MATHER MEMORIAL PARKWAY
(Washington Highway 410)
Mount Rainier National Park
Between Northeast Entrance and Chinook Pass
Longmire Vicinity
Pierce County
Washington

HABR No. WA-125

HAER WASH 27-LONG-Y

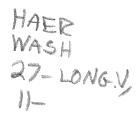
# PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

#### HISTORIC AMERICAN ENGINEERING RECORD

MATHER MEMORIAL PARKWAY (Washington Highway 410) Mount Rainier National Park HAER No. WA-125



#### I. INTRODUCTION

Location:

Between Northeast Entrance and Chinook Pass, Mount Rainier National Park, Pierce County,

Washington.

Quads: White River Park, Wash. Chinook Pass, Wash.

UTMs:

North end: .7 mi. S of USFS Silver Creek Guard

Station 10/611400/5203600

East end: Chinook Pass 10/613200/5191750

[NOTE: References refer only to section of road within

Mount Rainier National Park boundaries.]

Date of Construction:

1916-1932

Designer:

Washington State Department of Highways

Owner:

Mount Rainier National Park, National Park Service

Use:

National Park Service/U.S. Forest Service scenic

highway

Significance:

The Mather Memorial Parkway is a scenic highway which serves as the principal approach road to Mount Rainier from the Puget Sound cities to the north and the Yakima Valley to the east. A cooperative agreement between the National Park Service and the U.S. Forest Service preserved a timber belt along the road for a considerable distance beyond the north and east boundaries of the park. The scenic motorway is named in honor of Stephen T. Mather, the first Director of

the National Park Service.

Project Information:

Documentation of the Mather Memorial Parkway is part of the Mount Rainier National Park Roads and Bridges Recording Project, conducted in summer 1992 by the

Historic American Engineering Record.

Richard H. Quin, Historian, 1992

#### II. HISTORY

This is one in a series of reports prepared for the Mount Rainier National Park Roads and Bridges Recording Project. HAER No. WA-35, MOUNT RAINIER NATIONAL PARK ROADS AND BRIDGES, contains an overview history of the park roads.

### Mather Memorial Parkway

The Mather Memorial Parkway (Washington Highway 410) crosses the northeast corner of Mount Rainier National Park between the Silver Springs entrance and Chinook Pass. The 11.6 mile segment within the park boundaries is part of a roughly 60-mile scenic parkway across the park and the adjacent Mount Baker-Snoqualmie and Wenatchee national forests. The road is used both as one of the principal approach roads to Mount Rainier and for intra-state travel between the Puget Sound and the Yakima Valley.

The idea of a road around the east side of Mount Rainier may be traced to the "Around-the-Mountain" road proposal suggested by Hiram M. Chittenden of the U.S. Army Corps of Engineers in 1907. Major Chittenden supervised the Corp's construction of a road from the present Nisqually Entrance to Paradise Valley, and introduced the notion of a circuit road as a means to improve access and bolster use of the eight-year old national park. The Mather Memorial Parkway would become an important link of the present partial circuit route of the mountain.

The State of Washington began construction of the "McClellan Pass Highway" from Auburn via Enumclaw to the Cascade crest and across to Yakima in 1913. The road was intended to provide a link between eastern and western Washington through the Cascades. The first link of the road connected the Pacific Highway at Auburn with the Greenwater area north of Mount Rainier National Park.

The state legislature appropriated funds in 1916 for the construction of 8 1/2 miles of road between Greenwater River and the park's northwest boundary. Park Supervisor Dewitt L. Reaburn suggested that this link would spur road supporters to press for the extension of the government road to Paradise to connect with the new road at Cayuse Pass.<sup>2</sup> Funds were also appropriated for the construction of a road from Yakima up the east side of the Cascades to Chinook Pass, but were suspended on account of the World War.<sup>3</sup>

The Mount Rainier Mining Company constructed a private mine service road up the White River from the new state road to Glacier Basin inside the park between 1914 and 1916. The National Park Service took over maintenance of the lower 3 miles of the road within the park limits in 1916. Visitors soon began entering the park over the new access road. By 1918, the McClellan Pass Highway had been completed and surfaced as far as The Dalles on White River between Greenwater and the present park boundary. The state legislature then appropriated funds for the extension of the McClellan Pass Highway for the remaining 10 miles between The Dalles and the White River Ranger Station.

