

# Clearwater Park--Clearwater, KS

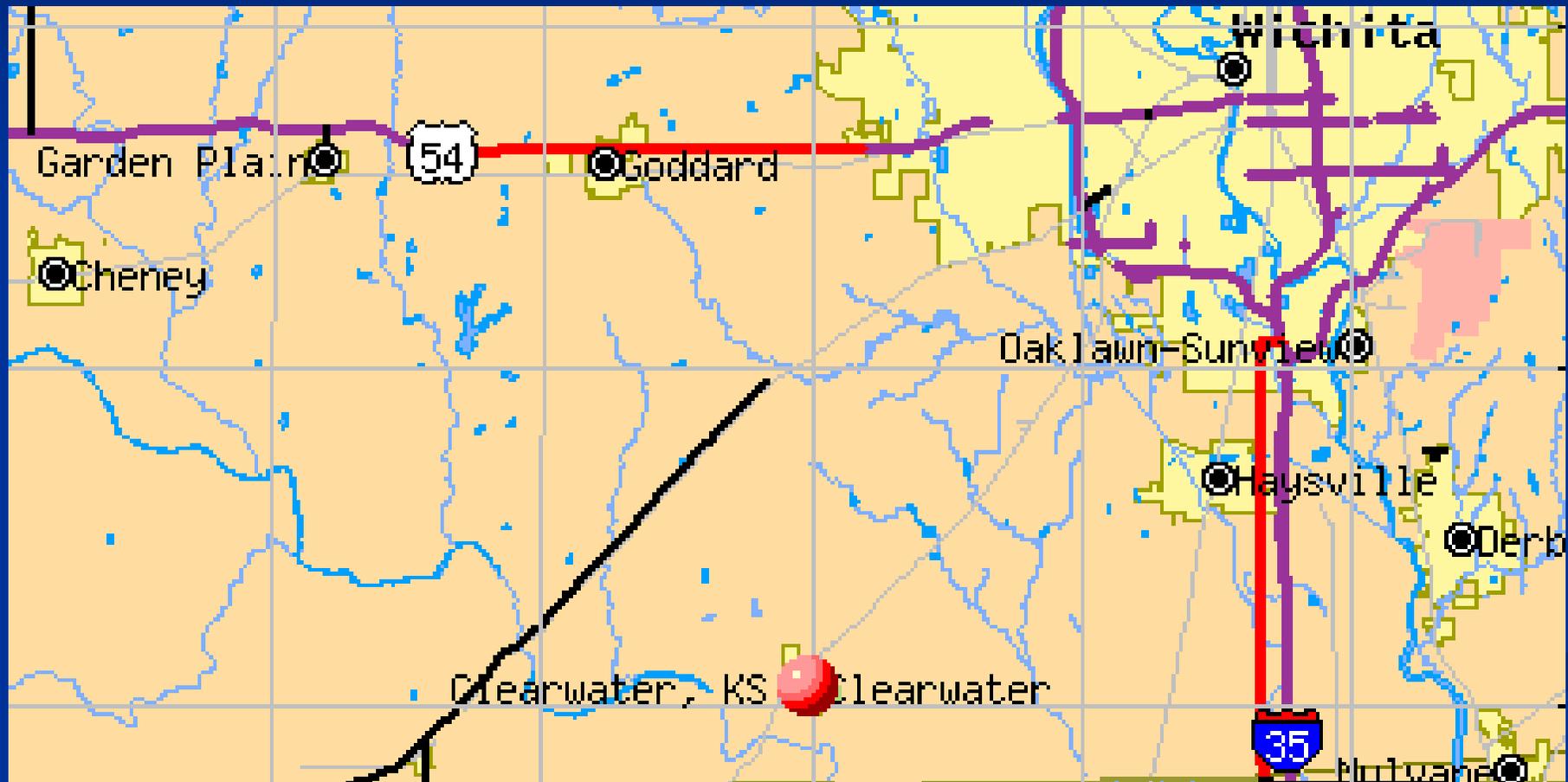


By Jonathan Corbett, Tor Janson, and Joe Schneider. Kansas State University, Spring 2006

# Location—Clearwater, KS



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# Location—Clearwater Park

- On major town entry road
- Near elementary school
- Near middle school
- About 3 blocks south of retirement center
- About 3 blocks west of high school



# Community Context

Clearwater Population in 2000: 2,178

2000 Median Household Income: \$50,694 (\$41,994 US average)

Bachelor's Degree or higher: 19.7% (24.4% US average)

Population change in the 1990s: +253 (+13.1%).

