"... the wind verry high from the S.W. with most tremendious waves brakeing with great violence against the Shores, rain falling in torrents, we are all wet as usial and our Situation is truly a disagreeable one ..."

- Capt. William Clark, Nov. 11, 1805

3.1 OVERALL SITE DESIGN

The overall site design concept is to provide access to facilities and interpretive opportunities at a site that is more developed at the eastern end, becoming less developed as the visitor moves west.

The more developed portion of the SRA include traveler services such as, the Restroom/ Information Center building, bus drop-off, Dismal Nitch Interpretive Feature, and formal viewpoints. A majority of visitors to the SRA will use and enjoy the amenities provided in this portion of the site.

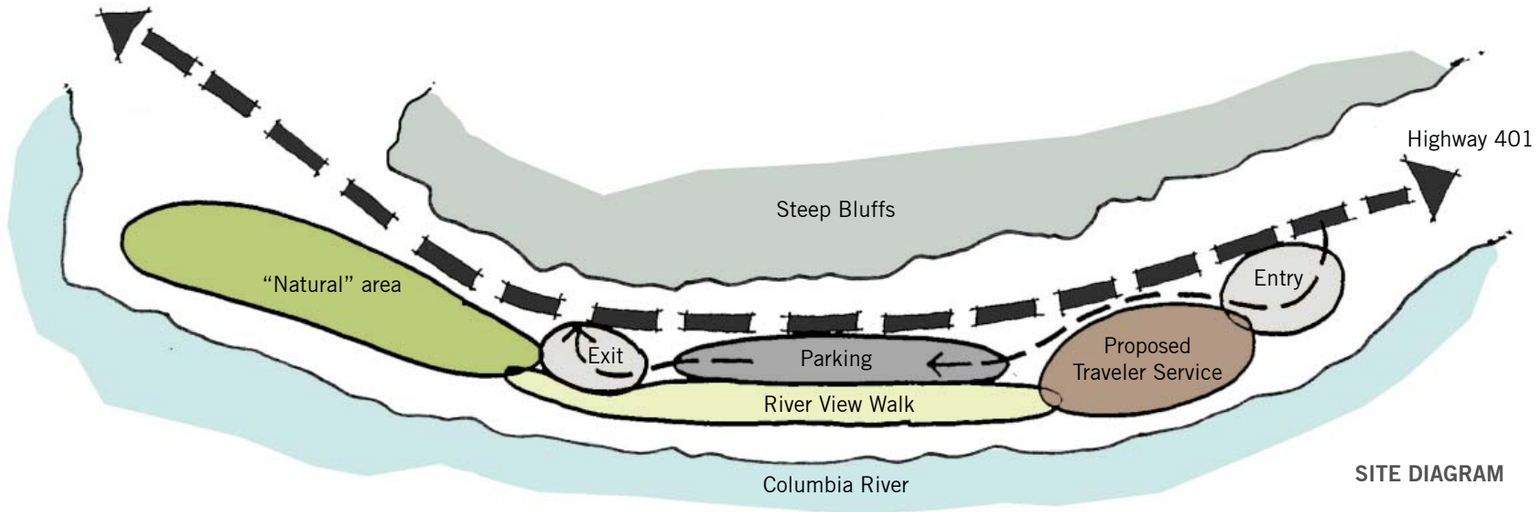
The parking is located in the central area of the site. This parking is fronted on the water side by a River View Walk that will link visitors by trails to the western portions of the site. Those who journey west will find that the site becomes more natural, and less formal. This concept allows the user to experience a more serene setting while at the same time protecting the natural resources of the western point.

FEATURES OF THE FINAL DESIGN

The Master Plan expands the area of the Dismal Nitch SRA and adds visitor features serving the needs of the SRA and the National Park. New features include:

Three Panoramic Viewpoints

The broad sweep of the Columbia River is viewed from the slightly elevated East, Central and Far West Viewpoints.



SITE DIAGRAM

Three New Trails

Three new trails along the river and linking the site features are planned: Trail to the East Viewpoint, the River View Walk, and the Western Interpretive Trail.

One Primary Feature, Re-Creation of the Dismal Nitch

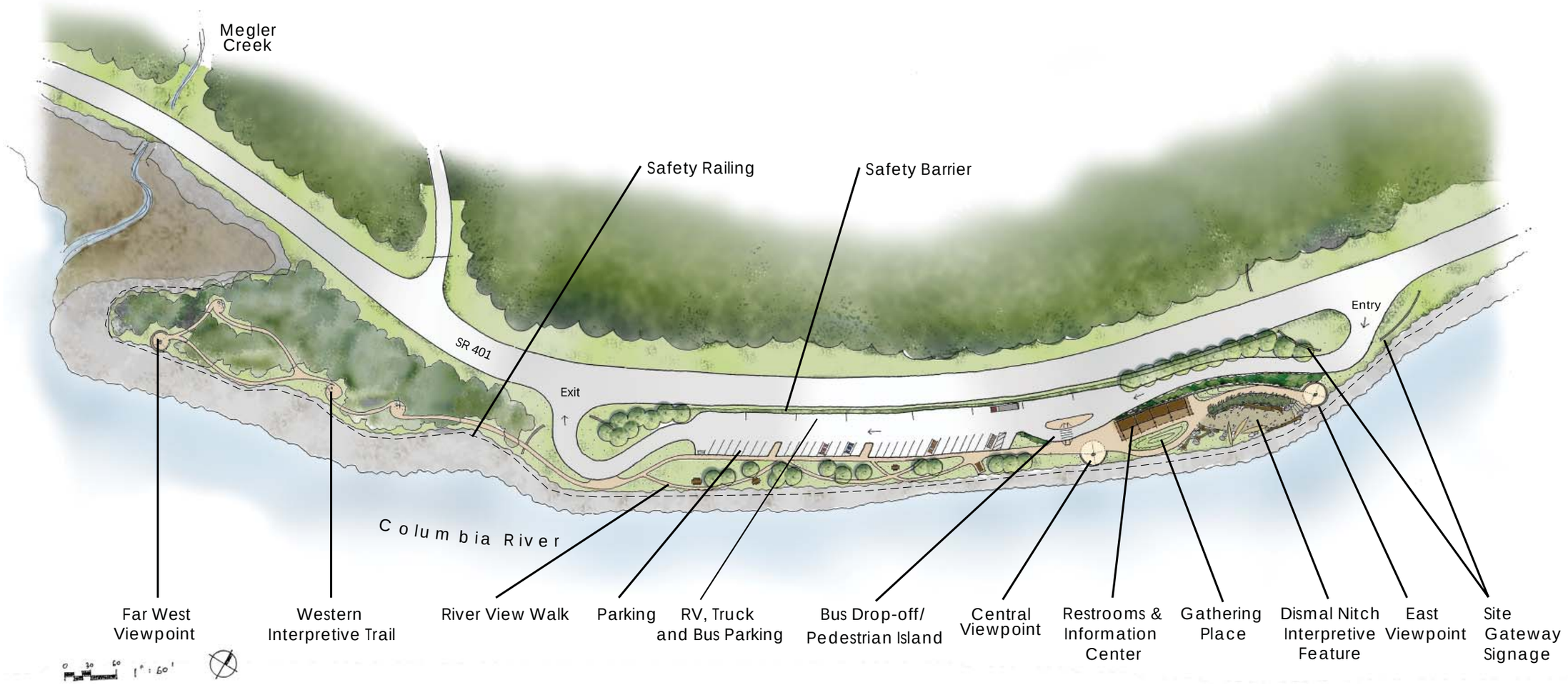
Presenting the Lewis & Clark experience at the Dismal Nitch site, accurately in scale with historic conditions, the re-creation will feature replicas of the members of the Corps of Discovery and their canoes.

One New Restroom/Information Center Building

Located conveniently by the entrance and the bus drop-off, the new building will welcome travelers and provide regional and national park information.

Improved Parking, Signage, Safety Features and Landscaping

Provided parking for cars, trucks, RV's and buses will meet current standards and ADA needs. A new entry sign is provided, along with interpretive and directional signage throughout. Safety fencing is incorporated into the design, and new landscaping will enhance the site with native plant materials.



OVERALL SITE PLAN

3.2 LANDSCAPE FEATURES

The following section describes the design intent of site landscape features such as the formal viewpoints, the Dismal Nitch Interpretive Feature and berm, gathering place, walkways and trails, stormwater management, view park, and western point. A specific description of the character of materials used for specific elements within the site follows in Section 4.2 (pg. 53).

Images that express the inspiration for the landscape features can be seen on pg. 30.

1. Designated Viewpoints

Three formal viewpoints have been designed as significant locations where visitors can gather and be oriented to amazing views of and across the river and their association with the Lewis & Clark story. The formality of their circular design is tempered with the use of materials, for example: colored concrete or crushed stone, a basalt column interpretive focal point, and low stone veneer walls. The interpretive purpose of each viewpoint, related to the story of Lewis and Clark, is described in more detail in Section 3.3 (pg. 33-38).

The East Viewpoint, which orients the visitor to the river landscape from which Lewis and Clark came, is the furthest east visitors can go within the SRA. The Central Viewpoint is located adjacent to the bus drop off area. It is the first interpretive site feature that visitors will encounter as they walk east towards the building and plaza from the parking area. These two viewpoints frame the rest of the developed area in between, which includes the building, gathering place, and Dismal Nitch Interpretive Feature.

