National Park Service
Cultural Landscapes Inventory
2008



Yakima Park Highway
Mount Rainier National Park

Yakima Park Highway
Mount Rainier National Park

Mount Rainier National Park concurs with the findings of the CLI, including the management category and condition assessment as identified below:

MANAGEMENT CATEGORY: **A: Must be preserved and maintained**

CONDITION ASSESSMENT: **Fair**

David V. Uberuaga 8/29/2008

Superintendent, Mount Rainier National Park — Date

Please return to:

Erica Owens
Cultural Landscape Inventory Co-coordinator
National Park Service
Pacific West Regional Office
909 First Avenue
Seattle, WA 98104-1060

STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

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September 17, 2008

Ms. Erica Owens
CLI Co-Coordinator
National Park Service
Pacific West Regional Office
909 First Avenue, Floor 5
Seattle, Washington 98104

In future correspondence please refer to:
Log: 091708-08-NPS
Property: Cultural Landscape Survey - Yakima Park Highway at Mt. Rainier
Re: Determined Eligible

Dear Ms. Owens:

Thank you for contacting our office. I have reviewed the Cultural Landscape Report for the Yakima Park Highway at Mount Rainier. It was a pleasure to read. Congratulations on a job well done! I concur with your professional opinion that the 12 of the historic features are eligible to the National Register of Historic Places, and 10 are not (see attached sheet) I look forward to further consultation regarding any effects to these resources as the park continues to provide maintenance and upgrades to the road system..

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800.

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Michael Houser
State Architectural Historian
(360) 586-3076
michael.houser@dahp.wa.gov

YAKIMA PARK HIGHWAY
MOUNT RAINIER NATIONAL PARK

Washington SHPO Consensus Determination of Eligibility

Actions Requested:

1) SHPO concurrence that the landscape characteristics as identified in the CLI contribute to the historic character of the Yakima Park Highway (see the following landscape characteristic descriptions in the Analysis and Evaluation section of the CLI: Spatial Organization, Natural Systems and Features, Land Use, Circulation, Topography, Vegetation, and Views and Vistas):

I concur __X__, I do not concur _____ that the landscape characteristics as described in the CLI contribute to the historic character of the Yakima Park Highway.

2) SHPO concurrence with the boundary adjustment for the Yakima Park Highway that includes all historic features associated with the road. (See the Boundary Description in the CLI.)

I concur __X__, I do not concur _____ with the boundary proposed for the Yakima Park Highway as described in the CLI.

3) SHPO concurrence with the list of contributing and non-contributing structures to the Yakima Park Highway cultural landscape, (see Buildings and Structures, Small-scale Features, and Circulation in the CLI):

Existing National Register Status of Contributing Structures: The following structures are already listed on the National Register of Historic Places (NR#97000344):

Structure Name	Date Listed on National Register
Yakima Park Highway	1997
Deadwood Creek Bridge	1997
Klickitat Bridge	1997
Fryingpan Creek Bridge	1997
White River Bridge	1997
White River Entrance Ranger Station	1997
White River Entrance Men's Comfort Station	1997
White River Entrance Women's Comfort Station	1997

Contributing Structures: Based on the information provided in the CLI, the following structures have been identified as contributing features of the Yakima Park Highway:

Contributing Structure Name	Date Built	Concur	Do not Concur
Yakima Park Highway Guard/Retaining Walls – Type 5 (3)	1927-1931	✓	

Contributing Structure Name	Date Built	Concur	Do not Concur
Yakima Park Highway Guard Walls – Type 5 (2)	1927-1931	✓	
Yakima Park Highway Guard Walls – Type 1-B (3)	1927-1931	✓	
Yakima Park Highway Retaining Walls (2)	1927-1931	✓	
Yakima Park Highway Rock Barriers (16)	1927-1931	✓	
Yakima Park Highway 18" Culverts (101)	1927-1931	✓	
Yakima Park Highway 24" Culverts (20)	1927-1931	✓	
Yakima Park Highway Box Culverts (2)	1927-1931	✓	
White River Entrance Area Drinking Fountain	1927-1931	✓	
Sunrise Point Stone Bench	1927-1931	✓	
Sunrise Point Sidewalks	1927-1931	✓	
Yakima Park Highway Island/Median at White River Road Intersection	1927-1931	✓	

Existing National Register Status of Non-contributing Structures: The following structures are already listed on the National Register of Historic Places (NR#97000344) as non-contributing:

Non-contributing Structure Name	Date Determined Ineligible for National Register
Shaw Creek Bridge	1997

Non-contributing Structures: Based on the information provided in the CLI, the following structures have been identified as non-contributing features of the Yakima Park Highway:

Non-contributing Structure Name	Date Built	Concur	Do Not Concur
White River Entrance Station	2001	✓	
Yakima Park Highway Sim Wall at Big Dump Area	1995	✓	
Yakima Park Highway Guard/Retaining Wall (1)	Post 1941	✓	
Yakima Park Highway Guard Rail - Core 10 Steel W (1)	Post 1941	✓	
Yakima Park Highway 18" Culverts (14)	Post 1941	✓	
Yakima Park Highway 24" Culverts (6)	Post 1941	✓	
Yakima Park Highway 36" Culverts (1)	Post 1941	✓	
Yakima Park Highway Drop Inlets (6)	Post 1941	✓	
Yakima Park Highway Gates (3)	Post 1941	✓	
Yakima Park Highway Island/Median at White River Entrance Area	1990s	✓	

Reasons/comments why any 'Do Not Concur' blocks were checked:

9.17.08

FOR Washington State Historic Preservation Officer Date

DAHP Log # 091708-9-NPS

Please return forms to the attention of:
Erica Owens
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National Park Service
Pacific West Regional Office-Seattle
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(206) 220-4128
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Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history,

significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

Inventory Unit Description:

The Yakima Park Highway is a 15.335 mile road in the northeastern portion Mount Rainier National Park. The road is a linear landscape that was designed by landscape architects and civil engineers as a scenic drive through Mount Rainier National Park from Mather Memorial Parkway (Highway 410), to Yakima Park and the Sunrise Developed area.

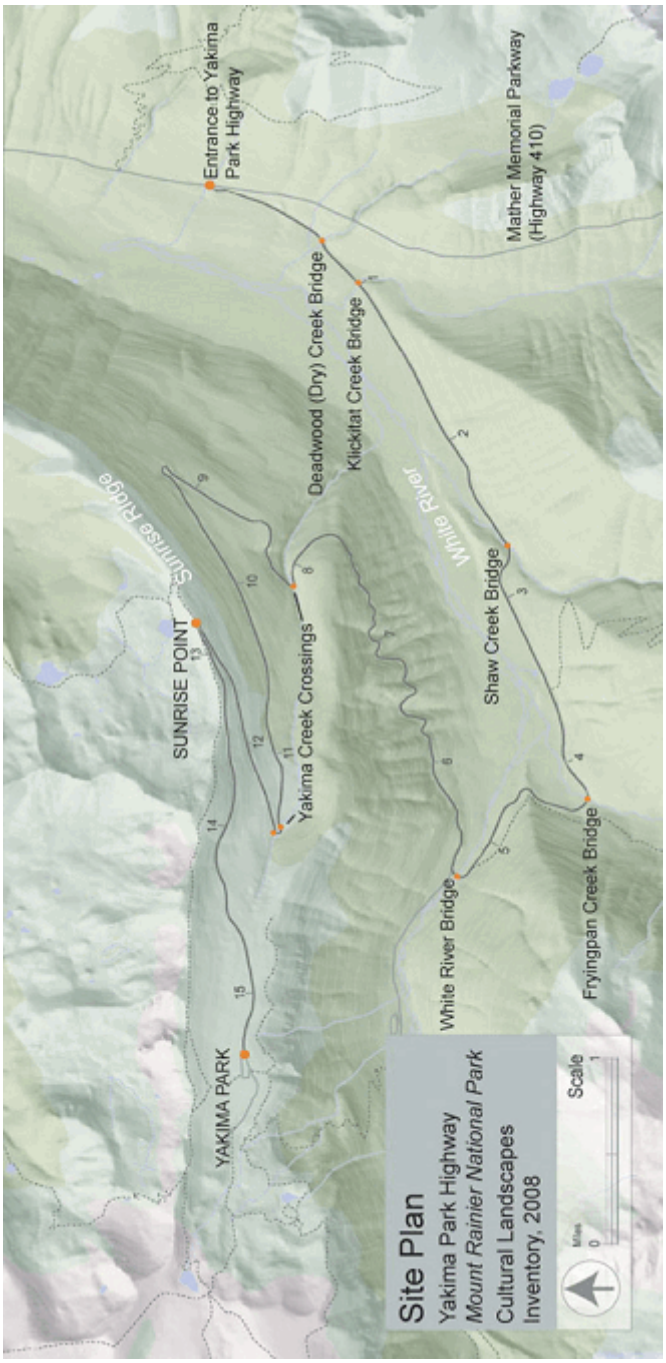
The road was originally part of the 1926 Mount Rainier Park master plan, which aimed to open up access to the northeastern portion of the park and thus alleviate visitation stress on other park areas. Ernest Davidson began formal planning of the roadway in 1927 incorporating the principles of rustic and naturalistic design. Construction was completed in 1931 following NPS and Bureau of Public Roads (BPS) standards. From 1933 through 1941, the CCC continued to maintain and improve the road corridor through revegetation and slope stabilization projects.

The alignment of the Yakima Park Highway was carefully selected to showcase spectacular scenery, while carrying vehicles through the park up to Sunrise Developed Area. Starting at the wye intersection with Mather Memorial Highway, the road gently winds through the White River Valley (3,400'). The road then ascends through a series of tight radial curves up the White River Valley Incline gaining 1000' of elevation in four miles. Winding through the Yakima Creek Drainage, up to Sunrise Ridge, the road gains still more elevation, and provides spectacular views. The final segment of the road is characterized by gentle curves, sub-alpine meadows and outstanding views of Mt. Rainier's northeast side before finally terminating at Sunrise Village (6,400'). Along its route, the road provides access to White River Campground, the Wonderland Trail, multiple vistas and turnouts, and a number of backcountry trailheads.

The Yakima Park Highway a nationally significant historic designed landscape. It is an example of an early national park scenic highway, and is an integral part of the extant early master plan for Mount

Rainier National Park. The historic road is within the Mount Rainier National Historic Landmark District (NHLD). Designated in 1997, the NHLD is nationally significant for its association with the events of early National Park Service master planning (criterion A) and the design style of naturalistic landscape architecture (criterion C) perpetuated by the NPS in the period between World War I and II. The highway is distinguished by outstanding engineering achievements and features of naturalistic design. The period of significance for the Yakima Park Highway cultural landscape spans the years 1927-1941, reflecting the period when the NPS coordinated the design and construction of the road, and the Civilian Conservation Corps continued to improve the road corridor with revegetation efforts. The naturalistic and historic character of the road is evident in its remaining landscape characteristics: spatial organization, natural systems and features, circulation, topography, land use, buildings and structures, small scale features, views and vistas, vegetation and archaeological sites. These patterns and their surviving features continue to exist as originally planned, conveying the integrity of the road as scenic highway.

Site Plan



Site plan showing major structures and natural features along Yakima Park Highway. (MORA 2008)

Property Level and CLI Numbers

Inventory Unit Name:	Yakima Park Highway
Property Level:	Landscape
CLI Identification Number:	400033
Parent Landscape:	400033

Park Information

Park Name and Alpha Code:	Mount Rainier National Park -MORA
Park Organization Code:	9450
Park Administrative Unit:	Mount Rainier National Park

Concurrence Status

Inventory Status: Incomplete

Completion Status Explanatory Narrative:

Fieldwork for the Yakima Park Highway was conducted in the summer of 2005 by Mark Davison (NPS) and students from the University of Oregon Field School, D. Whipp, S. Moss, S. Schrock, and S. Chapin. A draft report was completed in October 2006. Carrie Barnes finalized the draft and entered it into the database in 2008. The CLI will be considered complete once concurrence has been received by the park and the Washington SHPO office.

Concurrence Status:

Park Superintendent Concurrence: Yes

National Register Concurrence Narrative:

The Yakima Park Highway was included in the National Historic Landmark District, which was listed on the National Register in 1997. This CLI will be submitted to the Washington SHPO in 2008 for consensus determination on the additional descriptions of contributing features and proposed changes to the boundary.

Geographic Information & Location Map

Inventory Unit Boundary Description:

Boundary Justification
The boundary is defined by the National Historic Landmark District nomination of 1997 as 30’ on either side of the centerline of the road, for a distance of 15.335 miles and incorporating all of the structures associated with the road including the road bed, shoulders, turnouts, rock cuts, vegetation, buttresses, ditches, swales, culverts, retaining walls, guardwalls. However, this boundary description suggests a more delineated and tighter boundary for the road than that which is perceived in the experience of the landscape. For example, in certain segments along the road, the physical boundaries may narrow, such as between a rock cliff on the inside and a steep down slope on the outside edge. In other segments, the apparent boundaries of the road broaden to include fill material and views. In other words, the 30’ on either side of the centerline definition is inadequate to encompass all of the characteristics and features of the road. The boundary actually fluctuates along the length of the road, but is accurately approximated by 100’ on either side of the centerline.

Boundary Description
The boundary for Yakima Park Highway is defined by this CLI as 100' on either side of the centerline of the road for a distance of 15.335 miles beginning at the junction with Mather Memorial Parkway (Highway 410) and terminating at Yakima Park.

State and County:

State: WA

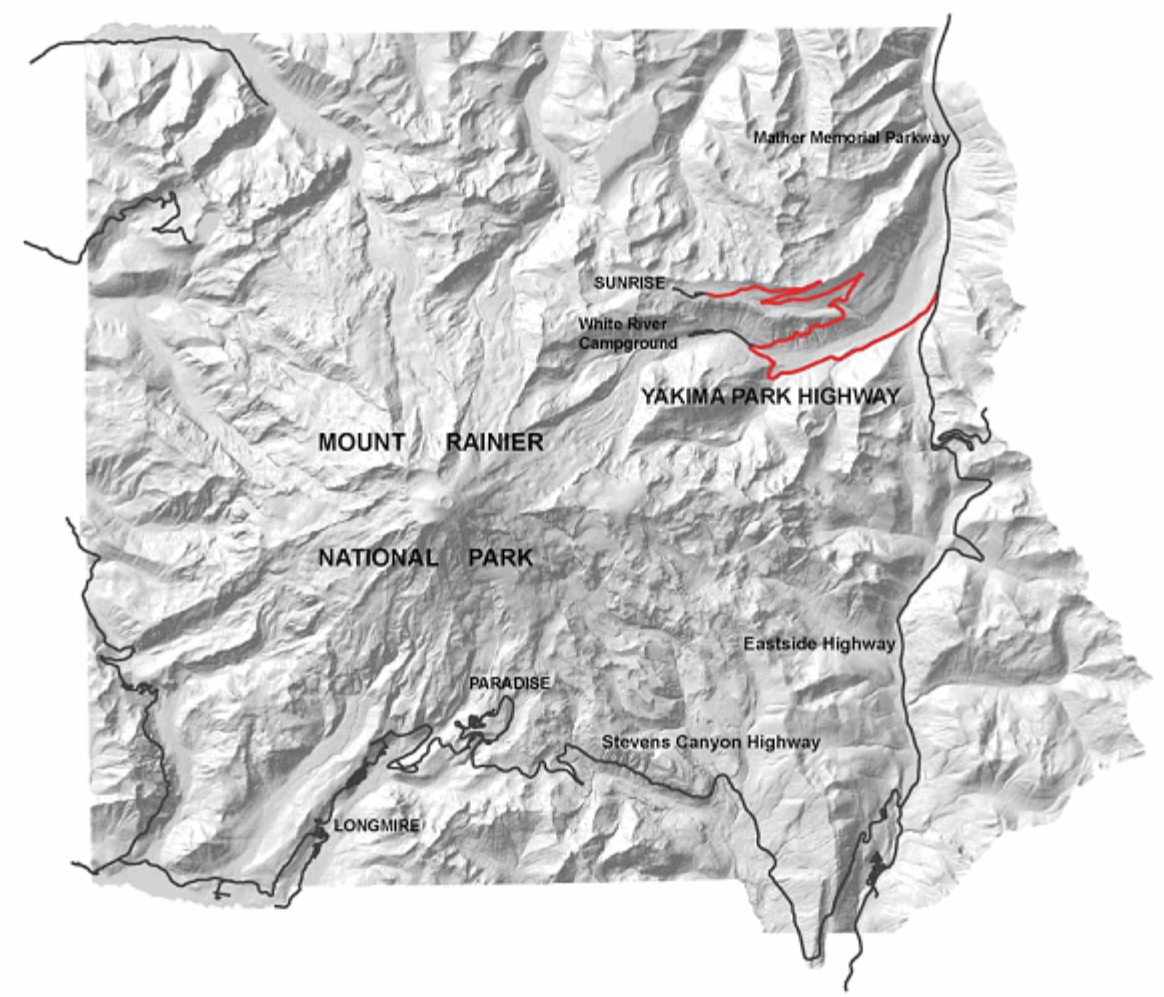
County: Pierce County

Size (Acres): 372.00

Boundary UTMS:

Source	Type of Point	Datum	UTM Zone	UTM Easting	UTM Northing
GPS-Differentially Corrected	Line	NAD 83	10	614,494	5,196,873
GPS-Differentially Corrected	Line	NAD 83	10	605,822	5,193,704
GPS-Differentially Corrected	Line	NAD 83	10	605,986	5,194,175
GPS-Differentially Corrected	Line	NAD 83	10	605,201	5,194,770
GPS-Differentially Corrected	Line	NAD 83	10	608,313	5,195,877
GPS-Differentially Corrected	Line	NAD 83	10	607,835	5,196,157
GPS-Differentially Corrected	Line	NAD 83	10	608,922	5,197,261
GPS-Differentially Corrected	Line	NAD 83	10	605,577	5,196,279
GPS-Differentially Corrected	Line	NAD 83	10	607,532	5,196,961
GPS-Differentially Corrected	Line	NAD 83	10	603,675	5,196,565

Location Map:



Map of Mount Rainier National Park showing the location of Yakima Park Highway. (MORA)

Track Numbers: The GIS files contain landscape feature and context data pertinent to the Cultural Landscape Inventory for the Yakima Park Highway. The files use a linear referencing system with unique identities for each feature and are linked to FHWA's VisiData.

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 02/18/1997

Management Category Explanatory Narrative:

The management category for Yakima Park Highway is “A – Must be Preserved and Maintained" because it meets the following criterion: the inventory unit is nationally significant as defined by National Historic Landmark criteria. The Yakima Park Highway was determined to be a contributing structure within a National Historic Landmark District in February, 1997. The NHL theme for the district is National Park Service landscape architecture and National Park Service master planning.

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement:

Expiration Date: NA

NPS Legal Interest:

Type of Interest: Fee Simple

Public Access:

Type of Access: Other Restrictions

Explanatory Narrative:

Road is closed in the winter.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

Lands outside the park are visible to motorists and travelers from the higher, sub-alpine elevations of the Yakima Park Highway. The appearance of adjacent lands within the viewshed of the Yakima Park Highway has the capacity to alter the experience for the visitor.

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Entered Inadequately Documented

National Register Explanatory Narrative:

Yakima Park Highway and its associated features and surrounding landscape were described in the 1997 National Historic District nomination. However, this nomination does not adequately document the landscape characteristics and features of the road. This CLI expands the description of the road's setting and the features associated with the road, providing greater detail.

National Register Eligibility

Contributing/Individual:	Contributing
National Register Classification:	District
Significance Level:	National
Significance Criteria:	A - Associated with events significant to broad patterns of our history C - Embodies distinctive construction, work of master, or high artistic values
Period of Significance:	
Time Period:	AD 1927 - 1941
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	The 1930's: Era Of Public Works
Other Facet:	None
Time Period:	AD 1927 - 1941
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Recreation
Facet:	General Recreation
Other Facet:	None

Area of Significance:

Area of Significance Category	Area of Significance Subcategory
Landscape Architecture	
Engineering	
Architecture	

Statement of Significance:

The Yakima Park Highway is a historic road within the Mount Rainier National Historic Landmark District (NHLD). Designated in 1997, the NHLD is nationally significant for its association with the events of early National Park Service (NPS) master planning and the Civilian Conservation Corps (criterion A) and the design style of naturalistic landscape architecture (criterion C) perpetuated by the NPS in the period between World Wars I and II. As part of the early Mount Rainier National Park master plan, the Yakima Park Highway is significant for its association with the national park system's most complete and significant example of park master planning. The road is also significant for its naturalistic landscape engineering as a scenic park highway.

The period of significance for the National Historic Landmark District of Mount Rainier National Park is 1906-1957, broadly incorporating the earliest and latest rustic period development in the park. The period of significance for the Yakima Park Highway cultural landscape spans the years 1927-1941, reflecting the period when the NPS coordinated the design and construction of the road, ending with Civilian Conservation Corps (CCC) revegetation efforts along the road. In association with the events of the American Park Movement and early NPS master planning, the Yakima Park Highway is significant as an integral part of the master plan of Mount Rainier National Park, as first developed in the 1920s. The Yakima Park Highway was the first complete road within the park to be designed and constructed after the Memorandum of Agreement (MOA) was signed by the NPS and Bureau of Public Roads (BPR) in 1926, establishing the framework for interbureau cooperation on national park road construction. The MOA included standard specifications for road construction that adopted the naturalistic style for landscape engineering.

Criterion A
The concept of the Yakima Park Highway had its origins in early plans for a comprehensive road system within the park. In the first two decades of the twentieth century, NPS Engineer Hiram Chittenden and Assistant Engineer Eugene Ricksecker developed and advocated a plan that would encircle the mountain with roads, greatly increasing the areas of the park accessible to automobiles. The plan, dubbed the "round-the-mountain" road concept, was based on Chittenden's similar plan for Yellowstone's Grand Loop. By 1913, preliminary surveys located the "round-the-mountain" route along an 80- to 100-mile irregular loop just below the glacier line. Although budget constraints and rugged terrain on the north and west slopes of the mountain prevented the realization of the plan as it was conceived, this early plan laid the groundwork for the comprehensive master planning of the 1920s. During the subsequent phase of master planning, the concept of the "round-the-mountain" road was abandoned in favor of a partial loop road system with spur roads to the major developed areas, which relied more heavily on regional roads outside of the park to complete the loop around the mountain.

The master plan developed during this time envisioned the infrastructure of the park as a system of scenic highways and developed areas, to be known as rustic park villages, which would accommodate visitors while limiting their vehicular access within the park. The Yakima Park Highway was conceived as apart of that system, connecting Sunrise Village with the Mather Memorial Parkway.

The Yakima Park Highway is also locally significant for its association with the CCC, a Depression-era unemployment relief program established by Franklin Delano Roosevelt. The program was designed to provide work experience and job training in a disciplined environment for young men between the ages of 18 and 25. Camps were generally located on public lands and work programs administered by the National Park Service or the Forest Service. The work was originally intended to be forestry in nature, with vegetation management and fire suppression the principal responsibilities, but the enrollees eventually undertook many light construction projects as well, ranging from trails to small buildings and even dams. On the Yakima Park Highway, CCC crews handled emergency clearing of the road as well as planting and erosion control along the cut and fill slopes. Because erosion and stabilization was such a problem on the Yakima Park Highway, cut and fill scars remained the main focus of the revegetation and reforestation work. In 1935 alone, the men of CCC camp NP 5 planted a total of 4,537 trees and shrubs along the Yakima Park Highway. Other roadwork by the CCC included repair projects following rock and mudslides and the maintenance of culverts.

Criterion C
Construction of the Yakima Park Highway began in 1927. The road was one of the first in the system to be designed from the start according to NPS standard specifications for road construction. The success of the design was due in large part to NPS Director Stephen Mather's collaboration with BPR in the 1920s. The culmination of these discussions led to the MOA being signed by the NPS and BPR in 1926, establishing the framework for interbureau cooperation on national park road construction. The MOA called for park Superintendents and NPS landscape engineers to determine the road alignment and road character, so that park roads could be designed in the naturalistic style of "landscape engineering," advocated by Mather. NPS landscape architects were given extraordinary scope in working with contractors and engineers at BPR, and were able to design a road that highlighted the most outstanding natural features as well as blending the built features into the surrounding landscape. The terminus of the road, Yakima Park, was chosen because it was "judged to have the most beautiful view of Mt. Rainier from anywhere in the park" (HAER WA-126: 5). In 1927, the route leading up to Yakima Park had been surveyed according to the park road design philosophies that followed naturalistic principles. Davidson ensured that it followed the landscape's natural contours and passed close to significant natural features such as dramatic overlooks, numerous creeks and interesting rock outcroppings. By protecting natural features, framing dramatic views of Mt. Rainier, and providing access to the high mountain meadows, the Yakima Park Highway became one of most stunning and popular drives in Mount Rainier National Park.

Davidson designed the road with 9' travel lanes and 1' shoulders on each side. The narrowness of the road created a feeling of closeness with the natural surroundings; huge trees lined the shoulder, and rocky cliffs towered nearby. In addition, steep grades, and short switchbacks were minimized in favor of gentle curves and a steady grade. The design ensured the road lay gently on the ground, simulating

the natural terrain. Strenuous efforts were undertaken to minimize cuts and fills, interrupting the natural topography as little as possible. Grading specifications called for a graceful 3:1 slope to blend the road into the surrounding hillside. In constructing a narrow and winding road with numerous stopping places, the designers provided an environment where visitors drove at a slow pace and noticed their surroundings. As NPS director George Hartzog wrote, "it is almost a truism that the slower you go the more you will see…along these roads, you will find a world as varied as it is unhurried" (Soulliere: 81). To further add to the natural experience, any segment of the road visible from distant turnouts, viewpoints or trails were blended into the scenery using vegetation or berms. Structures associated with the road including guardwalls, guardrails, signs, retaining walls and bridges were constructed with axe cut logs or local stones, designed to harmonize with the surrounding landscape. Specifications for headwalls on all the culverts for example, required weathered native stones that were hand-tooled to resemble natural boulders found near the roadway.

Protecting Mt. Rainier's natural beauty required careful control over the construction process. In 1929, Vint's division of landscape architecture developed standards for all road projects to prohibit destructive blasting, protect landscape features and remove any unsightly construction scarring. Under Davison's scrupulous oversight the Yakima Park Highway was one of the first roads constructed using the new standards. For example, restrictions were placed on debris cleared from the roadbed; trees were only to be removed from an area as wide as the road itself, and any damaged plants were to be removed or trimmed. The cleared trees were worked into rows along the centerline and burned, while contractors kept careful control of the blaze using water buckets and hoses. The NPS also required special approvals for the location of borrow pits, quarries, and crushing plants so that they would be hidden from the road. In addition, contractors had to clean up stones cast beyond finished slopes and follow detailed instructions for masonry construction of guardwalls, bridges, guardrails and culverts. Davidson, who asked for sections to be rebuilt by the contractors if they did not meet specifications closely, inspected the stone masonry work. Most significant were the blasting specifications known as "type B excavation." Typically, contractors blasted large masses of rock with powerful explosives, causing rock falls and pitting along the road. Mather and Vint witnessed the aftermath of one of these explosions along the highway and began requiring "gentle, controllable techniques for breaking surface boulders or rock fragments, known in the field as plastering and mudcapping" (McClelland: 120).

Summary
The development of Yakima Park Highway was hailed for its unprecedented scenic preservation efforts and as being one of the most coordinated planning projects by the NPS to date (Catton: 9). Today, as an integral part of the park's early master plan, the Yakima Park Highway remains largely unchanged and is an intact example of an early national park scenic highway constructed using the first national NPS standards for road building. The road's naturalistic character is evident in its remaining landscape characteristics and features, namely in the road's spatial organization, the land use, circulation patterns, structures, small scale features, views and vistas, topography, its pattern of response to natural systems, and archeological sites. These patterns and their surviving features, such as stone guardwalls, bridges, narrow curvilinear alignment, and vista turnouts continue to exist as originally planned, and convey the integrity of the road as a scenic highway.

National Historic Landmark Information

National Historic Landmark Status:	Yes
Date Determined Landmark:	02/18/1997
Landmark Theme:	National Park Service landscape architecture, and National Park Service master planning

World Heritage Site Information

World Heritage Site Status:	No

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Designed

Current and Historic Use/Function:

Primary Historic Function: Automobile

Primary Current Use: Automobile

Other Use/Function	Other Type of Use or Function
Outdoor Recreation-Other	Both Current And Historic

Current and Historic Names:

Name	Type of Name
Sunrise Road	Current
Yakima Park Highway	Both Current And Historic

Ethnographic Study Conducted: Yes-Restricted Information

Associated Group:

Name of Group: Cowlitz (Tainapan)

Type of Association: Both Current And Historic

Name of Group: Muckleshoot

Type of Association: Both Current And Historic

Name of Group: Nisqually

Type of Association: Both Current And Historic

Name of Group: Puyallup

Type of Association: Both Current And Historic

Name of Group: Yakama

Type of Association: Both Current And Historic

Ethnographic Significance Description:

Documented in "Ethnographic Guide to the Archeology of Mount Rainier National park" by Allan H. Smith, 1964 and "Review and Assessment of the Ethnographic Literature of Mount Rainier National Park, Volumes 1 and 2" by Astrida R. Blukis Onat, 1999.

Chronology:

Year	Event	Annotation
2000 BC - AD 1917	Established	Ancestors of the Yakima people developed and used the Chinook Pass Trail for east-west travel between the American River drainage and the Yakima territory.
AD 1899	Established	Mount Rainier National Park was established.
AD 1890 - 1914	Built	Beginning in the 1980s, silver and gold mining in the area contributed to adaptations of the natural environment, including the Mt. Rainier Mining Company building several miles of road along the White River, collectively known as the Storbo Road (Old Storbo Road).
AD 1904	Platted	The Army Corps of Engineers began surveying activities in the park with the aim of building access roads for the public.
AD 1916	Paved	Park invested $12,990 in road widening and surfacing projects along the Storbo Road from the entrance station to White River Campground four miles inside the park boundary.
AD 1923	Established	Tomlinson became park superintendent.
AD 1926	Designed	Master planning began in the park.
AD 1926	Established	Steven T. Mather succeeded in forging an agreement with Bureau of Public Roads (BPR) for the construction of roads in national parks.
AD 1926	Damaged	Heavy rains destroyed much of the Storbo Road which was constructed along the flood plain of the White River. This event inspired relocating the access road to higher ground.
AD 1927	Planned	Park Superintendent Tomlinson, Stephen T. Mather, Thomas C. Vint and assistant landscape architect Ernest A. Davidson together proposed the Yakima Park Highway that would connect (Mather Memorial Parkway) to Yakima Park.

AD 1927	Built	Yakima Park HIghway construction began.
AD 1928 - 1929	Platted	Mapping of the park proper was led by topographer Andrews.
AD 1927 - 1928	Graded	Project 3B-1: White River Crossing up to Yakima Creek Drainage. Contractor A. C. Goering turned the first "spadeful of dirt" (Davidson) in August 1927 beginning the clearing and burning work for this initial stretch of road. Grading followed clearing.
AD 1928 - 1929	Graded	Clearing and grading work accomplished on Project 3B-2: White River valley ridge to Yakima Creek Drainage by contractor A.C. Goering.
AD 1928 - 1929	Graded	Clearing and grading work undertaken for Project 3A-1: White River to Shaw Creek Bridge by contractor Lidral Construction Company.
AD 1928 - 1929	Built	Contractor John D. Tobin built the 90` span White River Bridge.
AD 1928 - 1929	Graded	Clearing and grading work undertaken for Project 3A-2: East Boundary to Mather Memorial Parkway by contractor A. C. Goering.
AD 1929	Built	Contractor J. F. Lidral built Shaw Creek Bridge using 60` stringer logs to create a "rustic-style" wood bridge. (Replaced in 1957.)
AD 1929	Built	Contractor A. C. Goering built the 24` Deadwood Creek Bridge, one of the shortest spans in Mt. Rainier Park.
AD 1929 - 1930	Graded	Clearing and grading work accomplished on Project 3B-3: Yakima Creek Drainage to Yakima Park by contractor A. C. Goering.
AD 1930	Built	Contractor J. F. Ward built the stone-faced, reinforced concrete spandrel arch Klickitat Creek Bridge.
AD 1930 - 1931	Built	Contractor A. F. Berni built Fryingpan Creek Bridge, a three-hinged, steel arch girder bridge with stone-faced abutments.

