

**Proposed Initial Study/Mitigated Negative Declaration
for the**

Restoration of Santa Rosa Creek – Pierson Reach



Prepared for:

**City of Santa Rosa
Public Works Department**

November 2005

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Prepared by:

Nancy Dakin, Environmental Planner

and

The City of Santa Rosa Public Works Department Staff

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APPENDIX

- A. California Historical Resources Information System Letter of March 7, 2005

1. Project Description

1.1 Project Overview

The proposed restoration of the Pierson Reach of Santa Rosa Creek involves the removal of the last portion of the existing grouted concrete and the construction of elements of a more natural channel including a low-flow channel, pools, riffles, meanders and riparian vegetation.

1.2 Project Location

The proposed project is located within the downtown core of Santa Rosa. It extends from just east of Olive Street and extends west to Pierson Street (See Figure 1, Project Vicinity Map). It is the western-most portion of the Prince Memorial Greenway Project.

1.3 Project Need

The project is proposed in accordance with General Plan policies that provide for the restoration of channelized waterways. The project consists of a portion of reaches C and D in the Santa Rosa Creek Master Plan. As stated in the Master Plan, the project goals are to:

- ❖ Conserve and restore natural habitats
- ❖ Maintain hydraulic capacity
- ❖ Respect private property
- ❖ Enhance access
- ❖ Provide recreational opportunities
- ❖ Designate creek-oriented commercial uses
- ❖ Enhance aesthetic values
- ❖ Provide educational opportunities
- ❖ Establish an alternative transportation mode of bikeways and pathways
- ❖ Take advantage of opportunities to be part of regional trail systems

1.4 Existing Conditions

Existing Conditions along the Pierson Reach of Santa Rosa Creek: The Pierson Reach has been improved as an alternative transportation corridor and linear promenade. A 12' multi-use path has been installed on the north side of the creek. Bridge underpasses have been constructed and rock work on the upper banks completed. Ironwork has also been used beneath roadways to prevent people from camping and loitering in these areas. The creek, itself, still exists as a grouted concrete channel with ivy and other exotic plants growing on much of the southern bank.

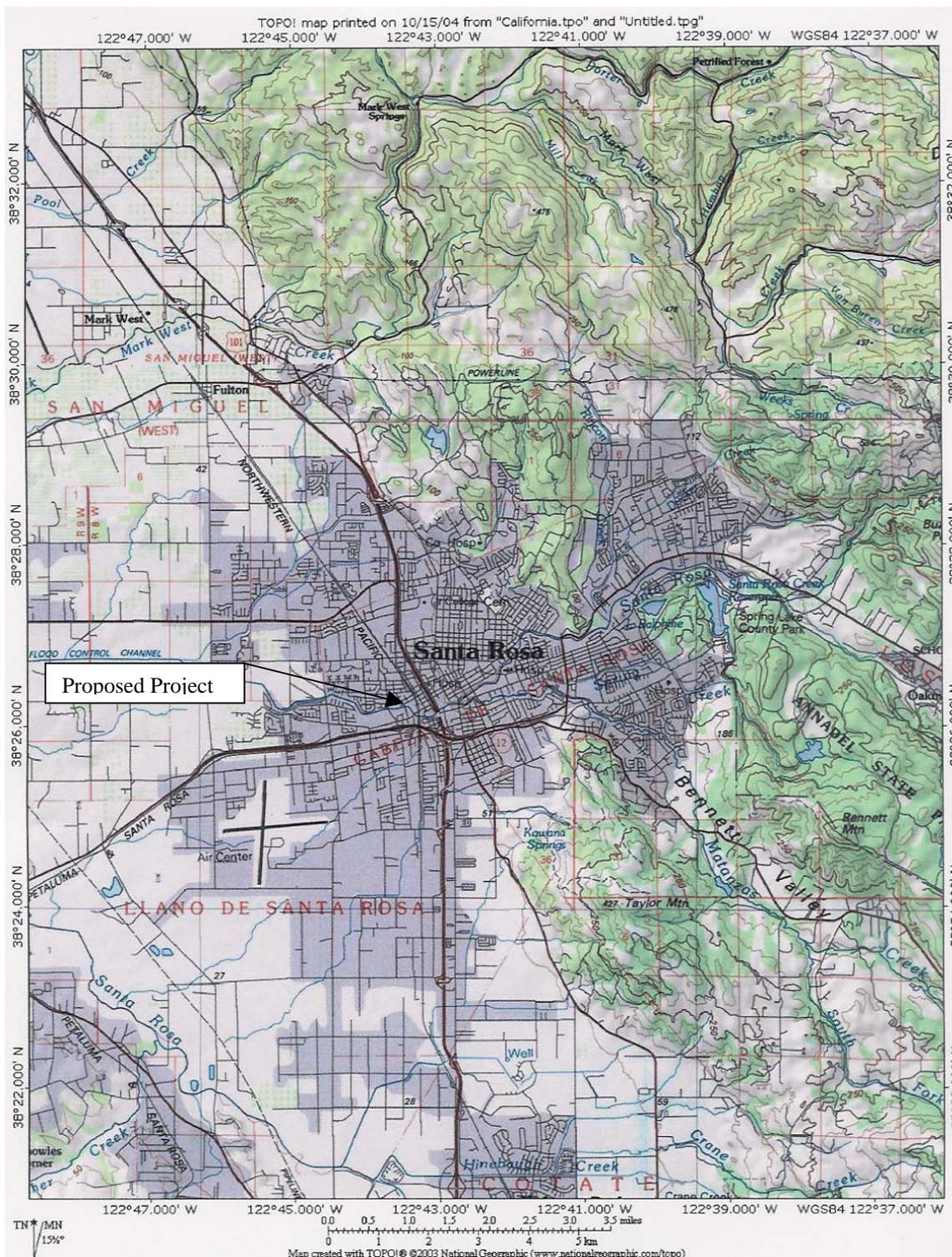


Figure 1
Project Vicinity Map

Surrounding Land Uses in the Project Vicinity: Surrounding land uses consist of commercial businesses including hotels, businesses in Railroad Square and some vacant, former industrial land. A number of residences are located close to Pierson Street along West 6th Street.

1.5 Project Characteristics

Creek Restoration: The proposed project would involve removing a large portion of the grouted concrete channel and lowering the channel bottom to add a low-flow channel. Other elements of a more natural creek channel would be added including pools, riffles, woody debris for fish habitat, and riparian vegetation to provide additional shade and habitat along the channel (See Figure 2).

1.6 Permits Needed for Project Approval and Implementation

The project would require the following permits for project approval and implementation:

- ***Streambed Alteration Agreement:*** A Streambed Alteration Agreement will be issued for the project by the California Department of Fish and Game (CDFG), contingent upon the completion of CEQA review.
- ***Working Agreement:*** An existing agreement for work in the creek with the Sonoma County Water Agency would be updated, as needed, for this project.
- ***Regional General Permit #12:*** A Regional General Permit #12 has already been obtained from the U.S. Army Corps of Engineers.
- ***Waste Discharge Permit/Water Quality Certification:*** A Waste Discharge Permit, site control measures and water quality certification has been obtained from the Regional Water Quality Control Board for off site waste storage of material excavated from the project area.
- Consultation with National Marine Fisheries Service has been completed.
- Consultation with the U.S. Fish and Wildlife Service.

1.7 Project Funding

The project would be funded through grants and local fees, as available.

1.8 Timeline for Implementation

Project construction is anticipated during 2006.