The Far West Viewpoint is located over 1,000 feet away at the west end of the site in the more natural area. This viewpoint is accessed by the Western Interpretive Trail and is oriented down river to Lewis & Clark's next destination—Station Camp and the Pacific Ocean.

2. Dismal Nitch Interpretive Feature and Berm

The Dismal Nitch Interpretive Feature, located at the east end of the site and adjacent to the building, will provide significant interpretive and educational opportunities to visitors. Specific discussion regarding the Lewis and Clark story to be told within this feature and the use of elements within, such as the basalt columns, representative canoes, and signage can be found in Section 3.3 (pg. 33-38).

The design of this space, in general, attempts to create a sense of enclosure, create an area that is buffered from the noise of the adjacent highway so that visitors can focus on the site and nearby river, and to create a space roughly the same size as the Dismal Nitch as recorded in Clark's expedition journal.

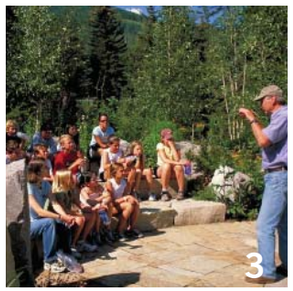
Enclosing and buffering the space is accomplished by raising the grade behind the Dismal Nitch feature and placing an elevated berm with plantings, including Shore pines, for example. This would be the first two layers of buffer. The second layer is a stone wall located between the walkway (from the East viewpoint and the building) and the entry drive. The berm will appear to be more than five feet tall from within the Dismal Nitch Interpretive Feature and be retained with the support of very large logs and root wads. On the walkway side, the berm will be retained by a low stone veneer wall. Large logs, boulders, canoes (material to be determined), and vegetation will create a low barrier between the Dismal Nitch Interpretive Feature and the rip-rap shoreline.

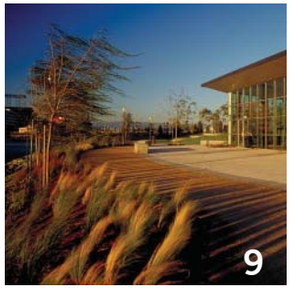
3. Gathering Place

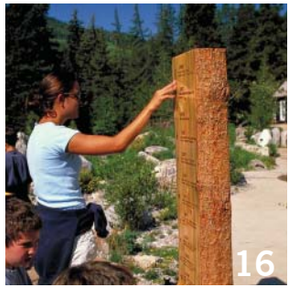
The Gathering Place is located in front of the building and provides a subtle vista out to the river. The high point of this subtle knoll should be no more than two feet above the elevation of the surrounding walkways. Planted with hardy clump grasses that can handle foot traffic. This area breaks up both the flatness and expanse of the surrounding plaza. Visitors should be allowed to walk up and over this area for better views of the river while waiting for family members or friends using the facilities.

4. Walkways and Trails

Primary, high-use walkways within the more developed east end of the site have been designed in such a way as to accommodate the differing needs of SRA users. A long sidewalk adjacent to the parking area will direct most visitors to the plaza area near the Central Viewpoint and bus drop-off area. From here, however, visitors will have a choice to go directly to the building (which is likely) or around the Gathering Place along a shoreline walkway. The two paths meet up again on the east side of the Gathering Place. At this point the visitor may be attracted to enter the Dismal Nitch Interpretive Feature. After winding their way through this area they can reach the East Viewpoint by climbing a set of rough stone stairs. After reaching the east terminus of the site, a more direct walkway allows visitors to walk back down to the building, plaza, and parking lot without entering the Dismal Nitch Interpretive Feature again. This circulation pattern will allow visitors to experience the site in various ways while providing for a more efficient flow of people.







SITE ELEMENTS
IDEAS
LEGEND

1. Rock walls, Brisbane, Australia
2. Decomposed granite walkway, San Francisco, CA
3. Interpretive water feature, Vail, CO
4. Rustic bench, Munakata, Japan
5. Split-rail fence, Santa Fe, NM
6. Walkway and guardrail, London, England
7. Interpretive paving with fish icon, Cherry Hills, CO
8. Paving/landscape feature, Cincinnati, OH
9. Arbor/canopy and walkway, Sydney, Australia
10. Decorative paving and boulders, Silver Springs, MD
11. Waterfront park art feature, Sydney, Australia
12. Interpretive viewpoint and sign, Sunnyvale, CA
13. Interpretive paving feature, Vail, CO
14. Decorative paving and vertical landscape feature, Cincinnati, OH
15. Interpretive sign and boulder wall, Seattle, WA
16. Rustic wayfinding sign, Vail, CO

Secondary, medium-use trails will be located between the parking lot sidewalk and the shoreline. These will allow visitors to access the edge of the rip-rap shoreline for spectacular views during their walk to or from the facilities located at the east end of the site. Additionally, low-use trails will be located at the western point and provide access for those adventurous visitors who journey to the Far Western Viewpoint. Alignment of the trail should be verified in the field during the design phase to ensure the protection of existing mature native vegetation and river viewing opportunities.

5. Stormwater Management

Rain gardens are landscape planting beds designed to accommodate stormwater run-off in order to filter pollutants and toxins from the water. Rain gardens, planted with native shrubs adapted to wet conditions, have been strategically placed adjacent to most parking areas and travel lanes in order to intercept rainwater having fallen on those impervious surfaces. A more specific discussion of these features can be found in Section 2.3 (pgs. 47-48).

6. River View Walk

The view park, a long linear stretch of turf and mature trees along the top of the rip-rap bank will continue to be an important component of the SRA as a spectacular view corridor. The width of this view corridor, averaging 20 feet or so, will become narrower to accommodate the integration of the rain garden which is four to five feet wide. Many of the mature trees that exist along this corridor have been preserved in the final plan. Looping gravel trails have been added to provide visitors visual access to the fenced upper edge of the rip-rap shoreline. Existing covered picnic table structures will be replaced and relocated, one of which will be located in close proximity to the ADA parking stalls and bus drop-off.

7. Western Point

Minimal development is proposed in this area at the far west end of the site. Small improvements are proposed for this area to accommodate the interpretive and educational needs of recreation users. Use of this point, which is currently not a functional component of the SRA, will help to link it to the rest of the site while protecting the natural resources of this area. Improvements include unpaved trails, interpretation, and a Far West Viewpoint and interpretive feature, which is discussed in more detail in Section 3.3 (pgs. 37-38). Removal of invasive species and enhancement of the natural environment through restoration will provide a natural wooded location adjacent to the river, providing visitors who walk to this more remote location a more serene experience than that of the SRA itself.

3.3 INTERPRETIVE FEATURES

Today, the Dismal Nitch SRA provides a place for remembrance of the amazing feats of the Corps of Discovery, and those desperate days that almost put an end to their journey only a short distance from the Pacific Ocean. This site remains a key element in the story of the Corps of Discovery. Now, as part of the Lewis and Clark National Historic Park, the Dismal Nitch SRA is poised to become a critical gateway element for historical tourism.

The site is part of a grouping of locations significant to the Corps of Discovery that comprise the Lewis & Clark National Historic Park. Each interpretive and recreational site have been designed to stand alone while providing a feel consistent throughout the Lewis & Clark National Park. The connection of the site to the Station Camp site, and to Cape Disappointment State Park, as well as to the Saltworks, Fort Clatsop, Natal Landing and other Lewis & Clark related sites needs to be made and reinforced in each location.

Situated as the first major site on the Washington side for those following the westward trek of the Corps of Discovery, this site has a place of great prominence and importance as an element of introduction to the park as a whole.

The site is arranged to present a core of visitor activity directly associated with the SRA building with secondary trails offering additional views and experiences to visitors. This approach provides for several desirable outcomes.

Firstly, the close proximity allows for effective orientation to the site, and to the Lewis & Clark National Historic Park as a broader entity. Secondly, it allows visitors to adjust time spent on site to weather conditions and larger time constraints. Thirdly, the location of the Dismal Nitch Interpretive Feature and amenities and architectural features creates a usage pattern that allows the site to provide areas of activity that are balanced against more contemplative experiences, allowing us to divide thematic content in a way in which the physical nature of the experience is matched to its interpretive content. Key information is placed in the most accessible portion of the site. Secondary interpretive opportunities fan out to utilize the full width of the available landscape, allowing visitors or guides to adjust presentation location and duration to their specific needs.

The less developed west point of the site allows an emphasis on stewardship and the natural environment that opens interpretive opportunities up to discussion of mitigation efforts, invasives, and the impacts of settlement and population on the landscape.