AD 1930 - 1931	Paved	Entire length of Yakima Park Highway was surfaced.
AD 1931	Established	Yakima Park Highway opened to public traffic.
AD 1933 - 1941	Altered	Civilian Conservation Corps (CCC) camp NP 5 managed road improvements including emergency clearing, planting and erosion control along cut and fill slopes, and reforestation efforts. In 1935 alone, the men of CCC camp NP 5 planted a total of 4,537 trees and shrubs along the Yakima Park Highway.
AD 1940 - 1942	Altered	Upper portion of Yakima Park Highway was resurfaced.
AD 1953	Planned	Mission 66 development planning began. Planning efforts for Mt. Rainier emphasized roadside improvements, including improved visitor circulation patterns and innovative wayside interpretation.
AD 1957	Altered	Circa 1957 signage for White River Campground at the junction of Yakima Park Highway and the spur road to White River Campground was updated.
AD 1957	Altered	The park replaced the wood bridge at Shaw Creek with a steel girder and reinforced concrete bridge that included metal guardrails.
AD 1995	Damaged	A slide area, the "Big Dump", severely damaged the road.
AD 1995	Built	A simulated stone guardwall and concrete retaining wall were built to prevent damage from future "Big Dump" slides.
AD 1997	Established	Yakima Park Highway was included in the National Historic Landmark District (NHLD) designation for Mt. Rainier National Park.

Physical History:

Pre-History

As early as 15,000 to 10,000 years ago, when Mt. Rainier was largely draped in ice and permanent snowpack, Native Americans lived in the plains and valleys within its view (Burtchard 2003: personal interview). Between 9,000 and 8,500 years ago the mountain's mid-slope settings became free of permanent snowpack enabling the establishment of plant and animal communities similar to the modern subalpine parklands. An east-west connection over the Cascades in the area of Mt. Rainier has probably existed for thousands of years. Prehistoric evidence reveals that a trail route at Chinook Pass linked Mt. Rainier on the west side to the American River drainage and Yakima territory on the east side (Burtchard 1998: personal interview). The Yakima Trail (FS 1996-11), also known as the Chinook Pass Trail, is believed to have been in use for nearly 4,000 years for foot travel and later for horse travel (Burtchard 2003: personal interview). The Yakima Trail served as a circulation link to hunting grounds as well as places of cultural importance, revealed by prehistoric cultural findings at Tipsoo Lakes, Deadwood Lakes and Yakima Quarry site, all at subalpine elevations. A 1915 park map indicates the alignment of the Yakima Trail up the American River drainage, over Chinook Pass, west to Cayuse Pass, crossing the White River and heading northwest up the Yakima drainage towards Yakima Park. In 1917, the Yakima people used this trail for the last time, due to NPS enforcement of rules prohibiting hunting in the park.

Development of Mount Rainier's Early Roads (1904 to 1926)

The Sundry Civil Appropriations Act in 1904 led to the development of park roads in Mt. Rainier under the guidance of Superintendent Grenville F. Allen. The park employees did not have the skills or equipment to build roads, therefore the earliest road surveys on the east side of Mt. Rainier were performed by the Army Corps of Engineers at the bequest of Superintendent Allen. The Corps surveyed a 17-mile wagon road along what they felt was the best route from the east into the park. The route followed the American River up to the Cascade Crest, over Shriner's Peak into the Ohanapecosh River valley, to later connect with Paradise. After preliminary survey work, Corps Engineer Hiram Chittenden proposed a "round-the-mountain" road concept in 1907. This concept was abandoned in the late 1920s, due to changing philosophies about the appropriate amount of road development in national parks and the immense difficulty of building a road on the steep topography of the west and north sides of Mt. Rainier. By the 1910s, a wagon road provided limited access to the east side of the park and initially the limited accessibility restricted development. However, pressure for development of the White River Valley and Yakima Park increased as the area gained in popularity.

Limited access to the northeast corner of the park had been made possible though road construction related to the operation of a mining company in this area. In the late 1890s, before the establishment of the National Park, copper and silver was extracted from the east side of Mt. Rainier in Glacier Basin by Peter Storbo and Associates from Enumclaw. Storbo was later elected Vice President and general manager of the newly formed Mt. Rainier Mining Company, which was established in 1905 (Thompson: 126). By 1914, the mining company had

built several miles of road, referred to as the Storbo Road (Old Storbo Road) that paralleled the White River up to Glacier Basin. The road construction work above the current White River campground was described by a park ranger as "in good condition," and bridges and culverts were reported to be "well constructed." However, in the higher elevations, along the north edge of the Emmons Glacier and on the Inter Fork just above 5000' elevation, the ranger described the road as "rough" (HAER: 2).

With pressure from the growing number of visitors driving private automobiles into the park, the NPS recognized the need to improve infrastructure in the northeast quadrant. During 1916, the park invested $12,990 in road widening and surfacing projects along the Storbo Road from the entrance station to a campground four miles inside the park boundary. During this period, Mt. Rainier Mining Company continued to also maintain the road, spending $38,500 on improvement projects in the upper segment near Glacier Basin (HAER: 2). By 1924, the company holding in the park was reduced to 164.8 acres, only a portion of its original holdings, as pressure mounted for the removal of uncontrolled development on the slopes of Mt. Rainier (Thomson: 131).

The level and type of development within the new national parks had become a burning issue of the day. Various politicians and interested parties were debating the essence of what a national park should entail. One of the advocates for controlled development within national parks was Stephen T. Mather. Mather was a philanthropist and mountain enthusiast, who later became the first director of the NPS. He decreed that aesthetic concerns were of the highest concern, and he advocated for the implementation of a design philosophy that became known as the "Rustic Style" or "naturalistic design." Mather's principles may have been influenced by the writings of Andrew Jackson Downing, a horticulturalist and writer of landscape architecture who outlined some of the first road construction ideals incorporating naturalistic design. These principles emphasized roads that follow the natural topography of the land, used naturalistic plantings, and captured scenic vistas along the route. Many of his ideas would go on to influence the standards for the design of park roads.

For his part Mather strove to combine these principles of aesthetics with economic values when developing parks, including the design of roads. He advocated for improved intra-park travel, preservation of scenery for the enjoyment of travel, and limiting private development in scenic areas (Carr 1998: 147). Mather believed that the roads should be scenic highways and laid out using "landscape engineering" principals. Mather coined the term landscape engineering to refer to the design of roads using a naturalistic approach, in order to blend roads with surrounding scenery. He facilitated this by hiring landscape engineers who shared his values. In 1927, Mather hired Thomas C. Vint to oversee the NPS Landscape Division in San Francisco (McClelland: 198). The San Francisco office worked on designing and planning of the western National Parks (McClelland: 196-200). Along with his team of landscape architects in San Francisco, Vint prepared standardized specifications for culverts, retaining walls, and bridges in the rustic style. The office also prepared planting plans that adhered to naturalistic principles including the use of native plants that blended with the surrounded landscape. Mather, Vint and his assistant landscape architect Ernest A. Davidson along with Superintendent Owen Tomlinson were involved in creating a comprehensive plan for Mt. Rainier; the first of its kind for a national park. The prototype plan entailed development of the

park using a holistic approach. The comprehensive plan clearly stated the locale and character of all future developments, avoiding the previously adhoc and disorganized approach to park development. The project would come to be known as the "master plan" and the document set the precedent for park planning in the United States (NHLD Nomination: 45).

In the early 1920s, Congress was appropriating funds for roads while Mather was working on the master plan for Mt. Rainier. He attempted to exert an influence over the design of roads, in and approaching parks. With his prompting, the NPS worked tirelessly with the Bureau of Public Roads (BPR) at Glacier National Park in the mid 1920s to hone the approach to landscape engineering of scenic highways. In 1926, Mather succeeded in forging an agreement with BPR for the construction of roads in national parks. The Memorandum of Agreement gave NPS landscape engineers (landscape architects) ultimate control of the naturalistic design style of park roads. By the time Mather visited the Naches Pass Highway (Mather Memorial Parkway) under construction in 1928, the NPS had developed landscape engineering standard specifications to be used by the BPR in national park road construction. Mather's ulterior interest in the road was probably widely acknowledged at the time. Also, while inspecting the road under construction, Mather strenuously argued with the USFS, BPR and Washington State Department of Highways that measures should be taken to preserve the 75-mile stretch of scenic forest belt between Enumclaw and Naches, in order to preserve the scenic quality of travel approaching the park (McIntyre 1952: 1). Mather's advocacy for the preservation of the scenery along the highway paved the way for acquiring national forest lands east of the park and expanding the park boundary to the crest of the Cascade Mountains. The expansion of the park boundary brought an 11 mile section of the Naches Pass Highway (Mather Memorial Parkway) under the park's jurisdiction, the eventual connector road for the Yakima Park Highway and Sunrise Village developments.

Prior to construction of the Mather Memorial Parkway, earlier projects on the east side of the park had raised concerns that uncontrolled development in this area threatened the NPS mission. For example, although the Storbo Road had been improved, Superintendent Tomlinson complained that thousands of new visitors would be visiting a corner once seen by a few hundred, and there were no appropriate facilities for their accommodation. Since master planning had begun in the park in 1926, the NPS had explored the idea of developing Yakima Park to include a rustic park village with hotel, camping, and cabin accommodations for visitors. The new village would also require the construction of a scenic highway to connect with the newly constructed Mather Memorial Parkway. Around this time, heavy rains destroyed much of the Storbo Road, which was constructed along the flood plain of the White River. Ernest A. Davidson, who would later return to manage construction of the future Yakima Park Highway, visited the site of the Storbo Road and noticed its poor condition as well as the lack of care taken to preserve some of the natural surroundings.

With the success of developments at Longmire and Paradise in the southern portion of the park, the pressure to develop the east side increased. The prevailing theory during this era maintained that a new park village at Yakima Park would ease pressure on other developed areas of the park and open up the east side of the park to visitors. Davidson had been assigned to oversee landscape design in other of Mt. Rainier's developments, as well as projects in

Yellowstone and Glacier National Parks, by Vint who valued Davidson's experience with roads, and planting and transplanting native trees and shrubs (McClelland: 198). Because of this experience and expertise, Davidson was placed in charge of designing a park village at Yakima Park and its approach road. Davidson instructed BPR engineer C.R. Short to conduct a survey from the Naches Park Highway (Mather Memorial Highway) to Yakima Park. The alignment of the proposed road would bypass the flood-prone valley floor formerly utilized by the mining company for the Storbo Road (Old Storbo Road) (HAER: 3). After the survey was completed Davidson noted:

"Considering that the preliminary highway survey is completed, that the new Natches Pass Highway is being pushed into rapid completion, and other factors, it seems to me that we might all well boost for immediate highway construction into this part of the park…"(Davidson 1926:1).

The proposed Yakima Park Highway would lead to Yakima Park, a sub-alpine meadow, that Superintendent Owen Tomlinson deemed "the only suitable place for development." Tomlinson predicted costs for the new road to be $450,000-$500,000 (HAER: 4). Davidson toured this area of the park and was impressed with what he saw. Despite minor alignment changes, the 1925 survey became the blueprint for a new road at Mt. Rainier that was to follow the latest guidelines in road construction and become one of the first roads to be completed that fully expressed the newly formed principles of rustic and naturalistic design:

"The views and scenery are so exceptionally fine that adequate description is difficult. This will be a wonderful development and I would like to help push it, with a hand in its building." (Davidson 1926: 1).

Yakima Park Highway: Road Construction (1927-1931)

Construction of the Yakima Park Highway began in 1927. The road was opened to the public in 1931, but improvements to the road and revegetation projects along the road corridor continued until 1937. Due to the complexity and scale of the route, construction was divided into five projects. From the Mather Memorial Parkway to White River Bridge, excavation was fairly light as there was little solid rock. This segment was divided into two projects 3A-1 and 3A-2. After the White River Bridge, the road ascended the north side of the White River Valley across unstable glacial debris. This segment was referred to as project 3B-1. The segment after Yakima Creek drainage up to Yakima Park travelled over light volcanic pumice and was "an ideal steam shovel job." This segment was divided into two projects 3B-2 and 3B-3. Groundbreaking for the road began in 1927 with project 3B-1 from the White River crossing two miles up the grade towards Yakima Creek drainage. Access to this project was made possible by using the Old Storbo Road to transport machinery and materials. By 1929, four separate road construction contracts were underway and the final contract was let the following year. Only three years after groundbreaking, the entire 15.335 miles of the Yakima Park Highway was graded and surfaced; ready to receive the general public. The five separate contracts for constructing the road are described in more detail below.

Project 3B-1: White River crossing up to Yakima Creek Drainage

Project 3B-1 began at the White River and continued 2.06 miles up the south-facing side of the White River valley towards Yakima Park. This section lies on a steep mountainside cut by sharp ridges and canyons. Because the road was designed to follow the natural contours of the land, it had many tight inside and outside curves. In addition, approximately one and a half miles of this segment had to be full benched due to the unstable glacial debris averaging only 25% rock. With this segment rising 1,000', the road extended just over two miles to maintain a 6% grade.

On August 26, 1927, contractor A. C. Goerig began clearing work along the heavily covered steep slopes of montane forest. After the trees were felled, the NPS specified a careful burning technique to clear trees from the roadbed. Working on small patches of 200' to 300', trees were felled to fall as close to the road bench as possible. Using horse teams, the contractor pulled trees and brush into rows along the centerline for burning. To control the blaze, the contractors wetted the surrounding forest while keeping hoses and pumps nearby, this also protected nearby trees from scorch marks. Charred branches were removed to maintain the aesthetic principles that required a natural appearance along the cut and fills slopes of the road.

Following the clearing work, Goerig began grading the site of the future roadbed using gas shovels, dynamite, and carts on tracks hauled by a caterpillar tractor. During the initial phases of construction, too much dynamite was used to clear granite ledges encountered, which caused large granite blocks to litter the surrounding hillside and destroying numerous trees. This incident occurred after the NPS adopted more stringent rules for protection of scenery during construction. After Mather inspected the damage, "special provisions and clauses [were] inserted into [Yakima] road building project contracts which would provide for special attention to preservation of scenery and existing landscape values…" (Davidson: 4). These clauses called for smaller amounts of dynamite to be used, which slowed construction work, but had the desired effect of reducing slope scarring and preserving more specimen trees along the shoulder of the road. By September 1928, phase 3B-1 had been completely graded and covered with crushed rock; this segment was surfaced two years later as part of a paving project for the whole of the road.

Project 3B-2: White River valley ridge to Yakima Creek Drainage

Project 3B-2 began 2.06 miles above the White River and continued 4.82 miles up grade, passing over a columnar andesite lava flow (White River Valley ridge), into the Yakima Creek drainage basin and up to Sunrise Ridge. This segment of the road contained three switchbacks necessary to gain elevation towards Sunrise Ridge. Each of the tight radial turns at the switchbacks was designed to bring visitors close to a significant natural feature, including two crossings near Yakima Creek and a wide overlook providing panoramic views of the White River Valley.

A.C. Goerig was contracted in 1928 for the clearing and grading of this project. With a soil composed mostly of light volcanic pumice, it was a fairly easy excavation job requiring only the

use of a steam shovel. Vegetation was also easily removed, as there were smaller trees in the upper segments and only a few downed trees. The layout of the land was uniform enough that practically all the road sections were built with a balanced cut to fill ratio. The surfacing of the road was finished the following fall, in October 1929 (Utz: 6). In the lower elevations of this segment, Davidson specified the construction of additional culverts as the slopes included numerous seasonal streams. Surfacing was completed in 1930.

Project 3A-1: White River to Shaw Creek Bridge

This 4.043 mile segment parallels the Old Storbo Road on the south side of the White River Valley along a relatively straight alignment with very gentle curves, avoiding the flood-prone valley floor. The dense mixed-conifer forest with stands of fir, spruce and alder, required major clearing work before grading could begin. In contrast, the small outcroppings of granite and large sections of glacial till made rock excavation work comparatively easy. Davidson noted that near Shaw Creek many small springs poured into the swampy flat below, necessitating the construction of additional culverts in this segment. The road also crossed Fryingpan Creek, approximately 2,000' above its confluence with the White River, were unstable glacial till dominated the underlying geology. This led Davidson to specify a bridge to be constructed with steel girders to lighten the pressure on the load bearing abutments (HAER WA-126: 5).

Shaw Creek Bridge: 1929, Contractor: J. F. Lidral
Davidson specified stringer logs 60' in length to create a rustic-style wood bridge across Shaw Creek. The railings were constructed with axe cut peeled cedar logs. Within a steep, rocky drainage area with sudden and concentrated runoff, the bridge was placed high enough to suffer no damage in a deluge. Large stones were used in the footings to ensure the wood bridge was firmly anchored into the surrounding bedrock. The bridge was later replaced in 1957.

Fryingpan Creek Bridge: 1930-1931, Contractor: A. F. Berni
Although stone-faced concrete spans were the preferred design for a bridge in this location, test pits proved the site geologically unsuitable. Therefore, Davidson worked with BPR to design a three-hinged steel arch girder bridge with stone-faced abutments that was the only one of its type constructed in the park (HAER WA-54: 7). The contract for construction of the bridge across Fryingpan Creek was awarded to A. F. Berni of Portland, Oregon in 1930. The bridge was completed in July 1931 after numerous construction delays. BPR had to constantly work with the contractors in order to convey the details of the specifications for the new style bridge including the large stone abutments which the contractors viewed as "uncommonly large."

White River Bridge: 1928-1929, Contractor: John D. Tobin
The White River is a glacial stream with a constantly changing channel. The site of the bridge was therefore chosen where the river is confined between granite banks, but still required a span of 90'. Davidson worked with BPR to design the longest stone-faced, reinforced concrete arch bridge at Mt. Rainier, exemplifying the rustic style embraced by the NPS. The large, hewn facing stones integrated the structure with its setting. This crossing point was the

historic crossing for the Wonderland Trail. The old bridge was raised, placed on rollers, and moved 30' downstream so that it could be used by the contractors during construction. John D. Tobin of Portland, Oregon won the contract to build the bridge and hired 20 men to complete the job. The work lasted for two seasons as early winter conditions forced the project to a halt when it was still only 70% complete. (Final construction report: 4).

The Higdon Brothers obtained sand and gravel for the concrete spandrel arch from a mile downstream, using shovels to fill their Ford trucks. The individual stones for the ring arch were cut from wooden templates to ensure accuracy. Excavations for the arch abutments and wall footings were dug into solid rock. Some of the larger rocks used for the abutments measured 7' long and weighed up to 500 lbs, the massive scale matching the grandness of the surrounding landscape.

Project 3A-2: East Boundary to Mather Memorial Parkway

The main contractor, A. C. Goerig, let out the clearing work for this 1.331 mile segment to Russian subcontractors. The felling of trees was kept to a minimum and stumps were loosened by blasting, then pulled out by gas shovel and burned with the felled trees along the centerline. The grading was a relatively easy project as the alignment of the road followed the north edge of the valley floor in this segment. Initially, the paved section of the road was 18' wide after surfacing in 1931.

Deadwood Creek Bridge: 1929, Contractor: Goerig
Only 24' long, this bridge is one of the shortest spans at Mt. Rainier. The reinforced concrete slab structures was designed to include masonry abutments as well as Type 1B and Type 1D masonry guardwalls in the characteristic rustic style.

Klickitat Creek Bridge: 1930, Contractor: J. F. Ward
After a site inspection, Davidson and BPR engineer, Utz, realized the Klickitat Creek crossing was too wide for a wood bridge, as originally planned. The design was altered to build a concrete spandrel bridge with masonry stone facing. The stonework specified by Davidson included Type 1B and Type 1D guardwalls. In July 1930, J. F. Ward of Seattle was awarded the contract. Ward began work almost immediately, and the structure was completed in a single season (HAER-126: 5). The contractors cut the ringstones for the bridge from a granite ledge near the White River crossing.

Project 3B-3: Yakima Creek Drainage to Yakima Park

The final construction project, begun in 1929, phase 3B-3, started above Yakima Creek and extended the highway 3.31 miles to Yakima Park. Davidson was able to take advantage of the relatively stable geology to design a series of tight radial turns with long tangent segments that maintain a steady grade of between 4% to 6%. Davidson took advantage of the topography in this segment by aligning the route below Sunrise Ridge and thereby creating some of the most dramatic views in the park. Along the cut and fill slopes wildflowers and groupings of sub-alpine firs framed the glacial valleys to the south and the snowy peak of Mt. Rainier.

BPR Engineer Short originally proposed four switchbacks with short tangent sections to gain the necessary elevation to access Yakima Park from Yakima Creek drainage. Upon inspecting the plan, Vint countered that the short switchback segments would cause major scarring of the hillside (probably based upon the unsatisfactory results from the blasting of rock between Cayuse Pass and Chinook Pass for Naches Park Highway (Mather Memorial Parkway) that caused major scarring of the mountainside). Based upon Vint's comments, Davidson scouted an alternative route with the help of a park ranger. Using the park ranger's field knowledge, Davidson designed three elongated switchbacks; extending the tangents segments northeast along the south slopes of Sunrise Ridge. The alternative route afforded framed views of Mt. Rainier and panoramic views of the valley below. During his fieldwork Davidson also discovered Sunrise Point, near Dege peak, and deemed it an ideal place for the last turn towards Yakima Park. In addition, Davidson also identified the outcropping at Sunrise Point as a location for a medium size developed area that would provide visitors with 360-degree views of the surrounding landscape. From an elevation of 6,120 feet, the visitor may look across the entire state of Washington. Davidson described the view from Sunrise Point with Mt. Baker to the north, Mt. Adams to the south, the Cascades to the east and Mt. Rainier towering in the west; "even the most jaded, scenery-weary tourist can not help but be thrilled by the magnificent panorama that greets the eye" (Davidson: 12).

Additional Development

White River Entrance Ranger Station and Comfort Stations 1929-1931

Three buildings were erected on the site concurrent with the construction of Yakima Park Highway: White River Entrance Ranger Station located at the entrance area for Yakima Park Highway and two comfort stations in the same development. Modeled after the Nisqually entrance station and designed under the supervision of Thomas. C. Vint, the log frame, one-story, T-shaped White River Entrance Ranger Station was built by the National Park Service in the rustic style. Construction began in 1929 but complications associated with the construction of Yakima Park Highway and increased costs delayed its completion until 1931. Like the ranger station, both of the comfort stations on the site were designed and constructed in the rustic style. Each was built in 1931.



Historic photo showing rock cut. (MORA 1931)



Historic photo showing road surfacing prior to opening of road. (MORA 1031)



Historic photo showing park staff inspecting guardwall construction. (MORA 1927)



Historic photo showing Type 5 guardwall at Sunrise Point. (MORA 1928)



Historic photo showing viewing area at Sunrise Point. (MORA 2005)



Historic photo showing fill-through and wood guardrail near Sunrise Developed Area. (MORA 1931)

Continued Road Improvements by CCC and NPS (1933-1941)

By 1933, the nation's failing economy had deteriorated into full-blown depression, and drastic measures were being called for. The incoming president, Franklin Delano Roosevelt, responded to the crisis with a policy of bold federal intervention which included grants to states and local governments, new fiscal regulatory structures, and a variety of unemployment relief programs. The Civilian Conservation Corps (CCC) was probably the most famous of Roosevelt's Depression-era unemployment relief programs. It was designed to provide work experience and job training in a disciplined environment for single young men between the ages of 18 and 25. Enrollees lived in military-style camps under Army supervision for a period of six months at a time. (Each period was called an enrollment, and enrollees could sign up for successive enrollment periods until they reached the maximum age). Camps were generally located on public lands and work programs were administered by the National Park Service or the Forest Service. The work was originally intended to be forestry in nature, with vegetation management and fire suppression the principal responsibilities, but the enrollees eventually undertook many light construction projects as well, ranging from trails to small buildings and even dams. These were generally carried out in a rustic style, with the emphasis on manual labor characteristic of the CCC program lending itself well to the craftsmanship ideal of this

design tradition. Under Park Service supervision, the CCC continued many of the rustic projects which had originated during the previous decade of national park development and did much to advance the rustic style itself. So considerable was their contribution that in later years the CCC are often better remembered for their rustic construction than for the forestry and landscape conservation which actually comprised the bulk of their activities.

Home to eight CCC camps of up to two hundred men, Mt. Rainier workers repaired trails, completed various types of landscaping projects, cleaned roadsides, and built a variety of facilities from campgrounds to patrol cabins.

On the Yakima Park Highway, the men of CCC camp NP 5 handled emergency clearing of the road as well as planting and erosion control along the cut and fill slopes. Because erosion and stabilization was such a problem on the Yakima Park Highway, cut and fill scars remained the main focus of the revegetation and reforestation work. In 1935 alone, the men of camp NP 5 planted a total of 4,537 trees and shrubs along the Yakima Park Highway (Davidson: 5). Davidson justified the focus on erosion control work by stating,

"Such erosion control work is not merely an excellent landscape betterment, but will make road and trail maintenance work immensely easier and more economical. We should not consider that erosion control work has been completed in the park until every cut or filled slope along all roads or trails has been stabilized to a point where there is no more erosion either from slides, rainfall, or other natural conditions except accidental occurrences" (Davidson: 6).

Other roadwork done by the men of Camp NP 5 included repair projects following rock and mudslides and the maintenance of culverts. Although the CCC had crews working in the park through 1942, the majority of CCC activities ceased in 1941.

With stabilization work carried out by the CCC crews completed, further improvement projects along the Yakima Park Highway were given a low priority. Of the few projects undertaken during this era, the Mather Memorial Directional Marker located at the wye intersection with the Mather Memorial Parkway was altered. The original sign was an ashlar stone mortared structure with metal lettering. The metal lettering of the original sign was replaced in 1940 with a wooden signboard and routed lettering, presumably to provide better visibility at this intersection (HAER: 10). The original sign monument remains intact. Between 1940 and 1942, the upper portion of the Yakima Park Highway was resurfaced. Ditches and slides occurring in the lower portion of the road provided the material for a 1" gravel base for the resurfacing.

Post Period of Significance (1942-2008)

Budget constraints remained through the Korean War era, though development planning associated with Mission 66 began in 1953. Mission 66, spearheaded by NPS director Conrad Wirth and approved by President Eisenhower, was a high profile, ten-year nationwide initiative aimed at modernizing the Park Service and accommodating changing visitation patterns. The program was so named because it would conclude in 1966 and commemorate the Service's fiftieth anniversary year. The years of neglect brought about by the economic climate of the war years left many of the Park Service facilities in substandard condition. The Service not

only had inadequate housing for its own staff, it was also completely unprepared to meet the demands of the new influx of visitors introduced by a higher post-war standard of living and the automobile. The lack of adequate facilities in the parks was widely publicized in popular magazines a warning that the public was beginning to lose faith in the park system. Mission 66 was conceived as a billion-dollar program to improve park facilities, increase staffing, and plan for the future expansion of the system. The philosophy behind Mission 66 was the "paradox of protection by development" (Sellars 1977, 181). Wirth believed:

"Development is based on the assumption that when facilities are adequate in number, and properly designed and located, large numbers of visitors can be handled readily and without damage to the areas. Good development saves the landscape from ruin, protecting it for its intended recreational and inspirational values. It is the purpose of Mission 66 to locate developed areas where they will not invade the wilderness, impair fragile areas or features, or encroach upon a well-thought-out plan for the protection and interpretation of the natural and historic features of the areas" (U.S. Department of Interior 1956, 308).

In an effort to meet tremendous park needs with a limited budget, Mission 66 planners sought ways to modernize or update park facilities and, at the same time, decrease the cost of development. The NPS adopted contemporary Modern architectural styles and methods of construction that were typically less expensive than traditional park styles and methods. Modern Style architecture emphasized machine production over craftsmanship and the use of new materials (inexpensive steel, concrete, and glass). Structural honesty, the use of simple, geometric forms, and restrained use of architectural details were important elements that characterized this style. The NPS adapted the style to visually blend the buildings into their surroundings through plainness, low massing, horizontal lines, and earth tone colors. To further increase efficiency, the NPS produced standardized architectural plans for park buildings that that were repeated throughout the region and nation, with modifications allowed to address specific landscape constraints, such as sloping topography, as well as variations in climate.

In March 1956, Secretary of the Interior Douglas McKay announced that the Mission 66 program would include $66 million over the ensuing ten years for comprehensive development and improvements at Mount Rainier (DOI Press Release, Catton files, March 16, 1956). Mt. Rainier was the first National Park to develop a comprehensive master plan as part of Mission 66 planning. The development plan addressed the general trend of visitor use which was shifting from overnight stays to day use, increased automobile use, and higher visitation overall. At that time, 92% of all visitors did not stay overnight and, of those who did, 66% were campers (MORA Archives Pam.979.77, 1956). Mission 66 planning efforts in Mt. Rainier emphasized roadside improvements, including improved visitor circulation patterns and innovative wayside interpretation.

Despite the emphasis on road improvements, Yakima Park Highway received only a small number of improvements during this era of massive park infrastructure upgrades. Viewfinders were proposed along Yakima Park Highway at the developed areas of Sunrise point, White River Bridge, and the columnar andesite turnout. Signage for the White River Campground was also updated, replacing the rustic wood sign with a dimensional lumber sign and adding a

small planting scheme around the sign. In 1957, the park replaced the wood bridge at Shaw Creek as part of the Mission 66 efforts. The historic log stringer bridge was replaced with a steel girder and reinforced concrete bridge that included metal guardrails. The historic masonry footings were the only portion of the old bridge that was retained. In 1965, Park Landscape Architect J.T. Clark, collaborating with BPR, proposed major improvements to the Yakima Park Highway. The improvements included a proposal to widen the cross section of the road on the fill slope side, presumably by decreasing the vegetated shoulder width. This project was never actualized.

In 1995, a slide area commonly referred to as the "Big Dump" severely damaged the road. The park, working with FHWA, proposed the construction of a concrete guardwall to secure the road bench and stabilize the slide area. The NPS decided to use a relatively new material treatment, in order to blend the appearance of the upper segment of the new wall with the surrounding environment. A guardwall of simulated stone was designed to sit atop of the concrete retaining wall. The simulated stone was created by pouring concrete into a molded formliner which had the impression of cut stone masonry. After curing of the concrete and removal of the formliner, the molded concrete was painted to simulate the color of native stone. The simulated stone guardwalls lacked crenellations and also lacked the picturesque qualities and craftsmanship of the authentic stone guardwalls along the road. In addition, the backside of the concrete retaining wall was not constructed using the simulated stone technique even though it was visible from the road due to the curvilinear alignment in this segment. In another slide area nearby, a Core 10 Steel W guardrail was added as a safety measure due to the steepness of the open fill slope in this segment.

In 1997, Yakima Park Highway was included in the National Historic Landmark District (NHLD) designation for Mount Rainier National Park. The NHLD nomination noted the centerline of the road still follows the original alignment and the majority of the historic structures had been retained. The nomination stated "Since the centerline of the road follows the alignment of the road during the period of significance, and since almost all of the major structures associated with the road are original, the road can be said to have excellent integrity overall to the period of significance" (NHLD Nomination, Carr: 14). In addition Deadwood Creek (Dry Creek) Bridge, Klickitat Creek Bridge, Fryingpan Creek Bridge, and White River Bridge were listed as contributing structures to the District.

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The Yakima Park Highway is an example of an early national park scenic highway, and an integral part of the extant early master plan for the park. The highway is distinguished by outstanding engineering achievements and features of naturalistic design. The period of significance for the Yakima Park Highway cultural landscape spans the years 1927-1941, reflecting the period when the NPS coordinated the design and construction of the road, ending with the revegetation efforts by the Civilian Conservation Corps (CCC).

Spatial Organization: The spatial organization of Yakima Park Highway is reflected in the historic alignment of the road. The road's alignment and stopping points along its route were carefully planned. The alignment of the road, along with the location of the turnouts, bridges, developed areas, and other features were carefully chosen to create a pleasant driving experience that took advantage of natural topography and views. The route begins in the White River Valley (3,400'), and starts its ascent near the Yakima Creek drainage. It climbs up to Sunrise Ridge before terminating at Yakima Park (6,400'). It was through the careful integration of horizontal and vertical alignment that NPS landscape architects were able to design a route that provided smooth travel at a leisurely pace. As a scenic highway, the road alignment offers views, provides places to pause, and creates an overall pleasurable drive as it follows the natural contours and curves in the landscape. The combined effect of the road gradient, the curvilinear alignment, and the ever changing scenery creates an experiential character unique to the Yakima Park Highway.

