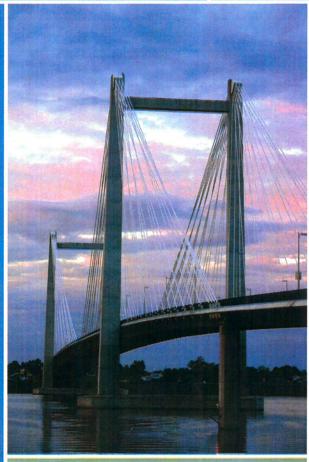
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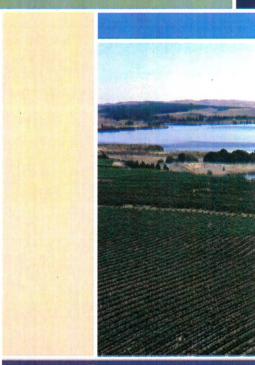


Tri-Cities Rivershore Enhancement Council









A project of the Tri-Cities Visitor & Convention Bureau



RIVER SHORE INVENTORY STUDY



Tri-Cities Rivershore Enhancement Council Inventory

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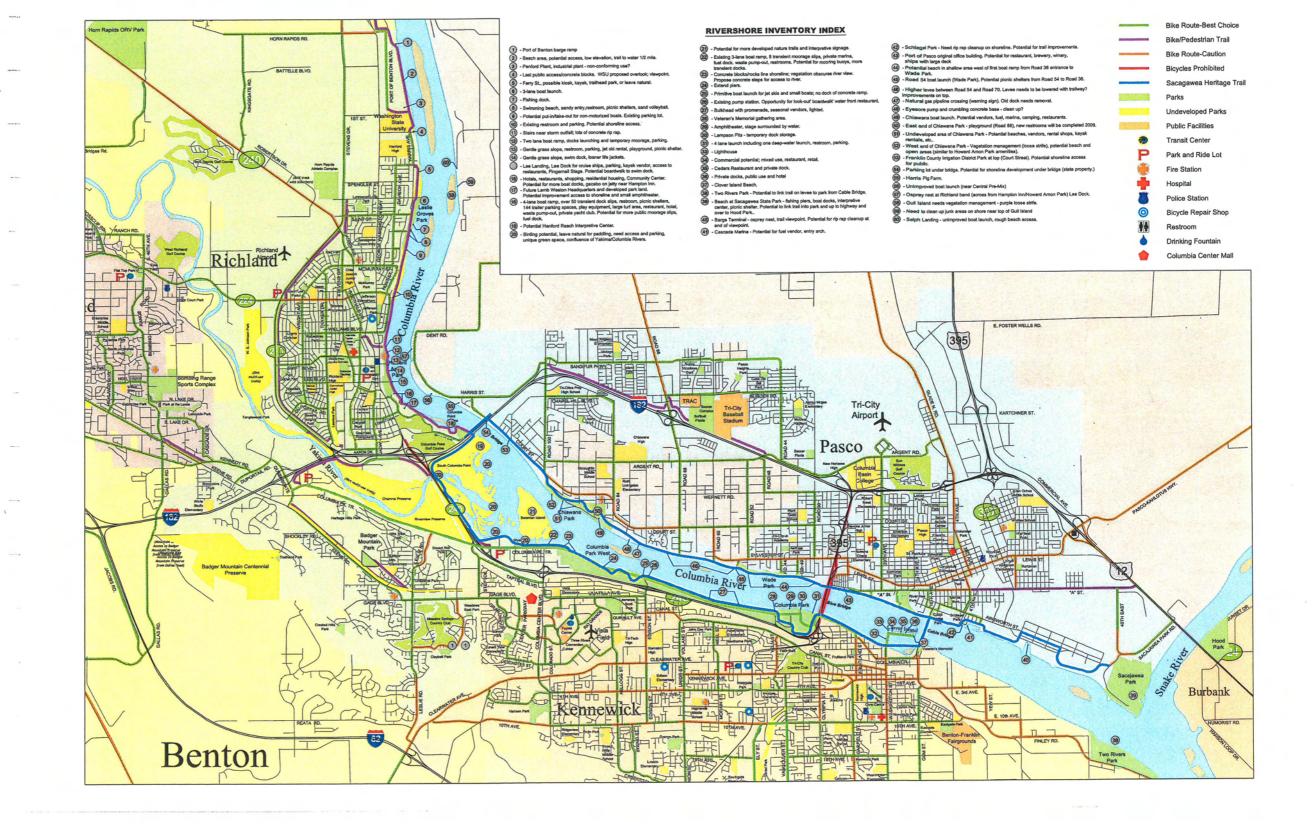
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River Shore Inventory Study

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Rivershore Inventory



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Master Plan

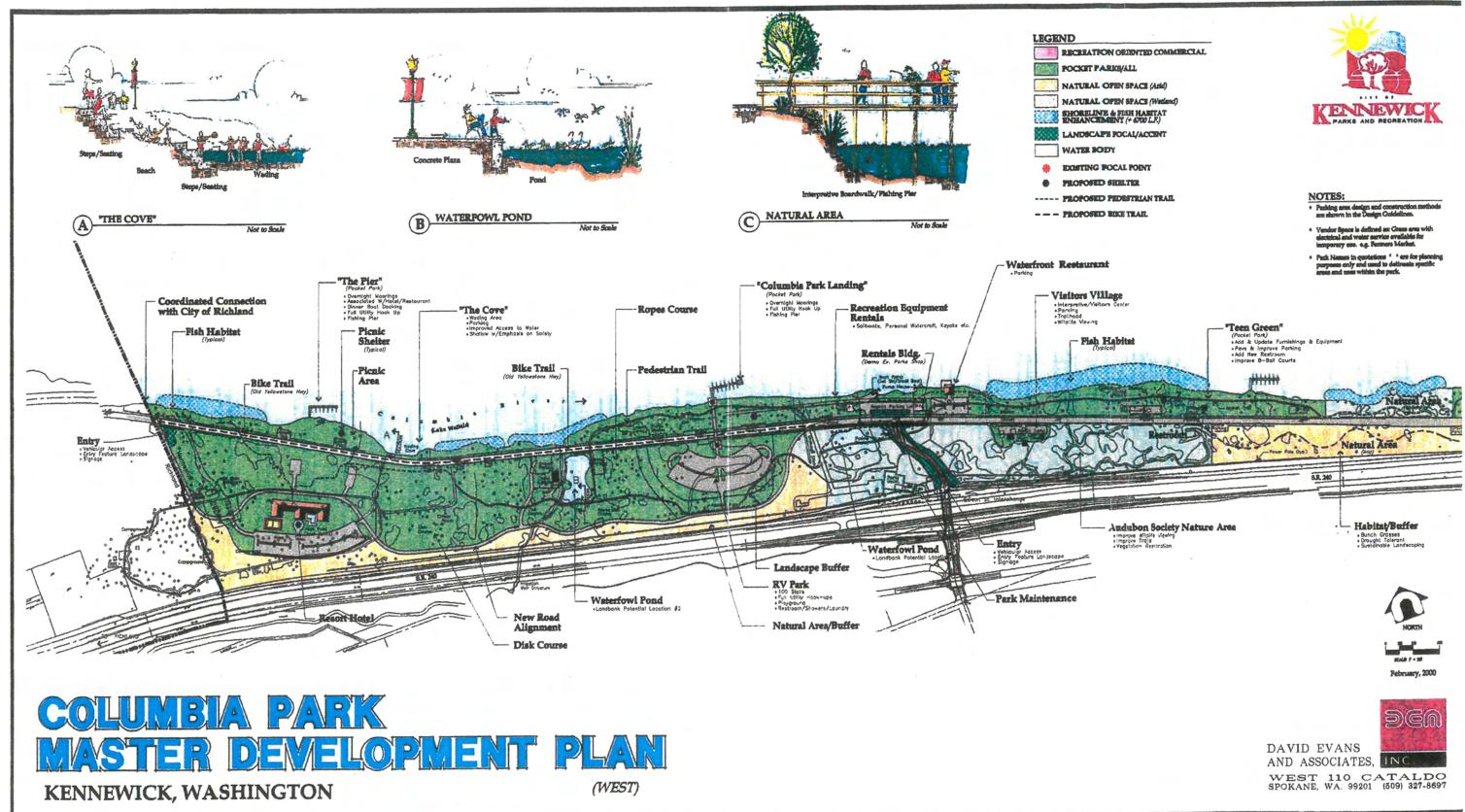
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River Shore Inventory Study

3rd Tab

City of Kennewick



COLUMBIA PARK TER DEVELOPMENT PLAN Boat Launch Area -KENNEWICK, WASHINGTON (EAST) Improve Shoreline Access/Seating - Bicycle Circulation Official Race Tower Center of Water Follies Track Shoreline Restoration Vegetation Restoration
 Fish Habitat
 Interpretive Area "Meadow Shares" "Nature's Park" (Pocket Park) • Water Accessible Interpretive Boardwalk Figh Habitet Habitat/Buffer

- Bunch Grassas

- Brought Tolerant

- Sustainable Landscoping Major Entry RECREATION ORIENTED COMMERCIAL POCKET PARKS/ALL NATURAL OPEN SPACE (Add) NATURAL OFEN SPACE (Wedend) SHORELINE & FISH HABITAT ENHANCEMENT (+ 6700 LF.) LANDSCAPE POCAL/ACCENT WATER BODY **BUSTING POCAL POINT** PROPOSED SHELTER ---- PROPOSED PEDESTRIAN TRAIL DAVID EVANS (E) "THE WATERFRONT" - - - PROPOSED BIKE TRAIL AND ASSOCIATES, INC. F "RING SIDE" WEST 110 CATALDO SPOKANE, WA. 99201 (509) 827-8697 Not to Scale Not to Scale

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Council

River Shore Inventory Study

4th Tab

City of Pasco



Request for Qualifications

City of Pasco

Boat Basin/Tank Farm Study

The City of Pasco is seeking qualifications and expression of interest from consultants to prepare a subarea plan for the Boat Basin/Tank Farm area located east of the Cable Bridge (10th Ave) and between Ainsworth Ave and the Columbia River shoreline.

The purpose of the study is to prepare a development vision and guidelines for the Boat Basin/Tank Farm area within the context of the City of Pasco Comprehensive Plan and the Port of Pasco Master Plan. This study would take a specific look at access, aesthetics, revitalization potential, and other urban design issues of the area - recognizing it as a prime river access property in the City. The study would develop preferred land use and circulation strategies and a strategy for implementing the redevelopment vision.

The request for qualifications is intended to evaluate a company's or team's ability to accomplish the study in a timely manner within a limited budget. Evaluation will be based on team qualifications, approach to the project, relevant experience, budget optimization and timeline for completion. A supplemental information package can be furnished upon request.

Information is due to the City by close of the business day on Friday, October 2, 2009.

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Pasco 2009 Rivershore Enhancement Plan

1. Executive Summary

Past planning efforts pertaining to the local shorelines have resulted in a plethora of documents ranging from regional, cooperative efforts to local plans. Some of the plans are broad in scope and general in their outlook; others are highly focused with measurable outcomes.

The objective of this plan is to review past planning efforts, and to consolidate and update goals, input and data from disparate sources into a single City of Pasco Shoreline planning document with narrow, metric action items.

2. Review of Previous Plans and Related Documents

The following documents were reviewed in the preparation of this plan:

- a. Comprehensive Plan 2007-2027
- b. BPIC Shoreline Permit; April 2008
- c. Parks & Recreation Plan 2005 Update
- d. Broadway Properties Land Use and Market Analysis; December 2004
- e. Master Plan; Sacajawea Heritage Trail: May 2000
- f. Tri-Cities Rivershore Enhancement; 1997
- g. Pasco Rivershore Enhancement Vision

3. Matrix

The following river-related elements can be found in the above documents (see matrix):

- a. Access
- b. Parking
- c. Bike Path/Trail
- d. Park/Sport Field
- e. Picnic/Pavilion
- f. Restroom
- g. Pier/ Boat Launch
- h. Water Feature/ Fountain
- i. Environmental
- j. Interpretive
- k. Commercial Development
- 1. Residential Development
- m. Trash Cans
- n. Dog Waste Station
- o. Levee Lowering
- p. Historic
- q. View Shed
- r. Beach
- s. Amphitheater
- t. Landscaping

4. Inventory of existing amenities

The following amenities have been installed along the City of Pasco shoreline to date:

- a. Access
- b. Parking
- c. Bike Path/Trail
- d. Park/Sport Field
- e. Picnic/Pavilion
- f. Restroom
- g. Pier/ Boat Launch
- h. Water Feature/ Fountain
- i. Environmental
- j. Interpretive
- k. Commercial Development
- l. Residential Development
- m. Trash Cans
- n. Dog Waste Station
- o. Levee Lowering
- p. Historic
- q. View Shed
- r. Beach
- s. Amphitheater
- t. Landscaping

- 5. Challenges and Opportunitiesa. Location/Distribution of current amenities
 - b. Levees
 - c. Water
 - d. Restrooms
 - e. Shade
 - f. Dog facilities

- 6. Updated Goals and Objectives-- The goals of the 2000 Sacagawea Heritage Trail plan are as follows:
 - a. Promote cooperation among jurisdictions
 - b. Provide trail continuity
 - c. Enhance connections with:
 - i. Upland areas
 - ii. Create links with parks, civic and cultural activities
 - d. Encourage regulators and developers of adjacent private property to enhance connections, buffers, etc.
 - e. Promote safety through quality, consistency and appropriateness of:
 - i. design
 - ii. construction
 - iii. maintenance
 - f. Increase visibility of the Trail and the rivers within all communities
 - g. Facilitate way-finding
 - h. Protect and interpret cultural, historical and natural resources
 - i. Design for environmental sustainability
 - j. Plan affordable improvements
 - k. Enhance accessibility (ADA)
 - l. Plan for regulatory approval
 - m. Maintain flood control
 - n. Enhance livability
 - o. Enhance economic vitality
 - p. Generate financial support for proposed improvements
 - q. Promote tourism

7. Proposed Linkages and Amenities

8. Possible Funding Sources

SCOPE OF WORK - BOAT BASIN/TANK FARM SUB-AREA

Scope of work for property located east of the Cable Bridge and adjacent to the Columbia River shoreline, in the City, as shown on Exhibit "A".

The City of Pasco and the Port of Pasco desire to prepare a subarea plan that will include the Boat Basin public and adjoining private properties, and the Tank Farm area. The subarea planning process is intended to be incorporated into the City's Comprehensive Plan. It is also intended that the subarea plan will functionally incorporate and coordinate elements of the existing Port Master Plan (SMP 08-001) with the Tank Farm and Boat Basin properties. The subarea planning process should be completed [within two (2) years from the date of this Interlocal Agreement.(?)]

Ownership of this area (including the "Tank Farm" and the "Boat Basin") is generally divided between the Port of Pasco, the US Government and private owners (see Exhibit B "Ownership Map");

Adjacent land has been master-planned through the Port of Pasco (SMP 08-001). The Master Plan includes a mix of land uses and is divided into four general areas: (1) the Riverfront Business Park; (2) the Expansion Area; (3) the Retention Area; and (4) the Rail/Barge Terminal Area.

- A. The subarea planning process shall include (at a minimum):
 - 1. a statement of the desired results of the planning process,
 - 2. an inventory of existing physical conditions of the planning area,
 - 3. a public participation component,
 - 4. identification of preferred land use,
 - a transportation (including bicycle and pedestrian facilities) and infrastructure element;
 - 6. a capital facility element that will identify preferred financing options.
 - 7. Additional components (design guidelines, development standards, regulatory and environmental constraints...) are encouraged.
- B. The total project cost shall not exceed \$50,000.00.
- C. The acquisition, holding, or disposing of real or personal property is not anticipated.

MEMORANDUM

DATE:

July 10, 2009

TO:

Planning Commission

FROM:

Jeffrey B. Adams, Associate Planner

SUBJECT: Rivershore Amenities Plan 2009

Past planning efforts pertaining to the local shorelines have resulted in a plethora of documents ranging from regional, cooperative efforts to local plans. Some of the plans are broad in scope and general in their outlook; others are highly focused with measurable outcomes.

For example, some of the broader goals of the 2000 Sacagawea Heritage Trail plan included enhancing livability and economic vitality, and promoting tourism. More focused plan goals included providing trail continuity, enhancing connectivity with upland areas and linking City parks, protecting and interpreting cultural, historical and natural resources, and providing affordable improvements.

The objective of the 2009 Rivershore Amenities Plan is to review some of these past planning efforts, and to consolidate and update goals, input and data from disparate sources into a single City of Pasco Shoreline planning document with narrow, metric action items.

Item Name	Access	Access Parking Path/ Sport Trail Field	Bike Park/ Path/ Sport Trail Field		Picnic/ Rest Pavillion room	Rest	Pier/ Boat Launch	Pier/ Water Boat Feature/ Launch Fountain	Environ mental	Interpr etive	Environ Interpr Commercial mental etive Development	Interpr Commercial Residential Trash etive Development Development Cans		Dog Waste Station
Comprehensive Plan														
BPIC Shoreline Permit	>	>	>	z	z		>		7		Υ			
Parks and Recreation Plan	>		>	>	>	>	>		Y					
Broadmoor Study Area	>			>			>		Υ		Υ	>	>	
Sacagawea Heritage Trail Master Plan	\	٨	\	>	٨	>		>	\	>				
Tri-Cities Rivershore Enhancement	>		>				>	>			>			
Pasco Rivershore Enhancement Vision	\	Υ	>	>	\	>	>	>	\		>	>		
Reconnaisance Report Tri-Cities Levees														
Rivershore Enhancement Plan Ph II Upland Linkage	\						7			>	>	>		
Tri-Cities Rivershore Enhancement Plan	P&R													
Alternatives for Development and Enhancement of the Pasco/Franklir	Pasco/Frai	nklin Coun	n County Shoreline	eline										
BPIC Marina Renovation Plan														
Cycling Tri-Cities														
2005 Regional Bicycle and Pedestrian Transportation														
Plan														

Scope Legend: 1=River-specific and Comprehensive; 2=River-Specific but narrow; 3=Not River Specific

Item Name	Levee Lowering	Historic Shed	View	Beach	Beach Ampitheater Landscaping	Landscaping
Comprehensive Plan						
BPIC Shoreline Permit						
Parks and Recreation Plan						
Broadmoor Study Area						
Sacagawea Heritage Trail Master Plan						
Tri-Cities Rivershore Enhancement	>	>	>			
Pasco Rivershore Enhancement Vision	>		>	>	\	>
Reconnaisance Report Tri-Cities Levees	>					
Rivershore Enhancement Plan Ph II Upland Linkage	>					qi
Tri-Cities Rivershore Enhancement Plan						
Alternatives for Development and Enhancement of the P						
BPIC Marina Renovation Plan						
Cycling Tri-Cities						
2005 Regional Bicycle and Pedestrian Transportation						
Plan						

Scope Legend: 1=River-specific and Comprehensive; 2=

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5th Tab

City of Richland

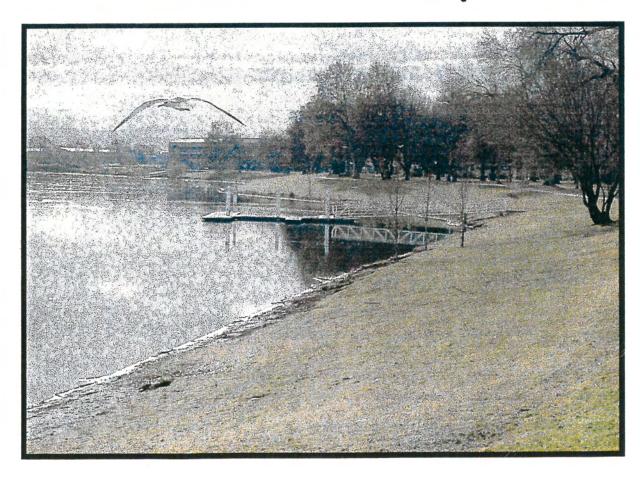
October 1999

Rivershore



Master

Plan



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I EXECUTIVE SUMMARY

The City of Richland is graced with a unique combination of natural and developed park assets along its riverfronts. The legacy of Army Corps of Engineers flood control structures, along with additional public lands in the floodplain, provide the City with almost continuous public ownership along the shorelines of both the Columbia and Yakima Rivers. Much of the shoreline of the Columbia River has been developed into traditional parks with lawn and shade trees, picnic and play areas, paved trails, boat launches and other passive and active use facilities. The Yakima River shoreline is relatively natural in character, with extensive riparian areas. Although some of these areas have been disturbed, and may lack pristine native plant communities, they contain tremendous aesthetic and habitat values. Each river has its own unique values as a resource to the community and to wildlife.

This Master Plan establishes guidelines for development and/or preservation of riverfront lands and facilities. In doing so areas are designated to receive substantial proposed changes or to remain largely the same, with slight refinements. As a master plan this document is intended to show the general size, number and location of proposed facilities or areas for preservation / restoration. Like any Master Plan this is somewhat conceptual in nature, and will require refinements to the location, size and finishes of design elements prior to implementation. Proposed facilities, improvements or restoration work are intended to be implemented over a long time frame, with the plan to be phased over a period of up to twenty years. Following approval of this plan, and as funding becomes available for proposed improvements to be implemented, more detailed designs will be needed prior to construction. That future design process will offer opportunities for further refinement of size and location of elements of this plan, and to determine details such as materials and finishes.

In addition to showing proposed park and open space conditions circulation and connections between the community and the riverfront is a key element of this plan. The goal is to establish seamless connections between potential park users at home or at work, and their riverfront parks. Additional signage could also be installed to assist tourists in finding waterfront parks. Pedestrian and bicycle connections along with watercraft and vehicular access are considered, in order to create a variety of travel routes, accounting for the needs of commuters, local recreational users and tourists. A web of feeder routes consisting of sidewalks, bike lanes and trails will facilitate travel to and from parks. Due to extensive use of water for boating, swimming etc., water travel routes for motorized and human powered craft have been incorporated into the plan. Trail placement takes advantage of the area's exceptional scenery while protecting sensitive riparian habitat. Grades in the City are typically gradual, and every effort should be made to provide accessible routes.

Trailheads, parking areas, boat launches and associated facilities are proposed at regular intervals to allow users access to a wide variety of land and water facilities. Branch routes are designed to integrate existing parks, schools and civic facilities, and provide connections to anticipated commercial and residential development.

On a broader scale, the trails within the Master Plan will form regional links within the Tri-Cities and West Richland as well as to Franklin and Benton Counties. Completion of important trail links contained in this plan will offer City residents access to many miles of existing and proposed trails outside Richland to other regional trails including the Tri-Cities Loop Trail. This plan also responded to the Tapteal Greenway's regional trail plan.

Local residents and people from throughout the region will benefit from implementation of this plan. Build-out of the completed plans may take more than twenty years. A variety of public and private funding sources from local, County, State and Federal sources should be tapped for development assistance. Changing land use patterns offer opportunities for gradual, phased construction and/or land acquisition over a period of years.

Recent ideas to lower or breach some dams on the Columbia or Snake Rivers could have serious adverse impacts upon the work proposed in this Master Plan. Existing and proposed riverfront improvements have been designed to accommodate a known set of parameters, and to take advantage of riverfront locations. Major modifications to the level of the McNary pool could render many existing and proposed facilities inoperable.

Efforts have been made to incorporate the unique character and site details of Richland into the Master Plan. Future detailed design work should coordinate furnishings and facilities to match the character of the landscape and cultural elements adjacent to the riverfront.

II MASTER PLAN

A. INTRODUCTION

1. Purpose & Scope of Work

During the spring of 1998 a consultant team lead by JGM - Landscape Architects (with JDL - Consulting Engineers and Richard Harrington - Facilitator) was selected to prepare the City of Richland's Rivershore Master Plan. The scope of work included:

- Preparation and presentation of a graphic inventory and analysis of existing conditions, and solicitation of visions from the community.
- Presentation of preliminary concepts, and solicitation of public comments.
- Refinement of preferred alternatives for a graphic and written Master Plan, and preparation of construction and acquisition cost estimates and phasing scenarios and solicitation of public comments.
- Coordination with the Parks and Recreation Commission, City Staff, special interest groups and members of the public.

In addition to careful consideration of riverfront park land the City expressed particular interest in circulation routes providing convenient access to parks, and increasing the visibility of the riverfront from the street system. Physical and visual linkages between residential areas, parks and open space, schools and civic facilities were seen as central to enhancing riverfront parks. Parks circulation routes should be designed for as many user groups as possible, and for people of all ages and abilities. Consideration of a broad range of design options, from developed parks to natural open space was required.

2. Relationship to Other Plans

The parks, open space and circulation guidelines established in this plan have built upon the ideals established in a number of previous plans, as well as the regulatory framework. Other plans include City of Richland plans, plans produced by nearby cities and governmental agencies (e.g. Port of Benton and Ben Franklin Transit), County plans, and plans by the U.S. Army Corps of Engineers. Input from concerned Native American Tribes has also been considered, although no written documents were submitted. One of the purposes of this work effort was to coordinate and integrate the ideas relating to riverfront parks from different plans, as well as to expand upon the parks and trails perspective.

Many good planning documents have been produced for the City and region. These include a host of plans dating back to the McNary Master Plans from the early 1980's, to recent area plans for the Chamna Preserve and Wye Area. Some of these focus specifically on the waterfront, while others concern related upland areas.

3. Citizen Participation

The consultant team worked closely with City Staff and the Parks and Recreation Commission to keep the public informed of plans, and to solicit public input. Extensive public involvement throughout the process was instrumental in shaping the plans and circulation routes in the Master Plan. Citizens provided detailed knowledge of specific sites, and offered input on their preferences for the plan. Both the local knowledge provided and visions expressed by residents who will be using the facilities in the future was carefully considered in determining the specific elements of the plans.

A number of public workshops were held to solicit opinions from as many sources as possible. These meetings were very well attended, providing good feedback from the community. City Staff did an excellent job advertising the meetings and providing opportunities for the public to view the plans outside the meetings, through a variety of media. Public input was also expanded beyond the meeting format - written comment sheets and a phone comment line increased opportunities for public comment. Many members of the City Council and Parks and Recreation Commission also attended the meetings, staying informed about the process and keeping the consultant team aware of their views. Following each meeting the consultants formulated or modified the plans to reflect a synthesis of meeting input and contextual factors. Later workshops focused on smaller refinements to plan alternatives presented during earlier meetings. The Master Plan is the result of excellent input from the community, City Staff, City government and boards and commissions.

Workshops and presentations were held on the following dates:

- 08-25-98 Visioning Workshop (review site analysis, solicit community input)
- 09-16-98 Planning Workshop (review programming alternatives, solicit input)
- 10-14-98 Master Plan Alternatives Workshop (review design alternatives, solicit small group input)
- 10-23-98 Parks and Recreation Commission Workshop
- 01-13-99 Preferred Alternative Draft Master Plan Presentation (solicit input on refinements to draft master plan)
- 06-10-99 Draft Final Master Plan Presentation (present draft final plan to City Council and Parks and Recreation Commission, solicit final review and prioritization comments)
- 10-09-99 Final Master Plan Presentation to Parks and Recreation Commission
- 11-10-99 Plan adopted by the Parks and Recreation Commission
- 12-14-99 Final Master Plan delivered to City of Richland for City Council approval

4. Goals

In response to the scope of work, and to citizen input, the goals of the Richland Rivershore Master Plan are as follows:

a. Objectives

- Expand public access / recreation
- Preserve natural habitat
- Enhance economic stability

b. Planning Criteria

- Public safety / security issues
- Natural factors
- Cultural factors
- Regulatory approvals
- Visibility
- Accessibility (ADA)
- Affordability
- Sustainability

Consistent with these goals the purpose of this master plan is to establish a long-term plan for circulation improvements, park development and habitat preservation.

5. Composite Site Analysis

A full range of existing conditions within the parks and potential circulation routes were considered by the consultant team to aid in establishing park and trail routes planning goals. The following are highlights of information gathered as a precursor to the planning process:

The landscape character of the riverfront along the Columbia and Yakima Rivers is quite different. Large portions of the riverfront along the Columbia River are currently developed park. Irrigated lawn and shade trees with a variety of active and passive park facilities are already established. For the most part these areas are attractive and function well, and require only minor modifications. Other undeveloped areas on the Columbia, such as the Port of Benton area and Columbia Point South, present opportunities for potential park improvements. A third category of land, exemplified by Columbia Point, has been designated by the City for planned waterfront development.

- Developed Park
- Natural Open Space
- Planned Waterfront Development

Along the Yakima River the shoreline is primarily more natural in character. Extensive riparian habitat, and floodplain lend themselves to preserves with limited improvements. Habitat

restoration, cleanup, trail construction and interpretation efforts have already begun in some areas (such as Chamna). Other locations, such as W.E. Johnson Park, house established uses which should be retained if possible.

Areas such as the Chamna Preserve and Columbia Point, which have approved area plans, were not considered for modification in this master plan. The approved plans have been accepted, and coordinated with this work, but not changed.

Integration of the central business district with the parks and trail system will improve park access for both residents and out-of-town visitors. Establishing circulation connections with sidewalks, bike lanes and trails could benefit local residents and trail users throughout the region. This could encourage out-of-town park users to shop in downtown due to improved access. A trail network could also provide residents better trail connections to surrounding communities. Coordination with road/bridge improvements and bus service adds to the potential use of parks and trails. Some existing infrastructure, however, may present obstacles to trail construction.

The Rivershore Master Plan provides the basis for public policy which will aid in securing future rights-of-way. As property develops along proposed trail corridors, land can be designated for the trail and the improvements negotiated. Some locations have existing sections of trail, established easements, or public ownership conducive to building trails. The master planning process identified and evaluated the best routes for future trails. Shoreline protection regulations will limit future development along the river banks, and provide an excellent opportunity for trail routes.

In summary, a number of important opportunities and constraints stand out:

Opportunities:

- Extensive public ownership along the riverfront
- Outstanding scenic values of the river corridors
- Established developed parks
- Established habitat preserves
- Potential improvements created during future development
- Existing regional trails
- Existing utility corridors / trail easements
- Planned transportation improvements
- Sensitive areas
- Cultural sites

Constraints:

- Vehicular conflicts with circulation
- Sensitive areas
- Cultural sites
- Water quality issues
- Potential flooding

B. CIRCULATION

1. Introduction

One of the primary elements of Richland's existing riverfront parks is a class I trail. An important aim of this plan is to extend the primary trail, and to create a network of side routes to improve access to and from riverfront parks. The circulation system will be comprised of sidewalks, trails, bikeways and water routes for a variety of users.

Much of the circulation system will consist of tree-lined boulevards with sidewalks and bike routes or bike lanes. The street trees should be planted to provide shade and to calm traffic. The City already has many large and beautiful street trees. The first priority in boulevard treatment should be preserving and maintaining the existing trees along these routes, then supplementing where gaps exist. One interesting theme could be established using the street tree system as an arboretum.

The City of Richland currently has a system of bicycle routes, identified on the City's "Bike Route Map". The existing routes consist largely of signed bike routes, without separated lanes for bicycle ravel. This master plan proposes to retain all of the existing bike routes, and to expand that system in two ways: by creating more complete pedestrian/bicycle improvements on existing bike routes, and by providing pedestrian/bicycle improvements on additional routes. The combination of these should provide a safer and more complete non-motorized circulation network. The expanded system of bicycle lanes and bicycle routes will create better trail connections with the downtown, neighborhood, and commercial areas. These bike routes should facilitate park and trail access and form more direct routes for bicycle commuters. The decision as to whether particular streets will have striped bike lanes, or simply be signed as bike routes will depend primarily upon existing and forecast traffic volumes and pavement widths. Higher volume streets should be striped to designate lanes for riders. This should be considered in conjunction with future roadway widening or resurfacing projects. Many of the bucolic side streets of Richland may not require separate bike lanes, and could be signed as bike routes based on a case-by-case safety evaluation.

There is currently an existing class I trail along much of the Columbia. The Rivershore Master Plan calls for extension of the trail, forming a continuous pathway along the Columbia. Routes along the Yakima are largely informal trail routes, which should be formalized, maintained and controlled. Where adequate public land is available, a separate, hard surface, multi-use trail will be built. This has many advantages including increasing safety by providing separation from driving lanes; flexibility by offering a surface for many types of trail users; and a pleasant trail experience due to the complete separation from auto traffic. The selection of trail routes along the Yakima and to outlying areas in this plan relies heavily on input from the Tapteal Greenway Plan. Similarly, circulation plans for the Wye Area have been coordinated with the City of Kennewick's planned changes to Columbia Park.

Where separated class I trails are built secondary, soft surface trails and/or social footpaths will be added where possible to better accommodate other users such as hikers, equestrians, joggers.

fishers and mountain bikers within the same corridor. Use restrictions (if any) on these smaller trails, particularly in natural preserves, can be determined in future planning efforts similar to that undertaken for the Chamna Preserve.

In addition to this proposed circulation network there are circulation obstructions which need to be dealt with for the system to function. The most important of these, from a parks perspective, is George Washington Way. We support the recommendations of other recent plans to calm traffic on G. W. Way. Traffic calming efforts could include a boulevard treatment, medians for pedestrian protection, pedestrian actuators at existing stoplights, and additional traffic signals. Current traffic volumes and speed on G. W. Way discourage pedestrian traffic to/from parks. Other important circulation obstructions relating to riverfront parks and trails, which warrant further study, include: Columbia Center Boulevard at SR-240, the potential realignment of Columbia Drive near Columbia Park West, West Columbia Drive at SR-240, and, Leslie Road at West Columbia Drive.

The other component of the circulation system is water routes. Due to the high numbers of people using various types of watercraft on the rivers in the summer accommodation of launch sites and areas for boaters to visit parks are crucial. During the public process it also became clear that some separation of incompatible types of watercraft, such as canoes and jet skis, may be needed. At the same time, the City wants to make an effort to provide areas for all types of watercraft.

Features of the proposed trail system include elements designed to provide an outstanding experience for trail users, and to facilitate prompt land acquisition and construction of the trail. Principal elements of the trail corridor include:

- Provide maximum public access to the riparian corridor.
- Create loop routes where possible.
- Design multiple trails within the primary trail corridor where possible to accommodate a variety of trail users.
- Build sidewalks and bicycle routes intended to complete a linkage between the primary trails, open space and civic facilities with the central business district and residential neighborhoods.

2. Trail Design Standards

a. Class I Bikeway (Primary Trail) - Paved, Separated Trail 12' Wide (can be outside R.O.W.)

A primary trail should typically be a minimum of 12' wide, with a paved surface (asphalt or concrete). The trail surface is separated by distance or a physical barrier from roadways. Trail construction should be such that safety, emergency and maintenance vehicles can travel the trail without damaging the surface.

A soft-surface shoulder at least 2' wide (grass or crushed rock) should follow each side of the trail. A clear zone free of all obstacles should be maintained within 5' of the edge of asphalt paving. All signs, posts, walls, and furniture should be outside of the clear zone. Vertical clearance of 10' should be maintained over the full width of the horizontal clear zone (including trail, shoulder and clear zone). In locations where barriers or walls may be placed closer to the trail, such as under bridges or near buildings, handrails should be constructed, and the trail surface should be widened. In some locations separate trail strands could accommodate potentially competing uses (such as road bikes and pedestrians, or horses and mountain bikes). Alternatively a centerline or other striping could be added as warranted by future user volumes.

Greater widths or different surfaces may be appropriate under certain circumstances. Trail widths greater than 12' may be advisable in the following situations:

- · areas where high user volumes are expected
- where visibility is limited or structures or activity areas crowd the trail
- where trail intersections warrant
- where viewpoints are incorporated into trail segments
- or at emergency vehicle access points.
- Where varying user groups have historic conflicts

Reduced trail width, down to 10', may be appropriate in certain locations, either because parallel trails exist, limited area is available for trail construction, or due to low anticipated user volumes in outlying areas. Some existing paved trails in high-use areas, such as the Hains levee and Howard Amon Park, which do not meet the 12' minimum standard width, should be widened. The primary waterfront trail through Howard Amon Park between Newton and the Hampton Inn. may warrant further increases in width beyond the 12' standard, due to heavy traffic and in order to establish a more urban aesthetic. Many existing trails in Richland have been constructed to an 8' width, and should be widened or replaced over time.

Where space allows a separate soft-surface trail should be incorporated within Class I trail corridors. This will provide for the maximum variety of user types to take advantage of the main trail routes along the rivers. This separation allows for a variety of experiences, and reduces conflicts between incompatible uses.

The construction techniques and surfacing material may need to be modified somewhat from a true "Class I" trail in areas with special conditions or use groups. A good example is the main trail from W.E. Johnson along the Yakima River towards Horn Rapids. Trail surfacing and construction techniques in that area should be appropriate for equestrians (perhaps wood chips or a fine crushed rock).

b. Class II Bikeway (Bike Lane) - Paved, Striped Bike Lane in Public R.O.W.

"Class II Bikeway" is a route in which bicycles travel in a designated, striped lane separated from automobile traffic. This can offer an extra safety margin for bicyclists traveling on roads with

higher vehicular traffic volumes. It provides a place for bike commuters to ride fast without creating a safety problem by exceeding trail speed limits. Standards should follow Washington Department of Transportation guidelines. The minimum bike lane width on roads with curbs is 5' from curb edge to traffic stripe, or 5' from the edge of the designated car parking area to the traffic stripe. Roads without curbs require only a 4' bike lane width.

c. Class III Bikeway (Bike Route) - Paved, Signed Bike Route in Public R.O.W.

"Class III Bikeway" is a signed bicycle route without striped separation from vehicular traffic. These routes are generally chosen because of their suitability for bike riders, and ideally should be on roads with relatively low traffic volumes and low speeds. The current bike route system in Richland relies heavily on these signed class III bike routes. The City should make an effort to upgrade to bike lanes or separate trails in the future to improve linkages as traffic volumes dictate.

d. Secondary Trail - Soft Surface, Separated 8' Wide Trail

Secondary trails should be at least 8' in width, and have a soft surface of compact earth, wood shavings, or crushed rock. The trail should be kept clear of obstructions to an 8' horizontal width and 10' vertical clearance. These paths could be included within Class I trail corridors where space and site conditions allow. The use of soft-surface paths is of particular interest to provide better routes for equestrians along the Yakima from W. E. Johnson to the northwest. Secondary trails could also be incorporated into trail corridors through open space or where class I trail corridors allow.

e. Social Footpath - Soft Surface, Narrow Walking Path

Social footpaths of narrow widths will be developed to increase passive use of park sites, particularly preserve areas. Though not detailed as part of this study, these paths should be planned and constructed to prevent haphazard trail formation and trampling of riparian vegetation. Many potential preserve sites in Richland have a network of existing paths and offroad vehicle roads. After vehicle traffic is eliminated some of these paths or roads could be eliminated (closed and restored), and others could be formalized as paths. Use of these trails may be restricted seasonally due to flooding or habitat sensitivity. Similarly, there may be restrictions on user groups in order to minimize conflicts and provide variety.

Crossings & Bridge Standards

Bridge crossings and undercrossings present design issues critical to the success of non-motorized connections. Establishing a trail link across and underneath the planned SR-24() revision is crucial to the completion of the Tri-Cities Loop Trail, connections between parks in north and south Richland, and the overall circulation system. Proper design of vehicular bridges must incorporate non-motorized users to ensure public safety and to create continuity of trails as transportation and recreation links. Incorporating non-motorized uses into any new bridge construction will save money (compared with expensive retrofitting) and ensure that non-motorized traffic is adequately served by new road, utility or railroad

construction projects. In addition, incorporation of utilities (sewer, water, gas, electrical/communication) on bridges should be accomplished in a manner that will not compromise trail function.

a. Overcrossings: - Minimum Standard Horizontal Clearance: 20' (or 10' each for separate one-way trails)

Bridge overcrossings are crucial to the success of a trail. A combined bicycle/pedestrian lane with a minimum 10' width in each direction is preferred. This allows more flexibility than a separate bike lane and elevated sidewalk configuration. Barriers between traffic lanes and the trail are needed to protect trail users. In addition, 54" high railings on both sides of the trail are required. Approach grades should meet ADA standards (maximum 5% slope, and maximum 2% cross slopes). Any gratings or manhole covers should be installed flush, and with grooves perpendicular to the line of travel.

The SR-240 causeway presents a special circumstance due to the fact that WSDOT would like to build one two-way trail along the east side of the road. In this case horizontal clearance minimums should be 20' (the width of the approaching trail -typically 12' plus two 2' shoulders - and an additional 4' clearance for safety and "shy-distance". The entire 20' width should be a paved surface to avoid problems with loose gravel landing on the surface of the trail. The increased width will reduce conflicts with oncoming trail traffic and make trail travel more comfortable than the standard 12' width. Where 20' is not available the minimum horizontal clear distance should be the width of the approaching path including both shoulders (typically 16' total). In addition to the trail width, occasional wider areas (an additional 4' or so) would offer trail users an opportunity to rest when crossing this long causeway.

b. Undercrossings: - Minimum Standard Vertical Clearance: 10'

To provide comfortable and safe trail access under bridges adequate vertical clearance will be needed. The preferred 10' minimum vertical clearance allows trail users to pass under bridges without dismounting from bikes or horses, and creates adequate headroom. Under very wide bridges clearance greater than 10' is desirable to counteract feelings of being confined. Further increases in vertical clearance would provide trail users a more pleasant experience, but additional clearance must be balanced with the need to elevate the trail tread above flood level or extending the height of planned overhead structures.

The absolute minimum acceptable vertical clearance is 8' from finished trail surface to the bottom of the bridge beams or other obstructions. An 8' clearance will require both bicycle riders and equestrians to dismount. The likelihood that some riders may not dismount presents some safety issues, and thus creates a strong case for increased vertical clearance.

In locations where trails will need to pass under existing roadway bridges crossing rivers, the trail surface elevation should ideally be set above the level of the 100 year flood at each undercrossing. This may not be possible in some instances in order to establish adequate headroom. Where the trail elevation is below flood level some mechanism to close the trail in the event of high water will be needed. Temporary barriers or permanent gates could be used to

bar the public from entering potentially dangerous flooded undercrossings. The likelihood of trail closure, and availability of safe alternative routes need to be considered at each bridge when setting trail and bridge elevations.

c. Undercrossings: - Minimum Standard Horizontal Clearance: 20'

Horizontal clearance minimums should be 20' (the width of the approaching trail -typically 12' plus two 2' shoulders - and an additional 4' clearance for safety and "shy-distance"). The entire 20' width should be a paved surface to avoid loose gravel on the surface of the trail. The increased width will reduce conflicts with oncoming trail traffic and make trail travel more comfortable than the standard 12' width. Where 20' is not available the minimum horizontal clear distance should be the width of the approaching path including both shoulders (typically 16' total).

Additional details should be considered to make bridge undercrossings pleasant and safe. Lighting should be installed under wide bridges for comfort and safety. In addition, niches where people could hide, or trash might collect should be eliminated to improve security and reduce maintenance. Loose rocks or soil should be prevented from rolling onto the trail where they could create hazards to trail users. Railings of 54" height should be installed on the water side of the trail if a steep bank is present. Positive drainage should be maintained to prevent water buildup on the trail tread. Any manhole covers or gratings on the trail should be flush with the trail surface and without any slots which could catch bicycle wheels.

Summary: - Plan Ahead for Trail Use

All aspects of trail/bridge crossings and undercrossings need to be considered during the design of new vehicular bridges to avoid costly remodeling, and to create adequate facilities for trail users.

4. Watercraft

Circulation on the water is an important part of the overall plan. Use of the water and watercraft on the rivers is very popular in the Tri-Cities area. The City wants to accommodate all types of watercraft and water use, but some separation of incompatible uses may be needed. Designating certain water areas or launch sites for slow speeds or limiting certain types of watercraft would improve the park experience, increase safety and protect habitat. "No-wake" zones are proposed in certain areas primarily to protect swimmers, and to limit noise for park users, but also designed to separate incompatible watercraft. These "no-wake" zones are proposed near Nelson Island, at Kiwanis Beach, and up from the mouth of the Yakima River west to the Richland city limits.

Existing boat launches along the Columbia River should be expanded as user volumes dictate. A string of launches for non-motorized watercraft on the Yakima is also proposed.

5. Trailheads

a. Introduction

The master plan calls for trailheads at regular intervals. These are as close as .5 mile apart in more populated urban areas, and up to 3 miles apart in outlying rural areas. Trailheads should consist of parking areas and basic services such as drinking water and restrooms. Taking advantage of existing facilities, existing parking areas in parks are considered "trailheads". Existing and future parking lots within parks are the primary trailheads. It is hoped that trailhead parking areas can be kept small to reduce the need for additional paving in parks. Improved non-motorized circulation routes to parks should help limit parking lot expansion, by encouraging people to leave their cars at home.

Where possible, existing public and private facilities with large parking areas, which are not used on weekends or during evenings, might be used for park and trail access (at least during special events). These parking areas might be used during off-hours to avoid costly construction of new facilities, and to reduce the amount of park land devoted to parking lots. "Joint-use" or "shared parking" agreements are encouraged. The size of each trailhead will vary depending upon available land on each site and anticipated user demand for nearby park and trail facilities. Adequate frequency of trailheads is important in order to provide access to a wide variety of experiences along the rivershore, and to provide the drinking water and sanitary facilities needed for a safe, clean park/trail experience.

b. Parking

Parking areas, either shared or dedicated to park/trail use, have been proposed at regular intervals along the primary trial routes. Parking lot size has been based largely on the adequacy of existing parking. Parking areas have been kept as small as possible while adequately serving the needs of associated park facilities and anticipated trail users. As the trail system becomes more complete and park facilities more developed, parking needs will probably increase. In some neighborhoods city streets could absorb some overflow peak-day parking demand.

c. Restrooms

Restrooms are proposed at major trailheads and park sites, at a maximum of approximately 2.5 mile intervals. This should put most people within a 20-minute walk or 5 minute bicycle ride of a restroom at any time. Restrooms will be somewhat less frequent along the more natural reaches of the Yakima, and more frequent along the intensively used section of the Columbia. Restroom buildings should be designed to facilitate access, safety and maintenance. The buildings should be designed to fit the context of their settings (rural, neighborhood, downtown etc.).

6. Trail Furnishings

a. Introduction

Trail furnishings should be selected to create a safe and comfortable environment for trail users. minimize repair and maintenance costs, and to express the unique character of the area. Items may include: lighting, bollards, signs, benches, drinking fountains, bicycle racks, emergency closure gates, trash, and special paving. (Some of these topics will be discusses in detail in the "parks furnishings" portion of the plan.

b. Lighting

The trail is planned to be closed after dark, and will not be lit, except in special situations listed below. Closing the trail at night should discourage inappropriate or unsafe use of the trail. If open hours are extended, additional lighting may be added. During trail construction utility sleeving should be placed under trail improvements as needed, to provide routes for future wiring for lighting with minimal disturbance. Also, wiring for electrical service should be installed underground along trails and in parks to reduce conflicts between overhead wires and trees. Undergrounding of all utilities will reduce pruning costs and eliminate the need for severe tree pruning around overhead wires. Portions of the trail proposed to be lit are as follows:

Undercrossings

Bridge undercrossings will be lighted at all times. This should discourage unwanted nighttime use of undercrossings, and promote a safe and secure environment. Light fixtures at undercrossings will be designed for maximum strength, and vandal resistance.

Urban Promenade

An "urban promenade" should be developed within Howard Amon Park, extending from Newton to the Columbia Point promenade. Light fixtures along this segment should be of a pedestrian scale and style.

Trailheads

Trailheads will be lighted for a certain interval after dusk to allow trail users to safely exit the trail. These timer-controlled lights will provide a beacon for people seeking to exit the trail. Fixtures should be designed for good light distribution, and be vandal resistant.

c. Bollards/Gates and Barriers

For the safety of trail users vehicles should be physically prohibited from entering trails through the use of bollards or gates. Where bollards are used some should be removable to provide efficient access for emergency, security and maintenance vehicles. Access for official vehicles should be accommodated at each trail intersection with a road to provide adequate access in case of emergency. Each of these access points will require removable bollards or gates unless alternative routes for emergency and maintenance vehicles are available.

A system of gates or barricades may also be needed to close portions of the trail (such as bridge undercrossings) during high water. Portions of trails are within the 100 year floodplain. In particular, bridge undercrossings may cause the trail surface to be located at lower elevations, necessitating a standardized closure system to prevent injuries during floods.

In areas where separation between the trail and auto traffic is necessary (e.g. some bridges) a jersey barrier with handrail, or completely separate trail causeway should be used.

d. Signs

Signs will display rules, directions, information, locations, safety warnings, and emergency closure/detour information. Signs should be of a consistent style and material, however, each category of signs (rules, information/directions, and interpretation) could be of a different color or shape. Posts should be set back from the trail surface a minimum of 5' where possible for safety. All signs could be integrated with historical themes representing local culture and iconography.

Locator System

A locator system will be convenient for trail users and significantly help emergency vehicles in getting to accidents. A locator system based upon the adjacent street system, numbers, colors, or letters might offer a way for people to quickly note their location in an emergency, to meet someone or to compute distances for recreation. Numbered mileposts (or tiles, etc.) could be spaced close together (perhaps at .10 or .25 mile intervals), and should be color or letter coded to identify the rivers. Choosing a point of beginning within what will become a regional trail presents logistical problems. One alternative would be to use a system of mileposts, selecting a logical place to begin such as the river confluence, though this might later be superseded by a comprehensive regional system. Another possibility would be to use a system based upon street addresses. This would have the advantage of being readily expandable to other regional trails without establishing a new basis point.

Locator signs for boaters could be installed at boat launches or beaches. These could consist of a series of colored banners or flags. These locator banners could make boat launches easier to locate from the water, just as trailheads should be made easier to locate from land.

Vehicle Traffic Signs

Traffic signs should follow Department of Transpiration standards. While establishing a creative theme is desirable for most sign types, traffic signs should follow established standards in order to eliminate possible confusion.

Regulatory Signs

Overall rules for use of the trail should be posted at trailheads and heavily used access points. Information such as open hours, speed limits, and general safety and courtesy information could be included. Directions to points of interest, or civic facilities along

the route should be included as needed. General community information could also be displayed at trailheads as appropriate.

Directory / System Map

A directory of trails and bikeways should be posted at trailheads, and at major junctions. The graphic should be designed to read as clearly as possible (at the expense of detail). Indicating "you are here" at the location of the sign should help to orient trail users viewing the sign. It also might be useful to publish the system map in a format which trail users could carry. This might be published in conjunction with local bicycle, volkswalk, equestrian, and/or business groups.

e. Security/Safety Issues

Important circulation safety issues include:

- Vehicle / pedestrian traffic conflicts the circulation system is intended to establish a
 network of continuous sidewalks, bike lanes or trails, providing safe separation from
 vehicle traffic. Discontinuity in the system should be avoided.
- Two-way trail traffic conflicts can be reduced by adding a centerline, building trails to adequate width (12') with shoulders and using gentle grades.
- Trail speed limits a maximum trail speed limit of 10 miles per hour should reduce conflicts between bicyclists and pedestrians.
- Shade overhead canopy with open site lines
- Drinking water sources of drinking water should be available at regular intervals.
- Watercraft issues user groups should be separated as needed (e.g. separate highspeed craft from swimmers and human-powered watercraft), and "no-wake" zones created where needed.
- Emergency vehicle access trail width and construction should be sufficient to convey authorized vehicles without endangering trail users or damaging the trail surface or shoulders. Regular access points for safety and security vehicles are proposed along the trail. Bicycle patrols may also be appropriate on portions of the trails. Based on trail use in other communities trail users tend to police themselves when adequate numbers of people are using a trail system. However, quick convenient access for emergency vehicles is a necessity. Adequate sight lines, lighting under bridges, bike racks at trailheads, and regular patrols should reduce security problems.
- Phones the increased use of cellular phones by the general public may make standalone public phones along the trail unnecessary.
- Bicycle / small boat storage installation of bicycle lockers and/or boat lockers may provide more secure storage.

f. Accessibility (ADA)

Circulation routes should be designed and constructed to be accessible to the greatest extent possible. Beyond the regulatory requirements for accessibility there should be a general goal to

make park and trail improvements accessible to people of all abilities. This not only serves people in wheelchairs, but also helps a variety of others from mothers with strollers to older people with difficulty walking. This does not mean that every portion of every site ought to be paved or undergo extensive grading. Some areas are not appropriate for extensive modifications. It does mean that wherever it can be done in an appropriate manner accessibility should be a guiding design criterion.

g. Planting

Planting along the trail is intended to enhance the experience of trail users by providing shade. buffering the trail from adjacent uses and improving wildlife habitat in the riparian corridor. Plant characteristics should include creation of shade, hardiness (including drought tolerance). visual character and habitat value. There may also be locations where view corridors should be maintained for adjacent properties and/or trail users. Planting may be used to structure the activities of trail users, encouraging or discouraging travel in certain locations.

Many of the upland links in the circulation system are tree-lined boulevards with sidewalks and bike routes or bike lanes. Richland has many large street trees which should be preserved, and supplemented to enhance upland links with parks. Retaining existing street trees and properly maintaining them should be done with or without the additional planting. Quality street trees are a tremendous resource which should be protected, particularly with the need for shade in Richland's summertime climate.

The street tree system could be used as an arboretum on a large scale. Tree types could be designated for each street or block, creating a visual and educational theme through the City. A variety of tree species perform well in Richland's climate offering a sufficient palette to implement the arboretum concept.

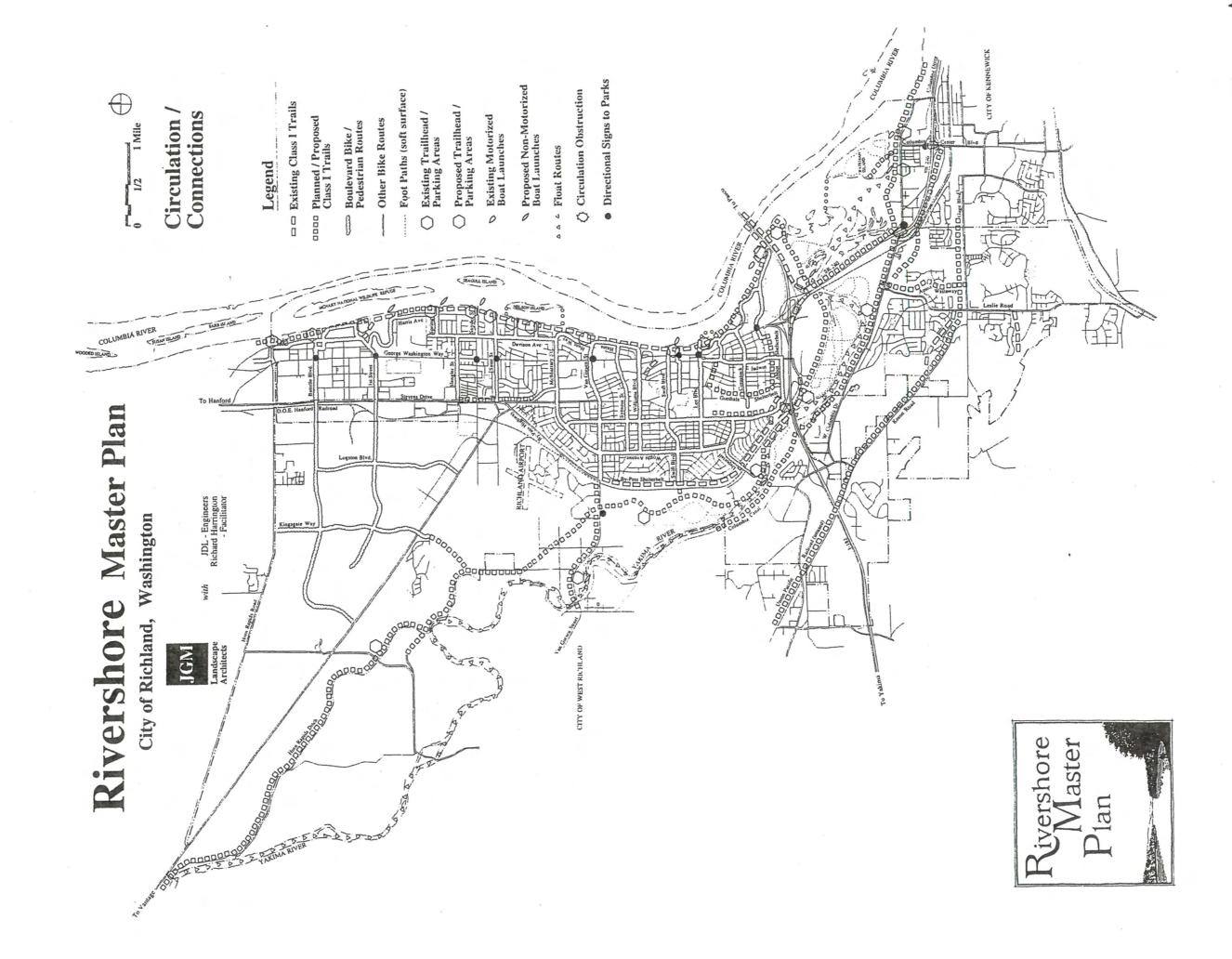
Plant selection will be coordinated with the character of different areas. In rural areas native plants used in naturalistic arrangements are appropriate. Urban area plantings should be more refined in character, and more carefully maintained. Urban plants might be predominantly exotic ornamentals such as shade trees, shrubs for screening and seasonal color and groundcovers. Urban area plantings will probably be irrigated.

