

DESIGN GUIDELINES FOR ROADSIDE ELEMENTS

9





Caption

The unique scenic qualities and visual characteristics....

of the San Juan Islands can be preserved and enhanced by following the guidance in this section of the corridor management plan (CMP).

improvements could be designed and implemented. The guidelines will be most applicable to improvements along

and within the scenic byway right-of-way and projects that are supported by byway funding or other public funding sources.

As projects and improvements are implemented along the byway, planners and designers involved with those efforts can refer to this section of the CMP for design examples and concepts. These design approaches and treatments are responsive to and consistent with the byway's existing visual character. The intent of providing this guidance is not to strictly regulate or mandate design approaches, but rather to guide, encourage and set the stage for how byway elements and roadside

PURPOSE

The purpose of this section of the CMP is to guide design and implementation of roadside byway improvements and features through cohesive and consistent, context-sensitive approaches and treatments.



Other Design Guidelines, Standards, and Requirements

In addition to the guidance in this section of the CMP, Project planners and designers will also need to reference all applicable local, state, and federal design standards and requirements, including the following:

- San Juan County requirements related to signing, buildings, site development, and road right-of-way improvements (including clear zone dimensions and requirements)
- National Park Service and Washington State Parks and Recreation Commission requirements
- Town of Friday Harbor Historic Preservation Design Review Board requirements per Friday Harbor Municipal Code 17.64.060
- Applicable requirements of the International Building Code, as well as Americans with Disabilities Act Accessibility guidelines (ADAAG)
- Cultural resource preservation requirements that apply to all federally funded projects and require consultation with Native American tribes of the region, as well as the State Historic Preservation Officer
- Other requirements that may be applicable to the specific site/location, depending on ownership and jurisdiction, check with San Juan County staff, or Town of Friday Harbor staff if the project is in the incorporated limits

Guiding Principles for Planning and Design

The following guiding principles apply to the planning and design of roadside elements along the scenic byway.

- Preserve and enhance the existing scenic qualities and visual character of the byway and surrounding visible landscapes through context-sensitive design approaches, as demonstrated in the examples and concepts of this section of the CMP.
- Strengthen the presence of and create a consistent “brand identity” in ways that enhance the visitor experience and leave a positive memorable impression of the byway.
- Provide aesthetic cohesiveness in the selection of materials, colors, and design styles for development of roadside elements and new features along the byway.
- Provide features that will help guide visitors/travelers and promote recognition of the byway.
- Improve safety for byway travelers through enhanced wayshowing elements and wayside improvements.

The Importance of Context-Sensitive Solutions in the San Juan Islands

The San Juan Islands are located in a unique setting that, because of limited lands and sensitive resources, is very

vulnerable to changes made through development. As described throughout this CMP, there are many sensitive and rare natural and cultural resources throughout the islands. Improvements within the scenic byway right-of-way, along the roadside, or on lands visible from the byway can affect the scenic qualities and visual characteristics of the islands. These existing qualities are cherished by the citizens of the islands, as well as the hundreds of thousands of visitors who go there each year. Context sensitive solutions/design approaches are important in order to preserve and enhance these qualities.

What Are Context Sensitive Solutions?

Context sensitive solutions (CSS) result from a collaborative, interdisciplinary approach that involves all stakeholders in providing a design solution that fits its setting. For transportation and roadside improvements, it is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions.

How Do You Reach Context Sensitive Solutions?

- 1) Strive towards a shared stakeholder vision to provide a basis for decisions.
- 2) Demonstrate a comprehensive understanding of contexts.
- 3) Foster continuing communication and collaboration to achieve consensus.
- 4) Exercise flexibility and creativity to shape effective solutions, while preserving and enhancing community and natural environments.

Achieving Project Success and Design Excellence

- *The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.*
- *The project is a safe facility for both the user and the community.*
- *The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.*
- *The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.*
- *The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.*
- *The project is designed and built with minimal disruption to the community.*
- *The project is seen as having added lasting value to the community.*

Source: *Thinking Beyond the Pavement: A National Workshop on Integrating Highway Development With Communities and the Environment*, Federal Highway Administration

Sustainable Planning and Design

Sustainability is an important consideration in planning and design of byway projects. Sustainable design balances human needs with the carrying capacity of the natural and cultural environments, avoiding or minimizing impacts to those environments. Sustainable design creates optimum and harmonious relationships between people and their environments. It allows opportunities for people to experience scenic qualities, natural habitats, wildlife, and plants with minimal effects on them.

Preserving the sense of place in the San Juan Islands and the scenic byway as part of this place is a critical aspect of sustainability. The uniqueness of the San Juan Islands is what drives visitors' interests and desires to see and experience this place. In providing facilities and activities for visitors, special care must be taken to not destroy the very resources and qualities the visitors are coming to experience. Retaining and enhancing existing aesthetics and visual character and protecting natural and cultural resources are the actions that will help preserve the islands' sense of place.

In addition to avoiding and minimizing impacts to the natural and cultural environment, sustainable design minimizes energy use or generates energy, manages or reuses waste, and conserves water. Sustainable design maximizes the use of local renewable resources and recycled and recyclable materials. The use of imported goods is minimized as much as possible. Sustainable design seeks to do more with less—more function within less space and more sharing of resources and spaces. It minimizes also long term upkeep and

replacement needs through the construction of lasting, durable improvements that require minimal maintenance and have a long life cycle. This results in a greater return on investment for public/capital expenditures. There are many excellent resources available to guide green building and sustainable design practices. Refer “References and Resources” in the appendix.

Existing Byway Context—Design Influences and Styles

In order to preserve and enhance the special characteristics of a place, it is important to have an in-depth understand of the existing natural systems and cultural influences that are inherent to that place—the existing context. Images on the following pages show the existing natural character visible from both marine and land segments of the byway, including natural conditions such as:

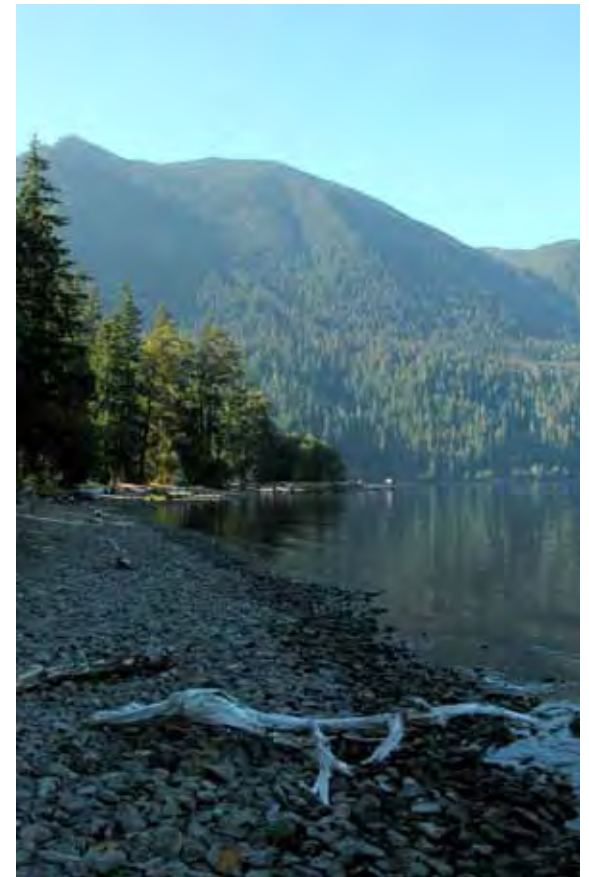
- Bluffs and beaches
- Forests/wooded areas
- Pastoral open spaces and fields
- Prairies and meadows