Natural Systems and Features: The overarching design philosophy of the NPS required that the road "fit" the landscape. Cut and fill was kept to a minimum, and slopes were graded to blend into the surrounding terrain. In areas where the road corridor cut across the face of cliffs and rock slopes, special methods of excavation were developed to minimize scarring. Where steep slopes could not be avoided and construction required a severe cut, an attempt was made to rehabilitate the disturbed area by simulating natural features. For example, granite rock cuts along the cut slope of the road in the White River Valley were crafted to present the natural stratification of the rock. In the upper segment of the highway salvaged stone from cut and fill was used to construct adjacent features, such as retaining walls, guardwalls, rock barriers that further blended the road with its surroundings.

Lands Use: Historic land use patterns on the Yakima Park Highway are virtually unchanged since the historic period. Remaining largely the same since it was opened, the road today is still a destination route to Yakima Park and Sunrise village and a scenic highway with places for stopping to enjoy views.

Circulation: The Yakima Park Highway was conceived and built as a scenic park highway terminating at Sunrise village. The road also provided access to the White River campground, several medium scale developed areas, and trailheads. Enlarged turnouts at these trailheads provided day-use and overnight parking for hikers. Numerous other turnouts along the corridor provided places for motorists to pause and view the surrounding terrain, as well as the bridges and other architectural elements of the road. These circulation patterns are intact today and contribute to the significance of the landscape.

The circulation features of the Yakima Park Highway include the 15.3-mile road itself, with travel lanes and paved shoulders, turnouts, parking areas, trailheads, and intersections.

Buildings and Structures: Buildings and structures built during the historic period in conjunction with the construction of the Yakima Park Highway are an integral part of the cultural landscape, revealing the naturalistic and rustic design philosophy of the road. The bridges, culvert headwalls, guardwalls, and retaining walls associated with the road were designed by landscape architects to minimize the visual impact of the structures and accentuate the picturesque qualities of the natural surroundings. The use of native materials, along with strict design principles and construction standards, ensured the structures blended with the scenery, matching the color and character of natural rock outcroppings and the surrounding terrain. The consistency in design and materials among the different structures creates a visual unity and helps define the character of the road corridor. There have been some losses and additions of buildings and structures within the road corridor including the loss of wood guardrails, the replacement of Shaw Creek Bridge, and the construction of a new White River Entrance Station.

Topography: Human manipulation of natural topography occurred along the entire length of the road from the White River Valley up to Yakima Park to address extremely steep slopes and slide zones. Loose glacial till soils and granite bedrock created a variety of conditions and challenges while building the road bench as well as in maintenance of the road post-construction. A substantial effort was made to minimize the visual impact of topographic manipulation by blending the highway's cross section with its surrounding environment. Manipulation of the natural topography is particularly evident in the constructed features of rockcuts, earth cuts, and fill-throughs.

Vegetation: The designers of the Yakima Park Highway attempted to integrate the road seamlessly into the natural landscape through the use of vegetation. Vegetation was retained or planted along the shoulder of the road, near bridges, denuded areas, and developed areas in an attempt to screen or soften the built features. Similarly, vegetation itself was considered an outstanding natural feature in its own right where they retained specimen trees along the road's edge or was used to highlight other natural features through the framing and filtering of views.

Views and Vistas: The views from the Yakima Park Highway today are much the same as they were when the road was planned. From Sunrise Point, visitors were treated to extraordinary views of Mt. Rainier's north and east flanks. Views from the road itself are also known as some of the most spectacular in the park and amongst the most beautiful in the national park system.

Small Scale Features: The small scale features found along the Yakima Park Highway collectively add to the function and aesthetic of the road and demonstrate care taken by NPS designers to seamlessly incorporate small built elements into the surrounding landscape. They include culverts with hand-tooled headwalls, a masonry stone bench at Sunrise Point, and a drinking fountain at White River Entrance. They are all stone masonry features using local materials. Harsh, high-elevation, winter conditions have led to the loss of rustic wood signs and gates. Over the years most of these have been replaced with weather-resistant materials such as anodized steel. With the exception of the replaced signs and gates, the majority of the small scale features still retain their historic character.

Archeological Sites: Three archeological sites exist within the road corridor that are associated with the early history of the road and its construction, including the Sunrise Ridge Borrow Pit Site (FS1990-01), Yakima Creek Historic Cabin Site (FS1997-18), and the remnants of the Old Storbo Road.

Note: Locations of contributing and non-contributing features are noted throughout the Analysis and Evaluation section in miles, beginning with milepoint (MP) 0.000 at the intersection of Mather Memorial Highway (Hwy 410) and the White River Road. The end point is located at the entrance to the Sunrise parking lot at milepoint (MP) 15.335.

Integrity

Today, the Yakima Park Highway is an intact example of an early national park scenic highway, serving as an integral part of the park's early master plan. Since the period of significance, there have been some alterations to the road to address safety and erosion issues, but these changes have had a minimal impact on the overall integrity of the road corridor. The greatest changes have been the addition of a new entrance station at White River (which was designed to blend the modern structure into the rustic character of the historic road corridor), a concrete retaining wall (with a simulated stone pattern) to address erosion problems in an area known as the "Big Dump," the replacement of a log stringer bridge, and removal of wood guardrails on the final stretch of road approaching Sunrise.

Despite the aforementioned changes, the road's naturalistic character is still evident in the numerous remaining landscape characteristics and features that reflect the seven aspects of integrity. The alignment of the scenic highway still follows its historic route, which was carefully planned to create a pleasant driving experience through gentle grades and beautiful views. The setting, feeling, and association of the road are most evident in the surrounding landscape and the attention to design details that blend the road into its environment. The design response to the natural setting, such as the use of native stone in the rock walls, culvert headwall, bridge facades, and curbing or the alignment of the road to capture extraordinary views of Mt. Rainier and surrounding peaks is still evident. The road's association with early park planning and the rustic style design is evident through the remaining built features (walls, culvert headwalls, and bridges) through their consistent design, materials, and workmanship that help to create a cohesive experience of driving along a rustic scenic highway. Efforts to hide construction scars through revegetation and naturalistic rock cuts are subtle, but reflect the careful attention paid to workmanship and design of the road. Sunrise Point, a lookout area at upper elevations of the road, is an exceptional example of rustic design and blending of natural and built features. As the road approaches the point, it takes a 180 degree turn that reveals a direct and unobstructed view of Mt. Rainier ahead. Visitors can park at Sunrise Point to enjoy 360 degree views of the surrounding mountain peaks and valleys. The development thoughtfully blends with the surrounding landscape through the use of stone walls that mimic the mounting ridges and peaks in the distance. As a result of the historic integrity of the Yakima Park Highway corridor, visitors continue to experience a drive from the forested valley of White River to the subalpine meadows of Sunrise and Yakima Park as it was designed and constructed during the period of significance.

Landscape Characteristic:

Spatial Organization

The alignment of the Yakima Park Highway, along with the location of the turnouts, bridges, developed areas, and other features were carefully chosen in keeping with the principles of naturalistic landscape design to maximize visitor experience. The alignment was chosen to integrate the relationship of the roadway and its associated features with the surrounding landscape. The physical characteristics of the road can be described by the horizontal plan and vertical profile, which describe the alignment of the route as it climbs out of the White River Valley (3,400'), around the Yakima Creek drainage, up to Sunrise Ridge before terminating at Yakima Park (6,400'). It was through the careful integration of horizontal and vertical alignment that NPS landscape architects were able to design a route that provided smooth travel at a leisurely pace. As a scenic highway, the road alignment purposely offers views, provides places to pause, and creates an overall pleasurable drive as it follows the natural contours and curves in the landscape. The combined effect of the road gradient, the curvilinear alignment, and the ever changing scenery creates an experiential character unique to the Yakima Park Highway.

To best understand spatial organization, the route is divided into four segments described below. These segments take on distinct spatial characteristics as they respond to the physical attributes in the landscape. To access a map of these four segments please see "Supplemental Information".

Segment 1 - White River Valley Floor, MP 0.0 – 5.2
Beginning at MP 0.0, the junction with the Mather Memorial Parkway, the road gradually descends to the White River Entrance Station, before continuing along a gently undulating grade up to the White River Bridge (3,950'). For the majority of the route in this segment, the road skirts along the lower slopes of Goat Island Mountain and ends at the intersection with the White River Campground Road just beyond the White River Bridge (MP 5.2). The narrow, densely forested route and the five river crossings including Deadwood Creek, Klickitat Creek, Shaw Creek, Fryingpan Creek, and White River define the spatial character of this segment. This segment also includes two medium size developed areas that are intended as places were drivers can stop and gain information or take a closer look at the surrounding landscape: White River Entrance Station and the Fryingpan Creek Bridge area. In addition, historic bridge crossings and turnouts offer visitors close up views of wild rivers and lowland old-growth forests. The horizontal alignment of the road through this segment is one of gentle tangential curves as it heads eastward along the White River valley. The alignment is purposefully designed to reveal intermittent views of Mt. Rainier and Little Tahoma framed by old-growth forest along the shoulders of the road.

Segment 2 – White River Valley Incline, MP 5.2 - 9.3
Climbing out of the White River Valley, this segment of road can be identified by tight radial curves, exposed rock cuts, and filtered views of the valley below. As the grade increases along this four mile segment, the road gains over 1,000' in elevation. From the White River Campground intersection the road climbs the northern slope of the White River valley up to a panoramic viewpoint at MP 9.3. After the granite rock outcroppings end, the road enters a

series of inside and outside radial curves as it skirts along the rolling topography of a steep valley side, deeply incised by perennial drainages that permeate the soft glacial till and pumice. The elevation gain provides intermittent sweeping views across the White River Valley and eastward towards the Cascades. Outcroppings of columnar andesite mark the ridge line for the White River Valley. Here, a tight radial curve carries the visitor around the end of the ridge with the road bench supported by a retaining wall and Type 5 guardwall. From this vantage point visitors are rewarded with the first of numerous panoramic views of the valley below and Mt. Rainier to the west. After the ridge, the road drops into the Yakima Creek Drainage where another tight radial curve negotiates the creek and the road begins the gentle climb up to Sunrise Ridge. Dense montane forest, isolated rock outcroppings and rock barriers characterize this segment. The rock barriers and trees growing in the shoulder provide visual security to the traveler. Interspersed between the rock outcroppings and the forest are major landslides. They generally occur where steep cut slope passes through a section of unstable glacial till and pumice.

Segment 3 - Sunrise Ridge, MP 9.3 - 12.5
This segment of road includes a series of switchbacks that negotiate the southern slope of Sunrise Ridge up to the Sunrise Point at MP 12.5. The switchbacks incorporate tight radial runs and long tangent sections. The radial curves are located in three places, the first utilizes the natural topography of the Yakima Creek drainage to make the tight turn, minimizing the use of cut and fill. The second required a large, steep cut in the relatively stable talus slope to realign the road back towards Mt. Rainier. The third radial curve is located on Sunrise Ridge, at the Sunrise Point developed area and takes advantage of the granite rock outcropping to create a dramatic 360-degree view. The relatively uniform slopes make long tangent segments possible, which pass through montane forest that begin to thin out as the vegetation transitions to subalpine forest. Small patches of subalpine meadow fill gaps in the forest along the cut slope, widening the driver's field of vision. These straight, forested segments provide stunning framed or filtered views of Mt. Rainier and the ridgeline of the Pacific Cascades to the east.

Segment 4 - Yakima Park, MP 12.5 - 15.3
The last segment of the road is characterized by gentle curves, sub-alpine meadows, outstanding views of Mt. Rainier's northeast side, and an arrival sequence that slowly reveals the terminus of the route, Sunrise Village. Beyond Sunrise Point, the route continues west and curves gently around granite rock outcroppings and talus slopes, paralleling Sunrise Ridge on the cut side of the road. This backdrop acts as a foil to the sweeping views on the fill side of the road; to the White River Valley below, the Cascade Range to the east, Mount Adams to the north, and alternating views of the Emmons and Winthrop Glaciers. To the west, the gentle grade, made possible though the use of fill throughs, makes for smooth driving as the impressive rock faces give way to the subalpine landscape of Yakima Park. Historic groupings of trees in the shoulder of the road filter views to Sunrise Village. Finally, a gentle curve aligns the road with the axial arrangement of the village, punctuated by a flagpole marking the end of the journey.

Summary
The spatial organization of Yakima Park Highway exhibits a high level of integrity. In accordance with naturalistic principles, the topography of the landscape dictates the horizontal alignment and gradient of each road segment. The vertical alignment maintains a maximum 6% gradient to provide ease of travel for leisurely driving. The combination of horizontal and vertical alignment creates a wide variety of scenic views, while driving and at designated stopping places. No appreciable alternations have occurred to the spatial organization of the road since the period of significance. A visitor today would experience, in terms of the spatial and physical placement of the road in the landscape, virtually the same road as when it was built.

Natural Systems and Features

The overarching design philosophy of the NPS required that the road "fit" the landscape. Cut and fill was kept to a minimum, and slopes were graded to blend into the surrounding terrain. In areas where the road corridor cut across the face of cliffs and rock slopes, special methods of excavation were developed to minimize scarring. Where steep slopes could not be avoided and construction required a severe cut, an attempt was made to rehabilitate the disturbed area by simulating natural features. For example, granite rock cuts along the cut slope of the road in the White River Valley were crafted to present the natural stratification of the rock. In the upper segment of the highway salvaged stone from cut and fill was used to construct adjacent features, such as retaining walls, guardwalls, rock barriers that further blended the road with its surroundings.

The road follows the natural progression from lowland old growth forests in the White River Valley, through montane forests, and finally into subalpine forests and meadows at Yakima Park. The overall sequence of the forest associations give a sense of the wildness as well as intimacy with the ecology of Mount Rainier National Park. The experience is an orchestrated effect thoughtfully planned by NPS landscape architects. The intent of the highway designers to bring park visitors from the tranquility of lowland old growth forests, through impressive forested valleys into the high alpine meadows survives today. An exception is the wide, flat road shoulder in the montane zone between the White River crossing up to the first Yakima Creek crossing. Here, the forest is set back from the fill side of the road by approximately 20' and the mowing of this shoulder curtails reforestation. From Sunrise Point to Yakima Park, the road passes through a park like landscape dominated by subalpine meadow vegetation and sub alpine firs as well as occasional specimens of Western white pine and Mountain hemlock. Manipulation of the landscape to build Yakima Park Highway resulted in large earthen cut slopes through steep subalpine meadows. These cut slopes suffer from repeated erosion despite efforts by the park to stabilize the slope and establish vegetation along the faces. Similarly, rock cuts continue to expel rock over the roadway. However, the rock cuts through this section maintain pockets for individual plants and fill-through sections have successfully re-established with native meadow vegetation. Overall, the forest associations retain a high degree of integrity.

Today, the road corridor retains many of the original turnouts, specimen trees, and rock cuts from the historic period. Historically, turnouts were strongly integrated into the natural

landscape and presented views of a variety of spectacular natural features. The retention of vegetation along the road corridor was of particular concern to the park landscape architects. Specimen trees still stand in the shoulder of the road or on the steep fill slopes. They are an important part of the highway, integrating the road with the surrounding landscape.

Periodic landslides have impacted the historic character of the road. In several places where landslide zones cross the road, the shoulder has been enlarged due to the gradual accumulation of slide material. In spite of these changes, the Yakima Park Highway as a whole retains its historic character and landscape scale in relation to natural systems and many of its original structures, patterns, and other features still blend into the landscape.

Land Use

Land use refers to the dominant uses of the road by visitors and park employees. Historic land use patterns on the Yakima Park Highway are virtually unchanged since the period of significance. Remaining largely the same since it was opened, the road today is still a destination route to Yakima Park, a scenic highway with places for stopping, and an access road for park employees. A table describing the type, location, and condition of extant land use features can be obtained through "Supplemental Information".

As a destination route, the road was developed in part to ease visitation pressure on Paradise by opening access to Yakima Park and Sunrise Village. It was also designed to provide access to the park for people arriving from the east side of Mt. Rainier. Original plans for Sunrise Village included a hotel, gas station and other independently run developments that would turn Yakima Park into a “scenic playland.” The hotel was only partially built; but the gas station, day lodge, cabins, amphitheater, and campsites turned Yakima Park into a large-scale developed area. When Sunrise Village opened it was the most popular destination in the park and during peak periods saw up to 2,000 visitors a day. Today, it is still one of the most visited and significant destinations at Mt. Rainier; the termination point for the Yakima Park Highway.

As a scenic highway, the Yakima Park Highway is just as picturesque and momentous as the destination it services. Slow design speeds, narrow travel lanes, and the curvilinear alignment, all encourage visitors to consider the traveling as a part of their total park experience. By aligning the road to reveal spectacular views, bringing visitors close to valley overlooks, geologic points of interest and stream crossings, NPS landscape architects direct the visitor’s attention to the most outstanding natural features along the road; even going so far as to align the road to cross Yakima Creek at mile point MP 11.398 and again at MP 11.482 so that it might be used twice as a point of natural interest. The overall effect of the road is to reveal a changing scene or point of interest at every corner, the best of which include turnouts or developed areas that permit the visitor to leave their car and explore.

The road’s intended use as a destination for visitors is evident in the numerous developed areas and trailheads created along the route that provide recreational and interpretive opportunities in the eastern area of the park. NPS landscape architects designed and sited numerous developed areas along the route and throughout the park to provide places for visitors to interact with the park’s natural resources. Depending on the number of people one of these

sites could accommodate, the scale of development could be large, medium, or small. Sunrise Developed Area, for example, accommodates up to 400 cars and is a large scale development with a wide array of built features such as buildings, picnic areas, a parking lot, sidewalks and trails.

Medium developed areas do not include any of the large scale amenities found in large developed areas. They are typically located in relation to exceptional natural features within the park, such as viewpoints, rivers, or geological features. Other than the medium developed areas around entrance stations, they are not typically sites where visitors can expect to acquire services, or come in contact with park employees. They are areas of medium development density and scale which typically include supporting features such as comfort stations, picnic areas and interpretive panels. There is an expectation for the visitor to be self-supporting within these areas, to bring with them what they need rather than to acquire it at the site. There are two medium-sized develop areas along the Yakima Park Highway. The first, the White RIver Entrance Station Area, is at the entrance to highway and provides a location for the park to collect entrance fees and orient the visitor. The second area, Sunrise Point, takes advantage of a scenic location to provide visitors with a place to stretch their legs, picnic and take in the outstanding views.

The White River Entrance Station area (MP 1.292) is able to accommodate up to 15 vehicles and acts as center for orienting and informing visitors. Central to this area is the White River Entrance Ranger Station, a historic structure, which is staffed by a park ranger. The road is aligned at the entrance station to provide the first framed view of Little Tahoma, providing a first glimpse of the parks spectacular scenery. The parking lot is edged by a rock barrier and specimen trees are planted around the main building, parking lot and at the intersection with a park service road. There are also two historic comfort stations, set back from the road and screened by vegetation. The signs in this area include an interpretation board that orientates visitors during the shoulder season. Overall the area is in fair condition, large trees are beginning to obstruct the view of Little Tahoma, the historic entrance station is showing signs of deterioration and the comfort stations are now lost in a dense planting of trees. The integrity is diminished by a modern entrance station located in the center of the road and the paths to the comfort stations have been widened. Despite these changes the Entrance Station area is still used as originally intended and is a contributing feature. The other medium developed area, Sunrise Point (MP 12.706), has many built features including the Type 5 “Rainier” guardwall designed specifically for this road, a unique double-layered Type 1 guardwall structure, a pedestrian bay with a rock bench, sidewalks and historic plantings. Sunrise Point also has one of the most dramatic panoramic views in the park, almost 360 degrees. Popular with visitors and able to accommodate 30 parked cars, Sunrise Point is an excellent example of a rustic style developed area.

Small developed areas are the most discrete of the developed areas. They typically serve one primary purpose, and are a cluster of landscape features intended to act as a unified whole to meet one central need. They seldom include more than the most basic of design elements such

as turnouts, rock barriers, trailheads and vegetation. Small developed areas are defined by the need to manage a cluster of features as a single site rather than separate elements. There are six developed areas along the road; Owyhigh Lakes trailhead (MP 3.550), Fryingpan Creek Bridge (MP 4.296), White River Bridge (MP 5.250), a columnar andesite turnout, known as "Devil's Postpile" (MP 7.728), Mt. Rainier viewpoint (MP 6.948), and the White River Valley viewpoint (MP 9.134). Each of the small scale developed areas includes a turnout (or turnouts) that accommodate no more than five vehicles at a time. They are located near a significant natural feature or rustic style built structure, which is intended to be viewed from outside the vehicle. For example, White River Bridge is a small developed area that includes a turnout with a rustic style rock barrier. The masonry faced bridge includes a wide sidewalk with historic plantings on either side that frame the glacial views upstream and the White River Valley downstream. This area is a contributing feature and is in good condition. The Owyhigh Lakes trailhead is also a historic developed area. Again, the turnout can accommodate up to five vehicles and the trailhead is marked by a rock barrier and historic plantings. The columnar andesite turnout, Fryingpan Creek Bridge and the White River Valley viewpoint are also contributing historic developed areas. Increased use of Fryingpan Bridge as a connection to the Wonderland Trail regularly causes the parking area to overflow onto the shoulders of the road both up and down grade, causing shoulder-widening. The White River Valley viewpoint is partially obscured by vegetation.

There are two non-contributing sites that have become small developed areas. The Big Bertha slide area (MP 0.312) has large turnouts on either side of the road, but also is a noticeable geologic site that has potential as an interpretive small developed area. The other non-contributing small developed area is at a large turnout south of Klickitat Bridge (MP 0.908) and is often used as a picnic stop. If the current use of this area is to continue, compatible rock barriers are recommended for limiting the widening of the turnout, as well as accommodating the contemporary needs of the visitors.

Summary
There are 11 developed areas along the Yakima Park Highway that have been designed for specific uses, from viewpoints, to trailheads to rest stops. The historic land uses and their associated features have changed little since the period of significance and still convey the historic character of the road.

Circulation

The Yakima Park Highway was conceived and built as a scenic park highway terminating at Sunrise Village. The road also provided access to the White River campground, several medium scale developed areas, and trailheads. Enlarged turnouts at these trailheads provided day-use and overnight parking for hikers. Numerous other turnouts along the corridor provided places for motorists to pause and view the surrounding terrain, as well as the bridges and other architectural elements of the road. These circulation patterns are intact today and contribute to the significance of the landscape. The circulation features of the Yakima Park Highway include the 15.3-mile road itself, with travel lanes and paved shoulders, turnouts, parking areas, trailheads, and intersections. The horizontal and vertical alignments of the road are discussed in the Spatial Organization landscape characteristic section, and the typical cross sections of the

road are discussed in the Topography section. The remaining circulation elements and features are discussed in this section. To obtain maps or a table of extant circulation features please see "Supplemental Information".

Design Principles
Similar to other roads within the park, the Yakima Park Highway serves as both a scenic highway and a destination route. The highway not only provides users with access to Sunrise Point and Yakima Park, but also to trailheads, developed areas, and viewpoints. Yakima Park Highway can be classified as a scenic highway where driving is referred to as a leisure activity due to the abundance of outstanding natural features along the route. In addition, turnouts along the road provide visitor access to many scenic destinations such as bridges, trailheads, and viewpoints. The primary function of the highway was captured by NPS policy Park Road Standards in 1984, which contains the following statement:

"Park Roads are for leisurely driving only. If you are in a hurry, you might do well to take another route now, and come back when you have more time."

The primary functions of Yakima Park Highway were established during planning in the late 1920s. The design intent followed the naturalistic style, established in the golden era of NPS master planning. Initially, NPS park staff surveyed the general route of the road's alignment on horseback. The Bureau of Public Roads (BPR) engineers surveyed the preferred route, providing detailed plans showing the vertical and horizontal alignment, grading, drainage, as well as specifications for the structural design of the major built features. After the survey was completed, NPS landscape architects worked on the aesthetic design of the built features, providing specific drawings for the rustic features including the stone facing on bridges, culvert headwalls, box culverts, and guard walls. In addition, the NPS landscape architects identified the location of turnouts, created scenic vistas and revised BPR plans. They ensured that rock cuts and plantings adhered to a naturalistic style, which blended structures and plantings with the natural environment through the use of native materials and natural forms.

Design Speed
The Yakima Park Highway was designed to be driven at an average speed of 35mph. The relatively slow design speed derives from the purpose of the road, a scenic highway, which is supposed to be driven at a leisurely pace, accommodating frequent stops. The 35mph speed limit is posted at the road's intersection with the Mather Memorial Parkway. The speed limit slows to 15 mph at the entrance station, were traffic lines form while drivers pay park entrance fees. Beyond the entrance station the speed limit again increases to 35mph. Prior to Fryingpan Creek Bridge, the speed limit is reduced to 20mph. This medium-size developed area includes a bridge with a view of the creek, a paved turnout, and a popular trailhead. The reduction in speed creates a safer environment for pedestrians to move around in this area. Past the bridge, the speed increases to 35mph. At MP 8.03, where the road crosses Yakima Creek for the first time, a sign with an arrow indicating a switchback slows traffic to 15mph. Beyond this point, the only sign with specific speed information is along the upper section of the road past Sunrise

Point. It directs traffic back to 35mph after exiting Sunrise Point. The design speed for the road has not change since the period of significance.

Trailheads

Trailheads provide visitors with an opportunity to exit their cars and explore the interior of the park through a network of trails. Trailheads along the highway have remained in the same location since the road was constructed. Trails accessed from the Yakima Park Highway include day-hike types as well as overnight hikes, especially those that access the Wonderland Trail. Five trailheads can be found along the road. Four are associated with paved parking areas, and one, the Summerland Trail, is located near a gravel turnout. Trailheads serve as the transition from road to trail and all trailheads along the highway are discretely marked by signs, rock barriers and specimen trees. All of the trailheads have retained their historic character and continue to integrate the two major forms of circulation in the park.

Turnouts

The location of turnouts along Yakima Park Highway offers travelers opportunities to view the scenery, and allows passage of trailing vehicles or pulling off and explore features of interest. Determining historic turnouts from non-historic turnouts is based on shape, size, and location. Historic turnouts can be identified by their shorter length and wider profile, as well as their associated landscape features. Historic turnouts along the Yakima Park Highway average 120’ in length, while non-contributing turnouts average 170’ in length. Of the 77 turnouts inventoried, 46 were determined contributing turnouts, while 31 were non-contributing. The historic turnouts included 63% that are associated with rock cuts where extra fill was available during construction of the road. Conversely, non-contributing turnouts are mostly associated with widening of the road shoulder. Widths also vary between turnouts; historic turnouts tend to be wider (22’) while non-historic turnouts are narrower (15’). The narrow width of non-contributing turnouts suggests cars pulling randomly onto the shoulder of the road gradually denuding the vegetation, and some are eventually surfaced with gravel. Often historic turnouts also have rock barriers or tree groupings lining the edge. Historic turnouts are typically surfaced with gravel, but there are three that are paved with asphalt. Non-contributing turnouts are not surfaced.

The vast majority of turnouts are in poor condition. Only seven historic turnouts remain in good condition. Fair and poor condition assessments result from the extension of the turnout by vehicular travel, gravel spilling over the shoulder, widening of the shoulder, or an inappropriate edging such as bare vegetation. Of the 46 historic turnouts, 63% were determined to be in fair or poor condition. Revegetation efforts, reshaping by paving, and placement of rock barriers to line the edges of historic turnouts in fair and poor condition will strengthen the long term integrity of these circulation features. The majority of remaining non-contributing turnouts require either removal through re-vegetation, or further evaluation to assess their function and need.

To the detriment of the road’s historic character, historic and non-historic turnouts along the

entire length have been extended or added along the shoulder respectively. The majority of non-contributing turnouts are found between MP 5.0 and MP 9.3, where a wide shoulder exists due the deposition of slide material from the cut slope above. The non-contributing turnouts are not necessarily permanent features of the road. New turnouts emerge each year while others become abandoned. This phenomenon most likely reflects vehicular travel patterns, and maintenance practices. Despite the large number of non-contributing turnouts (40%), the contributing turnouts are still an integral design feature because they facilitate safe travel and offer viewpoints and rest stops. The historic placement along the road is an intentionally designed feature that dictates travel patterns intended by the NPS landscape architects in the 1930s.

Curbs

The majority of the historic stone curbs along the road have been retained and are generally associated with bridges, sidewalks, and medians. The historic curbs are constructed from either unhewn granite or concrete, while later additions are often made of asphalt. The curbs are generally either 2' or 3' long, 12" deep, and 12-18" in height. Following rustic design principles, curbs were laid in random patterns. A modern asphalt berm was constructed along the south side of the road from MP 12.9 to MP 14.0 in order to direct water onto the road instead of down the steep fill slope, where erosion could become problematic.

Intersections

There are four historic intersections along the Yakima Park Highway. The first two intersections are located at developed areas in the lower White River Valley. The intersections provide access to park maintenance areas and are flanked by large specimen trees. The third intersection is a wye intersection at the White River Campground. The center of this intersection is marked by a small island with a sign for the White River Campground. The east side of the wye is flanked by a large rock cut and specimen trees mark the entrance to the White River Road. The intersection at MP 8.61 provided access to a historic quarry used during construction of the road.

Sidewalks

Sidewalks along the road are associated with bridges or developed areas such as Klickitat Bridge, the White River Bridge and Sunrise Point. Linear sidewalks along the bridges were put in place to provide a safe platform, elevated from the road, for viewers to stand on or walk over. At the White River Bridge, the broad 8' wide sidewalk was intended as both a bridal and pedestrian crossing. The sidewalks at Sunrise Point are curvilinear, following the alignment of the tight radial curve that encompasses this medium sized developed area. In all cases, sidewalks are edged with stone curbs and are paved with gravel or asphalt. Out of the six sidewalks along the highway, two are in good condition and four are in fair condition. The four in fair condition are cracking and require patching as well as the removal of vegetation.

Islands and Medians

At the entrance station, four stone-lined medians flank the front and back of the station and

separate lanes of traffic. The medians were built in the 1990s and are non-contributing features. However, they are planted with native vegetation and follow rustic design principles, which make them compatible features.

Summary
The major circulation patterns and associated features of the Yakima Park Highway have changed little since the period of significance. Many of the historical turnouts are still in tact, trailheads are easily accessible from the road, and sidewalks and curbs guide visitors safely along bridges and to viewpoints. However, shoulder widening has occurred in numerous locations due to a build-up of debris. Despite these changes the major components of circulation have been retained and continue to convey the historic character of the Yakima Park Highway.

Character-defining Features:

Feature: Island/Median at White River Road

Feature Identification Number: 129661

Type of Feature Contribution: Contributing

Feature: Sunrise Point Sidewalks

Feature Identification Number: 129645

Type of Feature Contribution: Contributing

Feature: Trailheads (5)

Feature Identification Number: 129669

Type of Feature Contribution: Contributing

Feature: Historic Turnouts (48)

Feature Identification Number: 129671

Type of Feature Contribution: Contributing

Feature: Island/Median at White River Entrance

Feature Identification Number: 129663

Type of Feature Contribution: Non Contributing

Feature: Non-historic Turnouts (34)

Feature Identification Number: 129673

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Contemporary photo of a historic turnout. (MORA 2005)



Contemporary photo of a historic sidewalk, which was designed to serve both pedestrians and horses at the White River Bridge. (MORA 2005)



Contemporary photo of a historic curb at Klickitat Bridge. (MORA 2005)

Buildings and Structures

Buildings and structures built during the historic period in conjunction with the construction of the Yakima Park Highway are an integral part of the cultural landscape, revealing the naturalistic and rustic design philosophy of the road. The buildings, bridges, guardwalls, and retaining walls associated with the road were designed by landscape architects to minimize the visual impact of the structures and accentuate the picturesque qualities of the natural surroundings. The use of native materials, along with strict design principles and construction standards, ensured the structures blended with the scenery, matching the color and character of natural rock outcroppings and the surrounding terrain. The consistency in design and materials among the different structures creates a visual unity and helps define the character of the road corridor.

Great care was taken in the specifications and design of stone guardwalls, rock barriers, and the stone facing on bridges. NPS landscape architects created full size template drawings to ensure that arch ring stones for bridges were individually specified with regard to size and shape, ensuring an irregular, hand-crafted effect. In addition, intersections within the joinery of stonework were specified so that four stone corners would never meet, creating an irregular,

varied texture to the masonry. The attention to detail and adherence to rustic design principles is still evident throughout the entirety of the road, creating a cohesive, visually interesting experience along the Yakima Park Highway. A table and map of extant buildings and structures can be found in "Supplemental Information".