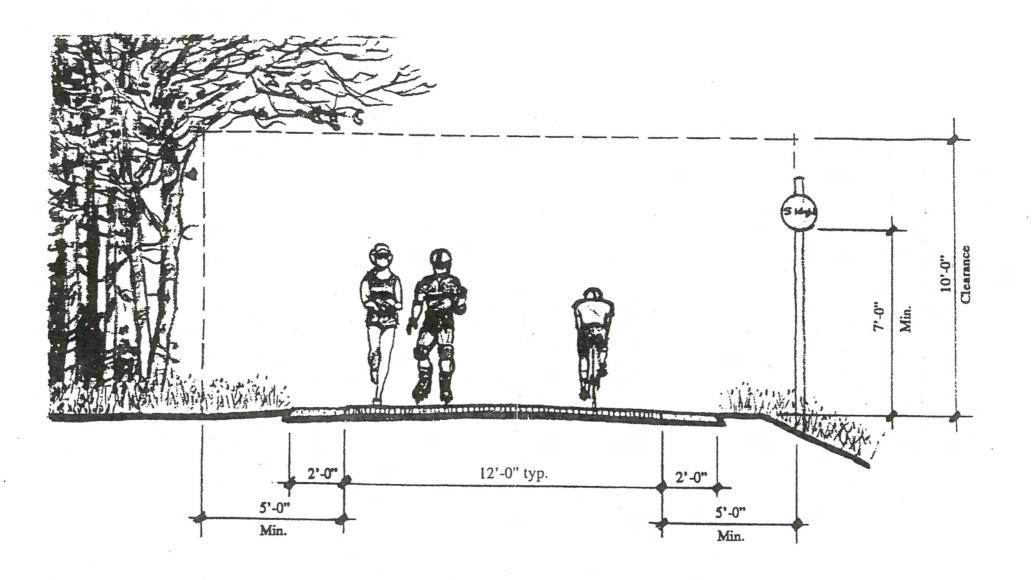
Natural preserve areas should be planted almost exclusively with native species. Primary attributes of plants in these areas should be durability, low maintenance and wildlife values. The primary communities of interest for restoration are dryland grasses / forbs, and riparian trees / shrubs / herbaceous plants. Dryland grass areas should be restored to a dense growth of bunchgrass. There is a unique beauty to be found in the stark native upland landscape of the Tricities area. These aesthetic values are heightened along the riverfront by their contrast to lush native riparian vegetation, and the glowing green ornamental landscape in irrigated areas. Exotic weeds such as knapweed, cheat grass or tackweed should be discouraged. The spread of these invasive weeds will be slowed if a thriving community of native grasses and forbs can be restored. Native plants should also be encouraged in riparian areas. With a very few exceptions riparian vegetation is proposed to remain intact and/or receive restoration. Restoration of these

native plant communities will decrease annoying weed species, increase habitat values, and improve aesthetics.

In addition to planting after construction, equal attention must be paid to preservation of existing vegetation. There are magnificent existing trees in both native and developed landscapes in the area. Determining the location and types of plants to retain in each area during detailed design and construction will be critical to the success of both aesthetics and habitat.

Plant selection, planting design and preservation of existing plants must each be done with great care. The services of landscape architects, arborists and/or maintenance staff should be used.



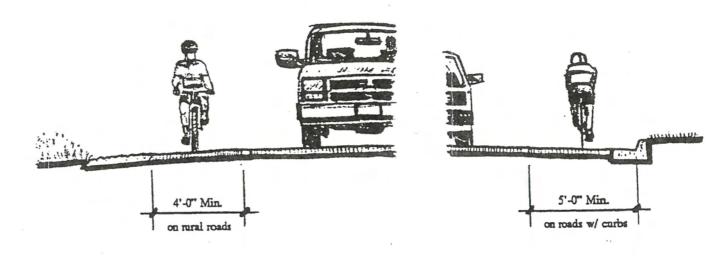


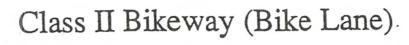
Primary Multi-use Trail (Class I Bikeway)

Surface: Asphalt trail
w/crushed rock shoulder

A paved, separated trail 12 feet wide.







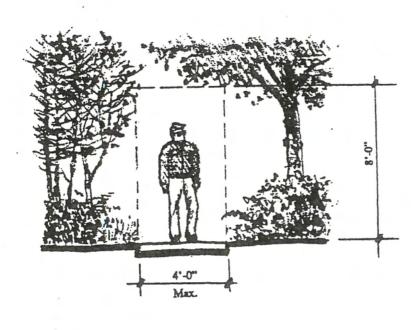
A striped bike lane in the public right-of-way for preferential bicycle use.



Class III Bikeway (Bike Route)

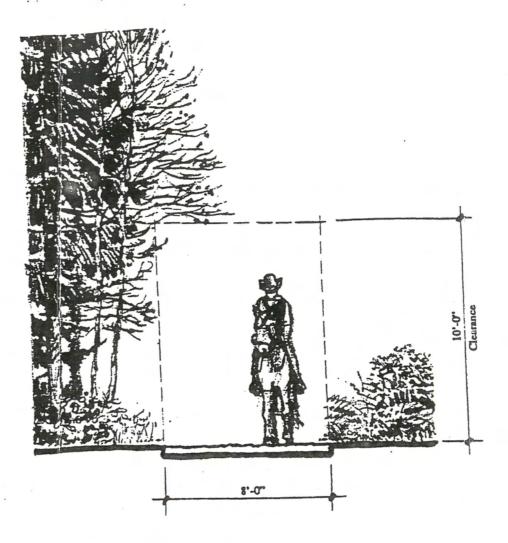
A signed bicycle route in the public right-of-way shared with vehicles.







A soft-surface, narrow walking path.



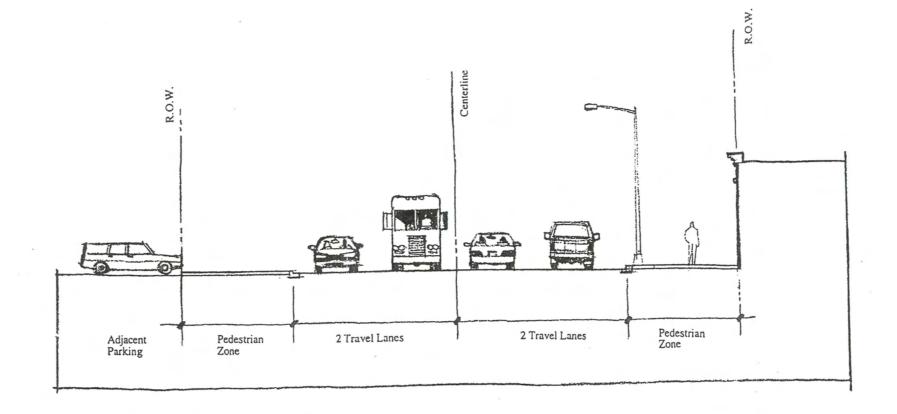
Secondary Trail

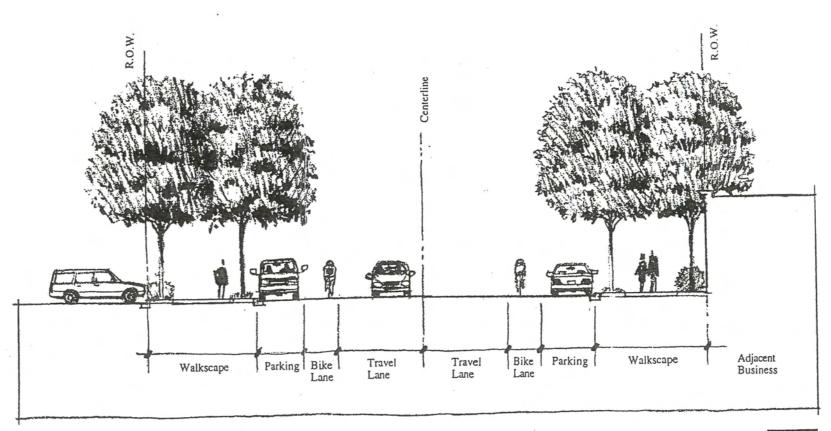
Surface: (Equestrian) Compact earth or wood shavings (Pedestrian) Crushed rock

A soft-surface, separated trail 8 feet wide.

Surface: Native soil





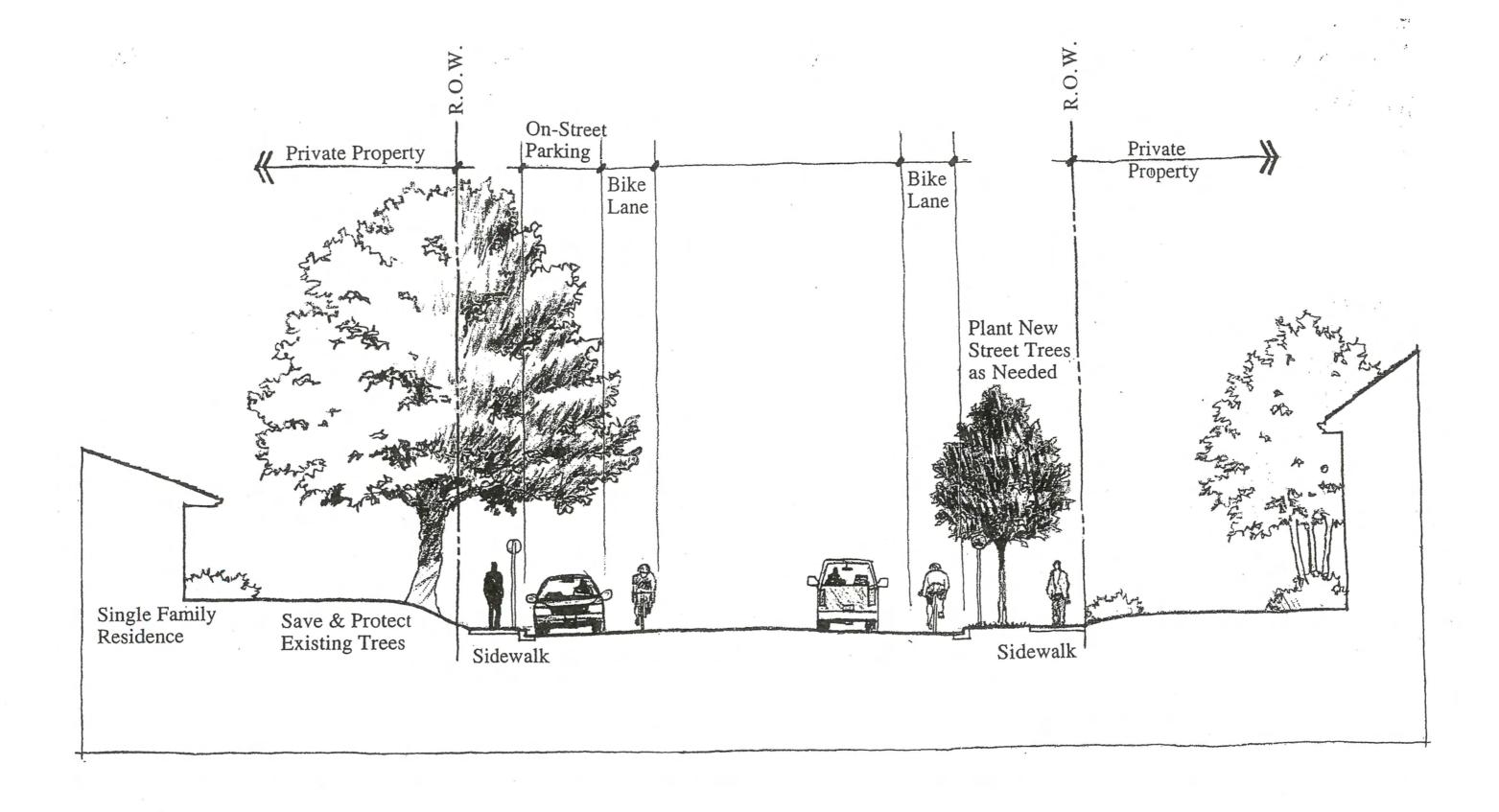


Suggested Treatment • Section

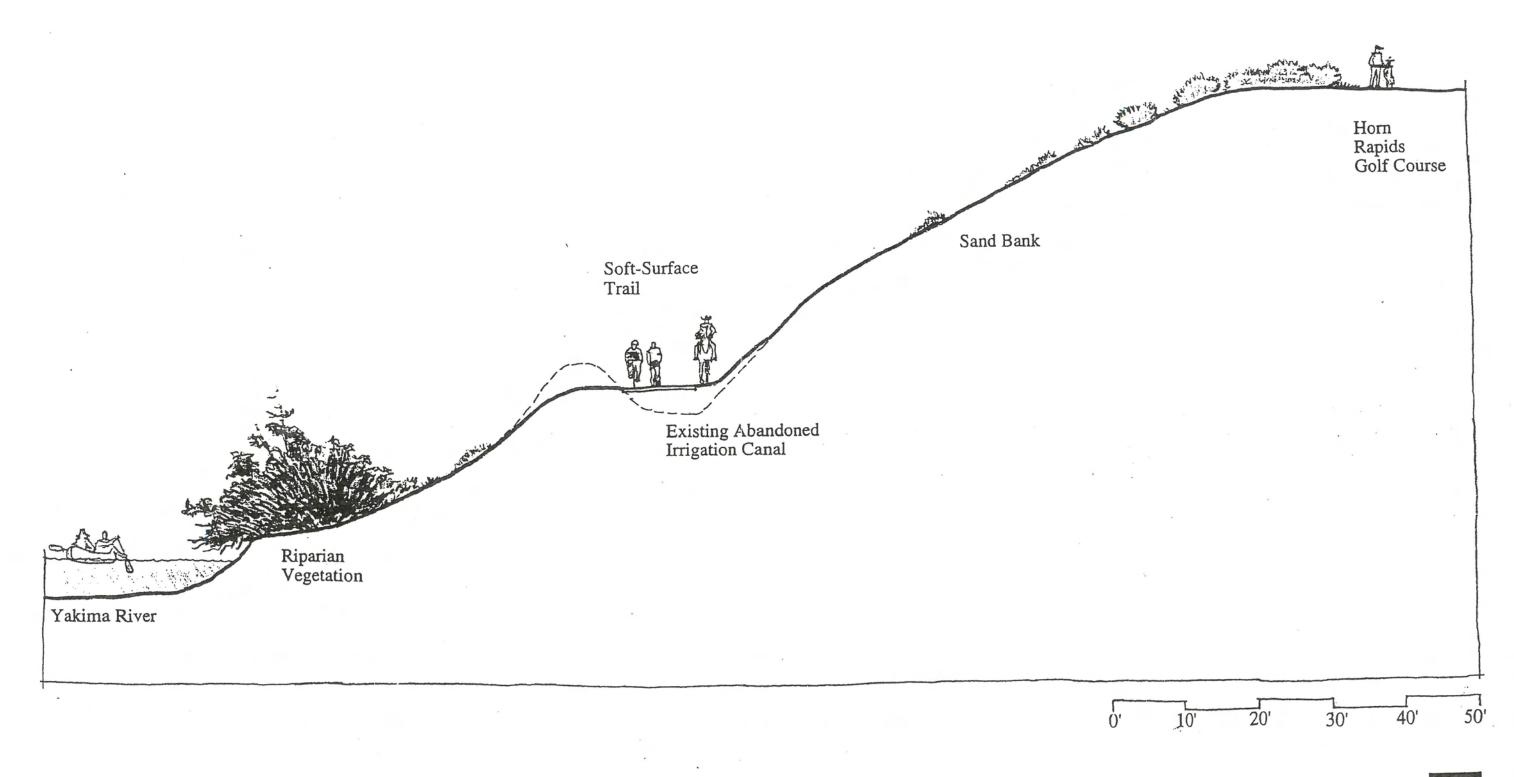


Rivershore Master Plan

Figure E



JGM
Rivershore Master Plan
Figure F



Section • Horn Rapids Sand Bank Looking Upstream

JGM Rivershore Master Plan

Figure G

C. PARKS AND OPEN SPACE

1. Introduction - Overall Park and Open Space Master Plan

The Columbia and Yakima Rivers offer unique recreational opportunities, enhanced by large tracts of shoreline in public ownership.

The overall Master Plan creates a framework which is then shown in further detail where circumstances warrant. In conjunction with the circulation plan the overall parks and open space plans establish two central planning criteria: zones to be natural or developed, and zones proposed for "substantial" modification or limited, subtle changes from their current conditions. In general the zones considered natural are intended to receive limited modification. The intent of "limited" modification in preserves would be some restoration of native communities, conversion of roads to trails, limited parking areas and interpretive displays. In developed park lands "limited" modification would be typical of areas such as Howard Amon or Leslie Groves parks, which have existing improvements and are proposed to receive small changes. The predominant character of these parks should be maintained, with subtle updating and refurbishing. Areas slated for more "substantial" improvements are typified by Columbia Point South or the Wye area. These are sites which are currently undeveloped, or poorly developed. yet have been disturbed and no longer have high quality habitats.

Most of the parks and trails provide excellent visual connections with the water, and some access to the water's edge. Some additional docks or water access areas have been sited in locations where minimal disturbance of riparian vegetation would be needed. Established boat launches have been retained or expanded to accommodate the popular use of the Columbia by boaters. Other areas have been proposed for fishing access or a small car-top boat launch.

2. Park Amenities

a. Introduction

Park furnishings should be selected to create a safe and comfortable environment for park users, minimize repair and maintenance costs, and to express the unique character of the area. Items may include: lighting, bollards, signs, benches, drinking fountains, bicycle racks, emergency closure gates, trash receptacles, and special paving.

b. Lighting

Portions of parks may be lit in the situations listed below. Closing other areas of parks at night should discourage inappropriate or unsafe use. If open hours are extended, additional lighting may be added. Electrical service should be installed underground in order to eliminate costly and unsightly pruning of shade trees around overhead electrical wires. Portions of parks proposed to be lit are as follows:

Urban Promenade

An urban promenade is proposed along portions of the trail immediately adjacent to the Central Business District. Light fixtures along this segment should be consistent with those proposed along downtown streets.

Parking Areas

Trailheads will be lighted for a certain interval after dusk to allow trail users to safely exit the trail. These timer-controlled lights will provide a beacon for people seeking to exit the trail. Fixtures should be designed for good light distribution, and be vandal resistant.

Sports Facilities

Sports facilities in rivershore parks, such as tennis courts or ball fields may be lighted as appropriate.

c. Picnic Shelters / Site Furnishings

Gazebos, picnic shelters, restrooms or other small structures should follow a consistent theme within a given area. The theme may vary depending upon the environment where they are placed (e.g. urban or natural preserve). Site furnishings such as benches, trash receptacles, bike racks should also reflect some consistency, with variations according to the context. Furnishings and small structures should be selected or designed for aesthetic value and durability. Aesthetic quality of furnishings should receive strong consideration during selection and design. In general it pays to purchase good quality furnishings intended for municipal use. The increased longevity of the items makes up for the higher initial cost.

Picnic shelters near the central business district could be lighted to facilitate nighttime use.

d. Sculpture

Sculpture would be an interesting addition to Howard Amon Park. The park's proximity to the "Arts and Entertainment District" create a logical tie-in. Almost any style of sculpture will add interest for many visitors to the park. Kirkland, Washington is a good example of a town which has a successful display which is mainly generic work out of a catalogue. Yet some of the more successful civic sculpture displays revolve around a theme relating to the local culture or landscape. For example the City of Spokane, Washington has a series of sculptures in Riverfront Park created by a local artist depicting the Bloomsday Run. Similarly, Raymond, Washington has a series of sculptures relating to local culture and wildlife. Richland should strive to display the highest quality work possible, hopefully with a local theme. This should be done in accordance with the policy and procedures adopted by the Parks and Recreation Commission in 1995.

Ideally the sculpture displays might offer local artists a venue to display their work. This, again, would relate to the arts an entertainment district. Some civic sculpture displays even show works which are for sale (Bellevue and Mercer Island both do this).

e. Play Areas

Play areas form an essential ingredient to making a park successful for all ages. Most of the existing play areas in the riverfront parks should be replaced over time, in order to comply with current guidelines for safety, surfacing, fall zones and accessibility. As older structures are replaced the placement of the play areas and types of play elements should be reexamined and fine-tuned.

There are some new water play systems which would work well in the climate of the Tri-Cities. Various jets and pools can be combined to create some entertaining play areas. Replacement and/or enhancement of the wading pool at Howard Amon Park with a water play system would work well. It may be appropriate to retain existing features, such as the wading pool, which have sentimental/historical value, and to develop new water play facilities nearby.

f. Boating Facilities

Due to the number of people using boats in the City areas to beach boats would be appropriate. While it may not be practical to construct a sand "beach", it would be desirable to create an area with a gentle slope and suitable surface to pull watercraft out onto land. Suitable grades and proximity to either a boat launch, dock or park improvements of potential interest to boaters should be considered.

"No-wake" zones are proposed in three areas in order to increase safety, to protect wildlife, and to separate incompatible uses. This should provide swimmers, and boaters in human-powered craft, a safer and more pleasant experience. It also begins to create use zones on the water separating incompatible uses (such as swimmers and jet-skis). Over time the City (or the Tri-Cities as a group) should consider providing suitable areas for different types of users, but also separating incompatible uses, as is done on trails in the preserve areas. Some of these proposed changes may conflict with current use patterns, but should be implemented over time.

g. Parking Areas

The general aim of parking modifications in existing parks is to open vistas at each road end, and to minimize interruptions of the park and trail. Some road-end parking areas do not currently supply adequate parking for nearby facilities, and should be expanded.

h. Levee Modification

In some areas within the City levees may be allowed to be lowered. This levee modification would enhance the use for trail users. The existing trail strand with irrigated lawn in the top and inland of the levee will be retained. The lawn offers people a soft-surface alternative to the paved trail. The possibility exists that the levee could be lowered, creating a broader top surface, allowing easier access from street level to the top of the levee, and possible improving views for nearby residents (depending upon the amount of levee modification, and the heights of houses). If possible, the topsoil removed from the top of the levee should be placed to cover the exposed

rip-rap on the water's edge. This could then be planted to native grasses, making a more appealing planting, while improving habitat.

Any modification of levees should be carefully coordinated with the Army Corps of Engineers. Current understanding is that the Army Corps will allow levees to be lowered to the regulated Standard Project Flood (SPF) elevation plus five feet of freeboard. The Army Corps is currently undertaking a study to determine exactly how much height would be allowed to be removed from each of the levees in the Tri-Cities area. The study is anticipated to be completed by late 1999, at which time specific levee modification options could be studied in greater detail.

i. Cultural Sites

It is anticipated that there will be a number of archaeological sites within rivershore parks. Prior to detailed design or construction work a survey of cultural resources should be performed. A more detailed understanding of the nature and placement of cultural resources at a given site will be an important consideration in refinement of site designs. Cultural sites should be respected and preserved. These sites also offer many interpretive opportunities.

j. Signs

Signs will display rules, provide directions and information, and disseminate interpretive information, safety warnings, and emergency closure/detour information. Signs should be of a consistent theme (style and material), however, each category of signs (rules, information/directions, and interpretation) could be of a different color or shape. Posts should be set back from the trail surface 5' for safety. All sign themes (excluding vehicle traffic signs) could be integrated with historical themes representing local culture and iconography.

In general signs should be used as infrequently as possible, while maintaining their message, in order to avoid visual clutter. Similarly, the size of signs should be kept small.

Directional Roadway Signs

Directional signs should posted to help people from outside the community locate riverfront parks, boat launches and trailheads. Small parking areas, or natural areas may not warrant these signs, and the extra traffic they could generate. However, significant improvements could be made in signage which helps people locate larger waterfront parks.

Traffic Signs

Traffic signs should follow Department of Transportation standards. While establishing a creative theme is desirable for most sign types traffic signs should follow established standards in order to eliminate any possible confusion.

Interpretive Signs

A number of interesting elements of the riverfront and local history warrant interpretative signs in conjunction with riverfront parks and trails. Outstanding natural habitat elements along the Yakima include riparian plants, wildlife, river processes, and geologic history.

k. Security/Safety Issues

Important safety issues with the parks system include those considered under the "circulation" portion of the plan and:

- Emergency access it is important to have clear emergency and security access to park improvements.
- Site lines where possible developed park areas should have open and clear site lines.
- Shade maintaining an overhead canopy will offer park users the opportunity to find shade.
- Drinking water and restrooms drinking water and restrooms should be available at regular intervals.

l. Planting

Planting design criteria will be similar to those discussed in the "trail" portion of this plan. One special note pertaining to parks is that some of the existing shade trees are old or in poor condition. It appears that young trees have been planted to replace trees in poor condition. We support this planting program, which gives the young trees a good head start.

3. Detailed Area Plans

In order to provide a greater level of detail for key segments along the shorelines detail plans have been prepared. Large portions of the conservancy areas along the Yakima River have not been detailed in these area plans. The general character of these preserves should follow the example set by the Chamna Preserve Plan, incorporating habitat preservation and restoration, with limited access for passive uses as its goal. The exact details of trail layout and user group restrictions can be worked out in a process similar to that which was performed for the Chamna Preserve.

Some of the Columbia River areas have been left off the detailed plans. These are either due to recently adopted area plans, which have been referenced and accepted as part of this Master Plan (e.g. Columbia Point), or areas which need further study before determining a development direction (e.g. the large parcel at the southeast corner of the Wye area).

Establishing priorities: some of the more subtle changes to existing facilities (e.g. realigning arrow-straight trail segments into meandering layouts) may be low on the priority list, and might only occur as existing improvements need major repairs.

The following descriptions are accompanied by individual plans for each area, beginning at the City's northern boundary with the Columbia River shoreline:

a. Port of Benton / W.S.U. / Harris Area (see figures 1-3)

Proposed plans for the Port of Benton area closely follow the recent draft of the Port's own master plan for the area. Broad areas immediately along the shoreline are proposed to be dryland grasses. A small developed park area with parking is proposed at the foot of Battelle Boulevard. This developed area includes picnic shelters, a restroom, irrigated lawn and shade trees. Another parking area is proposed near the north city limits. The entire length of this area is proposed for a Class I trail along the shoreline, with side trails connecting the shoreline trail and park lands to upland development.

South of the Port of Benton area is the Washington State University Tri-Cities campus. The park land adjacent to the campus along the shore is proposed to be restored dryland grasses. Taking the restoration idea even further W.S.U., in conjunction with Native American tribes, has proposed an arboretum consisting of native species. Interesting interpretive opportunities abound, showing the ethnobotanical study of native plants. A small new parking area is proposed near the north end of the native plant arboretum.

A boat launch and/or boat house for non-motorized use is proposed at the University. W.S.U. has expressed interest in utilizing this facility for its rowing club. It may be appropriate to form a partnership between the City and University to create a shared facility for residents and students to use for storage and maintenance on their non-motorized watercraft.

Adjacent to Harris Street (between Ferry Road and Sprout Street) bike lanes and sidewalks are proposed along the street in order to provide better connections between Leslie Groves Park and the W.S.U. campus. At a future date a social footpath is proposed along the riverbank in this same reach, in order to provide better pedestrian access to the public shoreline. Particular care should be taken in the design of this path to minimize disturbance to neighbors (see Figure J).

b. Leslie Groves Park (see figures 3-5)

Most of this park has existing developed improvements. We propose refinement of some existing facilities, and modest additions to the improvements. A realigned trail, revised or expanded parking (constructed only as it is needed), and two proposed docks highlight the changes. A proposed "no-wake" zone would protect swimmers, and offer a sheltered place for human-powered craft, between Nelson Island and the City shoreline.

Restoration of native grasslands combined with completion of irrigated areas is intended to create more uniform landscape zones. Some of the apparently "leftover" non-irrigated areas are proposed to become lawn, while three large dryland areas are restored to a healthy bunchgrass community. Park users will enjoy views of broad sweeps of dryland grasses in one area, and maintained, irrigated landscape in another. Riparian vegetation is proposed to remain largely intact and/or receive restoration (with a few exceptions).

Near Ferry Road and at Newcomer Street non-motorized car-top boat launches are proposed along with an area to beach small boats. There will not be ramps to accommodate boat trailers. Instead, it is intended that small car-top boats would be carried to or from the water at these

locations. While it may not be practical to construct a true sand "beach", it would be desirable to create an area with a gentle slope and suitable surface to pull watercraft out onto land.

c. Howard Amon Park (see figure 6-7)

The Hains Street levee connecting Leslie Groves and Howard Amon Park is proposed to receive some modifications. A wider trail strand with irrigated lawn on the top and inland edges of the levee will be retained. The lawn offers people a soft-surface alternative to the paved trail. Updated site furniture and added trail ramps would complete the improvements. The possibility exists that the levee could be lowered, pending approval from the Army Corps. This would create a broader top surface, allowing easier access from street level to the top of the levee, and possibly improving views for nearby residents (depending upon the amount of levee modification, and the heights of nearby houses).

A pedestrian access from Swift Boulevard to the levee trail, across the fire station property, would be desirable. There is also a possibility of extending Swift to the existing boat launch if the central fire station is moved in the future.

Howard Amon Park is currently one of the outstanding riverfront parks in the state. The kinds of changes proposed here are intended to update and enhance the park in subtle ways, without interrupting the special character it already has. Some expansion and improvements are proposed for the boat launch at the north end. Revised parking layout, and added planting should help to integrate the trail with the boat launch. Revisions and expansions of the main trail through the park, upgrading the scale and character of the current trail into an "urban promenade", would help to accommodate the large trail user volume in this area.

At the heart of the park, at the terminus of Lee Boulevard, a small public plaza is proposed. This could incorporate refurbished concession areas and restrooms, as those facilities need to be replaced. The nearby stage could be reoriented or replaced in order to take better advantage of the beautiful riverfront setting (see figures L-1 & L-2). Construction of the plaza could initiate the expansion of the waterfront trail to the north and south of the plaza into a wider "waterfront promenade". Night lighting might be appropriate along the promenade, and should be coordinated with lighting at the Richland Community Center and in the arts and entertainment district. Improved site amenities and furnishings could play an important role in the revitalization of the park.

Play areas form an essential ingredient to making a park successful for all ages. Most of the existing play areas in the riverfront parks should be replaced over time, in order to comply with current guidelines for safety, surfacing, fall zones and accessibility. As older structures are replaced the locations and types of play elements should be fine-tuned. Water play systems composed of jets and pools would work well in the climate of the Tri-Cities. The wading pool at Howard Amon Park could be replaced or enhanced with a water play system. It may be appropriate to retain existing features, such as the wading pool, which have sentimental/historical value, and to develop updated facilities nearby.

At the southwest corner of the park, currently occupied by parking and a ball diamond, the Richland Community Center and associated parking revisions are being designed. Integrating the community center with the park creates the potential for a lot of positive interaction. The other major advantage to siting the community center in this area is that it could anchor and revitalize a relatively weak edge to the park. Care will need to be taken in siting and designing the building so that community center visitors retain some privacy and autonomy from the park when needed. At the same time, the parking and site amenities must function for all park visitors. Reserved parking for the community center during events at the park will also be a issue.

During the planning process the possibility of a new public dock in the Howard Amon Park area was widely discussed during the public process. Opinions were expressed both in favor and opposed, with a number of people commenting that their opinion would depend upon the character and purpose of the dock. Three potential locations have been identified on the plans. Further inquiry into both the relationship of the dock to upland areas and the suitability of marine conditions are needed before a final preferred site is selected. At that time discussions about the aesthetics and purpose of the potential dock can be determined. We believe that a dock intended to provide a way for park visitors to get out over the water (difficult to accomplish currently without a boat) would be a important amenity for the downtown area. As a side benefit, the dock should be able to accommodate transient tie-ups for small boats, and the occasional tour boat. The dock could also provide a visual anchor to the proposed "no-wake" zone along Kiwanis beach, adding safety to water use in that area.

A final note on the Howard Amon area is that traffic calming on George Washington Way is an essential element in maintaining and enhancing this wonderful park. Currently it is only safe for pedestrians or vehicles to cross G.W. Way at stoplights. Both pedestrians and drivers have a difficult time finding the park, and traveling to it, across the busy traffic of G.W. Way. This will remain a major barrier to parks circulation until traffic calming is implemented.

d. Columbia Point (see figure 8)

This area was recently planned by Callison, and the City has a set of plans submitted for permit approval. This plan accepts the recommendations of the Callison plans for Columbia Point.

e. Columbia Point South (see figure 9)

Columbia Point South is a major piece of undeveloped real estate near the confluence of the Yakima and Columbia Rivers. The riparian areas offer good habitat, but also bear the scars of a number of "four-wheeler" roads. Like other wetland / riparian areas typical of public ownership on the Yakima River the lower portions of Columbia Point South should be closed to motor vehicles. Existing dirt roads should be transformed into a network of secondary trails and footpaths. Habitat restoration and interpretation would be appropriate through the riparian areas. Anticipated sensitive archaeological sites would require a detailed investigation prior to any detailed improvement design. The plan calls for trail improvements, parking for a viewpoint and developed park area, an area to hold large special events (e.g. tribal pow-wows or the renaissance fair), and a campground. Tree plantings proposed within this developed park area could be a

coordinated mix of species planted to form an arboretum. The remainder of the upland portion of the site is proposed to be restored to a native dryland bunchgrass meadow.

In order to accommodate the proposed improvements a secondary vehicle entrance / exit may be required. The preferred location for this road would be at the west end of the site, connecting with the existing public road north of the gravel extraction pits immediately upstream of the Hanford railroad. This roadway connection should be incorporated into planned modifications to the SR-240 bridge.

f. Wye Area (see figures 10-11)

Park improvements in the Wye Area are confined predominantly to a narrow strip of land along the shoreline. The levee on the west half is proposed to be modified to look similar in character to the existing Hains Street levee - with irrigated lawn and a paved trail. This levee might also be lowered in the future, creating a broader surface for trail and lawn. To the west are trail links across and under SR-240. Successfully establishing these circulation links should be a high priority.

The eastern half of the Wye Area has slightly more land area in public ownership, and the potential for more extensive park and trail improvements. Columbia Drive could be modified, in conjunction with Kennewick's plans for Columbia Park, to provide sufficient room for a continuous trail along the water, and to increase park area. Providing space for the proposed trail could be accomplished by removing the outer two traffic lanes, which are asphalt, while preserving the historic concrete roadway. A frontage road near SR-240 might also be created, in order to accommodate the traffic volumes displaced by modifications to Columbia Drive. However, further study of traffic issues in this area is important before suggesting the best roadway layout. At the foot of Columbia Center Boulevard a small plaza with more extensive interpretive displays (with topics including Lewis and Clark) is proposed (see figure N). Ideally, any interpretive displays celebrating Lewis and Clark should be completed prior to the bicentennial of their journey (2005-6).

A "no-wake" zone is proposed between Bateman Island and Columbia Point South. This is intended to protect waterfowl and other habitat in the delta area, offer a calm location for fishermen, and to provide a safe and enjoyable venue for boaters in human-powered craft. One particular activity in conflict with this proposal is the existing water-ski jumps north of the Wye levee. It is anticipated that the water-ski jumps could remain in place until the on-going natural siltation eliminates practical use of the area for ski boats.

Bateman Island is proposed to remain a preserve. Changes to trail configuration, and new regulations for use, could be determined in a process similar to the successful planning for the Chamna Preserve. Secondary trails and footpaths, with some interpretive displays, would be appropriate for the island. While the plans do not show an accessible path onto Bateman Island, if proper grades can be attained it would be desirable to construct an accessible route to a nearby viewpoint on the island. The surface might be packed crushed rock in keeping with the primitive site character.

g. Chamna and other Yakima River Preserve Lands

The City has recently completed a master plan detailing preservation, enhancement, interpretation and improvement strategies for the Chamna Preserve. Other natural preserve areas along the Yakima should be managed similar to the Chamna Preserve. These areas primarily include Bateman Island and Riverview Natural Preserve. The principals set forth in the Chamna plan to preserve habitat, with limited non-motorized trail access seem appropriate for the other riparian areas along the Yakima.

h. W.E. Johnson Park (see figure 12)

W.E. Johnson Park embodies the more natural character of much of the public land along the Yakima River. The park is in the floodplain, and has a mosaic of different habitat types and use areas. These vary from wetlands with some open water, to marshes and riparian areas, with some dryland meadows. The north end of the park is on open dryland field on the site of a former City land-fill. The primary improvements proposed for the park are in this northern area which has already been extensively disturbed. In this north end of the park the historic equestrian and archery uses are proposed to be retained, with some modifications and improvements.

Improvements to the equestrian area are envisioned for the northern part of the existing clearing. Proposed facilities should provide a more complete range of activities for equestrians, and could become a regional equestrian facility, if the demand and funds warrant. The existing archery range is shown to be relocated to a site which should greatly reduce the potential for conflicts with other users. Similarly the field course is proposed to be relocated. The field course and archery range should be carefully laid out, very well marked, and possibly fenced, in order to avoid a casual visitor from entering the course during a shoot.

A camping area is proposed for the northeast corner of the site. This is intended to accommodate out-of-town participants in equestrian and/or archery events, providing a proximal overnight area, if those active-use facilities are developed to that extent.

The majority of the site will be preserved in a natural state, with trails and interpretive elements. The Chamna preserve should be used as a model for the natural areas within this park. A public process similar to the one employed at Chamna could be used to determine user groups for each trail type.

A trail crossing of Van Giesen Street presents some safety concerns. Currently trail users go north on Hall Road from the park to Van Giesen, then west along Van Giesen to a crossing point. The proposed trail is realigned to traverse to the west along the north boundary of the park, then north along the canal to a crossing of Van Giesen. Adequate safety signage and/or traffic lighting should be installed to provide a safe crossing for trail users.

Due to the scale of the by-pass highway, and the difficulty it presents for trail users to cross, it would be desirable to form a trail link at the west end of Swift Boulevard. This would need to be sensitively sited across the railroad and around the cemetery. Given that the stoplight and railroad crossing are already in place it would be a good location to complete trail link.

i. Anticipated Costs

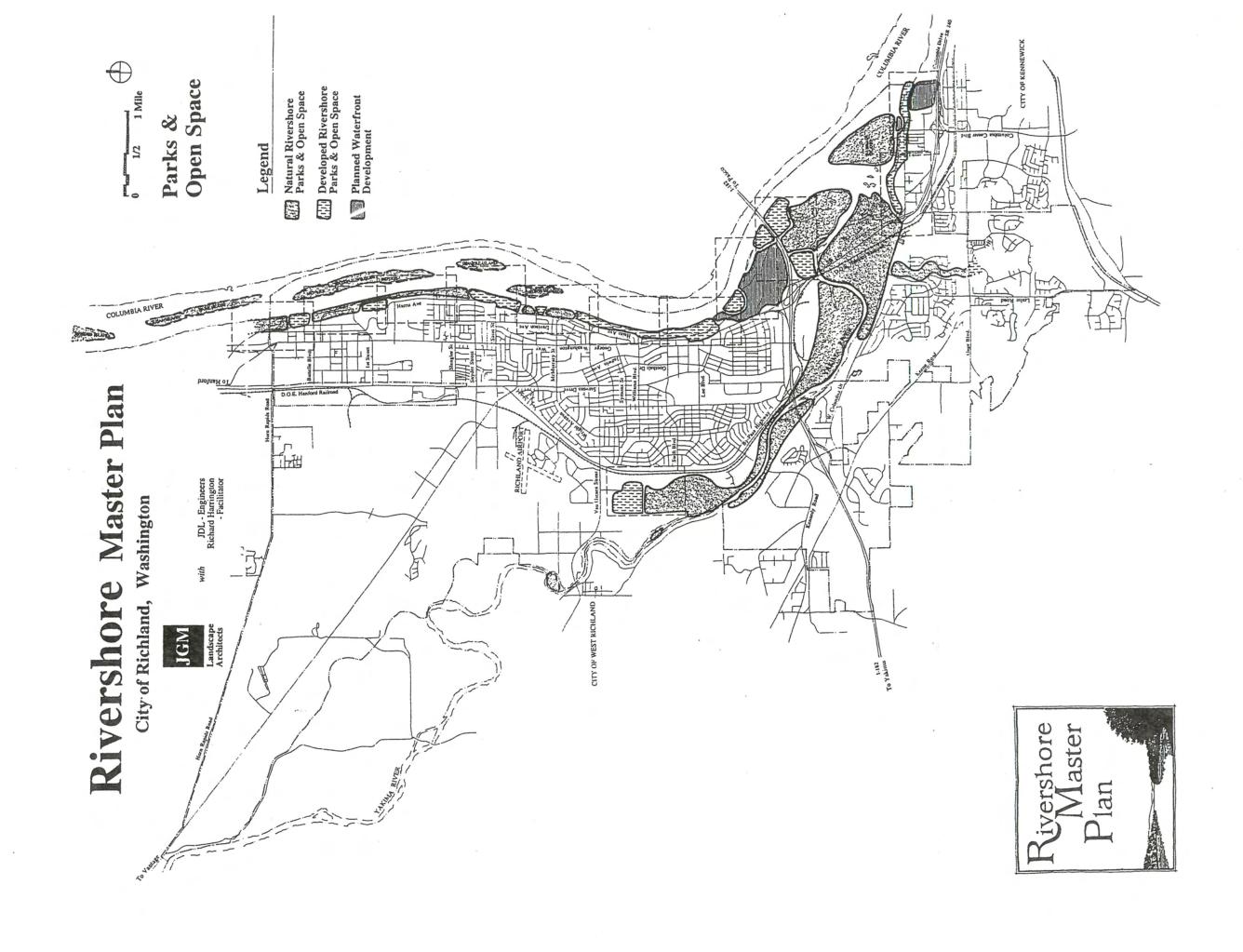
Table 1 below displays preliminary estimates of overall development cost for the completed Rivershore Master Plan. All costs are in 1999 dollars. Project priorities are discussed in the implementation section following table 1.

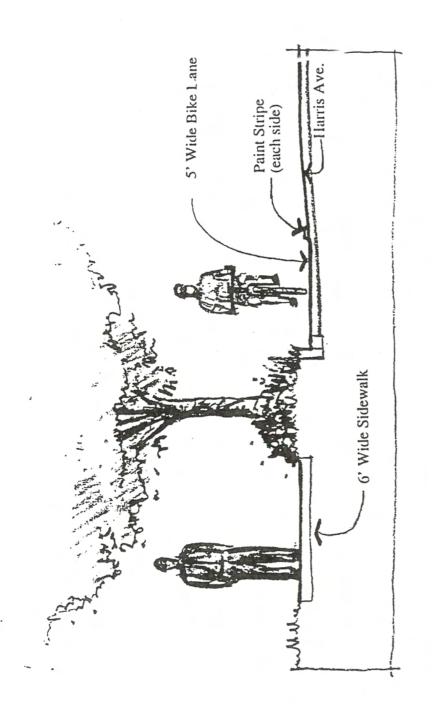
TABLE 1 CAPITAL IMPROVEMENT OVERALL COST SUMMARY		
	WIETT OF BRIDE COST SCI.	Projected Costs
Description of Geographic Areas		in \$1,000's
Port of Benton / W.S.U. (figures 1-3)		\$2,700
Paved Trails	Social Footpath	
Restrooms	Dryland Grasses	
Picnic Shelters	Landscape Preservation / Enhancement	
Sculpture Displays (by others)	Interpretive Displays (by others)	
Lawn and Shade Trees	Parking	
Leslie Groves Park (figures 3-5)		\$2,000
Picnic Shelters		
Boat Launch / Parking		
Docks	Lawn & Shade Trees	
Play Areas	Dryland Grasses	
Restrooms	Landscape Preservation / Enhancement	•
Trails	Parking	
Howard Amon/Hains Levee (figures 6-7)		\$2,100
Public Plaza		
Water Play Area	Levee	\$800
	Enhancement	
Play Area	Urban Promenade	
Revised Stage	Lawn & Shade Trees	
Picnic Areas	Sculpture Displays (by others)	
Concessions / Restrooms	Public Dock	
Trails	Parking	
Columbia Point (by Callison) (figure 8)		\$1.700
(See Adopted Plans - Callison - 1998)		
Parking		
Festival Area	Plaza Park	
Rivershore	Parking	

Columbia Point South (figure 9)		\$4,200
Cultural Facility (infrastructure only)		
Event Area	Picnic Areas	
Viewpoint	Fishing Access	
Arboretum	Landscape Preservation / Enhancement	
Lawn & Shade Trees	Trails	
Restrooms	Interpretive Displays	
Campground	Parking	
Wye Area (figures 10-11)		\$1,900
Boat Launches		
Storage Lockers	Levee	\$600
Dock	Enhancement	
Restrooms	Lewis & Clark Interpretive Plaza	
Picnic Areas	Lawn & Shade Trees	
Trails	Parking	
Non-motorized Boat Facilities		
Chamna Preserve		\$2,300
Landscape Preservation / Enhanceme	nt	
Dryland Grasses	Picnic Areas	
Lawn & Shade Trees	Restrooms	
Trails	BMX Area	
Interpretive Displays	Fishing Platform	
Accessible Fishing Docks	Parking	
W.E. Johnson (figure 12)		\$4,000
Equestrian Area		
Archery Range / Field Course	Lawn & Shade Trees	
Trails	Dryland Grasses	
Campground	Landscape Preservation / Enhancement	
Picnic Areas	Interpretive Displays	
Restrooms	Parking	
C J T.4.1		

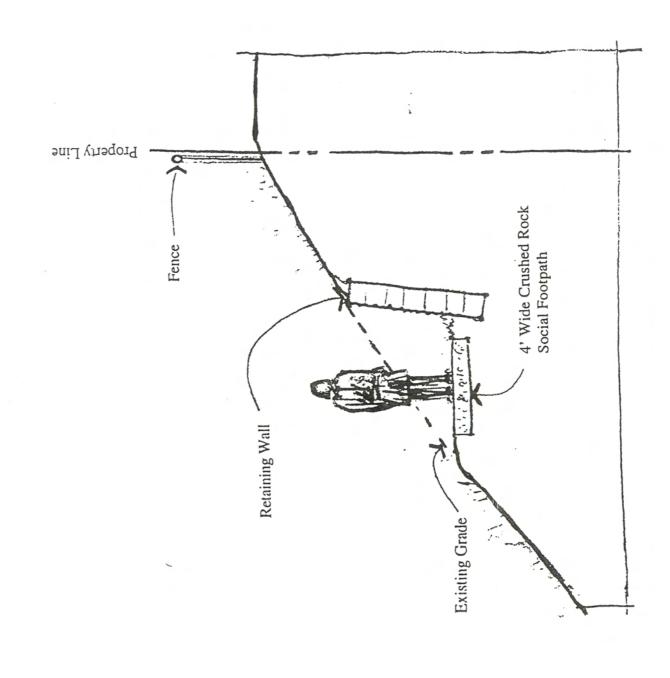
Grand Total \$21,800

Please Note: Estimate does not include taxes, design fees, construction contingencies, construction administration, permit fees, or utility assessment fees.