The possible location of a sculptural element depicting a canoe at the Far Western Viewpoint should be considered. This will reinforce the themes of nature and the continued presence and influence of the native peoples on the land. (See Far West Viewpoint)

FAR WEST VIEWPOINT

INTERPRETIVE FEATURES SITE PLAN
FINAL PHASE

INTERPRETIVE ELEMENTS

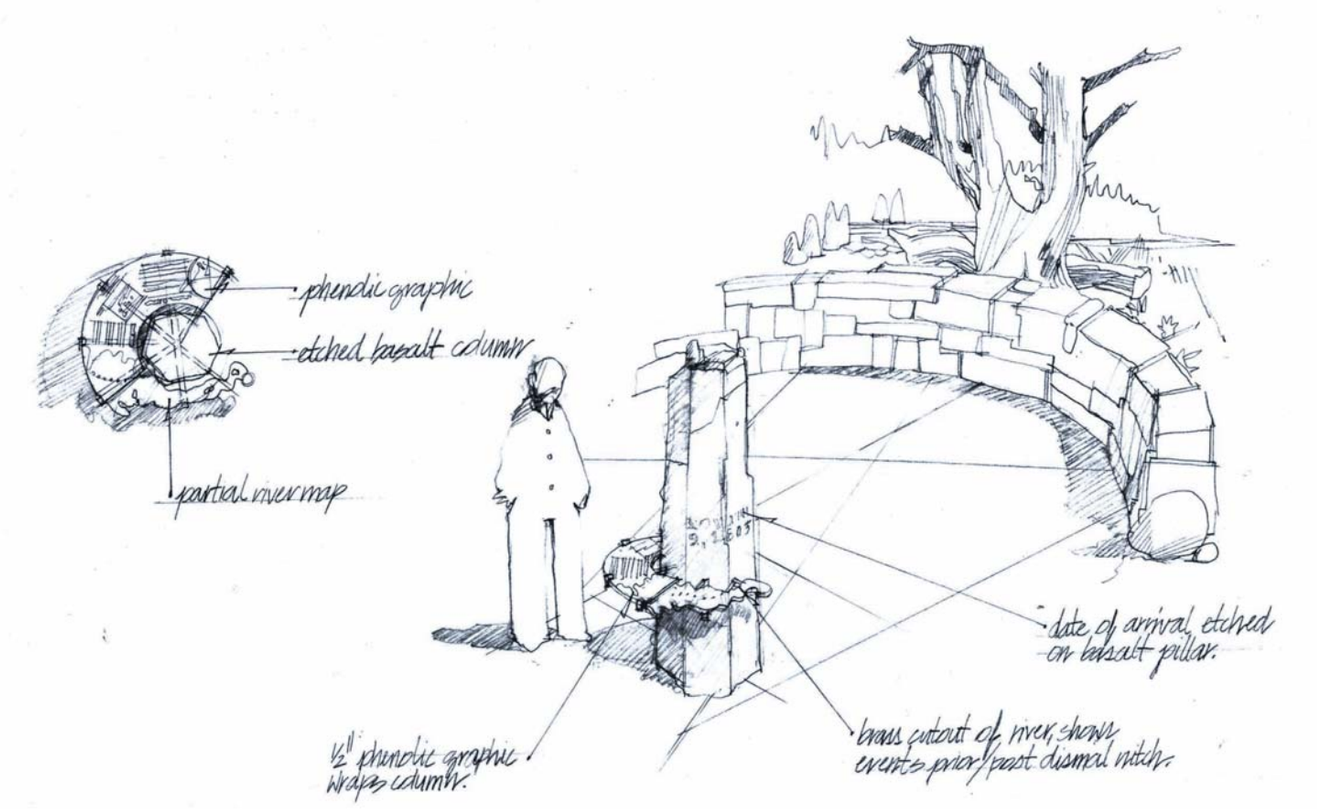
Based around a series of key elements, planning for the Dismal Nitch SRA easily incorporates visible physical elements placed to directly tie to both planned traffic flow as well as probable visitor behavioral patterns. A centrally located anchor feature provides an historical overview of the site, along with a basic list of site amenities. Designed to create a vertical element recognizable to visitors as a point of interpretation, this initial point of interpretation pairs with anchors located at the east and west end of the site. The central unit provides an opportunity to introduce the site and also offers a direct visual link to other key areas of interpretation on site.

Use of tactile elements within these components offer opportunities for low level interactions that can provide the basis for other guided activities intended to expand their interpretive potential.

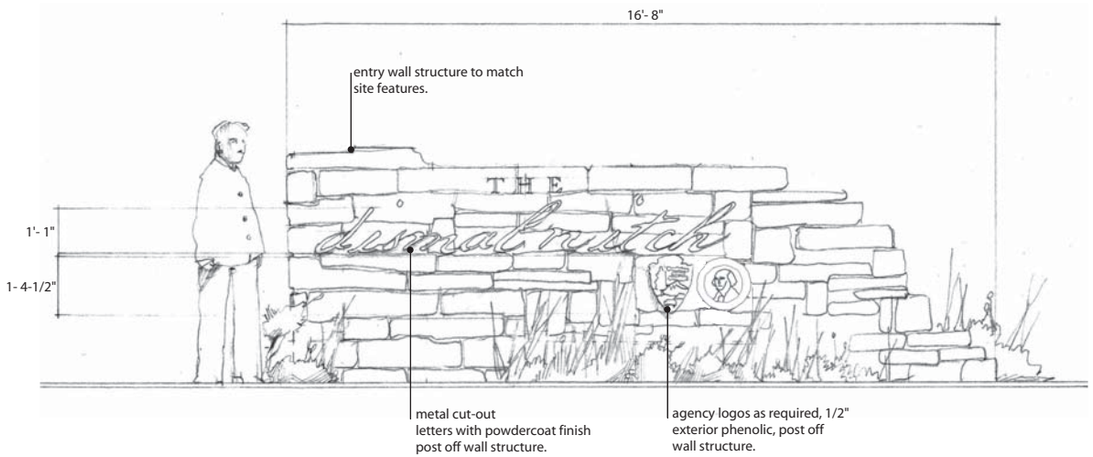
Secondary anchor units allow views up and down the river and provide a natural tie-in to the activities of the Corps of Discovery both before and after their experiences at Dismal Nitch. Cast elements show the shape of the river and provide tactile opportunities to trace its course. (See Anchor Feature) Symbols used by the Corps to show campsites and villages can be incorporated into this map element, with a simple key providing meanings and allowing for expansion of interpretation at both the east and west anchors to include other historical uses of the site and of the surrounding area. If desired, the river relief might be rendered in a way where rainwater can flow through the unit.

Additionally, the basalt used to create the vertical element shown in these units can also provide an opportunity to incorporate tactile features such as etched plant life or salmon, or it could serve as a place to incorporate artwork designed especially for the site by local artisans or tribal members.

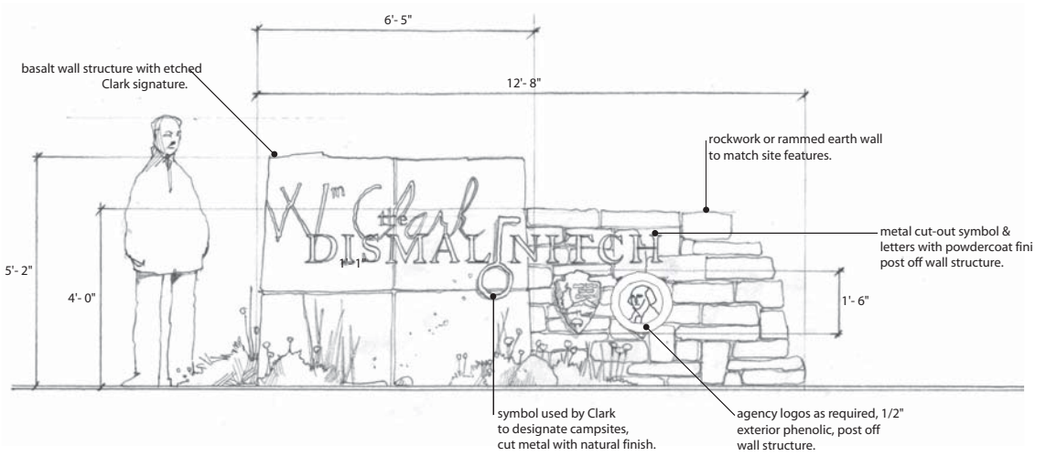
An entry sign that would incorporate the materials of the site would introduce the visitor to the park-like setting of the SRA (See following page).