By 1925 the new state road had been completed to the White River Ranger Station and had been renamed the "Naches Pass Highway." Mount Rainier National Park Superintendent Owen A. Tomlinson stated that the road was an excellent one and well-maintained.

The state conducted a location survey for the extension of the highway for the 8 miles between the White River Road and Chinook Pass in 1926. In the following year, the state legislature appropriated \$1,258,000 for construction and improvements to State Route 5, which consisted of all approach roads to

Mount Rainier National Park. The majority of the 1927 appropriation, \$977,000, was for the section between Renton and Yakima, and included the construction of 8 miles of road between the White River park entrance and the summit of the Cascades, as well as road improvements between the pass and Yakima.

The work was scheduled to begin in the spring of 1927, but was delayed when Governor Roland H. Hartley summarily dismissed Highway Engineer J. W. Hoover on 1 May. However, the highway department began making plans to quickly issue contracts for the section between the White River entrance and the Cascades summit. Governor Hartley, accompanied by state highway officials and commissioners from King County, met with Superintendent Tomlinson and made an inspection tour of parts of the new road route at the end of July. On 31 July, Hartley, his new highway chief Samuel B. Humes, state district highway engineer McCroy, State Senator Lund and State Representative McKibbon, along with King County Commissioners, held a public meeting at White River Camp. The conclave, sponsored by the Enumclaw Chamber of Commerce, was attended by about thirty citizens of Enumclaw, Auburn, Buckley and other nearby towns. Superintendent Tomlinson addressed the assembled crowd, telling them of plans to construct a road from the south to link with the new state highway at Cayuse Pass, and of plans to construct another road from the Nisqually Road across the southern part of the park. These assurances were well-received. Governor Hartley and his officials offered their pledges to see the proposed work to a speedy completion.8

During an inspection tour of Mount Rainier National Park in the summer of 1928, National Park Service Director Stephen T. Mather recommended that special provisions be made to preserve the scenery along the new road, which he suggested should be named the "Cascades Parkway." In Yellowstone National Park on 24 July, Director Mather met with Charles Donnelly, President of the Northern Pacific Railway Company, and H. S. Rhodes, President of the Rainier National Park Company to outline his plans to save the timber along a 75-mile stretch of the new highway from a point east of Enumclaw to near the town of Naches.9

By late fall the state's grading work on 4 miles of the remaining section was nearing completion. Superintendent Tomlinson reported that remaining section was "to be contracted during the spring of 1929 with the provision that the project be completed and the entire road from eastern Washington to the Puget Sound opened to trans-state traffic during the summer of 1930." 10

Director Mather suffered a stroke in Chicago on 5 November 1928, and was taken to the hospital. His long-time assistant, Horace Albright, then Superintendent of Yellowstone National Park, rushed to Chicago to be with him. Mather tried to speak to him, and with a great deal of effort, managed to form the word "Cascades." Albright asked if he meant the Cascades in Yosemite, the Cascades corner of Yellowstone National Park or the Kepler Cascades on the Firehole River in Yellowstone. Mather shook his head, and then Albright asked if he meant the Cascades Highway at Mount Rainier. Mather's face lit up; he wanted more news of the project, which was one of the chief priorities of his last year in office. He did not make much of a recovery, and resigned as Director of the Park Service effective 12 January 1929, when he was succeeded by Albright. He died at his home in Darien, Connecticut in November 1929.