Vernacular architectural styles (historic and present-day) also influence the look and feel of the byway at every turn, including:

- Villages and hamlets nestled in the scenic landscape
- Unique places such as the historic Rosario Resort on Orcas Island and historic Roche Harbor on San Juan Island, that each have their own style and character

- Rustic Cascadian features in the parks, including Civilian Conservation Corps (CCC)-built features at Moran State Park and other locations
- Old barns throughout the islands, built for many purposes over time
- Arts and Crafts and Craftsman style design integrated into buildings and features
- Mid to late 19th/early 20th century architectural styles evident in historic buildings in the Friday Harbor Historic District, Orcas Village, and other locations

BLUFFS & BEACHES



FORESTS/WOODED AREAS



PASTORAL OPEN SPACES & FIELDS



PRAIRIES & MEADOWS



VERNACULAR ARCHITECTURE



VERNACULAR ARCHITECTURE



Recommended Design Styles for Roadside Elements

Given that roadside elements are intended to complement the scenic byway, a design style that blends with the scenery and represents a park-like aesthetic is desirable. The contextually appropriate Rustic Cascadian style has been used in national and state parks in the Pacific Northwest and would fit well along the byway given that it extends through and to various parks and natural areas. As evident in Civilian Conservation Corps (CCC)-built park infrastructure of the 1930s, the Rustic Cascadian style uses heavy timber and stone and integrates the craft arts such as blacksmithing, woodcarving, and other forms of art. There are existing Rustic Cascadian buildings and features throughout the San Juan Islands Scenic Byway.

The Rustic Cascadian style is also complementary to the agricultural aesthetic (old barns, sheds, and farm cottages) found in some areas along



Typical Features of the Rustic Cascadian Style

- *Expression of substantial structural strength*
- *Low hugging profile/human scale emphasis*
- *Heavy timber (often log) and stone construction*
- *Unpeeled logs or half round logs or rough hewn timbers as beams, sometimes siding*
- *Multi- paneled windows (small paneled preferred)*
- *Exposed structure and decking*
- *Moderately to steeply pitched hipped and gable roofs*
- *Cedar shakes/shingles*
- *Sometimes asymmetrical composition*
- *Large stone chimneys*
- *Exterior materials and finishes complement the natural landscape such as rough-hewn wood, timbers, and rock; painted metal in an earthtone or accent color*
- *Varied exterior textures*
- *Board-and-batten or shingled siding left unpainted*
- *Natural materials such as cut stone used at the foundation, bases of columns, etc.*
- *Hand-worked metal fixtures*
- *Hand-crafted wood details, rustic decorative elements and artworks integrated into design*

the byway. Features of the style, such as pitched roofs and board-and-batten siding in some cases, are also consistent with architectural styles of the 1800s and early 1900s found along the byway.

Given the strong influence of arts and crafts in the islands, with pottery makers, painters, wood carvers, and various craftspeople, there could be opportunities to get local artists involved. Arts and crafts elements, such as tiles, carved wood features, and decorations could be integrated into the design of the roadside features, including Native American art and symbols with involvement of the tribes.

Recommended Materials Palette

To express the Rustic Cascadian style, natural, regionally available materials such as heavy, rough-hewn timbers or logs and the integral use of rock or stone should be used. The images on the following pages represent the recommended materials palette for roadside features.

Rock and Stone

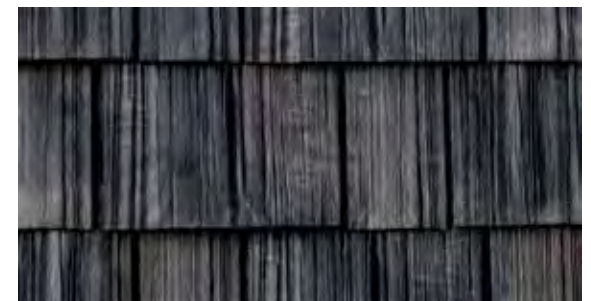
With the nickname “rock island,” San Juan Island, and other islands as well are founded on solid rock, which is clearly evident in the scenic views of rocky cliffs and bluffs along the shorelines. Rock outcrops occur all along the byway.

Glacial erratics and boulders are also found throughout the islands, remnants of the retreating glaciers of the Ice Age. Cut stone was used to construct historic lime kilns on both San Juan Island and Orcas Island, and field stone construction is found in foundations of barns and buildings throughout the islands. The tower at the top of Mount Constitution is also made of cut stone. This type of stone is most common throughout the islands, and as such is more appropriate as a design element than smooth river/ beach rock or rounded rubble. However, smooth, rounded rock elements could still be integrated into design as accent elements as long as the predominant look is the cut stone.



Timber

Heavy, rough-hewn timbers or logs (peeled and unpeeled) have been used in construction of picnic shelters, the Stage on the Green, restrooms, and other buildings in the parks and public areas along the byway. These are a source of inspiration for design of roadside elements. Recycled barn wood, and weathered wood/timbers fit well in the natural landscape. Timber is readily available in the Pacific Northwest, but given concerns about loss of habitat and environmental affects, natural sources should be avoided (such as beach wood/ drift logs or fallen timbers in the forest). Avoid use of timbers and logs that are so large that they could be old growth. Procure timber from authorized suppliers.



Weathered Steel and Painted Metal /Wood

Weathered steel, which has a rich earth tone color blends well with the natural landscape along the scenic byway, and can be used for guard rails, as well as features of kiosks, shelters, and buildings. Painted metal is another material that can be used in roadside features—painted in accent colors that express the color palette for the byway or earth tones that fit the context. Painted metal (steel beams and posts, window frames, and other elements) can provide a colorful accent to the predominantly natural tones of the rock/stone and timber features of the roadside elements.



Arts and Crafts Elements

The possibilities for integrating arts and crafts into roadside elements along the byway are endless and subject to human imagination and creativity. Integrally, elements such as tiles, murals, decorative applications to buildings, pavement patterns and etchings, carved and painted posts, and other features can be integrally designed into the architecture. Even if arts and crafts are not integrated into architectural features, they can be provided as stand-alone elements, such as sculptures. Arts and crafts may be used to tell stories or convey historic events of the byway, and as such, can have interpretive value as well as aesthetic value.



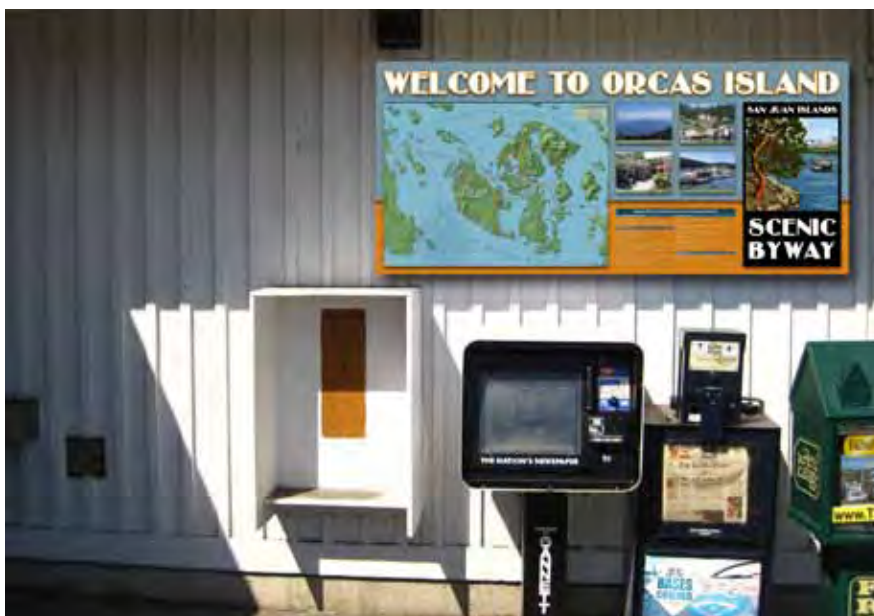
Design Examples and Concepts

Design examples and concepts are shown on the following pages to help inspire and influence the design of roadside elements along the byway.

