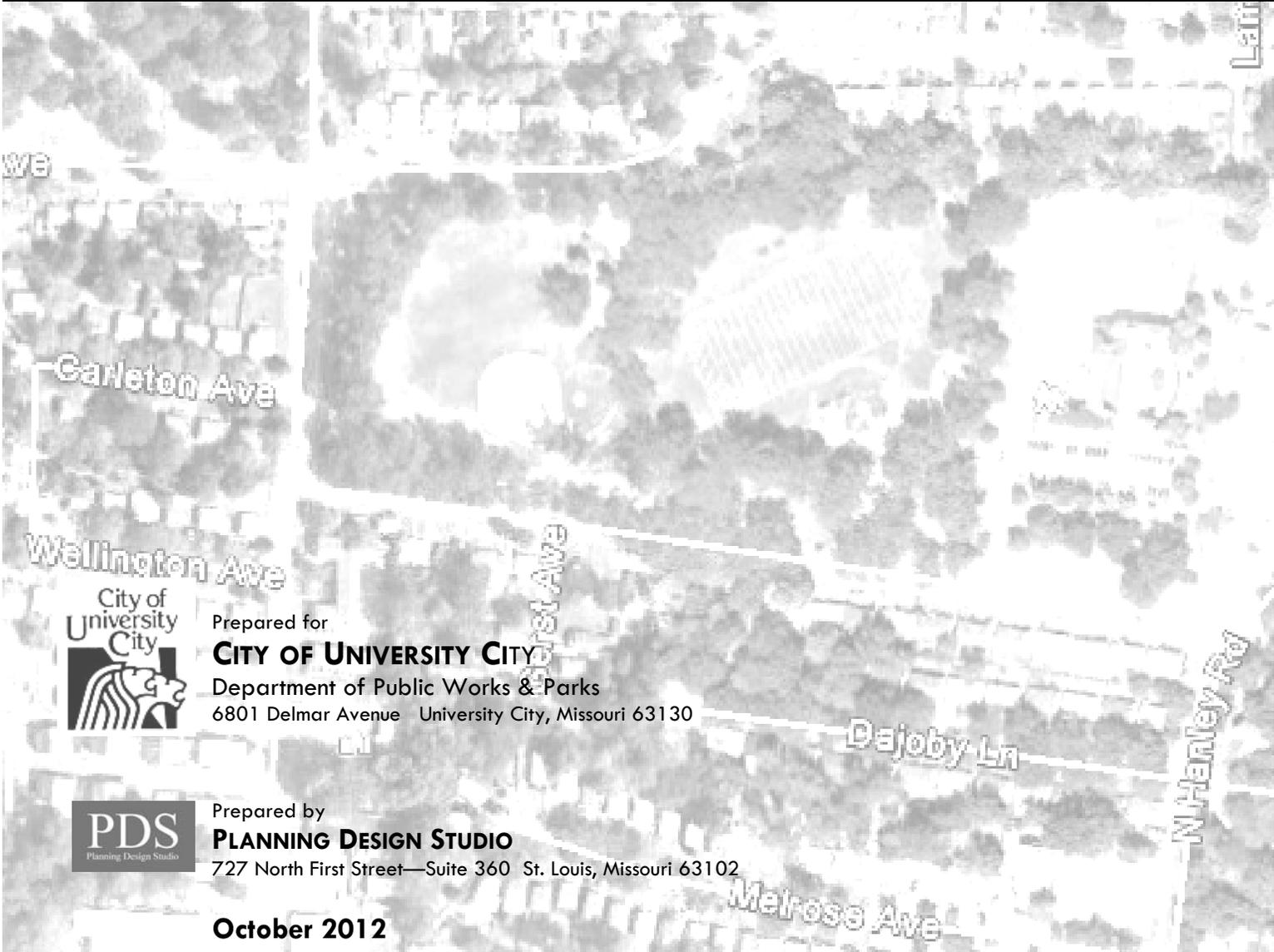


# *Millar Park*

## *Master Plan*



Prepared for  
**CITY OF UNIVERSITY CITY**  
Department of Public Works & Parks  
6801 Delmar Avenue University City, Missouri 63130



Prepared by  
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**October 2012**





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### Appendices (*Separate Document*)

- City's Request for Proposals
- PDS Proposal
- Community Survey Form
- Community Survey Summary
- Community Input Meetings Sign in sheets
- 7/24 /12 Park Board Presentation Slides
- 8/15/12 Public Meeting Announcement
- 8/15/12 Public Meeting #1 Presentation Slides
- 9/19/12 Public Meeting Announcement
- 9/19/12 Public Meeting #1 Presentation Slides
- 9/27/12 Park Board Presentation Slides
- Millar Park Summary Sheet from 2008 Citywide Parks Master Plan



# Acknowledgements

The following individuals and groups are acknowledged and thanked for their contribution to the development of the Millar Park Master Plan.

Millar Park Neighbors and University City Residents. Valuable input was received from the many individuals who participated in the Master Planning Process through Community & Neighbor Input Meetings at the Park, as well as during Park Board Meetings.

City of University City Elected and Appointed Officials:

Mayor Shelley Welsch  
Stephen Craft, City Council Liaison  
Caryn St. Clair, Park Board President  
Karen Dille, Park Board  
William Field, Park Board  
Alberta Garth, Park Board  
Ed Mass, Park Board  
Karen Palmer, Park Board  
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Planning Design Studio

Noel Fehr, ASLA, Principal Landscape Architect  
Scot Talbert, Associate Landscape Architect  
Andrew Franke, ASLA Landscape Architect

## Millar Park Master Plan Community & Neighbor Input Meeting

When: Wednesday - August 15, 2012  
 Open House: 5:30 PM until 7:30 PM  
 Overview Presentation: 6:30 PM  
 Location: Millar Park Picnic Shelter



University City is soliciting Community and Neighbor input regarding the Master Plan update for Millar Park. The findings from the recent park user survey and park facility analysis will be reviewed and additional input welcomed. Comments will also be solicited on several alternative concept park plans developed thus far. Based on the input received, a Master Plan for Millar Park will be prepared for final review in September.



Example Announcement prepared for Community Meetings that were posted at the park, community center and City Hall.



Community Meetings were held in the shelter at the park.

## Master Planning Process

The objective of developing a Master Plan for Millar Park was to develop a strategy to program improvements to the park that meet the needs and desires of the neighborhood and University City community in a logical and cost effective manner. To achieve the goal, the following tasks were scheduled and completed.

- ◆ **Project Kickoff:** A kickoff meeting was held with City staff to confirm the master plan project goals/objectives and review/request available background information for the planning effort. On an overview drawing at a scale to fit on a 22" x 34" sheet size.
- ◆ **Base Mapping** was prepared from aerial/topographic mapping provided by MSD. The overall park master site plan will be illustrated on a base map formatted onto 22" x 34" drawing sheets that can be reproduced onto 11" x 17".
- ◆ **Community Survey.** A community survey instrument was prepared, reviewed and refined. A copy included in the appendices. City interns used this form to conduct interviews with park users and residents in the surrounding neighborhood. In addition the survey was handed out at Park Board and public meetings on the Master Plan. The results of the survey were presented to the Park Board, at the public meetings and included with this submittal.
- ◆ **Park Inventory & Analysis.** An inventory of existing facilities was conducted to review existing facilities and conditions and to identify and document opportunities and constraints for developing master plan recommendations. A summary of this inventory was presented to the Park Board, at the public meetings and included within this summary report.
- ◆ **Visioning & Alternative Concept Plans:** Three alternative concepts of proposed programmed improvements within Millar Park
- ◆ **Park Board Review Meeting:** Results of the survey, inventory and analysis and the three alternative concept plans were presented to the Park Board on July 24, 2012. (Park Board meetings are open to the public). Input received from the Park Board resulted in developing a fourth alternative concept that was included in the Community Meeting and workshop.