Despite his inability to further participate in the campaign, Mather's proposal received the enthusiastic support of the Rainier National Park Company and U.S. Forest Service officials whose territory would be involved. Forest Supervisor E. J. Fenby, District Forester C. M. Granger, and Recreational Examiner J. N. Cleater agreed to help with the project. A land

status map was drawn up, showing that 55 miles of the proposed parkway lay in federal lands.  $^{12}$ 

At a meeting of the Rainier Park Advisory Board held at Seattle in April 1929, the U.S. Forest Service discussed its plans to set aside as a recreational area a considerable strip of timber and land bordering the new road. USFS officials stated they recognized the need to protect for scenic purposes the timber on the approaches to the National Park. The Board discussed the need to acquire some of the private timber bordering the road in areas adjoining the national forest land. 13

In July 1929, the state let the contract for the construction of the 4 remaining miles of road between Cayuse Pass and Chinook Pass, where it would make a connection with the already completed road from Yakima. Work on this section started in August and by the end of the month the clearing was 25 percent complete.  $^{14}$ 

Early in 1930, Asahel Curtis, Chairman of the Rainier Park Advisory Board, recommended that the Cascades Highway, now nearing completion, be renamed the "Mather Memorial Parkway" in recognition of the late Director's efforts to preserve the scenery along the route. The Automobile Club of Washington and the Washington chapter of the Stephen T. Mather Appreciation Fund supported the proposal and petitioned the President to set aside the portion of the road within the national forest as a memorial to Mr. Mather. 15

The Mount Rainier National Park boundaries were extended by an act of Congress on 31 January 1931 as far as the crest of the Cascades, and also to include the Ohanapecosh Hot Springs area in the southeast. This boundary adjustment brought the central 12 miles of the proposed parkway, extending from the Silver Springs area to Chinook Pass, under Park Service administration.

On 24 March 1931, Secretary of Agriculture Arthur M. Hyde issued an executive order setting aside a half-mile strip extending along 50 miles of the parkway on Forest Service land. A total of 24,500 acres was set apart for recreational purposes and the impressive standing timber along the route was preserved. The Land Classification Order stated that the lands possessed "much beauty which should be conserved and developed for use and enjoyment by the general public for purpose of outdoor recreation, and can be so administered most economically by the Forest Service." The proclamation designated the route through the Rainier National Forest as the "Mather Memorial Parkway" in honor of the outstanding conservationist. 16

Prompted by new National Park Service Director Horace M. Albright, Secretary of the Interior Ray Lyman Wilbur in turn proclaimed the 12-mile section of the new highway within the Mount Rainier National Park boundaries as the "Mather Memorial Parkway." Wilbur's proclamation, issued on 23 April, 17 was the final act in the creation of the parkway, which remains a unique example of a joint National Park Service/U.S. Forest Service scenic highway.

The state was still hurrying construction of the last links of the road, but would not meet the planned summer 1930 deadline. The contractor for the last 2 miles to the Cascade crest, Von der Hellen of Portland, Oregon, established his camp in June 1931 and planned to complete his grading work by August. The road was in good enough condition by July for a Congressional inspection party to travel over the entire length of the road. 18

The work was nearly completed in September. On the 13th, a celebration was held at Tipsoo Lake in the newly-acquired section of the park by citizens of Enumclaw and Yakima who wished to commemorate the uniting of the east and west sections of the state. Nearly 5,000 people attended in spite of driving rain.

All grading work was completed in October 1931 and the state began making plans to pave the road with an oiled and crushed rock surface the following spring. $^{19}$ 

On 1 February 1932 the Seattle Chamber of Commerce passed a resolution asking the state highway department to exclude all truck and heavy commercial traffic from the new road. Buses were to be permitted. Park Superintendent Tomlinson endorsed the proposal. $^{20}$ 

The Naches Pass Highway was surfaced in the spring of 1932 and opened to public use on 15 June. Completion of the road finally opened the park to easy access by visitors from eastern Washington. At the same time, the state was hurrying construction on the connecting East Side Highway between Ohanapecosh and Cayuse Pass. 21

Formal dedication ceremonies for the Mather Memorial Parkway were held at Tipsoo Lake on 2 July 1932. A bronze plaque recognizing Director Mather's work was unveiled at the ceremony, which was sponsored by the Rainier National Park Advisory Board. Governor Hartley and Professor Edmund S. Meany of the University of Washington, one of the foremost scholars on the Cascades, gave the principal addresses. 3

Despite the transfer of some of the adjoining territory to the National Park Service, the parkway remained a state highway under state maintenance. No entrance fees were collected from motorists using the road. The road was closed each winter by snow, as the state made no effort to keep the road plowed.<sup>24</sup>

On 14 March 1933, Washington Governor Martin signed House Bill No. 109 authorizing the acquisition by exchange with large private timber companies of certain lands bordering on the Naches Pass Highway beyond the boundaries of the Mather Memorial Parkway. Due to a constitutional challenge, the project was never consummated. However, the act was the basis for the eventual creation of the Federation State Forest [now Federation Forest State Park] between Enumclaw and Greenwater, which preserves a significant timber belt northwest of the parkway limits.