Bridges

There are five bridges along the Yakima Park Highway, two of which are concrete spandrel arch bridges faced with stone to give them a rustic appearance. Dry Creek Bridge is also constructed in the rustic style with hewn stones facing the structure, however the span of the bridge was short enough to only require a reinforced concrete slab to support the structure. Fryingpan Creek Bridge is a three-hinged steel web girder bridge and is the only historic exposed steel bridge in the park. Shaw Creek was formerly a rustic style log-stringer bridge that was replaced by a steel structure in 1957. Though some of the original masonry abutments can still be seen near the footings, this is the only bridge on the Yakima Park Highway that is non-contributing. The bridges are described in more detail in the following paragraphs.

Dry Creek Bridge: MP 0.638
Dry Creek Bridge, also known as Deadwood Creek Bridge, was built in 1929 and is located one half mile west of the intersection with the Mather Memorial Parkway. The bridge is a reinforced slab concrete bridge on battered masonry abutments, Type 1B and 1D guardwalls. Only 24’ long, this bridge is one of the shortest spans in the park. The structure has not been altered since its construction, it is in good condition and is a good example of the rustic design style.

Klickitat Creek Bridge: MP 0.966
The Klikitat Bridge is an excellent example of rustic bridge design, set in deep woods. The bridge is a reinforced concrete spandrel arch with masonry stone facing, Type 1B and 1D guardwalls, and abutment walls. The native granite is hewn with 6” hand chisels to give a naturally aged appearance and the cap stones have a bossed edge along the length of the guardwall. The care, craftsmanship and attention to detail in the construction of this bridge blend it seamlessly into the natural surroundings. The NPS landscape architects initially planned to construct a large log-stringer bridge similar to the structure at Shaw Creek. The span proved to be too long so the spandrel arch was built instead. During the building of this bridge great pains were taken to preserve the forest around it. Specimen trees can still be seen and remain close to the bridge further blending it into the surrounding forest. This bridge was finished in 1931 only a few months prior to the opening of the road. The Klikitat Creek Bridge is in good condition and contributes to the significance of the Yakima Park Highway.

Fryingpan Creek Bridge: MP 4.240
Located four miles west of the White River entrance area, the Fryingpan Creek Bridge is a three hinged arch structure with solid web arch girders. The abutments and spandrel walls are faced with native hewn stone. Initially, a masonry faced concrete arch spandrel bridge was

proposed by NPS landscape architects, however, test pits proved the site unsuitable for the weight of the concrete span so steel was used for construction of the arch. The final arch spanned over 127’ making it one of the longest in the park.

The Fryingpan Creek Bridge is in poor condition. Concrete cracking is visible along the expansion joints, and the concrete is spawling along the exposed deck sections. In addition, river erosion is exposing the eastside footings and the large stones are cracking on the masonry abutments. While the exposed steel girders are not typical of the rustic style care was taken to integrate the bridge into the surrounding environment. On either side of the railings, Type 1B guardwalls mark the ends of the bridge. In addition, the abutments incorporated over sized native stone and naturalistic plantings were placed around the bridge. The Fryingpan Creek Bridge contributes to the significance of the Yakima Park Highway.

White River Bridge: MP 5.256
The White River Bridge, built in 1929, is a reinforced concrete spandrel arch structure, faced with granite masonry. Of the many bridges in the park, this is the longest at 180’. It is 35’ wide and has an arch span of 90’. The bridge exemplifies the rustic style of architecture practiced in the NPS between the two world wars. The individual stones for the arch were cut from wooden templates to ensure accuracy for the arch stone fittings. Some of the larger stones measured 7’ long and weighed up to 500 lbs. The hewn stone facing seamlessly integrates the structure with its rocky setting. Type 1B guardwall was used on the east side of the bridge and Type 1D on the west. The Type 1D guardwall was modified to accommodate a bridal path, at 8’ wide. The site of the bridge was chosen where the river is confined between granite banks allowing both abutments to be placed on solid rock. Due to the solid granite foundation, excavations for the arch abutments and wall footings were done without incident and the stone foundation also has insured the survival of this bridge above a river channel that is constantly fluctuating. The White River Bridge is in good condition and is an outstanding example of rustic style architecture.

Shaw Creek Bridge MP: 2.668
Shaw Creek Bridge is the only non-contributing, incompatible bridge along the Yakima Park Highway. The structure is a reinforced concrete and steel girder bridge, replacing an earlier rustic log bridge in 1957. Even though the historic masonry work on the footings was retained, the bridge still differs significantly from the earlier masonry faced bridge. The original structure spanning Shaw Creek used 60’ old growth logs as stringers to cross the creek bed. This bridge was an unusually large rustic-style wood bridge that amazed even the contractors that constructed it. While the decking of the bridge remains in good condition, attempts to protect the abutments have resulted in a large build-up of stone riprap along the stream bank. The Shaw Creek Bridge is a non-contributing feature.

Buildings

White River Entrance Ranger Station

Built by the National Park Service between 1929 and 1931 under the supervision of Chief Architect Thomas C. Vint, this log frame, one story, T-shaped, gable-ended building is an excellent example of park service rustic style architecture. The structure, located at the entrance area for the Yakima Park Highway was modeled after the Nisqually entrance station and is similar to other rustic ranger stations in the park. Up until the new entrance station was added in 2001, the ranger station was the main contact structure for visitors. The building is in fair condition with brown rot in the lower logs and a slump in the roofline. The portico of the building has been altered to accommodate the increasing size of cars and the chimney stack has been altered. The entrance station is a contributing building.

Comfort Stations

There are two comfort stations on the Yakima Park Highway both constructed in 1931 within the White River Entrance Station developed area. Like the White River Entrance Ranger Station, the comfort stations were designed and constructed in the rustic style under the supervision of Chief Architect Thomas C. Vint. Each building is constructed using whole and half log structural timbers, finished with wood siding, and roofed with cedar shake. The structures' rustic appearance conceals the fact that they contain modern restroom facilities. The comfort stations are set back from the parking area, and are easily accessed following a stone lined path. A concrete enclosed septic tank is located behind the structures.

Despite the difficulties typically encountered with maintaining a wood structure in a moist, shady environment, the exteriors of the comfort stations are in good condition. However, the moisture and growth of lichen and moss on the structures is beginning to take a toll, and the end sections of the structural timbers are beginning to soften, in some cases they are rotting away. The rustic comfort stations are contributing buildings.

White River Entrance Station

The White River Entrance Station was constructed in 2001. The design and construction of the new structure is non-compatible with the rustic style. This includes the use of board and batten siding, asphalt shingle roofing, sliding aluminum windows, and exposed concrete foundations. None of the materials recall the guidelines for rustic structures which included wood lap or log siding, and wood shake roofing. An exception is the stone facing on the foundation. The placement of this entrance station also does not follow the design principles of the rustic style; it is very prominent, located in the center of the road and blocks a prominent view of the mountain. The entrance station design represented modern architecture in terms of the clean lines, unadorned facades and windows, and simplicity of form. The entrance station does not contribute to the significance of Yakima Park Highway.

Guardwalls and Retaining Walls

Yakima Park Highway includes the only set of Type 5 guardwalls in the whole park system. These are reinforced concrete, masonry faced walls with crenellations. The crenellations make

this Type 5 guardwall unique. They were designed to symbolize the shape of Mt. Rainier as viewed from the east side of the park. There are five Type 5 guard walls, three are located at the Sunrise Point developed area. The walls are remarkable in that they follow the patterns of the mountains and add to the quality of the panoramic views without calling too much attention to themselves. The guardwalls at Sunrise Point are built on top of retaining walls that support the road bench around Sunrise Point. The two other sections of guardwall are located at the columnar andesite rock outcroppings that form the north ridge of the White River Valley. One section of the wall is associated with a skillfully constructed rock cut. The rock cut and the guardwall funnel travelers through a curvilinear stretch of road with a steep drop off and an outstanding view of the mountain. The fifth section of guardwall is located close to a landslide area and is in poor condition. The wall is rotating, layers of paving cover the base of the wall and it is overgrown with woody vegetation. Along with the Type 5 guardwalls, a series of Type 1B guard walls accompany the Type 5 at Sunrise Point. These flat topped walls demark the boundary between the road and the parking area in the center. Sidewalks weave in between these walls allowing the circulation to flow smoothly in and around the parking and viewing areas.

Yakima Park Highway has six historic retaining walls. The tallest retaining walls are located in the area with the most rugged topography above the White River Bridge up to the Yakima Creek Drainage. A large, rustic style retaining wall is located at MP 6.206. This was an experimental wall built in 1930 to hold the steep, unstable cut slope in place. A trench was dug on the inside of the wall designed to catch rock and rubble sliding down the slope, which would be periodically removed. Davidson referred to this structure as a “breast wall,” and it has stood the test of time. The mortar joints are in good condition and there is no sign of rotation. In an area where frequent landslides have denuded the cut slopes, the slope above this wall is covered with trees and low growing vegetation. The wall follows the radial curve of the road, and includes massive semi-hewn stones measuring up to 8’ in length.

There is one non-contributing wall located at MP 7.350, this site is referred to as the “Big Dump.” Along the steep cut slopes in this segment the exposed sections of unstable glacial till and pumice are prone to frequent landslides. The Big Dump slide is probably the worst effected area and from the top of the cut slope to the toe of the fill slope it measures approximately 1,000’. An attempt to secure the road bench led to the construction of a reinforced concrete retaining wall in 1995. Although the wall has prevented major landslides the steepness of the cut slope above has prevented vegetation from establishing itself and minor slides still occur in this area. While the retaining wall is in good condition, the exposed concrete on the outside is easily viewed from the road. An attempt was made to blend the inside and top of the wall with simulated stone using concrete forms. However, the structure is incompatible with the historic character of the road.

Rock Barriers

Rock barriers are located along the length of Yakima Park Highway. They were designed by

NPS landscape architects to provide a variety of uses including the delineation of turnouts, act as guardrails along the steep sections of fill slope, to accent trailheads, and blend the ends of guard walls and gates into the landscape. Twenty-three rock barriers were found along the length of the highway; thirteen are contributing. The majority of these are arranged in a linear pattern marking the edge of historic turnouts to keep vehicular traffic from encroaching into the natural vegetation. Solitary boulders are also a form of rock barrier. Six solitary rock barriers appear along the road, three are contributing and follow the NPS naturalistic style. Three are located at turnouts, and are non-contributing rock barriers, they are placed above the ground, but are compatible features. The NPS design standards for rock barriers outlined a series of characteristics including specifications for height, width, shape and spacing. Although there is variation among rock barriers; a pattern has emerged of common characteristics indicated below.

Typical rock barrier characteristics:
1. Rocks are irregularly spaced between 3’ to 5’ apart, but may vary from 2’ to 6’ apart depending upon location.
2. At least one-third of each rock is recessed into the ground.
3. Rock heights range from 2’ to 2.5’ and height is typically less than width, which ranges from 3’ to 6’ wide.
4. The strata of the rock is oriented to blend with the natural rock strata found in their vicinity.
5. The placement of the rock follows the line of the road shoulder or turnout with which they are associated.
6. Rocks are generally placed in a linear alignment.
7. An ideal barrier rock is five-sided with triangular shaped faces.

The quality and character of the contributing rock barriers are characteristic features of the road. They represent the naturalistic style of design employed by the NPS and exhibit a high level of integrity.

Guardrails

After the Yakima Park Highway opened it included an extensive series of whole log wooden guardrails along the road. Through the years they have been removed and none now remain. The purpose of these guardrails was to delineate the steep cut banks and to protect the delicate meadows along Sunrise Ridge into Yakima Park. One section of the historic guardrail has been replaced with a Core 10 Steel W Rail. This guardrail is a non-contributing feature and is incompatible with the rustic design style of the road.

Summary
The buildings and structures along the Yakima Park Highway remain much the same as would have been found during the period of significance. Apart from the loss of the wood guardrails, the replacement of Shaw Creek Bridge with a incompatible structure, and the construction of a new entrance station, the buildings and structures that remain still retain a high degree of

integrity, including the White River Bridge, Fryingpan Creek Bridge, the unique Type 5 guardwalls, and numerous rock barriers. Together, these building and structures help convey the design intent and aesthetic character of the historic highway.

Character-defining Features:

Feature: Deadwood Creek Bridge

Feature Identification Number: 129571

Type of Feature Contribution: Contributing

Feature: Klickitat Bridge

Feature Identification Number: 129589

Type of Feature Contribution: Contributing

Feature: Fryingpan Creek Bridge

Feature Identification Number: 129593

Type of Feature Contribution: Contributing

Feature: White River Bridge

Feature Identification Number: 129595

Type of Feature Contribution: Contributing

Feature: White River Entrance Ranger Station

Feature Identification Number: 129893

Type of Feature Contribution: Contributing

Feature: White River Entrance Men`s Comfort Station

Feature Identification Number: 129895

Type of Feature Contribution: Contributing

Feature: White River Entrance Women`s Comfort Station

Feature Identification Number: 129897

Type of Feature Contribution: Contributing

Feature: Guard/Retaining Walls- Type 5 (3)

Feature Identification Number: 129575

Type of Feature Contribution: Contributing

Feature: Guard Walls - Type 1-B (3)

Feature Identification Number: 129583

Type of Feature Contribution: Contributing

Feature: Guard Walls - Type 5 (2)

Feature Identification Number: 129585

Type of Feature Contribution: Contributing

Feature: Rock Retaining Walls (2)

Feature Identification Number: 129573

Type of Feature Contribution: Contributing

Feature: Rock Barriers (16)

Feature Identification Number: 129579

Type of Feature Contribution: Contributing

Feature: Shaw Creek Bridge

Feature Identification Number: 129597

Type of Feature Contribution: Non Contributing

Feature: White River Entrance Station

Feature Identification Number: 129899

Type of Feature Contribution: Non Contributing

Feature: Sim Wall at Big Dump

Feature Identification Number: 129937

Type of Feature Contribution: Non Contributing

Feature: Guard/Retaining Wall (1)

Feature Identification Number: 129577

Type of Feature Contribution: Non Contributing

Feature: Guard Rail - Core 10 Steel W (1)

Feature Identification Number: 129587

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Contemporary photo of Dry Creek Bridge with masonry stone facing. (MORA 2005)



Contemporary photo of historic retaining wall (breast wall) in slide zone. (MORA 2005)



Contemporary photo of a contributing rock barrier at a turnout vista. (MORA 2005)



Contemporary photo of type 5 guardwall crenellation mimicking the shape of Mount Rainier. (MORA 2005)

Topography

Topography refers to the manipulation of the landscape that occurred during the building of Yakima Park Highway. The manipulation of natural topography occurred along the entire length of the road from the White River Valley up to Yakima Park to address extremely steep slopes and slide zones. Loose glacial till soils and granite bedrock created a variety of conditions and challenges while building the road bench as well as in maintenance of the road post construction. A substantial effort was made to minimize the visual impact of topographic manipulation by blending the highway's cross section with its surrounding environment. Manipulation of the natural topography is particularly evident in the constructed features of rock cuts, earth cuts, and fill-throughs. These topographic features are described in more detail in the following paragraphs. A table and map of topographical features are available in "Supplemental Information."

Cross Section
The Yakima Park Highway was constructed using a set of standard cross sections, which were adapted for different conditions found along the route. The road traverses extremely rugged and variable topography on the east side of the park, resulting in a cross section that is highly

variable beyond the shoulders of the road. The Yakima Park Highway passes through low lying floodplains, steep cliff sections, across ridges up to the rolling slopes of Yakima Park. Each individual circumstance required a slightly different design response, which is reflected in the different applications of the typical cross sections.

Despite the variations required by the rugged topography within the park, the cross section of the road is defined by common elements that remain consistent within each type. In some areas, the road was constructed across solid granite segments, requiring near vertical rock cuts. In an effort to control erosion in these areas, the road designers employed earth cuts with an average slope of 3:1. They were typically rounded at the top in order to provide stability and blend them into the natural topography. In other areas, the road was constructed through steep areas of glacial till and pumice. In both the rock cut and earth cut areas, the typical fill side consists of a glacial till, talus, or vegetated slope. Rock guardwalls are occasionally set atop these fill slopes. Less common, but still typical, are elevated segments of the highway known as "fill-through" segments. This type of cross section was used to traverse the numerous small drainages or to maintain a steady grade. In these sections the road was constructed completely on fill, creating a cross section that falls away on either side of the roadway.

The typical cross section of the Yakima Park Highway features a 20'-22' paved roadway, consisting of two 9'-10' travel lanes. The typical fill side shoulder has a 3' width (1' paved) with a typical slope of ¾" per foot and a vegetated fill-slope below with a variable grade. The typical cut shoulder has a 2'-3' width (1' paved), depending on the local topography, with a typical slope of ¾" per foot. The combined width of the travel lanes and the shoulders results in a typical width of 26'-28'. The typical width of the cross section varies depending upon the terrain in which the road was constructed. Areas of moderate topography and subsequently light grading, were typically narrower than areas of rugged topography, which required heavy grading. The cut side contains a ditch designed to direct runoff and reduce erosion to the roadbed. The typical ditch is 3' wide with a minimum depth of 1'. The angle of the cut slope is variable and responds to the conditions encountered along the route. Overall, the cross section of the road retains its original configuration and contributes to the significance of the Yakima Park Highway.

Rock Cut
The steep and rocky terrain necessitated numerous rock cuts in the construction of the Yakima Park Highway. Beyond sheer utility, however, the rock cuts were intended as featured design elements of the road, contributing considerably to the character of the landscape. Great effort was made to create rock cuts that appeared natural. Workers carved the rock to blend in with surrounding terrain, varying the surface of the rock, utilizing natural fissures to create natural cleavage, and removing tool marks. The rock cuts in general are characterized by irregular outcrops and diagonal banding, although the style and design of the cuts were varied along the road. Three major forms of rock cuts are found along the highway: battered, in which the rock slopes back from the road, vertical, and overhanging. Many of the rock cuts in the White River Valley segment are cut into granite creating mostly vertical rocks faces varying in length from

70’ to 300’. The rock cuts in this segment are often covered with vegetation, some to the point of being nearly obscured. However, rather than detracting from the historic character of the features, the vegetation contributes to it, reflecting the goals of the designers to disguise the rock cuts as natural rock outcroppings.

In contrast to the cuts on the lower portion, those on the upper half of the road are generally high and rugged with little vegetation on them. During construction of the road excessive amounts of dynamite were used to clear the area above the White River Bridge. The blasting damage in this area led to strict enforcement of blasting standards along the remainder of the road. However, rock litter from these initial blasting areas can still be seen on the fill slope of the road. An outstanding grouping of rock cuts is found at the top of the ridge on the north side of the White River Valley. This ridgeline is formed by a layer of columnar andesite overlaying glacial till and pumice. The road bench is cut into the columnar andesite, which forms a vertical wall with dramatic overhanging sections. Out of the 23 rock cuts recorded, 20 are in good condition with 3 in fair condition due to vegetation obscuring the rock face. As a whole, the rock cuts are a unifying element of the road and contribute to its historic character.

Engineered waterfalls
Where rock cuts corresponded with natural drainage and creeks, the road-builders created waterfalls and sculpted creek beds to convey the water in an aesthetically pleasing way and provide points of interest for motorists. The waterfalls were carved into the rock following naturalistic design principles, resulting in features that are nearly indistinguishable from natural waterfalls. While each waterfall is unique, differing stylistically and structurally from the others on the roads, certain principles were used to guide the design of the waterfalls with almost formulaic consistency. At the top of each waterfall, the water was directed into a 2” to 8” channel using a cut or gap in the rocks. Often the water was then divided into two channels, with most of the water directed to the main channel and the remaining water into the other. The water then cascaded over a sheer drop of a few inches to several feet before splashing onto ledges, being collected into small pools, and channeled into another cascade. The purpose of the system of ledges and pools was not only for the visual quality but also for the auditory experience of the road. The cascade falling onto a flat ledge created a distinct sound and alerted the attention of the travelers to the presence of water. This pattern of cascade, splash ledge, and pool was often repeated several times in the roads built during this period in the naturalistic style. The waterfalls range in size from small fingers that splash down next to the road to multi-channeled falls that tumble tens of feet over the rock cuts. There are six along the Yakima Park Highway and four are classic examples of the naturalistic design style for engineered waterfalls. The waterfalls in general are in good condition and continue to showcase the technical and artistic skill of the designers and craftsmen that built the road. Some of the falls are partly or mostly obscured by vegetation and debris, obscuring them from the road. The engineered waterfalls contribute to the historic character of the highway.

Cut/Fill
Cuts and fills are an integral part of the geometry of an engineered road and are found along

the entire length of the Yakima Park Highway. A typical cross-section of the road features a cut side travel lane that is carved into the adjacent slope. The material gained from the cut was then used to create the fill side travel lane. To the greatest extent possible, the designers and builders of the road attempted to equalize the amount of cut with the amount of fill material. Where the excavation of large rock cuts resulted in an excess of fill material, the surplus was often piled to create turnouts on the fill side of the road.

After the White River Bridge, up to the Yakima Creek Drainage, large segments of the road are benched into an unstable slope. This slope forms a portion of the White River Valley's north side. As mentioned earlier the columnar andesite marks the ridge line of the valley, below which a combination of glacial till, pumice and small sections of talus form an unstable zone that is prone to erosion and occasional large landslides. The unstable nature of the underlying geology combined with the steepness of the slope makes it extremely difficult to prevent landslides in this segment. In addition, the sharp angle of repose on the cut slopes discourages revegetation and further encourages erosion, especially when the slope is saturated by heavy rains or the melting snow pack. For example, the Big Dump slide area now extends 1,000' from the top of the road cut to the toe of the fill slope.

Beyond the Yakima Creek drainage the cut and fill slopes are mostly talus with subalpine plant communities able to establish themselves on the cut side of the road. Within the park, these subalpine earth cuts are unique and this can be attributed to the Yakima Park Highway attaining the highest elevation of all park roads, 6,400' at the entrance to Sunrise Village. Maintaining a steady grade on the approach to Sunrise Village required the construction of fill-through sections within this area. These segments of the road were built entirely on material brought in from other sections, creating an earthen bridge. The fill-through sections allowed the road to maintain a consistent grade of 2% while also maintaining the soft gentle curving alignment the road designers desired. The slide zone section of the road is an unsightly scar on the landscape of the park, detracting from the historic character of the road. However, the cut and fill sections along the remainder of the road retain a high degree of integrity and contribute to the significance of the Yakima Park Highway.

Summary
The topography of the Yakima Park Highway has changed very little from the historic period. The rock cuts and engineered waterfalls remain unaltered. The majority of the original cut and fill sections remain with the exception of those located within slide zones. These sections are continually eroding and are denuded of vegetation. Despite some alterations to these areas, manipulated topography remains relatively intact and conveys the historic character of the Yakima Park Highway.

Character-defining Features:

Feature: Yakima Park Highway Earth Cuts (3)

Feature Identification Number: 129697

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Fill Throughs (2)

Feature Identification Number: 129701

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Rock Cuts (22)

Feature Identification Number: 129703

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Talus Cut (1)

Feature Identification Number: 129705

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Earth Cuts (18)

Feature Identification Number: 129699

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Contemporary photo of a historic columnar andesite rock cut with corresponding Type 5 rock guard wall. (MORA 2005)



Contemporary photo of a historic engineered waterfall. (MORA 2005)

Vegetation

The designers of the Yakima Park Highway attempted to integrate the road seamlessly into the natural landscape through the use of vegetation. Vegetation was retained or planted along the shoulder of the road, near bridges, denuded areas, and developed areas in an attempt to screen or soften the built features. Similarly, vegetation was considered an outstanding natural feature in its own right, specimen trees were retained during construction, and vegetation was used to highlight other natural features through the framing and filtering of views.

In addition, the larger vegetation patterns along Yakima Park Highway create varied effects as a traveler ascends the historic highway. Three major forest associations are found along the road while other smaller patches of forest associations are interspersed throughout the route. The road travels through lowland old-growth forests along the White River, then ascends mid-elevation slopes through mixed conifer and montane forests, and finally reaches the sub-apline zone dominated by meadow with sub-apline forest. Designers of the road were aware of the contribution vegetation made to the desired naturalistic aesthetic and considered the vegetation carefully during design and construction. NPS landscape architects enhanced these natural communities by retaining or planting specimen trees along the route. Historic vegetation patterns are evident today as they contribute to the historic character of the road. Two tables summarizing specimen trees, groupings and their associated features are available through "Supplemental Information".

Specimen Trees
Specimen trees can be divided into archetypal trees and groupings. Archetypal trees refer to individual trees, usually of large size and were intentionally retained during road construction. Archetypal trees are intended to be viewed from the road and give the traveler an intimate sense of the forested environment in which they are traveling. Similarly, tree groupings consist of clusters of trees, usually of the same species, serving aesthetic and restoration purposes. Development of the road created bare slopes and restoration efforts included the planting of trees and shrubs to blend the construction scars back into the landscape. Following principles of naturalistic design, tree groupings also soften built elements such as bridges and buildings and blend them with the natural environment. Tree specimens represent the intent of the road designers to bring the visitor close to nature through naturalistic design.

Built features along the road that are associated with retained or planted trees include turnouts, bridges, shoulder, developed areas, as well as cut and fill slopes. There are 19 archetypal trees and 25 tree groupings along the road. 46% of archetypal trees are associated with shoulders and were retained during construction of the road. The average DBH (diameter at breast height) is 3’, while some of the largest specimens have a 6’ diameter. The majority of archetypal trees are found in the lowland forest and the majority of tree groupings (41%) are associated with developed areas.

Tree groupings in developed areas define space, provide shade, screen, and blend built features into the landscape. For example, Englemann spruce (Picea englemannii) is planted among Silver fir, Hemlock, and Douglas-fir at Fryingpan Creek Bridge to define the parking area and create an informal allée along the roadway. At Sunrise Point, tree groupings of Subalpine fir screen the space between the road and the sitting area to the east of the parking lot. Tree groupings associated with bridges constitute a specialized type of tree planting. These trees were planted to mark the end of bridges and blend the built features into the surrounding vegetation. Historic plantings are located at Klickitat Creek Bridge, Fryingpan Creek Bridge, and the White River Bridge. For example, at the White River Bridge, Subalpine fir (Abies lasiocarpa) was planted at

each corner of the bridge, although one of the specimens has been felled and only the stump remains.

Along with providing close contact to the surrounding forest, specimens trees located in the shoulder of the road stabilized the road bed. During cut and fill operations, NPS landscape architects made strenuous efforts to retain specimen trees along the steep slopes. In some cases, even snags were retained to anchor the fill slope and prevent patches of bare earth despoiling the scene from the perspective of the visitor. Vegetation was also used to demark the edge of turnouts and in some cases the turnout brings visitors into contact with large specimen trees. These large trees were retained near the turnout (or the turnout may have been built because of the tree) enabling visitors access to awe inspiring old growth specimens. Finally, in the approach to Sunrise Village, Subalpine firs were planted in pairs on opposite sides of the road, marking the entrance to the rustic village, similar in style to the rustic arches that demark the major entrances to the park.

Specimen trees are found along the length of the Yakima Park Highway, however the surrounding forest type influences whether the road designers decided to use archetypal or tree groupings. In the lowland forest type, 17 archetypal trees can be found. As the road ascends and enters the montane and subalpine forest associations, only two archetypal trees are encountered along the road. The lack of archetypal trees in the upper portion of the road is a result of lower tree density and a less impressive size in the subalpine vegetation forest. The archetypal trees give way to tree groupings in the upper elevations of the road where trees tend to naturally cluster. In this manner, NPS landscape architects used specimen trees similar to their natural occurrence in the landscape, as demonstrated by the progression of archetypal trees to tree groupings as the visitor ascends the highway.

Mt. Rainier's landscape architects utilized the native vegetation along the road to bring visitors as close to nature as possible. The landscape architects also planted specimen trees to blend built elements into their surroundings. Today, 44 specimen trees are located along the road and they retain a high level of integrity. They are an often overlooked example of naturalistic design and contribute greatly to the road's historic character.

Vegetation along the road reveals the natural process of succession and landscape transformation as visitors move through lowland old growth forest, across mid-elevation montane forest, and into subalpine meadows. Vegetation was used by NPS landscape architects as a naturalistic design element to blend built features such as bridges and buildings. Specimen trees were retained to showcase old growth forests as well help stabilize the road prism. The deliberate use of native vegetation to screen and blend built features, mark turnouts, and stabilize slopes provides a natural experience to travelers who encounter this designed wilderness via their vehicles. While vegetation along the road remains intact, road design and maintenance has altered some native vegetation patterns along the road. Vegetation is a landscape characteristic that continues to convey the historic character of the Yakima Park Highway.

Character-defining Features:

Feature: Yakima Park Highway Tree Groupings (19)

Feature Identification Number: 129711

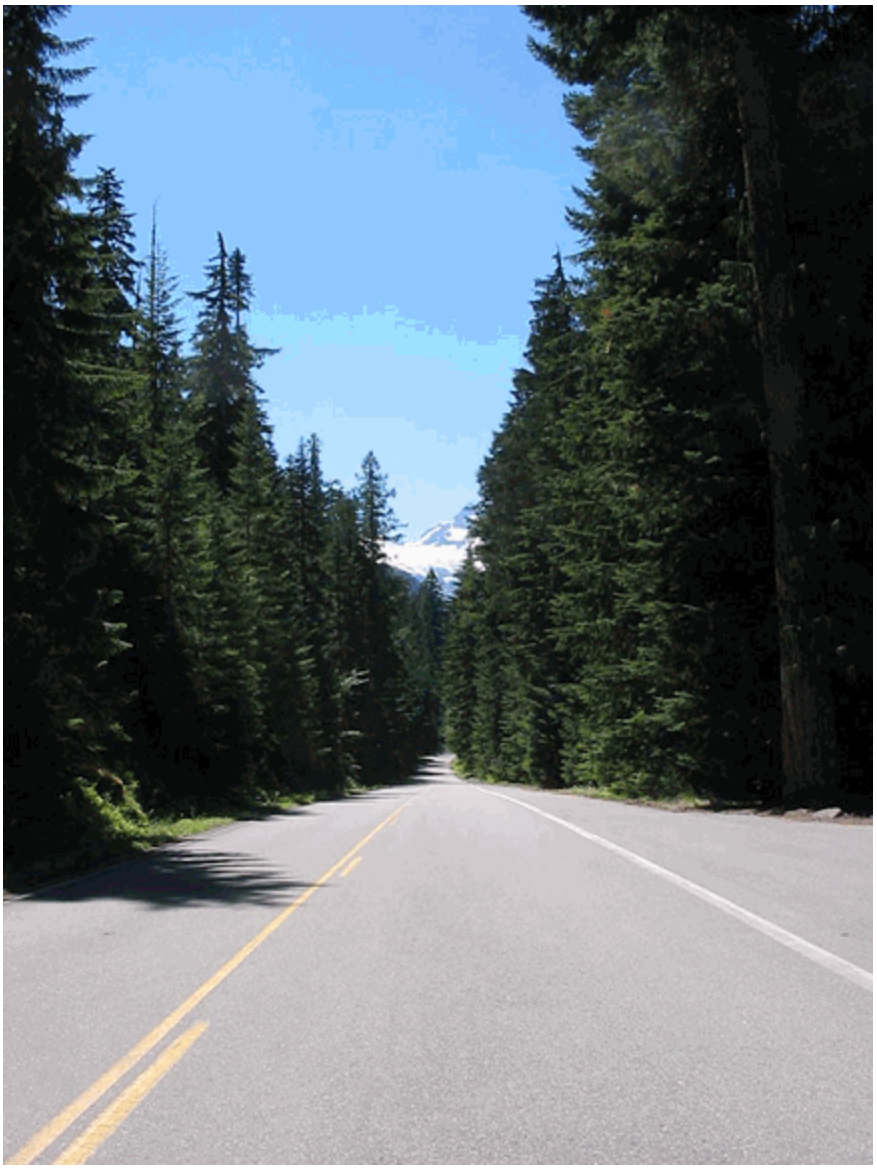
Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Tree Specimens (18)

Feature Identification Number: 129715

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Contemporary photo of old growth vegetation, which frames the road, creating an alleé. (MORA 2005)



Contemporary photo of a specimen tree planted at end of Fryingpan Creek Bridge. (MORA 2005)

Views and Vistas

The views from the Yakima Park Highway today are much the same as they were when the road was planned. The planning of the highway was, in part, to quench the public's desire for access, and in some measure centered on Owen Tomlinson's plan to provide visitor access to the meadows surrounding Sunrise Village. From Sunrise Point, visitors were treated to extraordinary views of Mt. Rainier's north and east flanks. Views from the road itself are known as some of the most spectacular in the park and amongst the most beautiful in the national park system.

