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Go to the staff report addendum.

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Staff report prepared:	9/29/2010
Staff report prepared by:	Susan Craig
Staff report approved by:	Dan Carl
Hearing date:	10/14/2010

COASTAL DEVELOPMENT PERMIT APPLICATION

Application number.....**3-09-068, Arana Gulch Master Plan**

Applicant.....City of Santa Cruz

Project location .....Between Frederick Street, Agnes Street, 7th Avenue, and the Santa Cruz Harbor, including primarily the Arana Gulch open space greenbelt area (framed in by Arana (Gulch) Creek, Hagemann (Gulch) Creek, Agnes Street, and the Harbor), within portions of both the City of Santa Cruz and unincorporated Santa Cruz County.

Project description.....Consolidated coastal development permit application to implement the Arana Gulch Master Plan for the 67.7-acre City-owned greenbelt property and to construct improved connecting trail segments outside of the greenbelt area. Project includes management and restoration of habitat areas, including certain trail segment retirements; improvements to and realignments of the existing trail system, including some paved multi-use paths (some over existing trails, some new); construction of a bridge over Hagemann Gulch; interpretive displays and trail signage; and installation of fencing and a water supply to allow cattle grazing (to benefit Santa Cruz tarplant).

File documents.....Coastal development permit (CDP) file 3-09-068; City of Santa Cruz certified Local Coastal Program (LCP); Arana Gulch Draft Master Plan (February 2006); Arana Gulch Master Plan Draft Environmental Impact Report (DEIR) (February 2006); Arana Gulch Master Plan Final EIR (FEIR) (May 2006).

Staff recommendation ...**Approval with Conditions**

A.Staff Recommendation

1. Summary of Staff Recommendation

The City of Santa Cruz is applying for a coastal development permit to implement the Arana Gulch Master Plan for the 67.7 acre City-owned Arana Gulch greenbelt and to construct improved connecting trail segments into the Arana Gulch property from Frederick Street and 7th Avenue. Although the majority of the Arana Gulch property and the project are located within the Santa Cruz city limits, the

proposed project also extends into unincorporated Santa Cruz County (for the connecting trail segment extending from near Arana Creek to 7th Avenue). A portion of the project at and around Arana Creek is also located within the Commission's retained CDP jurisdiction. The Coastal Act allows for the Coastal Commission to act upon a consolidated CDP application if the local government(s), the applicant(s) in question, and the Commission (through the Executive Director) agree to such a process. In this case, the City, the County, and the Coastal Commission have agreed to a consolidated CDP application process for the proposed project, and thus the CDP application is before the Commission.

The proposed project would implement the Arana Gulch Master Plan, and includes management and restoration of habitat areas, including certain trail segment retirements; improvements to and realignments of the existing unpaved trail system, including some paved multi-use paths (some over existing trails, some new); construction of a bridge over Hagemann Gulch; interpretive displays and trail signage; and installation of fencing and a water supply to allow cattle grazing (to benefit the federal and state listed Santa Cruz tarplant). The proposed paved multi-use path system would also provide a continuous west-east multi-use trail connection between the intersection of Broadway and Frederick Street in the City of Santa Cruz and the intersection of Brommer Street and 7th Avenue in the unincorporated Live Oak area of Santa Cruz County.

The main issue raised by the proposed project is addressing potential conflicts between protecting environmentally sensitive habitat areas (ESHAs) and providing public access because all of the Arana Gulch greenbelt area is ESHA. These sensitive habitats include primarily tarplant habitat in the meadow, creek riparian habitat along Arana Creek and Hagemann Gulch, and wetland habitats associated with both areas. In particular, Arana Gulch is home to one of the few remaining extant Santa Cruz tarplant habitats in the world. In recent years there has been a significant documented decline in the tarplant population in Arana Gulch (from a census of over 100,000 plants in the 1980s down to 44 plants in the 2008 survey). There has also been ongoing stress to other Arana Gulch area natural resources from invasive plant species and unmanaged public access that has resulted in erosion and other adverse impacts, including due to the number of "volunteer" trails on the site, many of which crisscross through the main historic tarplant habitat area within which individual plants have been most recently identified.[1] With respect to the tarplant specifically, the precipitous decline appears to be closely correlated with the end of grazing activities in the meadow area in the 1980s.

One of the main purposes of the City's proposal is to enhance Arana Gulch's Santa Cruz tarplant habitat, both through direct habitat restoration and through enhanced public access management and education. The proposed installation of interpretive and other signage and information in concert with multi-use trails and unpaved trails that explicitly direct public access to remain on the approved trails and inform the public of the sensitive nature of the site, as well as the proposed closure of the numerous existing "volunteer" trails with subsequent restoration of these areas, should substantially reduce the impacts on tarplant habitat and other habitats that currently occur on the site. No trail alignments will be

[1] The entirety of the meadow area is considered tarplant habitat, but four areas have been identified as historic occurrence areas within the meadow because past census data identified tarplant plants in these areas (and not in the rest of the meadow). As a result, these disjunct sub-areas are referred to herein as historic tarplant habitat areas or tarplant occurrence areas.

located in the identified historic tarplant habitat areas (i.e., some trails will be removed from these areas, but no trails will be located in these areas once the proposed project is implemented), and existing unpaved trail alignments that pass through two of the historic tarplant habitat areas will be realigned to avoid these areas, and these areas will be restored. All new trails have been designed to minimize cut and fill in order to minimize disturbance to tarplant habitat, and to minimize changes to hydrology. Appropriate mitigations are required to protect tarplant habitat during construction. The City is also proposing an adaptive habitat restoration plan and improved management of public access to address potential impacts to tarplant and other sensitive habitats on the site. The project proposes grazing as the primary means of enhancing the habitat at the onset. The Master Plan also requires continued experimental research directed toward refining understanding of the management regime that maximizes long-term success of the tarplant at Arana Gulch, as well as ongoing monitoring on an annual basis to determine the success of the applied management measures, to monitor the overall well-being of tarplant colonies on the site, and to identify potential threats to tarplant persistence on the site. Revision of the management prescriptions and remedial actions to enhance long-term viability of the tarplant are also required as necessary. Such master plan habitat restoration, enhancement, and long-term management activities generally are consistent with Coastal Act 30240 because they will benefit and are dependent on the resources. However, special conditions that require habitat management plan provisions consistent with those typically required by the Commission are recommended to assure that the proposed Master Plan is fully consistent with the Coastal Act, and special conditions associated with maximizing the area for grazing are also included.

With respect to the proposed public access improvements, the main issue is whether the proposed path improvements are allowed in Arana Gulch ESHA and whether they will result in significant disruption to these habitat areas. A main concern has been the proposed construction of approximately 2,250 feet of paved, 8-foot-wide multi-use (i.e., pedestrians, bicyclists, wheelchair users, caregivers with strollers, pedestrians with walkers, etc.) paths with 2-foot unpaved shoulders in the meadow (approximately 900 feet of these paved paths would extend through the tarplant meadow area in new alignments, and about 1,350 feet would be located on top of existing trail segments), and the new bridge spanning Hagemann Gulch. In particular, there is a concern that these public access features are not resource-dependent (as is required by Coastal Act Section 30240) but rather constitute a transportation improvement for bicyclists, pedestrians, and others wishing to travel more easily from the City to the County through this location. However, the main point is that the paths serve multiple purposes, including facilitating non-automobile alternative transportation, and labeling this as only a transportation project does a disservice to the proposed project, especially when considering how the project has changed over the 15 years that it has been the subject of City efforts. In fact, the project has been significantly reduced in scale from its initial design (when it was originally billed as a “commuter bike path” some 15 years ago), and has also been specifically designed as an interpretive public access system to improve access to and education about the resources of Arana Gulch. One of the primary objectives of the proposed project is to maximize opportunities to educate, inform, and inspire users of the trail system so as to enhance their enjoyment of Arana Gulch and its resources, and possibly more importantly to encourage them to take action to help protect such resources here and elsewhere. Interpretive trail opportunities like this, particularly in close proximity to urban areas with significant numbers of users and potential users, are limited, and thus it is

critically important that their interpretive utility in this regard is maximized. Such is even more so the case at Arana Gulch where the Master Plan's proposed resource protection program includes significant opportunities to inform and educate the public regarding pro-active (as opposed to passive "don't touch") habitat management strategies for enhancing sensitive resources (including for tarplant grazing, mowing, prescribed burns, scraping, etc.) as well as adaptations to these strategies and related experiments and research to maximize resource protection possibilities. In addition, the public access improvements include the removal and restoration of some existing trail segments that are damaging resources, limited new trail development to provide multi-use shared public access into and through the Gulch, the avoidance of all of the most significant habitat areas (including wetland, riparian, and historic tarplant habitat areas), and the installation of significant new interpretive and education signage. Even so, approximately 2,250 feet of paved trails would be installed within the Arana meadow area outside of the noted historic tarplant occurrence areas but within an area that is considered tarplant habitat nonetheless, 40% of which would be located in new trail alignments.