- ◆ **Community Meeting #1:** The first community meeting was held as an “On-Site Open House” type meeting held in Millar Park at the existing pavilion in the park from 5:30 PM to 7:30 PM, during which time park planners and city staff were present to discuss the concepts and answer questions. A 20-minute overview presentation was conducted at 6:30 PM. Materials presented included a summary of the proposed facility program, site analysis and plan alternatives. The purpose of the meeting was to solicit citizen input. The meeting was very well attended not only by neighbors and regular users of the park, but also by attendees coaches, parents and children that were participating in football and cheerleading practices that night at the park.
- ◆ **Draft Master Plan:** Based on the input received, a refined Draft Plan was prepared including a Site Plan, Cost Estimate and Summary Description. This plan was reviewed by City Public Works & Parks staff.
- ◆ **Community Meeting #2:** The second community meeting was also held as an “On-Site Open House” type meeting held in Millar Park at the existing pavilion in the park from 5:30 PM to 7:30 PM, during which time park planners and city staff were present to discuss the concepts and answer questions. A 20-minute overview presentation was conducted at 6:30 PM. Materials presented focused on the refined draft Master Plan. The purpose of the meeting was to communicate the proposed improvements and confirm direction from the public.
- ◆ **Park Board Review Meeting:** The draft Master Plan including cost estimates and phasing options were presented to the Park Board. During that meeting the Board voted to approve the Millar Park Master Plan.
- ◆ **City Council Meeting.** The Master Plan was distributed to the City Council prior to their October 22 meeting. During that meeting the Council approved the Millar Park Master Plan.
- ◆ **Master Plan Summary Report.** A summary report of the Master Plan was prepared to summarize the process and recommendations, including the final Master Plan drawing, Summary Description and Cost Estimate.

## What we heard from YOU!

- ▶ Don't Remove any Parking.
- ▶ Upgrade Restrooms – Separate from Picnic Shelter
- ▶ Playground should be near Picnic Shelter
- ▶ New Picnic Shelter
- ▶ Improve Trail and Provide More Lighting
- ▶ Site Furnishings & Seating Areas

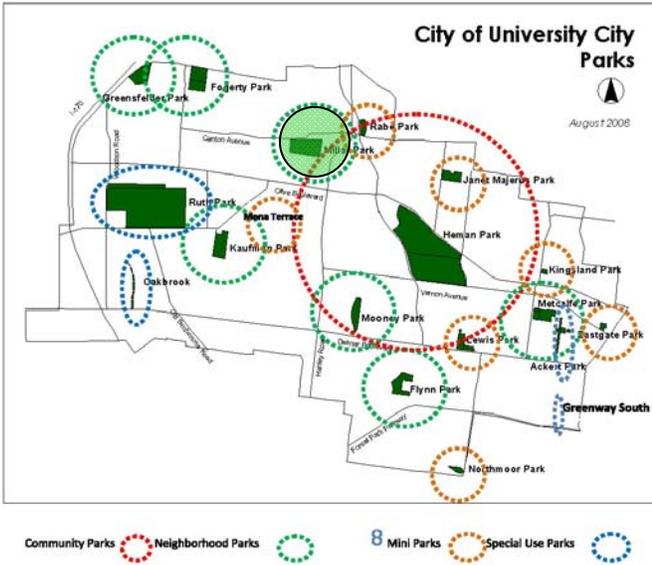
PDS



Existing sign at Canton Avenue and North-South Avenue Rd.



Existing softball field backstop and Oak Trees that help to define the park



Millar Park Highlighted in green onto a Citywide Parks Plan graphic.

## Park Context & Site Analysis

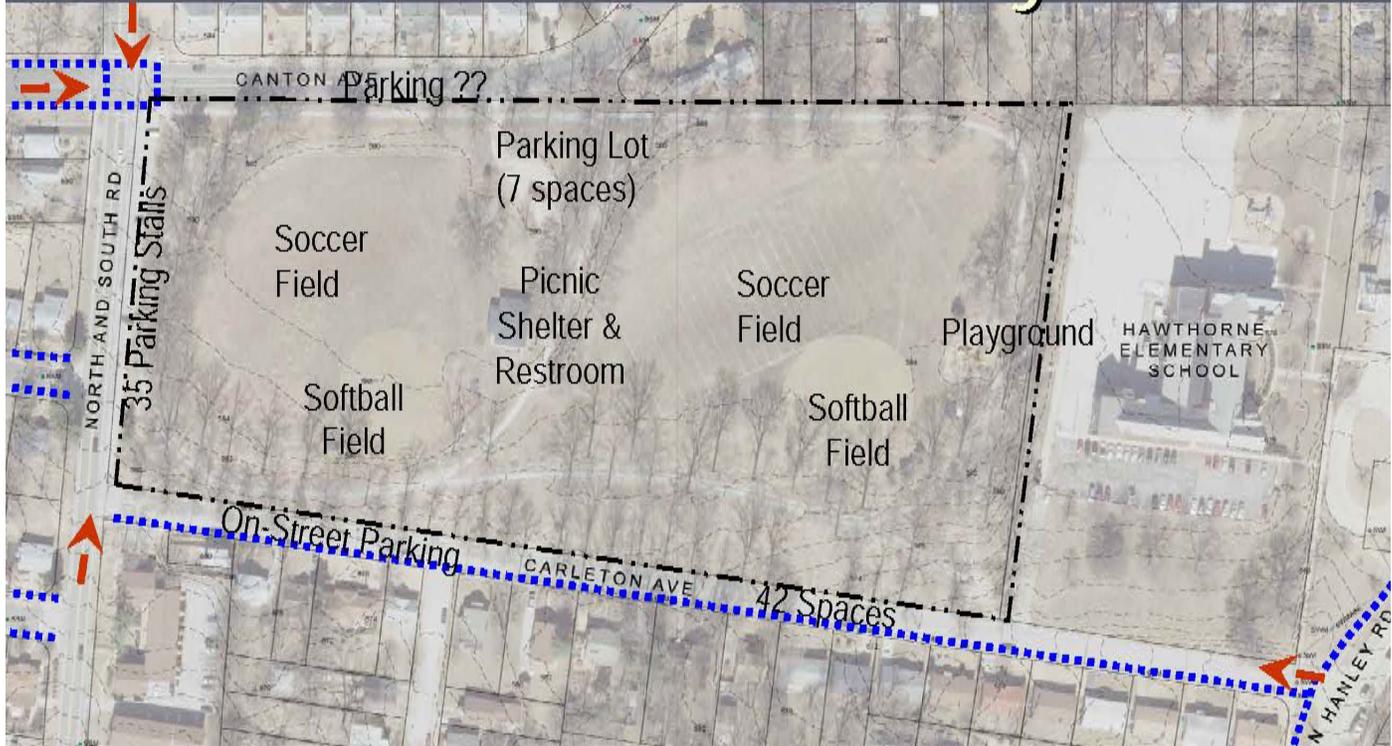
Millar Park is a 12.1 acre neighborhood park with some sports field community use. It's located along North South Road between Carleton and Carlton, about three blocks north of Olive Boulevard. The park was acquired by University City in 1928.

The Citywide Park System map illustrated to the left illustrates the Millar Park's context within the City. The aerial photograph below illustrates the residential neighborhood setting of the park. Homes are generally single family brick structures, with drives and garages. Hawthorn School (University City School District) is located just to the east of the park. The school currently is not being used, but has been used while other buildings were being renovated or rebuilt. The School District indicated they have no plans to dispose of the property. They are evaluating several optional uses for the facility.





# Millar Park Site Analysis



NW Corner of Park (North South Road and Canton)



SW Corner of Park (North South Rd and Carleton)



View along North South Road - east side of park



View along Carleton - south side of park



*Mature oaks visually define spaces and the park.*



*Exist. Pavilion - not ADA compliant, poor condition*



*Trail from SE corner is not ADA compliant*



*Restrooms are in disrepair and not ADA compliant rk*



*Stone gutter along trail is a safety issue*



*Existing Parking Lot area*



*Existing trails are well used and enjoyed.*



*Existing backstop*



*Hawthorn School located just east of the park*



*Hawthorn School located just east of the park*



*Sportfield on east side of park.*



*Drinking fountain are not ADA compliant and require on-going service.*



*Existing restroom pavilion has mature trees forming a nice setting for future improvements.*

## Alternative Concepts & Program Development

The Master Planning process developed several Alternative Concept Plans based on the existing site and facility condition, the neighborhood context, community park needs and issues identified by the City staff. These initial visions we used to develop a discussion with the park users, neighbors, the community and Park Board members on the community vision for Millar Park. The plans addressed various needs at different levels and location which helped to develop a good dialog on what was shown as well as additional ideas. Three Alternative Concepts were prepared in collaboration with the City staff and then brought to the Park Board meeting. Discussions with the Park Board generated a fourth Alternative concept. All four we reviewed at the first community— meeting held on site at Millar Park.