“Clearwater has become known for its community-oriented way of life that makes it one of the premier places in the **Wichita metropolitan area** to live and raise a family. Residents share a vision for Clearwater that balances its heritage with progress and economic vitality.”

-[www.clearwaterks.org](http://www.clearwaterks.org)

# Community Context

## Economic Strategies ([www.clearwaterks.org](http://www.clearwaterks.org)):

- **Improve image and promote our community and businesses**
  - Vested Stakeholder Network
  - Conduct Annual Business Evaluations
    - Build an Entrepreneurial Network
- Support efforts to purchase land for industrial area.
  - **Build on rural image through Agri-tourism**

# Community Context

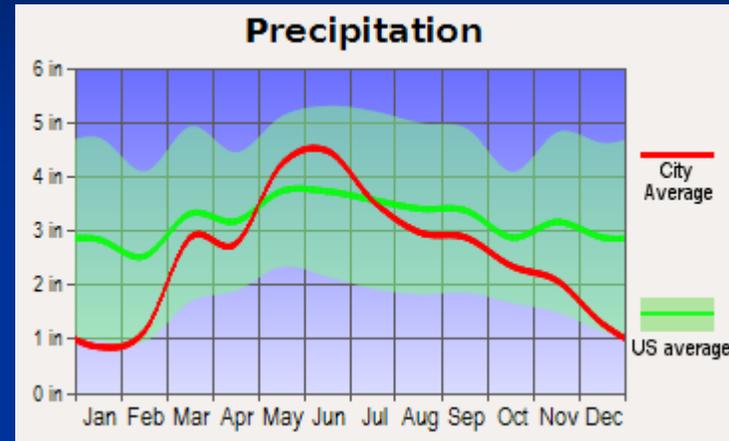
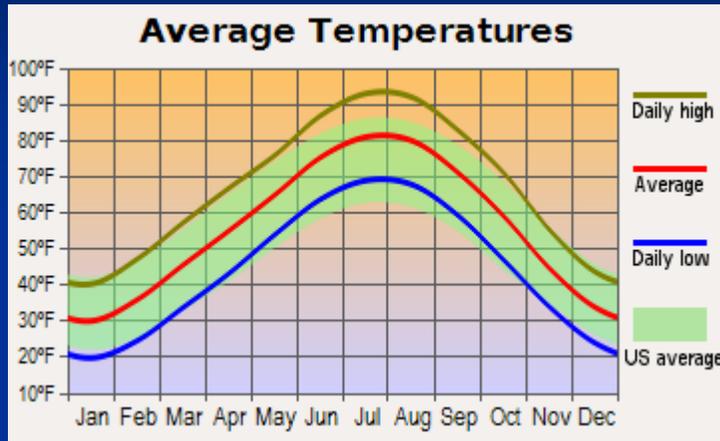
## Physical Strategies to meet Focus on Future Goals ([www.clearwaterks.org](http://www.clearwaterks.org))

- Develop plan to make Ross Avenue the front porch of Clearwater to live, work and play in
  - drainage through park – enhance / walk/ garden/ bridge
  - New picnic building
- Expand the number/mixture of recreational opportunities in the parks
  - Bike and Walking Paths
  - Add family type sculptures to area