The Commission has a long history of approving interpretive public access trails and pathways in ESHA as resource-dependent developments. In this case, the proposed project not only includes trails of this nature, but it will also result in the improvement of habitat resources in Arana Gulch as part of the proposed project. In other words, this project goes beyond many other interpretive trail projects approved by the Commission in the past to not only provide the interpretative trail itself, but to also provide for significant habitat restoration and enhancement as part of the project. The project will result in a network of public access to and through Arana Gulch that will interpret the resources and educate the visiting public about them. To be effective, this interpretation and education is dependent on being in and around the resources of Arana Gulch and thus the project is resource-dependent. In addition, the path components of the project have been sited and designed to prevent impacts that would significantly degrade the habitat areas in question. In short, the paved paths can be found consistent with Coastal Act Section 30240. The public access components will also result in significant enhancements to public access, consistent with the public access and recreation policies of the Coastal Act. Special conditions are recommended to assure such consistency by requiring a public access plan that refines certain siting and design issues, that clearly identifies all public access components (including signs and interpretive elements), and that clearly ensures that these features will be available and maintained for public use in perpetuity. Special conditions are also included to ensure that the fencing used for the grazing regime blends into the open space and path aesthetic as seamlessly as possible.

Staff recognizes that the paved path portion of the project has engendered much debate and controversy over the years. In particular, because any paved path alignment through the Arana Gulch meadow area will cover areas considered to be appropriate Santa Cruz tarplant habitat,[2] any alternative that includes such a paved option includes such an impact. Such is the case with the proposed project. However, the paved path portion of the project is both dependent on the ESHA resource for it to function as an interpretive path, and its installation is not expected to result in significant disruption of habitat values,

[2] That is, it would cover a strip of meadow area that is currently dominated by non-native species, but that is considered tarplant habitat because it might still contain a viable native seed bank and potentially could once again support native species. As proposed, all of the known and mapped historic tarplant occurrence areas would be avoided.

including that it is not expected to fragment tarplant habitat in such a way as to significantly disrupt the resource. In addition, it has also been sited and designed to prevent impacts that would significantly degrade the habitat areas in question. In short, the paved paths can be found consistent with Coastal Act Section 30240. Even so, although the paths will not result in the level of impacts that Section 30240 does not allow, it will result in some habitat impacts. As a result, some have asked whether there are appropriate path alternatives that can avoid all such impacts altogether.

Clearly, if the objective is simply to get from point A in Santa Cruz County to point B in the City of Santa Cruz (i.e., the elusive "Broadway-Brommer" connection) more quickly than is currently the case (including for pedestrians, bicyclists, wheelchair users, etc.) then there are other alternatives that can meet this objective without placing paved paths in Arana Gulch. In fact, there are multiple permutations of projects that can achieve such an objective outside of Arana Gulch, including several that have been considered by the City and/or identified over time as the paved path project has been pursued by the City (including road and bridge improvements nearby, including even new pedestrian bridges spanning the Harbor and connecting to Frederick Street Park, and including use of the railroad right-of-way nearer the ocean as an accessway).

There is little doubt that such projects, alone or together, could facilitate such cross-town connectivity, and could do it without paved paths in Arana Gulch. However, and although the original paved path concept of 15 years ago was largely driven by such circulation connectively concerns,[3] the objective for the project currently before the Commission cannot be distilled to only, or even mostly, one of getting across town more quickly. Rather, the objective is much broader than that, and includes both comprehensive resource management and enhancement in Arana Gulch, and a strong desire to provide an interpretive path system that can help foster an awareness and appreciation of this special open space area and its resources, including for users for whom access to this area is currently unavailable altogether or is difficult (including those in wheelchairs, those less physically able to traverse uneven footpaths, caregivers with strollers, pedestrians with walkers, etc.). It is true that the paved trail component will facilitate cross-town connectivity, including for bicyclists. Most such path projects by definition provide a "transportation" function; granted some more than others. However, the fact that the proposed project facilitates alternative non-vehicular modes of transportation does not somehow negate it also being resource-dependent, as the two can coexist in a Section 30240 context. In addition, the fact that it facilitates such non-vehicular alternative transportation in addition to providing a resource-dependent nature study and interpretive experience is not a bad thing. In fact, reducing vehicle miles traveled and energy consumption is a stated objective of the Coastal Act, including as a means to address issues associated with global climate change, and the project furthers such objectives. At the same time, the paved path component of the project will provide a much richer interpretive experience of the Arana Gulch area for a much wider spectrum of the general public than is currently the case. As such, the range of "Point A to Point B" alternatives does not and cannot meet such an objective.

As to alternative siting and design options within Arana Gulch for the paved path portion of the project, there are obviously options. For example, the path segments could be made more direct (i.e., with less

[3] And was preceded historically by proposals for a large-scale vehicular connection through Arana Gulch.

meander) or could be sited more to the periphery of the meadow, and could be made narrower. Such options would result in reducing habitat coverage to a limited degree. However, for most of the paved components of the proposed project, such options do not make sense at this location in relation to the project before the Commission. In terms of straighter line segments, the path alignments chosen are fairly straight in most respects, and loops and variations are in place to avoid noted habitat areas (like Area A in the main meadow area, the location of the highest concentration of tarplant individuals in recent surveys) and to provide gentler gradients for the path to both facilitate Americans With Disability Act (ADA) and other user access, as well as to reduce the potential for erosion, sedimentation, and other related adverse impacts associated with steeper path segments (e.g., as is currently the case with the main access path from the Harbor up to the meadow). In terms of more peripheral siting, there is one area where such siting could be applied to better protect the meadow area and facilitate habitat management there. This area is made up of the proposed paved path segment leading into the site from Agnes Street to its connection to the main east-west trail segment. Relocating this portion of paved path to the west in the alignment of an existing unpaved path will allow a greater area in the northern part of the project site to be more actively managed for habitat purposes, including through adaptive management activities such as grazing, mowing, and scraping, and will not significantly lessen its interpretive access utility. Staff recommends that the project be conditioned to require the relocation of this paved path component to the west. Shifting the main path from Agnes Street to the west and shifting paths around historic tarplant occurrence areas frees up additional space within which active grazing management can occur on the main meadow, and staff recommends conditions to expand the grazing area to make maximum use of the tarplant meadow area (other than buffers for steep slopes and riparian/woodland setbacks). With respect to using a pathway narrower than 8 feet in width, this would also be possible. However, an 8-foot path width is a reasonable width to allow two-way use, including when pedestrians, bicyclists, wheelchair users, strollers, and leashed dogs are all using the path. In fact, some might argue that a wider path width is necessary to avoid potential user conflicts along the paved path segments, and that 8 feet is too narrow. In this case, staff believes that the proposed 8-foot-wide paved path width strikes a reasonable balance and will allow adequate path utility while avoiding enough coverage as to avoid a significant disruption of habitat values.

Finally, the project proposes up to five-foot-tall metal post and wire (including alternating barbed wire) fencing around the grazing areas. It appears that such fencing cannot be avoided if the site is to be grazed for the benefit of tarplant. Such fencing will adversely impact the aesthetics and ambiance of the recreational use experience to be provided. There are a variety of potential alternative fence types that could be used. Although staff believes that wooden split-rail fencing would be the most appropriate aesthetically speaking, including as it is more commonly associated with park-like settings, the City indicates that such fencing would be significantly more costly, including due to maintenance issues over time (including cattle breaking the fence). An appropriate middle ground, staff believes, is the use of a wooden post and wire fence system which will be more aesthetically in tune with public use while still accounting for the City's issues associated with cost and maintenance over time.

In short, the proposed project, as conditioned, represents the most appropriate alternative to meet project objectives and to find consistency with the Coastal Act, including Section 30240.