Making Use of Available Space

There are blank wall spaces and empty kiosk faces in public areas and parks along the byway. These can be great places to locate byway information, such as the logo, a map of the byway, photos of key sites, stewardship messages, and other information to help guide visitors. Blank wall spaces at ferry terminals are available for these uses at the photo simulation images on these pages show. Ferry terminals are excellent locations to convey visitor information because they serve as gateways to the byway, and they are places where a lot of people gather and look for information. Making use of available space is a resourceful approach to displaying byway information, and also results in less need for infrastructure and signing along the byway routes.

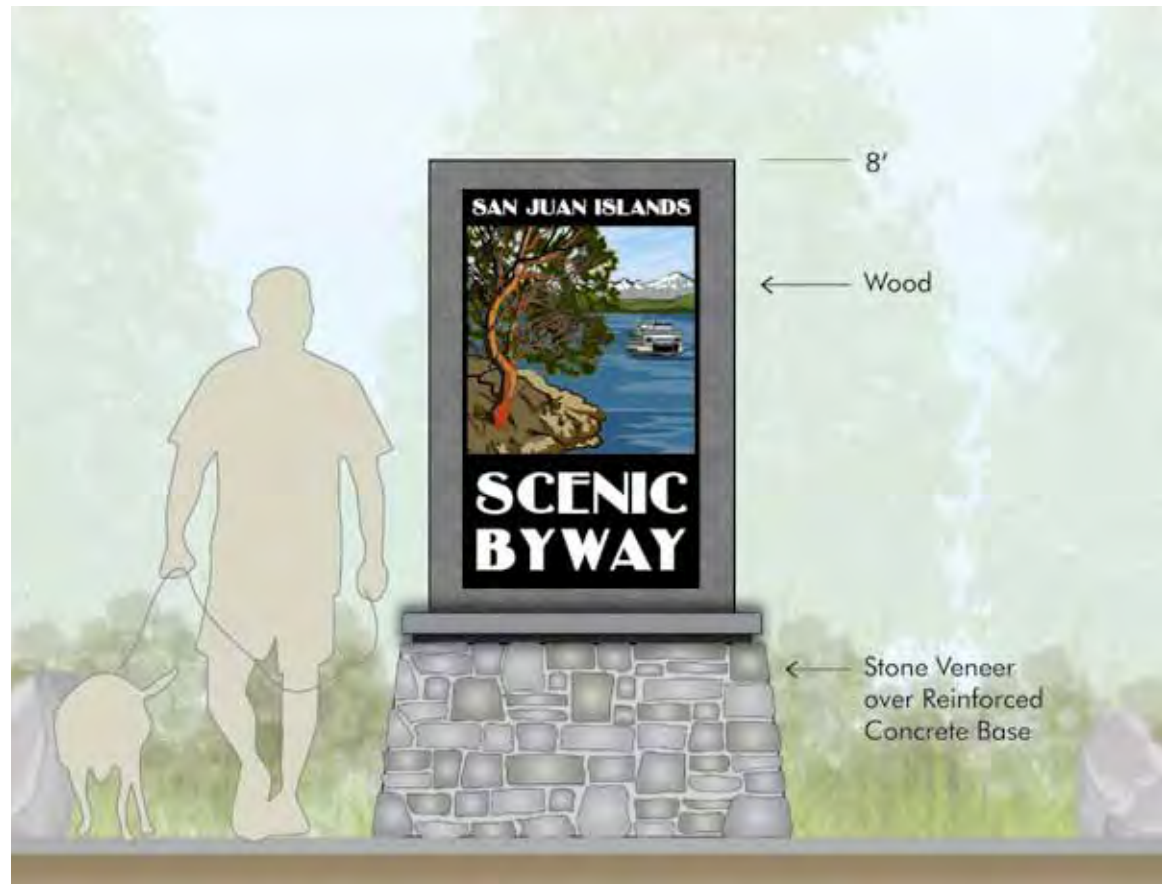




Gateways and Wayshowing Signs

Gateways at key entry points to the byway and wayshowing signs at important cross roads can help to reassure visitors that they are on the byway and guide them in their travels. Space for gateway monuments along the byway and funds for new signs are limited, so these types of features may take years to implement.

The current system of wayshowing signs on both islands functions adequately, but some additional signs are needed in a few locations to help guide travelers (see Section 8). The design style of the wayshowing signs on Orcas Island is unique and appreciated by Island residents. As such, it will be important to retain the existing wayshowing signs, while integrating new signs where needed that blend with and complement the older design style. The design should be upgraded so sign boards are easier to replace and add and so the structure is longer-lasting, as shown in the concepts on these pages.