Based on the initial discussions and site analysis, there were several facilities that were treated consistently in all of the alternatives. This includes:

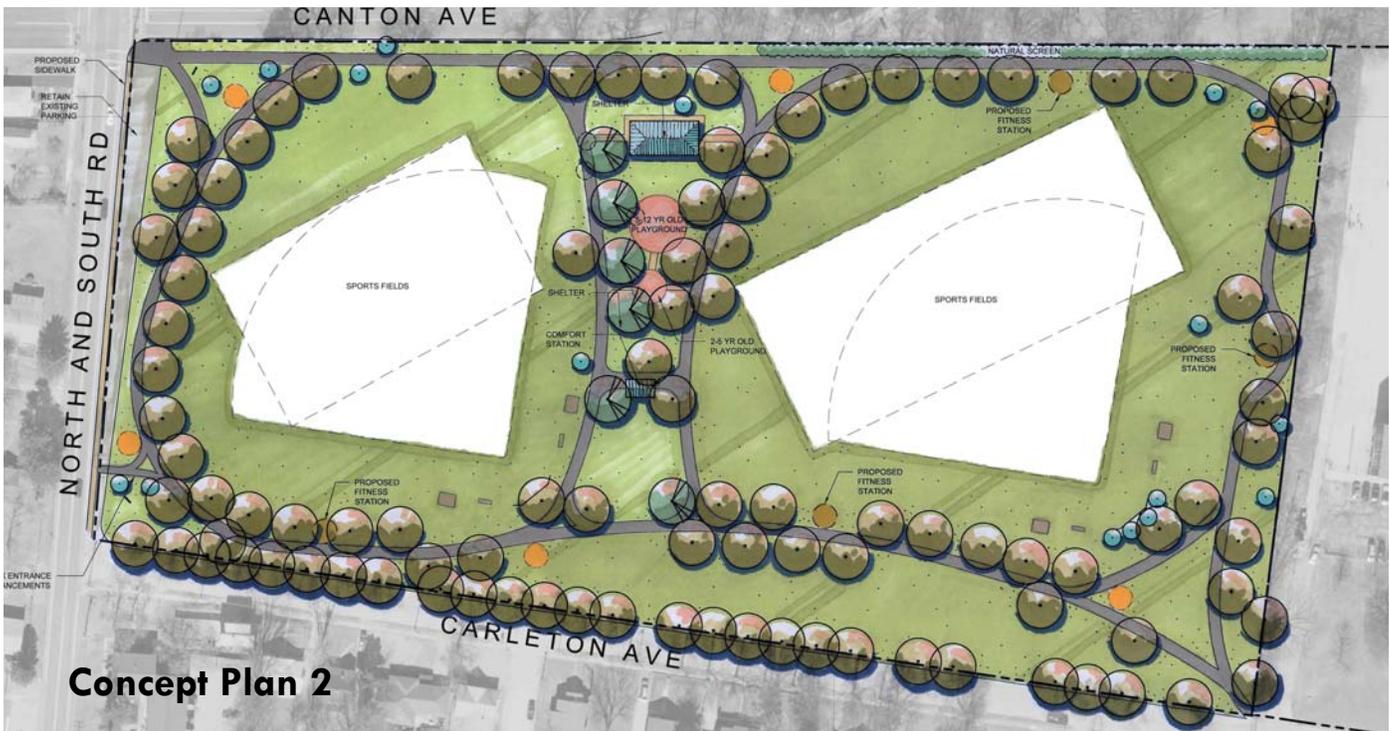
- Perimeter Trail - All alternates included widening the trail to 8' wide, repaving and removal of the



Perimeter trail on north side of park.



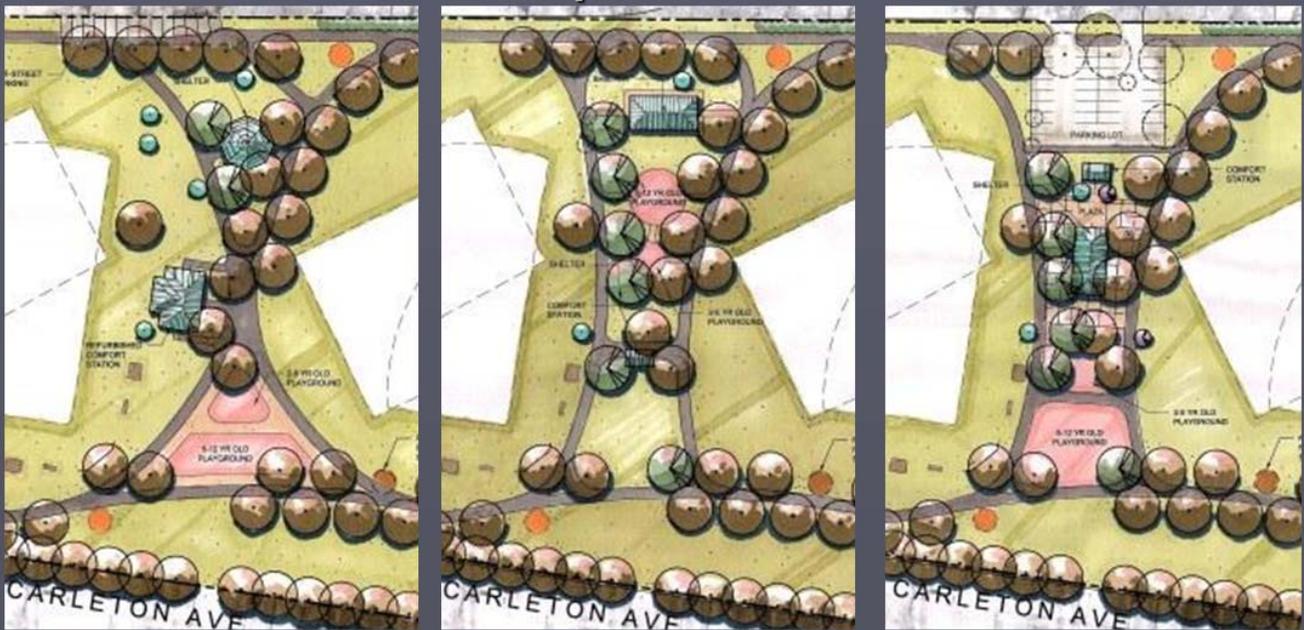
Concept Plan 1



**Concept Plan 2**

- stone gutter along the south half of the trail.
- Playground - All alternates moved the playground to the central core area of the park to provide closer access and better visibility from the higher use and picnic areas of the park. The playground would include two separate age oriented playground areas (2-5 yrs and 5-12 yrs). The playground area will include a seating area.
- All alternatives would maintain the existing play-ground at the east end of the park until the equipment was obsolete or no longer safe.
- All alternatives included replacing and adding new site furnishings to include benches, trash receptacles, drinking fountains and signing.
- All alternatives included adding pedestrian lighting along the perimeter trail and in the core park area.
- All alternatives would improve the sportsfields by

## Park Center Options - Discussion





**Concept Plan 3**

improving the turf, possibly irrigation, backstop and bleacher replacement and improving the infields.

- All alternatives paid high priority to saving existing trees due to their spatial definition, prominent visual impact and concerns express by neighbors.
- All alternatives recommended developing a long term tree replacement plan, improving landscape plantings and screening of residents to the north.
- All alternatives maintained the exercise stations and added a few more.
- All alternatives would replace the existing water and sewer service to the comfort station.

Concept Plan 1 - Key distinguishing features of Alternative Concept 1 included

- Renovating the existing pavilion by demolishing the existing restrooms part of the structure and rebuilding those facilities within the pavilion structure. A large storage area would remain in the center of the building.
- Construct a new more open Picnic Pavilion built approximate over the existing parking lot.
- Construct a new playground on the south end of the park's core area.
- Remove the existing parking lot in the north core area.
- New pull-in parking (14 stalls) would be added along Canton Avenue on the north side of the park.

Concept Plan 2 - Key distinguishing features of Alternative Concept 2 included:

- Demolition of the existing pavilion and restrooms
- Adding a new more open Picnic Pavilion built near

the existing parking lot at the north end of the core.