In making this finding, staff notes that this proposed project was heard at a Commission hearing in Santa Cruz on March 11, 2010, a hearing that was also preceded on the same day by a Commission field trip that included a tour of the Arana Gulch property. At that time, the Commission heard several hours of public testimony regarding the proposed project, both for and against, and ultimately the Commission continued the matter to a future date. It was clear at that hearing that the Commission was interested in additional detail and analysis regarding the City's proposed path alignment and ways to further reduce potential habitat impacts, and was particularly interested in additional analysis of an alternative alignment suggested by the California Native Plant Society (CNPS) that would use a loop nearer to the Harbor to connect paved trails from east to west. In the time since that hearing, the City has done considerable investigation into ways to reduce potential impacts, and has significantly revised its proposed project to address the Commissioner's concerns. In particular, the City has eliminated duplicative path segments and all path alignments within historic tarplant areas, and has instead moved paths farther away from historic tarplant areas more to the periphery of the meadow. All paved surfaces would now be permeable as opposed to the non-permeable asphalt previously proposed. The City has also nearly tripled the area within which grazing would be prescribed immediately, including within the area from which paths were moved. Along with staff's recommended conditions, including to move one of the paved path segments even farther to the periphery of the site and to increase the area available for grazing even further, the City's proposed project is significantly improved as compared to the version that the Commission considered in March.

In terms of CNPS's alternative alignment, staff is convinced that the City's proposed project is superior under the Coastal Act. CNPS's alternative alignment would result in significantly more area on the meadow given over to paved trail (or boardwalk) than the City's proposed project. Over 50% more coverage would be required to provide the east-west connection portion of the project (approximately 1,194 linear feet in the City's proposal as compared to 1,841 linear feet in CNPS's proposal to extend from the Harbor access to the Hagemann Gulch crossing). If the CNPS version were on-grade, then it would also require significant cut and fill and retaining wall slopes to achieve required grades, all of which would occur within the meadow area and/or existing oak woodland area along the knoll of the site above the Harbor at its most southerly boundary. If the CNPS version were on a boardwalk, it would either require the same or similar grading to allow the boardwalk to be installed or, if caissons or equivalent were used as a means to avoid such grading, it would require significant elevation above existing sloping topography and in most areas would require railings to be installed. Such an alternative would significantly alter the existing unpaved pedestrian-only trail experience extending along this loop trail (proposed to be retained in the City's project) and turn it into an overly-engineered trail facility that would significantly alter its interpretive public access utility. If boardwalks on caissons were used to avoid more significant grading at slopes, the CNPS alternative would also provide an attractive area along the slopes that would facilitate illegal camping, a problem that has long been an issue in Arana Gulch. In addition, it is not clear to what degree such elevation above the slopes and the habitat areas would facilitate vitality of the underlying habitat.

With respect to CNPS's assertions that the City's proposed east-west connection would lead to significant and un-approvable habitat fragmentation and hydrology impacts, staff does not believe this to be the case. In terms of habitat fragmentation, although the City's proposed path alignment will go

through the meadow (but not through identified historic tarplant areas), it will not lead to significant adverse fragmentation impacts. The meadow is relatively uniform and the trail is not likely to result in significant changes in habitat conditions on either side of the trail. The postulated increased habitat "edge" effect is unlikely to be significant because the existing community that will be affected is comprised of non-native grasses and other weeds and any restored native community will be continuously managed and maintained. Anecdotally, tarplant appears to be relatively tolerant of edge effects (e.g., the tarplant management areas at the Watsonville Airport). It is also unlikely that the trail will act as a dispersal barrier for the tarplant or its pollinators. Tarplant is pollinated by several species of insects for which the trail will not pose a barrier, and effective seed dispersal is via animals whose movements will not be constrained by the trail (including the cow/calf pairs that will be moved around to benefit tarplant). In short, while the path across the meadow raises an obvious question of fragmentation (because it is a classic case of bisecting an area), the facts specific to tarplant habitat indicate that such habitat fragmentation is not a significant concern in this case, and not a significant disruption, thus meeting Section 30240 requirements.

As to CNPS's hydrological concern, recent soil tests confirm that the relatively shallow grading necessary for the paths will not alter subsurface hydrology in any appreciable way that would affect tarplant. The paths would involve grading roughly the upper foot of soil, which is not nearly to the 3½ to 12½ foot depths where perched groundwater was found. In addition, the paths would include no soil compaction, and would include both a permeable subsurface area and a permeable paving material. At the depth proposed and with the permeable surfaces, the hydrological affect on tarplant would be insignificant. In conclusion, staff, including the Commission's senior ecologist and the Commission's hydrogeologist, have further reviewed the City's now revised project as well as new data and information developed in the time since the March hearing, and staff is convinced that the City's proposed project, as conditioned, represents the best possible outcome under the Coastal Act with respect to this project. It is clear that the City took Commissioner input seriously from the March hearing and modified its project accordingly. It is also clear that the City's now proposed project is superior to the CNPS alternative project, and that it represents an important habitat protection and public access project that will facilitate multiple Coastal Act goals and objectives, particularly with respect to protection and enhancement of ESHA at this location.

As conditioned, the project can be found consistent with the Coastal Act, and staff recommends that the Commission approve a CDP for the proposed project. The motion to act on this recommendation is found directly below.

2. Staff Recommendation on CDP Application

Staff recommends that the Commission, after public hearing, **approve** the proposed project subject to the standard and special conditions below.

> **Motion:** I move that the Commission approve coastal development permit number 3-09-068 pursuant to the staff recommendation.

Staff Recommendation of Approval: Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve the Permit: The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

Please click on the link below and the one on the next page to go to the exhibits. Exhibits A through O are in one file and Exhibit P is in another file.

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Exhibit K: Correspondence (Opposed to Paved Trails) received since March 2010 Staff Report
Exhibit L: U.S. Fish and Wildlife Service Correspondence Dated September 15, 2008
Exhibit M: California Department of Fish and Game Correspondence dated July 15, 2010
Exhibit N: Ex Parte Communication
Exhibit O: Santa Cruz Tarplant Population Censuses
Exhibit P: City of Santa Cruz Binder Response dated July 2010
- Tab 1: City's Habitat Fragmentation Discussion
- Tab 2: Proposed Arana Gulch Interpretive Program
- Tab 3: Neary Lagoon Wildlife Refuge & Interpretive Trail System
- Tab 4: Subsurface Drainage Conditions Adjacent to Mid-Meadow Trail Alignment
- Tab 5: Proposed Cattle Grazing Areas and Grazing Plan
- Tab 6: City's Tarplant Habitat Management Activities 1995-2010
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  - Map 3: City's Revised Proposed Trail Alignment (current proposed alignment)
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- Tab 14: Quantitative Comparison of City and CNPS Alternative Trail Alignments
  - AL-1.1: City's Proposed Trail Alignment
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  - AL-2.1: CNPS's Proposed Trail Alignment
  - AL-2.2: Cross Sections of CNPS's Proposed Trail Alignment
  - AL-2.3: Slope Analysis for CNPS's Proposed Alignment re: ADA Compliance
- Tab 15: Arana Gulch Master Plan (includes Tarplant Adaptive Management Program)

B.Findings and Declarations

The Commission finds and declares as follows:

1. Project Location and Description

A. Arana Gulch Location and Setting

Arana Gulch is a City-owned open space area situated along the eastern boundary of the City of Santa Cruz where it transitions to the unincorporated Live Oak area of Santa Cruz County, just inland of the upper portion of the Santa Cruz Harbor (Harbor) (see Exhibit A for a location map and Exhibit B for an aerial photograph of the site). This 67.7-acre open space area includes a large meadow area that is generally framed in on both sides by Arana Creek (downcoast, to the east) and Hagemann Gulch (upcoast, to the west), both of which feed into the upper Harbor (to the south). Grassland covers the main expanse of the meadow area. On the eastern portion of the property, the grassland gives way to riparian scrub and forest, sloping down to the broad floodplain of Arana Creek. To the west, Hagemann Gulch, a steep wooded canyon with intermittent Hagemann Creek at its base, forms the southwestern boundary of the property.

The Arana Gulch area is currently a highly used public access area (mostly pedestrian with some bicyclists),[4] with the primary access from the upper Harbor parking lot and dry boat storage area, and from the Agnes Street residential neighborhood on the inland side.[5] At least 2.5 miles of unimproved trails, most of which long existed in one form or another prior to the City's ownership of the property, crisscross and loop the meadow and Arana Creek area within Arana Gulch (see Exhibit P, Tab 13, Map 1 for a depiction of existing trails within the property). The main trail that gets the most use extends from the main entrance at Agnes Street at the north end of Arana Gulch to the upper Harbor area at the south end of Arana Gulch. This main trail ranges from about six to eight feet in width, is made up primarily of hard packed soil, and is subject to ongoing erosion problems, including primarily along the portion of the trail that drops down from the primary meadow elevation to the Harbor elevation (an elevation change of roughly 35 feet). In addition to the main trail, a variety of loop trails have been created through ongoing use that extend along both the perimeter of the meadow area as well as in loops interior to that perimeter. With the exception of limited park signage and fencing, and some crumbling foundation elements from long gone buildings (see below), there are no existing structures or other such development within the Arana Gulch property.

