

# Wilsonville Memorial Park

Trails Plan - September 2004



# Wilsonville Memorial Park

## Trails Plan

September 2004

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## **Wilsonville Planning Commission**

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# Table of Contents

- I. Executive Summary**
  - Executive Summary . . . . . 9
  - Goals of the Trails Plan Project . . . . . 9
  
- II. Introduction**
  - Study Purpose . . . . . 13
  - Location . . . . . 13
  - Background . . . . . 13
  - Public Involvement . . . . . 16
  - Site Introduction . . . . . 16
  - Summary of the Trails Concept . . . . . 17
  
- Trails Plan**
- III. Trail Planning Issues and General Recommendations**
  - Park Identity and Access . . . . . 23
  - Directional Signage and Wayfinding . . . . . 23
  - Trail Use . . . . . 24
  - Safety . . . . . 24
  - Protection of Natural Resources . . . . . 25
  - Americans with Disabilities Act (ADA) . . . . . 25
  
- IV. On-site Trail Elements and Recommendations**
  - Park Entries . . . . . 31
  - Hierarchy of Trails . . . . . 33
  
- V. Trail Design Standards**
  - Trail Clearing Limits . . . . . 39
  - Typical Trail Cross Section . . . . . 40

- Trail Switchback . . . . . 41
- Trail Stairway and Decommissioning . . . . . 42
- Trail Surfacing . . . . . 43
- Trail Overlook and Log Barrier . . . . . 44
- Trail Cantilevered Overlook . . . . . 44
  
- VI. Park Amenities**
  - Boardwalks . . . . . 49
  - Benches and Picnic Tables . . . . . 49
  - Kiosk . . . . . 49
  - Lighting . . . . . 49
  - Trash Receptacles . . . . . 49
  - Overlooks . . . . . 49
  
- VII. Off-site Recommendations**
  - Off-site Recommendations . . . . . 53
  
- VIII. Priorities, Phasing and Implementation**
  - Phase I: Central Loop Trail . . . . . 57
  - Phase II: The River Trail . . . . . 58
  - Phase III: The Homestead Trail . . . . . 59
  
- IX. Trail Maintenance**
  - Trail Alignment . . . . . 63
  - Grading . . . . . 63
  - Drainage . . . . . 63
  - Maintenance . . . . . 63
  - Vegetation Management . . . . . 63
  - Trail Decommissioning . . . . . 63
  - (cont)

<b>X.</b>	<b>Recommended Next Steps</b>	
	Public Information Campaign . . . . .	67
	Friends of Memorial Park . . . . .	67
	Funding . . . . .	67
	Walking Clubs . . . . .	67
	Nature Study Tours . . . . .	67
	Trail Maintenance . . . . .	68
	Trail Signage Master Plan . . . . .	68
<b>XI.</b>	<b>Conclusion</b>	
	Conclusion . . . . .	71
<b>XII.</b>	<b>Appendices</b>	
	Appendix A - Existing Facilities	
	Appendix B - Existing Natural Resources	
	Appendix C- Trail Improvements	
	Appendix D - Estimated Construction Costs and Phasing	
	Appendix E - Summary of the Public Involvement Process	
	Appendix F - Summary of Survey Results	
	Appendix G - Bibliography	
	<b>Maps</b>	
	Context Map . . . . .	13
	Trails Plan . . . . .	29
	Phase I: Central Loop Trail and North-South Circulation . . . . .	57
	Phase II: The River Trail, Kolbe Homestead Trail and General Circulation Connections . . . . .	58
	Phase III: The Klein Homestead Trail and General Circulation Connections . . . . .	59
	Site Analysis . . . . .	A5
	Multi-Use Trails . . . . .	C4
	Barrier-Free Trails . . . . .	C5

# Executive Summary

Executive Summary

Goals of the Trails Plan Project





# Executive Summary

Memorial park is a cherished resource for the community and offers a diversity of activities. The Park is currently the City of Wilsonville's center for active outdoor recreation and organized community team sports. It is a place where people gather for special events, picnics, and day camps. Memorial Park is also used by pet owners whose dogs enjoy the designated off-leash exercise area. There is a very clear distinction between the developed, grassy portions of the recreational core of the park and the forests that form a dense vegetative envelope that nearly surrounds the sports complex. The native landscape of the site provides wonderful opportunities for walking and observing wildlife.

The existing trail system of the park is complex, largely made up of dirt trails and old gravel access roads left from former residences. Improved wayfinding information and trail improvements will reduce confusion regarding ways to use and explore the park.

Improved entries to the park that feature signage directing users to a system of established & easily identified trails will render the park more user friendly. Trails within the park need improvement to link facilities, create better trail connectivity, remove physical barriers, and allow varied uses throughout the seasons. A system of established trails will help protect natural resources from degradation, since park use will increase over time, as the community continues to grow.

In addition, an established trail network with improved wayfinding will afford visitors greater enjoyment of the park as a whole. Many park users do not venture beyond the recreational core where picnic areas and sport fields are located. Yet approximately 91 acres of riverfront, forest and meadows are also part of the park.

Civic Center Park, a new public park with an urban focus will be developed directly adjacent to Memorial Park on the former Boozier property. Civic Center Park will be located on SW Wilsonville Road and be bounded by Memorial Drive and Kolbe Lane. Together, Civic Center Park and Memorial Park will provide a variety of activities and trail experiences. There are excellent opportunities to coordinate trail planning and link facilities of these two public recreational and open spaces. The proposed trails and access points for Civic Center Park have been included in the Trails Plan for Memorial Park. The total acreage (126) for Memorial Park includes Civic Center Park.

## Goals of the Trails Plan Project

The purpose of the Memorial Park Trails Plan is to provide a guide that will serve to create a trail system that extends throughout the park to encourage use, improve access, and offer opportunities for



Recreational core area

passive recreation and exercise. Moreover, by planning for improved, designated trails, the city will be able to better protect, restore, and enhance natural resources of its Memorial park by adhering to the following project goals and objectives:

- Improve visibility and accessibility of trails for the public.
- Improve trail connectivity of features and activities within the park.
- Improve trail quality and safety.
- Create a hierarchy of trails throughout the park.
- Reduce trail use conflicts.
- Improve natural resource values and promote environmental education and awareness.
- Minimize erosion and damage to the natural resources; and improve maintenance.
- Retain rustic character of the park.
- Encourage exploration of the park.
- Respect park boundaries and adjacent properties.

# Introduction

Study Purpose

Location

Background

Public Involvement

Site Introduction

Summary of the Trails Concepts



# Introduction

Memorial Park is a popular destination for residents and visitors to Wilsonville. The park boasts generous facilities for community events and sports. The park also affords visitors an opportunity to explore the Willamette River, and the forested and open landscape of 126 acres. (See Site Analysis, Appendix A and the Trails Plan pg. 29)

## Study Purpose

The Wilsonville City Council identified this project as a goal for fiscal year 2003-04. The goal to provide quality parks, trails, and to protect significant open spaces and natural areas was the inspiration behind the Memorial Park Trails Plan. The Memorial Park Trails Plan sets forth standards and guidelines for points of entry, as well as trail enhancement, development, and maintenance. Standards and guidelines address typical trail issues such as construction materials, width, location and accessibility. Priorities and phasing of trail improvements, trailheads and signage are also an important component of the trails plan. This document will also be used as a tool by the City of Wilsonville to obtain funding for implementing the goals and objectives of the study.

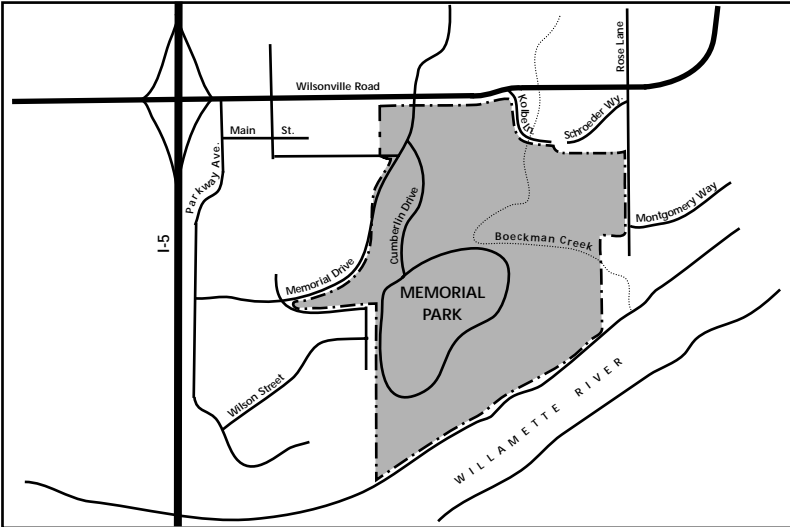
The Memorial Park Trails Plan will be adopted as implementing element of the Memorial Park Master Plan, which in turn implements the Parks and Recreation Master Plan. The Trails Plan will also be viewed as an implementing element of the Bicycle and Pedestrian Master Plan. The Parks and Recreation and Bicycle and Pedestrian Master Plans are being updated by the City of Wilsonville, and their goals, policies and implementation measures will address the recommendations in the Memorial Park Trails Plan."

## Location

Memorial Park is located on the Willamette River and close to the heart of Wilsonville's commercial district. Memorial Park is easy to access from Wilsonville Road. The park is located within walking distance of two established single-family residential neighborhoods on the east and west sides of the park, as well as the city's public Library and City Hall to the northwest. A higher density residential development (Village at Main Street) is under construction to the northwest of the park and south of the library.

## Background

Memorial Park has evolved over the past 35 years as an important community resource and amenity for the citizens of Wilsonville. The initial land purchase of 61 acres of the Boozier property, formally known as the Klein homestead took place in 1969. The park was



Context map

then named Wilsonville City Park. Wilsonville City Park was developed in the early 1970's with the addition of the access/loop road, parking lots, restroom facilities, equestrian arena (later to be removed), picnic sites, two baseball fields, double tennis courts and a boat dock. In the late 1970's picnic shelter C was built. Wilsonville City Park became known as Wilsonville Memorial Park. In 1987, 4 acres of Memorial Park were converted for the City Library construction project. That same year the 41 acres to the northeast of the core recreational area, known as the Nike property, was purchased as a replacement for the 4 acre library parcel.



Boat dock

In 1993, the remaining 22-acres of the Boozier/Klein property, south of Wilsonville Road and north of the core recreational area was purchased by the city and used as a maintenance facility.

In the 1990's, sports fields, a basketball courts and the skatepark were added to the park. Civic Center Park, when developed over the next two years on the Boozier property, is expected to become a focus of activity for communi-

ty celebrations and public events. The focus of the design will be more manicured in character than Memorial Park but will act as an important link between Wilsonville Road and Memorial Park.

### **Context, Location and Access**

Memorial Park is bordered on the north by Wilsonville Road, Kolbe Lane and Schroeder Way. Memorial Drive, the Day Dream Ranch Neighborhood and a large private tract form borders on the west side of the park. The Willamette River stretches along the south border. Rose Lane and parcels of private property border the east side of the park.

Memorial Park is located adjacent to Wilsonville's Town Center near the Village at Main Street, the City Library and City Hall. It is relatively easy for motorists, pedestrians, and cyclists to access the main park entry from Memorial Drive off SW Wilsonville Road. However, if unfamiliar with the location of the park, finding one's way is currently dependent on a single small directional sign on Wilsonville Road.

The main entry to Memorial Park and a park sign are located near the intersection of Memorial Drive and Cumberlin Drive. The main entry is presently under-developed in terms of park identity and signage. There is a barrier-free, paved pedestrian trail extending from Memorial Drive that parallels the vehicular access drive to the recreational core. This path terminates abruptly at the parking lot. Currently, there is no safe connection across the parking lot to the paved walks of the central sports portion of the park. This plan proposes to address this issue by providing a pedestrian crosswalk across the parking lot.

Seasonally, pedestrians utilize a paved road that is closed to vehicles in winter. The roadway extends around the sports fields. It does not create an entire loop, but terminates in a gravel parking lot at either

end. In summer months, when there is use of the road and gravel lots by motorists, pedestrians tend to stick to the shoulders of the road or use the lawns.

Other entrances to the park are largely used only by adjacent residents. There is one unpaved footpath entry on Kolbe Lane near the community gardens. There is another footpath entry on the north side of the park at the intersection of Wilsonville Road and Kolbe Lane. There is a small gravel parking area located near the end of Kolbe Lane adjacent to the community garden.

On the east side of the park, an old gravel road serves as a pedestrian entry near a few private residences on Rose Lane and Montgomery Way. This entry has a small gravel parking area for two cars. A small paved entry exists at Salmon Street near Wilson Lane on the west side of the park that is easy to access and is well used by neighbors.

Willamette River boaters can access Memorial Park from the day-use boat dock located at the southwest corner of the park. Currently there is no paved access from the park to the dock and the topography makes for a challenging connection.

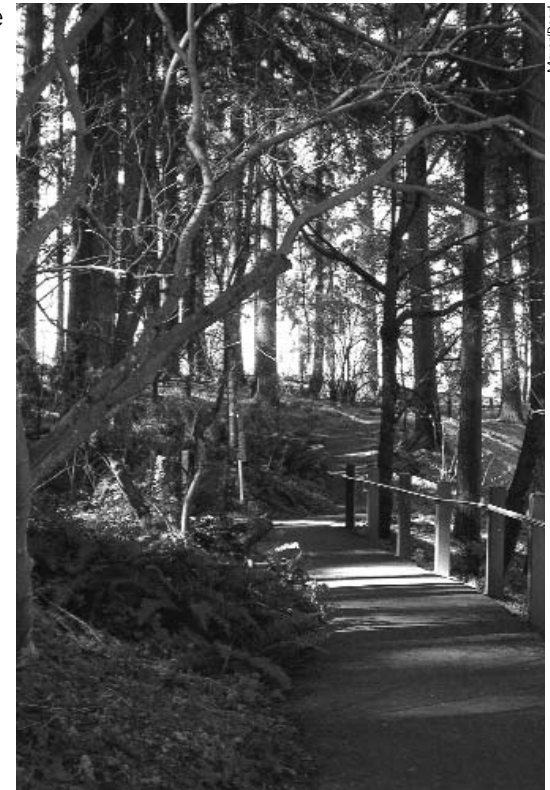
### **Civic Center Park**

Due to its undeveloped site condition and the existence of remaining houses and accessory buildings, the Civic Center Park property is now commonly thought to be private, rather than public open space. Civic Center Park is currently in the design phase. Refinement to trail alignments and design in Civic Center Park may occur during the final design process. Plans include a plaza, community gathering space, water feature, play area, picnic shelter, restroom buildings, parking lot, outdoor classroom and paved trails. A significant historic wooden barn on the south end of the Civic Center Park property is intended to be renovated as a community gathering/event

space and interpretive location in the park. Improvements to Civic Center Park are anticipated for construction in summer of 2005. In terms of park identity, Memorial Park will benefit from the greater visibility that Civic Center Park has on Wilsonville Road. However, there may also be some confusion about what activities occur in the two adjacent parks. Identity and wayfinding will need to be closely coordinated.

