether or not projects are constructed individually or grouped together. In addition, a recommended plant palette for each area is described in *Appendix F, Master Plant List.*



The Lower Lawn

Assesment: Following are the key physical assets and liabilities related to the Lower Lawn area:

- ***Assets***
  - Graceful, sweeping form
  - Illusion of extending beyond the park itself
  - Pathways and wall alignments accentuate sweeping forms
  - Strong sense of enclosure and "escape"
  - Great place for dogs to run

- ***Liabilities***
  - Drain not working properly in one area resulting in stagnate marshy area
  - Limited visibility to and from surrounding streets, particularly at access points
  - Barrier-free access only from the east, however, the existing walk is a gradient of 8% and is not ADA compliant
  - Problems with irresponsible dog owners
  - Visual clutter – transformers, "poop bag" dispensers
  - Turf susceptible to extreme wear
  - Stone wall in poor repair
  - Sewer smell at northern entrance

Design Intent: Preserve the integrity of the original Olmsted Brothers design by restoring the historical park elements without altering the original forms significantly. Avoid filling the space up with additional "stuff."

Description: The lawn is the signature of the Dell. Its sweeping, open character will be preserved and enhanced. Drainage will be improved and the turf stabilized. A temporary stage site is planned adjacent to the stone wall at the base of the slope in front of the BMA. Here, electrical and water hookups (discreetly located) will be provided to facilitate concerts and performances. The lawn and gentle slope on the east side offer a natural amphitheatre seating area to view performances on a temporary stage. This east slope area will also be designated a "dog free zone." Dog owners will be encouraged to walk their dogs on the pathways and lower lawn. The stone wall surrounding much of the lower lawn is in poor repair. It will be reconstructed in the drywall manner to improve drainage control of the slopes.

Project Components:

- ***Lower Lawn***
  - -Preserve the original organic, sweeping form of the lawn.
  - -Improve drainage in wet areas.
  - -Consider closing off portions of the lawn periodically with visually unobtrusive fencing and educational signage to reestablish turf.
  - -Maintain flexibility of open space for different activities, recreation and special events (restrict additional program elements and plantings to lawn edges).

- ***Natural Hillside Amphitheater***
  - -Limb up low branching trees that block views into lower lawn.
  - -Utilize only high-canopied shade trees as replacements such as oak, beech or maple to preserve views to the lower lawn.
  - -Designate this area as a "dog free" zone by installing signage, as described below.

- ***Asphalt Paths and Steps***
  - -Preserve the original pathway forms and alignments.
  - -Reconstruct steps that are in disrepair.

- ***Stone Retaining Walls***
  - -Rebuild the stone retaining walls with dry-stacked stone using granite or other stone that is compatible in design qualities with historic stone walls throughout Wyman Park.
  - -Consider stone wall as a potential "memorial" project.

- ***Temporary Stage Site***
  - -Provide the infrastructure (electric and water hookup) necessary to set up a temporary stage at the base of the open slope in front of the BMA.
  - -Relocate the existing green electrical transformer in lawn to a less visible area (woodland slopes).
- ***Trees***
  - -Gradually remove Japanese Sophora trees and replace with 1-3 specimen quality oaks and or maples.
  - -With exception of accent shade trees described above, keep lower lawn free of tree planting.

- ***Site Furnishings and Structures***
  - -Replace benches and trash receptacles that are in poor condition, using park standard as described later in this report.
  - -Replace light fixtures that are damaged or not working.
  - -Provide "Poop Bag" dispensers and locate near edges, trees or other site furniture so as to help reduce the appearance of "visual clutter."

- ***Dog Area***
  - -For the immediate future, rely on "self-policing" by dog-owners to enforce proper conduct by dogs and dog owners to restrict off-leash dog activity to the lower lawn only and to respect the amphitheater hillside to the east as a "dog-free zone".
  - -In the future, if there is increased conflict between dogs and park users reevaluate the policy and consider other actions such as enforcing leash laws, exploring off-leash hours or constructing a separate fenced off dog park tucked into the southern end of the lower lawn.

- ***Refurbish Utility Lines (Baltimore City Consent Decree)***
  - -Upgrade the existing sewer lines to remove the unpleasant odor near the existing building and north entrance. Coordinate with Department of Public Works to ensure minimal intrusion on existing trees and park features.

- ***Signage***
  -Provide discrete signage as described later in this report.

Critical Considerations: Coordinate with Department of Public Works before making major investment in walls and paths to ensure that upgrades to the sewer will not impact these features. At some point in the future, as the park becomes more successful and draws larger crowds, a turf management strategy will need to be developed.

Approximate Budget:

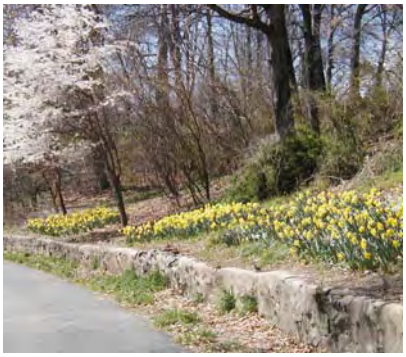
Construction	$523,300
Design (10%)	$ 52,300
Total	**$575,600**

Budget does not include improvements to sewer line nor turf management strategy.

The Lower Lawn - Images

The Lower Lawn is characterized by a strong sense of enclosure and a play of light and shadows and gives the impression that it continues on beyond the actual Dell.

Sweeping pathways and the stone wall reinforce the forms of the Dell.



The stone wall is one of the most distinct features but is in poor repair.

The gentle lawn slope on the east side of the Lower Lawn provides a natural amphitheater and place for picnicking.

The Lower Lawn - Images

Example from Wyman Park (west of JHU) of how events could be used to attract people to the Dell.

Example of a "dog-free" lawn area in New York City.

Example of a temporary stage used for "Shakespeare in the Park" in Greenville, South Carolina. The stage remains for the duration of the festival.

Wooded Slopes

Assessment: Following are the key physical assets and liabilities related to the Wooded Slopes:

- ***Assets:***
  - Create "enclosure for Lower Lawn"
  - Provide seclusion from surrounding urban environment
  - Provide opportunities for biodiversity within the park

- ***Liabilities:***
  - Erosion problems where cut-through pedestrian traffic occurs
  - Native forest cover threatened by invasive species
  - Predominantly mature and over mature canopy
  - Lacks substantial sub-canopy
  - Limited sightlines to street, particularly near entrances
  - Limited pathway connections to Lower Lawn area

Design Intent: Selectively open up views at park entrances and other key areas, while maintaining the visual buffer, "enclosure" and habitats that the Wooded Slopes provide.

Project Description: The wooded slopes will be protected and enhanced to increase the biodiversity of the park and to address erosion problems. A few new pathways will be added creating linkages from Art Museum Drive to the lower lawn in areas that are currently acting as cut-throughs and causing some of the erosion problems. One path will be in the approximate location of one originally planned as part of the Olmsted plan. Sledding routes on the east slope near the playground will be protected, but fenced off during non-winter months to encourage the reestablishment of native groundcovers. Invasive plant materials will continue to be removed and replaced with native groundcovers and understory plantings. In some areas, particularly at entrances to the lower lawn, plantings will be restricted to low groundcovers and high canopied trees to allow views into and out of the lower lawn. Refer to *Appendix F, Master Plant List* and *Exhibit C, Planting Zones* (included in the Executive Summary).

Project Components:

- ***Remove and Replace Invasive Plant Species***
  -Remove invasive species (e.g. paper mulberry, honeysuckle, English ivy, privet) that is threatening the native vegetation and replace with appropriate plant material.
  -Maintain original shade canopy with new plantings. Plant new trees at 3:1 ratio for every invasive tree removed.
  -Plant an assemblage of tall shrubs and sub-canopy trees along woodland edges (where view corridors are not critical) to soften the forest/meadow edge at the BMA and to create a transitional step habitat.

- ***Erosion Control Measures***
  -Plant additional understory and woodland groundcovers to stabilize slopes.

-Repair broken sidewalks and clogged drain inlets in upper park that result in excess runoff down slopes.
-Add additional paths and steps at desire lines.

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- ***Selective Thinning at Entrances and Important View Corridors***
  -Selectively remove overgrown and invasive under-story plantings at all park entrances and within important view corridors as indicated on the plan. Replace invasive plants with low- growing native plant materials.
  -Where view corridors are important, place taller growing shrubs at the base of the slope to allow views from above. Refer to cross section illustration included on the following pages, *Wooded Slopes-Images.*

- ***Proposed Path to Lower Lawn***
  -Provide additional path and steps to lower lawn from Art Museum Drive entrance per the original Olmsted Brothers vision to accommodate "desire line" and minimize erosion on western slope. Path and steps should be designed in keeping with the character of other steps in the park, however, the low risers that currently characterize the existing steps may not be possible because of the current gradient of the slope that needs to be traversed.

- ***Tree Maintenance and Aged Tree Replacement Plan***
  -Limb up low branching shade trees in key view corridors to maintain visibility into park.
  -Plant replacement shade tree species in areas consisting mostly of mature or over mature trees (e.g. beech, oak).

- ***Hillside Meadow at Museum Opening***
  -Convert lawn area to meadow on slope across from BMA. Meadow mix to consist of native grasses and wildflowers that offer seasonal appeal.

- ***South West Entrance Improvements and ADA Ramp***
  -Expand southwest entrance into park and provide ADA accessible ramp.

- ***Preserve Existing Sledding Routes***
  -Plant low-growing woodland groundcover on eastern slopes where plants are worn away by foot traffic.
  -Provide fence with gate openings (that can be locked) at top of slope to accommodate wintertime sledding. Allow the groundcover to re-establish in other seasons.
  -Provide educational signage describing intent of restorative plantings.

Critical Considerations: Refer to *Appendix B, Ecological Assessment* for more detailed information on aged tree replacement and forest plantings. Priority areas within the wooded slopes should be the designated view corridors and entrances.

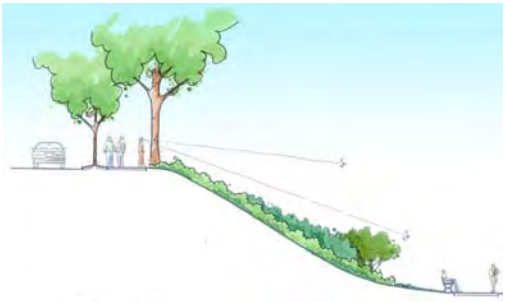
Project Budget:

Construction:	$334,800
Design (10%):	$ 33,500
Total	**$368,300**

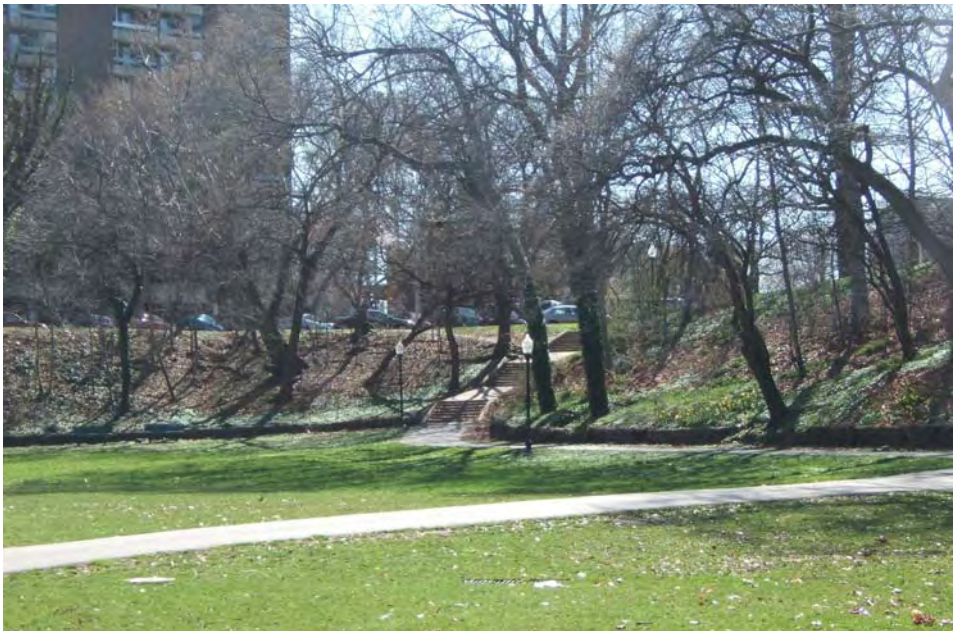
Wooded Slopes - Images

Left: Views to significant neighborhood landmarks, such as the SS. Philip and James dome should be preserved and enhanced.

Above: Important view corridors are highlighted above showing where planting should be restricted to low groundcovers and high canopy trees.



Right: Restricting taller shrubs to the bottom of the slopse will allow views from Charles street into the Lower Lawn



The wooded hillsides provide a strong sense of enclosure for the Lower Lawn. View corridors should be opened near park entrances, however, to improve park image and sense of security for park users.

Wooded Slopes - Images

Native ferns (above) could be used to address erosion (below right).

Open hillside (above) provides opportunity for meadow planting (below).

Limited pathways along "desire lines" results in erosion along hillsides.

Example of colorful meadow planting on steep hillside in Greenville, South Carolina.

Union Monument Plateau

Assessment: Following are the key physical assets and liabilities related to the Union Monument Plateau:

- ***Assets:***
  - Fairly level area at street grade – ideal for events
  - Union Soldiers and Sailors Monument
  - Attractive and well-sited playground
  - Potential area for expansion of playground or other active use
  - Near proposed trolley stop
  - Additional green space with potential closure of 29th Street "sweep"
  - Highly visible gateway corner at 29th and Charles Streets
  - Existing bus stop at 30th Street
  - Natural amphitheater space for small events
  - Park's only barrier-free access to Lower Lawn from this area (however, gradient is 8% and is not ADA compliant.
  - One of few areas that offers potential for pedestrians as a "shortcut through the park"

- ***Liabilities:***
  - Speeding traffic as long as "sweep" remains
  - Gateway "triangle" area cut off from remainder of park
  - Ornamental trees block views into Lower Lawn
  - Park entrance at 30th Street obscured by vegetation
  - Lack of electric and water supply for events

Design Intent: Take advantage of the Charles Street Reconstruction plan to reclaim the existing asphalt traffic "sweep" as park open space, and maintain flexibility of this space for special events and gatherings. Create a safe, visually unobtrusive, fenced-in zone around the playground and monument for the expanded playground and future expansion of activity areas.

Project Description: This area is located at the southeastern corner of the park. Key features proposed for the future include a broad promenade that can accommodate benches for events such as the Charles Village Festival. The promenade will follow the alignment of the roadway *sweep* that will be eliminated as part of the Charles Street Reconstruction. In addition, this area will accommodate an expanded playground and other programmed activities. This is one of the few areas in The Dell that can accommodate structures (such as playground equipment) while not detracting from the overall integrity of this Olmsted Brothers' park. Special lighting will illuminate the Union Monument at night, and a new pathway will provide better access to the lower lawn. Many understory trees that block views into the lower lawn from this area will be removed and replaced by taller canopy trees. In addition, most of this plateau will be enclosed by a 4' ornamental fence to create a safe and dog-free zone for children and adults alike, much like that in Federal Hill Park.

Project Components:

- ***Union Monument***
  - -Provide accent lighting
  - -Limb up existing cherry trees surrounding the monument. Do not replace these trees in the future after they decline.
  - -Utilize CHAP's Adopt-A-Monument Program to secure annual conservation funds for the monument.

- ***Ornamental Metal Fencing and Gates***
  - -Provide a low 42" ornamental fence with gates around the monument and play area.
  - -Maintain flexibility to open fence and access monument during special events, utilizing several wide gates.
  - -Fencing shall follow inside of path edges.
  - -Fenced area will be designated a "Dog Free" zone prohibiting both leashed and unleashed dogs.
  - -Provide informally aligned paths and ADA access to playground and future activities.

- ***Proposed Path***
  - -Provide a more direct connection from the Charles/29th Street corner to the steps leading to the lower lawn.

- ***Picnic Area and Expanded Playground***
  - -Provide an informal picnic area with tables and additional shade trees.
  - -Expand playground in each direction along existing pathway. Maintain relationship with woodland edge.
  - -Provide additional shade trees within playground area.

- ***Future Play Area/Activity Expansion***
  - -Maintain flexibility adjacent to playground and along woodland edge for future activities that may require special equipment or structures. Keeping these elements adjacent to the woodland edge will minimize visual intrusion and visual conflicts with monument. Future activities may include horseshoes, bocci ball or the creation of a labyrinth to name a few examples.

- ***Promenade***
  - -Maintain the original "teardrop" form established by the roadway "sweeps" by widening the existing sidewalk to create a promenade.
  - -Provide special paving (e.g. bluestone) from Charles Street to the southwestern entrance to Lower Lawn.
  - -Use 18-foot width in this zone to accomadate festival booths and other special events.
  - -Provide benches, bike racks and game tables.
  - -Leave "cut-outs" in the paving of the promenade to accommodate existing trees if necessary. "Cut-outs" can be filled in with paving at a future date when the trees decline and are removed.
  - -Provide electric and water hookups to accommodate vendors and events.

- ***Reclaimed Open Space (Charles Street Reconstruction)***
  -Maintain as flexible open lawn area for gathering and special events.

- ***Wyman Park Dell Sign***
  -Incorporate park identification sign into low stone wall or ornamental fencing at corner of Charles Street and 29th Street

- ***Transplant Flowering Trees to Woodland Edges***
  -Transplant Kousa dogwoods and other flowering trees that block views to the Lower Lawn to woodland edges. If not feasible to transplant, the majority of these trees should be removed and replaced (in the general vicinity) with larger canopy trees that will not block views.

- ***30th Street Entrance***
  - Provide park map/directory (possibly near 29th Street as well)
  - Provide seasonal color in small space defined by walkways
  - Potential memorial/monument placeholder in space defined by walkways.

Critical Considerations: Removal of the "sweep" from Charles Street to 29th Street as part of the Charles Street reconstruction may need to be coordinated with the Department of Transportation. Documentation associated with the Charles Street Reconstruction seems to indicate that the roadway sweep is not public right-of-way, however, this needs to be verified. Park project should try to capture credit for pavement removal if there is increase in pavement with new paths throughout the park (unless credit is claimed as part of Charles Street Reconstruction). Consideration should be given to taking advantage of the proposed trolley stop at 29th and Charles Streets. JHU owns the Dell House and several properties across 29th Street from this area. If these properties are renovated or redeveloped in the future, careful consideration should be given to providing ground-floor uses that would relate to and help activate the park.

Project Budget:

Construction:	$664,100
Design (10%):	$ 66,400
Total:	**$730,500**

Budget does not include land acquisition costs associated with elimination of the sweep.