A new "rustic style" overpass bridge/entrance arch was constructed at Tipsoo Lake between 1934 and 1936. The rock for the abutments was gathered from the sides of the road for a distance of 3 miles on either side of the arch. Cement and sand were hauled from Enumclaw, and the logs were obtained from thick growth along the White River. The construction utilized Public Works Administration funds and was carried out by workers from the Civilian Conservation Corps. The parking area below the entrance at Tipsoo Lake was subsequently paved with funds appropriated in 1935. The parking area below the entrance at Tipsoo Lake was subsequently paved with funds appropriated in 1935.

Use of the parkway was limited to passenger vehicles under 5,000 pounds, travelling for pleasure purposes only, by an executive order issued 25 May 1936 by L. V. Murrow, Director of the Washington Department of Highways. This order was later the cause of considerable concern over possible interpretation, and today commercial vehicles are permitted to use the road outside of the national park boundaries.

As part of the road's 1930s construction, a temporary wooden trestle was erected over Deadwood Creek. The state designed a reinforced concrete open spandrel arch bridge for the permanent crossing before it learned that Federal Aid Funds could not be used for its construction as the area had been added to the national park. As park funds would have to be substituted, the project fell under the responsibility of the Public Roads Administration (the Depression Era successor to the Bureau of Public Roads). PRA engineers

redesigned the structure, and the Interior Department subsequently appropriated \$53,000 for its construction. The Construction Company of Roseburg, Oregon, was awarded the contract and began work in August 1936. The company made only feeble progress on the job, and abandoned operations in July 1937. The work was resumed by Williams and Douglas, contractors for the bonding company. Although the replacement company made good progress on the contract, a union strike in October forced further delays, and the bridge was not completed until June 1938. [See HAER form WA-56 for a full report on the structure.] The PRA accepted the project on 12 October and the National Park Service did the same on 21 March 1939.<sup>29</sup>

The state revised its restrictions on the use of the parkway in June 1947. While commercial vehicles in excess of 5,000 pounds were still prohibited from using the road, busses weighing more than the limit were permitted to use the road provided they obtained a special use permit from the State Director of Highways.<sup>30</sup>

The new Federation Forest on Highway 410 north of the boundary of the Mather Memorial Parkway was dedicated on 16 July 1949. Funds for the purchase of this timber strip were acquired by the Federation of Womens' Clubs and helped extend the wooded approach to Mount Rainier. 31

Highway 410 was widened and paved from Cayuse Pass to the park's northern boundary in 1971. The State of Washington awarded the contract to the Asphalt Paving and Engineering Company of Tacoma. The project was inspected by the National Park Service and the state on 15 September and accepted.<sup>32</sup>

A new "rustic style" log entrance arch, matching those at the Nisqually and Ohanapecosh entrances, was erected in 1977 on the road at the northeast entrance. 33 Completion of the arch provided each of the main gateways to the park with an attractive and imposing entrance structure clearing delineating the park entrance.

A March 1988 cooperative agreement between the Washington State Department of Transportation and the National Park Service affirmed that the state remained responsible for maintenance of the road. Under its terms, the state is allowed to stockpile gravel and operate a highway maintenance garage north of Deadwood Creek.

Since the designation of the route as a scenic parkway, there have been sporadic attempts to commercialize the route by area businesses and booster groups. The U.S. Forest Service and the National Park Service have been able to resist these attempts, and the road remains a scenic and recreational parkway, providing motorists with an unspoiled and forested approach to Mount Rainier National Park.

