TOWN OF FAIRFAX
142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
(415) 453 - 1584 /FAX (415) 453-1618

August 28 2015

Dear Resident:

As a follow up to our letter dated August 26, 2015, we wanted to provide you with an update on the status of our discussions with Caltrans. Specifically, Caltrans has made the following key determinations:

- The bridge must be replaced. Caltrans indicates the bridge is Functionally Obsolete and they will not fund any repairs. *Caltrans has agreed that a replacement bridge made of timber (i.e., wooden structure) would be allowed under the program*. Initially, Caltrans would not allow a timber replacement bridge. However, we "appealed" their decision to the Federal Highway Administration who indicated a timber bridge is an option that is eligible for funding.
- Caltrans agreed, after much discussion, *that the replacement bridge can be one-lane, but must meet current standards.* The existing bridge is 14 feet wide including the guardrails. The minimum width of new bridges is 21 feet including rails. The bridge website has a schematic of what this could look like.
- Caltrans authorized additional funding for engineering design and environmental assessments, including funding for continued public outreach and to finish current studies and reports.

Attached is a more detailed summary of our activities including our discussions with Caltrans. We also invite you to visit the bridge website at www.fairfaxbridges.com for more information. Specifically, we have posted all the current reports including the geotechnical and bridge inspection reports as well as emails from Caltrans regarding the bridge.

In addition to the emergency repair work for the bridge, we have also scheduled for Council consideration on September 2nd the approval of an amendment to the contract with California Infrastructure Consultancy (CIC) to continue work on the Meadow Way Bridge including funding for community outreach. At the September meeting, the Council will also discuss the determinations from Caltrans and the next step in the process. The next step in the process is to complete any unfinished preliminary studies and to conduct a community workshop in the Fall to provide an opportunity for residents to ask questions and provide input on design concepts. Caltrans has indicated they will attend this workshop so they can answer your questions regarding their determinations.

Please note that in addition to sending out emails, we have also mailed hard copies of this letter to all the residents and property owners along Meadow Way as well as posted this information on the bridge web site. We would appreciate hearing from you regarding this project either by email or phone, especially if you are unable to attend the Council meeting.

If you haven't already, please sign-up on the bridge website to receive future information/notices via email. Remember this is a four (4) year project with construction not slated to begin until FY 18-19. We still have a long time to go with plenty opportunity for community input on design and other issues.

Should you have any questions, feel free to contact me at (415) 458-2345 or gtoy@townoffairfax.org or Nader Tamannaie, bridge engineer, at (916) 448-1980 or via email at ntamannaie@califstructure.com with any questions.

Thank you for your understanding and cooperation.

Sincerely,

GARRETT TOY
Town Manager

Cc: Nader Tamannaie

SUMMARY OF ACTIVITIES

Below is a summary of the activities undertaken since the last workshop (Nov. 2013). All the reports and studies referenced below are available on the Town's bridge website at **www.fairfaxbridges.com.**

Immediate Repairs Required for the Bridge

In August, a new surprise challenge about the bridge reared its head. The Caltrans Bridge Maintenance Department called both CIC and the Town and said they had revisited the site for another inspection after their regular biennial inspection in 2014. They consider this bridge at risk and their policy is to revisit such bridges for a more thorough check. They found a 10-foot ± long 12"x12" wood beam to have become hollow, as well as splitting of a wood pile head. They want the Town to repair these two problems in the next six months, or they would close the bridge down. Caltrans has issued an addendum/amendment to the 2014 inspection report. The report is available on the bridge website.

Needless to say, these repairs have become the first order of priority for the Town. This being the dry season also necessitates quick action. The Town is in the process of putting together a plan for the immediate repairs. Town staff will be going to the Council for approval to perform the work at the September 2nd Council meeting. The work will take up to 7 days to stage and complete. The preliminary estimate is that construction and design will cost approximately $40,000. This work is not eligible for reimbursement under the Highway Bridge program. The emergency repair does require a permit from the California Department of Fish and Wildlife (CDFW), but we do not anticipate any problems obtaining the permit. All the repair work will be done underneath the bridge and, as a result, there should not be any restrictions to traffic on the bridge during the repairs. No schedule for the work has been set yet, but it must be completed by mid-October per CDFW.

Where were we before the long break?

The existing bridge is 14 feet wide, with a 10-foot wide path for vehicles and the remainders of the width allocated for pedestrians, separation elements and safety railings. Caltrans's biennial Bridge Inspection Report indicates the bridge has a low Sufficiency Rating of 47.5 (out of 100) and is Functionally Obsolete because of its deck width, making it a candidate for replacement. For the first phase of this project, the Town was given a small grant by Caltrans in late 2000's to study the replacement of the bridge. Federal funding is 88.5% for design and environmental studies and 100% for construction.

After a bit of preliminary work, including some engineering studies, surveying and mapping, the Town held a public workshop with the neighbors in November of 2013. At the conclusion of this workshop, a few neighbors requested that a study be conducted to see if the existing bridge could be rehabilitated and kept. They also requested that the property lines and Town right-of-way be determined accurately by the time of the next meeting. When asked what new amenities the neighbors might like to see at the site, some indicated a timber bridge might be appropriate if the existing bridge were to be replaced. Additionally, some neighbors did not want the bridge to have two lanes or be too close to their homes.

What have the Town and its consulting team been doing since the last workshop?