The creation of views derived from the naturalistic design ideals adopted by the NPS in the early part of the 20th century and was realized by landscape architects during the planning of the road. Some of the principles for constructing views stem from Frank Waugh, a landscape architect who was an early scenic highway designer. Waugh's own design of Mount Hood Road, exemplifies his philosophy regarding the design of views. In 1917 Waugh wrote;

"First, the line of the best view must be determined and kept open; second, this view must be framed by suitable plantings; third, inferior views must be blocked out or reduced to more promissory glimpses."

Views along the Yakima Park Highway are generally determined by the character of the landscape in relation to the alignment of the road. There are two types of views, they are either framed to direct the viewer to a particular feature or sweeping panoramas of the surrounding landscape. A framed view is where a vista is revealed between trees or other natural features. A panorama is a view with a large aperture and a vista that gradually unrolls in front of the spectator. A map and a table of the views and vistas extant along Yakima Park Highway are available in "Supplemental Information".

Framed and panoramic views are experienced while traveling in a vehicle or at stopping points along the road that invite the visitor to step out of their car. Moving views are often associated with road alignment and travel lanes. Horizontal and vertical alignments were utilized by landscape architects to align the road in the direction of, or along the side of a natural feature such as the mountain, or a man-made prospect such as a bridge. Stationary views are often found in conjunction with developed areas, turnouts and bridges. These views are witnessed from outside of the vehicle and can be panoramic or framed. Views may be the filtered, interrupted by trees giving the scene a naturalistic feel. An unfiltered view is one that is intentionally or naturally cleared of obstructions. In addition, views can be described by length, aperture, and angle. Length refers to the distance the object or objects of interest lie in relation to the viewer, and are classified as either "close" or "distant." Aperture refers to the width of the view, and is categorized into three sections: 0-80', 80-200', and over 200'. Finally, angle is the orientation of the view and is classified as "high" and/or "low." Framed and panoramic views incorporate naturalistic style ideals of landscape architecture along park roads. The following paragraphs will describe in detail how these views are utilized along the Yakima Park Highway.

Framed Views

Framed views are common the length of the highway and are the only type of view for the first 7.5-miles. Both moving and stationary views are included, the latter found most commonly at bridges. Framed views in the upper portion of the highway are closely associated with turnouts, road alignment and views from travel lanes. Traveling west in the lower Sunrise Ridge portion of the highway, the road is aligned so that Mt. Rainier is framed between the tall trees lining the highway for long tangential sections. Along the upper portion, framed vistas give way to panoramic views. Nine of the thirteen framed views are in good condition. Three of the

thirteen-framed views are in fair condition. Vegetation has obscured the intended depth, aperture and/or length of these views. At MP 7.35, a new framed view of the valley below is associated with the construction of a non-contributing guardwall at the "Big Dump" slide area. The area is a popular stopping point and is compatible with historic framed views created using naturalistic design principles. While the integrity of these views may be compromised, the overall patterns of framed views from and associated with the road are very much intact.

Panoramic Views
There are six notable panoramic views along the highway. The first panoramic view along the highway is a moving view at MP 7.5, and is most striking when viewed upon descent. Here, the roadbed is constructed on a full bench cut and edged by a Type 5 guard wall. The north side of the road exposes dramatic rock cuts, and snow-capped peaks in the distance are visible from either travel lane. A stationary panorama is located at the switchback on the lower part of Sunrise Ridge at MP 9.1. It is in fair condition; historic plantings have grown to a point where they are obscuring the view. At MP 12.5, the road loops around a granite outcropping, known as Sunrise Point. Davidson referred to this site, stating: "There can be no question that the scenic point is destined to become one of the best known in our country." Sunrise Point is an outstanding historic panoramic view; an excellent example of naturalistic design principles in practice. The natural granite outcropping was carefully manipulated to provide a large viewing platform, edged by Type 5 "Rainier" guardwalls. The road and associated sidewalk that loops around the outcropping takes advantage of the site to incorporate a 360-degree view of the surrounding landscape. Some vegetation has obscured small sections of the aperture, but overall the view is in good condition. Beyond Sunrise Point, the views are open or filtered panoramas, where the road traverses the subalpine meadows interspersed with clusters of subalpine trees. At 6400', Yakima Park is the state's highest drivable point (paved) and the terminus of the highway. Incredible views of the rolling meadows, surrounding peaks and Mt. Rainier's northeast flank, in particular Emmons Glacier, offer a suitable visual climax to the end of the journey. In all, four of the panoramic views are visible from the roadway and are appreciated from the car at travel speed. Two are stationary, located at medium size developed areas. One of the views is non-contributing, associated with a slide zone at MP 7.98 where a non-contributing turnout has been constructed. The overall patterns of panoramic views are intact, although vegetation is obscuring the aperture of some views.

Summary
The overall patterns of views from and associated with the road are very much intact. Of 19 views documented in the CLI, 17 are historic. The majority of the views are unobstructed and derive from thoughtful planning. Most of the views on the upper portion have been retained because vegetation cannot be easily established on the steep, eroding hillsides. Four of the views have been obscured or are being threatened by vegetation, especially at lower elevations within old growth forest. Two non-historic views have been identified. Despite these changes, the historic pattern of views and vistas remain and contribute to the significance of the Yakima Park Highway.

Character-defining Features:

Feature: Yakima Park Highway Framed Vistas (12)

Feature Identification Number: 129729

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Panoramic Views (5)

Feature Identification Number: 129735

Type of Feature Contribution: Contributing

Feature: Yakima Park Highway Framed Vista (1)

Feature Identification Number: 129731

Type of Feature Contribution: Non Contributing

Feature: Yakima Park Highway Panoramic View (1)

Feature Identification Number: 129737

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Contemporary photo of a "moving" view from the downhill travel lane. (MORA 2005)

Small Scale Features

The small scale features found along the Yakima Park Highway collectively add to the function and aesthetic of the road. They demonstrate care taken by NPS designers to seamlessly incorporate small built elements into the surrounding landscape by following rustic design principles. They include culverts with hand-tooled, stone headwalls, a stone bench, and a drinking fountain. All were constructed using local materials and built to an appropriately large scale for placement within the landscape. The harsh high-elevation winter snow conditions have led to the loss of rustic wood signs and gates. Over the years all of these have been replaced, mostly with incompatible weather-resistant materials such as anodized steel. With the exception of the replaced signs and gates, the majority of the small scale features still retain their historic character. A table and a map describing small scale features can be found in "Supplemental Information".

Culverts
The natural topography and hydrology of the road bench and surrounding area of the Yakima Park Highway necessitated extensive use of culverts to facilitate drainage of rainwater and small streams. For most of the length of the road, runoff from uphill slopes was collected in an open ditch on the cut side of the road. This water was then conveyed across the road through culverts placed at regular intervals. The same principles of naturalistic design and use of native materials that guided the design and construction of the major structures along the highway informed the location and design of the culverts and their headwalls. The two major types of culverts are box culverts and pipe culverts with stone headwalls. Stones headwalls built around the pipe culverts prevent erosion and blend the man-made features with the surrounding environment, providing both an aesthetic and functional purpose. The two box culverts retain their original stone facing in good condition with stable mortar and minimal intrusion by vegetation. All the historic culverts were built to the specifications of NPS branch of Plans and Design in San Francisco, using locally quarried stone that was hand tooled by masons.

There are 150 culverts on the Yakima Park Highway, 124 of which still retain historic masonry stonework. Most culverts, including the two box culverts, can be found between MP 01.00 and MP 09.00, where many streams flow into the White River Valley. Standard specifications called for 18” and 24” steel culvert pipes. Of the historic culverts, 59 are in poor condition due mainly to collapsing headwalls and debris filling the culvert. In the upper White River area unstable glacial till is a constant erosion problem and many culverts have been partially to completely buried, despite recent attempts to protect them using non-contributing, incompatible wooden planks over the headwalls. The majority of the culverts require major repairs, such as the cleaning out of culvert pipes and catch basins as well as clearing woody vegetation around the headwalls.

Seating
A granite bench composed of three monolithic stones is placed in the center of the pedestrian viewing bay at Sunrise Point. Situated within a three-sided historic guardwall, the bench

creates a room-like space while offering visitors a place to rest and view the dramatic panorama. With the parking loop to the west and Sunrise Lake trailhead to the east, the bench and viewing bay function as an important transitional space between the paved sidewalks and dirt trails. The granite stones of the bench are 5.5' long, formed with imperfect edges to maintain a rustic character. The large scale and rough-cut style of the stones reflect rustic design principals that were also applied to the surrounding built structures such as rock walls and rock barriers. The granite bench is in fair condition due to a cracked stone. Nevertheless it exemplifies the rustic style of landscape architecture practiced by the NPS prior to World War II.

Drinking Fountain

There is one fountain on Yakima Park Highway, located just east of the White River Entrance Station. It is made of concrete faced with river rock probably obtained from the nearby White River and is in good condition. The fountain is 3' high and is the only structure of its kind found along this road. The sides are battered in accordance with the rustic style. Evidenced by rustic-style construction, the fountain dates to the early 1930s and retains high integrity.

Signs

There are eight signs along the highway, none of which are contributing. However, the current "Sunrise Park" sign rests on the contributing log footings of the former sign and is compatible with the rustic design of the original sign. With routed letters on a large wood background and a jagged mountain peak carved along the top edge, the replacement sign carefully expresses the rustic style of the original. The other wood signs on Yakima Park Highway are found at the White River Entrance Ranger Station and at the White River Campground, spur road intersection. These signs also have routed letters on a wood background with milled timber support posts rather than historic-style ax-cut logs. The large scale and material of the wood signs makes them compatible features, all in good condition.

In addition to the wooden signs, there are three anodized steel signs along the road. They designate the Shaw Creek Bridge, Fryingpan Creek Bridge and the White River Bridge. All of these signs are non-contributing features. Two information kiosks were added during the Mission 66 renovations, one adjacent to the entrance station and one at Fryingpan Creek Trailhead. Both of these are constructed with milled timber posts and small, pitched roofs. They are in good condition but lack the irregularity found in rustic architecture and are incompatible. While all signs along the Yakima Park Highway are functional and in good condition, they are non-contributing features.

Gates

While originally all gates along Yakima Park Highway were log structures, today, there are two gates of weather-resistant steel and one of milled timber. Crossing the road at the Mather Memorial Parkway intersection, is a steel gate painted in bright yellow with black striping. The concrete, imported stone-veneer pillars associated with the gate do not follow rustic design principles. East of the White River Bridge, there is another steel gate at the entrance to White

River campground. At MP 0.02 miles above the White River Bridge, a third steel gate exists where historic rocks demarcate the site of a former log gate. All gates are non-contributing and incompatible features along the highway.

Summary
Small scale features are important to the historic character of the Yakima Park Highway as they exemplify the high level of attention given to creating the rustic character of the road. Rustic style, design, and construction techniques are still evident in the remaining 126 historic culverts, the granite bench at Sunset Point, and the stone drinking fountain at the White River Entrance Developed Area.

Character-defining Features:

Feature: 18" Culverts (101)

Feature Identification Number: 129599

Type of Feature Contribution: Contributing

Feature: 24" Culverts (20)

Feature Identification Number: 129601

Type of Feature Contribution: Contributing

Feature: Box Culverts (2)

Feature Identification Number: 129603

Type of Feature Contribution: Contributing

Feature: White River Entrance Drinking Fountain

Feature Identification Number: 129613

Type of Feature Contribution: Contributing

Feature: Sunrise Point Stone Bench

Feature Identification Number: 129953

Type of Feature Contribution: Contributing

Feature: 18" Culverts (14)

Feature Identification Number: 129605

Type of Feature Contribution: Non Contributing

Feature: 24" Culverts (6)

Feature Identification Number: 129607

Type of Feature Contribution: Non Contributing

Feature: 36" Culverts (1)

Feature Identification Number: 129609

Type of Feature Contribution: Non Contributing

Feature: Drop Inlets (6)

Feature Identification Number: 129611

Type of Feature Contribution: Non Contributing

Feature: Gates (3)

Feature Identification Number: 129615

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Contemporary photo showing a stone headwall of a contributing culvert in good condition. (MORA 2005)



Contemporary photo showing a contributing granite bench at Sunrise Point. (MORA 2005)



Contemporary photo showing a contributing drinking fountain at the White River Entrance area. (MORA 2005)

Archeological Sites

Archeological sites inventoried by the CLI include the location of ruins, traces, or deposited artifacts in the landscape that are associated with the period of significance and are evidenced by the presence of either surface or substance features. The CLI makes every effort to not disclose the location of sensitive sites. Three archeological sites exist within the road corridor that are associated with its construction, however, a complete archeological investigation has not been conducted.

Sunrise Ridge Borrow Pit Site – FS1990-01
The site is situated on a prominent sideslope bench overlooking the White River Valley and the Yakima Creek drainage. The bench was used as a gravel borrow area for construction of the Yakima Park Highway.

Yakima Creek Historic Cabin Site – FS1997-18
This site consists of the collapsed remains of a small log cabin. The outline of an approximately 13’ by 13’ square cabin with 3’ wide doorway in the south wall is still visible. A concentration of stones in southwest corner of cabin area may have been the location of a wood stove.

Cabin logs are located nearby measuring 8”-10’ in diameter, notched with sawed ends. The notches are about 7.5” across and 4” deep. The roof was shingled; there is a small pile of shingles outside the southeast corner of the cabin outline. The cabin may have functioned as a small patrol cabin for rangers before the Yakima Park Highway was built, when they would patrol on horseback.

Old Storbo Road

In the late 1890s, before the establishment of the National Park, copper and silver was extracted from the east side of Mt. Rainier in Glacier Basin by Peter Storbo and Associates from Enumclaw. Storbo was later elected Vice President and general manager of the newly formed Mt. Rainier Mining Company, which was established in 1905. By 1914, the mining company had built several miles of road, referred to as the Storbo Road (Old Storbo Road) that paralleled the White River up to Glacier Basin. Today, segments of the historic road bench from the Mather Memorial Parkway to the White River Bridge are still visible. The White River Campground Road follows the approximate alignment of the old road from the White River Bridge. Segments of the road bench still exist above the White River Campground up to Glacier Basin.

Condition

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 09/30/1998

Condition Assessment: Fair

Assessment Date: 07/23/2008

Stabilization Measures:

Vegetation Removal
The removal of vegetation is necessary to stabilize the features that are being negatively impacted by vegetation growth. Vegetation is growing within ditches and along turnouts, sidewalks, bridges, culverts and guardwalls. The invading vegetation should be removed on an annual or semi annual basis to prevent excessive regrowth. The majority of the vegetation may be cut using mechanized means, but vegetation growing in close adjacency to historic features such as stone walls should be removed by hand to avoid damaging the features. This vegetation should be cut by hand and their root wads should not be pulled from the ground. Vegetation that is interrupting historic views should be managed by selective thinning and the removal of young trees so that views can be maintained.

Ditch Cleaning
The ditches along the road need to be cleaned in order to permit the proper drainage of the road and to prevent undermining or deterioration of the roadbed. This process should include the removal of large woody vegetation and rock debris within the ditches. The location of culverts with stone headwalls should be marked before vegetation and rock debris removal begins. The removal of vegetation adjacent to historic features should be done by hand with care taken not to damage the features. Care should also be given to protecting stone headwalls during the cleaning of the ditches.

Culvert Cleaning
The cleaning and repair of culverts is required to permit the proper drainage of the road and to prevent deterioration of the roadbed. This process should involve the hand removal of vegetation adjacent to the stone headwall of the culvert. The repair of the culverts will often also require the excavation of the headwall, some of which have been partially obscured by the buildup of sediment and debris. The stone headwalls of the culverts are important for the proper function of the culverts as they serve to protect the otherwise exposed end of the culvert and to anchor it in place. For this reason, as well as to preserve the integrity of these historic features, the headwalls that have been damaged should be repaired. The culvert pipes should also be cleaned out using an appropriate method. Again, care should be taken to ensure the protection of the historic components of the culverts throughout the cleaning process.

Wall Maintenance & Reconstruction
The historic stone walls of the Yakima Park Highway are in need of basic maintenance as well as some minor repairs. Basic maintenance that should be undertaken includes repointing the mortar joints

which have begun to deteriorate over time. Care should be taken to ensure that the proper color, texture, size and finishing technique are maintained in order preserve the historic character of the features. Stone features should also be cleaned of all material such as sediment, moss, lichen or other material that may have built up over time. This process should be repeated on an annual or semi annual basis to prevent the unnecessary deterioration of the features. Walls that have loose or missing stones should be repaired. The most severe wall damage is located along the inside curve of the guardwall at the Sunrise Point hairpin turn.

Bridges
Most of the bridges along the Yakima Park Highway are in good condition, however prompt and regular maintenance is necessary to avoid deterioration. Vegetation should be removed from sidewalks and curbs with care being taken to avoid damage to the historic stone work. The walls should be repointed and repaired where necessary. Built up vegetation, moss and lichens should be removed on a semi-annual basis to avoid future damage. The metal railing on Fryingpan Creek Bridge needs to be repainted.

Bank Stabilization
Bank stabilization measures are necessary to prevent slides and further erosion along some of the steeper road cuts, particularly in areas with pumice based soil. The area between mile 6.5 and 8.5 is the most vulnerable section of road with the most slide activity. Between the 13 and 14 mile markers is another area of ongoing slide activity. Bank stabilization measures should comply with historic preservation guidelines in order to maintain the historic character and feeling of the roadway.

Road Repairs
Repairs are necessary to address slumping, heaving, alligator cracking and soft spots along the length of Yakima Park Highway. The lower half of the road between the park entrance building and the nine mile marker is in the most urgent need of attention. Road repairs should comply with historic preservation guidelines.

Impacts

Type of Impact: Structural Deterioration

External or Internal: Internal

Impact Description: The culverts and stone walls along the road are the primary features being impacted by structural deterioration. The mortar in these features is beginning to deteriorate and their joints are in need of repointing. Culverts, particularly in the lower portion of the highway have been compromised resulting in culvert collapse and road slumping.

Type of Impact: Deferred Maintenance

External or Internal: Internal

Impact Description: Some culverts are blocked resulting in damage to the headwalls and infill of organic material in the catch basins.

Type of Impact: Erosion

External or Internal: Internal

Impact Description: There is a significant amount of erosion occurring to cut slopes in many locations along the route particularly between the 6.5 and 8.5 mile marks and again at mile 13.5. This problem is largely a result of the loose consistency of the pumice soil in which the road was constructed and the steep angle of many of the cuts. The inherent instability of the slope prohibited proper revegetation and resulted in a bare exposed slope adjacent to the roadway.

Type of Impact: Improper Drainage

External or Internal: Internal

Impact Description: Due to erosion there is a significant buildup of soil and debris in and around the ditches and culverts, inhibiting adequate drainage. In some cases, culverts have collapsed, resulting in road slumping.

Type of Impact: Vegetation/Invasive Plants

External or Internal: Internal

Impact Description: The growth of woody vegetation has damaged some of the historic culverts along the road. Herbaceous and woody natives are colonizing sidewalks, curb edges and niches within ditches, guardwalls and bridges. Moss is of particular concern on bridges and stone walls in lower elevations. Vegetation has grown in over time and is encroaching on historic views and vistas.

Type of Impact: Exposure To Elements

External or Internal: Internal

Treatment

Treatment

Approved Treatment: Rehabilitation

Approved Treatment Document: General Management Plan

Document Date: 09/01/2001

Approved Treatment Completed: No

Approved Treatment Costs

Cost Date: 09/01/2001

Bibliography and Supplemental Information

Bibliography

Citation Title: See Supplemental Information for bibliography.

Supplemental Information

Title: Additional Photographs

Description: Additional historic and contemporary photographs are available in a separate pdf file. This file is available from the Pacific West Regional CLI Coordinator or from the cultural resources staff at Mount Rainier National Park.

Title: Bibliography

Description:

Catton, Theodore. Wonderland, An Administrative History of Mount Rainier National Park. Seattle, WA: National Park Service, 1996.

Davidson, Ernest A. Landscape Work in Connection with Development of the Yakima Park Area Including Approach Highway within MT. Rainier Park. A report to Thomas C. Vint Chief Landscape Architect U.S. National Parks Service (Green Book).

Kirk, Ruth. Sunrise to Paradise, The Story of Mount Rainier National Park. Hong Kong, China: University of Washington Press, 1999.

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McClelland, Linda Flint. Presenting Nature: The Historic Landscape Design of the National Park Service 1916 to 1942. Washington, D.C.: National Park Service, 1993.

Quin, Richard H. "The Roads and Bridges of Mount Rainier National Park," Mount Rainier National Park, HAER No. WA-49." Historic American Engineering Record, 1992.

Sellars, Richard West. Preserving Nature in the National Parks: A History. New Haven: Yale University Press, 1997.

Soulliere, Laura E. Historic Roads in the National Park System, Special History Study. Denver, CO: National Park Service, 1995.

Thompson, Erwin N. Mount Rainier National Park Washington, Historic Resoure Study. Denver, CO: National Park Service, 1981.

U.S. Department of the Interior. Our heritage, a plan for its protection and use, Mission 66. Government report. Washington, DC: Department of the Interior, National Park Service, 1956.

Utz, W. T., Chief Engineer, Inspector-Superintendent, Bureau of Public Roads, "Final Construction Report (1927-1928) on Yakima Park Road Project, White River Section,

Mt. Rainier National Park, County of Pierce, State of Washington, Project No. 3-B1 (Accts. No. 3101) Sta. 454/83 to 345." Portland, OR: Bureau of Public Roads, 1928.

Title: Yakima Park Highway CLI Inventory Data, 2005

Description: Additional maps and charts providing detailed information collected for individual features associated with the Yakima Park Highway are available in a separate pdf file. This file is available from the Pacific West Regional CLI Coordinator or from the cultural resources staff at Mount Rainier National Park.

ADDITIONAL PHOTOGRAPHS

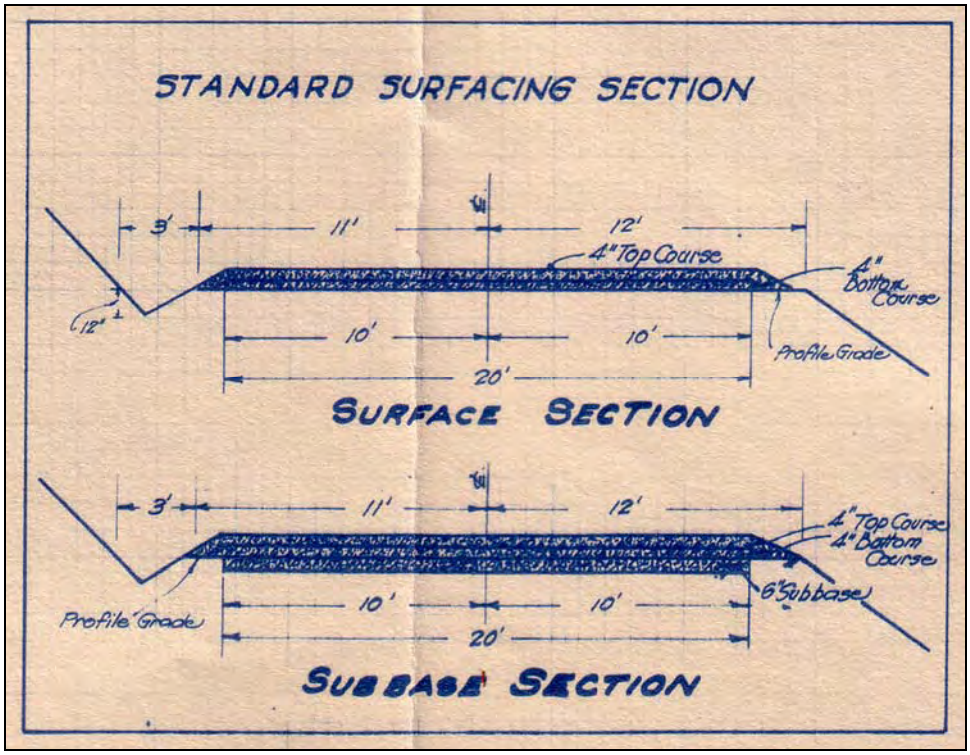
Figures for Historical Narrative



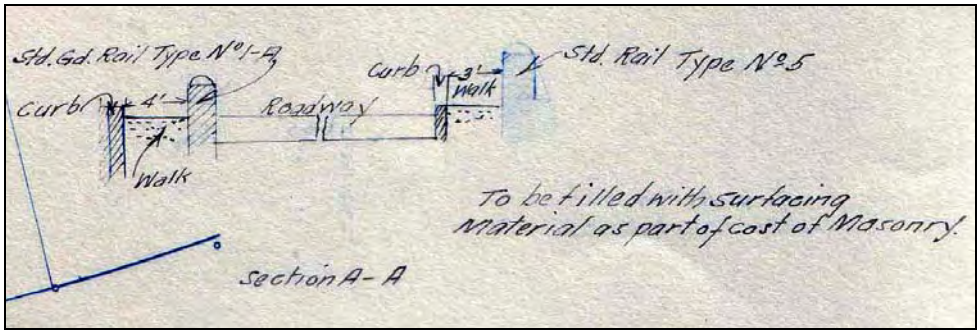
Historic photo showing old White River crossing. (MORA 1917)



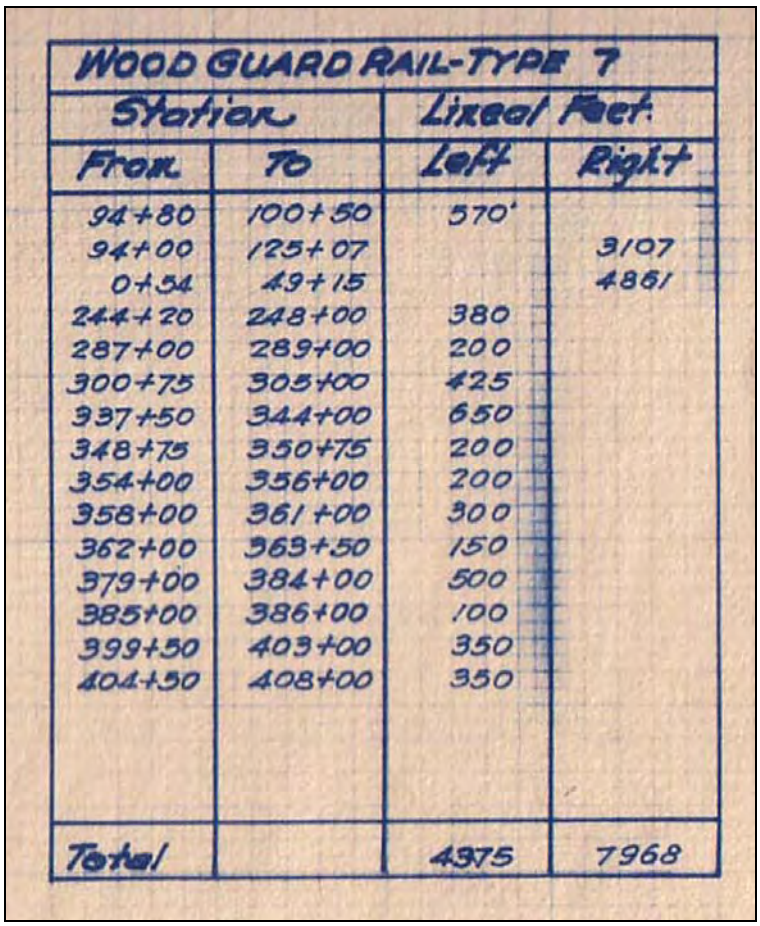
Historic photo showing log guard rail on old White River crossing. (MORA 1926)



Historic drawing showing typical cross sections of road. (MORA 1927)

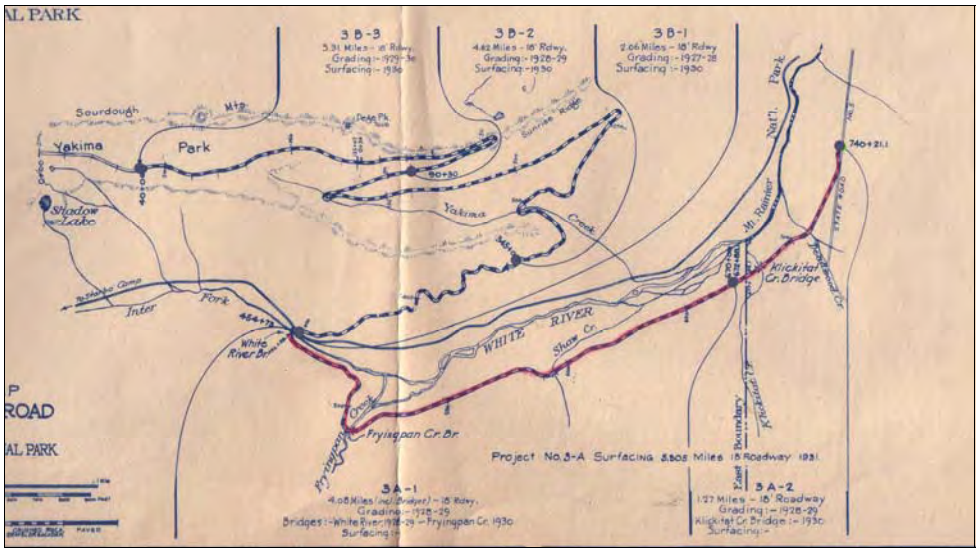


Historic drawing showing typical cross section of bridge. (MORA 1927)



WOOD GUARD RAIL-TYPE 7			
Station		Lineal Feet	
From	To	Left	Right
94+80	100+50	570'	
94+00	125+07		3107
0+34	49+15		4861
244+20	248+00	380	
287+00	289+00	200	
300+75	305+00	425	
337+50	344+00	650	
348+75	350+75	200	
354+00	356+00	200	
358+00	361+00	300	
362+00	363+50	150	
379+00	384+00	500	
385+00	386+00	100	
399+50	403+00	350	
404+50	408+00	350	
Total		4375	7968

Historic drawing showing quantities of guardrail and location along road. (MORA 1927)



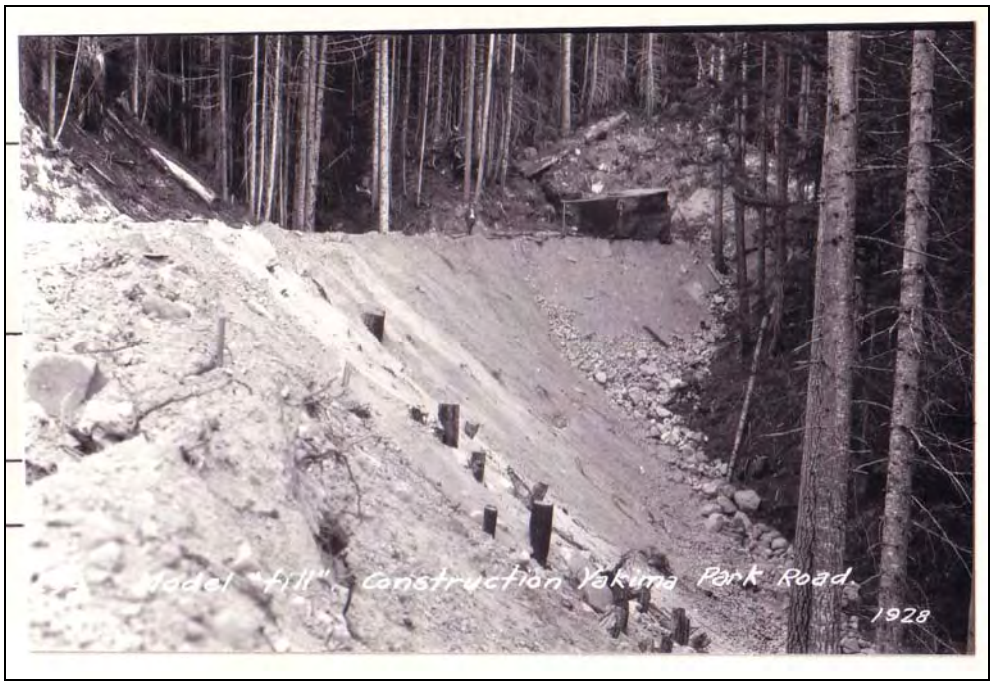
Historic drawing showing road construction phases. (MORA 1931)