#### Description

The Mather Memorial Parkway (Washington Highway 410) provides access to the northeast and eastern sections of Mount Rainier National Park from the Puget Sound cities and from Yakima and eastern Washington. Originally conceived as the "McClellan Pass Highway" to connect Auburn (near Seattle) with Yakima, 60 miles of the road was later redesignated as a scenic parkway through the national park and what was then the adjacent Rainier National Forest (now sections of the Mount Baker-Snoqualmie and Wenatchee national forests). The road is open from late spring until closure by winter snows.

The road approaches the northeast corner of the park from Enumclaw and Greenwater, entering the park a mile south of the Forest Service's Silver Springs Guard Station through a 1977 log portal resembling the one at the

Nisqually Entrance. The road continues through the park for a distance of 11.6 miles. Beginning at the entrance at an elevation of 2749', the road parallels the east bank of the White River (so named for its burden of glacial silt) generally south for four miles. For the first two miles, the road keeps to the river valley floor. This is a lush riverine forest zone. Where the ever-shifting river keeps the massive conifers away from the banks, thick clumps of alders and vine maples provide a thick, brushy cover. Two miles south of the entrance, a series of springs break on the cliffs to the east side of the road. A mile further south, gravel and cinders are stored in a turnout for winter road clearing. Near this point, at milepost 61, traces of the old (1916) White River Road and the footings for the old entrance station can be discerned down the slope. The White River valley strikes off southwest from this point toward the river's source at the Emmons Glacier on Mount The Mather Memorial Parkway continues south-southwest, climbing the west flanks of Crystal Mountain and Yakima Peak to Cayuse Pass. A Washington state highway maintenance garage is passed on the west side near milepost 60. A half mile further south, at an elevation of 3,686', the Yakima Park Highway bears off to the southwest. The stone marker at the wye was designed by the National Park Service Branch of Plans and Design and erected in 1940; 35 it has since been resigned to designate the Mather Memorial Parkway. The large paved turnout by the wye marker is heavily used by motorists trying to decide on a choice of routes.

Mather Overlook, a scenic vista and turnout offering excellent views of the Emmons Glacier and the White River valley, is located 5 miles south of the park boundary on the west side of the road. The interpretive display here dates from the 1960s or 1970s. A quarter mile farther south, the Mather Memorial Parkway crosses the doomed Deadwood Creek Bridge at 3,920' elevation. The 1937 structure is the only open spandrel reinforced concrete arch bridge in Mount Rainier National Park, and reflects the streamlined design of the period. The concrete is deteriorating; plans were being made in 1992 for its replacement. Whether through careful planning or coincidence, the crossing offers a splendid view of the east flank of Mount Rainier. A little farther south, an old earthquake fault line is clearly visible in the road cut.

From the Yakima Park Highway wye to Cayuse Pass, the roadway was largely excavated and benched out from the cliffsides. The resulting scar is very obvious from the Yakima Park Highway at Sunrise Point and from other high points and spurs on the northeast face of Mount Rainier. In the 1930s, Emergency Conservation Works personnel attempted to landscape cuts by the road by planting native species, but the road cut will remain visible for decades, if not forever. Where the road runs close to the downhill slope, old log or replacement steel guardrails line sections of the road. Grassed shoulders line many segments of the road; however, in the steeper sidehill cuts, vegetation is sparse despite the ECW landscape restoration work. High rock retaining walls, in places topped by BPR Type 2 standard parapet walls, characterized by single cap stones topping the wall at intervals of 18' to 20,' border several sections.

The road continues to climb, passing Ghost Lake far below on the west side in the final mile before Cayuse Pass (elev. 4,694') is reached. Cayuse Pass is the eastern low point on the divide between the White and Ohanapecosh river watersheds. The East Side Highway [Washington Highway 123, HAER No. WA-122] leaves at this point, heading east and then south to Ohanapecosh and a junction with U.S. 12 seven miles north of Packwood. No parking areas per se are provided at the pass, but motorists often park in the middle of the wye.