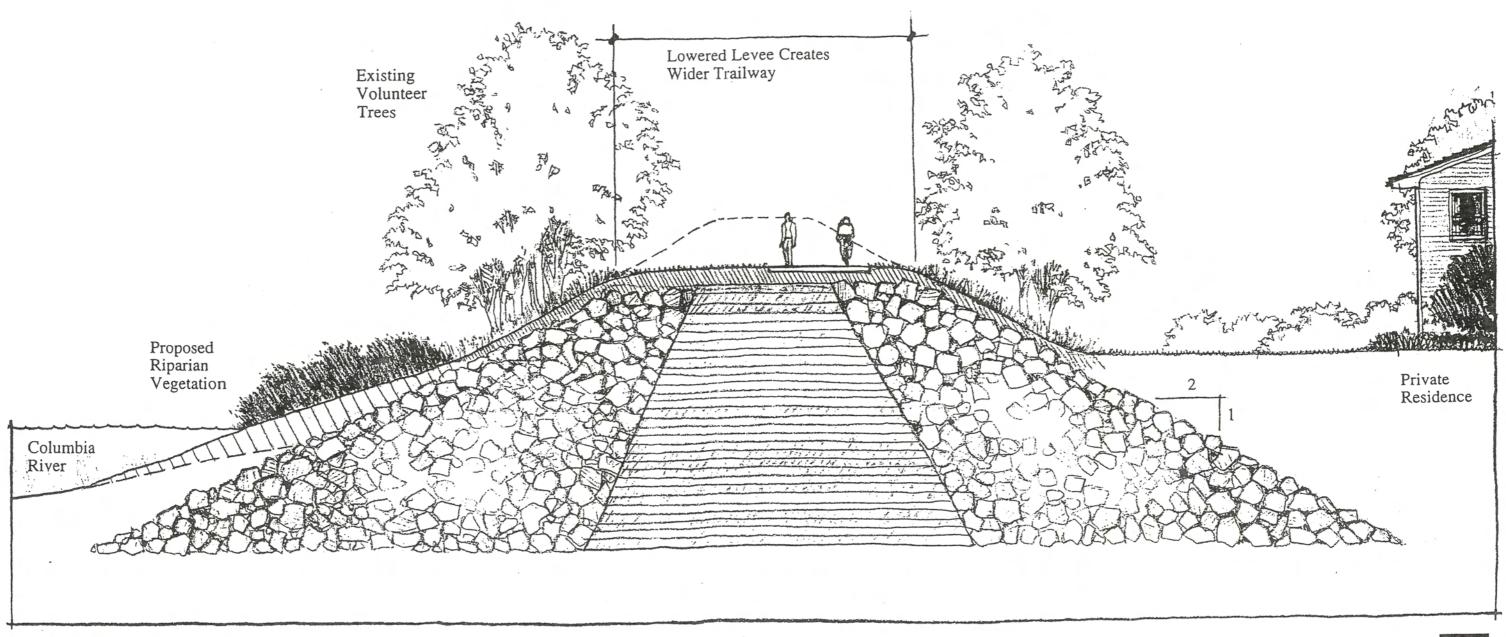


Ferry Street/Harris Ave/Sprout Street



Riverfront Trail between Ferry and Sprout Streets



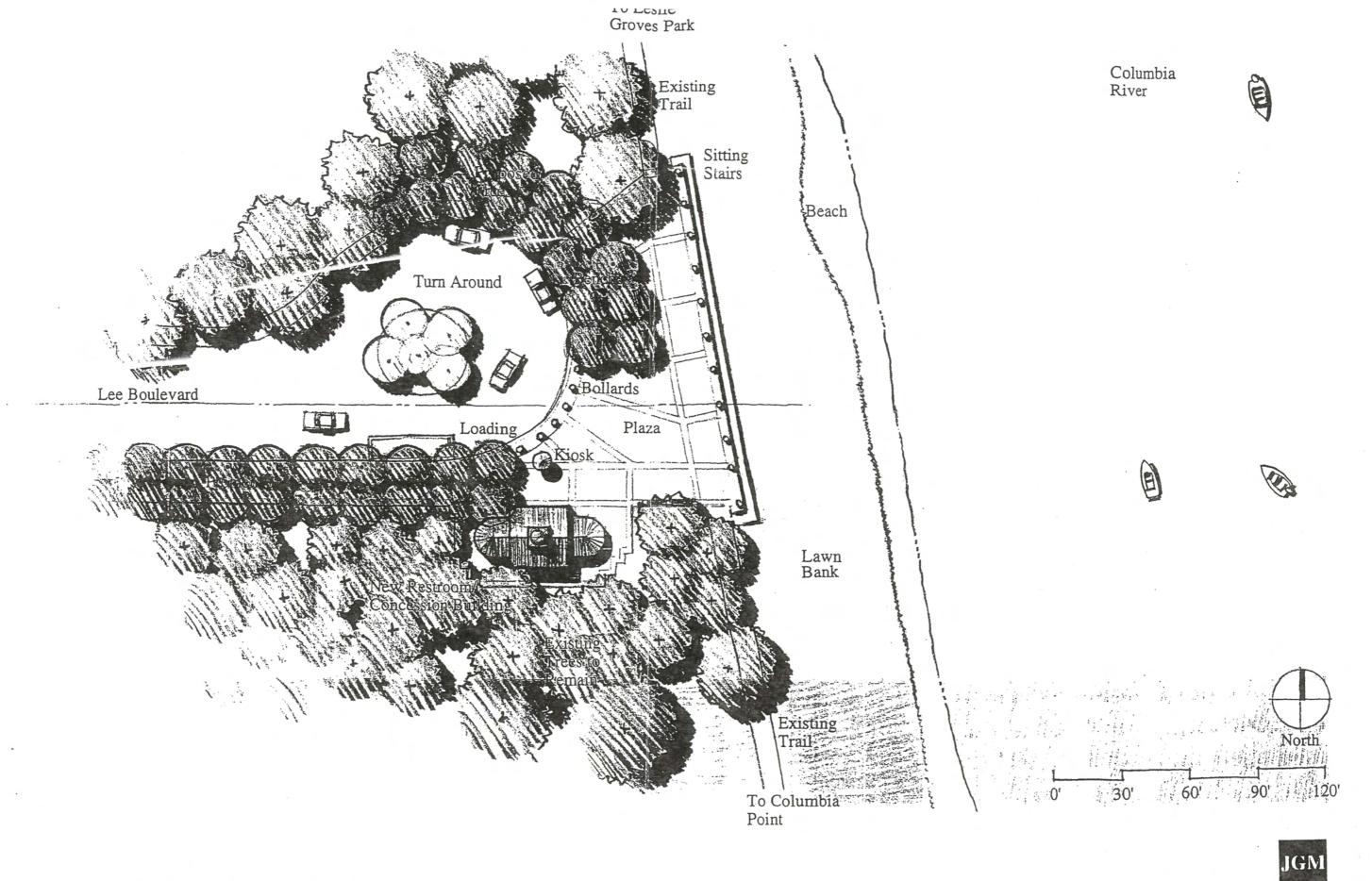


Section Through Levee



Rivershore Master Plan

Figure K



Plan • Lee Boulevard Landing

Rivershore Master Plan
Alternative 2 Figure L

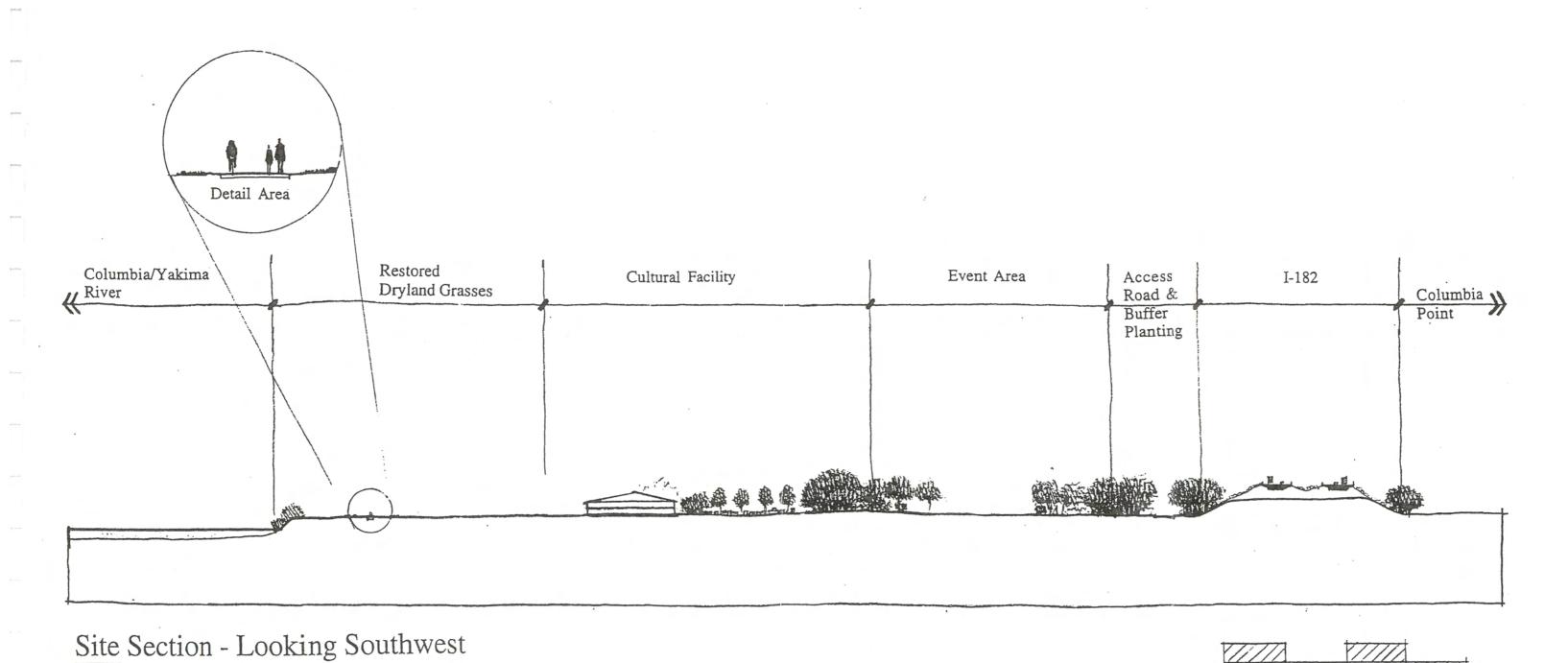


Figure M

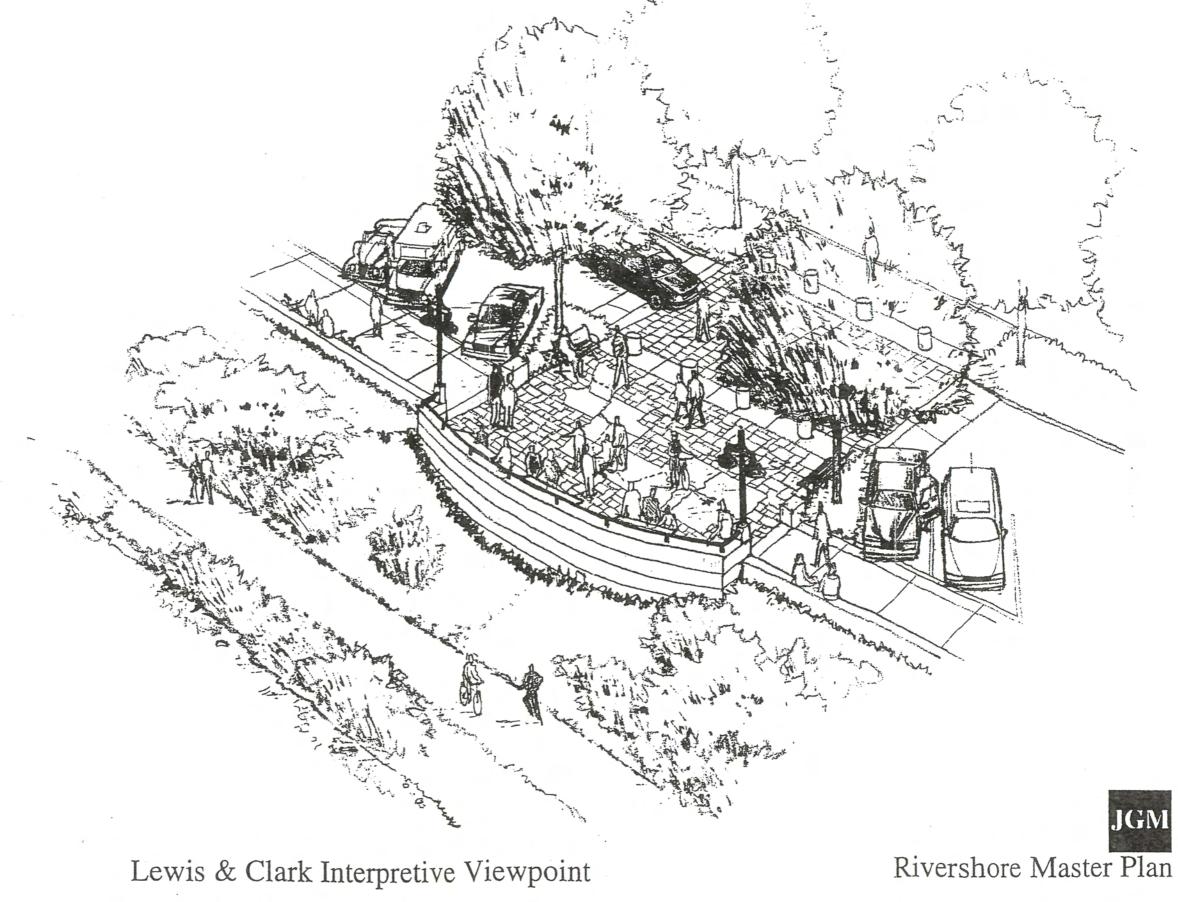
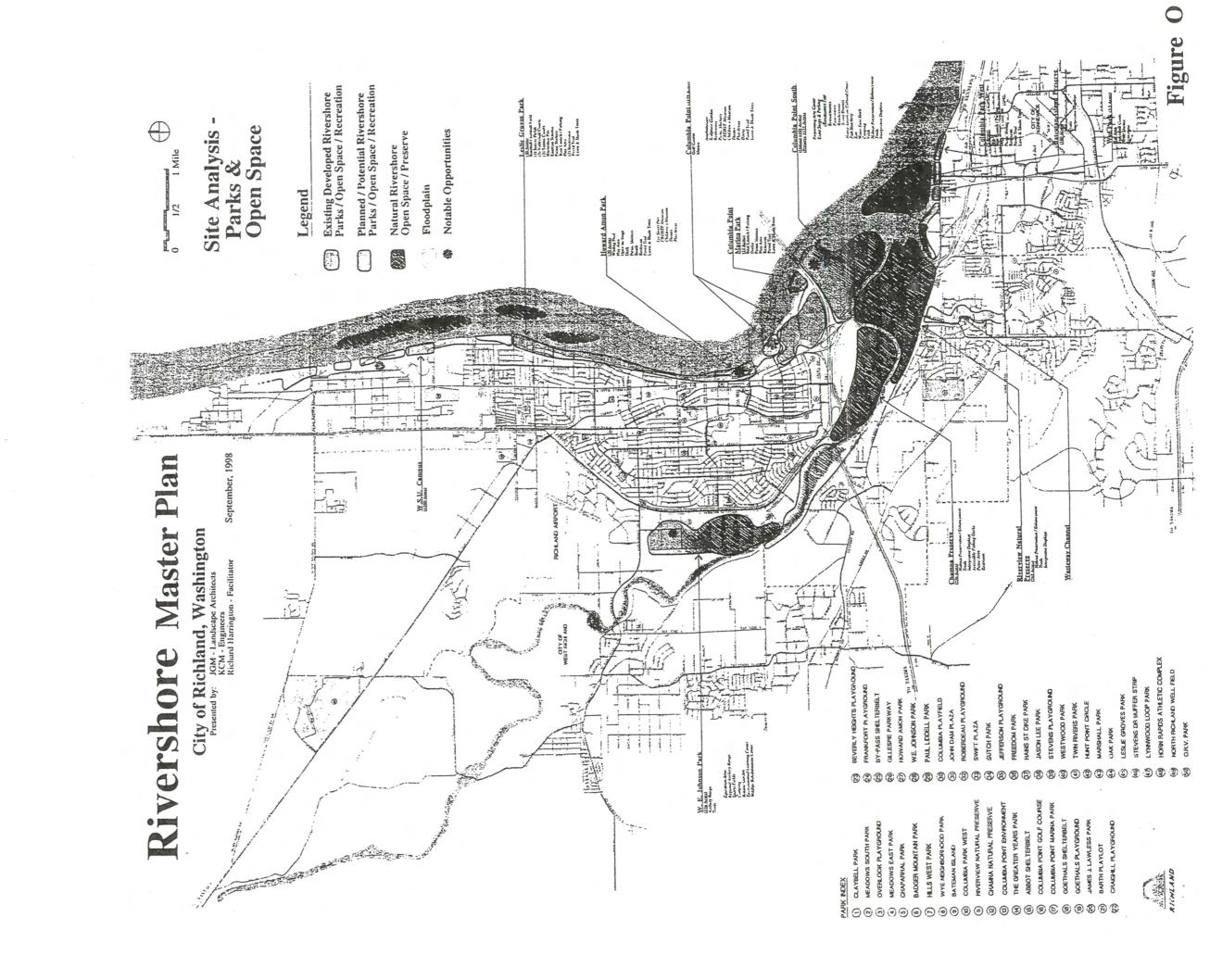
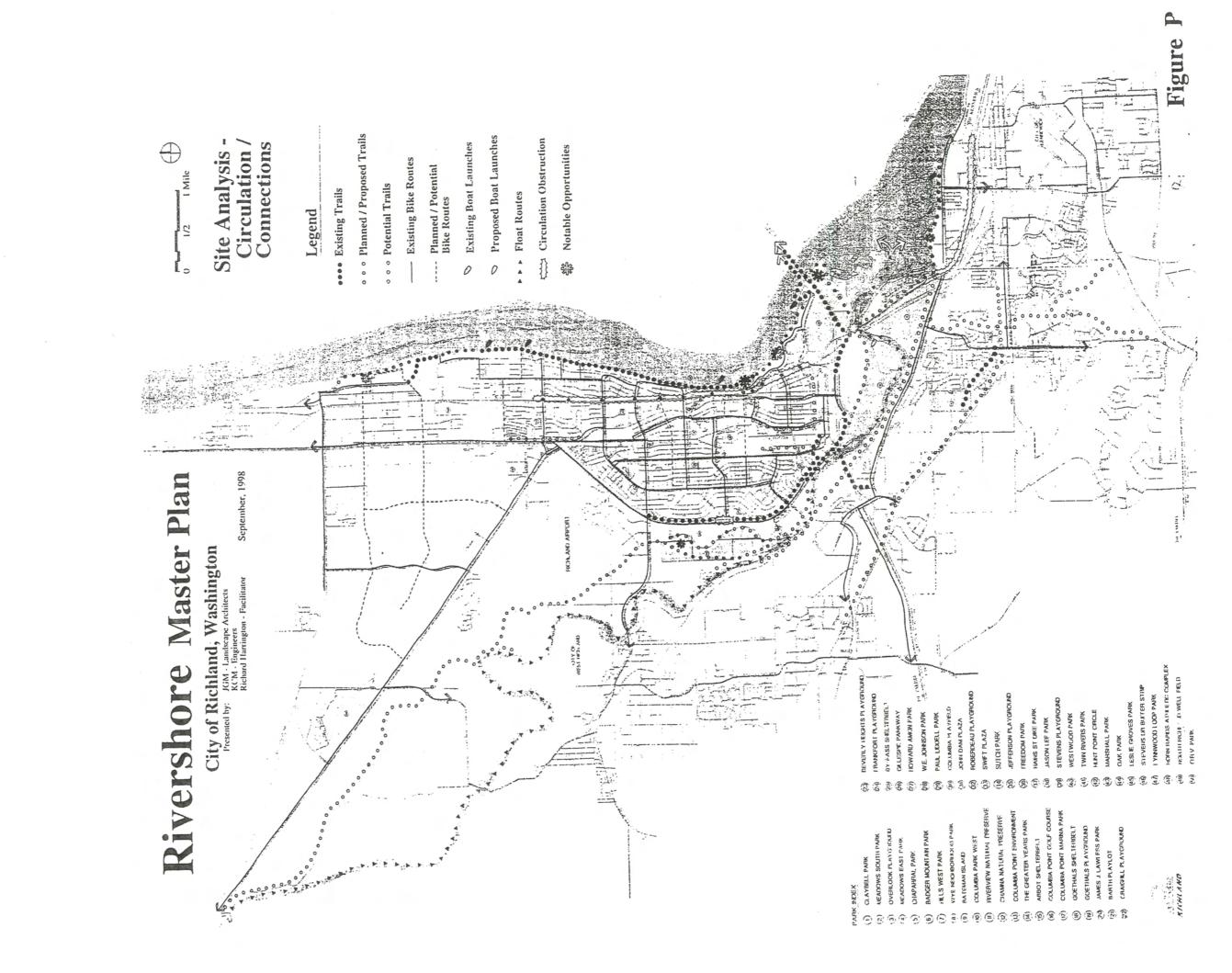
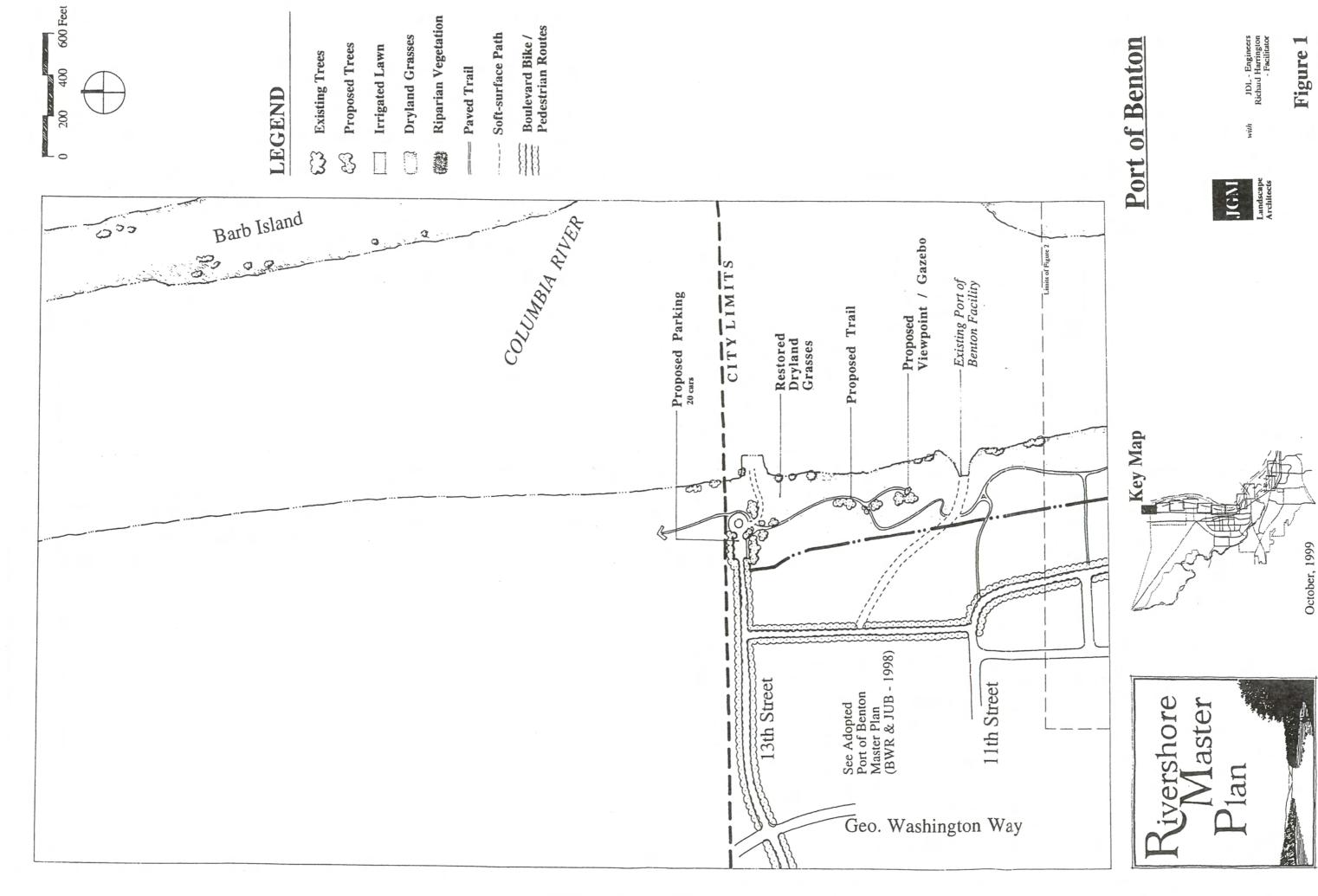
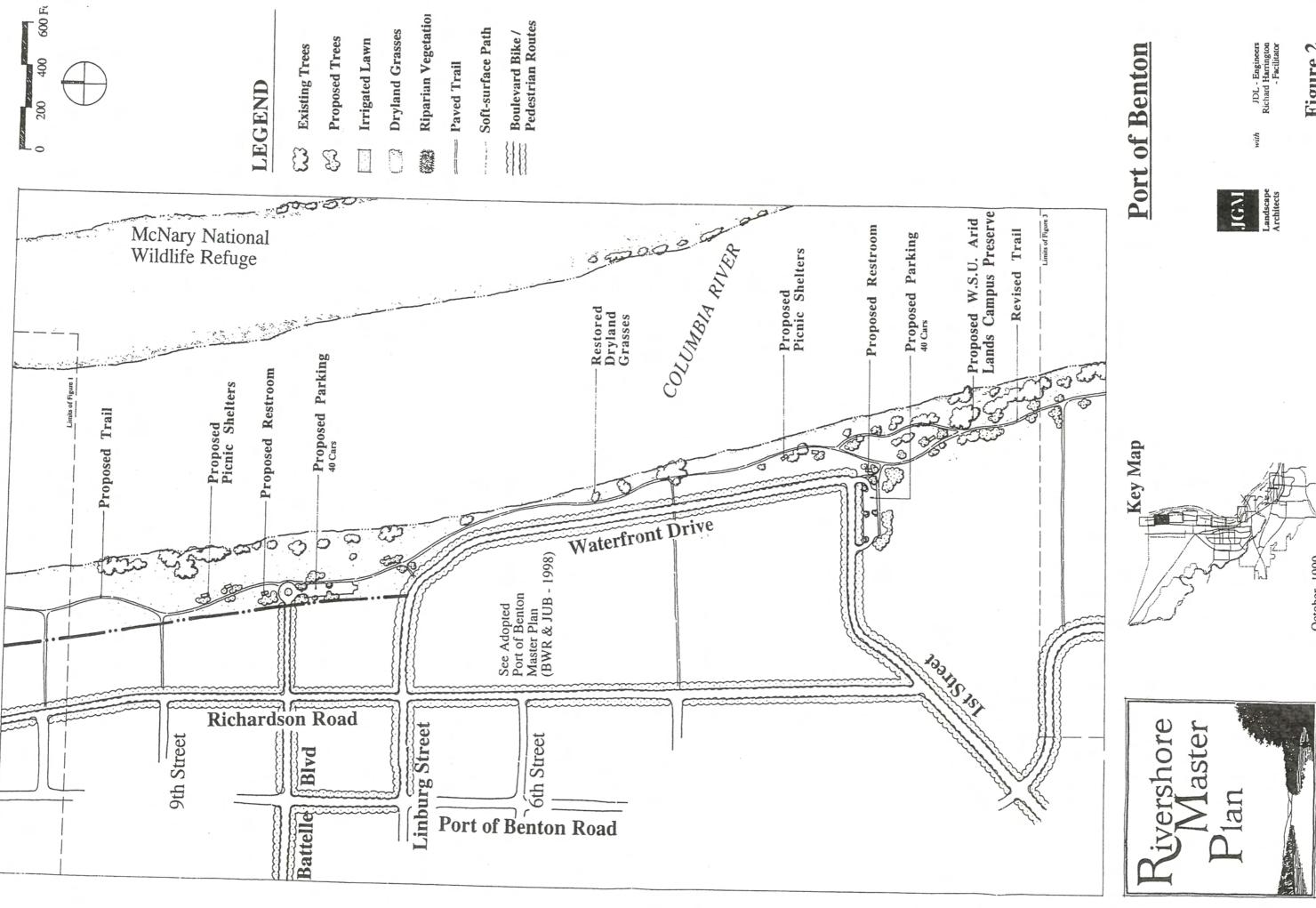


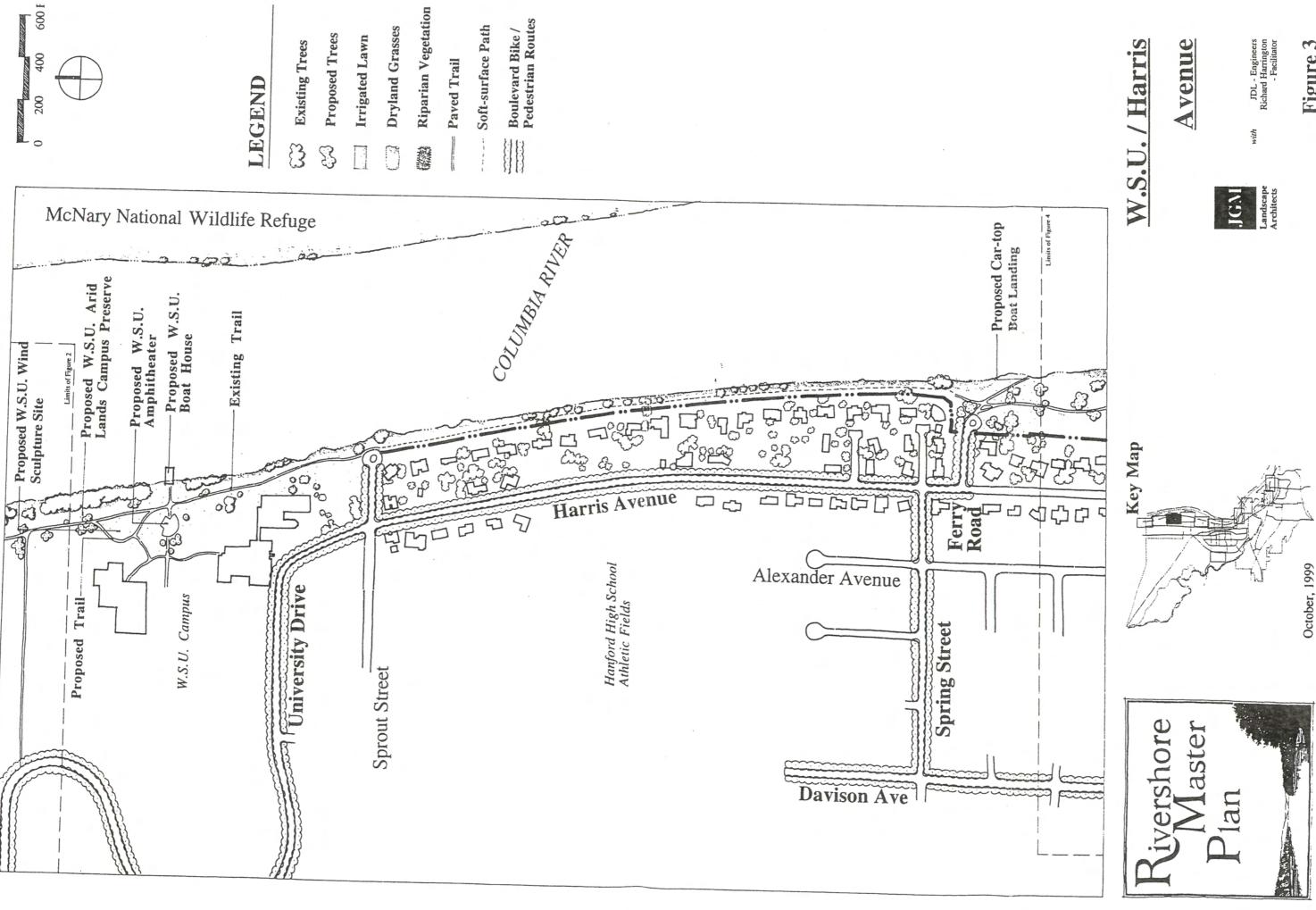
Figure N

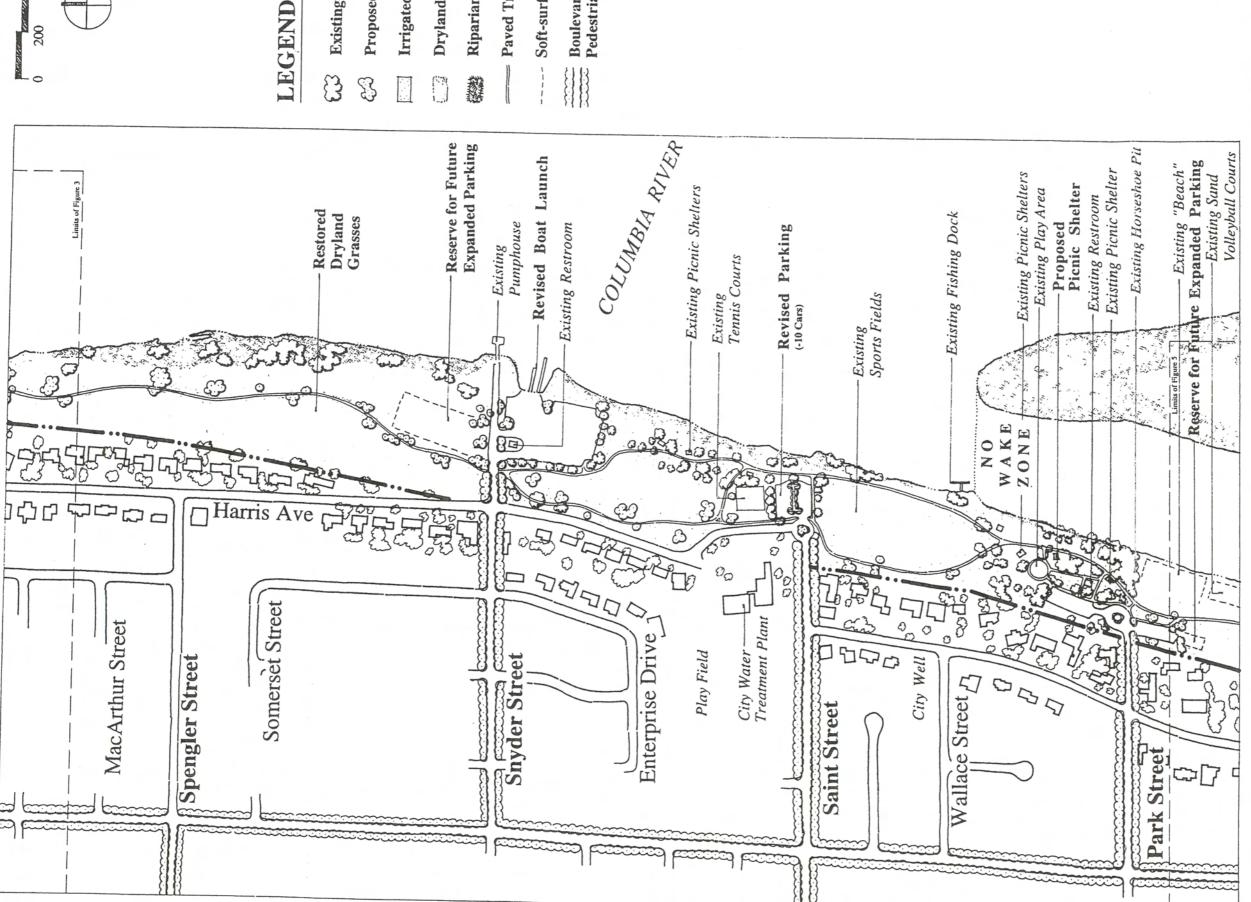












Riparian Vegetation

Dryland Grasses

Irrigated Lawn

Proposed Trees

Existing Trees

Boulevard Bike / Pedestrian Routes

Soft-surface Path

Paved Trail

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Key Map

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vershore

Park

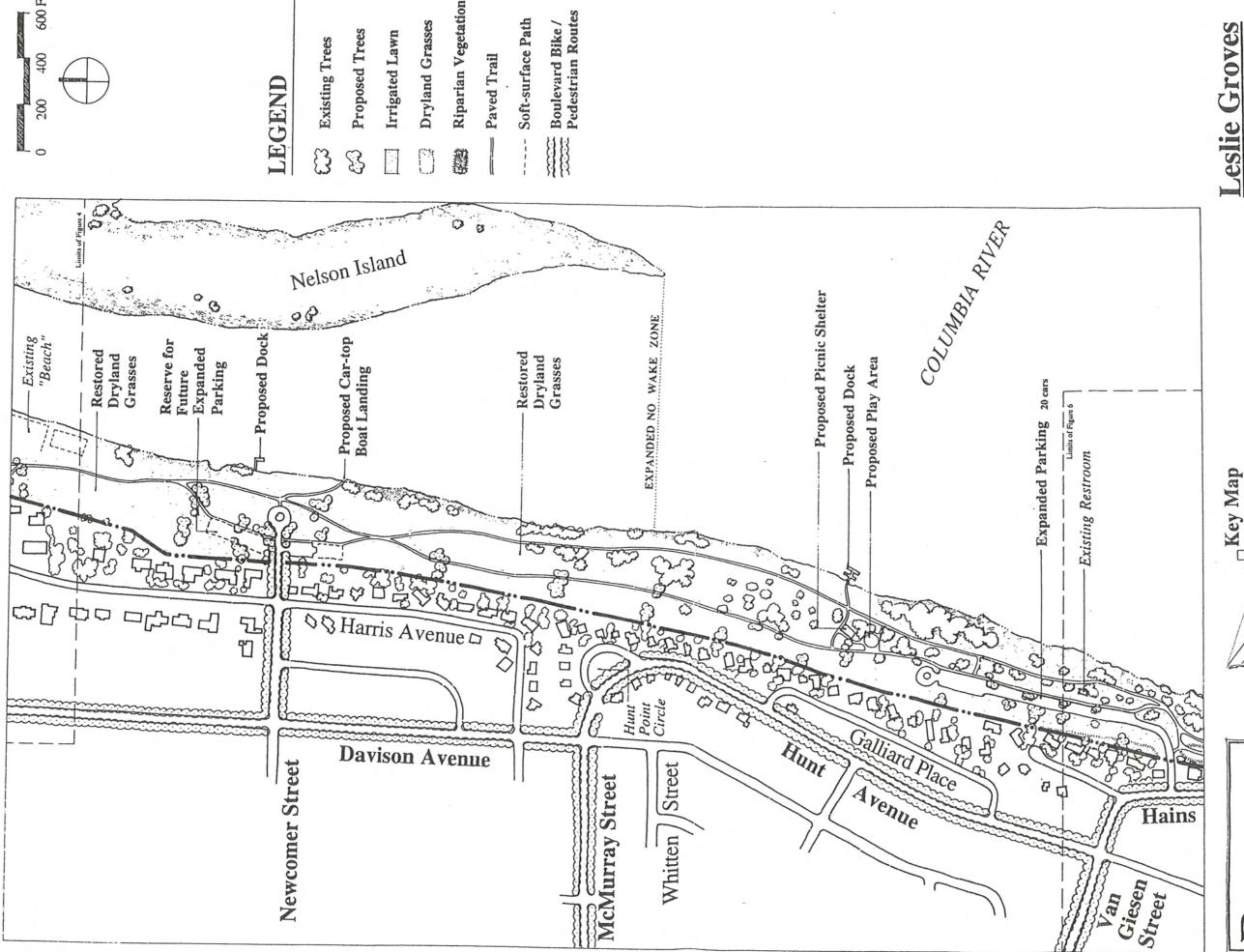
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JGMI Landscupe Architects

Figure 4

October, 1999



Leslie Groves

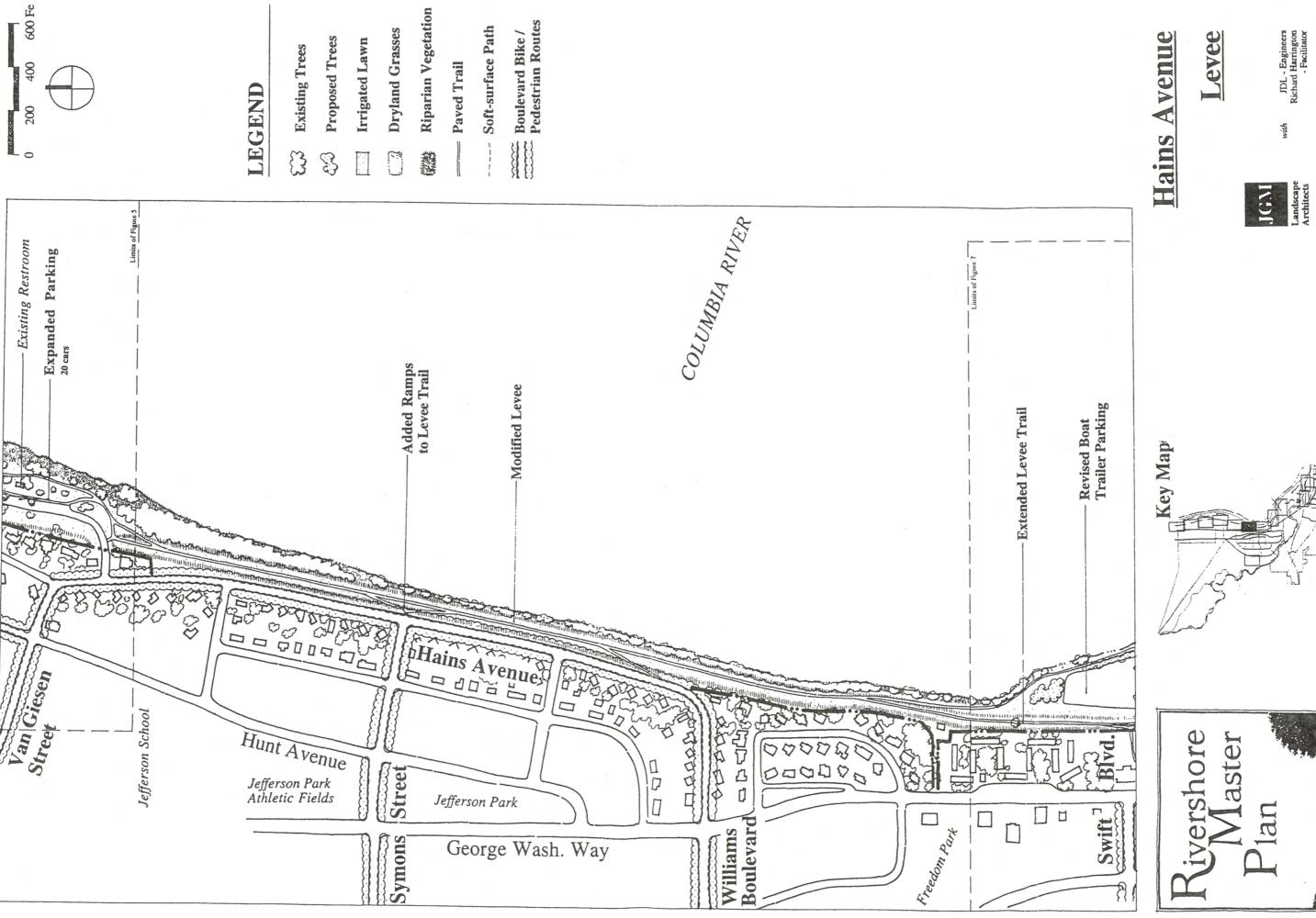
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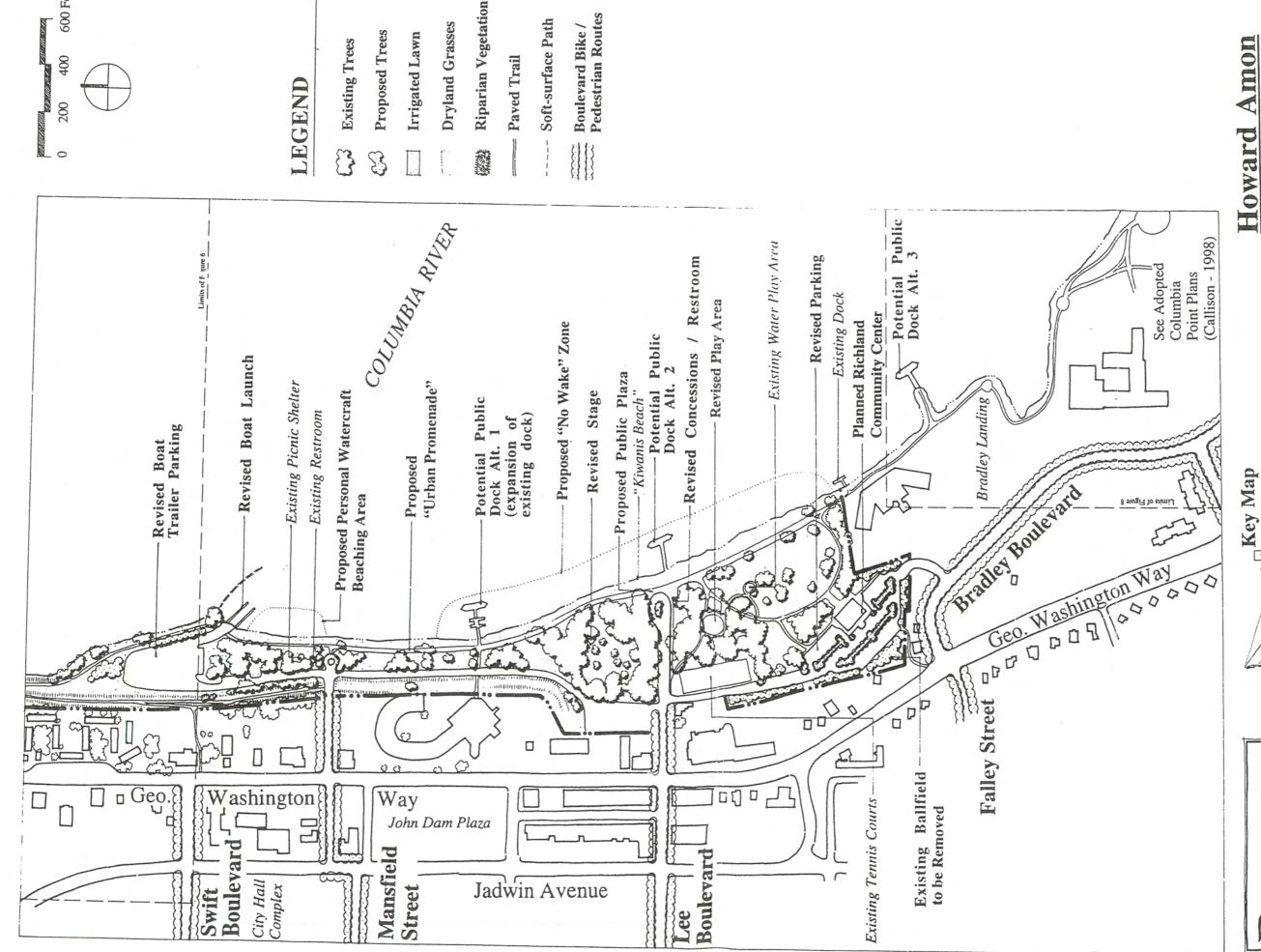
JGNI Landscape Architects

Figure 5

October, 1999



JDL - Engineers Richard Harrington - Facilitator



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Park Amon

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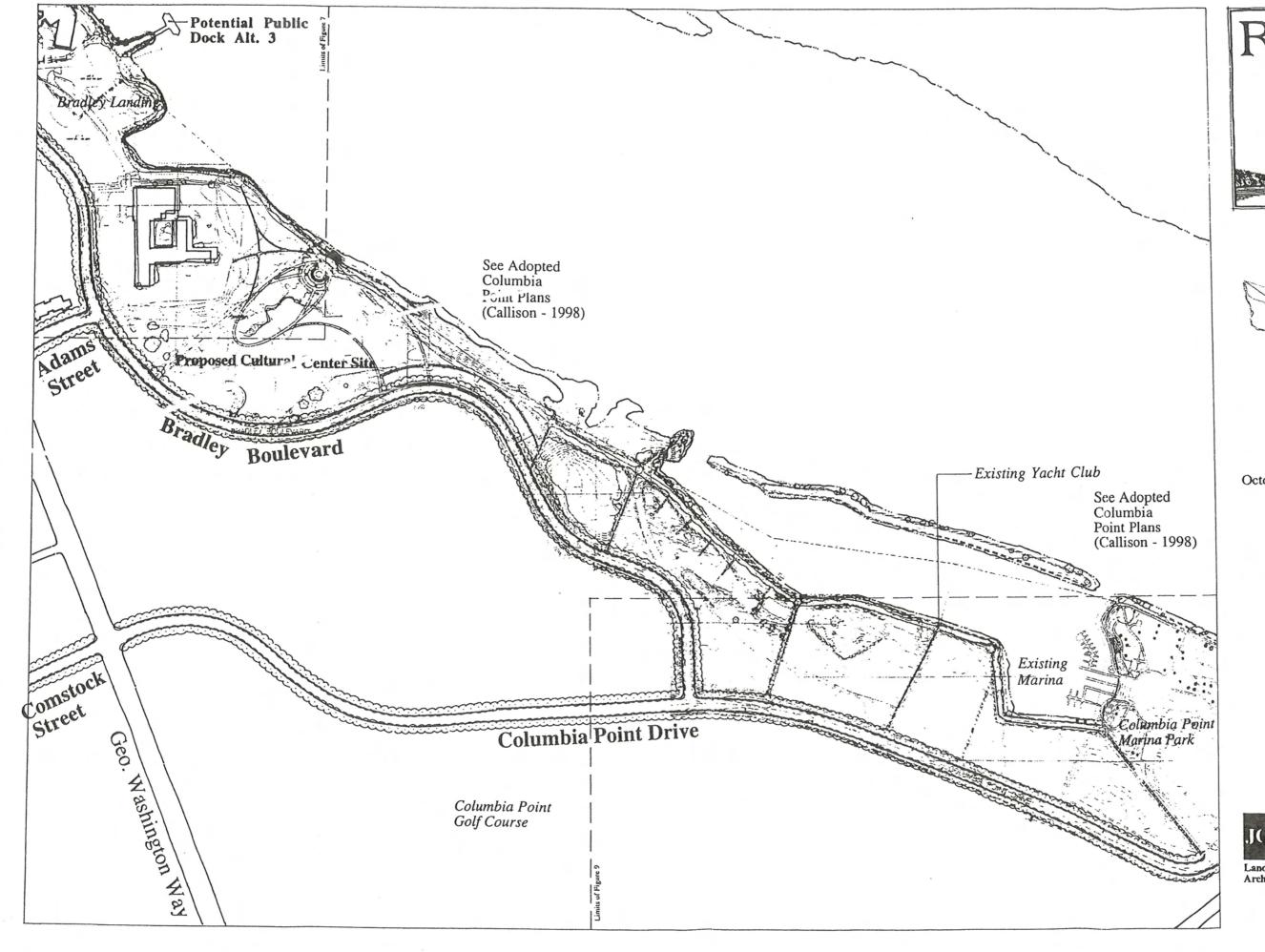
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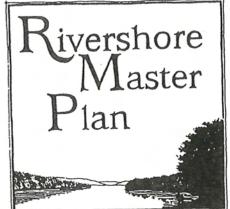
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JDL - Engineers Richard Harrington - Facilitator

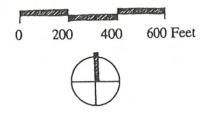
Figure 7

October, 1999







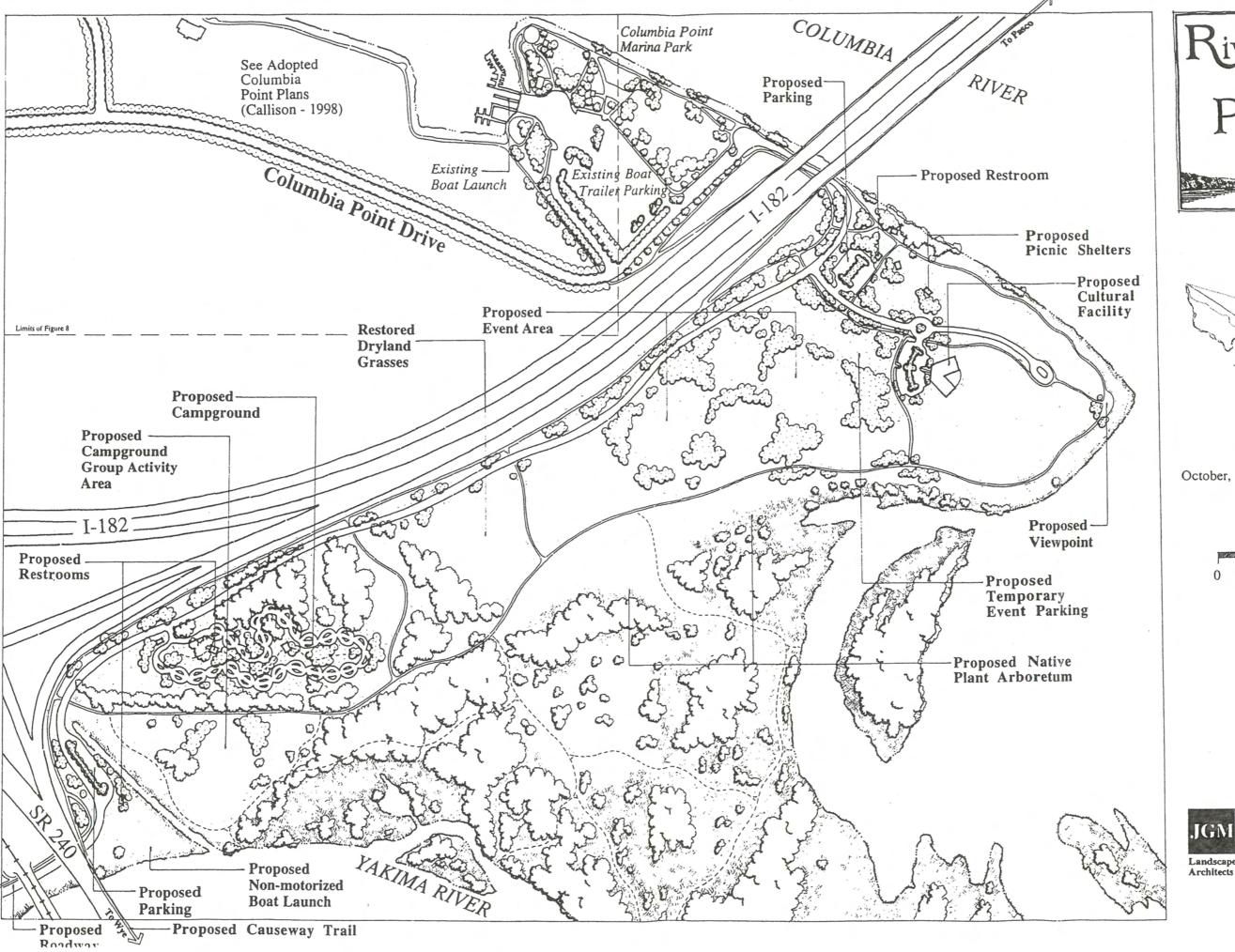


Columbia Point



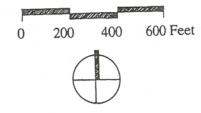
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h DL - Engineers Richard Harrington - Facilitator





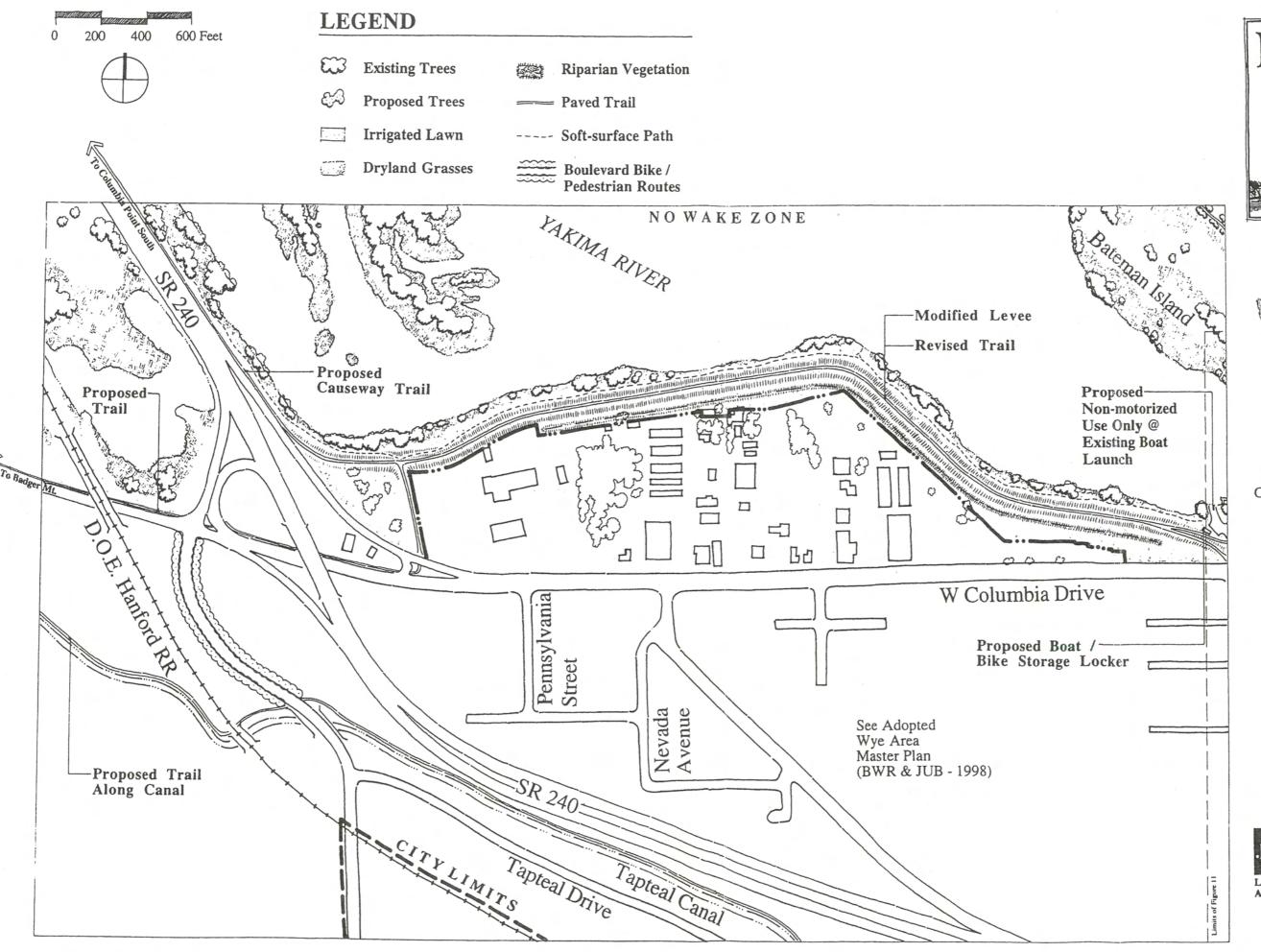


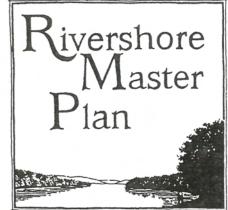


Columbia Point South



JDL - Engineers







Wye Area



with JDL - Engineers
Richard Harrington

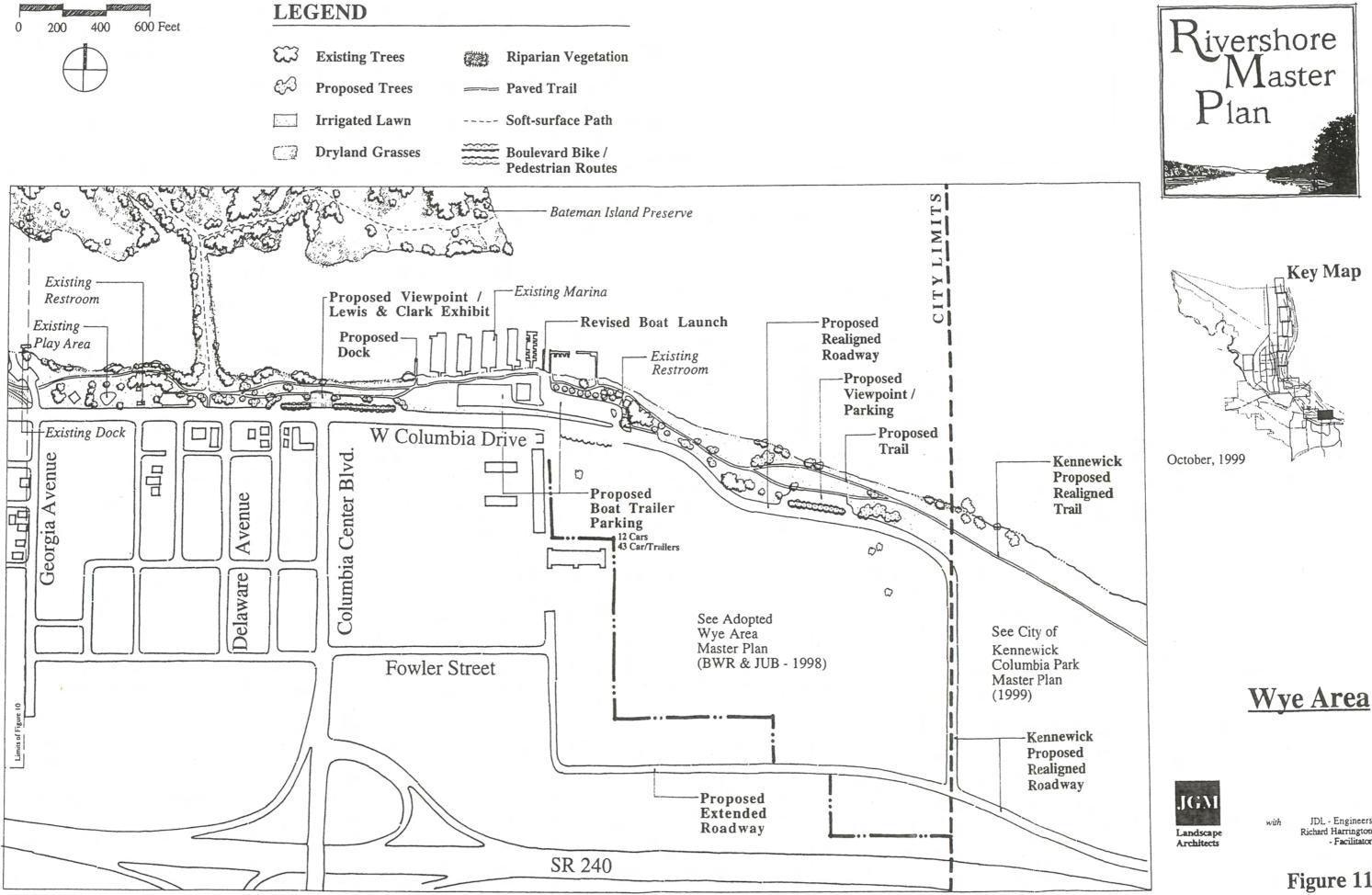
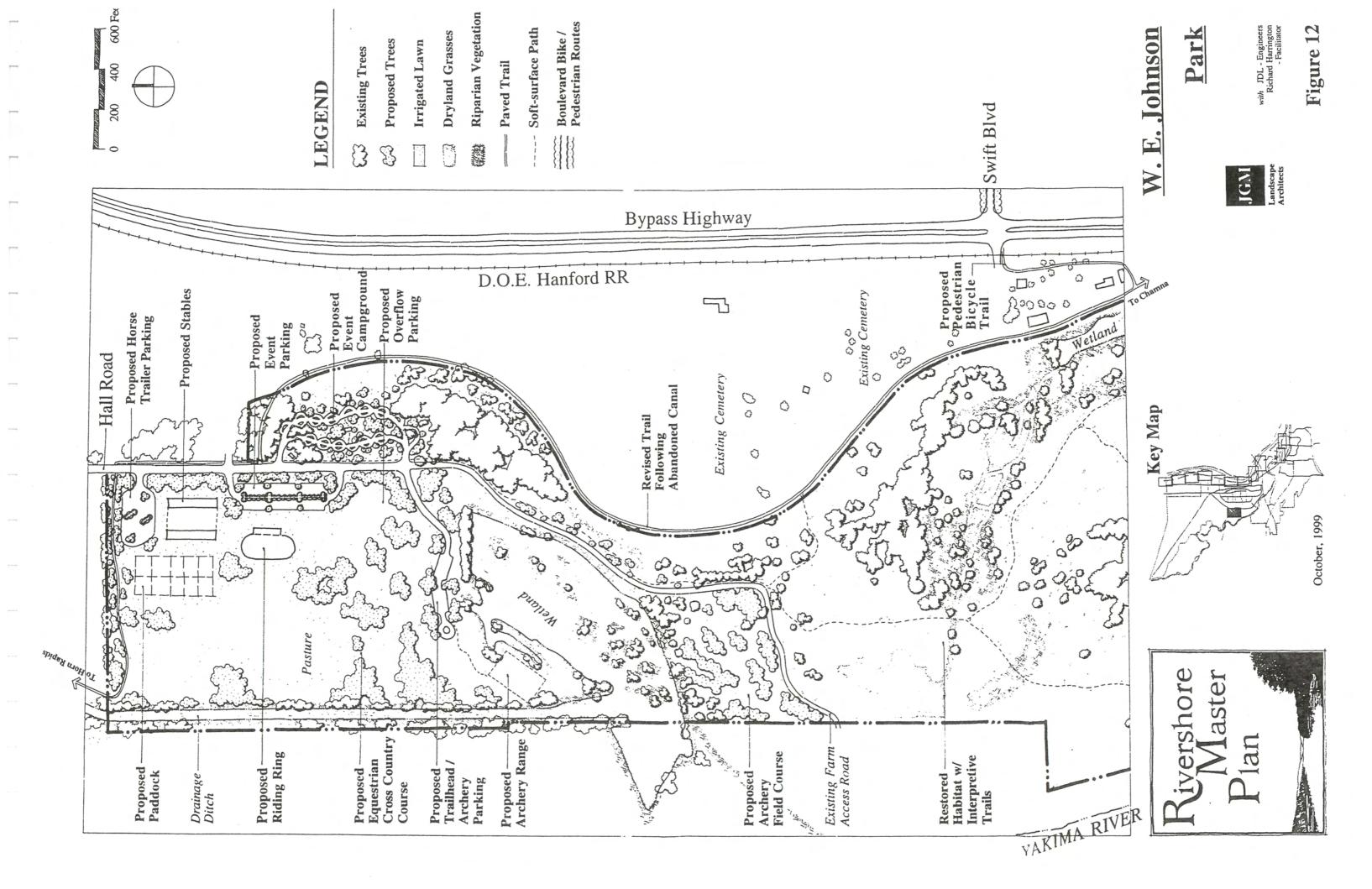


Figure 11

JDL - Engineers Richard Harrington - Facilitator

Key Map



D. IMPLEMENTATION

1. Cost Estimates

Park and trail development costs consist of three primary components: land acquisition, survey/design fees, and construction costs.

a. Land Acquisition Costs

The City of Richland is fortunate to have substantial shoreline areas in public ownership. This plan does not propose that additional land be acquired for park use, though completion of some trail segments may require future land acquisition.

b. Survey / Design / Engineering Fees

These overhead fees are expected to be roughly 25% of the construction cost of the project.