1.9 Other Projects Proposed or Reasonably Foreseeable in the Project Vicinity

The project area runs along the back-side of Railroad Square. Future development would be encouraged to be oriented to the creek as well as to Railroad Square. The Cannery Site, immediately adjacent to the Pierson Reach will contain 80 residential units. The 5-acre SMART site is anticipated to support a mix of uses transit-oriented uses including residential, commercial and retail development. Some portion of the site may be used as a food and wine center. The City of Santa Rosa will be preparing a Specific Plan and EIR that focuses on land within ½ mile of the rail station¹. The rail station is envisioned as a stop along the SMART rail line at some point in the future.

The Pierson Reach is a component of the Santa Rosa Creek Master Plan. This plan involves restoring Santa Rosa Creek from the east side of Santa Rosa in the vicinity of Melita Road, to the west side at the Laguna de Santa Rosa. The downtown reaches are the first phases of the project, which will ultimately cross the entire watershed.

¹Telephone communications with Lisa Krantz and Ken MacNab of the City of Santa Rosa Advanced Planning and Policy Department, November 16, 2005.

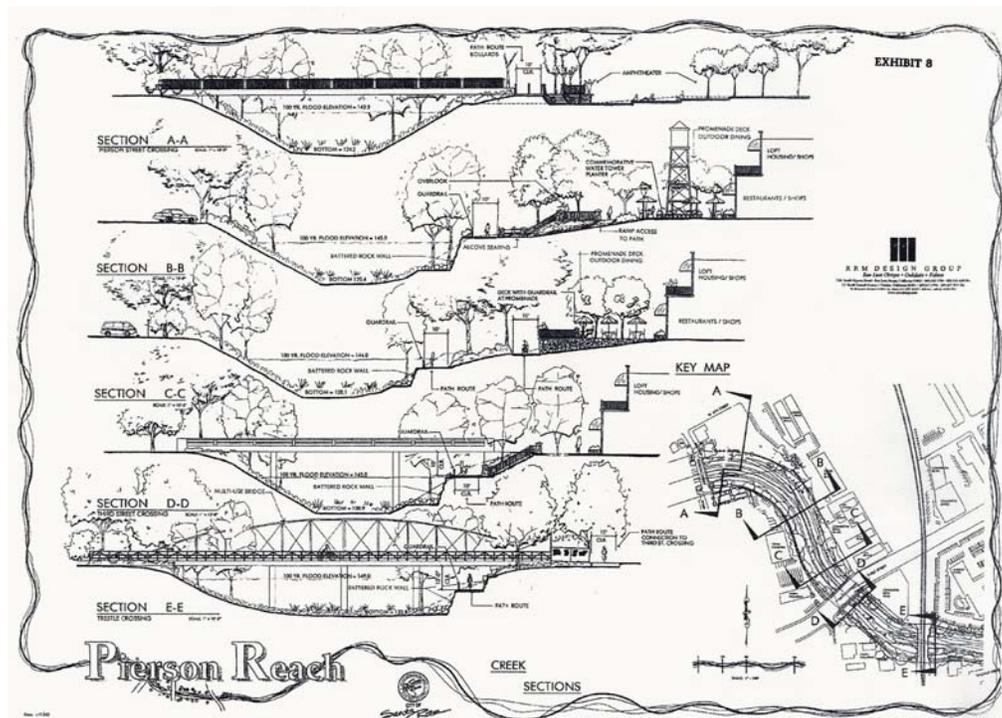
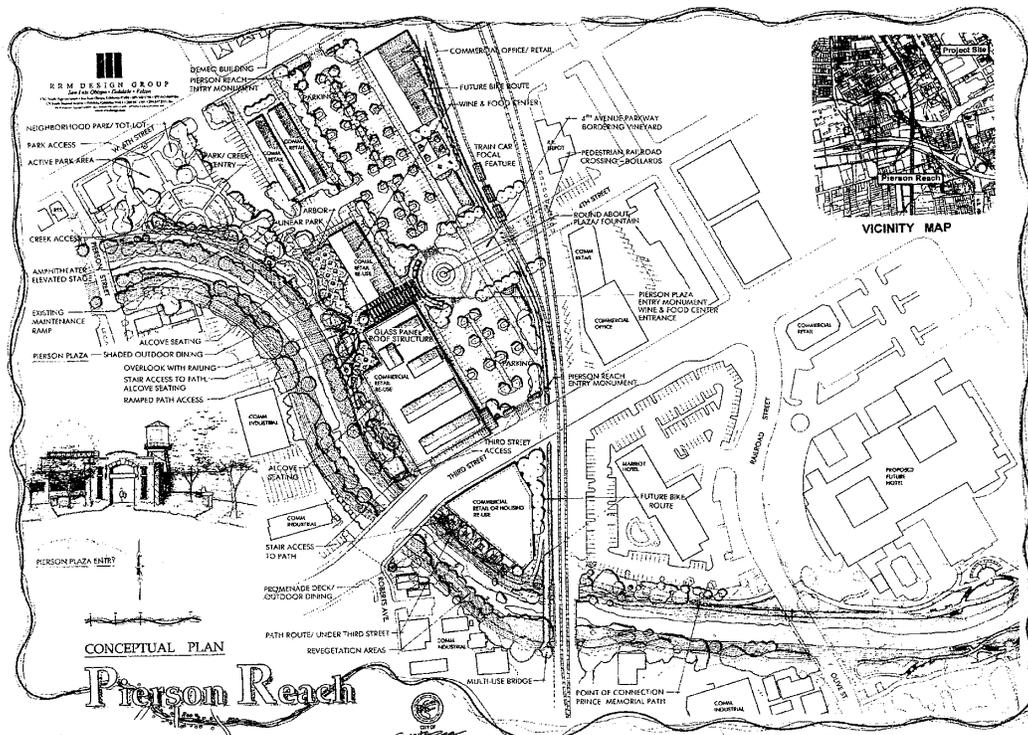


Figure 2
Concept Plan and Section Drawings by RRM Design Group

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2. Environmental Checklist

1. Project title:

Santa Rosa Creek Restoration–Pierson Reach

2. Lead agency name and address:

City of Santa Rosa Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

3. Contact person and phone number:

Nancy Adams
Transportation Planner
(707) 543-3910

4. Project location:

The Pierson Reach of Santa Rosa Creek extends from just east of Olive Street to Pierson Street.
The project extends behind the Railroad Square area.

5. Project sponsor's name and address:

City of Santa Rosa Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

6. **General plan designation:** The project site is identified as a creek on the Santa Rosa General Plan Land Use Map. Land uses north of the Pierson Reach of Santa Rosa Creek are designated Retail and Business Services and Medium Density Residential (8.0 – 18.0 units per acre); land uses south of the Pierson Reach are designated as Medium Density Residential, Light Industrial and Low Density Residential (2.0 – 8.0 units per acre).ⁱ
7. **Zoning:** Parcels north of the Pierson Reach of Santa Rosa Creek are zoned Downtown Commercial (CD) and Downtown Commercial Historic (CD-H), and Planned Development – Historic (PD-H). Parcels south of the creek corridor along the Pierson Reach are zoned General Industry (IL) and Light Industrial in the County (unincorporated land).ⁱⁱ

8. **Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The project consists of restoring the habitat value of the Pierson Reach of Santa Rosa Creek by removing grouted concrete, adding a low-flow channel, and incorporating elements of a more natural channel including pools, riffles, and meanders, as feasible. In addition, the project would involve adding riparian vegetation and some logs and other debris for fish habitat.