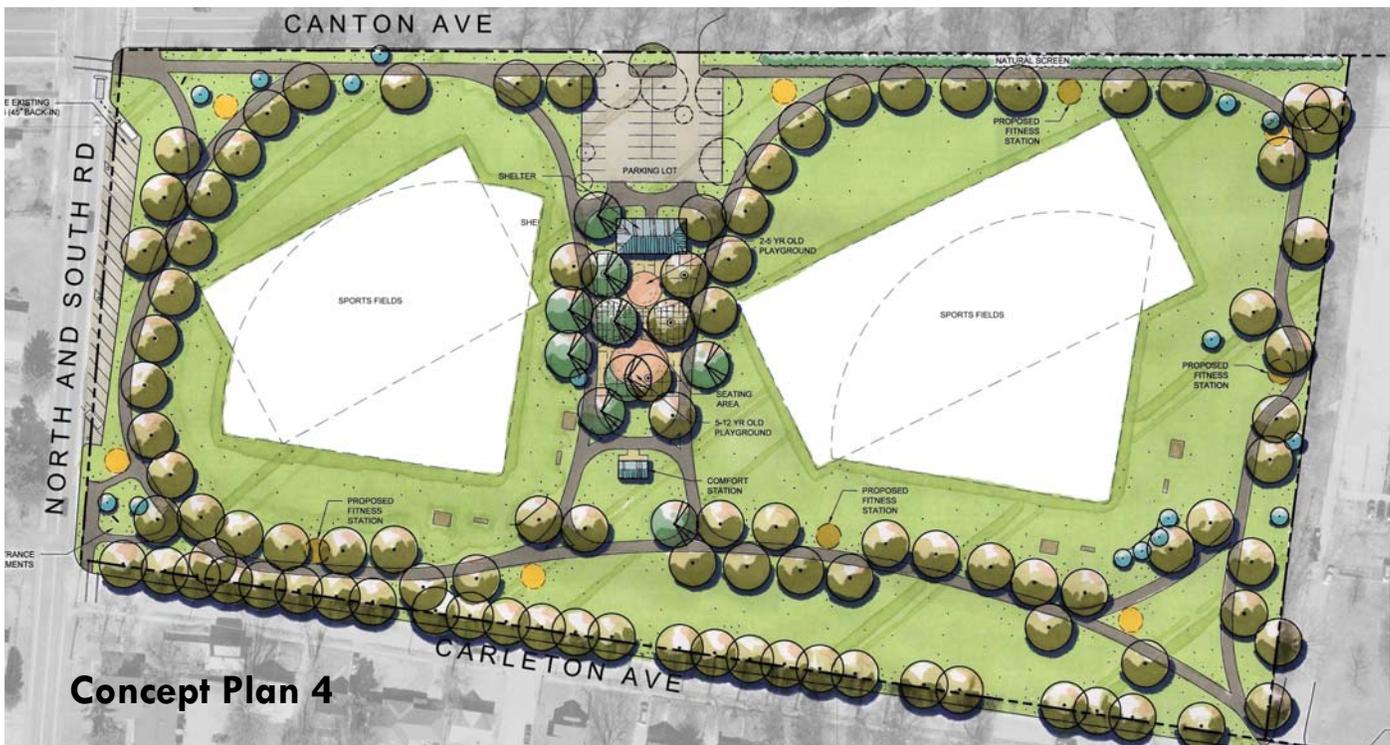
- Construct a new playground just south of the Picnic Pavilion.
- Construct a new restroom / comfort station at the south end of the central core area.
- Remove the existing parking lot in the north core area.
- Parking along North South Road would be maintained and improved.

Concept Plan 3 - Key distinguishing features of Alternative Concept 3 included:

- Demolition of the existing pavilion and restrooms
- Replace the existing parking lot in the north park core area with a drive through parking lot
- Construct a new restroom / comfort station at the north end of the central core area, just south of the new parking lot.
- Construct a new more open Picnic Pavilion in the central part of the core park area.
- Construct a new playground just south of the Picnic Pavilion at the south end of the park.
- Parking along North South Road would be removed.

Concept Plan 4 - Key distinguishing features of Alternative Concept 4 included:

- Demolition of the existing pavilion and restrooms
- Replace the existing parking lot in the north park core area with a drive through parking lot
- Construct a new more open Picnic Pavilion in the north part of the core area, just south of the parking lot.
- Construct a new playground just south of the Picnic Pavilion in the central part of the core area.



**Concept Plan 4**

- Construct a new restroom / comfort station at the south end of the central core area, just south of the new parking lot.
- Parking along North South Rd would be maintained and improved with 45 degree back-in parking.

The Facility Program for Millar Park was established during the development of the Concept Plans and then refined during the Community Engagement process. The facility program listing below went through many reviews, modifications and refinements, but in the end represents a consensus of what the City and community wants in Millar Park.

### Millar Park Master Plan – Facility Program Summary

The Facility Program for improvements to Millar Park have been grouped into the following five categories:

1. Core Area Improvements
2. Trail Improvements
3. Parking Improvements
4. Sports Field Improvements
5. Other Miscellaneous Improvements

#### CORE AREA IMPROVEMENTS

The Alternative Plans presented at the Public Meeting and to the Park Board had various options related to proposed facilities. The consensus of most everyone was to redevelop the core area to include the following new facilities:

- Picnic Shelter – More open style than the existing shelter would be preferred. Preferred it on higher north side with higher and better views around park. Shelter should be sized to hold tables to seat about 120, include lighting and electric service.
- Comfort Station/Restroom Facility – ADA accessible, 1 Lavatory each side; Women - 2 toilets; Men – 1 toilet and 1 urinal). No request for separate family restroom. Some storage would be very useful within the building.
- Playground – separate areas for younger children (2-5 yrs.) and older children (6-12 yrs.). Safety surface. Locate in area close to and visible from picnic shelter and seating area. Try to incorporate around trees that would provide shade.
- Seating area overlooking playground and sport fields. Incorporate benches, trash receptacles, bike racks and related site furnishings. Tie the “look” to the building design theme.
- Drinking fountain – existing fountain doesn’t work well and is not ADA accessible.
- Generally the preference was to locate these facilities from north to south in the following order: Picnic Shelter; Playground (2-5 yrs); Seating Area w/drinking Fountain; Playground (5-12 yrs); Comfort Station.
- All facilities designed around a common visual design theme – meaning to design facilities at a related scale, with similar materials, colors and texture.
- Select materials and systems that are low maintenance and the most vandal resistant – an example discussed was standing seam metal roofing.
- Maintain good visibility for safety, security and to minimize vandalism.

#### TRAIL IMPROVEMENTS

The trail was identified in the survey and at the meetings as the most used amenity in the park and therefore is of primary importance in establishing the Master Plan’s facility program. Key improvements to the trail would be to:

- Widen the trail to accommodate the level of use.
- Eliminate the drop off and gutter along the trail on the west and south sides of the park. This will require sensitive design to minimize impacts on the root zone (either cutting or filling) of the mature Oak trees that line the trail.
- Resurface the trail
- Improve and/or additional pedestrian lighting

- Construct a connection to the SW park entrance
- Reduce the profile slope of the trail entering from the SE to less than 5%. (the max currently is about 6% - so it should be feasible to rework this without too much impact to the surrounding area.
- Integrate trail amenities including signing, exercise stations, benches, and mile marker system.

#### PARKING

Parking becomes an issue for neighbors and patrons when the sports fields are programmed for use, particularly for the Youth Football program (Weekend games and weeknight practices.) Additional parking cannot be justified for these limited peak use times, but there is a strong desire to maintain and not reduce parking. Therefore the Master Plan proposes:

- Existing on-street parking Carlton and Canton will be maintained.
- The existing on-street 90 degree parking along North and South needs to remain. Improvements include removal of stalls directly adjacent intersections for safety. It was suggested that renovation include changing parking stalls to 45 degree back-in parking, which is considered safer along a street.
- The existing parking lot just north of the shelter is a dead end lot and doesn’t function well. Based on strong support, the plan will include redeveloping this lot to provide thru circulation and parking for about 30 cars including ADA accessible stalls.

#### SPORTS FIELD IMPROVEMENTS

The existing sport fields are two softball sized fields, one with a soccer field overlay and the other a football field overlay. The following are suggestions received and recommendations of how to address in the Master Plan.