2. Improvement Priorities

a. Prioritization Process

This section describes how the priorities were established, and is following by tables representing the top priority projects. Priorities were established for improvement types and for focus areas from among the many components of the master plan. The consultant team worked with the City Council, the Parks and Recreation Commission, and the City staff. A process was used that looked at both geographic areas and types of improvements to give a well-rounded evaluation. A workshop format was used at a joint study session of the City Council and the Parks and Recreation Commission (May 25, 1999). The consultant team presented a prioritization exercise in which five members of the City Council and seven members of the Parks and Recreation Commission participated. In addition to the City Council and Parks and Recreation Commission, five members of the City staff and three members of the consultant team also completed the exercises. The data that was collected was synthesized into the overall priority summary (see tables 2 and 3 below).

The highest priority improvement types were trails, the public dock, boat launch revisions, play areas, and dryland grass restoration. The Howard Amon/Hains Levee area was the top priority area, followed by Columbia Point, the Wve Area, and Leslie Groves Park.

By the nature of the scope of this Rivershore Master Plan the scope of the priorities listed here is somewhat smaller than the scope of the upcoming Parks element of the Comprehensive Plan. Therefore, priorities established below should be woven into the Parks plan, where the overall funding for parks construction priorities will incorporate the recommendations of this plan, as well as budget considerations, into the Capitol Improvement Program (CIP).

Table 2 below indicates those projects ranked in the top 25% in the priority exercises. The remaining projects, not listed in the tables below, are considered lower priority and could receive

detailed rankings in the future. Improvements are included in the table below for each of the priority improvement types and each of the priority park areas. Table 2 is summarized in terms of proposed improvement priorities for each area. Improvements in some lower priority areas. such as Chamna and W.E. Johnson, modest funding has been included on the priority list. \$190,000 is estimated for restroom construction, which it is hoped could act as "seed" money to encourage user groups to initiate further improvements.

	TAB	LE 2		
IM	<i>IPROVEME</i> N	T PRIORITI	ES	
Improvement	High Priority	Medium Priority	Low Priority	Total
Port of Benton (figures 1-3)	\$0	\$0	\$0	\$0
Leslie Groves (figures 3-5)	\$315	\$125	\$150	\$590
Master Plan	\$25			
Boat Launch Revisions	\$75			
Dryland Grass	\$90			
Play Areas	\$125	\$125		
Park Amenities			\$150	•
Howard Amon/Hains Levee (figures 6-7)	\$835	\$150	\$0	\$985
Master Plan	\$25			
Park Amenities	\$520			
Play Areas	\$150	\$150		
Trails	\$140			
Columbia Point (figure 8)	\$100	\$160	\$0	\$260
Trails	\$100			
Plaza Park		\$160		
Columbia Point South (fig 9)	\$75	\$640	\$0	\$715
Master Plan	\$25			
Dryland Grass	\$50	\$250		
Trails		\$200		
Restrooms		\$190		1

_	High	Medium	Low	Total
Improvement	Priority	Priority	Priority	
Wye Area (figure 10-11)	\$248	\$420	\$0	\$668
Dryland Grass	\$23	•		
Park Amenities	\$225			
Trails		\$235		
Non-Motorized Boating Facilities		\$185		
Chamna	\$0	\$190	\$0	\$190
Restroom		\$190		
WE Johnson (figure 12)	\$0	\$0	\$190	\$190
Restroom			\$190	
Other (figure 7)	\$375	\$0	\$0	\$375
Public Dock Location & Design	\$75			
Public Dock Construction	\$300			
Total	\$963	\$1,935	\$2,090	\$3,973

b. Priority Summary

Table 3 below shows the information used in table 2, displayed in a written format. Projects are organized in the priority summary to reflect priorities that were described above Projects are bundled to take advantage of the other projects that are proposed for each area, and economies of scale, both for location and type of project.

	TABLE 3				
	PRIORITY SUMMARY				
Priority	Projects				
High	 Specific master plans for Leslie Groves, Howard Amon/Hains Levee, and Columbia Point South. Park amenities, play areas and trails for Howard Amon (to coincide with planned Richland Community Center). Trail connection in Columbia Point. Dryland grass restoration projects in Columbia Point South and the Wye area. Location and design study for the proposed public dock. Boat launch revisions, dryland grass restoration, and updated play area in Leslie Groves. Completion of amenities for Howard Amon/Hains Levee. Park amenities in the Wye area. Public dock construction. 				
Medium	 Second play area for Howard Amon/Hains Levee. Plaza Park for Columbia Point. 				

Dryland grass restoration for Columbia Point South. Trails for the Wye area. Restroom for Chamna. Second play area for Leslie Groves. Trails and restrooms for Columbia Point South. Non-motorized boating facilities for the Wye area.

Low

- Additional park amenities for Leslie Groves.
- Restrooms for W. E. Johnson.

3. **Potential Funding Sources**

The City's existing funding sources may cover part of the anticipated capital costs of projects identified in this plan, but it will likely take a combination of sources from federal, state and local jurisdictions, as well as from the private sector, to fund the projects. What follows is a brief discussion of some of these sources that the City should consider for park improvements.

City Funding Sources a.

The City has a number of fund sources that it could consider for park improvement funding. Some of the funding sources are unrestricted which means that the City can choose to allocate these sources for any City purpose. Other local fund sources are dedicated for specific purposes. A description of the range of City funding sources that may be available for park improvements follows.

General Fund b.

General funds are non-dedicated revenues whose revenue source is primarily property tax collection. It is the single largest revenue source for paying for city government activities. Since the general fund is non-dedicated it can be used for many purposes and its allocation can change from year to year.

The City Council could elect to use general funds to finance a portion of the park projects. The Council could do so either with a direct budget allocation for a specific park improvement project, or use general fund revenue to retire bonded debt. A non-voted or councilmanic bond would have to be initiated by the Council to pay for the park improvements. General fund revenues would then be used to pay for the bond debt.

The advantage of this approach would be the flexibility of the City Council to re-allocate the general fund budget to pay for the park improvements. There are, however, several disadvantages to this approach. One of the most important disadvantages would be the restriction on increasing general fund tax assessments to accommodate the additional park improvement costs. The City would not be able to increase the general fund budget to pay for the park improvements. Instead, the City would have to re-allocate funds from other City services to pay the park improvement costs. This might be difficult to justify given the number of competing needs for the budget that the City Council must fund.

c. Taxing Bond

The City could consider proposing a taxable bond to pay for park improvements. This type of bond would be used specifically for the proposed park improvements and would have to be approved by voters. If the bond is approved, the City would use additional tax assessments to pay for the park projects and use these assessments to pay for the bond.

The main advantage of this funding approach would be a reliable, dedicated revenue stream. There would not be the same risk that exists with the general fund approach as the special tax assessment would only be used to pay for the bond.

d. Park Reserve Funds

The City has a park reserve fund that could be used, in part, to pay for the improvements. The source of the park reserve fund revenues are from lease rentals, land sales, interest income, donations, and contributions from the community. The City has forecast annual revenue for the years 1999-2004. While the total revenue ranges from \$403,376 in 1999 to approximately \$191,494 in the year 2004, much of the revenue is already committed for other park and recreation activities.

This source, however, could be used for park improvements. To do so would require reallocating the park reserve fund budget to pay for some of the projects.

e. Hotel/Motel Tax Funds

Hotel/Motel taxes are collected by the city to fund projects or activities that enhance or promote tourist-related business. While the fund allocation is restricted to certain types of activities. some park improvement activities that have been identified in this plan may qualify.

Recently completed fund revenue and commitment projections indicate that there might be funding available for qualified park improvements. Ending fund balances for the years 1999-2004 indicate a cumulative balance of approximately \$748,000.

f. Real Estate Excise Tax Funding

The City collects real estate excise taxes (REET). The City divides the revenue that it collects from this source into two portions, the First .25 percent REET and the Second .25 percent REET. Revenues from each of these sources are used for specific activities.

The First .25 percent REET is currently obligated to paying for debt service on city shop facilities and plumbing materials. Forecasts for the years 1999-2004 indicate a small amount of revenue is available for other activities.

The Second .25 percent REET excise tax revenue can be used to finance construction of specific facilities. Current commitments indicate that some of the funding is being used for the Columbia

Park West Construction and the City's Industrial Development Fund. Park improvements identified in this plan might also qualify for this funding.

Forecasts of the Second .25 percent REET for the years 1999-2004 indicate that there is an increasing amount of revenue available for other projects. The amount of revenue available in 1999 is \$173,000 and rises to approximately \$1.5 million by the year 2004.

g. Public Facility Authority

The City might consider the creation of a public facility authority. A public facility authority would create a separate taxing district and the ability for the authority to use bonds to pay for facility construction. There are restrictions, however, on the eligibility requirements. A public facility authority must have a minimum of \$10 million in facility improvements. Currently the Rivershore park improvements over the next 6 years are about \$6 million. Additional, improvements will need to be made in the future that could exceed the \$10 million minimum criterion. At this time, however, it does not appear that the park improvements would meet minimum construction criterion.

h. Park Impact Fee Revenue

Under the State Growth Management Act (GMA) cities have the authority to impose park impact fees to pay for the cost of additional park, recreation and open space capacity needs that would come from new Richland residents and users. While the City does not currently collect impact fees, it might consider doing so for future park improvements.

Impact fees can only be collected for that portion of new park improvements that is attributable to the additional park capacity demanded by new residents and users. For example, a developer would pay an impact fee based on the additional park capacity needed to serve the new develop residents or users of the new facility.

To determine the impact fee level the City would need to determine what portion of the new park facilities would be related to new residents and users. The costs associated with the new residents and users would be the basis for the impact fee. The impact fee amount a developer would have to pay would be based on the proportional contribution the development would have on new capacity demand.

I. Miscellaneous Local Funding

There are several other fund sources that could be used to help pay for park improvements. These sources include mitigation fees, public/private partnerships, and user fees.

Developer contributions and mitigation fees are determined on a case-by-case basis. The amount would vary depending on negotiations between the City and the developer.

Public/Private partnerships could be another source of funding park improvements. This would be best for projects that have a potential revenue stream. A private developer could potentially

manage and operate this type of facility and provide the City with a share of the revenue from events that would be scheduled.

User fees would also be a potential revenue source. Nominal fees could be collected from parking facilities, tennis courts, and boat launches to help offset the maintenance costs. Savings on maintenance costs could be used for construction costs.

j. State Funding Sources

Funding from the state of Washington may be available for facilities construction through the Interagency Committee for Outdoor Recreation (IAC). The IAC provides matching grants for acquisition and development of parks, trail, and waterfront recreation facilities, as well as waterfront and upland habitat areas. The city does not have to have the entire matching amount in cash, however. In-kind services performed by volunteer groups, or donated materials or services also qualify for the match.

The Richland Rivershore Master Plan is a good candidate for funding from IAC and similar programs because it will receive high marks in some of their qualification categories including:

- A well articulated vision for the parks and trail systems.
- Coordination between Richland and other jurisdictions.
- Comprehensive and well thought out plans.
- Linkage with other trails in the area.
- Linkage within the community.
- Views of, and physical access to the water.
- Wildlife habitat connectivity provided by the riparian habitats.
- Exceptional scenic value, including natural and cultural aspects.
- Demonstration of cost efficiency through cooperative agreements with business and citizens for maintenance or with developers.
- Strong community support.
- Coordination with both local and regional planning documents and requirements.

•

Similar state funding from IAC or other sources may also be available for small park and boat launch projects associated with the trails.

k. Federal Funding Sources

Funding sources can include federal grants from the Federal Transportation Equity Act (TEA 21) enhancement funding. TEA 21 funds are currently available for transportation projects including non-motorized transportation facilities such as trails, which facilitate commuting. TEA 21 funding can also be used to enhance multi-modal transportation facilities, including aesthetic improvements and adjacent park facilities.

In addition to TEA21, the National Recreational Trails Fund Act (NRTFA) may also provide funding. NRTFA is part of the National Highway System bill and is based on taxes paid on fuel used in off-highway recreational vehicles.

1. Other Funding Opportunities

Volunteers have the potential to have a significant impact upon the construction, and in particular, the maintenance of these parks and trails. The formation of an Adopt-A-Park or Trail program for volunteer crews to help keep the parks / trails clean, could reduce the City's parks / trails maintenance costs. Americore volunteers (America's domestic Peace Corps program equivalent) may be available for construction assistance. Other groups which might be possible sources of volunteer labor include: Rotary, Kiwanis, Boy Scouts, Girl Scouts, equestrian groups. archers, rowing clubs, garden clubs, elementary school groups and high school clubs.

E. MAINTENANCE

1. Maintenance Strategies

Good design, quality construction, and appropriate planting should help to minimize future maintenance. The cost of implementing this proposed plan lies not only building park facilities and trails, but also in keeping the improvements safe, clean, and in good repair far into the future. Controlling maintenance costs begins with good design, and establishing realistic maintenance goals. More highly developed, intensively used facilities will generally require the highest level of upkeep. Irrigated lawn, in particular, requires frequent upkeep. In developed areas, selection of appropriate materials, placement of facilities and proper plant selection should help to control future maintenance costs. Materials for hardscape, buildings and furnishings should be durable as well as visually appropriate to the situation.

The City could encourage a public/private partnership to control cleanup costs in some locations. An "Adopt-a-Park" (or trail) program offering recognition to volunteer groups could serve this purpose. In addition to controlling costs it broadens the community "ownership" by giving people an active role in the their park, trails and open spaces. Local businesses, and user groups such as bicycle clubs, running groups, equestrian clubs or walking clubs should be encouraged to "adopt" a segment of trail or park area. Backcountry trails and natural preserves are particularly difficult for staff to maintain, but can lend themselves well to this type of program.

Proper plant selection and placement should reduce the need for maintenance in both natural and developed park areas. Within natural preserves the use of native plants should be strongly encouraged for their abilities to tolerate difficult site conditions, appropriate aesthetics and for the habitat values they can provide. In developed areas where irrigated, ornamental landscape is appropriate plants should be chosen for hardiness as well as ornamental characteristics. Best management practices should be used reduce maintenance costs and reduce fertilizer and pesticide applications. Plants should be chosen for their ability prosper in the microclimates where they will be placed. Consideration should be given to their future growth characteristics, so that pruning and other long-term maintenance can be reduced.

APPENDIX A - SITE ANALYSIS

APPENDIX B – REFERENCES

1st Street Industrial Park Master Development Plan, Port of Benton, 1996

<u>Chamna Natural Preserve Land Use and Wildlife Management Plan (Draft)</u>, the Chamna Work Group, 1998

City of Richland Comprehensive Plan, KCM, WA, 1997

City of Richland Entry Signs / Streetscape Mater Plan, Robert Perron, Landscape Architects & Planners, 1992

City of Richland Visual Preference Survey, Hewitt Isley, 1993

McNary Lakeshore Management Plan, U.S. Army Corps of Engineers, 1983

McNary Master Plan, U.S. Army Corps of Engineers, 1982

Richland Central Business District - Economic Enhancement Strategy, Hyett Palma, 1998

Richland Parks & Recreation Comprehensive Plan, City of Richland, WA, 1993

Richland Wye Master Plan, BWR & JUB, 1998

Rivershore Enhancement Plan - Phase II: Upland Linkages, Mundy & Associates, 1990

Rivershore Report to the Citizens of Tri-Cities, WA, Tri-Cities Rivershore Enhancement Council, 1997

South Columbia Point Concept, Dr. Robert Nelson, 1995

Tapteal Greenway Concept Plan (Draft), Tapteal Greenway Board, 1998

Tri-Cities Regional Rivershore Enhancement Plan, The NBBJ Group, 1989

Tri-Cities Riverboat Feasibility Study, The Gilmore Research Group, 1991

Tri-Cities Science and Technology Park Master Plan, BWR & JUB, 1996

WSDOT Design Manual, Facilities for Nonmotorized Transportation, Washington State Department of Transportation, 1989-94

APPENDIX C - PRIORITY EXERCISES

1. Improvement Priorities

a. Prioritization Process

This section describes how the priorities displayed in tables 1 and 2 were established. To chose priority projects and focus areas from among the many components of the master plan, the consultant team worked with the City Council, the Parks and Recreation Commission, and the City staff. A process was used that looked at both geographic areas and types of improvements to give a well-rounded evaluation. The data that was collected was synthesized into the overall CIP.

c. Methodology

At a joint study session of the City Council and the Parks and Recreation Commission (May 25. 1999), the consultant team presented a prioritization exercise. Five members of the City Council and seven members of the Parks and Recreation Commission were in attendance and participated in the exercise.

The exercise consisted of three parts: first, priorities were determined based on park location: next, priorities were determined based on improvement types; and last, a mock budget was prepared for the first year of the program. Each participant used a set of numbered "Post-it" notes to indicate priority between eight park areas and nineteen improvement types, with "1" indicating the most important priority.

In addition to the City Council and Parks and Recreation Commission, five members of the City staff and three members of the consultant team also completed the exercises.

d. Data Summary

The data that were collected were compiled for each exercise. An overall average and a group average for each of the participant groups were compiled for both the improvement types and the park areas. Because only seven budget exercise worksheets were received, only an overall average was computed for this data.

Table 3 shows the top eight priorities for improvement types for the participant groups. Of the nineteen choices, the highest priority items were trails, public dock, boat launch revisions, play areas, and dryland grass restoration.

TABLE 3 IMPROVEMENT TYPE PRIORITIES				
Overall Average	City Council	P & R Commission	Staff	Consultant Team
Trails	Trails	Trails	Public Dock	Dryland Grass
Public Dock	Public Dock	Play Areas	Trails	Trails
Boat Launch Revs.	Boat Launch Revs.	Restrooms	Play Areas	Irrigated Lawn
Play Areas	Cultural Facility	Dryland Grass	Columbia Point	Public Dock
Dryland Grass	Restrooms	Park Amenities	Boat Launch Revs.	Boat Launch Revs.

Irrigated Lawn	Dryland Grass	Irrigated Lawn	Park Amenities	Levee Modifications
Restrooms	Columbia Point	Cultural Facility	Irrigated Lawn	Mitigation Planting
Park Amenities	Play Areas	Mitigation Planting	Small Docks	Small Docks

Table 4 shows the top five priorities for park areas to be improved. Howard Amon/Hains Levee was the top overall priority area, followed by Columbia Point, the Wye Area, and Leslie Groves.

TABLE 4 PARK AREA PRIORITIES				
Overall Average	City Council	P & R Commission	Staff	Consultant Team
Howard Amon/Hains Columbia Point Wye Area Columbia Pt. South Chamna	Columbia Point Howard Amon/Hains Wye Area Leslie Groves Chamna	Howard Amon/Hains Columbia Point Wye Area Leslie Groves Columbia Pt. South	Howard Amon/Hains Columbia Point Wye Area Leslie Groves W. E. Johnson	Columbia Pt. South Chamna W. E. Johnson Wye Area Howard Amon/Hains

Table 5 shows the ranking given to the top eight improvement types in the budget exercise. In this exercise, trails were the top priority, followed closely by the public dock and the amphitheater.

TABLE 5 BUDGET EXERCISE RANKING			
Rank Improvement Type			
1	Trails		
2	Public Dock		
2	Amphitheater		
4	Levee Modifications		
5	Miscellaneous Columbia Point Improvements		
6	Cultural Facility Site Work		
7	Restrooms		
8	Play Areas		

Howard Amon Park Master Plan

June 14, 2001

Prepared for:

City of Richland Parks and Recreation Department



Consultants:

Ramm Associates, Inc.

SCM Architects and Engineers, Inc.

Pomegranate Institute

Chapter I: Introduction and Overview

- 1.0 Introduction
- 2.0 Background and History
- 3.0 Master Planning Process
- 4.0 Plan Organization

Chapter II: Foundation

- 1.0 Introduction
- 2.0 Relationship to City and Parks and Recreation Plans.
- 3.0 Summary of Trends, Issues and Opportunities.

Chapter III: Vision and Development Concepts

- 1.0 Vision of Howard Amon Park
- 2.0 Objectives

Chapter IV: Master Plan

- 1.0 Activity Programming
- 2.0 Art Integration Recommendations
- 3.0 Pedestrian and Vehicular Circulation
- 4.0 Safety, Security and Emergency Access
- 5.0 Rehabilitation
- 6.0 Master Plan Graphics

Chapter V: Implementation Strategies

- 1.0 Design Guidelines
- 2.0 Community Participation in Construction Opportunities
- 3.0 Funding Options
- 4.0 Cost Estimate

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1.0 Introduction

Parks, trails and greenways provide our communities with a sense of place and identity while forming the fabric of our communities. Howard Amon Park tells the story of Richland through its history and use. Its creation through vision and hard work symbolize the independence and dedication of the people of Richland. As Richland has grown and changed Howard Amon Park has adapted through the years to meet the ever changing needs of the community. This Howard Amon Park Master Plan is prepared to strengthen the character of Howard Amon Park for future generations through a coordinated and systematic master planning effort.

2.0 Background and History



Howard Amon Park is generally recognized as the first public park created in Richland. It was established by Howard S. Amon for the community at about the time the city was established in 1905. Later, Howard S. Amon donated the initial parcel to the city in 1911. Martha Berry Parker's book "Tales of Richland, White Bluffs & Hanford" 1805-1943, Before the Atomic Reserve, (1986, Ye Galleon Press) provides several important historical notes about Howard Amon Park. These include:

"1906 – Richland built a floating dock to accommodate boats which touched there daily. Before that they landed against the river bank at the north end of Amon Park at the foot of Fourth Street – Amon Park is still there and Fourth Street was renamed Lee Boulevard by the Government in 1943." (pg. 47)

"The Inland Empire unloading at the foot of 4th Street just north of Amon Park. 4th Street is now Lee Boulevard." (pg. 85)

"1910 – Taken from the living quarters over Wiesnbach's store looking east' steamer on Columbia Amon Park trees; Burmaster water tower; Schireman home extreme right." (pg. 146)

"In August, 1911, Howard S. Amon presented the deed to Amon Park to C.F. Breithaupt, who represented the city of Richland. Richlanders still enjoy this park along the Columbia." (pg. 155)

"Charles Buckner, lying down, caught this sturgeon below Amon Park in Richland in 1920. It took a team of horses to haul it up on shore." (pg. 203)

"Richland's Amon Park in 1920. Howard Amon gave the deed to the city in 1911. It had been in existence for several years, probably from the time the city was established in 1905. A well was drilled in the park for the convenience of picnickers in 1918, in 1920 a bandstand was built, and in 1934 a swimming pool was started at the north end of the park. Built mostly by volunteer labor and aided with a \$2,767 federal grant in 1935, it was officially opened on the 4th of July in 1936." (pg. 204)

The 1940's brought significant changes to the nearly 46 acre park. The federal government took over park operations as part of the Hanford Reservation. In 1948, the pool was severely damaged by flooding and closed. The play area with swings, elephant slide and other elements was established. The park became the gathering place for a whole new generation of Richlanders.

The lack of shade and yards in the majority of the new housing made Howard Amon Park the destination to escape the heat of summer. It's location on the Columbia River and incorporation of play equipment, wading pool and trees

cemented Howard Amon Parks position as Richland's premier outdoor gathering place.

Changes and improvements to the park continued with the addition of tennis courts at Lee Boulevard. Picnic shelters in the north and south ends of the park, restrooms and concession stand located near the tennis courts, and restrooms to the north added critical amenities to the park infrastructure. Docks and a boat ramp north of Lee Boulevard extended the relationship of Howard Amon Park with the Columbia River and encouraged river oriented recreation

The introduction of the "Ellipsoid" or "Fingernail" and stage to the park in 1982 created a public event venue that continues to be used to this day. The "Ellipsoid" was relocated from the current site of the I-182 freeway through a community effort led by Mr. James R. Dillman. This event is chronicled in an unpublished document by prepared by Mr. Dillman in March 2001. It has been used for small and large events over the last nearly twenty years.

The most significant changes to the park are associated with the creation of the Rivershore Trail and construction of the new Community Center.

The Rivershore Trail has brought significant numbers of people into the park on a daily basis. Runners, walkers, and bicyclists use the trail extensively year round. The trail is a true resource for the community linking Columbia Point, Howard Amon, and Leslie Groves with the rest of the pedestrian and bicycle circulation system.

The construction of a new Community Center brings a new and exciting dynamic into the south portion of the park. A facility for all ages, the Community Center is located to take full advantage of the park setting and its amenities. The programming of the building itself contributes to the park by providing additional parking for park events, food concessions, and restrooms. The event





Introduction and Overview

programming for the Community Center will range from high school proms to children's day camps and classes for seniors. It provides opportunities for wider range of citizens to enjoy the park.

The park has received a number of important individual elements that at present have little relationship to one another. These include:

Peace Pole – at the main entry on Lee Boulevard.

Brick Entry Signage, Bar-B-Que's and signs. – Lee Boulevard and throughout the park.

Sign for Kiwanis Beach

Kennel Club Drinking Fountain

Eagle Scout Seating projects.

Pig Roast Pit at the South Meadow

3.0 Master Planning Process

The Master Plan for Howard Amon Park is a product of community collaboration through interviews, comments and public meetings. When adopted, the master plan will contribute to the City's existing Comprehensive Park and Recreation Plan by organizing the direction and establishing a theme for improvement and renovation for Howard Amon Park.

The City selected a consultant team in late 2000 led Ramm Associates, Inc. with SCM Consultants, Inc. for civil engineering and the Pomegranate Center to facilitate the community involvement process, prepare the master plan, cost estimate and implementation plan.

The *Master Plan* was based upon extensive community input. The process centered around a five step process.

Howard Amon Park Master Plan

June 14, 2001—City of Richland



- 1. Vision Development
- 2. Identification of Opportunities and Challenges
- 3. Identification of Activity Centers
- 4. Concept Development
- 5. Master Plan Adoption

Community Participation

Critical park stakeholders and neighbors were contacted for one on one interviews. These interviews included representatives of:

- Citizens at large
- Downtown Businesses
- Allied Arts
- City Council
- Park and Recreation Commission Members
- City Staff

The first workshop involving community members was held on January 30, 2001. This workshop was televised to Milenko Matanovic of the Pomegranate Center, who facilitated the workshop providing ground rules and the workshop goals. This workshop focused on discussion of design milestones and receiving additional information about Howard Amon Park from the general public. It included discussion of the existing facilities in Howard Amon Park, and an overview of what other communities have done with waterfront parks. The 50 citizens attending were divided into small groups to discuss and record individual park concepts and opportunities. These groups reported back to the overall group and comments were recorded.

An overview of the workshop results was presented and discussed at a joint City Council / Park and Recreation Commission workshop on February 12, 2001. The council and Park and Recreation Commission commented on concepts and discussed various issues including:

- Location of a dock in Howard Amon Park
- Extension of streetscape from Howard

Introduction and Overview

Amon Park into the Downtown, especially on Lee Boulevard.

- Significance of the Fingernail.
- Significance of the Tennis Court location and quantity of courts.
- Impact of a restroom / concession building on sight lines down Lee Boulevard.
- The incorporation of dock would be of economic benefit to the City of Richland.

On March 22, 2001, the conceptual master plan with alternatives was presented to the public. An overview of the process, concepts and alternatives were presented to nearly fifty members of the community. The community was invited to provide written comments and indicate preferences for specific concepts. The following issues were identified:

- Lee Boulevard should be kept open for pedestrian traffic. It should be modified to better accommodate civic events that have historically used the park and closed Lee Boulevard in order to minimize impacts on turf areas.
- No consensus was reached on the incorporation of the dock at Lee Boulevard. Several members of the audience noted that a dock at Lee might be acceptable if it were of reasonable size, multiple use and of high aesthetic quality.
- General consensus was reached on the incorporation of a performance venue at the north end of the park to allow events to occur in another venue to reduce impacts on the core of the park.
- Concern was voiced about removal of the play equipment and the wading pool.

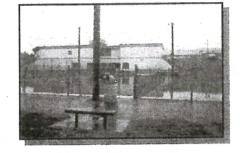
The Draft Master Plan was presented to the public and Parks and Recreation Commission and the public on April 12, 2001. The community was invited to this event to review and provide final comments on the Master Plan, and to embrace the future of Howard Amon Park. C o m m e n t s included:

- Discussion about preserving access and parking along Lee Boulevard.
- Commitment to a high level of detail and quality in the development of the dock concepts at the end of Lee Boulevard.
- The master plan should include notations about the suitability / limitations of the Sail/ Fingernail for performances.
- Replacement of the Sail / Stage area with a more suitable performance venue should include recommendations about disposition of the Sail.
- The multi-sport use of the tennis courts has historically damaged the surface.
- The amphitheater at the north end of the park is a good approach to spreading the impact of community events into other portions of the park.
- The development of Lee Boulevard into a more pedestrian friendly area with special paving makes it more attractive for staging events like car shows on the paving instead of out onto the park.
- Maintenance of the Xeriscape demonstration garden may be problematic and costly.
- The demonstration garden could be a perennial garden with the rose garden relocated from the end of Lee to be better appreciated.
- The garden area could be plots developed by individuals in the community if appropriate.
- The location of the restroom / concession building at the main entry on Lee should

- be sensitive to the site lines into the park from Lee Boulevard.
- The parking lot on Lee Boulevard should be landscaped to be more pedestrian friendly.
- The pathway connections from the Rivershore Trail to the Community Center should flow around the Community Center Meadow creating a sense of place.
- The plan should represent an implementation horizon of 20-50 years.
- Consider shifting the location of the fountain to maintain a clear connection north – south along the Rivershore Trail.
- Separation of the bicycles from the Rivershore Trail would reduce conflict. A trail along the top of the dike, extended from the trail at the north end of the park could provide the alternative route.

The Draft Master Plan was presented to the Parks and Recreation Commission on May 10, 2001. The following issues were discussed:

- The tennis courts should be for tennis only. If space for in-line skates or skate boards was needed it should be accommodated at another location.
- Lee Promenade should be pedestrian oriented and the visual impact of any parking or vehicles should be minimized by the planting of trees between angle parking and the elimination of parallel parking on the north side.
- More information about aesthetic design and integration of the dock with the overall park plan needs to be incorporated. The dock needs to accommodate multiple uses with tour boat access just one of many potential uses by park visitors.
- The plan needs to include more detail about design guidelines.
- The entrance garden should be a display garden with year-round color to match the



high quality and character of the park.

- The entry arch at Lee Boulevard should be listed as one option for the entry to the park. Other options should be listed. For example, a colonnade or a smaller historic pedestrian arch are possibilities.
- Tour buses should not be allowed access to the end of the Lee Promenade.

The Final Master Plan was presented for adoption to the City of Richland Parks and Recreation Commission on June 14, 2001.

4.0 Plan Organization

This Master Plan is organized into five chapters:

<u>Chapter I: Introduction and Overview</u>
This chapter describes the origins and purpose of this plan; the master planning process and the organization of this document.

Chapter II: Foundation

This chapter presents the information gathered during the public participation and interview process; history of the park and relationships to the Rivershore Trail and Central Business District

Chapter III: Vision and Development Concepts

This chapter presents the consolidated community vision for Howard Amon Park, and a Park Development Concept that links the key components of the community vision and desires with the future park renovation rehabilitation.

Chapter IV: Master Plan

This chapter details the objectives and strategies proposed for the rehabilitation and energizing of Howard Amon Park. The key recommendations will guide the improvements to Howard Amon Park over the next 20-50 years.

Chapter V: Implementation Strategies

This chapter will focus on the phasing, funding and implementation strategies available to the City of Richland for the re-development of Howard Amon Park. Priority Projects will be identified in the "Implementation Matrix". The matrix will identify the agencies or organizations responsible for implementation, timeframe for implementation, and potential funding sources.

1.0 Introduction

Richland is a city in transition. It is the traditional gateway into the upper Columbia Basin, agricultural areas and now the Hanford Nuclear Reservation. Ferries and steam ships plied the waters of the Columbia bringing commerce and settlers to Richland. Railroad bridges and now highways spanned the Columbia and Yakima Rivers opening up the country to even greater development.

Richland has continued to grow over time with the City's population nearly doubling since 1970. As the population has grown, Richland has expanded its amount of park and recreation areas to nearly 1,200 acres. The neighborhood, community parks, sports complexes and special use areas provide significant opportunities for recreation in Richland. Some of the facilities, however, are in need of rehabilitation or expansion of facilities. Howard Amon Park is one such park.

2.0 Relationship to City and Parks and Recreation Plans

The City of Richland has completed a number of significant planning projects that relate to Howard Amon Park over the last ten years. These include:

- City of Richland: City Entry Signs and Landscaping, Streetscape Master Plan, Parkway Street Master Plan, Uptown Shopping Center Master Plan, 1992, Prepared by The Office of Robert Perron.
- Richland Central Business District Economic Enhancement Strategy, 1998, Prepared by HyettPalma, Inc.
- The Rivershore Master Plan, October 1999, Prepared by JGM – Landscape Architects, Johnson, Davies and Lathrop – Consulting Engineers, Richard Harrington –Facilitator

Foundation

- Survey of Public Attitudes, Recreation Interests, and Recreation Participation Characteristics, Conducted by J.C. Dragoo and Asso
- Richland Arts and Entertainment District Design Guidelines, 2000, Prepared by Perron Collaborative

In general terms, the documents address some critical relationships between Howard Amon Park and the rest of Richland. These relationships include:

Lee Boulevard from the Park to Parkway

Extending the character of Howard Amon Park into the Richland by implementing the street tree program created as part of the Parkway Street Master Plan. The Richland Central Business District Economic Enhancement Strategy identified the need for a "Link to the River – A more pronounced link is needed between the Columbia River and the Heart of Downtown Richland – particularly the Parkway and Lee Boulevard corridor."

Pedestrian Connections

The "Rivershore Trail Master Plan" and The Sutch Park Master Plan note several opportunities for additional pedestrian linkages. Specifically, the Trail Master Plan notes that "pedestrian access from Swift Boulevard to the levee trail, across the fire station property, would be desirable." A connection from a future pedestrian bridge across George Washington Way from Sutch Park to the levee trail near the pump house property would link Sutch Park, the Richland Riverfront Trail and Howard Amon Park.

Richland Riverfront Trail

The "Rivershore Trail Master Plan" (Rivershore Trail was renamed to the







Richland Riverfront Trail on May 10, 2001), calls for the extension of the existing class I trail, forming a continuous pathway along the Columbia River. It also notes that "Revisions and expansions of the main trail through the park, upgrading the scale and character of the current trail into an 'urban promenade', would help accommodate the large trail user volume" in the park.

Hains Street Levee

Sections of the levee connecting Howard Amon Park and Leslie Groves Park to the north have been lowered and improved with the Richland Riverfront Trail. The Trail Master Plan identified the opportunity to lower the section west of the Howard Amon boat ramp and behind the fire station.

Community Center Meadow

The "Rivershore Trail Master Plan" notes that "most of the play areas in the riverfront parks should be replaced over time, in order to comply with current guidelines for safety, surfacing, fall zones and accessibility. As older structures are replaced the locations and types of play elements should be finetuned. Water play systems composed of jets and pools would work well in the climate of the Tri-Cities. The wading pool at Howard Amon Park could be replaced or enhanced with a water play system." The construction of the Community Center creates a new dynamic for the south end of the park. "Integrating the community center with the park creates the potential for a lot of positive interaction."

Lee Boulevard Dock

The Richland Central Business District Economic Enhancement Strategy, 1998 noted the process revolving around the development

Howard Amon Park Master Plan

City of Richland—June 14, 2001

of "a new pier to be located at the foot of Lee Boulevard. When completed, the Lee pier should become the location where excursion boat rides are started and concluded." The "Rivershore Trail Master Plan" noted the evolution of this proposal with the modification of the pier concept to a dock. "During the planning process (Richland Riverfront Trail) the possibility of a new public dock in the Howard Amon Park Area was widely discussed." "Opinions were expressed both in favor and opposed, with a number of people commenting that their opinion would depend upon the character and purpose of the dock." Preliminary engineering was conducted for the dock by Reid Middleton in early 2001.

Projects Under Consideration

The Richland Parks and Recreation Department has an on-going process for improvement in the Howard Amon Park. Within the last ten years a new comfort station, play equipment and other amenities have been constructed. Funding for renovation of the tennis courts and expansion of the boat ramp area has been procured. Additionally, planning for removal and replacement of the barricades at the end of Newton Street is underway.

Howard Amon Park is the center of an extremely unique district for a city the size of Richland. The critical properties and elements bordering the park include:

- Columbia River
- Richland Community Center
- Two major hotels
- Allied Arts Museum
- Columbia River Exhibition of History Science and Technology
- Main Richland Fire Station
- Numerous Businesses



The diversity of this district and the presence of major employment centers, housing and government centers within 4-5 blocks of the park are a unique combination that should be embraced.

3.0 Summary of Trends, Issues and Opportunities.

The location of Howard Amon Park along the Columbia River and the concentration of public and facilities around it provide a unique opportunity for the citizens of Richland. These relationships in and around the park are the foundation for a greater connected network for the City of Richland. Howard Amon Park is at the hub an extremely diverse district of governmental, retail and business activities. The park is connected to the rest of Richland through the Richland Riverfront Trail and various streets and paths including, Lee Boulevard and Newton Street. Lee Boulevard connects the park visually and physically to the proposed downtown parkway. This highly connected network, when fully developed, will promote centralized activities, pedestrian movement and a greater sense of place. The extension of the park into the rest of Richland via streetscape along Lee Boulevard and Newton Street will increase the pedestrian and visual connections.

Clearly, Richland has the components in place to initiate a "New Urbanist" revitalization of downtown that reconnects the city to its downtown core and the Columbia River.

The trend toward developing new "town centers" from scratch, can easily be harnessed to revitalize and reconnect large sections of the existing community with its park and waterfront. The issues to be addressed are numerous and contain significant opportunities. These include:

 The main corridor into downtown Richland, Lee Boulevard, extends through the park to the Columbia River creating a vehicular intrusion into the park.

- Pedestrian / Vehicular conflicts along Lee Boulevard and within the Park.
- Existing play equipment that is not accessible and in many cases does not meet current safety requirements.
- Existing wading pool has no accessible route for access, does not meet ADA standards for access into the pool itself. It is also poorly located.
- Existing trees that are reaching the end of their expected lifespan.
- Pedestrian access to and within the park is limited by few sidewalks or trails.
- The shortage of restroom facilities and water fountains as identified by public comment.
- Non-vehicular travel. The existing trail and street layout and proximity to destinations throughout Richland and downtown create an ideal environment for walking, biking, and connections to public transit.
- Lighting in the park is sparse and does not contribute to an overall theme or coherent design. Lack of lighting can limit use by sectors of the population in the evening.
- Development of pathways within the park would provide access to noontime walkers by extending the Richland Riverfront Trail to the new Community Center.
- Increased recreational opportunities like basketball, roller-blading, running, and volleyball may draw people to the park.
- Facilities for vendors would increase public interest. Specifically, food!
- Activities need to be provided for all ages.
- Access needs to be provided for all abilities.
- Programs in the park could increase the active public presence. For example; senior Tai Chi classes, 4-6 year old soccer practice and other programs run from the Community Center.
- Water service to the north comfort station was installed too shallow. The comfort





- station must be closed and winterized due to threat of freezing.
- Programming for events in the park should include facilities for power and water hookups for booths and venders.
- History of the park and Richland should be included. Historic issues are: Richland prior to World War II and the natural history of the Columbia River and the three rivers region.
- Incorporate art / sculptural opportunities into the design.
- The Fingernail is loved, hated or ignored.
 In its current configuration it is not suitable for major performances due to its orientation and the configuration of the stage. The lack of adequate restrooms/ dressing rooms and storage also limit its utility for performances.

Mr. Jim Dillman notes in his unpublished history "The Ellipsoid, Richland, Washington", March 16, 2001:

"The Ellipsoid is a small, imperfect bandshell. It is not large enough for a full symphony or ballet, but it is big enough to host small groups and serves that purpose very well. Even so, bigger events have used it successfully." "...during the summer Sunfest, two years after it was placed in the park, some 83,000 citizens sat in front of this bandshell during five separate weekend events to hear small groups of musicians."

As a long time Richland icon it brings a sense of history and place. The form in its pure configuration resembles the sails of sailboats on the Columbia. The connotation as the "Fingernail" is used by some in a disparaging way. Rename as 'Sail' to reflect the relationship with river and provide a more artistic moniker to this significant icon.

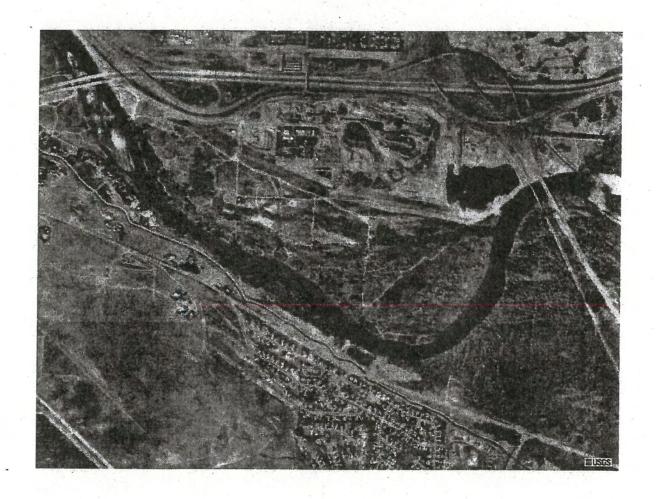


City of Richland—June 14, 2001



CHAMNA NATURAL PRESERVE LAND USE AND WILDLIFE MANAGEMENT PLAN

June 6, 2000



CHAMNA WORK GROUP

A Cooperative Management Project for Protecting, Enhancing, and Mitigating Wildlife Habitat Losses and Providing Multiple Use Opportunities

Chamna Natural Preserve Land Use and Wildlife Management Plan

Executive Summary

Purpose

The purpose of the Chamna Natural Preserve Land Use and Wildlife Management Plan is to guide short and long-term activities which will protect and enhance fish and wildlife resources and habitat; help mitigate impacts from the construction of McNary, Priest Rapids and other dams; and provide managed recreational uses. The City of Richland, The Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and The Tapteal Greenway Association are developing a cooperative agreement to manage the area for these purposes.

The plan will integrate on-site land use planning with wildlife management guidelines established under the Northwest Power Planning Council Fish and Wildlife Program, the U.S. Army Corps of Engineers lease, City of Richland land use and zoning requirements and McNary Project Wildlife Mitigation objectives, management standards and guidelines. The Chamna Natural Preserve is bordered on three sides by the U.S. Army Corps of Engineers Yakima Delta Habitat Management Unit.

Project Location

The Chamna Natural Preserve is located in the City of Richland, along the lower Yakima River near its confluence with the Columbia River. The Preserve is bounded on the south by the Yakima River, on the north by a levee adjacent to the City of Richland Wastewater Treatment Facility, on the east by the SR 240 causeway bridge, and on the west by the I-182 highway bridge and the Yakima River. The area comprises approximately 276 acres along 2.5 miles of riverfront.

Cultural Resources

The confluence of the Yakima and the Columbia Rivers is known to be both a historic and prehistoric site of American Indian activity. Early records from the Pacific Fur Company mention the Yakima and the Columbia confluence. The Walla Walla Treaty of 1855 identifies the confluence of the Yakima and Columbia Rivers as an Indian religious site. By the late 1800s and early 1900s, homesteaders had settled both sides of the lower Yakima. The Chamna Natural Preserve and much of the surrounding area is identified as culturally sensitive.

Wildlife Habitat

The Chamna Natural Preserve contains a mixture of upland shrub-steppe, wetland and riparian habitats of varying quality. This variety provides valuable nesting, cover, and foraging habitat for many wildlife species. Implementation of the Chamna Land Use and Management Plan should result in significant improvements in the habitat quality for several targeted wildlife species. The Yakima Delta area is regionally significant as part of the Pacific Flyway which provides a migratory corridor for fish, waterfowl and birds. The land contains several different wetland and dry land habitats which provide essential habitat for a variety of reptile, amphibian, avian and mammalian species. The delta area provides suitable habitat for several species that are listed as federal and/or state endangered, threatened, sensitive, or candidate species.

Wetlands

Upstream dams and subsequent control of flood events have resulted in the present generation of riparian growth. Much of the wetlands located along the river are annually flooded and provide open water habitat and wetland resources. The Chamna Natural Preserve Land Use and Wildlife Management Plan will adhere to State and Federal regulations for all activities in or near wetlands. Chamna wetlands are listed and mapped in the National Wetland Inventory (US Fish & Wildlife Service, 1980).

Floristic Resources

The Chamna Natural Preserve and the delta area contain wetland, riparian, and upland shrub-steppe (semiarid area covered by grasses and shrubs, typically treeless) habitats. Significant changes in the local plant life have occurred over the past 100 years. Russian Olive trees have taken over the native Black Cottonwood stands in the riparian plant communities. A number of weed species, such as cheatgrass and Russian thistle, have replaced the native bunchgrasses and sage that once were the primary species of the shrub-steppe. As a result, many of the wildlife species associated with these habitats now have limited distribution and numbers.

The Chamna area contains about 50 acres of abandoned farm fields, which currently contain non-native invasive species. About 100 acres of the Chamna Preserve are classified as upland with remnant big sage, limited native species and non-native understory. Riparian and wetland areas are largely dominated by Russian Olive with remnant stands of Cottonwood. Areas not influenced by Russian Olive contain a mixture of native and non-native trees and shrubs including Alder, Red Osier Dogwood and Willow species.

Threatened, Endangered, Sensitive, and Candidate Species

The Chamna Natural Preserve and the delta area provide suitable habitat for several species that are listed as federal and/or state threatened, endangered, sensitive, or candidate species. Additional research and field survey would be necessary to determine presence/absence of individual species, habitat suitability, and development of site-specific mitigation measures before ground disturbing activities take place.

Fisheries Resource

The Yakima and Columbia rivers support native resident and anadromous fishery resources as well as non-native fish. The delta area provides rearing and migratory habitat for spring, summer, and fall Chinook salmon, Coho salmon, sockeye salmon, and summer steelhead trout. In addition, the area provides spawning and rearing habitat for species such as smallmouth bass and channel catfish.

Anadromous fish in the Columbia and Yakima Rivers share the ecosystem with nearly forty other native and introduced fish species. Government agencies and anglers introduced most of the non-native species to improve sports and food fisheries. Many of the introduced fish species have adapted well to the basin and have come to dominate the backwater habitat. These introduced species have contributed to the reduction of the native fish populations through predation and competition.

Species of special concern, as determined by the State of Washington, federal and Tribal representatives, include the upper Columbia summer steelhead, mountain sucker, sandroller, paiute sculpin and reticulate sculpin. The Yakima Basin summer steelhead and spring Chinook salmon are currently proposed threatened species.

Hydrology and Water Quality

Prior to construction of dams on the Columbia River, its large volume and seasonal patterns, combined with substrate and climate, shaped the ecosystems along the river shoreline. Numerous hydroelectric dams on the Columbia have altered historic hydrologic processes and created a series of reservoirs. The Hanford Reach, the lower portion of which is located 10 miles upriver from the delta area, is the only remaining free flowing, non-tidal stretch of the Columbia River. Flow in the Yakima and the Columbia Rivers in the vicinity of the delta area is regulated by the Priest Rapids Dam located at the upper end of the Hanford Reach, and McNary Dam, located downstream of the Tri-Cities area. The delta area is subject to daily water elevation changes of 2 to 5 feet as a result of operations at these dams. These flow changes result in a continual flux of exposed mudflats, flooded wetlands and tide-water effects along both the Columbia and lower Yakima Rivers in the delta area.

The water quality in the upper portion of the Yakima River sub-basin is good to excellent, but becomes fair to poor in the lower sub-basin and the delta area. Non-point

source pollution from a wide variety of sources, including irrigation and return flows, forestry practices in the upper portion of the basin, poor agricultural practices, malfunctioning septic systems, urban runoff, and mining leachates degrade the water quality. Irrigation return flows is the largest contributor of non-point source pollution in the Columbia River Basin.

Archaeological/Cultural Resources

The Chamna Natural Preserve and the Yakima River Delta area are located entirely within the Tri-Cities Archaeological District, which begins at the east end of Columbia Park and extends along both sides of the Columbia River as far north as Wooded Island on the Hanford Nuclear Reservation. All properties in this district are listed on the National Register of Historic Places (NRHP). Even though an extensive cultural resource inventory and assessment has not been completed, cultural resources are known to exist in the Chamna Natural Preserve and the Yakima River Delta.

Approximately 20 sites are known to exist in the Yakima Delta area and at least two sites have been identified in the Chamna Natural Preserve. Although only limited surveys have been conducted in the past, additional cultural resource investigations will be conducted as part of the development and implementation of this management plan. Any ground disturbing activities will comply with existing regulations governing archaeological and cultural resources. In addition, appropriate liaison will be maintained in consonance with the Memorandum of Agreement that has been established between the CTUIR, the U. S. Army Corps of Engineers (USACE) lease agreement and the City of Richland.

Recreational Resources

The recreational plan for the Chamna Natural Preserve will enhance the use of a portion of the area for walking and hiking, off-road bicycles, equestrian activities, bird watching, natural resource education, fishing and other non-motorized activities. Recreational facilities will include parking, trails, water and restroom facilities. To preserve and protect the natural resources, facilities will be designed to accommodate the type and intensity of activities that are consistent with land use and wildlife management objectives established in this plan. Paved handicapped-accessible trails are appropriate within the Preserve. Arrangements will be available to assist disabled individuals to access the learning centers located internally to the Chamna Natural Preserve.

With both upland and riparian habitats present, educational opportunities are at hand. Looping trails can provide access through various habitats, which can be studied at different levels of complexity. Habitat restoration projects can provide hands-on learning experiences. The sites' location within the City of Richland and its proximity to

Educational Service District Schools and Richland and Kennewick Community Schools make the Chamna Natural Preserve a good candidate for living laboratories, and provides opportunities for long term studies.

Hiking and biking activities will be integrated into the designated trailway system. Based on the plan's management goals to protect wildlife and wildlife habitat, these activities will be required to conform to seasonal and habitat driven restrictions.

Wildlife is a protected resource within the Chamna Natural Preserve. Hunting is not permitted in the Chamna Natural Preserve. Discharging or shooting a firearm, air pistol, air rifle, crossbow, or bow and arrow is not permitted in the City of Richland. The Chamna Natural Preserve is located entirely within the corporate limits of the City of Richland.

Access and Travel Management

The Chamna Natural Preserve has a long history of unregulated access. Because of significant damage caused by uncontrolled creation of roads and trails, as well as illegal trash dumping, the City Council authorized closing the Chamna Natural Preserve to motorized vehicle access in early 1997.

As part of the Chamna Natural Preserve Land Use and Wildlife Management Plan, access and travel management strategies are being developed to provide recreational use of the property while protecting its resources. Upon completion and approval of the Management Plan, implementation will begin with: 1) development of trailheads and parking areas; 2) installation of informational kiosks, learning centers and trail signs; 3) maintenance of the trail system and 4) the re-vegetation and return to resource production of those existing trails and roads that will not be included in the trails system.

Except for administrative use, all motorized access will be limited to designated roads and parking areas. Motorized boats are permitted along the rivershore adjacent to the rivershore, but not within the perimeter of the Chamna Natural Preserve or the slough area.

A gravel parking lot will be developed at the west end of the preserve. The parking area will accommodate 15 - 20 cars and 3 - 5 horse trailers. Additional parking will be available just outside the entrance to the Chamna Preserve on Cullum Avenue and at the east end of Lacy Road. No motorized vehicles will be permitted on any trailway without permission from the City, except for emergency and maintenance vehicles, and motor-operated wheelchairs.

There will be a restroom, drinking water, and a potable water spigot for animals near the West End parking lot. Bicycle racks and a hitching post will be located near the restrooms, separate from the parking area. Handicapped access will be provided from a paved parking area to the restrooms and the river. Trail markers and interpretative signs will be installed.

Non-motorized access is permitted on designated trails and waterways within the preserve. The All Season Trails will be open all year; Seasonal Trails will be subject to closure as needed to protect habitat and targeted species, and during periods of flooding. Signs will be posted to alert people to trial limitations and closures.

Monitoring and Evaluation

Monitoring and Evaluation (M&E) of habitat and targeted wildlife populations will be done by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Periodic evaluations will determine whether wildlife mitigation and management objectives are achieved. Baseline habitat conditions will be assessed following completion of lease arrangements with the US Army Corps of Engineers (USACE) for each project area using Habitat Evaluation Procedures (HEP) from the US Fish and Wildlife Service (USFWS). Subsequent HEP analyses will be conducted at five-year intervals in order to track and document changes in habitat.

Monitoring results will be evaluated and compared to project goals. If required management strategies/plans will be modified to achieve overall program objectives.

Vegetation response to enhancement and protection measures will be documented on an annual basis. Wildlife transect routes will be established and monitored on an annual basis. Recreational activity will be monitored through periodic site surveys and questionnaires.

General Administration

Federal, state and local laws and regulations remain in full force and effect on the Chamna Natural Preserve lands and waters. In addition, the USACE's lease agreement requires protection of the leased lands and identifies activities, which are considered illegal.

A five-year budget will be developed, with time lines, cost estimates and defined goals and measurable standards established for habitat enhancement, capital improvements, operations and maintenance, and habitat monitoring and evaluation.