The physical trail connections of Civic Center Park and Memorial Park are being coordinated. Visitors will be able to park their vehicles in Civic Center Park and easily access trails in Memorial Park. In turn, when large community events are held at Civic Center Park, people will likely park at the recreational core of Memorial Park and walk up to the Civic Center Park site using the north-south connection currently being used as a maintenance facility access road.

The barn is a landmark in Civic Center Park and, when adaptively redesigned for use by the public, will function well as a trailhead for Memorial Park. In



Asphalt path along Cumberlin Dr. from Memorial Dr.



particular, it will be a starting point for the two proposed Homestead Trails. In the barn there is the opportunity to provide more in-depth information than is practical to provide along the trail. The barn will have an interpretive story line about the architecture of the barn itself and early settlement of the land. (See discussion under Homestead Sites, Appendix A.)

## Public Involvement

The city and its consultants held 2 public open houses and one neighborhood meeting during the trails planning process. These meetings solicited active participation from community members and neighbors. Opportunities were provided to engage in informal dialog, to ask questions and raise concerns regarding the trails planning process. During these meetings notes were taken which are summarized in Appendix E of this report. In addition to the public open houses and neighborhood meeting, on-site surveys were conducted to gather additional information from park users. Surveys were also taken at the open houses and neighborhood meeting. Refer to Appendix F for a summary of survey results.

Through the public involvement process and with the help of open house and neighborhood participants, the project goals were developed and refined to guide the Memorial Park Trails Plan. Refer to the Executive Summary for a list of the project goals.

## Site Introduction

The 126 acre Memorial Park is a diverse and interesting park landscape. This popular park receives heavy seasonal use in the summer months with active recreation by local schools and youth sports programs. A paved entry to the park from Memorial Drive provides access to a parking facility that is within walking distance of the park's well-used active recreational core. The active recreational core features playground, sports facilities (basketball, tennis, skateboarding, baseball, volleyball and soccer), picnic areas and restrooms.

Memorial Park also offers passive recreational opportunities in walking, hiking, bike riding, picnicing, horseshoes, and ample areas for outdoor relaxation.

Memorial Park contains two historic residences known as the Klein and Kolbe homesteads. Historic remnants of these two homesteads remain in Memorial Park today. Among the remnants that can be found on the park property are a nut drying shed, barn, waterwheel and water conveyance system, a mature orchard and a large collection of specimen trees. Additional information on these historic homesteads and other existing facilities can be found in Appendix A.

The natural resources of Memorial Park are characteristic of both the riparian and upland Willamette Valley native landscapes. Undeveloped portions of the park feature forested, stream riparian corridors and open meadow landscapes. The park has a variety of native flora and fauna that have established since early settlement times when the area was logged and cleared for agricultural purposes. The soils, slopes, and plant



Existing forest trail

communities show signs of recovery from previous clearing for agriculture. There are several areas of the site that are presently being restored with native plant communities. More detailed information on existing natural resources can be found in Appendix B.

## Summary of the Trails Concept

Since the recreational core is the park center, where parking and the developed recreation facilities are located, it is recommended that a Central Loop Trail be constructed around the perimeter of this developed area. The Central Loop Trail will have a series of marked trail-



Off leash dog area within Memorial Park

heads connecting to other trails that radiate out into the rest of the park. These radiating trails link with park entrances on the west, north, and east sides.

Two themed trails have potential to become attractors in the park. One is the River Trail that parallels and affords wonderful opportunities for overlooks to the Willamette River. The other themed trail concept is the Homestead Trail that will offer an interpretive tour of former

homesteads, remaining historic artifacts, and specimen trees.

The balance of the park trail system is intended to provide for general use by pedestrians and bicyclists, and will be improved according to topographic conditions, connections, and anticipated use. Many existing dirt trails and footpaths that closely duplicate other trails, are recommended to be removed as main trails are given priority and improved.

Points of entry for the park are recommended for improvement in accordance with the level of anticipated use. The primary entrance to Memorial Park will remain at Memorial Drive, with improved directional signage from Wilsonville Road. Two new pedestrian and bicycle entries, one on the east side of the park located off of Rose Lane and another on the west side located off of Memorial Drive will provide more convenient access for nearby residents. A proposed tertiary park access will serve to residents north of Wilsonville Road.

A system of identity, map and wayfinding signage needs to be established throughout the park. This system will help users feel more confident to explore different parts of the park.



# Trails Plan

Trail Planning Issues and General  
Recommendations

On-Site Trail Elements and Recommendations

Trail Design Standards

Park Amenities

Off-Site Recommendations

Priorities, Phasing and Implementation

Trail Maintenance

Recommended Next Steps

Conclusion



# Trail Planning Issues and General Recommendations

Park Identity and Access

Directional Signage and Wayfinding

Trail Use

Safety

Protection of Natural Resources

Americans with Disabilities Act (ADA)



# Trail Planning Issues and General Recommendations

The following paragraphs briefly discuss issues or conditions that were observed or raised in the public involvement process. Input was obtained through user interviews, survey results and public meetings. A summary of the public involvement process is included in Appendix E & F.

## Park Identity and Access

Memorial Park does not have direct visibility from a major thoroughfare in the city. Some people who were interviewed (as part of the public survey) were unclear as to where the park is located, what facilities exist and how to get there. It is currently difficult for park users to understand where public property begins and ends. Some park users are uncertain as to whether they might be on private property since there is little designation of boundaries, formal entry points or established trails. Civic Center Park will help to give clarity to some of the uncertainties. Civic Center Park will also provide additional pedestrian access points directly from Wilsonville Road. However, it will be important to establish a separate identity for Memorial Park. At least one adjacent resident has had some problems with trespassing by park users.

Recommendations:

- Install more visible directional signage for Memorial Park on Wilsonville Road.
- Reinforce the identity of the park with a stronger sense of entry on Memorial Drive using signage and other site improvements to create a gateway.
- Designate park boundaries through the use of discreet signage that marks private property.

## Directional Signage and Wayfinding

One of the most important improvements for Memorial Park is the development of maps and directional signage to enhance wayfinding for the public. A system of maps and signage will help park users with orientation and will encourage greater use of the site.

Currently, vehicular and pedestrian circulation primarily serves the active recreational core. Natural resources of the park and passive recreation opportunities that trails can offer are, by comparison, not fully understood or appreciated by park users. At present, there are very few cues to direct a visitor to explore the trail network of the wonderful park landscape surrounding the active recreational core. Several park users who were interviewed did not know that Memorial Park is located on the Willamette River. Many people who use the picnic areas or active sport facilities said they are reluctant to venture from the active recreational core. On the other hand, it is also beneficial to have reduced trail usage in sensitive environmental areas.

Duplicate trails may also create a problem with wayfinding. When using many of the existing footpaths, it is difficult to understand where they are located in relation to one another, how they interconnect, where they lead and how long a certain route may be. Many park users said they do not feel comfortable using trails that seem confusing.

Recommendations:

- At all points of entry, locate park identity and directional signage. The signs should be scaled appropriately to the location and expected volume of trail use. See discussion under Park Entries. At the primary and secondary entries, a park map should be easy to reference.



- Locate directional signage at major intersections of trails.
- Clearly identify park facilities that are difficult to see from the recreational core such as the dog exercise area, boat dock, picnic areas and themed trails.
- Designate approximate lengths of trails or distances from entries to facilities.
- Create a clear hierarchy of trails and trailheads. A trail hierarchy can be designated through width, alignment, paving materials, amenities and accessibility.
- Eliminate a number of trails that duplicate other routes, confuse park users and lead to habitat fragmentation.



Existing footpath

## Trail Use

Key issues to consider in planning trails are how they get used and by what individuals or groups. In surveys and through time spent onsite, it was observed that the park trails are used by mountain bikers, runners and walkers. Except for the main paved trail from Memorial Drive, road bikes have difficulty on trails due to the lack of surfacing. Shared use of trails by pedestrians and bikes is not advisable in many instances

due to narrow widths, steep grades and blind corners on alignments. Bike and pedestrian conflicts may result in accidents. Presently there are no rules or regulations for bike use on existing trails.

Bikes can have significant impacts on natural resources since they are difficult to contain on the network of existing trails. Since most trails are not improved for their use, bike riders cause significant amounts of erosion by impacting soils and vegetation. (See Multi-Use Trails map, Appendix C).

Recommendations:

- Create a hierarchy of paved trails that provide for adequate widths to accommodate safe passage and shared use for bikes and pedestrians.
- Designate smaller footpaths for pedestrian use only.
- Develop park regulatory signage and maps that designate which trails are to be shared with bikes and which trails are for pedestrians only.

## Safety

Public safety is a critical issue for encouraging more people to enjoy trails as a form of passive recreation. In conversations with public safety officials, it is proven that the more people who use a park facility, the greater the safety and sense of wellbeing which, in turn, results in more frequent park use.

A number of families and elderly adults use the park, but they tend to stay near the recreational core. Safety issues that were mentioned by park users include the occasional presence of homeless or potentially threatening persons, dark trails, areas of dense vegetation and isolation from other park users. These issues tend to be perceived differently by women and various age groups, and can be a deterrent to use of the park.

Unimproved trail surfaces, especially in the damp or steeply forested areas of the park, can be seasonally wet and slippery. Trail erosion creates poor drainage conditions and impacts the natural resources. Trails that are difficult to maintain are more subject to erosion and can negatively affect surrounding vegetation and water quality.

Recommendations:

- Improve wayfinding and reduce difficulty of established trails so that a more diverse cross-section of people feels comfortable using them.
- Improve some trails with paving to reduce muddy, slippery conditions and create better surfaces for use in wet weather.
- Eliminate trails in poorly drained areas, boardwalk over low places or correct adverse drainage conditions.
- Provide low-illumination lighting for the Central Loop Trail.

## Protection of Natural Resources

More planning of the trail network will help to reduce ecological disturbance throughout the park. Trail redundancy tends to fragment sensitive environments unnecessarily. Random footpaths created without regard for steep slopes, vegetation, hydrologic conditions or other sensitive areas impact the natural environment. Duplicate trails also create visual clutter in the landscape that can become a distraction to those on nature walks.

Recommendations:

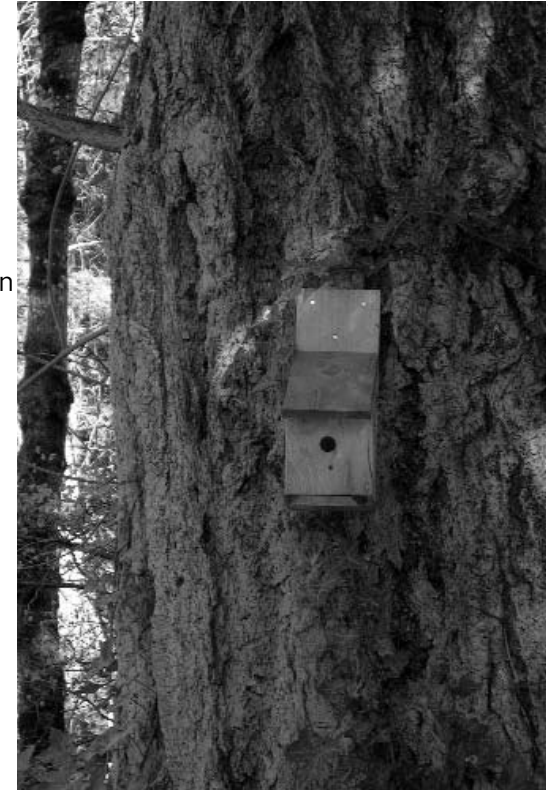
- Create a network of interconnecting trails that link important destinations and are designed to be more compatible with soils, topography and natural resources.
- Eliminate duplicate trails which cause habitat fragmentation.

## Americans with Disabilities Act (ADA)

The national Americans with Disabilities Act provides opportunities for all citizens to have physical access to public facilities. The site topography of Memorial Park presents a significant challenge with regard to barrier-free access for everyone. Presently the trails that are barrier-free and ADA accessible are limited to the main park access trail from Memorial Drive and the walks that link the rest-rooms and sports facilities in the recreational core. The lack of ADA trails in Memorial Park is a significant deterrent to elderly citizens, persons with disabilities, or even families with strollers. (See Barrier-Free Trails map, Appendix C).

Recommendations:

- Design accessible trails that link all portions of the park complying with ADA standards, including gradients less than 5% and firm and stable surfaces.
- Provide information regarding what routes are appropriate for varying abilities and interests.
- Install signage that describes lengths, conditions and level of accessibility of trails in the park.



Nesting box built and installed by volunteers



# On-Site Trail Elements and Recommendations

Park Entries

Hierarchy of Trails

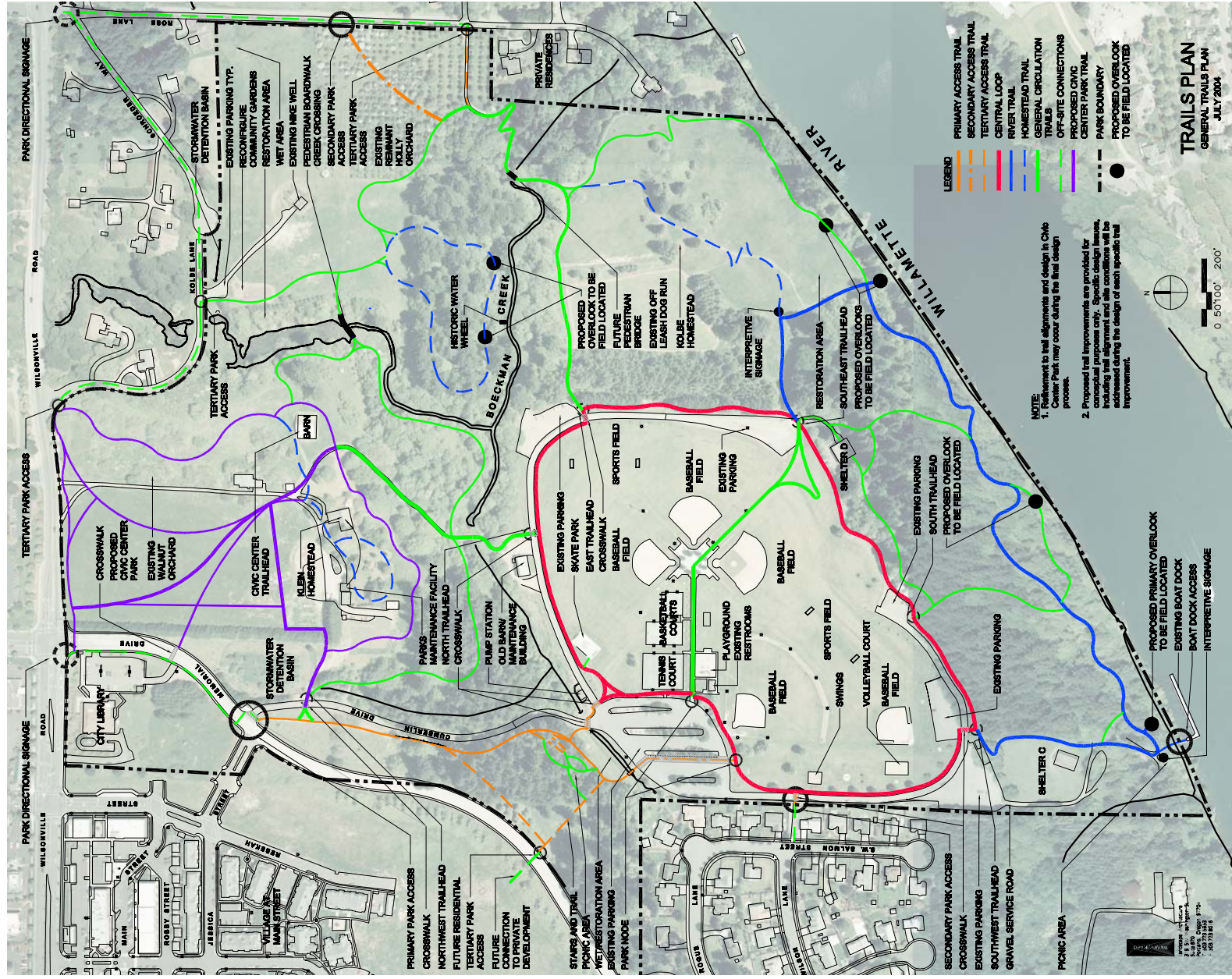
- General Park Circulation Trails

- The Central Loop Trail

- The River Trail

- The Homestead Trail





Wilsonville Memorial Park Trails Plan



# On-site Trail Elements and Recommendations

The following paragraphs discuss specific improvements and recommendations of the on-site trails proposed for Memorial Park.

