6 ALTERNATIVES

6.1 INTRODUCTION

The California Code of Regulations (CCR) Section 15126.6(a) (State CEQA Guidelines) requires EIRs to describe "… a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project, and foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

> Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Dry Creek Greenway Multi-Use Trail. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "…shall also identify an environmentally superior alternative among the other alternatives." (CCR Section 15126[e][2]).

In defining "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"), CCR Section 15126.6(f) (1) states, in part:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These

factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, here the City of Roseville City Council. (See PRC Sections 21081.5, 21081[a] [3].)

6.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

The purpose of the alternatives analysis is to determine whether or not a variation of the Dry Creek Greenway Multi-Use Trail Project would reduce or eliminate significant project impacts, while attaining most of the project's basic objectives.

6.2.1 Project Purpose and Objectives

One of the key factors in considering alternatives is whether they can feasibly attain most of the basic objectives of the project. As described in Chapter 3, "Project Description" of this Draft EIR, during development of the 2009 Dry Creek Greenway Planning and Feasibility Study the following Purpose and Need Statement was drafted by the Stakeholder Representative Group (SRG) and accepted by the City Council:

> "The Dry Creek Greenway multi-use trail is envisioned as a paved, off-street trail along Dry, Cirby, and Linda Creeks that will provide residents a place for bicycling, walking, running, and dog-walking, for fun, education, recreation, health, and transportation.
>
> The Dry Creek Greenway trail is a vital component of the City of Roseville Bikeway and Trail system because it will provide a safe, comfortable, convenient, and highly connected bike route as an alternative to using City streets in an area of the City that is underserved by bicycle facilities. The Dry Creek Greenway trail will connect schools and businesses to residential neighborhoods. The trail will also provide important regional connections as it is part of a series of existing and planned paths that will form a loop around the greater South Placer/Sacramento area."

The objectives for the Dry Creek Greenway Multi-Use Trail are to:

- Develop a safe and continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways.
- Enhance access to the Dry Creek, Cirby Creek, and Linda Creek open space areas for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response.
- Protect the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas, minimize the potential for loss of life and property due to flooding, enhance compatibility with private properties, and reduce the need for right-of-way acquisition.
- Seek the most effective and efficient balance of capital cost, operational and maintenance costs, environmental and community impacts, and public benefits.
- Direct consideration of cost is not required under CEQA. However, efforts to attain this objective are part of the design process employed by the City in meeting its health, welfare and economic obligations to the citizens of Roseville.

6.2.2 Significant Effects of the Dry Creek Greenway Multi-Use Trail

Impacts associated with implementation of the proposed project are evaluated in Chapters 4 and 5 of this Draft EIR. As identified in Table 2-1, "Summary of Impacts and Mitigation Measures," construction and/or use of the proposed project would have the potential to cause the following significant but mitigable environmental impacts:

4.2-1 Short-term construction-generated and long-term use-related emissions of ROG, NO_X, $PM_{10,}$ and $PM_{2.5}$.

4.3-1 Disturbance and loss of waters of the United States, waters of the state and riparian habitat.

4.3-2 Central Valley steelhead and Central Valley fall/late fall-run Chinook salmon.

4.3-3 Disturbance or loss of valley elderberry longhorn beetle or its habitat.

4.3-4 Disturbance or loss of Swainson's hawk, white-tailed kite, and other nesting raptors.

4.3-5 Disturbances to special-status song birds.

4.3-6 Disturbance or loss of Western pond turtle.

4.3-7 Disturbance or loss of special-status bats – pallid bat and silver-haired bat.

4.3-8 Disturbance or loss of City protected trees, oak woodlands and other sensitive vegetation alliances and associations.

4.3-9 Disturbance or loss of special-status plants – Sanford's arrowhead.

4.3-10 Impacts on movement of native resident or migratory fish or wildlife species or migratory wildlife corridors or impede the use of native wildlife nursery sites.

4.4-1 Disturb archaeological resources, including tribal cultural resources.

4.4-2 Accidental discovery of human remains.

4.7-5 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are located adjacent to urbanized areas or where residences are intermixed with wildlands.

4.10-3 Exposure to construction-related groundborne vibrations.

4.13-1 Safety-related traffic impacts during construction.

As discussed in the technical sections of this Draft EIR, all but one potentially significant impact would be reduced to a less-than-significant level with mitigation under the proposed project:

4.10-1 Short-term construction-related noise.

6.3 ALTERNATIVES CONSIDERED AND ELIMINATED FROM FURTHER EVALUATION

The State CEQA Guidelines state that an EIR should identify alternatives that were initially considered by the lead agency, but were rejected as infeasible and explain the reasons for the determination (Section 15126.6[c]). As described in Chapter 3, "Project Description" of this Draft EIR, the City has conducted an extensive planning process and consideration of alternatives for the proposed project, as reported in the 2009 Dry Creek Greenway Planning and Feasibility Study. For planning purposes, the path alignment was initially divided into twelve segments, numbered from west to east. Connections were considered to Hillcrest, Cirby Side, Sierra Gardens, Meadow Oaks, and Maidu neighborhoods, Eich Intermediate and Sierra Gardens Elementary Schools, and to Maidu Regional Park. The alternatives analysis considered 30 different creek crossing alternatives and in the end, eliminated 12 creek crossings from consideration. The 18 remaining creek crossings were carried forward to the next stage of project planning. Of these, 3 were existing bridges. Four areas along the path were recommended as trailhead access points: 1) Riverside Avenue; 2) Rocky Ridge Drive; 3) Eastwood Park; and 4) Old Auburn Road (north and south).

The study outlined the existing conditions, opportunities and constraints, alignment options, evaluation criteria, and a recommended alignment for a paved multi-use trail from Riverside Avenue and Darling Way to the City limits just south of Old Auburn Road. The SRG selected a preferred alignment based on criteria that included consideration of property owners, path users, public safety, environmental concerns, and municipal operations. There were two segments of the trail where the SRG did not reach a consensus on a recommended alignment. These were referred to as Segment 1 – Hillcrest and Segment 5 – Sunrise Avenue in the feasibility study. Segment 1 is the first portion of the proposed trail between the end of the Saugstad/Royer Trail at Darling Way to the area south of Machado Lane, west of the I-80 underpass. Segment 5 is located in the Cirby Side neighborhood to the east and west of Sunrise Avenue. Segment 5 begins near the Cirby Creek/Linda Creek confluence west of Sunrise Avenue to just east of the Sunrise Avenue bridge near the Meadow Gate connection. Four alignment options were identified for Segment 1 (1A, 1B, 1C, and 1D) and three alignment options were identified for Segment 5 (5A, 5B, and 5C).

The City then conducted an Alternatives Analysis in 2012 and 2013 to provide further information regarding alternative trail alignment options. Each of the alignment options were evaluated using criteria developed during for the 2009 Planning and Feasibility Study, in conjunction with the SRG, and based on the ability of each option to meet the project goals and objectives, as well as the feasibility criteria. A matrix was used to compare benefits, constraints, advantages, and disadvantages of each option. During this process, two of the options, Alternative 1D and Alternative 5C, were dismissed from further evaluation. The remainder of the alternative trail alignment options were carried forward. Options 1B and 5B were incorporated into the Proposed Trail Alignment and are part of the proposed project; Options 1A, 1C, and 5A are referred to as alignment options in this EIR and are described below and analyzed in each technical section of this EIR.

