CUESTA

Cuesta is Spanish for slope or grade. Many times you will hear "Cuesta Grade" used in the same breath. This is similar to Sierra Nevada mountains [snowy mountain mountains] or Rio Grande river [big river river]. The grade is redundant and should not be included. In this discussion of the sights and events along the old Southern Pacific right-of-way between San Luis Obispo and Santa Margarita we will always and simply refer to it as The Cuesta.

There are only 19 miles between San Luis Obispo and Santa Margarita. In that 19 miles the railroad passes through 5 tunnels as it surmounts the 1380 foot summit over the Santa Lucia [pronounced loo-see-ah] range. The Cuesta begins in SLO at 240' and ends in Santa Margarita at 998'. The Cuesta is the most difficult climb on the entire Coast Line from San Francisco Bay to Los Angeles. The steepest portion of the grade is about 2.2%. There are also places on the Cuesta where the train makes turns back on itself in such a manner so that both ends of the train can easily be seen from the middle. These characteristics limit the maximum speed limit to 30 mph for passenger trains and 25 mph for freight trains. This slow speed allows for additional time to comment about the places of interest along the route. What follows is a description of some of those places of interest from departure at San Luis Obispo to just beyond Santa Margarita.

The entire section of track between San Luis Obispo and Santa Margarita is controlled by Centralized Traffic Control. This means a dispatcher controls the signals and the switches to guide the trains over the Cuesta. The original CTC was installed in 1942 to help the wartime traffic. It allows greater capacity and performance over the demanding Cuesta. The dispatcher and the control board were located at the depot in San Luis Obispo until 1964 when the entire machine was moved to San Francisco. CTC is now being extended along the Coast. The area between the SLO station and the end of the double tracks east of town became CTC on August 27, 2005. Portions of the Coast Line from Los Angeles to Goleta and an "island" at Gaviota became CTC in 2003.

The other comment that needs to be made about Cuesta is that it is steep in both directions. This requires that longer heavier trains get additional help going up and coming down. The extra help or "helper" engines are based in San Luis Obispo and usually park just east of the station. In steam days, even the Daylight passenger trains received "helpers". These days the Amtrak trains do not usually need "helpers" but most of the freight trains still do.

Less than a mile after leaving the SLO station the tracks pass over Monterey Street, one of the main north-south streets in San Luis Obispo. Just beyond that was the site of the Ramona Hotel, one of San Luis Obispo's grand hotels in the late portion of the nineteenth century. The Ramona Hotel, built in 1889, was a four-story luxury hotel located near the Southern Pacific Railroad on Essex Street (now Johnson Avenue) between Marsh and Higuera streets. The Southern Pacific depot was saved when the hotel burned to the ground in 1905 and was moved to its present location around 1960. It was donated to the Historical Society by Roberty Leitcher. The station building survives on

the grounds of the Dallidet Adobe at 1185 Pacific in San Luis Obispo. The adobe is operated by the San Luis Obispo County Historical Society and is open by appointment. The Ramona Hotel can be seen through the fence from the parking lot at the end of Pacific just above Santa Rosa.

[http://www.slochs.org/dallidet/History/RamonaDepot/t_he_ramona_hotel.htm]

Just beyond the site of the Ramona Hotel the tracks cross over highway 101 which takes a more direct and steeper route to the Cuesta summit.

Another Southern Pacific station was located at Hathaway just beyond the 101. [Remember that stations are merely locations on the tracks that may be mentioned in the timetable. It does not mean that there was a depot building or that trains ever stopped there.] Hathaway was named for Dr. Hathaway, over whose estate the railroad was constructed into San Luis Obispo in 1894.

