Regarding the historic train trestle over the Los Gatos Creek in Willow Glen:

I am disappointed by the Council decision to remove the historic Willow Glen train trestle and replace it with a catalog-order steel bridge. I could have accepted the decision if the engineering study had shown that restoring and adapting the trestle was infeasible or uneconomic, or if the choice between the historic trestle and a new steel bridge had been thoroughly discussed and decided upon at public meetings, but I do not feel that either is the case here. The City is running a series of three public meetings on the community's wishes for this trail, and yet the City made this major design decision after only the first of the three meetings. The citizens of San José are also represented by the Parks and Recreation Commission, and they too have not been contacted on this decision. Adding to my unease, I feel that the City seemed almost devious in how it sought the trestle's removal, given the obtuse wording of the agenda items. There certainly was little community outreach: the City knew that many of us in the community are interested in the trestle, but none of us received an email or call to even mention item 2.17 on the Consent Calendar.

I feel that the engineering the trade between trestle and the steel-bridge seems "biased". I do not mean to imply any undue influence by city staff, but, nonetheless, any consulting company that hopes for repeat business can not help but try to give their customers what they want, whether deliberately or subconsciously. They may have simply asked "would you like a section on alternative concepts" and then gauged your response, be it "if you wish" or "oh yes, please".

For the record:

The engineering report by CH2M-Hill in my opinion is very thorough and precise. It details out exactly which timbers need to be replaced, which should be patched or repaired, and which can be used as-is. It documents which bolts need to be replaced; it studies wind, water, and earthquake loads; and it evaluates alternative decking options. It describes how the existing railroad ties, catwalk and wire handrail would be removed, extra "stringers" (longitudinal beams) would be added, and then decking and railing constructed on top. The report evaluates concrete-slab decking, IPE planking (apparently some South American hardwood), and a remove-and-replace alternative – the steel bridge.

The recommendation to replace the trestle apparently derives from the Alternative Comparison Matrix, Table 16 on page 5-7. This is where the bias can come in: it is an un-weighted, subjective trade study. As an aerospace engineer, I deal with similar trade studies at work all the time, and I know both their strengths and their shortcomings: these trades are fine for listing various subjects for consideration, and they can be an aid in guiding the thought process. However, they shouldn't be used as the sole factor in decision-making, especially when the scoring is close. And yet this trade matrix apparently is the basis for their recommendation, and the justification the City is using for the removal of the trestle. Thus, I need to go thru this in detail:

• Each alternative in each category is to be assigned points: a 1 for worst, 3 for best, or 2 for middle. The scores are unweighted: for example, the "best maintenance costs" is only \$45k better than worst, whereas best construction cost is nearly \$700k better than worst, and yet each has a score in the same 1 - 3 point range.

- The "best construction cost" is for trestle with concrete decking, over \$100k less expensive than the second-best (trestle with IPE decking), yet it was given only a "2" rather than a "3".
- For "expected lifespan", the trestle with IPE is 25-40 years, trestle with concrete is 30-50, and steel is 75, yet the trestle with concrete was only given a "1" rather than a "2".
- For "neighborhood aesthetics", preserving the trestle is properly given a "3", but tearing it down is given a "2" rather than a "1" because "it could be made pleasing".
- The "environmental permitting" score does not seem right, either: either of the trestle options involve only the repair of about 4 of the piles (vertical timbers) in the actual stream, whereas the steel bridge option requires the digging up and removal of dozens of in-stream piles: this should be given a "1" rather than a "2".

Using these corrected values, rather than the steel bridge being ahead by a score of 19 to 17, instead the trestle with concrete decking has 19 points and comes out on top over the steel bridge's 17 points.

The scoring can also be impacted by the inclusion or omission of categories. Given California's rules on "carbon footprint", I would suggest that it should also be considered. The impact of replacing a few timbers and a couple dozen bolts is far less than that of mining, smelting, forming and shipping tons of steel, in addition to hundreds of bolts: give the trestle a "3" and the steel bridge a "1" and the score would then become 22 to 18 in favor of the trestle.

Also from the engineering memo:

- The cost of repairing the trestle (from Table 16, p. 5-7) is only about 2/3rds the cost of replacing it with a steel bridge.
- When including the cost of inspection, maintenance, and repairs over a 40-year lifespan are included, the trestle is still over \$50k cheaper than the steel bridge, and that is assuming that the steel bridge will require absolutely no maintenance or repair not what I've seen on other steel bridges in the area.

Fire:

Fire and fire damage seem to be a big concern:

- The bridge has been on fire a couple times, damaging the catwalk walkway and badly charring some rail ties. This does not affect the trestle's suitability for the trail as the walkway and ties are all to be removed anyway.
- Regarding fire damage to the structure itself: as discussed in Sec. 3.5.2 (page 3-9), "Bents 7, 8, and 9 have some char damage, but it is not significant." Translation: the big vertical timbers (piles) are fine they just need some patching or modest repairs. Many of the diagonal timbers ("sash braces") do need to be replaced, but they are just 8"×10" beams bolted to the verticals that are relatively straightforward to remove and replace.

