



Reference: 509051.100

July 5, 2012

Greg Plucker, Planning Director
Siskiyou County
806 South Main Street
Yreka, CA 96097



Subject: Recommended Actions for JH Ranch Traffic Analysis

Dear Greg:

Based on our meeting of June 15 and your response to questions that I raised, SHN and JH Ranch propose to implement the following work program to collect and analyze roadway information and existing traffic data collected for French Creek Road. The work will be documented in a separate report and will reference the previously completed traffic volume studies.

The work program and reporting will focus on the four items outlined in our June 15 meeting, and are listed below.

Task 1-French Creek Road Characterization

SHN will re-characterized French Creek Road to provide a better overall discussion of what the road looks like. This description is intended to provide more detail on roadway segments that have different characteristics (lane width, shoulders, slope/grade,). The intent is to provide a better "picture" of the road, but will not include a "station by station" description as would be typically developed in a set of roadway improvement plans.

Work will include the following:

- Delineation of the existing French Creek Road into four (4) segments for analysis. We propose to undertake this from the intersection with Highway 3 to past the new JH Ranch Bridge. These segments will generally include:
 - The lower roadway (where its flat with wide lanes, shoulders),
 - The segment near the first bridge where it narrows and has an increase in grade,
 - The segment where the lanes have variable width and are immediately adjacent to French Creek, and
 - The upper section near the Ranch to the new bridge.
- Information will be input onto roadway analysis forms for later use in calculations.
- Descriptions will be developed so that when we later talk about the Level of Service (LOS) and the various aspects that go into the calculations of LOS (vehicles per hour) we can point to lane width, grade, etc. and the public will have a better understanding of what this means. Information will also be used to describe the local road status of French Creek Road as defined by American Association of State Highway and Transportation Officials (AASHTO).

Task 2-Peak Volumes

Peak Volume will be addressed based on the data previously collected for the roadway. A general review of what Peak Volume is, what it tells us about traffic demand on the roadway, and how it varies from day to day and weekday to weekend will be included. Peak Volumes from the traffic volume study previously undertaken will be used to illustrate these points for existing conditions. We will provide a discussion on how Peak Volume and Average Daily Traffic (ADT) are, and are not, related and have a discussion on how you can have multiple times in a day or week that have different peak hours.

Discussions will also include a scenario where the Peak Volume increases above “perceived” volume levels and why this may not be significant when it is within the LOS for the roadway. We will include discussions related to the 5 weeks of the year that provide the most peak volume of traffic, which is a small portion of the year. Our analysis of peak hour data will consider the issue raised by the County that traffic volume is spread out over the day and does not “fit” into a typical peak hour. While we disagree with the County’s view, we will provide a review of the data and show the peak hour and have a review of other higher hour periods during weekends, which appears to be the main issue. Our discussions will also explain how traffic volumes relate to roadway LOS.

Task 3-Cumulative Traffic Volumes

Cumulative Traffic over the next 10 year planning period will be analyzed. We will include a clear statement about the limits of JH Ranch on future non-project traffic; that is traffic not related to the JH Ranch project. Based on our previous discussions and County comments, SHN will provide trip generation calculations for two analysis scenarios over the next 10 years. Those are:

- **2% Growth Rate.** We will use a 2% growth rate for area traffic based on historic standards for the industry. Research, especially in California, has shown that this rate overestimates the future potential traffic volumes, and we will state that, noting that this is a very conservative approach and provides the highest potential traffic volumes, based on local growth only.
- **1% Growth Rate.** We will also use a 1% growth rate based on California data that shows this to be closer to realistic traffic related growth projections in the state. This rate is also close to the typical Siskiyou County growth rate over the last several decades.

Using the 2% and 1% rates, SHN will use the future potential private buildout in the area, estimated by the County at 66 parcels. Our analysis will look at two time periods, 5-years and 10-years, and provide traffic growth estimates for each, based on the 2% or 1% annual growth (development) potential. This data will then be analyzed in Peak Hour and ADT.

Task 4 -Evaluation of ADT, Peak Volumes and Vehicles per Hour

Using the information discussed above, SHN will evaluate the LOS for French Creek Road. The evaluation will be undertaken to define the vehicle per hour, ADT and finally the LOS thresholds


Greg Plucker
JH Ranch Traffic Analysis
July 5, 2012
Page 3 of 3

for LOS C. This item will review data collected and calculations made for various items such as lane widths, shoulders, passing distance, grade, truck traffic, etc. and the analysis will have discussions of each showing why the roadway was developed with 2 foot shoulders, even though there are none in spots, or conversely, why narrower lane widths were used (as the final analysis is developed). As we discussed at our meeting, the focus of this work will be to provide a better "layman's" description of the process, rationale and then back it up with fact based technical calculations. Analysis will then provide the threshold of vehicles for LOS C, which becomes the point at which a project will impact roadway functions.

Please let us know if you concur with the program of work, and if you do, then SHN will work with JH Ranch to develop a schedule to implement the data collection and analysis to complete this item this summer.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.



Mark S. Chaney
Project Manager

MSC:llc

c: Rob Hayes-St. Claire