## Park Entries

Well-marked park entries will help orient visitors and improve wayfinding. Visitors will understand their location relative to trails, park facilities and natural resources. A hierarchy of park entries (primary, secondary and tertiary) that are appropriate to the location and anticipated level of use will improve the circulation system in Memorial Park. Each park entry will have park identity and directional signage appropriate to the location.

### Primary Entry

The primary park entry will remain at Memorial Drive near the library and Town Center. The existing trail connecting to the recreational



Existing Memorial Park entry

core will serve the majority of park visitors arriving by foot. The existing Cumberlin Drive that extends into the park will continue to serve automobiles. At Memorial Drive, a stronger sense of park identity and arrival should be developed through the use of improved signage, a kiosk, landscape plantings, benches and/or public art. These improvements will distinguish this entry from secondary and tertiary entries. At this location, a detailed map and directional signage should clearly indicate that this is the primary park entrance.

### Secondary entries

Secondary entries for pedestrians and cyclists will be provided on the north, east and west sides of Memorial Park. Each secondary entry should have a bench, a park identity sign, a map, and regulatory and wayfinding signage. The scale of these signage elements should be differentiated from the primary entry.

Civic Center Park has its main pedestrian and bike entry at the corner of Wilsonville Road and Memorial Drive and another entry at the corner of Wilsonville Road and Kolbe Lane. The vehicular entry to the parking lot will be located directly across from the City Library driveway on Memorial Drive. On the north side of Memorial Park, Civic Center Park will be the entry. The renovated barn in Civic Center Park will become a trailhead for the Homestead Trails. No formal distinction or boundary between the two parks will exist. While the boundaries will be blended and not obvious to park users, all park maps should be extended to show both parks and their trail connections to each other. One or two of the maps should be located at the main entries to Civic Center Park.

On the west side of the park, the existing entry at Wilson Lane and Salmon Street will be classified as a secondary entry and continue to



serve the adjacent neighborhood. A well-defined crosswalk across the paved park loop road will improve safety and help formalize this entrance. This entry will include off-site directional signage indicating the local streets that can connect walkers and bicyclists to another riverfront park, Boones Ferry Park, located approximately 1.1 miles from Memorial Park on the west side of Interstate 5.

On the east side of the park, a new secondary entry off Rose Lane will be developed to accommodate pedestrians and cyclists coming from the northeast part of the city and residential neighborhoods across Wilsonville Road. It is recommended that the city examine

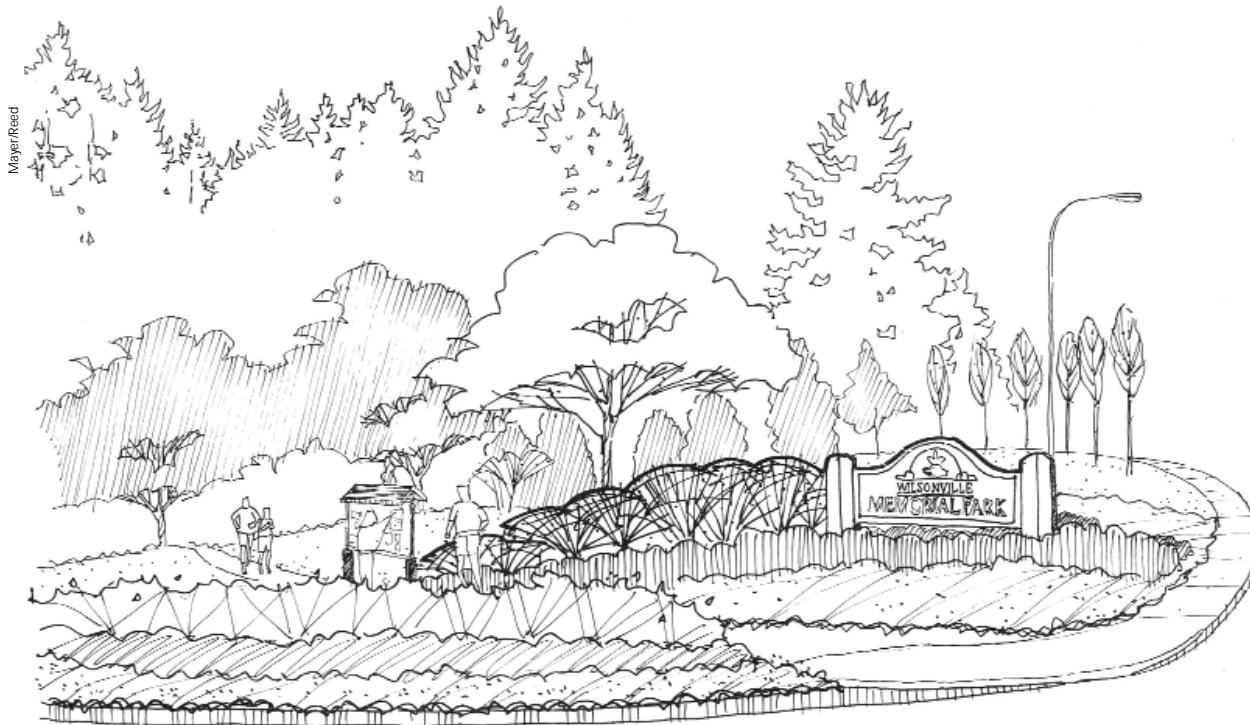
the intersection at Rose Lane and Wilsonville Road for safety improvements for bike and pedestrian crossings. From this entrance near the park's northeastern border, a paved access trail will lead pedestrians and cyclists to the park's general trail system. The trail alignment will run diagonally across the existing holly orchard off Rose Lane. No vehicular parking will be provided at this entry location.

Near the corner of Rose Lane and Wilsonville Road, motorists will be directed by new signage to the park's main entry on Memorial Drive. A smaller pedestrian-scaled directional sign will need to indicate that there is only bike and pedestrian access to the park from Rose Lane.

### Tertiary Entries

Due to the size and topographic conditions of the park, additional tertiary entries on each side of the park will be developed or improved. These tertiary access points at the west, north and east sides of Memorial Park are intended to promote neighborhood residents' use of the park by providing more convenient access. Tertiary entries will have park identity and regulatory signage only. The scale of the pathways linking them to the main park circulation system will be smaller.

One new tertiary entry on the west will be located on Memorial Drive that will serve the new multi-family housing development (Village at



Memorial Park entry at intersection of Memorial Drive and Cumberlin Drive

Main Street) across the street. This park entry will traverse the steep, wooded slope and tie to the ADA accessible trail. In addition, it may be possible to construct a series of stairs and landings that will connect down the hill in the area already cleared for underground utilities to provide more direct access to the park recreational core.

Another tertiary access point currently exists off Kolbe Lane near the community garden. This entry will serve pedestrians and cyclists by linking them with the general circulation trail routes of Memorial Park and across Boeckman Creek to Civic Center Park.

The existing entry on Rose Lane south of the secondary entry is conveniently located at the intersection with Montgomery Way. The existing trail at this location should be maintained as a tertiary access that links to the park's main circulation routes.

A tertiary access point will be located at the northeast corner of Civic Center Park at the intersection of Wilsonville Road and Kolbe Lane. This access point will provide pedestrian connectivity between the neighborhoods north of Wilsonville Road and Memorial Park.

## Hierarchy of Trails

As with the park entries, improved trails will convey the message that they are part of an established park. Improved trails will be constructed in accordance with a hierarchy relative to the level of importance and anticipated use. Since there are so many existing trails, most improved ones will follow existing routes, rather than clearing and grading the site to create new alignments. Improved trails will be easier to use and understand, given the complexity, size and diversity of the landscape in Memorial Park. This plan recommends a central loop trail and several themed trails as park features. Additional trails are for general park circulation or for exploration of natural areas. Trail designations are discussed in the following paragraphs. A summary of trail improvements, Multi-Use Trail map and Barrier-Free Trail map can be found in Appendix C

## General Park Circulation Trails

The primary purpose of the general park circulation trails is to provide the basic connections through the park and for hiking and passive recreation. Most of these trails will link to the Central Loop Trail and parking areas. These trails will be paved with either an ADA surface or wood chips and 6 ft, 10 ft, or 12 ft. in width. General circulation trails will feature benches and wayfinding signage at key intersections and trailheads along the Central Loop Trail.

The main trails from primary and secondary access points will be barrier-free and designed for shared bike and pedestrian use. In places, the steep, wooded slopes will dictate the grades of the trails, with some exceeding 5%. While some of these trails will be marked on maps as "difficult grades," the alternative barrier-free, ADA accessible routes will be highlighted.

## The Central Loop Trail

The Central Loop Trail will encircle the perimeter of the recreational core of the park. This trail is intended to provide access from parking areas to a series of



Skate park in recreational core

trailheads that radiate out into different parts of the park from the core. It also is intended to serve as a continuous exercise loop for walking, bicycling and running. The Central Loop Trail will be paved, and 12 ft. in width to accommodate passage of bikes and pedestrians. Where possible, it will be located on the inside of the existing paved loop road. At several designated crosswalks, the trail will shift to the outside of the loop road to make connections to other trails. In total, the Central Loop Trail will be approximately 4,232 ft. long.

A paved general circulation trail connection across the interior of the recreational core will create more options for use of the central loop. This crosstrail will enable pedestrians to use smaller loops or take a more direct route without following the entire loop. This trail will join the existing paved walkways in the recreational core and not interfere with active sports play.

A new connection across the paved parking lot from the main entry trail will allow for safe access to the recreational core of the park. Some parking spaces will need to be re-stripped, but it appears that this trail improvement can be accomplished without losing parking spaces.

Along the central loop at main trail intersections, maps, wayfinding signage and some regulatory signs will be posted. The central loop will include some benches for resting. Low-level illumination, provided through bollard lighting will improve safety for trail use in the dark winter months. The Central Loop will be fully ADA accessible.

### **The River Trail**

The River Trail is intended to serve as a multi-use pedestrian and bike trail that travels atop the riverbank through the forest. The trail will connect to the boat dock and feature several river overlooks with benches. The exact overlook locations will need to be designed with special considerations for safety and access due to the steep banks.

The River Trail will be paved and will have a width of 10 ft. The River Trail will follow one of the major alignments already established through the woodlands. However, some grade modifications and short bridge spans will be required to make the trail barrier-free for ADA accessibility and more compatible with the hummocky terrain. Other parallel trails, except for one footpath leading to an overlook, will be abandoned to consolidate facilities, reduce maintenance, limit habitat fragmentation and avoid confusion in wayfinding.

The River Trail will connect at the west end to the Central Loop Trail where a trailhead will provide information about its length and use.

Near the boat dock, the trail will include interpretive signage regarding river ecology and historical references.

At its east end, the River Trail will connect to the Homestead Trail on the west side of Boeckman Creek. There will be additional interpretive signage about the ecological restoration site at the southeast corner of the park. Overall, the River Trail will be approximately 3,282 ft. in length.



Willamette River

Mayer/Reed

## The Homestead Trails

The Homestead Trails are interpretive routes of approximately 3,298 ft. that offer information and a tour of the historic Kolbe and Klein homesteads, specimen trees and selected areas of forest. The upper portion of the Homestead Trail is through the former Klein property on the west side of Boeckman Creek. The middle portion of the trail is east of Boeckman Creek; and the lower portion is through the former Kolbe property on the west side of the creek. The three segments are joined through general park circulation trails and will be signed at the beginning and end of each trail. A new crossing of Boeckman Creek will be required as part of the park's general circulation trail system.

Mayer/Reed



Runners along path

Refer to Appendix A for additional information on existing facilities.

The Homestead Trails will be surfaced with an ADA surface and will be 6' wide, intended to serve pedestrians only. They will be improved to be ADA accessible where feasible. Along the trail, interpretive signage will describe features and site remnants, such as the water wheel that provided electricity to the Klein homestead, the specimen

ornamental tree collection, extensive coniferous tree plantings and the barn. More detailed information regarding the homesteads and site tours could be made available at the renovated historic barn or in the form of a brochure at the nearby City Library.