Facilities and trail operations and maintenance (O&M) will be funded jointly by the City and the CTUIR through a variety of funding sources. Individual volunteers and supporting organizations including the Tapteal Greenway will play a major role in accomplishing O&M activities. Approved wildlife and wildlife habitat O&M needs will be funded through annual allocations from BPA. All funding plans must include personnel, equipment and land management activities. Plans to coordinate and manage police and fire protection, trash and garbage disposal and vector control will be developed as part of the overall management plan. Mitigation funding will be focused on habitat enhancement, restoration and maintenance.

Land Use and Wildlife Management Plan

1.0 Introduction

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the City of Richland are negotiating a formal co-lease agreement and a co-management Memorandum of Understanding (MOU) with the US Army Corps of Engineers (USACE) to manage the Yakima delta area for purposes of protecting wildlife and wildlife habitat, while simultaneously providing managed recreation opportunities. Pending completion of the co-lease agreement, the CTUIR and the City of Richland will develop a cooperative management plan to protect, enhance, and mitigate wildlife habitat and provide recreational opportunities in the Yakima Delta.

The Chamna Work Group has developed this Document of the Chamna Natural Preserve Land Use and Wildlife Management Plan. The work group consists of representatives from the City of Richland, CTUIR, USACE, Washington Department of Fish and Wildlife (WDFW), and the Tapteal Greenway (TG). The Plan describes the management framework for the area including: 1) Desired Future Conditions (DFC's) and comparisons with the existing conditions; 2) restoration and enhancement opportunities; 3) recreational uses, opportunities, and facilities; 4) operations and maintenance activities; 5) monitoring and evaluation; and 6) a Five Year Action Plan for planned development, redevelopment and proposed enhancements with an accompanying budget.

The approximate 276-acre Chamna Natural Preserve, located along the lower Yakima River near its confluence with the Columbia River, is owned by the USACE and leased to the City of Richland. The land use designations identified for this area under the City of Richland Comprehensive Land Use Plan are primarily natural open space (NOS), with two smaller areas designated for developed open space (DOS) in the context of a conservancy park. The City's Parks and Recreation Master Plan (1993) as well as the current draft of the City's Parks, Facilities and Open Space Plan is consistent with the Comprehensive Plan classifying the area as a Conservancy Park.

The Chamna Work Group utilized the following eight-step process as it developed the draft document:

- 1. Development of lease arrangements and co-management agreement
- 2. Scoping of issues and concerns (including public scoping)
- Assessing and describing existing resource conditions and conducting a Habitat Evaluation Procedure (HEP, USFWS 1980) for McNary target wildlife species
- 4. Describing Desired Future Conditions (DFC's), comparing to existing conditions, and identifying management opportunities (enhancement/restoration) to move areas towards the DFC's

- 5. Development of management alternatives that respond to key issues and concerns
- 6. Developing a Five Year Action Plan for Planned Development and Enhancements (including a budget)
- 7. Monitoring and evaluation (monitoring and evaluation of plan implementation will be accomplished to assess progress towards meeting the DFC's)
- 8. Plan review and update at 5 year intervals (or sooner if necessary).

TABLE 1
CHAMNA NATURAL PRESERVE
Management Considerations and Proposals

Management Considerations and Proposals					
Management Considerations/Issues	Management Proposals				
A. Recreation/Public Use/Access and Travel Management What levels and types of public use are appropriate in the Chamna Natural Preserve? What levels and types of access are appropriate in the Chamna Natural Preserve? What types of recreational developments should be permitted? How can recreational uses be consistent with meeting wildlife habitat objectives?	 Maintain and provide public access for primarily non-consumptive uses such as hiking, biking, equestrian, wildlife viewing, and nature study. Maintain fishing opportunities. Hunting is prohibited (the area is within the Richland City Limits) Provide and maintain non-motorized access. Provide reasonable motorized access to designated parking areas. Develop and maintain non-motorized trail system that is handicap accessible. Allow for non-motorized boating access and activities. Monitor use. Maintain administrative access for emergency and maintenance vehicles. Develop day-use trailhead/parking/picnic area with picnic tables, restroom, garbage disposal, and water supply for public use. Develop/enhance day-use recreation site and trail system in areas with least disturbance to key wildlife habitat areas and plant communities. Avoid additional development along Yakima River and delta wetlands. Locate trail system on existing trails/roads to minimize new disturbance. Identify areas/seasons where habitat sensitivity and human use potentially conflict (i.e., waterfowl nesting/migration) 				
B. Habitat Management/Restoration 1. What types of habitat restoration activities should be accomplished? 2. Where should these activities be focused?	1. Habitat restoration proposals include obliterating roads and revegetating areas with native species, wetland/riverine restoration/enhancement, encouraging Black Cottonwood gallery development/Russian Olive control. 2. Focus restoration efforts on obliterating roads, controlling weeds, and revegetating. Identify existing Black Cottonwood stands/galleries, expand where practicable through vegetation manipulation. 3. Assess feasibility of improving side channels and braids along the Yakima River. Emphasis on restoring/enhancing historic floodplain, wetlands and high quality side channel habitat.				
C. Weed Control/Vegetation Management Should all weeds, or only noxious weeds be controlled? What are the appropriate procedures to control weeds while avoiding impacts to wildlife? Should all Russian Olive be removed and replaced with native species?	Perform weed assessment. Control yellow-star thistle/other noxious weeds via manual and/or ground/spot application methods. Encourage recolonization of disturbed/restored areas with native species over time. Begin vegetation manipulation of existing Russian Olive stands on small scale to encourage development of Black Cottonwood galleries. Monitor results and incorporate adaptive management into future management actions.				
D. Cultural Resources 1. Recognize cultural significance of the lower Yakima and Columbia Rivers to CTUIR and other Columbia Plateau Tribes and protect resources. 2. How could cultural resource protection affect land uses on the Chamna Natural Preserve.	1. Perform cultural resource assessment. Incorporate rich history of the area into Chamna Natural Preserve stewardship. Build upon existing MOA between the CTUIR and City of Richland associated with land use planning and cultural resource protection. 2. Avoid disturbance to cultural resources. Design and locate developments identified in plan in areas outside of sensitive areas. 3. Preserve cultural heritage. Provide educational opportunities to learn about history of area, Ben Rosencrance waterwheel, historical Tribal uses (fishing villages), etc.				
E. Public Education 1. What types of public education and relations activities are required to inform the public about the Chamna Natural Preserve and respective management plan? 2. How can the City of Richland, Tapteal, CTUIR, and other project cooperators keeps people informed of project activities? 3. What types of natural and cultural resource educational opportunities exist at the Chamna Natural Preserve?	 Installation of signs is proposed to provide the public with information about the Chamna Natural Preserve and the restoration effort. Installation of kiosks/project information billboards, Tapteal Greenway newsletters, City of Richland Comprehensive Land Use Planning Process and Parks and Recreation Master Plan, CTUIR mitigation plan and monitoring and evaluation reports. Restoration of native habitats and resources provides opportunities for local citizens to become involved in restoration plans and monitoring and evaluation of results. The Tapteal Greenway organization is a local advisory Group that can help develop specific education opportunities such as ecological relationships, restoration strategies, etc. 				

1.1 Purpose of the Management Plan

The purpose of the Chamna Natural Preserve Land Use and Wildlife Management Plan is to provide programmatic and site-specific standards and guidelines on how the Chamna Natural Preserve will be managed. The management plan is necessary to provide overall guidance on both short and long-term management activities which will move the area towards the Desired Future Conditions (DFC's) described in Section 1.2. The Management Plan will incorporate land use planning, Northwest Power Planning Council Fish and Wildlife Program McNary Project Wildlife Mitigation objectives, management standards and guidelines, and improved park amenities and facilities.

1.2 General Goals and Desired Future Conditions

The Charma Natural Preserve Management Plan has three general goals:

- To improve stewardship of the land and water environments of the Chamna Natural Preserve
- 2. To protect, enhance, and mitigate wildlife and wildlife habitat
- 3. To provide recreational opportunities in keeping with improved stewardship, and managed and protected wildlife resources.

The desired future conditions for the Chamna Natural Preserve involve the protection and enhancement of natural resource-related values as well as the social and intrinsic values a sociated with an undeveloped open space located adjacent to urban development. The Chamna Natural Preserve is a place where wildlife, natural vegetation, and people co-exist with nature. The Preserve has controlled access and parking for motorized vehicles, and provides opportunities for non-motorized recreation, education, and habitat protection and enhancement. To achieve this, the Chamna area is being planned and managed for present and future generations through community involvement and inter-jurisdictional cooperation. To this end:

- The upland, riverine, and wetland habitats in the area exhibit natural characteristics and provide high quality habitat conditions for a wide variety of flora and fauna.
- The area is aesthetically pleasing to visitors and provides an open space adjacent to urban development where people can walk, ride bicycles, fish, hike, canoe on the river, ride horses, and view wildlife in a natural setting.
- Facilities such as parking areas, restrooms, day use areas, fishing decks, informational kiosks, learning centers and a developed and maintained trail system are available for recreational users.
- Motorized vehicle use is limited to designated areas in order to protect soil and vegetation, and to minimize disturbance to wildlife and provide for non-motorized recreation.

1.3 Northwest Power Planning Council and Bonneville Power Administration Direction for Development and Implementation of Columbia River Basin Wildlife Mitigation Projects

The Bonneville Power Administration (BPA) has set forth a standard project planning process that has been applied to this Chamna Natural Preserve Management Plan. Appendix C contains program-wide standards and guidelines established in the Department of Energy/Bonneville Power Administration Wildlife Mitigation Program Environmental Impact Statement (EIS) and Record of Decision (DOE/EIS-0246, June 1997). The process includes eight steps, and requires that a given management plan addresses each step commensurate with project scale and complexity. The process is summarized as follows:

- 1. Define area of interest;
- 2. Involve stakeholders;
- 3. Develop statement of desired future condition;
- Characterize historical and present site conditions and trends;
- Establish project goals;
- 6. Develop and implement action plans for achieving goals;
- 7. Monitor conditions and evaluate results; and
- 8. Adapt management according to new information.

1.4 Government to Government Relations

Cooperative Resource Management Between the Confederated Tribes of the Umatilla Indian Reservation and the City of Richland

The primary objectives of the CTUIR and the City of Richland in regard to the Chamna Natural Preserve and other areas within the lower Yakima River corridor include: 1) developing and cultivating mutually beneficial partnerships that result in biological, cultural and historical resource stewardship, and protection and enhancement of public lands to achieve biological and social benefits; 2) providing perpetual benefits to target wildlife mitigation species and other native flora and fauna through protection and enhancement of habitat, and development of an access and travel management plan that provides for recreational uses while maintaining high quality habitat conditions; 3) controlling noxious weed infestations and promoting native plant communities; 4) providing educational opportunities; and 5) development and implementation of adjacent mitigation project opportunities (fee title acquisition, cooperative

intergovernmental agreements, etc.) to complement and expand benefits achieved on the Chamna Natural Preserve.

Relationship To Other Plans and Decisions

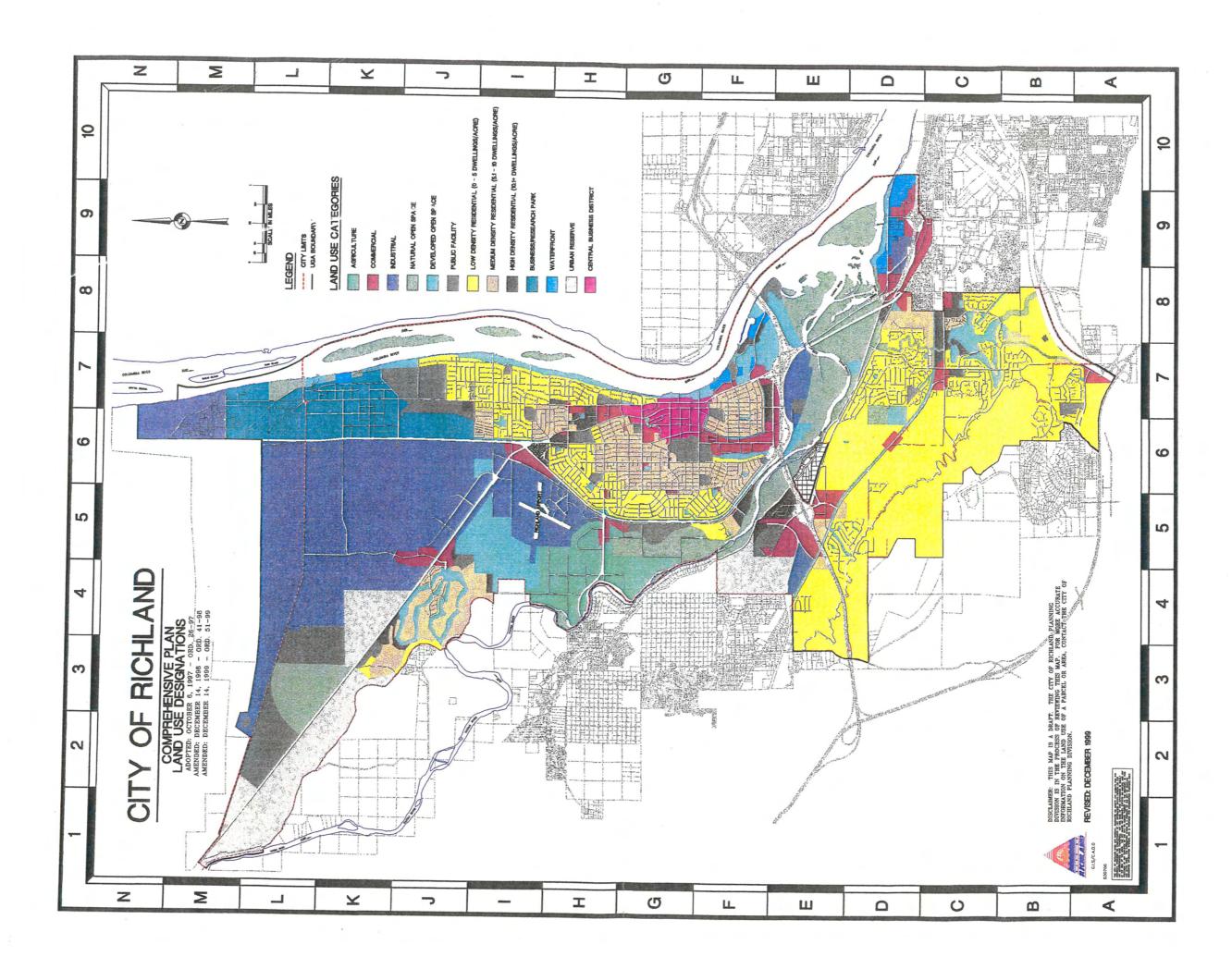
The Chamna Natural Preserve Land Use and Wildlife Management Plan is tied to the CTUIR Wildlife Mitigation Plan (CTUIR, 1997), the Power Act of 1980 of the Northwest Power Planning Council Fish and Wildlife Program, and BPA's Regional Programmatic Wildlife Mitigation Program Environmental Impact Statement and Record of Decision (BPA, 1997). Policies guiding development of this Plan are also provided through an agreement between the CTUIR and the City of Richland. Principle guiding policies and goals and objectives related to land use planning and wildlife management are approved by an agreement between the CTUIR General Council, Board of Trustees, and the Richland City Council. The CTUIR Fish and Wildlife Committee, and the Department of Natural Resources Fish, Wildlife, and Cultural Programs, will provide technical information and services related to natural resource management requirements for the planning area, CTIUR services are dependent on a future allocation of funds from the Federal Government. The City of Richland will provide technical information and services related to enforcement, operations and maintenance, and overall implementation of the Management Plan.

The Richland Comprehensive Plan, which was adopted pursuant to the requirements of the State of Washington Growth Management Act, identifies approximately 40 acres of the Chamna Natural Preserve as Developed Open Space (DOS), and the remainder of the preserve as Natural Open Space (NOS). The Comprehensive Plan contains a number of goals and objectives that support prudent land use and wildlife management planning for the Chamna Natural Preserve. Community Goal 5 states that a primary purpose of the Comprehensive Plan is to enhance the system of open space that will serve the needs of the community. Community Goal 3 identifies a desire to encourage continued interaction with other cities and county, regional, tribal, state and federal governments in order to coordinate regional efforts. Community Goal 6 calls for the implementation of programs for the improvement of the environment and aesthetic quality of the neighborhood. In addition, the Comprehensive Plan identifies three goals in the Capital Facilities Element relative to providing parks and recreation opportunities, and attendant goals and policies in the Land Use Element which address unique land use issues, the conservation of natural resource and critical lands, and providing public access to lands based on the ability for the resource to support the use.

City of Richland







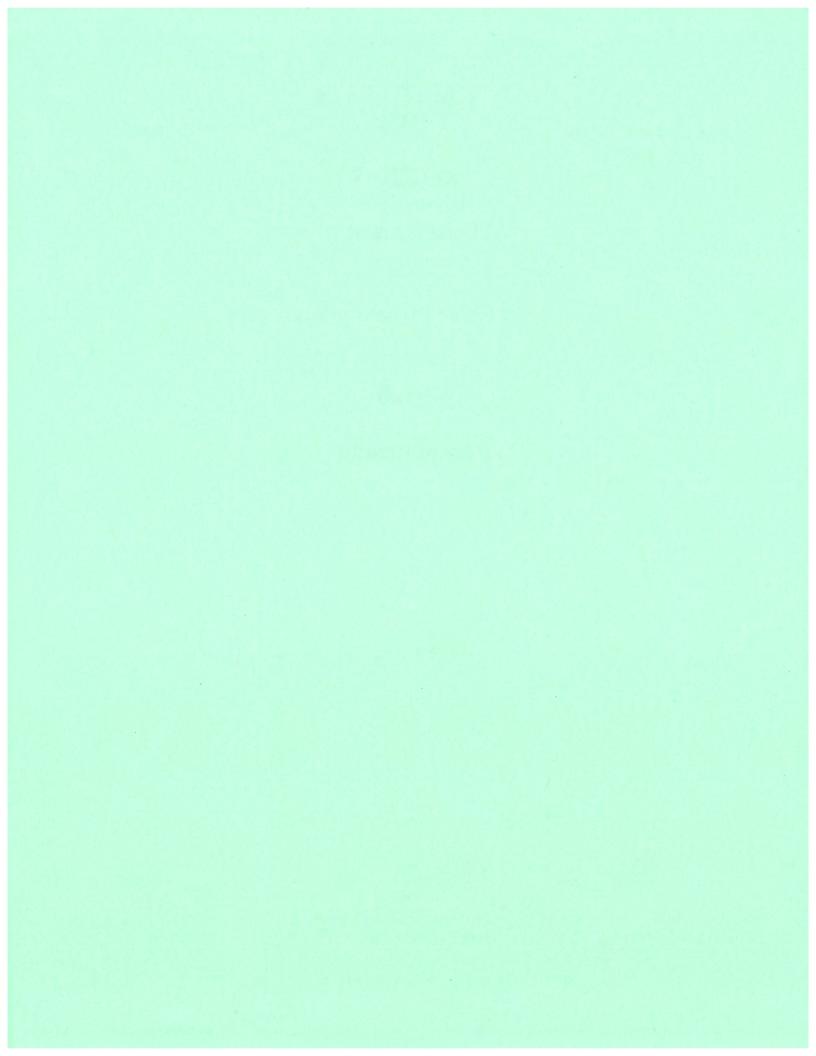
TAB TITLES FROM

TRI-CITIES
Rivershore
Enhancement
Council

River Shore Inventory Study

6th Tab

Port of Benton



Port of Benton Technology and Business Campus

Outdoor Facilities Plan



Master Plan Addendum Update

June 2008

Prepared by:



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Introduction

In 1997 the Port of Benton adopted the Richland Industrial Park Master Plan. The Master Plan was comprised of seven major sections including an introduction, goals and objectives, background, existing conditions, site analysis, Conceptual Master Plan as well as recommended protective covenants and design guidelines. Although there are many references to the development of open space and other amenities in the Master Plan, a primary focus was on utilities and automobile transportation facilities. Goals and objectives also addressed the need to provide outdoor amenities that would enhance the Park's ability to meet the changing needs of a diversifying tenant base as well as the larger area encompassed by the Tri-Cities Research District (then known as the Science and Technology Park).

Since 1997, the Port has renamed the area as the Technology and Business Campus to reflect the changing atmosphere and growing influence of the Tri-Cities Research District (TCRD), including the nearby Washington State University Tri-Cities Campus. The area is no longer predominantly identified for industrial land in the City of Richland Comprehensive Plan and has been rezoned primarily as Business Research Park, with some natural open space, parks and public facilities, waterfront, and industrial.

A portion (23 acres) of the land in the Technology and Business Campus (T&BC) owned by the Port of Benton that fronts on the Columbia River was purchased and is being developed privately as "WillowPointe". The area is roughly between Lindberg Street and 9th Street from Richardson Road to the Columbia River and is identified as Waterfront within the City of Richland Comprehensive Plan, allowing commercial, residential and office uses. Trail connections were coordinated to benefit not only tenants of the T&BC but will also enhance the outdoor environment for nearby students at Washington State University Tri-Cities, existing nearby residents and future employees and residents of the waterfront development. The area is seen as one campus not separate parts.

The Port of Benton is not necessarily in the business of providing recreational facilities. However, the Port does recognize the importance and value of establishing safe and visually appealing places to walk, jog, and bicycle as well as appropriate places to gather, socialize and recreate. Such places are appreciated by nearby residents and employees alike and enhance the ability to attract additional business for the Park and stimulate the productivity of those who work in and live within the area.

With this in mind, this Outdoor Facilities Plan Addendum to the 1997 Master Plan was originally prepared in 2002 with the intent to refine and expand on earlier efforts, and to more specifically identify desired outdoor facilities. This 2008 update will note accomplishments since 2002 and incorporate current opportunities as well.

This addendum is structured so as to be a stand alone document. It will draw on the idea base, goals and objectives established in the earlier effort, and, where appropriate, will restate important components. It is also a compilation and expansion of other planning efforts.

Goals and Objectives

The following goals and objectives specific to outdoor facilities are developed with the original objectives of the Master Plan as a basis. The stated purpose of the Master Plan was to provide a general guide for the planning and future development of the Technology and Business Campus. The Master Plan was not intended to provide detailed design information for each parcel on the site, but instead defined the general location, type and scale of developed areas, open space areas, circulation systems for automobiles, bicyclists and pedestrians and the location of utility systems. Design guidelines were also part of the Master Plan and still hold true today and provide for a certain level of uniformity in development and minimum design standards.

Goal 1: To provide for pedestrian and bicyclist connections, landscaped where appropriate.

Objectives:

- Create important pedestrian connections internal to the Technology and Business Campus that will facilitate business between park tenants.
- Create pedestrian connections between developed areas of the Port of Benton site and other adjacent developed areas including the following:
 - Riverfront to the east
 - Washington State University Campus to the south
 - Tri-City Research District west of George Washington Way.
- Provide bicycle storage facilities.

Goal 2: Construct outdoor gathering places with recreational amenities that take advantage of the Columbia River frontage.

Objectives:

- Provide a mix of outdoor amenities including three outdoor eating facilities to meet the increasing demand for on-site services.
- Provide recreational features appropriate for riverfront, including view areas.
- Provide mapping and kiosks where appropriate.

Background

Geographic Boundaries

The Port of Benton Technology and Business Campus is located at the north-eastern corner of the City of Richland's corporate limits. The site is bounded to the west by George Washington Way, to the north by Horn Rapids Road and the 300 Area of Hanford, to the east by the Columbia River and to the south by 1st Street and the Washington State University Tri-Cities branch campus.

The Port of Benton's 250 acre site is part of the larger TCRD. The TCRD is approximately 1,600 acres in size. The Port of Benton's 1997 Master Plan was incorporated into an overall Master Plan for the TCRD.

Planning Framework

The 1997 Master Plan, as well as this addendum for Outdoor Facilities, has been developed within a framework that recognizes the legal constraints of the City of Richland's municipal code, specifically the zoning and subdivision codes and the policies set forth in the City's Comprehensive Plan.

Comprehensive Plan and City of Richland Zoning and Subdivision Codes

The City of Richland's Comprehensive Land Use Plan was first adopted in October of 1997 to comply with the state's Growth Management Act. The Plan can be amended annually; the most recent amendment was in December 2007. Within the boundaries of the T&BC the City used the Port's 1997 Master Plan as a basis for future land use and revised not only the area owned by the Port, but much of the larger TCRD, to be primarily Business Research Park zoning. Portions along the Columbia River are identified as both natural and developed open space activities throughout the City. Rezoning of the area to be consistent with the Comprehensive Plan was completed in the Spring of 2002.

Richland Shoreline Master Plan

Since the Port of Benton has the Columbia River as an eastern boundary, any future development of the Port must comply with the City of Richland's Shoreline Master Program Ordinance. The purpose of this ordinance is to implement the state's Shoreline Management Act of 1971 and to provide for the wise and proper management of shorelands, wetlands and water bodies.

The Master plan must abide by the shoreline master program regulations which includes but are not limited to building setbacks, permit applications, placement of parking areas, and public access to the shoreline. Substantial development within 200 feet of the shoreline currently requires a shoreline permit.

Rivershore Master Plan

In October of 1999 the City of Richland adopted the Rivershore Master Plan that establishes guidelines for development and/or preservation of riverfront lands and facilities. This area covered by the Plan includes the shorelines of both the Columbia and Yakima rivers within the City. An extensive public process included nine workshops or presentations to the public,

Parks and Recreation Commission and the City Council over an 18 month period. This document discusses appropriate trail furnishings, trailhead spacing, plantings as well as trail design standards. It also conceptually identifies locations for trailside parks and other features. Within the Port of Benton T&BC additional detail was added beyond that included in the 1997 Master Plan. This Addendum in turn builds upon those ideas, given current opportunities.

Parks, Facilities and Open Space Plan

The City of Richland has also prepared a Parks, Facilities and Open Space Plan, completed in 2000 and last updated in 2006. This Plan provides a park and facility inventory as well as identifies goals and objectives. In addition to public meetings, a survey of the public to determine park and facility needs was a key component. Recommendations are given for many parks within the City and potential funding sources are also discussed.

Accomplishments

Since the 2002 Outdoor Facilities Plan was originally completed, the Port of Benton and its partners have made some significant progress in accomplishing the recommendations of the Plan. These achievements are summarized below along with the addition of other features that enhance the plan that have come about through new opportunities.

- Conducted a visual survey of on-street pedestrian activity to prioritize sidewalk installation.
- Distributed a written survey to several businesses in the T&BC to prioritize locations for new sidewalks.
- Constructed approximately 2 miles of new sidewalks.
- Upgraded existing pathway along the riverfront.
- Modified existing trail to accommodate WillowPoint development.
- Extended Battelle Boulevard, with sidewalks, east to the Columbia River to improve river access, including sidewalk and landscaping.
- Created a buffer and visual berm around the Penford property in the southeast corner.
- In 2006 the US Department of Navy made landscaping and barge improvements including installing juniper trees at the north end.
- Signed an agreement with the Department of Defense to acquire the surplused USS Triton Sail, in order to develop a park.
- Purchased and placed a kiosk in partnership with TRE as part of the community wide trail system.
- · Mapped trail area and provided information regarding connections
- Leveled 12 acres north of Penford along the rivershore for development.

These accomplishments will be incorporated into the existing conditions and conceptual plan later in this document.

Existing Conditions

Since the creation of the Master Plan for the Technology and Business Campus (T&CB) in 1997, then referred to as the Richland Industrial Park, the Port has added some important features that currently provide benefits to the area. Existing facilities are discussed in this section to provide a basis from which to add future improvements. Existing land use, trails, sidewalks and other amenities within the T&BC are shown in Figure 1 and discussed below.

Land Use

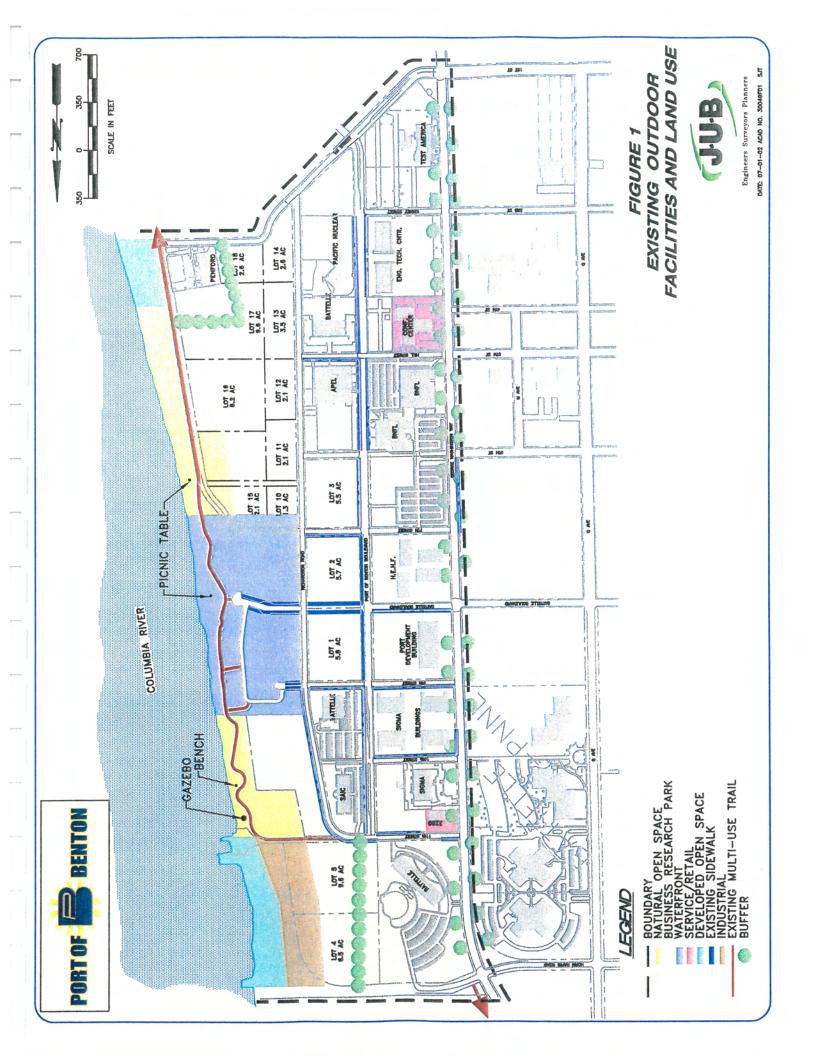
Existing land use at the Port of Benton Technology and Business Campus is varied in type and size, with an overall orientation to office use and some industrial uses still taking place. Few business-oriented services exist within the T&BC, however there are a few restaurants as well as the Digital Image who serve businesses in the area. The T&BC has an employment base of over 7,000 people. As mentioned earlier, the WillowPoint is a mixed use development along the Columbia River including residential that is also progressing.

Significant vacant land within the TBC is developable. The site is predominantly flat, the area east of Richardson Road slopes down to the Columbia River. The Port has recently leveled 12 acres north of Penford in preparation for development. Areas within 200' of the Columbia River fall under the jurisdiction of the Shoreline Management Act, thus requiring a shoreline permit.

Bicycle and Pedestrian Facilities

Sidewalk facilities for pedestrians within the Port of Benton T&BC cover about 25% of the roadways. Sidewalks along the street network include the east side of Port of Benton Boulevard north of Kinney Street, one side of most of the east-west streets and a few hundred feet in other locations as shown in Figure 1. A few individual businesses have installed sidewalks from parking areas to building entrances.

Opportunities for bicyclists and other trail users in the area were greatly enhanced when the Port extended the regional Sacagawea Heritage Trail north from the Washington State University campus situated south of the T&BC. This trail now follows the Columbia River through the T&BC north to 11th Street where it heads west to Port of Benton Boulevard. Trail connections to Battelle Boulevard and WillowPoint have also been constructed that provides access to the central portion of the T&BC. The regional trail can be traversed south through the City of Richland along the Columbia River and is linked to many other City of Richland trails as well as trails to both Pasco and Kennewick. An asphalt trail also extends north from Horn Rapids Road to the 300 Area of Hanford. The condition of these trails given their recent construction is good.



A connection between these trails can be made from 11th Street to Horn Rapids Road via an old Hanford service road on the Port of Benton Boulevard alignment; the condition of this surface is poor, but is for the most part unused by motorized vehicles.

On-street bike paths in northern Richland include one route that serves the T&BC by heading north on Davison Street (east of George Washington Way), then east on Spring Street to Harris Street and from there proceeding north to the WSU campus and eventually entering the T&B at the intersection of 1st Street/Port of Benton Boulevard. On-street bicycle routes outside of the T&BC include Kingsgate Way, and Stevens Drive to the west of the T&BC which provide north-south connections, while SR 240 and Saint Street provide east-west travel routes. Several roadways south of Saint Street also provide connections to the separate bicycle path along the Columbia River. Figure 2 shows existing on-street bicycle paths and off-street trails in northern Richland.



Parks and Other Amenities

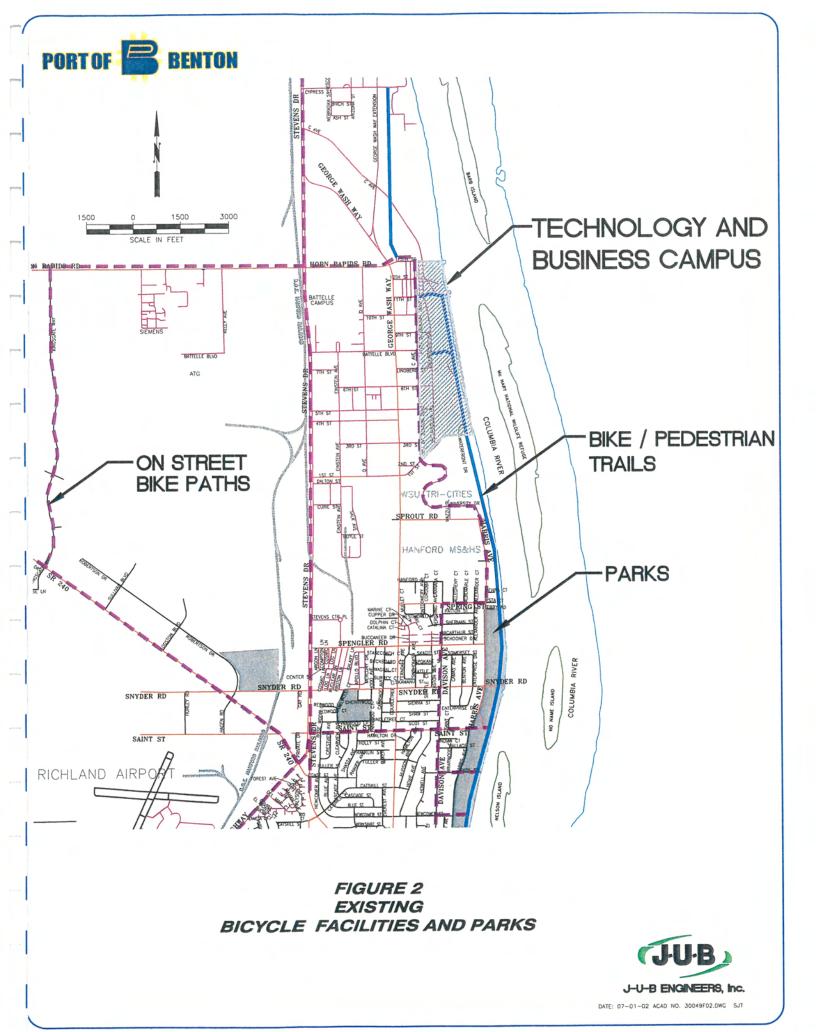
Within the T&BC, the Port installed a Gazebo including picnic tables overlooking the Columbia River at the north end of the site between the trail and the barge slip. Two isolated picnic tables are situated along the trail to the south. Two benches have also been installed overlooking the river. Although the condition of these amenities are good, the surrounding ground is comprised of dirt, weeds and sand and is less than attractive to many seeking a location for a picnic or gathering.

Some other picnic tables have been observed that have been placed near businesses at the T&BC for their employees to enjoy the outdoors during lunchtime and other breaks.



Northern Richland park facilities, all of which are more than 1 mile from the T&BC, are listed below with their associated amenities:

- Lynnwood Loop Park includes a practice baseball field, soccer field, swings and a children's playground. The Lynwood Swim/Tennis Club is adjacent to the park which contains and outdoor pool and two tennis courts. Minor improvements to this park are proposed.
- Leslie Groves Park is the largest and most heavily used park within the Richland park system. It is a lineal park with more than 8,000 feet of shoreline access along the Columbia River extending to the south through the City. Facilities include picnic shelters, children's play areas, restrooms, boat docks, softball fields, soccer fields, volleyball courts, basketball courts and a swim beach.
- Other City owned open space includes the North Richland Well Field and the Steven Drive Buffer Strip which are undeveloped.



Public Involvement

An initial meeting with the Port of Benton Commissioners was held on February 20, 2002 to discuss goals and objectives and general ideas regarding sidewalk, trail and park amenities for consideration.

As conceptual ideas for improvements were developed, two public Open Houses were held on May 9, 2002 from 12:00 - 1:30 PM and from 5:00 - 7:00 PM. The meetings were advertised in the Tri-City Herald in advance and flyers were posted on the entrances to many of the buildings at the T&BC and along the existing trail. Contacts were made with individual businesses as well with a request that notices be posted in common areas. Sign-in sheets were provided and comment sheets were distributed to those in attendance. A copy of the newspaper advertisement as well as the comment sheet are included in the Appendix.

A lunchtime meeting was determined to be useful in attracting those businesses and employees at the T&BC that walk recreationally during work day breaks. Several of the businesses were represented at the meetings, as well as residents from the City of Richland that use the trail system. Apart from Port and project staff, 29 people signed in, but it was clear that several others that came did not sign in.

In addition to verbal comments received at the meetings, 17 comment sheets were returned by attendees and are on file at the Port offices. Regarding potential sidewalk improvements, the Port had identified a desire to eventually complete a phased comprehensive sidewalk network. Input was requested with respect to where sidewalk improvements would be most valued. Responses included George Washington Way, Port of Benton Boulevard, Richardson Road and Battelle Boulevard. Sidewalks in any location were identified as a benefit.

Comments regarding outdoor recreational amenities, as expected, range from people wanting absolutely nothing done, to those that believe that everything should be done. A ranking of potential improvements was requested from those in attendance. The vast majority of comment sheets returned ranked connections to the existing trail as the highest priority, with a trail extension upstream as the second most desired feature. Picnic shelters, benches grass and trees generally ranked high while a fitness course, horseshoe pits and barbeque facilities ranked lower.

Written comments included that a water fountain would be appreciated, and that informational signs about the history of the Barge Slip would be a nice feature. Challenges should be expected considering the shoreline master program and involvement of the Indian tribes as well. Many species of wildlife are present along the river including meadowlarks, kill deer, bald eagle, owls, curlew, deer, coyotes, beaver and rabbits. Blueberry bushes along the shoreline are an attraction as well.

In March 2005 the Port performed an on-site visual observation of foot traffic and distributed a sidewalk survey to tenants at the T&BC to get input on where sidewalks would be most desirable and determine the best use sidewalk funding improvements.

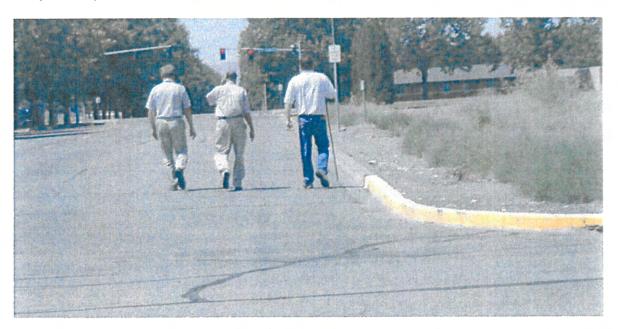
In June of 2008 an Open house was held to provide an update to interested parties regarding accomplishments and current opportunities as well as to receive input on preferences for future outdoor facilities. A copy of comment sheets received are included in the Appendix.

Demand and Needs Analysis

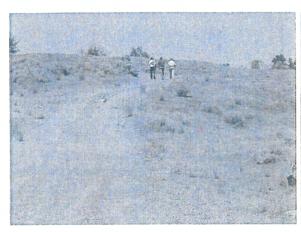
Existing Deficiencies

As reported earlier in the existing conditions section, very few sidewalks exist throughout the Technology and Business Campus. Some businesses have personnel located in different buildings at the Campus and other companies have regular dealings with each other necessitating travel within the campus. Pedestrian travel within the T&BC generally occurs on the street network due to the dusty areas adjacent to most streets. Although some roadways have grassy areas adjacent to them, pedestrians walking adjacent to most roadways will encounter obstacles such as sticks, rocks and weeds.

Many noontime recreational walkers/joggers use the street network rather than traverse the weeds, sand and sloping terrain to access the trail along the Columbia River. As evidenced in the public input comment sheets, connections to the trail are the most desirable need.



Existing park facilities within the City of Richland are situated some distance for potential users at the Port of Benton T&BC. Although Leslie Groves park is a very nice facility, it is over 1-1/2 miles distance from the Campus for those who would like to walk to a public park area. Such park facilities and green spaces could be provided along the rivershore in the areas designated for open space by the City of Richland Comprehensive plan and Zoning Ordinance.





Future Development

The Port has sold 23 acres along the Columbia River to a private development known as "WillowPointe". The development is to include over 200 condominium residences as well as 20,000 sq ft of retail with residential above and 35,000 sq ft of retail with office above and an additional 170,000 sq ft of office space. The trail along the Columbia River remains continuous and open to the public. Restaurants as well as a hotel may consider this site for future development. The trail connection on the Battelle Boulevard alignment was removed due to the extension of Battelle Boulevard to provide access to the site, however a trail connection from Battelle Boulevard to the Sacagawea Heritage Trail was also constructed. Additional trail connections north and south of this residential area would be a benefit to T&BC employees.

Currently the most likely users of the trail along the Columbia River are those that work in the nearby T&BC or further north at the Hanford 300 Area. With future private development of the waterfront area, over 200 new families will be far from existing parks within the City of Richland. Additional amenities that would include grassy and gathering areas along with picnic facilities will be important for these new residents.

Along with future residential development, restaurants along the waterfront are anticipated to bring additional users as well. Future use of trails and activity along this portion of the Columbia River regional trail are anticipated to increase substantially with the coming WillowPointe development.

City of Richland Parks Survey

As mentioned earlier, the City of Richland conducted a public survey about park facilities as part of the preparation of the Parks, Facilities and Open Space Plan. Pertinent aspects of this survey revealed the following:

- the predominant response for how open space should be used indicated that trails are the most desired feature;
- more picnic shelters were identified as desired additions to the park system; and
- the three most needed recreational facilities in the City were pathways and trails, indoor swimming pool and more waterfront parks.

Conceptual Plan

Early in the development of this planning document the general ideas and concepts shown in Figure 3 were important to understand existing facilities and potential improvements. Several elements are evident; a sidewalk network throughout the T&BC to allow pedestrian connections for safe walking areas and circulation. Several other amenities are also identified generically such as trail heads and landscaping, while some ideas for potential locations for trail extensions and group shelters are indicated as well.

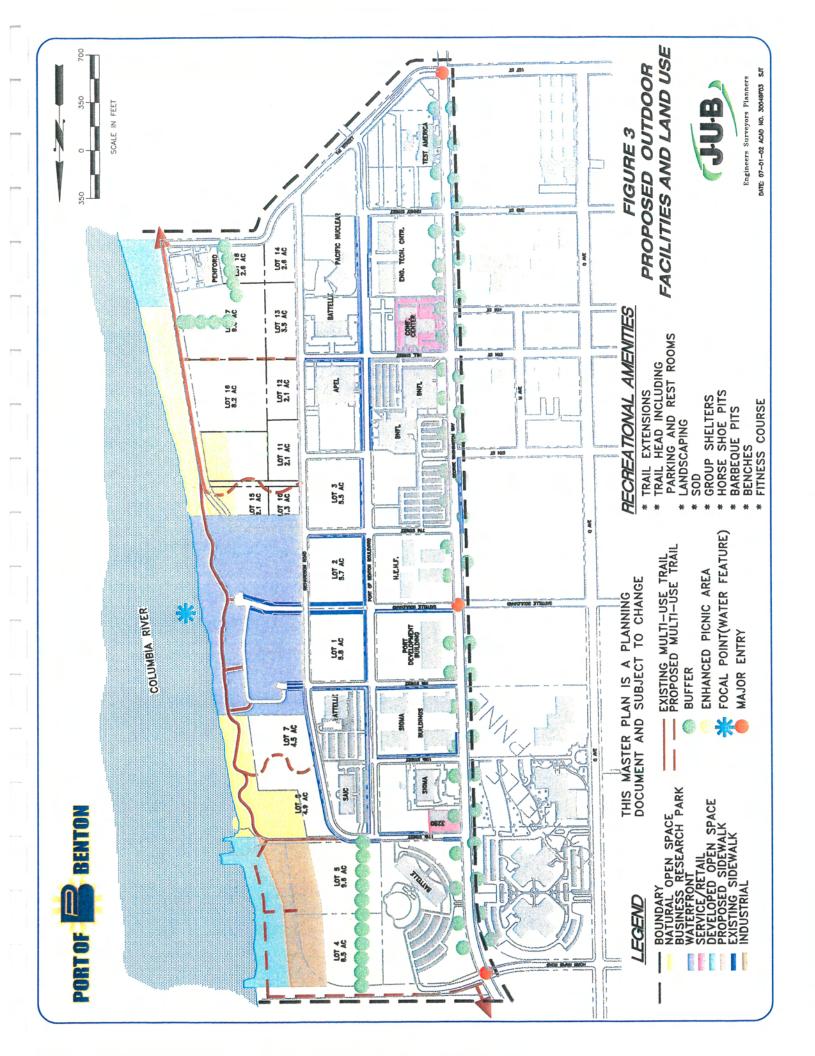
As a result of early discussion, public meetings and other coordination with the developers of WillowPointe, a more detailed graphic was created that presented conceptual improvements and potential locations for such improvements. Based upon public input and comment sheets returned, as well as discussion with professional recreation facility planners, the detailed conceptual site plan was refined and adjusted. Site visits were also helpful to determine appropriateness of various improvements. Most important to this Plan are safe walking areas and access to the regional trail along the river.

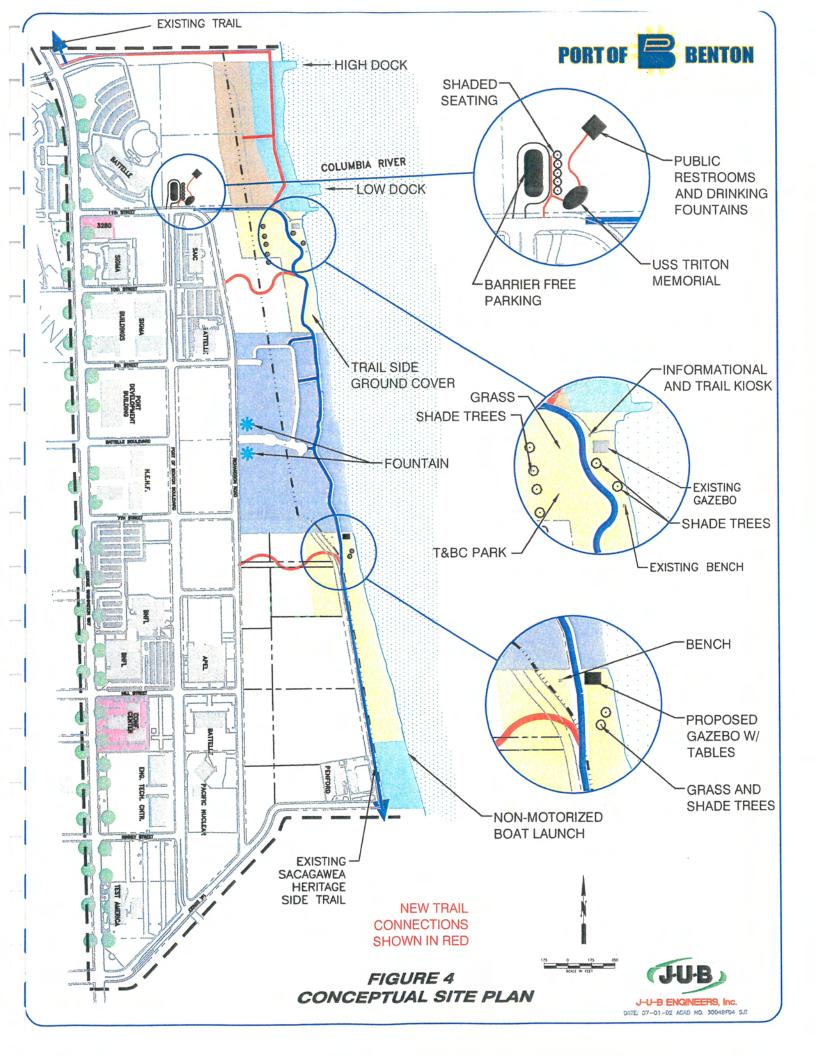
Port of Benton improvements to enhance connections to the Columbia River are anticipated to include two new trail connections situated both north and south of Riverwalk that are planned in the early phases to enhance the trail system. A trail extension north to Horn Rapids Road, additional gazebos, grassy areas, additional benches and picnic tables as well as a future trailhead including trail information public restrooms and a water fountain are also envisioned.

The Port of Benton has secured an agreement to acquire the surplused USS Triton submarine sail and has selected a site at the north end of the T&BC on which to establish a Memorial along with parking, a learning walkway, shaded seating and public restrooms.

The Port is also working to provide a T&BC Park with natural open space, trails and benches, trash receptacles and other amenities for gatherings along with a launch area for non-motorized vessels.

The resulting Conceptual Site Plan is shown in Figure 4. Clearly, more detailed architectural and engineering studies will further refine this site plan based upon actual grades and soil conditions.





Capital Improvement Plan

Given the Port of Benton's desire to coordinate the installation of sidewalks throughout the T&BC, total costs to install the remaining sidewalks at the Campus shown in Figure 3 were calculated at slightly over \$555,000 in 2008 dollars, including some landscaping. Budgetary constraints, considering other Port priorities, necessitated that a phasing plan be developed that would better fit within anticipated overall budget amounts.

The sidewalk phasing plan, depicted in Figure 5, and shown in Table 1: Capital Improvement Plan, identifies segments of sidewalks that could be constructed annually if the Port were successful in securing grant funding through the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Other grant possibilities through the State of Washington Transportation Improvement Board also exist. The Port would be obligated to match such grants at 20%. Matching funds as well as overmatch could be provided not only from the Port but from private businesses located within the T&BC.

The Triton Sail Memorial and associated park features are also anticipated to be phased, with the memorial itself starting in 2009, parking and some amenities the following year and restrooms thereafter.

Trail connections and recreational amenities shown in Figure 4 are also included in the Capital Improvement Plan. A phasing plan for recreational features was also prepared that reduces the capital outlay for any given year as It is unlikely that the Port would be able to fund all of the improvements in a single year. This is also shown in Table 1.

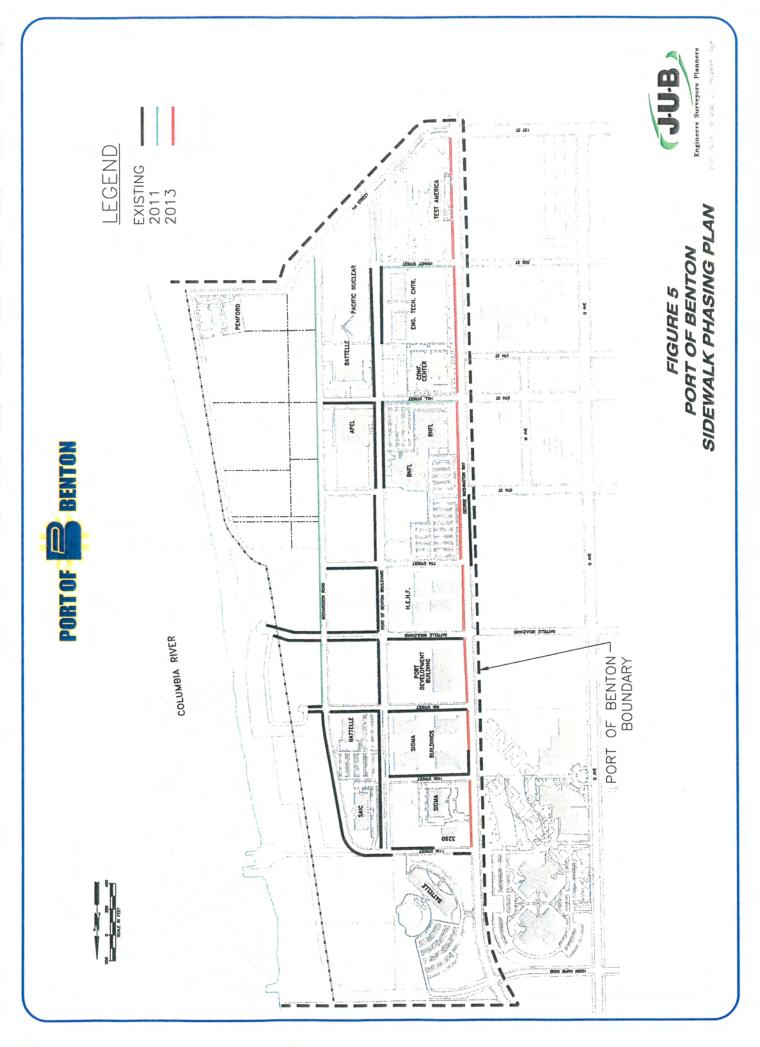


Table 1: CAPITAL IMPROVEMENT PLAN (YEAR 2009-2013) - Technology and Business Campus Outdoor Facilities

May 29, 2008	Remarks																	
		2013				\$ 375,000												\$ 375,000
	ent Year	2012									\$ 100,000					\$ 100,000		561,000 \$100,000 \$300,000 \$480,000 \$ 200,000 \$ 375,000
	Project Development Year	2011		\$ 180,000						\$ 100,000				\$ 200,000				\$ 480,000
	Proje	2010							\$ 100,000			\$200,000						\$ 300,000
		5005						\$100,000										\$ 100,000
	Local Matching Funds			\$ 36,000		\$ 75,000		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 100,000		\$ 100,000		\$ 50,000		\$ 561,000
	Other Funding Type			Private Business		Private Business						Private Business		Private Business		Private Business		
	Other Funding																	
	Grant Application Due Date			Jan / Sept		Jan / Sept		May	May	May	May	May		May		May		
	Potential Grant Type			STP (E)/TIB		STP (E)/TIB		RCO	RCO	RCO	RCO	RCO		RCO		RCO		
	Potential Grant Funding			\$ 144,000 STP (E)/TIB		\$ 300,000		\$ 50,000	\$ \$0,000	\$ 50,000	\$ 50,000	\$ 100,000		\$ 100,000		\$ 50,000		\$ 894,000
	Estimated Total Project Costs			180,000		375,000		100,000	100,000	\$ 100,000	100,000	200,000		200,000		100,000		\$ 1,455,000
	Work Description		Sidewalk Improvements Project	Richardson Rd (east side): 1st St to 11th St	Kinney St & Hills St: GWWay to PoB Blvd (north side)	George Wash. Way: 1st St to 11th Ave (east side)	 Parks, Trails and Landscaping	Triton Sail Memorial	Barrier Free Parking, park amenities	Rest Rooms S	Other park amentiles (i.e. kiosk)	Riverfront Area from north of Waterfront Zoning to 11th St S	New Trails, grass, trees, landscaping and irrigation and parking	Riverfront Area from 1st St north to Waterfront Zoning S	New Trails, gazebo, grass, trees and landscaping and irrigation	Riverfront Area from 11th St to Horn Rapids Rd	New trail, landscaping and irrigation	TOTAL FUNDING ALLOCATIONS 5
	Project Priority		Side	-		2	Park	-				2		3		4		

Adopting Resolution

The Plan was originally adopted on June 24th, 2002 included on the following page. The amendments to the Plan were approved on June 10th, 2008 with the minutes of that meeting also included.