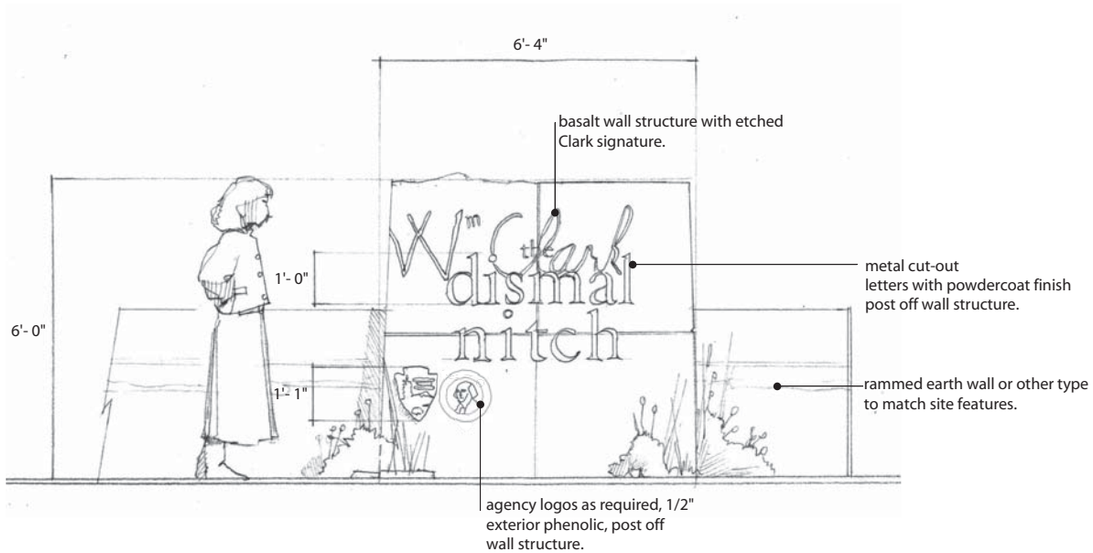
ANCHOR FEATURE



ENTRY SIGN- OPTION 1



ENTRY SIGN- OPTION 3

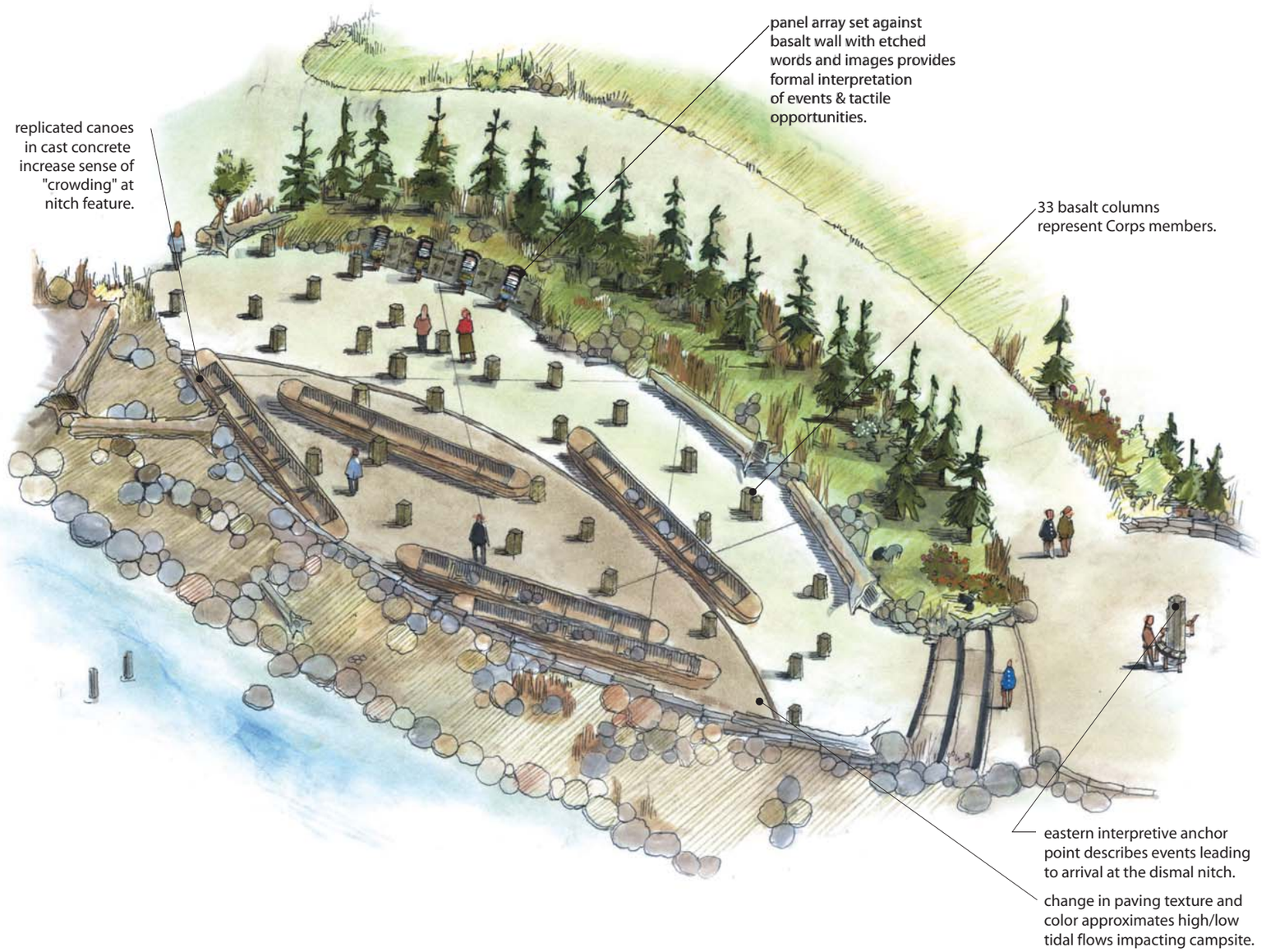


ENTRY SIGN- OPTION 2

The Dismal Nitch Interpretive Feature

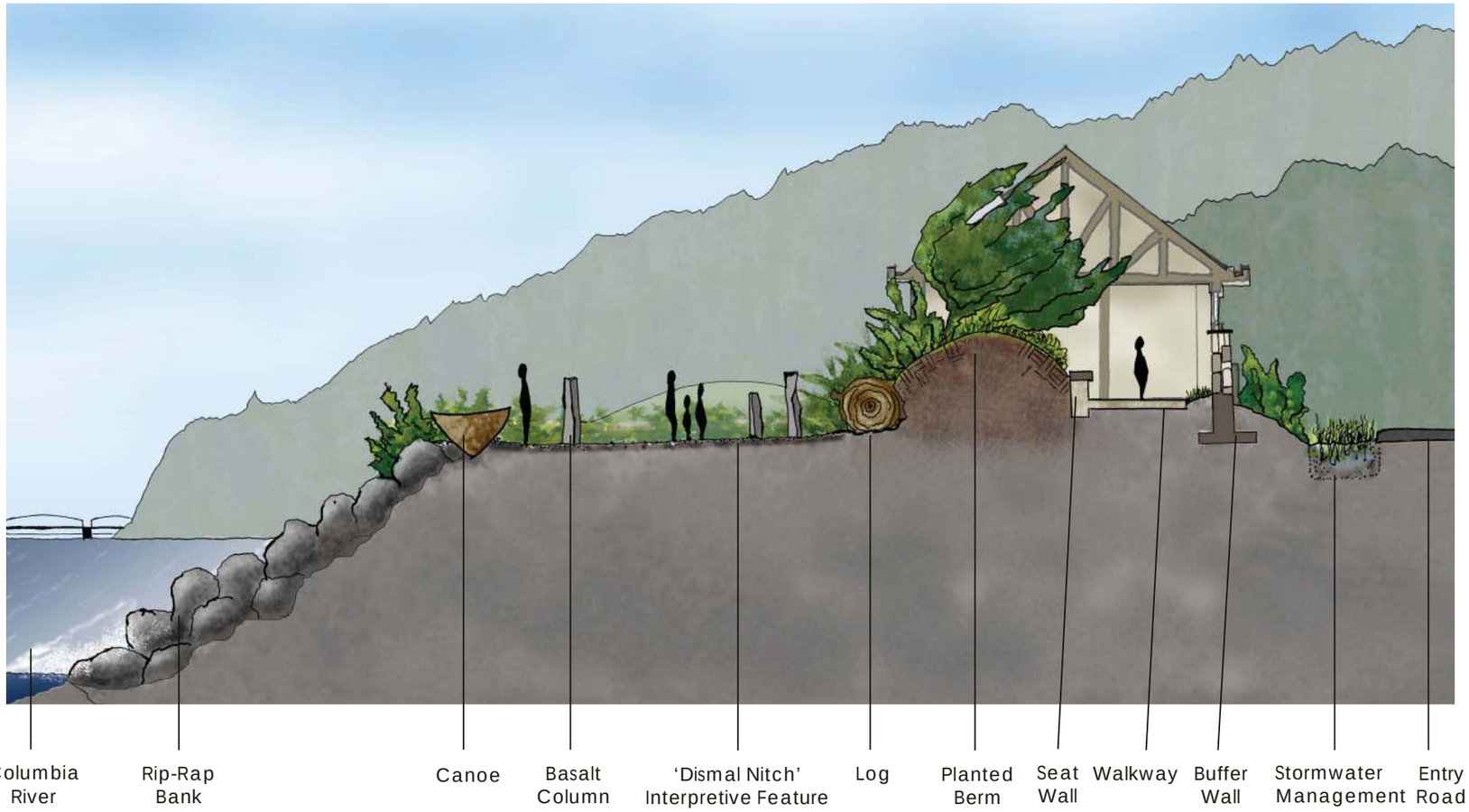
This feature is intended to evoke the tight quarters in which the Corps of Discovery was constrained in November of 1805. Columns representing the members of the Corps combine with sculptural pieces depicting the dugouts used by the Corps to navigate the Columbia. Changes in ground surface color and texture suggest how the Corps' temporary camp was impacted by the tides. An area dedicated to a more formal telling of the four days spent at this site provides an historical accounting of the events that took place here using the words of the Corps' itself, as well as text and images intended to provide a clear overview.

A backing component of basalt panels set into the berm provides an opportunity for showing plants associated with the site, some of which are referenced directly in the journals, as well as etched images of river species and key words describing the environment in the Chinookan language.



DISMAL NITCH INTERPRETIVE FEATURE

Detailed Cross Section Through Dismal Nitch Interpretive Feature



Other Elements

Consideration should also be given to the use of locally produced art elements as part of the interpretive program. These could take the form of a decorative screen or column wraps associated with the planned architecture. Another possibility would be to emphasize the "gateway" aspect of the site through a piece combining the work of several artisans to create a feature at the central hub that references the overarching themes found within the National Historical Park, possibly combining them into a structure similar to the Astoria column.