Union Monument Plateau - Images

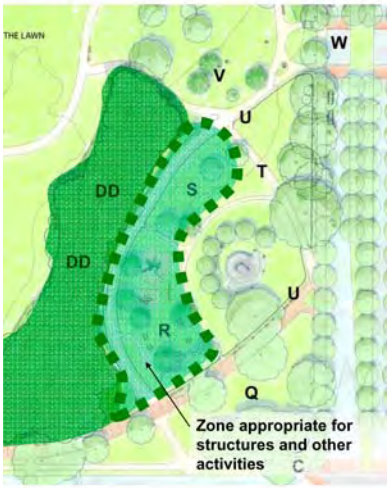
Highly visible gateway potential

This is area is at-grade with the surrounding streets, offering potential for park to draw people in

There is the opportunity to take advantage of the existing bus stop at 30th Street, however, the park entrance needs to be more inviting

Gentle slope offers natural amphitheater for smaller events. Ornamental trees, though lovely, block important visual connections to the Lower Lawn and should be removed.

Union Monument Plateau – Images



Wooded edge provides natural context for integrating "structures" such as play equipment into the park (above). This is often done in New York City parks (above right). A low ornamental fence could be used to control this entire area as a "dog-free" zone as in Federal Hill Park (right).

With the removal of the "sweep," the walkway can be widened into a grand promenade allowing a place for vendors and exhibitors during events.

West Gateway

Assessment: Following are the key physical assets and liabilities related to the West Gateway:

- ***Assets:***
  - Highly visible "west gateway" from the Howard Street corridor
  - Adjacent to Wyman House and an important park user group (seniors)
  - Existing parking resource for visitors to the Dell
  - Tall canopy trees in "triangle"
  - Proposed bus stop on 29th Street
  - Signal (for crossing) at 29th Street

- ***Liabilities:***
  - Existing 29th Street "sweep" allows vehicles to speed without stopping
  - Green "triangle" area has low sub-canopy trees that block views to Dell and make space uninviting
  - 29th Street and "sweep" act as barriers for seniors and others to get to park
  - Lacks ADA access to Lower Lawn and entrance steps are dark and unwelcoming
  - Parked cars create barrier between "triangle" and Dell

Design Intent: Improve the image of the park at Howard and 29th Streets and strengthen the overall relationship between the "triangle" and the Dell by creating a usable space within the existing triangle and improving pedestrian access between the triangle and the Dell.

Project Description: The southwestern corner of the park will include an enhanced entrance to the lower lawn, with opened sight lines and an accessible ramp to accommodate seniors and those with disabilities. The plan recommends eliminating the broad roadway sweep linking 29th Street and Howard Street by changing the geometry of the roadway and enhancing the parking area to discourage high speed *cut through* traffic which creates a barrier between the Dell and the triangle across from Wyman House. This recommendation, however, will need to be studied further with the community, institutions and the Transportation Department. The plan calls for a pronounced pedestrian crossing from the triangle and the parking area and for an enhanced seating area/shade garden.

Project Components:

- ***Central Gathering/Seating Area***
  - -Remove inappropriate sub-canopy trees that block views from the triangle to the Dell.
  - -Provide small paved area with benches.
  - -Establish a placeholder for future monument/memorial within the space.
  - -Incorporate design of gathering space with future bus stop waiting area to improve environment at bus stop.

- ***Shade Garden***
  -Provide shade-loving ornamental plantings at corner and around gathering space to create an attractive setting for the seating area and to promote a positive image from Howard Street and Remington.
  -Establish partnership with Wyman House residents who may be interested in planting and maintaining the plants.

- ***Strengthen Pedestrian Connection(s) to Park***
  -Use curb extensions and special paving to strengthen pedestrian connections between the triangle and the Dell. Special paving should not utilize any surface that is difficult to walk upon, particularly for seniors.
  - Replace existing steps leading into the park with re-designed stairs that include a ramp system, providing easier access to the Lower Lawn for seniors and those with disabilities.
  - Provide park map/directory
  - Establish potential monument/memorial placeholder at new entrance to Lower Lawn

- ***Wyman Park Dell Sign***
  -Incorporate Wyman Park Dell identification sign into a low stone wall or ornamental fencing at corner of 29th and Howard Streets. Identification sign should match that placed at the corner of Charles and 29th Streets.

- ***Reconfigured Parking (Recommended Option)***
  - Reconfigure "sweep" so that ingress/egress points are less flowing, removing the ability to speed from 29th Street to Art Museum Drive without having to slow or stop.
  - Widen pavement edge by 9-feet in each direction from the existing curb line to accommodate a 58-foot wide parking bay that would allow 90 degree parking on both sides. This would provide the ability to maintain the existing number of parking spaces, while providing traffic calming and increasing green space. Resulting impervious surface is approximately 14,500 SF.
  - Consider bioretention if configuration results in an increase in paved surface.

  This option needs to be studied further with the Baltimore City Department of Transportation and the adjacent community.

- ***Reconfigured Parking (Option)***
  -Maintain existing 40-foot wide roadway width and parking configuration if recommended option (described above) is not feasible. Resulting impervious surface is approximately 19,235 SF.
  -Provide curb extensions, special paving and bollards to strengthen pedestrian crossing from "triangle" into park.
  - Consider speed humps at the entrance to the "sweep" to slow motorists as they approach the pedestrian crossing.

- ***Promenade***

  -Maintain the original "teardrop" form established by the roadway "sweeps" by widening the existing sidewalk to create a promenade.

  -Provide special paving (e.g. bluestone) from West Gateway to Charles Street.

  -Transition from 18-foot width, further to the east, to 12' width in this zone to accommodate adjacent slopes and parking along roadway sweep.

  -Provide benches, bike racks and game tables.

  -Leave "cut-outs" in the paving of the promenade to accommodate existing trees if necessary. "Cut-outs" can be filled in with paving at a future date when the trees decline and are removed.

  -Provide electric and water hookups to accommodate vendors during events.

Critical Considerations: It will be difficult to maintain an 18' width for the promenade in this area because of steep slopes and the parking configuration; however, the parking area should be closed off during events to accommodate booths, vendors and activities. If it proves feasible to remove or alter the "sweep" as recommended, coordination with the Department of Transportation may be necessary and ownership of the actual roadway sweep needs to be verified. Residents of Wyman House should be included in the process for the detail design of the gathering area and shade garden since they are a significant user group for this area.

Project Budget:

Construction:	$203,800
Design (10%):	$ 20,400
Total:	**$224,200**

Budget does not include land acquisition if "sweep" is removed.

West Gateway - Images

29th Street, the "sweep" and sub-canopy trees create physical and visual barriers between Wyman House and the Dell, however, there is great potential to create a gathering area for seniors and draw them into the park.

By removing sub-canopy trees, an attractive gathering area such as the one shown above could be established in the "triangle" area.

West Gateway – Images

The existing entrance to the Lower Lawn across from the Wyman House, Senior Apartments is dark, uninviting and offers no ADA access.

Regardless of what happens to the "sweep," a well-defined pedestrian crossing should be established between the "triangle" and the Dell. This may be done with special paving (above) or bold crosswalk striping (right). If special paving is used, care should be given to avoiding uneven surfaces that would be difficult for seniors to navigate.

West Crescent

Assessment: Following are the key physical assets and liabilities related to the West Crescent:

- ***Assets:***
  - Attractive wooded buffer between residential area and the institutions of Johns Hopkins University and the Baltimore Museum of Art
  - Mature tree canopy with good visibility through the space
  - Existing Harris Monument

- ***Liabilities:***
  - Few young trees to replace aging canopy in the future
  - Redundant "spur" road separates two park spaces
  - Dangerous intersection at Howard Street /Wyman Park Drive
  - Narrow sidewalk along east side that is not ADA compliant
  - Difficult to cross from this space into the Dell

Design Intent: Improve pedestrian circulation in this area, while maintaining the passive qualities of this space as a buffer from the surrounding streets. Strengthen the connection between the West Crescent and the Dell.

Project Description: This parkland is separated from the main park by Howard Street. Enhancements to this area include widening of the sidewalk along Wyman Park Drive/Howard Street and removal of the spur road at the northern end of the crescent. Additionally, supplemental tree plantings will be provided as replacement canopy for the aging trees. The feasibility of creating a traffic circle at the intersection of Wyman Park Drive/Howard Street and Art Museum Drive to provide safer pedestrian and vehicular movement should be studied in more detail and vetted with the community.

Project Components:

- ***Expand Concrete Sidewalk***
  -Widen existing concrete walk to 5-foot width, and provide ADA accessible route along Wyman Park Drive and Art Museum Drive edge.

- ***Proposed Asphalt Paths***
  -Provide asphalt paths along W. 31st Street and Wyman Park Drive at existing desire lines.

- ***Remove "Spur" Road***
  -Convert asphalt "spur" road to open space and replace with path.

- ***Aged Tree Replacement***
  -Plant canopy shade trees to replace the aging oaks and other trees.

- ***Harris Monument***
  -Utilize CHAP's Adopt-A-Monument Program to secure annual conservation funds for the monument.

Critical Considerations: Removal of the spur road will need to be coordinated with Baltimore City Department of Transportation. Preliminary studies have been done to explore the option of creating a traffic circle at the intersection of Wyman Park Drive, Art Museum Drive and Howard Street to improve traffic flow and pedestrian safety. This concept is illustrated in *Appendix D, Master Plan Alternatives*. It is important to note that this idea needs to be explored further with the Department of Transportation and the surrounding community and institutions to fully understand advantages and disadvantages for traffic flow, pedestrian safety as well as the impact on the West Crescent.

Project Budget:

Construction:	$82,700
Design (10%):	$ 8,300
Total:	**$91,000**

Budget does not include costs associated with official closing of spur road.

West Crescent - Images

Existing sidewalk along busy roadway is narrow and obstructions inhibit ADA access.

Mature canopy provides attractive buffer while allowing important views through the space.

Lee and Jackson Plateau

Assessment: Following are the key physical assets and liabilities related to the Lee and Jackson Plateau:

- ***Assets:***
  - Lee and Jackson Monument
  - Unique "grove" environment with high-canopied trees
  - Fairly large area at grade with surrounding streets, inviting pedestrians to "cut-through" park
  - Dell has strong presence at terminus of Wyman Park Drive
  - Joseph Beuys memorial

- ***Liabilities:***
  - Monument not ADA accessible
  - Monument is somewhat "lost" – no interpretation
  - Erosion around base of monument plinth
  - Few younger trees to replace aging canopy in the future
  - Difficult pedestrian access across adjacent streets
  - Hillside planting creates visual barriers to Lower Lawn
  - Limited pathway access between this area and Lower Lawn
  - Loose gravel pathway is difficult to navigate
  - Difficult to maintain lawn because of shade

Design Intent: Increase visibility into the park and utilize the Lee and Jackson Monument area to create more of a destination and gathering space, while creating stronger linkages to the Lower Lawn.

Project Description: Similar to the Union Plateau, the Lee and Jackson Monument area could accommodate some additional activities such as horse shoes for the seniors living in Wyman House. The plan also calls for establishing native groundcovers to replace the lawn which is struggling beneath the tree canopies. Supplemental tree planting will provide replacement canopy for many of the maturing trees in this area.

Project Components:

- ***Lee and Jackson Monument***
  - -Provide ADA accessible paths to the lower platform
  - -Provide accent lighting.
  - -Provide interpretive signage between monument and sidewalk.
  - -Create seating area and steps behind monument.
  - -Restore aggregate surfaces in poor condition.
  - -Provide ornamental planting at base of monument to add seasonal color and help stabilize soils.
  - -Utilize CHAP's Adopt-A-Monument Program to secure annual conservation funds for the monument.

- ***Asphalt Path***
  - -Convert existing gravel path to accessible asphalt path.

- ***Joseph Beuys Memorial***
  -Provide informal mulch paths to memorial sign and bench.
  -Replace dead shade tree at memorial.

- ***Lighting***
  -Replace and/or repair broken light fixtures.

- ***Site Furnishings***
  -Replace benches and trash receptacles that are in poor condition and add additional benches near monument.

- ***Planting Zones***
  -Utilize various shade groundcovers to stabilize soil and minimize erosion
  Woodland Edge – Naturalistic groundcovers, low shrubs, ferns and herbaceous material at woodland edge.
  Transition Zone – low, dense groundcover between woodland and lawn (e.g. Liriope).
  Lawn – Lawn in areas of sun and partial shade around monument and at sidewalk edge.
  - Refer to *Appendix F, Master Plant List* and *Exhibit C, Planting Zones Diagram* (included in Executive Summary)

- ***Activity Zones***
  -Maintain flexibility for additional "low-impact" activities such as horseshoes.

Critical Considerations: The concept for providing additional paths and access to the monument would impact a few significant trees. Therefore, an interim solution should be considered to provide ADA access to the lower monument platform until such time that the full recommendations can be implemented (when the existing trees are in decline). If interim access is provided, it should be integrated into the overall design of the monument; a wooden ramp or solution that looks temporary should not be utilized.

Project Budget:

Construction:	$203,800
Design (10%):	$ 20,400
Total:	**$224,200**

Lee and Jackson Plateau - Images

Mature trees provide unique grove-like setting but will ultimately need to be replaced by younger trees. Turf is difficult to maintain because of shade and roots.

Low groundcovers, such as Liriope, should be considered where it is difficult to establish turf, still allowing a continuous "green" ground plane such as in this square in Savannah, Georgia.

Lee and Jackson Plateau - Images

The lower plinth to the Lee and Jackson Monument is not ADA accessible, nor is interpretation provided.

Bold, simple accent planting and seasonal color should be considered at the base of the monument to highlight it as a special feature in the park, such as with this monument in Savannah, Georgia.

Art Museum Drive Frontage

Assessment: Following are the key physical assets and liabilities related to the Art Museum Drive Frontage:

- ***Assets:***
  - BMA plans to reopen main entrance off of Art Museum Drive and facing the Dell
  - Opportunity to draw visitors from BMA to the Dell and to partner for temporary outdoor exhibits
  - Dramatic view to Lower Lawn

- ***Liabilities:***
  - Speeding traffic along Art Museum Drive
  - Visitors to BMA are not currently drawn to the Dell

Design Intent: Increase visibility into the park along Art Museum Drive and create a stronger visual and physical relationship between the BMA and the Dell.

Project Description: The relationship between the BMA and the Dell will be enhanced along Art Museum Drive with the addition of an overlook opposite the original main entrance of the BMA. This will engage more visitors to the museum with the Dell. Direct access will be provided in a series of paths that lead out from this overlook. In addition, the open slope and vista in front of the BMA will be enhanced with native meadow grasses and groundcovers to stabilize the slope. Along the edges of the existing woodland, smaller understory trees will frame the vista and provide a graceful transition between woodland and meadow.

Project Components:

- ***North Entrance Path and Steps***
  - -Selectively thin overgrown vegetation at entrance.
  - -Remove existing lower portion of path along base of wall and pull path and steps away from the retaining wall to provide a more direct connection to the Lower Lawn.
  - -Remove the top portion of the retaining wall (that which projects above the Art Museum Drive sidewalk) with an ornamental railing/stone pier combination to increase visibility to the park from the street.
  - -Provide Wyman Park Dell identification sign on wall or railing at northern corner of park.

- ***Park Overlook and Paths***
  - -Provide overlook on axis with museum main entrance (as planned in the BMA Master Plan) to capitalize on views into Dell.
  - -Grade overlook to be slightly depressed from sidewalk to allow views over railing from sidewalk.
  - -Consider special paving at overlook area.
  - -Provide seasonal color in planting bed defined by sidewalk and overlook path.
  - -Provide benches and signage at overlook.
  - -Provide park map/directory

-Provide two crisscrossing paths that lead from the overlook down the hillside to the lower lawn.
-Utilize stone (that matches stone used elsewhere in the park) for overlook retaining wall and railing piers.
-Consider "memorial" wall elements along overlook as a naming/funding opportunity (ie: plaques on stone piers).

- ***Special Paving and Museum Connection***
  -Provide special paving in broad crosswalk area across Art Museum Drive from planned museum entrance to overlook.
  -Strengthen the visual connection between the Museum and the park by keeping paved crossing area free of parked cars during events when Art Museum Drive is closed to vehicular traffic.

- ***Lee and Jackson Plateau Entrance***
  -Remove tall shrubs near existing steps to Lee and Jackson Plateau area, particularly immediately adjacent to steps. Provide low shrub/groundcover on steep embankment adjacent to steps.

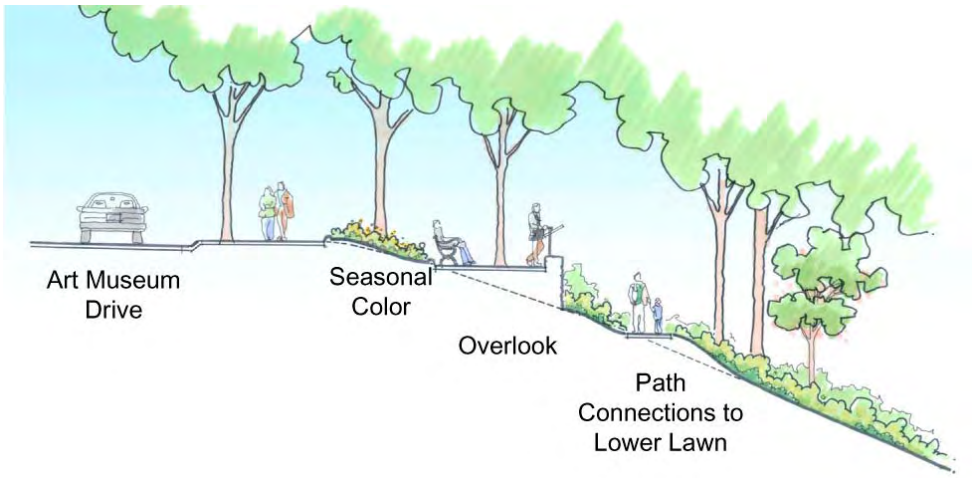
- ***Art Museum Drive Streetscape***
  -Replace street trees that are damaged and in decline (red maples).
  -Enhance woodland edge along Art Museum Drive with replacement canopy trees.

Critical Considerations*:* Coordination with the Department of Transportation will be required to determine feasibility of using special paving in Art Museum Drive across from planned museum entrance and for any impacts within right of way.

Project Budget:

Construction:	$339,600
Design (10%):	$ 34,000
Total:	**$373,600**

Art Museum Drive Frontage Images



Dramatic slope and open view provides opportunity to establish stronger relationship between the BMA and the Dell. The master plan proposes an overlook as illustrated above (top)

Dynamic views of the Lower Lawn are afforded from Art Museum Drive.

The overlook should incorporate low stone walls and could be an opportunity to provide sponsorship recognition

Charles Street Frontage

Assessment: Following are the key physical assets and liabilities related to the Charles Street Frontage:

- **Assets:**
  - Adjacencies to Charles Village commercial district and Charles Street
  - Near Gertrude's Restaurant and BMA sculpture garden
  - Potential for strong axial relationships with 31st Street
  - Charles Street Reconstruction
  - Views from southbound Charles Street along the length of the Lower Lawn
  - Existing bus stop

- **Liabilities:**
  - Dark, unwelcoming "front door" to the Dell
  - Sewer smell
  - Overgrown vegetation obscures best views of the Dell and create sense of unease for visitors
  - Lacks ADA accessibility
  - 30% Charles Street Reconstruction plans do not provide for pedestrian crossings at 30th Street
  - Existing restroom building is unattractive and blocks important vistas into Dell

Design Intent: Restore the original design intent of the Olmsted Brothers plan by increasing visibility into park along the Charles Street edge. Relocating the existing north entrance will provide additional amenities (overlook, food pavilion, ADA ramp, storage), while also solving one of the park's largest problems – a dark, sunken, unwelcoming major entrance.