Access connections into Arana Gulch associated with the project (see also project description below) would include trail development both in the City of Santa Cruz to the west (upcoast) and in

[4] Vehicular access is not allowed within Arana Gulch.

[5] Additional access can be gained from a variety of locations where Arana Gulch intersects public use areas (including along the creeks themselves), but the signed and identified (and most used) main access points are at Agnes Street and the Harbor.

unincorporated Santa Cruz County to the east (downcoast). In the City, trail development would extend from Frederick Street where it intersects Broadway Avenue along a City owned right-of-way that skirts Harbor Drive and connects to the Arana Gulch property. This area extending from Frederick Street is currently occupied by a parking lot used by a local church. In the County, trail development would extend along the upper Harbor access road to 7th Avenue at its intersection with Brommer Street. This area extending to 7th Avenue is currently an access road framed on the seaward side by a largely undeveloped property and on the inland side by a Port District storage yard.

See Exhibit A for a location map, Exhibit B for an aerial photograph of Arana Gulch and the surrounding area, and Exhibit P, Tab 13, Map 1 for the locations of existing trails within the property.

B. Arana Gulch and Proposed Trail History

The Arana Gulch site was once part of 110 acres of ranchlands known as Live Oak Ranch in the late 1800s. Cattle were grazed on the grassland portion of that property, including the current meadow area at Arana Gulch. In the 1920s, the Arana Gulch property became the site of the East Side Dairy. The dairy operation continued through the mid-1950s. A barn and other structures were once located within the northern portion of the property, but were demolished after the mid-1970s. No historic buildings or significant remnants exist from either the Live Oak Ranch or the East Side Dairy operations, although some limited remnants of old foundations remain from some of the structures associated with the East Side Dairy. Cattle grazing continued on the property until the late 1980s.

In 1994, the City of Santa Cruz acquired the majority of the property (63 acres) as part of a phased effort to acquire greenbelt areas in and around the City. Years prior to that purchase, the City had already acquired a strip of land in the central portion of the property (approximately 4.7 acres) that was originally intended for a roadway extension between Frederick Street in the City of Santa Cruz and 7th Avenue in adjacent unincorporated Santa Cruz County (i.e., the road segment, if it were to have been constructed, would have connected Broadway in the City to Brommer Street in the County), but the proposed road connection was very controversial, and the City did not continue to pursue it past the original property acquisition. The City also annexed four of the Arana Gulch properties that had been in the County (i.e., the County area east of Arana Creek proper) into the City in April 2007.[6]

Shortly after the 1994 acquisition that combined the City's holdings in Arana Gulch, the City formally opened the property to public use,[7] with the City Parks and Recreation Department managing the area. In 1997, the City Council approved the *Arana Gulch Interim Management Plan,* which outlined limited actions to maintain the property but did not include any land use decisions. At about that same time, the City began pursuing a trail project designed to connect Broadway to Brommer Street along essentially the old once-proposed roadway alignment. Originally the project was primarily billed as a commuter

[6] Note that the Arana Gulch Master Plan exhibits in this report show the four properties east of Arana Creek as still located in the County because the City created these exhibits before the annexation was final. When reviewing these exhibits, the City-County boundary in this area is now along the area called out as "Arana Gulch Boundary" in that area.

[7] Prior to that time the property was informally used by the general public, including along the series of trails described above.

bicycle project,[8] and it originally included two possible project alternatives: 1) a 12-foot-wide paved path traversing the meadow area and connecting to two bridges: a 740-foot long, elevated bridge over Arana Creek to connect the meadow trail to the Harbor access road (and ultimately to Brommer Street in the County), and a bridge over Hagemann Gulch connecting the meadow trail to the parking lot area extending between Frederick Street and Hagemann Gulch (and thus to Broadway in the City), and; 2) a 12-foot-wide paved path traversing the meadow area and connected to a shorter bridge (130 feet long) elevated over Arana Creek and the same bridge over Hagemann Gulch. For both alternatives, the bridge over Hagemann Gulch would have included two support columns placed directly into the riparian corridor. Both projects included lighting throughout the length of the paved paths and bridges.

The originally proposed alternatives, and the path project as a whole at that time, engendered both significant interest and controversy. Over the course of the years that followed, the City considered a variety of options to address identified concerns, and modified the project over that time in ways small and large. Ultimately, the proposed project was reduced in scale and scope as the City sought to address potential resource impacts (including by reducing the paved path widths to 8 feet, eliminating lighting along the entire trail length, eliminating bridge supports in riparian areas, etc.). Perhaps more importantly, over that same time, the project also morphed into a much more comprehensive master plan project for Arana Gulch and the meadow that goes beyond simply a paved path project to include other components related to maintaining and enhancing the open space and habitat values of Arana Gulch. In addition, although the paved trail components would still facilitate bicycle use, including commuter bicycle use, there has clearly been a burgeoning recognition over time that the paved trails would also enhance access for other users (including those in wheelchairs, those less physically able to traverse uneven footpaths, etc.), including in a nature study and interpretive capacity.

More recently, the City proposed an LCP amendment in 2006 that would have changed the LUP land use designations that affect Arana Gulch (proposed LCP Amendment STC-MAJ-2-06 Part 1). The City ultimately withdrew the LCP amendment,[9] and thus the old land use designations and zoning continue to apply to the property. These land use designations are holdovers from before the City's acquisition that reflect prior use and/or at one time contemplated use for the property, including LCP Land Use Plan (LUP) designations of CF (Community Facilities), L (Low Density Residential), VL (Very Low Density Residential), and NA (Natural Area), and zoning designations that are roughly half single-family residential with a minimum lot size of 5,000 square feet (R-1-5) and half FP (Flood Plain). The proposed 2006 LCP amendment would have changed these designations to one dual LUP designation of NA/PK

[8] Although it also would have facilitated other types of access (i.e., pedestrian, wheelchair, etc.).

[9] The City withdrew the LCP amendment just prior to the Commission's scheduled March 2009 hearing on the LCP amendment after reviewing the staff report for the hearing. In that report, Commission staff had identified problems with the City's submittal that warranted modifications to it. Specifically, the primary thrust of the amendment was to remove some of the more intensive development designations that currently apply to sections of the Arana Gulch property (i.e., residential, community facilities) in recognition of the fact that the City did not (and does not) intend to pursue such development of this open space greenbelt property in the future, and to instead designate the property as a natural area, flood plain, and park area. Although this primary objective was generally identified as appropriate by staff, the proposed amendment was deemed problematic because neither the Parks LUP designation nor the Flood Plain IP designation are appropriate for this property in light of its habitat sensitivity (see also ESHA findings that follow). Staff instead recommended that the appropriate LUP designation for this site was NA (Natural Area), and the appropriate IP designation for the site was PK (Parks).

(Natural Area/Parks), and a combination IP designation of FP (Floodplain) and PK (Parks).