The approach to interpretation described above is intended to create a dynamic environment for discovery that will encourage exploration throughout the sites falling within the Lewis & Clark National Historic Park. By blending straight forward interpretation with evocative moments and opportunities for contemplation, the master plan goal is to create an environment rich with meaning and history that will serve visitors of all ages and backgrounds for years to come.

3.4 CONFIGURATION OF DISMAL NITCH

The final construction phase of the SRA Master Plan for Dismal Nitch develops the primary feature area at the east end of the site. Included in the feature area are the Restroom/Information Center building, the re-creation of the Dismal Nitch Interpretive Feature, the Eastern Viewpoint. In addition there is landscaping, paving, walls and fencing, as well as parking and a bus drop-off.

This feature area is planned for the east end of the site to maximize convenience and take advantage of high visibility. A curvilinear entry road is identified and marked by a gateway sign, from which the road partially circles the feature area to the parking beyond. This has the effect of naturally slowing the entrance traffic, and making visible both sides of the area to improve safety.

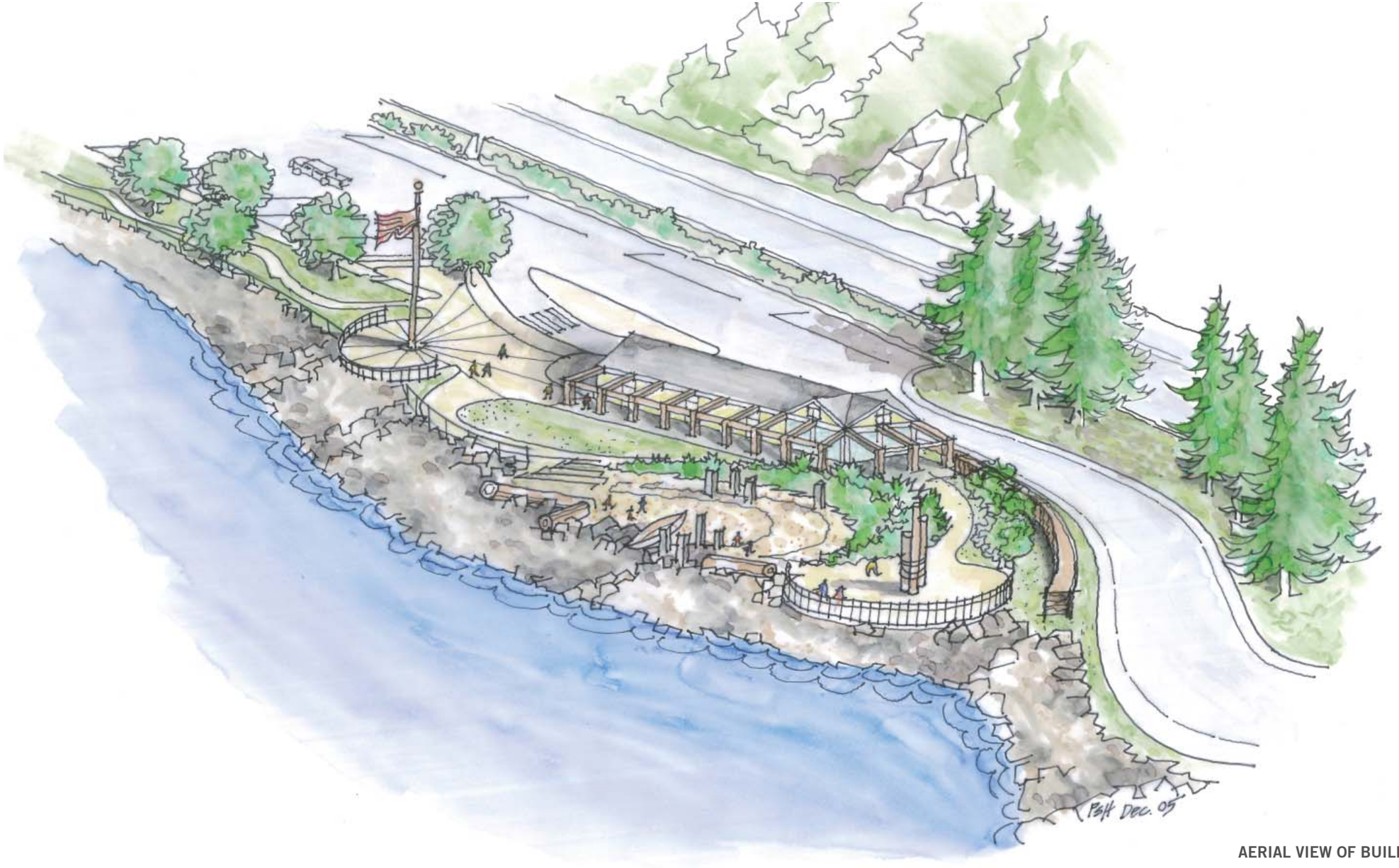
The site plan calls for a Restroom/Information Center that opens out to the magnificent view of the Columbia River, across the Gathering Place. The building backs up to the entry road, creating a sound wall that partly mitigates the highway noise from SR 401.

Beyond the building is the Dismal Nitch Interpretive Feature, a sculpted bowl of land and rocks, trees and sculpture. Like the Dismal Nitch itself, it is a confined outdoor space open to the view and open to the weather that tormented the Corps of Discovery.

Beyond the Dismal Nitch Interpretive Feature is the East Viewpoint, a circular plaza that captures the view upriver to Pillar Point. Raised up a few feet by a gradual ramping of the path, the viewpoint is perched over part of the river embankment to maximize the sense of looking out to the view. We imagine this place as a rallying point for tour groups, families, or individuals starting a tour of the site. They would visualize the points upriver from which the Corps of Discovery came in their canoes, and the tour group would move downriver to the west, following Lewis & Clark to the Pacific. Moving through the Dismal Nitch Interpretive Feature, the tour group would follow the River View Walk to the Western Interpretive Trail, a more natural area, and far west viewpoint, with the ocean almost in view.

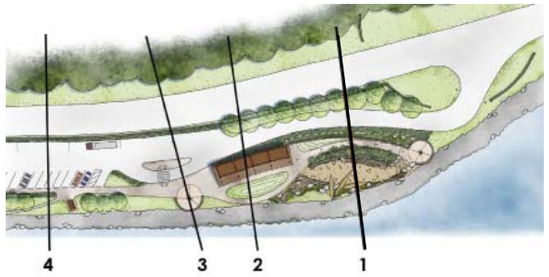
Rounding out the feature area is a bus drop-off and an entry plaza with a flag pole. Protected by a landscaped island, arriving bus passengers move safely into a circular entry plaza inscribed with the points of the compass in the pavement for orientation and a first big view of the river. Nearby is the restroom and information center building, with services and amenities for the traveling public.