9. **Surrounding land uses and setting:** Land uses surrounding the Pierson Reach include commercial, industrial and residential development. Railroad Square is located north of the project site; and underutilized and vacant parcels are located immediately adjacent to the creek.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):** A Waste Discharge Permit, site control measures and Section 401 Water Certification have been obtained from the Regional Water Quality Control Board (RWQCB); a Regional General Permit #12 has been obtained from the U.S. Army Corps of Engineers (ACOE); and, an existing agreement with the Sonoma County Water Agency (SCWA) for work in the creek would be updated, as necessary, for this project. The project is outside of the range of the California Tiger Salamander (CTS).ⁱⁱⁱ The California Department of Fish and Game (CDFG) will issue a Streambed Alteration Agreement, contingent upon the completion of CEQA review. For NOAA Fisheries, a Section 7 consultation was completed for the project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

NONE

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

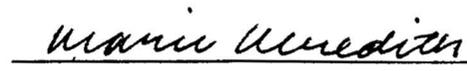
Prepared By:

 Nov. 17, 2005
Nancy Dakin Date
Environmental Planner

Reviewed By:

 11.17.05
Nancy Adams Date
Transportation Planner
City of Santa Rosa Public Works Department

I concur with the findings and conclusions above.

 11-18-05
Marie Meredith Date
Environmental Coordinator and Deputy Director of Community Development
Community Development Department
City of Santa Rosa

CEQA GUIDANCE

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question;
and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 1. AESTHETICS. Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Over the short-term, restoration of the Pierson Reach would result in some visual impact as a result of project staging, bringing equipment down into the creek, diverting water around the construction site, and re-armoring the creek with concrete in some locations, as needed.

Over the long term, the project would result in a beneficial impact to aesthetics by incorporating more natural creek elements into the existing channel. Restoring the channel would involve adding hydraulic features including a low-flow channel, pools, riffles and some additional meanders, as is feasible. These features would add visual interest to the creek corridor. The project also involves planting riparian vegetation, which would enhance the appearance of the channel and support the goal of extending a linear parkway through the downtown corridor (**Beneficial**).

Mitigation Measures:

None required.

| | | | |
|--------------------------------------|--|--------------------------|--------------|
| Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--------------------------------------|--|--------------------------|--------------|

2. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental impacts, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping & Monitoring Program of the California Resources Agency, to non-agricultural uses? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The site is categorized as “Urban and Built-up Land” on the Sonoma County Important Farmlands Map (1996).^{iv} This category of land is occupied by structures and has a building density of at least one unit per one and one-half acres. There are no lands under Williamson Act contracts in the project vicinity (agricultural preserve lands subject to enforceable restrictions).^v The project would not conflict with existing zoning for agricultural use nor result in the conversion of prime agricultural land to other uses (**No Impact**).

Mitigation Measures:

None required.



Figure 3. The banks of the existing channel consist of grouted concrete and lack visual interest. Currently, they also have very limited habitat value.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| 3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Fine particulate matter (PM₁₀) is the pollutant of greatest concern with construction activities. PM₁₀ emissions can result from a variety of construction activities including excavation, grading, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust.^{vi}

Generation of Dust

Construction activities including any additional grading that may be required for the site would result in an increase in dust and some vehicle and equipment emissions during the construction period. Some residences are located near the creek channel on the west end of the project area. They would be considered the most sensitive land uses (sensitive receptors) in the project area.

Potential for Encountering Contaminated Soils

With a history of industrial uses around the Railroad Square area, excavation of the creek channel has the potential for unearthing some contaminated soils. Soils would be sampled and categorized as described in Section 7. In addition, air monitoring would be conducted for soils that are contaminated with hydrocarbons.

Long-term Benefit

Enhancing the creek corridor would draw additional users, and, particularly bicycle commuters. Planting trees also has a beneficial impact on air quality. Development of this project together with a network of other pathways along creeks would have a beneficial impact on air quality.

While impacts during the construction period are not potentially significant, the following mitigation measures are recommended to further reduce dust and emission-related impacts (**Less-than-significant impact; mitigation measures are recommended as conditions of project approval to further reduce the level of impact (LS/M)/Cumulative Beneficial Impact (B)**).

Mitigation Measures:

- 3-1 During earth disturbing activities, the contractor shall be responsible for spraying exposed soil surfaces with water or another approved dust inhibitor. The contractor shall be responsible for cleaning streets and driveways of fugitive soils in the immediate vicinity of construction work, as necessary.
- 3-2 The contractor shall be responsible for ensuring that all construction equipment and vehicles are maintained in good operating order and that all factory installed emission control devices are installed and functioning properly. All vehicles and construction equipment shall be turned off when not in use to minimize emissions.
- 3-3 Feasible Control Measures for Construction Emissions of PM₁₀ would also include:
 - (a) Water all active construction areas daily, as required to minimize mobilization of dust.
 - (b) Apply water daily, as required to minimize mobilization of dust, or apply soil stabilizers on all unpaved access roads and staging areas.
 - (c) Sweep daily (with water sweepers) all paved access roads.
 - (d) Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
 - (e) Replant vegetation in disturbed areas as quickly as possible.
 - (f) Limit the area subject to construction activity at any one time, as applicable to the project.
- 3-4 Air monitoring would be conducted during the excavation process where soils are contaminated with hydrocarbons.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|---|--------------------------------|--|--------------------------|-------------------------------------|
| 4. BIOLOGICAL RESOURCES. Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the DFG or USFWS? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the DFG or USFWS? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, <i>etc.</i>) through direct removal, filling, hydrological interruption or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Similar to the Prince Memorial Greenway immediately east of the project area, "...the original riparian habitat was completely removed when channelization occurred in the early 1960's. What remains is a riverine system fringed with marsh at the bottom of a trapezoidal, concrete rip-rapped channel. The flood control project drastically altered the ecosystem and adversely affected species associated with the former riparian woodland habitat. Today, the predominant environmental characteristics of the project area are a grouted channel surface with infrequent trees, rows of non-native trees at the top of bank and a lack of cobbles and gravel in the channel bottom. Adjacent habitats are urban (industrial, commercial) with backyards, empty lots and parking lots."¹

The Restoration Plan for the project is being developed by Prunuske Chatham. The plan would be consistent with the following General Plan goals related to channelized waterways:

¹ Discussion of Biological Resources by Marco Waaland, Prince Memorial Greenway Initial Study/Mitigated Negative Declaration, (July 1997), p. 3-1.