Project Description: The Charles Street frontage and the intersection of Charles Street and Art Museum Drive are important image areas for the Dell. Planting low native shrubs and groundcovers will allow sweeping views from Charles Street to the Lower Lawn. The plan proposes a major new entrance, opposite 31st Street, coupled with a new pavilion that provides refreshments and outdoor seating at street level and park operations and restroom facilities on the lower level. Cities worldwide have recognized the importance of the availability of refreshments in a park and their role in encouraging postitive activity. This Charles Street edge of the Dell can accommodate this activity and be economically viable. The pavilion would be within the Charles Street commercial area and could be constructed without destroying the Dell's integrity.

Project Components:

- ***Charles Street Streetscape***
  -Selectively thin overgrown and invasive understory vegetation along the Charles Street edge. Replace with low-growing appropriate plant material to stabilize slope, while allowing views to the Lower Lawn from Charles Street.

-Coordinate plantings at park entrances (31st Street and 30th Street) with the Charles Street Reconstruction Project. Charles Street trees should be placed to frame—not block—views into the park at park entrances.

- ***North Entrance, Overlook and ADA Ramp***
  - -Provide special paving (i.e. bluestone) and ornamental fencing and stone piers (fencing/piers to match that used along Art Museum Drive and at overlook).
  - -Provide tables and movable chairs for gathering, eating, drinking on overlook and lower park terrace.
  - -Provide visitor orientation map/directory.
  - -Construct overlook into hillside to allow for storage, park offices and/or restrooms at the lower level, with ability to construct pavilion or vending carts above.
  - -Relocate existing utility lines in 31st street to accommodate pavilion and overlook on axis with 31st Street.
  - -Provide accessible ramp from Charles Street (in vicinity of pavilion and overlook) to Lower Lawn.
  - -Provide electric and water hookup for future permanent pavilion or interim vending carts.
  - -Additional crosswalk added at 31st Street.
  - -Provide benches, bike racks and trash receptacles
  - -Potential memorial/monument feature incorporated into entrance design.

- ***Pavilion***
  - -Construct small pavilion for park concessions and information. Architectural design could be traditional or contemporary but, regardless of the style, the building should be of a signature design.
  - -Provide wireless internet connection for park users.

- ***Remove Existing Restroom Building***
  - -Storage space will be accommodated in new entrance structure/overlook.
  - -Salvage stone for use elsewhere in the park.

- ***Expand 30th Street Entrance***
  - -Steps and low stone wall on north side (one side only).
  - -Coordinate with the Charles Street Reconstruction Project to provide additional pedestrian crossings here

Critical Considerations: If moving the utilities from 31st street (to allow the pavilion to be on axis with 31st Street) is not feasible, the pavilion and overlook should be moved to the south and, if possible, located on axis with the south sidewalk along 31st Street. Removal of existing restroom building should not occur until new storage facilities are developed with the new overlook. If permanent pavilion is not feasible, the overlook should be designed to accommodate temporary vendor carts as an interim solution until such time that a permanent structure is feasible. The transformers can stay in their existing locations since they will no longer be along the primary entrance into the park.

There is a trolley stop planned at Charles Street and 32nd Street, one block to the north of the pavilion area. Information about the Dell should be provided to the Visitors and Convention Bureau to help attract trolley riders to the park.

There has been some interest expressed in creating a water feature or other attraction in the Dell. The entrance overlook and pavilion described above would be an appropriate area to incorporate a feature such as this, where sound of water would help mask noise from adjacent traffic. Also, a significant investment such as this should be in a highly visible location where it would be less susceptible to vandalism and also function as a way to attract people into the Dell from the adjacent commercial district.

Project Budget:

Construction:	$1,465,900
Design (10%):	$ 146,600
Total:	**$1,612,500**

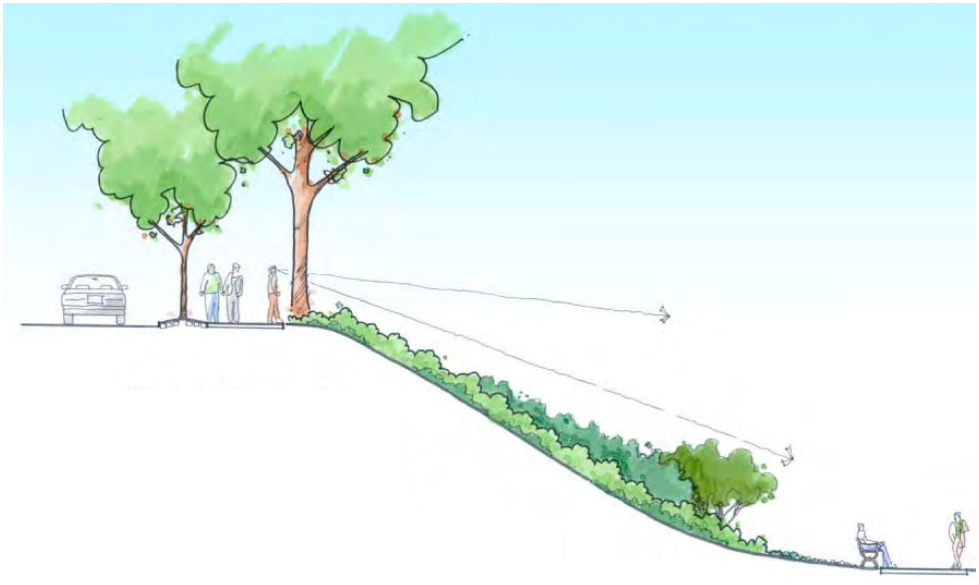
Charles Street Frontage - Images

Low wall and overgrowth block most important vista of Lower Lawn (top left). Steps are uninviting and do not provide ADA access (top right). Presence of transformers and old restroom structure along with overgrown vegetation create uncomfortable environment, particularly for the main entrance to the Dell (left).

Existing commercial activity should be "captured" and brought to the edge of the Dell to help activate the park and a new main entrance.

Charles Street Frontage - Images

The low concrete wall along Art Museum Drive at Charles Street (above) could be lowered to sidewalk elevation and replaced with stone piers and open railing to allow better visibility from the street to the park (below).



Restricting taller shrubs to the bottom of the slopes will allow views from Charles Street into the Lower Lawn

Charles Street Frontage - Images

Perspective sketch showing how new pavilion at 31st Street could help activate the Dell and provide a more inviting entrance to the park.

Study model illustrates how the lower portion of the pavilion could have additional outdoor seating as well as storage space, restrooms and/or a park manager's office.

Existing view from 31st Street illustrates the potential to look down the length of the lawn. Note how vegetation is overgrown. In the summer, this view is completely obstructed.

Charles Street Frontage - Images

The availability of food, refreshments and portable seating is very important in helping to activate a park.. This example from Greenville, South Carolina illustrates how a terrace area overlooking the Dell might function

New pavilions helped transform a dark and unwelcoming entrance into an inviting one in New York's Bryant Park (above). A new pavilion in New York's Madison Square Park is contemporary in design and even incorporates a "green roof" (right). Vending carts (above right) could be a reasonable interim approach until such time that a pavilion is funded.

Other Projects

The projects described above are area-specific. Following are additional park enhancement projects that may be included within the project areas described above, or they may occur as a project in and of themselves. These elements generally occur throughout the park and, therefore, consistency in design is critical. In some cases, the elements are identified as optional.

Wireless Network: Consideration should be given to providing wireless service throughout the major areas of the park to encourage yet another use and to encourage people to stay in the park. The pavilion area is the most appropriate location as is the Lower Lawn.

Signage: A coordinated sign system should be designed for the park including major park identification signs, "trailblazers" that might be located beyond the park, informational signs, regulatory signs, orientation map and sponsorship recognition. The emphasis should be on a clean simple design and positive educational messages ("The lawn is being restored, please stay on pathways" vs. "Keep off the grass"). In addition, signage should be visible so that information is conveyed, however, they should be integrated into the setting as much as possible. Visual clutter should be avoided.

Interpretation: The Dell has a rich history, yet few know its significance as part of the Olmsted's legacy in Baltimore. Interpretive messages should be integrated into the overall park design to inform citizens and visitors. Interpretative messages should include the Olmsted history, information on environmental restoration efforts and Dell habitats and the Civil War history related to the monuments.

Miscellaneous Landscape Planting: While most of the new plant material will be provided as each project is constructed, there may be an opportunity to add new plantings if donors come forward or specific groups want to sponsor new plantings. Following are some basic guidelines for adding new trees and plant materials:

- All tree and landscape planting should be closely coordinated with the master plan to determine if the construction of future projects will negatively impact the plantings (grading, for example) or if the plantings are part of a broader concept where uniformity of species will be important.

- The predominant plant material should be large canopy trees that generally have long life spans. The temptation to plant fast growing (and often short-lived) trees such as Bradford pear and cherry trees should be avoided. The most effective park trees are those that get more stately and picturesque with age and those with high canopies that do not obscure sight lines. Appropriate trees include oaks, maple, beech, elm, American sycamore and tulip poplar. The majority of trees should be native to Central Maryland as they are adapted to the soils and climate of this region. Occasional specimens of some non-native but adapted species may also be considered, but only as accents and not widespread plantings.

- Shrub, flower and groundcover plantings should be planted in bold simple masses and should be concentrated in areas where they will make the most impact. These areas include park entrances, edges of gathering spaces, the pavilion area and areas where grass is difficult to maintain. Complex planting beds with only a few of many different plant species should be avoided as they are difficult to maintain and can be visually distracting.

Site Furniture: Site furniture primarily includes benches, trash receptacles and bike racks. While some areas of the park may contain a greater amount of site furniture than others, furniture will be located throughout the park and should, therefore, be consistent in design. The bench design should reflect the historic "Baltimore Bench" and should be adapted to accommodate sponsorship plaques. Trash receptacles and bike racks should be selected to be compatible with the bench in terms of colors and materials and should respect the historic qualities of the Dell. Bike racks should be located primarily near main park entrances such as the Union Monument Plateau, West Gateway and north entrance area along Charles Street.

Signage: Like site furniture, signage should belong to a consistent design family throughout the park and should include park identification signs ("Wyman Park Dell"), identification signage for park elements (pavilions, special areas), regulatory signage and sponsorship signage. The signs should be designed to be unique to Wyman Park Dell and may incorporate a special logo or color. Care should be taken not to clutter the park with too much signage or inappropriately located signs. The overall sign system should be designed as a package, then implemented on a project-by project basis.

Public Art and Historic Interpretation: Because of the Dell's rich history and proximity to the BMA and its sculpture garden, there is a unique opportunity to capitalize on the park setting and its high visibility for an "art in the park" program. Public art should be considered for gateway areas and as temporary and permanent features throughout the park. Care should be given to locating public art in context with the overall park landscape design and with sensitivity to the Lower Lawn.

Memorial Plantings and Monuments: Parks tend to be logical receiving grounds for memorial plantings. These memorials can be an effective source of income for the park. However, if un-managed they can result in visual clutter that detracts from the overall park and its proper functioning. All memorial plantings shall, therefore, be reviewed carefully prior to planting to determine their appropriateness in the context of the park master plan. It is important to note that, Olmsted generally avoided adding monuments or features that call a lot of attention to themselves. Any memorial or monuments should be carefully designed and located. The Baltimore Park Board has established guidelines and a formal review process for the placement of statues and memorials in city parks. All proposals for memorials must be reviewed by the Park Board and approved by the Department Director. In addition, the Friends of Wyman Park Dell and Master Plan Steering Committee should evaluate proposals prior to submission to the Baltimore Park Board.

The following guidelines should be considered when proposals are reviewed for Wyman Park Dell:

- Memorial tree plantings should be restricted to areas of the park where tree planting is included as part of a master plan. Care should be taken to avoid planting trees in the middle of an open space (such as the Lower Lawn) as described in this master plan.

- Memorial tree plantings should utilize species appropriate to the park. Large canopy shade trees are encouraged and could be appropriate in most areas of the park. Sub-canopy trees, on the other hand, should be limited to a few areas as described in the master plan.

- Nameplates or plaques should be simple and limited to an engraved stone or brick that is set flush with the grade adjacent to the tree.

Parking: Approximately 28 parking spaces are provided along the "sweep" linking 29th Street with Howard Street (the number of parking spaces in the recommended approach and the option as described in the master plan are the same). While these parking spaces are reserved for the Museum during the day, Monday through Friday, they are available, and should remain so, to the public in evenings and weekends. For the most part, however, parking will occur along existing streets. This is positive as it will provide access to different areas of the park as well as opportunities for more "natural surveillance" as people enter and exit their cars. It will be important, however, as the Charles Street Reconstruction moves forward, that parking is prohibited opposite 30th and 31st Streets where key views into the park should be maintained. Partnerships with surrounding institutions should be explored to accommodate parking for large events, particularly when events do not compete with parking needs of the particular institutions. Parking agreements will need to be coordinated among Recreation and Parks and the surrounding institutions.

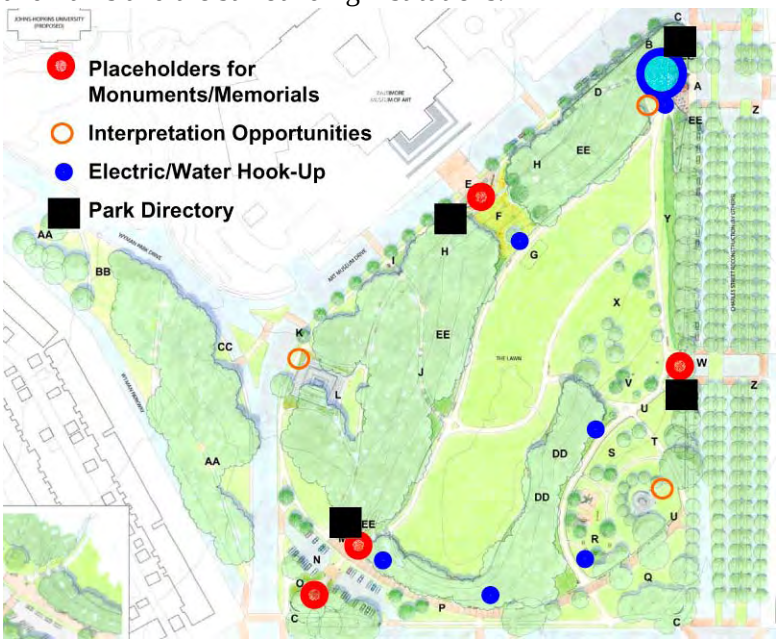


Diagram illustrates potential "placeholders" for park directory signs, electric and water hookups, interpretation opportunities and additional monuments/memorials

MISCELLANEOUS IMAGES

Examples of signage that might be appropriate for the Dell. Because the Dell is not well known, "trailblazers" (top left) might be appropriate to direct visitors to it as it becomes more of an attraction.

MISCELLANEOUS IMAGES

Examples of sponsorship recognition signs. Note that they do not need to be visually dominant. Bench sponsorships such as that used in Central Park (middle) are a great way to generate funds for the park and is something very tangible for people of all income levels.

MISCELLANEOUS IMAGES

Regulatory signs can be much more effective if there is an educational component tied in with the message. This sign from Central Park is an example of one that could be used in Dell areas where invasive species are being removed and replaced with native plants.

The availability of wireless internet connections can make the Dell more appealing to a whole new user group. Inexpensive moveable chairs and tables allow users to create the arrangement that fits their current mood…alone, with others, in the sun or in the shade.

V. IMPLEMENTATION PLAN

A. Project Priorities

Implementation of the master plan will occur over many years on a project-by-project basis as described in this report. Project priorities will vary depending on available funding and the efforts of project "champions"— the key stakeholders most interested in implementing a particular project. However, some early priorities should be considered, as successful completion of these will help to change perceptions of the park, increase the number of park stakeholders, help maintain momentum for future improvement projects and help build credibility for all of the park support groups, as outlined in *Appendix G: Park Support Groups*.

Critical first steps should focus on physical elements such as park edges and elements that will help change perceptions about the park, defining ways to improve park management, establishing "replacement trees" for the mature canopy areas, removal of invasive species and promotion of the park and the master plan. Priorities to consider include the following:

1. Begin planting program to secure future of large, canopy trees. Plant initial new canopy trees made available through the Department of Recreation and Parks in Spring, 2006. Place order in Fall, 2006 for additional trees.

2. Develop an invasive plant management strategy. Continue removal of invasive plant materials, concentrating on key view corridors and at entrances to the Lower Lawn. Efforts should focus on removal of invasive species and replacement with natives.

3. Stabilize eroding slopes with plantings. Protect with temporary fencing and educational signage that explains restoration effort. Complete efforts in specific areas one at a time, starting with key view corridors and at entrances.

4. Provide drain for wet area in Lower Lawn. Provide inlet and connect to existing storm drain system to eliminate mosquito hazards and unattractive overgrowth.

5. Repair walks and steps with temporary or permanent treatment, depending on context within master plan. Initial efforts should focus on the worst conditions, such as dangerous steps.

6. Repair stone wall. This is a three-phase effort. First it will be important to prepare design drawings, then seek funding (or sponsorship) then construct the wall.

7. Widen existing sidewalk along West Crescent. Walking along Wyman Park Drive as it transitions into Howard Street is uncomfortable for pedestrians because of speeding traffic. The sidewalk should be widened early on to accommodate those with disabilities, area residents and those who will be visiting/going to the new South Quad at the JHU campus.

8. Design and construct gathering area/shade garden in West Gateway area. The seniors in Wyman House are an important user group for the Dell.

9. Design and fence the Union Monument Plateau area. Establishing the "kid and family-friendly" zone at the Union Plateau will send a highly visible message that the Dell continues to be enhanced and made a better resource for the surrounding communities.

10. Develop comprehensive sign system. System should include schedule of messages, potential locations and design template. While new signs are not an immediate priority, it will be important to establish the design of the sign system and typical messages so that as new projects are implemented, the correct signs can be installed at that time, in association with the project.

11. Develop bench, tree and garden sponsorship program and corresponding fund-raising campaign. As with the sign system, the details of a sponsorship program should be established so that as projects are implemented, these sponsorship elements can be incorporated directly into the project. Include options ranging from individual elements (like a singular tree or bench) to groves or entire garden areas (such as the Joseph Beuys Memorial).

12. Formalize organization of Steering Committee partnerships. The master plan is complete, but it will be important for partners to continue working together to "get the message out," to establish capital campaigns and to oversee the master plan implementation.

13. Participate each year in Baltimore City C.I.P. planning process. Purpose is to get Dell projects included in the fiscal year budget.

14. Work with Baltimore City Planning Department to ensure that Dell is protected as a park. Initially, apply the new "Open Space Overlay District" zoning classification which is currently being developed. Begin to explore "Landmark" designation for Wyman Park Dell.

15. Develop events program. Begin to develop series of events to activate and promote the park. Events should be highly visible and some should be developed with some regularity such as a "First Friday Movie Night" which allows people to get used to coming to the park a particular night of the week or month.