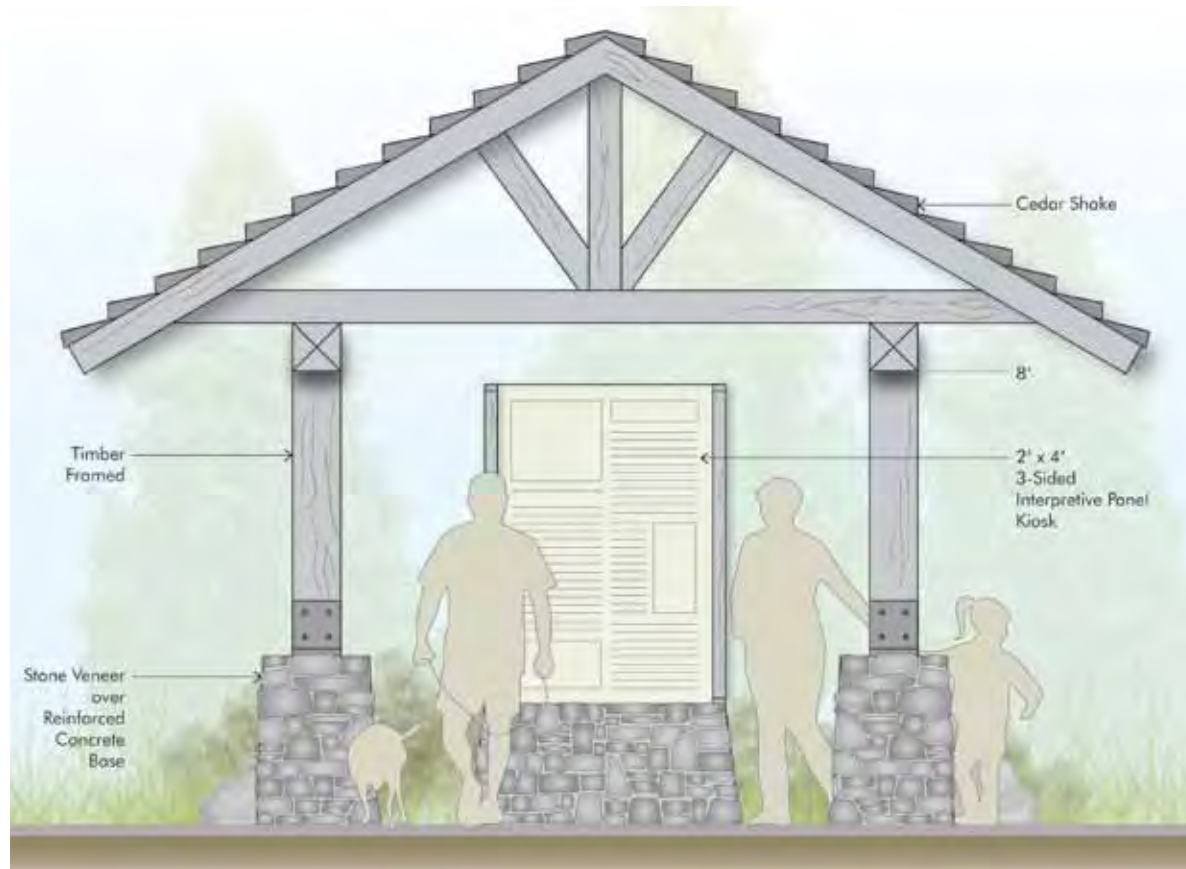


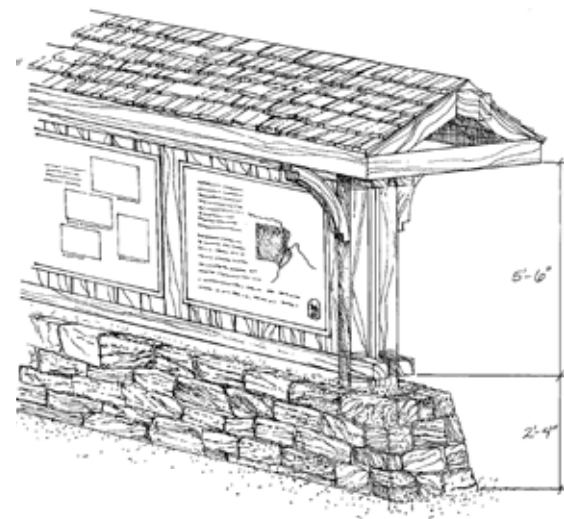
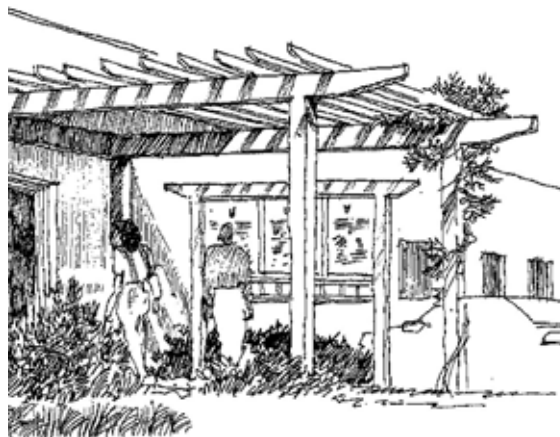


Kiosks and Shelters

Kiosks and shelters currently exist along the byway, and there may be a need for new ones in the future to display information and interpretation, shelter visitors in waiting areas, provide picnicking opportunities, and for other functions. The design examples and concepts on these pages show existing kiosks and shelters as well as ideas for new construction, reflecting the Rustic Cascadian style. Eco-friendly elements, such as green roofs, can be integrated into the designs.







Comfort Stations

Several partners have indicated that there is a need for comfort stations/small restroom facilities at key points along the byway. These can be integrated into the design of wayside improvements, as recommended in Section 11 of the CMP. Given that access to water, sewer, and other utilities may be limited in the locations where restrooms are needed, the byway partners should consider the use of self-composting, prefabricated restroom buildings. Purchasing a number of these may provide price discount opportunities. These are made by manufacturers to blend with natural settings and come in a variety of styles to fit the context. Solar composting features can be included, and because they can be used without water, sewer, and electricity, they are more eco-friendly, low impact buildings.





Waysides/Interpretive Displays

Waysides are places along the byway where people may stop and get out of their vehicles or off their bikes to rest and get information. They may also be places where the shuttle stops. Waysides often provide visitor information and interpretation. This information can be displayed on kiosks or other types of structures, such as low profile panels and upright displays.

For upright displays and low profile displays, off-the-shelf products are available from various fabricators who also serve federal land management agencies (such as the National Park Service and US Fish and Wildlife Service) and state parks. These are typically cast metal products with structural elements and hardware can be painted in an earthtone colors appropriate to the context. Because these are pre-fabricated, they are economical and easy-to-replace. They are also extremely durable and easy to maintain. They also ensure a consistent, cohesive means for displaying interpretation across the byway, which reflects quality in design and provides visual continuity.

Uprights bring the advantage of being able to display more content in one location, including visitor information as well as interpretation. They are typically suitable for visitor information hubs and group gathering places. They can interfere with viewsheds and scenic resources, so careful thought in placement is important.

Low profile displays are excellent for conveying resource-based/theme-based interpretation at key sites on the refuge. Typically sized at 24" vertical x 36" horizontal but also available in various other sizes, low profile interpretive panels allow the advantage of letting the viewer review the panel while also looking at the resources

beyond. With illustrative scenes depicting historical events that occurred in the setting, the panels allow the viewer to look at the illustration and then imagine the scene in the real setting beyond.

Use of existing available spaces for visitor information and interpretation can be resourceful. But placement of information and interpretation should be carefully considered to maximize effectiveness.

When considering locations and structure types for information and interpretation, ask the following questions:

- Is the location a hub or group gathering place? (in which case, upright displays may be most suitable)
- Is the location more resource-oriented, such as along a trail or boardwalk? (in which case, low-profile panel displays may be most suitable)
- Be sure that visitors can see/experience resources being interpreted from the subject location.
- In accordance with the Americans with Disabilities Act (ADA), interpretive displays and programs are public services, and as such should be designed to accommodate people with disabilities. Consider their needs in placement and design of each display.
- If using existing kiosks or wall spaces:
 - Is the location a place that visitors are naturally drawn to for information/interpretation?
 - Is it a comfortable place to view and read information (shelter from sun/weather and glare)?
 - Will visitors be able to see the resources being interpreted from that location?