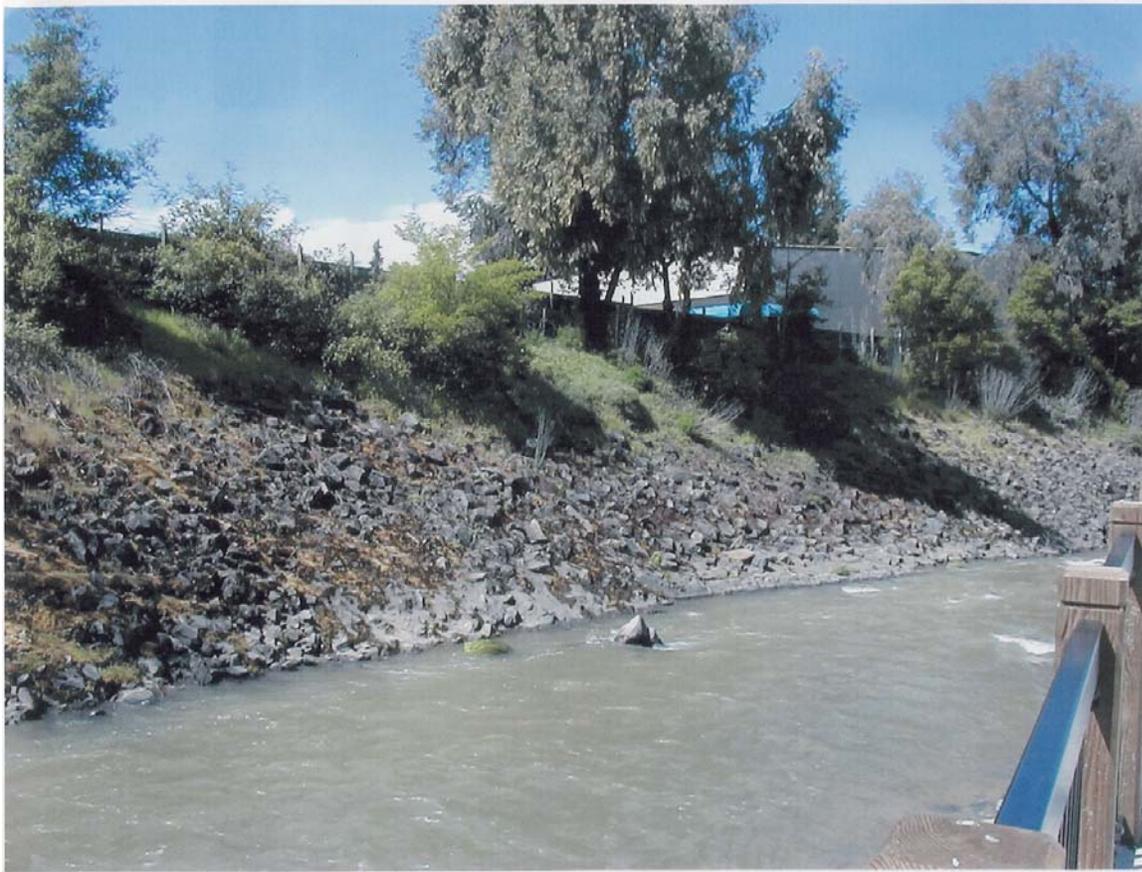


Figure 4. The existing grouted concrete along the banks of the Pierson Reach allow only a minimum of vegetation to become established.



Figure 5. Restoration of the creek channel will provide opportunities for planting more trees. Providing more shade along the channel will result in cooler water temperatures.

- OSC-D-7 Rehabilitate existing channelized waterways, as feasible, to remove concrete linings and allow for a connection with the stream channel and the natural water table. Avoid creating additional channelized waterways, unless no other alternative is available to protect human health, safety, and welfare.
- OSC-D-8 Restore channelized waterways to a more natural condition which allows for more natural hydraulic functioning, including development of meanders, pools, riffles and other stream features. Restoration should also allow for growth of riparian vegetation which effectively stabilizes banks, screens pollutants from runoff entering the channel, enhances fisheries, and provides other opportunities for natural habitat restoration.

Restoring native vegetation and a more natural creek configuration would result in long-term beneficial impacts to biological resources. For example, for steelhead, the design changes in channel morphology (especially the construction of a narrow low-flow channel and deep pools with natural substrate), the addition of instream features such as rootwads, boulders and cut banks; and restoration of riparian and emergent vegetation with corresponding shade and nutrient input, would all result in improvements over the existing condition. The same improvements would also make the reach more attractive and livable. Over the short-term, the project could result in impacts to biological resources from erosion and increased sedimentation, and exposure to contaminants released during the construction process. These potential short-term impacts would be reduced to a less-than-significant level with mitigation identified below (**Potentially Significant Impact reduced to a Less-than- Significant level with required mitigation (PS/M)**).

Mitigation Measures:

- 4-1 To minimize the potential for disruption and harm to aquatic life indigenous to the water body, the following measures should be implemented:
- (a) Prior to channel disturbance activity, fish and amphibians would be removed from the project area and placed upstream or downstream depending on the species.
 - (b) Work would only occur during the dry season, as permitted by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), the North Coast Regional Water Quality Control Board (NCRWQCB), the U.S. Army Corps of Engineers (ACOE), and NOAA Fisheries.
 - (c) During construction, a biological monitor would be onsite for work taking place in aquatic habitat.
- 4-2 The Restoration Planting Plan would utilize native species, emphasizing those that effectively help to stabilize the newly configured banks.
- 4-3 Points of excessive erosion potential would be designed with a hardened un-erodable surface.
- 4-4 All exposed soils would be protected with erosion control fabrics and other measures specified in Standard Best Management Practices for erosion control.

- 4-5 In-stream vegetation (i.e. marsh cells) would function to trap sediments and decrease downstream transport of fine sediments.
- 4-6 Areas where concentrated contaminants occur would be resealed.
- 4-7 Marsh areas would be developed (to the extent that “roughness” is permitted, while still maintaining channel “n” values) to help to trap and remediate through natural treatment processes the pulse of low level contamination which may be released after construction.
- 4-8 Use of the project area by aquatic and terrestrial animals would be monitored following project completion to evaluate the effectiveness of the improvements to the stream.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| 5. CULTURAL RESOURCES. Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project area extends west from the Prince Memorial Greenway along Santa Rosa Creek. Most of the work along the creek banks has already been completed. A multi-use path and associated rockwork were installed along the north side of the creek. The project would involve removal of most of the grouted rock along the lower banks of the creek.

Archeological Resource Service noted that: “Santa Rosa Creek has been a strong magnet for human settlement for thousands of years. This section of the creek in the project area (refers to the Prince Memorial Greenway, but applies more broadly) has undergone major changes since the first Europeans arrived in the 1820’s. For several thousand years native Californians settled along its banks. The major settlement for our purposes lay at the confluence of Santa Rosa and Matanzas Creeks, at the upstream end of our project area. This site, SON-11 originally may be at least 6000 years old. Additional settlements lay downstream. It is likely that the entire reach of Santa Rosa Creek we are examining was actively used by native peoples. In the earliest part of the historic era the main settlement lay upstream, this changed rapidly in the American era. Several prehistoric and historic resources are reported in the general vicinity of the project area”^{vii} The project was reviewed by the California Historical Resources Information System; no additional study of cultural resources is needed for the project (See Appendix A).

Creeks are known to be sensitive locations for cultural resources. While the project area is currently covered with grouted concrete, excavation does have the potential for unearthing resources. The following mitigation measures would further reduce the potential resulting in impacts to cultural resources (**Less-than-Significant Impact; mitigation measures are recommended as conditions of project approval to further reduce the level of impact (LS/M)**).

Mitigation Measures:

- 5-1 If archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds. Prehistoric archaeological indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils

may contain a combination of fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and features remains such as building foundations, and discrete trash deposits (e.g., wells, privy pits, dumps).

- 5-2 If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| 6. GEOLOGY and SOILS. Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) Rupture of a known earthquake fault, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines & Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Seismicity

The project is located in the vicinity of a potentially active fault (with displacement within the last 700,000 years).² The wider region is also considered seismically active (Seismic Zone 4) and strong ground shaking can be expected during the life of the facility. The closest known active faults are the Healdsburg-Rodgers Creek Fault Zone, located about 1 1/2 miles to the east, and the San Andreas Fault located about 19 miles to the southwest. These faults are considered capable of generating earthquakes with magnitudes of 7.0 and 7.9 respectively.

The project would be constructed in accordance with the standards set forth in the Uniform Building Code for Seismic Zone 4, as described under mitigation below.

² Santa Rosa General Plan, Geologic and Seismic Hazards, Figure 12-2, p. 12-7.

Soils/Erosion

Soils in the Santa Rosa Creek channel consist of Riverwash (RnA). Riverwash consists of very recent depositions of gravel, sand and silt alluvium along major streams and their tributaries. Soils north of the creek channel consist of the Yolo Silt Loam (YsA) (0 to 2 percent slopes). Generally, this soil is more stratified than Yolo loam. The silt loam surface layer is a result of deposition from infrequent overflow and the sloughing of finer textured soil material from areas bordering this soil. Soils south of the creek channel consist of Zamora silty clay loam (0-2 percent). This soil is similar to Zamora silty clay loam (0-2 percent), but it is slightly steeper. Runoff is slow to medium and the hazard of erosion is slight to moderate.^{viii}

Excavation of the low-flow channel and grading of the channel to add more natural hydraulic features would result in the potential for sedimentation. Mitigation measures are identified below to reduce this potential impact to a less-than-significant level (**Potentially Significant Impact; mitigation measures recommended as a condition of project approval to further reduce the level of impact (PS/M)**).

