

# Chinook Pass (National Park Highway) 1994-95, Part II

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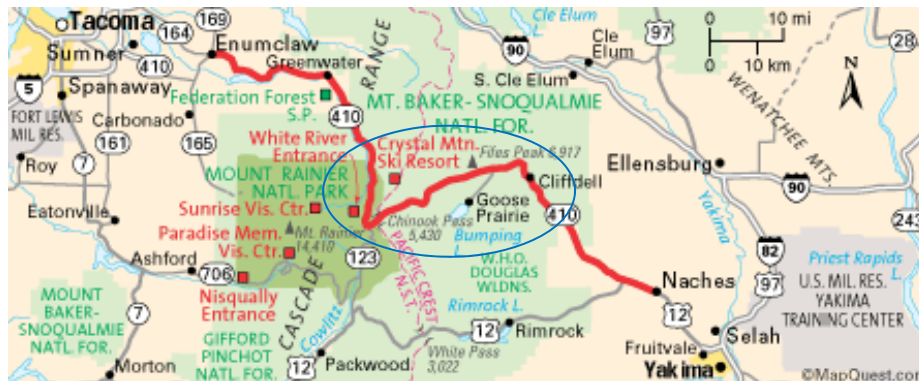
*A Glimpse into  
an Earlier Era*

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*From accidents on the project to unsatisfactory work by the contractor – it's all part of the job for the Project Engineer.*

*All photos provided by Gary Hunter.*



“One of the things that you really dread as a project engineer is having an accident on your project,” **Gary Hunter** reflected as he recounted a couple of incidents that occurred on the Chinook Pass project. “We had our project office down in Cliffdell, which was quite

a ways” down Mather Memorial Parkway (Highway 410) toward Natches. “The office was in a little trailer right next to the highway. . . .

One day I was sitting in the office doing some work and I heard some sirens go by.” Whenever

that happens, he said, “it just really makes you wonder. Did something happen on my project. . . Did a tourist come by and have an accident there? Was there an accident involving some of the crew members on the project?”

## When Accidents Occur

That day he heard the sirens pass the office, “and of course I had that dreadful feeling that maybe something had happened.”

The project included a lot of concrete guardwall simulating original stone walls that had been built in the 1930's by the Civilian Conservation Corps. “I drove on up there, and sure enough,” there had been an accident involving one of the cranes that had been setting forms for the

concrete work. “It was a windy, gusty day, and the winds caught the form (as) the crane was lifting (it), and swung it aside. It was like a sail. That threw the crane off balance and it toppled over.”

The crane fell on top of a laborer and crushed his legs. “The last I heard, he would probably never recover the use of his legs.”



During a stormy day in the summer of 1994, a strong gust of wind catches the heavy concrete form being lifted by this boom truck, toppling the truck. A laborer is seriously injured.



## A View to the Fall

Another accident occurred at the turnout at the summit. Late one night, a couple of guys were driving from the Seattle area after an evening of drinking. “They got up to Chinook Pass and the turnout at the top of our project. It was probably about 4:00 in the morning,” Gary said.

The turnout provides a spectacular view from atop a 125-foot cliff. One guy got out of the car to answer nature’s call, and he got too close to the edge. “He lost his balance – he was very drunk – and he fell that 125 feet straight down.”

The project crew discovered him a couple of hours later when they arrived on the job, “and they climbed down to him and gave him first aid,” Gary said. “**Bob Toops** had EMT training and was the first person to reach the injured man. . . .He was broken up pretty badly. . . . They had to call in a rescue helicopter and airlift him out..”



An injured man is placed on a litter airlifted out after falling from the Chinook Pass Overlook during the summer of 1994.

## Simulated Stone Masonry Walls

*We were bringing in ten or twelve concrete trucks every day from the supplier in Yakima.*

“There was a big drop off below the highway,” Gary said, and protective walls were built along the edge. “These concrete guard walls ... were made to look like stone walls.”

**Jim Conquest**, who also worked on the project, described that process. “They had to make these form molds from existing stone” to replicate the

existing stone walls. “They’d make sheets of this stuff in a repeating panel in a certain length and then they’d use that as a form liner inside the concrete forms.” The concrete was

placed inside the plywood forms and “when it came out, it looked like the stone masonry design. . . .