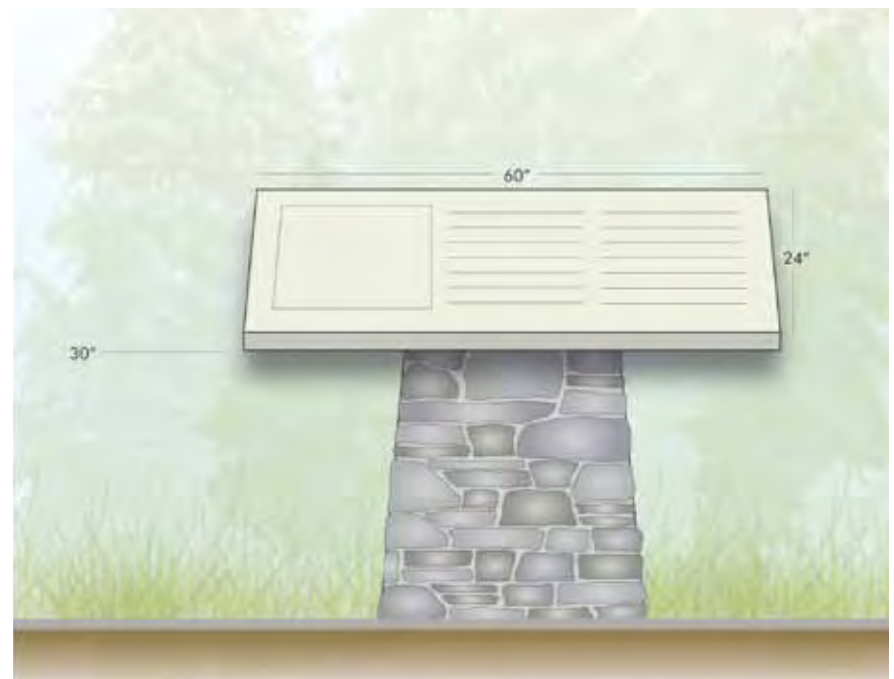
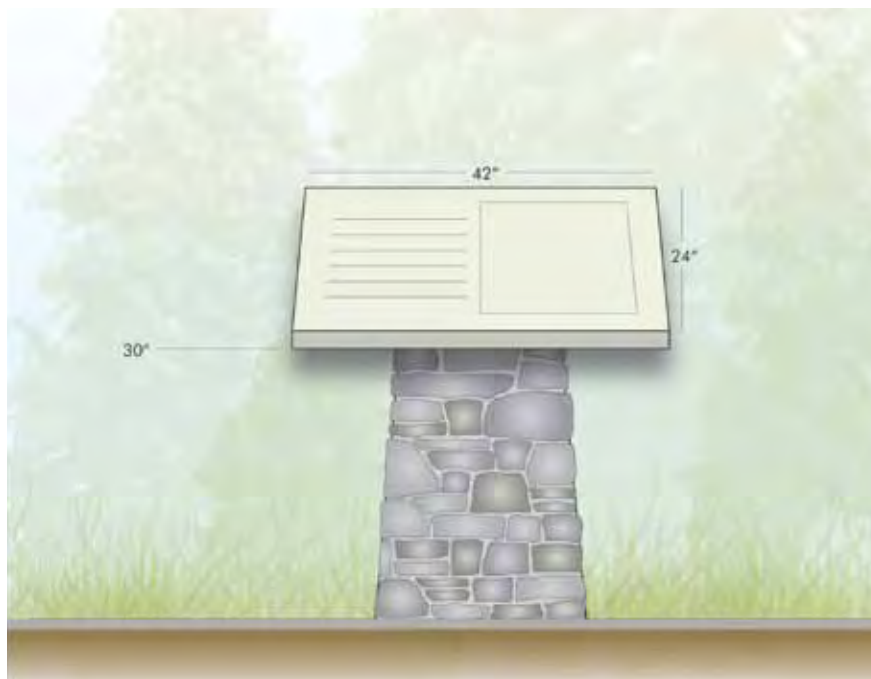
- Can an accessible route of travel be provided to the display and can it be mounted to allow for viewing by visitors in wheelchairs?
- Is information displayed at eye level?

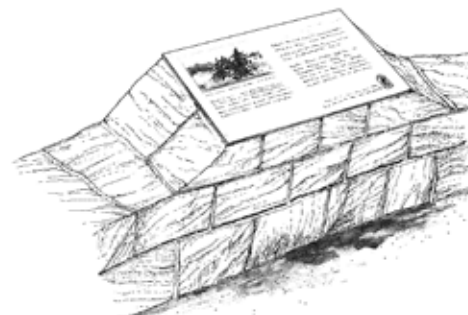
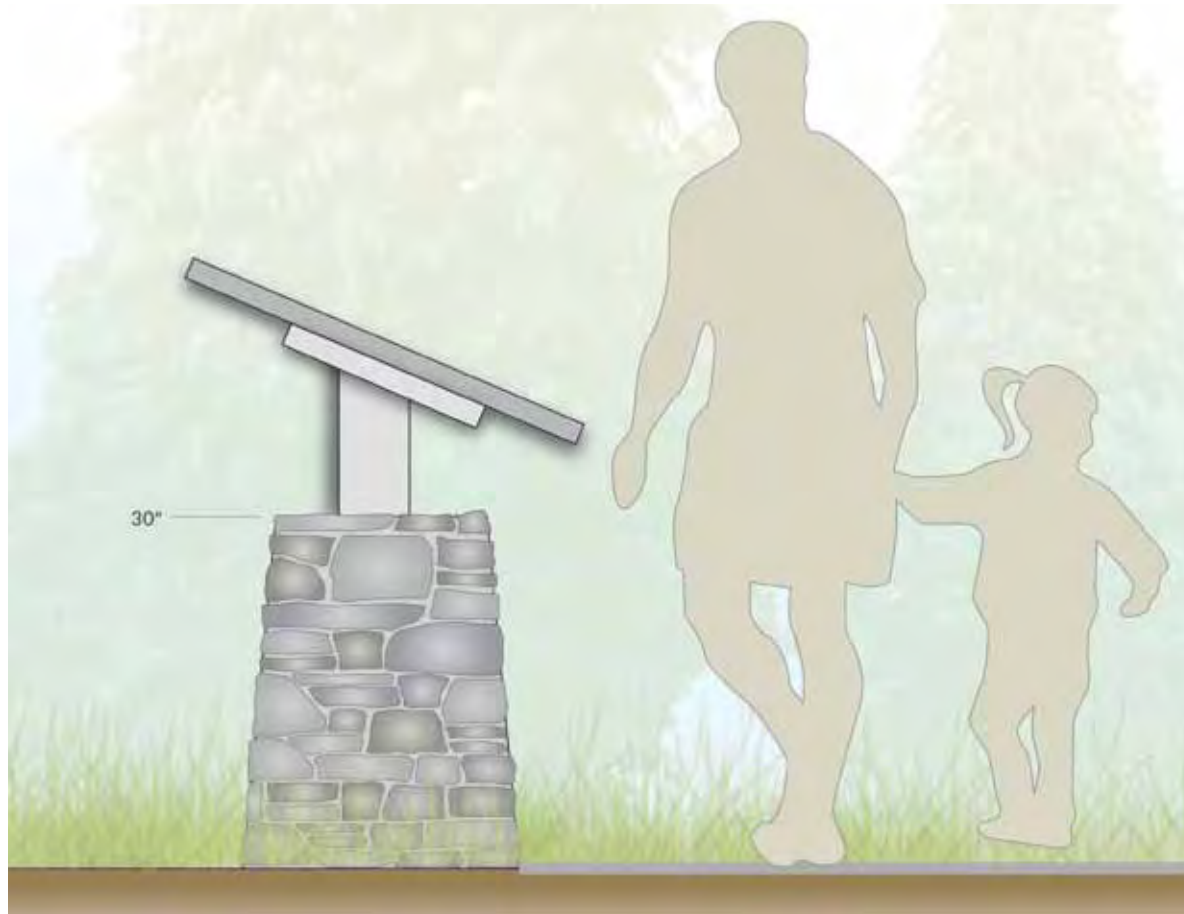
The graphic panels should be designed consistently across the byway, using the same design styles, colors and fonts as used in the logo and other graphic materials already developed for the byway.