The tracks continue along California Avenue, crossing Foothill and entering California Polytechnic University at San Luis Obispo. Cal Poly was founded as a vocational high school on March 8, 1901. They first held classes on October 1, 1903. They granted their first bachelor's degree on May 28,1942. They have been known as California Polytechnic School (1901 –37), California State Polytechnic School (1937-47), California State Polytechnic College (1947-72), and California Polytechnic State University (1972- present). There is an enrollment of about 18,500 students, 1100 faculty and 1200 support staff. If you include all the off campus properties, Cal Poly is about 9678 acres. This makes it the second largest land-holding university in California, second only to UC Berkeley, and one of the largest land-holding universities in the nation. Cal Poly, however, uses all of its land holdings in active support of the education of its students. While there are now more Cal Poly students in the engineering school than in any other program, the agriculture program is still very important. As you pass out the west side of campus you are passing through the dairy and the ranch land once owned by Dr. Hathaway.

As you leave Cal Poly, you soon cross over the Stenner Creek Bridge. The bridge is 80 feet tall and 931 feet long making it the longest bridge on the Coast Line (Gaviota is 811 feet long). The bridge was built in Pittsburgh and was brought out on over 50 freight cars. The bridge was one of the last projects in the construction over Cuesta and when finally completed the railroad arrived in San Luis Obispo on May 5, 1894 to great fanfare. Originally called Steiner Creek, the accepted name became "Stenner" in 1915, but the Southern Pacific continued to call it "Steiner" until the 1960's when the railroad changed its designation to "Stenner".

Just across the bridge is Goldtree and the remains of the turning "wye". Goldtree is named for Nathan, Isaac, and Morris Goldtree who were SLO merchants, land owners and supporters of the railroad. A branch off the wye went to Camp San Luis Obispo.

[The following was taken from www.militarymuseum.org Satellite and Partner Museums] Camp San Luis was established as Camp Merriam in 1928 as a training site for the California National Guard. The name was changed in 1940 when the Army occupied the camp. The original Camp Merriam was comprised of an area of 5,800

acres, which lies east and north of State Highway 1. At that time, the camp also included approximately 400 acres in that area, which were transferred to the State Department of Corrections in 1952.

The post served as a training base for several combat divisions heading for both the Pacific and Europe. Marine Corps recruitment after Pearl Harbor so taxed the limited ranges and training facilities at <u>Camp Matthews</u> near San Diego that some 5,000 Marines had to be rushed to Camp San Luis Obispo for marksmanship and other training. This continued until the facilities at Camp Joseph H. Pendleton were completed.

Camp San Luis Obispo was returned to the State of California in 1946. Following the outbreak of hostilities in Korea in 1950, mobilization of the 40th Infantry Division and several support units of the California National Guard, the Army again leased Camp San Luis Obispo as a Class I installation. The Southwest Signal Corps Training Center was located at the camp as a Class II activity.

The Army returned the camp to State control in July 1965. By this time, the California Military Academy had been established and was growing in size and importance, increasing the demand for adequate training areas. There was also a growing need for additional training areas for support type organizations and units in order to relieve congestion and scheduling problems at Federal training sites.

The camp area can house a population of more than 2,000 under normal conditions, and more than 3,500 under emergency conditions. The eleven separate dining facilities on the installation have the capability to feed over 3,000 people. There are also eleven assembly buildings with a total occupancy capacity of 1,520, as well as more than fifty administrative and office buildings. Additionally, the camp maintains a heliport, a complete complex of warehouses, workshops and maintenance facilities. Other supporting facilities include a chapel, two service clubs, two theaters, as well as laundry and post exchange facilities.

Camp San Luis Obispo provides operational, training and logistical support to a wide variety of civilian and military agencies at the federal, state and local levels. These agencies include the California Army and Air National Guard, the United States Army Reserve, the United States Coast Guard Reserve, the California Conservation Corps, the California Specialized Training Institute, Cuesta Community College, California Department of Transportation and the San Luis Obispo County Sheriff's facilities.