Mitigation Measures:

- 6-1 Project construction would utilize best management practices for handling of soil to ensure that the project does not result in sedimentation of the channel. Geo-fabric or other slope stabilization materials would be used to stabilize reconfigured slopes prior to the onset of winter rains. Best Management Practices would include, but not be limited to the following:
- (a) Allow work only when stream flows are low and are routed around the work area.
 - (b) Utilize phased construction periods to control the amount of work zone sites that are exposed at any one time.
 - (c) Utilize a dewater/sedimentation tank system. Dewatering zones are separated by sedimentation dams with controlled overflows. Sedimentation dams are dry weather features only and contain failure of a dewatering system or breach of the bypass system/coffer dam.
 - (d) All exposed graded slopes not re-armored would receive high quality erosion control blankets installed in a timely manner. All areas of restored creek below the 100-year water surface elevation would receive its ultimate surface treatment prior to the October 15th end of work period.
 - (e) Re-vegetation of the creek zone would be conducted concurrent with all phases. Hydro-seeding, mulching, or other common organic methods would be included for all phases.
 - (f) All areas that would ultimately be planted would have erosion blankets placed in grassed areas. Revetment or other high velocity armoring systems would be blanketed with soil filter fabrics to reduce soil loss.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 7. HAZARDS and HAZARDOUS MATERIALS. Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Hazards to the Public or to the Environment

Santa Rosa Creek has a history of industrial uses located along its banks. In addition, it received substantial debris after the 1906 earthquake. As a result, excavation of the low-flow channel and lower banks of the creek could result in uncovering contaminated soils.

Environment, Community & Opportunity Network (ECON) prepared a Limited Phase One ISA for the Pierson Reach Path Project.^{ix} As part of this study, ECON conducted a review of the environmental records identified from a data base search performed by Environmental Data Resources (EDR). The following is a list of the sites located within 250 feet of the Pierson Reach:

1. N.W.R.R., 20 West 6th Street, #A (one 10,000-gallon underground fuel storage tank for gasoline)
2. 206 West 6th Street (corrosive PPG gray paint to ground)
3. Burt Olhiser Painting, 206 W 6th St. (small quantity generator; no violations found).
4. David Sierra, 15 West 3rd St., (soil only, remedial action completed or deemed unnecessary)
5. Dee Jay Sosa & Gloss Inc., one 500-gallon UST for gasoline)
6. Westside Foreign Auto Inc. 12 West 3rd St. (small quantity generator, one 1000-gallon UST for gasoline and one 500-gallon UST for waste oil).
7. Mead Clark Lumber Co, Inc. 3rd/Wilson St. (aqueous solution with less than 10% total organic residues; waste oil and mixed oil; unspecified solvent mixture waste; latex waste; other organic solids).
8. American Sun Motors Corp, 77 West 3rd St. (oxygenated solvents [acetone, butanol, ethyl acetate, etc]).
9. Downey Tire Center, 102 Chestnut St. (unspecified solvent mixture waste; latex waste; other organic solids)
10. Franchetti, Peter, 3 Third Street (database did not specify contamination type of status).
11. Third Street Culvert, Third Street West (orphan site, database did not specify contamination type or status).

These sites may have the potential to pose a hazardous materials impact during construction of the Pierson Reach. Encountering contaminated soil is a potentially significant impact of the project. Mitigation is identified below to reduce this potentially significant impact to a less-than-significant level.

Cortese List

There are no sites in the project vicinity listed on the Department of Toxic Substances Control Hazardous Waste and Substances List (Cortese List). The closest site on this list is in the vicinity of Sonoma County Airport (Charles M. Schulz Airport) at the west end of Airport Boulevard.^x

Airstrips

The closest airport is the Charles M. Schulz Airport (Sonoma County Airport) located approximately 8 miles northwest of the site. Other airstrips include Skypark south of the City of Sonoma, and the Petaluma Municipal Airport on the eastern edge of the City of Petaluma.

Emergency Response

The project would not interfere with any emergency response plans. Some trucks and other equipment would be needed during the construction period, but they would not impede traffic flow or affect access in the project area. Signs would be posted alerting residents about the timing and the duration of the construction period.

The project has the potential to encounter hazardous soils and groundwater. This potentially significant impact is reduced to a less-than-significant level with mitigation measures identified

below (**Potentially Significant Impact requiring mitigation to reduce the potential impact to a less-than-significant level (PS/M)**).

Mitigation Measures:

- 7-1 The selected contractor would be supplied with the ECON Limited Phase One ISA summary document. The potential to encounter impacted soil and groundwater would be discussed.
- 7-2 Hazardous materials encountered in the project area would be addressed as follows:
- (a) For soils with petroleum products, excavated soils would be stockpiled, categorized and disposed of at a qualified landfill. Air monitoring would also be conducted.
 - (b) Groundwater would be treated with activated carbon or treated at the Sub-regional Treatment Plant, as needed, prior to discharge. Cut-off dams and impermeable backfill may also be required on a site-specific basis.
 - (c) The City would notify residents of the construction period with an area sign.
- 7-3 Water monitoring should be conducted on a periodic basis to identify any increases in sediment load or contaminants.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| 8. HYDROLOGY & WATER QUALITY. Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site, including through alteration of the course of a stream or river, or substantially increase the rate or volume of surface runoff in a manner that would: | | | | |
| i) result in flooding on- or off-site | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii) create or contribute runoff water that would exceed the capacity of existing or planned storm water discharge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) provide substantial additional sources of polluted runoff | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv) result in substantial erosion or siltation on-or off-site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Place housing or other structures that would impede or re-direct flood flows within a 100-yr. flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Expose people or structures to a significant risk of loss, injury, or death involving flooding: | | | | |
| i) as a result of the failure of a dam or levee? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) from inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Would the change in the water volume and/or the pattern of seasonal flows in the affected watercourse result in: | | | | |
| i) a significant cumulative reduction in the water supply downstream of the diversion? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) a significant reduction in water supply, either on an annual or seasonal basis, to senior water right holders downstream of the diversion? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) a significant reduction in the available aquatic habitat or riparian habitat for native species of plants and animals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| | | | | | |
|-----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| iv) | a significant change in seasonal water temperatures due to changes in the patterns of water flow in the stream? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| v) | a substantial increase or threat from invasive, non-native plants and wildlife | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) | Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) | Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Potential for Flooding

The design criterion and performance standard for the project is: *There is to be no significant increase in water surface elevation for any particular storm.* Adhering to this criterion limits flooding related impacts to a less-than-significant level.^{xi}

Potential for Degradation of Water Quality

The project would involve excavation of a low-flow channel and some grading of the existing channel to create a more natural creek channel with pools, riffles, and wider meanders, as is feasible. Recontouring and re-grading of the channel would result in the potential for sediment to enter the creek. Best management practices would be used as described below to prevent sedimentation of the creek.

Change in Water Temperature

Planting trees which over time would result in increased shade and a canopy over the creek channel, and development of a low-flow channel would result in a decrease in water temperature within the project area. This would constitute a beneficial impact of the project.

Potentially significant impacts related to water quality would be reduced to a less-than-significant level with mitigation measures identified below (**Potentially Significant Impact Reduced to a Less-than-Significant level with mitigation/Beneficial Impact (PS/M/B)**).