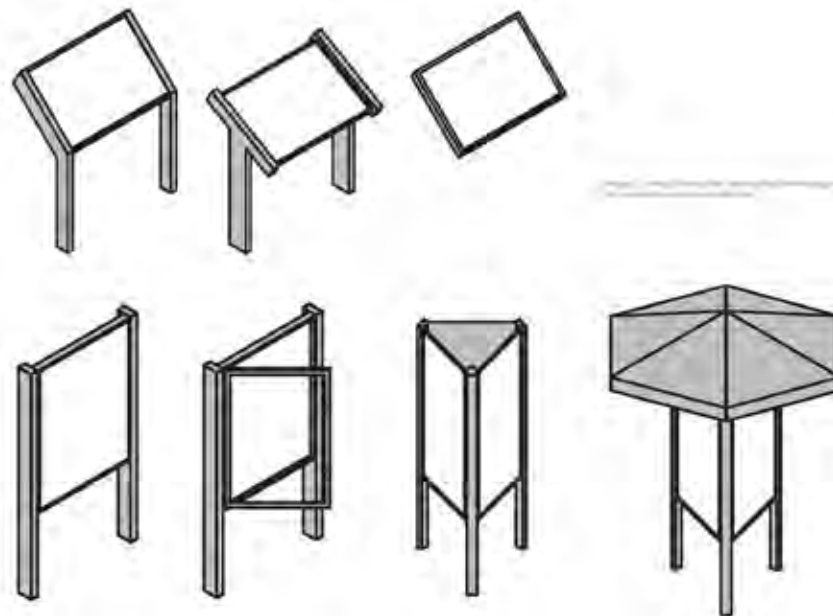
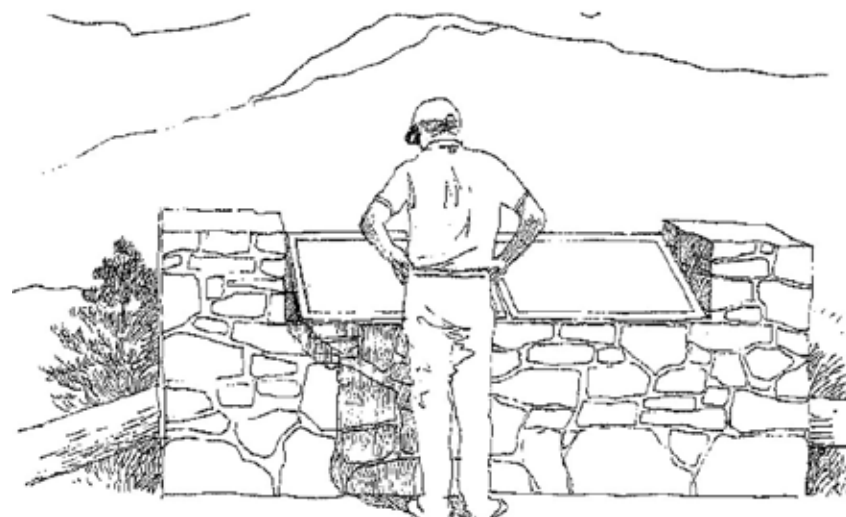
Static interpretive panels and visitor information displays can be helpful to visitors at key locations, but they should not be overly relied upon to guide visitors or installed in great numbers

along the byway. In a scenic setting, less is more. Provide only information and interpretation that is essential to educate and enlighten the visitor. Remember that the byway hopes to explore electronic/digital forms of conveying information and interpretation as time progresses (such as podcasts, QR coded messages, apps, and other internet-based programs). Over time, these approaches can take the place of static, on-the-ground signs that require maintenance.

Refer to Section 6 of the CMP for additional guidelines related to providing visitor information and interpretation. See also “References and Resources” in the appendix.



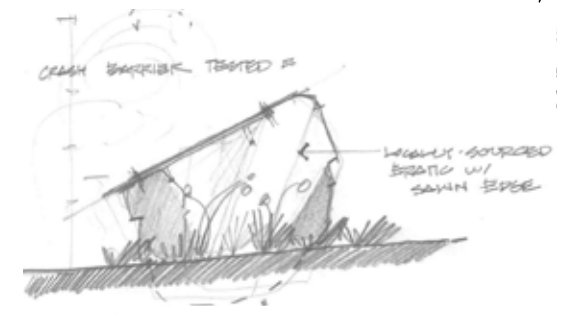
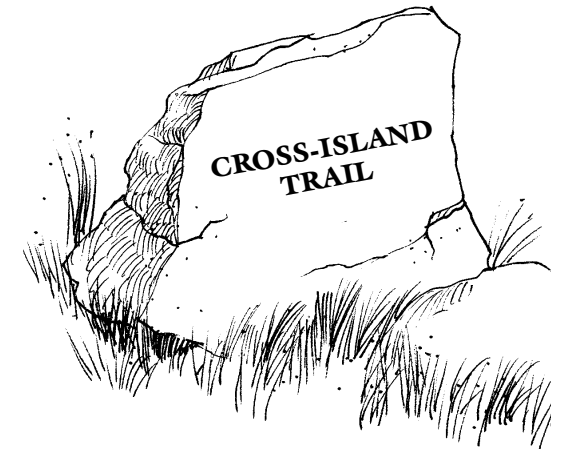




Site Signs and Markers

Some public sites and parks along the byway already have existing identity signs. Some do not. National, state, and county parks have their own specific standards for entry signs and on-site signing. If new signs are needed to identify sites, these could be created following both the park standards, as well as the scenic byway design guidelines. Inclusion of the scenic byway logo on the signs or sign bases can help to let visitors know that the site/park is on the byway and part of the experience of the byway. These can take the form of larger entry monuments, smaller identity signs/markers, or simpler approaches—such as a larger boulder carved with the name of the site and with the scenic byway logo affixed to it.





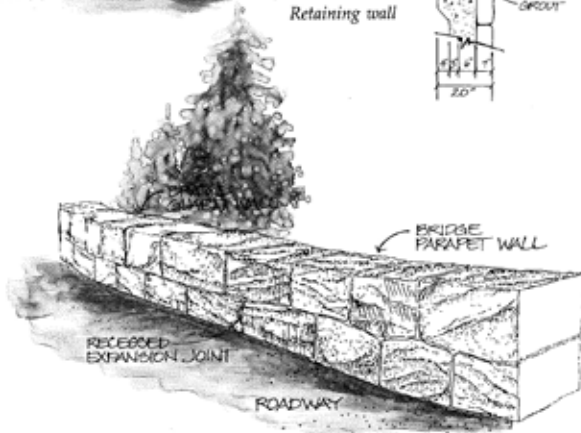
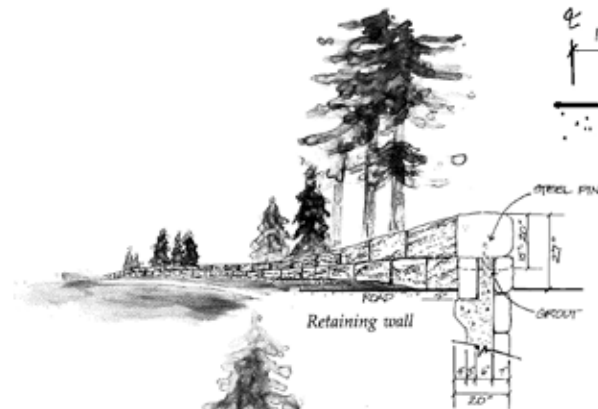
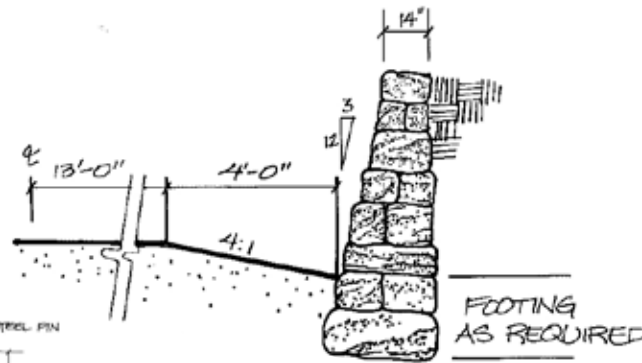
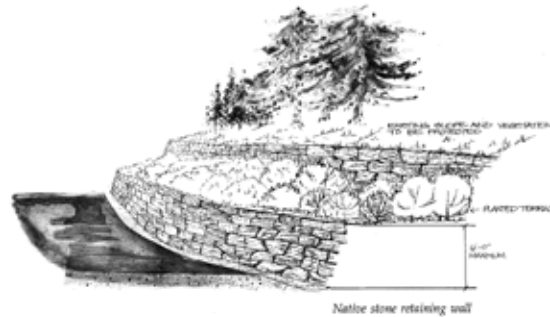
Milepost Markers/ Trail Markers

