



RECYCLED MATERIALS

Final design may also incorporate the use of recycled or second-hand materials such as reclaimed lumber and recycled copper. The reduction in use of new materials creates a corresponding reduction of energy used in the production of materials. All four existing wood shelters will be relocated and reused. When possible, building materials may be gleaned from the site itself. An example of this includes using wood from the trees that were cut to make room for the building in the construction of the building itself or for benches along the trails.

SUSTAINABLE ENERGY USE

Energy efficiency throughout the entire life cycle of the buildings is the most important goal of sustainable design. The final design will incorporate many different techniques to reduce the energy needs of the buildings and increase their ability to capture or generate their own energy.

NATIVE PLANTINGS

Areas disturbed by construction and new planting areas within the parking lot and roadways will be planted with native plants that require less maintenance and help to sustain habitat and scenic values. Volunteers will be encouraged to remove English ivy and other non-native plants.

OPERATIONS AND MAINTENANCE

Economic sustainability is important. Modifying staff demands can help in this goal. Maintenance costs will be kept lower by the design of efficient maintenance access and use of durable materials. The proposed centralized facilities will reduce maintenance costs. Improved trails will reduce the need for frequent trail maintenance and will reduce soil erosion.

Security and Control Systems

Security and control of the park will be upgraded using current technology. The ability for staff to remotely monitor each activity area and operate gates and locks will greatly enhance safety and security for park visitors. It will also reduce staff work time, granting them more time to interact with park visitors.

The closed-circuit camera system will allow the ranger to monitor the following areas:

- ranger residence and shop
- small parking lot by the interpretive trail
- entrance and exit on 56th Street NW
- main parking lot
- beach road gate
- beach area restroom, parking, and viewing area
- beach/picnic area
- day use/picnic area and kitchen/shelter building

The staff will be able to monitor all cameras and operate all gates and building door locks by cell phone. They will also be able to control building lights and thermostats.

Wi-Fi service may be made available as a convenience to park visitors.

Structures

A key consideration voiced by the ad hoc committee, general public, and Parks' staff was that all structures and site furnishing be rustic – or, as it is also known, Cascadian Northwest – in character. In general, this type of design expresses respect for the location, climate, topography, and vegetation of the Northwest. Similar character can be seen in the buildings at Millersylvania State Park. Buildings will be simple with dominant roofs. Windows will be paired and divided paned windows to maximize sunlight and view. Structures will be sound and substantial with exposed wood trusses. Post and beam construction may be used both externally and internally on all buildings. Exterior and interior materials will be predominantly wood with a metal, dark-colored standing seam roof. The roof will be simple in shape with gabled openings toward the sunlight and views.

New materials, while utilizing wood, will also include state-of-the-art materials and recycled materials that are durable and long-lasting, minimizing maintenance as much as practical.



PROPOSED CHARACTER OF SHELTER / KITCHEN STRUCTURE

Site Furnishings

Scout and other volunteer projects as well as emergency remedial measures over the years have resulted in an eclectic collection of materials and small structures in the park. This is particularly true for steps on the trails, fencing, bridges, and signs. The purpose of establishing set design standards for the park is to not preclude future volunteer efforts but rather to standardize the materials and design character of the park as a whole. Like the buildings, site furnishings such as benches, guardrails, and bridges should also be Cascadian Northwest in character. This will improve park aesthetics, provide efficient direction to volunteers, and simplify maintenance.

BRIDGES

Instead of using dimensioned lumber, the rail system will be round three rail design with fiberglass grated decking that complies with ADA requirements. On ADA-accessible bridges and ramps, handrails will be installed.

FENCING

The intent is to provide uniform and rustic character throughout the site. Existing fencing and guardrails utilize dimensioned lumber, primarily two-by-fours. All fencing is proposed to be round three rail and round posts. Where needed, galvanized or powder-coated 2" square mesh can be added to the rails to prevent small children from getting through the rails. These rails are readily available and, although manufactured, have a rustic character.

PICNIC TABLES AND BENCHES

The park has an eclectic collection of tables in variations of wood, metal, and recycled plastic. As tables and benches are replaced, one interior table, one exterior table, and one bench model should be selected and used. These may vary in length but should be consistent in design, materials, and colors.