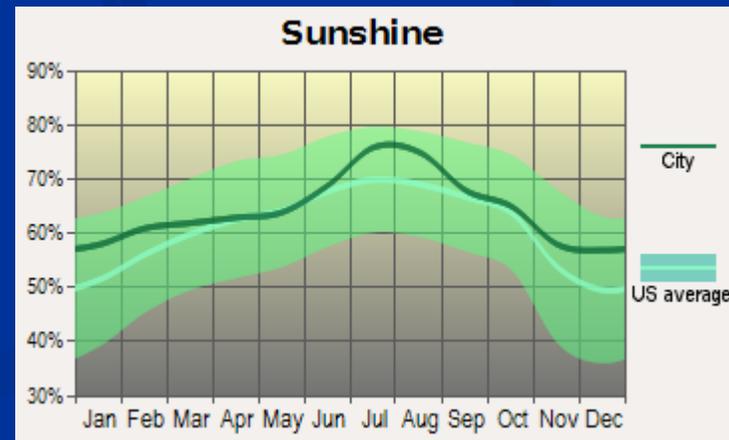
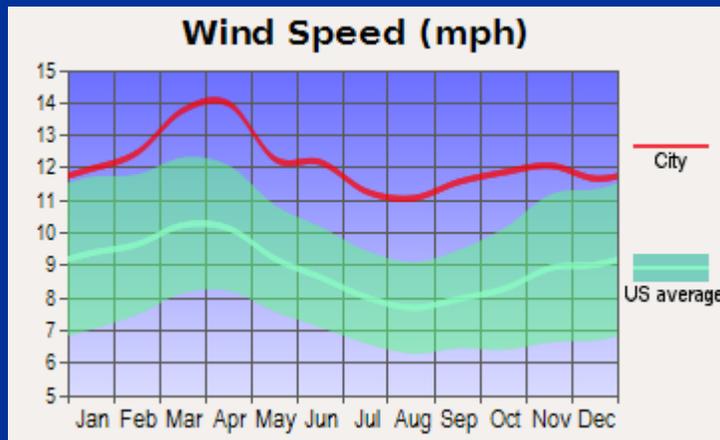
# Community Analysis

- Clearwater is a growing, thriving community with excellent school facilities and a progressive, forward thinking city government.
- Clearwater's future growth will be closely aligned with its ability to attract new residents from the greater Wichita area.
- **Physical improvements to Clearwater Park will assist the community's growth:**
  - Increase the quality of recreational opportunities for residents
  - Improve visitors' first impressions
  - Improve hosting capabilities for regional events (concerts, Fall Festival) that draw visitors to Clearwater

# Climate Context



Climate Charts for Clearwater (<http://www.city-data.com/city/Clearwater-Kansas.html>)



