DATE: **July 16, 2012**

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Dan St. John, F.ASCE – Director, Public Works and Utilities
Larry Zimmer, P.E. – Capital Projects Manager

SUBJECT: Resolution Adopting a Mitigated Negative Declaration for the Downtown Trestle Rehabilitation Project and Selecting Alternative 1 to Rehabilitate the Trestle Structure

RECOMMENDATION

It is recommended that the City Council adopt a Mitigated Negative Declaration for the Downtown Trestle Rehabilitation Project and designate Alternative 1 as the preferred alternative to rehabilitate the trestle structure.

BACKGROUND

In December 2010, the State Coastal Conservancy awarded $475,000 for planning and design of the trestle rehabilitation. The Coastal Conservancy requires a $25,000 match that the City and SMART are meeting with in-kind services. SMART is supportive of the current work, but no formal commitments have been made regarding the future ownership or responsibility for maintenance of the trestle structure.

On December 14, 2011, a public meeting was held to present the process to date, the results of the preliminary analysis of the trestle structure and three alternative approaches to rehabilitate/reconstruct the trestle. In summary, all of the attendees were in favor of restoring the trestle in some fashion as opposed to its removal. Opinions differed between preference for a full replacement project (Alternative 3) and the rehabilitation project that maintains as much of the existing structure as feasible (Alternative 1).

On February 6, 2012, staff presented the project development to date and a summary of the public comments from the December Public Meeting to City Council. Staff received commentary from the Council that indicated a preference for Alternative 1 – Rehabilitation. Council members indicated a desire to maintain as much of the existing structure as feasible. Work since the Council meeting focused on developing Alternative 1 and the California Environmental Quality Act (CEQA) environmental document.

Agenda Review:

City Attorney_____ Finance Director_____ City Manager _____

On June 26, 2012, staff presented the project to the Historical and Cultural Preservation Committee (HCPC) and received a unanimous recommendation to Council for selecting Alternative 1 and adopting the Mitigated Negative Declaration. In addition, one committee member requested the addition of the mid-span pedestrian bridge which is discussed in more detail as an option to Alternate 1 in attachment 2 of this report. It was recommended that staff confirm the potential impacts to fish be properly investigated. Another comment was regarding the potential impact of implementation of the mitigation that may become necessary when the brackish marsh is established at a new location. This may be necessary if existing brackish marsh is impacted during construction, and concern that the construction impacts may not have been adequately defined specifically related to land-based vs. water-based construction operations. The project consultant has been directed to consider and address these comments.

DISCUSSION

The "preferred" project for purposes of primary study in the Mitigated Negative Declaration (MND) is Alternative 1, but Alternatives 2 and 3 are also considered for informational purposes. A CEQA Initial Study and MND has been prepared and published for public comment. As the governing body, the Council is responsible for adopting the MND and designating the preferred alternative.

An Environmental Impact Report (EIR) is not required because the project impacts can be mitigated. Consistent with a MND, the project proposes to rehabilitate the existing structure to address safety issues and use it as pedestrian promenade while maintaining the tracks for possible future use. As proposed, the final form of the trestle will be the same as the structure that exists currently. The rehabilitation alternatives have estimated construction costs from $3.4 million to $4.7 million.

The Historic Resource Evaluation was completed at the outset of the current project to determine the historic resource eligibility of the downtown trestle to the National Register of Historic Places and the California Register of Historical Resources. The trestle appears to be eligible for the California Register, but not eligible for the National Register.

During the public review period of June 13 to July 16, 2012, staff received comments from the Petaluma Yacht Club and the State Lands Commission. Staff responded to the Yacht Club and has attached the correspondence. The State Lands Commission comments have been incorporated into the MND.

Staff recommends that Council adopt the MND and authorizes staff to direct the engineering design firm to begin the detailed design process for Alternative 1. Alternative 1 will rehabilitate the existing structure by retaining as much of the existing material as is practical. The decking must be completely replaced, but a large portion of the stringers, and bent caps can be reused. Except for the piles all material structurally inadequate will be replace with wood materials of same or similar dimensions to maintain the look and feel of the original trestle. Due to potential impacts from pile driving of timber piles, augured in steel piles and steel shells would likely be used to replace or strengthen existing timber piles. The steel pile will extend only to the high water line, with either existing or replacement timber piles extending beyond that elevation best

maintaining the original trestle design. Design is scheduled for completion by the end of the calendar year. The State Coastal Conservancy grant requires close-out by March 31, 2013.

The proposed action meets City Council goal: "Plan for and implement priority capital projects as funding permits."