Mitigation Measures:

- 8-1 The design criterion and performance standard for the project is: *There is to be no significant increase in water surface elevation for any particular storm.*
- 8-2 Best management practices would be implemented for excavation, grading and any stockpiling of soils to minimize erosion and sedimentation.
- 8-3 The project would be constructed during the dry season between June 15th – October 15th. All exposed surfaces would be hydro-seeded/mulched prior to the onset of winter rains. Bio-

engineering techniques should also be used to stabilize banks. Geo-fabric and other slope stabilization materials should be used as needed to minimize erosion.

- 8-4 Water monitoring would be conducted on a periodic basis to identify any increases in sediment load and/or contaminants. Additional plantings should be installed to provide additional stabilization of slopes if increases in sediment are observed. A monitoring plan would be implemented during and at the end of the rainy season, following project installation, to ensure that erosion control measures are sufficient and that appropriate remedial action is taken, if deemed necessary. Some re-armoring of the banks could be required if contaminants are identified that are adversely affecting water quality.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 9. LAND USE AND PLANNING. Would the project: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project would not divide an established community or conflict with any applicable land use plan, policy or regulation. In addition, it would not conflict with any applicable habitat conservation plan or natural community plan.

The project would implement general plan policies that support restoration of channelized waterways, as follows:

- OSC-D-7: Rehabilitate existing channelized waterways, as feasible, to remove concrete linings and allow for a connection with the stream channel and the natural water table. Avoid creating additional channelized waterways, unless no other alternative is available to protect human health, safety and welfare.
- OSC-D-8: Restore channelized waterways to a more natural condition, which allows for more natural hydraulic functioning, including development of meanders, pools, riffles and other stream features. Restoration should also allow for growth of riparian vegetation, which effectively stabilizes banks, screens pollutants from runoff entering the channel, enhances fisheries, and provides other opportunities for natural habitat restoration.

Over the short-term, there would be some nuisance impacts to adjacent land uses related to noise, construction equipment and generation of dust,

As a project that extends the linear parkway/promenade from Railroad Square to Pierson Street, the project would have a unifying impact on land uses in the vicinity and along the Santa Rosa Creek corridor. The project also implements goals and policies of the General Plan that relate to creek restoration (see above). The land use impact of the project individually and cumulatively is beneficial (**Beneficial Impact (B)**).

Mitigation Measures:

None required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 10. MINERAL RESOURCES. Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

There are no known State-designated (MRZ-2) mineral resources located at the project site. ^{xii} **(No Impact)**

Mitigation Measures:

None required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| 11. NOISE. Would the project result in: | | | | |
| a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Exposure of persons to, or generation of, excessive ground-borne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing in or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing in or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Noise During the Construction Period

Development of the project would result in substantial noise during the construction period that would be audible from nearby residences and other land uses. Residences would be considered the most noise-sensitive uses (sensitive receptors) in the project area. Construction activities would include removal of existing grouted concrete with jack-hammers, further excavation, grading and re-contouring of the creek channel, and transportation of construction materials to and from the site. Potentially significant noise-related impacts could be reduced to a less-than-significant level by incorporating the following mitigation measures **(Potentially significant impact requiring mitigation to reduce the impact to a less-than-significant level (PS/M))**.

Mitigation Measures:

- 11-1 Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (7:00 a.m. to 7:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City’s project manager approve such work.
- 11-2 Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited.
- 11-3 The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 12. POPULATION AND HOUSING. Would the project: | | | | |
| a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project would not result in population growth, nor would it displace any housing units or people requiring housing units (**No Impact**).

Mitigation Measures:

None required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| 13. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services: | | | | |
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project involves restoring the existing creek channelized waterway in the Prince Reach of Santa Rosa Creek. Improvements including the multi-use path and the bridge under-crossings have already been made. Increasing use of the creek would require some additional police surveillance, but this impact is not anticipated to be potentially significant. The project would not result in impacts to public services. No additional public services are required (**No Impact**).

Mitigation Measures:

None required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 14. RECREATION. Would the project: | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project would not result in the demand for additional recreation services or require the construction or expansion of recreational facilities. As a project that would enhance the linear parkway/promenade through the Pierson Reach of Santa Rosa Creek, the project would attract additional users to the project area. The project would enhance an existing recreation resource and would result in a beneficial impact to recreation (**Beneficial Impact**).

Mitigation Measures:

None Required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| 15. TRANSPORTATION / TRAFFIC. Would the project: | | | | |
| a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Exceed, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

Traffic Impacts During the Construction Period

The project would result in some truck traffic during the construction period due to the need to deliver and remove equipment and materials, and due to the need to remove some soil from the creek reach. Staging could be accomplished on parcels adjacent to the creek.

Neighbors would be notified of the construction period with an area sign so that they are aware that there will be trucks and other equipment in the vicinity.

Transportation/Traffic

The proposed project would implement General Plan policy T-K-6, as follows:

- T-K-6: Integrate multi-use paths into all creek corridors, railroad right-of-way and park designs.

On an ongoing basis, the project would result in beneficial impacts related to traffic and circulation

Parking

Over-time, as more people are drawn to the Santa Rosa Creek corridor, additional parking may be needed at trailhead locations.

The project would result in some additional demand on parking in the vicinity of the Pierson Reach and would result in some cumulative parking impact as the pathway is extended and connected to other reaches of Santa Rosa Creek. This impact would not be considered significant. The project is being designed to be an integral part of the existing pedestrian and bicycle network of Santa Rosa, which would encourage people to reach the project by foot or bicycle rather than by car. Over the short term, construction of the project would result in some congestion in the project area **(LS/M)**. The overall impact of the project on transportation, circulation and parking is beneficial **(Beneficial)**.

Mitigation Measures:

- 15-1 Flag-persons would be used as needed to direct trucks hauling soil from the site.
- 15-2 Neighbors would be notified of the construction period.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 16. UTILITIES AND SERVICE SYSTEMS. Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

The project would involve excavation into the existing creekbed. The project would not involve the need for any additional utilities or service systems (**No impact**).

Mitigation Measures:

None required.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant | No Impact |
|--|--------------------------------|--|--------------------------|-------------------------------------|
| 17. MANDATORY FINDINGS OF SIGNIFICANCE. | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

OVERVIEW OF ENVIRONMENTAL IMPACTS

As a project that involves restoration of an existing channelized creek, most project impacts are beneficial. However, some short-term impacts have been identified during the construction period. Project impacts are described below.

Aesthetics: The project would enhance the existing linear parkway/promenade by adding visual interest along the corridor (Beneficial **(B)**).

Air Quality: The project would result in some short-term air quality impacts due to the excavation of the low-flow channel and other earthwork and grading. Over the long-term, restoring the creek, planting trees, and enhancing the project area would reduce air quality impacts by improving a corridor used for alternative transportation (Less-than-significant **(LS/M)**; Beneficial **(B)**).

Biological Resources: The project would require removal of the very limited existing vegetation along the upper banks of the creek channel. The project would involve planting of riparian vegetation. Over the short-term, the project could result in impacts to aquatic wildlife. Mitigation is included to reduce this potential impact to a less-than-significant impact. Over the long-term, the project would result in a very beneficial impact to biological resources, including riparian vegetation and fisheries (Beneficial **(PS/M, B)**).

Cultural Resources: Stream courses are sensitive areas with respect to cultural resources. While there are no known Stream artifacts in the creek, the potential to encounter resources exists. Mitigation measures are identified to minimize impacts in the event that resources are encountered during the construction period (Less-than-significant impact; mitigation measures are identified as a condition of project approval to further reduce the level of impact **(LS/M)**).