Integrating the byway logo and aesthetics into a consistent style mile marker along the route can serve multiple functions. It can help guide travelers along the byway routes (which turn frequently on both islands), and it can reinforce the identity and “brand” aesthetic of the byway. The markers can also help travelers measure their distances, a traditional function of mile markers. Trail markers can also be designed with consistency, and if they connect with the byway, can include the byway logo.



Fencing and Walls

As with other roadside elements, fencing and walls should be designed in a consistent manner along the byway as much as possible. Retaining walls of stacked rock/stone best represent the recommended design aesthetic. Split rail timber fences, similar to those shown on this page, are commonly found along the byway and blend well with both open field and forested landscapes.



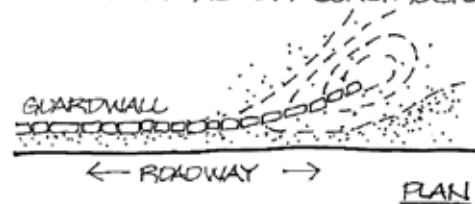
Guardrails

Creative and aesthetically pleasing designs are desirable for guardrails where required along the scenic byway. As new sections of guardrail are added or as older sections are replaced, the county should consider the best options for designs to blend with settings along the byway. Weathering steel guardrail is an example of an inexpensive barrier that may be considered acceptable in certain surroundings. For many byways, weathering steel has been a good solution, because its rustic color helps the guardrail blend into the environment. Timber guardrails are often installed in national park and state park settings and also can be designed to meet barrier safety requirements. Guardrail ends should not be rounded or allowed to descend into the landscape. Where landforms allow, guardrail termini should be tapered away from the roadway and transitioned into the landscape.





ADJACENT LANDFORM
NATURAL OR CONSTRUCTED



ADJACENT LANDFORM
NATURAL OR CONSTRUCTED



Shoulders and Clear Zone Requirements

Refer to San Juan County roadway standards for specific dimensional requirements related to shoulder widths and clear zones provided at the outside edges of the roadway shoulders. The American Association of State Highway and Transportation Officials (AASHTO) publishes various guides with standards and guidelines related to roadside shoulders and clear zones, as well as for pedestrian and bicycle facilities. The county's standards are based on these federal provisions. AASHTO guides encourage creativity and flexibility in scenic settings in meeting the design standards. For example, the width of travel lanes can vary depending on the setting, as well as traffic volumes and speeds. Shoulder widths also can vary. The minimum standard for striping bicycle lanes and for use of shoulders along bicycle routes is 4 feet. If off-road trails are provided along certain routes, less shoulder width may be needed.

In addition to space for bicycling, roadside shoulders provide other important functions such as pull off space for disabled vehicles. Because they are kept clear, they can enhance scenic views



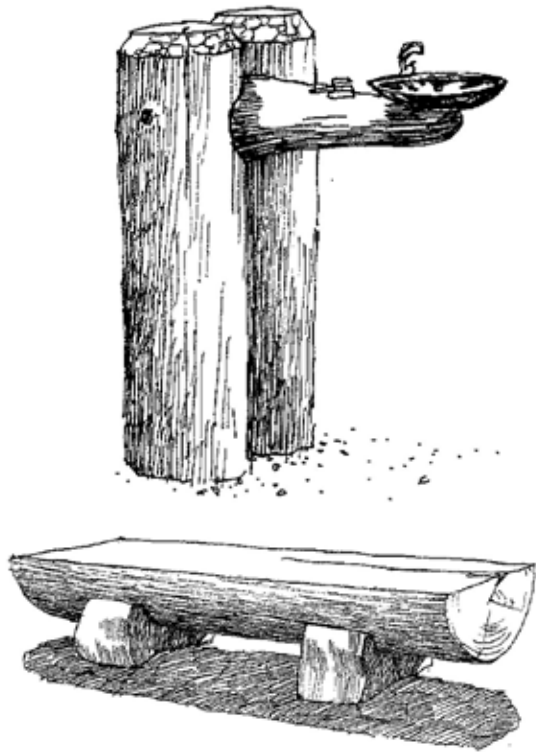
from the road. On the other hand, if shoulders are too wide, they can affect environmental resources and scenic qualities of the byway experience. Wide travel lanes and shoulders present a more urban appearance that is not in keeping with the rural countryside and natural setting of the byway. For these reasons, lane width and shoulder width should be kept to the minimum needed to facilitate safe travel by vehicles and bicycles.

The clear zone is the space on either side of the outside edge of the roadway. As defined in Chapter IV of the AASHTO

Green Book, the clear zone is "...the unobstructed, relatively flat area provided beyond the edge of the traveled way for the recovery of errant vehicles." The width of the clear zone is influenced by several factors, the most important of which are traffic volume, design speed of the roadway, and slope of the embankments. The AASHTO Green Book suggests providing a minimum clear zone width of 10 feet. <CONFIRM/CLARIFY WITH COUNTY.> It is important that the clear zone be kept free of obstructions such as walls, sign posts that are not designed as break-away, mature trees, or other fixed elements.

Other Features

A variety of other features may be located along the byway at waysides, parks, and other sites. Benches, picnic tables, drinking fountains, bicycle racks, overlooks, and other elements should be designed to blend with the other roadside elements. Natural materials and the Rustic Cascadian style should be used as much as possible, as shown on these pages.



Use of the Scenic Byway Logo

The byway partners envision use of the byway logo in a number of ways throughout the byway. The logo can be placed along the land routes at key intersections and locations to help guide travelers. In these usages, the byway partners will seek to use existing sign posts as much as possible to avoid adding new signs along the routes. Refer to the photo simulation examples on these pages. As previously discussed, the logo also can be integrated into milepost markers and other features along the byway as appropriate.