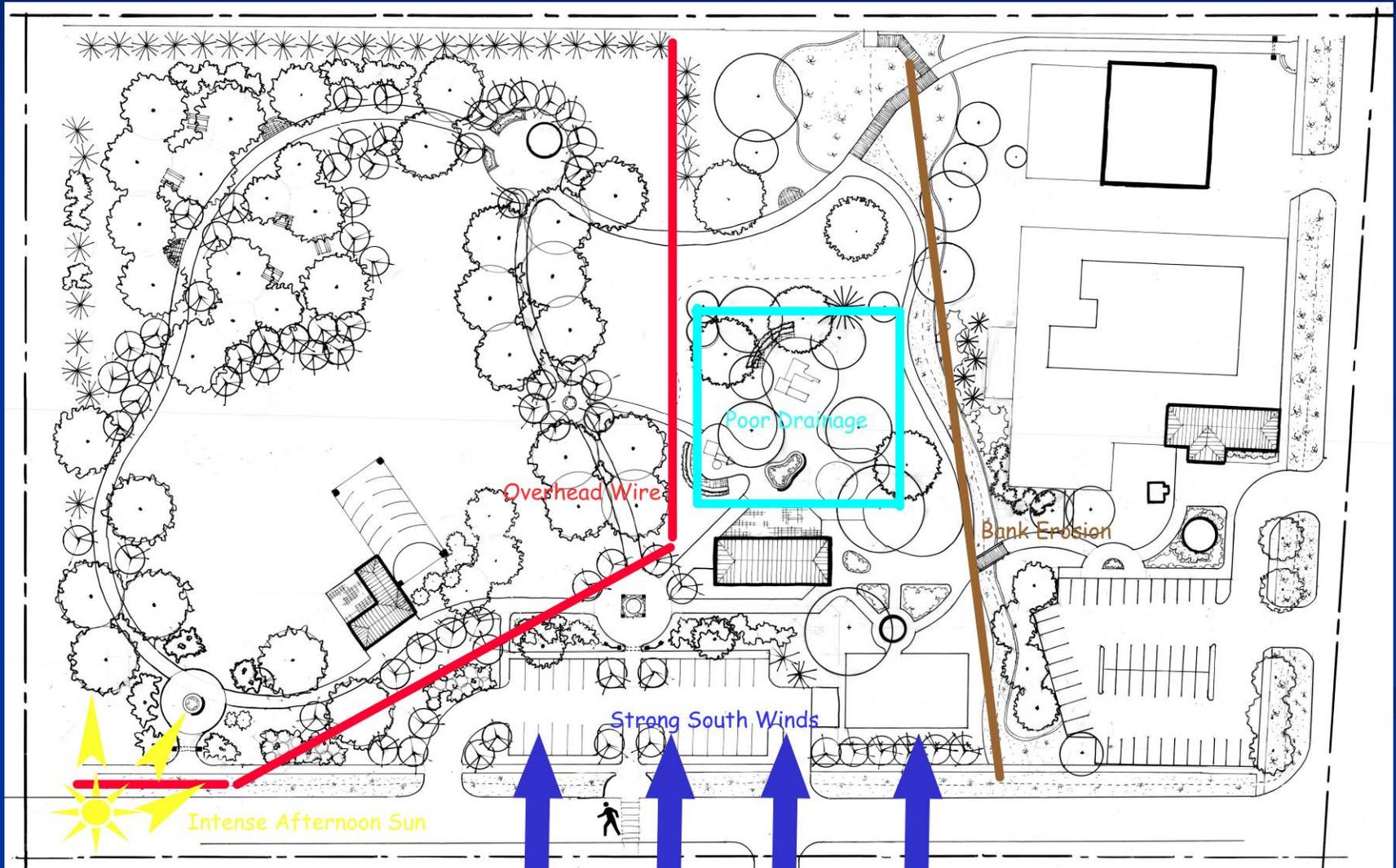
# Climate Analysis

- Clearwater is sunny, hot, windy, and dry compared to the national average.
- Plant material must be chosen that will thrive in a challenging environment.
- Recreation areas will have canopy shade trees and windbreaks to create an inviting area for play. Pathways will offer shade throughout the day and especially in the afternoon.

# Clearwater Park Tree Palette

Scientific Name	Common Name	Native	Height	Spread	Fall Color	Fruit	Flower	Parking/Street	Notes
<b>Trees</b>									
Acer campestre	Hedge Maple		25-35	25-35					
Acer ginnala	Amur Maple		15-18	15-18					
Acer saccharinum	Silver Maple	x	50-70	30-50		samara			short-lived, messy
Acer truncatum 'Shantung'	"Shantung" Maple		30-40	20-30					
Asimina triloba	Paw Paw	x	15-20	15-20			dark purple		hostplant for Zebra Swallowtail butterfly
Betula nigra	River Birch		40-70	40-60					
Celtis occidentalis	Hackberry	x	40-60	40-50				x	
Cercis canadensis	Redbud	x	20-30	25-35			rosy pink	x	
Chionanthus virginiana	White Fringe Tree		10 to 20	10 to 20			white		
Fraxinus pennsylvanica	Green Ash	x	50-60	25-30				x	
Gleditsia triacanthos var. inermis	Honey Locust	x	30-70	30-70	yellow	long pod		if fruitless	
Gymnocladus dioica	Kentucky Coffeetree	x	60-75	40-50		large pod			unique, irregular branching
Juglans nigra	Black Walnut	x	50-75	50-75		walnut			
Juniperus virginiana	Red Cedar	x	40-50	8 to 20				x	evergreen
Malus 'Adams'	Adams Crabapple		20-25	20-25			pink		
Malus 'Donald Wyman'	Donald Wyman Crabapple		15-20	15-20			white		
Malus 'Prairie Fire'	Prairie Fire Crabapple		15-20	15-20			pink		
Malus 'Sugar Tyme'	Sugar Tyme Crabapple		15-20	10 to 15			white		
Platanus occidentalis	Sycamore	x	75-100	75-100					
Platanus x acerifolia	London Plane Tree		70-100	60-80					
Populus deltoides	Cottonwood	x	75-100	50-75					
Prunus 'Montmorency'	Montmorency Cherry		20-25	20-25			pink		
Pyrus calleryana	Callery Pear		30-50	20-35			white		avoid "Bradford" cultivar
Quercus macrocarpa	Bur Oak	x	70-80	75-85		acorn			
Quercus muehlenbergii	Chinkapin Oak	x	40-50	45-55		acorn			
Quercus velutina	Black Oak		50-60	50-60	red	acorn			
Quercus palustris	Pin Oak		60-70	25-40	bronze	acorn			susceptible to chlorosis
Quercus rubra	Red Oak		60-75	60-75	red	acorn			
Salix nigra	Black Willow	x	20-40	15-25					
Thuja orientalis	Oriental Arborvitae		18-25	10 to 15					evergreen
Ulmus americana 'New Harmony'	American Elm	x	60-80	30-40	yellow			x	use Dutch Elm resistant cultivars
Ulmus parvifolia	Lacebark Elm		40-50	25-35				x	
Ulmus rubra	Red Elm	x	65-75	70-80				x	
<b>Shrubs</b>									
Amorpha fruticosa	False Indigo	x	6 to 20	5 to 15		pod			for streamsides
Berberis thunbergii x Red Leaf	Red Leaf Barberry		3 to 6	4 to 7		berry			
Cornus drummondii	Rough-Leaved Dogwood	x	10 to 15	10 to 15	purple	berry	white		clonal
Cotoneaster divaricatus	Spreading Cotoneaster		5 to 6	6 to 8		berry			
Euonymus alata	Burning Bush		15-20	15-20	red				
Euonymus atropurpurea	Eastern Wahoo	x	12 to 24	6 to 12		berry			
Juniperus chinensis 'Hetzii'	Hetz Chinese Juniper		5 to 10	5 to 10		berry			evergreen
Juniperus chinensis 'Pfitzeriana'	Pfitzer Chinese Juniper		5 to 8	10 to 12		berry			evergreen
Juniperus horizontalis 'Plumosa'	Andorra Creeping Juniper		2	10		berry			evergreen
Juniperus horizontalis 'Wiltoni'	Wilton Creeping Juniper		0.5	6 to 8		berry			evergreen
Juniperus procumbens	Japanese Juniper		1 to 2	10 to 15		berry			evergreen
Ligustrum vulgare x Lodense	Lodense Privet		12 to 15	12 to 15		berry			
Potentilla fruticosa	Bush Cinquefoil		1 to 4	2 to 4			yellow		
Prunus americana	Wild Plum	x	4 to 10	4 to 12		plum	white		clonal
Prunus virginiana	Chokecherry	x	20-25	10 to 15		berry	white		clonal
Prunus x cistena	Purpleleaf Sand Cherry		7 to 10	7 to 10	purple	berry	pink		
Rhus aromatica	Aromatic Sumac	x	2 to 6	6 to 10		berry			
Rhus glabra	Smooth Sumac	x	8 to 16	12 to 20	red	berry			clonal
Sambucus canadensis	Elderberry	x	5 to 12	3 to 10		berry	white		
Symphoricarpos orbiculatus	Coralberry	x	2 to 5	4 to 8		berry			
Syringa meyeri	Meyer Lilac		4 to 8	6 to 12			violet		low maintenance, clean form
Viburnum carlesii	Korean Spice Viburnum		4 to 5	4 to 8	wine red	berry	white		
Viburnum carlesii 'compacta'	Korean Spice Viburnum		3 to 4	3 to 4	wine red	berry	white		compact version of species
Viburnum dentatum	Arrowwood		6 to 12	4 to 10	purple	berry	white		
Viburnum plicatum var. tomentosum	Doublefile Viburnum		8 to 10	9 to 12	red-purple	berry	white		