## Trail Design Standards

Trail Clearing Limits

Typical Trail Cross Sections

Trail Switchback

Trail Stairway and Decommissioning

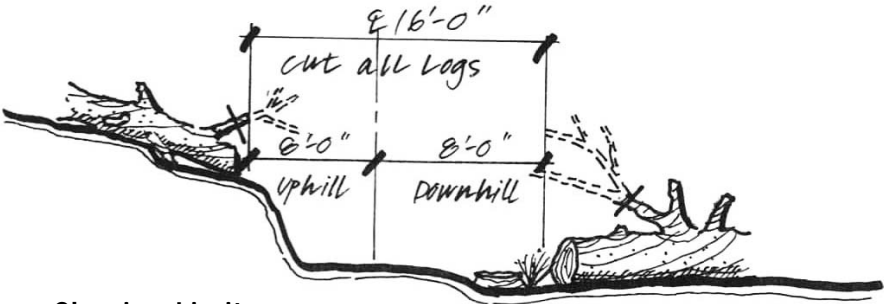
Trail Surfacing

Trail Overlook and Log Barrier

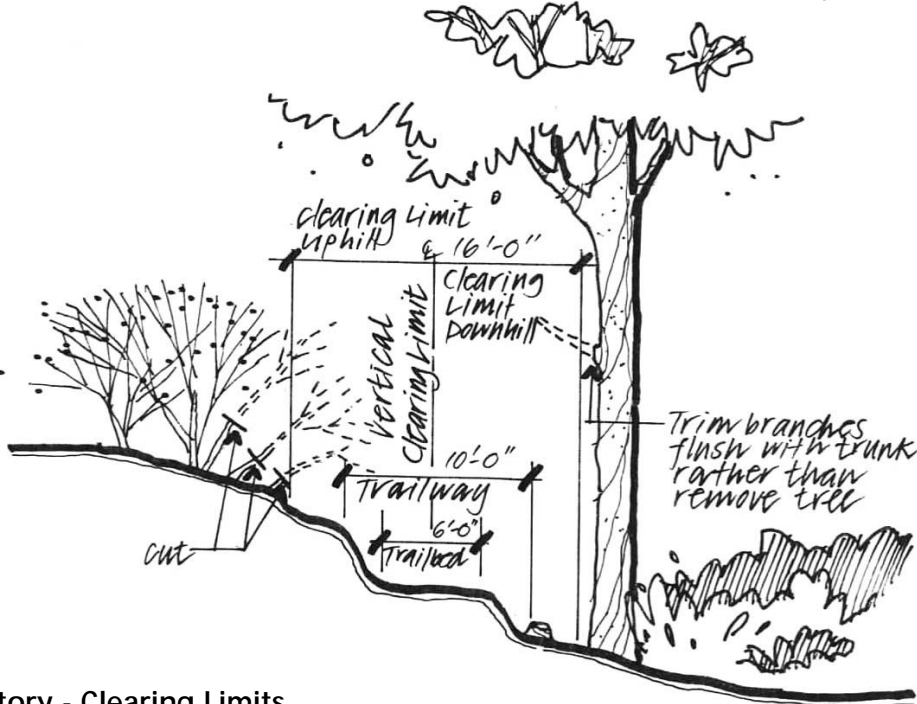
Trail Cantilevered Overlook



# Trail Clearing Limits



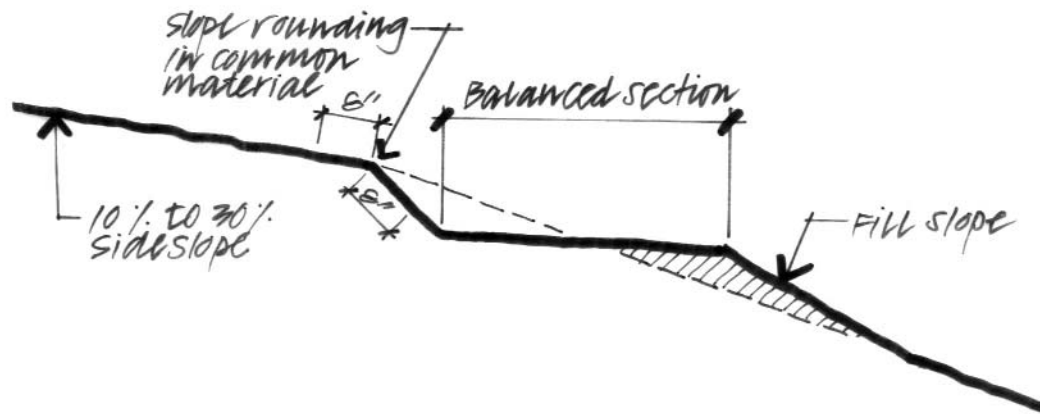
Stump - Clearing Limits



Understory - Clearing Limits

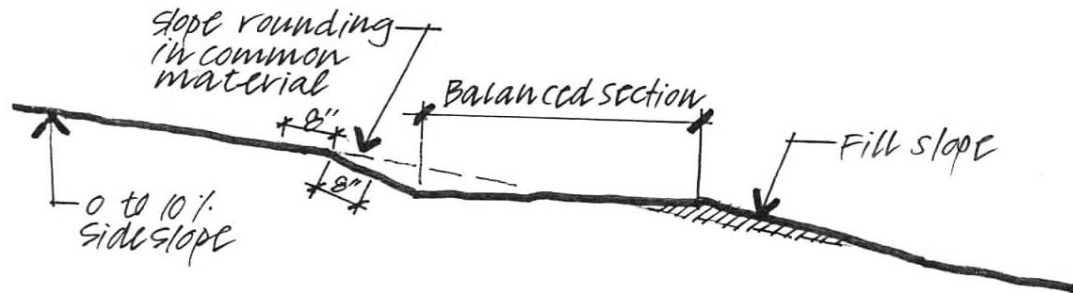


# Typical Trail Cross Sections



10% to 30% Sideslope

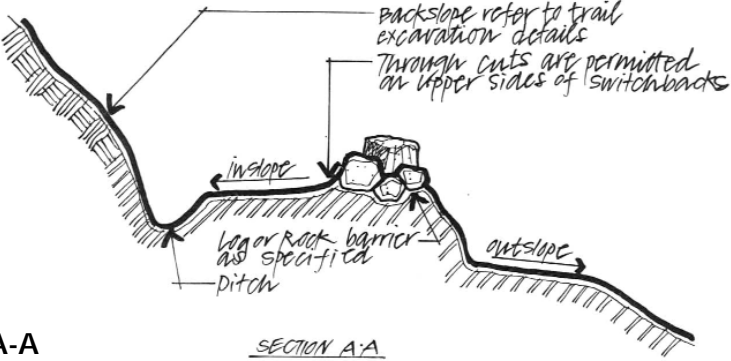
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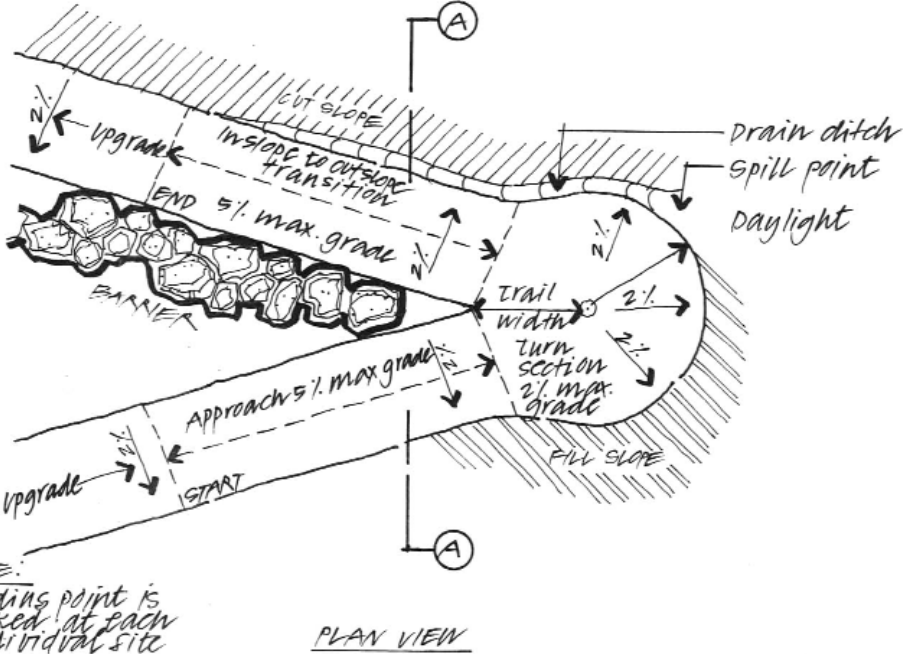
0% to 10% Sideslope