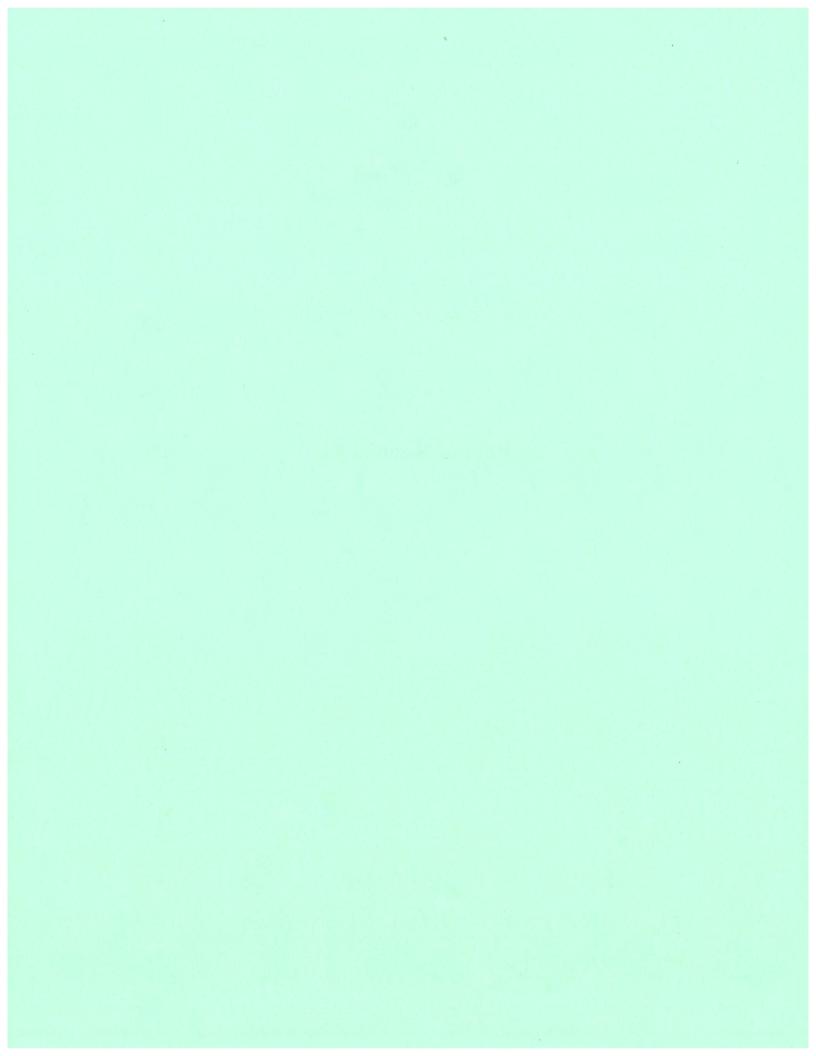
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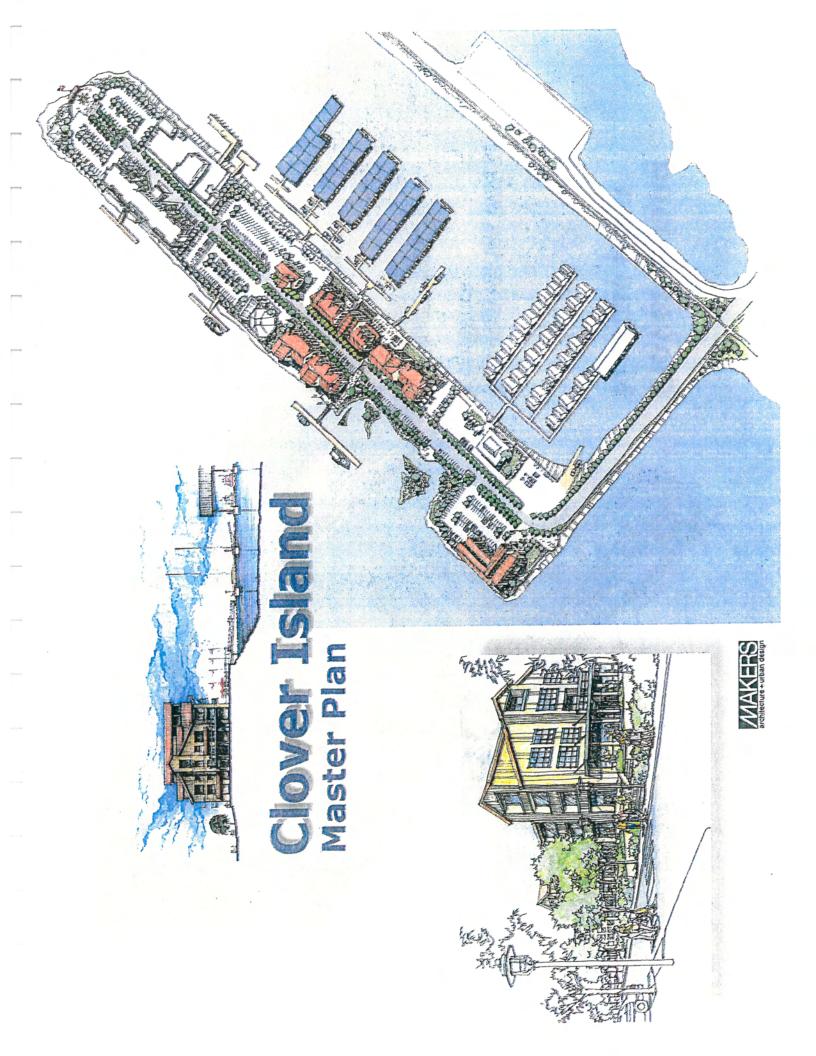
TRI-CITIES
Rivershore
Enhancement
Council

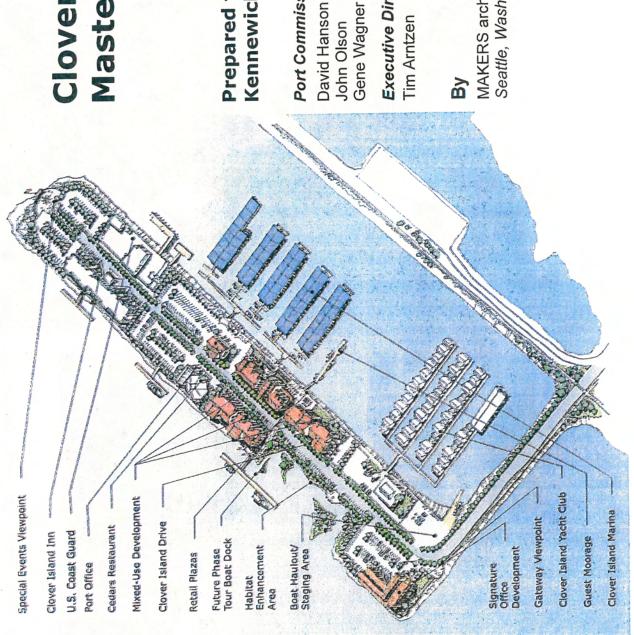
River Shore Inventory Study

7th Tab

Port of Kennewick







Clover Island Master Plan

Prepared for the Port of Kennewick

Port Commissioners: David Hanson John Olson

Executive Director: Tim Arntzen

MAKERS architecture and urban design Seattle, Washington

Acknowledgments

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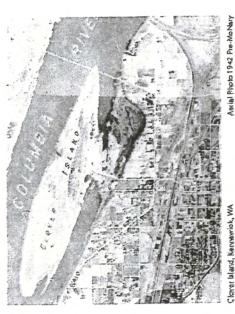
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- A. CAC Letter to Commissioners
- B. Public Meeting Summary
 C. Response to Draft Submittal Comments

INTRODUCTION

Purpose and Objectives



island and raising it to an approximate elevation of 352 feet mean sea level. This created about 16 acres of property 12 feet above the 340-foot ordinary high ted in the northeastern portion of the City of Kennewick, near Island site was created by placing fill on the highest part of the 162-acre original the city's historic downtown and Columbia Drive areas. The existing Clover water elevation of the McNary Pool when it was raised in late 1953.

Port of Kennewick to complete a Master Plan for Clover Island based on the Port In October 2002, MAKERS architecture and urban design was retained by the of Kennewick Commissioners' goals summarized on the following page.

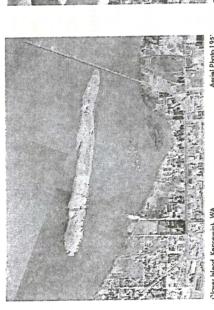
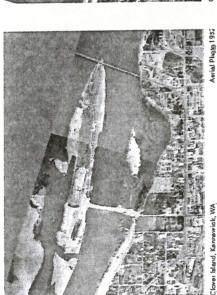


Figure 1. Clover Island's Evolution



Commissioners' Master Plan Goals

Build on the island's positive attributes.

- Prioritize water-dependent uses, including moorage and boating activities.
- Maintain an island waterfront theme.
- Encourage a variety of uses or activities that draw the community and visitors.

Consider the island within its larger community context.

- Recognize Clover Island as a community resource and Kennewick city icon.
- Coordinate with bridge-to-bridge and river-to-rail planning.
- Support revitalization of downtown Kennewick.

Have realistic economic performance and funding expectations.

- Plan for self-sustaining uses that pay their maintenance and operating expenses.
 - Base private investment on a realistic demand analysis.
- Maximize the use of existing funding sources for project implementation.

Involve the community in the planning process.

- Reach out to stakeholders and Port District residents early in the process.
 - Provide ongoing opportunities for community input in all project planning phases.
 - Work with a Citizens Advisory Committee (CAC).

Target the Master Plan for completion by year-end 2003.



Figure 2. Clover Island, 2003

A Unique Opportunity

Today Clover Island boasts several businesses, supports the boating community with its yacht club and marina, and is home to the U.S. Coast Guard's Aids to Navigation Team Kennewick. But a visit to the site confirms, the island is underutilized and its overall appearance does not represent a premier Port facility. Clover Island is realizing only a fraction of its potential.

The Port of Kennewick Commission has an opportunity to:

- Transform Clover Island into a showcase river-shore development site.
- Support tourism and economic development, while bringing new customers to the island's existing tenants.
- Become Kennewick's front door to the river.

The Opportunity

This lofty vision for Clover Island is not overly ambitious. In fact, the time is right for the Port of Kennewick to position Clover Island to achieve its potential.

- The Tri-Cities region is growing; the local economy will generate demand for housing, office, retail, and marina development on the island.
- There is growing interest and support for investment in and around downtown Kennewick.
- The Port of Kennewick's current financial position will support funding the infrastructure needed to entice private investment to the island.

Implementing the Master Plan will benefit the City of Kennewick, the Port of Kennewick district, and the surrounding region.

Benefits to the City

Clover Island development, as envisioned in the master plan:

- Is a cornerstone of bridge-to-bridge river-to-rail development as envisioned in the UDAT planning process.
- Supports downtown Kennewick revitalization efforts.
- Provides the premier boat moorage facility in the Tri-Cities region.
- Reconnects the port district's and region's citizens with the river by providing opportunities to stroll, fish, and enjoy its river views.
- Enhances the aesthetic and habitat quality of the shoreline.

Benefits to the Port

Clover Island development, as envisioned in the master plan:

- Supports the Port's mission to provide sound economic growth opportunities that create jobs and improve its citizens' quality of life.
- Supports the Commissioners stated goals for the planning process, which are summarized on Page 2.
- Will be a signature project for the Port of Kennewick.
- Exemplifies the Port's genuine desire to collaborate with the community by working with a Citizens Advisory Committee (CAC). The CAC brought an invaluable, varied, and balanced community perspective to the plan.
- Anticipates City cooperation in regards to parking and height allowances. If approved by the City, these allowances create the opportunity to develop a mixed-use waterfront village. They increase project feasibility by: a) allowing an efficient building layout intended to increase the private sector's interest in the project, b) allowing increased building height which will result in greater land values and ground-lease return to offset the port's investment in island infrastructure and public amenities.
- shoreline habitat and does not significantly adversely impact the environment. Can be permitted. The City of Kennewick staff supports the project and is committed to working with the Port towards plan implementation. Other permitting agencies will also likely support this project as it enhances

The Challenge

Transforming Clover Island will require the Port Commission's leadership to implement the key recommendations contained within this Master Plan. It will require:

- Port investment in the public amenities and infrastructure described in the plan.
- Working with the private sector development community through an RFP process to develop the island's uplands. Upland development of the island is vital to achieving its potential, allows the project to be self-sustaining, and protects against it becoming a drain on the Port's budgets or its tax payers.
- Updating a survey of the island and carefully siting new development to safeguard future parking capacity, development feasibility, and view corridors.
- Port investment in rebuilding Clover Island Marina. This project supports the boating community and creates a signature marina on the mid-Columbia.
- Applying the master plan's design standards to control building development siting and quality while ensuring a coordinated look and feel on the island.

Community Involvement

members). The CAC met seven times in 2003 to establish recommendations for the Master Plan and review its progress. The development priorities of the CAC The CAC played an important role in developing the Clover Island Master Plan. Commission and planning team (See the acknowledgements for a list of CAC Made up of 16 active tenant stakeholder, citizen, agency, and government municipalities, the CAC provided overall planning guidance to the Port representatives from within the Kennewick Port District or surrounding are summarized below:



parking options.

Water views, public access to the shoreline, and shoreline conditions. Protect:

Aesthetics and landscaping, shoreline, entrance and interior road, and the connection to downtown. Enhance:

The levee lowering project and downtown development plans. Support:



Figure 3. CAC Input Meeting Activity





Figure 4. CAC Input Meeting Results

At a CAC retreat in December 2003, the attending members formulated a letter to the Port Commission summarizing their recommendations. The letter in its entirety is in Appendix A; the main points of the cover letter are included below.

- Develop Clover Island as a community showcase in the three-rivers region to support tourism and economic development.
- Include housing as an integral part of a balanced, mixed-use development.
- Pursue private sector partnerships and creative financing to reduce the amount of upfront Port investment and allow the plan to support the Commission's stated goal of generating a self-sustaining project that does not become a drain on the Port's budget or its tax payers.

The project team also held community meetings (summarized in Appendix B) to determine the desires and concerns of the public and conducted interviews with the following island tenants, stakeholders, and local interests:

Tenants

- U.S. Coast Guard
- Clover Island Inn
- Cedars Restaurant
- Metz Marina (now the Clover Island Marina, owned by the Port of Kennewick)
- Clover Island Yacht Club (1 meeting, 1 briefing)

Stakeholders and Others

- Downtown Kennewick & Columbia Drive Association
- City of Kennewick (4 meetings)

Local development interests

- Adjacent property owners
 - والمحادث والمحادث والمحادث والمحادث
- Army Corps of Engineers
- Washington Department of Fish & Wildlife
- NOAA Fisheries
- Confederated Tribes of the Umatilla Indian Reservation (invited)

Regulatory Framework

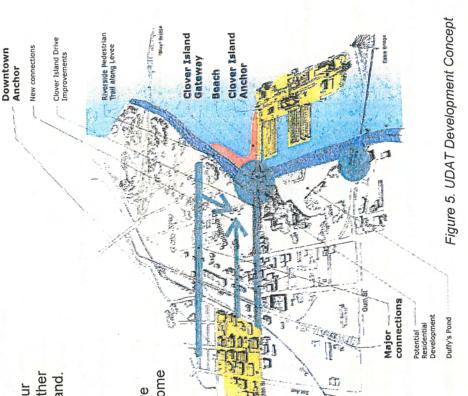
numerous regulatory bodies such as the Corps of Engineers, Washington Department of Fish New development on Clover Island will require approval by the City of Kennewick and and Wildlife, and NOAA Fisheries.

meetings to discuss current City plans, zoning, environmental review, and other coordination items that might be associated with development on Clover Island. The Port and the project planning team met with the City of Kennewick at four These discussions are summarized below:

Current City Plans

The redevelopment of Clover Island conforms with the City's Comprehensive Plan. Most City plans have anticipated Clover Island's redevelopment for some time. Those City initiatives which do relate to Clover Island include:

- Bridge-to-Bridge River-to-Rail. A Downtown Kennewick and Columbia Drive Association-sponsored, City and Port-supported study project that occurred in the fall of 2003. This project, called a UDAT (Urban Design Assistance Team), brought a team of planners, designers, and economists to Kennewick for an intensive planning program focusing on the area along Columbia Drive between the Cable and Blue Bridges. Its intent is to chart a concept for the longrange improvement of the "Bridge-to-Bridge River-to-Rail" area (see Figure 5). Mixed-use development of Clover Island was recommended as a first phase project critical to the success of upgrading the UDAT study area. A summary of UDAT findings was published early in 2004.
- Levee Lowering. The Corps of Engineers recently agreed that the levee that separates Kennewick from the Columbia River could be lowered up to six feet without increased flood danger. This lowering would improve views of the River and add width to the levee top for a pedestrian/bicycle trail along the waterfront. This project is seen as a benefit to Clover Island.



Zoning/Shoreline Master Program

Clover Island is currently zoned CM (Commercial Marina). This zoning classification is consistent with the uses and development types being planned for Clover Island, providing for water oriented recreational uses such as marinas and docks, multi-family residential uses, overnight accommodations, and a variety of commercial uses, including offices and retail establishments.

be required, for example, by a three-story office building with a gabled roof. This sort of construction is anticipated, and a height variance or zoning change will be The only significant issue is the need for a change which allows new buildings to exceed 35 feet in height allowed in the CM zone. A height limit variance would needed to allow financially viable building projects.

Standards and Guidelines

The building planning and parking standards, guidelines and assumptions used to develop the master plan are based on the City of Kennewick municipal code.

- Parking. The master plan assumes joint-use parking reductions of up to 15 percent as allowed in the Kennewick municipal code. Parking requirements are assumed to be:
- Residential 1.0 space per sleeping unit
- Office 2.5 spaces per 1,000 square feet
- Marina 0.5 spaces per slip (assumed, code is not specific)
- Retail 2.5 spaces per 1,000 square feet
- Hotel 1.0 space per sleeping unit plus support space
 - Restaurant 1.0 space per 4 seats
- The following building types may require a building height Building heights. variance.
 - Mixed-use 3 stories with gabled roof, minimum roof slope 4:12.
- Office: 4 stories

¹ It appears the Shoreline Master Program defers to the City's Zoning Code to set Shoreline Zone building height limits.

Views and Public Access

The City will continue to monitor Clover Island planning to ensure that it allows sufficient public access opportunities and view corridors/viewpoints from the island's roadway system.

Shoreline Enhancement

On March 20, 2003, the Port and planning team met with representatives from the Corps of Engineers, Washington Department of Fish and Wildlife, and NOAA Fisheries. The purpose of this meeting was to discuss potential environmental and permitting issues associated with this project. The resulting shoreline enhancement parameters incorporated into the master plan are summarized below.

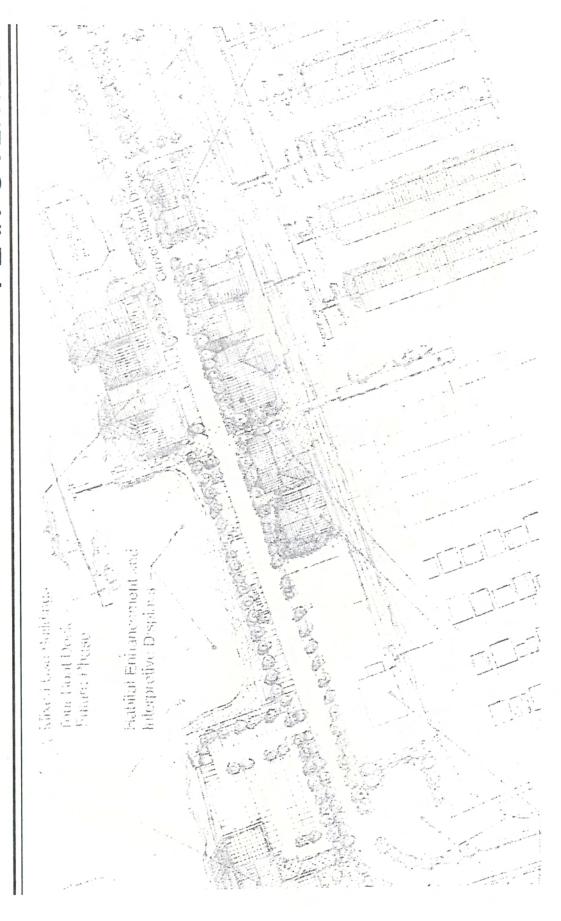
- . The most favorable areas for habitat restoration appear to be the levee face along the boat basin, at the island's eastern terminus, and miscellaneous shoreline improvements at the island's perimeter. Habitat restoration on Clover Island could include:
- Reshaping the levee face in the boat basin or other island shoreline segments to provide a complex shoreline configuration.
- Reducing the number of cavities along the shoreline where predators may lurk. This means infilling the spaces between large rip-rap rocks with gravel or 6-inch cobbles.
- Upgrading the vegetation along the shoreline to provide some shade, leaf litter, and insects for food.
- The impacts of new marina development can be largely avoided by keeping floats and covered areas 40 feet away from the shoreline and minimizing over-water coverage.
- projecting the path or boardwalk structure over the ordinary high water mark. The impacts of a shoreline boardwalk can be largely avoided by not რ
- habitat. The master plan limits over-water coverage to marina structures and Over-water shading prevents vegetation growth and can create predator water-dependent uses. 4



Figure 6. The island's eastern end is eroding. Habitat restoration should be incorporated along with erosion control measures.



Figure 7. There is potential to upgrade the appearance and quality of shoreline habitat around the island's perimeter.



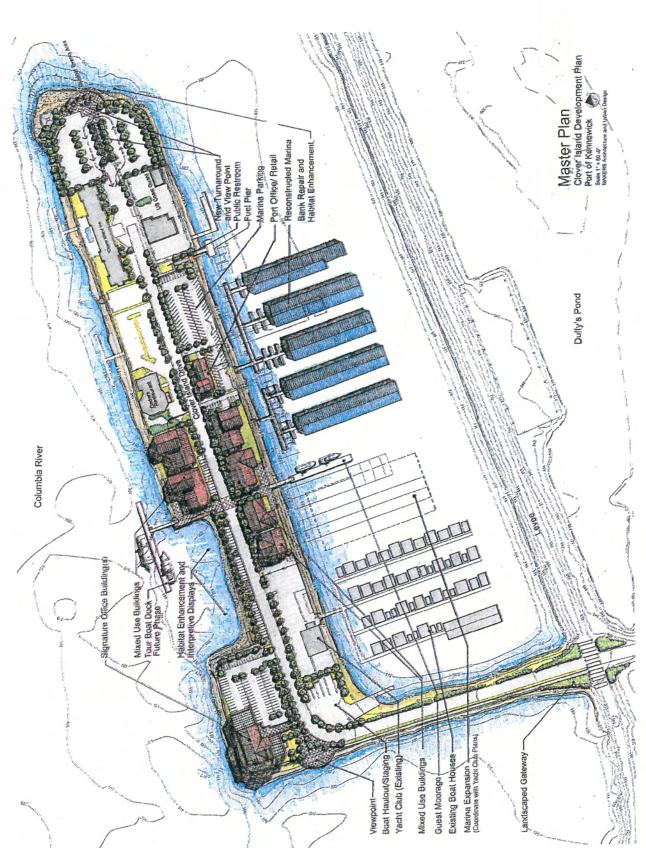


Figure 8. Master Plan

PLAN OVERVIEW

Plan Organization

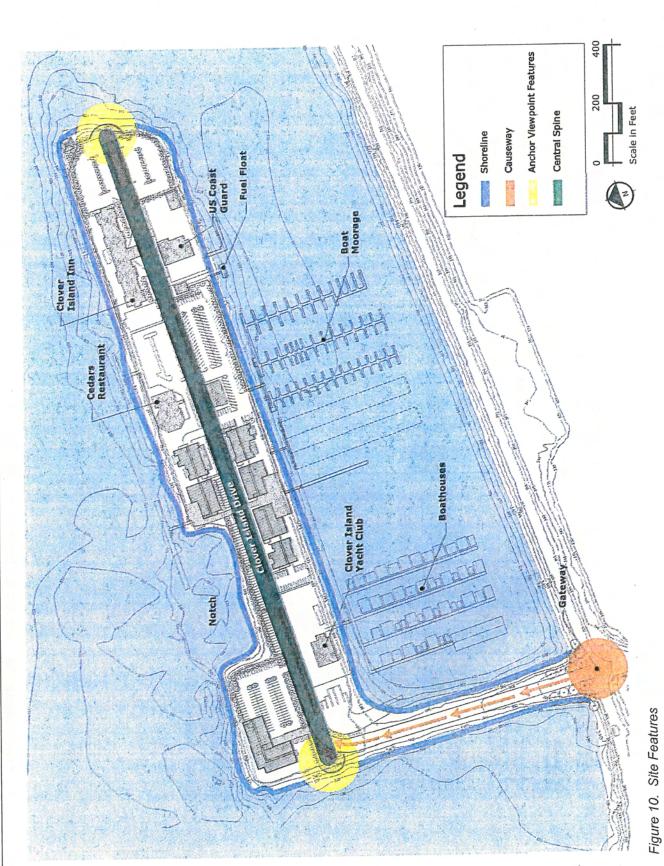
Mixed-Use Development special Events Viewp Cedars Restaurant Claver Island Drive Claver Island Inn U.S. Coast Guard Future Phase Tour Boat Dock Retail Plazas Part Office

Figure 9. Master Plan Overview

the Port Commission and incorporates the priorities and recommendations of the The Clover Island master plan illustrated on the facing page meets the goals of CAC and community. The plan's features are described in more detail in the following Master Plan sections, organized around the following elements:

- A coordinated system of public amenities and island infrastructure.
- A viable mix of upland uses that will support an active upland environment.
- In-water uses that support the island's waterfront character and boating heritage.

Each of these elements is a key component to successful development of Clover Island.



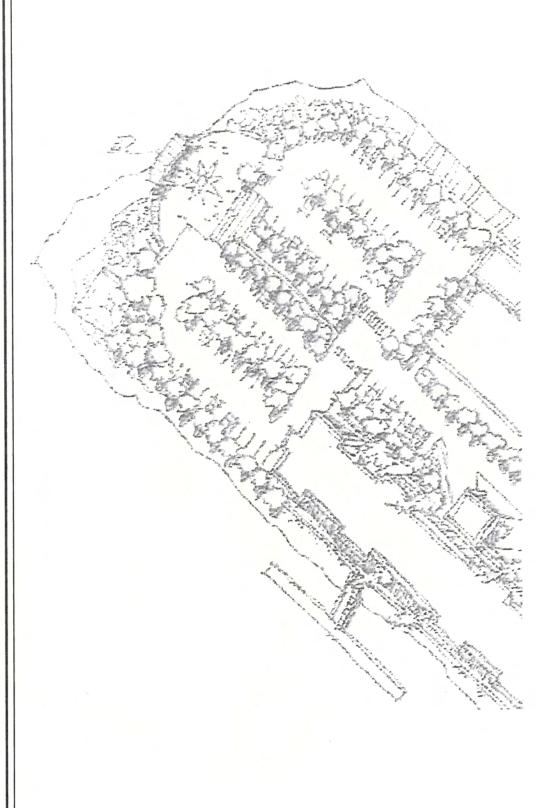
MAKERS architecture and urban design

Concept PLAN OVERVIEW

exploitation of these features forms the framework around which this Master Plan shoreline, which is the island's most significant natural feature and most versatile public access amenity, and Clover Island Drive, its organizational and functional gateway and physical connection to the mainland, its approximately one mile of characterized by three features: The causeway, which is the island's access In addition to its unique island setting in the Columbia River, Clover Island is spine. From both a functional and urban design perspective, the creative is structured.



Figure 11. View of Clover Island Drive



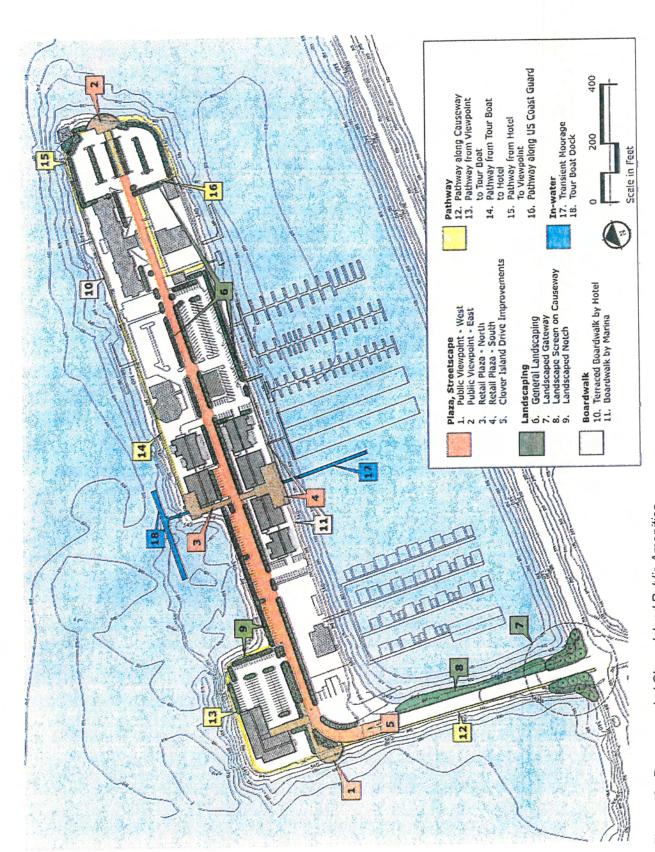


Figure 12. Recommended Clover Island Public Amenities

PUBLIC AMENITIES AND ISLAND INFRASTRUCTURE

Overview

The Master Plan includes the following public amenity and infrastructure projects.

- Pathway System (Approximately 3,500 feet landscaped pathway, approximately 1,200 feet structured boardwalk)
- 2. Gateway Feature
- 3. Pedestrian Improvements to Clover Island Drive (Approximately 2,100 feet)
- 4. Viewpoints (2) (Approximately 15,000 square feet)
- 5. Retail Plazas (2) (Approximately 9,000 square feet)
- 6. Public Access and Interpretive Area in the Notch
- 7. Shoreline Enhancement
- 8. Transient Moorage Dock (Approximately 200 feet)²

These projects were developed over several CAC and community meetings; they are illustrated below and discussed in detail on the following pages.

As the plan is developed, it should be kept in mind that the public amenities proposed are not merely cosmetic; they are intended to provide three distinct functions:

- To provide community access to the island and its shoreline areas.
- To provide the infrastructure and physical connection improvements needed to attract and support new development and existing Clover Island tenants.
- To provide open spaces and support facilities that bring people to the island for events such as street fairs, boating or wine country thematic events, or special holiday events (e.g., lighted boat parade). Although these spaces and facilities provide the setting, it is the people who will make the island a fun place to be.

² This public amenity is discussed in the In-Water Uses chapter.

Pathway System

boardwalks around the perimeter of the island that provide continuous waterfront A feature of the plan's public access component is a system of pathways and access opportunities for the public. The island's pathway system consists of three components, summarized below and described in detail in the design guidelines chapter. These are:

at the water's edge. The pathways are approximately five feet wide, with low-Pathways. These are informal, paved walkways constructed above the bank level lighting. New shoreline vegetation is installed on the top part of the bank adjacent to the pathway.

A pedestrian walkway with shoreline plantings and low-level thematic lighting is also recommended along the west side of the Causeway. The west side location takes best advantage of river views and connects directly to Viewpoint West, Clover Island Drive, and the proposed perimeter pathway system.

- **Boardwalk.** Boardwalks are recommended where adjacent development does not allow sufficient space for pathway construction. The boardwalk is constructed on a structure over the shoreline bank but not extending over water. The design is kept open and the walkway narrow (approximately five feet wide) to facilitate light penetration under the walkway. Light penetration under the walkway allows shoreline planting to be installed under the boardwalk and along the water's edge.
- **Terraced Pathway.** At some locations it may be more economical to construct a terraced pathway instead of a boardwalk. The viability of a terraced pathway will depend on review by environmental agencies; however, all components of the pathway terraces should be constructed well above the high water mark.

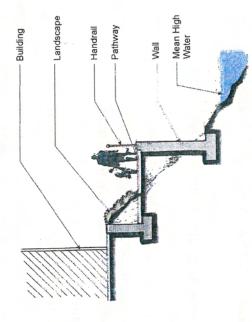


Figure 13. Terraced Pathway Section

PUBLIC AMENITIES AND ISLAND INFRASTRUCTURE

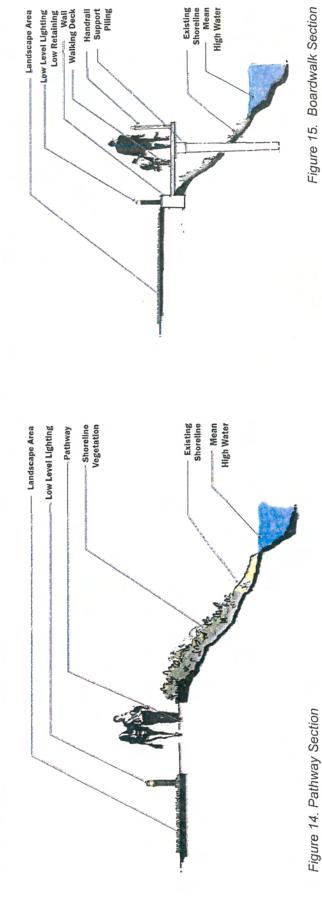


Figure 15. Boardwalk Section



Figure 16. Causeway Section

A new gateway landscape feature will be installed at the levee crossing, as illustrated in Figure 17. This feature will signify the entry to Clover Island and encourage pedestrians and bikers on the levee pathway to enter the island and island.

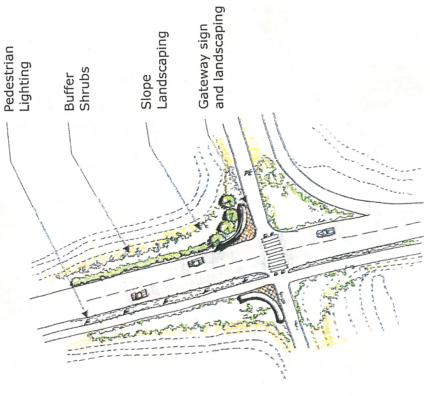


Figure 17. Site Plan of Gateway Feature

MAKERS architecture and urban design

Clover Island Drive

envisions Clover Island Drive as the island's landscaped, lighted, multipurpose Figure 18 indicates the plan's concept for Clover Island Drive. This concept spine. The roadway:

- Connects the island's viewpoint areas with a continuous, walkable boulevard.
- Becomes an easily recognizable icon visible from the Cable Bridge and other viewpoints.
- Creates a signature pedestrian boulevard along the full length of the drive that includes pedestrian sidewalks, landscaping, and lighting.
- is Clover Island's main access and circulation feature.

When in place, Clover Island Drive will become the organizational and circulation spine supporting all of the island's activity areas.

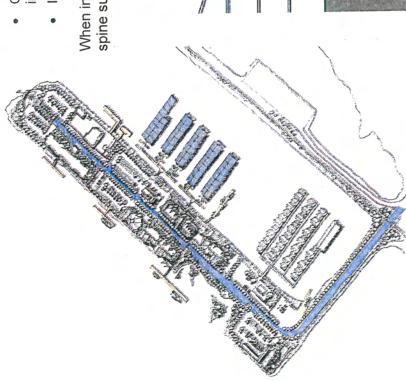


Figure 18. Clover Island Drive, the Island's Multi-Purpose Organizational Spine

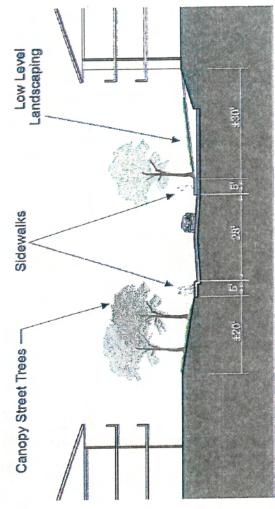


Figure 19. Clover Island Drive Typical Section

PUBLIC AMENITIES AND ISLAND INFRASTRUCTURE VIEWPOINTS

The Clover Island plan contains two major public viewing points: Viewpoint East, these three components become the visual—as well as functional—concept that a special-event viewpoint, and Viewpoint West, the gateway viewpoint. Both together as the island's signature coordinated public feature. When in place, viewpoints are connected by Clover Island Drive. The three elements work defines the island's image.

Viewpoint East is a special-use feature area. It will incorporate:

- A new walkway connection to the Clover Island Inn.
- A public gathering area suitable for special outdoor events, such as event displays, a reception, a Friday night barbeque, an outdoor summer bar, or other similar events.
- Potential access to a restored, enhanced shoreline at the east end of the island.
- Connections to the island's pathway and boardwalk system.

Viewpoint West is the island's gateway feature. It incorporates special lighting and public art features and acts as an introductory forecourt that supports a signature office building located at the west end of the island. It is also the termination point for the Causeway path and shoreline improvements and is an integral part of the island's pathway and boardwalk system.

Where appropriate and feasible, shaded resting areas should be included within the public plaza areas of both viewpoints.

PUBLIC AMENITIES AND ISLAND INFRASTRUCTURE

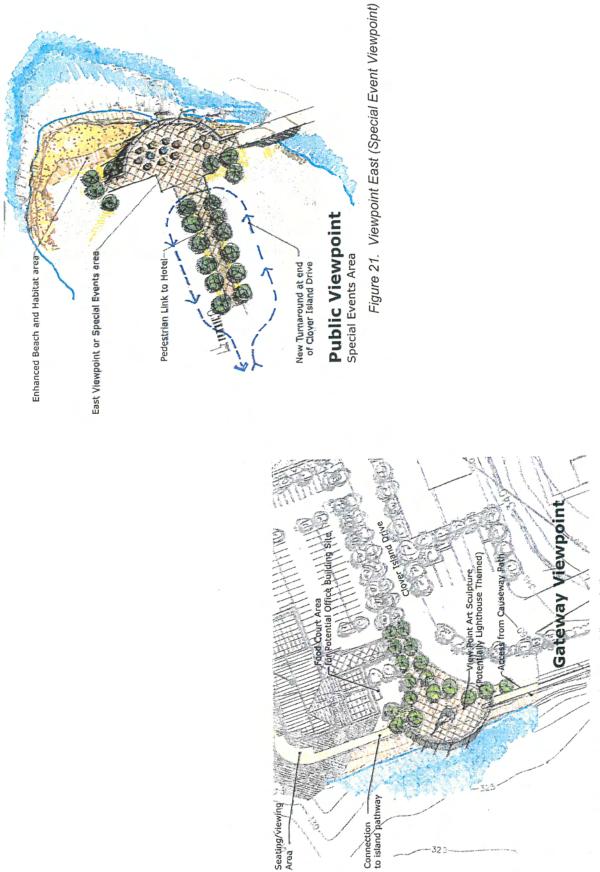


Figure 20. Viewpoint West (Gateway Viewpoint)

Retail Plazas

Island is the two public open spaces referred to as Retail Plaza North and Retail A key component in the development of a mixed-use building concept on Clover open space unit. Both plazas would also be designed to work with and support pedestrian street (Clover Island Drive), allowing both to work as a combined Plaza South. Both open spaces are connected by a paved, landscaped the adjacent buildings and their retail/commercial spaces.

Retail Plaza North is oriented to river views and for observing the Notch, planned for a landscaped/interpretive redesign. The plaza would also be the access point for a potential tour boat dock and could act as a waiting/gathering place for tour patrons. The tour boat connection would also support retail shop, deli, or potential restaurant uses in the adjacent buildings.

Retail Plaza South is focused on marina activities and is the connection to a transient moorage pier. The adjacent mixed-use buildings could house marine retail, food, deli, or commercial services.

Both plazas could be used for boating, special event displays, or in support of other Clover Island events. Both spaces also connect to the island's perimeter pathway and boardwalk system and should include shaded resting areas, where feasible.

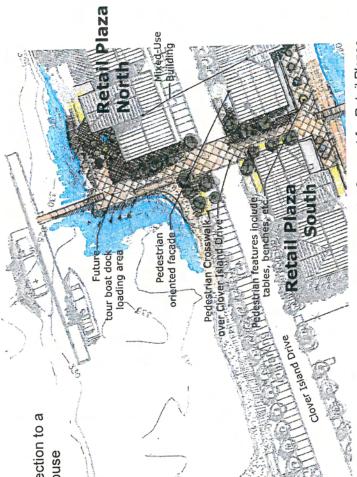


Figure 22. Concept for Retail Plazas

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The Notch



Figure 23. Clover Island's "Notch"



Figure 24. Eastern Washington Riparian Vegetation

The inset area in the northwest corner of the island, referred to as "The Notch," has received considerable discussion during the master planning process. The Notch area is a remnant of the city's old water filtration system. This system was abandoned a number of years ago, and The Notch remains as a shallow water indentation in the island's northern shore approximately 1-1/3 acres in area.

Several Notch reuse options were evaluated, including filling, over-water construction, deepening for small boat berthing, public beach, and landscaping with interpretive habitat improvements. Filling the site for development was not selected because of limited support from the CAC and community and because a Corps of Engineers representative indicated any fill would need to support a water-dependent use. Uses involving dredging or over-water construction were considered too expensive for the benefit they provided and could be difficult to permit. Creating a shallow-water beach area in The Notch was felt to be a potential policing, maintenance, and safety problem and had little support.

The consensus of the planning team, CAC, community participants, and the Port Commission has been to consider The Notch as a habitat/public access interpretive area. The Master Plan includes improving The Notch area with landscaping and treating the shoreline with additional planting and habitat improvements as mitigation for Port projects that impact the environment. This will promote a more natural setting with an interpretive component. The plan also provides a public access pathway at its perimeter.

As a future phase project, the Port should pursue grant funding and enhance the natural wetland features of this site to improve the fish and wildlife habitat. Habitat enhancement of The Notch could include:

Shoreline Enhancement to

- Shoreline reshaping using strategic cutting and filling to create a sinuous shoreline with points, inlets, and islands, and a mosaic of water depths to provide diverse habitat niches for fish and wildlife.
- Combining emergent wetlands and open water areas with a vegetated riparian zone to create the desired habitat to attract fish and wildlife.
- Providing public access through a system of trails and viewpoints to accommodate wildlife viewers. One element of this system could be a pedestrian bridge over The Notch or a portion of it.

Once established as a wildlife haven, the area could become a regional attraction for bird watchers.

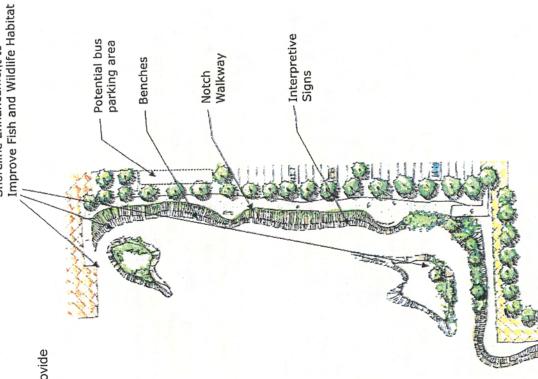


Figure 25. Concept for The Notch

MAKERS architecture and urban design

Shoreline Enhancement





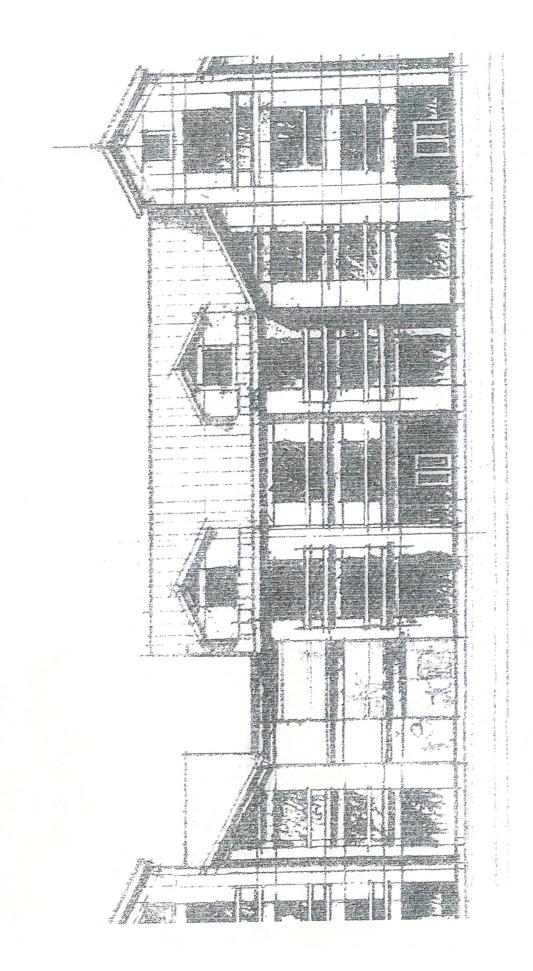
Figure 26. Shoreline Improvement Areas

Shoreline improvement projects would not only provide mitigation, if required, for terminus, but miscellaneous shoreline improvements could also occur anywhere marina projects, but would also beautify the Clover Island's shoreline. The most favorable areas for habitat restoration appear to be at the island's eastern around the island's perimeter.

Options for shoreline enhancement include the following:

- shrubs as mitigation for most in-water projects such as those proposed for Clover sland. Shoreline reshaping may be necessary for successful planting in some areas. Re-vegetation is the least expensive mitigation option and it beautifies NOAA Fisheries has required shoreline re-vegetation with native trees and and protects the shoreline while providing benefits for fish and wildlife.
- slope. The primary mitigation value of the rubble-removal option is the reduction of smallmouth bass habitat, but that would only be the case for rubble removed must be exercised because some of the rubble presently functions as erosion Removing rubble around the island could improve the aesthetics, but caution control. Removal of rubble may require installation of fill to retain shoreline from below the waterline.
- The filling of interstitial spaces between large rocks with smaller gravels and agencies consider this a viable mitigation option. Covering rubble with such cobbles to eliminate predator habitat has been proposed previously. The material could also improve esthetics.

combination of the previous three elements. Re-contouring of the slope would be those rocks would be necessary. In general, shoreline treatments that minimize necessary to provide a substrate for a viable re-vegetation plan. Rubble would necessary to prevent erosion, and the filling of the interstitial spaces between need to be removed or buried. Armoring with large, angular rock would be Restoration of shoreline conditions on the east end would require the erosion should be selected.



Existing Tenants

UPLAND USES



Figure 27. Clover Island Inn

The Port owns a majority of Clover Island, with the exception of the U.S. Coast Corps of Engineers' parcel located in island's northwest corner. The Port is in Guard's approximately %-acre site near the island's southeast corner and the the process of purchasing the Corps site through a federal Port and Industrial Use Authority program³. Clover Island currently supports the following tenants. The Master Plan assumes continued inclusion of these tenants.

- Clover Island Inn
- Cedars Restaurant
- The Clover Island Yacht Club
- The U.S. Coast Guard (owned by the Coast Guard)



Figure 28. Cedars Restaurant

³This mechanism of federal property transfer limits future uses of the northwest corner of this island to commercial or non-residential facilities or purposes.

Potential Future Tenants

development on Clover Island. The planning process devoted significant effort to As illustrated in Figure 30, there are approximately 7 acres available for future analyzing potential tenant mixes and discussing the pros and cons of various options for development of these areas with the Port staff, Commission, and CAC. An integral piece of this analysis was determining the potential market demand for a variety of individual and mixed uses over the next 20 years.

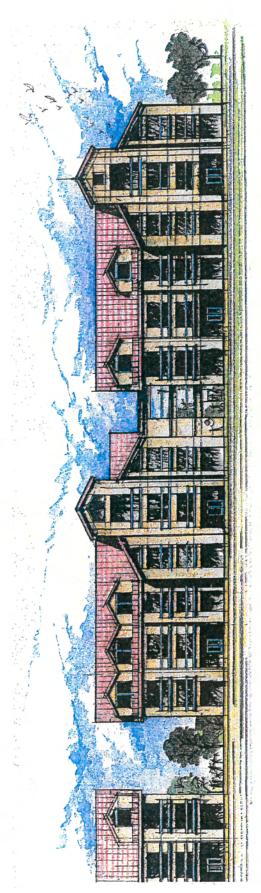
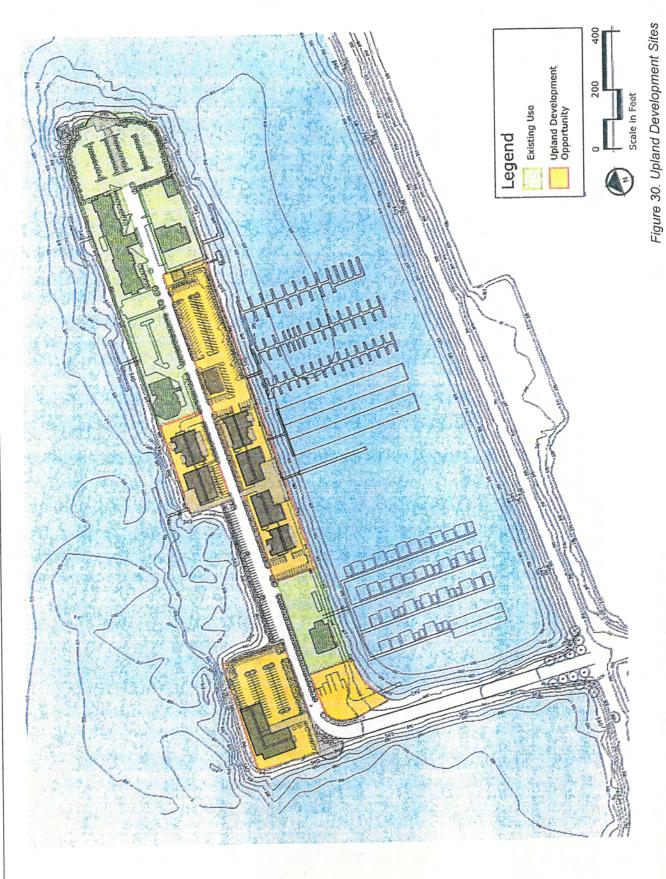


Figure 29. Potential Building Illustration



Clover Island Master Plan Accepted by Resolution 2005-04

Upland Market Analysis

trends, key real estate indicators, and recent similar projects. BST's key findings estimated likely demand on Clover Island by researching local and regional in a March 2003 Clover Island Highest & Best Use Study, BST Associates and estimate of likely retail/restaurant, office, lodging, and residential development on Clover Island are summarized below:

Retail

There are issues affecting retail development on Clover Island. These include:

- Lack of multi-directional access from the waterfront property to surrounding population centers.
- Competition from neighboring shopping areas (especially downtown Kennewick and Columbia Center).
- Seasonality of marina and other tourist and recreation activities, which focus this type of activity into the period from May through September or October.

As a result, retail opportunities on Clover Island will likely be limited to the following uses:

- **Convenience/Food Store.** A convenience store serving local residents, office workers, boaters, and other visitors. Size range: 1,500 to 2,000 square feet.
- Restaurant. A 4,000 to 5,000 square foot restaurant offering additional service to residents and visitors.
- **Café/Deli.** A café or deli to address the limited opportunities for breakfast and lunch on Clover Island. Estimated size: 2,500 square feet.
- Miscellaneous Retail. A gift shop, clothing store, or service retail store. Size range: 3,000 to 4,500 square feet.
- Marine Retail. A marine retail store serving the local boating community. Size range: 1,200 to 2,000 square feet.

Lodging

upgraded to improve occupancy rates and average room rates. It is expected to The potential opportunity for an additional lodging facility at Clover Island is not considered highly probable. The existing Clover Island Inn is currently being continue to capture the island's lodging traffic for the foreseeable future.

Office

The opportunities for commercial office space development at Clover Island appear to be positive. The market analysis indicated that between 80,000 and 120,000 square feet of commercial office space could be developed over a tenyear period. This would represent capturing approximately 7 to 11 percent of non-Hanford-related demand and 30 to 44 percent of the projected office demand for the City of Kennewick.

The amenities associated with Clover Island (waterfront views and access to the shoreline, the mooring, waterfront environment) would be attractive to potential office tenants. These users would likely require suites of between 1,500 and 3,000 square feet, which would imply a need for multi-tenant buildings. In addition, there is some opportunity to attract a larger anchor tenant, such as a sizable professional service firm, high-tech firm, financial firm, or regional service center.

Residential

Condominiums. This survey projects that the City of Kennewick could experience growth of approximately 28 condo units per year in the period from 2000 to 2010, or a total of 280 units. This assumes that Kennewick will continue to account for approximately 40 percent (or slightly more) of the multi-family unit development in the Tri-Cities.

The opportunity for sale of condos at Clover Island appears particularly attractive. Waterfront sales have been strong in the recent past at Columbia Point, and the supply of competitive areas is limited. Clover Island could absorb 100 to 125 units over a ten-year period (10 to 15 units per year), accounting for approximately 36 to 45 percent of condo development in Kennewick.

It is assumed that the island's units may be slightly smaller than the product currently on the market, ranging in size from 900 to 1,500 square feet per unit.

Apartments. The opportunity for development of apartments on Clover Island appears attractive from a demand perspective but is less certain from a financial standpoint due to the area's low rental rates. This analysis estimates that Clover Island could develop 80 to 90 apartment units over a tenyear period.

31

Residential Development on the Island

and cons, the CAC recommended the Port include residential development as an The inclusion of residential development on Clover Island was a hotly debated Appendix A). The CAC recommendation was primarily based on the following topic during the planning process. After much discussion of the potential pros integral part of a balanced mixed-use development on Clover Island (see factors:

- Residential development will likely be the highest revenue generator for the Port;
 this use will provide a return on the Port's investment in island infrastructure and public amenities and is considered responsible stewardship of public monies.
- Island residents will support existing and future retail and restaurant businesses.
- Residential development requires less parking than office or retail uses and will help improve the image and efficient use of Clover Island.
- Island residents will provide 24-hour security and activity on the island.
- Residential development will likely have the quickest timeline for development.

There were a number of concerns regarding the feasibility and desirability of condos on the island. These concerns and the Master Plan's recommendations to address them are summarized below:

Concern 1. The banking community will not finance construction or purchase of condos on leased land. Although there is no

guarantee that lenders will finance condos on Clover Island, financing of for-sale products on leased land occurs on school district, tribal, and state-owned land throughout Washington State. Issuing a Request for Proposal (RFP) to determine private developer and lender interest in this product type poses no risk to the Port and should be explored.

The CAC also believes the Port should consider the option of selling specific development parcels if the sale is necessary to meet Commissioner and CAC goals for the project. The sale would need to be coordinated with appropriate use restrictions and controls over future resale (See upland use recommendations).

Concern 2: Condos smaller than 1,200 square feet are an unusual product for the tri-cities. Again, issuing an RFP to determine private developer interest in this product type poses no risk to the Port. The final developer approved will define actual unit mix and

size.

Concern 3: Residents will "take over" the island or exert more influence than other tenants. The Port should institute a structured decision-making processes to keep a single stakeholder from having an unduly large influence.

firmly supports residential development as a critical component for popular in the community. Although residential development on Allowing residential development on Clover Island will not be development. The current Clover Island plan represents the best generating return on the Port's investment in island infrastructure represents a cross-section of community members and opinions, Clover Island was not a popular option in the past, this use was investment toward increasing the island's size for residential utilization of the island's existing footprint. The CAC, which connected to a large project that directed significant public and its public amenities. Concern 4:

Port Office/Retail

undersized. It does not meet current work place standards, nor can it support the Island. The planning team analyzed two primary options for constructing a new manager. It also occupies a premier development site. After exploring several sites, the Port Commission voted in 2003 to build a new Port Office on Clover The existing Port office building on the northwest corner of Clover Island is Port's future responsibilities as an industrial property, marina, and airport Port office on Clover Island:

- Construct a port-financed stand-alone office building convenient to the marina docks with first-floor retail tenants. A stand-alone building could be ready for Port occupation fairly quickly, would generate immediate activity on the island, and could establish the architectural and quality standard for future development.
- Partner with the Private-sector to locate in a fee-owned portion of a new signature office building or a new mixed-use facility adjacent to the public plaza. Locating the Port office within a new building would encourage development by guaranteeing an anchor tenant. However, due the size and complexity of the project, this project may take some time to implement and would require continued use of the existing office or an interim port-office location.

would be approximately 9,100 square feet. The first floor would include retail and a marina office. The second floor would include the Port offices and Commission stand-alone office building. Based on preliminary office programming, this facility The Port staff and Commission have selected Port-financed construction of a meeting room. A preliminary space breakdown is shown in Figure 32 on the facing page.