BUILDING SITE PLAN

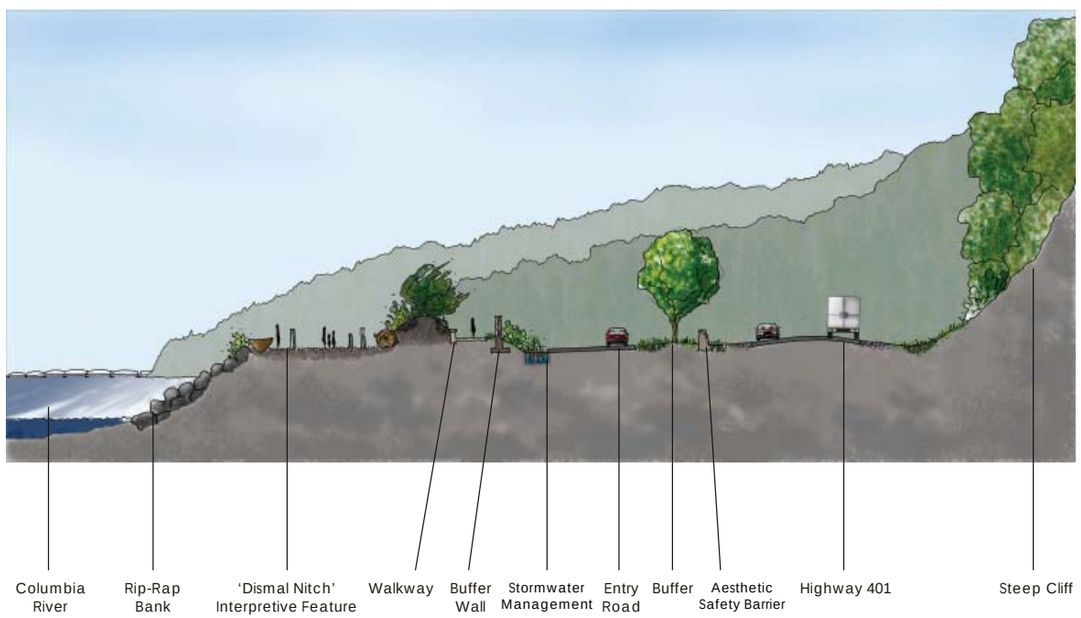


AERIAL VIEW OF BUILDING SITE

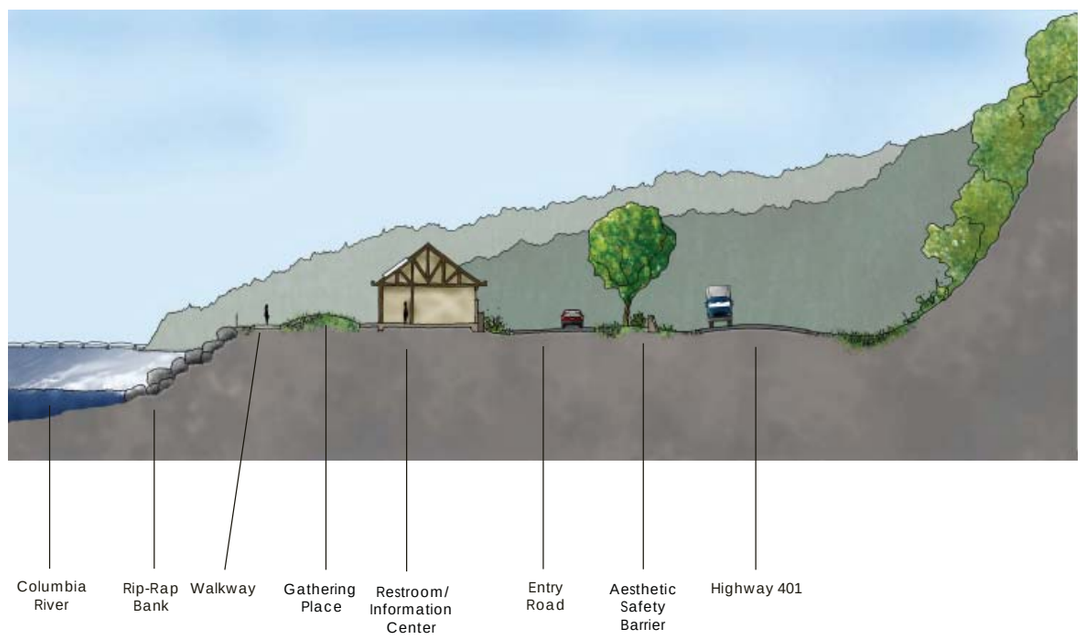
Site Sections
These sections illustrate the relationship between the shore, the site and the highway through various points in the central area. These are shown in the order in which the visitor experiences the site.



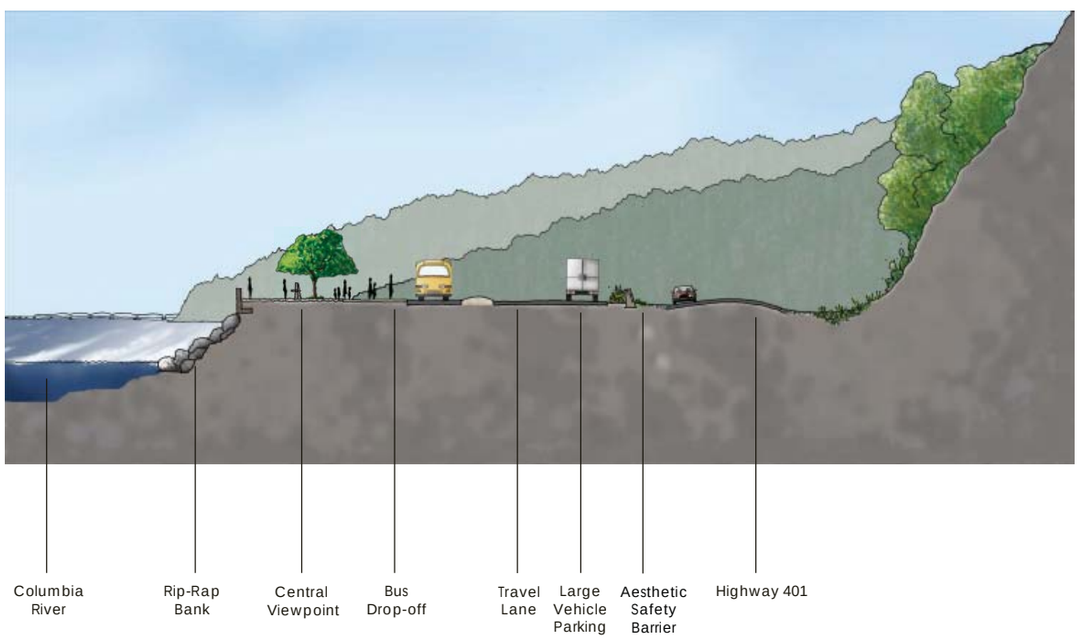
1 - Section Through Dismal Nitch Interpretive Feature



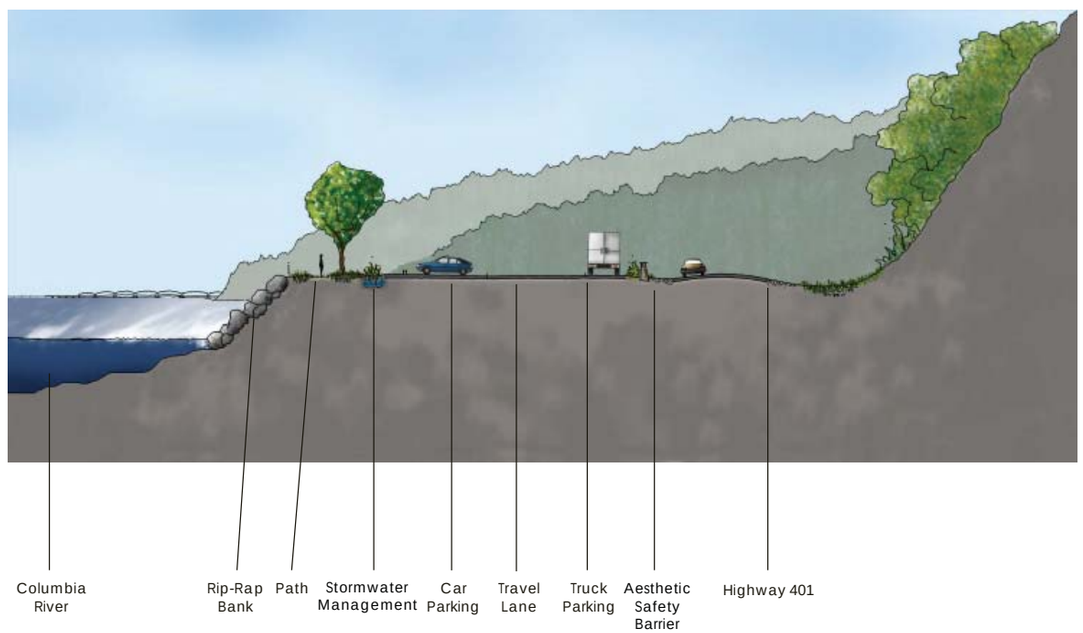
2 - Section Through Information Center



3 - Section Through Bus Drop-off & Central Viewpoint



4 - Section Through Parking Area



3.5 SAFETY REST AREA & RESTROOM/INFORMATION CENTER

Travelers arriving at the SRA will pass by the main feature area prior to parking. Walking past the entry plaza and arrival/basic information signage, visitors will find the restrooms conveniently located. Just beyond will be an information center for both the National Park and for Pacific County.

Information signage for the site, and mapping for the National Park will be displayed in an open roofed outdoor space (g). The Pacific County Information Center depends on brochures, and needs to be planned flexibly so that it can be manned when appropriate, or unmanned, or secured as needed and as funded by the county. An additional possible use for the area is a free coffee station operated by local volunteers, similar to those seen in other WSDOT Safety Rest Areas.

Because of the indeterminate nature of the program for the Information Center, it has been designed as a flexible multi-use space (f) with an ample roofed outdoor space connected to it. Some additional power and utilities will be provided to serve future unanticipated needs. The roofed outdoor space has a valuable function as a place of shelter in inclement weather for small tour groups and individuals.

Design standards and fixture counts have been provided by WSDOT as a recommendation for this phase of the project only, and as a standard for the purposes of budgeting. The planning meets ADA requirements. All of the restroom fixtures are backed up to wide service chases, providing ample access to the plumbing for maintenance, and fixtures will be “standard or equal”. In our design, the adjacent maintenance room (c) doubles as a service access zone.