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# Trail Switchback

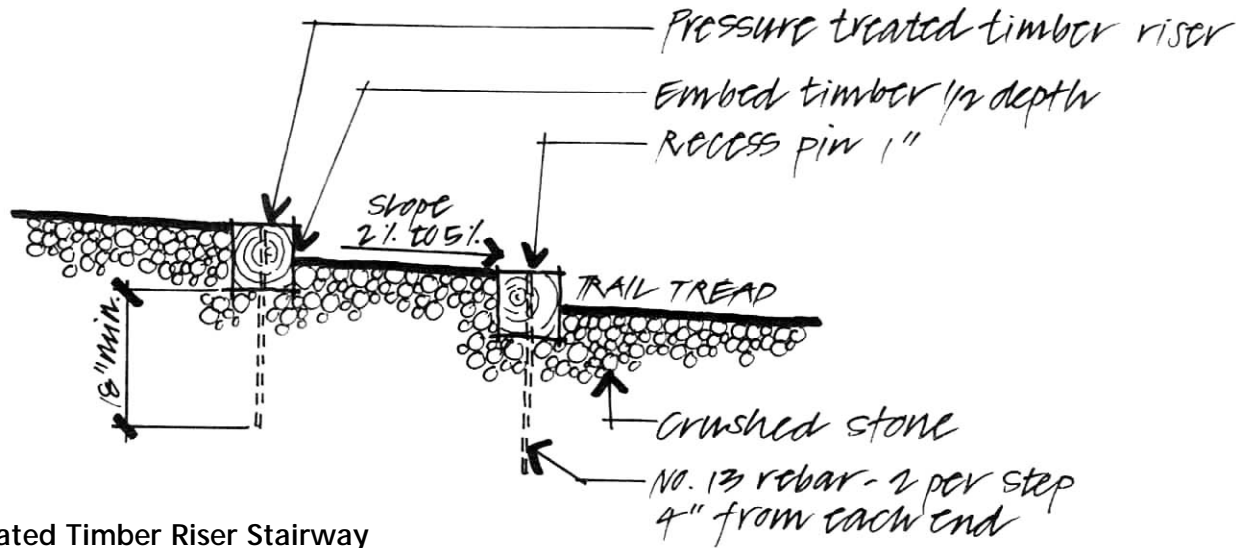


Section A-A

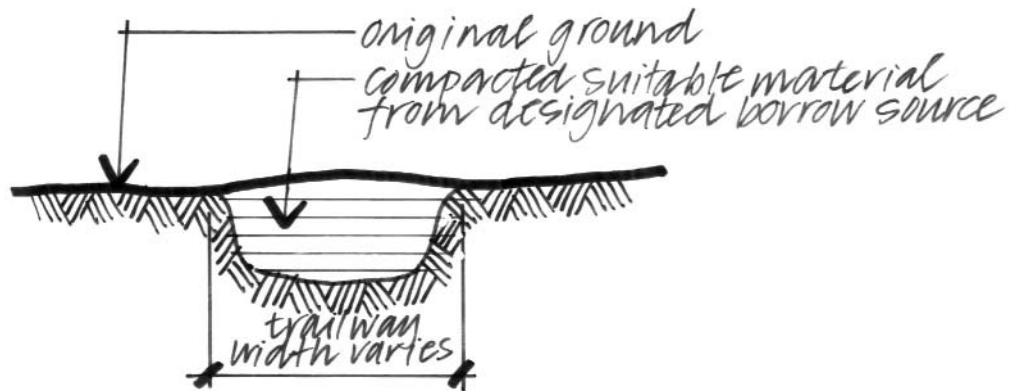


Plan View

# Trail Stairway and Decommissioning

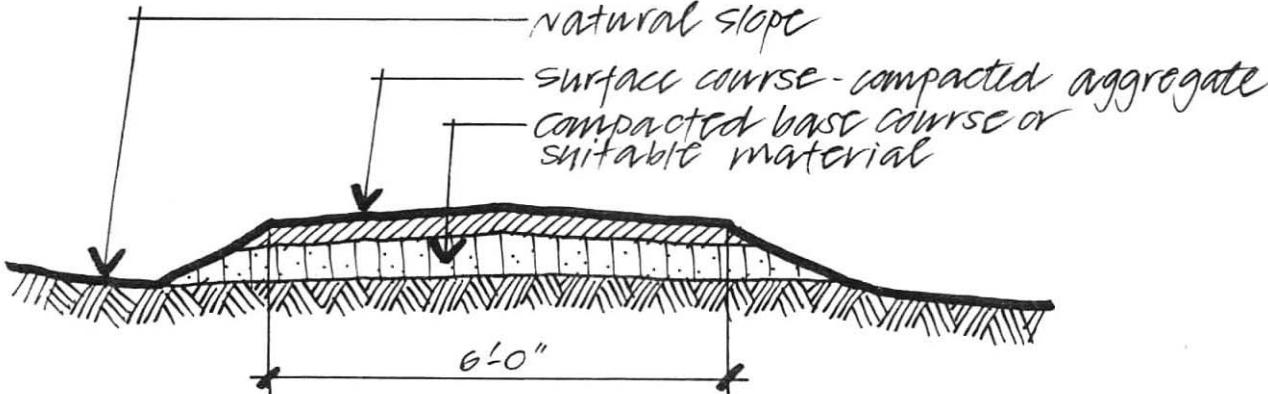


Treated Timber Riser Stairway



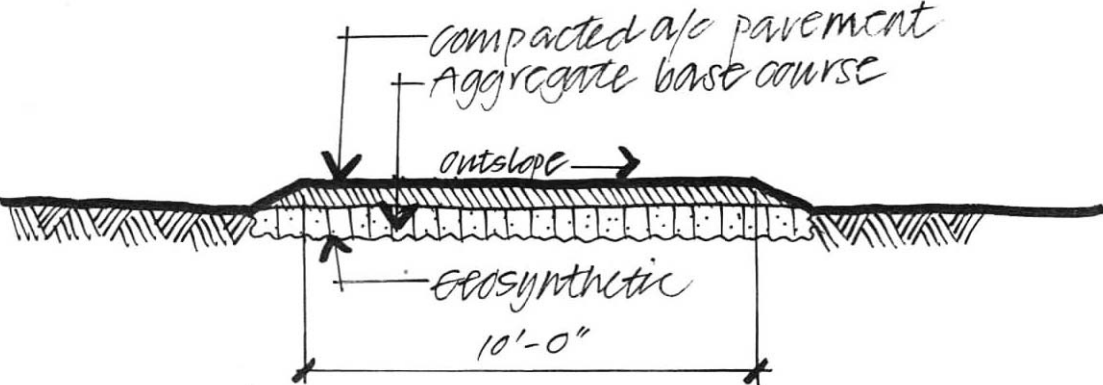
Trench Backfill

# Trail Surfacing



Aggregate Surfacing - Crowned Section

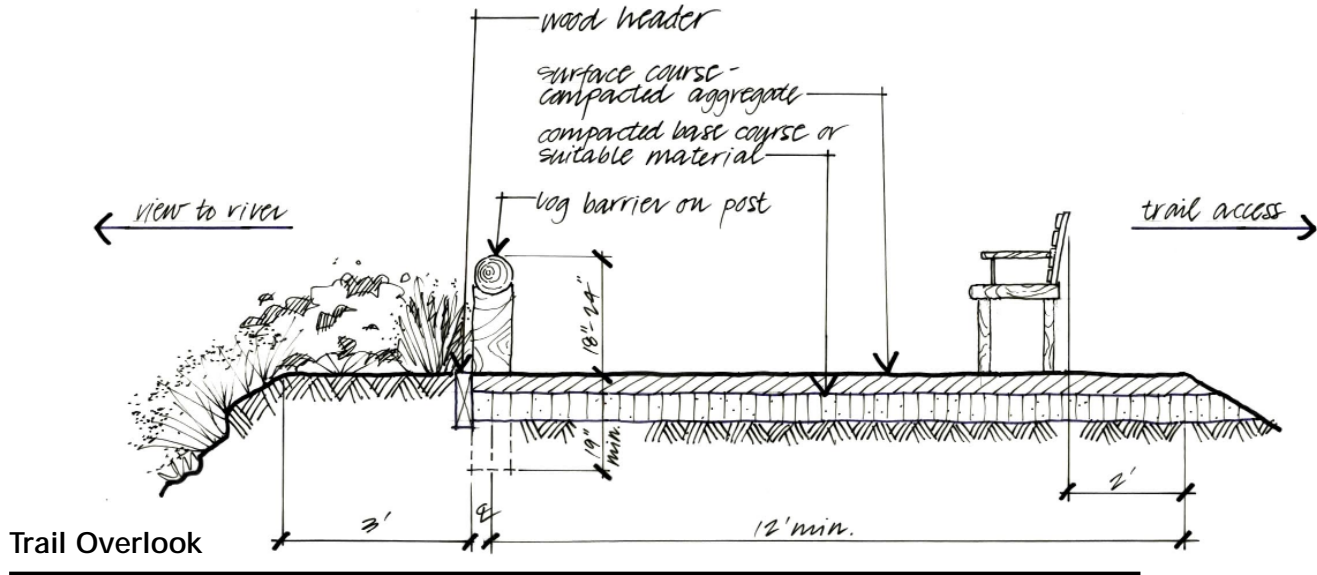
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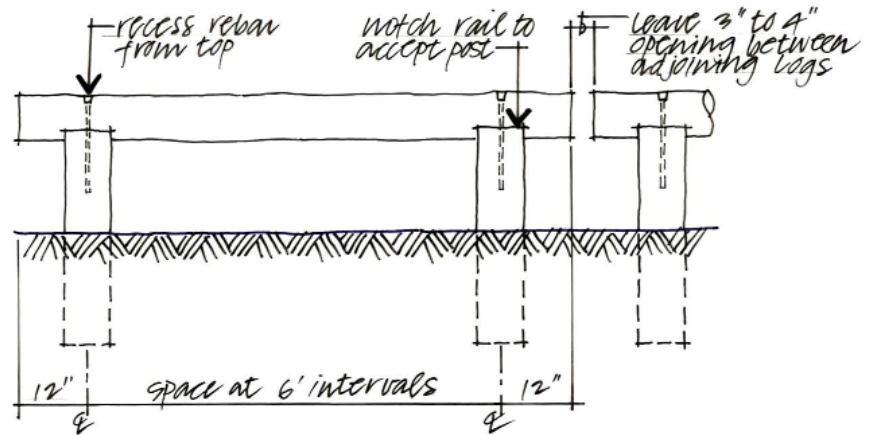
Asphalt Surfacing - No Shoulders

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# Trail Overlook and Log Barrier

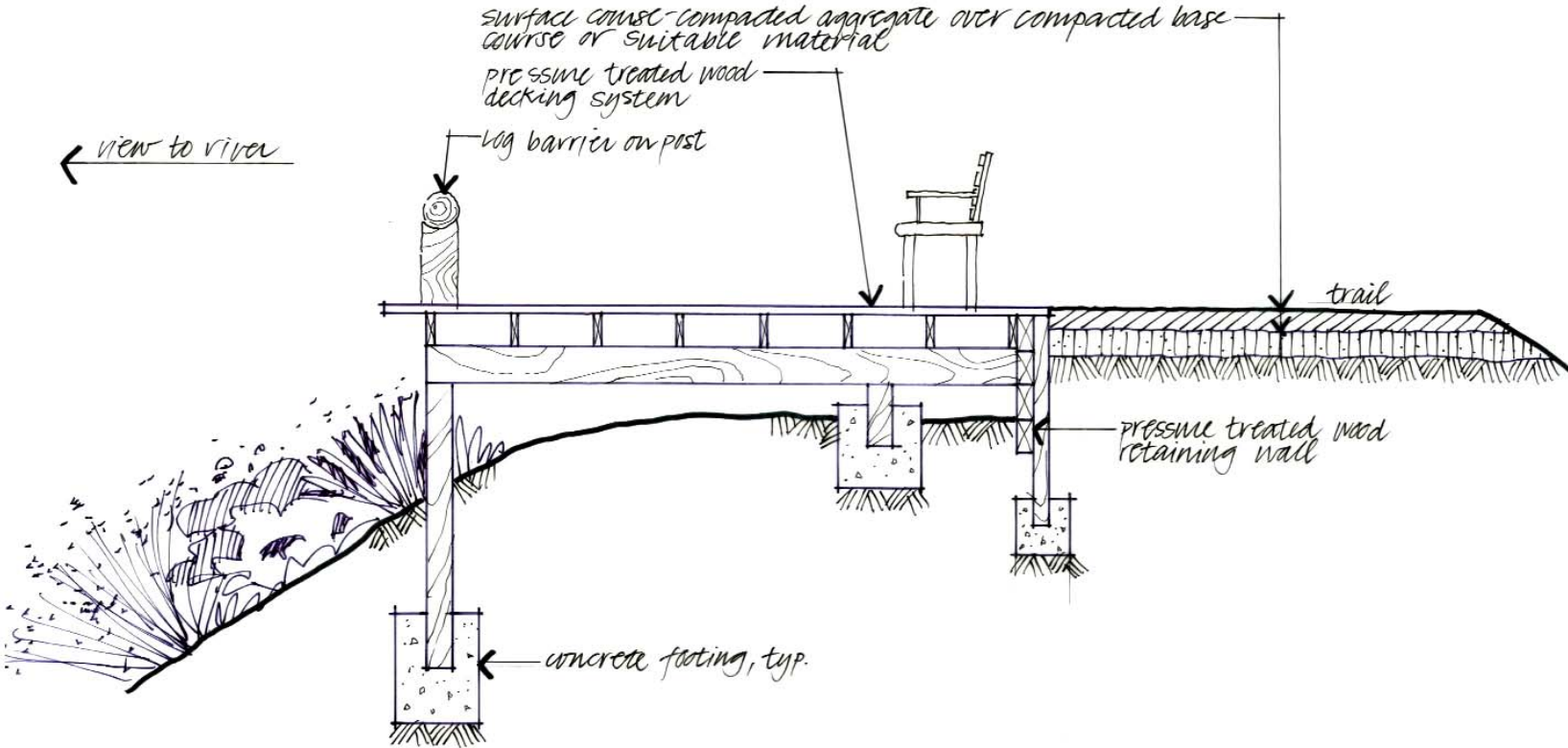


Trail Overlook



Log Barrier

# Trail Cantilevered Overlook



Trail Cantilevered Overlook



## Park Amenities

Boardwalks

Benches and Picnic Tables

Kiosk

Lighting

Trash Receptacles

Overlooks





# Park Amenities

## Boardwalks

Elevated boardwalks will be constructed where the general circulation trail crosses Boeckman Creek on the east side of the historic Klein Barn. Visual, not physical, access to the wetlands will be provided at this location. The boardwalks will be designed and constructed to minimize impacts to Boeckman Creek and the surrounding natural habitat and to comply with Forest Service Guidelines.

## Benches & Picnic Tables

Rustic wooden or recycled plastic lumber benches and picnic tables will be located throughout Memorial Park. Benches will be located along the trails to provide rest opportunities. Benches will be located at trailheads, access points, interpretive nodes, and overlooks. Additional benches will be located along the Central Loop Trail. Picnic tables will be located along trails in areas as to not cause further damage to the natural resources.

## Kiosk

Three rustic type kiosks will be located in Memorial Park to provide park identification, maps, wayfinding and regulatory signage. A kiosk will be located at the park entry off of Wilsonville Road. A second kiosk will be located at the park node of the recreational core sidewalk and the main parking area while the third kiosk will be located at the East Trailhead. The kiosks will be designed and constructed out of pressure treated wood timbers to meet the needs of the park.

## Lighting

Low-level bollard lighting will be installed around the perimeter of the Central Loop Trail. The bollard light will be housed in a steel, powder coated and vandal resistant housing.

## Trash Receptacles

Trash receptacles will be provided at all primary, secondary and tertiary park access points. Additional trash receptacles will be placed along the Central Loop Trail. Trash receptacles may also be placed at trailheads, kiosks, boat dock and near proposed picnic tables and at the overlooks.

## Overlooks

The primary overlook and two secondary overlooks will be located along the River Trail. Secondary overlooks will also be located along the general circulation trail adjacent to the Willamette River and along the Homstead Trail over looking Boeckman Creek. The primary overlook will be located near the boat dock and will feature a picnic table and trash receptacle. The secondary overlooks will feature a bench and trash receptacle. Bank condition and potential views should be considered when constructing overlook.



Playground in recreational core



## Off-Site Recommendations



## Off-Site Recommendations

On a city-wide scale, the City of Wilsonville is preparing to update the Bicycle and Pedestrian and Parks and Recreation Master Plans. With these new studies, it will be possible to understand the larger context of Memorial Park in the city. Trails and potential on-street routes that link other facilities to Memorial Park should be identified and signed, particularly for bicyclists.

Improved identity and directional signage for Memorial Park has been discussed in this report previously. Again, at the larger scale, Memorial Park should stand out in the city as a major destination and focus of activity. Once Civic Center Park is developed with trails and parking, the two parks together will have more visibility in the community.



Baseball game in the parks recreational core



## **Priorities, Phasing and Implementation**

Phase I: Central Loop Trail and North-South  
General Circulation

Phase II: The River Trail, Kolbe Homestead Trail  
and General Circulation Connections

Phase III: The Klein Homestead Trail and  
General Circulation Connections





# Priorities, Phasing and Implementation

Improvements to the trail system of Memorial Park can be implemented in phases, according to funding packages and priorities. Phases are packaged so that there are some economies of scale in construction, and different areas of the park that are disturbed will be turned back over for public use in a coherent and timely fashion. See Appendix D for project costs.

Planning, design and construction of the onsite park identification, wayfinding, regulatory signage and park amenities should be implemented as each phase is implemented.

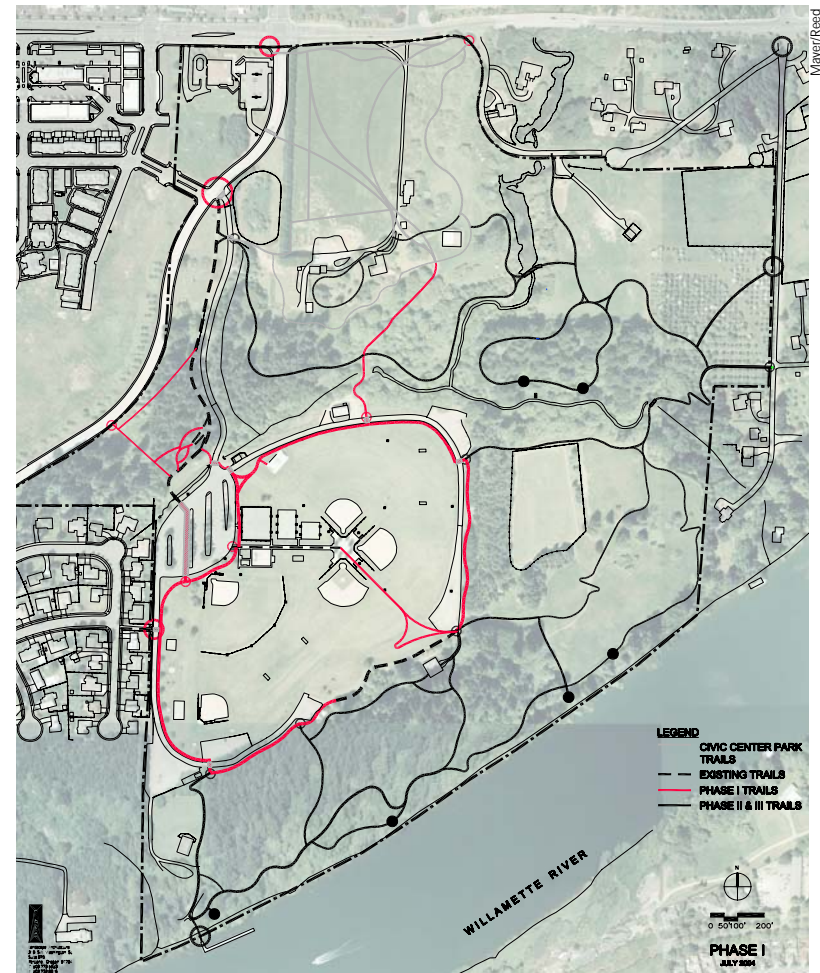
Civic Center Park improvements will be implemented using a separate process. Connections from and within Memorial Park are included in the following paragraphs.

## Phase I: Central Loop Trail and North-South Circulation

**Cost \$512,363**

Signage and construction of a kiosk at the primary park access point should be given priority in this phase to create a pedestrian gateway into Memorial Park. A secondary pedestrian gateway with kiosk should be constructed at the recreational core area's park node located at the west end of the existing concrete sidewalk. The third kiosk should be constructed in concert with trailhead improvements at the East Trailhead leading to the dog off-leash area.

With the current construction of Phase II at the Village at Main Street the tertiary park access point will be constructed by the developer. The Tertiary Access Trail and the general park circulation trail



Phase I trails map

connecting the existing picnic tables to the primary access trail should also be constructed at this time.

Given the potential for the highest and most immediate use, the Central Loop Trail should be constructed. This amenity should be designed in concert with new or redeveloped parking lots, so that no segment of trail will have to be reconstructed when parking configuration is changed. The primary access trail through the main parking lot should be constructed to improve safety. The north-south general circulation trail through the recreational core connecting the existing concrete sidewalk southeast to the Central Loop near Shelter D should also be constructed at this time.