16. Celebrate each success. Promotion and visibility of the Dell is extremely important. The completion of each new project, no matter how small, should be publicized and celebrated to continue to change perceptions of the park and to recognize (and energize) those who have worked so hard to implement the project. Events and celebrations could be something as simple as a cookout or something themed to fit the project, such as a "circuit walk" along the pathways, to highlight the completion of a new pathway system.

17. Become active in CHAP's Adopt-A-Monument Program. FWPD should become active in this program to secure annual conservation funds for the Lee and Jackson, Union Soldiers and Sailors and Harris Monuments.

B. Design Documents

While some of the improvement projects outlined in this master plan are relatively straightforward and require little additional design, many projects will require detail design and the development of construction documents. Some of these design projects may be initiated by the City's Department of Recreation and Parks and others may be initiated by Friends of Wyman Park Dell or the Master Plan Steering Committee. Design documents are critical to the successful implementation of the master plan and should be prepared prior to the construction of any major project, whether it involves infrastructure (like parking and stormwater drains), built elements (like walks, pavilions, or walls), or planting (like Lee and Jackson Plateau planting or the Wooded Slopes invasive removal and re-vegetation).

C. Park Management

Through the new Office of Partnerships, work with Friends of Wyman Park Dell (FWPD) to formalize a working relationship between the two organizations and improve park management. One of the first tasks that should be considered is assisting FWPD with exploring the feasibility of a paid staff position, responsible for park management. The position could oversee the park, address maintenance concerns, coordinate volunteers and coordinate the implementation of the master plan in accordance to the vision. Following is a sample of responsibilities that might be included in a position such as this:

Typical Responsibilities

- Assist in developing and implementing park programming, including special events, visitor services, concessions, development and enforcement of park rules and regulations.
- Facilitate development of and maintain public/private partnership programs such as conservancy boards.
- Assist in developing a long-term strategy for implementing the master plan.
- Assist in identifying the necessary resources for implementation of the master plan including funding, staffing, expertise and systems.
- Assist in developing and implementing short and long-term funding strategies for the park, including initiatives that include the private sector.
- Assist in developing and implementing a short and long-term promotion and marketing strategy to increase community, corporate and foundation interest in the park.
- Develop and maintain volunteer program and network.

- Develop and implement an on-going management study to improve the quality of park maintenance and operations.

- Develop and implement a natural resource management plan identifying the responsibilities of in-house staff as well as the needs for outside consultants or additional technical staff.

- Develop and implement park programming and special events strategy, coordinating with Charles Village and Remington community groups; Baltimore Museum of Art and Johns Hopkins University and other organizations as appropriate.

- Assist in designing and implementing a visitor services strategy.

- Design and implement a strategy for effective enforcement of park rules, including the use of park rangers and coordination with BMA and JHU security personnel.

- Develop a comprehensive concessions policy and a plan for attracting responsible investors and sponsors.

- Review proposals (such as community service projects, tree donations, etc.) generated by the public and stakeholders and determine appropriateness based on master plan.

- Schedule and coordinate the use of the park grounds and facilities.

- Coordinate with City permits office regarding permits for park use.

- Program special events and promote public utilization of park resources.

PART 4: APPENDICES

APPENDICES

APPENDIX A: STAKEHOLDER LIST AND INPUT

APPENDIX A: STAKEHOLDER LIST AND INPUT

MASTER PLAN STEERING COMMITTEE

Marcia Holden, *Chair, Friends of Wyman Park Dell*
Sarah Fawcett-Lee, *Friends of Wyman Park Dell*
Sandy Sparks, *Friends of Maryland's Olmsted Parks and Landscapes*
Emily Thayer, *Remington Neighborhood Alliance*
John Spurrier, *Charles Village Civic Association*
Alan Dirican, *Baltimore Museum of Art*
Mark Demshak, *Johns Hopkins University*
Mary Porter, *Baltimore City Department of Recreation and Parks*
Tamara Woods, *Baltimore City Department of Planning*
Eric Holcomb, *Baltimore City Department of Planning*

STAKEHOLDER LEADERSHIP PARTICIPANTS

Business Community
John Shields, Gertrude's Restaurant

Faith and Senior Centers
Alice Jellema, Church of the Guardian Angel
Regina Smith, Wyman House

Friends of Wyman Park Dell
Suzanne Rexing

Institutional Leaders
Doreen Bolger, Baltimore Museum of Art
Dr. Jim McGill, Johns Hopkins University
Larry Kilduff, Johns Hopkins University

Real Estate Agents
Judy Morris, Long & Foster

Security
Steve Ossmus, Johns Hopkins University
Ron Haddaway, Baltimore Museum of Art
Doug Gibson, Baltimore City Police

Charles Village Festival
Joe Rexing, Charles Village Festival (UMBC Campus Architect)

Community Leaders
Beth Bullamore, Charles Village Civic Association

Institutional Grounds Managers
Brad Pudner, Baltimore Museum of Art

Baltimore City Department of Recreation and Parks
Fran Spero
Sharon Shuler

Friends of Maryland's Olmsted Parks and Landscapes
David Holden

Baltimore City Department of Planning
Duncan Stuart
Gary Letteron, Environmental Planner

TOWN HALL MEETING PARTICIPANTS

The following names were taken from the sign-in sheets from each Town Hall Meeting. By signing in, the participants did not necessarily indicate support or opposition to the ideas discussed.

Town Hall Meeting #1

Ed Hopkins
Mark McMullen
Julisa Slavikas
Mark Counselman
Wendi Groden-Thomas
David W. Wallace
Kent Waters
Carole Evitts
Emily Ellickson-Brown
Sandy Sparks
Mark Demshak
Dan Bailey
Jim Morrison
Tim Armbruster
Regina Smith
John Spurrier
Tiffany James
Pam Kelly
Jodie Shivery
Sarah Fawcett-Lee
Joan Floyd
Phyllis J. Lindley
Christie Richards
Susie Counselman
Cathy Brilhart
Kwabena Appiah
Sara McCarty
Joe Slattery
Maria Matveena
David R. Holden
Dottie Campbell
Terry Broar
Chuck Bullamore
Helen Kerig
Chris Bruce
Betty Hill
Mark Derien
Mary Porter
Phyllis Jaslow
Lucy Cook
JoAnn Orlinsky
Darlene Harenberg
Dave Bobart
Suzanne Rexing
N. Yarlery
Emily Thayer
Tim Msozek
Christina Ralls
Daniel Jones
Kevin Koenig
Alan Dirican
John Rouse
Christine Gardella
Aaron Oldenburg
Peter Cramer
Al Barry
Tamara Woods
Sheila L Rees

Town Hall Meeting #2

Valerie McGuire	Mary Porter	Betty Hill
Mariann Millard	Jeff Millard	Emily Thayer
Kathy Poole	Martin Kramer	David Holden
Marcia Holden	Beth Bullamore	Chuck Bullamore
John Spurrier	Brad Erickson	Jennifer Erickson
Sarah Fawcett-Lee	Jason Lee	Sandy Sparks
Sandy Waters	Kevin Koenig	

Town Hall Meeting #3

Martin Kramer	Richard Fawcett	James L. Jeweers
Kent Waters	Wink Hastings	Regina P. Smith
John Orlinsky	Fred Besche	Chuck Bullamore
Tim Hartman	Kevin Estis	Larry Kildruff
Sheila L. Rees	Terry Brown	Victoria Der
Judith Manterah	Mark Counselman	Joan Floyd
Mike O'Keefe	Steve Theodowpoulos	Lucy Cook
Judith Orlinksy	Alan Dirican	Betty Hill
Bryen Fracchia	David Holden	John Shields
James D. Thornton	Tim Armbruster	Douglas Armstrong
Chue Romano	Julia Romano	Brad N. Erickson
Mary Porter	Valerie McGuire	Ron Griffin
Gerry Kirk	Nicholas M. Prevas	Tamara Woods
Sarah Fawcett-Lee	Mr. William Saxon	Mrs. William Saxon
Jason Lee	Julie Cook	Salem Reiner
Beth Bullamore	Patricia Canick	Cherlyn Kirk
Mark Derien	John Spurrier	

STAKEHOLDER INPUT

Town Hall Meeting #1 September 13, 2005

The following comments represent input generated by meeting participants. At the conclusion of the meeting, participants were asked to place "dots" adjacent to the ideas/issues that they felt were most important.

Assets

1 Park is a selling point.
2 Unique bowl shape – illusion. "Quiet place" in the city. (*2 dots*)
3 Keep integrity/diversity of trees (*1 dot*). 23 species of birds. (*2 dots*)
4 Keep and enhance native, non-invasive trees. (*2 dots*)
5 Park feels old/established.
6 Keep trees that screen Dell – illusion of country.
(A-1) End of Page

1 Old stone – keep/enhance.
2 Separation – separate playground from lawn. New use shouldn't destroy integrity. (*1 dot*)
3 Statues are unique: one North/one South.
4 Pathways – keep true to original design (*3 dots*).
5 Maintain wildlife diversity.
(A-2) End of Page

1 Gentle natural amphitheater doesn't require formalization. (*2 dots*)
2 Variety of spaces/shapes/forms.
3 Sledding places. (*1 dot*)
4 Preserve playground – enhance.
5 Antique – style light posts.
6 Understated, elegant space – not overly programmed.
(A-3) End of Page

1 Relative safety of the Dell.
2 Welcomes everybody.
3 The history/providence "pedigree." (*2 dots*)
(A-4) End of Page

1 Preserve as buffer from urban conditions. (*2 dots*)
2 Variety of views. Keep lawn open (Feels larger than it is). (*3 dots*)
3 Terrific gathering place -- edges & below. (*1 dot*)
4 Continue to attract diversity of user groups.
(B-1) End of Page

1 Gentle natural amphitheatre an asset.
2 Preserve sledding routes in winter (along Charles Street & down BMA slope).
3 Preserve defined areas for activity (active along Charles, quiet along Art Museum Drive).
4 Preserve wetland area at bottom of steps for biodiversity. (*4 dots*)
5 Community's interest in the Dell.

6 Dog friendly. (*2 dots*)
(B-2) End of Page

Liabilities

1 No staff /caretaker. (*4 dots*)
2 Attracts homeless, drug addicts – hustlers (not as bad as before).
3 Paths not handicap accessible (*1 dot*).
4 Benches – too low.
5 Low swampy area – attracts insects, unattractive.
6 Charles Street edge is "sketchy". Planting obstructs views from Charles Street. (*3 dots*)
(A-5) End of Page

1 "Triangles" are neglected. (*1 dot*)
2 Poe Statue moved and others moved. Some spaces might not have a purpose.
3 Sewer line under Dell?
4 Condition of stair entrances and asphalt paths (should be stone or gravel/brick).
5 Inability to/ lack of planning for sustainability. (*1 dot*)
6 People don't know it is there. (*1 dot*)
(A-6) End of Page

1 Entrances not visible/clear.
2 Lack of amenities for possible use (no electric, water, restroom). (*1 dot*)
3 Building is a liability – creates a dark corner.
4 Lighting creates high contrast areas.
5 Lights on Art Museum Drive too close to eye level. (*2 dots*)
6 Hard to get City to adjust timing of lights for different seasons.
(A-7) End of Page

1 Neglect of park itself; not maintained (invasive species, trees limbed up, stairs redone). (*1 dot*)
2 Severe erosion. (movement along desire lines).
3 Swamp area at base of steps unattractive & attracts insects.
4 Dogs (off leash) and irresponsible owners. (*1 dot*)
5 Lack of designated dog run. (*5 dots*)
(B-3) End of Page

1 Stench of raw sewage. (from both utilities & people). Sewer line under Dell? (*1 dot*)
2 Safety/uncertainty due to enclosure and lack of visibility.
3 Trash pickup inconsistent & limited number of receptacles. (*2 dots*)
4 Overgrowth – difficult to see in/out safety (Art Museum Drive & Charles Street).(*1 dot*)
5 Edges scruffy & unattractive to passerbys. (*2 dots*)
(B-4) End of Page

1 No coordination between residents' planting & Dell maintenance. (No system to locate areas where residents can plant).

2 Security *within* the Dell lacking. (*2 dots*)
3 Graffiti on benches & structures unattractive.
(B-5) End of Page

Opportunities

1 Possible dog hours.
2 Creation of native meadow areas. (*1 dot*)
3 Removal of "Spur" street at Western Edge. (*3 dots*)
4 Put a stream/waterfall to dump into a pond – needs something to draw people in. (*5 dots*)
5 Add water/power source to accommodate events.
6 Wireless networks. (*1 dot*)
7 Tables for checkers/chess.
(A-8) End of Page

1 Living classroom/take advantage of native environment. (*1 dot*)
2 Drinking fountain. (*2 dots*)
3 Capitalize on history w/signage and interpretation.
4 Rebuild stone walls as dry stone walls – help erosion. (*4 dots*)
5 Community notice board.
6 Acquire a caretaker. (*1 dot*)
7 Large enclosed NY style dog run.
(A-9) End of Page

1 Design for low maintenance.
2 Triangle at Howard and 29th – Valuable space next to senior center – sitting area for seniors. (*2 dots*)
3 Events, but not as money makers – make available to all.
4 Utilize portable power sources.
5 Connect Dell to sculpture garden/BMA – take advantage of this relationship. (*2 dots*)
6 Opportunities for art and functional art.
(A-10) End of Page

1 Movies in park during summer. (*3 dots*)
2 Community flea markets/concerts/Shakespeare. (*2 dots*)
3 Events as revenue generators.
4 Activities to draw people in. (chess tables, etc.)
5 Pavilion could serve coffee & food (e.g. Starbucks?). (*2 dots*)
6 Enhance playground – (climbing structure).
(B-6) End of Page

1 Flower beds (possibly below museum on hillside).
2 Temporary ice skating rink. (*1.5 dots*)
3 Picnic tables – draw families. (*1 dot*)
4 Research/model after Central Park rehab (signage and grand entrances).
5 Flexible seating – rent a deck chair (make your own space). (*2 dots*)
6 Explore public/private partnerships.
(B-7) End of Page

1 Events that highlight local community.
2 Enhance sledding slopes/routes. (*1.5 dots*)
(B-8) End of Page

Threats

1 Events that are too large and attracting too many people for the Dell to handle.
2 Complacency/neglect.
3 Poor maintenance of surrounding streets leads to erosion.
4 Dell doesn't have its own identity (officially) within the Greater Wyman Park. (*1 dot*)
5 Lack of promotion (awareness for Dell within community).
6 Traffic impedes connections to park.
(A-11) End of Page

1 Invasive species and labor intensiveness of removing.
2 Potential not to honor historic legacy.
3 Pre-existing plans that threaten park. (*4 dots*)
4 Appearance of apathy.
(A-12) End of Page

1 Future tall buildings could cut off light to Dell. (*2 dots*)
2 Threat of development in Dell.
3 Lack of sustainability of maintenance.
4 BMA/JHU expansion or encroachment into Dell a concern.
5 Land might not be legally protected as historic designation. (*10 dots*)
6 City lacks well-funded parks/recreation department for maintenance. (*4 dots*) City is the ultimate "custodian." The park is too large for a community group to maintain.
(B-9) End of Page

1 Invasive plant materials & ability to control.
2 Historic Olmsted legacy will not be honored. (*3 dots*)
3 Will City actually implement master plan? Where will the money come from? (*2 dots*)
(B-10) End of Page

QUESTIONAIRE RESPONSES 8/05/05-10/31/05

Strengths

- It is a wonderful urban park. Please maintain it as it was designed.
- Trees – both old and new. Walkways. Accessibility. Overall attractiveness.
- Below grade park area helps to buffer City traffic noise.
- Public usage occurs despite minimal City maintenance and investment.

- The way the park is split into sections naturally should be maintained. It allows a relatively small park to serve many different interests simultaneously.
- Toboggan runs, walkways & steps, enhance entrances & improve visibility & sight lines/add more playground equipment.
- It is "away" from the City because it is sunken and surrounded by thick vegetation.
- Landscape area for dogs, football & benches.
- Open, yet feels protected by the trees, that is able to be used by the community.
- Wooded slopes and open central area. Need more flowering trees & shrubs. I would like to see butterfly bushes.
- The Dell is a great place to take dogs because they can run around w/o being too close to the street. It is also a good place to exercise and/or relax.
- Open space; allowance for dogs.
- The Dell ought to be preserved as a Green Space for Public Use.
- Nicely landscaped; should preserve and enhance cleanliness – maintain lamps; maybe maintained more frequently would be helpful.
- To stay clean.
- One of the great strengths of the current Dell is the large number of dog walkers who frequent it. While at certain times of day – after work, for instance – it can get almost crowded with dogs playing around and chasing each other, that is a very small price to pay for the other effect that such use provides: safety. My understanding is that in the past, the Dell was not always the safest place. I'm sure it isn't still. But, it is now frequented at nearly all times of day by friendly, conscientious (as in they clean up after their dogs) dog owners, and their presence is the best deterrent to crime I can imagine. I'm sure that there will be people pushing to limit the access of dogs to the Dell, or to start enforcing leash laws there. I believe this would be a terrible mistake; if owners can't let their dogs run free in the Dell, they will stop coming. The current situation is a remarkable example of self-policing. Unless it changes in some marked way, I strongly urge any plan that is developed not to meddle with the dogs.
- The Dell is our oasis in the middle of a busy city. Its strengths lie in the fact that it has many uses, from playground, dog park, ball field. These should be preserved.
- The peaceful atmosphere. The lush trees and plants that surround the park. The open areas for the dogs to play.
- The basic design is fabulous – it really provides respite from the city environment. We should continue to pursue the Olmsted landscaping, but we must take care not to destroy small animal and bird habitat.
- Large known for games, protected from traffic by hillsides with trees; 2 beautiful monuments, large trees, benches in shade.
- I love the way the Dell is now; it is unusual because it is like being in a valley.
- Its open, green spaces… its shape pleasing to be in. This is what should be preserved.
- Open space for dogs & people to meet up. Lots of trees. Good walking path.

- The Dell serves as one of the rare, open-air locales where residents can exercise, walk their pets, and have picnics.
- The open green spaces are key to community building – plenty of trees – a feeling of space in the middle of the city with grass.
- Robert Lee statue. Can it be illuminated with vandal proof lights? Cover head lights attached to trees).
- The circulation system of pathways
- The lovely expanse of green – the meandering paths and established "shape" of park are very soothing to walk on. Not to stray from original design.

Weaknesses

- No conservation program for statues.
- While doing cleanups, I have noticed that the city provided trash receptacles are plastic barrels, which migrate around the park. In addition, there are not enough of them. The side of the park nearest to 29th street has none. The trees need to be pruned properly! We cannot expect to keep the "grand, old" trees unless they are properly cared for.
- Dogs. The Dell is known as a "dog park." I have talked to several people who do not use the Dell solely because of the dogs. Some people are intimidated by the large number of dogs running freely – and illegally – while some are deterred by the dog feces. (There will always be some percentage of the dog owners who are negligent in this area).
- Security. The other common reason for not using the Dell is security concerns.
- Trash, poor maintenance, swamp area at bottom of steps (a river runs through this area – Stoney Run and it is blocked by the Senior Citizen Center on 29th Street.
- Use by homeless persons as bathroom, bedroom, & storage area for bedding. General poor upkeep – no regular watering; too few trash receptacles. Bad smell (sewer gas?) at the north end.
- Places should be designated for specific activities so that many people can utilize the park at the same time. Also, more lights & landscaping that deter crime are always beneficial.
- Maintenance of walkways, steps, sweeping. Lighting is adequate, but fixtures are prone to vandalism. Difficult to cross Charles Street to get to and from the park.
- The swamp! It's ugly and unfortunately a "fun" spot for dogs. Plant a tree or something. Drainage. In rainy days, the puddles just get bigger and don't go away. Sewage smell. Coming from the area circled on the map.
- Haven't been there at night, but lighting? Perhaps water fountain for dogs and people.
- Marsh-like area in the SW area. People still sleep on the benches at night. Although well lit, no policing. The old lavatories building – something should be done with that.
- Marshy area, which does not drain. Park benches need work. Need more trash cans. Sewage smell.