# Site Inventory and Analysis



# Site Inventory and Analysis



## Parking Inventory

- The layout of the picnic area parking lot is haphazard and has poor pedestrian and vehicular circulation
- Several trees have been included in the paving of the parking lot. There are no barriers or curbs around the trees to provide warning to drivers.
- During Clearwater's Fall Festival the parking lot is used by vendors as a place to set up booths.
- Parking lot drainage (both picnic and aquatic center lots) is directed straight into the surrounding swales.

# Site Inventory and Analysis



## Parking Analysis

- A distinct circulation system will be established for vehicular and pedestrian traffic.
- Provide service vehicles access to trash receptacles and restrooms through the parking lot.
- Tree removal from the parking lot will increase overall site safety. Plantings around the perimeter of the lot will provide shade and interest.
- Parking lot drainage will be directed through prairie bio-swales increasing water infiltration and reducing bank erosion.

# Site Inventory and Analysis



## Entrance Inventory

- Vehicular and pedestrian circulation collide at the park entrance .
- There is no distinct entry feature that welcomes and draws guests into the park.
- Trash cans, bollards, and a chain link fence clutter the entrance giving visitors a poor first impression.
- The shelter's close proximity to the parking lot is convenient for families, picnics, and events.

# Site Inventory and Analysis



## Entrance Analysis

- An entry space that links the parking lot to the park will be created to welcome visitors. This space will clearly establish the park's circulation and identity.
- Trash receptacles will be screened from the entry but will remain accessible for servicing.
- The close relationship between the main entry and playground pavilion will be preserved.
  - Plantings will accent the entry and will draw visitors into the space.