The City indicated that its primary reason for its LCP amendment withdrawal was because the City thought that the staff report recommendation (to designate the site NA (Natural Area) in the LUP and PK (Parks) in the IP) would have precluded and/or prejudiced a future decision on implementation of a master plan with a paved path component (i.e., the current project before the Commission - see project description below). Although Commission staff did not (and do not) agree with this assessment, and continue to believe that the NA/PK designation is appropriate and allows for consideration of paved trails such as are being proposed here, the City ultimately concluded that it preferred to have a CDP decision on its master plan project prior to an LCP amendment so as to focus the deliberative process directly on the paved path question through a CDP application that includes the paths as opposed to an LCP amendment focused on land use designations that did not explicitly include or account for the paths. Although it is generally preferable to have LCP planning precede development associated with it, it is not a requirement (unless the LCP has to change to allow consideration of a project),[10] and the City's approach is reasonable in this case, including because: 1) the LCP does not need to be amended to allow for consideration of the project;[11] 2) the Coastal Commission retains CDP jurisdiction over much of the area where the path would be proposed (and thus the LCP can only provide non-binding guidance there); and, 3) because the City indicated it intended to pursue a consolidated CDP application (and thus the Coastal Act would be the standard of review for the entire Master Plan).[12]

In December 2009, the City of Santa Cruz applied to the Commission for a CDP to implement the Arana Gulch Master Plan for the 67.7 acre City-owned Arana Gulch greenbelt and to construct improved connecting trail segments outside of the greenbelt area. The CDP application was heard by the Commission at a March 11, 2010 hearing in Santa Cruz. After a Commission field trip that included a tour of the Arana Gulch property, and after several hours of public testimony and Commission deliberations, the Commission voted at that time to continue the hearing to a future date, including because the Commission was interested in additional detail and analysis regarding the City's proposed path alignment and ways to further reduce potential habitat impacts, and was particularly interested in additional analysis of the alternative alignment suggested by CNPS at that time that would use a loop nearer to the Harbor to connect paved trails from east to west (see Exhibit P, Tab 13, Map 4). In the time since that hearing, the City has done considerable investigation into ways to reduce potential impacts, and has significantly revised its proposed project to address Commissioner concerns (see City's binder submittal dated July 2010 in Exhibit P). In particular, the City has eliminated duplicative path segments and all path alignments within historic tarplant areas, and has instead moved paths farther away from

[10] That is, a "project-driven LCP amendment" (e.g., if an LCP does not allow for a hotel at a site where a hotel is proposed, then the LCP would have to be amended if a hotel at that site is to be considered).

[11] At about the time of the City's withdrawal of the proposed LCP amendment, it was discovered that a City policy requiring a specific plan for the site prior to any development (Policy 2.2.7 – see also Coastal Development Permit Determination section below) was in fact not an LCP policy. Policy 2.2.7 is in fact a City General Plan policy that is not part of the certified LCP, and thus has no LCP status. Also, to be clear, this policy is based on a previous position (no longer held by the City) identifying urban development in Arana Gulch. In fact, the specific plan required by Policy 2.2.7 identifies residential and potentially community facility (schools, playgrounds, etc.) development as part of such specific plan.

[12] See also CDP determination for discussion of the standard of review and the consolidated CDP process.

historic tarplant areas more to the periphery of the meadow as compared to the path alignment that was before the Commission in March 2010. The City has also nearly tripled the area within which grazing would be prescribed immediately, including within the area from which paths were moved.

C. Project Description

The proposed project would implement the Arana Gulch Master Plan, and includes management and restoration of habitat areas, including certain trail segment retirements; improvements to and realignments of the existing unpaved trail system, including some paved multi-use paths (some over existing trails, some new); construction of a bridge over Hagemann Gulch; interpretive displays and trail signage; and installation of fencing and a water supply to allow cattle grazing (to benefit Santa Cruz tarplant). The proposed project also includes construction of improved connecting trail segments into the Arana Gulch property from Frederick Street and 7th Avenue. The City indicates that the Master Plan has superseded and replaced the interim management plan from 1997. See the Arana Gulch Master Plan attached as Tab 15 of Exhibit P.

Since the March 2010 hearing, the City has revised the Master Plan to realign all trails (paved and unpaved) to avoid historical Santa Cruz tarplant areas, has expanded the area that would be grazed, and has removed an unpaved spur trail between the central meadow area and the portion of the Coastal Prairie Loop Trail adjacent to the Harbor. The City proposes to use porous asphalt or porous concrete as the surface for the multi-use trails, instead of nonporous asphalt as previously proposed. The City has also developed significant additional information and analysis on project issues, including issue areas where questions were raised at the March hearing, and including an analysis and comparison of the City's proposed trail alignment as compared to the CNPS alternative, as well as additional detail on the proposed cattle grazing regime, the interpretive program, project funding, potential hydrological impacts, potential habitat fragmentation impacts, trail materials comparison, and other related issues (see City's submitted binder in Exhibit P). See Exhibit P, Tab 13, Map 2 for the originally proposed trail alignment (from the March hearing), and Map 3 for the currently proposed trail alignment. See Exhibit P, Tab 14 for a quantitative analysis and graphic representation of the City's proposed trail alignment, including the way in which it compares to CNPS's proposed alternative alignment. See Exhibit P, Tab 12 for a written comparison between the City's proposed trail alignment and CNPS's proposed alternative alignment.

At its core, the proposed project is designed to enhance both public recreational access and coastal resources, each of which is described in more detail below.

1. Proposed Public Access Improvements

The existing trail system (see Exhibit P, Tab 13, Map 1) in Arana Gulch is quite heavily used and currently provides access opportunities for pedestrians and bicycles. However, the trails are currently footpaths on soil resulting in an irregular surface that can be difficult to traverse on a bike (particularly bikes made for road surfaces), can be difficult to traverse for potential access users (disabled or otherwise) that are less physically able to traverse uneven footpaths, and can be impossible to traverse for other user groups dependent on wheeled access (including those in wheelchairs, caregivers with

children in strollers, pedestrians needing walkers for assistance, etc.), particularly when trails are wet and soggy. Although the proposed trail improvements would actually reduce the number and length of trails in Arana Gulch through trail retirement (and restoration – see coastal resource enhancement section below), they would also pave a section of existing trail and provide realigned paved trail connections to it, thus providing new opportunities for currently underserved and un-served user groups. The City indicates that existing trails in Arana Gulch (including those maintained by the City and "volunteer" trails) total more than 2.5 miles, and the proposed trail system would total about 2 miles, including less than ½ mile (roughly 2,250 feet) of paved 8-foot-wide multi-use trails in the meadow, and over a mile (roughly 6,300 feet) of unpaved pedestrian trails in the meadow. Of the 2,250 feet of new paved trails in the meadow, about 60% would be installed on top of the existing hard pack trail, primarily along the main existing trail segment and a smaller section of the existing trail segment that is located nearer Hagemann Gulch, and about 40% (or 900 linear feet) would be a new paved trail connecting to these paved trail segments. There would be an additional roughly 2,200 linear feet of trails connecting to the meadow from 7th Avenue and from Frederick Street (including the bridge over Hagemann Gulch). The multi-use paved trails would feature a hardened surface made of either porous asphalt or porous concrete and a gradient that is compliant with ADA requirements. The paved multi-use trails would be neutral in color to blend with the surrounding environment. Multi-use trails would be designed for pedestrian, bicycle, and wheelchair use, and for dogs on-leash. The unpaved trails would be limited to pedestrian use only. See Exhibit P, Tab 13, Map 3 for the proposed trail system.

A new 340-foot multi-use pedestrian/bicycle bridge would be installed across Hagemann Gulch as part of the Canyon Trail at the western edge of the Arana Gulch meadow (see page 5 of Exhibit D). This bridge would provide new public access into Arana Gulch from the neighborhoods along the Gulch at the eastern boundary of the City, where none exists now. The new bridge would be supported by abutments located at either side of the top of Hagemann Gulch (no abutments would extend into the creek or into the lower-elevation riparian corridor located at the bottom of Hagemann Gulch). The bridge would be constructed by stringing cables across the span, anchoring the cables to each abutment, and then placing precast concrete deck panels on top of the cables. Following the placement of the deck panels, a cast-in-place concrete overlay would be added on top of the panels and the cables would be tensioned. The proposed bridge may be wider than 8 feet in some locations to accommodate interpretive displays and nature viewing areas. One non-heritage coast live oak tree would need to be removed to provide for installation of the bridge (see page AL1.1 in Tab 14 of Exhibit P), and some tree branches would need to be trimmed back.

Together with the bridge trail segment, the trail segment extending from the bridge to Frederick Street, and the trail segment extending along the Harbor access road to 7th Avenue, the west-east paved trails through the meadow would provide a continuous multi-use trail connection between the intersection of Broadway and Frederick Street in the City of Santa Cruz and the intersection of Brommer Street and 7th Avenue in the unincorporated Live Oak area of Santa Cruz County. Similarly, the north-south paved trail connection to this west-east paved trail would improve the existing unpaved north-south trail route that extends from Agnes Street to the upper Harbor, and thus to the beach and immediate shoreline via the Port District's public trail system ringing the Harbor itself (and providing a connection to the beach at Harbor Beach and Twin Lakes State Beach extending toward the ocean).