- Turf Improvement Program & Irrigation – Sport field user groups expressed an interest in better turf. This would require a renovation program and installing irrigation. The type and level of use in the future should dictate the priority given to this program element.
- Sports Field Lighting – Again this was identified, but will not be included in the Master Plan due to impacts to the surrounding neighborhood.

#### OTHER PROGRAM ITEMS

The following items are included in the Facility Program for the Master Plan.

- Encourage the City to facilitate the addition of sidewalks for safer access to the park from surrounding neighborhoods. This would include:
  - Along North and South including a crosswalk at Carlton.
  - Along the north side of Carlton, just west of Hanley (along the Hawthorn School south property line.)
- Provide additional landscape screening between the perimeter trail and neighbor yards in the northeast corner of the park.
- Develop a Park Forestry Plan to address long term tree care and replacement. The magnificent oak trees are the most memorable visual element of the park, making it a most attractive open space area. These trees are close to the same age and if lost at one time would significantly change the character and attractiveness of the park. This Park Forestry Plan should include a replanting program to be implemented through an on-going long term basis.

Millar Park Master Plan  
University City, Missouri

**Park User & Community Survey Questions**

1. How often do you go to Millar Park?  
(More than once a Week) (Weekly) (Monthly) (Seldom)
  2. Do you typically arrive by:  
a. \_\_\_ Walking or Biking      b. \_\_\_ Automobile
  3. Are there any parking issues associated with facilities and/or activities within Millar Park? \_\_\_\_\_
  4. What facilities do you use in Millar Park and how would you rate those facilities?
- | Facility                 | Do you Use? | Rate the Facility |
|--------------------------|-------------|-------------------|
| Playground               | Yes - No    |                   |
| Football/Soccer Fields   | Yes - No    |                   |
| Softball/Baseball Fields | Yes - No    |                   |
| Perimeter Walk/Trail     | Yes - No    |                   |
| Picnic Tables            | Yes - No    |                   |
| Picnic Shelter           | Yes - No    |                   |
| Restrooms                | Yes - No    |                   |
5. What are the most positive and negative aspects regarding Millar Park?  
a. Positive: \_\_\_\_\_  
b. Negative: \_\_\_\_\_
  6. What would be your top five priorities for improvements and/or new facilities in Millar Park?  
a. \_\_\_\_\_  
b. \_\_\_\_\_  
c. \_\_\_\_\_  
d. \_\_\_\_\_  
e. \_\_\_\_\_
  7. Are there any facilities that if built would concern you? (ie. Sports Field Lighting)  
\_\_\_\_\_
  8. What other comments or suggestions do you have regarding Millar Park?  
\_\_\_\_\_  
\_\_\_\_\_

PLANNING DESIGN STUDIO

## Community Survey & Engagement

The Master Planning process included significant Community Engagement, including a survey of adjoining neighborhoods as well as park users and the larger University community. This input has provided significant guidance that has been incorporated into the final Master Plan for Millar Park. The Community Engagement included the following activities.

The Community Survey task started by developing a survey instrument (form) was prepared, reviewed with City staff and refined. A copy included in the appendices. City summer interns administered this survey via personal interviews with park users and residents in the surrounding neighborhood during June and July. In addition the survey was handed out at Park Board and public meetings on the Master Plan. The results of the survey were presented to the Park Board, at the public meetings and included with this submittal. While nearly fifty survey responses were received, even more meaningful was the fact that 79% use the park at least once

## Park Survey – User Summary



- ▶ 48 Respondents
  - 79% use park at least once a week.
  - 76% Walk or ride a bike to the park.
- ▶ Park Facilities Used
  - Walk/Trail – 93%
  - Picnic Shelter or Tables – 56%
  - Restrooms - 41%
  - Playground - 27%
  - Sportsfields - 20%



a week. This is interpreted as respondents who use and understand the park and it's needs. Additional characteristics are included in the slide below. Key Community Engagement Meetings and Workshops conducted are listed below:

- 7/24/12 Park Board Meeting (Park Board meetings are open to the public.)
- 8/15/12 Public Meeting
- 9/13/12 Green Practices Commission
- 9/19/12 Public Meeting
- 9/27/12 Park Board Presentation Slides

## Summary of Survey Responses

### What we heard from YOU!

- ▶ Don't Remove any Parking.
- ▶ Upgrade Restrooms – Separate from Picnic Shelter
- ▶ Playground should be near Picnic Shelter
- ▶ New Picnic Shelter
- ▶ Improve Trail and Provide More Lighting
- ▶ Site Furnishings & Seating Areas

PDS

### Other Things we heard from YOU!

- ▶ Protect Existing Trees – Involve City Forester
- ▶ Separate Playground Areas "2-5 yrs" and "6-12 yrs."
- ▶ Visually Relate New Buildings to Neighborhood
- ▶ Picnic Shelter Size – 12 to 16 Tables
- ▶ Improve Sportsfield turf – Field Lighting would be nice.
- ▶ Install Sidewalks along North-South and Carleton
- ▶ More Police Security in Park

PDS

### MOST POSITIVE ASPECTS OF MILLAR PARK

- Could be Great Neighborhood Park
- Good Location
- Always Clean & Safe
- Well Maintained, Vibrant, Convenient & Friendly
- Great Walking/Running Trail
- Trees – provide shade
- Peaceful
- Attracts People
- Family Friendly
- Good play space for kids
- Clean Restrooms

### MOST NEGATIVE ASPECTS OF MILLAR PARK

- Picnic Shelter & Restrooms
  - Scary (with Drug Users) & Hangout for "bad" use
  - Need Daily Cleaning and Closed in Winter
- Walk / Trail Comments
  - Needs Upgrades & Lighting
- Issues with Park Users
  - Persistent Loitering & Loud Music
  - Congested Streets during games
  - Golf Ball Hitting
  - Excessive Alcohol Consumptions
  - Drug Use
  - Unleashed Dogs
  - Some Activities Incompatible w/Neighbors
- Unsafe Feeling at Night
- Abandoned Homes near Park
- More Picnic Tables
- Upgrade Drinking Fountains



### SURVEY RESULTS - TOP PRIORITIES

- Upgrade Restrooms
- Playground (for 2-5 and 5-12 year old)
- Larger Shelter
- Wider Walk w/Centerline
- Site Furnishings/Amenities: Benches, Trash Cans, BBQ Pits, Bike Racks, Pet Bag Dispensers
- Better Parking
- Better Lighting
- Sportsfield Area Seating
- Dog Workout Facilities

### Community Preference: Concept #4

- ▶ Generally Concept 4 was Preferred
  - Kept N-S Parking and Upgraded Shelter Area Parking
  - Redeveloped Core: Shelter – Playground - Restroom
  - Separated Restrooms from Shelter & Playground
- ▶ Preferred Aspects of Other Concepts
  - NW & SW Park Entry Feature on Alt 3

# Millar Park

## Master Plan



### Park Master Plan

The Millar Park Master Plan was developed based on site conditions, Park Board and City staff input, but particularly the community input received during the Public Engagement process. The following Facility Program Summary describes the five areas of proposed improvements to the park.

- Core Area Improvements
- Trail Improvements
- Parking Improvements
- Sports Field Improvements
- Other Miscellaneous Improvements



#### CORE AREA IMPROVEMENTS

The Core Area is viewed as the higher use and focal point of activity in the park. There was strong consensus of almost all participants of the Public Engagement process to redevelop the core area to include the following new facilities:

- Picnic Shelter – More open style than the existing shelter would be preferred. Preferred it on higher north side with higher and better views around park. Shelter should be sized to hold tables to seat about 120, include lighting and electric service.
- Comfort Station/Restroom Facility – ADA accessible, 1 Lavatory each side; Women - 2 toilets; Men – 1 toilet and 1 urinal). No request for separate family restroom. Some storage would be very useful within the building.
- Playground – separate areas for younger children (2





# MILLAR PARK



MASTER PLAN



-5 yrs.) and older children (6-12 yrs.). Safety surface. Locate in area close to and visible from picnic shelter and seating area. Try to incorporate around trees that would provide shade.

- Seating area overlooking playground and sport fields. Incorporate benches, trash receptacles, bike racks and related site furnishings. Tie the “look” to the building design theme.
- Drinking fountain – existing fountain doesn’t work well and is not ADA accessible.
- Generally the preference was to locate facilities from north to south in the following order: Picnic Shelter; Playground (2-5 yrs); Seating Area w/drinking Fountain; Playground (5-12 yrs); Comfort Station.
- All facilities designed around a common visual design theme – meaning to design facilities at a related scale, with similar materials, colors and texture.
- Select materials and systems that are low maintenance and the most vandal resistant – an example discussed was standing seam metal roofing.
- Maintain good visibility for safety, security and to minimize vandalism.