FINANCIAL IMPACTS

The study and design project is within the prior approved budget for work. The completion of environmental clearance process will allow staff to search for and apply to granting agencies for construction funding. The Coastal Conservancy may contribute up to another $500,000 toward the construction phase if they have funding available and find a subsequent grant application worthy. Staff is seeking grant opportunities for the future project and working to define discrete projects within the overall project that could be grant funded in advance.

ATTACHMENTS

1. Resolution
2. Alternative 1
3. Trestle Existing Pile Bent Elevation
4. Historic and Cultural Preservation Committee Staff Report
5. Historical and Cultural Preservation Committee Resolution
6. Petaluma Yacht Club letter dated June 21, 2012
7. Petaluma Yacht Club response dated July 2, 2012
8. State Lands Commission comments dated July 5, 2012

☒ Items listed below are large in volume and are not attached to this report, but may be viewed in the City Clerk's office.

9. Environmental Assessment and Initial Study/Proposed Mitigated Negative Declaration

RESOLUTION ADOPTING A MITIGATED NEGATIVE DECLARATION FOR THE DOWNTOWN TRESTLE REHABILITATION PROJECT, SELECTING ALTERNATIVE 1 TO REHABILITATE THE TRESTLE STRUCTURE

WHEREAS, the Downtown Railroad Trestle, built in 1922 on the west bank of the Petaluma River in downtown Petaluma, is currently in poor condition and fenced off from public use; and

WHEREAS, the City of Petaluma is desirous to complete a project to rehabilitate this structure; and

WHEREAS, the Sonoma Marin Area Rail Transit agency, the owner of the trestle, is supportive of the rehabilitation project; and

WHEREAS, the San Francisco Bay Area Conservancy Program, administered by the Coastal Conservancy, has awarded $475,000 toward the planning and design of the Downtown Railroad Trestle Rehabilitation Project; and

WHEREAS, the Trestle Rehabilitation Project supports Conservancy goals by improving public access to the Bay through the connection of land and water based trails and promotes open space accessible to urban populations for recreational and educational purposes; and

WHEREAS, staff has worked with an engineering design consultant to develop design criteria and alternative rehabilitation and reconstruction approaches; and

WHEREAS, city staff presented the alternative approaches at three public meetings held on December 14, 2011, February 6, 2012, and June 26, 2012 and received support for the rehabilitation approach, Alternative 1; and

WHEREAS, an Initial Study and Mitigated Negative Declaration (MND) was prepared pursuant to the requirements of the California Environmental Quality Act (CEQA), which

concludes that there is no substantial evidence that the proposed Trestle Rehabilitation Project as mitigated, will have a significant adverse effect on the environment; and

WHEREAS, a mitigation and monitoring plan incorporating all mitigation measures identified in the MND has been prepared for the project; and

WHEREAS, a Notice of Intent to Adopt a Mitigated Negative Declaration for the project was published in the Argus-Courier on June 14, 2012, and posted with the Sonoma County Clerk and the State Clearing House, providing for a thirty (30) day public comment period as required by CEQA; and

WHEREAS, the City received and reviewed all comments received during the 30-day public review period and to date, none of which identify new significant or substantially increased environmental effects from those evaluated in the MND; and

WHEREAS, on June 26, 2012, the Historical and Cultural Preservation Committee recommended to the City Council that they adopt a Mitigated Negative Declaration for the Downtown Trestle Rehabilitation Project, select Alternative 1, Rehabilitation, and approve the initiation of the design and specification documents; and

WHEREAS, the record of proceedings of the decision on the Project is available for public review at Petaluma City Hall, Public Works and Utilities Department, 11 English St., Petaluma, CA.

NOW, THEREFORE BE IT RESOLVED that the City Council of the City hereby finds that:

1. On the basis of the entire record, including the Initial Study and Mitigated Negative Declaration for the Downtown Trestle Rehabilitation Project ("Project"), dated June 13, 2012 there is no substantial evidence that the Project, as mitigated, will have a significant effect on the environment.

2. The Initial Study/Mitigated Negative Declaration has been reviewed by the City Council and reflects the independent judgment and analysis of the City as lead agency for the project.

BE IT FURTHER RESOLVED by the City Council that:

1. The Mitigated Negative Declaration is hereby adopted.

2. All mitigation measures identified in the Initial Study/Mitigated Negative Declaration are imposed upon the Project as conditions of approval.

3. The Mitigation Monitoring and Reporting Program presented herewith as Appendix A to the Mitigated Negative Declaration is hereby adopted.

BE IT FURTHER RESOLVED by the City Council that:

1. Staff is directed to proceed with design and specification documentation for the Project, Alternative 1, Rehabilitation.