- The northern corner sometimes smells bad and has human excrement. Also, the trees and bushes should be a little better maintained. It could be a little cleaner.
- I think more grass in the bottom main area would be nice. I would also like a small gate/fence at the tops to prevent children and animals from getting hit by cars.
- Missing understory on BMA slope. Missing understory on Charles Street slope. Blindingly bright lights, causes one to stumble on stairs (can't see).
- Too many dogs off leash – especially pit bulls; it should not be only a dog park.
- I don't see any real problems or weaknesses with the Dell.
- The worst problem is trash! Sometimes the inability to sustain it. This year, we have done wonderful things, tree plantings, shrubs, but it must be maintained.
- The sewer smell; the swamp area (turn into a wildflower garden).
- We must pay full-time staff to maintain and protect the Dell. Then rest rooms could be responded. The stone wall must be restored.
- Need a pedestrian bridge to connect over Howard Street – see photo repair comfort station – get grant for Dell caretaker to monitor and keep clean. Dogs illegally running loose.
- Dogs are a problem when the owner thinks the Dell belongs to them instead of the public; dog poop problems too.
- Keeping it clean and in good repair; especially the stone wall & steps. Benches too.
- It's a little bit stinky near Art Museum Drive because of the sewers (I guess). It's not well lit at night; kind of creepy.
- A stronger, more visible police presence, on bicycles, cycling through, would be great – and take care of the swampy areas!
- No running water – drinking fountains. Redo stone retaining walls.
- Badly deteriorated paths and stone walls, stairways.
- Playground surface should be replaced and no longer chips. The benches need new and better slats. Need water fountain with dog fountain.
- Poor trash maintenance. People trash/litter. Vandalism of existing fixtures; ex. trash bins, dog bag holders, benches, lamp posts. Non-compliance of poop and scoop.

Opportunities

- New space from triangle could be used for new features: playground expansion, vendors.
- The City Recreation Bureau (I think) has a city park band that plays in parks across the city. We could do a night with the Park Band and publicize it. (Like Bolton Hill does in Fitzgerald Park).
- We have the opportunity to put up a couple of historical markers at entrances to the park. They could identify it as an Olmsted designed park and talk about its history. Not just a sign that says Wyman Park Dell.
- I would suggest that there is an opportunity to provide aesthetically pleasing receptacles, which would be anchored into the ground, preferably near each series of benches. The receptacles could look like

wrought iron strips with a receptacle inside. I think I have seen these on the Hopkins University campus.

- But is seems that we could work towards making the park more people friendly right now. The entrances to the Dell are labeled with signs about keeping your dog on a leash and, I think, about "cleaning up after your dog." Can we – you – start getting this law enforced? Periodic sweeps through the park, resulting in fines for a bunch of people could go a long way towards getting the dogs – their owners really – under control. And if we get the dogs under control, and let people know about it, we might be able to get some of the dog-adverse people back into the Dell. Can we get the Hopkins or Charles Village Security people to go down INTO the Dell? There are students down there now doing things, despite the dogs, and it would be in Hopkins' interest to extend its security down there. I think it would be great if the Hopkins' security people on bikes started looping down into the Dell. (They don't have to carry their bikes down steps – they can come down the sloping path from the south east corner where the playground is). And can we do anything to get more lighting in the Dell? Dottie and I go out walking after dark, but we would never dream of going down into the Dell. We go up on Hopkins' campus where there are lights, security people and other people all around. Improve the security, curb the dogs, and let the community know about it. Why wait?
- One more philosophical note about the issues raised at the Master Planning meeting the other night. There are two radically different schools of thought about the future of the Dell: one has it as a rural wilderness sheltered from the hustle and bustle of the city; the other has it as full of life, drawing the life of the city into itself. I, the guy who suggested the Starbucks in the Dell, subscribe to the Full of Life point of view. The only possible future for the Dell as a living park – and not as an abandoned wooded area like the woods behind the Zoo in Druid Hill Park – is to find ways to bring the people in and get the fullness of life going all the time. That life of many people in the park draws more people and creates security. My ideas are not at all original with me. I subscribe to the view of Jane Jacobs, in her great book on cities: The Death and Life of Great American Cities. I have considered giving a course on this book at the Free University – and might yet do it).
- A full-time maintenance person; a positive use for the little stone building.
- Possibility of creating a fenced-in section for dog exercisers.
- Existing trodden paths in wooded areas could become walking trails, if cleaned up and enhanced.
- The Dell should be the center of the community providing a place for organized community activities. It would be great to have a committee for the park for each interest that planned events.
- Sumualt Run – consider unburying this stream and restore it through the Dell as a water feature.
- Whatever is done, capital needs to be in place for continued upkeep. Right now, upkeep is minimal and usage has increased exponentially over the last couple of years.
- More community activities; concerts?
- I think more people would come to and enjoy the Dell if there were more benches and if the benches were in better condition.

- This space could be used. Ice rink? Stadium? Hopkins athletic field? Hmmmm..
- More patrolling at night.
- I don't see any missed opportunities, really. It's not a big enough area for organized sports, but it's fine for the occasional pickup game of touch football, or Frisbee.
- Concerts, community picnics, more playground equipment.
- Avoid false "opportunities".
- Dogs must be leashed or contained within fenced area – as now, they interfere with human's use of the park.
- More activities for children in the near neighborhoods & concerts too. Arts, running, biking for the kids w/the help of the Hopkins students.
- I wouldn't want to spoil the Dell, but an art show and sale on an annual basis would be a great way to attract attention… or perhaps an afternoon concert series of classical or jazz, once in a while.
- Cleaner landscaping and safe passageways at night.
- The field would be an excellent place for concerts and could be utilized more during festivals.
- A gazebo, if maintained, would be an attraction for music and social events.
- Introduction of a stage for performances/programs. The stage design should be unobtrusive and integrated into the cleared space, path to the BMA, utilizing the grassy slope as a natural amphitheater.

Threats

- Taken over by eminent domain (Jay Brodie supports it, the Supreme Court supports it) BMA tried to take part of the park in the past.
- Aforementioned problems could intensify and make the park so unpleasant, it will fall into disease.
- Parents with children need a protective separation from the dog running so that the parents can relax and feel their kids are not threatened.
- Would be great to have an area where dogs can run freely, with places for owners to sit & talk, and with appropriate sanitary trash collection.
- Different people wanting to use the same space for different activities i.e. an area should be made separate for children to play, separate dog area, picnic area and sports area. Efforts should be made with design to ensure that everyone who enjoys the Dell for different activities is able to continue their use without feeling threatened or inconvenienced by other activities. I think using the parks natural borders and adding some fencing for areas such as the dog area, is the best way to accomplish this, but another alternative is to assign certain times for specific activities (i.e. off leash dog hours from 6:00 AM – 9\8:00 AM and again from 4:30 PM – 6:30 PM).
- Vandalism of playground, benches.
- Cutting down too many trees. They provide shade from the sun, shelter from the rain, and privacy from the noisy city.
- Lack of upkeep. It took years for the park to become what it is now. Doing some hair-brained scheme that meets the needs of a vocal minority.

- After nearly two (2) decades of not utilizing the park Dell, my family now goes there daily – enjoys the company of others. I am afraid that too much change (the rest cut off)
- As a dog owner, too many people not picking up after their dogs.
- Leash laws could negatively impact the Dell because a lot of people bring their dogs there. It is the only place in the area where dogs can be off the leash and run.
- Creating unnecessary rules or making the Dell unusable due to statues, more trees in the main area, or not allowing dogs.
- Over-management. Car exhaust. Erosion. Developers. Drunken students. Dog waste.
- Kids out there at night (Johns Hopkins students). Prostitution and homeless.
- The biggest threat to the Dell would be an attempt to control the dog activity there.
- Lack of interest; lack of ownership of the Dell, not keeping it natural and welcoming.
- We must guard against too many uses. The Dell is after all, quite small. Too small for team sports or a separate dog area or any other separate areas. We must avoid attempting to subdivide our wonderful but limited space. Parking developers always lust after any open space. They are often clever and always relentless. They must be watched carefully. This especially applies to the flat areas off Charles Street and Art Museum Drive.
- Encroachment to benefit traffic or parking. Inability for children to run and play games on large lawn because of loose dogs.
- Development.
- Not maintaining it would be a threat. Any encroachment as in adding structures also a threat….although some sculpture or rock/natural formation could be a treat.
- Overbuilding in that area – don't want it to turn into a parking lot or shrink in size.
- Development projects would destroy the Dell by rebuilding it as commercial property, a parking lot, etc.
- JHU's steadily encroaching through Charles Village – save the green spaces for our community!
- Changing traffic pattern to remove southern service road. Parking would be lost and access to JHU from Charles Street would be hindered.
- Changes that are not in character w/the simplicity/subtleness of the original design.
- Could Charles Village safety guards fine litterers? More frequent trash pick-up.
- Support the proposal of a person in attendance (9/13) that legislation be enacted that Wyman Park Dell be permanently protected as a park. Large parts of Wyman Park have already been given to JHU (along San Martin Drive).
- Having lived in this area since 1969, I remember when the city assigned a caretaker to the Park who was very conscientious, kept out those who misused it, kept the steps clean and cleared and performed basic upkeep. A treasure like W.P. ought to be cared for in this way. With such a

person present, it might be possible to maintain a sanitary restroom, which will add to the park's assets.
- Would be great to maximize the creation of flexible, multi-purpose space.
- Need an all-weather bulletin board for public information & notices.
- Multi-purpose space should be adaptable for musical and theatrical performances.
- Need a monthly general maintenance strategy plan to guide the City and supportive organizations.
- Consider making the grassy hillside a dog-free zone where people can picnic or sunbathe without sitting in dog excrement. The Dell functions well as a "defensible refuge." Survey should ask about usage of park by respondent, and include a respondent profile. Should include a preamble to explain how the survey will be used.
- Water fountain in marshy area to take advantage of underground spring?
- I don't know what that small building on the north side is for, but maybe it could be put to better use.
- Why not plant wetland-type plants in wet areas? And for future – dog waste composting pit maintained by volunteers…..
- I could not live here without this park. I am in it every day! It has always been a haven for me.
- Add more trees, lights & flowers/garden….no development.
- I love the Dell because it's a green oasis that welcomes pets and their people. Dogs need to run and people need the fresh air and friendly socialization that the Dell facilitates.
- Somehow keep the Park dog friendly. Dogs are vital to the people in Charles Village. Can the CV benefits district patrol cars ride thru at night to discourage vandalism?
- Redo the perimeter sidewalks as a 10 foot path directly abutting the streets except by the Jackson and Lee sculpture where space is too limited. Use a surface that is softer and friendly for walkers.
- Steps could be improved – maintained.

TOWN HALL MEETING #2 – December 15, 2005

Discussion related to alternatives as described and illustrated in *Appendix D, Master Plan Alternatives.*

Following presentation of the alternative concepts, the following ideas were discussed by those present:

General:
- Discussion about where funding will come from to implement plan. Funding will depend upon partnerships. Detail discussion about this will occur at draft stage (Town Hall Meeting #3)
- Town Hall Meeting #3 will occur in February (date to be determined).
- Signage should be well-placed and designed in a visually unobtrusive manner.

West Crescent:

- Existing sidewalk along Wyman Park Drive/Howard Street is narrow and dangerous. Like all concepts that widen and improve this sidewalk.
- Potential gathering space at north end of crescent (Concept C) is pointless and not necessary, particularly when considering that Hopkins is building a new entrance across the street. This will be the gathering area.
- Concern with traffic circle and the impact that it would have on the crescent (by taking land area from the crescent). Like idea of improving pedestrian crossings but could traffic circle be smaller? What is the smallest size circle possible? Historic photo of Dell (in snow) appeared to show some sort of circular movement. Concern that traffic circle would detract from integrity of the "Y" intersection that currently exists. After much discussion on the traffic circle, the suggestion was made that further study, including traffic studies, and vetting within the community would need to occur on this issue. The final report should, in an appendix, show ideas that have been explored.
- First priority is pedestrian safety…expanding existing walkway.
- Like sidewalk connection down lower part of crescent.
- Recognition that people will cross from Crescent mid-block along Howard Street but that this should not be a marked crosswalk to encourage that behavior.
- Show closing of "spur road" as an option. The plan is not dependent on this and this idea should be vetted further within the Remington community.

Art Museum Drive Edge: No particular discussion

Lee and Jackson Grove: No particular discussion

29th Street Edge:

- Need to provide electric and water hookup along this edge to accommodate events such as Charles Village Festival.
- Like the idea of a 15' (approximately) promenade (Concept B) rather than a large paved plaza (Concept C). The wide promenade would accommodate events but not appear empty when events are not taking place.
- Is there a bike path connection to Jones Falls trail?
- Need to look at traffic impacts of eliminating "sweep" at 29th and Howard Street. All three concepts show elimination of this road, however, it should not be assumed that this is a done deal. Discussion clarified that this was an incorrect assumption on Mahan Rykiel's part. This will need further study outside the master plan, however, the master plan is not dependent on this going away. Traffic studies and more conversation within the Remington community will be needed on this issue.
- If roadway sweep does go away at 29th and Howard, Concepts B and C are preferred over Concept A as they allow access from both Howard and 29th Street.

Union Plateau:

- Suggestion from the community to create a fenced area for people in this zone, similar to Federal Hill Park where no dogs (leashed or unleashed) are allowed within the fenced zone. This idea garnered a lot of discussion. An ornamental fence should be used and it should cover a large enough area that it doesn't feel like a "pen". Seating, picnic and playground areas could be

located within fenced area. Fence would only need to be about 4' high. It should not be a visual barrier. A suggestion was made to locate the fence adjacent to walkways so that it has a logical 'context' within the park. Mahan Rykiel will explore the concept of a separate fenced area for the draft plan.

Charles Street Edge: No specific discussion.

The Lawn:

- Suggestion that a pavilion should be considered in lower lawn at southern end of park to play off of pavilion at northern end.
- Nobody seemed to like the idea of a small fenced dog park as shown in Concept B. There would be significant smells associated with this and it disrupts the integrity of the lawn area.
- Most favored off-leash times vs. a separate dog park (ie: Prospect Park in Brooklyn, NY, however this is a much larger park…may not work here). Some remarked that many dog owners would not observe hours. Many agreed that the dog owners are, for the most part, self-policing and preferred the recommendations of Concept A. It was suggested that these ideas can be discussed in the master plan, but it can be dealt with separately from the master plan. Perhaps dog owners could work with City in experimenting with different solutions.
- Discussion on dog park led to discussion on separate fenced people area (see discussion under Union Plateau).

Wooded Slopes:

- Idea of new path connections down into the lower park was well-received.

Transition Slope: No specific discussion other than that this area should be dog free because it is a great place to sit and picnic.

North Gateway:

- Creating a pavilion with food availability, terraces add interest (see Millenium Park in Chicago). Food in parks is key to attracting users and it would be feasible here because of its proximity to nearby retail and attractions (museum, sculpture garden, etc).
- Concept B is preferred over Concept C as pavilion at 31st Street has better interface with Charles Village commercial district and it does not impact any Beech Trees (as would Concept C).
- Concern that a restaurant would require significant parking. Discussion clarified that this would not be a full service restaurant…rather a pavilion with limited refreshments, serving people already using the park and in the area. It was also mentioned by a citizen that the Charles Street Reconstruction plans accommodate additional parking.
- Restrooms must also be provided. Discussion clarified that restrooms, park management office, storage would need to be included in any kind of structure.
- Concept A could be a short-term alternative leading up to Concept B. At any rate, Concept A should also incorporate an ADA ramp connection from Charles Street down to lawn.

TOWN HALL MEETING #3 – March 23, 2006

General Discussion

- Like the examples of signs that had positive messages vs. "Keep off the Grass"
- Plan does good job of balancing different needs while maintaining integrity of park
- Important that crossing at 29th Street sweep or parking area (at West Gateway) not have a rough surface so it is easy for seniors to cross
- Plan is "appalling" because removal of "sweep" at 29th Street and widening of parking area reduces size of "triangle"
- Don't put new footpaths along the length of the West Crescent ….not needed…just improve existing sidewalk along outer edge.
- Need detailed list of plants, emphasize native plants
- Stone wall should use granite because it is common to the area
- Need to give more information related to temporary stage area and how this is to function
- Like the pavilion idea
- Concern with pavilion…what would Olmsted think of this?
- If pavilion goes in, is there the danger of building more and more commercial establishments around the perimeter?
- Need to protect as park space.

APPENDIX B: ECOLOGICAL ASSESSMENT

APPENDIX B: ECOLOGICAL ASSESSMENT

I. ECOLOGICAL GOALS

a. Improve & maintain native vegetation community health through the removal and monitoring of invasive plants.
b. Improve & maintain nesting, foraging and over-wintering habitat for various types of bird communities.
c. Increase biological diversity through incorporating additional plant species and habitat types.

