July 5, 2024

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TUOLUMNE ROAD SURFACE TREATMENT PROJECT, CONTRACT NO. 1722

This project originally bid on June 8, 2023 along with another project named 2023 Tuolumne County Surface Treatment Project, Contract Nos. 1765, 1766, and 1767. The County rejected all bids on the Tuolumne Road Surface Treatment Project due to the County not including an Experience List requirement from the Contractor, and they awarded the 2023 Tuolumne County Surface Treatment Project, Contract Nos. 1765, 1766, and 1767 to American Pavement Systems, Inc. The Tuolumne Road Surface Treatment Project was put out to rebid on August 3, 2023 and received 3 bids, the project was awarded to American Pavement Systems, Inc. on August 15, 2023 and we had a Preconstruction Meeting with the County on August 16, 2023 for both projects.

At the Preconstruction Meeting it was brought up by American Pavement Systems that the section of Tuolumne Road near the Junction Shopping Center and Mono Way should be ground out 2" and paved instead of the placement of the Asphalt Rubber Chip Seal due to the heavy traffic and intersections in that area. American Pavement Systems, Inc. submitted a Change Order Request on September 13, 2023 and this request was denied by the County and we were instructed to proceed per the plans and place the Asphalt Rubber Chip Seal in this area. We proceeded to plan the Chip Seal schedule and the week prior to the planned placement of the chip seal on Tuolumne Road, we found out that George Reed would have Standard Road closed to perform their paving work. We requested that the County push the chip seal work on Tuolumne Road to the Spring of 2024 to avoid having excess traffic from the closure of Standard Road on the Chip Seal during and after construction, this request was also denied by the County.

We performed the Asphalt Rubber Chip Seal on both projects from October 4th through October 11th 2023, these projects included Asphalt Rubber Chip Seal placement on Lyons Bald Mountain Road, Delores Lane, Aarondale Road, Merced Falls Road, and Tuolumne Road. The County's specifications for Tuolumne Road differed from the specifications for all the other roads, the only difference was that the County required that a large ½" chip aggregate be placed on Tuolumne Road and all of the other roads receive a 3/8" aggregate, which is typical size for this work. After placement of the ½" Chip Seal on Tuolumne Road, American Pavement Systems identified areas of failure and went out multiple times to try and repair the failed areas. Per the County's specifications, the only repair method allowed was to place another layer of the ½"

chip seal over the failed area. We were never provided a punch list (or list of repair areas) from the County, all the repairs were identified by American Pavement Systems.

The materials placed were tested and in compliance with the County's specifications, but the chip seal was continuing to fail in areas, even where repairs had been done. American Pavement Systems researched what the cause of the failures could be. We consulted the Caltrans' Asphalt Rubber Usage Guide, which states that the use of $\frac{1}{2}$ " chip aggregate should only be used on roads where the average daily traffic is less than 5,000 vehicles per day, which Tuolumne Road is well above that at about 15,000 vehicles per day. This guide also states that "Use of chip seals is not encouraged in areas with heavy trucks or stop-and-go traffic, at signalized intersections, or in locations where speed limits are \geq 45 mph (72.4 kph)." All of these criteria are present on Tuolumne Road and we believe have led to the failed areas of the $\frac{1}{2}$ " Chip Seal, but at the time of placement American Pavement Systems was unaware of the high traffic volume on Tuolumne Road.

It was then brought to the attention of the County by American Pavement Systems that the design of this project utilizing the large ¹/₂" aggregate was the cause of the failures. We met with the County on February 12th and offered to place a Micro-Surfacing over the entire roadway to encapsulate the chip seal. We offered to do this work at cost with no added markups even though the failure was not caused by American Pavement Systems. We told the County that a decision needed to be made soon, so that when the weather improved in the Spring, we could plan to get the work done before the summer heat to avoid further failures. The County finally responded to the offer on June 7, 2024 and proposed that APS split the cost to place the Micro-Surfacing on Tuolumne Road due to their opinion that failures were due to workmanship rather than a flawed design. American Pavement Systems used the same equipment, crew, and asphalt rubber binder at all locations, the only difference is the aggregate size utilized solely on Tuolumne Road. It is the opinion of American Pavement Systems that if the issues were due to workmanship, then the work performed on Lyons Bald Mountain Road, Delores Lane, Aarondale Road, and Merced Falls Road would also be having the same issues which is simply not the case.

To date, the County has not paid American Pavement Systems, Inc. for the work on Tuolumne Road and we are still trying to help the County resolve the issues, even though the issues stem from the design of the project and improperly specified large ¹/₂" aggregate.