The Mather Memorial Parkway continues west from Cayuse Pass, climbing along the south side of Yakima Peak in a series of half-mile switchbacks constructed in part on cut-and-filled benches or high masonry retaining walls. In places,

the roadway was merely blasted from the side of the mountain. At the end of the switchbacks, the Tipsoo Lake development is reached, and a half mile further, the park boundary at Chinook Pass (elev. 5,432'). The boundary is marked by the Chinook Pass Entrance [HAER No. WA-43]. This rustic log and masonry structure serves as an entrance portal and as a trail bridge carrying the Pacific Crest National Scenic Trail over the road. Outside the park, the parkway drops down the east side of the Cascades, following the Rainier Fork of the American River and the main river proper down through the Wenatchee National Forest towards Naches, Washington. The State of Washington began reconstruction of sections of the road on Forest Service land outside the park in 1980.<sup>37</sup> A number of commercial developments are also located along the parkway in the Forest Service sections; none are on the parkway segment in the national park.

Changes in the management of the forest borders on the section of road within the park were being discussed in 1992. Currently, trees in the old cleared right-of-way have grow to medium height, and the intact mature conifers generally stand off to some distance from the road. Park Service maintenance staff are considering trimming, thinning or removing the intermediate-height trees to open up views into the old-growth forest and to allow sunlight to better reach the road; this would open up views into the old-growth forest and help with snow removal operations. The opposing argument maintains the intermediate trees will begin maturing in a few decades and should not be cut.

The road's scenic parkway character is in part offset by its integration into the Washington state highway system and its consequential high traffic volume. While many motorists use the road to reach Mount Rainier National Park and its attractions or adjacent national forests, many others use the road for intrastate transit. The 1990 National Register of Historic Places nomination for the parkway states that "some of the experiential qualities of leisure driving in a natural setting are negated by use of the road by larger volumes of higher speed traffic than is consistent with the standards for a park road." 38

# III. ENDNOTES

- 1. U.S. Department of the Interior, National Park Service, Denver Service Center, National Register of Historic Places nomination for the Mather Memorial Parkway, prepared by Harlan D. Unrau, Historian, Denver Service Center, 19 January 1990, (Hereinafter cited as Unrau) Sec. 8, p. 4.
- 2. Dewitt L. Reaburn, Supervisor, Mount Rainier National Park, Supervisor's Monthly Report, January 1916, 3. Mount Rainier National Park [MORA] Archives Box H2615, Superintendents' Monthly Reports 1913-1919 file.
- 3. Roger W. Toll, Superintendent, Mount Rainier National Park, Superintendent's Annual Report, 1919, 41-42. MORA Archives Box H2621, Superintendent's Annual Reports 1917-1925 file.
- 4. Reaburn, Superintendent's Monthly Report, July 1917, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports, 1913-1925 file; Toll, Superintendent's Annual Report, 1919, 9-10. MORA Archives, Box H2621, Superintendents' Annual Reports, 1917-1925 file.
- 5. Unrau, Sec. 8, 4.
- 6. O. A. Tomlinson, Superintendent, Mount Rainier National Park, Superintendent's Annual Report, 1926, 4. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file; Superintendent's Monthly Report, March 1927, 3. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
- 7. Idem, Superintendent's Monthly Report, June 1927, 8. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
- 8. Idem, Superintendent's Monthly Report, July 1927, 2, 7-8. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
- 9. Robert N. McIntyre, Park Naturalist, Mount Rainier National Park, "Mather Memorial Parkway--A Brief History," 1. MORA Archives, File D30.
- 10. Unrau, Sec. 8, p. 4.
- 11. Robert Shankland, Steve Mather of the National Parks (New York: Alfred A. Knopf, second ed. 1954), 284, 287; Horace M. Albright and Robert Cahn, The Birth of the National Park Service: The Founding Years, 1913-33 (Salt Lake City, UT: Howe Brothers, 1985), 222-23.
- 12. McIntyre, 2.