Historic photo showing bucket crane used to clear roadbed of rock. (MORA 1927)



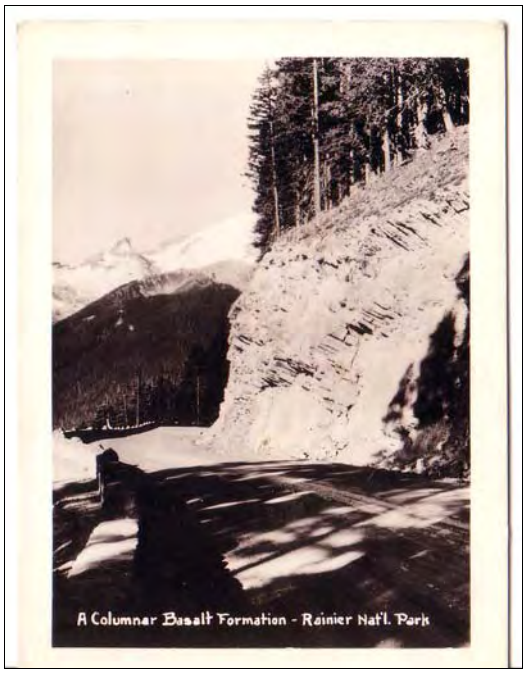
Historic photo showing workers clearing road prior to laying gravel. (MORA 1927)



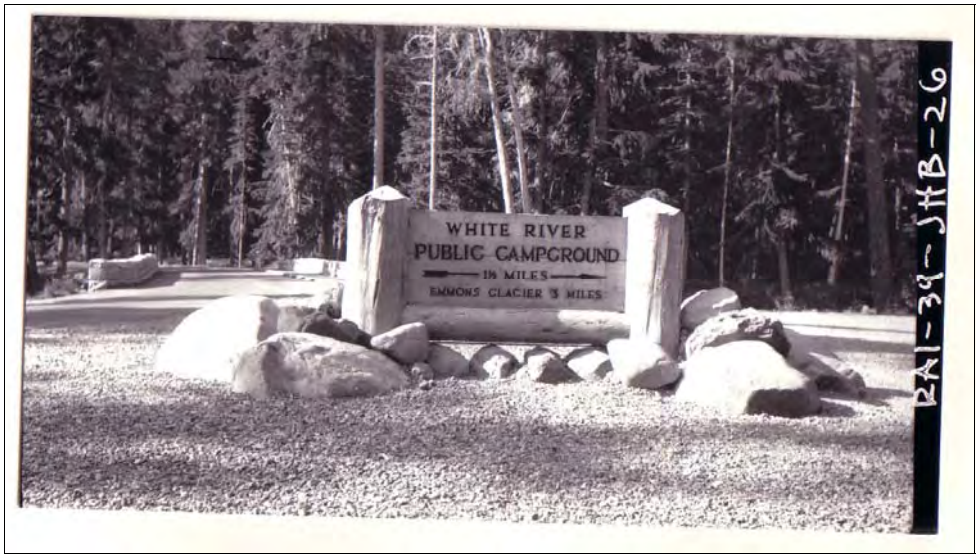
Historic photo showing fill bank with tree stumps retained to support slope. (MORA 1927)



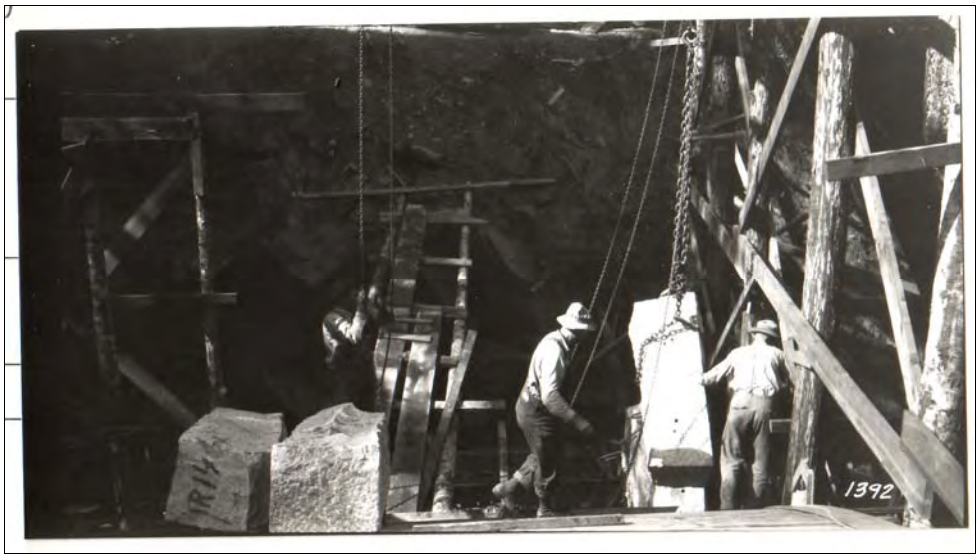
Historic photo showing rock being cut at for guard walls. (MORA 1927)



Historic photo of columnar andesite rock cut. (MORA 1935)



Historic photo showing White River Campground entrance sign. (MORA 1940)



Historic photo, placing the arch stones for the White River Bridge construction. (MORA 1930)



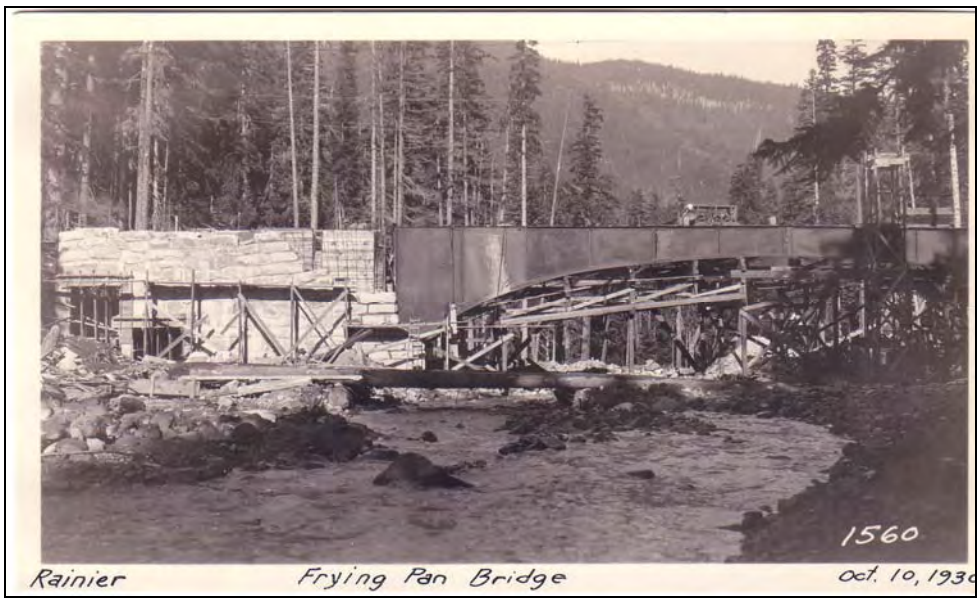
Historic photo showing White River Bridge just after completion. (MORA 1929)



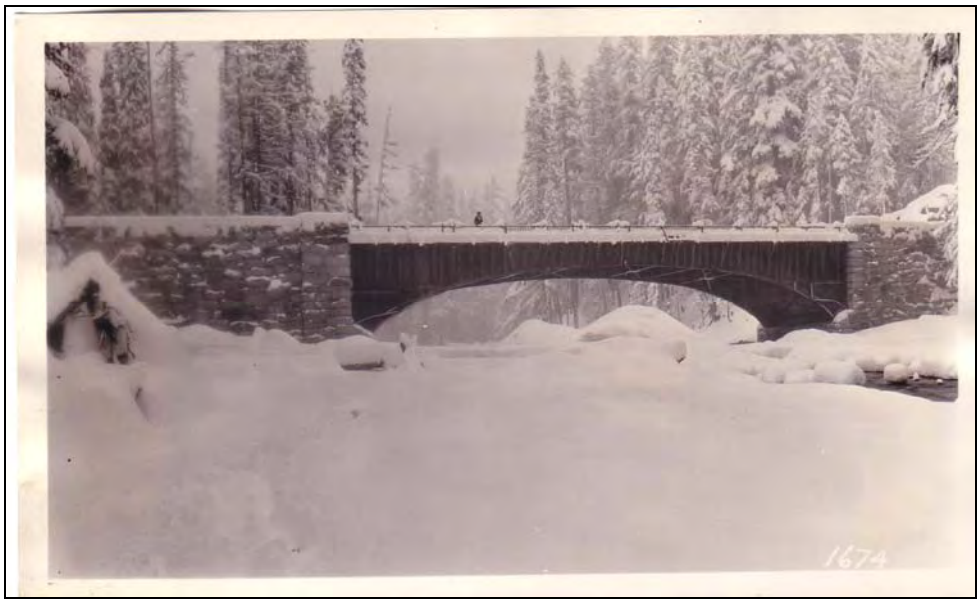
Historic photo showing log stringer and stone abutments of the original Shaw Creek Bridge. (MORA 1941)



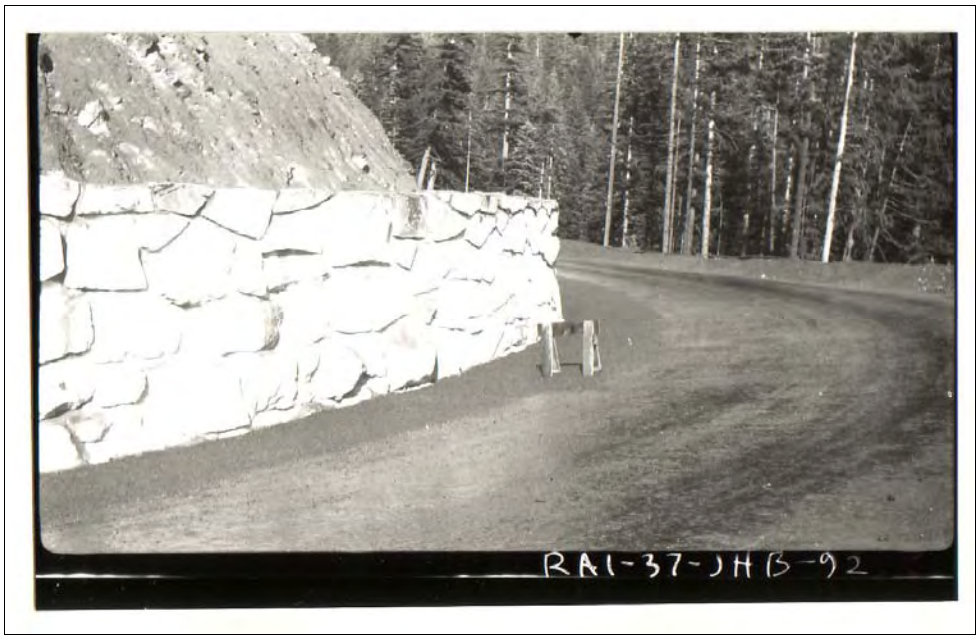
Historic photo showing masonry work of Klikcitat Creek Bridge and specimen trees protected and retained during construction. (MORA 1930)



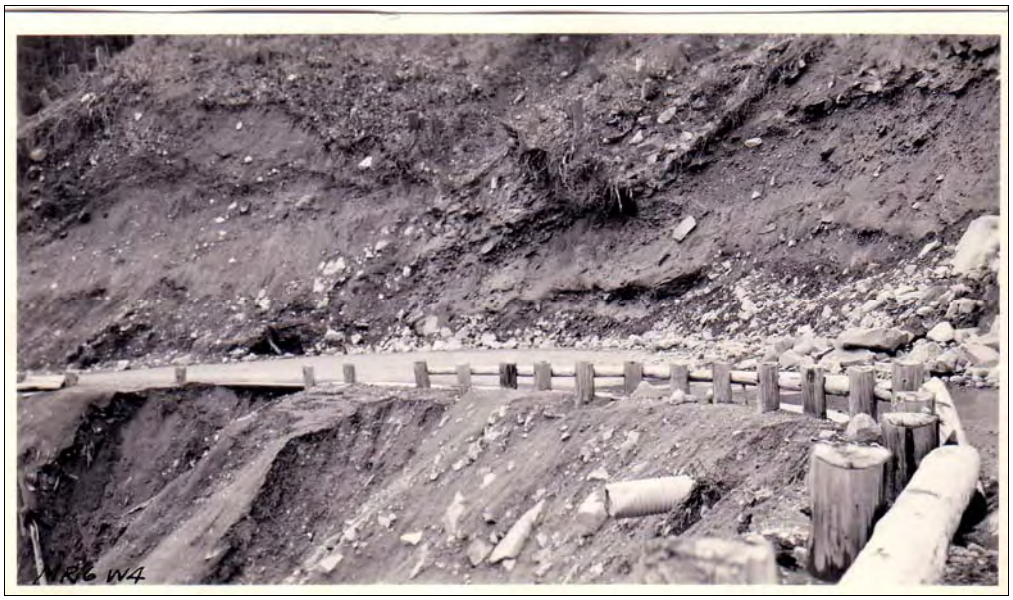
Historic photo showing Frying Pan Bridge under construction. (MORA 1930)



Historic photo showing Frying Pan Bridge just after completion. (MORA 1930)



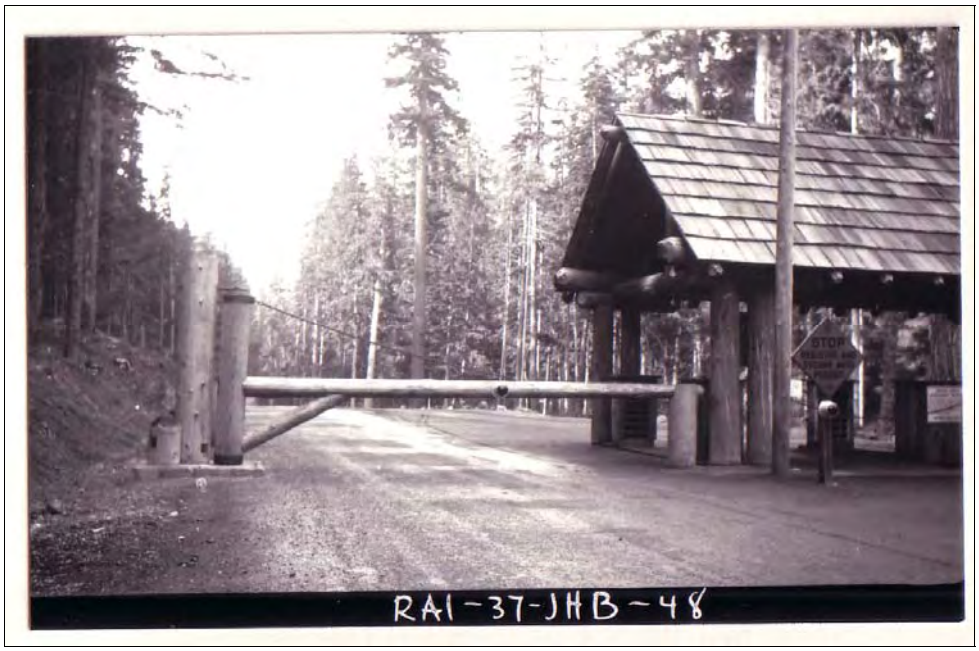
Historic photo showing original condition of retaining wall with space behind to catch falling material. (MORA 1937)



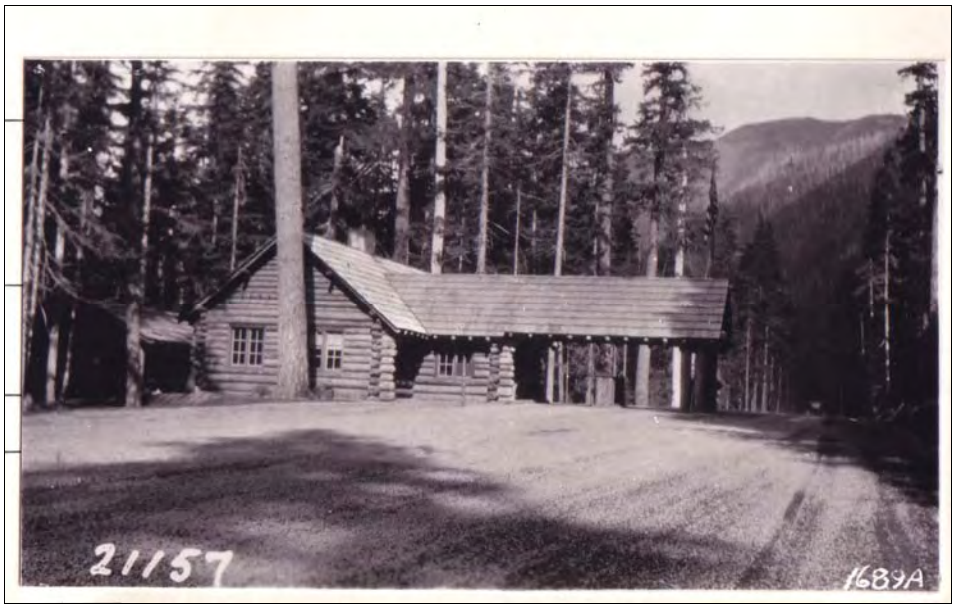
Historic photo rock slide at Big Dump. (MORA 1939)



Historic photo showing turnout with rock barrier. (MORA 1931)



Historic photo showing White River Entrance Station with peeled log, single-leaf gate. (MORA 1937)



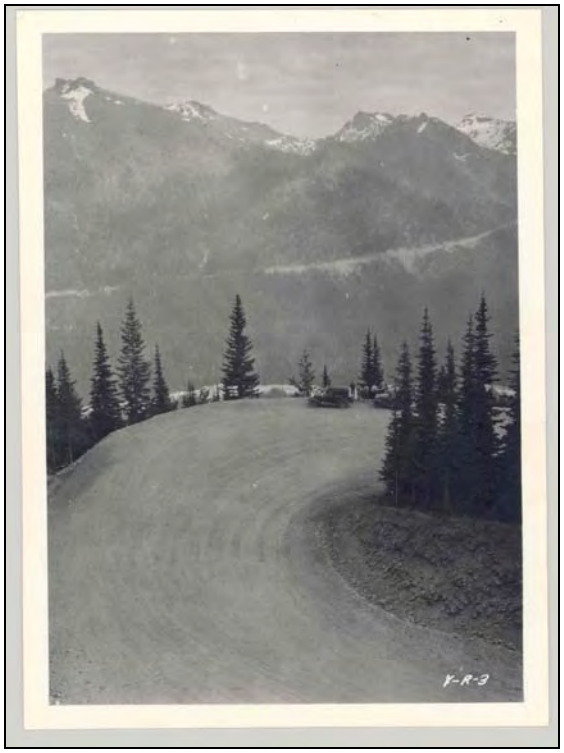
Historic photo of the White River Ranger Station showing complete porto cochere. (MORA 1929)



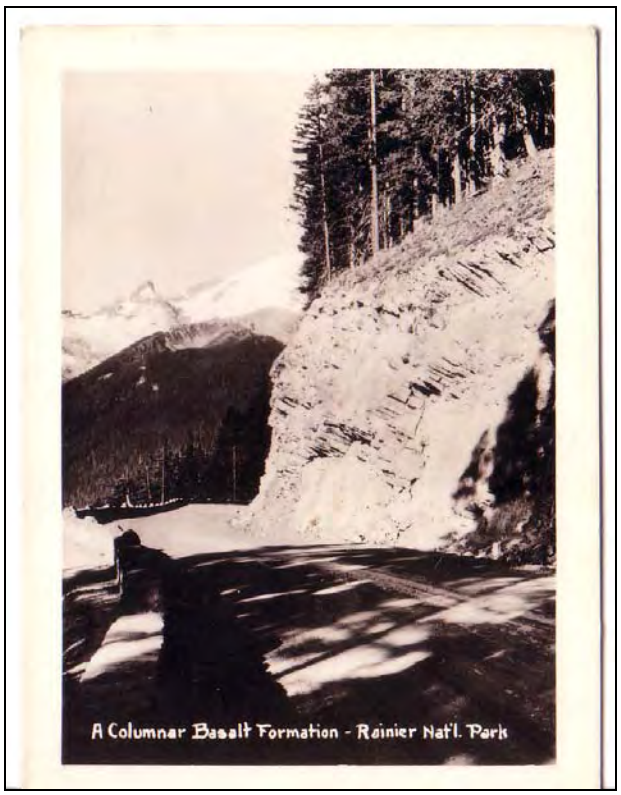
White River Entrance Station with fern plantings around base of structure. (MORA 1927)



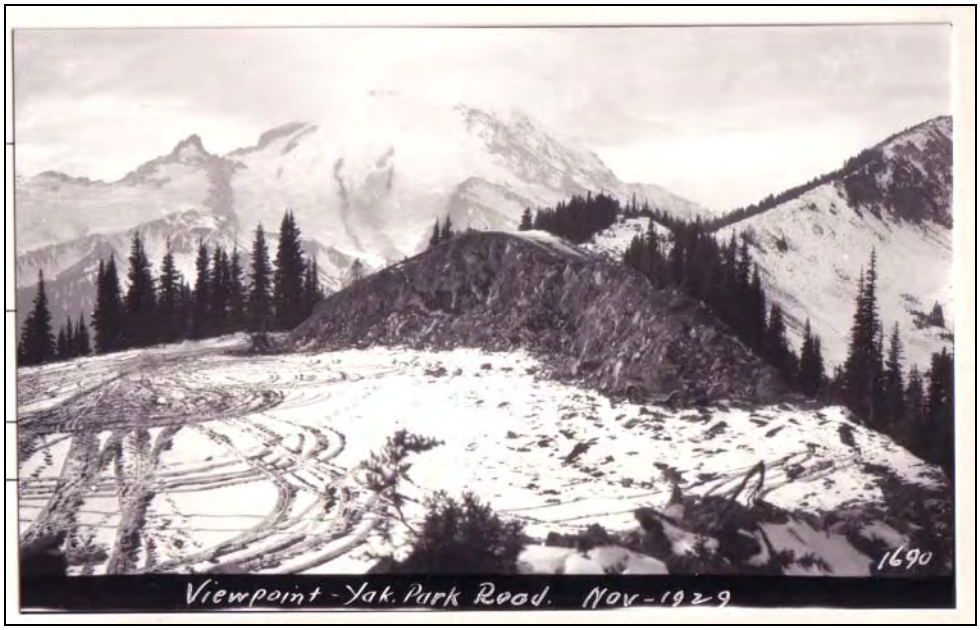
Historic photo showing tree well to protect specimen tree. (MORA 1937)



Historic photograph of stationary panoramic view at turnout near mile point 9. (MORA 1930)



Historic Photo of “moving” view from travel lane. (MORA 1935)



Historic photo showing Sunrise Point after blasting to create parking area. (MORA 1929)



Historic photo showing Sunrise Point during construction. (MORA 1928)



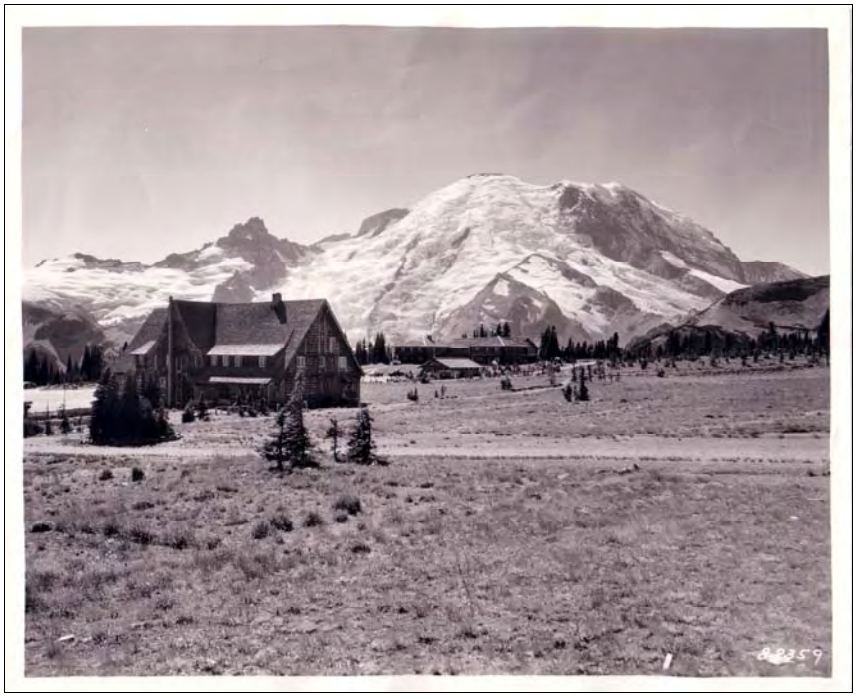
Historic photo showing Sunrise Point just after completion. (MORA 1930)



Historic photo showing fill-through approach to Sunrise Developed Area. (MORA 1931)



Historic photo showing specimen trees along road near Sunrise Developed Area. (MORA 1935)



Historic photo of Sunrise Developed Area. (MORA 1952)

Figures for Analysis and Evaluation Section



Contemporary photo showing non-contributing turnout associated with widening of shoulder. (MORA 2005)



Contemporary photo of a historic turnout in poor condition with ill-defined edging, denuded vegetation, and extension of turnout beyond historic length and width. (MORA 2005)



Contemporary photo of historic sidewalk at Sunrise Point. (MORA 2005)



Contemporary photo of historic sidewalk and curb, both in fair condition, at Sunrise Point. (MORA 2005)



Contemporary photo of historic sidewalk in good condition at Sunrise Point. (MORA 2005)



Contemporary photo of non-contributing curb and steel rails at Shaw Creek Bridge. (MORA 2005)



Contemporary photo of non-contributing rock barrier along the shoulder of the highway. (MORA 2005)



Contemporary photo of rock barrier marking a trailhead where the plantings have grown over the rock barrier. (MORA 2005)



Contemporary photo of contributing rock barriers at the location of the former historic gate. (MORA 2005)



Contemporary photo of Type 1 guardwall on alternating sides of the sidewalk at Sunrise Point. (MORA 2005)



Contemporary photo of retaining wall with concrete foundation on north side of Sunrise Point. (MORA 2005)



Contemporary photo of Fryingpan Creek Bridge medium developed area with cars overflowing parking lot and parking on road shoulder. (MORA 2005)



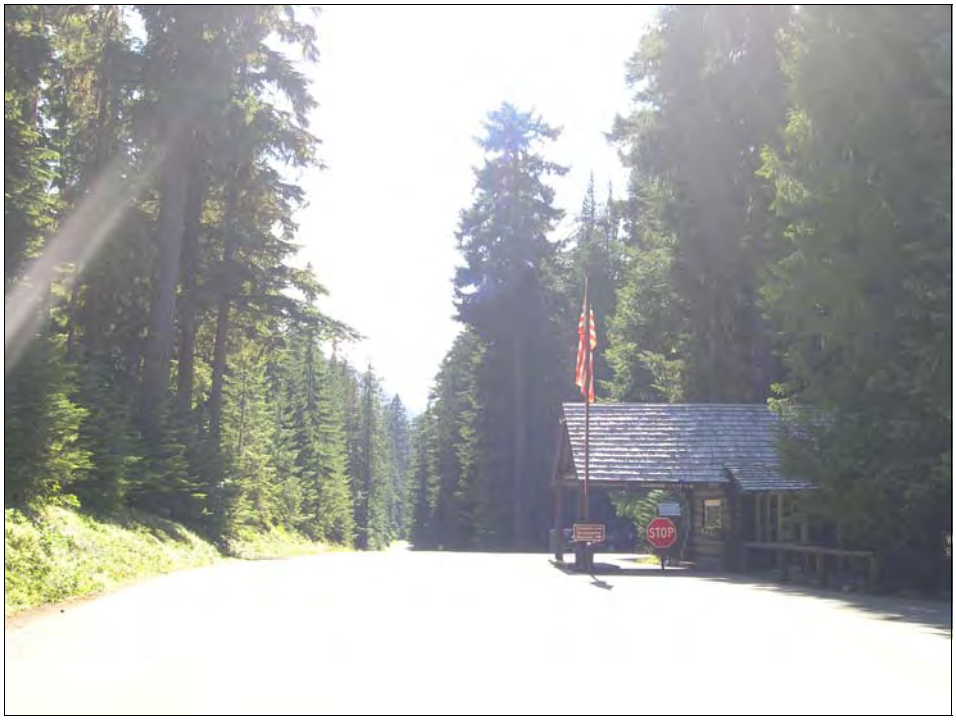
Contemporary photo of Fryingpan Bridge Creek medium size developed area with trailhead sign for Wonderland Trail. (MORA 2005)



Contemporary photo of White River Bridge sidewalk, a small size developed area. (MORA 2005)



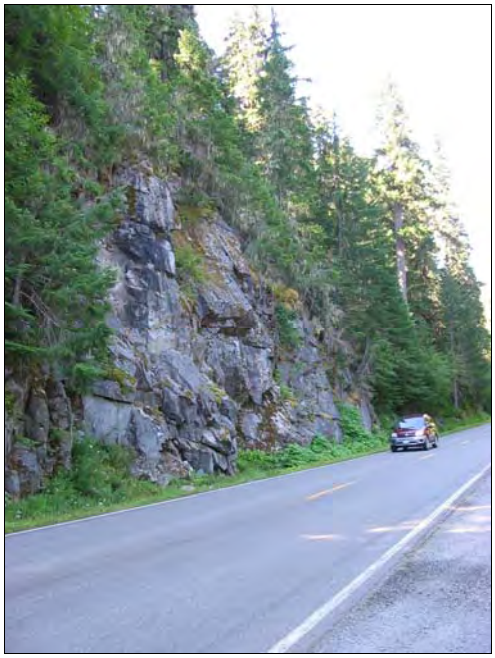
Contemporary photo of non-contributing median at White River Entrance. (MORA 2005)



Contemporary photo of the historic White River Ranger Station at the entrance of Yakima Park Highway, MORA 2005.