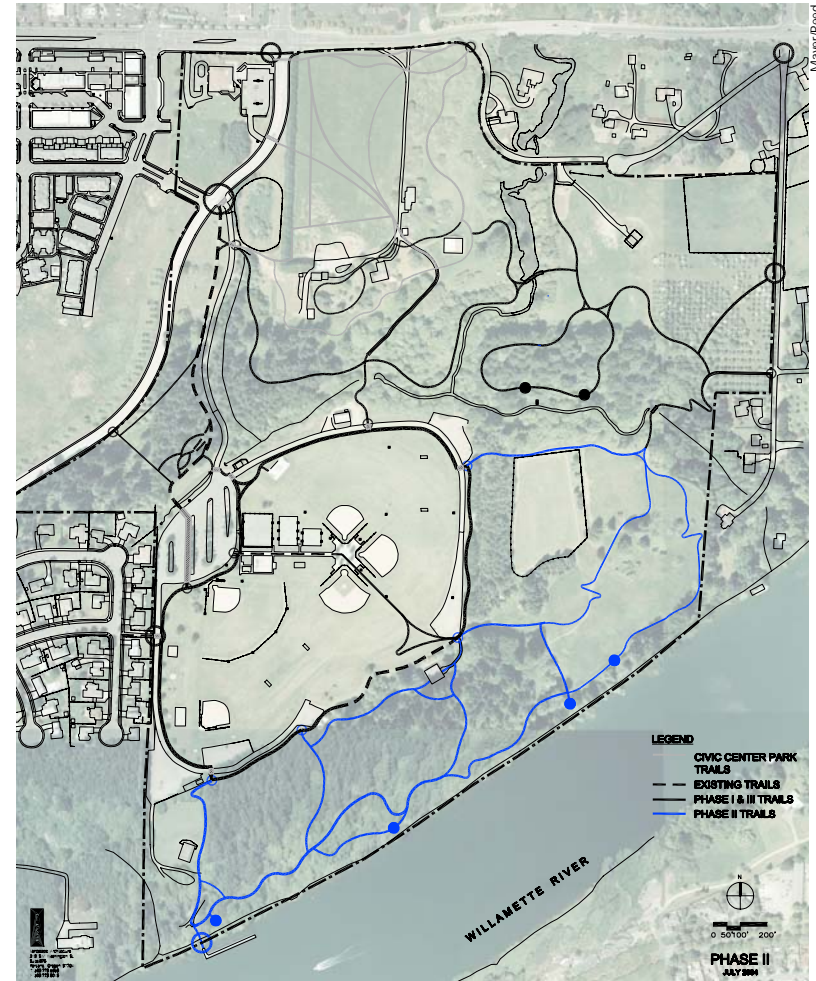
As Civic Center Park improvements are constructed, a formalized connection to Memorial Park will become more important. The existing service road should be given a high priority for improvement to enhance the two parks as a combined resource and provide north-south circulation.

## Phase II: The River Trail, Kolbe Homestead Trail and General Circulation Connections

**Cost \$487,965**

The River Trail and Willamette River overlooks will be a popular feature in Memorial Park. Improvements to the River Trail, related overlooks and general circulation trails connecting the River Trail to the Central Loop Trail should be constructed during Phase II.

The Kolbe Homestead Trail connecting the general circulation trails with the River Trail should be constructed at this time. Construction of the Kolbe Homestead Trail should end at the intersection of the east-west general circulation trail and the River Trail. The remainder



Phase II trails map

of the Homestead Trail shall be constructed in Phase III. The east-west general circulation trail adjacent to the off-leash dog run area should also be constructed during this phase. Some temporary connections to existing trails will be required. Redundant trails through the forest should be abandoned at this time.

### Phase III: The Klein Homestead Trail and General Circulation Connections

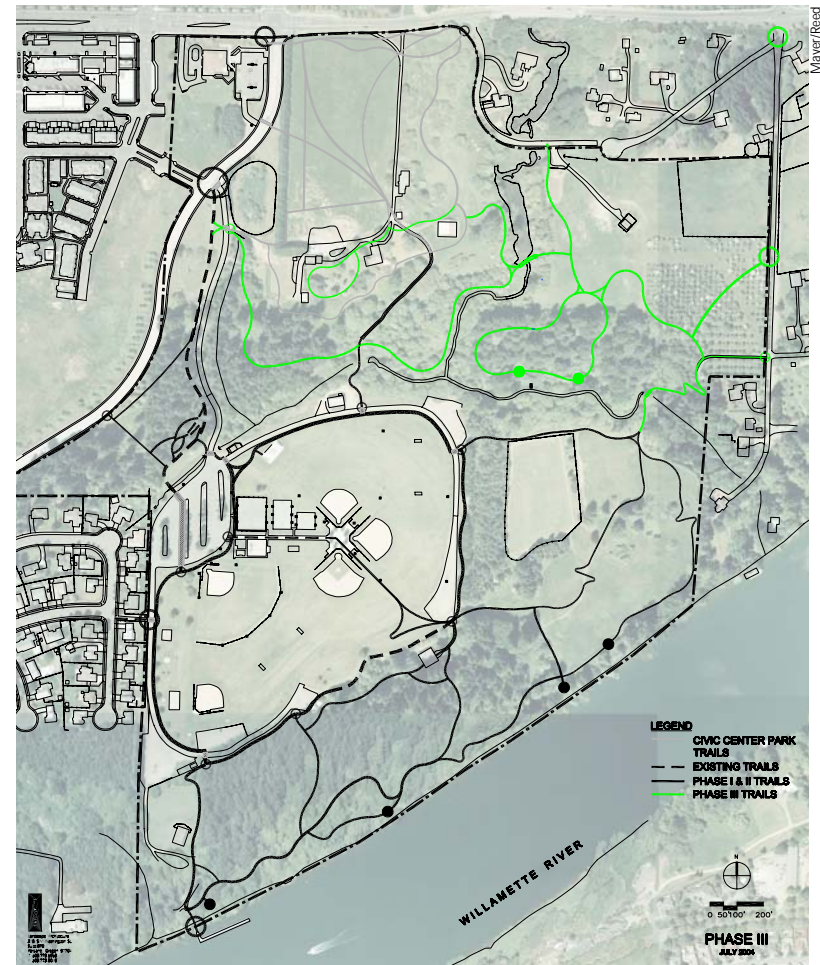
**Cost \$219,585**

Phase III construction efforts are localized within the northern half of Memorial Park. During this phase the secondary and tertiary park access points along Rose Lane should be developed. Signage for these park access points should be planned, designed and constructed at this time along with the secondary access trail leading to the Klein Homestead Trail.

The remainder of the Homestead Trail should be constructed at this time. In conjunction, the Boeckman Creek pedestrian bridge project should be completed at this time.

The north/south general circulation trail connecting the Klein Homestead Trail to Kolbe Lane should be constructed. The general circulation trail crossing Boeckman Creek via a boardwalk and connecting the site to Cumberlin Lane south of the Stormwater Detention Basin should be constructed at this time.

Permitting for Boeckman Creek and wetland crossings via pedestrian bridges and boardwalks will need to be done within this phase.



Phase III trails map



## **Trail Maintenance**

Trail Alignment

Grading

Drainage

Maintenance

Vegetation Management

Trail Decommissioning



# Trail Maintenance

## Trail Alignment

Trail grades, alignment and endpoints need to be carefully considered before active trail construction is implemented. In the case of Memorial Park, many of the existing trails will be upgraded while others will need some adjustment of alignment to smooth out the grades. In some cases, such as the River Trail, short sections of boardwalk may be required due to extreme variations of the terrain.

For new trails, an approximate alignment can be staked in the field, then a surveyor can shoot topographic conditions for about 20 feet on either side of the proposed trail center line. Accurate alignment drawings can then be developed to guide construction.

## Grading

Trails should be graded slightly toward the downhill side of a slope at a max slope of 2%. This will help keep stormwater from concentrating and increasing in velocity and help reduce potential for erosion. At locations where a natural concentration of stormwater crosses a trail, a culvert or other control device should be used to reduce the velocity, control its route and help reduce negative impacts. See Trail Design Standards.

## Drainage

Positive drainage is essential to trail maintenance. Most trail failure is due to poor drainage and erosion. Trail construction and maintenance practices should focus on controlling drainage on and off the trail. Water should not be allowed to puddle or travel across a trail. If the trail is not eroded by water running across it; it may still become further degraded by the foot traffic that tries to avoid puddles or muddy areas.

Culverts, waterbars, ditches, and other types of drainage devices used should be routinely inspected, cleaned or adjusted to maximize their effectiveness. A map of culvert locations is suggested since culverts often become obscured from casual view.

## Maintenance

Routine maintenance tasks for trails includes weekly trash pick-up and debris removal, seasonal blowing of leaf litter and yearly inspection of trail conditions. Crushed rock surfaced trails will need to be replenished every 2-3 years. Wood chip surfaced trails will need to be raked and wood chips replenished annually. Hardscape surfaced trails will need to be repaired as needed. Trail signage needs to be inspected on a monthly basis to remove graffiti or other vandalism.

## Vegetation Management

In addition to controlling invasive plant species it is also important to keep trails clear of low-growing vegetation and of overhanging obstacles. Both of these conditions become impediments to trail users. On either side of trails, understory and brush should be kept to a height of 24 inches for safety purposes. Trees along the trails should be assessed for hazardous conditions such as partially broken, broken or dead branches. See Trail Design Standards.

## Trail Decommissioning

Since Memorial Park has many duplicate foot paths that parallel other trails, the intent is to improve one preferred alignment and remove others. Trail removal methods include scarification of the compacted subgrade, addition of soil where required, seeding the trail with an appropriate seed mix of native species and placement of limbs and brush at trail entry points to discourage use. Temporary signage may also be required.





## Recommended Next Steps

Public Information Campaign

Friends of Memorial Park

Funding

Walking Clubs

Nature Study Tours

Trail Maintenance

Trail Signage Master Plan



## Recommended Next Steps

The following paragraphs outline steps that may be considered in implementing the Memorial Park Trails Plan:

### Public Information Campaign

The public meetings for the Trails Plan did not draw a large number of participants, despite the fact that many people love and use the park. It is therefore recommended that the city elevate its effort to gain more interest and community support for the trails project. Articles in the local newspaper, the city's web site and another mailer to residents will all help raise awareness of the park's potential for an improved trail network. The updates to the Bicycle and Pedestrian and Parks and Recreation Master Plans also represent an opportunity to disseminate information on the Trails Plan.

### Friends of Memorial Park

Along with the public information campaign, the city may want to organize a "Friends of Memorial Park" group. This volunteer group may be able to help monitor the park and assist with maintenance of trails. It is possible that scout groups could build trails or assist in decommissioning existing trails.

### Funding

The City of Wilsonville should seek funding for trail design and construction from a variety of sources. These may include, but are not limited to the following:

- Land and Water Conservation Fund Grants
- Federal Highway Administration's Transportation Efficiency Act for the 21st Century (TEA-21) program
- Oregon Parks and Recreation Department
- State Transportation Improvement Program (ODOT)
- Recreational Trails Program Grants

- Measure 66 Funds
- Metropolitan Transportation Improvement Program
- Local funding from systems development charges
- Community Development Block Grants
- Private and Corporate donations

### Walking Clubs

There are a number of walking clubs already organized in the metropolitan area that utilize different park facilities to promote wellness and exercise. The city can encourage use of Memorial Park by walking clubs through assisting volunteers with tours.

### Nature Study Tours

Memorial Park is an excellent place to appreciate and learn about the Willamette River, native plant communities, wildlife, ecological



Native Trillium

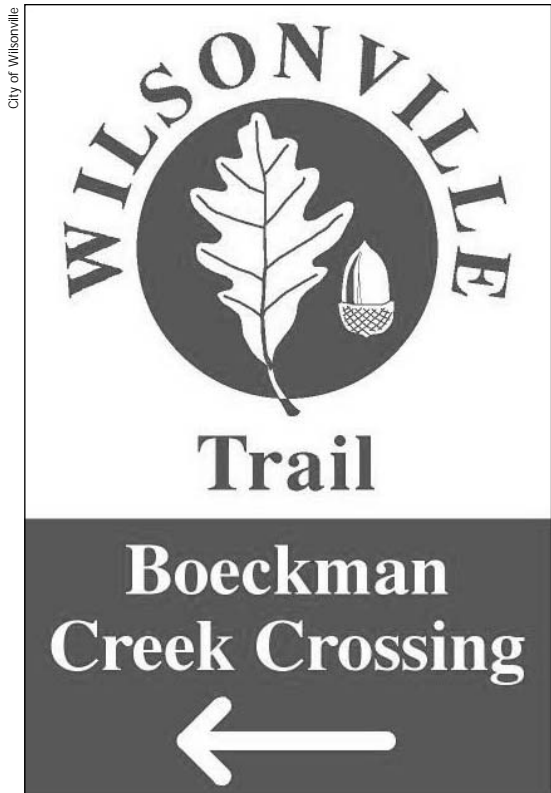
restoration and the potential for sites to recover. School and scout groups can be organized to follow the trails of the park to discover what nature has to offer on this remarkable site.

## Trail Maintenance

With improved trails, additional maintenance responsibilities and costs follow. City planning staff will need to work with parks maintenance staff to establish a schedule of routine tasks. Ideally, volunteer groups or individuals can be organized to assist with these tasks. Volunteers are currently being utilized to help with park clean up, invasive vegetation maintenance, vegetative restoration and trail

maintenance. Volunteers participate in the City's work day and school groups participate in vegetative restoration throughout Memorial Park. Other volunteer groups include: Boy Scouts of America, local church groups, Clackamas Corrections and various Community Groups.

City staff will need to examine access and facilities periodically so that operations and maintenance are more efficient, clearances are provided



Typical trail park/trail signage

and ADA access is assured. Over time, the parks maintenance facilities in Civic Center Park will probably need to be relocated and consolidated to one location.

## Trail Signage Master Plan

As a critical mass of improved trails and entrances are developed over time, park identity and directional signage should be incrementally installed. Regulatory and park identity signs, both part of the signage program, can be implemented at any time.

A signage master plan should be prepared that designates the exact content and location of each sign in the form of a schedule. The system should be easy to understand and maintain. It should be constructed of sturdy materials that resist removal and vandalism. Signs should have a consistent appearance in color, font and materials so that they can be updated periodically without introducing new elements that are not perceived to be part of the system. Production of maps may wait until enough of the main trails are in place, to prevent the need for replacement of outdated maps.

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## Conclusion



## Conclusion

The Memorial Park Trails Plan describes the resolution and commitment of the City of Wilsonville and the community to protect the park's natural resources, improve public awareness of park amenities, improve trail connectivity, park features and activities, and to improve trail quality and safety.

Upon approval by the City of Wilsonville Planning Commission and City Council, this trails plan will be a guiding force for the next 10 to 15 years.

The City of Wilsonville would like to thank all the individuals who recognize the potential of the site and have participated in this important planning effort for Memorial Park. Your input and support throughout this process was essential to the success of this project.

It is our hope that the energy and enthusiasm of this effort will continue toward implementation of the plan in the future and that Memorial Park will provide a public place for outdoor education, active and passive recreation, and the enjoyment of the natural areas.