Program Description

a. Men’s Restrooms — approx. 180 sf

Provide two stalls, one urinal, two sinks with hot and cold water, two hand dryers, two soap dispensers, two mirrors, floor drains, a lockable hose bib and a lockable electrical outlet. Partitions should be leather-grained stainless steel. Non-ADA stall width standard shall be 36 inches on center. ADA stall shall be full width of restroom. In addition, a wall-mounted baby changing station shall be provided and can be located within the ADA stall. Walls and floors should be finished with ceramic tile or other durable, nonporous material. The restroom shall be designed to meet the latest ADA guidelines.

b. Vending Area

A secured covered space for two vending machines, complete with power, recycling and trash receptacle should be incorporated into the building design.

c. Mechanical / Janitorial Service Area — approx. 150 sf

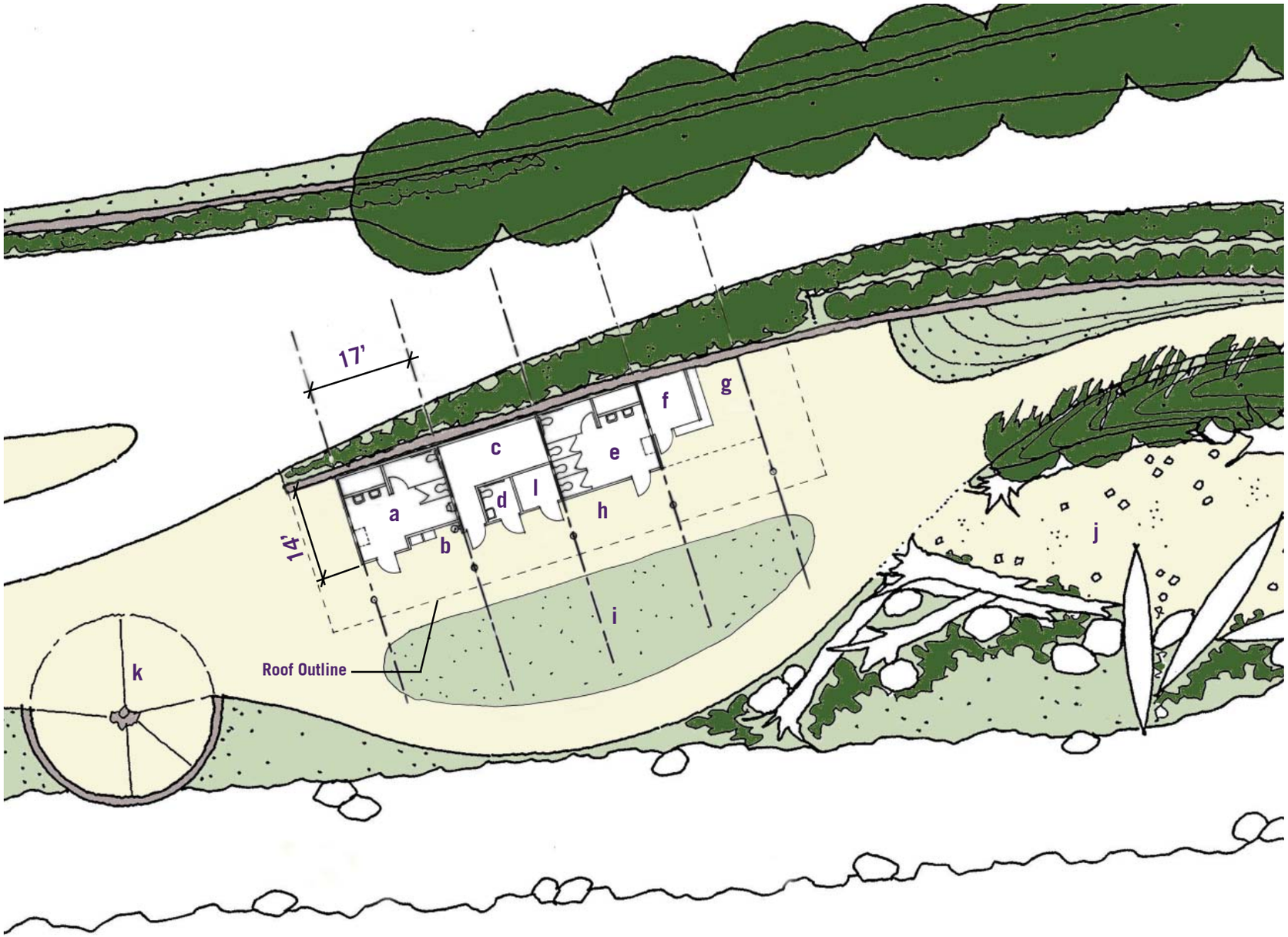
Janitorial is combined with mechanical room. Space shall contain a service sink with hot and cold water, a mop holder, a floor drain and a phone jack. Fifteen linear feet of 16” deep storage shelving shall be provided. Walls shall be painted CMU or other durable construction. Floors may be concrete. For mechanical, provide adequate space for the HVAC handlers, hot water heater, a telephone jack, irrigation controls, and electrical panels. Walls shall be painted CMU or other durable construction.

d. Assisted Use Restroom (unisex) — approx. 50 sf

This will contain one stall, one sink with hot and cold water, one hand dryer, one soap dispenser, one mirror, one sanitary napkin disposal receptacle, a floor drain, a lockable hose bib and a lockable electrical outlet. All hardware must be stainless steel. All fixtures shall be installed to meet the latest ADA Guidelines. In addition, a wall-mounted baby changing station shall be provided. Walls and floors should be finished with ceramic tile or other durable, nonporous material.

e. Women’s Restrooms — approx. 200 sf

Provide four stalls, two sinks with hot and cold water, two hand dryers, two soap dispensers, two mirrors, floor drains, a lockable hose bib and a lockable electrical outlet. A sanitary napkin disposal receptacle is required near each stall All hardware must be stainless steel. Partitions should be leather-grained stainless steel. Non-ADA stall width standard shall be 36 inches on center. ADA stall shall be full width of restroom. In addition, a wall-mounted baby changing station shall be provided and can be located within the ADA stall. Walls and floors should be finished with ceramic tile or other durable, nonporous material. The restroom shall be designed to meet the latest ADA guidelines.



f. Multi-Use Space / Information Center — approx. 200 sf

Includes power, lights, and potential storage for brochures and space for information assistance. Needs visibility to the site for security.

l. Crew Space — approx. 50 sf

Space shall contain a desk, phone and cable jack, electrical outlets, a bar sink and counter. Accommodate for storage. Visibility to site for security, specifically to restroom entries.

CONCEPTUAL BUILDING PLAN
ORGANIZATION
LEGEND

a. Men's Restroom
b. Vending / Drinking Fountains
c. Mechanical / Janitorial Service Area
d. Assisted Use Restroom
e. Women's Restroom
f. Multi-use Space/ Information Center
g. Outdoor Multi-use Space/ Information
h. Porch/ Covered Area
i. Gathering Area
j. Dismal Nitch Interpretive Feature
k. Central Viewpoint
l. Crew Space

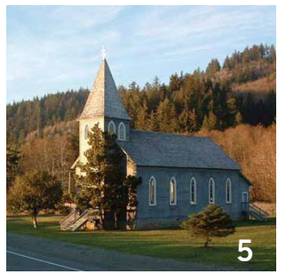
Architectural Character

The design of the buildings and the interpretive features at the Dismal Nitch SRA will grow out of the planning of the site, particularly the orientation of these facilities to sunlight and the expansive view of the river. The broad roofed area described previously is also planned for the south front of the buildings. This veranda is conceived as roofed and glazed, admitting sunlight for daytime brightness and warmth in a climate that is mostly cool.

Architectural style should be consistent with the image and character existing and/or planned for facilities within the new National Park (See examples on opposite page), which encompasses 11 sites in a 40 to 50 mile zone. Taking a cue from locally historic buildings at Fort Columbia plus images of the Megler Ferryboat Landing, the architecture will accommodate pitched and gable roofs, pilings and columns, and porches. Compatible with the imagery of wood frame construction, the buildings will be built in fire resistant materials or heavy timber. This is to achieve an insurable fire rating consistent with the site's distant proximity to the fire station in Chinook.

FORT COLUMBIA STATE PARK BARRACKS

MEGLER FERRY LANDING / RAILROAD DEPOT



NATIONAL PARK AND REST AREA EXAMPLES

ARCHITECTURAL STYLES

LEGEND

1. Fort Columbia State Park, WA.
2. Fort Columbia State Park, WA.
3. Fort Columbia State Park, WA.
4. Netul Landing, OR.
5. St Mary's Chapel, Station Camp, WA.
6. Mt Rainier National Park, Longmire, WA.
7. Bryant House, S. Mockbee, MS.
8. Washington Pass Rest Area, WA.
9. Washington Pass Rest Area, WA.
10. Washington Pass Rest Area, WA.
11. San Juan Island, Restroom, WA.
12. Bayview Corner Restroom, Whidbey Island
13. Hammonasset State Park, Pavillion, CT.
14. Hammonasset State Park, Restroom, CT.
15. Olympic National Park, Port Angeles, WA.
16. North Cascades National Park, Porch, WA.
17. Chitna Rest Area, AK.
18. Linn County Rest Area, OR.
19. Paris, Public Restroom
20. Zion National Park, UT.
21. Zion National Park, Solar Array, UT.
22. Zion National Park, UT.
23. Zion National Park, Interpretive Display, UT.
24. Solar Crest, Restroom

3.6 SUSTAINABILITY: GOALS & SYSTEMS

The State of Washington has a strong interest in site and architectural sustainability, as evidenced in recent legislation and Executive Orders from the Governor. This project and this site present a good opportunity to incorporate sustainable practices in the design of the site and its future structures.

Also, it was evident during public involvement that there is support for the State's program of sustainable practices for the Dismal Nitch SRA improvements.

The governing rating system for sustainable site and building development is LEED (Leadership in Energy and Environmental Design). This rating system was developed by U.S. Green Building Council (USGBC) to "certify" buildings that achieve a certain level of sustainability. This project has the potential for this certification with the proper sustainable approach.
As is stated in the LEED Reference Guide, this approach:

> "...strives to balance environmental responsibility, resource efficiency, occupant comfort and well-being, and community sensitivity..."

Options for sustainable practices include photo-voltaic (PV) panels. They could supply a portion of the site's electrical needs, but would need to be supplemented with other sources of power during various times of the year. Investments in sustainable elements, like PV panels, will be considered in the final design phase, as these technologies are constantly evolving in efficiency and cost-effectiveness.

In this Master Plan we would be premature in determining a specific sustainability program for the site and the buildings, but the agency partners can recommend some general principles.