6.3.1 Alternative 1D

This alignment option would begin just before the existing terminus of the Saugstad/Royer trail, travel under the bridge on the east side of Dry Creek and continue south for approximately 700 ft. The trail alignment would continue along the east side of Dry Creek and Cirby Creek for approximately 500 feet before crossing Cirby Creek via Bridge #4 to the southern bank of Cirby Creek, and continue within the floodplain along the south side of Cirby Creek toward the I-80 underpass. Access to the proposed trailhead parking would be via Riverside Avenue. Ultimately access to the trailhead parking and future trail extension to lower Vernon Street, would be provided via Bridge #2.

As a result of limited access and no direct connection to the trail head parking, Alternative 1D ranked poorly in terms of the potential to create additional traffic and parking in the neighborhood and trail accessibility and connectivity. Costs associated with this alternative and minimal right-of-way requirements resulted in good ranking for these criteria. It was recommended that this option not be considered by City staff for recommendation to the City Council and Transportation Commission.

6.3.2 Alternative 5C

The alignment option would begin just south of the confluence of Cirby Creek and Linda Creek and cross Linda Creek via Bridge #13 and follow the northern bank of Linda Creek within the City owned property. The trail would tie into the existing maintenance path in front of the floodwalls on the north side of Linda Creek and travel eastward under Sunrise Boulevard overcrossing. The alignment would continue east, using the existing maintenance ramp in the vicinity of the existing drainage outfall structure, before continuing further east toward Oak Ridge Drive. No direct access would be provided to Sunrise Boulevard.

Alternative 5C ranked poorly in terms of accessibility and providing connectivity to surface streets compared to the Alternatives 5A and 5B. It also ranked lower than the proposed alignment and other alternatives related to visibility and emergency access to the trail. Visual impacts to adjacent property owners were considered low for this alternative. This alternative ranked well in terms of constructability using an existing bench on north side of Linda Creek; however, the elevation of this bench at the 2-year water surface elevation (WSE) would mean the trail would be unusable for storms greater than the 2-year event. This alternative would require minimal right-of-way acquisition. It was recommended that this option not be considered by City staff for recommendation to the City Council and Transportation Commission.

6.3.3 Additional On-street Portions of the Path

The City also previously considered an alternative design that would include more on-street bikeways. This alternative would create areas within paved streets identified by striping and signs for preferential (semi-exclusive) bicycle use (Class II bike paths). Proposed retaining walls in areas susceptible to slumping would not be constructed. Areas currently subject to localized creep, slumping, and small landslides on over-steepened slopes, along incised drainages, and during periods of water saturation would continue to be subject to localized ground failure. While this alternative could reduce the proposed project's effects to biological resources and construction-related noise impacts because construction along the creek corridors would be reduced, it would not implement the City's Bicycle Master Plan by providing a Class I off-site trail. Therefore, this alternative would not meet the proposed project objectives for the Dry Creek Greenway Multi-Use Trail. For these reasons, an alternative design with additional on-street portions of the trail was dismissed from further analysis in this EIR.

6.4 ALTERNATIVES CONSIDERED FOR DETAILED EVALUATION

As discussed above, during the 2013 Alternatives Analysis Options 1B and 5B were incorporated into the Proposed Trail Alignment and are part of the proposed project; Options 1A, 1C, and 5A are referred to as alignment options in this EIR and analyzed in each technical section.

6.4.1 No Project Alternative

Under the No Project Alternative, the Dry Creek Greenway Multi-Use Trail would not be constructed. The creek corridors along portions of Dry, Cirby, and Linda creeks would continue to contain segments of existing unimproved, natural-surface paths and paved multi-use paths, some of which do not meet current City design standards. Proposed retaining walls in areas susceptible to slumping would not be constructed, other bank stabilization elements would not be constructed, and access to the creek corridor for utility maintenance, open space maintenance, and emergency response would not be enhanced.

Aesthetics

Under the No Project Alternative, there would be no alteration of the visual quality or character of the project site. Views of the project site from surrounding vantage points would not change, and no new sources of light and glare would be created. This alternative would not introduce new pavement, structures, and recreational users into new areas. The No Project Alternative would avoid the less-than-significant impacts associated with the visual character of the site and sources of new light and glare, and Impacts 4.1-1 and 4.1-2 would not occur. Overall, impacts under this alternative would be less than those that would occur with the proposed project.

Air Quality

Under the No Project Alternative, no earthwork or ground-disturbing activities would occur, nor would any associated vehicle trips related to trial construction or maintenance, and this alternative would not result in the exposure of sensitive receptors to TAC levels. The less-than-significant construction and operation-related impacts identified for the proposed project would not occur. Air quality impacts under this alternative would be less than those that would occur with the proposed project.

Biological Resources

Under the No Project Alternative, no earthwork or ground-disturbing activities would occur. There would be no potential for construction-related disturbance of special-status plant or animal species or their habitat or disturbance or loss of oak woodlands, and disturbance or loss of wetlands or other waters of the U.S. would not occur. This alternative would avoid the project's potentially significant impacts to these resources, and no mitigation would be required under this alternative.

Cultural Resources

Under the No Project Alternative, no earthwork or ground-disturbing activities would occur. There would be no potential for disturbance to undiscovered human remains or archaeological resources. Therefore, no impacts related to cultural resources would occur and Mitigation Measures 4.4-1 and 4.4-2 would not be required. Cultural resource impacts under this alternative would be less than those that would occur with the project.

Geology and Soils

Because no development would occur under the No Project Alternative, there would be no construction requiring excavation in an area with steep banks and loose, granular soils that could be susceptible to localized areas of slope failure. Proposed retaining walls in areas susceptible to slumping would not be constructed. Areas currently subject to localized creep, slumping, and small landslides on over-steepened slopes, along incised drainages, and during periods of water saturation would continue to be subject to localized ground failure and no bank stabilization elements would be constructed. Future soil and streambank erosion could continue to occur, creating adverse environmental effects. Overall, impacts under this alternative would be slightly greater than those that would occur with the proposed project.

Greenhouse Gas Emissions and Climate Change

Under the No Project Alternative, the project site would remain undeveloped land. Because no construction would occur, this alternative would not increase emissions of greenhouse gases (GHG). Under the No Project Alternative, vehicle miles traveled would not be reduced because it is unlikely that vehicle commuters would commute by bicycle instead of motor vehicles without a contiguous paved path. Implementation of the No Project Alternative would generate slightly fewer emissions overall; therefore, overall impacts under this alternative would be less than those that would occur with the project.

Hazards and Hazardous Materials

Under the No Project Alternative, there would be no use of hazardous materials onsite for construction or operation, because the site would remain undeveloped land. This alternative would avoid exposing people or structures to wildland fire during construction activities that could ignite the dry grasses on, and adjacent to, the project site. This alternative would not result in a potentially significant impact related to public health and safety related to hazardous materials or hazards, and Mitigation Measure 4.7-5 would not be required. Overall, hazards and hazardous materials impacts under this alternative would be less than those that would occur with the project.

Hydrology and Water Quality

Under the No Project Alternative, no construction or soil disturbance would occur; therefore, there would be no construction-related water quality impacts and no potential to introduce oil, grease, litter, and chemical pollutants into Dry, Linda, and Cirby Creeks during long term maintenance and repair of the multi-use path. Additionally, there would be no encroachments within the regulated floodway. As discussed above under Geology and Soils, future soil and streambank erosion could continue to occur because retaining walls in areas susceptible to slumping would not be constructed and bank stabilization elements would not be constructed. Overall, impacts under this alternative would be slightly greater than those that would occur with the proposed project.