- 13. Tomlinson, Superintendent's Monthly Report, April 1929, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- 14. Idem, Superintendent's Monthly Report, July 1929, 6-7; Superintendent's Monthly Report, August 1929, 7. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- 15. Idem, Superintendent's Monthly Report, March 1930, 8. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- 16. U.S. Department of Agriculture, Land Classification Order, "Designation for Scenic and Recreation Purposes of Lands Within the Rainier National Forest Embracing the Naches Pass Highway," 24 March 1931.
- 17. McIntyre, 2.
- 18. Tomlinson, Superintendent's Monthly Report, March 1931, 6; Superintendent's Monthly Report, July 1931, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- 19. Idem, Superintendent's Monthly Report, September 1931, 7; Superintendent's Monthly Report, October 1931, 6. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- 20. Idem, Superintendent's Monthly Report, January 1932, 5-6. MORA Archives, Box H2615, Superintendents' Monthly Reports 1932-1935 file.
- 21. Idem, "Paragraphs Suggested for Director's Annual Report," attached to Superintendent's Annual Report, 1932. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file.
- 22. McIntyre, 2-3. An identical plaque is located in front of the old park administration building at Longmire.
- 23. Unrau, Sec. 8, p. 7.
- 24. Ibid..
- 25. Tomlinson, Superintendent's Monthly Report, March 1933, 12. MORA Archives, Box H2615, Superintendents' Monthly Reports 1932-1935 file.

- 26. R. D. Waterhouse, Associate Engineer, Mount Rainier National Park, "Final Construction Report on Tipsoo Lake Overpass Bridge and Boundary Marker," 1. MORA Archives, Roads and Trails Box 1.
- 27. Samuel L. Cutler, Resident Engineer, Mount Rainier National Park, "Final Construction Report on Tipsoo Lake Parking Area Paving, Account No. 538," 10 December 1941.
- 28. McIntyre, 3.
- 29. C. A. Vincent, Associate Engineer for Structural Bridges, Federal Works Agency, Public Roads Administration, District No. 1, "Final Construction Report (1936-1938) on Deadwood Creek Bridge, Chinook Pass Highway, Mt. Rainier National Park Project RTEC 9-A, Mt. Rainier National Park, Pierce County, Washington," 1-4. Copy in MORA Archives, File D-30.
- 30. John C. Preston, Superintendent's Monthly Report, June 1947, 7. MORA Archives, Box H2621, Superintendents' Monthly Reports 1947-1952 file.
- 31. Idem, Superintendent's Monthly Report, July 1949, 1. MORA Archives, Box H2621, Superintendents' Monthly Reports 1947-1952 file.
- 32. Kenneth D. Bachmeyer, Chief of Maintenance, Mount Rainier National Park, Memo, "Pave and Widen Sr-410, Cayuse Pass to North Boundary, Final Inspection," 17 September 1971. MORA Archives, Roads and Trails Box 1.
- 33. William J. Briggle, Superintendent, Mount Rainier National Park, Superintendent's Annual Report, 1978, 14. MORA Archives, Box H2621, Superintendents' Annual Reports.
- 34. Unrau, Sec. 8, p. 8.
- 35 Samuel L. Cutler, Resident Engineer, Mount Rainier National Park, "Final Construction Report, Wye Construction--Junction State Highway and White River Road, Account 539," typed MSS, 14 November 1941. MORA Archives, File D22, Construction Program 1940.
- 36 National Register of Historic Places nomination for Mather Memorial Parkway, prepared by Harlan D. Unrau, Historian, National Park Service, Denver Service Center, 19 January 1990, Sec. 7, p. 5.
- 37 Ibid, Sec. 7, p. 8. The reconstruction work includes replacement of bridges with modern concrete structures, widening the travel lanes to 12' each with 2' shoulders, making for a 28' roadway. Trees are cleared for 50' to either side as a safety or recovery zone. Rock walls have been removed and concrete barriers installed on downslope sides.