### Comfort Station / Restrooms



- ▶ Approx. 18' x 24'
  - Womens – Lav + 2 Toilets
  - Mens – Lav + 1 Toilet + Urinal
  - Chase Area – but No Storage
- ▶ Low Maintenance, Secure & Vandal Resistant
- ▶ Electric (Lighting, Dryers & Heat)
- ▶ New Water & Sewer Lines
- ▶ Prefabricated or Contractor Built



### Picnic Pavilion



- ▶ 44' x 44' - 15 Tables (8')
- ▶ Keep Open for Visibility
- ▶ Prefabricated Metal Structure
- ▶ Lighting & Electric Service
- ▶ Drinking Fountain & Water



### Design Theme & Materials

- ▶ Follow a Consistent Visual Design Theme
- ▶ Brick Walls & Columns - Predominant Neighborhood Material
- ▶ Include a Pitch on the Roof – Use a Standing Seam Metal (Attractive, Vandal Resistant & Long Lasting) - Patina
- ▶ Buildings - Prefabricated Structure or Stick Built
- ▶ Trail & Walks – Consider Concrete as Alternative (Cost Competitive with Asphalt)
- ▶ Plaza – Exposed Aggregate Concrete
- ▶ Parking Lot – Permeable Pavers
- ▶ Site Furnishings – Metal with Fusion Color – Forest Green

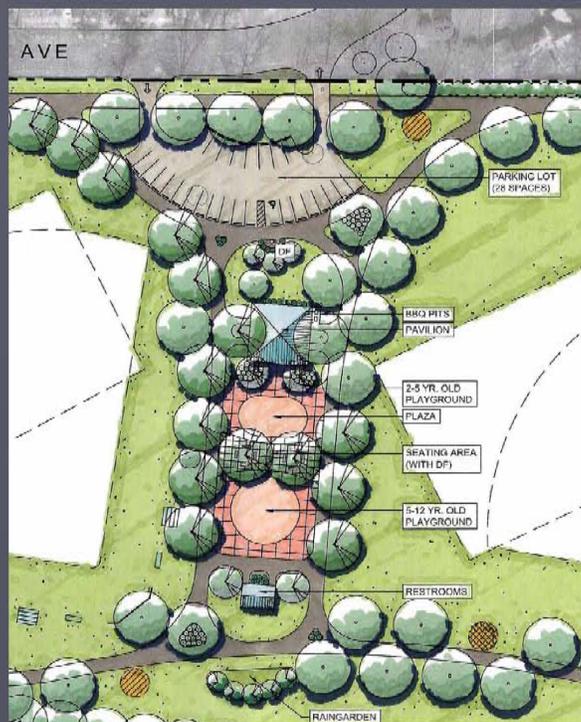
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### Site Furnishings

- ▶ Low Maintenance & Vandal Resistant
- ▶ Relate Style and Colors to Visual Design Theme



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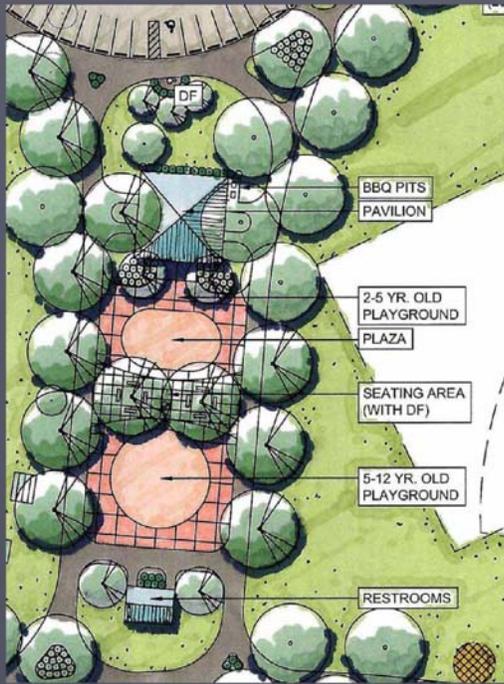


## Miller Park - Core Area

- ▶ Upgraded Parking Lot
- ▶ Picnic Shelter
- ▶ Playground
- ▶ Seating Area
- ▶ Restroom
- ▶ Raingarden

PDS

# Playgrounds



- ▶ Locate between Pavilion & Restroom
- ▶ Two Areas (2-5 yrs. and 5-12 yrs.)
- ▶ Play Equipment – Highly Physical, Open, Imaginative, Climbing with Cable and Nets
- ▶ Poured-in-Place Safety Surface
- ▶ Open Sight Lines - High Visibility
- ▶ Provide Shade Refuge
- ▶ Maintain Existing Playground until Obsolete



## Playground (2 - 5 Yrs Old)



## Playground (5 - 12 Yrs Old)



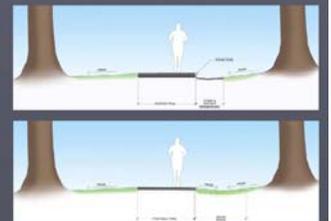
### TRAIL IMPROVEMENTS

The trail was identified in the survey and public meetings as the most used amenity in the park and therefore is of primary importance in establishing the Master Plan's facility program. Key improvements to the trail would be to:

- Widen the trail to accommodate the level of use.
- Eliminate the drop off and gutter along the trail on the west and south sides of the park. This will require sensitive design to minimize impacts on the root zone

### Trail Improvements

- ▶ Remove Curb/Gutter and Resurface
- ▶ Widen Trail
- ▶ Improve Access at Canton & Carleton Corners
- ▶ ADA Accessibility from SE Corner
- ▶ Other Considerations
  - Benches
  - Fitness Stations



### Trail – Exercise Stations

- ▶ Add 2 - 3 Exercise Stations
- ▶ Pilot Trial of New Equipment Types



PDS

(either cutting or filling) of the mature Oak trees that line the trail.

- Resurface the trail (asphalt or concrete)
- Improve and/or additional pedestrian lighting
- Construct a connection to the SW park entrance
- Reduce the profile slope of the trail entering from the SE to less than 5% to be ADA compliant.
- Integrate trail amenities including signing, exercise stations, benches, and mile marker system.



## PARKING

Parking has been an issue for neighbors when the sports fields are programmed for use, particularly for the Youth Football program (Weekend games and week-night practices.) Taking of addition parkland for parking cannot be justified for these limited peak use times, but the community has a strong desire to maintain and not reduce parking. Therefore the Master Plan proposes:

- Existing on-street parking Carlton and Canton will be maintained.
- Existing on-street parking along North & South will remain and be upgraded. Improvements include removal of stalls directly adjacent intersections for safety. Parking stalls will be changed to 45 degree back-in parking—considered safer along a street.
- The existing parking lot just north of the shelter is a dead end lot and doesn't function well. This lot will be replaced with a 28 car parking lot with thru circulation and ADA accessible stalls.

### Upgraded Parking Lot

- ▶ 1-way Entry-Exit Access
- ▶ 28 Stalls (2 ADA)
- ▶ Worked Around Trees
- ▶ Consider Permeable Pavers

### North and South Parking

- ▶ Reconstruct Parking Lot
- ▶ Reconfigure for 45° Back-In Parking
- ▶ Remove Unsafe Parking Near Intersections
- ▶ Provide Direct Pedestrian Access to Perimeter Trail
- ▶ 20 Stalls (2 ADA)
- ▶ Improve Plant Beds and Signing at corners

## SPORTS FIELD IMPROVEMENTS

The existing sport fields include two softball fields, one with a soccer field overlay and the other a football field overlay. Master Plan recommendations include:

- Turf Improvement Program & Irrigation – Sport field user groups expressed an interest in better turf. This would require a renovation program and installing irrigation. The type and level of use in the future should dictate the priority given to this program element.

- Sports Field Lighting – Again this was identified, but will not be included in the Master Plan due to impacts to the surround neighborhood.

## OTHER PROGRAM ITEMS

The following items are included in the Facility Program for the Master Plan.