II. ECOLOGICAL NARRATIVE

a. Existing Conditions
   i. Native Vegetation
      1. There are many mature and over-mature beech (*Fagus grandifolia*) and white oak (*Quercus alba*) that are 18-24+" in diameter at breast height (dbh) showing signs of decline (ie. Dead and dying main limbs, discolored leaves, heavy fruiting, root suckering). Most of the understory is composed of invasive species but there are some areas of ash and beech regeneration.
   ii. Soils
      1. There are isolated areas of surface erosion associated with steep slopes, compaction and de-vegetation due to pedestrian traffic. The main areas include: south-eastern corner to the west of the playground, western slope between upper bench and lower bench. Other areas of surface erosion exposing tree roots occur in either steep sloping areas with little ground vegetation or heavily mowed areas that are shaded.
   iii. Invasives
      1. Invasive plants are prolific in Wyman Park Dell. Those species most commonly occurring include: bush honeysuckle (*Lonicera sp.*), English ivy (*Hedera helix*), white mulberry (*Morus alba*), paper mulberry (*Broussonetia papyrifera*), Tree-of-Heaven (*Ailanthus altissima*), Princess tree (*Paulownia tomentosa*), and privet (*Ligustrum sp.*).

b. Reference Conditions
   i. **Piedmont / Coastal Plain Mixed Oak – Beech Forest**
   Communities in this group are similar to Mesic Mixed Hardwood Forests but usually occupy drier, steeper sites that support fewer mesophytic plants and a greater abundance of heaths. Typical habitats are drier, usually north-facing bluffs, and steep ravine slopes with acidic, nutrient-poor soils.
      1. **Canopy:** American beech (*Fagus grandifolia*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), and tulip poplar (*Liriodendron tulipifera*)
      2. **Sub-canopy:** Red maple (*Acer rubrum*), and American holly (*Ilex opaca* var. *opaca*)

3. **Shrub:** Low-bush blueberry (*Vaccinium pallidum*), maple-leaved viburnum (*Viburnum acerifolium*), and mountain-laurel (*Kalmia latifolia*)
4. **Herbaceous:** Christmas fern (*Polystichum acrostichoides*) and Virginia creeper (*Parthenocissus quinquefolia*). Few other herbaceous species occur.
5. **Mammals:** Eastern chipmunk, gray squirrel, Eastern cottontail, white-footed mouse, woodland vole, and red fox
6. **Canopy Nesting Birds:** blue jay, Cooper's hawk, broad-winged hawk, Eastern wood-peewee, blue-gray gnatcatcher, Acadian flycatcher, red-eyed vireo, and scarlet tanager
7. **Trunk Nesting Birds:** great crested flycatcher, Carolina chickadee, tufted titmouse, downey woodpecker, hairy woodpecker, pileated woodpecker, white-breasted nuthatch, Northern "yellow-shafted" flicker
8. **Ground Nesting Birds:** whip-poor-will, black-and-white warbler, ovenbird

c. Summary

Several steps to meet the goals listed above:

1. Remove and manage the invasive plant species threatening the native vegetation.
2. Plant an assemblage of tall shrubs and mid-story trees to soften the forest/meadow edge at the BMA Overlook and produce a transitional step habitat.
3. Maintain views and increase vertical structure by planting low growing native plants at the base of the hill slopes.
4. Prevent erosion of soil by planting shade tolerant native ground cover plants in select areas.
5. Enhance bird habitat by planting native fruit bearing shrubs in select locations.

III. AGED TREE REPLACEMENT & FOREST PLANTINGS

Typically as forest trees age, seedlings from the understory serve a source of the next generation of overstory trees. The Wyman Park Dell woodland areas have some seedling regeneration, mostly comprised of species differing from the overstory, but are generally deficient in desirable tree replacements. Conduct a thorough health and hazard assessment of the mature trees.

a. **Aged Tree Status:** Each of the actively managed woodland areas should receive a complete inventory to assist in the development of a long-term tree replacement plan. Through this inventory the significant tree resources can be identified, mapped and evaluated. Evaluations of health condition can then be used to determine the urgency of replacement by individual tree.

i. Inventory significant trees

1. Mature and over-mature trees of the Wyman Park Dell woodland area occur regularly throughout the site. An assessment of the health of individual trees should be conducted to determine the health status of each tree 18" or greater.

ii. Determine health condition and risk status
1. Many mature oaks and beech are showing signs of stress and decline. In the spring, look at the top of the oaks for dead limbs and sparse branching. Decline seems to be related to an imbalance of crown/root ratio. A reduction in the number of branches lessens the demand on the roots for water. Thinning of the crown and removing the dead branches is the most direct way of helping an oak in decline. (This is not topping a tree). Mulching and fertilizing may also invigorate a tree. A stressed tree with dead branches is an invitation to diseases and insect invasions.
2. Hazard Trees- Hazardous defects are visible signs that the tree is failing. We recognize seven main types of tree defects: dead wood, cracks, weak branch unions, decay, cankers, root problems, and poor tree architecture. A tree with defects is not hazardous, however, unless some portion of it is within striking distance of a target.

b. **Tree Removal & Improvement**: As part of a long term tree replacement strategy and to improve the overall health of the Wyman Park Dell tree removal and/or trimming should be incorporated.
i. Prioritize removal based on risk and health
1. Objective criteria for tree removal include: current and future maintenance costs, years of estimated useful life, structural integrity, and public welfare. Because they are more subjective, the following items should be considered only as secondary criteria: diminishing aesthetics, amenities, and engineering values, such as noise abatement and wind reduction.
2. Removal recommendations must clearly identify priorities for tree removal. These priorities could become a sequence for removal. Dead or dying trees might be first. Second would be trees representing a potential hazard to adjacent property, buildings, parked cars or people. Next might be stumps from trees cut previously. The final category could be trees growing in undesirable locations.
ii. Arrange for possible use/disposal of removed tree resource
1. Citilog™
2. Local composting/mulching facility

c. **Planting Plan:**
A planting plan should be developed and incorporated into the management and operations of the park. First priority for planting should be currently non-forested aged-tree removal areas. Second priority for planting should be forested areas in need of supplemental vegetation and replacement of invasive plants. Include as part of a planting plan:
i. Species, Sizes & Quantities
ii. Planting locations
iii. Planting procedures
iv. Tree removal procedures
v. Integrated Vegetation Management (IVM)

d. **Summary**
   i. Conduct a mature tree inventory & health assessment.
   ii. Perform decadent and hazard tree removal and trimming prioritization.
   iii. Develop a planting plan and IVM plan.

IV. INVASIVE SPECIES MANAGEMENT

There are several steps included in an invasive species management plan. First, identify and map key areas of invasive infestation. Second, apply treatments specific to the target plant species. Third, regularly monitor the treatment areas to assess the effectiveness of the treatment. Lastly, re-apply the treatment to areas identified through monitoring. The number of re-applications will vary by the site, but may be multiple years.

a. Invasive Species Treatment Example
   i. **Bush honeysuckle** (*Lonicera maackii, L. tatarica, L. standishii, L. morrowii, L. xylostem, L. X. bella, and possibly others*)
      1. The recommended approach for honeysuckle control is treatment with a systemic herbicide followed by physical removal or retreatment with herbicide the following spring.
         a. Foliar Herbicide Treatment
            Foliar application to shrubs using GLYPHOSATE, surfactant and a colorant should be considered for large thickets of bush honeysuckle where risk to non-target species is minimal. This treatment is recommended <u>in the fall</u>.
         b. Cut Stump Treatment
            This control method should be considered when treating individual bushes or where the presence of desirable species precludes foliar application. This treatment is effective as long as the ground is not frozen. This treatment should take place <u>in fall or early spring</u> when native vegetation is dormant.
         c. Basal Bark Method
            This method is effective throughout the year as long as the ground is not frozen for mature shrubs with a diameter at breast height (dbh) of 6 inches or less, providing no desirable native species are growing around the base of the target shrub.
         d. Physical Control
            Because hand removal of bush honeysuckle is time consuming and in some instances promotes resprouting from any left over plant material or seed bank, this method is appropriate only for small initial populations or environmentally sensitive areas where herbicides cannot be used.

V. COSTS

a. Invasive Species Management costs can vary greatly depending on the target species and their density. Although many of the species at Wyman Park Dell have been identified, the degree of infestation needs to be calculated as part of an invasive species management plan. Estimated cost $4,000-8,000/ Acre

b. Planting cost for understory enhancement in forested areas varies according to the final palette of plant species and size. Estimated cost $8,000-12,000/ Acre

VI. ADDITIONAL ITEMS

Some other specifics associated with developing both the aged-tree replacement strategy and invasive species management plan involve planning for resource allocation and incorporating an adaptive management framework. Resources include labor requirements and material costs. An adaptive management framework includes developing targets, trajectories, monitoring, and modifications when needed.

Tree ID #	Common Name	Scientific Name	DBH (in)	Health	Note	Action
1	Beech	*Fagus grandifolia*	36	Fair	Severe limb damage	
2	Elm	*Ulmus species*	15	Excellent		
3	Beech	*Fagus grandifolia*	40	Good		Limb up
4	Beech	*Fagus grandifolia*	29	Good		Limb up
5	Tulip poplar	*Liriodendron tulipifera*	29	Very Good		
6	Beech	*Fagus grandifolia*	48	Good		
7	Beech	*Fagus grandifolia*	28	Poor	Severe limb damage	
8	Tulip poplar	*Liriodendron tulipifera*	54	Good		
9	Beech	*Fagus grandifolia*	39	Very Good		
10	Beech	*Fagus grandifolia*	36	Excellent		Limb up
11	Beech	*Fagus grandifolia*	29	Very Good		
12	Beech	*Fagus grandifolia*	38	Very Good	Exposed roots	Limb up
13	Beech	*Fagus grandifolia*	38	Very Good		Limb up
14	Beech	*Fagus grandifolia*	32	Excellent		
15	Sugar maple	*Acer sacharum*	16	Excellent		
16	Sugar maple	*Acer sacharum*	15	Excellent		
17	Mulberry	*Morus species*	19	Very Good	Significant lean	Remove
18	Beech	*Fagus grandifolia*		Very Good	Exposed roots	
19	Black cherry	*Prunus serotina*	14	Good		
20	Tulip poplar	*Liriodendron tulipifera*	36	Excellent		
21	Hackberry	*Celtis occidentalis*	20	Poor	Severe limb damage/trunk damage/exposed roots	Remove
22	Beech	*Fagus grandifolia*	30	Very Good	Exposed roots	
23	Beech	*Fagus grandifolia*	24	Very Good	Exposed roots	
24	Japansese pagoda-tree	*Sophora japonica*	26	Poor	Severe limb damage	
25	Japansese pagoda-tree	*Sophora japonica*	24	Poor	Severe limb damage	
26	White oak	*Quercus alba*	6	Excellent		
27	White oak	*Quercus alba*	6	Excellent		
28	Japansese pagoda-tree	*Sophora japonica*	24	Fair	Severe limb damage	
29	Japansese pagoda-tree	*Sophora japonica*	15	Good	Severe limb damage/trunk damage	
30	Japansese pagoda-tree	*Sophora japonica*	10	Fair	Severe limb damage	
31	Pin Oak	*Quercus palustris*	4	Excellent		
32	Pin Oak	*Quercus palustris*	4	Excellent		
33	Oak	*Quercus species*	3	Very Good		
34	Tulip poplar	*Liriodendron tulipifera*	38	Good	Severe limb damage	
35	Mulberry	*Morus species*		Good		
36	Beech	*Fagus grandifolia*		Very Good		
37	Beech	*Fagus grandifolia*		Very Good		Limb up
38	Beech	*Fagus grandifolia*	30	Very Good		
39	Pin oak	*Quercus palustris*		Good	Severe limb damage/exposed roots	
40	Mulberry	*Morus species*	15	Fair	Severe limb damage/exposed roots	
41	Mulberry	*Morus species*	42	Good	Exposed roots	
42	Mulberry	*Morus species*	12	Poor	Sig. lean/poor crown	
43	Mulberry	*Morus species*	12	Poor	Sig. lean/poor crown	
44	Mulberry	*Morus species*	16	Good		
45	Sycamore	*Platanus occidentalis*	40	Very Good		
46	Mulberry	*Morus species*	12	Good		
47	Mulberry	*Morus species*	18	Fair		
48	Black gum	*Nyssa sylvatica*		Very Good		
49	Beech	*Fagus grandifolia*		Fair	Main leader damage	
50	Hackberry	*Celtis occidentalis*	15	Fair	Exposed roots	
51	Beech	*Fagus grandifolia*		Good	Exposed roots/root damage	Limb-up
52	Beech	*Fagus grandifolia*	32	Good		Limb-up
53	Beech	*Fagus grandifolia*		Fair	Sig. lean	
54	Beech	*Fagus grandifolia*	25	Fair	Exposed roots/root damage	Limb-up
55	Beech	*Fagus grandifolia*	27	Fair	Exposed roots/root& limb damage	
56	White ash	*Fraxinus americana*	37	Good		
57	Beech	*Fagus grandifolia*	20	Poor	Trunk/bark damage/Basal cavity	Limb-up
58	Beech	*Fagus grandifolia*	27	Very Good		
59	Beech	*Fagus grandifolia*	27	Poor	Trunk/bark damage/Basal cavity	
60	Beech	*Fagus grandifolia*	20	Very Good		
61	Beech	*Fagus grandifolia*	20	Fair	Trunk/bark damage/Basal cavity	Limb-up
62	Beech	*Fagus grandifolia*	24	Fair	Trunk/bark damage	
63	Beech	*Fagus grandifolia*	24	Very Good		Limb-up
64	Beech	*Fagus grandifolia*	17	Very Good		Limb-up
65	Scarlet oak	*Quercus coccinea*	30	Good		
66	Hackberry	*Celtis occidentalis*	19	Critical	limb/trunk.bark damage/exposed root	
67	Mulberry	*Morus species*		Good		

68	White oak	*Quercus alba*		Excellent		
69	White oak	*Quercus alba*	41	Very Good	Trunk/bark damage	
70	White oak	*Quercus alba*	41	Excellent		
71	Norway maple	*Acer platanoides*	13	Good	Trunk/bark damage/exposed/damaged roots	
72	Red oak	*Quercus rubra*	40	Very Good		
73	White oak	*Quercus alba*	40	Very Good		
74	White oak	*Quercus alba*	39	Very Good		
75	Beech	*Fagus grandifolia*	27	Very Good		
76	White oak	*Quercus alba*	36	Very Good		
77	White oak	*Quercus alba*	15	Very Good		
78	Beech	*Fagus grandifolia*	15	Good		Limb-up
79	Beech	*Fagus grandifolia*	36	Very Good		
80	Norway maple	*Acer platanoides*	14	Poor	Trunk/bark damage/exposed/damaged roots	
81	Norway maple	*Acer platanoides*	15	Poor	Trunk/bark damage/exposed/damaged roots	
82	Beech	*Fagus grandifolia*	46	Very Good		
83	Beech	*Fagus grandifolia*		Very Good		
84	White oak	*Quercus alba*	50	Good	Basal cavity	
85	Beech	*Fagus grandifolia*	25	Very Good		Limb-up
86	Red oak	*Quercus rubra*	15	Very Good		
87	White oak	*Quercus alba*	42	Very Good		
88	Beech	*Fagus grandifolia*	39	Very Good		
89	Beech	*Fagus grandifolia*	28	Very Good		Limb-up
90	Beech	*Fagus grandifolia*	12	Good	Basal cavity	
91	Beech	*Fagus grandifolia*	42	Very Good		
92	Beech	*Fagus grandifolia*	20	Very Good		
93	Red oak	*Quercus rubra*		Very Good		
94	Beech	*Fagus grandifolia*	20	Good		Limb-up
95	Beech	*Fagus grandifolia*	36	Very Good		
96	Beech	*Fagus grandifolia*	26	Very Good		
97	Beech	*Fagus grandifolia*		Good	Trunk/bark/root damage	
98	Beech	*Fagus grandifolia*		Good	Trunk/bark damage/exposed roots	
99	White oak	*Quercus alba*	40	Very Good		
100	White oak	*Quercus alba*	19	Very Good		
101	White oak	*Quercus alba*	36	Very Good		
102	White oak	*Quercus alba*	42	Very Good		
103	Red maple	*Acer rubrum*	24	Fair		
104	Beech	*Fagus grandifolia*	24	Good		
105	Red oak	*Quercus rubra*	55	Very Good		
106	Red oak	*Quercus rubra*	14	Very Good		
107	Beech	*Fagus grandifolia*	24	Very Good		
108	Beech	*Fagus grandifolia*	17	Good	Exposed root	
109	Beech	*Fagus grandifolia*	18	Good	Exposed root	
110	White oak	*Quercus alba*	30	Very Good		
111	Red oak	*Quercus rubra*	33	Very Good		
112	White oak	*Quercus alba*	31	Very Good		
113	Beech	*Fagus grandifolia*	21	Fair	Exposed root/sig. lean	
114	Beech	*Fagus grandifolia*	27	Very Good	Exposed root	
115	Beech	*Fagus grandifolia*	31	Very Good		
116	Beech	*Fagus grandifolia*	28	Good		
117	Beech	*Fagus grandifolia*	39	Very Good		
118	Beech	*Fagus grandifolia*	28	Poor	Basal cavity/exposed roots/root damage	
119	Beech	*Fagus grandifolia*	36	Fair	Trunk/bark damage	
120	Beech	*Fagus grandifolia*	16	Very Good		Limb-up
121	Beech	*Fagus grandifolia*	27	Fair	Severe limb/trunk/bark damage	
122	Beech	*Fagus grandifolia*	39	Very Good		Limb-up
123	Beech	*Fagus grandifolia*	34	Good	Exposed & damaged roots	Limb-up
124	Mulberry	*Morus species*	16	Good	Exposed roots	
125	White oak	*Quercus alba*	42	Very Good	Exposed roots	
126	Beech	*Fagus grandifolia*	36	Very Good		
127	White oak	*Quercus alba*	31	Fair	Insect/disease infestation	Limb-up
128	Beech	*Fagus grandifolia*	27	Very Good		Limb-up
129	White oak	*Quercus alba*	21	Good	Poorly developed crown	
130	Scarlet oak	*Quercus coccinea*	50	Very Good		
131	Tulip poplar	*Liriodendron tulipifera*	36	Very Good	Basal cavity	
132	Hickory	*Carya species*	12	Very Good		
133	Scarlet oak	*Quercus coccinea*	27	Good		
134	Scarlet oak	*Quercus coccinea*	32	Very Good		
135	White oak	*Quercus alba*	21	Very Good		
136	White oak	*Quercus alba*	38	Very Good		
137	Japansese pagoda-tree	*Sophora japonica*	8	Excellent		

138	White oak	*Quercus alba*	32	Very Good		
139	Ginko	*Ginko biloba*	30	Excellent		
140	Japansese pagoda-tree	*Sophora japonica*	12	Excellent		
141	Ginko	*Ginko biloba*	20	Excellent		
142	Ginko	*Ginko biloba*	41	Excellent		
143	Ginko	*Ginko biloba*	39	Excellent		
144	Japansese pagoda-tree	*Sophora japonica*	48	Excellent		
145	Tree of heaven	*Ailanthus*	34	Very Good		
146	Yellow-wood	*Cladrastis lutea*	41	Very Good	Trunk/bark damage	
147	Japansese pagoda-tree	*Sophora japonica*	51	Excellent		
148	Buckeye	*Aesculus*	16	Excellent		
149	Ginko	*Ginko biloba*	36	Excellent		
150	Yellow-wood	*Cladrastis lutea*	61	Excellent		
151	White oak	*Quercus alba*	36	Very Good		
152	White oak	*Quercus alba*	36	Very Good		
153	Elm	*Ulmus species*	60	Good	Trunk/bark damage	
154	Scarlet oak	*Quercus coccinea*	36	Very Good		
155	Live oak	*Quercus virginiana*	21	Poor	Trunk/bark damage	
156	Beech	*Fagus grandifolia*	24	Good		
157	Beech	*Fagus grandifolia*	25	Good		
158	Scarlet oak	*Quercus coccinea*	18	Very Good		
159	Linden	*Tilia*	21	Very Good		
160	Linden	*Tilia*	18	Good		
161	Linden	*Tilia*	23	Very Good		
162	Sugar maple	*Acer sacharum*	16	Excellent		
163	Sugar maple	*Acer sacharum*		Very Good		
164	White ash	*Fraxinus americana*	26	Very Good		

Tree Assessment Key
Biohabitats/RK&K/Mahan Rykiel
September 2005

APPENDIX C: EXISTING LIGHTING ANALYSIS

MEMORANDUM
Wyman Park Dell

Date: December 12, 2005

To: John d'Epagnier

From: Jennifer Parlette

Subject: Wyman Park Dell Existing Lighting Conditions

A field survey of the existing conditions at Wyman Park Dell was conducted on December 7, 2005 beginning at 7:25 PM and ending at 9:00 PM. Three pedestrians were observed in the park during this time. Work was completed under mostly clear skies with an approximate half moon. All readings were completed in darkness; sunset was at 4:43 PM with end of twilight at 5:13 PM.