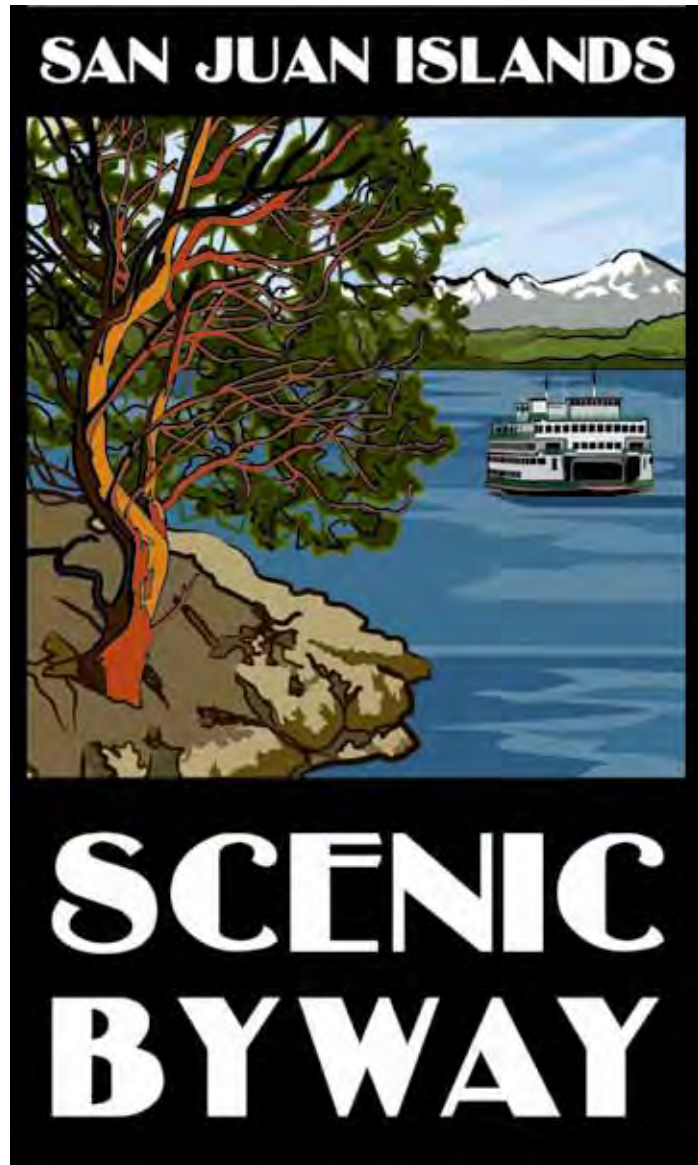
The logo may also be used at key sites along the byway, affixed to existing kiosks and site signs. It may also be integrated into gateway signs, as well as displays at the ferry terminals (see “Making Use of Available Space”). The byway partners also intend to use the logo for collateral materials and marketing products and activities.

These uses of the logo will strengthen visitors’ recognition of the brand identity of the byway and help travelers in discerning when they are on the byway or at sites along the byway.

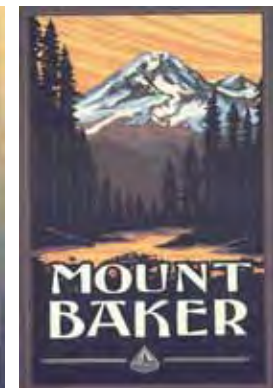




Creating a “Family” of Logos



Design Inspiration:
Old Postcards



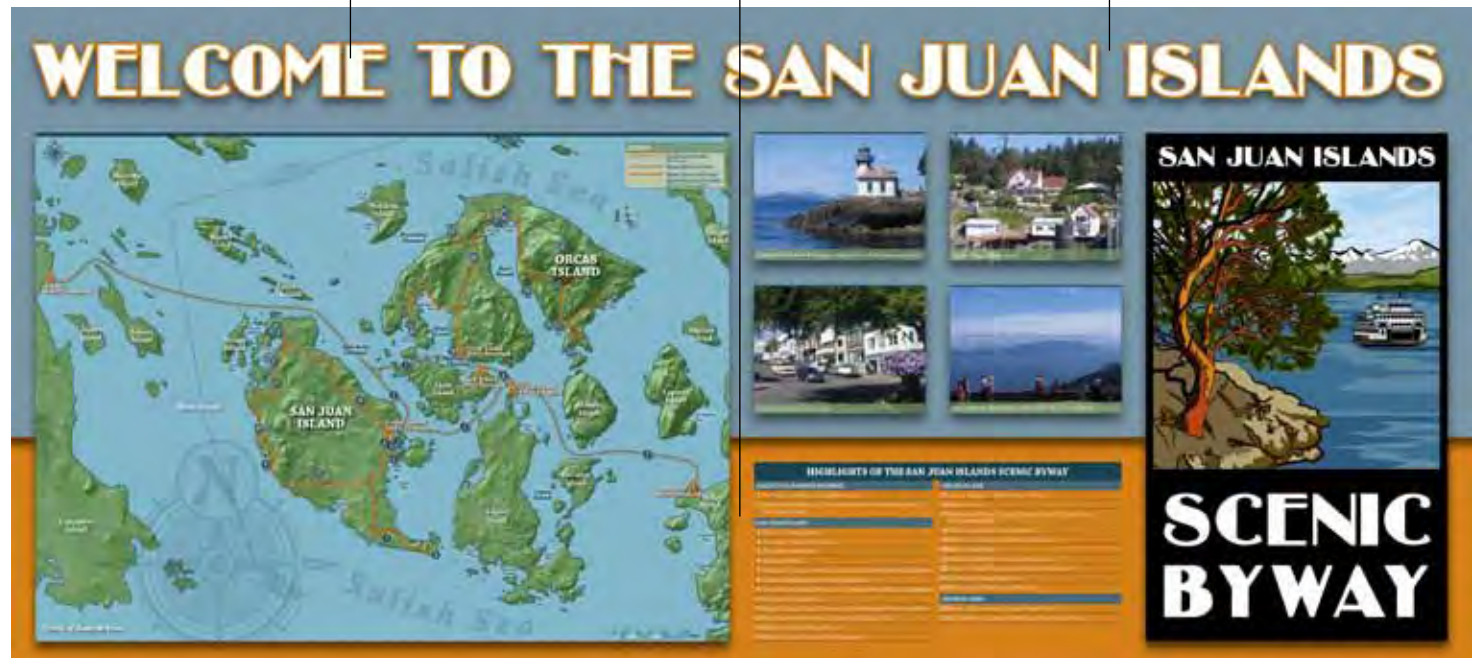
Recommended Color Palette

The recommended color palette for roadside elements and byway signing includes primary colors that blend with the various settings the byway traverses, as well as secondary colors (or accent colors) that draw more attention and have more graphic appeal.

FONT: Broadway Normal

ORANGE: C – 1
M – 50
Y – 99
K – 15

LIGHT BLUE: C – 24
M – 0
Y – 0
K – 43



Project Planning, Design, and Implementation Process

Suggested steps for project planning, design, and implementation are provided in Section 12. There are also a number of excellent resources available to help guide projects, including development of interpretive waysides and byway improvements:

- Wayside Exhibits, A Guide to Developing Outdoor Interpretive Exhibits, National Park Service
- AASHTO Green Book, Pedestrian and Bicycle Design Guides, and Other Guides
- Scenic Byways—A Design Guide for Roadside Improvements, USDA Forest Service and US Department of Transportation
- The Built Environment Image Guide For the National Forests and Grasslands, USDA Forest Service
- WSDOT Scenic Byway Logo Signing Guidelines

See also “References and Resources” in the appendix.