- Include Green Sustainable Practices in developing and maintaining the Park. Examples include:
  - Incorporating Water Quality BMP's such as raingardens and permeable pavements.
  - Green Building Design including natural lighting (thru windows) in comfort station, energy efficient site and building lighting, utilizing recycled building materials and recycle construction waste.
  - Use of native and draught tolerant plantings
  - Receptacles for both trash and recycling.
  - Minimize site disturbance.
- Encourage the City to facilitate the addition of sidewalks for safer access to the park from surrounding neighborhoods. This would include:
  - Along North and South including a crosswalk at Carlton.
  - Along the north side of Carlton, just west of Hanley (along the Hawthorn School south property line.)
- Provide additional landscape screening between the perimeter trail and neighbor yards in the northeast corner of the park.
- Develop a Park Forestry Plan to address long term tree care and replacement. The magnificent oak trees are the most memorable visual element of the park, making it a most attractive open space area. These trees are close to the same age and if lost at one time would significantly change the character and attractiveness of the park. This Park Forestry Plan should include a replanting program to be implemented through an on-going long term basis.

### Green – Sustainable Practices

- ▶ WQ BMP's – Raingardens & Permeable Pavements
- ▶ Green Building Design
  - Natural Lighting in Restroom
  - Energy Efficient Site & Building Lighting
  - Recycled Building Materials
- ▶ Use Native Plant Materials
- ▶ Receptacles w/Trash & Recycle Bins
- ▶ Recycle Construction Waste
- ▶ Minimize Impermeable Surfaces



## Cost Estimates

Cost estimates have been prepared for the proposed improvements included in the Millar Park Master Plan. These cost are based on 2012 construction cost and available information. Therefore they include design and construction contingencies, as well as projected surveys, design, construction period services fees. In future years escalation should be added. A summary is included below with more detail cost included on the following pages.

<b>Millar Park Master Plan</b>	
MASTER PLAN LEVEL - ORDER of MAGNITUDE COST ESTI	15-Nov-12
CORE AREA RESTROOMS (Comfort Station) & PARKING LOT	\$ 284,932
CORE AREA PICNIC SHELTER	\$ 125,038
CORE AREA PLAYGROUND, WALKS & SEATING AREA	\$ 271,394
TRAIL IMPROVEMENTS	\$ 288,988
PEDESTRIAN LIGHTING	\$ 170,775
NORTH & SOUTH RD 45o BACK-IN AREA PARKING IMPROVEMENTS	\$ 69,603
SPORTS FIELD IMPROVEMENTS	\$ 165,848
<b>LONG TERM TOTAL MASTER PLAN IMPROVEMENT COST</b>	<b>\$ 1,376,577</b>



# Millar Park Phase 1 Improvements - Cost Estimate

11/15/2012

City of University City, Missouri

COST ESTIMATE (MASTER PLAN LEVEL - ORDER of MAGNITUDE)

<b>CORE AREA RESTROOMS (Comfort Station) &amp; PARKING LOT</b>				
<i>Item</i>	<i>Unit</i>	<i>Qty</i>	<i>Unit Price</i>	<i>Total Cost</i>
New Water Service Line - including meter/valves (from Canton)	LF	140	\$ 35.00	\$ 4,900
New Sanitary House Connection to Carleton Ave.	LF	140	\$ 42.00	\$ 5,880
Electric Service	LS	1	\$ 2,500.00	\$ 2,500
Site Grading & Preparation	SY	4200	\$ 1.25	\$ 5,250
Parking Lot Curb Inlet	EA	1	\$ 2,200.00	\$ 2,200
12" RCP Storm	LF	330	\$ 40.00	\$ 13,200
Raingarden including forebay (excavation, pipes, soils, and aggregates)	LS	1	\$ 9,500.00	\$ 9,500
Asphalt Pavement - New Lot North End of Core Area	SY	960	\$ 32.00	\$ 30,720
Pavement Striping (4")	LF	480	\$ 0.45	\$ 216
Pavement Markings (Arrow, Symbol, etc.)	EA	4	\$ 150.00	\$ 600
Concrete Curb (S-Type) - North Core Area	LF	220	\$ 25.00	\$ 5,500
Concrete Walk (8' wide)	SF	3000	\$ 5.00	\$ 15,000
Restroom Area Concrete Pavement	SF	300	\$ 5.00	\$ 1,500
Restrooms/Comfort Station (approx. 16' x 24', 1 lav. & 2 Stalls each side)	LS	1	\$ 135,000.00	\$ 135,000
Concrete Footings for Restrooms	CY	14.8	\$ 610.00	\$ 9,028
Concrete Slab for Restrooms	SF	500	\$ 5.00	\$ 2,500
<b>MATERIAL COST FOR ITEMS TO BE INSTALLED BY CITY FORCES</b>				
Concrete Wheel Stops - North Core Area	EA	27	\$ 64.00	\$ 1,728
Signage (Hncp Prkng, Directional)	EA	4	\$ 120.00	\$ 480
Benches	EA	2	\$ 900.00	\$ 1,800
Trash Receptacles	EA	1	\$ 600.00	\$ 600
Sodding	SY	450	\$ 2.50	\$ 1,125
Overstory Trees	EA	3	\$ 150.00	\$ 450
Understory trees	EA	3	\$ 125.00	\$ 375
Shrubs	EA	15	\$ 20.00	\$ 300
<b>Restroom (Comfort Station) &amp; Parking Lot CONTRACTED Construction Cost</b>				<b>\$ 250,352</b>
<b>Fees for Design &amp; Construction Period Services</b>				<b>\$ 29,760</b>
<b>IN-KIND INSTALLATION WORK BY CITY FORCES (FYI ONLY - Not included in Grant Application)</b>				
Demolition (Restroom Area Asphalt Pavement, etc.)	LS	1	\$ 2,200.00	\$ 2,200
Demolition (North Parking Lot Area)	SY	620	\$ 6.50	\$ 4,030
Concrete Wheel Stops - North Core Area	EA	27	\$ 15.00	\$ 405
Signage (Hncp Prkng, Directional)	EA	4	\$ 80.00	\$ 320
Benches	EA	2	\$ 400.00	\$ 800
Trash Receptacles	EA	1	\$ 300.00	\$ 300
Seeding	SY	1800	\$ 0.50	\$ 900
Sodding	SY	450	\$ 2.50	\$ 1,125
Overstory Trees	EA	3	\$ 150.00	\$ 450
Understory trees	EA	5	\$ 125.00	\$ 625
Shrubs	EA	15	\$ 20.00	\$ 300
<b>Total In-Kind Installation Work By City Forces</b>				<b>\$ 4,820</b>
<b>Total Cost - Restroom (Comfort Station) &amp; Parking Lot Construction</b>				<b>\$ 284,932</b>

<b>Millar Park Phase 1 Improvements - Cost Estimate</b>					11/15/2012
<i>City of University City, Missouri</i>					
<i>COST ESTIMATE (MASTER PLAN LEVEL - ORDER of MAGNITUDE)</i>					
<b>CORE AREA PICNIC SHELTER</b>					
<i>Item</i>	<i>Unit</i>	<i>Qty</i>	<i>Unit Price</i>	<i>Total Cost</i>	
Building Demolition (Existing Pavilion & Comfort Station)	LS	1	\$ 4,500.00	\$ 4,500	
Site Grading & Preparation	SY	2000	\$ 1.25	\$ 2,500	
Concrete Walk (8' wide)	SF	1500	\$ 5.00	\$ 7,500	
Picnic Shelter Area Concrete Pavement	SF	500	\$ 5.50	\$ 2,750	
Open Picnic Pavilion (approx. 44' x 44') installed	LS	1	\$ 66,500.00	\$ 66,500	
Concrete Slab for Picnic Shelter	SF	2500	\$ 5.00	\$ 12,500	
				\$ -	
New Water Service Line - (from Comfort Station)	LF	30	\$ 35.00	\$ 1,050	
Lockable Hose Bib	EA	1	\$ 500.00	\$ 500	
Drinking Fountain	EA	1	\$ 3,100.00	\$ 3,100	
<b>MATERIAL COST FOR ITEMS TO BE INSTALLED BY CITY FORCES</b>					
Benches	EA	2	\$ 900.00	\$ 1,800	
Trash Receptacles	EA	2	\$ 600.00	\$ 1,200	
Park Grill	EA	2	\$ 500.00	\$ 1,000	
Sodding	SY	450	\$ 2.50	\$ 1,125	
Overstory Trees	EA	3	\$ 150.00	\$ 450	
Understory trees	EA	3	\$ 125.00	\$ 375	
Shrubs	EA	15	\$ 20.00	\$ 300	
<b>Picnic Shelter Construction Cost Esimtate (Master Plan Level)</b>				<b>\$ 107,150</b>	
<b>Fees for Design &amp; Construction Period Services</b>				<b>\$ 12,738</b>	
<b>IN-KIND INSTALLATION WORK BY CITY FORCES (FYI ONLY - Not included in Grant Application)</b>					
Benches	EA	2	\$ 400.00	\$ 800	
Trash Receptacles	EA	2	\$ 300.00	\$ 600	
Park Grill	EA	2	\$ 300.00	\$ 600	
Sodding	SY	450	\$ 2.50	\$ 1,125	
Overstory Trees	EA	3	\$ 150.00	\$ 450	
Understory trees	EA	3	\$ 125.00	\$ 375	
Shrubs	EA	15	\$ 20.00	\$ 300	
Seeding	SY	1800	\$ 0.50	\$ 900	
Total				<b>\$ 5,150</b>	
<b>TOTAL COST - CORE AREA PICNIC SHELTER</b>				<b>\$ 125,038</b>	