Construction of the new multi-use Creek View Trail along the northern boundary of the upper Harbor at the dry boat storage parking lot area and through to 7th Avenue (see Exhibit P, Tab 13, Map 3) requires an easement from the Santa Cruz Port District[13,14] and coordination with Santa Cruz County. The trail would be elevated via retaining walls for the easternmost portion of the paved Creek View Trail on Harbor property so as to locate the trail as far from Arana Creek as possible in this narrow area.[15] The Creek View Trail would pass above the four, six-foot-in-diameter culverts that allow Arana Creek to pass under the Harbor's dry boat storage area and adjacent parking lot and to empty into the Harbor's waters. The proposed retaining walls would vary in height up to a maximum height of 6 feet 7 inches in order to meet the grade extending away from the Harbor and toward 7th Avenue along the Harbor access road. This segment of trail lies within Arana Gulch's 100-year floodplain and 100-year floodway. The trail in this area would be elevated in such a way as to allow a 100-year creek flow event to pass through the existing culverts unimpeded and without any change to upstream conditions. No bridge is proposed over the open water of Arana Creek.

Pedestrian-only trails would include the Coastal Prairie Loop Trail and the Marsh Vista Trail (again, see Exhibit P, Tab 13, Map 3). These pedestrian trails would be maintained as narrow earthen footpaths, about two feet wide, and similar to what currently exists. The Coastal Prairie Loop Trail would loop the majority of the meadow area, and the Marsh Vista Trail would loop off of it nearer to the edge of the meadow where it transitions to the Arana Creek riparian area. As indicated previously, most of the trails in the proposed trail system currently exist, though some minor realignments and improvements would be necessary to avoid historic tarplant areas, for erosion control, and to enhance interpretive opportunities. Also, about a half-mile of existing soil trails in Arana Gulch would be closed and restored to better protect sensitive habitat areas. Most of Arana Gulch would remain undeveloped, with a focus on protection and enhancement of the sensitive habitat areas (see below).

The proposed Master Plan would allow dogs on-leash on all designated trails (paved and unpaved) except for the Marsh Vista Trail (to avoid disturbance to wildlife, primarily waterfowl, in the adjacent Arana Creek and associated wetlands). Off-leash dog use and off-trail uses of all types would be strictly prohibited.

To foster maximum appreciation and understanding of Arana Gulch resources, a series of interpretive displays and overlooks would be located along the trails at a series of appropriate locations. One of the primary objectives of the proposed project is to maximize opportunities to educate, inform, and inspire

[13] The Santa Cruz Port District Commission granted an easement for the trail at its public meeting on November 24, 2009.

[14] As part of its approval of CDP 3-98-113 (Santa Cruz Harbor Dry Storage), the Coastal Commission required that this portion of the Harbor's property provide a buffer between the Harbor's dry boat storage area and Arana Creek. The Commission's findings in that approval stated: "The City's General Plan calls for development of a bike/pedestrian trail to connect Broadway and Brommer streets through the Arana Gulch greenbelt property… Alternative D2 is one of the options that the City is considering. This alternative includes using a part of the Port District property… The proposed plans [dry boat storage] have been designed to allow for future development of the Broadway-Brommer pathway if the City develops the D2 alignment and if the development is permitted." Thus, the Commission's approval of CDP 3-98-113 acknowledged that a future trail might occupy a portion of this buffer area (i.e., the referenced D2 alignment).

[15] Some have claimed that the elevated trail structure is better considered a bridge due to such elevation. Because it is supported on fill with no airspace underneath, it is more aptly considered an elevated trail. See elevations of this trail segment in Exhibit C.

users of the trail system so as to enhance their enjoyment of Arana Gulch and its resources, and possibly more importantly to encourage them to help to protect such resources here and elsewhere. Interpretive and nature study trail opportunities like this, particularly in close proximity to urban areas with significant numbers of users and potential users, are limited, and thus it is critically important that their interpretive utility in this regard is maximized. Such is even more so the case at Arana Gulch where the Master Plan's proposed resource protection program includes significant opportunities to inform and educate regarding proactive (as opposed to passive "don't touch") management strategies for enhancing sensitive resources (including mowing, prescribed burns, scraping, grazing, etc.) as well as adaptations to these strategies and related experiments and research to maximize resource protection possibilities (see also resource protection and management section below). The two primary interpretive themes proposed for Arana Gulch include: 1) preservation and enhancement of the Santa Cruz tarplant/coastal prairie habitat, and; 2) riparian/wetland wildlife viewing and nature observation (see Exhibit P, Tab 13, Map 3 for the proposed locations of interpretive signs, and Exhibit P, Tab 2 for a detailed description of the City's proposed interpretive program).

In terms of other features, some limited bench seating will be provided at scenic overlooks, and fencing and signs would be installed as needed to discourage off-trail use. The project does not include any new parking areas; existing parking areas would continue to be available for site visitors (e.g., parking is available along adjacent public streets as well as in the upper Harbor parking lot). Likewise, no new restrooms are proposed, but existing public restrooms at nearby Frederick Street Park (accessed via stairs from the Harbor as well as from Harbor Drive and Frederick Street) would remain available.

No lighting would be installed along the trails within the meadow area of Arana Gulch, but low-level lighting would be installed at the Hagemann Gulch Bridge and the portion of the Creek View Trail that is located on Harbor property. The City indicates that lighting would be necessary to meet minimum public safety standards in these areas because tree cover would otherwise limit light in these areas during early morning hours and just prior to sunset (as proposed, the paths would be open from sunrise to sunset).

See Exhibit P, Tab 13, Map 1 for the existing trail configuration. See Exhibit P, Tab 13, Map 3 for the proposed trail system. See Exhibit C for cross sections of the proposed trails. See Exhibit D for photographs of the existing site conditions at Arana Gulch and for photographic simulations of the proposed trail improvements.

2. Proposed Coastal Resource Protection and Management

In addition to the public access improvements, the proposed Arana Gulch Master Plan also addresses protection and management of environmentally sensitive habitat areas (ESHAs). The City has identified three ESHAs (identified as "Management Areas" in the Master Plan) at Arana Gulch: 1) Coastal Prairie/Tarplant Management Areas (30.2 acres); 2) Arana Creek Riparian and Wetland Management Areas (34.5 acres), and; 3) Hagemann Gulch Riparian Woodland Management Areas (3.0 acres).

Coastal Prairie/Tarplant Management Area

The Coastal Prairie/Tarplant management area encompasses the main meadow area of Arana Gulch (see

Exhibit E). A key goal within this area is to enhance the populations of the Santa Cruz tarplant and other native prairie species, while reducing the abundance of invasive non-native grasses.

Resource Management Guidelines for Coastal Prairie/Tarplant Management Area

- Implement the Management Program for the Santa Cruz tarplant. This program sets forth potential management actions, monitoring protocols, and an organizational framework involving a botanist to ensure that the program is carried out in the long term. Management actions may include grazing, mowing, scraping, and prescribed burns;
- Avoid and preserve delineated seasonal wetlands located within the grassland;
- Monitor impacts of trail users near sensitive species. As needed, install fencing and/or signs or implement other strategies to deter off-trail use;
- Close unauthorized pathways in coastal prairie habitat;
- Remove non-native invasive shrubs to prevent further loss of coastal prairie acreage;
- Conduct annual fuel break mowing along the property boundaries to reduce the fuel load within the grassland areas;
- Coordinate with the City of Santa Cruz Fire Department to conduct prescribed burns (timing of the prescribed burns to be determined by a qualified botanist);
- Install post and wire livestock fencing (4½ to 5 feet in height) in three fenced grazing areas (12.33 acres; see Exhibit P, Tab 13, Map 3) of the Coastal Prairie/Tarplant Management Area to allow for cattle grazing (see Exhibit P, Tab 5 for grazing program information).

Public Use Guidelines for Coastal Prairie/Tarplant Management Area

- Provide multi-use interpretive trails into Arana Gulch and connecting to surrounding neighborhoods and the upper Harbor area;
- Ensure that pathways minimize disturbance to the coastal prairie habitat and Santa Cruz tarplant;
- Minimize grading and alteration of natural drainage patterns;
- Align trails to avoid all seasonal wetlands within the grassland;
- Provide some pedestrian-only trails to ensure a range of interpretive access experiences.

See Exhibit E for the proposed habitat management areas and Exhibit P, Tab 13, Map 3 for the historic Santa Cruz tarplant areas in relation to the proposed trail system and for the areas proposed for grazing and associated fencing.

Arana Creek Riparian and Wetland Management Area

This management area is located along the eastern portion of the project site and features valuable habitat for aquatic species and birds. The proposed unpaved Marsh Vista Trail, which is located in an area similar to an existing "volunteer trail", will offer overlooks of the creek and the coastal marsh. No dogs would be allowed on the Marsh Vista Trail. Public access within the wetland and stream habitat areas would be prohibited to protect wildlife habitat.