Land Use and Planning

The No Project Alternative would not construct the proposed multi-use trail. While this alternative would not require the acquisition of right-of-way from the 38 parcels, it would also not create a linear travel corridor that would provide linkages through the community. This alternative would not implement the City's Bicycle Master Plan, which includes a plan for development of Class I trails in Roseville. This alternative would not result in the beneficial impact associated with the proposed project related to the provision of linkages through the existing community. Overall, the No Project Alternative would result in less-than-significant impacts related to land use and planning that would be slightly greater than with the proposed project.

Noise

Under the No Project Alternative, no construction activities would take place, and there would be no increases in short-term construction-related noise or vibration. No increase in operational noise would occur, and this alternative would not expose persons to, or generate, operational noise levels in excess of adopted standards. The No Project Alternative would avoid the less-than-significant impacts associated with construction and operational noise impacts. It would also avoid the potentially significant vibration impact related to construction. Overall, impacts under this alternative would be less than those that would occur with the project, and Mitigation Measures 4.10-1a, 4.10-1b, 4.10-1c, and 4.10-3 would not be required.

Public Services

Under the No Project Alternative, the project site would remain undeveloped land and would not generate additional visitors along the creek, including neighbors and transitory users. This alternative would not facilitate utility or open space maintenance access, or emergency vehicle access, including fire apparatuses along the creek corridor. The RFD has stated that without the trail, their ability to

respond to a fire in the open space is hampered. Similarly, the RPD has indicated that the trail assists police efforts to reduce loitering or illegal camping in the open space. The No Project Alternative would result in less-than-significant impacts related to public services that would be slightly greater than with the proposed project.

Recreation

Unlike the proposed project, the No Project Alternative includes no new recreation facilities and would not include connections to local or regional tails or other recreation facilities. The proposed project results in less-than-significant impacts related to recreation. No recreation-related impacts would occur under the No Project Alternative.

Utilities

Under the No Project Alternative, the project site would remain undeveloped and there would be no need for preparation of a SWPPP to manage stormwater during construction and use as with the Proposed Trail Alignment. However, under this alternative the proposed trail would not be available to provide maintenance and emergency access for the City Environmental Utilities Department, open space and storm water maintenance crews, and the Roseville Fire Department. Overall, impacts under this alternative would be less than those that would occur with the project.

ABILITY TO ACHIEVE PROJECT OBJECTIVES

The No Project Alternative would not meet the project's basic objectives. Access to the Dry Creek, Cirby Creek, and Linda Creek open space areas would not be enhanced for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response. Effects to the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas would not occur; therefore, they would continue to be protected in the same manner as under existing conditions. The No Project Alternative would not meet the objective to develop a continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways. In addition, the proposed retaining walls in areas susceptible to slumping would not be constructed. Areas currently subject to localized creep, slumping, and small landslides on over-steepened slopes, along incised drainages, and during periods of water saturation would continue to be subject to localized ground failure.

6.4.2 Option 1A Alternative Alignment

Option 1A Alternative Alignment would begin at the existing terminus of the Saugstad/Royer trail, travel across Darling Way bridge (potentially requiring widening of the bridge) and loop under the bridge on the west side of Dry Creek. The alternative would continue south for approximately 900 feet, crossing Dry Creek via Bridge #3 to the southern bank of Cirby Creek, from where it would traverse the existing steep slope down to the existing bench located above the 2-year water surface elevation, and continue within the floodplain along the south side of Cirby Creek toward the I-80 undercrossing. This alternative would require a retaining wall on the south side of Cirby Creek, east of the confluence with Dry Creek. Prior to Bridge #3 (on the north side of Dry Creek), access would be provided to the proposed trail-head parking area at Riverside Avenue and to the future trail extension to Vernon Street. Option 1A Alternative Alignment would require Bridge #3, but would eliminate the need for Bridge #2 and Bridge #4. See Chapter 3, "Project Description," for a description of this alternative, including Exhibit 3-13 of the proposed Option 1A alignment.

As explained on page 4-3 of this Draft EIR, this alternative is analyzed in Chapter 4, and each technical section includes a discussion of the substantial evidence supporting the impact significance conclusion for the Option 1A Alternative Alignment. The discussion that follows is a summary of the technical

analyses for this alternative to explain how this alternative compares to the proposed project. For a full evaluation, please see the appropriate resource section in Chapter 4, "Environmental Setting, Impacts, and Mitigation Measures." See Table 6-1 at the end of this chapter for a summary comparison of impacts between the Option 1A Alternative Alignment and the proposed project.

Aesthetics

The Option 1A Alternative Alignment would cross under Darling Way as described for the Proposed Trail Alignment, but would remain on the south side of the creek, closer to the commercial uses on Riverside Avenue and further from the residences that front Machado Lane. The Option 1A Alternative Alignment would also cross Dry Creek with one bridge (Bridge #3) rather than the two bridges (Bridges #2 and #4) required for the Proposed Trail Alignment. The retaining wall for this option would be located on the south side of Dry Creek, closer to the commercial uses. For these reasons, the trail may be less visible to existing residents under this alternative than with the Proposed Trail Alignment. As with the Proposed Trail Alignment, the actual visual change due to implementation of the Option 1A Alternative Alignment would be relatively low. As discussed for the Proposed Trail Alignment, there would not be light and glare impacts associated with the construction of this alternative. Because there would be one fewer bridge with associated lighting, and the bridge would be further from residences, which have more potential to be light sensitive than commercial land uses, there would be less potential for the Option 1A Alternative Alignment to have adverse effects related to light and glare, and this would remain a less-than-significant impact (see Section 4.1, "Aesthetics").

Air Quality

Although the Option 1A Alternative Alignment would require an additional 765 linear feet of retaining walls or streambank stabilization when compared to the Proposed Trail Alignment, the total number of bridges constructed under the Option 1A Alternative Alignment would be fewer. Construction emissions would be less than under the Proposed Trail Alignment, because emissions from the type of equipment needed to construct these elements would be less than emissions for the heavy equipment needed for bridge construction. This would result in fewer emissions associated with construction activities. However, the Option 1A Alternative Alignment could still potentially exceed PCAPCD's recommended CEQA-level project significance threshold of 82 lbs/day of NO_x during construction; Mitigation Measure 4.2-1 would be required, and the impact would be less than significant after mitigation (see Section 4.2, "Air Quality").

Biological Resources

The Option 1A Alternative Alignment would permanently affect up to 0.75 acre of riparian forest (0.05 acre more than the Proposed Trail Alignment). Option 1A Alternative Alignment would permanently affect up to 4.10 acres of valley oak riparian woodland (0.2 acre less than the Proposed Trail Alignment). Although the Option 1A Alternative Alignment would affect less acreage of valley oak riparian woodland than the Proposed Trail Alignment, it would result in permanent loss and temporary disturbance of wetlands and other waters of the United States, waters of the state, and associated riparian habitat.

Because this option does not require the construction of Bridge #2 or Bridge #4, the total permanent impacts to salmonid aquatic habitat (i.e., aquatic habitat) is 0.01 acres less than the Proposed Trail Alignment (or 0.25 acres). Similarly, temporary impacts to aquatic habitat is 0.03 acres less than the Proposed Trail Alignment (or 0.55 acres). The Option 1A Alternative Alignment would permanently impact 0.023 acre of SRA habitat (or 0.017 acre less than the Proposed Trail Alignment) and would temporarily impact 0.034 acre SRA habitat (or 0.109 acre more than the Proposed Trail Alignment).