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Alternative 1 – Rehabilitation Approach

The objective of Alternative 1 is to retain as much of the original structure as possible in order to maintain the historic integrity of the trestle and provide a pedestrian amenity and connection for the downtown area, while maintaining the railroad tracks. In general, components of the existing trestle can be both repaired and retained as part of the rehabilitated structure, or for those that are too far deteriorated, replaced. The components that remain in good condition, including piles, can be preserved. According to an evaluation of the condition of the trestle piles conducted in late 2011, approximately 70% of the piles were identified as being in "fair", "poor" or "beyond poor" condition with significant section loss due to microbial decay and dry rot. The majority of the piles cannot withstand full loads and will require treatment for strengthening or replacement.

To approach the trestle rehabilitation with a consistent method both for design integrity and aesthetic value, three rehabilitation scenarios were developed for the piles: repair piles (A), replace with steel piles (B), and replace with wood piles (C). At the initiation of the environmental assessment, staff considered option C to be the preferred method since new wood piles would provide the desired original look while installing new timber that is treated for installation within waterways to modern best-management-practices (BMP's) acceptable to environmental protection agencies. However, the impact related to pile driving and the resulting vibration poses a risk of damage to the adjacent historic downtown buildings that may be too great for the City to mitigate. In light of this, staff considers the repair option (A) or (B) to be the best project approach. Following is a discussion of the rehabilitation approaches for the different trestle components.

Rehabilitation Scenario A: Timber piles to be **repaired** with a fiberglass reinforced plastic (FRP) jacket placed over the existing pile from approximately one foot below mud line to mean highest high water (MHHW) and filled with grout to provide structural integrity. If the section of the existing pile is found to be deteriorated above MHHW, a new timber pile section would be spliced using a steel sleeve with mechanical connections. The remainder of the piles will have a steel sleeve installed to provide visual consistency.

Rehabilitation Scenario B: Timber piles to be **repaired** with an augured steel pipe pile extending to MHHW and new timber pile section spliced with mechanical connections to support the bent cap. The remainder of the piles will have a steel pipe sleeve installed to provide visual consistency.

Rehabilitation Scenario C: Timber piles to be **replaced** would be removed and a new coated timber pile would be installed. Timber piles in good condition and able to be **preserved** must be wrapped with PVC or HDPE sheets extending to MHHW to prevent future creosote leaching into the water, retard further deterioration, and maintain visual consistency. Since timber piles must be driven, or vibrated into place, this method is not recommended due to potential impacts to adjacent buildings.

Approximately forty piles (eight bents of five piles each) in the middle section of the trestle have shifted away from the bank possibly due to adjacent slope failure pushing the piles out of alignment. Due to the condition of these piles, the recommended solution is to replace these

piles with steel pipe piles extending to the MHHW line with a wood section at the top to connect with the bent cap and provide a historically accurate look. The steel piles, unlike wood piles can be augured in to greatly reduce ground vibration.

It is not possible to precisely identify which part of the trestle would be repaired and retained and those that would require replacement due to the unknown timeframe for actual construction. The trestle is continuing to deteriorate; what may be repairable today may need to be replaced in a few years. It is expected that much of the wood components above the piles (bent caps, stringers, joists, outriggers and ties) are in good and useable condition will be retained and reused. Sections of these wood components that have deteriorated will be replaced in-kind. The deck boards and joists are unusable and will be completely replaced.

Several components of the trestle are mutually exclusive of which alternative is selected, and discussed at the public meeting.

- The existing tracks will be replaced in their current alignment, for possible future use.

- The hand railing is not an original component of the structure and since there was no railing during the active original use of the trestle, there is no historic material to save and no design to copy. Current building codes set certain requirements of the railing design upon the project. At this time, staff is intending continuation of the railing installed a few years ago during the Water Street Plaza project, or something similar to maintain consistency.

- Some citizen comments suggested the addition of a mid-span pedestrian bridge. Historically, a spur railroad line split off the trestle, heading south, approximately between First and Second Streets, paralleling both. The mid-span pedestrian crossing was further investigated and, although both desirable and feasible from an engineering standpoint, the estimated costs for planning and design prohibit inclusion into the project at this time.

- The fender piles are a line of solid timber piles, spaced approximately four feet apart, and approximately four feet from the trestle structure. This line of fender piles is visible from across the Turning Basin, however, they are not required for any structural purpose. It is staff's intention to include construction of removal and replacement fender piles, possibly of the same material as whatever becomes the recommended alternative of the trestle, as an alternative bid in the construction documents. This will allow City Council to decide on inclusion of the fender piles, based on actual cost, at the time of contract award.