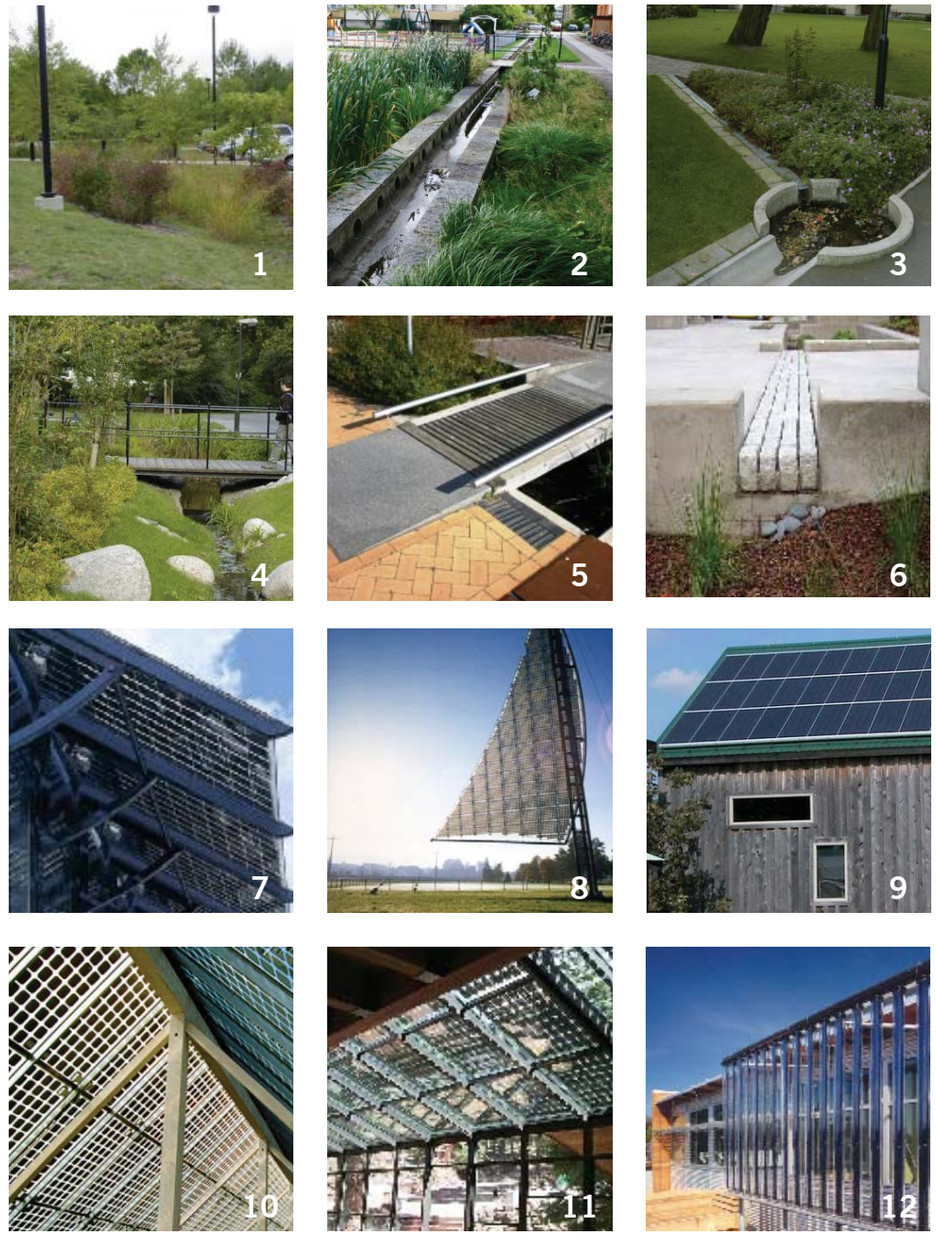
Site Sustainability

Minimize impervious surfaces

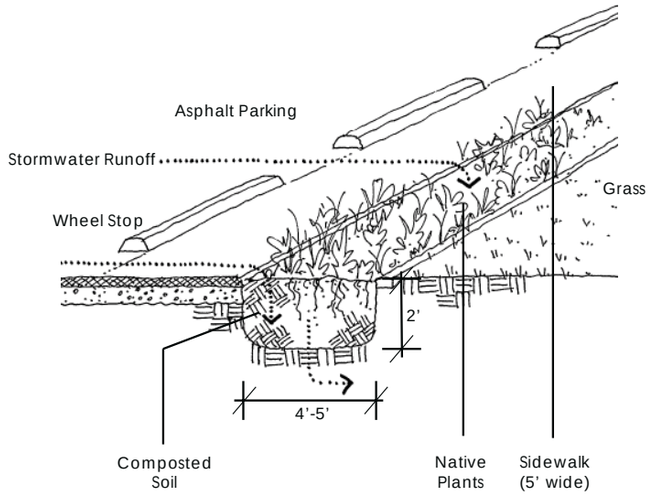
The asphalt parking lot, travel lanes, and entry/exits at the SRA have been re-designed and engineered to reduce their footprint by over 20 percent. This allows the stormwater to filter through vegetation and infiltrate through soil instead of picking up parking lot pollutants and draining directly into the Columbia River.

Minimize disturbance of natural areas

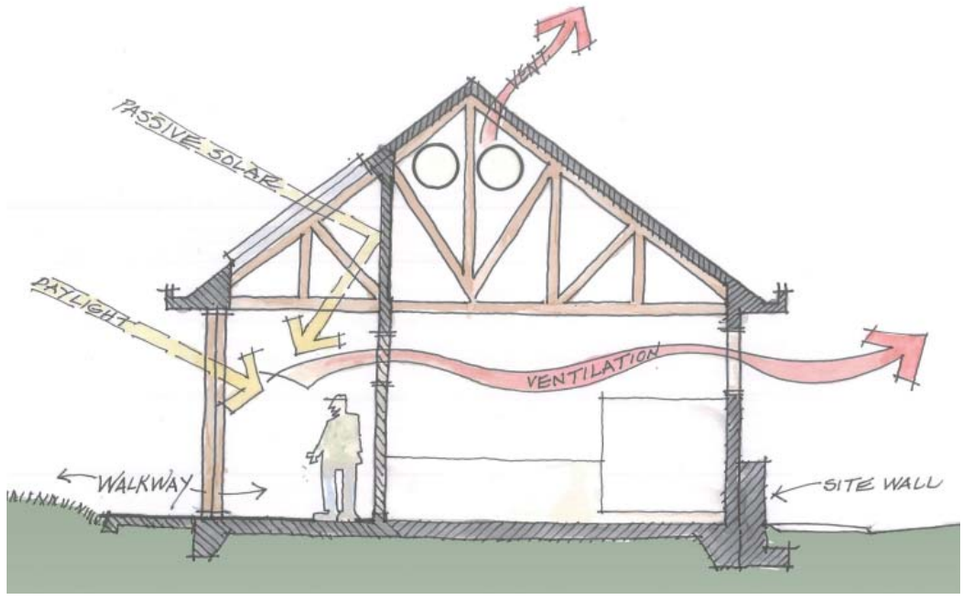
The western point is currently undeveloped as part of the SRA. Minimal development in this area includes improvements to accommodate recreation users. These improvements include unpaved trails, interpretation, and a viewpoint. No parking or structures are proposed for this area. Removal of invasive species and restoration plantings will enhance this area as well.



SUSTAINABLE DESIGN
FEATURES
LEGEND
1 through 6: Stormwater Site Design Images, 7 through 12: Solar / Photovoltaic Building Integration Images



STORMWATER MANAGEMENT DIAGRAM



BUILDING SECTION

Treat stormwater run-off

Landscape planting beds are designed to accommodate stormwater run-off in order to filter pollutants and toxins from the water, resulting in better water. (See Stormwater Management Diagram) They contain composted soil and specific plants that meet the requirements of the soil moisture conditions, which range from seasonally saturated to mostly dry. Rainwater falling on the impervious paving of the parking lot will flow to the stormwater treatment area (adjacent to the parking area) instead of the catch basins, which have been conveying stormwater from the parking lot directly to the Columbia River by pipe. Stormwater treatment design will be in accordance with the 2004 Highway Runoff Manual and Ecology's Stormwater Manual.

Use native plant species

Native plants are those that occur naturally in a given region. There are a number of reasons to use native plants at this site. Native plants are adapted to growing in the region's soils and climate requiring less maintenance and irrigation than do non-natives species. Native plants often attract a wider variety of native animals, such as birds and insects, than do exotic plants. There is also an educational and interpretive opportunity- native plants are the species that Lewis and Clark encountered and used during their expedition in this area.

Use local stone, gravel, and natural landscape materials

These materials should be obtained from local sources and quarries to limit delivery costs and limit the energy expended to haul materials to the site. Aesthetic consistency between the site and surrounding landscape is often achieved by using local natural materials.

Use sustainable materials in site furnishings

Whenever possible, site furnishings should be manufactured with recycled materials or be of the quality that the usable life-term of these amenities is significant, minimizing frequent maintenance and replacement. Regionally produced materials and rapidly renewable materials should also be given consideration.

Building Sustainability

Natural Ventilation

The restroom and information center lends itself to natural ventilation, and the site is positioned to receive breezes from the river. (See Building Section to the left)