Regarding future fire damage:

• Fires in the past may have gone unnoticed for some time before the smoke drifted to nearby homes or was visible from the freeway. Going forward, it would be easy to incorporate smoke or fire detectors that could immediately contact the fire department. Technology is changing: the sensors can be wireless and internet connected, requiring nothing more than a battery replacement every biannual inspection cycle.

• The railroad right-of-way leading up to the trestle will likely be landscaped. It would be simple to incorporate a water line at that time, perhaps leading up to hydrants near the trestle. (When doing our "urban stream restoration project" along the Los Gatos over between Meridian and Leigh some years ago, I organized volunteers who laid a half-mile long water main for irrigation. If need be, I'd be willing to help in a similar fashion here...)

Some other points that have been raised:

Termites:

Councilmember Pierluigi Oliverio at the Council meeting repeatedly talked about termite damage: this is not mentioned anywhere in the engineering memo. If you do a text-search on the report, the word "pest" also doesn't appear, and the only reference to "insect" is in Table 16, where it notes that the IPE decking might allow for some future insect damage.

Community Support:

Councilmember Oliverio also noted the support by the community. I've watched the video of the proceedings: there were only two speakers at the March 26th Council meeting: Richard Zappellli (on behalf of WGNA) and Martin Delson (on behalf of Save Our Trails – SOT). Richard exaggerated his participation in the process: I don't recall him at any of the fund-raising presentations and private meetings that I, SOT chair Taisia McMahon, vice-chair Bill Rankin and others had with County Supervisors, Open Space Authority Boardmembers, and a State Assemblymember. Martin accurately presented the SOT position of wishing to preserve the trestle, but reluctantly (and hardly unanimously) accepting the City's recommendation so as to obtain trail continuity. (I've since talked to various SOT Boardmembers, and they all said that there was no preference for the steel-bridge option, and that they endorsed the recommendation thinking that it was the only option.) I am disappointed that my letter to Council in support of the trestle was not even acknowledged.

I understand that the SJ Parks & Rec Commission was last briefed on the Three Creeks Trail some years ago. As the official representative of the community on park matters, it seems that they should have been consulted on this major design change, especially since they contributed some \$800k towards the project back when the trestle was part of the plan.

Also, note that when we gave the briefings that helped garner much of the funding for the trail acquisition, the trestle was prominently featured in the PowerPoint presentations. I feel that I'm morally obligated to go back to those funding agencies and rebrief the topic, in case they wish to adjust the funding levels given the change in scope and concept. At the minimum, it may be more difficult in the future for the City to get grant funding if they fear another "bait and switch"...

History:

The city cites some report from 2004 that does not recognize the trestle to be historic. (I was an official member of San José's "Willow Glen Spur Trail Task Force", and as such was given a notebook filled with relevant documents covering that time period, but I don't recall ever seeing this report: was it ever formally released?) Also, what criteria are used to determine "historic"? The trestle is not the category of, say, Williamsburg, but it was built in the 1920's, at the time

before Willow Glen became its own town. Yet, since some of the timbers have been replaced over time, someone deemed it not historic by some criteria. (Has the Historic Landmarks Commission been consulted on this?) This is a no-win situation: if the timbers had not been replaced, it probably would have been considered too decrepit to preserve. Even the Statue of Liberty has had structural upgrades over the years, but it (like the trestle) looks the same on the outside.

In-stream structures:

One of the stated concerns is that the trestle can catch debris in the creek. But this debris would be in the stream whether or not the trestle is there. At this point, the creek channel is 25' deep and 210' (that's why the trestle is so large), but the creek gets narrower downstream (e.g., at the Auzerais bridge): it'd seem to me that it'd be preferable for debris to be caught here rather than allowed to flow downstream: the trestle performs a free service acting as a "strainer". Apparently the SCVWD has no objections to the trestle remaining, given that they gave the City a \$500k grant to restore it. (Has the City checked to see if they will have to return the grant money if they instead remove the trestle?)

Schedule:

There apparently is a rush to complete the trail project before the expiration of some grant. There are limitations on the times when in-stream work can be done: there are just a few months outside the high-flow and fish-migration periods. If the trestle is replaced, then all the timbers have be removed during that period; if the trestle is preserved, then only a couple of the timber patches and repairs have done during that time: all the work on the decking is well outside the stream channel and can be done at any time.

Homeless:

And the final concern is that there often are homeless encampments under the bridge. But rather than deciding on infrastructure for decades to come based on where some folks are sleeping today, it would seem better to try to deal with the homeless problem directly. Help the people, or at least help relocate them: the solution to folks sleeping under the bridge is not to remove the bridge!

It just seems unconscionable for the City to talk about transparency and community involvement, to have a citizen Parks & Rec Commission and Historic Landmark Commission, and to schedule a series of public meetings on the design of the trail system, and then to rush thru and decide beforehand on the most important feature of the trail!

~Larry Ames, 4/17/2013