SIGNS

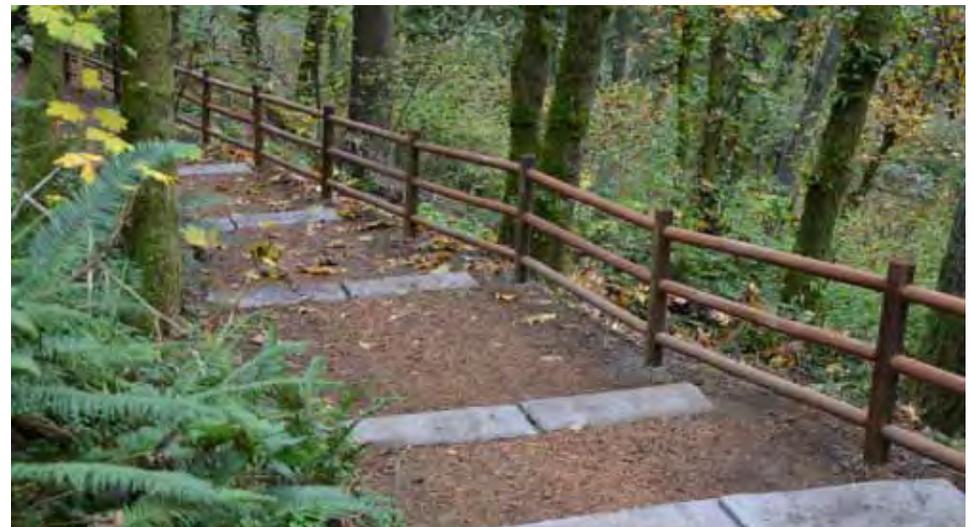
The information kiosks should be wood structures in character with the buildings and other site furnishings. Sign posts should be round and appropriate scale, see discussion on interpretive signs for more detail.

DRINKING FOUNTAINS & SPIGOTS

Stone bases are the most durable, though round timber may be employed in certain settings and locations. Existing fountains and spigots should be replaced with ADA-compliant designs and sites.

STEPS

As discussed in the section on trails, steps will now be precast concrete made to resemble stone. They are essentially indestructible and, once in place, will be permanent. They will provide safe and secure continuity throughout the trails.





Permits, Checklists, Titles & Compliance Requirements

At the preliminary master plan stage, a pre-application meeting was held with Pierce County to ascertain required permits. The plan was presented to Pierce County staff, including representatives from the Health Department, Building Department, Fire Prevention, Resource Management, Development Engineering, and Planning. The following approvals will be required for construction:

COUNTY COMPLIANCE REQUIREMENTS

- Demolition Permit
- Building Permit
- “Rural Residential Conservancy Zone” Conditional Use Permit
- “Shoreline Management Area” Conditional Use Permit
- Conditional Use Permit for Park Land Use Portion
- Shoreline Substantial Development Permit (SSDP)
- Shoreline Conditional Use Permit (SCUP)
- SEPA Checklist
- Title 18J Compliance

ADDITIONAL STATE AND FEDERAL COMPLIANCE REQUIREMENTS AS APPLICABLE

IMPLEMENTATION STRATEGIES

The ad hoc committee recommended developing all proposed improvements at one time; however, due to the magnitude of the project, it is unlikely that the entire list of improvements would be constructed at one time. If the project is phased, the phasing needs to consider logical construction sequence, priority of needs, and probable funding. The following scenarios should be considered:

BEACH AREA

Improvements to the beach area will provide safer and easier access to the beach, allowing people with disabilities to reach areas currently inaccessible to them. If the proposed restroom is served by a force main and not a vault system, the force main will have to be constructed up the beach road and across the main parking lot to the drain field. The beach road improvements should also be included. If the beach area is not constructed initially, then the existing beach restroom could be replaced with ADA-accessible temporary units in the interim.

BEACH TRAIL

The beach trail improvements provide a needed path between the day use area and beach area. People with disabilities would still access the beach by vehicle. The beach loop trail, therefore, could be included with either the day use area, beach area, or even as a separate stand alone phase.

ALL OTHER TRAILS

All other trails could be improved as either individual projects or as a single large project.