38 Ibid., Sec. 7, p. 1.

#### IV. BIBLIOGRAPHY

- Albright, Horace M. and Robert Cahn. The Birth of the National Park Service: The Founding Years, 1913-33. Salt Lake City, UT: Howe Brothers, 1985.
- Bachmeyer, Kenneth D., Chief of Maintenance, Mount Rainier National Park. "
  Pave and Widen Sr-410, Cayuse Pass to North Boundary, Final Inspection."
  17 September 1971. MORA Archives, Roads and Trails Box 1.
- Briggle, William J., Superintendent, Mount Rainier National Park, Superintendent's Annual Report, 1978. MORA Archives, Box H2621, Superintendents' Annual Reports.
- Cutler, Samuel L., Resident Engineer, Mount Rainier National Park. "Final Construction Report on Tipsoo Lake Parking Area Paving, Account No. 538." 10 December 1941. MORA Archives, Roads and Trails Box 1.
- McIntyre, Robert D., Park Naturalist, Mount Rainier National Park. "Mather Memorial Parkway--A Brief History." MORA Archives, File D30.
- Preston, John C., Superintendent, Mount Rainier National Park.

  Superintendent's Monthly Report, June 1947. MORA Archives, Box H2621,
  Superintendents' Monthly Reports 1947-1952 file.
  - --Superintendent's Monthly Report, July 1949. MORA Archives, Box H2621, Superintendents' Monthly Reports 1947-1952 file.
- Reaburn, Dewitt L., Supervisor, Mount Rainier National Park. Supervisor's Monthly Report, January 1916. MORA Archives Box H2615, Superintendents' Monthly Reports 1913-1919 file.
  - --Superintendent's Monthly Report, July 1917. MORA Archives, Box H2615, Superintendents' Monthly Reports, 1913-1925 file.
- Shankland, Robert. Steve Mather of the National Parks. New York: Alfred A. Knopf, revised 2nd ed. 1954.
- Toll, Roger W., Superintendent, Mount Rainier National Park. Superintendent's Annual Report, 1919. MORA Archives Box H2621, Superintendent's Annual Reports 1917-1925 file.
- Tomlinson, O. A., Superintendent, Mount Rainier National Park. "Paragraphs Suggested for Director's Annual Report," attached to Superintendent's Annual Report, 1932. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file.
  - --Superintendent's Annual Report, 1926. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file.
  - --Superintendent's Monthly Report, March 1927. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
  - --Superintendent's Monthly Report, June 1927. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
  - --Superintendent's Monthly Report, July 1927. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.

- --Superintendent's Monthly Report, April 1929. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, July 1929. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, August 1929. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, March 1930. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, March 1931. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, July 1931. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, September 1931. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, October 1931. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- --Superintendent's Monthly Report, January 1932. MORA Archives, Box H2615, Superintendents' Monthly Reports 1932-1935 file.
- --Superintendent's Monthly Report, March 1933. MORA Archives, Box H2615, Superintendents' Monthly Reports 1932-1935 file.
- U.S. Department of Agriculture. Land Classification Order, "Designation for Scenic and Recreation Purposes of Lands Within the Rainier National Forest Embracing the Naches Pass Highway." 24 March 1931.
- U.S. Department of the Interior, National Park Service, Denver Service Center. National Register of Historic Places nomination for the Mather Memorial Parkway, prepared by Harlan D. Unrau, Historian, Denver Service Center, 19 January 1990.
- Vincent, C. A., Associate Engineer for Structural Bridges, Federal Works Agency, Public Roads Administration, District No. 1. "Final Construction Report (1936-1938) on Deadwood Creek Bridge, Chinook Pass Highway, Mt. Rainier National Park Project RTEC 9-A, Mt. Rainier National Park, Pierce County, Washington." MORA Archives, File D-30.
- Waterhouse, R. D., Associate Engineer, Mount Rainier National Park. "Final Construction Report on Tipsoo Lake Overpass Bridge and Boundary Marker." MORA Archives, Roads and Trails Box 1.

## HISTORIC AMERICAN ENGINEERING RECORD

## INDEX TO PHOTOGRAPHS

HAER WASH 27-LONG V

HAER No. WA-125

MATHER MEMORIAL PARKWAY
(Washington Highway 410)
Mount Rainier National Park
Between Northeast Entrance and Chinook Pass
Longmire vicinty
Pierce County
Washington

Jet Lowe, photographer, summer 1992

WA-125-1 VIEW FROM SUNRISE POINT FACING SOUTHEAST

WA-125-2 RUSTIC WOODEN GUARDRAIL NEAR WHITE RIVER OVERLOOK FACING WEST