Light readings were taken at multiple locations throughout the park. The results are presented in the table below. Refer to the notes below for comments on each location and to the attached graphic.

Location	Average Horizontal Illuminance	Maximum	Minimum	Maximum-to-Minimum Ratio	Average-to-Minimum Ratio	Vertical Illuminance
1	1.4 fc	2.7 fc	0.6 fc	4.5:1	1.9:1	0.6 fc
2	0.5 fc	1.3 fc	0.2 fc	5.5:1	2.1:1	-
3	0.7 fc	1.1 fc	0.4 fc	2.8:1	1.8:1	0.5 fc
4	1.2 fc	2.4 fc	0.7 fc	3.4:1	1.7:1	1.5 fc
5	0.5 fc	0.7 fc	0.3 fc	2.3:1	1.5:1	0.4 fc
6	0.5 fc	0.8 fc	0.3 fc	2.7:1	1.7:1	0.4 fc
7	0.1 fc	0.2 fc	0.1 fc	2.0:1	1.1:1	0.1 fc
8	0.3 fc	0.5 fc	0.2 fc	2.5:1	1.5:1	0.2 fc
9	0.4 fc	0.5 fc	0.3 fc	1.7:1	1.2:1	0.9 fc
10	0.4 fc	0.7 fc	0.2 fc	3.5:1	1.9:1	0.2 fc

1. Sidewalk adjacent to Art Museum Drive southwest of the stair entrance to the park. The area is illuminated by 250-Watt (W) high-pressure sodium (HPS) cobra head roadway luminaires.
2. Stair entrance to the Dell from Art Museum Drive. The area is illuminated by HPS roadway luminaires and metal halide (MH) park fixtures.
3. Walkway adjacent to the retaining wall along Art Museum Drive. Note that the results are lower than expected because one of the luminaires is not performing at full capacity.
4. Stairways at northern corner of the Dell. This area is lit by MH park fixtures and benefits from HPS roadway lighting above.
5. North/south path located near northern corner of the Dell. This area is representative of light levels where a fixture is not functioning.
6. Stairway entrance to the Dell from 29th Street
7. Interior stairway. The light performance at this stairway is poor because the luminaire located at the center of the stairs is not functioning. If it were working, light levels should be sufficient.
8. Interior walkway located near center of the Dell. This area, located south of the stairway, is adjacent to a wooded lot and does not benefit from spill light from other park fixtures.
9. North/south path located near southwestern corner of the Dell
10. Walkway adjacent to playground area

In its publication *Recommended Lighting for Walkways and Class 1 Bikeways (IESNA DG-5-1994),* the Illuminating Engineering Society of North America (IES) recommends the following lighting criteria for park walkways:

1. Minimum Average Horizontal Illuminance – 0.5 fc. Horizontal illuminance is a measure of the amount of light striking the surface of the pathway (horizontal plane).
2. Uniformity Ratio (average-to-minimum) not to exceed 10.0:1

3. Vertical Illuminance – 0.2 fc to 0.5 fc. Vertical illuminance is a measure of the amount of light striking a vertical plane five feet above the pathway parallel to the direction of travel. Facial recognition can be made at 0.25 fc and facial identification can be made at 0.5 fc. Typically, 0.2 fc is sufficient for basic security conditions. Under special conditions listed below, 0.5 fc is suggested:
    a. Areas where nighttime activity is intermittent throughout the entire night
    b. Areas where architectural configurations provide opportunities for significant shadows
    c. Areas where dense and high (4 feet and higher) landscaping occurs for great stretches
    d. Areas where pedestrians are likely to be alone and on a recurring schedule
    e. Areas where crime has been recorded as a community problem

Conclusion:

Lighting in the vicinity of the intersection of Art Museum Drive and Charles Street is, for the most part, adequate. It is important to note that this area benefits from lighting on the adjacent roadway; if the area were to be redesigned, the impact of the roadway luminaires would not be considered in accordance with IES recommended practice.

Illumination levels for the remainder of the park are below standard recommendations. The western path of the Dell was not evaluated due to the number of fixtures that were not functional. Overall, an increase in horizontal and vertical illuminance is suggested.

As noted in the attached graphic, there are multiple fixtures in the park that are not functioning. Additionally, some fixtures have cracked globes and there are several types of globes (wide acorn globe and tall/narrow acorn globe). Based on IES recommendations and other project experience, the following lighting is recommended:

1. Average horizontal illuminance – ranging between 0.6 and 0.8 fc with higher levels at the entrances to the Dell. The increased average illuminance will benefit pedestrian safety and encourage increased use of the facility in the evening hours.
2. Uniformity Ratio (average-to-minimum) not to exceed 5.0:1 to match existing conditions.
3. Vertical Illuminance – 0.3 fc to 0.5 fc, depending on community input. It is important to note that the type of optics selected for the luminaire is critical to obtaining sufficient vertical illuminance. Cutoff fixtures (no light above the plane of the luminaire) are dark sky friendly and may minimize perceived “glare”, however they are not pedestrian friendly for this type of park setting. With cutoff fixtures, it is difficult to obtain vertical illuminance results greater than 0.1 fc. A luminaire with some component of up-lighting, such as the existing pathway luminaires, is desirable.

Also note that it may be beneficial to consider the installation of a vandal resistant globe. If there are any questions or comments concerning the lighting survey or the results, please contact Jennifer Parlette at (410) 462-9191.

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CC: 105-103
D.Mitchell
B. Brandt

BALTIMORE
MUSEUM OF ART

WYMAN PARK DRIVE

ART MUSEUM DRIVE

CHARLES STREET

29TH STREET

Location 1

Location 2

Location 3

Location 4

Location 5

Location 6

Location 7

Location 8

Location 9

Location 10

4 of 5 luminaires do not function along this path.

BALTIMORE CITY
SURVEY CONTROL SYSTEM
N

Park Walkway

Operational Luminaire

Unlit Luminaire

Note - Luminaire locations are approximate; drawing is not to scale.

WYMAN PARK DELL

EXISTING CONDITIONS PLAN

OCT. 7, 2005

DWG: SK-1

10/6/2005
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APPENDIX D: MASTER PLAN ALTERNATIVES

APPENDIX D: MASTER PLAN ALTERNATIVES

Three concept alternatives were developed for discussion at Town Hall Meeting #2 on December 15, 2005 at Saints Philip and James Church. The intent was to engage the community in discussion regarding different possibilities for the park and to discuss new ideas that emerged during the course of the meeting. For a number of reasons, some areas of the park were treated the same in alternatives. Following is a brief description of each alternative along with a summary of the discussion that followed.

RECOMMENDATIONS APPLICABLE TO ALL ALTERNATIVES

Design Integrity: Maintain the strong wooded edge and open lawn that defines the basic integrity of the Dell.

Erosion Control: Utilize new pathways along pedestrian desire lines, planting of native species and repair of drainage systems to control erosion.

Pathway/Stair Repair: Repair broken steps and crumbling walkways.

Signage and Wayfinding: Provide a hierarchy of signage including identity signage ("Wyman Park Dell"), interpretive signage, regulatory signage (dog owner responsibilities), map/directory of park features, etc. Signage will be designed to be discreet and visually unobtrusive.

Electric and Water Hookups: Provide utility hookups at key areas in the Dell to accommodate events. In particular, provide electric and water hookups at base of slope (in front of BMA), at the North Gateway and on the level areas near the intersections of Howard and 29th Streets and Charles and 29th Streets.

Stone Wall Repair: Replace existing stone wall with dry stack stone wall to facilitate drainage and replace damaged sections of wall.

Habitat Enhancements: Establish invasive species replacement program to replace damaging plant material with native, wildlife-beneficial plant materials. Maintain dead tree trunks in some areas to provide wildlife habitat.

Remove Existing Building: Remove existing stone building at a time when it can be replaced with a new multi-functional structure in an appropriate location.

CONCEPT A

Overview: Concept A illustrates recommended "minimum" improvements to the park. The plan includes only the most critical changes and it has the lowest project budget.

Area by Area:

West Crescent:

- Improve sidewalk along Wyman Park Drive/Howard Street frontage
- Enhance under-story planting in low swale area
- Manage overhead canopy by planting additional shade trees to eventually replace trees that are nearing the end of their lifespan
- Add sidewalk along West 31st Street to accommodate pedestrian "desire line"

Art Museum Drive Frontage:

- Recognize Baltimore Museum of Art's (BMA) master plan to reestablish the front door as the main entrance and provide special paving (brick or decorative concrete) in street to create a "plaza" space when Art Museum Drive is closed to traffic for events.
- Create modest overlook off of sidewalk to engage museum visitors in the Dell.

Jackson and Lee Grove:

- Manage overhead canopy by planting additional shade trees to eventually replace trees that are nearing the end of their lifespan.
- Continue to keep mature trees "limbed-up" to provide better visibility throughout this area.
- Replace some areas of lawn (where turf cannot be maintained because of the shade) with groundcover. In some areas this could be in the form of Liriope which looks like lawn while in other areas the groundcover would take on a more naturalistic feel and include a variety of native ferns, Wild Ginger and Native Wood Asters to provide a transition to the wooded slope. These efforts will be important in helping to control erosion.
- Create a pathway link to the Jackson and Lee monument to provide for interpretation opportunities and to tie it into the overall park experience.

29th Street Frontage:

- Eliminate 29th Street "sweep" to help calm traffic and connect the "green triangle" of land to the greater park.
- Reconfigure existing road bed to maintain parking spaces (for BMA during the day and park visitors/residents in the evenings and on weekends) while providing for a safer pedestrian connection to the park. This parking will only be accessible from 29th Street, eliminating a "through" movement.
- Create a shade garden and sitting area in the "green triangle" to provide an attractive gathering place for seniors in the Wyman House. Remove small trees that block visibility in this area.
- Consider bio-retention area parallel to parking area to accommodate storm-water runoff and help control erosion.
- Eliminate the Charles Street "sweep" to help calm traffic and connect the "green triangle" of land to the greater park. This work is already being planned as part of the Charles Street reconstruction planning.
- Remove asphalt paving from roadbed and create additional lawn area in its place. This will be a level area suitable for events that take place in this part of the park.

Union Plateau:

- Expand playground area and provide additional canopy shade trees for playground.
- Remove understory trees (Kousa Dogwoods) that block views into the lower park and transplant in more appropriate areas of the park.
- Remove eye-level shrubs that block visibility into the park.
- Add pathway connection between Charles Street and the steps into the lower park.
- Create a more significant pedestrian entrance at East 30th Street. Provide an additional paved path to replace the "cut-through" path on the slope.

Charles Street Frontage:

- Maintain street tree planting (Japanese Sophoras) along park edge.
- Widen sidewalk (proposed as part of Charles Street Reconstruction)
- Clear hillside of view-blocking trees and shrubs, particularly invasive species, and replace with low native shrubs that support wildlife habitat while allowing for long views into the Dell from Charles Street.

The Lawn:

- Provide temporary stage area on west side of lawn, below the BMA. This site would have electric hookup and will allow audience to sit on the lawn and on the transition slope area.
- Allow lawn area to function as dog area as it currently does, but supplement with additional signage (visually unobtrusive) educating dog owners on their responsibilities, providing contact information, etc. In this scenario it will be important for dog owners to police themselves and reprimand irresponsible dog owners.
- Post "No Dog Zone" signs on the transition slope area and maintain this as a dog free zone (including leashed dogs).

Wooded Slopes:

- Remove invasive plant materials and replace with appropriate native ground-plane plantings and under-story trees to help control erosion.
- Maintain key view corridors at entrances and on select axis. View corridor areas would be planted with ground covers and low shrubs (below eye level) to allow views (and sense of security) into and out of the lower park. Trees in key view corridors would be limbed-up appropriately.
- Provide an additional pathway connection from the Art Museum Drive park entrance, down the slope to the lower lawn. This path will replace an eroded "cut-through" and also reflects a path that was historically planned for this location.
- Provide meadow grasses on the slope beneath the BMA to stabilize the slope, provide an aesthetically pleasing view from within the park and maintain a visual relationship between the BMA and the Dell.

Transition Slope:

- Limb up trees to provide vistas into the lower park from the upper park.
- Supplement existing trees with additional canopy shade trees.

North Gateway:

- Realign lower pathway parallel to Art Museum Drive to curve through the wooded slope and enter the lower park closer to the main lawn area.
- Remove the portion of stone wall that projects above the sidewalk level along Art Museum Drive and replace with a railing to open up visibility into and out of the park.
- Widen steps at Charles Street to create a more welcoming entrance and provide an information kiosk to make the park more welcoming.
- Limb up trees and remove small trees that block visibility to make the entrance more inviting.
- Work with Department of Public Works to address sewer issues to eliminate smell.
- Relocate utility boxes to be less visually intrusive.

CONCEPT B

Overview: Concept B illustrates additional ideas for the West Crescent, the slope in front of the BMA and the North Gateway, in addition to showing how a fenced dog park might work within The Lawn.

Area by Area:

West Crescent:
- All the recommendations for Concept A plus the following:
- Remove the "spur road" and reclaim as lawn area.
- Provide an additional pathway to accommodate pedestrian movement from the intersection of Howard and 29th through the lawn area to the existing pathway.

Art Museum Drive Frontage:
- Same as Concept A plus the following:
- Create a grander overlook off of sidewalk to engage museum visitors in the Dell. Overlook could define a small planting area adjacent to the sidewalk along Art Museum Drive.

Jackson and Lee Grove:
- Same as Concept A

29th Street Frontage:
- Eliminate 29th Street "sweep" to help calm traffic and connect the "green triangle" of land to the greater park. Same as Concept A

- Reconfigure existing road bed to maintain parking spaces (for BMA during the day and park visitors/residents in the evenings and on weekends) while providing for a safer pedestrian connection to the park. This parking will have access from both Howard Street and 29th Street but would be configured to make "cut-through" traffic less desirable.
- Create a grander shade garden and sitting area in the "green triangle" to provide an attractive gathering place for seniors in the Wyman House. Remove small trees that block visibility in this area. This area could also be a placeholder for a monument or memorial.
- Consider bio-retention area parallel to parking area to accommodate storm-water runoff and help control erosion. Same as Concept A
- Create a wider "promenade" along existing sweeping pathway (currently along curb line of roadway sweep) to be able to accommodate vendors for festivals and events.
- Charles Street/20th Street recommendations same as Concept A

Union Plateau:
- Same as Concept A

Charles Street Frontage:
- Same as Concept A

The Lawn:
- Provide temporary stage area that is carved into hillside below BMA, using low terraced stone walls so that the space is visually integrated with the existing stone wall.
- Provide fenced dog area at southern end of lawn. Surface would be gravel.

Wooded Slopes:
- Same as Concept A

Transition Slope:
- Same as Concept A

North Gateway:
- Same as Concept A with the following:
- Create terraced entrance plaza into park. Provide a pavilion structure on axis with East 31st Street and at grade with Charles Street for sale of coffee and light refreshments in conjunction with outdoor seating. The lower level of the structure would house park management office and storage facilities, along with additional terraces for outdoor seating. This would not impact the existing Beech Trees in this area.
- Provide ADA pathway from entrance down slope along Charles Street.

CONCEPT C

Overview: Concept C illustrates additional ideas for the West Crescent, the slope in front of the BMA, the 29th Street Frontage, The Charles Street Frontage and the North Gateway.

Area by Area:

West Crescent:

- All the recommendations for Concept A and B plus the following:
- Replace the "spur road" with a pathway.
- Provide a small gathering space at the northern end of the crescent.
- Provide a traffic circle to illustrate how this could provide a "terminus" for Art Museum Drive, Wyman Park Drive and Howard Street, while creating a "place" for the Jackson Lee monument. In addition, this would provide safer pedestrian crossings at this intersection.

Note: traffic circle is conceptual only shown to explore the idea. Concept needs to be vetted with the community and City and traffic studies would need to be completed to determine feasibility.

Art Museum Drive Frontage:

- Same as Concepts A and B plus the following:
- Provide pathway connections into the park from the overlook.

Jackson and Lee Grove:
- Same as Concepts A and B plus the following:
- Add additional pathway connection to the crosswalks created as part of the new traffic circle, creating a new major entrance to the park.

29th Street Frontage:
- Same as Concept B plus the following:
- Create a significant paved entrance plaza and gathering space at the corner of 29th and Charles Street in place of the widened promenade.

Union Plateau:
- Same as Concepts A and B

Charles Street Frontage:
- Same as Concepts A and B plus the following:
- Remove the existing street trees at the time of the Charles Street reconstruction and replace with new trees that match spacing and species of Charles Street tree plantings to reinforce a grand pedestrian promenade.

The Lawn:
- Same as Concept A plus the following:
- Explore feasibility of a larger fenced in dog park using "invisible fence". This would require dog owners who wish to let their dogs run free to purchase a collar for use in the dog zone.

Wooded Slopes:
- Same as Concepts A and B

Transition Slope:
- Same as Concepts A and B

North Gateway:
- Same as Concept B with the following:
- Create terraced entrance plaza into park at corner of Art Museum Drive and Charles Street instead of adjacent to East 31st Street. Pavilion would be for sale of coffee and light refreshments in conjunction with outdoor seating. The lower level of the structure would house park management office and storage facilities, along with additional terraces for outdoor seating. This would require the removal of approximately 3 aging Beech trees to allow the grade transition.

APPENDIX E: PROJECT CONSTRUCTION BUDGETS

APPENDIX E: PROJECT CONSTRUCTION BUDGETS

Project Budget Summary

The following project budget summary should be used as a planning tool for establishing project budgets. The totals shown include preliminary construction costs (outlined on the following pages) and 10% design costs. The actual budgets will vary based on timing and scope of project.

Lower Lawn	$575,600
Wooded Slopes	$368,300
Charles Street Frontage	$1,612,500
Art Museum Drive Frontage	$373,600
Lee and Jackson Plateau	$224,200
West Gateway	$224,200
Union Monument Plateau	$730,500
West Crescent	$91,000
Total	***$4,199,900***

APPENDIX F: MASTER PLANT LIST

APPENDIX F: MASTER PLANT LIST

Zone A: Wooded Slopes

Naturalistic planting for erosion control, wildlife habitat and buffer.