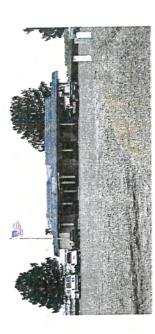


Figure 31. Existing Port Office Building

Building Summary	Total Ground Floor Area

Total Ground Floor Area	4,420	4,420 square feet	
Total Second Floor Area	4,700	4,700 square feet	
Total Building Area	9,120	9,120 square feet	

Second Floor (Port Offices)		
Office Space	Area (SF)	(SF)
Private Offices	778	
Commissioners Chambers	009	
Lobby/Reception/Front Desk	484	
Open Work Area/Filing/Office Machines	1,660	
Small Conference Room	177	
Break Room	177	
Restrooms	180	
Mechanical/Maintenance/Elevator	200	
Stair Towers	444	
Total Second Floor Area		4,700

Ground Floor	Area (SF)	(F)
Rental/Retail	3,005	
Harbormaster Office	186	
Entry/Lobby	230	
Restrooms	360	
Mechanical/Elevator	195	
Stair Towers	444	
Total Ground Floor Area		4,420

Figure 32. Port Office Preliminary Space Breakdown

Total Ground Floor Area

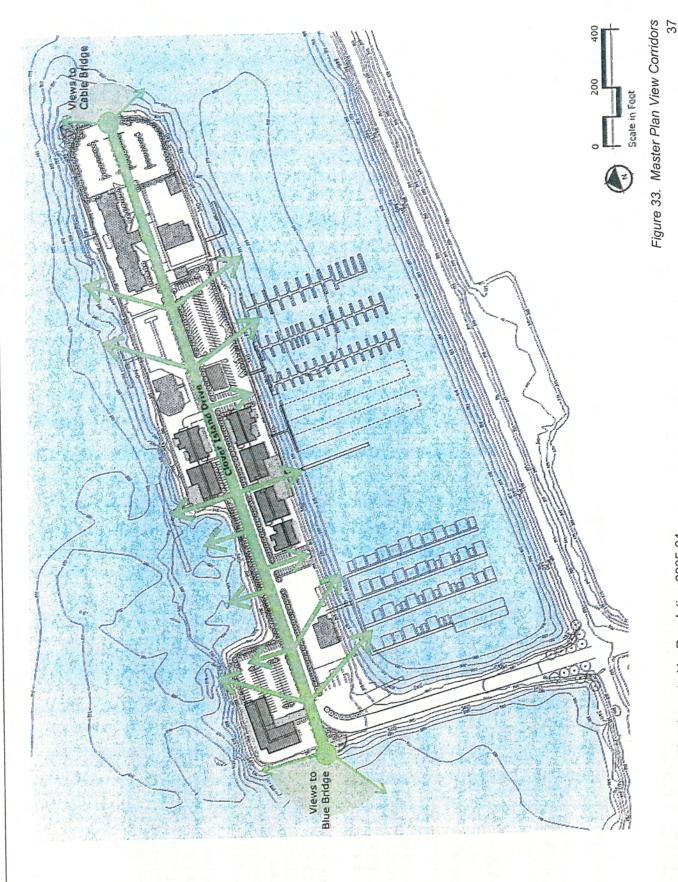
Upland Uses Recommendations Summary

The Master Plan recommends the following in regards to upland uses:

- Pursue mixed-use development on parcels as laid out and sited in the Master Plan. Mixed-use development supports the goals of the Port Commission and the Clover Island CAC by:
- Increasing the level of activity and use of the site.
- Helping to establish Clover Island as a destination.
- Providing new infrastructure improvements that support the island's existing tenants.
- Returning the Port's investment in infrastructure and public amenities.

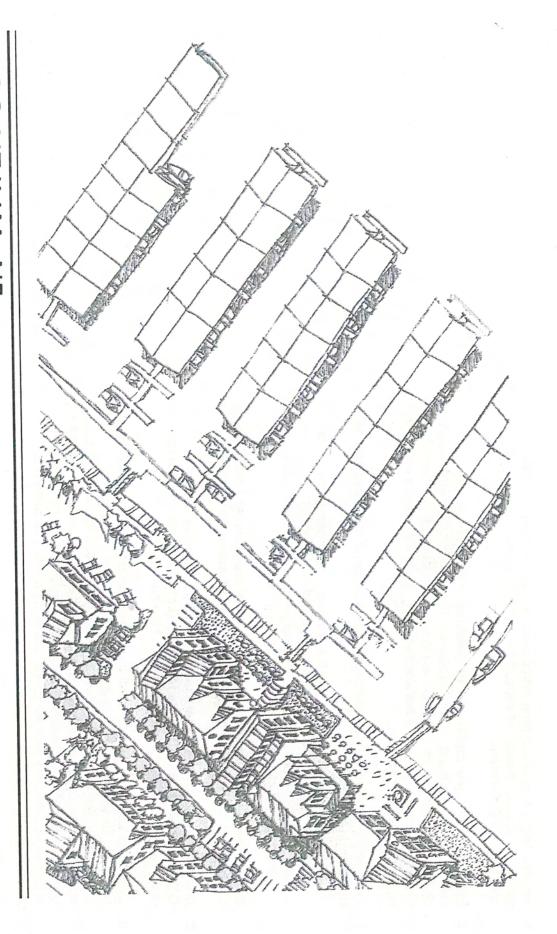
Siting of initial phase development on Clover Island will be critical to ensuring the success of the overall plan. Careful siting will maximize parking on the site, affect the feasibility of development on surrounding parcels, and protect view corridors, as illustrated in Figure 33.

- 2. Keep the island's development sites flexible and solicit developer proposals. As it is largely dependent on private market investment, the ultimate combination of future upland tenants on Clover Island is difficult to predict. Maintaining maximum flexibility in regard to future potential uses (although not in building siting) will attract the maximum developer interest and offer the Port the maximum number of options.
- uniquely suited to large office development (one large or possibly two smaller Engineers Port and Industrial Land Use deed restrictions. This site is also Position and market the northwest corner of the island for Signature Office(s) development. This use is appropriate under the Corps of ouildings) because of its unique shape and relatively-large size. က



Clover Island Master Plan Accepted by Resolution 2005-04

- Require retail or professional office uses facing the island's retail
 plazas. This requirement will support the pedestrian-and-public access
 orientation of these areas.
- maximize development square footage (within appropriate and sensitive the island, support economic development, and return the public's investment design). Maximizing development will improve the destination potential of Encourage and give preference to development proposals that in the island's infrastructure. 5
- 6. Provide for the construction of public amenities and infrastructure on the island through either:
- Negotiating a fair ground-lease rate that provides a reasonable return on the Port's investment in island infrastructure and public amenities, or
- Discounting the ground-lease rate in exchange for an appropriate contribution to construction of infrastructure and public amenities.
- Ensure the quality and coordinate the look of future development using the master plan's design guidelines and architectural standards. 7.
- 8. Consider selling development parcels where necessary to meet Commissioner and CAC goals for the project; include appropriate use restrictions and control the future resale of the parcels.
- standards. Recognizing the catalyst effect Port office construction could have Construct a Port office and retail building of approximately 8,500 square office/retail building design as it will establish the island's theme and building on private sector investment, the CAC recommends that, once Clover Island is developed, the Port relocate off the island to provide this catalyst to feet sited as shown in the Master Plan. Be discriminating in Port another developing area. တ်



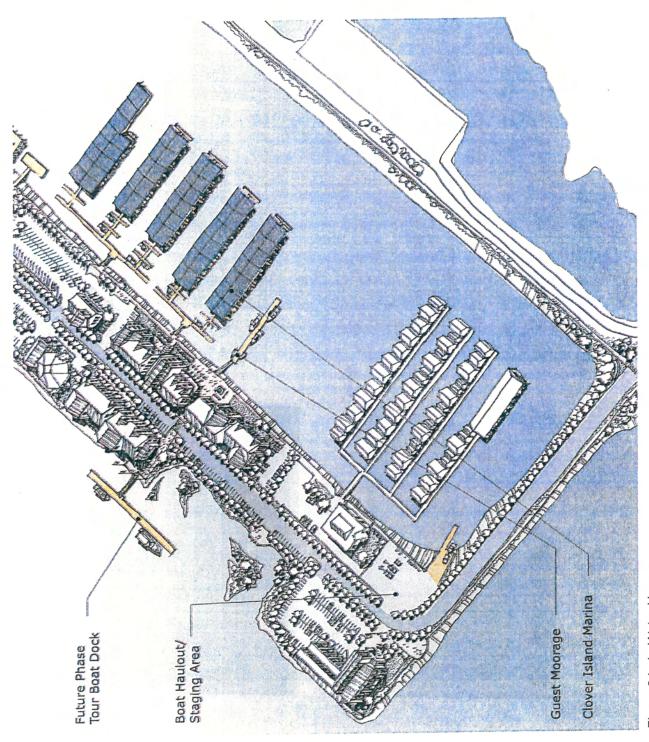


Figure 34. In-Water Uses

Marina

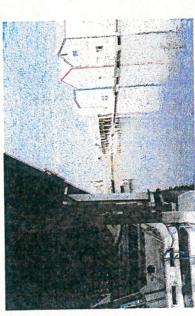


Figure 35. Existing Boathouses and Covered Moorage at the Clover Island Marina



Figure 36. Covered Moorage at the Clover Island Marina

Existing Conditions

The following summarizes the condition assessment of Clover Island Marina (formerly Metz Marina) prepared by Peratrovitch, Nottingham & Drage, Inc., engineers. The purpose of the condition review was to assess current marina conditions and establish a baseline from which future planning can proceed.

The key conclusions of this survey are:

- The entire marina is showing significant signs of wear and age. There are maintenance issues that should be addressed immediately and other issues that can only be addressed by a major replacement project.
- The immediate work is considered to be necessary to keep the marina operating while planning, design, and permitting work is under way for the replacement of the existing structures. This maintenance work includes the repair of broken or loose structural components to stabilize existing structures and address obvious deterioration. It includes:
- Replacing broken, loose, or warped decking.
- Replacing missing bracing, bolt connections, and damaged columns.
- Employing a testing agency to verify proper operation of existing electrical circuit breakers and grounding.
- The long-term issues at the marina include:
- The need to replace all electrical systems to meet current code and marina operating standards.
- The incorporation of a fire suppression system.
- Upgrading gangways and access to meet new ADA requirements.
- Addressing code compliance conditions for meeting snow load requirements, meeting wind load standards, and eliminating conditions that could obstruct walkways or create trip hazards.

facility. The recommendation is to replace all floats and to begin planning, design, The basic finding is that it would not be cost effective to upgrade the existing and permitting work immediately.

Marina Market Analysis

The marina market analysis prepared by BST Associates was completed in May 2003 as part of their Clover Island Highest and Best Use Study.

BST's marina market assessment is based upon a review of current supply and demand and other market factors, economic and real estate conditions, and trends in the region, the City of Kennewick and the Tri-Cities; physical and regulatory settings; and discussions with property owners, stakeholders, and other knowledgeable persons (realtors and developers, among others).

The adjacent tables present a total and net forecast of demand for slips in the Tri-Cities and at Clover Island by the year 2020. The forecast is based on the boating demand forecasts compared with available slips (existing as well as those planned at the Richland Yacht Club, which are assumed to be in place by 2005). As shown, there are no additional slips required under the low forecast scenario, 208 additional slips under the high forecast scenario, and 82 slips under the medium forecast.

It should be noted that this forecast is based on existing rate structures and boating participation rates; it also assumes that moorage will be covered.

Tri Cities Slip Demand Forecast

			l olecast		
Year	Actual	Low	Med.	High	
2002	258				
2005		194	230	279	
2010		213	268	342	
2015		230	304	402	
2020		246	340	466	

Demand for Net Additional Slips on Clover Island

	h		_	4	8	
	High	21	84	144	208	
l Olecast	Med.	(28)	10	46	82	
	Том	(64)	(45)	(28)	(12)	
	Year	2005	2010	2015	2020	

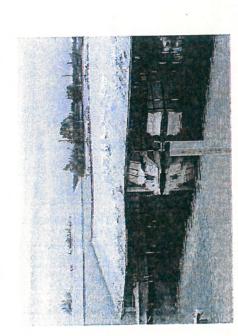


Figure 37. Recent Snow Load Impacts at the Clover Island Marina

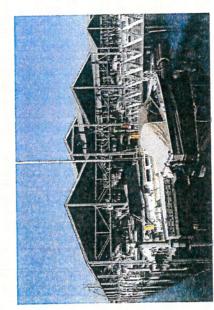


Figure 38. Port of Edmonds Covered Moorage

Marina Reconfiguration

New marina development on Clover Island supports the goals of the Port Commission and the Clover Island CAC by:

- Supporting water-dependent and boating uses on Clover Island, and
- Helping to create a "destination" at Clover Island.

The planning process analyzed several reconstruction alternatives based on the following criteria:

- Ability to meet future customer demand and accommodate existing tenants
- Facility quality and expected life
- Estimated construction cost
 - Estimated net revenue
- Amount of over-water coverage.4

The Port Commission selected the preferred slip mix option illustrated in Figure 39 and listed in the table below based on its flexibility to meet future demand and modest increase in amount of water area covered. After evaluating a number of different construction systems, they also selected a concrete dock/metal roof system similar to that constructed at the Port of Edmonds. This facility will be one of the top quality marinas on the mid-Columbia and should last approximately 40 years.

The proposed marina will be constructed in two phases. The first phase is currently being designed; its layout contains one dock of 30-foot fingers, one dock of 35-foot fingers, and one dock with 40-foot fingers. Four 60-foot slips are included at the end of the dock with the 40-foot fingers. Fairways between the docks are sized at a minimum of 1.5 times the longest slip width. In addition, there is a 488-foot transient dock to be used for temporary boathouse moorage.

⁴ Over-water coverage is a critical project characteristic evaluated by permitting agencies. Projects that decrease or only moderately increase over-water coverage are looked on more favorably than projects that create significant additional shaded area.

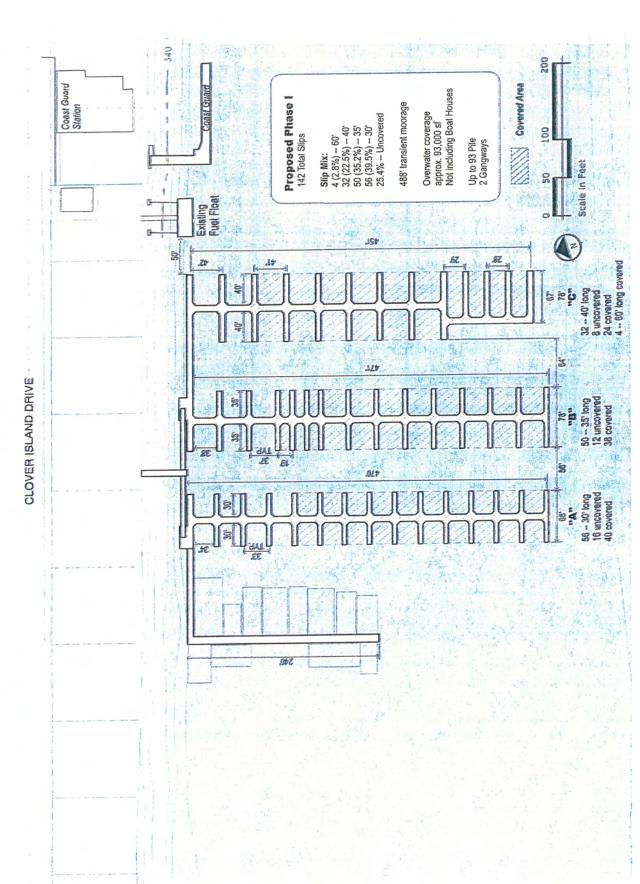


Figure 39. Phase 1 Marina Layout

Slip Length (LF)	Existing Mix	First Phase Marina Reconstruction
23 feet	89	
27 feet	89	
28 feet	4	
30 feet		56
35 feet		20
40 feet		32
60 feet		4
Total	140 slips + 24 boathouses	142 slips
Over-Water Coverage	105,500 square feet	93,000 square feet ⁵

The marina will be constructed to minimize disruption to the Port's existing tenants.

The layout of the second phase of marina construction has not been determined in order to allow for flexibility to re-evaluate the slip mix. In addition, a 200-foot by 14-foot transient moorage float providing 400 feet of side-tie moorage will be constructed with grant funding. This dock is accessible from the public retail plaza, will be open to the public, and can be used for fishing and marina viewing.

⁵ Not including boathouses.

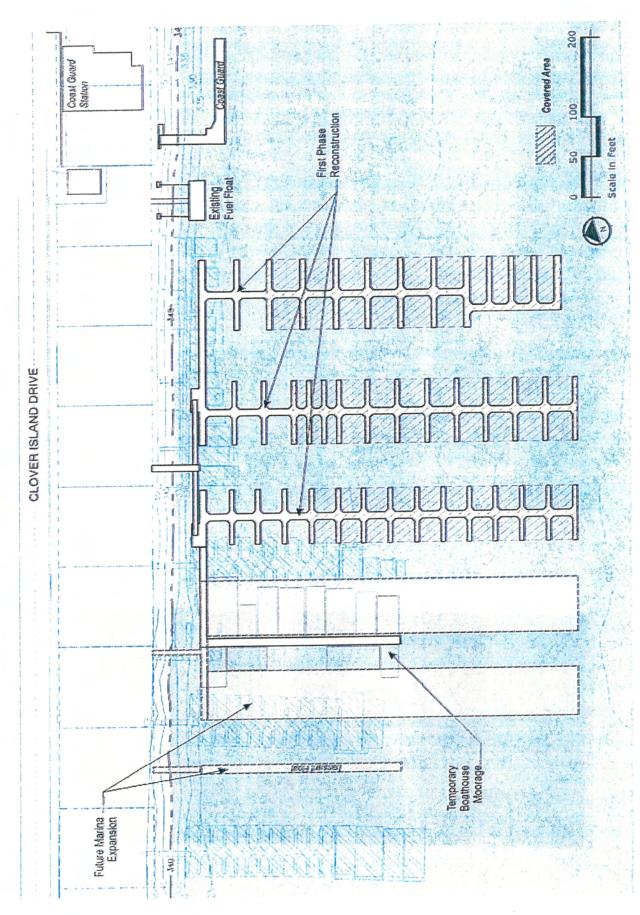


Figure 40. Marina Construction Phasing

Boat Haulout and Staging

areas in the Tri-Cities, the planning team analyzed the pros and cons of providing As there are limited opportunities for boat haulout with adjacent repair staging propelled submersible hydraulic trailers, submersible hydraulic trailer and this service on the island. The team analyzed a variety of travel lifts, selftractors, and leased crane alternatives based on the following criteria:

- Service provided
- Likely island location
- Estimated construction cost
- Estimated operational costs and net revenue

At the conclusion of this analysis the Port selected the 35-ton hydraulic yard trailer/tractor option for further analysis. This option requires either repair or reconstruction of the existing deep-water boat ramp and would locate boat staging at the head of the island just west of the Clover Island Yacht Club.

this analysis was to determine potential methods and costs to upgrade or replace the facility to support a 35-ton hydraulic yard trailer. An informal summary of this on-site inspection of the deep-water ramp in December 2003⁶. The purpose of The planning team's engineers (PND), working with local divers, completed an analysis is included below:

- The deep-water ramp is 20 feet wide and extends approximately 42 feet offshore.
 The in-water portion of the ramp is comprised of four 20-foot by 10-foot concrete panels.
 - One of the concrete panels was cracked all the way through and across the 10foot dimension.
- Significant and substantial voids exist under all offshore panels, with voids becoming more significant farther off shore.
- In the worst places, the voids under the panels extend more than 6 feet back from the edge of the ramp and are up to 15 feet deep.



⁶ The slope and depth of the existing shallow ramp are insufficient for hydraulic trailer use; therefore, this ramp was not inspected.

- Conditions seem to indicate that the voids are being created primarily through sloughing of the bank and the motion of the underwater slope on the east side.
- There are risks associated with continued use of the ramp. The ramp should be closed to the general public, and tenant use should be at their own risk.
- The potential exists to repair the ramp; however, the method and cost to do this repair are undetermined at this time. PND will review and describe potential repair and/or replacement options and the associated order-of-magnitude costs in their report. However, it is likely that any method to repair the ramp will not guarantee a load rating that will weather repeated use and heavy loads over time; i.e., it is possible that at some point in the future heavy load use may damage the repaired ramp. If repairs are undertaken, the engineers will recommend the Port establish a periodic ramp inspection schedule.

As is stated in their letter (Appendix A), the CAC could not reach consensus on whether to provide boat haulout and staging services on Clover Island, on an acceptable location for this facility, or whether it was up to the Port to "work this issue" to a satisfactory conclusion.

Based on the CAC's discussions and planning/engineering analysis, this plan presents the following options for Clover Island boat haulout and staging:

- Do not include an upgraded boat haulout and adjacent repair staging area on the island. This option is based on the likely cost to repair or replace the ramp, the expected net revenue loss from this operation, and concern that a repair facility is not the highest and best use for Clover Island land. This option assumes the existing boat ramp will be repaired for emergency, tenant, and Coast Guard use only, with very limited boat trailer parking available.
- Clover Island Yacht Club or a private sector entity to fund in-water and upland Pursue a permit for and set aside the area adjacent to the existing boat construction and haulout equipment. This is an arrangement currently being ramp for potential future boat haulout and staging; partner with the pursued by the Port of Umatilla and Umatilla Yacht Club. 0

Construct a boat haulout and adjacent repair staging operation as a marine-oriented service on Clover Island available for public use. Any
boat haulout and repair facility constructed on Clover Island should adopt
Best Management Practices for operation and comply with all applicable
stormwater compliance and permit conditions. Likely permitting conditions for
this facility would include constructing a wash pad(s) drainage system
equipped with a valve that can be switched from stormwater to sanitary when
in use. An oil/water separator should be installed to treat wash water prior to
its release to the sanitary system. Perimeter landscaping should be included
to help screen this facility.

Note: The Port Commission has decided to repair the deep-water ramp and construct an adjacent repair staging area just west of the Clover Island Yacht Club. This facility is currently in the design phase.

IN-WATER USES

Tour Boat Dock

There is a potential to provide a tour boat dock supporting tour boats that cruise the Columbia and Snake Rivers. It is unknown at this time if the market for this use is sufficient enough to support this facility, especially considering the recent completion of a similar tour boat facility in Richland. This project has been included in the plan as a potential future phase project.

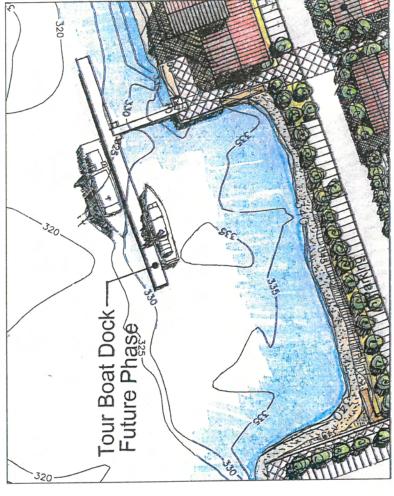


Figure 42. Future Phase Tour Boat Dock

In-Water Uses Recommendations Summary

Boating and marine activities are unique to the island's use and history and are an integral part of its image. In support of water-related activities on Clover Island, the Plan recommends the following in regards to in-water uses on Clover Island.

- mid-Columbia. Advantages of this approach are that it will attract customers, highlight the island's unique character, draw the general public to the island, spur upland development, and require less maintenance. Disadvantages of this approach are the costs associated with constructing a quality facility.
- 2. Begin marina design/permitting as soon as possible. There can be long and unpredictable delays in receiving the permits required for in-water construction; in addition, "fish windows" limit in-water construction activities to approximately three months per year. This plan assumes permits will be submitted in 2004 to allow for the first phase of marina construction by 2006.
- 3. Permit the slip mix with the maximum over water coverage likely to be desired by the Port. Once the permits are obtained, constructing a mix with less over-water coverage would likely be approved with minimal conditions; trying to expand the amount of over-water coverage after work begins could require starting over in the permit approval process.
- 4. Build the marina in phases. Phasing the project will allow for mid-project review of the slip mix and spread the construction costs out over several vears.
- Consider developing a quality standard for the marina and exploring opportunities to partner with the private sector. This sharing of development and operating costs could improve the project's financial performance.

IN-WATER USES

Set a policy regarding boathouses as soon as possible. Accommodating decrease the amount of new covered moorage allowed, or require additional design phase. Providing long-term permanent moorage for boathouses that existing boathouses on the end of the new docks can be incorporated into marina design, but, this should be taken into account early in the project's meet the design standards included in the Master Plan will likely either environmental mitigation. 6.

Consider partnering with the yacht club to expand their moorage east of their boathouses and west of the transient moorage pier. The Port should also work with existing tenants and the CI Yacht Club to explore opportunities for yacht club accommodation of boathouses that meet the plan's quality parameters and appropriate environmental standards.

- 5. Select one of the boat haulout and staging options described on Page 46; considering the potential costs and benefits of providing a boat haulout and staging facility on Clover Island. (The Port Commission has decided to construct a boat haulout and adjacent repair staging area.)
- 8. Consider a tour-boat dock as a potential future phase project.

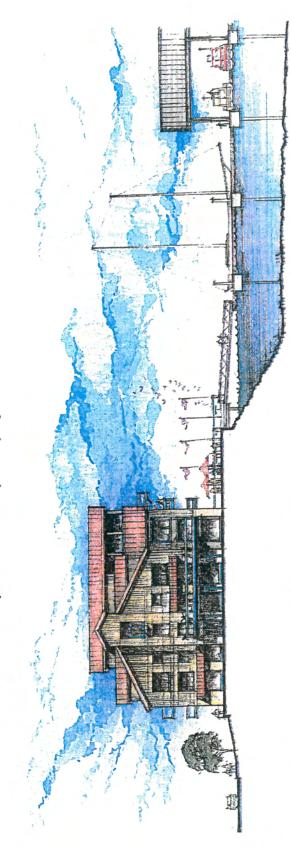


Figure 43. Commercial Plaza and Clover Island Marina Section

PLAN IMPLEMENTATION

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Recommendation: Recommended on Demantices & SEPA states	Planning Commission Briof Pro-submittel Aigs W/ Agencies
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CAC Refressi Formulatio Un	

Submit BLA

Overview

The development projects for Clover Island have been preliminarily scheduled for implementation over the next eight years. This phasing accounts for funding and permitting time tables, and plans construction schedules accordingly. The resulting project phases are as follows:

Permitting and Design (Next Step) Projects	JanJune 2004	July-Dec. 2004
Boat Haulout Analysis Completed		
CAC and Community Meetings		
Marina and Port Office Design Begins		
Master Plan Completed		
Developer RFP		
City Coordination		
City Approves Planned Development		
SEPA and JARPA; Shoreline, Sect 10, 404, 401 Permits Submitted		
Port Management Agreement Submitted		

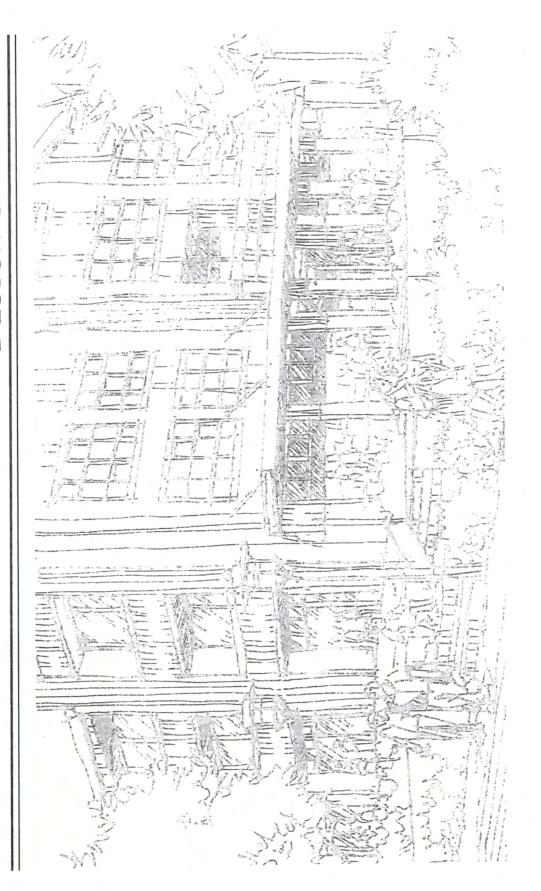
PLAN IMPLEMENTATION

Project Phasing

	Estimated Cost	Phase I (2004-2005)	Phase II (2006-2008)	Phase III (2009+)	Future Phase
Inland Projects					
West public view point/lighthouse	\$416.5K	•			
Pathway along causeway	\$76K				
Environmental enhancement of the shoreline	\$250K				
Landscape screen on causeway	\$23K				
Landscape gateway	\$80K				
Port office/retail building	\$1.4M				
Clover Island Drive improvements	\$247K				
Clover Island Drive utilities upgrades	\$150K				
Pathway along US Coast Guard	\$69K				
Upland support parking lot	\$100K				
East public view point	\$405K				
Pathway from tour boat dock to east viewpoint	\$91K				
Boardwalk by hotel	\$140K				
Retail plaza south	\$174K				
Retail plaza north	\$246K				
Demolish existing Port office	\$30K				
Pathway from west viewpoint to tour boat dock	\$111K				
Fish and wildlife habitat enhancement of the Notch	Grant Funding				
Total Upland Projects	\$4,008,500	1			

PLAN IMPLEMENTATION

In-Water Projects Boat work yard area Hydraulic trailer/truck Truck or loader to pull trailer Ramp repairs	\$75K \$65K \$30K \$50K \$40K \$4.1M			
l trailer	\$75K \$65K \$30K \$50K \$40K \$4.1M			
l trailer	\$65K \$30K \$50K \$40K \$4.1M			
	\$30K \$50K \$40K \$4.1M			
Ramp repairs	\$50K \$40K \$4.1M			
	\$40K \$4.1M			
Demolition of existing buildings (Metz)	\$4.1M	•		
Clover Island Marina (replace existing)		•		
Marina parking lot	\$273K			
Boardwalk by marina	\$592K	•		
Transient moorage dock (Port 25%; balance by grant)	\$125K			
Clover Island Marina expansion	\$1.5M			
Tour boat dock	\$583K			
Total In-Water Projects \$7	\$7,433,000			
All Projects				
Upland Projects	\$4,008,500			
In-Water Projects	7,433,000			
Total Projects \$1	\$11,441,500			



Intent



Figure 44. Positive Attribute: Local Granary Architecture



Figure 45. Positive Attribute: Local Historic Architecture



Figure 46. Positive Attribute: Unique Island Setting

The intent of the following guidelines is to describe a practical/desirable development character for Clover Island and to create an environment that is inspired by local Kennewick and Tri-Cities building traditions, while conveying an appropriate waterfront image.

Design Theme

The Port of Kennewick, Clover Island tenants, and the CAC have expressed a desire to upgrade the character of the island around a theme that is built on and enhanced by the positive attributes of both the island and the larger community. These attributes include:

- A unique island setting on the Columbia River.
- A visual link to historic local architecture, including granaries, mills, and early Kennewick residences.
- The island's close proximity to downtown.
- A mix of water-dependent, water-related, tourism, and business uses.

This theme is primarily an architectural one, modeled after the area's historic waterfront architecture. However, it may be appropriate to incorporate a Sacagawea/Lewis & Clark interpretive element, especially if either interacted with the island. If included, interpretive elements should augment the primary interpretive centers already in or planned for the region.

DESIGN STANDARDS

Design Objectives

Based on these attributes, planning participants developed design objectives to serve as a frame of reference for the Clover Island Master Plan and design standards. Future development on Clover Island should:

- Maintain an island waterfront theme inspired by local historic architecture.
- Provide for a variety of uses or activities that invite visitors to the island.
- Protect water views and access to the water.
- Ensure that access to the island is physically inviting, with a gateway and easy pedestrian access.
- Set a high priority on public access along the shoreline.
- Protect and enhance the shoreline environment.
- Emphasize the island's proximity to downtown Kennewick by encouraging appropriate development on adjacent lands.
- Minimize the impact of parking and service areas on the island's character.
- Encourage high-quality, multi-story buildings that contribute to the architectural character and economic vitality of the island.
- Include appropriate safety measures, such as barriers on island edges and posted life jacket information.

Additionally, all development proposals must conform to the provisions of the City of Kennewick's Municipal Code, including zoning and Shoreline Master Program requirements (detailed in the Regulatory Framework portion of the Introduction).

In addition to meeting the design objectives, future development on Clover Island should endeavor to incorporate the Site Planning, Building Design, Public Spaces and Roadways, and Plaza and Streetscape Design Elements design standards that follow. Specific projects may deviate from the suggested standards if they meet the design objectives and are approved by the Port of Kennewick.



Figure 47. Objective: Provide Inviting Pathways



Figure 48. Objective: Create Vibrant Outdoor Spaces that Invite Visitors



Figure 49. Objective: Encourage High-Quality, Multi-Story Buildings

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Site Planning

The organization and siting of new development in the Clover Island Master Plan is based on the desire to create focal points of activity, a network of pathways, and view corridors that retain the opportunity for water views from Clover Island Drive. Key site planning requirements and guidelines include:

- New buildings shall be sited consistent with the Clover Island Master Plan. This
 will protect future development feasibility and view corridors.
- Surface parking lots associated with new development are prohibited on sites directly adjacent to the planned retail plazas.
- Buildings adjacent to the planned retail plazas must feature pedestrian-oriented
 facades. Such facades shall include transparent window or storefront coverage
 along at least 75 percent of the façade facing the plaza, weather protection at
 least 4 feet in width along at least 75 percent of the façade facing the plaza, and
 at-grade building entrances to each business located adjacent to the retail plaza.
 - Service areas should be located to minimize the visual impacts on the streetscape and pedestrian environment.

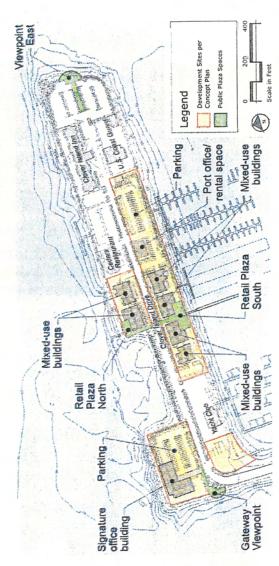


Figure 50. Illustrating Key Site Planning Elements of the Clover Island Plan Concept

DESIGN STANDARDS

Building Design

Character and Form

The desired character of new buildings should draw inspiration from local historic architecture, such as granaries, mills, and early Kennewick residences (see design theme section). These architectural prototypes are notable for their functionally efficient character, their incorporation of unique architectural elements such as steeply pitched gable and dormer roof forms, and their use of traditional construction materials. The guidelines below provide specific recommendations for relation to this architectural form through the use of individual building elements, including roofs, exterior walls, materials, windows, and building color.

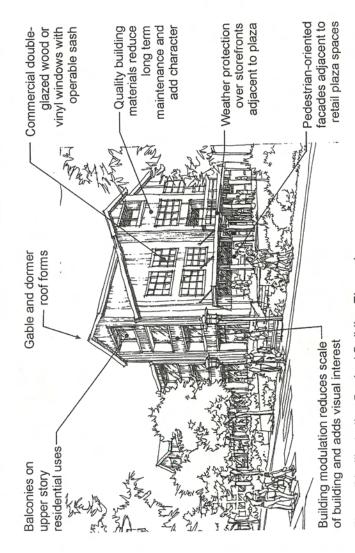


Figure 51. Illustrating Desired Building Elements

Figure 52. Example Roof Form

Roofs

Required roof forms and features include:

- Form: Gabled roof with dormers. The required minimum roof slope is 4:12, although a steeper roof slope is preferred.
- Modulation: Gabled dormers are encouraged to lend variety to the buildings, add
 visual interest, and provide additional usable space in the buildings' attic spaces.
 The maximum width of a roofline without modulation (a gabled dormer, for
 instance) shall be 75 feet for commercial buildings and 50 feet for buildings
 containing residential uses.
- Material: Metal roofs are preferred.
- Color. See Building Color section.
- Overhangs. Significant eave overhangs are recommended for protection from weather elements. The recommended minimum eave overhang is 15 to 18 inches.

Marina roofs should be designed to accommodate easy snow removal.

Exterior Walls Materials and Design

The recommended wall material is wood bevel siding, stucco, or cement board applied per the manufacturer's specifications and in combination with painted wood trim and/or galvanized sheet metal. Concrete unit masonry with a split face or ground face block is acceptable for smaller support buildings, pump stations, public restrooms, etc., with floor areas of less than 500 square feet.

Great care should be given to the first phase of building construction, which will establish a baseline for future architectural and building material character. All following buildings will need to be sympathetic in the use of similar building forms and construction materials.

Windows and Window Openings

Commercial-grade double-glazed wood or vinyl windows with operable sash are recommended. Projected and bay windows are also acceptable options.

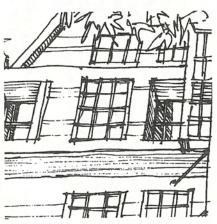


Figure 53. Example Window Form

Building Modulation

Building modulation (using setbacks, box windows, dormers, etc.) is encouraged to reduce the visual scale of new construction and add visual interest to the building. Specifically, the maximum length of a wall without horizontal modulation of at least 3 feet shall be 20 feet.

Avoid Blank Walls

Due to the highly visible character of Clover Island, untreated blank walls (walls without entry way, fenestration or other significant openings) visible from Clover Island Drive, public open spaces, and pathways are prohibited.

Treatment of Service Elements

Service elements, such as dumpsters, loading docks, etc., visible from the street, pathways, public open spaces, and parking lots shall be screened with an enclosure that blends with the architecture of the adjacent building. For example, dumpster enclosures should utilize permanent and durable materials and should include landscaping around the perimeter to soften their appearance as necessary. Care should also be taken in siting dumpsters and enclosures to lessen noise and odor impacts on adjacent structures or residential areas.

Signage

Automobile-oriented signs typically found on commercial strips can be overpowering and obtrusive to the pedestrian environment. Large, freestanding pole signs should be prohibited on Clover Island since they are oriented towards automobiles traveling at high speeds. New signs should be small in scale, oriented to the pedestrian, and integrated with the building design. Signage should contribute positively to the image of Clover Island.

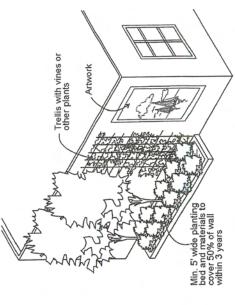


Figure 54. Possible Methods to Treat Blank Walls

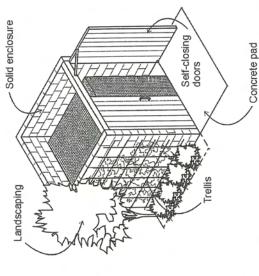


Figure 55. Service Element Enclosure
Example

Building Color

Buildings shall use earth tones for the basic building shell (at least 70 percent of the building shell, excluding the roof). Recommended colors include:

Building Shell/Base Coat

- Trim

Roof color

- Light to medium gray
- Tan
- Ivory
- Ochre
- Light Brown

Building Trim/Windows and Downspouts

- White
- Powder coat gray

Roofs

Figure 56. Areas of Building Color

Basic building shell

- Clay-tile red
- Gray/galvanized
 - Blue (marina)

Site Fixtures

- Galvanized
- Power coat gray
- Powder coat blue/gray

DESIGN STANDARDS

Boathouse Maintenance Guidelines

Based on their over-water coverage, new boat houses will not be allowed in Clover Island Marina. Existing boathouses shall be maintained in good structural and visible condition. Specifically, boathouses shall meet the following standards:

- Boathouse structures must meet local building code requirements.
- Boathouses must meet local electrical code requirements.
- Floatation elements must be encapsulated within the boathouse.
- Damaged, rusty, stained, or moldy siding must be cleaned, repaired, or replaced.
- Roofs must be secured to the walls typical of industry standards.
- Boathouse structures must be secured sufficiently to the dock.

Boathouses may also need to conform to local, state, and federal permitting agency requirements and additional requirements that may be imposed by the Port by resolution in the future.



Figure 57. Boathouses to Be Maintained in Good Structural and Visible Condition.

Public Spaces and Roadways



Figure 58. Pathway Example

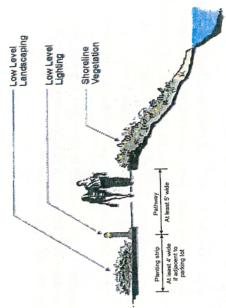


Figure 59. Pathway Section

Island Pathways

A feature of the plan is a system of pathways and boardwalks that provides continuous, attractive waterfront access opportunities throughout the island. The pathway and boardwalk system includes the following components:

Pathways. These are informal, paved walkways constructed above the bank in proximity to the water's edge. Specific guidelines include:

- Minimum width is 5 feet.
- Low-level bollard lighting, no more than 3½ feet in height, should be provided to reduce visual glare and impacts on adjacent uses.
- New shoreline vegetation should be installed on the top part of the bank to act as a buffer and pedestrian barrier between the pathway and the top of the bank.
 Native plant species are preferred.
- Planting strips a minimum of 4 feet in width are required between parking lots and the pathway.
- Where buildings must be sited directly adjacent to the pathway, a specific design plan shall be prepared which provides adequate area for pedestrian circulation. A combination of pathways, boardwalks, or terraced walkways may be used to create pleasant, barrier-free access in these areas.

Boardwalk. Boardwalks are recommended where adjacent development does not allow sufficient space for pathway construction. Specific guidelines include:

- The boardwalk may be constructed as a structure extending over the shoreline bank but not extending over water. The impacts of a pathway or boardwalk can be largely avoided by not projecting the path or boardwalk over the ordinary high water mark. (see regulatory framework)
- Boardwalk design should be kept open and the walkway narrow (approximately five feet wide) to allow light penetration under the walkway. Light penetration under the walkway allows shoreline plantings to be installed under the boardwalk and along the water's edge.
- Low-level lighting, no more than 3½ feet in height and consistent with that installed along pathways, should be used.
- As an alternative, the boardwalk could be terraced, as shown in Figure 61.

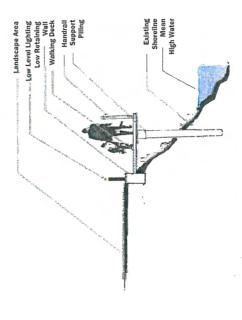


Figure 60. Boardwalk Section

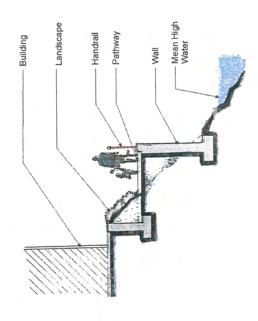


Figure 61. Terraced Boardwalk Section

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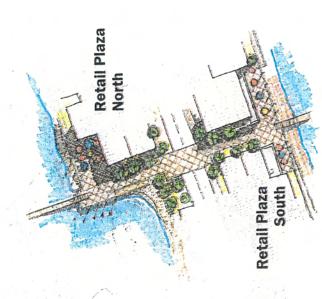


Figure 62. Retail Plazas

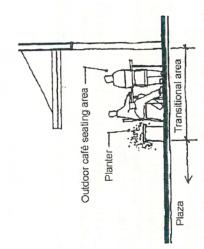


Figure 63. Transition Zone Along Building Edge

Public Plaza Spaces

Key components in the development of the mixed-use building cluster proposed near the center of the island are the two public plaza spaces called Retail Plaza North and Retail Plaza South. The plazas are connected by a paved and landscaped pedestrian corridor, allowing both to work as a combined open space unit. Both plazas shall be designed to work with and support the adjacent buildings and their retail/commercial spaces.

Retail Plaza North shall be oriented to river views and activities on the river and within the adjacent area referred to as the "Notch." The plaza would also be the access point for a potential future cruise boat dock where it would act as a waiting/gathering place for tour patrons.

Retail Plaza South is focused on marina activities and is the connection to a transient moorage pier. This plaza should focus on its marina/boating connection.

Specific standards and guidelines for these plazas include:

- Buildings adjacent to the retail plazas must feature pedestrian-oriented facades. Such facades shall include transparent window or storefront coverage along at least 75 percent of the façade facing the plaza, weather protection at least 4 feet in width along at least 75 percent of the façade facing the plaza, and at-grade building entrances as appropriate to each of the businesses located adjacent to the retail plaza.
- The design of the plaza shall encourage river/marina views.
- A transition zone or buffer along the building edge to provide outdoor seating and/or a planted buffer should be considered. This zone could be marked with a change in paving material or color.

Roadways

Causeway to Clover Island. As currently planned, the access roadway remains in its existing alignment. Proposed roadway improvements include:

- A new gateway landscape feature to be installed at the levee crossing to signify the entry to Clover Island.
- A pedestrian walkway (approximately 5 feet in width) with shoreline plantings (preferably no taller than 24 inches above the walkway surface to maintain views) and low-level thematic lighting (consistent with other pathway lighting) along the west side of the Causeway.
- Landscape plantings on the east side of the Causeway to screen views of the boat staging and ramp area and to direct views west toward the river.

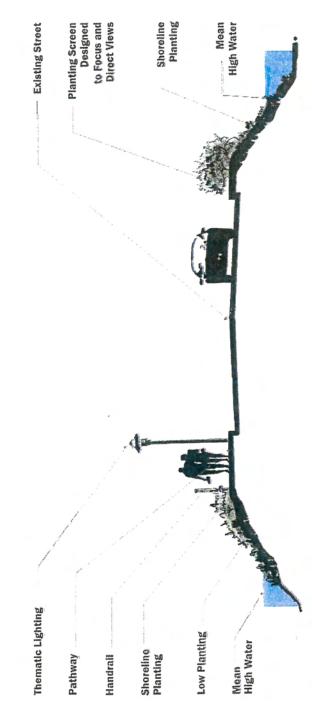


Figure 64. Causeway Section

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Clover Island Drive. Clover Island Drive is envisioned as the island's multipurpose landscaped, lighted center around which all island features are organized. The roadway connects the two key island viewpoint areas with a continuous, walkable boulevard that is an easily recognizable icon visible from the Cable Bridge and other viewpoints. The section drawing below highlights the Drive's key design features.

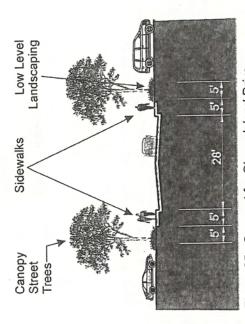


Figure 65. Concept for Clover Island Drive adjacent to Parking Areas

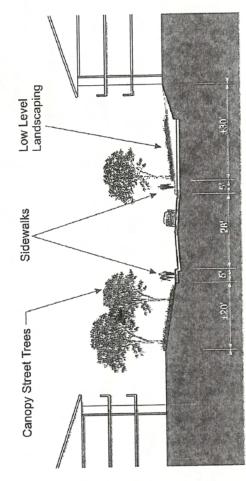


Figure 66. Concept for Clover Island Drive Adjacent to Buildings

Public Viewpoints

The Clover Island plan contains two major public viewing points: Viewpoint East will be a special-event viewpoint, while Viewpoint West will be the gateway viewpoint. Both viewpoints are connected by a landscaped, relighted, and upgraded Clover Island Drive. The three elements will work together as a coordinated multipurpose public feature to which all island buildings, activities, or public uses are connected.

Viewpoint East is proposed as a special-use feature area. It should incorporate:

- A new paved walkway link between the Clover Island Inn and the view point.
- A public gathering area suitable for special outdoor events. This could include a covered shelter or gazebo structure that acts as a focal point and provides weather protection for viewpoint users and special activities.
- Potential access to a restored, enhanced shoreline at the eastern end of the island.
- Connections to the island's pathway and boardwalk system.
- Reconfiguration of the existing vehicular turnaround to improve access and circulation.

Viewpoint West is the island's gateway feature. It should incorporate special lighting and a significant public art feature, and act as the island's introductory forecourt. The viewpoint also provides a visual plaza for the proposed signature office building site located at the eastern end of the island. It is also the termination point for the Causeway and gateway improvements and is an integral component of the island's pathway and boardwalk system.

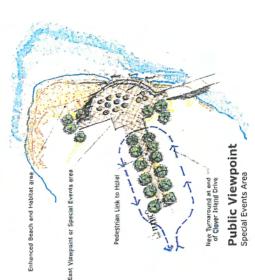
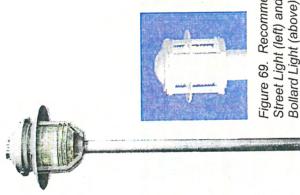


Figure 67. Concept for Viewpoint East



Figure 68. Concept for the Gateway Viewpoint

Plaza and Streetscape Design Elements



Street Light (left) and Pathway Figure 69. Recommended



Figure 70. Special Paving Example

Lighting Recommendations

Street Lights: Extend the new streetlights on the Causeway throughout the island. Lights should be placed to conform with local standards for roadway lighting levels. The recommended color is gray/silver/metallic.

such lights should be reduced to a maximum of 12 feet, or as appropriate to the scale of the plaza or space. The fixtures should be sited to minimize light glare Plaza Lighting: The public open spaces should maintain average surface lighting levels of 2- to 4-foot candles. Utilize the street lights above, as needed for recommended sidewalk lighting levels and viewpoint plazas. The height of and the impacts on views from the plaza spaces and adjacent buildings to the

substituted with approval). Special attention should be given to ensuring vandal resistance in the bollard's design. Integral post-mounted lights are also options Pathway and Boardwalk Lighting. The recommendation is for metal bollard for pier and boardwalk areas. The recommended color is gray/silver/metallic. fixtures with integral lighting (concrete bollards with integral lighting may be

Special Pavement Areas

recommended primary color is grey, to be used in conjunction with patterns of should utilize a coordinated pavement design. Interlocking modular concrete The retail plazas, public viewpoints, and other key pedestrian open spaces pavers are recommended for durability, cost, and visual effect. The concrete bonding and/or colored pavers.

Site Furniture and Fixtures Recommendations

Seating Guidelines: One linear foot of seating (at least 16 inches deep) should be provided for every 50 square feet of public open space, including the retail plazas and public viewpoints. Seating may include movable chairs, benches, low seating walls, steps, or, if properly designed, a planter edge or edge of a fountain.

Benches. Metal benches with powder coating finishes are recommended for character and durability. The recommended color is gray/silver/metallic.

Trash Cans and Support Features. Use metal trash receptacles that complement the benches. The recommended color is gray/silver/metallic.

Clearance Bollards. For clearance bollards and special separation or vehicular delineation bollards, use concrete-filled steel pipe, either embedded in concrete or with a built-down base. The recommended color is solar yellow.

Railings and Handrails. Metal pipe handrails are considered the prototypical railing types for marine and ship-related railings and are recommended here. Metal mesh panel railings are acceptable for boardwalks, walkways, and piers.

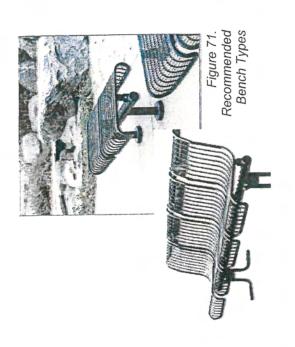




Figure 72. Recommended Trash Receptacles

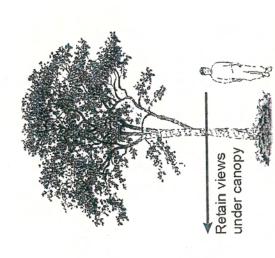


Figure 74. Provide Canopy Trees that Maintain Views Underneath

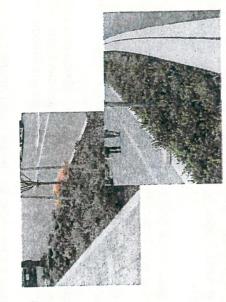


Figure 75. Examples of Attractive Low-Level Plantings

Landscape Plantings

This plan does not contain specific recommendations for landscape materials or plant species types. The plan's major planting concepts include:

Clover Island Drive Street Trees. Deciduous trees with a round, branching pattern are recommended to promote visual impact and provide summer shade, yet allow views under the canopy. Trees with bright fall color are also preferred.

Groundcover Plantings. Use low-maintenance groundcovers and shrubs at street edges and within planting strips adjacent to the sidewalk. Shrubs that reach a mature height of approximately 2 feet are recommended to retain views towards the river from the street and sidewalk. Where appropriate, lawns are recommended.

Parking Areas. Use trees similar to those proposed for Clover Island Drive, which can provide shade, soften the appearance of the parking lot, and allow for views under the canopy towards the water. Trees and groundcover plantings similar to those used for the vehicular streets are recommended.

Pathway Plantings. Plant shrubs and low, leafed plants along pathways. As along sidewalks and in parking lots, limit the height of shrubs to 2 feet to retain views towards the water.

Shoreline Plantings. Utilize native shrubs and grasses to soften the shoreline.



CLOVER ISLAND CITIZENS ADVISORY COMMITTEE

December 31, 2003

Port of Kennewick Commissioners 101 Clover Island Drive Kennewick, WA 99336

RE: Clover Island Master Plan Citizens Advisory Committee Recommendations

Dear Commissioners Hanson, Olson, and Wagner:

The Clover Island Master Plan Citizens Advisory Committee (CAC) convened seven times in 2003 to discuss a variety of issues impacting Clover Island development. This letter summarizes CAC recommendations at this stage in Clover Island master planning. It is our hope that the letter will help the Port of Kennewick realize Clover Island's unique potential as an asset to the Port district and Kennewick, Richland, West Richland and Pasco communities.

The Committee would like to emphasize the following recommendations for Clover Island development:

- Develop Clover Island as a community showcase in the Three Rivers region to support tourism and economic development.
- Include housing as an integral part of a balanced, mixed-use development.
- Pursue private sector partnerships and creative financing to reduce the amount of upfront Port investment and allow the plan to support the Commission's stated goal of generating a self-sustaining project that does not become a drain on the Port's budget or its taxpayers.

These recommendations and others are included in the following pages of this letter, organized around these topics: Public Benefit, Island Image, Water-Related Activities,

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Upland Uses, and Port Investment and Financing. Please consider the CAC's recommendations in formulating the Clover Island Master Plan. Thank you for your consideration.

Sincerely,

Clover Island Master Plan Citizens Advisory Committee*

Donna Noski Ed Frost Ken Silliman Paul LaRiviere Hal Bury Rita Mazur

James Hempstead

Mike Macon Mark Showalter Max Sloan

^{*} These 10 CAC members met on Saturday, December, 13, 2003 to develop these recommendations.

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PUBLIC BENEFIT

The CAC believes Clover Island to be a valued community asset and recommends the Port pursue the following:

- Invest in uses and public amenities that appeal broadly to the community and provide a
 variety of activities oriented toward all ages.
- Allow for a variety of ways for the public to access and enjoy the island, including
 walking, viewing, picnicking, etc. Include amenities such as landscaping, interpretive
 displays, shaded areas, viewpoints and open space.
- Enhance the existing shoreline environment and utilize the "notch" as a special water enjoyment area. Enhance the notch area aesthetically and as shoreline habitat while providing public access to its perimeter.
- Enhance the island's relationship to its surroundings and downtown Kennewick by: 1) coordinating with other planning efforts, 2) working to improve connections and signage, 3) encouraging appropriate development on adjacent lands, and 4) supporting leveelowering.
- Create an asset for tourism and economic development that will complement rivershore enhancement efforts throughout the Three Rivers region.
- Develop a project consistent with the commission's goal of realistic economic funding expectations that:
 - Has self-sustaining improvements that pay for their yearly maintenance and operation or are justified as a public benefit.
 - Maximizes the use of existing funding sources and mechanisms for project implementation.
 - Explores alternative funding sources if required while avoiding additional taxes without voter support.
- Generate excitement around the project by illustrating its amenities so the community understands how the general public will benefit from the Port's investments.
- Inform the public about the plan through a variety of means, including mainstream media vehicles that reach a larger population such as television and radio, brochures, presentations to cultural and civic organizations, and website updates.

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ISLAND IMAGE

The Clover Island Master Plan should be organized around a vision that generates excitement and results in a cohesive image in the community. The CAC recommends the Port include the following strategies in its Master Plan in order to upgrade Clover Island's image and implement this vision:

- Create design standards/guidelines that will guide and ensure future development quality.
- Organize the design standards/guidelines by imparting a coordinated identifiable design character to future development by selecting a specific architectural theme that reflects local character, including the use of native local plants where appropriate.
- Treat Clover Island Drive as a unifying design element by improving its sidewalks and landscaping and lighting. Take special care to install lighting that creates an attractive organizational spine as the island centerpiece.
- · Invest Port dollars in high-quality projects that create an inviting environment.
- Enhance the island's entrance with a more prominent, well-designed entry feature and signage.
- Improve pedestrian access from Columbia Drive.
- · Keep parking from dominating the island.
- Ensure that the island is pedestrian-friendly in look and in actuality.