Additionally the camp now houses the California Men's Colony. This facility of the California Department of Corrections is a minimum and medium security prison. The prison was design to house about 3900 inmates. The current population is about 6600. [http://www.corr.ca.gov/InstitutionsDiv/INSTDIV/facilities/fac_prison_CMC.asp]

The horseshoe curve shortly after Stenner Creek Viaduct allows you to view not only the California Men's Colony on the left side of the train but also the train itself on the right side as it makes a sharp right turn and heads up the mountain. As we leave the horseshoe curve we come to Chorro where there are great views out the right side of the train over San Luis Obispo and the Stenner Creek viaduct. Chorro is Spanish for "rapids" and

refers to the creek and the two adjacent land grants —Arroyo del Chorro and Cañada del Chorro. Immediately after Chorro you pass through the first of the tunnels. Tunnel 11 is 722 feet long.

About two miles beyond tunnel 11 there is a small horseshoe curve Another half mile brings us to Serrano siding named for Miguel Serrano from whom the Southern Pacific obtained the right of way in 1893. Here we head southeast back toward SLO. As we make the turn to the left we will pass tunnel 10 on the left side of the train.

At 12:45AM on February 24, 1910, 46 feet of the east end of tunnel 10 collapsed. The SP crews had been working on the tunnel, but no one was caught in the cave-in. The Sunset Limited, Train 10, had passed through the tunnel just moments before. Repairs on the tunnel began almost immediately with over 300 men working on the removal of dirt, rock and broken timbers. Trains from the north approached the west end of the tunnel while trains from the south approached the other end. The passengers walked over a small road around the collapsed tunnel to the other train. Mail was also carried around the mess. This was only done during daytime hours and all night trains were annulled for a few days and then rerouted via the San Joaquin Valley. Within two days it was clear that the tunnel could not be repaired. A fire was set in the remaining portion of the tunnel and the timber supports were burned and the tunnel collapsed. A cut was made to the outside of the tunnel which the tracks continue to pass through to this day. After about 10 days the transfer had become a regular exercise with stations set up on each side – Owlville on the north and Curran on the south. Curran actually had a spur track and a telegraph office. A daily pen and ink paper was issued detailing the events of the previous day. Everyone walked between trains and on March 8, 1910 the SLO paper reported "Andrew Carnegie was forced to walk around the cave-in in the same manner as the poorest passenger." Finally, on March 14, 1910, the rerouting was completed and the first train passed through the cut that we use today.

Now the views out the right side of the train are spectacular with 101 winding its way up San Luis Obispo Canyon.

We quickly pass through tunnels 9, 8 and 7. The lengths of the tunnels are 9 - 527 feet, 8 – 481 feet, and 7 – 1354 feet. The tunnels were the most difficult part of the railroad's construction. They were all built to similar dimensions, 16 feet wide and 18 feet maximum height. All of the tunnels were hand drilled and most were lined with heavy redwood timbers. About 1.1 million cubic yards of rock were removed from the seven tunnels, a world record for hand-drilled tunneling. Between 1940 and 1954, all the tunnels were enlarged and relined. It took 14 years because the railroad decided to continue regular train schedules without interruption on the single track main. This meant the work crew could only work between trains. The geology of the Santa Lucia's also complicated the job. The rock the tunnels pass through is heavily faulted. It has areas of serpentine [the green rock, California's State mineral], shale [black layered], and volcanic rocks. There are also subterranean springs of acidic water. The procedure for the enlargement was to remove one bent of the original timbers at a time, excavate the

enlargement, and then install a new bent before removing the next bent. Finally the concrete lining was installed from 1954 to 1959.

Tunnel 7 suffered a fire in April/May 1987. The route was closed for 13 days during the reconstruction. After the fire, Coast traffic was limited to the Amtrak Coast Starlight and 2-3 local freights. All other traffic was rerouted to the Central Valley. This continued until 1990 when freights again started using the Coast on a regular basis.

Between tunnel 7 and tunnel 6 there was a construction camp in 1893 named Thyle for the Thyle family. Irvine Thyle later worked for the SP and lost his arm in a switching accident in Paso Robles.