Under the Option 1A Alternative Alignment, a total of 12 elderberry shrubs (as compared to 15 elderberry shrubs under the Proposed Trail Alignment) could be adversely impacted through direct removal of elderberry shrubs, ground-disturbing construction (cut/fill) within the root zone of the shrubs, or permanent removal of riparian habitat within 165 feet of elderberry shrubs. It is anticipated that implementation of this

alternative would result in the removal of a total of 0.89 acres (as compared to 1.22 acres under the Proposed Trail Alignment) of suitable riparian habitat within 165 feet of elderberry shrubs.

Because this option does not require the construction of Bridge #2 or Bridge #4, the total permanent impacts to Sanford's arrowhead habitat is 0.01 acre less than the Proposed Trail Alignment (or 0.25 acres). Similarly, temporary impacts to Sanford's arrowhead habitat is 0.03 acres less than the Proposed Trail Alignment (or 0.55 acres).

The Option 1A Alternative Alignment would result in similar impacts to nesting raptors, nesting special-status birds, western pond turtle, roosting special-status bats, migratory fish, and similar impacts to sensitive habitats as would occur with the Proposed Trail Alignment.

On balance, the Option 1A Alternative Alignment would have slightly less impact on biological resources than the Proposed Trail Alignment; however, all mitigation measures identified for the Proposed Trail Alignment would be required (see Section 4.3, "Biological Resources").

Cultural Resources

The Option 1A Alternative Alignment would cross Dry Creek via Bridge #3. By remaining on the south bank of Cirby Creek, this alternative would not require the construction of Bridge# 2 or Bridge #4. The total number of bridges constructed under the Option 1A Alternative Alignment would be fewer than the number of bridges constructed under the Proposed Trail Alignment, which would reduce the area of construction for ground-disturbing activities that could damage or destroy as yet undiscovered archaeological resources or human remains as compared to the Proposed Trail Alignment. Mitigation Measures 4.4-1 and 4.4-2 would be required, and these impacts would be less than significant after mitigation (see Section 4.4, "Cultural Resources").

Geology and Soils

The Option 1A Alternative Alignment would reduce the area of temporary and permanent impacts by 0.40 acre and 0.29 acre, respectively. There would be a corresponding 0.72 acre reduction in construction in the area mapped as slight erosion hazard when used for roads and trail, and a 0.03 acre construction increase in areas not rated. There would be no change in the bank erosion severity along this alternative compared to the Proposed Trail Alignment. Overall, impacts under this alternative would be less than significant but to a lesser degree than those that would occur with the proposed project (see Section 4.5, "Geology and Soils").

Greenhouse Gas Emissions and Climate Change

The total number of bridges constructed under the Option 1A Alternative Alignment would be fewer than the number of bridges constructed under the Proposed Trail Alignment, which would result in fewer GHG emissions associated with bridge construction activities. Construction emissions would be less than under the Proposed Trail Alignment, because emissions from the lighter duty-type of equipment needed to construct these elements would be less than emissions for the heavy equipment needed for bridge construction. Thus, construction activities under Option 1A Alternative Alignment would be less than estimated emissions for the Proposed Trail Alignment and would also be a less-than-significant impact (see Section 4.6, "Greenhouse Gas Emissions and Climate Change").

Hazards and Hazardous Materials

The Option 1A Alternative Alignment could require more activity in the southwest corner of the access and staging area on Riverside Avenue, which is the site of the former facilities at 649 Riverside Avenue. The Option 1A Alternative Alignment would reduce the area of temporary impacts by 0.40 acre, which would result in a proportional reduction in the potential to encounter undocumented contamination that has not been characterized or remediated. Mitigation Measure 4.7-4 would be required. Overall, impacts under this alternative would be similar to those that would occur with the proposed project and would be less than significant (see Section 4.7, "Hazards and Hazardous Materials").

Hydrology and Water Quality

Where the Proposed Trail Alignment would cross Dry Creek via Bridge #2 and continue on the northern bank of Cirby Creek, the Option 1A Alternative Alignment would cross Dry Creek via Bridge #3. By remaining on the south bank of Cirby Creek, this alternative would not require the construction of Bridge #2 or Bridge #4. The streambank of Cirby Creek is moderately erosive in this area, and the proximity of private property would require the path to be located near the top of the bank. For this reason, the Option 1A Alternative Alignment would require an additional 765 linear feet of retaining walls or streambank stabilization when compared to the Proposed Trail Alignment. The Option 1A Alternative Alignment would require the construction of Bridge #3 instead of bridges #2 and #4 and would, therefore, have a smaller, but still significant, encroachment footprint within the 100-year floodplain when compared to the Proposed Trail Alignment. Additionally, the Option 1A Alternative Alignment would comply with the protective conditions of the existing CDFW Routine Maintenance Agreement and would have a less-than-significant impact on hydrology and water quality. Overall, impacts under this alternative would be slightly greater than those that would occur with the project (see Section 4.8, “Hydrology and Water Quality”).

Land Use and Planning

Consistency with relevant land use plans under the Option 1A Alternative Alignment would be the same as under the Proposed Trail Alignment because the alternative travels through the same land use designations and zoning and contains the same elements as the Proposed Trail Alignment. Effects on established communities under the Option 1A Alternative Alignment would be the same type and of the same magnitude as under the Proposed Trail Alignment, although this alternative would require the acquisition of 17,984 more square feet than the Proposed Trail Alignment. The Option 1A Alternative Alignment would include right-of-way requirements on one additional parcel and on a larger portion of one parcel than would be required under the proposed trail alignment. Overall, impacts under this alternative would be greater than those that would occur with the proposed project and would be less than significant (see Section 4.9, “Land Use and Planning”).

Noise

The location of construction activities under the Option 1A Alternative Alignment would vary slightly based on differences in the alignment of the northernmost section of the trail south of Darling Way and east of Riverside Avenue. This alternative would shift the trail alignment to the south side of Cirby Creek and would be closer to existing commercial land uses and further away from residential land uses located north of Cirby Creek. Additionally, the total number of bridges under the Option 1A Alternative Alignment would be fewer than the number of bridges constructed under the Proposed Trail Alignment, which would result in less noise overall from bridge construction activities. Furthermore, Bridge #3 would be located further away from existing residential land uses located north of Cirby Creek than Bridges #2 and #4 under the Proposed Trail Alignment. For all other sections of the trail, both the trail alignment and bridge locations would be the same as the Proposed Trail Alignment, so significant vibration impacts could occur. Mitigation Measures 4.10-1a, 4.10-1b, 4.10-1c, and 4.10-3 would be required, however impacts related to short-term construction noise would be remain significant and unavoidable after mitigation. While there would be some differences in the locations of the trail and changes in proximity to sensitive receptors would occur, the magnitude and duration of construction activities and associated noise would not be substantially different under the Option 1A Alternative Alignment compared to the Proposed Trail Alignment (see Section 4.10, “Noise”).

Public Services

The Option 1A Alternative Alignment would cross Dry Creek via Bridge #3. By remaining on the south bank of Cirby Creek, this alternative would not require the construction of Bridge# 2 or Bridge #4. This change in design would not affect potential impacts related to fire protection and police protection services. Overall, this alternative would result in the same less-than-significant impacts to existing utilities and service systems as identified for the proposed project (see Section 4.11, “Public Services”).