WATER-RELATED ACTIVITIES

The CAC recognizes boating and marine activities are unique to the island's use and history and are an integral part of its image. In support of water-related activities on Clover Island, we recommend the Port do the following:

- · Recognize water-related uses as a high priority,
- · Provide adequate permanent and transient moorage.
- Constructing new moorage is unlikely to generate a positive return for the Port on its
 investment, although it will generate net annual revenues that cover yearly operating
 and maintenance expenses. The Port should develop a quality standard for the project
 that must be adhered to, and then partner with the private sector to share development
 and operating costs.
- There are limited opportunities for boat launching and adjacent repair staging areas in the Tri-Cities. This use is unlikely to generate a positive return for the Port on its investment and will likely not pay for its operating and maintenance costs.

Public Meeting #3: Public Amenities and Land Use

discussion were a summary of the market analysis prepared by BST Associates and meetings and a Yacht Club briefing held on May 6, 2003. Also incorporated into the with the goal of defining a preferred land use and public amenities direction for the island's redevelopment. The meeting built on the original public meeting's visioning The purpose of Public Meeting #3 was to review concept plans for Clover Island preferences, on input received at CAC meetings #1 and #2, and from tenant the ongoing review of potential environmental issues affecting the project.

Public Amenities Prioritization

in an exercise similar to the preference exercise prepared for the third CAC meeting. The attendees were asked to rank (prioritize) their preferences for public amenities The results of that exercise are tabulated to the right.

Land Use Discussion

A number of Clover Island Yacht Club members, Metz Marina moorage customers, and other local boaters attended this meeting. Discussion involved the following items:

- **Boat Lift and Repair/Staging Area.** Several attendees felt the island, as a boating center, needed to have lift capability for boats up to and over 40 feet, plus area for wash-down and repair staging. Phase III of the Master Plan will review this need and recommend if this use should be on-site or nearby.
- Boat Ramps. Ramp access for island tenants should be retained.
- Marina Expansion. Plan for marina expansion with adequate parking and upland support areas. Also plan to support larger boats when the marina is rebuilt and
- Residential. Some attendees felt residences should be built off-island and more island property retained for boat repair, parking, and marina support.
 - Parking. There was some concern about joint-use parking and its potential effect on security at the Yacht Club.

Public Meeting #4: Draft Master Plan Review

An open house and draft Master Plan presentation was held at the Clover Island Inn on February 2, 2004. The purpose of Public Meeting #4 was to review the draft Master Plan and its primary recommendations.

The draft plan's goals, concept, details, implementation, and design standards were presented. Attendees were encouraged to view the numerous displays and comment either at the meeting or by email. These comments, along with draft plan comments received by the CAC, the Port Commission, and the City of Kennewick Planning Commission, were documented, and the draft Master Plan was updated as described in Appendix C.



Figure 76. Community Members Discussing Issues at Public Meeting #4.

Appendix C: Response to Draft Submittal Comments

Cmt #	Forum	Page	Para./Line	Commenter	Comment	Response	
0 5 0	01/23/04 Commission Meeting (C)	52	4th line from bottom	ć.	Construction of the gateway feature should be sooner than what is shown on the schedule (Phase II) and coordinated if possible with the City's levee improvements.	Landscape gateway project moved to Phase I. [Based on recent discussions with City staff, mare Port realizes the City's levee project will most likely go to bid in late 2004; the Port should attempt to coordinate with the City's project but may not be able to obtain the appropriate permits in time.]	
	U	41 - 42		Commissioner Hanson	He would hate to see the boat slips undersized.	The Port is currently working with boating stakeholders and consultant engineers to finalize their preferred marina slip size, dock configuration, and boathouse phasing plans. This preferred plan will be incorporated into the final Master Plan.	
	ပ	na		Arntzen	Tim provided a letter with recommendations. These have been separated and included as comment #s 4 – 13.	na	THE REAL PROPERTY.
	O	na		Arntzen	Decide whether or not to permit condos	This is a Commission decision; no change was made to the Master Plan.	-
	O	na		Arntzen	Revisit policy regarding lease of land v. sale of land.	Commission decision	
	O	па		Arntzen	Pursue height variance	No change made to report; however, MAKERS will help the Port with its height variance request in the planned development permit application that will be submitted to the City of Kennewick.	
	O	51, 53		Arntzen	Accelerate marina design, permitting and construction	Marina construction project moved to Phase I; no change made to design/permitting as this is recommended as soon as possible (p. 51).	To the same of the same
	Ο.	52 – 53		Amizen	Pursue (subject to available funding) accelerated construction of the: a. Gateway, on a timeline and in a manner consistent with the levee lowering b. West viewpoint with lighthouse viewing structure c. Boardwalk areas adjacent to marina d. Causeway landscaping screening e. Boat repair facility f. Port office/retail building	 a. Project moved to Phase I. b. East and west viewpoints projects will be split into two; west will remain in Phase I. A budget for a lighthouse viewing structure has been provided by the Port of Kennewick and included in this project's cost estimate. c. Boardwalk moved to Phase I. d. Landscape screening moved to Phase I. e. Boat haulout facility moved to Phase I. f. No change to the port office building (already in Phase I) 	
	O	23		Arntzen	Use the notch area for mitigation	Text added to page 23 (paragraph 3) noting this potential	and property of

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Response	Boathouse relocation/purchasing polices are a Commission decision; however, the report recommends the Commission set a boathouse policy as soon as possible on p. 50 and includes boathouse maintenance design standards on p. 62.	Commission decision	Text added to this effect on p. 38 (number 9)	Commission decision	See response to comment #2.	Edit incorporated.	Edit incorporated	Edit incorporated	Edit incorporated	Edits incorporated (also see response to comment #8)	Great!
Comment	Formulate boathouse design standards and relocation policy (including purchases on willing seller basis)	Do not sell the marina (it will generate cash flow)	Be discriminating in Port office/retail building design (it will establish the island theme and building standard)	Establish a funding policy (cash versus debt)	Add a boathouse dock next to the Clover Island Yacht Club lease site.	Implementing the Master Plan will benefit the City of Kennewick, and the Port of Kennewick; district and surrounding region.	Reconnects Kennewiek's the port district's and region's citizens with the river by providing opportunities to stroll, fish, and enjoy its river views	Confederated Tribes of the Umatilla Indian Reservation (invited)	Metz-Marina, which the port will obtain Clover Island Marina, which the Port took over in January 2004. Plans to develop this property are included in this plan.	Add the following projects to Phase I: a. Demolition of existing buildings/Metz site and Port office (add costs for these items) b. Separate out east and west viewpoints. West viewpoint should be done early; east one later c. Landscape screen on causeway & gateway project should move to Phase I d. The "boardwalk by marina" upland project (page 52) should be listed next to the Clover Island Marina docks A-E and marina parking lot in-water projects (page 53)	The hotel owners are willing to make cosmetic changes to the building façade to match the island theme. They are also evaluating from an engineering design standpoint the viability of a balcony and first floor bar at the east end that would provide views.
Commenter	Arntzen	Arntzen	Arntzen	Arntzen	Commissioner Wagner	Commissioner Olson	Commissioner Olson	Commissioner Olson	Commissioner Olson	Commissioner Olson	Rettig
Para./Line						Last	4th bullet	Add a bullet	Last bullet		
Page	62	na	38	па	41 – 44	3	4	7	27	51 – 52	Па
Forum	O	O	O	O	O	υ	U	U	O	U	02/2/04 CAC Meeting (CAC)
Cmt #	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.

Cmt #	Forum	Page	Para./Line	Commenter	Comment	Response
21.	CAC	21 – 22		general discussion	It was suggested that the west viewpoint be extended to the northwest corner of the island.	The west viewpoint actually already connects / extends to this corner via the perimeter pathway; the graphic on p. 21 was updated to identify this. Some additional area for seating/viewing at the northwest corner was also incorporated.
22.	CAC	na		Rettig	MAKERS has done an excellent job and reflected the concerns of the CAC in the master plan. They have answered all of his concerns and included some of the important things—lighting, cleaning up the shoreline, and establishing a theme. He thinks the plan's a winner.	Great! Thank you.
23.	CAC	38		Frost	The CAC recommendation of not having the Port office on Clover Island <u>long-term</u> is not included in the Upland Uses section.	CAC recommendation has been added to the Port Office discussion on p. 38.
24.	CAC	na		Frost	He appreciated the attitude of the consultants who were able to take and give information and advice to people who didn't know much about the island as it can be hard to educate people about what goes into a plan of this type.	Thank you.
25.	CAC	na		Showalter	Are boathouses going to be addressed in the permitting phase?	The Port's plans for boathouses will be addressed in permitting (the master plan will summarize the Port's plans for boathouse phasing – please see response to comment #2)
26.	CAC	47		2	Clarify that the boatyard will be available for public use.	Clarified (p. 47)
27.	02/02/04 City of Kennewick Planning Commission Meeting (CoK)	67	Figures 64 and/or 65	Commissioner Rasp	Separating the street from buildings and parking areas with landscaping and sidewalks is in conflict with City design standards just adopted.	This is correct; however, those standards relate to single-family residential areas — Clover Island development will be of a significantly different character. [During discussion, other City Commissioners seemed to agree the residential standards should not apply.]
28.	CoK	29	Figures 64 and/or 65	Spaulding	He is concerned about isolating people from the buildings with the wide landscape strip.	This is a good point, however, the distance from the buildings and the sidewalk was programmed to provide handicapped access to the buildings first floors which are estimated to begin about 5 feet above street level. One benefit of this distance is that it provides separation/privacy for first floor units if these buildings are developed with residential uses.
59.	COK	<u>B</u>		Spaulding	Can the partially underground parking level go 1-2 feet farther down to create a more gradual slope from the sidewalk to the building?	It is difficult to predict how far down it will be possible to build underground without a survey and geotechnical investigation. For planning purposes, 5' was assumed based on anecdotal evidence obtained during various island projects. This will be refined when a site survey and geotechnical work are complete – programmed for 2004. Borings and test pits dug early in 2004 found water at depths ranging from 12 feet to 14.5 feet.
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Response	Overall shoreline environmental enhancement moved to Phase I of the project; environmental enhancement of the notch is pending grant funding and included as a future phase.	Added a recommendation for the Port to considering constructing a bridge across the notch (or a portion of the notch) on p. 24.	Added a recommendation to incorporate shaded-resting areas where appropriate into the retail plazas and viewpoints on p. 21 – 22.	Yes, near the notch area. This potential has been noted on the graphic on p. 24.	The Port of Kennewick has designated the public viewpoints and notch to public access as described in the master plan. Using these areas to support other functions would require amending the plan and involve a public process; this flexibility is believed important as public and Port priorities may change.	Yes there are; these have now been identified on the site plan (fig 8, backside of p. 10). The Port is also considering including public restrooms in the new Port Office/retail building.	Yes, the Port believes there is adequate water and sewer service to support the improvements as envisioned by the Master Plan.	Thank you.	Exceeding the height limitation of 35' will be required for some of the proposed buildings. This request will be handled through the City's planned development permit process. Rick White responded that Clover Island is designated differently than Columbia Park [Columbia Park is zoned Public Reserve—Clover Island is Commercial Marina; Columbia Park's shoreline designation is Conservancy—Clover Island is Urban.]
Comment	She liked the plan's public access (UDAT process highlighted its importance). She also encouraged the Port to do habitat improvement early in the process as citizens would likely support it.	Would like to see a walkway put over the notch (bridge)	Suggested including more shaded-resting areas on the island.	Is there a place for a small bus to park?	Will the Port retain ownership of the public improvements like the west and east end viewpoints and notch improvements in perpetuity?	Are there / where are the public restrooms?	Is there adequate water and sewer service to the island?	The Commissioners' goals statement is good; these should be important guiding principles for future development requests for proposals.	Will the height of the proposed buildings require a zoning change? Will the Port face similar problems as the City had with the Veterans Memorial in Columbia Park because of height restrictions on the shoreline?
Commenter	Commissioner	Commissioner Neuenschwander	Commissioner Neuenschwander	Commissioner Neuenschwander	Commissioner Neuenschwander	Commissioner Neuenschwander	Commissioner Spaulding	Commissioner Spaulding	Commissioner
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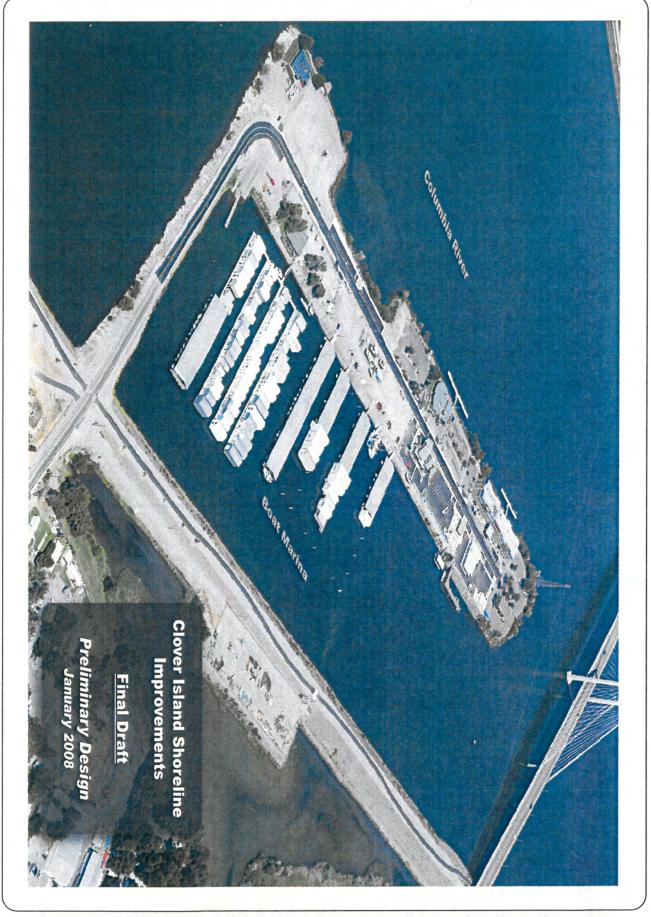
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Response	Corrected.	Probably not on both counts. Modifying the roof line would not likely be cost effective.	Good point; boater-oriented services on Clover Island should encourage more boaters to stop there, both during and outside the primary boating season. The plan provides over 21,000 square feet of first floor retail space in the mixed-use buildings appropriate for this use.	A signage section has been added to the Design Guidelines chapter (p. 60).	Added text to this effect on p. 55. The theme selected for development on Clover Island is primarily an architectural one and felt to be more appropriately modeled after the area's historic waterfront architecture rather than Lewis & Clark/Sacagawea. However, it may be appropriate to incorporate a Sacagawea/Lewis & Clark interpretive element, especially if either interacted with the island. Interpretive elements on the island should augment the primary interpretive centers already in or planned for the region.	A casual restaurant would be a great addition to Clover Island; the plan provides over 21,000 square feet of first floor retail space in the mixed-use buildings appropriate for this use.	Please see response to comment #47.	The plan contains over 400 lineal feet of transient moorage, believed to be more than adequate to accommodate the transient demand.
Comment	that supports a signature office building located at the west end of the island.	Will the hotel be changing its roof line to be consistent with the roof line specified for future buildings? Will the hotel have the opportunity to expand upward?	The plan says the boating season is from May through October; she believes this would be longer if people had a place they can pull into and have a cup of coffee.	Concerned about the look of signage in the development.	Suggested a historic theme drawing on Sacagawea Trail and/or Lewis & Clark.	Include a casual restaurant that caters to boaters and kids near the new marina	Would like the Clover Island boat launch to remain open to the public because of its protected and central location. The east Columbia Park launch is often crowded with jet skiers.	Would also like to see more transient slips to bring additional traffic to the island and more people to fish.
Commenter	Commissioner Rasp	ċ	Commissioner Neuenschwander	Rick White	Wayne Daily – property owner	Michaud – Yacht Club member; prior owner of the Wheelhouse Restaurant, Pasco	Nisbett & Ticknor – boat launch users	Nisbett & Ticknor
Para./Line	Last prgrph							
Page	20	na	30	na	55	Па	45 – 47	43
Forum	CoK	CoK	CoK	CoK	02/03/04 Community Meeting (CM)	CM	CM	CM
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Response	Unfortunately, continuing to provide the trailer parking on the island required by a public boat launch would preclude most of the master plan's recommendations. In anticipation of needing to close the Clover Island public boat launch, the Port of Kennewick contributed significantly to the City of Kennewick's public launch at the east end of Kennewick's public launch at the east end of Columbia Park and to the City of Richland's public launch at the west end of the park. The plan does include revamping the existing ramp to provide boat haulout and adjacent repair staging. This service will be fee-based and could be privately- or publicly- managed; its operational concept has not yet been worked out by Port Operations. This service will be open to paying customers (not for exclusive island-tenant use). The ramp will also be available for island-tenant / U.S. Coast Guard emergency use.	CAC and community members involved in the planning process prioritized "joint-use" parking and wished to avoid large empty lots, or "seas of parking. The plan tries to balance parking and development on the island"s limited area; it incorporates parking to meet City requirements at a level consistent with that provided at other marinas. Adequate boater loading / offloading areas are also included near the dock access ramps.	Please see response to comment #2.	Corrected.	Please see response to comment #48.	Please see response to comment #44.
Comment	Sir/Madam, I had the pleasure of attending the Clover Island Development meeting last night at the Clover Island Inn. While I am very impressed with the plan as a whole, a vast improvement over the future of the boat launch facilities on the island. It was made apparent that the Port plans to ban use of the ramp by the apparent but a half million dollars to be spent on improving it, my question would have to be "improving it for whom"? If the answer is the Clover Island Yacht Club then I have a serious issue with Port (ie. taxpayer) money going to provide exclusive facilities for a private club. If the club wants it's own launch ramp, then they can pay for the improvements and also pay the Port for leasing the ramp. In addition, this boat ramp is one of very few in the Tri-Cities that offers (virtually) Jet Ski free launching facilities, if any of you have tried to use any other ramp around here during the summer you will know what I am referring too. Please consider my points as you make final decisions reagrading the future of Clover Island. Sincerely, Gareth Nisbett Kennewick resident 17 years / Boat owner 25 years Owner Northwest Fiberglass (boat repair) 12 years	Concerned about the amount of parking provided for boaters in particular. Marina parking should be nearby and convenient for loading and unloading boats.	Concerned about boathouse timeline.	The gas dock is not property drawn on the plan.	Concerned about the amount of parking, which ultimately will affect the desirability of the marina.	Would like casual dining to be available.
ine Commenter	Nisbett	Martin, Lauman, Peterson	Martin - boathouse owner	Lauman	Lauman	Lauman
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Page	45 – 47	о	44	Figures 9 - 18	6	na
Forum	Via e-mail	CM	CM	CM	CM	CM
Cmt #	47.	48.	49.	50.	51.	52.

Response	Good suggestion; considerations such as these should be included as the recommended projects are designed; text added to this affect on p. 56.	Included text to this affect on p. 25.	There is an "enhanced beach and habitat area" included on the east end of the island (p. 21). (Creating a beach area in The Notch was also considered; but, stakeholders felt this would be a potential policing, maintenance, and safety problem.)	Good suggestion; considerations such as these should be included as the recommended projects are designed; text added to this affect on p. 59.	Per Port Commission instructions, the planning team did not explore options to increase the size of the island, except within "the notch" area. Filling the notch was not selected because of limited CAC and community member support and because a Corps of Engineers representative indicated any fill would need to support a water-dependent use that could not be accommodated elsewhere on the island. In general, creating new land was also considered too expensive for the potential benefit it would provide.	Several options to improve Duffy's Pond were considered during the early planning phases including improving its river-flow and habitat function. However, as this area is not owned by the Port, the Commission chose to focus planning resources within its property boundaries. The Port hopes to coordinate with the City, Corps of Engineers, and other property owners to improve this area in the future — check out the recently published Bridge to Bridge River to Railroad Plan for some good Duffy's Pond improvement ideas.	Please see response to comment #43.
. Comment	Include safety measures in the plan; for example, barriers keeping people from driving off the island and posted lifejacket information.	Analyze and select shoreline treatments that minimize erosion.	Likes the idea of a beach.	Design marina roofs to accommodate easy snow removal.	The size of the project should be increased. Ideas for adding to the size of the island include: a) adding a vertical seawall at or above the water line on the island's river side and filling in the area to create an additional 20' of property. This new area could be used for parking and the walkway could be shifted to be over water. This also gets rid of the weed problem; b) adding a couple feet to the island's south side; c) extending the boat ramp toward the dike and gaining more landside for other uses; d) including "floating shops" along the dike. Environmental rules for over water coverage in this area should consider that it has been flooded by the dam.	Restore the aquatic environment to Duffy's Pond by engineering a solution to improve depth and flow. Consider adding a fountain.	This area is the historic center of Northwest tribes' southern winter range. Reference or acknowledge tribal and Lewis & Clark history on the island.
Commenter	Allen (Columbia Basin Dive Rescue)	Allen	Allen	Allen	Jesernig – adjacent property owner	Holder – Pasco	Holder
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Page	па	25	51	па	па	Па	na
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Response	Inclusion of housing was a hotty debated topic during the planning process; please see the discussion on p. 32 – p. 33 for a summary of this issue.	Please see response to comment #29.	Please see response to comment #58.	Please see response to comment #57.	Please see response to comment #2.	Please see response to comment #29.	Thanks. Including perimeter landscaping around this facility has been added to the text on p. 47.	Please see response to comment #58.	Constructing a boat repair/haulout facility on Clover Island has been included as a phase 1 project in the master plan (see response to comment #8). As currently envisioned, this will include a wash pad(s) facility.	Please see response to comment #2.	Incorporated	Incorporated
Comment	There should not be any housing on the island because it is too small. These residents will soon "own" the island and limit his ability to come "get a beer".	Parking under the buildings will most likely not work.	The Port should own the Corps laydown yard and Duffy's Pond area.	The Port should fill in the notch to provide parking.	The new marina should include more slips in the 35' and 40' range.	Concerned about the feasibility of basement parking.	The boat maintenance/haulout area is a good feature and can be hidden with trees.	Would like to see Duffy's Pond improved.	I'm very excited to see the improvements, but as a boat owner with a slip it would be nice to have a lift available for boats to pulled in and washed like car wash facilities available! Maybe in the future and good luck & best wishes.	Hi Linda, Having looked over the plans, I wanted to share a thought with you on the marina layout. In Portland at Columbia Crossings, they have options for moorage. Double slips the most inexpensive, and single the most expensive. Add to that the length of the boat and the boater can make the choice if they wish to pay the price for the single slip. Anyway, on the coast they are putting in nothing but double slips. I just don't know if this area is ready for the abruptness of sharing a slip, but enter the money difference and the adaptability will come quicker or the additional money layout. Anyway, just a thought, as I saw your confact on the bottom of the flyer for tonight's meeting. As a boater, we appreciate all the port is	Various edits including updating Clover Island Marina's layout, removing Metz Marina references and clarifying naming for boat haulout area	Remove all references to underground or partially depressed parking
Commenter	Youngs	Youngs	Youngs	Youngs	Coie – (Yacht Club member)	Coie	Coie	Esters & Johnson	Kenfield	Norman – (Yacht Club member)	Port of Kennewick	Port of Kennewick
Para./Line											<u></u>	Ė
Page	32 – 33	6	na	23 – 24	41 – 42	6	45 – 47	па	45 – 47	41 – 42	e Through out	e Through out
Forum	CM	CM	CM	CM	CM	CM	CM	CM	Via Letter	Via E-mail	Via Telephone Through- – Oct 2004 out	Via Telephone Through- December out 2004
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ennewick Clover Island Shoreline Improvements





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Goal and objectives

Partner with private and public interests in fostering development of tourism and public recreational facilities along the shoreline of Clover Island.

- Provide a strong 'sense of place' for Clover Island and the shoreline amenities it will provide
- Enhance the shoreline experience for boats, cars and pedestrians
- Encourage public opportunities for gathering and staging
- Create special opportunities for viewing the existing surrounding environment
- Celebrate the Columbia River's and Clover Island's special character
- Provide opportunities for seasonal festivities (lighting, banners, signage, etc).
- Provide pedestrian linkages
- Encourage fishing and other recreational opportunities in designated areas
- Promote ADA accessibility along all proposed pedestrian routes
- Develop an environmental friendly and sustainable shoreline that is supportive to local flora and
- Protect and enhance the structural integrity of the embankment and shoreline

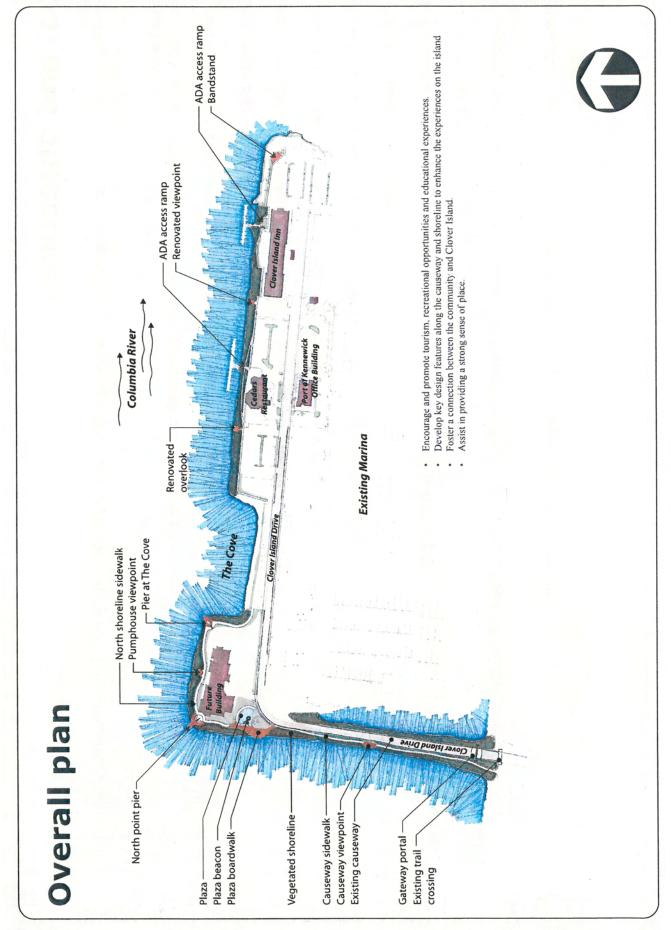




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Walkway layout

Columbia River



Columbia River



- Widths of walkway vary between 5' and 10' Sidewalk widths vary depending upon the anticipated use
- Concrete surfacing for ease of maintenance
- Cross slope at 2% toward the water.
- All ADA accessible.

 Gradient along main pathway is less than 5%.
- In areas with adjacent steep slopes exist (2:1 or greater), railing is provided for safety







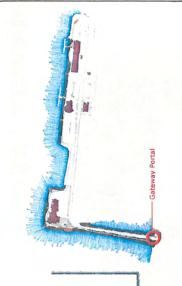
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Gateway portal



Round tube steel construction. Support columns are 24" in diameter.

Translucent structure

Dimensions: height clearance 22' at mid point to allow for boat passage Color: cobalt blue

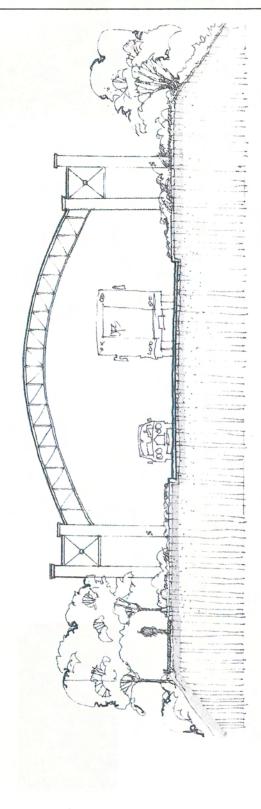
Structure is placed on the north side of the existing trail dike. Entry monument signage near the base of arch.

Capability to light up during seasonal times of the year.

Decorative hardscape beneath the entry arch.

Lawn and groundcover in the foreground of the arch with gentle berms on each side. Tree grove planting along the flanks of the entry.

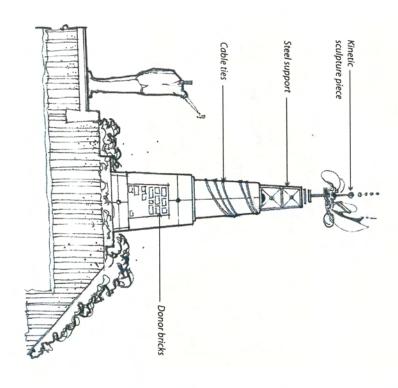






Enlarged plan

Causeway culture









- Sculptural monuments reflect the culture of island in history, recreation and tourism opportunities
- Potential donor bricks or panels near the base of the sculpture columns
- Possible anodized aluminum pictorials of the original island in lieu of donor bricks.



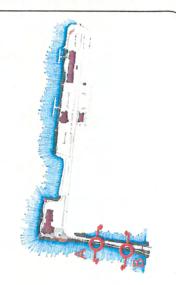




















Causeway access



Use larger shade trees along walkway and columnar smaller trees near the plaza Frame key views of the river.

Retain open view of the river.

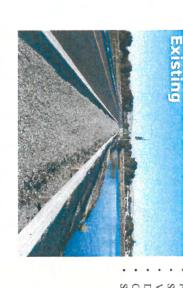
- Create shade areas along the walkway in key areas.

 Native species near the water's edge and embankment

 A mix of ornamental plants near the side of the road and adjacent to walkway area.

 Blend WSDOT tension cable guardrails into the roadside shrubbery.

Causeway viewpoint



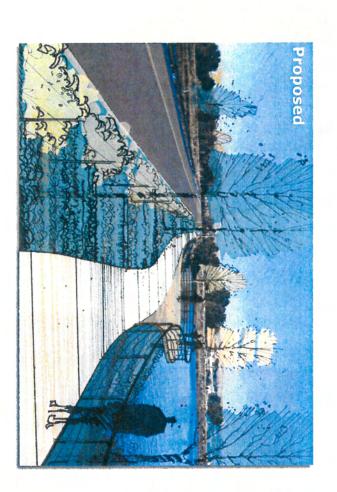
- First rest stop along the causeway. Simple bulb out form in plan view.

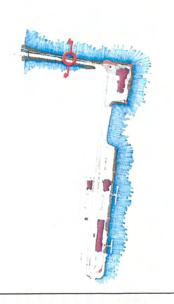
- Viewing point of the 'blue bridge'.

 Decking is 'trex' material. Environmentally more friendly and durable.

 Cantilever structure.











Enlarged plan

Viewpoint with 'Trex' decking



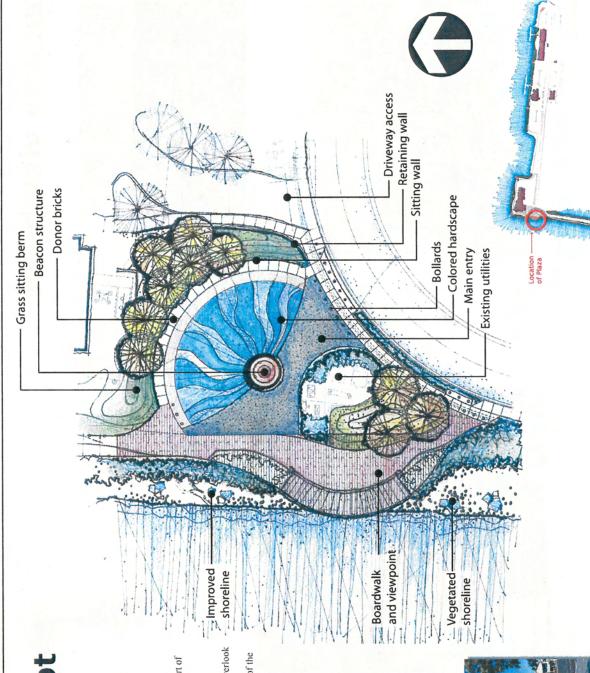








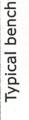




Plaza concept

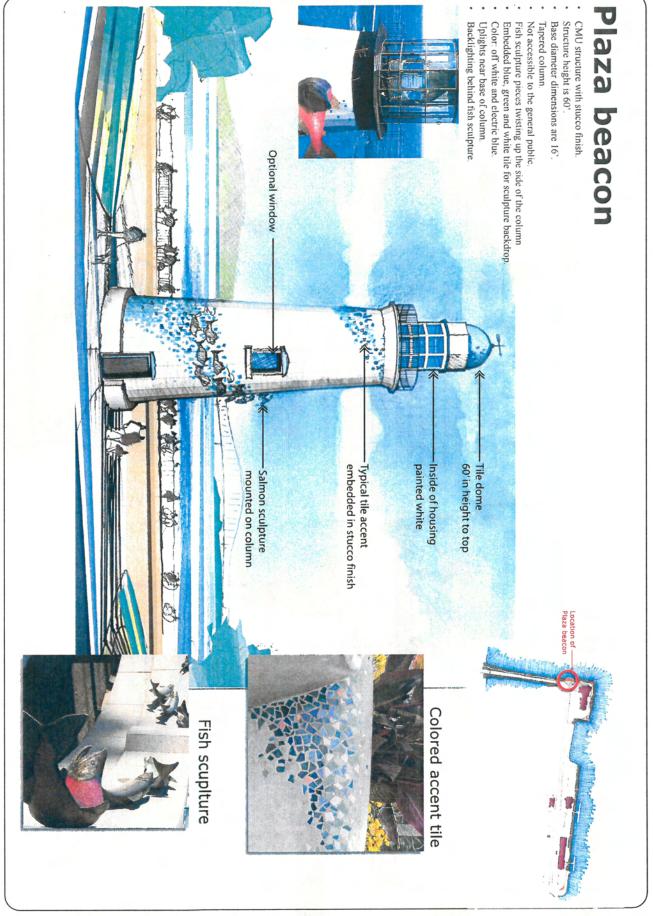
- Includes artwork and sculpture within space Main public space along the shoreline.
 - - Main viewpoint.
- Columnar tree groves provide shade areas
- Beacon structure is centrally located. Buffer existing utilities with plant materials.
- hardscape near the Port of Kennewick building. Colored concrete patterns matching existing
- Decorative railing similair to railing near the Port of
 - Kennewick building.
- Environmentally friendly 'Trex' surfacing on overlook Small amphitheater place for groups. Sitting walls and grass berm
 - Donor brick walk areas surround the periphery of the structure and boardwalk











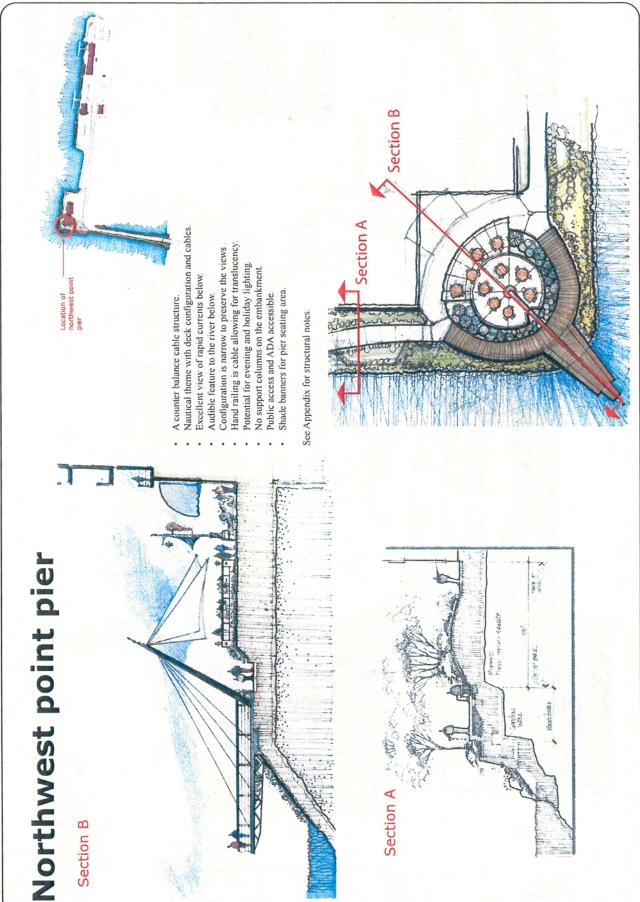


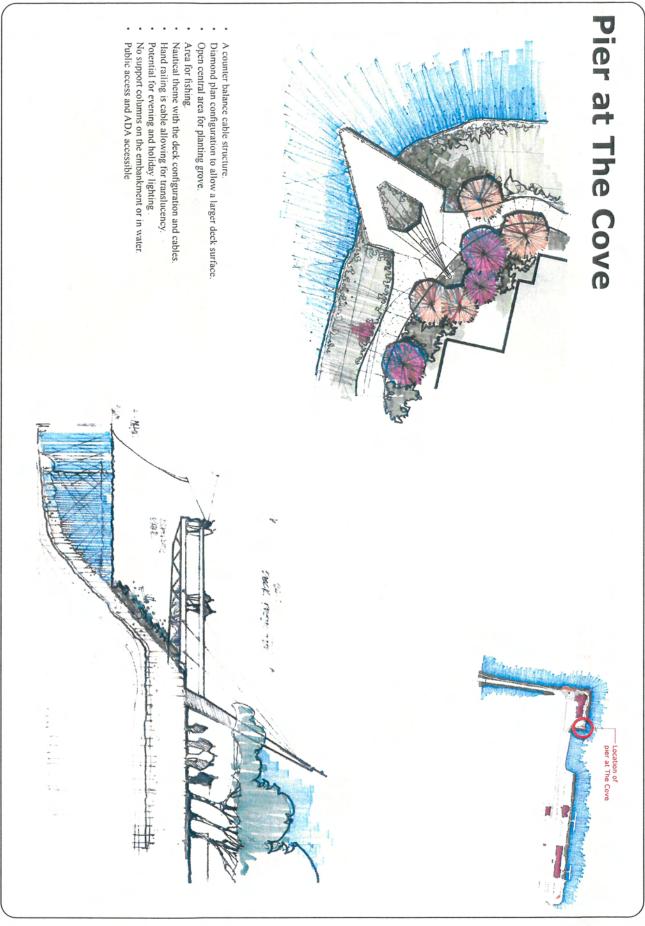


Clover Island Shoreline Improvements









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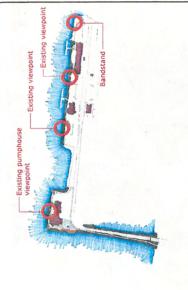




Existing viewpoints improvements

+1

EXISTING SLAB



Existing viewpoints

- Opportunity to view water and banks from three different vantage points.
 - Retain existing concrete decks.
 - Rest areas along the pathway.
- Viewpointss are at top of embankment and provide easy access. Proposed new cable railing for consistency. Proposed plant buffering near the existing concrete foundation.
- Stronger physical connection to the proposed walkway with transition.

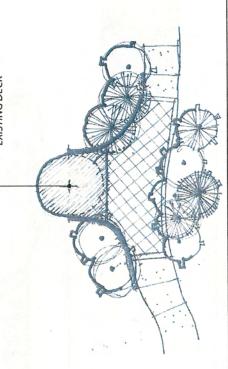
Bandstand

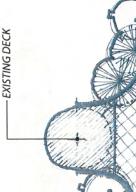
- "Trex" deck system on far east end of the island. Approximate size is $20^{\circ} \times 40^{\circ}$.

- NEW GARDEN RETAINING WALL

- Excellent backdrop view with 'cable bridge'
- Located just off the parking lot near the top of the embankment. Incorporated deck into the existing trees.





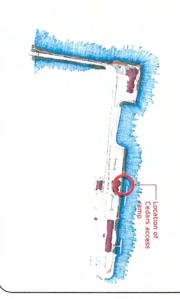


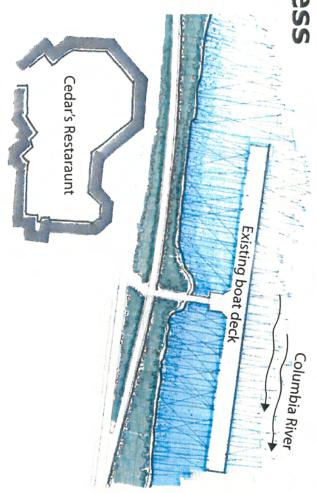
Cedar's Restaurant access



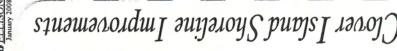
- Provisions for ADA accessibility sidewalks down to the existing boat dock ramp. Required retaining wall structures in conjunction with ADA sidewalks. Hand railing along the ADA walkway.
- Utilize existing steps with new handrails





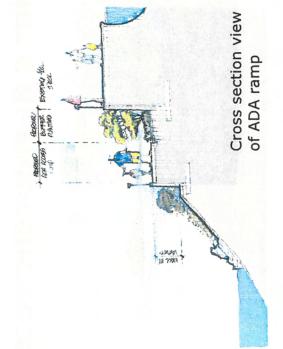






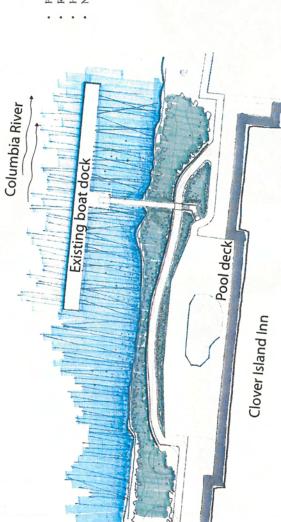


Clover Island Inn access

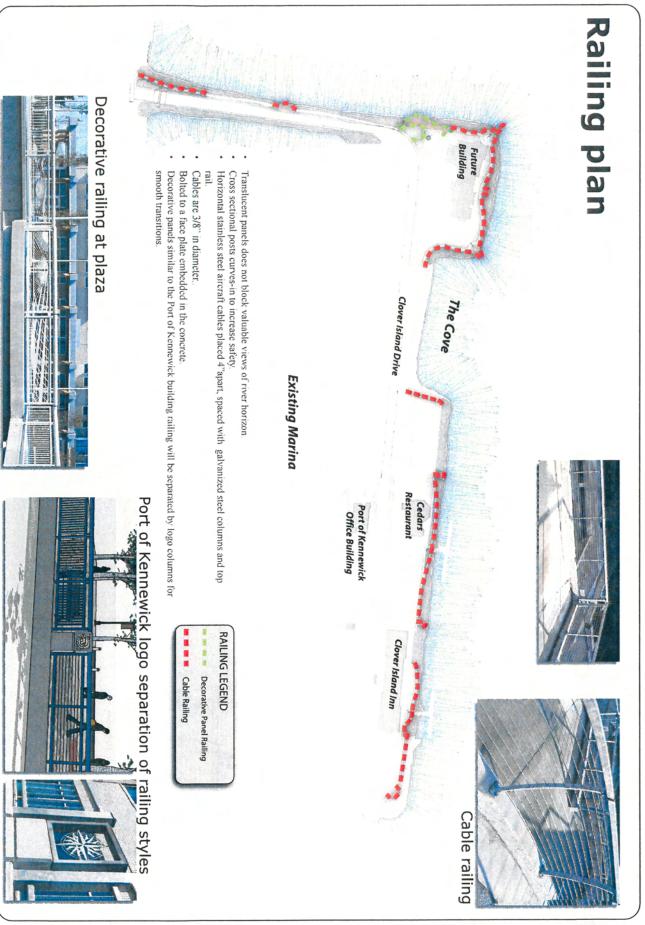




New reconfigured stair case access.







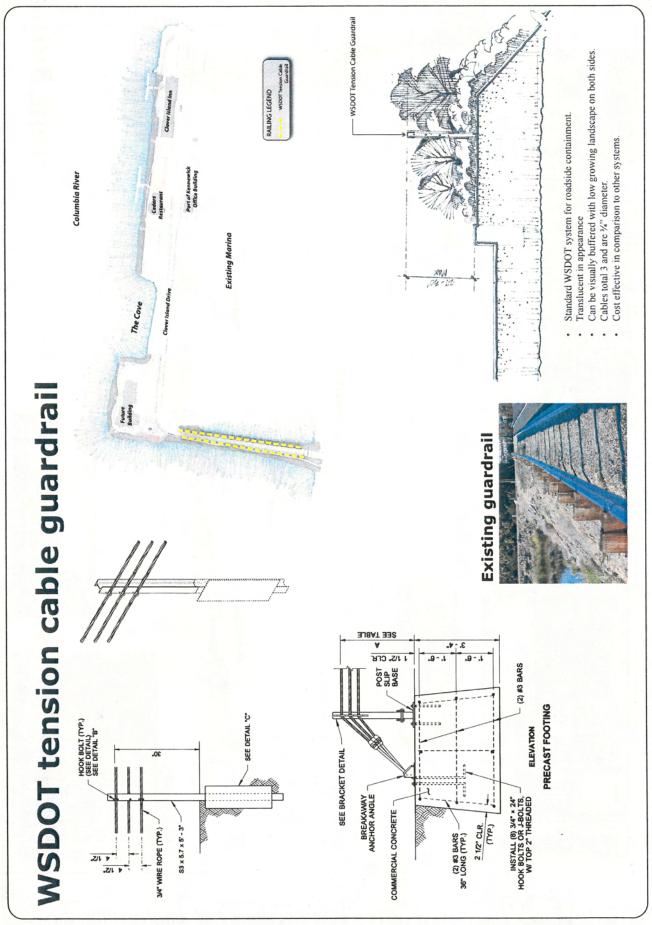


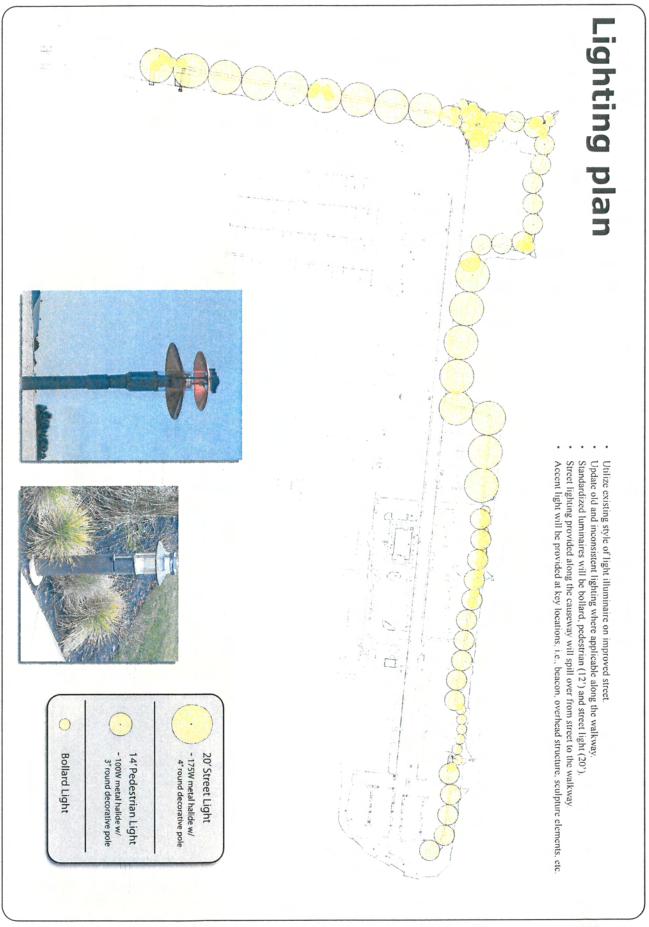


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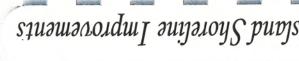


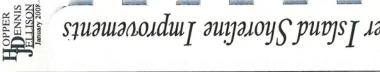




StanmovorqmI saidstond Inprovements









Bio-engineering solutions

Container plants -

willows, groundcovers Self rooting plants:

sedges, rushes Water plants:

OHW - elev 340

Placement of two different types of graduated topsoil depending on the proximity to the ordinary high water line.

Pyramat fabric, secured

Two types of reinforcement fabric to stabilize the two soil profiles

Placement of snags and larger boulders in key locations for habitat.

Placement of native plantings near the waters edge and below high water line.

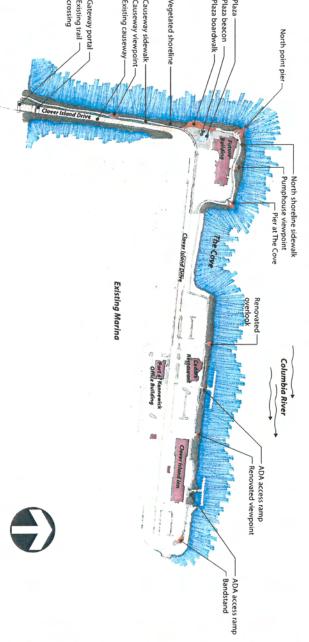
Placement of a select list of ornamental plantings above the high water line. Provisions for irrigation to ensure healthy and rapid plant growth.

- 'L' shaped Gabbion wire - Tensar grid









Cost Opinion Summary	`				
Category Item	Quantity	Unit	Quantity Unit Unit Price	Subtotal	Total
Demolition					
Demolition & Clearing	123,356 SF	SP.	\$1.70	\$1.70 \$209.705	\$209,705
Planting & Irrigation					
Soil Import	4,569	Q	\$35.00	\$159,906	
Mulching	1,630	Q	\$30.00	\$48,903	
Planting - shoreline	57,047	SE	\$3,00	\$171,141	
Planting - upland	66,300	SF.	\$4.25	\$281,813	
Seeding (1/3 of total area)	40,707	SF	30.50	\$20,354	
Irrigation - drip (installed)	57,047	SF	\$1.25	\$71,309	
Irrigation - conventional (installed)	66,309	SF	\$1.50	\$99,464	THE STREET
					\$852,889
Hardscapes					
Sidewalk (varies width, concrete)	30,979	35	34.00	\$123,916	Mention of the last
Colored concrete	2.021	320	\$10.00	\$20,210	

	F	3,443	Shoreline edge
	SF	59,690	Ordinary high to ordinary low water mark
	57	30,679	Path
	SF	57,047	Graded Slope
	20 Th	66,300	Upland
			Assumptions
32.126			GRAND ICIAC

4041 SF 430 EA

\$0.75 \$1.50 \$60.00 \$500.00 \$1,500.00

1 EA \$175,000,00 S EA \$15,000,00

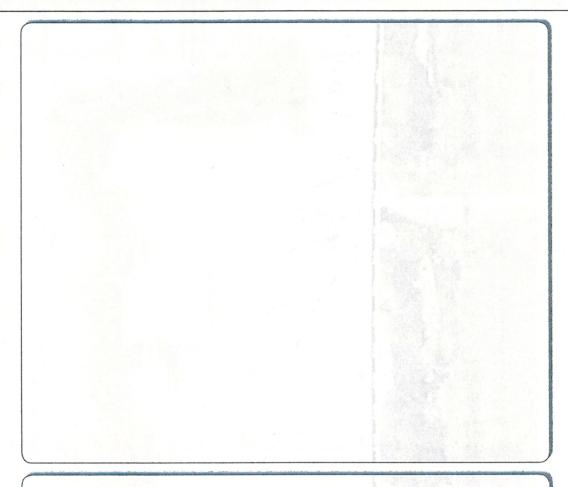
\$175,000

2,145







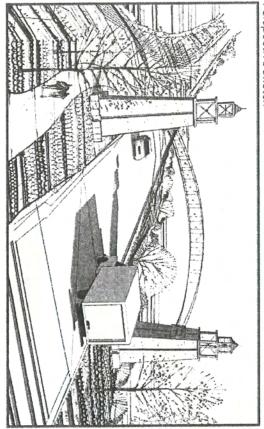


Appendix

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	Portal character images	A
	Portal alternative 'A'	В
	Portal alternative 'B'	O
	Portal alternative 'C'	Δ
	"The Cove" pier alternatives 'A'	Ш
	"The Cove" pier alternatives 'B'	Щ
		G
	Northwest point alternatives 'A'	I
	Northwest point alternatives 'B'	H
	Gateway plaza alternatives 'A' & 'B'	7
		\times
	Plaza beacon character images	_
		2
	Structural design notes and figures	Z
	Cost opinion estimate	O

Port of Kennewick - Clover Island Entry Portal Alternate 1

Perspective Sketch

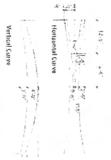


Existing context

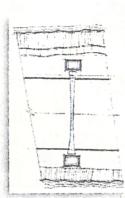


























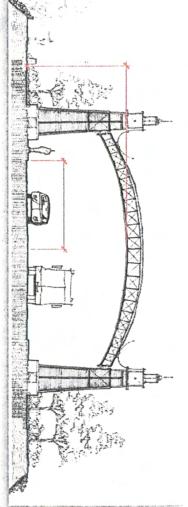


Elevation

Recessed joints run vertically on the columns to visually tie the large structure to the ground. Pre-manufactured concrete panels in various modules along sides of columns. Strategic lighting on the structure will allow visibility in evenings. Provided mounting brackets for future signage on steel archway.

Steel arch defines entrance and separation from surrounding private uses.

Nautical inspired structures and elements povides a consistent theme throughout the island.



SXXX,000 - SXXX,000

Underpass clearance is 24' at the highest point of the overpass and 20' feet at the lowest. Base plinth is square 10' by 10'.

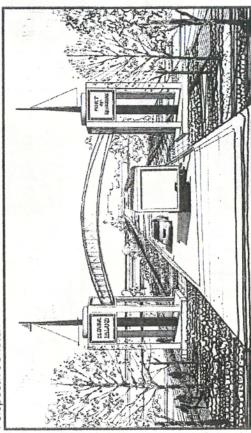
Steel structure is powdercoated in a teal green and mauve. Base plinth is a half tone darker shade of the side panels. Concrete side panels are a shade of light brown or tan. Top two elements are transparant with crossed galv. cables supported by steel casting. Steel overpass connection is composed of bent round stock tube steel.

CMU wall column. Concrete base plinth.

HDJ DESIGN GROUP 2009

Port of Kennewick - Clover Island Entry Portal Alternate 2

Perspective Sketch



- Nautical inspired structures and elements povides a consistent theme throughout the island. Steel arch defines entrance and separation from surrounding private uses.

 - Columns are transparent with steel support beams.
 - Canvas or wireframe mesh "sail" anchors at the top and middle panel.
- Middle panel is galv, sheet metal concaved in center surrounding main support column.
- Center column "maxı" runs vertically through entire structure coming to a trapezoidal point. Strategic lighting will allow visibility in evenings including inside center support & middle pariel.

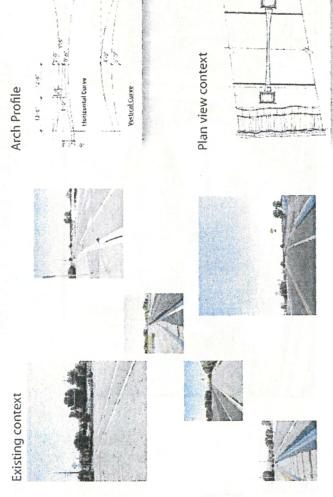
 - Provided mounting brackets for future signage on steel archway.

- Concrete base plinth.
- Steel support legs on four sides with main column centered as structural support.

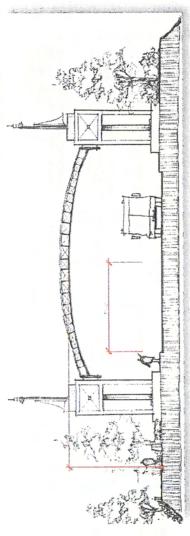
 Center column is trapozoidal and tapers to a point at the apex of the column w/ attached "sail."

 Steel overpass connection is composed of bent square stock tube steel.
- Base plinth is sand blasted and light brown.
- Center mast is a darker shade of the base plinth brown. Steel support legs are powdercoated in a teal green or blue. Middle panel is gafvanized to tie into proposed railing system.
- Underpass clearance is 24° at the highest point of the overpass and 20° feet at the lowest.
 Base plinth is square 12° by 12°.

\$XXX,000 - \$XXX,000







TAB TITLES FROM

TRI-CITIES
Rivershore
Enhancement
Council

River Shore Inventory Study

8th Tab

Port of Pasco