“Then they’d color it (with a concrete stain) to match the various hues of the natural stone, Jim said, “to make it look like the stuff they were replacing.”

This concrete work posed some problems for the contractor. “Constructing these concrete guard walls required a substantial amount of concrete,” Gary said. “We were bringing in 10-12 trucks every day. The supplier was based in Yakima, 90 miles away. His plan had been to batch the mud in Yakima, mix it on the road to the project, and then pour it right away.



Center: Laborers drill holes in the top of existing retaining walls where vertical rebar will be epoxied into the holes. Left: Forms for the guard wall are installed on top of the retaining wall. Right: The guardwall after the forms have been removed. After final curing, the concrete will be stained to emulate the colors of stone.





A portable batch plant erected on the project adds cement to a truck. Trucks left the supplier in Yakima loaded with sand, water, and gravel.

“Concrete that is mixed on the road this way must be used within the first 60 to 90 minutes, so getting a batch from Yakima over 90 miles of road to the project was a real problem.”

Gary said the supplier tried adding a retardant to the mixture to make it last 2 to 3 hours. “He experimented with the mix ratios by putting the mix in the trucks and having them driven around Yakima for 2-3 hours, trying to simulate the trip to the project, but they could never get the mix exactly right.”

“In the end, they put a cement silo on the project. That way they could put the sand and aggregate and water into the trucks in Yakima, send them up to the project, and add the cement at the project. By doing this, it sat in the mixer for only 15-20 minutes.”



A truck delivers concrete to the guardwall forms. Sixty linear feet of forms are filled at a time.

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## Improperly Cured Concrete

That solved *that* problem, but it didn't solve all the contractor's problems.

“Concrete needs to be kept moist for 30 days in order to cure properly,” and to keep it from cracking and spalling, Gary pointed out. “The contractor didn't do that; he didn't keep (the walls) moist enough after they were done.”

Gary said he had hoped to rectify the situation right away, but “I didn't get the support I wanted. . . .” It wasn't until the work was completed – about

\$750,000 worth – that “the Vancouver office realized the mistake.

They went back in and rejected all of the walls. . . . They brought in experts

to do some core drilling of the concrete walls, and then they had a big conference in Vancouver with the contractor to determine what was to be done about it.

“It was determined that the walls would not be durable enough, that they weren't completed according to the specifications, so it ended up that the contractor gave the FHWA a cash settlement.”



Forms remain in place at the left until the concrete achieves its initial set. At right, forms have been removed from an earlier pour. The insides of the forms are textured to give the concrete guardwall an appearance of stonework.

## Western Federal Lands Highway Division

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<http://www.wfl.fhwa.dot.gov/about/history/articles.htm>



### *A Glimpse into an Earlier Era*

*Gary Hunter' would return to Mather Memorial Parkway for another project in 1998. His experiences on Cayuse Pass will be recounted in an upcoming article.*

*Stories in this series have been developed by Marili Reilly from interviews and correspondence. Retirees who would like to share their memories may email [marili.reilly@dot.gov](mailto:marili.reilly@dot.gov).*

## Snow Delays Project Completion

The Chinook Pass project was begun in 1994, and most of the work was completed that year. "I was over there at the tail end," Jim said. "One of the last things you do is the steel guardrail, and that was down at the lower end of the job on the east side toward Natches."

They were trying to finish it when the first winter snows started. "We tried to push on and we tried to work around it,

(but) it finally got too cold and the ground was frozen."

Snowplows came through and they pushed big berms of snow to the sides of the road "where the guardrail had to go, so we finally had to just shut her down and finish the guardrail the next spring."

Jim didn't return to the project when spring 1995 rolled around, but he wasn't sorry to leave the job that

winter. "I was living in a fifth wheel trailer down in the trailer park, down by Natches," and some of the contractor's crew were also living there, he said. "It was pretty miserable there in the RV Park when it was so cold and snowing and freezing."



The final guardwall, after staining.



Laborers use a vibrator to consolidate the fluid concrete. This eliminates air bubbles and ensures sand and gravel are distributed evenly.