Geology/Soils: The project would result in potential erosion and sedimentation. Mitigation measures are identified to reduce this potential impact to a less-than-significant level (Potentially significant impact; mitigation is required to reduce this potential impact to a less-than-significant level **(PS/M)**).

Hazards: There are no hazardous waste sites listed on the Cortese List in the project vicinity. However, some parcels have a history of contaminated soil in the project vicinity. Contaminated soils and/or groundwater could be encountered during project construction. Mitigation measures are identified to reduce potential impacts to less-than-significant levels (Potentially significant impact; mitigation is required to reduce this potential impact to a less-than-significant level **(PS/M)**).

Hydrology/Water Quality: The project would involve some excavation into the existing channel and the removal of existing grouted concrete and rock along the creek banks and bottom of the channel. The design criterion and performance standard for the project is that there be no significant increase in water surface elevation for any particular storm (Potentially significant impact; mitigation is required to reduce this potential impact to a less-than-significant level **(PS/M)**).

Land Use: The project would not divide an established community or conflict with any applicable land use plan, policy or regulation. The project would implement policies in the General Plan that support restoration of channelized waterways and the development of a creek promenade through the downtown core of Santa Rosa (Beneficial Impact **(B)**).

Noise: The project would result in potentially significant noise impacts during the construction period. Noise impacts would be reduced to a less-than-significant level with identified mitigation measures. (Potentially significant impact requiring mitigation to reduce the impact to a less-than-significant level **(PS/M)**).

Recreation: The project would result in a beneficial impact related to recreation; enhancing the creek corridor through restoration would draw many additional users for wildlife viewing and bird-watching, by enhancing an opportunity for walking within the neighborhood without using the existing roadway (Beneficial **(B)**).

Transportation and Circulation: The project would result in some additional traffic during the construction period. Over the long term, restoring the creek will draw additional users to this corridor as an alternative transportation corridor. While the multi-use bicycle/pedestrian path has already been installed, this project would also contribute to greater use of the creek; restoration of the creek corridor would draw many additional users to the creek for wildlife viewing/bird-watching and ecological study. As the creek environment is enhanced, many additional users would use the linear parkway as an alternative transportation corridor (Short-term impact: Less-than-significant **(LS/M)**; Long-term impact Beneficial **(B)**).

(Form updated 7/06/04)

Authority: Public Resources Code Sections 21083, 21084, 21084.1, and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.1 through 21083.3, 21083.6 through 21083.9, 21084.1, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal. App. 3d 1337 (1990).

Endnotes/Information Sources

ⁱ Santa Rosa 2020 General Plan Land Use Diagram, As Amended May 11, 2004.

ⁱⁱ Zoning Map of the City of Santa Rosa, Effective September 3, 2004

ⁱⁱⁱ Potential Range of the Sonoma County California Tiger Salamander, U.S. Department of the Interior, Fish and Wildlife Service, Sacramento, CA. October 23, 2003.

^{iv} Important Farmlands Map, California Department of Conservation – Division of Resource Protection, 1996.

^v Sonoma County Agricultural Preserve Lands Subject to Enforceable Restrictions, Sonoma County Planning Department, May 2000.

^{vi} Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, April 1996; Revised December 1999. BAAQMD Office: 939 Ellis Street, San Francisco, CA 94109.

^{vii} A Cultural Resources Evaluation of Prince Memorial Greenway, Santa Rosa Creek, Santa Rosa, CA, June, 1997.

^{viii} Sonoma County Soil Survey, USDA and UC Agricultural Experiment Station, May 1972; reviewed and approved for reprinting, August 1990, Sheet Number 81; p. 88.

^{ix} Environment, Community & Opportunity Network (ECON), Pre-construction Corridor Study (Limited Phase One ISA), Pierson Reach Path Project, Santa Rosa Creek, Santa Rosa, CA, December 1, 2001.

^x Department of Toxic Substances Control Hazardous Waste and Substances Site List (Cortese List), March 12, 2005. (http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm)

^{xi} Telephone communication with Stephen Chatham, Principal, Prunuske-Chatham, October 19, 2005.

^{xii} Sonoma County General Plan, December 31, 1998, as amended, Figure RC-2i. (www.sonoma-county.org/prmd/docs/gp/index.htm).

3. MITIGATION MONITORING PROGRAM

Table 1
Pierson Reach Creek Restoration Project
Project Name

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to reduce identified significant environmental impacts to a level of insignificance, or to further reduce the level of impact, where indicated. A completed and signed report for each mitigation measure indicates that this mitigation measure has been complied with and implemented.

Mitigation measures required to reduce Potentially Significant Impacts to less-than-significant levels are identified as: **(PS/M)**.

Mitigation measures required or recommended as conditions of project approval for Less-than-Significant Impacts to further reduce the level of impact are identified as: **(LS/M)**.

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|---|---|----------------|------------------------|---------|
| Air Quality (LS/M) | | | | |
| 3-1 During earth disturbing activities, the contractor shall be responsible for spraying exposed soil surfaces with water or another approved dust inhibitor. The contractor would be responsible for cleaning streets and driveways of fugitive soils in the immediate vicinity of construction work, as necessary. | <div style="border: 1px solid black; padding: 5px;"> The City of Santa Rosa Department of Public Works would implement or oversee implementation of all mitigation measures. </div> | | | |
| 3-2 The contractor shall be responsible for ensuring that all construction equipment and vehicles are maintained in good operating order and that all factory installed emission control devices are installed and functioning properly. All vehicles and construction equipment shall be turned off when not in use to minimize emissions. | | | | |
| 3-3 Feasible Control Measures for Construction Emissions of PM ₁₀ would also include: | | | | |
| (a) Water all active construction areas daily, as required to minimize mobilization of dust. | | | | |
| (b) Apply soil stabilizers to exposed soil surfaces and staging areas. | | | | |
| (c) Sweep all paved access roads daily with water sweepers. | | | | |

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|---|-------------------|----------------|------------------------|---------|
| <ul style="list-style-type: none"> (d) Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). (e) Replant vegetation in disturbed areas as quickly as possible, and always prior to the onset of winter rains. (f) Limit the area subject to construction activity at any one time, as applicable to the project. | | | | |
| <p>3-4 Air monitoring would be conducted during the excavation process where soils are contaminated with hydrocarbons.</p> | | | | |
| Biological Resources (PS/M) | | | | |
| <p>4-1 To minimize the potential for disruption and harm to aquatic life indigenous to the water body, the following measures should be implemented:</p> <ul style="list-style-type: none"> (a) Prior to channel disturbance activity, fish and amphibians would be removed from the project area and placed upstream or downstream, depending on the species. (b) Work would only occur during the dry season, as permitted by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), the North Coast Regional Water Quality Control Board (NCRWQCB), the U.S. Army Corps of Engineers (ACOE), and NOAA Fisheries. (c) During construction, a biological monitor would be onsite for work taking place in aquatic habitat. | | | | |
| <p>4-2 The Restoration Planting Plan would utilize native species, emphasizing those that effectively help to stabilize the newly configured banks.</p> | | | | |
| <p>4-3 Points of excessive erosion potential would be designed with a hardened, un-erodable surface.</p> | | | | |
| <p>4-4 All exposed soils would be protected with erosion control fabrics and other measures specified in Standard Best Management Practices for erosion control.</p> | | | | |
| <p>4-5 In-stream vegetation (i.e., marsh cells) would function to trap sediments and decrease downstream transport of fine sediments.</p> | | | | |