# Site Inventory and Analysis



## Playground Inventory

The current playground equipment is in good shape and is fairly large. Children are offered a wide variety of activities with the advanced new play sets.

The ground material used as the playing surface is woodchips which carry high lifetime costs from repeated replacements. New woodchips filled to a depth of 6 inches uncompressed have a critical fall height of 6-7ft compared with 10-12 feet with shredded rubber tires.

# Site Inventory and Analysis



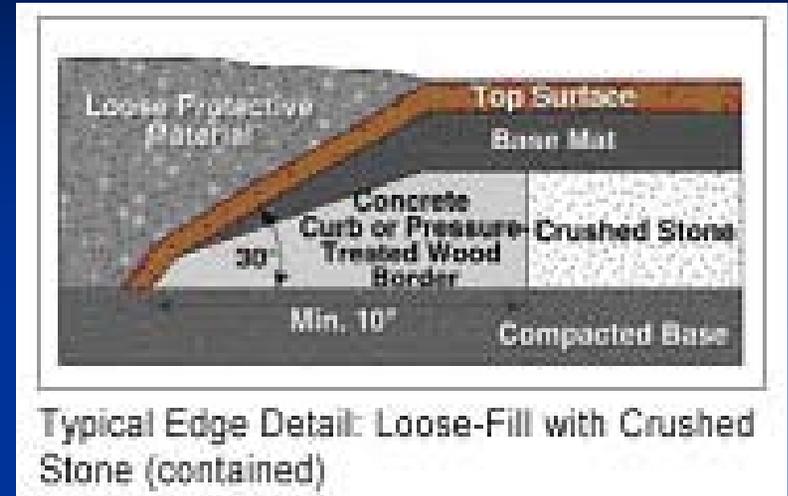
## **Playground Inventory Continued...**

Drainage is also an issue in the playground. Water pools under the equipment after rainstorms making the play sets temporarily unusable. Excessive water causes the woodchips to deteriorate at a much higher rate than normally expected, resulting in higher maintenance costs.

# Site Inventory and Analysis

## Playground Analysis

- A safe surface material that allows for drainage will be used beneath the play structures (see diagram).
- Playground equipment and seating to be arranged in a manner that increases comfort and maintains playground safety.
- In order to maintain a shade canopy into the future, tree plantings around the playgrounds perimeter must be established.
- A small grass swale will be established for directing water runoff around the playground perimeter.
- A strong connection between the playground and pavilion will be maintained.
- Seating walls with planters will help enclose the space and provide seating for teachers or parents supervising their children.



*Cross Section of Surface America Inc.*

## Playground Surface

# Site Inventory and Analysis



## Drainage Swale Inventory

Drainage swales surrounding the park and running through the park are showing signs of erosion.

Concrete bridges provide access across the swale along the south end of the park. A small iron and wood bridge spans the creek between the aquatic center and playground pavilion.

# Site Inventory and Analysis



Prairie Swale

## Drainage Swale Analysis

- Bioswales will be established to increase water infiltration and to lessen erosion within the park.
- New bridges will be constructed to replace current structures, increasing safety and creating fluid circulation . A boardwalk will carry pedestrians over the proposed prairie planting on the north end of the site.
- Water will be slowed in a prairie planting established just below where the storm water enters the park from the north.

# Site Inventory and Analysis

## Pathway Inventory

- The current pathway system is concentrated around the playground pavilion.
- Indirect linkage between aquatic center and playground pavilion.
- Sidewalk around the perimeter of the park is not continuous.



# Site Inventory and Analysis

## Pathway Analysis

- Construction of new pathways and entries will strengthen spatial relationships within the site.
- A perimeter pathway will provide the community with a unique place to exercise. Seating and enframed views will be part of the pathway experience.
- Circular nodes with planting beds will be located at important intersections to improve circulation through spaces.



# Site Inventory and Analysis



## Baseball Field Inventory

- The baseball field currently occupies approximately half of the park area.
- The large open space is where Clearwater's Fall Festival is staged.
- Restrooms and a concession stand are near the infield in the SW corner of the park.
- A deed restriction prohibits Sunday baseball games.

# Site Inventory and Analysis



## Baseball Field Analysis

- The baseball field will be redesigned to accommodate several uses including recreation. Accommodating large events and the Fall Festival will be integrated into the new design.
- An arboretum and picnic area designed in the current baseball field's outfield will provide an opportunity for privacy within the park.