# Millar Park Phase 1 Improvements - Cost Estimate

11/15/2012

City of University City, Missouri

COST ESTIMATE (MASTER PLAN LEVEL - ORDER of MAGNITUDE)

## CORE AREA PLAYGROUND, WALKS & SEATING AREA

Site Clearing & Preparation	SF	8700	\$ 0.80	\$ 6,960
Grading	SY	1350	\$ 1.25	\$ 1,688
Concrete Walk (8' wide)	SF	550	\$ 4.00	\$ 2,200
Plaza Area - Exposed Ag. Or Color Concrete Pavement	SF	5950	\$ 7.00	\$ 41,650
Benches	EA	8	\$ 1,300.00	\$ 10,400
Picnic Tables (left out of Shelter Ap Cost Est.)	EA	15	\$ 800.00	\$ 12,000
Trash Receptacles	EA	2	\$ 900.00	\$ 1,800
Bike Rack	EA	2	\$ 1,200.00	\$ 2,400
Extend Water Service Line - (to drinking fountain)	LF	65	\$ 35.00	\$ 2,275
Drinking Fountain	EA	1	\$ 3,500.00	\$ 3,500
Playground Equipment - 2-5 Year Old Area	LS	1	\$ 28,000.00	\$ 28,000
Playground Equipment - 5-12 Year Old Area	LS	1	\$ 38,000.00	\$ 38,000
Playground Surfacing	SF	2200	\$ 13.50	\$ 29,700
Playground Underdrain System (geotextile, aggregate and underdrain)	SF	2200	\$ 7.00	\$ 15,400
Overstory Trees	EA	12	\$ 300.00	\$ 3,600
Shrubs/Grasses	EA	32	\$ 40.00	\$ 1,280
Mulch	CY	4	\$ 45.00	\$ 180
<b>Subtotal Core Area Construction Cost Estimate</b>				<b>\$ 201,033</b>
Unforeseen Contingency - Conceptual Level	15%			\$ 30,155
Construction Contingency	5%			\$ 10,052
Surveys, Final Design & Construction Period Services	15%			\$ 30,155
<b>Master Plan Level Core Area Project Cost</b>				<b>\$ 271,394</b>

## TRAIL IMPROVEMENTS

Demolition (Asphalt Pavement, Gutter Removal) - Southside	SY	1170	\$ 6.50	\$ 7,605
Linear Grading - southside	LS	1050	\$ 3.00	\$ 3,150
Asphalt Pavement (South Trail, New Entrance Walk)	SY	1345	\$ 36.00	\$ 48,420
Concrete Walk (8' wide) SE Corner access	SF	1100	\$ 4.00	\$ 4,400
Asphalt Milling, Overlay & Widening (West, North & East Trail)	SY	1420	\$ 22.00	\$ 31,240
Fitness Station	EA	2	\$ 5,000.00	\$ 10,000
Fitness Station Surfacing (2 @ 10' x 15')	SF	300	\$ 4.00	\$ 1,200
Water Service (from Core Area west to drinking fountain and UCB irrigation)	LF	880	\$ 15.00	\$ 13,200
Drinking Fountain	EA	2	\$ 3,500.00	\$ 7,000
Pedestrian Lighting (including service wiring)	EA	12	\$ 5,500.00	\$ 66,000
Raingarden	LS	1	\$ 10,000.00	\$ 10,000
Understory trees	EA	3	\$ 250.00	\$ 750
Shrubs	EA	7	\$ 40.00	\$ 280
Perennials	EA	300	\$ 6.00	\$ 1,800
Mulch	CY	8	\$ 45.00	\$ 360
Turf Restoration	SY	580	\$ 5.00	\$ 2,900
Irrigation (U City in Bloom: NW & SW Entrances)	SF	4800	\$ 1.20	\$ 5,760
<b>Subtotal Trail Improvement Construction Cost Estimate</b>				<b>\$ 214,065</b>
Conceptual Level Contingency	15%			\$ 32,110
Construction Contingency	5%			\$ 10,703
Surveys, Final Design & Construction Period Services	15%			\$ 32,110
<b>Master Plan Level Trail Improvement Project Cost</b>				<b>\$ 288,988</b>

<b>Millar Park Phase 1 Improvements - Cost Estimate</b>					11/15/2012
<b>PEDESTRIAN LIGHTING</b>					
Pedestrian Lighting (pole, fixture, electric service and panel)					
Central Core Area	EA	6	\$ 5,500.00	\$	33,000
North Parking Lot	EA	5	\$ 5,500.00	\$	27,500
Perimeter Trail	EA	12	\$ 5,500.00	\$	66,000
<b>Subtotal Pedestrian Lighting Cost Estimate</b>				<b>\$</b>	<b>126,500</b>
Conceptual Level Contingency	15%			\$	18,975
Construction Contingency	5%			\$	6,325
Surveys, Final Design & Construction Period Services	15%			\$	18,975
<b>Master Plan Level Pedestrian Lighting Project Cost Estimate</b>				<b>\$</b>	<b>170,775</b>
<b>NORTH &amp; SOUTH RD 45° BACK-IN AREA PARKING IMPROVEMENTS</b>					
Pavement Demolition & Haul (near corners at West Parking Lot)					
	SY	500	\$ 15.00	\$	7,500
Asphalt Pavement Repair					
	SY	270	\$ 32.00	\$	8,640
Asphalt Pavement - (West end - 45 degree back-in parking off N & S)					
	SY	1267	\$ 22.00	\$	27,874
Concrete Curb (S-Type) - West End					
	LF	170	\$ 30.00	\$	5,100
Concrete Wheel Stops - West End					
	EA	20	\$ 80.00	\$	1,600
Pavement Striping (4")					
	LF	320	\$ 0.45	\$	144
Pavement Markings (Arrow, Symbol, etc.)					
	EA	2	\$ 150.00	\$	300
Signage					
	EA	2	\$ 200.00	\$	400
<b>Subtotal Parking Lot Construction Cost Estimate</b>				<b>\$</b>	<b>51,558</b>
Conceptual Level Contingency	15%			\$	7,734
Construction Contingency	5%			\$	2,578
Surveys, Final Design & Construction Period Services	15%			\$	7,734
<b>Master Plan Level Trail Improvement Project Cost</b>				<b>\$</b>	<b>69,603</b>
<b>SPORTS FIELD IMPROVEMENTS</b>					
Overseeding					
	AC	5.4	\$ 2,750.00	\$	14,850
Irrigation (per Field)					
	EA	2	\$ 40,000.00	\$	80,000
Team Benches					
	EA	4	\$ 2,000.00	\$	8,000
Bleachers					
	EA	4	\$ 5,000.00	\$	20,000
<b>Subtotal Sports Field Improvements Construction Cost Estimate</b>				<b>\$</b>	<b>122,850</b>
Conceptual Level Contingency	15%			\$	18,428
Construction Contingency	5%			\$	6,143
Surveys, Final Design & Construction Period Services	15%			\$	18,428
<b>Master Plan Level Sports Field Improvements Project Cost</b>				<b>\$</b>	<b>165,848</b>