The Town embarked on several tasks through its consulting firm, CIC. These included:

1. *Apply for funding to study the rehabilitation of the bridge.*

   As the Town submitted the request to fund the above bridge rehabilitation study, and while waiting for Caltrans approval, CIC began a preliminary look at rehabilitation of the existing bridge. There are no record drawings available and the underground condition and embedment length of the wooden piles cannot be determined. Because of their age, CIC knows the piles would not be in ideal condition. As the geotechnical investigations of the site proceeded forward, it became known that the ground in which the piles are embedded will be liquefiable during the Maximum Credible Earthquake (MCE) to a depth of 50 feet below the road. The conclusion was that the piles were not dependable for safe everyday use of the structure because of their condition and depth, nor for a large seismic event causing liquefaction and threatening the collapse of the bridge.

   CIC determined that to keep the existing bridge would require building a new exoskeletal structure (i.e., shell) around it to support not only itself, but maintain the existing bridge. A new travel surface and rails would be constructed on top of this exoskeletal structure. This would defeat the purpose of its preservation since the bridge would no longer look the same nor be made of the same materials. Ironically, you technically would not even be driving on the same bridge. It would also be extremely expensive to construct, since we would be working around the existing structure. In addition, the fact that the existing timbers are soaked with creosote, the toxicity would remain present at the site. (With replacement, the piles will be cut a couple of feet below the creek bed and the remaining pile lengths will remain buried below ground.)

   Continuation of the studies and any chance of rehabilitation became moot when Caltrans Headquarters staff in Sacramento informed us that neither they nor the federal agency in charge, FHWA, would allow the use of the money for rehabilitation, given the condition and obsolescence of the bridge. They simply would not allow the funds to be used for anything other than replacement of the bridge. Meanwhile, CIC had concluded that rehabilitation of the bridge would not be feasible or a sensible course of action based on extent of the study already performed.

2. *Pursue a glue-laminated (glulam) timber bridge as a replacement option*

   In addition to opposing bridge rehabilitation, the HQ staff responsible for funding also initially opposed using glulam beams (timber) for a new bridge at the site, asserting this was a coastal zone and FHWA would not allow that. CIC continued the dialogue with Caltrans District staff and Structures Department and requested confirmation of the FHWA's prohibition of glulam wood. After months of waiting, Caltrans HQ received a response from FHWA stating that the use of wood was permissible. CIC will consider this material as one of the alternative designs considered for replacement of the bridge. Emails of discussions with Caltrans and final permission by FHWA are posted on the web site.

3. *Pursue a one-lane bridge with Caltrans*

   This was initially objected to by Caltrans District Office, even though they had already approved it several years ago when the initial funds had been applied for. Again, after several discussions with the HQ staff, they confirmed that a one-lane bridge would be permissible as long as the

clear distance between the barriers at each edge of bridge deck is a minimum of 18 feet. This would allow for a 12-foot standard lane, a one-foot buffer width, and five feet for pedestrians, all at the same roadway deck level. With the 18 feet of clear deck required and a total of three feet for barriers needed at each edge of deck, the bridge will be 21 feet wide. CIC is looking into proper separation of auto and foot traffic through striping, delineators and slow speed signage, and making sure ADA requirements will be met. A schematic of the minimum width and bridge construction stages has been posted on the web site and explanation of construction stages appears below.

4. *Apply for funding for the second phase of project for design and environmental studies*

   Given the replacement course charted by the funding agencies for the bridge, the Town applied for the remainder of the funds for design, environmental studies and construction. There were questions asked by the HQ about funding bridge aesthetics, the extent of fortifications needed for the creek bank and bridge foundation erosion, as well as the need for public outreach. It is a bit of a "Catch 22" since the Town needs the additional funding to complete some of the preliminary work (e.g., surveys) and to fund the community outreach so we can convey this information to the neighborhood.

   To show the feasibility of construction, and as part of the funding requirements, CIC developed a concept where the new bridge will be constructed in phases, by initially placing it adjacent to the existing bridge. Subsequently, traffic will be temporarily shifted onto the new bridge while the existing bridge is removed. Then, the new bridge will be lifted with two cranes or hydraulically jacked sideways to the middle of the roadway for its permanent location, setting it the same distance away from the Town's right-of way on either side.

5. *Perform Field Review with Caltrans to chart the environmental course of the project*

   Caltrans informed the Town, in order to complete the funding application, a Field Review needed to be performed with its environmental and Local Assistance staffs. This was done on January 6, 2015, and some neighbors observed it as it was taking place. This process brought Caltrans staff to the site to observe its natural, demographic, and physical settings and set the tone for the environmental, cultural and archeological studies of the project. Through this site visit and project documentation, the Town was able to defend the project's needs and justify funding for all of the elements that Caltrans had questioned earlier. Subsequently, in late June of this year, Caltrans approved the Town's requested expenditures for design and environmental studies.

What is next for the project?

The first step is the immediate repair of the bridge. The next steps are for the Town to finish the surveys and property line identification, monumentation and recordation; conduct creek flow analyses; prepare a few concepts for the new bridge; and schedule and prepare for the next community workshop, at which Caltrans plans to attend. We anticipate the workshop would be conducted in the Fall. At the workshop, Town staff, CIC, and Caltrans will be available to answer questions regarding the reports and studies and, most importantly, Caltrans' determinations. All the materials to be discussed at the workshop will be available on the Town's bridge website prior to the meeting.