Resource Management Guidelines for the Arana Creek Riparian and Wetland Management Area

- Conduct further hydrologic analysis regarding accelerated head cutting and bank erosion along the tidal reach of Arana Creek. Design and implement a bank restoration project that reduces sedimentation and enhances fisheries and wildlife habitat;
- Restore the eroded gully in the northern portion of Arana Gulch. Design and implement a restoration project that reduces sedimentation and blends with the natural setting;
- Remove non-native invasive vegetation;
- Close unauthorized pathways within the wetland and riparian habitat areas;
- Monitor impacts of trail users near sensitive wetland and riparian habitats and, as needed, install fencing and/or signs or implement other strategies to deter off-trail use.

Public Use Guidelines for the Arana Creek Riparian and Wetland Management Area

- Enhance the existing trail (Marsh Vista Trail) along the western boundary of the Arana Creek Riparian and Wetland Management Area for pedestrian use only;
- Prohibit dogs within the riparian and wetland habitat of Arana Creek and on the Marsh Vista Trail;
- Conduct non-toxic mosquito abatement as needed in a manner that minimizes impacts to wildlife species.

See Exhibit E for the habitat management areas and Exhibit P, Tab 13, Map 3 for the wetland areas and the proposed trail system.

Hagemann Gulch Riparian Woodland Management Area

This 3-acre wooded canyon along the southwestern boundary of Arana Gulch features a mix of riparian trees and scrub, though the number of invasive plant species in the canyon reduces habitat value somewhat. Due to the steep terrain, public use of this area would be limited to a new bridge providing pedestrian, bicycle, and wheelchair access between Arana Gulch and the adjoining neighborhoods.

Resource Management Guidelines for the Hagemann Gulch Riparian Woodland Management Area

- Remove non-native, invasive understory species, such as broom and ivy, to the extent feasible;

- Contain expansion of eucalyptus trees and reduce fire hazard by pruning lower branches of eucalyptus and removing smaller trees and saplings;
- Close unauthorized pathways within Hagemann Gulch.

Public Use Guidelines for the Hagemann Gulch Riparian Woodland Management Area

- Establish a new west entrance at Hagemann Gulch, consisting of a new multi-use trail and bridge crossing with an interpretive overlook, to provide a multi-use trail connection into Arana Gulch as well as between Arana Gulch and the residential Seabright neighborhood of Santa Cruz;
- Design the bridge to minimize impacts to heritage trees and habitat values and to blend with the natural setting as much as possible.

See Exhibit E for the habitat management areas, Exhibit P, Tab 13, Map 3 for the proposed trail system in relation to Hagemann Gulch, and page 5 of Exhibit D for photographic simulations of the proposed Hagemann Gulch bridge and multi-use trail.

Phasing, Funding and Implementation of the Management Plan

The Arana Gulch Master Plan would be implemented in phases. Its phasing plan identifies specific projects, projected timelines, and staffing needs to maintain and manage the proposed improvements. The phasing plan is organized into two phases, based on City fiscal year cycles that begin in July of each calendar year. The first phase focuses on establishing a management program[16] for the Santa Cruz tarplant and developing the multi-use interpretive trail system. The second phase is largely focused on continued implementation of the Santa Cruz tarplant adaptive management program, management of the trail system, and restoration of eroded areas. Both phases include continued removal of non-native invasive vegetation.

Major multi-use trail improvements, including the Hagemann Gulch Bridge, and the Canyon and Creek View Trails would be largely funded through federal and local grants (see Exhibit P, Tab 9). The City has obtained $2.7 million in federal funds and local funds to construct the ADA accessible multi-use paths. According to the City, federal transportation enhancement funds are commonly used to develop pedestrian, bicycle, and accessible paths. These funds can also be used to provide mitigation for the project as identified in the EIR (see Exhibit F for required mitigations) for up to three years. The City states that these funds are critical to the initial implementation of tarplant restoration efforts (e.g. cattle grazing and associated fencing) and monitoring activities, as well as wetland enhancement and restoration. The City also proposes to use local funds from the sale of public property (valued at over $1 million) adjacent to Arana Gulch that was originally purchased for the construction of a connecting road between Broadway and Brommer Street. Of these funds, $420,000 is identified in the Santa Cruz

[16] A management plan has been prepared and incorporated as part of the proposed Master Plan for the Santa Cruz tarplant on the Arana Gulch site (BMP Ecosciences, 2005). In addition to ongoing management techniques such as semi-annual mowing and other more intensive techniques such as scraping or prescribed burns, this management plan also prescribes continued experimental research on management techniques and ongoing monitoring, with subsequent revisions of the management prescriptions as appropriate.

County Regional Transportation Plan as a local match for design and construction of the multi-use path. The remainder of these funds will be placed into a trust fund for habitat restoration and management activities. After the three-year implementation phase of the adaptive management program is complete, the City estimates that continuing program activities will cost less than $20,000 per year, which the City indicates it will fund from its operating budget. The maintenance of the multi-use paths and unpaved trails will be done within the City's existing operating budget, which has a variety of funding sources.

Ownership

Although most of the affected property is owned by the City (i.e., Arana Gulch itself and the connection to Frederick Street), the trail segment extending along the inland side of the Harbor's dry boat storage parking lot and along the Harbor access road is owned by the Santa Cruz Port District. As indicated above, the Port District granted an easement to the City for that portion of the proposed project located on Port District property in 2009.

2. Coastal Development Permit Determination

A. Standard of Review

Although the vast majority of Arana Gulch is located within the City of Santa Cruz's city limits,[17] the proposed project also extends into unincorporated Santa Cruz County (i.e., the trail segment extending along the Harbor access road to 7th Avenue). Thus, a portion of the project is located in the City's coastal permitting jurisdiction, and a portion is located in Santa Cruz County's coastal permitting jurisdiction. In addition, a significant proportion of the proposed project is located within the Commission's retained coastal permitting jurisdiction (i.e., that portion of the project area that includes the Arana Creek riparian area and associated woodland). Thus, the proposed project spans three different CDP jurisdictions, and two property ownerships.

To simplify the coastal permitting process in such multi-jurisdictional cases, Coastal Act Section 30601.3 allows for the Commission to act upon a consolidated CDP application if the applicants, the local government(s) in question, and the Commission (through its Executive Director) agree to the Commission processing and acting upon a consolidated CDP application, provided public participation is not substantially impaired. In this case, the City, the County, and the Commission have all agreed to such a consolidated CDP application process. Pursuant to Coastal Act Section 30601.3, the standard of review for this consolidated CDP application is Chapter 3 of the Coastal Act, with the City's LCP providing non-binding guidance for the portion of the proposed project in the City and the County's LCP providing non-binding guidance for the portion of the proposed project in the County. As such, applicable Coastal Act policies are cited in the analysis that follows, as well as certain LCP policies for guidance as relevant.

[17] Id (note recent annexation not shown on Master Plan exhibits).

B. Environmentally Sensitive Habitat Area (ESHA)

1. Applicable Policies

The Coastal Act is very protective of habitat, including environmentally sensitive habitat areas (ESHA) and wetlands. With respect to ESHA, the Coastal Act defines ESHA as follows:

> ***Section 30107.5.*** *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Non-resource dependent development within ESHAs is prohibited, and adjacent development must be sited and designed so as to maintain the productivity of these natural systems. In particular, Coastal Act Section 30240 states:

> ***Section 30240(a).*** *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> ***Section 30240(b).*** *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

The Coastal Act also includes specific protective policies for marine and aquatic environments, including wetlands. Coastal Act Sections 30230, 30231, and 30233 provide:

> ***Section 30230.*** *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*
>
> ***Section 30231.*** *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*
>
> ***Section 30233(a).*** *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible*

mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

***Section 30233(c).** In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary…*

Finally, the Coastal Act references general habitat protection in the provisions of Section 30250(a) with respect to coastal resources in general as follows:

***Section 30250.** (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located ... where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.*

In addition, the following certified City of Santa Cruz LCP policies,[18] although not the standard of review, can provide pertinent information and guidance:

***Environmental Quality Element Policy 2.3.1:** Design and site development to minimize lot coverage and impervious surfaces, to limit post-development runoff to predevelopment volumes,*

[18] The City's General Plan includes Land Use Element Policy 2.2.7, which requires a specific plan for the Arana Gulch site prior to any development. Per this General Plan policy, the required elements of the specific plan include habitat protections, pedestrian and bicycle linkages through Arana Gulch, as well as clustered development consisting of low-density residential development and a possible community facility, such as a school or a neighborhood park. Although the City's General Plan attaches a wave symbol to this policy (identifying it as a component of the certified LUP), Policy 2.2.7 was never certified as part of the LCP and is not an LCP policy. The City submitted this policy for Commission consideration as part of LCP Amendment 2-93 in 1993, but subsequently withdrew this proposed policy from its submittal.

and to incorporate storm drainage facilities that reduce urban runoff pollutants to the maximum extent possible.