Contemporary photo of non-contributing simulated stone wall at the Big Dump slide area. (MORA 2005)



Contemporary photo of rock cut along the White River Valley segment. (MORA 2005)



Contemporary photo showing historic viewpoint at eroded area with simulated stone wall. (MORA 2005)



Historic photo of current site of simulated stone wall and eroded area. (MORA 1935)



Contemporary photo of herbaceous earth cut along the Sunrise Ridge segment. (MORA 2005)



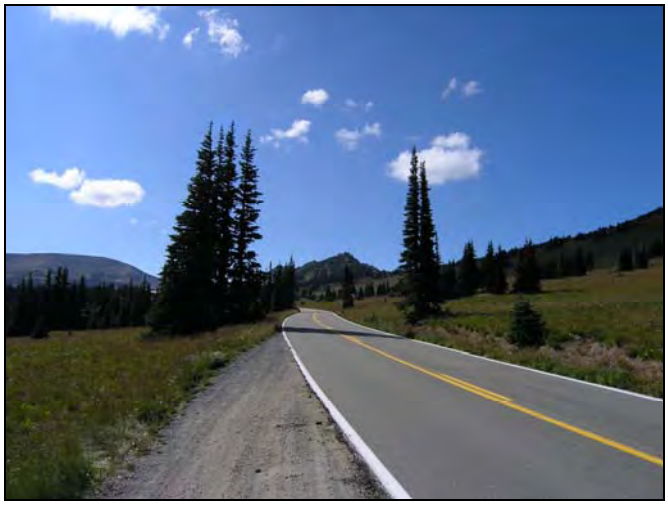
Contemporary photo of old growth archetypal tree retained along the shoulder of the road. (MORA 2005)



Contemporary photo of spruce planted along the boundary of Fryingpan Creek developed area. (MORA 2005)



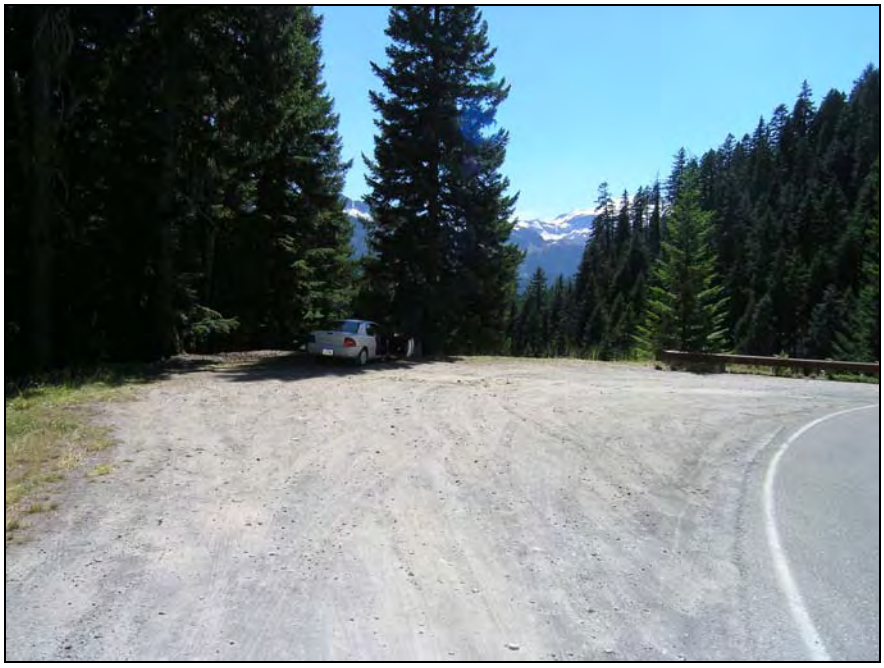
Contemporary photo of tree grouping that blends guardwalls at Sunrise Point with the surrounding subalpine forest. (MORA 2005)



Contemporary photo showing specimen subalpine plantings along the road shoulder. (MORA 2005)



Contemporary photo of "Camera Point" small developed area with vegetation obscuring view. (MORA 2005)



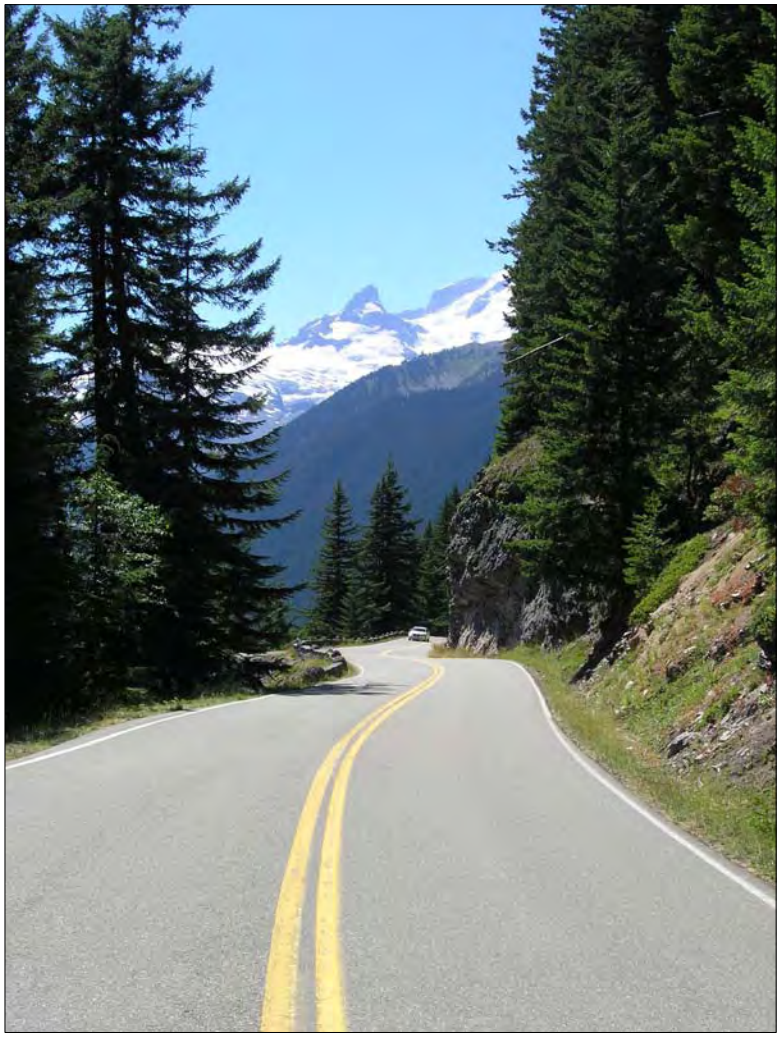
Contemporary photo of viewpoint that has been compromised by vegetation growth. (MORA 2005)



Contemporary photo showing condition of stationary panorama in fair condition. Vegetation is starting to obscure the view. (MORA 2005)



Contemporary photo showing panoramic view of turnout and panoramic view in fair condition due to vegetation growth. (MORA 2005)



Contemporary photo showing “moving” type of framed view visible from travel lane. (MORA 2005)



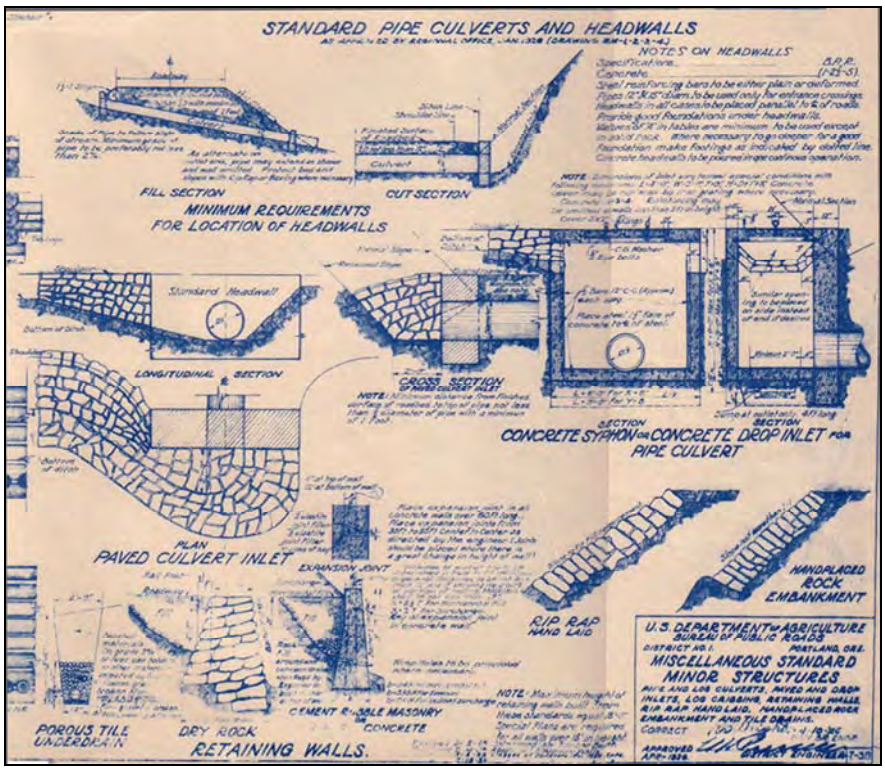
Contemporary photo showing panoramic view in the sub-alpine meadows between Sunrise Point and Yakima Park. (MORA 2005)



Contemporary photo showing Mount Rainier from Sunrise Point. (MORA 2005)



Historic photo of view from Sunrise Point towards Mt. Rainier. (MORA 1931)



Historic NPS culvert specifications. (MORA 1927)


Contemporary photo showing contributing box culvert in good condition. (MORA 2005)



Contemporary photo showing contributing culvert in fair condition; note full catchbasin and chipping mortar. (MORA 2005)



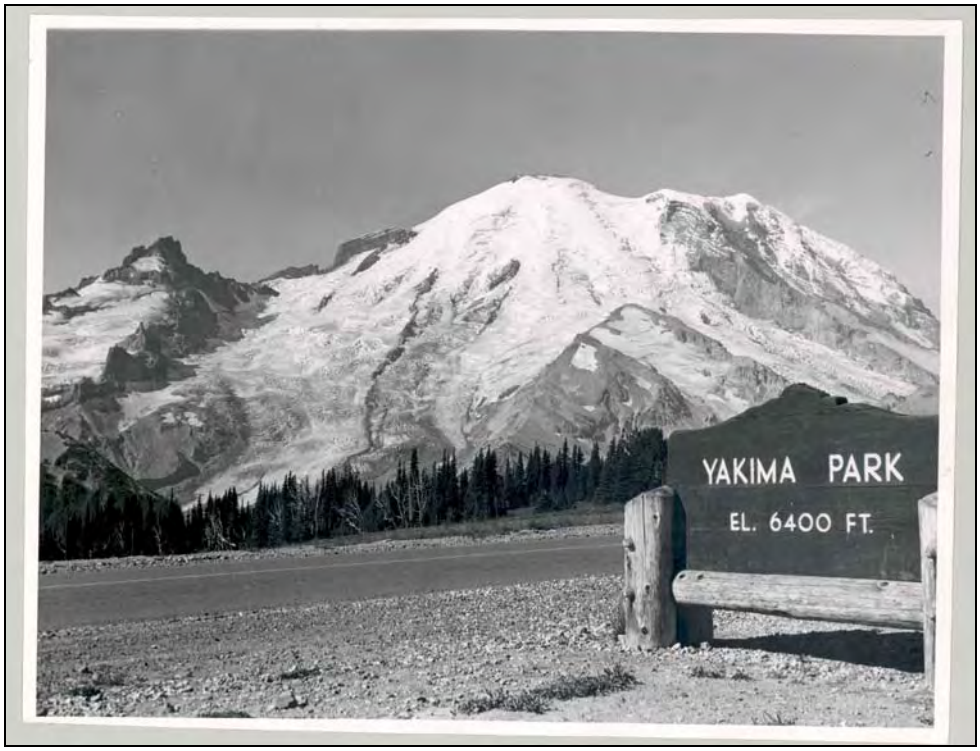
Contemporary photo showing contributing culvert in poor condition; note vegetation overgrowth and full catchbasin. (MORA 2005)



Contemporary photo showing non-contributing wooden planking covering a contributing culvert in a debris slide area. (MORA 2005)



Contemporary photo showing compatible sign at Sunrise Developed Area. (MORA 2005)



Historic photo showing historic Sunrise Developed Area sign. (MORA 1930)



Contemporary photo showing a compatible White River Campground sign. (MORA 2005)



Historic photo showing White River Campground sign. (MORA 1939)



Contemporary photo showing non-contributing stone veneered gate pillar. (MORA 2005)



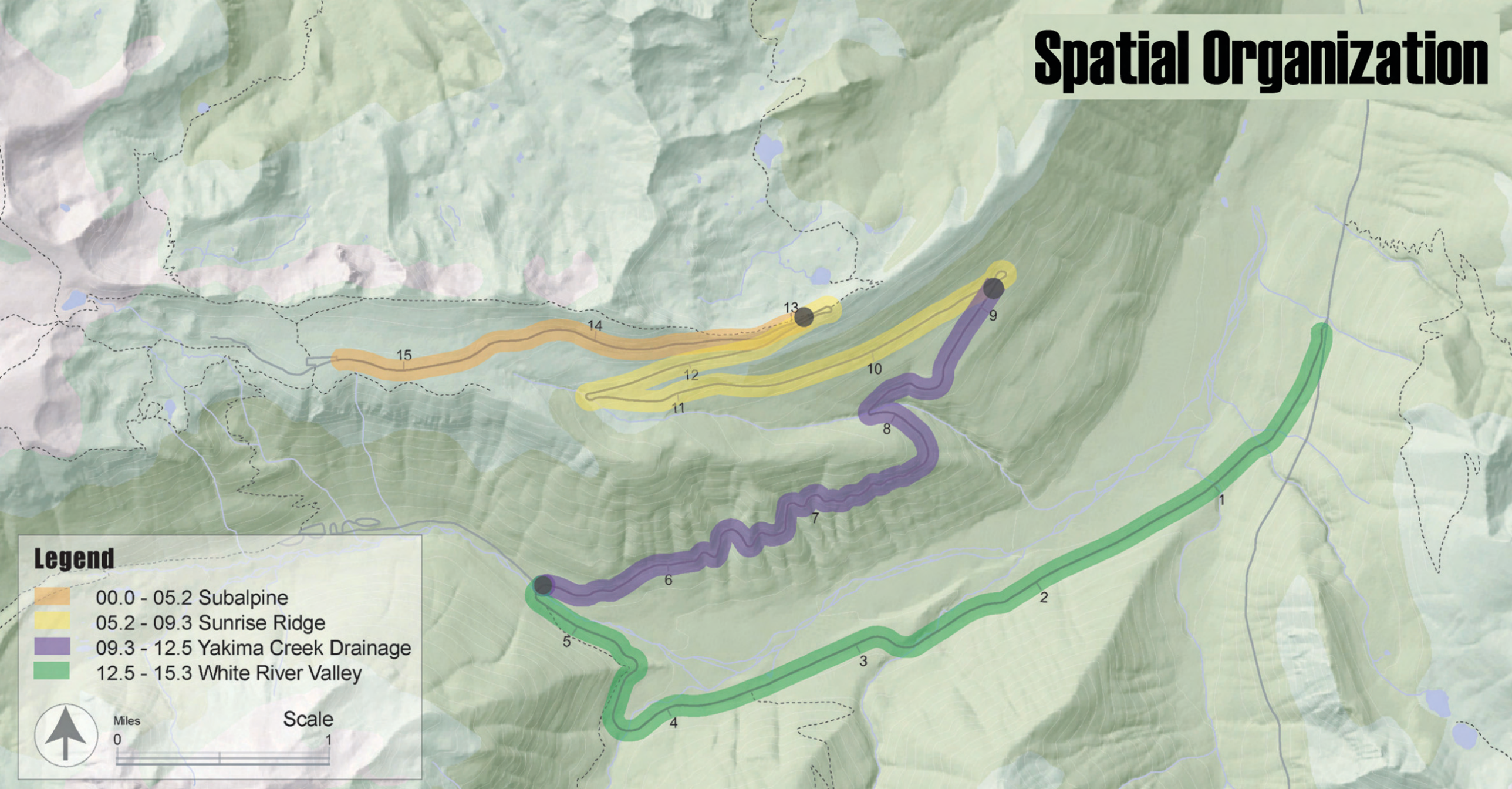
Contemporary photo showing non-contributing gate. (MORA 2005)

Yakima Park Highway

CLI Inventory Data, 2005



Spatial Organization



Circulation Features

Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Description Association	Type
Curb	0.1	0.154	Yes		Good	Shoulder	Unhewn Stone
Curb	0.368	0.648	Yes		Good	Shoulder	Unhewn Stone
Curb	0.959	0.989	Yes		Poor	Shoulder	Unhewn Stone
Curb	4.194	4.24	Yes		Good	Shoulder	Unhewn Stone
Curb	2.676	2.69	No	No	Good	Bridge	Concrete
Design Speed	1.29		Yes		Good		15
Design Speed	1.45		Yes		Good		35
Design Speed	4.014		Yes		Good		20
Design Speed	4.36		Yes		Good		35
Design Speed	8.032		Yes		Good		15
Design Speed	12.82		Yes		Poor		35
Intersection	1.334		Yes		Good		T
Intersection	3.56		Yes		Good		T
Intersection	8.61		Yes		Good		T
Intersection	5.296		No	No	Good		Wye
Island / median	9.226		Yes		Poor	Turnout	Vegetated
Island / median	1.304		No	Yes	Good	Developed Area	Stone
Sidewalk	0.958	0.986	Yes		Fair	Bridge	Linear
Sidewalk	5.252	5.29	Yes		Fair	Bridge	Linear
Sidewalk	12.708	12.734	Yes		Fair	Developed Area	Curvilinear
Sidewalk	12.738	12.81	Yes		Fair	Developed Area	Curvilinear
Sidewalk	12.764	12.872	Yes		Good	Developed Area	Curvilinear
Sidewalk	12.816	12.852	No	No	Good	Developed Area	Curvilinear
Trailhead	3.551		Yes		Good	Developed Area	Terminus
Trailhead	4.26		Yes		Good	Developed Area	Terminus
Trailhead	5.112		Yes		Good	Turnout	Terminus
Trailhead	12.794		Yes		Good	Developed Area	Terminus
Trailhead	12.872		Yes		Good	Developed Area	Terminus
Turnout	0.458	0.476	Yes		Fair	Passing Place	Lens
Turnout	0.652	0.676	Yes		Poor	Developed Area	Lens
Turnout	0.754	0.798	Yes		Poor	Rock Cut	Lens
Turnout	0.884	0.95	Yes		Fair	Developed Area	Lens
Turnout	2.75	2.786	Yes		Poor	Rock Cut	Lens
Turnout	3.368	3.408	Yes		Poor	Rock Cut	Bell
Turnout	3.744	3.77	Yes		Poor	Rock Cut	Lens

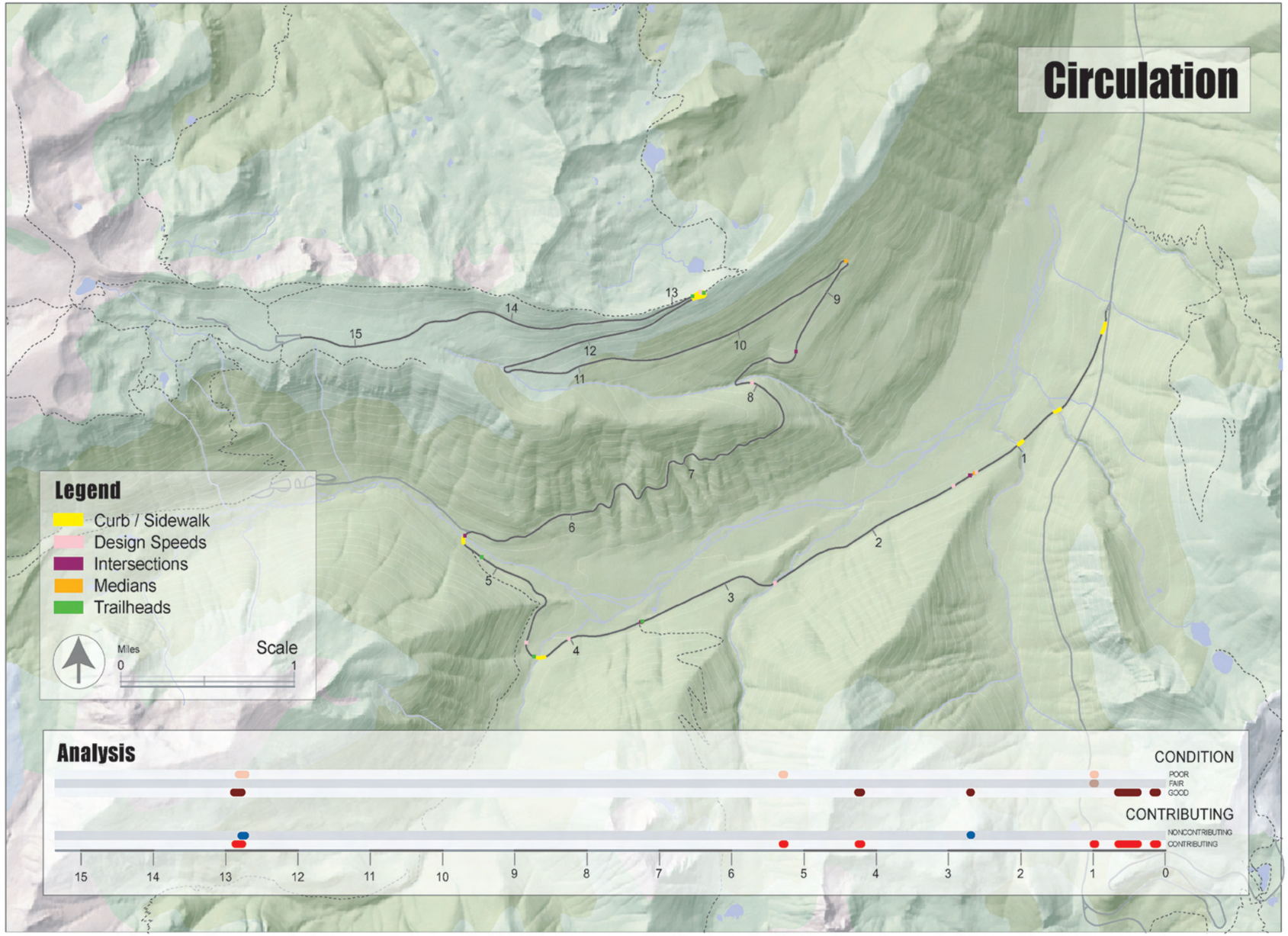
Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Description Association	Type
Turnout	4.588	4.602	Yes		Good	Rock Cut	Lens
Turnout	5.04	5.056	Yes		Good	Trail Head	Bell
Turnout	5.17	5.206	Yes		Fair	Trail Head	Lens
Turnout	5.52	5.534	Yes		Poor	Passing Place	Bell
Turnout	5.542	5.56	Yes		Poor	Passing Place	Bell
Turnout	5.872	5.886	Yes		Poor	Rock Cut	Bell
Turnout	6.004	6.026	Yes		Poor	Rock Cut	Lens
Turnout	6.116	6.132	Yes		Poor	Rock Cut	Lens
Turnout	6.228	6.256	Yes		Fair	Rock Cut	Bell
Turnout	6.538	6.566	Yes		Fair	Rock Cut	Bell
Turnout	6.754	6.77	Yes		Fair	Rock Cut	Bell
Turnout	6.832	6.846	Yes		Poor	Passing Place	Lens
Turnout	6.956	6.98	Yes		Poor	View	Bell
Turnout	7.192	7.204	Yes		Poor	Rock Cut	Lens
Turnout	7.256	7.286	Yes		Poor	Rock Cut	Lens
Turnout	7.412	7.422	Yes		Fair	View	Bell
Turnout	7.424	7.446	Yes		Good	Rock Cut	Lens
Turnout	7.646	7.674	Yes		Fair	Rock Cut	Bell
Turnout	7.724	7.76	Yes		Fair	Developed Area	Bell
Turnout	8.216	8.26	Yes		Poor	Rock Cut	Lens
Turnout	8.44	8.456	Yes		Poor	Rock Cut	Lens
Turnout	8.594	8.61	Yes		Poor	Rock Cut	Lens
Turnout	8.676	8.69	Yes		Poor	Rock Cut	Bell
Turnout	8.72	8.752	Yes		Poor	Rock Cut	Lens
Turnout	9.15	9.208	Yes		Good	View	Lens
Turnout	9.218	9.282	Yes		Poor	Rock Cut	Bell
Turnout	10.214	10.25	Yes		Fair	Rock Cut	Lens
Turnout	10.958	10.982	Yes		Fair	Rock Cut	Lens
Turnout	11.044	11.068	Yes		Fair	Rock Cut	Lens
Turnout	11.108	11.126	Yes		Poor	Shoulder Widening	Lens
Turnout	11.402	11.452	Yes		Poor	Rock Cut	Lens
Turnout	11.676	11.712	Yes		Fair	Rock Cut	Lens
Turnout	12.77	12.79	Yes		Good	Developed Area	Lens
Turnout	12.838	12.884	Yes		Good	Developed Area	Lens
Turnout	14.01	14.04	Yes		Poor	Rock Cut	Lens
Turnout	14.3	14.328	Yes		Poor	Passing Place	Lens
Turnout	14.484	14.526	Yes		Good	Rock Cut	Trapezoidal
Turnout	14.57	14.616	Yes		Fair	View	Lens
Turnout	14.586	14.622	Yes		Fair	View	Lens

Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Description Association	Type
Turnout	15.032	15.06	Yes		Poor	Rock Cut	Lens
Turnout	15.04	15.062	Yes		Poor	Rock Cut	Lens
Turnout	0.136	0.17	No	Yes	Fair	Rock Cut	Lens
Turnout	0.31	0.38	No	No	Poor	Passing Place	Lens
Turnout	0.314	0.38	No	No	Poor	Passing Place	Lens
Turnout	0.548	0.576	No	No	Poor	Shoulder Widening	Lens
Turnout	0.992	1.008	No	No	Poor	Shoulder Widening	Lens
Turnout	0.994	1.04	No	No	Poor	Shoulder Widening	Lens
Turnout	2.272	2.29	No	No	Poor	Shoulder Widening	Lens
Turnout	2.412	2.434	No	No	Poor	Shoulder Widening	Lens
Turnout	3.826	3.846	No	No	Poor	Shoulder Widening	Lens
Turnout	4.294	4.238	No	No	Good	Trail Head	Lens
Turnout	5.144	5.162	No	No	Poor	Trail Head	Lens
Turnout	5.334	5.356	No	No	Poor	Shoulder Widening	Lens
Turnout	5.668	5.686	No	No	Poor	Shoulder Widening	Lens
Turnout	6.364	6.396	No	No	Poor	Shoulder Widening	Lens
Turnout	7.336	7.346	No	No	Fair	Rock Cut	Lens
Turnout	7.784	7.856	No	No	Poor	Rock Cut	Lens
Turnout	7.874	7.856	No	No	Poor	Rock Cut	Lens
Turnout	7.942	7.958	No	No	Poor	Rock Cut	Lens
Turnout	7.986	8.01	No	No	Poor	Rock Cut	Lens
Turnout	8.04	8.098	No	No	Poor	Rock Cut	Lens
Turnout	8.112	8.132	No	No	Poor	Rock Cut	Bell
Turnout	8.38	8.398	No	No	Poor	Shoulder Widening	Lens
Turnout	8.398	8.456	No	No	Poor	Rock Cut	Lens
Turnout	9.138	9.17	No	Yes	Fair	Rock Cut	Lens
Turnout	9.792	9.812	No	No	Fair	Shoulder Widening	Lens
Turnout	10.628	10.664	No	No	Poor	Rock Cut	Lens
Turnout	11.108	11.126	No	No	Poor	Shoulder Widening	Lens
Turnout	11.45	11.474	No	No	Poor	Shoulder Widening	Lens
Turnout	14.582	14.652	No	No	Poor	Shoulder Widening	Lens
Turnout	14.586	14.654	No	No	Fair	Shoulder Widening	Lens
Turnout	14.85	14.866	No	No	Poor	Shoulder Widening	Lens
Turnout	14.858	14.868	No	No	Fair	Rock Cut	Lens
Turnout	15.068	15.102	No	No	Fair	Shoulder	Lens

Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Description Association	Type
						Widening	
Turnout	15.089	15.12	No	No	Good	Shoulder Widening	Lens

CIRCULATION

YAKIMA PARK HIGHWAY

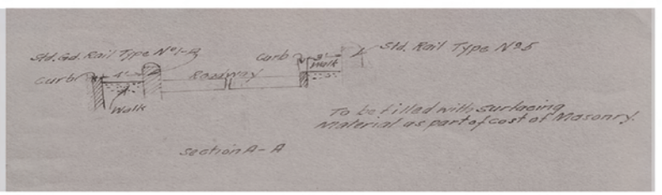




FEATURE	CONTRIBUTING	COMPATIBLE	CONDITION	TOTAL
CIRCULATION	71	3	GOOD-30 FAIR-26 POOR-54	110
CURB	3		GOOD-2 POOR-1	3
SIDEWALK	5		GOOD-2 FAIR-4	6
DESIGN SPEED	8		GOOD-7 POOR-1	8
INTERSECTION	3		GOOD-4	4
MEDIAN		1	GOOD-1	1
TURNOUT	79	2	GOOD-9 FAIR-21 POOR-51	81
TRAILHEAD	5		GOOD-5	5



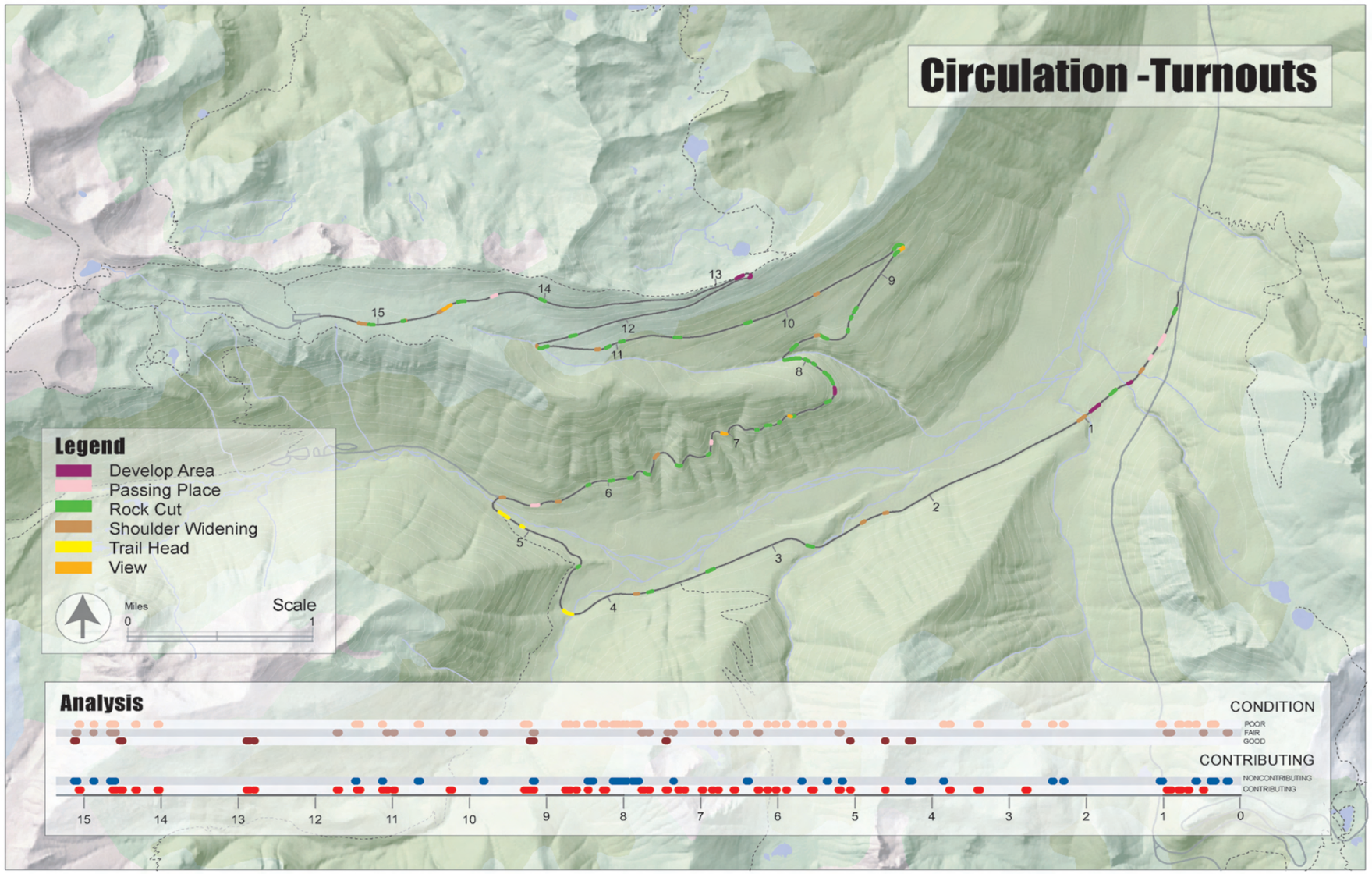






CIRCULATION-TURNOUTS

YAKIMA PARK HIGHWAY





FEATURE	CONTRIBUTING	COMPATIBLE	CONDITION	TOTAL
CIRCULATION	71	3	GOOD-30 FAIR-26 POOR-54	110
CURB	3		GOOD-2 POOR-1	3
SIDEWALK	5		GOOD-2 FAIR-4	6
DESIGN SPEED	8		GOOD-7 POOR-1	8
INTERSECTION	3		GOOD-4	4
MEDIAN		1	GOOD-1	1
TURNOUT	79	2	GOOD-9 FAIR-21 POOR-51	81
TRAILHEAD	5		GOOD-5	5