Recreation

Access to recreational facilities under the Option 1A Alternative Alignment would be the same type and magnitude as the Proposed Trail Alignment and is not expected to result in a substantial number of additional users at existing recreation facilities such that new facilities would need to be built to accommodate increased use. Recreation-related impacts associated under the Option 1A Alternative Alignment would be less than significant similar to the Proposed Trail Alignment (see Section 4.12, "Recreation").

Utilities

The Option 1A Alternative Alignment would cross Dry Creek via Bridge #3. By remaining on the south bank of Cirby Creek, this alternative would not require the construction of Bridge #2 or Bridge #4. This change in design would result in the same less-than-significant impacts to existing public services as identified for the Proposed Trail Alignment (see Section 4.13, "Utilities").

ABILITY TO ACHIEVE PROJECT OBJECTIVES

The Option 1A Alternative Alignment would be similar to the proposed project and would meet most of the project objectives in a similar manner as the proposed project. This alternative would meet the objective to develop a continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways. Access to the Dry Creek, Cirby Creek, and Linda Creek open space areas would be enhanced for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response. Effects to the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas would be similar to the proposed project. On balance, the Option 1A Alternative Alignment would have slightly less impact on biological resources than the Proposed Trail Alignment. This alternative would slightly reduce trail connectivity by not providing a connection to Hernandez Lane. Also, this alternative would reduce maintenance and public safety access to the open space behind Hernandez Lane. This alternative would not meet the project objective related to seeking the most effective and efficient balance of capital cost, operational and maintenance costs, environmental and community impacts, and public benefits because preliminary cost estimates determined that construction costs for Option 1A would be greater than the proposed project and Option 1C. In addition, construction of Option 1A would be more challenging than the proposed project because of the steep terrain.

6.4.3 Option 1C Alternative Alignment

The Option 1C Alternative Alignment would begin just before the existing terminus of the Saugstad/Royer trail, travel under the bridge on the east side of Dry Creek and continue south for approximately 700 feet. A spur to the west would provide access to the proposed trail head parking and future trail extension toward Vernon Street, via Bridge # 2 over Dry Creek. This alternative would continue along the east side of Dry Creek and Cirby Creek for approximately 400 feet before crossing Cirby Creek via Bridge #4 to the southern bank of Cirby Creek, from where it would continue within the floodplain along the south side of Cirby Creek toward the I-80 undercrossing. The Option 1C Alternative Alignment would not require the widening of the Darling Way bridge. However, three retaining walls on the east side of Dry Creek would be required. Similar to the Proposed Trail Alignment, this alternative would include the construction of two bridges (#2 and #4). See Chapter 3, "Project Description," for a description of this alternative, including an Exhibit 3-14 of the proposed Alignment Option 1C.

The discussion that follows is a summary of how this alternative compares to the proposed project for each resource topic. For a full evaluation, please see the appropriate resource section in Chapter 4, "Environmental Setting, Impacts, and Mitigation Measures." See Table 6-1 at the end of this chapter for

a table summarizing the comparison of impacts between the Option 1C Alternative Alignment and the proposed project.

Aesthetics

The Option 1C Alternative Alignment would require the same bridges and a similar undercrossing as the Proposed Trail Alignment, but would be located closer to the residences that front Hernandez and Machado Lanes. Because this alternative would result in constructing elements of the trail closer to residences than the Proposed Trail Alignment, there could be more potential for the perceived visual character or quality of the project area to be effected by construction or operation of the trail since it would be more visible to area residents. As discussed for the Proposed Trail Alignment, there would not be light and glare impacts associated with the construction of the Option 1C Alternative Alignment. This alternative would require the same bridges and a similar undercrossing as the Proposed Trail Alignment. The Darling Way undercrossing would be on the side of the creek closer to residences, but is unlikely to affect these receptors because any lighting would be below street level, and this would remain a less-than-significant impact (see Section 4.1, “Aesthetics”).

Air Quality

The Option 1C Alternative Alignment would not require the widening of the Darling Way bridge, which would result in fewer emissions associated with bridge construction activities. Thus, construction and use-related activities combined under the Option 1C Alternative Alignment would be less than estimated emissions for the Proposed Trail Alignment. However, the Option 1C Alternative Alignment could still potentially exceed PCAPCD’s recommended CEQA-level project significance threshold of 82 lbs/day of NO_x during construction; Mitigation Measure 4.2-1 would be required, and the impact would be less than significant after mitigation (see Section 4.2, “Air Quality”).

Biological Resources

Under the Option 1C Alternative Alignment permanent impacts to wetlands and/or waters would be 0.01 acre less than the Proposed Trail Alignment, and the Option 1C Alternative Alignment temporary impacts would be 0.05 acre less than the Proposed Trail Alignment. The Option 1C Alternative Alignment would permanently affect up to 1.25 acres of riparian forest (0.55 acre more than the Proposed Trail Alignment) and temporarily disturb up to 0.90 acre of riparian forest (0.20 acre more than the Proposed Trail Alignment). Project implementation with the Option 1C Alternative Alignment would permanently affect up to 4.25 acres of valley oak riparian woodland (0.05 acre less than the Proposed Trail Alignment) and temporarily disturb up to 4.85 acres of valley oak riparian woodland (0.05 acre less than the Proposed Trail Alignment).

Under the Option 1C Alternative Alignment permanent impacts to salmonid habitat (i.e., aquatic habitat) would be 0.01 acres less than the Proposed Trail Alignment (or 0.25 acres), and the Option 1C Alternative Alignment temporary impacts would be 0.05 acres less than the Proposed Trail Alignment. Implementation of the Option 1C Alternative Alignment would result in an anticipated removal of 0.032 acre of SRA (or 0.019 acre more than the Proposed Trail Alignment) and temporary effects on SRA to be 0.25 acre (or 0.072 acre more than the Proposed Trail Alignment).

Under the Option 1C Alternative Alignment, a total of 14 elderberry shrubs (as compared to 15 elderberry shrubs under the Proposed Trail Alignment) could be adversely impacted through direct removal of elderberry shrubs, ground-disturbing construction (cut/fill) within the root zone of the shrubs, or permanent removal of riparian habitat within 165 feet of elderberry shrubs. It is anticipated that implementation of the project would result in the removal of a total of 0.87 acres (as compared to 1.22 acres under the Proposed Trail Alignment) of suitable riparian habitat.

Under the Option 1C Alternative Alignment permanent impacts to Sandford’s arrowhead potential habitat would be 0.01 acres less than the Proposed Trail Alignment (or 0.25 acres), and Option 1C Alternative Alignment temporary impacts would be 0.05 acres less than the Proposed Trail Alignment.

The Option 1C Alternative Alignment would result in similar impacts to nesting raptors, nesting special-status birds, western pond turtle, roosting special-status bats, migratory fish, and similar impacts to sensitive habitats as would occur with the Proposed Trail Alignment.

On balance, the Option 1C Alternative Alignment would have slightly less impact on biological resources than the Proposed Trail Alignment, however all mitigation measures identified for the Proposed Trail Alignment would be required (see Section 4.3, “Biological Resources”).

Cultural Resources

The Option 1C Alternative Alignment would not require the widening of the Darling Way Bridge, which would reduce the amount of excavation and other ground-disturbing activities that could damage or destroy as yet undiscovered archaeological resources or human remains as compared to the Proposed Trail Alignment. Mitigation Measures 4.4-1 and 4.4-2 would be required, and these impacts would be less than significant after mitigation (see Section 4.4, “Cultural Resources”).