Tunnel 6 is the summit tunnel and is 3600 feet long. The summit is reached inside the tunnel. When you exit you are at Cuesta, on your way down grade and already in the Salinas River Valley. Just to the west (left side of the train) along the ridge above the pass, but out of sight of the train, is a botanic area that includes a stand of Sargent Cypress (Cupressus sargentii).

The tracks parallel highway 101 on its way north.

A few miles further and the tracks turn east into Santa Margarita. This was the end of track from January 13, 1889 until the Cuesta was complete with the arrival of the train into San Luis Obispo, May 5, 1894. Originally mentioned in Anza's diary in 1776. Mission San Luis Obispo operated the Asistencia de Santa Margarita (a branch mission) here. A century-old barn on the old Rancho Santa Margarita preserves the ruins of the mission. The barn may be visible if you know where to look out the left side of the train after you make the left turn out of Santa Margarita. [Should be before you get to the tank farm located on the right side of the train.] Currently the barn also houses a restored narrow gauge steam engine and the original wooden cars from the Disneyland Railroad (in use prior to the opening of the Grand Canyon Diorama). The engine and cars are sometimes outside and may make spotting the barn easier.

This history can go almost anywhere in the trip and may need to be split up if used at all. The history of the railroad between San Jose and San Luis Obispo started in 1868 when the Central Pacific formed the Southern Pacific to build lines south from Sacramento and San Francisco. They acquired the San Francisco and San Jose RR Co. on March 30, 1868 and broke ground in San Jose for a southern extension on April 21. By 1871 they had reached Hollister (named after the same Hollister that owned Hollister Ranch) and began a "branch" line south to Salinas that was reached November 1, 1872. They continued to push construction south through the Salinas Valley to Soledad by August 12, 1873. Construction stopped on the "branch" while the Southern Pacific completed the Tehachapi route into Los Angeles in 1876 and the Sunset route east through Yuma, Tucson and El Paso in 1883. The work resumed in 1886 about the same time they pushed the tracks up to Santa Barbara. Southward progress was to King City Jul 20,

1886; San Miguel by October 18; Paso Robles October 31; and Templeton, November 16, 1887. Now what stood in the railroads way was the Santa Lucia range. That and financing slowed the project. Several surveys had been done. While the tracks were extended to Santa Margarita by January 13, 1889, real construction did not commence until spring 1893. Southern Pacific's Chief Engineer, William Hood, who also had designed the Tehachapi Loop, made the final alignment. Laborer's were hired through local contractors including the famous Ah Luis, whose charges had helped build the narrow gauge Pacific Coast Railroad from San Luis Obispo to Los Olivos 20 years earlier. A larger-than-life statue to honor the Chinese-Americans that built the railroads was dedicated in February 2003 at the San Luis Obispo train station.

The construction included the grading of the route and the building of 6 tunnels. The tunnels included one 1400 feet long and the summit tunnel at 3600 feet long. The summit of the grade is actually inside the tunnel so you cannot see all the way through. Five of these tunnels are still in use.

Bullets

- Cuesta is Spanish for grade
- Route is 19 miles from SLO to Santa Margarita
- Summit is at elevation of 1380 feet inside tunnel 6 which is 3,610 feet long
- Completed May 5, 1894. Designed by SP's Chief Engineer William Hood [of Tehachapi and SB realignment fame]
- Sites in order:
 - o Ramona Hotel
 - o 101 crossing
 - o Cal Poly SLO
 - o Hathaway
 - Stenner Creek viaduct
 - o Goldtree
 - o California Men's Colony (prison) [Camp San Luis]
 - Horseshoe Curve
 - o Tunnel 11
 - o Small Horseshoe Curve
 - o Serrano
 - o Tunnel 10 [not passed through but passed by]
 - o Tunnels 9, 8, 7, 6
 - o 101 underpass
 - Cuesta siding
 - o Santa Margarita