Dogs at play in off-leash dog area





# Appendices

Appendix A  
Existing Facilities

Appendix B  
Existing Natural Resources

Appendix C  
Trail Improvements

Appendix D  
Estimated Construction Costs and Phasing Chart

Appendix E  
Summary of the Public Involvement Process

Appendix F  
Summary of Survey Results

Appendix G  
Bibliography



# Appendix A

Existing Facilities



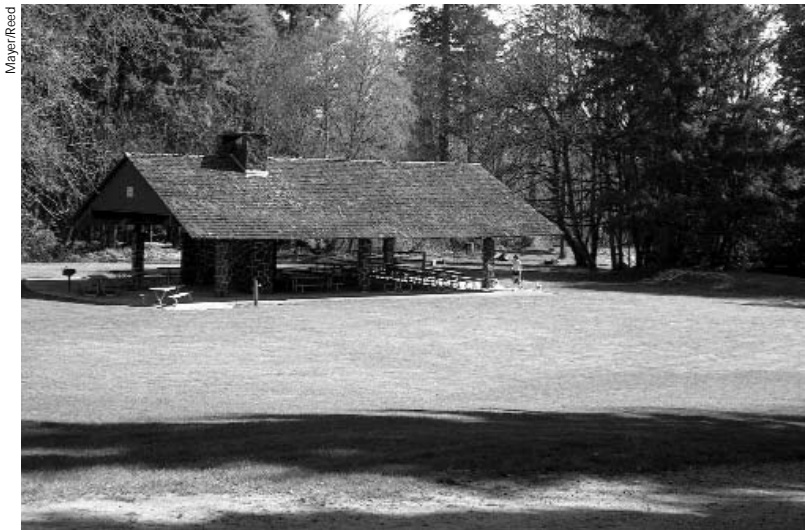
# Existing Facilities

## Active Recreation and Picnic Areas

Existing park facilities are clustered near the center of the park. These facilities include paved and gravel parking, restrooms, picnic tables and shelters, benches, an off-leash dog exercise area, various memorials, a skate park, children's play area, lighted tennis courts, basketball courts, and lighted sports fields. Two of the picnic shelters are available for rental by groups or organizations and are used in summer for children's day camps. City maintenance and operation facilities are located at several places in the park.

## Homestead Sites

Remnants of two historic residences exist in the park. The area designated for Civic Center Park, known as the Boozier property, was formerly the Klein homestead. In 1850, Gustov Klein staked a claim and acquired an 84-acre tract. The farmhouse was built in 1897 and



Shelter C



Old Kolbe homestead

the barn was constructed in 1901. With the construction of the waterwheel and water conveyance system the Klein homestead was among the first in the area to have hydro powered electricity. The property still includes the barn, nut drying shed, the waterwheel and water conveyance system from Boeckman Creek, a mature walnut orchard, and a collection of large ornamental specimen trees. The historic nut drying furnace will be displayed in Civic Center Park as part of the interpretive story. Unfortunately, the house has been remodeled and has had additions over the years that have significantly altered the character of the original building. Due to its poor condition, the house is slated for removal.

The original Ernest L. Kolbe cabin (circa 1940s) was located on what is now the lower southeast part of Memorial Park. Mr. Kolbe was a notable professional forester and was very influential in the U.S. Forest Service and other various forestry organizations. In the 1970s,

Kolbe became the first Executive Director of the Western Forestry Center in Portland, now known as the World Forestry Center. The dwelling no longer remains on site, but an extensive number of mature coniferous trees that were part of an experimental plantation on Kolbe's property still remains. This stand of pine trees can best be viewed against the skyline from the lower meadow of Memorial Park. Kolbe's cabin was relocated east of Boeckman Creek when the property was sold. At that time, Nike, Inc. purchased the site for the company's future corporate world headquarters. The land was sold to the city when Nike developed their corporate world headquarters in Beaverton.

## Trails and Footpaths

Existing paved trails consist of the main park entry trail from Memorial Drive and concrete walks linking the central sports complex, play area, and public restrooms. Most of the trails and footpaths leading from the central portion of the park are unimproved, but do provide some connections through the surrounding woodlands. Numerous volunteer unmarked, soft footpaths lace the woodlands and meadows. Several gravel drives (closed to all but service vehicles) extend throughout the park.

Existing trails do not adequately take into account where people arrive and depart from the park. A series of trailhead and wayfinding maps that are visible from park entries and the main parking areas will better serve park users

## Maps and Signage

Presently, there is little identity, directional or wayfinding signage in the park. A routed wood map showing several old trails was located in the recreational core of the park, but is now in storage. There are some regulatory signs in the park, but they are not part of a larger system that conveys information in the most effective manner.

## Parking

There are several parking options for motorists in the recreational core. The paved parking lot that is accessed from Memorial Drive via Cumberlin Drive serves as the primary parking facility for the site. This parking lot can accommodate approximately 122 vehicles including 4 handicapped spaces. There are five additional gravel parking areas that are available in the summer months from the road that rings the recreational core. These lots are randomly shaped and lack striping. If improved, parking would be more orderly and efficient. The lots are also somewhat hazardous to cross, especially for children, due to the lack of striping to organize the vehicles. Near the parks maintenance facility there is an additional gravel parking area. There is a small parking area adjacent to the community garden at the north side of the park.



Existing paved parking

Mayer/Reed







# Appendix B

Existing Natural Resources



# Existing Natural Resources

## Topography of the Park

Memorial Park falls into three distinct topographic zones that rise in elevation from the Willamette River on the south to the uplands on the north. The lowest topographic zone consists of a fairly level bench with slopes from 0 to 6% extending east to west, that serves as the floodway of the Willamette River. Running generally parallel, a hillside consisting of slopes greater than 10%, is the second topographic zone of the site. The third zone is the upland portion of the park to the north, that is relatively flat, with slopes from 0 to 6%.

The second zone creates challenges in developing a park trail system to link top and bottom of the site that is both barrier-free and compatible with the heavily wooded slopes. This hillside divides the central recreation area where most of the park facilities have been developed from the upper portion of the site.

The Boeckman Creek drainage, running north-south and very steep in places, further divides the park, making east-west access somewhat of a challenge.

## Willamette River

Memorial Park has approximately 2,400 ft. of frontage on the Willamette River along its southern border. Other than Boones Ferry Park located on the west side of the I-5 freeway, Memorial Park is the city's only public open space on the river with water access. Viewpoints of the river from the top of the bank are clearly an underdeveloped opportunity of the park. There are only a few spots with sufficient clearing on the bank where the river can be seen. The banks tend to be too steep and heavily vegetated for fishing or safe river access.

The riparian area immediately adjacent to the river is forested, with some hummocky pockets of topography. A swift river current has caused some erosion along the bank. The river level varies greatly throughout the seasons, and can rise to inundate vegetation on the lower portion of the banks. In the 100-year storm event of 1996, floodwaters crested over the top of the bank and extended into the floodplain in the southern portion of the park. A sign posted on one of the boat dock pilings, indicates the depth of the 1996 floodwaters.

## Boeckman Creek

Boeckman Creek is an important natural resource in Memorial Park. The creek extends approximately 2,300 linear feet through the park, joining the Willamette River just outside the southeast corner of the park. A tributary joins Boeckman Creek within the park. The creek



Upland picnic area

area contains riparian vegetation and fluctuating water flow and levels dependent on seasonal conditions. There is evidence of beaver activity in the upper portion of the creek.

The only existing creek crossing is over a steep embankment and culvert. The city is interested in removing the culvert and fill material and replacing them with a wooden, open span pedestrian bridge. The span will provide barrier-free pedestrian access and, in conjunction with riparian restoration, provide improved fish passage into the upper reaches of the creek.



Lower Boeckman Creek

## Forests

Approximately 47 acres of native forest exist in Memorial Park. The largest forested tract in the park lies in a band south of the recreational core adjacent to the Willamette River. The forest sustains a continuous canopy of mature conifers and a dense understory of native, deciduous trees and shrubs. Non-native invasive plant species, such as English ivy and holly, have spread within the forested portions of the park.

Mature mixed conifer and deciduous woodlands extend across the steep slopes between the upper and lower portions of Memorial Park north and east of the recreational core. This upland area is bisected by Boeckman Creek.

To encourage the use of habitat by native mammals and birds, and to protect natural resources in general, it is important to limit the number of trails. Trails that divide the forest can lead to reduced use by wildlife due to periodic disruption of feeding and nesting sites. Dogs, even on leashes, have potential impacts on wildlife. They tend to mark territory along trails and may be perceived by wildlife as predators.

Mountain and dirt bikes on unpaved trails and footpaths are also having an impact in the woodlands of the park. Use of bikes in the woodlands causes compaction of soils, rutting and erosive conditions.

## Meadows

There are approximately 44 acres of the park currently maintained as open meadow. The meadows are mowed several times per year to prevent them from being overtaken by non-native invasive plant species. Meadows of herbaceous vegetation contribute to the diversity of habitat on site. Trails can pass through the meadows, but should be consolidated so that they do not excessively fragment the habitat of nesting ground birds and mammals.

A municipal well that is part of the city's back-up source of potable water is located in the northeast meadow, formerly known as the Nike property. The well facility will continue to have service access from Kolbe Lane.

## Wetlands

There are several parts of the park that are seasonally wet, such as an area at the northeast corner of the park along Rose Lane. There are also wetlands associated with the Boeckman Creek drainage. Intermittent drainageways at the base of the steep slopes north of the recreational core area drain to Boeckman Creek. Trails will be routed around wetlands and streams wherever possible. If a wetland or stream must be crossed, in the case of Boeckman Creek, it will need to be permitted and constructed in conformance with local, state and federal regulations.

For a more detailed assessment of the natural resources and wildlife inventory, reference the report entitled "Wildlife and Habitat Assessment: Memorial Park, Boozier Property and Adjacent Areas", prepared by PBS Environmental in February 2001.

## Habitat Restoration Areas

There are two meadow areas being restored by the City with native riparian and upland plant communities. One area extends along the Willamette River bank in the southeast corner of the park. The second area is located along the north portion of Boeckman Creek, south of Kolbe Lane near the community garden.

These restoration areas will have trails adjacent to them with interpretive signage that explains the purpose, importance and process of restoring the native landscape for wildlife habitat. Pedestrian access to the restoration areas will be limited so that successful establishment of native plant communities and periodic monitoring can take place.



Habitat restoration area adjacent to Willamette River

## Remnant Holly Orchard

Wilsonville was once well known for ornamental holly production. A holly orchard, originally part of the Kolbe property, still remains on the east side of the park. While the orchard is no longer maintained, it is an interesting example of colonization by both native and invasive species of plants. Thickets of vegetation within the holly plantation provide habitat for a variety of birds and small mammals. Long-range plans include removal of the holly and restoration of the area with native plants.