Geology and Soils

With implementation of the Option 1C Alternative Alignment, the trail would be located in an additional area of high risk, as identified in the trail risk assessment (PSOMAS 2014). The section of trail along the east side of Dry Creek downstream of the Darling Way Bridge would be located in proximity to the eroding creek bank in an area where the stream power is high. Key constraints in this area include the distance between the top of the creek bank and the existing fence line of the adjacent private properties, an existing sewer trunk line, and a number of large trees. A reinforced concrete retaining wall would be constructed along the property line, and the trail would be located up against the property line to maximize setback from the creek. Trail width would be reduced to 8 feet, and a post and cable fence would be constructed on the western side of the trail.

The Option 1C Alternative Alignment would decrease temporary impacts by approximately 0.57 acre, while increasing permanent impacts by 0.59 acre. This would result in a net increase of 0.02 acre mapped as slight erosion hazard when used for trails and roads. There would also be an increase in the length of bank affected; an additional 146.29 linear feet of moderately eroded bank would be affected (67.98 feet of temporary impacts and 78.31 acres of permanent impacts). Overall, impacts under this alternative would be less than significant but to slightly greater degree than those that would occur with the proposed project (see Section 4.5, “Geology and Soils”).

Greenhouse Gas Emissions and Climate Change

The Option 1C Alternative Alignment would not require the widening of the Darling Way bridge, which would result in fewer emissions associated with bridge construction activities. Thus, construction and use-related activities under the Option 1C Alternative Alignment would be less than estimated emissions for the Proposed Trail Alignment, and this would be a less-than-significant impact (see Section 4.6, “Greenhouse Gas Emissions and Climate Change”).

Hazards and Hazardous Materials

The Option 1C Alternative Alignment would shift trail construction at the westernmost end of the project site from the west side of Dry Creek to the east side. This would separate earthwork that could encounter hazardous materials from the industrial and commercial properties along Riverside Avenue more than the Proposed Trail Alignment. The Option 1C Alternative Alignment would also reduce the area of temporary impacts by approximately 0.57 acre, which would result in a proportional reduction in the potential to encounter undocumented contamination that has not been characterized or remediated. Mitigation Measure 4.7-4 would be required and impacts would be less than significant after mitigation. Overall, impacts under this alternative would be less than those that would occur with the proposed project (see Section 4.7, “Hazards and Hazardous Materials”).

Hydrology and Water Quality

The Option 1C Alternative Alignment is the same as the Proposed Trail Alignment with the exception that in the Sheet 1 Segment, the multi–use trail would be located on the northeastern side of Dry Creek. In the Sheet 1 Segment, the northeastern bank of Dry Creek is steep and erosive with little distance between the top of the bank and the adjacent private property (CBEC 2014). Because of this, implementation of this alternative would require an additional 1,080 linear feet of streambank stabilization. The Option 1C Alternative Alignment would have the same bridges and undercrossings described above under the Proposed Trail Alignment, with the exception of the widening of the Darling Way Bridge (Bridge #1), and this alternative would have the same construction and use-related impacts. Because the Option 1C Alternative Alignment would not require the widening of Darling Way Bridge (Bridge #1), it would therefore have a smaller encroachment footprint within the 100-year floodplain when compared to the Proposed Trail Alignment. Option 1C would have a less-than-significant impact on hydrology and water quality. Overall, impacts under this alternative would be slightly greater than those that would occur with the proposed project (see Section 4.8, “Hydrology and Water Quality”).

Land Use and Planning

Consistency with relevant land use plans under the Option 1C Alternative Alignment would be the same as under the Proposed Trail Alignment because the alternative travels through the same land use designations, zoning, and contains the same elements as the Proposed Trail Alignment. Effects on established communities under the Option 1C Alternative Alignment would be the same type and magnitude of as under the Proposed Trail Alignment, although this alternative would require the acquisition of 55,881 fewer square feet than the Proposed Trail Alignment, and this impact would be less than significant. Compared to the proposed project, Option 1C Alternative Alignment would include small right-of-way requirements on two parcels on the east side of Dry Creek and one parcel north of Darling Way. It would require less acquisition on five parcels along Riverside Avenue. Overall, impacts under this alternative would be less than those that would occur with the proposed project (see Section 4.9, “Land Use and Planning”).

Noise

The location of construction activities under the Option 1C Alternative Alignment would vary somewhat based on differences in the alignment of the northernmost section of trail near Darling Way and east of Riverside Avenue. The location of the trail alignment under this alternative would shift to the east side of Dry Creek and would be within 50 feet or less of existing residential land uses. This alternative would not require the widening of the Darling Way bridge; therefore, the total number of bridges requiring construction under the Option 1C Alternative Alignment in the areas near Darling Way and east of Riverside Avenue would be fewer than the number of bridges constructed under the Proposed Trail Alignment, which would result in less noise overall from bridge construction activities; however, a series of retaining walls would be constructed under this alternative along the trail alignment both north and south of Darling Way and north of Bridge #2. For all other sections of the trail, both the trail alignment and bridge locations would be the same as the Proposed Trail Alignment. The construction of retaining walls would result in construction activity occurring closer to residences under Option 1C Alternative Alignment than under the Proposed Trail Alignment. Mitigation Measures 4.10-1a, 4.10-1b, 4.10-1c, and 4.10-3 would be required, however impacts related to short-term construction noise would remain significant and unavoidable after mitigation. Although the magnitude, frequency, and duration of construction activities would be similar to those under the Proposed Trail Alignment, the activities may occur closer to residences under Option 1C Alternative Alignment compared to the Proposed Trail Alignment (see Section 4.10, “Noise”).

Public Services

The Option 1C Alternative Alignment would not require the widening of the Darling Way Bridge, but would include the construction of Bridge #2 and Bridge #4. This change in design would not affect potential impacts related to fire protection and police protection services. Overall, this alternative would

result in the same less-than-significant impacts to existing utilities and service systems as identified for the proposed project (see Section 4.11, “Public Services”).

Recreation

Access to recreational facilities under the Option 1C Alternative Alignment would be the same type and magnitude as the Proposed Trail Alignment and is not expected to result in a substantial number of additional users at existing recreation facilities such that new facilities would need to be built to accommodate increased use. Recreation-related impacts associated under the Option 1C Alternative Alignment would be less than significant and would be similar to the Proposed Trail Alignment (see Section 4.12, “Recreation”).

Utilities

The Option 1C Alternative Alignment would not require the widening of the Darling Way Bridge, but would include the construction of Bridge #2 and Bridge #4. This change in design would result in the same less-than-significant impacts to existing utilities and service systems as identified for the Proposed Trail Alignment (see Section 4.13, “Utilities”).

ABILITY TO ACHIEVE PROJECT OBJECTIVES

The Option 1C Alternative Alignment would be similar to the proposed project and would meet the project objectives in a similar manner as the proposed project. This alternative would meet the objective to develop a continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways. Access to the Dry Creek, Cirby Creek, and Linda Creek open space areas would be enhanced for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response. Effects to the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas would be similar to the proposed project. On balance, the Option 1C Alternative Alignment would have slightly less impact on biological resources than the Proposed Trail Alignment. This alternative would attain the project objective related to seeking the most effective and efficient balance of capital cost, operational and maintenance costs, environmental and community impacts, and public benefits in a similar manner as the proposed project because preliminary cost estimates were similar for Option 1C and Option 1B (the proposed project).