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|--|-------------------|----------------|------------------------|---------|
| 4-6 Areas where concentrated contaminants occur would be resealed. | | | | |
| 4-7 Marsh areas would be developed (to the extent that "roughness" is permitted while still maintaining channel "n" values) to help to trap and remediate through natural treatment processes the pulse of low flow contamination, which may be released after construction. | | | | |
| 4-8 Use of the project area by aquatic and terrestrial animals would be monitored following project completion to evaluate the effectiveness of the improvements to the stream. | | | | |

Cultural Resources (LS/M)

- 5-1 If archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and features remains such as building foundations, and discrete trash deposits (e.g., wells, privy pits, dumps).
- 5-2 If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|--------------------|-------------------|----------------|------------------------|---------|
|--------------------|-------------------|----------------|------------------------|---------|

Geology and Soils (PS/M)

6-1 Project construction would utilize best management practices for handling of soil to ensure that the project does not result in sedimentation of the channel. Geo-fabric or other slope stabilization materials would be used to stabilize reconfigured slopes prior to the onset of winter rains. Best management practices would include, but not be limited to the following:

- (a) Allow work only when stream flows are low and are routed around the work area.
- (b) Utilize phased construction periods to control the amount of work zone sites that are exposed at one time.
- (c) Utilize a dewater/sedimentation tank system. Dewatering zones are separated by sedimentation dams with controlled overflows. Sedimentation dams are dry weather features only and contain failure of a dewatering system or breach of the bypass system/coffer dam.
- (d) All exposed graded slopes not re-armored would receive high quality erosion control blankets installed in a timely manner. All areas of restored creek below the 100-year water surface elevation would receive ultimate surface treatment prior to the October 15th end of work period.
- (e) Re-vegetation of the creek zone would be conducted concurrent with all phases. Hydro-seeding, mulching, or other common organic methods would be included for all phases.
- (f) All areas that would ultimately be planted would have erosion blankets placed in grassed areas. Revetment or other high velocity armoring systems would be blanketed with soil filter fabrics to reduce soil loss.

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/Installed | Remarks |
|--|-------------------|----------------|-----------------------|---------|
| Hazards (PS/M) | | | | |
| 7-1 The selected contractor would be supplied with the ECON Limited Phase One ISA summary document. The potential to encounter impacted soil and groundwater would be discussed. | | | | |
| 7-2 Hazardous materials encountered in the project area would be addressed as follows: (a) For soils with petroleum products, excavated soils would be stockpiled, categorized, and disposed of at a qualified landfill. Air monitoring would also be conducted. (b) Groundwater would be treated with activated carbon or treated at the Sub-regional Treatment Plant, as needed, prior to discharge. Cut-off dams and impermeable backfill may also be required on a site-specific basis. (c) The City would notify residents of the construction period with an area sign. | | | | |
| 7-3 Water monitoring should be conducted on a periodic basis to identify any increases in sediment load or contaminants. | | | | |
| Hydrology/Water Quality (PS/M) | | | | |
| 8-1 The design criterion and performance standard for the project is: <i>There is to be no significant increase in water surface elevation for any particular storm.</i> | | | | |
| 8-2 Best management practices would be implemented for excavation, grading and any stockpiling of soils to minimize erosion and sedimentation. | | | | |
| 8-3 The project would be constructed during the dry season between June 15th and October 15 th . All exposed surfaces would be hydro-seeded/mulched prior to the onset of winter rains. Bio-engineering techniques. Bio-engineering techniques should also be used to stabilize banks. In addition, | | | | |

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|--|-------------------|----------------|------------------------|---------|
| <p>geo-fabric and other slope stabilization materials should be used as needed to minimize erosion.</p> | | | | |
| <p>8-4 Water monitoring would be conducted on a periodic basis to identify any increases in sediment load and/or contaminants. Additional plantings should be installed to provide additional stabilization of slopes if increases in sediment are observed. A monitoring plan would be implemented during and at the end of the rainy season, following project installation, to ensure that erosion control measures are sufficient and that appropriate remedial action is taken, if deemed necessary. Some re-armoring of the banks could be required if contaminants are identified that are adversely affecting water quality.</p> | | | | |
| Noise (PS/M) | | | | |
| <p>11-1 Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (7</p> | | | | |
| <p>11-2 :00 a.m. to 7:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City’s project manager approve such work.</p> | | | | |
| <p>11-2 Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited.</p> | | | | |
| <p>11-3 The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses.</p> | | | | |
| Traffic and Circulation (LS/M) | | | | |
| <p>15-1 Flag-persons would be used as needed to direct trucks hauling soil from the site.</p> | | | | |
| <p>15-2 Neighbors would be notified of the construction period.</p> | | | | |

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|---------------------------|--------------------------|---------------------------|-----------------------------------|----------------|
|---------------------------|--------------------------|---------------------------|-----------------------------------|----------------|

Exhibit 2: Initial Study/Mitigated Negative Declaration

| Mitigation Measure | Monitoring Agency | Shown on Plans | Constructed/ Installed | Remarks |
|---------------------------|--------------------------|---------------------------|-----------------------------------|----------------|
|---------------------------|--------------------------|---------------------------|-----------------------------------|----------------|

4. Agencies and Organizations Consulted

- Sonoma County Water Agency (SCWA)
- Regional Water Quality Control Board (RWQCB)
- California Department of Fish and Game (CDFG)
- USDA – Natural Resource Conservation Service (NRCS)
- U.S. Army Corps of Engineers (ACOE)
- NOAA Fisheries

5. Report Preparation

This report was prepared by Nancy Dakin, Environmental Planner in association with staff from the City of Santa Rosa Public Works Department.

Report Personnel

City of Santa Rosa Public Works Department

Richard Moshier, Director
Steve Dittmer, Supervising Engineer
Nancy Adams, Transportation Planner
Steve Brady, Fisheries Biologist

City of Santa Rosa Department of Community Development

Charles J. Regalia, Director, Community Development Department
Marie Meredith, Deputy Director, Community Development

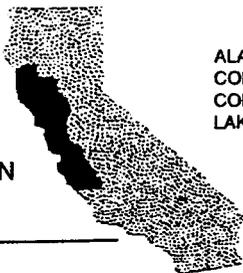
Consultants

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Appendix

**A. California Historical Resources Information System
Letter of March 7, 2005**

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
LAKE

MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO

SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1303 Maurice Avenue
Rohnert Park, California 94928-3609
Tel: 707.664.0880 • Fax: 707.664.0890
E-mail: nwic@sonoma.edu

7 March 2005

File No.: 04-SO-134

Nancy Dankin
Environmental Planner
2435 Professional Drive, Suite B
Santa Rosa, CA 95403

re: CEQA Review-Cultural Resources Review for the Restoration of Santa Rosa Creek - Pierson Reach, Santa Rosa

Dear Ms. Dankin:

Records at this office were reviewed to determine if this project could adversely affect historical resources. The review for possible historic structures, however, was limited to references currently in our office. **Please note that use of the term historical resources includes both archaeological sites and historic structures.**

___ The proposed project area contains or is adjacent to the archaeological site(s) (). A study is recommended prior to commencement of project activities.

XX Study #S-26342(V. Beard,2001) identified no historical resources. Further study for historical resources is not recommended.

___ The (year) (name) 15' quads depict (number of) buildings in the proposed project area. Since the Office of Historic Preservation has determined that any building or structure 45 years or older maybe of historic value, if this or any other such building is located in the project area then it is recommended that they be evaluated by an architectural historian familiar with the history of Sonoma County.

XX Review for possible historic structures was limited to the Northwest Information Centers documents and should not be considered comprehensive.

XX We recommend you contact the local Native American tribe(s) regarding traditional, cultural, and religious values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/653-4082.

___ Comments:

If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 664-0880.

Sincerely,

Leigh Jordan
Leigh Jordan
Coordinator