Canopy:

Acer rubrum	Red maple
Carya tomentosa	Mockernut hickory
Diospyros virginiana	Common persimmon
Fagus grandifolia	American beech
Liriodendron tulipifera	Tulip poplar
Nyssa sylvatica	Blackgum
Quercus alba	White oak
Quercus rubra	Northern red oak
Ulmus americana 'Princeton'	'Princeton' American elm

Sub-canopy:

Amelanchier canadensis	Serviceberry
Cercis canadensis	Eastern redbud
Chionanthus virginicus	Fringetree
Cornus florida	Flowering dogwood
Ilex opaca var. opaca	American holly
Magnolia virginiana	Sweetbay magnolia

Shrubs:

Hamamelis virginiana	Common witchhazel
Ilex glabra	Inkberry (evergreen)
Ilex verticillata	Winterberry
Lindera benzoin	Spicebush
Rhododendron catawbiense	Catawba rhododendron
Rhododendron periclymenoides	Pinxterbloom azalea
Rhododendron viscosum	Swamp azalea
Vaccinium pallidum	Low-bush blueberry
Viburnum acerifolium	Maple-leaved viburnum
Viburnum dentatum	Arrowwood viburnum
Viburnum prunifolium	Black haw

Groundcovers:

Asarum canadense	Wild ginger
Aster cordifolius	Common blue wood aster
Onoclea sensibilis	Sensitive fern
Osmunda cinnamonea	Cinnamon fern
Polystichum acrostichoides	Christmas fern (evergreen)
Parthenocissus quinquefolia	Virginia creeper
Senecio aureus	Golden ragwort (evergreen)
Solidago caesia	Blue-stem goldenrod

Note: Alternate Herbaceous Species Seed Mix

Zone A1: Transitional Vertical Structure

Lower-branched understory for meadow foraging birds

Amelanchier canadensis	Serviceberry
Aronia melanocarpa	Black chokeberry
Comptonia peregrine	Sweetfern
Cornus racemosa	Grey dogwood
Sambucus Canadensis	American elder
Viburnum acerifolium	Mapleleaf viburnum

Zone A2: Berry-Bearing Trees and Shrubs

Berry-bearing plants to attract birds

Aronia arbutifolia	Red chokeberry
Calycanthus americana	American beautyberry
Cornus florida	Flowering dogwood
Ilex opaca var. opaca	American holly
Ilex verticillata	Winterberry holly
Vaccinium angustifolium	Low-bush blueberry
Viburnum dentatum	Arrowwood viburnum
Viburnum acerifolium	Maple-leaved viburnum

Zone B: Low Wooded Slopes

High canopy trees and low growing shrubs and groundcovers (under 4') within important view corridors.

Canopy:

Acer rubrum	Red maple
Carya tomentosa	Mockernut hickory
Diospyros virginiana	Common persimmon
Fagus grandifolia	American beech
Liriodendron tulipifera	Tulip poplar
Nyssa sylvatica	Blackgum
Quercus alba	White oak
Quercus rubra	Northern red oak
Ulmus americana 'Princeton'	'Princeton' American elm

Shrubs:

Ilex verticillata 'Red Sprite'	'Red Sprite' winterberry (3'-5' Ht.)
Itea virginica 'Little Henry'	'Little Henry' Virginia sweepspire
Rhododendron periclymenoides	Pinxterbloom azalea (4' Ht.)

Vaccinium angustifolium	Low-bush blueberry (2’ Ht.)
Viburnum acerifolium	Maple-leaved viburnum (4’ Ht.)

Groundcovers:

Asarum canadense	Wild ginger
Aster cordifolius	Common blue wood aster
Onoclea sensibilis	Sensitive fern
Osmunda cinnamonea	Cinnamon fern
Polystichum acrostichoides	Christmas fern (evergreen)
Parthenocissus quinquefolia	Virginia creeper
Senecio aureus	Golden ragwort (evergreen)
Solidago caesia	Blue-stem goldenrod

Note: Alternate Herbaceous Species Seed Mix

Zone C: Woodland Edge Groundcover

Naturalistic groundcovers and low shrubs for slope stabilization in shade

Groundcovers:

Asarum canadense	Wild ginger
Aster cordifolius	Common blue wood aster
Onoclea sensibilis	Sensitive fern
Osmunda cinnamonea	Cinnamon fern
Polystichum acrostichoides	Christmas fern (evergreen)
Parthenocissus quinquefolia	Virginia creeper
Senecio aureus	Golden ragwort (evergreen)
Solidago caesia	Blue-stem goldenrod

Note: Alternate Herbaceous Species Seed Mix

Zone D: Ornamental Groundcovers

Low-growing, carpet-like substitute for lawn in areas of deep shade.

Liriope spicata	Creeping lilyturf
Sisyrinchium angustifolium	Blue-eyed grass
Phegopteris hexagonoptera	Broad beech fern
Polystichum acrostichoides	Christmas fern (evergreen)
Asplenium platyneuron	Ebony spleenwort
Thelypteris noveboracenisis	New York fern
Osmunda claytoniana	Interrupted fern
Pachysandra terminalis	Pachysandra/Japanese spurge

Zone E: Ornamental Plantings

Ornamental Shrubs and groundcover, seasonal color and bulbs at entrances and around monuments.

Zone F: Hillside Meadow

Meadow Grasses and Flowering Shrubs in full sun.

Andropogon virginicus	Broom sedge
Andropogon scoparius	Little bluestem
Helioposis helianthoides	Ox eye sunflower
Liatris spicata	Spiked gayfeather
Lupinus perennis	Wild blue lupine
Echinacea purpurea	Purple coneflower
Rudbeckia hirta	Black eyed susan
Solidago spp.	Goldenrod
Asclepias syriaca	Common milkweed
Aster laevis	Smooth blue aster

APPENDIX G: PARK SUPPORT GROUPS

APPENDIX G: PARK SUPPORT GROUPS

Baltimore City Department of Recreation and Parks
3001 East Drive
Baltimore, MD 21217
Mr. Connie Brown, Director
410.396.6132

Friends of Wyman Park Dell
C/O 2717 St. Paul Street
Baltimore, Maryland 21218
Ms. Marcia Holden, President
(410) 339-4131

Wyman Park Dell Master Plan Steering Committee
C/O 2717 St. Paul Street
Baltimore, Maryland 21218
Ms. Marcia Holden, President
(410) 339-4131

COST ESTIMATE SUMMARY

AREA	AMOUNT
The Lower Lawn	$ 523,267
Wooded Slopes	$ 334,800
Charles Street Frontage	$ 1,465,860
Art Museum Drive Frontage	$ 339,588
Lee and Jackson Plateau	$ 203,760
West Gateway	$ 203,832
Union Monument Plateau	$ 664,140
West Crescent	$ 82,692
Total	**$ 3,817,939**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

THE LOWER LAWN | Prepared by RKK/MRA | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Improve Drainage in Wet Area (Storm Drain Pipe)			45	LF	150.00	1	150.00	$ 6,750.00
2	Improve Drainage in Wet Area (SD Inlet, MH)			1	EA	7,500.00	1	7500.00	$ 7,500.00
3	Reseed Lawn (Assume Half)			62,000	SF	0.20	1	0.20	$ 12,400.00
4	Limb Up Shade Trees			1	LS	2,500.00	1	2500.00	$ 2,500.00
5	New Shade Trees			6	EA	450.00	1	450.00	$ 2,700.00
6	New Signage ("Dog Free" Areas)			2	EA	2,000.00	1	2000.00	$ 4,000.00
7	Rebuild Steps up Hillside to Union Monument			1	LS	40,000.00	1	40000.00	$ 40,000.00
8	Remove Existing Stone Wall			9,900	CF	3.94	1	3.94	$ 39,006.00
9	Rebuild Stone Retaining Wall with Dry Set Stone			3,300	LF	75.00	1	75.00	$ 247,500.00
10	Provide Infrastructure for Temporary Stage Site			1	LS	10,000.00	1	10000.00	$ 10,000.00
11	Water Line (for temporary stage site)			650	LF	40.00	1	40.00	$ 26,000.00
11	Water Hose Bib (for temporary stage site)			1	EA	800.00	1	800.00	$ 800.00
12	Relocate Existing Transformer (Move Approximately 20')			1	LS	6,500.00	1	6500.00	$ 6,500.00
13	Replace Benches (18) and Trash Receptacles (6)			1	LS	22,400.00	1	22400.00	$ 22,400.00
14	Replace Damaged and/or Unlit Light Fixtures			4	EA	2,000.00	1	2000.00	$ 8,000.00
						SUB TOTAL			$ 436,056.00
	CONTINGENCY 20%								$ 87,211.20
						TOTAL			**$ 523,267**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

WOODED SLOPES | Prepared by MRA/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Remove Invasive Plant Material			3.0	AC	6,000.00	1	6000.00	$ 18,000.00
2	Replace Invasive Trees with Shade Trees (3:1 Ratio)			60	EA	450.00	1	450.00	$ 27,000.00
3	Hillside Understory Planting			3.0	AC	12,000.00	1	12000.00	$ 36,000.00
4	Proposed Path and Steps from Jackson-Lee Grove to Lawn			1	LS	65,000.00	1	65000.00	$ 65,000.00
5	Limb Up Shade Trees			1	LS	5,000.00	1	5000.00	$ 5,000.00
6	New Shade Trees (Replacements for Aged Trees)			20	EA	450.00	1	450.00	$ 9,000.00
7	Remove Lawn on Hillside			8,000	SF	1.00	1	1.00	$ 8,000.00
8	Meadow Grasses and Shrubs on Hillside			8,000	SF	2.50	1	2.50	$ 20,000.00
9	Rebuild Southwest Entrance and Steps			1	LS	38,000.00	1	38000.00	$ 38,000.00
10	Southwest Entrance ADA Ramp			1	LS	50,000.00	1	50000.00	$ 50,000.00
11	Dell Park Map/Sign			1	EA	3,000.00	1	3000.00	$ 3,000.00
						SUB TOTAL			$ 279,000.00

CONTINGENCY 20% $ 55,800.00

TOTAL **$334,800**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

CHARLES STREET FRONTAGE | Prepared by: MRA/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Thin Out Overgrown and Invasive Vegetation			0.50	AC	6,000.00	1	6000.00	$ 3,000.00
2	Replace with low-growing understory vegetation			0.50	AC	12,000.00	1	12000.00	$ 6,000.00
3	North Entrance Overlook Structure			1	LS	750,000.00	1	750000.00	$ 750,000.00
4	Relocate Existing Utilities (sanitary & stormwater lines)			1	LS	300,000.00	1	300000.00	$ 300,000.00
5	Concessions Pavilion			250	SF	200.00	1	200.00	$ 50,000.00
6	Stone Paving			1,500	SF	17.00	1	17.00	$ 25,500.00
7	Ornamental Fencing and Stone Piers			100	LF	120.00	1	120.00	$ 12,000.00
8	Tables and Movable Chairs			25	EA	500.00	1	500.00	$ 12,500.00
9	Electric Hookup and Water Hose Bib			1	LS	15,800.00	1	15800.00	$ 15,800.00
10	New Bicycle Racks at Entrance			2	EA	1,000.00	1	1000.00	$ 2,000.00
11	Remove Existing Restroom/Storage Building			1	LS	11,000.00	1	11000.00	$ 11,000.00
12	Abandonment of Existing Water Service			1	LS	1,500.00	1	1500.00	$ 1,500.00
13	30th Street Entrance Asphalt Paving			1,500	SF	5.00	1	5.00	$ 7,500.00
14	30 Street Entrance Steps			1	LS	9,000.00	1	9000.00	$ 9,000.00
15	30th Street Entrance Stone Wall			50	LF	75.00	1	75.00	$ 3,750.00
16	Dell Park Map/Sign			2	EA	3,000.00	1	3000.00	$ 6,000.00
17	Benches, Trash Receptacles, Bike Racks			1	LS	6,000.00	1	6000.00	$ 6,000.00
						SUB TOTAL			$ 1,221,550.00
	CONTINGENCY 20%								$ 244,310.00
						TOTAL			**$ 1,465,860**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

ART MUSEUM DRIVE FRONTAGE | Prepared by: MRA/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Remove Existing North EntrancePath/Steps			1,120	SF	2.00	1	2.00	$ 2,240.00
2	New North Entrance Asphalt Path/Steps			1	LS	35,250.00	1	35250.00	$ 35,250.00
3	Replace Top Portion of Wall with Railing			1	LS	40,000.00	1	40000.00	$ 40,000.00
4	Wyman Park Dell Gateway Sign			1	EA	5,000.00	1	5000.00	$ 5,000.00
5	Park Overlook			1	LS	120,000.00	1	120000.00	$ 120,000.00
6	Asphalt Paths from Overlook to Lawn			1	LS	15,000.00	1	15000.00	$ 15,000.00
7	Special Paving/Paving Removal across Art Museum Drive			2,750	SF	20.00	1	20.00	$ 55,000.00
8	Replace Street Trees (Assume Half)			10	EA	450.00	1	450.00	$ 4,500.00
9	Dell Park Map/Sign			2	EA	3,000.00	1	3000.00	$ 6,000.00
						SUB TOTAL			$ 282,990.00
	CONTINGENCY 20%								$ 56,598.00
						TOTAL			**$ 339,588**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

LEE AND JACKSON PLATEAU | Prepared by MRA/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Jackson-Lee Monument Improvements			1	LS	65,000.00	1	65000.00	$ 65,000.00
2	Convert Existing Gravel Path to Asphalt			3,600	SF	5.00	1	5.00	$ 18,000.00
3	Joseph Beuys Memorial Upgrades			1	LS	1,000.00	1	1000.00	$ 1,000.00
4	New Benches			11	EA	1,000.00	1	1000.00	$ 11,000.00
5	New Trash Receptacles			2	EA	800.00	1	800.00	$ 1,600.00
6	Woodland Edge Planting (Groundcover)			8000	SF	5.00	1	5.00	$ 40,000.00
7	Transition Zone Planting (Groundcover)			7000	SF	2.50	1	2.50	$ 17,500.00
8	Seeded Lawn			26000	SF	0.20	1	0.20	$ 5,200.00
9	Limb Up Shade Trees			1	LS	2,500.00	1	2500.00	$ 2,500.00
10	Replace Damaged and/or Unlit Lights			4	EA	2,000.00	1	2000.00	$ 8,000.00
						SUB TOTAL			$ 169,800.00
	CONTINGENCY 20%								$ 33,960.00
						TOTAL			**$ 203,760**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

WEST GATEWAY		Prepared by	MRA/RKK			Date : 5/2006			
Proj. No.:		Checked by				Date			
ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Clear Scrub Vegetation			1	LS	1000	1	1000.00	$1,000.00
2	Gathering/Seating Area (Stone Paving)			950	SF	17.00	1	17.00	$16,150.00
3	Gathering/Seating Area (Benches)			5	EA	1000.00	1	1000.00	$5,000.00
4	Additional Asphalt Paths (Triangle)			1,600	SF	5.00	1	5.00	$8,000.00
5	Additional Asphalt Paths (New Park Paths)			1,170	SF	5.00	1	5.00	$5,850.00
6	Shade Garden Planting			1250	SF	5.00	1	5.00	$6,250.00
7	Pedestrian Connection to Park (Special Paving)			500	SF	14.00	1	14.00	$7,000.00
8	Bollards			4	EA	900.00	1	900.00	$3,600.00
9	Wyman Park Dell Gateway Sign			1	EA	5000.00	1	5000.00	$5,000.00
10	Reconfigure Asphalt Parking Area (Optional)			9,550	SF	5.00	1	5.00	$47,750.00
11	Concrete Curb and Gutter at Parking/29th Street (Opt.)			815	LF	24.00	1	24.00	$19,560.00
12	Remove Existing Asphalt (Optional)			14000	SF	2.00	1	2.00	$28,000.00
13	New Park Open Space, Topsoil and Lawn (Optional)			6,000	SF	2.00	1	2.00	$12,000.00
14	New Shade Trees (Optional)			6	EA	450.00	1	450.00	$2,700.00
15	Park Map/Directory			1	LS	3000.00	1	3000.00	$3,000.00
						SUB TOTAL			$169,860.00
	CONTINGENCY 20%								$33,972.00
						TOTAL			**$203,832**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

UNION MONUMENT PLATEAU | Prepared by MAR/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Monument Accent Lighting & Signage			1	LS	8,000.00	1	8000.00	$ 8,000.00
2	3' Metal Fence (Monument/Playground)			850	LF	75.00	1	75.00	$ 63,750.00
3	3' Metal Fence (Top of Slope)			350	LF	75.00	1	75.00	$ 26,250.00
4	New Asphalt Path (Monument Area)			1,400	SF	5.00	1	5.00	$ 7,000.00
5	New Asphalt Path (Reclaimed Triangle)			1,320	SF	5.00	1	5.00	$ 6,600.00
6	New Informal Impervious Paths			1,700	SF	3.00	1	3.00	$ 5,100.00
7	Playground Equipment/Expansion			1	LS	140,000.00	1	140000.00	$ 140,000.00
8	New Shade Trees			7	EA	450.00	1	450.00	$ 3,150.00
9	Play Area Benches (6) & Trash (2)			1	LS	7,600.00	1	7600.00	$ 7,600.00
11	New Picnic Tables			6	EA	400.00	1	400.00	$ 2,400.00
11	Wyman Park Dell Gateway Sign			1	EA	5,000.00	1	5000.00	$ 5,000.00
12	12' - 18' Promenade (Special Paving)			10,000	SF	17.00	1	17.00	$ 170,000.00
13	Remove Existing Asphalt			6,700	SF	2.00	1	2.00	$ 13,400.00
14	Promenade Benches (14) & Trash (4)			1	LS	17,200.00	1	17200.00	$ 17,200.00
16	Promenade Game Tables			6	EA	1,500.00	1	1500.00	$ 9,000.00
17	Promenade Electric & Water Hookup			1	LS	60,000.00	1	60000.00	$ 60,000.00
18	Transplant/Remove Flowering Trees			1	LS	2,000.00	1	2000.00	$ 2,000.00
19	Dell Park Map			1	EA	3,000.00	1	3000.00	$ 3,000.00
20	Replace Damaged and/or Unlit Light			1	EA	2,000.00	1	2000.00	$ 2,000.00
21	Bike Racks			2	EA	1000.00	1	1000.00	$ 2,000.00
						SUB TOTAL			$ 553,450.00
	CONTINGENCY 20%								$ 110,690.00
						TOTAL			**$ 664,140**

COST ESTIMATE WORKSHEET

Wyman Park Dell Master Plan

WEST CRESCENT | Prepared by MRA/RKK | Date : 5/2006

Proj. No.: | Checked by | Date

ITEM									TOTAL
KEY	DESCRIPTION	SIZE/COND.	REMARKS	QTY.	UNIT	$/UNIT	MULT.	COST	COST
1	Remove Existing Concrete Walk			2,500	SF	2.00	1	2.00	$ 5,000.00
2	5-foot Concrete Sidewalk			3,900	SF	5.50	1	5.50	$ 21,450.00
3	Traffic Maintenance			1	LS	5,000.00	1	5000.00	$ 5,000.00
4	New Asphalt Paths			1,400	SF	6.00	1	6.00	$ 8,400.00
5	Remove Asphalt "Spur" Road			4,000	SF	2.00	1	2.00	$ 8,000.00
6	Additional Curb and Gutter (Spur Road)			300	LF	24.00	1	24.00	$ 7,200.00
7	New Park Open Space (Topsoil and Lawn)			2,880	SF	2.00	1	2.00	$ 5,760.00
8	New Shade Trees (Replacements)			10	EA	450.00	1	450.00	$ 4,500.00
9	New Groundcover on slope			1,200	SF	3.00	1	3.00	$ 3,600.00
						SUB TOTAL			$ 68,910.00
	CONTINGENCY 20%								$ 13,782.00
						TOTAL			**$ 82,692**