6.4.4 Option 5A Alternative Alignment

The Option 5A Alternative Alignment would begin just south of the confluence of Cirby Creek and Linda Creek and remain on the south side, following the southern bank of Linda Creek within City-owned property. The trail would travel eastward and pass beneath Sunrise Avenue. Connecting ramps would provide access to both sides of Sunrise Avenue. This alternative would continue to just east of the existing drainage outfall structure at which point it would cross to the north side of Linda Creek via Bridge #14, before continuing further east toward Oak Ridge Drive. The Option 5A Alternative Alignment would eliminate the need for Bridge #13 (see Chapter 3, “Project Description” Exhibit 3-15 Alignment Option 5A).

The discussion that follows is a summary of how this alternative compares to the proposed project for each resource. For a full evaluation, please see the appropriate resource section in Chapter 4, “Environmental Setting, Impacts, and Mitigation Measures.” See Table 6-1 at the end of this chapter for a summary comparison of impacts between the Option 5A Alternative Alignment and the proposed project.

Aesthetics

The Option 5A Alternative Alignment would cross under Sunrise Avenue on the south side of Linda Creek, rather than the north side as described for the Proposed Trail Alignment. With this alternative, the bridge over Linda Creek (Bridge #14) would be constructed on the eastern side of Sunrise Avenue, immediately adjacent to residences on either side of the creek. This bridge may be visible from nearby residences, while the corresponding bridge for the Proposed Trail Alignment (Bridge #13) would most likely not, because the residences located to the north of Bridge #13 are screened by at least 200 feet of dense vegetation. This alternative also includes a connection to the residences on Meadow Gate Drive, which would increase the visibility of the project. As discussed for the Proposed Trail Alignment, the actual visual change due to implementation of this alternative would be relatively low. Construction of the Option 5A Alternative Alignment would not result in substantial light or glare for the same reasons discussed for the Proposed Trail Alignment. In this commercial area, which already has ample street and business lighting, this change would not substantially affect views of the project area. Installation of Bridge #14 instead of Bridge #13 would result in a bridge with associated illumination in closer proximity to residences than the Proposed Trail Alignment. These impacts would be less than significant (see Section 4.1, “Aesthetics”).

Air Quality

Implementing the Option 5A Alternative Alignment would change the location of one bridge (#14 rather than #13), but would not change the number of bridges proposed, which would result in approximately the same emissions associated with bridge construction activities. Thus, estimated emissions for construction and use-related activities under the Option 5A Alternative Alignment would be the same as the Proposed Trail Alignment. However, Option 5A Alternative Alignment could still potentially exceed PCAPCD’s recommended CEQA-level project significance threshold of 82 lbs/day of NO_x during construction; Mitigation Measure 4.2-1 would be required, and the impact would be less than significant after mitigation (see Section 4.2, “Air Quality”).

Biological Resources

The Option 5A Alternative Alignment would have the same permanent and temporary riparian forest impact as the Proposed Trail Alignment. However, the Option 5A Alternative Alignment would permanently affect 4.60 acres of valley oak riparian woodland (0.30 acre more than the Proposed Trail Alignment) and temporarily disturb 5.10 acres of valley oak riparian woodland (0.20 acre more than the Proposed Trail Alignment). Project implementation would result in permanent loss and temporary disturbance of wetlands and other waters of the United States, waters of the state, and associated riparian habitat.

The permanent impacts to salmonid habitat under Option 5A Alternative Alignment would be 0.0005 acre more than the Proposed Trail Alignment, and the temporary impacts to wetlands and/or waters would be 0.001 acres less than the Proposed Trail Alignment. No riparian impacts are expected from implementation of Option 5A Alternative Alignment. However, based on the analysis for SRA, implementation of the Option 5A Alternative Alignment would result in an anticipated removal of 0.022 acre of SRA (or 0.009 acre more than the Proposed Trail Alignment) and temporary effects on SRA to be 0.16 acre (or 0.059 acre more than the Proposed Trail Alignment).

Adverse impacts to VELB habitat would be the same under Option 5A Alternative Alignment as compared to the Preferred Trail Alignment. Under Option 5A Alternative Alignment, total of 15 elderberry shrubs could be adversely impacted through direct removal of elderberry shrubs, ground-disturbing construction (cut/fill) within the root zone of the shrubs, or permanent removal of riparian habitat within 165 feet of elderberry shrubs. It is anticipated that implementation of the project would result in the removal of a total of 1.22 acres of suitable riparian habitat.

The permanent impacts to Sanford's arrowhead potential habitat under Option 5A Alternative Alignment would be 0.0005 acre more than the Proposed Trail Alignment, and the temporary impacts to Sadford's arrowhead potential habitat would be 0.001 acres less than the Proposed Trail Alignment.

The Option 5A Alternative Alignment would result in similar impacts to nesting raptors, nesting special-status birds, western pond turtle, roosting special-status bats, migratory fish, and similar impacts to sensitive habitats as would occur with the Proposed Trail Alignment.

On balance, the Option 5A Alternative Alignment would have slightly more impact on biological resources than the Proposed Trail Alignment, however all mitigation measures identified for the Proposed Trail Alignment would be required (see Section 4.3, "Biological Resources").

Cultural Resources

The Option 5A Alternative Alignment would change the location of one bridge (#14 rather than #13), but would not change the number of bridges proposed. Therefore, the amount of excavation and other ground-disturbing activities that could damage or destroy as yet undiscovered archaeological resources or human remains would be the same as the Proposed Trail Alignment. Mitigation Measures 4.4-1 and 4.4-2 would be required, and these impacts would be less than significant after mitigation (see Section 4.4, "Cultural Resources").

Geology and Soils

The Option 5A Alternative Alignment would increase temporary and permanent impacts by 0.13 acre and 0.22 acre, respectively. There would be a corresponding increase of 0.43 acre mapped as slight erosion hazard for roads and trails and a decrease of 0.07 acre not rated. Areas with moderate erosion hazard would be slightly less effected during construction (a reduction of 0.03 acre), but would make up slightly more of the project footprint (an increase of 0.02 acre). There would be no change in the bank erosion severity along the alignment. Overall, impacts under this alternative would be less than significant but to a greater degree than those that would occur with the proposed project (see Section 4.5, "Geology and Soils").

Greenhouse Gas Emissions and Climate Change

Implementing the Option 5A Alternative Alignment would change the location of one bridge (#14 rather than #13), but would not change the number of bridges proposed, which would result in the same emissions associated with bridge construction activities. Thus, construction and use-related activities under this alternative would be the same as estimated emissions for the Proposed Trail Alignment, and this would be a less-than-significant impact (see Section 4.6, "Greenhouse Gas Emissions and Climate Change").

Hazards and Hazardous Materials

The Option 5A Alternative Alignment would increase the area of temporary impacts by 0.13 acre, which would result in a proportional increase in the potential to encounter undocumented contamination that has not been characterized or remediated. Mitigation Measure4.7-5 would be required, and impacts would be less than significant after mitigation. Overall, impacts under this alternative would be slightly greater than those that would occur with the proposed project (see Section 4.7, "Hazards and Hazardous Materials").

Hydrology and Water Quality

The Option 5A Alternative Alignment deviates from the Proposed Trail Alignment just west of Bridge #13. Bridge #13 would not be constructed, and this alternative would remain on the south bank of Cirby Creek until crossing to the north bank via Bridge #14. The Option 5A Alternative Alignment would include both an undercrossing of Sunrise Avenue and connecting paths to both sides of Sunrise Avenue. Both the Proposed Trail Alignment and this alternative would make extensive use of retaining walls through this section of the path; however, this alternative would require an additional 635 linear

feet when compared to the Proposed Trail Alignment. Under the Option 5A Alternative Alignment, Bridge #13 would not be constructed, and this alternative would not result in the significant impact related to the 100-year floodway described under the Proposed Trail Alignment. This alternative would cross Linda Creek via Bridge #14 and would result in no encroachments within the regulated floodway and, therefore, would not result in an increase in the 100-year WSE; and the magnitude of the impacts would be less than those that would occur with the proposed project. Option 5A Alternative Alignment would have a less-than-significant impact on hydrology and water quality. (see Section 4.8, “Hydrology and Water Quality”).