# Appendix C

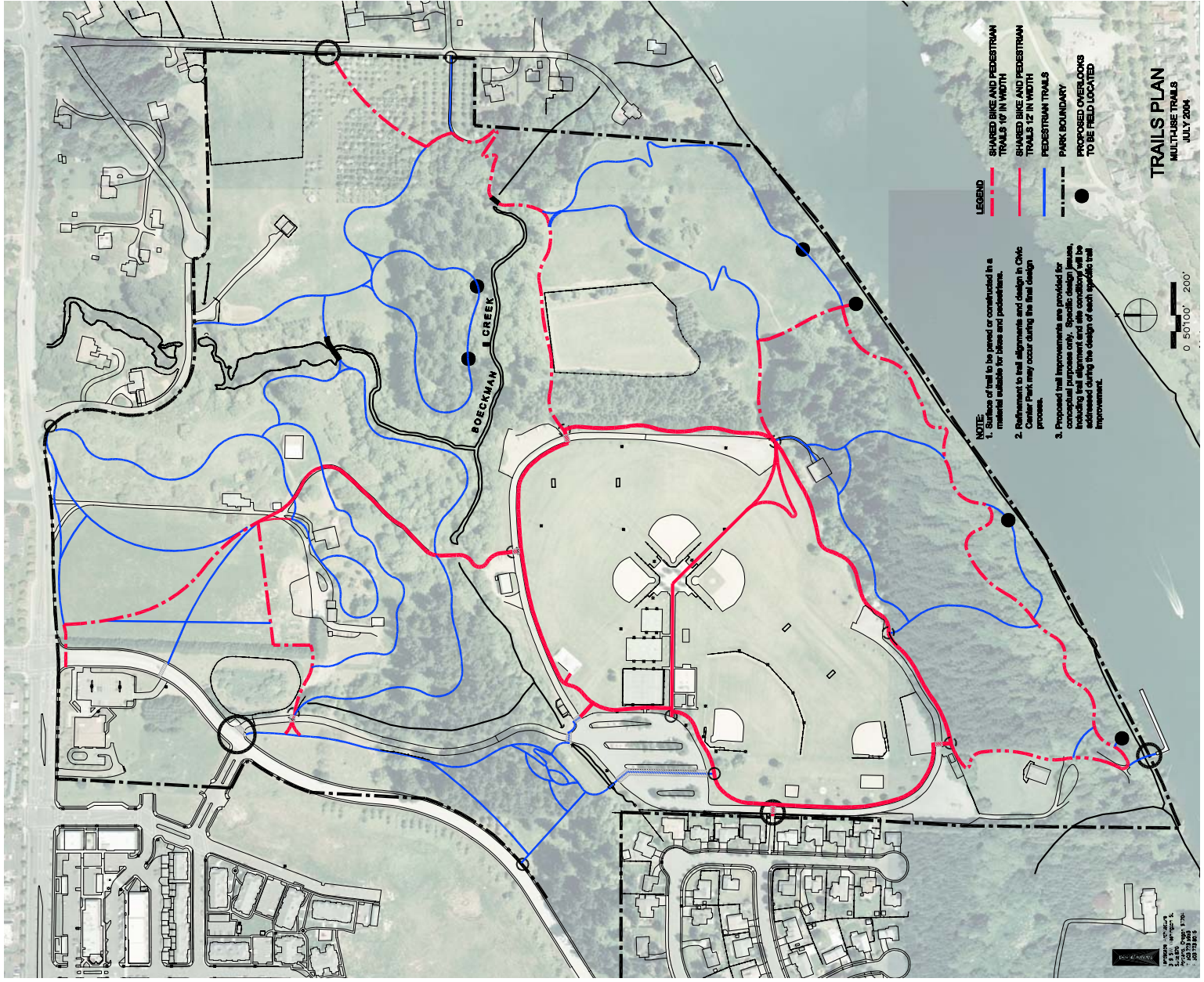
Trail Improvements



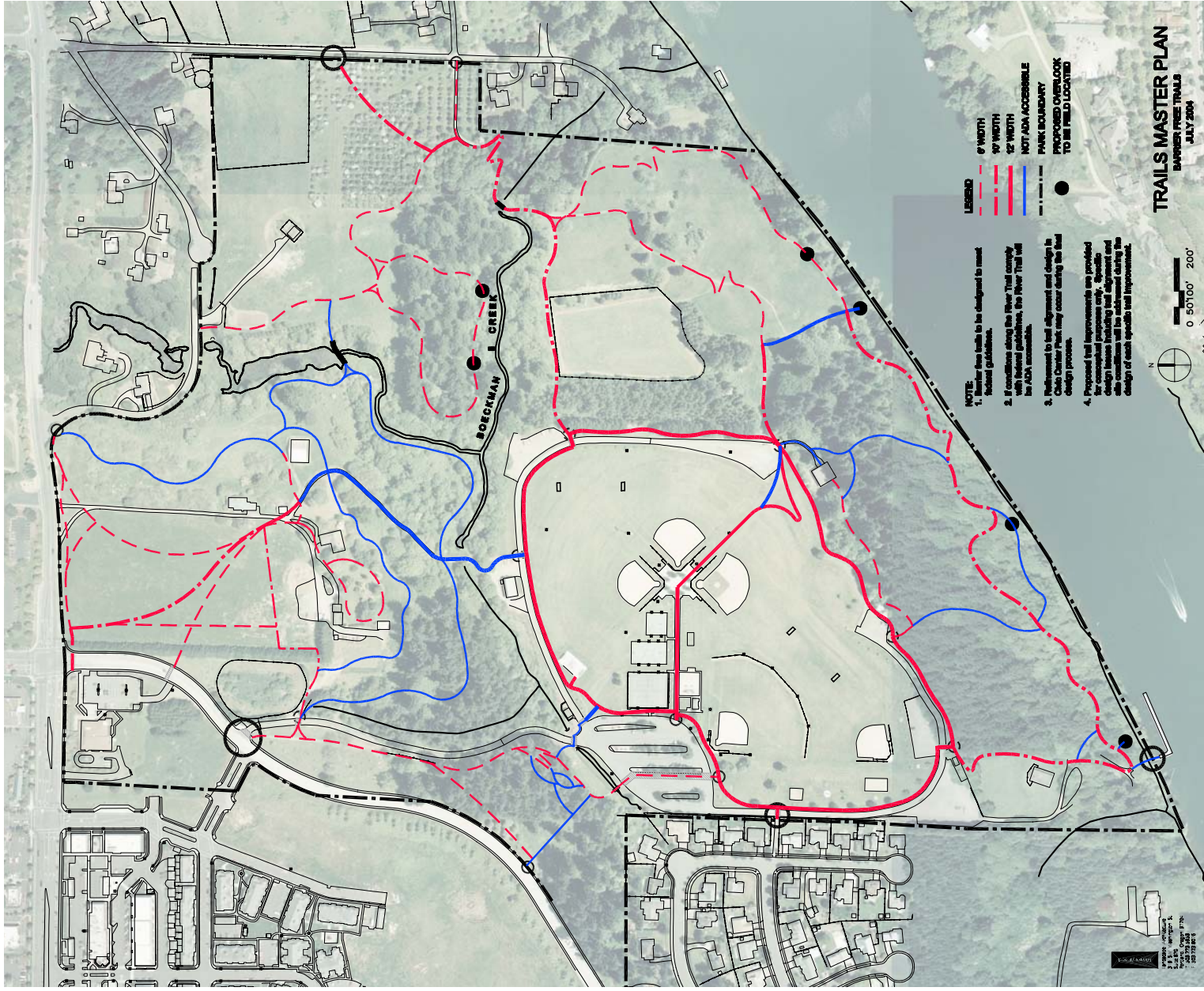


# Trail Improvements

<u>Trail</u>	<u>Purpose or Theme</u>	<u>Description</u>	<u>Dimensions</u>	<u>Signage</u>	<u>Illumination</u>
Primary Access	Provides trailhead & park access from northwest corner at Memorial Drive	Pedestrian - paved	6 ft. wide	Kiosk with park identification, map, wayfinding & regulatory signage	no
Secondary Access	Provides trailhead & park access from east & west neighborhoods	Shared pedestrian & bike - paved	10 ft. wide, 1,137 ft.	Park identification, map, wayfinding & regulatory signage	no
Tertiary Access	Provides trailhead & park access from the north, west and east	Pedestrian - paved or ADA surface	6 ft. wide, 658 ft.	Park identification, map, wayfinding & regulatory signage	no
Central Loop	Provides access from parking to internal trailheads; exercise loop	Shared pedestrian & bike - paved	12 ft. wide, 4,232 ft. long loop	Kiosks (2) with park identification, map, wayfinding & regulatory signage	low level
River Trail	Provides trail along river through forest; connects to boat dock & river overlooks	Shared pedestrian & bike - paved	10 ft. wide, 3,282 ft. long trail	Interpretive signage for river ecology & restoration areas	no
Homestead Trail	Provide tour of specimen trees and historic homesteads; connects to Boeckman Creek overlooks	Pedestrian - ADA surface	6 ft. wide 3,298 ft. long trail	Interpretive signage for specimen trees, historic homesteads & restoration areas	no
General Circulation Trails	Provide connections through park for hiking and passive recreation	Pedestrian & bike - paved; Pedestrian only - ADA surface or wood chips	6 ft., 10 ft. and 12 ft. wide, 11,429 ft.	Wayfinding & interpretive signage for restoration areas	no
Off-Site Connections	Provide access to park	Existing streets & sidewalks	varies	Directional signage to Memorial Park	existing



Multi-Use Trails Map



Barrier-Free Trails Map



# Appendix D

Estimated Construction Costs



# Estimated Construction Costs

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Cost Range</u>	<u>Phase</u>
Primary, secondary, tertiary access point	LS	1	\$14,000	Phase 1, 2 & 3
General park circulation trail (gravel), includes grading & header board	s.f.	114,290	\$444,584	Phase 1, 2 & 3
Central Loop Trail (asphalt), includes grading, base rock & paving	s.f.	50,784	\$281,667	Phase 1
Core area general circulation connection (concrete) includes grading, base rock & concrete)	s.f.	9,570	\$70,711	Phase 1
Homestead Trail (ADA soft surface), includes grading & wood chips	s.f.	19,788	\$44,230	Phase 2 & 3
Primary Access Trail	NIC	-	-	Existing
River Trail (gravel), includes grading & header board	s.f.	32,820	\$127,920	Phase 2
Secondary Access Trail (asphalt), includes grading, base rock & paving	s.f.	11,370	\$25,414	Phase 3
Tertiary Access Trail (paved or ADA surface), includes grading & materials	s.f.	3,948	\$15,387	Phase 1 & 3
Boeckman Creek crossing Boardwalk (wooden)	l.f.	100	\$21,000	Phase 3
Boeckman Creek crossing Bridge (reused bridge), installation only	LS	1	TBD	TBD
Kiosk	LS	3	\$31,500	Phase 1
Signage: park identification, wayfinding, interpretive & regulatory	LS	1	\$77,000	Phase 1, 2 & 3
Site Furnishings: picnic tables, trash receptacles & benches	LS	1	\$92,500	Phase 1, 2 & 3
River Overlooks	LS	4	\$7,000	Phase 2

**Total:**

Phase I  
Phase II  
Phase III

**\$1,252,913**

\$530,363  
\$495,465  
\$227,085

**General Assumptions**

1. Cost estimates are for construction costs only and do not include design, administration, contractors overhead and profit or other soft costs or fees. (add 25% for these costs)
2. All costs are estimated in 2004 prices and are subject to 3-5% yearly increase.
3. Costs can vary based on phasing of work.
4. Parking is not included.

**Unit Definitions**

LS = lump sum  
s.f. = square feet  
l.f. = lineal feet





# Appendix E

Summary of the Public Involvement Process



**City of Wilsonville**  
**Wilsonville Memorial Park Trails Plan**  
**Open House #1**  
**October 7, 2003**

**Agenda**

- Welcome and introductions.
- The trails planning process.
- The public involvement process.
- Project goals and objectives.
- Presentation of Site Analysis
- Presentation of Preliminary Trails Plan
- Questions and discussion
- Presentation of Site Analysis

END

**City of Wilsonville**  
**Wilsonville Memorial Park Trails Plan**  
**Open House #1**  
**October 7, 2003**

**Summary of Input**

Park users agreed that trails should have themes that represent historical events that have taken place on present day Memorial Park property.

Community members would like to see the park improvements done in phases, taking into consideration what is priority.

A looped trail system was suggested to give park users a "circuit" to walk/run/bike.

There was concern expressed over how many trails would be paved. The majority of the participants were not in favor of paved trails. They agreed that the main trail around the recreational core should be paved.

One participant expressed a need for more extensive bike trails.

It was suggested that a creek crossing be made over Boeckman Creek in order to give park users a connection to the water.

All in attendance agreed that signage and trail maps would be useful. It was even suggested that a city wide trail map was needed.

Kerry pointed out that there is a trail along the north hillside that contains stairs access. Kerry stated that the trail needs some repair but that it passes beautiful trees.

Park users expressed a need for more programming within the park. They would like to see "more activities" such as entertainment and instruction/classes take place in Memorial Park.

The suggestion was brought forward to consolidate all the maintenance facilities on the old "Nike" property and relocate the community gardens.

END

**City of Wilsonville  
Wilsonville Memorial Park Trails Plan  
Neighborhood Meeting  
November 4, 2003**

**Agenda**

- Welcome and introductions.
- The trails planning process.
- Project goals and objectives.
- Presentation of Image Board
- Presentation of Site Analysis
- Presentation of Trail Themes
- Presentation of Preliminary Trails Plan
- Questions and discussion
- Conclusion

END

**City of Wilsonville  
Wilsonville Memorial Park Trails Plan  
Neighborhood Meeting  
November 4, 2003**

**Summary of Input**

Adjacent residents agreed that a new goal should be added. The new goal is to protect neighbors.

Residents living on or adjacent to Rose Lane rejected more parking at the existing two car gravel parking area. They also agreed they did not want to see a major park identification sign at the intersection of Wilsonville Road and Rose Lane. They did agree upon a bike and pedestrian access only sign. Residents also agreed that the secondary access point along Rose Lane should be shifted north to the utility clearing within the holly orchard.

Concern was brought up that the Central Loop trail connection from the existing concrete walkway to the skate park was in conflict with soccer play.

All attendees agreed that low level lights on the Central Loop trail and needed for safety reasons. One community member suggested that the lights be placed on a timer which could be activated via a switch on the proposed kiosk.

A concern was raised that youth soccer programmers have been looking at the flat portion of the site near and within the existing holly orchard.

Attendees favored the proposed trail alignment that led the trail closer to the river. They felt that this trail would allow users to dis-

cover the river in a more personal manner. A need for more river viewing access was expressed. Others would like to see the River Trail designated as a multi-use trail. All participants agreed that the existing trails should be used where applicable and that benches be provided along trails.

One member expressed preference for dirt trails versus gravel because of the 'natural' effect. This member then said that they would consider bark chips over gravel.

It was agreed upon that the gravel access road near shelter C should read as Shelter C Service Access Road. Participants also agreed that the general circulation trail near the Nike well site should move west to follow the tree line.

A suggestion was made to provide interpretive signage on the Arboretum Trail and to let the library be the starting point for the Arboretum Walk. Later to be known as Homestead Trail.

It was suggested that both park entries along Rose Lane would become tertiary access points. Later it was agreed that the north entry along Rose Lane would be secondary and the south entry would be tertiary.

A concern for ADA access was expressed. It was agreed upon that ADA access would be considered when laying out the final trails plan.

It was agreed upon that all trails should be field located before construction and that trails be classified according to difficulty ratings.

END

**City of Wilsonville**  
**Wilsonville Memorial Park Trails Plan**  
**Open House #2**  
**November 20, 2003**

**Agenda**

- Welcome and introductions.
- Project goals and objectives.
- Presentation of Site Analysis
- Presentation of Trail Themes
- Presentation of Preliminary Trails Plan
- Conclusion
- Questions and discussion

END



**City of Wilsonville**  
**Wilsonville Memorial Park Trails Plan**  
**Open House #2**  
**November 20, 2003**

**Summary of Input**

Park users raised concern over issues of safe circulation. Neighbors to Memorial Park have seen suspicious persons coming from woods. All in attendance agreed that low level lighting should be used along the Central Loop Trail.

Kerry stated that although the City is planning on replacing the existing culvert with a pedestrian bridge; trail development is first priority.

A crosswalk at Rose Lane at the existing park entrance was discussed. Neighbors of the park entry expressed concern over the crosswalk bringing additional park users to this entry.

Neighbors reported seeing nesting owls on the park site.

Questions were asked about the construction material that would be used for the river overlooks. Park users would like to see natural materials used that blend in with the surrounding environment.

Community members would like to see the Memorial Park Trails Plan be coordinated with the proposed Civic Center Park design.

Park users agreed that the general circulation to the east of Civic Center Park should be eliminated. They also agreed that graphically there needs to be a green trail line in the shelter C gravel service road. It was suggested that part of the Homestead and east access

trail be changed from blue dashed to green.

All present agreed that a walking club/program would help to promote Memorial Park, initiate interest and educate through the promotion of wildlife and seasonal walks. They also agreed that designated trails would need frequent benches for older community members.

END

# Appendix F

Summary of Survey Results



**City of Wilsonville**  
**Wilsonville Memorial Park Trails Plan**  
**Survey Results**  
**Aug. 2003 - Nov. 2003**

The city and its consultants conducted two on-site surveys and provided survey materials at both the public open houses and the neighborhood meeting. In total, 28 community members were surveyed. Not all park users answered all survey questions, resulting in total percentages per question less than 100%. The survey results are summarized below per survey question.

How often do you use Memorial Park during the year?

- 1% first time users
- 22% daily park users
- 30% weekly park users
- 22% monthly park users
- 22% less than four time a year

Typically, what time of day?

- 25% morning
- 30% afternoon
- 45% evening

What members of your family use Memorial Park?

- 30% self
- 14% self & husband
- 18% self & wife
- 1% self & dog
- 33% self & whole family

What are their ages?

(results reflect the number of family members per age group of all survey participants who answered the question)

- 2 0-10
- 3 11-20
- 2 21-30
- 6 31-40
- 5 41-50
- 3 51-60
- 2 61-70
- 1 71+

How often do you use the existing trail system in Memorial Park?

- 14% daily
- 67% weekly
- 14% monthly
- 17% never
- other:
  - 1% 3-4 times a year
  - 1% once
  - 1% did not know the trails where there

Why do you use the existing trail system?

- 39% exercise
- 39% exercise & nature walk/wildlife viewing
- 13% access to events (e.g. picnics, sports)
- 1% nature walk/wildlife viewing
- other:
  - 1% dog walking

Are you aware of the boundaries of the park?

- 37% yes
- 41% no
- 22% improved area only

What are the important trail connections to Memorial Park from off the site?

- to Town Center via Wilsonville Road
- to Rose Lane
- to neighborhoods
- to south parking, east parking, boat ramp
- to Memorial Drive
- to Daydream
- to bike lane on Wilsonville Road
- to neighborhoods to the north

How do you typically arrive in Memorial Park?

- 68% car
- 1% bike
- 21% foot
- 1% boat

If the trail system to and in Memorial Park were improved, would you be more inclined to use an alternative to arriving by car?

- 25% - yes
- 12% - no
- 63% - no comment

What are the important points of interest in Memorial Park that should be connected and accessible by trails?

- Rose Lane and Kolbe Lane

- boat dock to parking area
- neighborhoods to park
- event areas
- trails to shelters
- river, picnic shelter, dog park, other city parks
- Willamette
- water-wheel
- trails and dog walk
- It's great just as it is
- natural resources, river, unique trees, history of site
- sports fields
- picnic shelters

Additional Comments:

As well as walking in the park almost every day I also like to trail ride my bike. I think the parks people have done a great job maintaining the existing trails. I would very much like to see more trails built. I also think the dog off leash area could be and should be enlarged.

Avoid impact to wildlife. Would prefer not to have trail in Owl woods. Move east trail of Civic Center Park away from wildlife corridor. No lighting. Prefer wood chips to gravel.

The park is fine as is. Spend the money on something that needs to be done.

The park is very well taken care of. The facilities are always clean. It's a great place! We love the big trees.

Need to make trail/trail heads more visible from core area.

END

# Appendix G

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