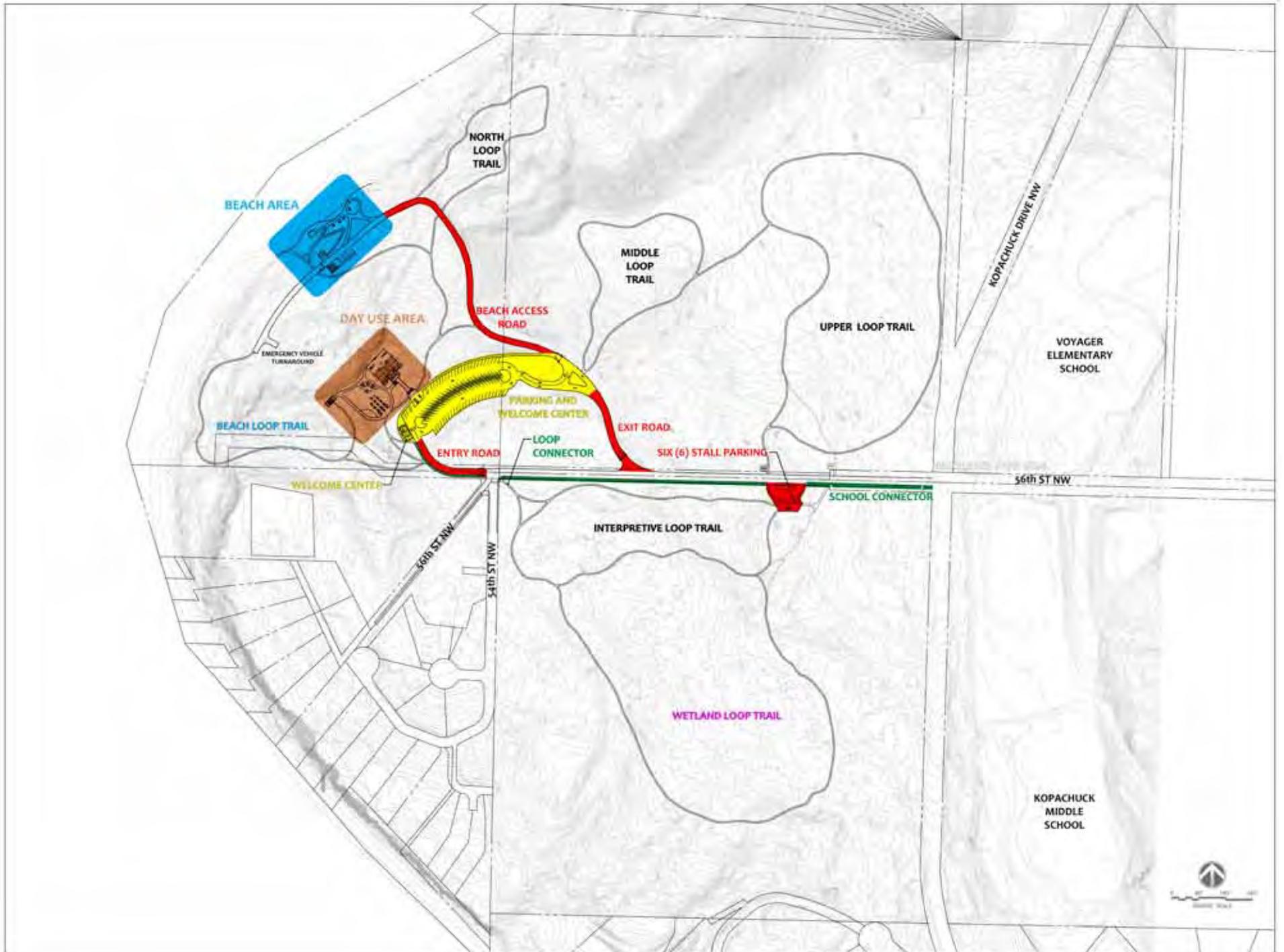
INTERPRETIVE SIGNS

Interpretive signs could be included with each phase or as a single stand-alone phase.

DAY-USE AREA, PARKING LOT, & ROADS

The day use area with the kitchen/shelter/restroom will provide a source of revenue to replace lost revenue from the campground closure. There is a demand for small and large gathering spaces and the proposed building design offers flexibility for small and large events alike. Moreover, with roll-up glass doors leading to the patio, the building would be an attractive venue in any season. The restrooms in the kitchen/shelter and the direct access to the building, picnic area, amphitheatre, play area, and view point will make that portion of the site fully accessible for people of all abilities.

It makes sense to construct the main parking lot with the day use area. The exit road could remain as is if the beach access road and beach improvements are constructed later. New utilities for the beach area should be constructed across the parking lot to the beach road gate, ready for extension down to the beach at a later phase. The welcome center, with utility stubs to it, could be a stand alone project at a later date.



Estimated Probable Construction Costs

Estimated costs for the entire master plan are based on 2014-2015 construction prices and will need to be adjusted annually for the current rate of inflation if the project is constructed after 2015. Estimated costs include 35% for construction contingency, architectural and engineering design fees, inspection, and testing. Precise quantities of the various construction items cannot be determined until final design (for construction) is complete; therefore, the design contingency covers the unknowns inherent at the master plan stage. Washington State Parks and Recreation Commission administration costs must be added to this estimate.

Day Use Area	\$ 2,202,611.00
Beach Area	\$ 824,777.00
Entry Road	\$ 117,656.00
Exit Road	\$ 150,932.00
Main Parking Lot & Welcome Center	\$ 1,400,480.00
Beach Road	\$ 251,798.00
Beach Trail	\$ 780,053.00
North Loop Trail	\$ 41,128.00
Middle Loop Trail	\$ 32,117.00
Former Camp Loop Trail	\$ 46,391.00
Interpretative Loop Trail	\$ 171,113.00
Wetland Loop Trail	\$ 476,974.00
School Connector	\$ 14,324.00
GRAND TOTAL	\$ 6,510,354.00

Grants

In addition to the Washington Wildlife and Recreation Program (WWRP) grants which help fund State Parks' capital improvements, other grants such as the Aquatic Lands Enhancement Account (ALEA) and WSDOT's Safe Routes to Schools may be used.

Partnerships, Volunteers, & Donations

Projects may be implemented using partnerships and donations. For example, interpretive research could be conducted in cooperation with the local tribes and students. The closing and re-vegetation of to-be-abandoned trails could be done by Scouts or other volunteers. Protect Our Parks (POP), Harbor WildWatch, Rotary Clubs, or other park-friendly advocacy groups may want to propose Community-Based Park Improvements. or raise Park Foundation donations to be used for park improvements.

Acknowledgements

Washington State

Parks and Recreation Commission

Brian Yearout, Project Manager

Julie McQuary, Parks Planner

Janet Shonk, Area Manager

Dennis Mills, Kopachuck State Park Ranger

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