Land Use and Planning

Consistency with relevant land use plans under the Option 5A Alternative Alignment would be the same as under the Proposed Trail Alignment because the alternative travels through the same land use designations, zoning, and contains the same elements as the Proposed Trail Alignment. Effects on established communities under the Option 5A Alternative Alignment would be the same type and magnitude of as under the Proposed Trail Alignment, although this alternative would require the acquisition of 14,603 fewer square feet than the Proposed Trail Alignment, and the impact would be less than significant. Compared to the proposed project, Option 5A Alternative Alignment would not require acquisition from five parcels north of Linda Creek, but it would require acquisition from three parcels south of Linda Creek. Overall, impacts under this alternative would be less than those that would occur with the proposed project (see Section 4.9, “Land Use and Planning”).

Noise

The location of construction activities under the Option 5A Alternative Alignment would vary from the Proposed Trail Alignment due to differences in the trail near Sunrise Avenue along Linda Creek. The location of the trail under this alternative would shift to the south side of Linda Creek, which would result in trail paving and construction activities located further away from existing residential land uses on the north side of Linda Creek. The alignment under this alternative would be closer to existing commercial uses and some existing residential uses south of Linda Creek based on a trail spur that would connect to Meadow Gate Drive. A series of retaining walls would be constructed under the Option 5A Alternative Alignment on both sides of Sunrise Avenue, compared to only on the north side of Linda Creek under the Proposed Trail Alignment. This alternative would also require the construction of Bridge #14 over Linda Creek east of Sunrise Avenue, rather than Bridge #13 west of Sunrise Avenue. Thus, although the magnitude, frequency, and duration of construction activities under Option 5A Alternative Alignment would be similar than compared to the Proposed Trail Alignment, the activities may occur closer to residences under Option 5A Alternative Alignment compared to the Proposed Trail Alignment. Mitigation Measures 4.10-1a, 4.10-1b, 4.10-1c, and 4.10-3 would be required, however impacts related to short-term construction noise would be remain significant and unavoidable after mitigation (see Section 4.10, “Noise”). If the caisson drilling for Bridge #14 cannot feasibly be located greater than 43 feet from occupied structures, vibration human disturbance impacts would also remain significant and unavoidable after mitigation.

Public Services

Implementing the Option 5A Alternative Alignment would change the location of one bridge (#14 rather than #13), but would not change the number of bridges proposed. This change in design would not affect potential impacts related to fire protection and police protection services. Overall, this alternative would result in the same less-than-significant impacts to existing utilities and service systems as identified for the proposed project (see Section 4.11, “Public Services”).

Recreation

Access to recreational facilities under the Option 5A Alternative Alignment would be the same type and magnitude as the Proposed Trail Alignment and is not expected to result in a substantial number of additional users at existing recreation facilities such that new facilities would need to be built to accommodate increased use. Recreation-related impacts associated under the Option 5A Alternative

Alignment would be less than significant and would be similar to the Proposed Trail Alignment (see Section 4.12, “Recreation”).

Utilities

Implementing the Option 5A Alternative Alignment would change the location of one bridge (#14 rather than #13), but would not change the number of bridges proposed. This change in design would result in the same less-than-significant impacts to existing utilities and service systems as identified for the Proposed Trail Alignment (see Section 4.13, “Utilities”).

ABILITY TO ACHIEVE PROJECT OBJECTIVES

The Option 5A Alternative Alignment would be similar to the proposed project and would meet the basic project objectives in a similar manner as the proposed project. This alternative would meet the objective to develop a continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways. This alternative would enhance trail connectivity when compared to proposed project by providing access to the west side of Sunrise Avenue and to Meadow Gate Drive neighborhood. Access to the Dry Creek, Cirby Creek, and Linda Creek open space areas would be enhanced for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response. Effects to the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas would be similar to the proposed project. On balance, the Option 5A Alternative Alignment would have slightly more impact on biological resources than the Proposed Trail Alignment. This alternative would be similar to the proposed project in attaining the project objective related to seeking the most effective and efficient balance of capital cost, operational and maintenance costs, environmental and community impacts, and public benefits because estimated construction costs would be similar. However, preliminary cost estimates for Option 5A were slightly higher than Option 5B (the proposed project).

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) states that when the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. Per the analysis conducted for this Draft EIR for the Dry Creek Greenway Multi-Use Trail Project, the environmentally superior alternative would be the No Project Alternative because it would not result in new impacts on the project site. However, as discussed above, the No Project Alternative would not achieve any of the project’s objectives. Among the other alternatives, Option 1A Alignment Alternative would be the environmentally superior alternative.

As discussed above and in the analyses in Chapter 4, the magnitude of several impacts would be less than the proposed project with Option 1A Alignment Alternative (see Table 6-1). This alternative would result in the construction of one fewer bridge than under the proposed project because it would construct Bridge #3, rather than Bridges #2 and #4, but additional retaining walls would be required. This would result in less construction than under the proposed project. Under Alternative 5A, Impact 4.8-3 (Alter or redirect 100-year flood flows, or expose people or structures to risk of injury or damage by flood waters) would be less than significant because this alternative would not include the construction of Bridge #13.

Table 6-1 Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed Project

Environmental Topic	Proposed Project	No Project	Option 1A Alternative Alignment	Option 1C Alternative Alignment	Option 5A Alternative Alignment
Aesthetics	LTS	NI	LTS (Less)	LTS (Greater)	LTS (Greater)
Air Quality	LTS	NI	LTS (Less)	LTS (Less)	LTS (Similar)
Biological Resources	LTSM	NI	LTSM (Less)	LTSM (Less)	LTSM (Greater)
Cultural Resources	LTSM	NI	LTSM (Less)	LTSM (Less)	LTSM (Similar)
Geology and Soils	LTS	LTS (Greater)	LTS (Less)	LTS (Greater)	LTS (Greater)
Greenhouse Gas Emissions and Climate Change	LTS	LTS (Less)	LTS (Less)	LTS (Less)	LTS (Similar)
Hazards and Hazardous Materials	LTSM	NI	LTSM (Similar)	LTSM (Less)	LTSM (Greater)
Hydrology and Water Quality	LTS	LTS (Greater)	LTS (Greater)	LTS (Greater)	LTS (Less)
Land Use and Planning	LTS/Beneficial	LTS (Greater)	LTS/Beneficial (Greater)	LTS/Beneficial (Less)	LTS/Beneficial (Less)
Noise	SU	NI	SU (Similar)	SU (Greater)	SU (Greater)
Public Services	LTS	LTS (Greater)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Recreation	LTS	NI	LTS (Similar)	LTS (Similar)	LTS (Similar)
Utilities	LTS	NI	LTS (Similar)	LTS (Similar)	LTS (Similar)
Meet Project Objectives?	Yes	No	No	Yes	Yes

Impact Status:

NI=No Impact LTS = Less Than Significant Impact LTSM = LTS with Mitigation

Source: Data compiled by Ascent Environmental in 2016

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