Buildings and Structures

Feature Name	Type	MP Begin	MP End	Contributing	Compatible	Condition	Description Association
Bridge	Deadwood Creek	0.638	0.65	Yes		Good	Creek
Bridge	Klickitat Bridge	0.966	1.022	Yes		Good	Creek
Bridge	Fryingpan Creek Bridge	4.194	4.24	Yes		Poor	Creek
Bridge	White River Bridge	5.256	5.29	Yes		Good	River
Bridge	Shaw creek	2.668	2.688	No	No	Good	Creek
Guard / retaining wall	Type 5	7.504	7.626	Yes		Good	Shoulder
Guard / retaining wall	Type 5	12.738	12.791	Yes		Good	Turnout
Guard / retaining wall	Type 5	12.798	12.87	Yes		Good	Developed Area
Guard / retaining wall	Reinforced Concrete	7.35	7.402	No	No	Good	Shoulder
Guard rail	Type 5	7.436	7.462	Yes		Fair	Shoulder
Guard rail	Type 1-B	12.708	12.778	Yes		Good	Developed Area
Guard rail	Type 1-B	12.778	12.8	Yes		Good	Developed Area
Guard rail	Type 5	12.794	12.798	Yes		Fair	Viewing Area
Guard rail	Type 1-B	12.81	12.86	Yes		Good	Developed Area
Guard rail	Core 10 Steel W	6.946	6.96	No	No	Good	Developed Area
Retaining wall	Stone	6.206	6.25	Yes		Fair	Shoulder
Retaining wall	Stone	12.794	12.797	Yes		Fair	Developed Area
Rock Barrier	Linear	1.314	1.336	Yes		Good	Developed Area
Rock Barrier	Linear	1.344	1.352	Yes		Fair	Developed Area
Rock Barrier	Linear	1.36	1.398	Yes		Fair	Developed Area
Rock Barrier	Linear	3.549	3.566	Yes		Good	Developed Area
Rock Barrier	Linear	4.242	4.28	Yes		Fair	Developed Area
Rock Barrier	Random	4.344	4.345	Yes		Good	Other
Rock Barrier	Random	5.18	5.2	Yes		Poor	Turnout
Rock Barrier	Random	5.302	5.303	Yes		Good	Developed Area
Rock Barrier	Isolated	5.33	5.331	Yes		Good	Gate
Rock Barrier	Isolated	6.236	6.238	Yes		Good	Turnout
Rock Barrier	Isolated	7.344	7.348	Yes		Poor	Turnout
Rock Barrier	Isolated	7.744	7.745	Yes		Fair	Viewing Area
Rock Barrier	Linear	9.146	9.206	Yes		Fair	Other
Rock Barrier	Linear	12.795	12.795	Yes		Good	Developed Area
Rock Barrier	Linear	12.799	12.799	Yes		Good	Developed Area
Rock Barrier	Linear	14.388	14.398	Yes		Poor	Shoulder
Rock Barrier	Linear	4.088	4.142	No	Yes	Fair	Shoulder
Rock Barrier	Isolated	4.18	4.19	No	Yes	Poor	Turnout
Rock Barrier	Isolated	7.432	7.433	No	Yes	Poor	Shoulder
Rock Barrier	Linear	14.588	14.608	No	Yes	Fair	Turnout
Rock Barrier	Linear	14.664	14.706	No	Yes	Good	Shoulder
Rock Barrier	Linear	14.844	14.85	No	Yes	Good	Shoulder
Rock Barrier	Linear	15.184	15.284	No	Yes	Fair	Developed Area
Rock Barrier	Linear	15.244	15.256	No	Yes	Fair	Developed Area

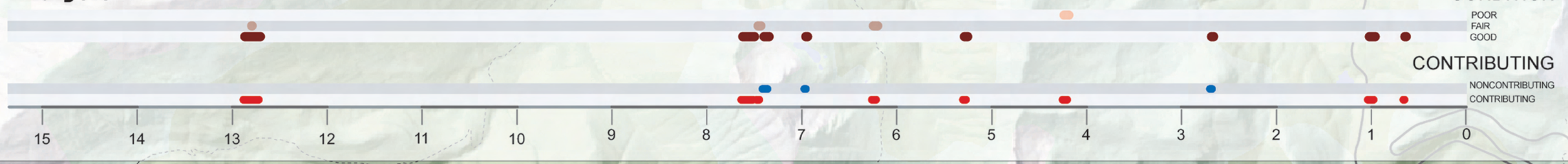
Buildings and Structures

Legend

- Bridges / Buildings
- Guard Rails
- Guard / Retaining Walls
- Retaining Walls
- Guard Walls

0 0.5 1 MILES

Analysis



Land Use Features

Name	MP Begin	MP End	Contributing	Compatible	Condition	Type
Entrance Station	1.292	1.394	Yes		Fair	Medium developed area
Fryingpan Creek Bridge	4.269	4.296	Yes		Fair	Medium developed area
Sunrise Point	12.706	12.886	Yes		Good	Medium developed area
White River valley view	9.134	9.216	Yes		Fair	Small developed are
Big Bertha Slide	0.312	0.386	No	No	Poor	Small developed area
Klickitat Bridge	0.908	0.960	No	Yes	Fair	Small developed area
Owyhigh Lake Trailhead	3.55	3.572	Yes		Good	Small developed area
White River Bridge	5.25	5.296	Yes		Good	Small developed area
Mt. Rainier View	6.948	6.974	Yes		Poor	Small developed area
Sim wall/Big dump	7.338	7.426	Yes		Poor	Small developed area
Andesite columns	7.728	7.772	Yes		Fair	Small developed area

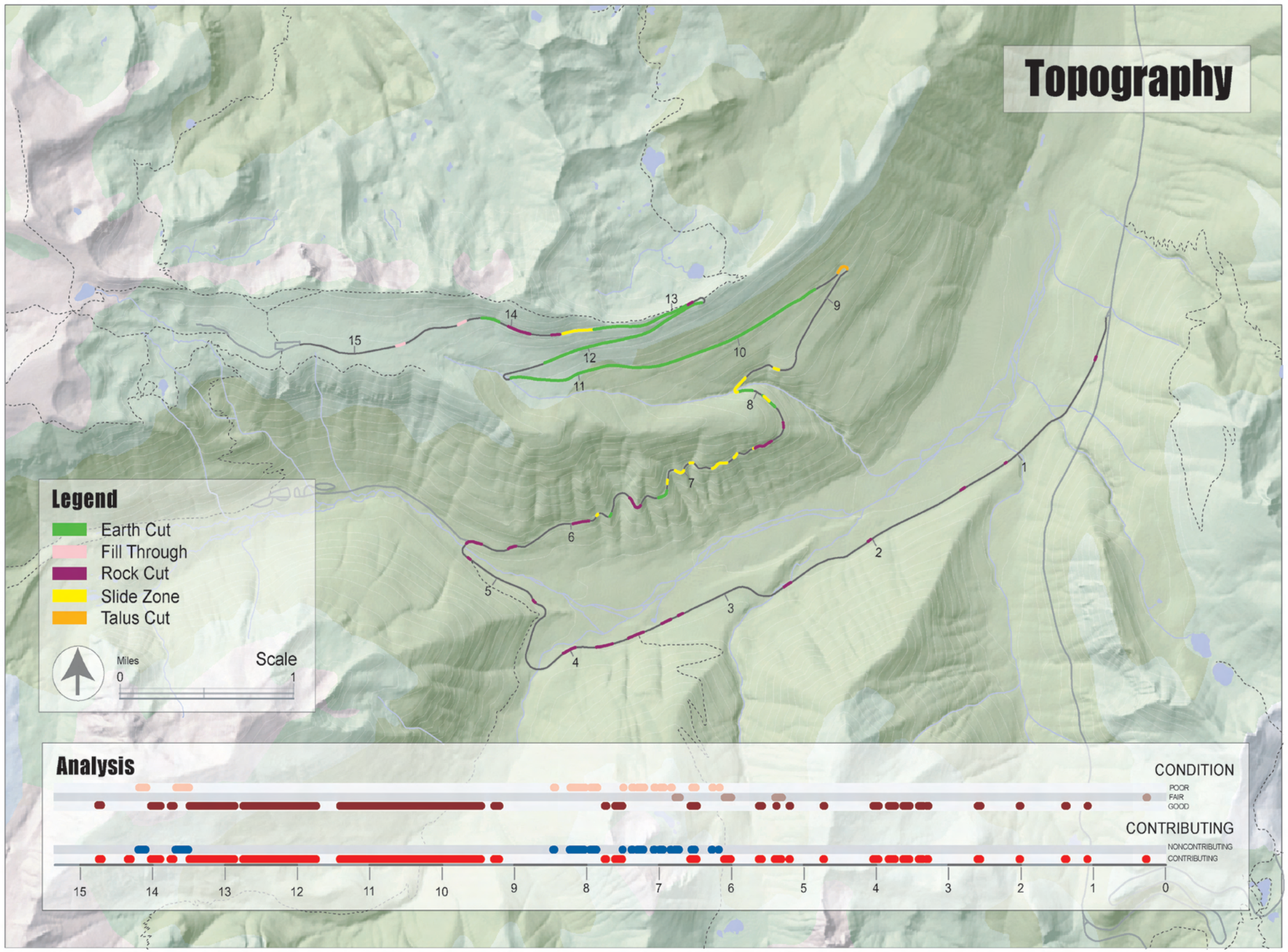
Topographical Features

Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Type	Material
Earth Cut	9.46	11.42	Yes		Good	Battered	Herbaceous Cover over Glacial Till
Earth Cut	11.74	12.76	Yes		Good	Battered	Herbaceous Cover over Glacial Till
Earth Cut	12.91	13.5	Yes		Good	Battered	Herbaceous Cover over Talus / Glacial Till
Earth Cut	6.17	6.18	No	No	Poor	Battered	Glacial Till
Earth Cut	6.26	6.28	No	No	Poor	Battered	Glacial Till
Earth Cut	6.5	6.56	No	No	Poor	Battered	Glacial Till
Earth Cut	6.72	6.79	No	No	Fair	Battered	Glacial Till
Earth Cut	6.83	6.85	No	No	Poor	Battered	Glacial Till
Earth Cut	6.94	7	No	No	Poor	Battered	Glacial Till
Earth Cut	7.06	7.08	No	No	Poor	Battered	Glacial Till
Earth Cut	7.21	7.31	No	No	Poor	Battered	Glacial Till / Talus / Pumice
Earth Cut	7.36	7.39	No	No	Poor	Battered	Glacial Till
Earth Cut	7.5	7.51	No	No	Poor	Battered	Glacial Till
Earth Cut	7.86	7.96	No	No	Poor	Battered	Glacial Till
Earth Cut	7.91	7.95	No	No	Poor	Battered	Glacial Till
Earth Cut	8.03	8.11	No	No	Poor	Battered	Glacial Till
Earth Cut	8.12	8.22	No	No	Poor	Battered	Glacial Till
Earth Cut	8.22	8.24	No	No	Poor	Battered	Glacial Till
Earth Cut	8.44	8.47	No	No	Poor	Battered	Glacial Till
Earth Cut	13.5	13.69	No	No	Poor	Battered	Glacial Till / Talus
Earth Cut	14.09	14.2	No	No	Poor	Battered	Glacial Till / Talus
Fill through	14.3	14.35	Yes		Good	Battered	
Fill through	14.7	14.75	Yes		Good	Battered	
Rock Cut	0.26	0.28	Yes		Fair	Battered	Granite
Rock Cut	1.08	1.09	Yes		Good	Battered	Granite
Rock Cut	1.37	1.4	Yes		Good	Battered	Granite
Rock Cut	2.01	2.03	Yes		Good	Battered	Granite
Rock Cut	2.56	2.61	Yes		Good	Vertical	Granite
Rock Cut	3.28	3.31	Yes		Good	Vertical	Granite
Rock Cut	3.36	3.42	Yes		Good	Vertical	Granite
Rock Cut	3.54	3.64	Yes		Good	Battered	Granite
Rock Cut	3.74	3.84	Yes		Good	Battered	Granite
Rock Cut	3.97	4.05	Yes		Good	Battered	Granite
Rock Cut	4.72	4.74	Yes		Good	Vertical	Granite
Rock Cut	5.19	5.21	Yes		Good	Battered	Granite
Rock Cut	5.31	5.41	Yes		Fair	Battered	Granite
Rock Cut	5.38	5.39	Yes		Good	Vertical	Granite
Rock Cut	5.58	5.63	Yes		Good	Vertical	Granite
Rock Cut	6.01	6.11	Yes		Fair	Battered	Granite

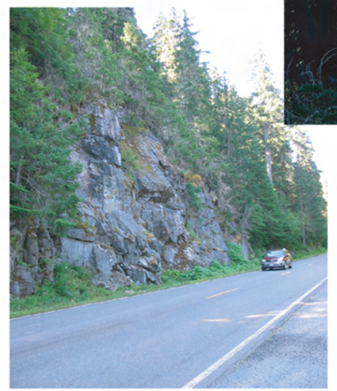
Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Type	Material
Rock Cut	6.48	6.58	Yes		Good	Vertical	Granite
Rock Cut	7.51	7.62	Yes		Good	Overhang	Columnar Andesite
Rock Cut	7.73	7.76	Yes		Good	Overhang	Columnar Andesite
Rock Cut	12.87	12.9	Yes		Good	Battered	Granite
Rock cut	13.71	13.76	Yes		Good	Vertical	Granite
Rock cut	13.89	14.03	Yes		Good	Battered	Granite
Talus Cut	9.21	9.29	Yes		Good	Battered	Talus / Pumice

TOPOGRAPHY

YAKIMA PARK HIGHWAY









FEATURE	CONTRIBUTING	COMPATIBLE	CONDITION	TOTAL
TOPOGRAPHY	46		GOOD-25 FAIR-4 POOR-17	46
ROCK CUT	26		GOOD-23 FAIR-4 POOR-17	44
FILL THROUGH	2		GOOD-2	2





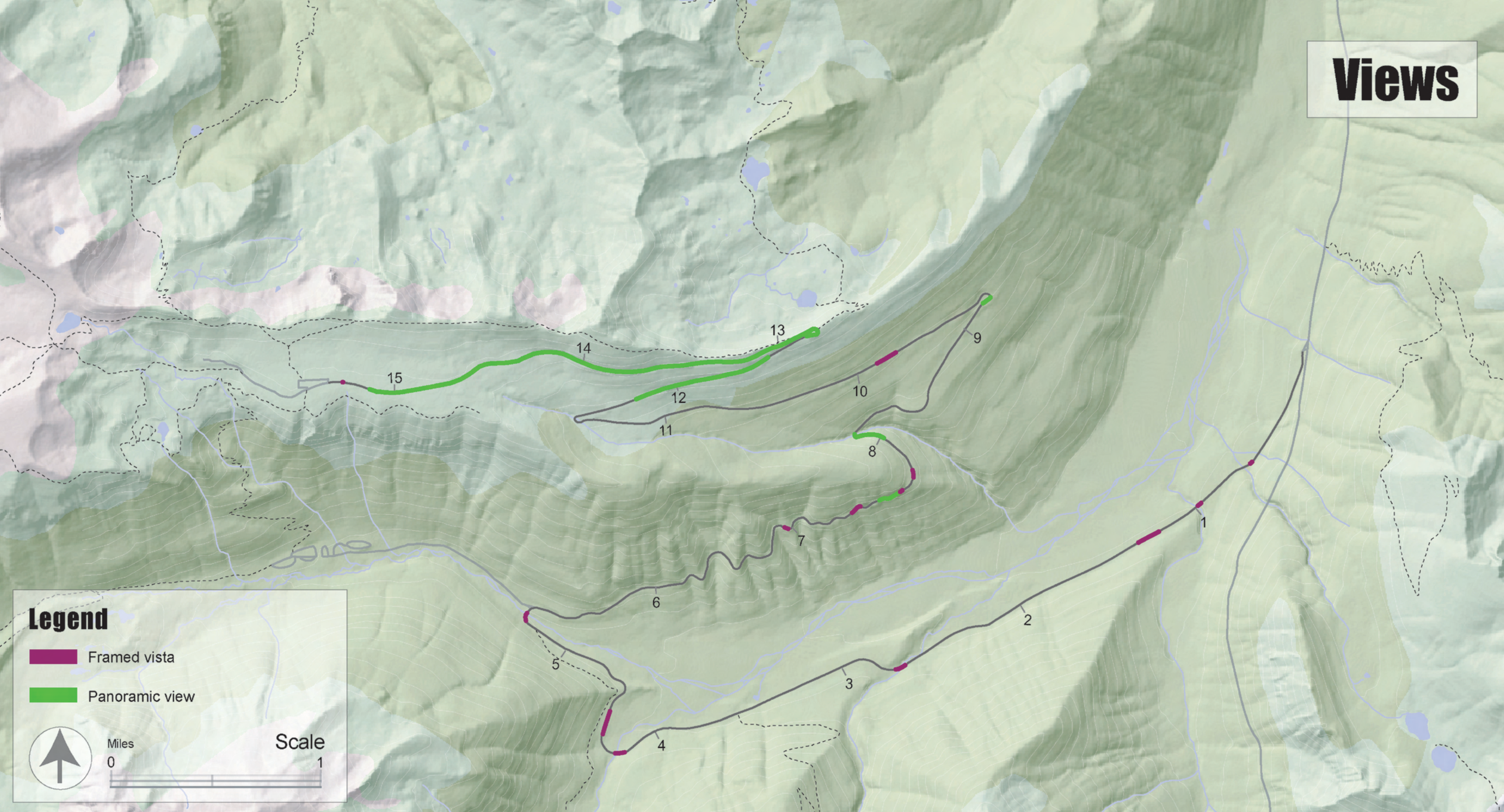
Vegetation Features

Feature Name	MP Begin	Contributing	Compatible	Condition	Type	Association
Tree Grouping	0.04	Yes		Fair	Snags	Fill Slope
Tree Grouping	0.224	Yes		Fair	Douglas-fir and Western red cedar	Shoulder
Tree Grouping	0.566	Yes		Good	Douglas-fir and Western red cedar	Shoulder
Tree Grouping	0.644	Yes		Good	Riparian vegetation	Other
Tree Grouping	1.306	Yes		Good	Douglas-fir	Developed Area
Tree Grouping	1.34	Yes		Fair	Ornamental	Developed Area
Tree Grouping	1.364	Yes		Fair	Douglas-fir	Developed Area
Tree Grouping	2.018	Yes		Good	Douglas-fir and Western red cedar	Fill Slope
Tree Grouping	2.788	Yes		Good	Western red cedar and Douglas-fir	Cut Slope
Tree Grouping	3.55	Yes		Good	Douglas-fir	Developed Area
Tree Grouping	4.192	Yes		Fair	Pacific silver fir	Bridge
Tree Grouping	4.252	Yes		Good	Spruce verifty species	Developed Area
Tree Grouping	4.74	Yes		Fair	Douglas-fir	Fill Slope
Tree Grouping	5.04	Yes		Good	Western hemlock	Turnout
Tree Grouping	5.252	Yes		Good	Subalpine fir	Bridge
Tree Grouping	5.87	Yes		Good	Douglas-fir and Western hemlock	Turnout
Tree Grouping	7.11	Yes		Fair	Douglas-fir	Turnout
Tree Grouping	14.906	Yes		Good	Subalpine fir and Western white pine	Shoulder
Tree Grouping	15.144	Yes		Good	Subalpine fir	Shoulder
Tree Grouping	5.298	No	Yes	Good	Ornamental Alaska yellow cedar	Turnout/Intersection
Tree Grouping	5.308	No	No	Poor	Black cottonwood	Cut Slope
Tree Grouping	9.212	No	Yes	Good	Subalpine Fir	Earth Cut
Tree Grouping	12.794	No	No	Poor	Subalpine Fir	Developed Area
Tree Grouping	14.32	No	Yes	Fair	Subalpine Fir	Shoulder
Tree Grouping	14.64	No	Yes	Fair	Subalpine Fir	Turnout
Tree Specimen	0.1	Yes		Good	Thuja plicata	Shoulder
Tree Specimen	0.964	Yes		Good	Douglas-fir	Shoulder
Tree Specimen	0.988	Yes		Good	snag	Bridge
Tree Specimen	1.636	Yes		Fair	Douglas-fir	Shoulder
Tree Specimen	2.502	Yes		Good	Western hemlock	Shoulder
Tree Specimen	3.75	Yes		Good	Douglas-fir	Turnout
Tree Specimen	4.022	Yes		Good	Western hemlock	Fill Slope
Tree Specimen	4.261	Yes		Good	Western hemlock	Developed Area
Tree Specimen	4.268	Yes		Fair	Western hemlock	Developed Area
Tree Specimen	4.34	Yes		Good	Western hemlock	Shoulder
Tree Specimen	5.056	Yes		Good	Douglas-fir	Shoulder
Tree Specimen	5.15	Yes		Good	Douglas-fir	Turnout

Tree Specimen	6.054	Yes		Good	Douglas-fir	Shoulder
Tree Specimen	6.415	Yes		Good	Douglas-fir	Cut Slope
Tree Specimen	6.62	Yes		Good	Douglas-fir	Fill Slope
Tree Specimen	7.436	Yes		Good	Douglas-fir stump	Shoulder
Tree Specimen	10.254	Yes		Good	Subalpine fir	Turnout
Tree Specimen	11.692	Yes		Good	Subalpine fir	Turnout
Tree Specimen	4.26	No	Yes	Good	Western red cedar	Developed Area

Views and Vistas

Feature Name	MP Begin	MP End	Contributing	Compatible	Condition	Type	Association
Framed vista	0.636	0.65	Yes		Good	Moving Vehicle	Bridge
Framed vista	0.964	0.986	Yes		Good	Stationary Vehicle	Bridge
Framed vista	1.22	1.336	Yes		Good	Moving Vehicle	Alignment
Framed vista	2.662	2.714	Yes		Fair	Moving Vehicle	Bridge
Framed vista	4.192	4.24	Yes		Good	Moving Vehicle	Bridge
Framed vista	4.37	4.488	Yes		Good	Moving Vehicle	Alignment
Framed vista	5.248	5.29	Yes		Good	Stationary Vehicle	Bridge
Framed vista	6.952	6.972	Yes		Fair	Moving Vehicle	Travel Lane
Framed vista	7.642	7.626	Yes		Good	Moving Vehicle	Alignment
Framed vista	7.73	7.766	Yes		Fair	Stationary Vehicle	Turnout
Framed vista	9.782	9.892	Yes		Good	Moving Vehicle	Alignment
Framed vista	15.276	15.28	Yes		Good	Moving Vehicle	Alignment
Framed vista	7.352	7.408	No	Yes	Poor	Moving Vehicle	Travel Lane
Panoramic view	7.512	7.626	Yes		Good	Moving Vehicle	Travel Lane
Panoramic view	9.156	9.204	Yes		Fair	Stationary Vehicle	Turnout
Panoramic view	11.8	12.5	Yes		Good	Moving Vehicle	Travel Lane
Panoramic view	12.72	12.89	Yes		Good	Stationary Vehicle	Turnout
Panoramic view	12.889	15.138	Yes		Good	Moving Vehicle	Travel Lane
Panoramic view	7.984	8.146	No	No	Poor	Moving Vehicle	Travel Lane


Views
Legend
Framed vista
Panoramic view
Miles
0
Scale
1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Small Scale Features

Feature Name	MP Begin	Contributing	Compatible	Condition	Type
Culvert	0.034	No	No	Poor	36” Culvert
Culvert	0.434	No	No	Good	18” Culvert
Culvert	0.63	No	No	Fair	18” Culvert
Culvert	2.272	No	No	Poor	18” Culvert
Culvert	5.834	No	No	Good	24” Culvert
Culvert	5.936	No	No	Fair	18” Culvert
Culvert	6.046	No	No	Poor	24” Culvert
Culvert	6.17	No	No	Poor	24” Culvert
Culvert	6.374	No	No	Poor	24” Culvert
Culvert	6.414	No	No	Poor	18” Culvert
Culvert	6.662	No	No	Good	18” Culvert
Culvert	6.682	No	No	Good	18” Culvert
Culvert	6.86	No	No	Poor	18” Culvert
Culvert	7.292	No	No	Poor	18” Culvert
Culvert	7.418	No	No	Poor	18” Culvert
Culvert	7.986	No	No	Fair	18” Culvert
Culvert	12.28	No	No	Poor	24” Culvert
Culvert	12.598	No	No	Poor	18” Culvert
Culvert	13.322	No	No	Fair	Drop Inlet
Culvert	13.39	No	No	Fair	Drop Inlet
Culvert	13.436	No	No	Fair	Drop Inlet
Culvert	13.52	No	No	Good	Drop Inlet
Culvert	13.572	No	No	Good	Drop Inlet
Culvert	13.632	No	No	Good	Drop Inlet
Culvert	0.12	Yes		Fair	24” Culvert
Culvert	0.222	Yes		Fair	18” Culvert
Culvert	0.306	Yes		Fair	18” Culvert
Culvert	0.574	Yes		Good	Box Culvert
Culvert	0.622	Yes		Poor	18” Culvert
Culvert	0.686	Yes		Poor	24” Culvert
Culvert	0.838	Yes		Poor	18” Culvert
Culvert	0.874	Yes		Poor	18” Culvert
Culvert	1.214	Yes		Fair	18” Culvert
Culvert	1.544	Yes		Good	18” Culvert
Culvert	1.714	Yes		Fair	18” Culvert
Culvert	1.746	Yes		Good	18” Culvert
Culvert	1.764	Yes		Good	18” Culvert
Culvert	1.856	Yes		Fair	18” Culvert
Culvert	1.866	Yes		Fair	18” Culvert
Culvert	1.924	Yes		Fair	18” Culvert

Feature Name	MP Begin	Contributing	Compatible	Condition	Type
Culvert	1.952	Yes		Poor	18” Culvert
Culvert	1.994	Yes		Fair	18” Culvert
Culvert	2.016	Yes		Poor	24” Culvert
Culvert	2.032	Yes		Poor	18” Culvert
Culvert	2.068	Yes		Poor	18” Culvert
Culvert	2.106	Yes		Fair	18” Culvert
Culvert	2.156	Yes		Fair	18” Culvert
Culvert	2.166	Yes		Fair	18” Culvert
Culvert	2.204	Yes		Poor	18” Culvert
Culvert	2.328	Yes		Poor	18” Culvert
Culvert	2.364	Yes		Poor	24” Culvert
Culvert	2.484	Yes		Poor	18” Culvert
Culvert	2.566	Yes		Poor	18” Culvert
Culvert	2.628	Yes		Poor	18” Culvert
Culvert	3.118	Yes		Poor	18” Culvert
Culvert	3.176	Yes		Fair	18” Culvert
Culvert	3.194	Yes		Fair	18” Culvert
Culvert	3.218	Yes		Poor	18” Culvert
Culvert	3.232	Yes		Fair	18” Culvert
Culvert	3.262	Yes		Poor	18” Culvert
Culvert	3.354	Yes		Poor	18” Culvert
Culvert	3.442	Yes		Poor	18” Culvert
Culvert	3.448	Yes		Poor	18” Culvert
Culvert	3.48	Yes		Fair	18” Culvert
Culvert	3.67	Yes		Poor	18” Culvert
Culvert	3.714	Yes		Poor	18” Culvert
Culvert	3.788	Yes		Fair	18” Culvert
Culvert	3.846	Yes		Poor	24” Culvert
Culvert	3.89	Yes		Fair	18” Culvert
Culvert	4.102	Yes		Fair	24” Culvert
Culvert	4.296	Yes		Poor	18” Culvert
Culvert	4.342	Yes		Poor	24” Culvert
Culvert	4.352	Yes		Fair	18” Culvert
Culvert	4.374	Yes		Fair	18” Culvert
Culvert	4.714	Yes		Fair	18” Culvert
Culvert	4.822	Yes		Poor	18” Culvert
Culvert	4.95	Yes		Fair	18” Culvert
Culvert	5.104	Yes		Fair	18” Culvert
Culvert	5.128	Yes		Fair	18” Culvert
Culvert	5.144	Yes		Poor	24” Culvert
Culvert	5.306	Yes		Poor	24” Culvert

Feature Name	MP Begin	Contributing	Compatible	Condition	Type
Culvert	5.328	Yes		Poor	18” Culvert
Culvert	5.536	Yes		Poor	18” Culvert
Culvert	5.57	Yes		Fair	18” Culvert
Culvert	5.712	Yes		Poor	18” Culvert
Culvert	5.79	Yes		Fair	18” Culvert
Culvert	5.826	Yes		Good	24” Culvert
Culvert	5.884	Yes		Poor	18” Culvert
Culvert	6.31	Yes		Poor	18” Culvert
Culvert	6.368	Yes		Fair	18” Culvert
Culvert	6.576	Yes		Poor	18” Culvert
Culvert	6.626	Yes		Fair	18” Culvert
Culvert	6.72	Yes		Fair	18” Culvert
Culvert	6.816	Yes		Fair	18” Culvert
Culvert	6.833	Yes		Poor	18” Culvert
Culvert	6.89	Yes		Poor	18” Culvert
Culvert	6.904	Yes		Poor	18” Culvert
Culvert	7.01	Yes		Poor	24” Culvert
Culvert	7.07	Yes		Poor	18” Culvert
Culvert	7.142	Yes		Poor	24” Culvert
Culvert	7.228	Yes		Fair	18” Culvert
Culvert	7.78	Yes		Poor	18” Culvert
Culvert	7.856	Yes		Fair	18” Culvert
Culvert	8.122	Yes		Good	Box Culvert
Culvert	8.186	Yes		Poor	18” Culvert
Culvert	8.224	Yes		Poor	18” Culvert
Culvert	8.328	Yes		Fair	18” Culvert
Culvert	8.396	Yes		Fair	24” Culvert
Culvert	8.612	Yes		Fair	18” Culvert
Culvert	8.94	Yes		Fair	18” Culvert
Culvert	9.06	Yes		Fair	18” Culvert
Culvert	9.442	Yes		Fair	18” Culvert
Culvert	9.732	Yes		Poor	18” Culvert
Culvert	10.244	Yes		Poor	18” Culvert
Culvert	10.406	Yes		Fair	24” Culvert
Culvert	10.81	Yes		Good	18” Culvert
Culvert	10.912	Yes		Fair	18” Culvert
Culvert	11.044	Yes		Good	18” Culvert
Culvert	11.202	Yes		Poor	18” Culvert
Culvert	11.266	Yes		Poor	18” Culvert
Culvert	11.28	Yes		Fair	18” Culvert
Culvert	11.332	Yes		Fair	18” Culvert

Feature Name	MP Begin	Contributing	Compatible	Condition	Type
Culvert	11.4	Yes		Fair	18” Culvert
Culvert	11.432	Yes		Poor	18” Culvert
Culvert	11.441	Yes		Good	24” Culvert
Culvert	11.476	Yes		Fair	24” Culvert
Culvert	11.55	Yes		Poor	18” Culvert
Culvert	11.572	Yes		Fair	18” Culvert
Culvert	11.868	Yes		Fair	18” Culvert
Culvert	11.914	Yes		Fair	18” Culvert
Culvert	13.082	Yes		Poor	18” Culvert
Culvert	13.544	Yes		Poor	18” Culvert
Culvert	13.782	Yes		Poor	18” Culvert
Culvert	14.042	Yes		Poor	18” Culvert
Culvert	14.285	Yes		Good	24” Culvert
Culvert	14.324	Yes		Poor	18” Culvert
Culvert	14.354	Yes		Fair	18” Culvert
Culvert	14.386	Yes		Good	24” Culvert
Culvert	14.488	Yes		Good	18” Culvert
Culvert	14.5	Yes		Fair	24” Culvert
Culvert	14.504	Yes		Fair	24” Culvert
Culvert	14.566	Yes		Poor	18” Culvert
Culvert	14.582	Yes		Poor	24” Culvert
Culvert	14.646	Yes		Poor	18” Culvert
Culvert	14.93	Yes		Poor	18” Culvert
Culvert	14.94	Yes		Fair	18” Culvert
Culvert	14.989	Yes		Poor	18” Culvert
Culvert	15.078	Yes		Fair	18” Culvert
Culvert	15.19	Yes		Good	18” Culvert
Culvert	15.244	Yes		Poor	18” Culvert
Fountain	1.346	Yes		Good	Stone
Gate	0.03	No	No	Good	Steel w/ Stone Pillars
Gate	5.302	No	No	Good	Wood
Gate	5.328	No	No	Good	Steel
Seating	12.796	Yes		Good	Granite
Sign	0.03	No	No	Good	Directional
Sign	1.306	No	No	Good	Entrance Fee
Sign	1.34	No	No	Good	Ranger Station
Sign	1.37	No	No	Good	Kiosk
Sign	2.664	No	No	Good	Feature / Creek
Sign	4.19	No	No	Good	Feature / creek
Sign	4.258	No	No	Good	Kiosk

Feature Name	MP Begin	Contributing	Compatible	Condition	Type
Sign	5.248	No	No	Good	Feature / River
Sign	5.298	No	No	Good	

Small Scale Features- Culverts