Environmental Quality Element Policy 4.2: *Preserve and enhance the character and quality of riparian and wetland habitats, as identified on Maps EQ-8 and EQ-11, or as identified through the planning process or as designated through the environmental review process.*

Environmental Quality Element Policy 4.2.1: *Develop, adopt, and implement management plans for City-owned wetland and riparian areas including:…Arana Gulch…*

Environmental Quality Element Policy 4.2.2: *Minimize the impact of development upon riparian and wetland areas through setback requirements of at least 100 feet from the center of a watercourse for riparian areas and 100 feet from a wetland. Include all riparian vegetation within the setback requirements, event if it extends more than 100 feet from the water course or if there is no defined water course present.*

Environmental Quality Element Policy 4.2.2.1: *Require that all development within 100 feet of these areas be consistent with the applicable management plan provisions[19] under EQ 4.2.1 and L 3.4, if one has been established.*

City-Wide Creeks and Wetlands Management Plan. *For Hagemann (Gulch) Creek and Arana (Gulch) Creek, the following apply:*

> *Arana (Gulch) Creek: …the lower watershed where Arana Gulch Creek broadens into a wetland, Arana wetland, is located within the Arana Greenbelt, and development within or adjacent to Arana Wetland would be subject to the Arana Gulch Management Plan (currently being prepared).[20]*
>
> *Hagemann (Gulch) Reach 1: In 2003, the average width of the vegetated corridor along Reach 1 of Hagemann Gulch was 40 feet. For Hagemann Gulch Reach 1, the Management Plan recommends a 40-foot-wide riparian corridor and a development setback of 60 feet.[21]*

Environmental Quality Element Policy 4.2.2.3: *Prohibit uses such as construction of main or accessory structures, grading or removal of vegetation within riparian and wetland resource and buffer areas and allow permitted uses (such as pervious non-motor vehicular trails,*

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[19] The Commission certified the City's "City-Wide Creeks and Wetlands Management Plan" as part of the LCP on May 9, 2008. Among other things, the Plan identifies appropriate development setbacks (often less than 100 feet) based on an evaluation of habitat, stream, and land use characteristics of individual watercourses and wetlands.

[20] Thus, the LCP's City-Wide Creeks and Wetlands Management Plan envisions that appropriate setbacks in the area of Arana Creek and its associated wetland would be determined by a plan developed specifically for the Arana Gulch open space area. As previously indicated, this Master Plan represents such guidance, and has superceded and replaced the City's 1997 interim management plan for the property.

[21] The setbacks required in the LCP's City-Wide Creeks and Wetlands Management Plan are meant to apply to residential, commercial, and similar types of development, and were not intended to restrict or prohibit bridge development or bridge redevelopment over the City's watercourses.

incidental public services, …) associated with nature study or resource-dependent activities, construction, grading or removal of vegetation necessary for maintenance, landscaping designed to provide a natural buffer and grading necessary as a part of such landscaping plan, passive recreation, habitat preservation, and restoration, that are consistent with the environmental quality policies of the Plan, Section 30222 of the Coastal Act, and adopted management plans. Development in wetlands can be undertaken only where there is no feasible, less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. If any exceptions to this policy are to be considered, it shall be within the context of a resource management plan approved by the Coastal Commission as an amendment to the Land Use Plan.

Environmental Quality Element Policy 4.2.4: *Preserve riparian and wetland vegetation by minimizing removal and allowing only for uses dependent on the resources, passive recreational use, and maintenance of existing uses according to adopted management plans with compensating mitigation. Remove non-native invasive plants as specified in the management plans. Where consistent with the protection of riparian and wetland areas, provide actual or visual access of a low-impact nature (e.g., unpaved, narrow trails, boardwalks, and vista points).*

Environmental Quality Element Policy 4.3: *Preserve the character and quality of grassland habitats, as identified on Map EQ-8 by minimizing disturbance and removal of native grasslands and design landscaping to provide a natural buffer.*

Environmental Quality Element Policy 4.5: *Continue the protection of rare, endangered, sensitive, and limited species and the habitats supporting them as shown in Map EQ-9 or as identified through the planning process or as designated as part of the environmental review process.*

Environmental Quality Element Policy 4.5.2: *Preserve the Santa Cruz Tar Plant by requiring appropriate buffers from any development and a management plan for onsite preservation.*

Likewise, Santa Cruz County LCP guidance also provides policies geared to protection of the County's natural resources, such as the Arana Creek area located at the City-County boundary in the project area. Applicable policies include:

Santa Cruz County LCP Policy 5.2.4 - Riparian Corridor Buffer Setback: *Require a buffer setback from riparian corridors in addition to the specified distances found in the definition of riparian corridor. This setback shall be identified in the Riparian Corridor and Wetland Protection ordinance and established based on stream characteristics, vegetation and slope. Allow reductions to the buffer setback only upon approval of a riparian exception. Require a 10 foot separation from the edge of the riparian corridor buffer to any structure.*

Santa Cruz County LCP Policy 5.2.5 - Setbacks From Wetlands: *Prohibit development within the 100 foot riparian corridor of all wetlands. Allow exceptions to this setback only where consistent with the Riparian Corridor and Wetlands Protection ordinance, and in all cases,*

maximize distance between proposed structures and wetlands. Require measures to prevent water quality degradation from adjacent land uses, as outlined in the Water Resources section.

Santa Cruz County LCP Policy 5.2.7 - Compatible Uses With Riparian Corridors: *Allow compatible uses in and adjacent to riparian corridors that do not impair or degrade the riparian plant and animal systems, or water supply values, such as non-motorized recreation and pedestrian trails, parks, interpretive facilities and fishing facilities. Allow development in these areas only in conjunction with approval of a riparian exception.*

2. ESHA Analysis

General Setting

Vegetation on the 67.7-acre Arana Gulch open space site consists of degraded coastal prairie grassland, riparian scrub and woodland, oak woodland, seasonal wetlands, emergent wetlands, and open water. Stands of eucalyptus groves and remnants of landscape plantings are also found within the project site. The gently rolling coastal terrace area of the site is occupied by grassland that is largely dominated by non-native species but that has some remnant characteristics of native coastal prairie grassland. Oak woodland occurs on the lower east-facing slope of Hagemann Gulch and, to a lesser extent, on the mid and lower east-facing slopes above Arana Creek. Riparian scrub and woodland occupy the narrow bottom of Hagemann Gulch and much of the broad bottomland adjacent to Arana Creek, and locally extends onto the adjacent slopes where it transitions into oak woodland. A large area of mixed vegetation in the central portion of the Arana Creek bottomland, which is influenced by brackish tidal flow and a high water table, is characterized as emergent wetland. Scattered oaks and oak woodland are also present on the southern knoll of the terrace area above the Harbor. See Exhibit E for the locations of these various habitat areas.

Three special status animal species are present within the Arana Gulch open space area: Steelhead (*Oncorhynchus mykiss*), Western red bat (*Lassiurus blossevillii*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Steelhead, which is federally-listed as threatened, are present in extremely small numbers in Arana Creek. Western red bat, which is considered a California "Species of Special Concern" by the California Department of Fish and Game, roosts in foliage primarily in riparian and wooded habitats along Arana Creek. The San Francisco dusky-footed woodrat, also a California "Species of Special Concern," occurs along Arana Creek and in the Hagemann Gulch woodlands.

At least one special-status plant species,[22] Santa Cruz tarplant (*Holocarpha macradenia*) occurs on the Arana Gulch site. Santa Cruz tarplant is a small to medium-sized annual herb in the sunflower family (Asteraceae). It is glandular, aromatic, and more or less sticky to the touch, and produces solitary or

[22] In addition to tarplant, observations of Choris's popcorn flower (*Plagiobothrys chorisianus*) have also been reported at Arana Gulch, Choris's popcorn flower is a low-growing, white-flowered annual herb in the borage family, that has two recognized varieties (var. *chorisianus* and var. *hickmanii*), both of which occur in Santa Cruz County. Although neither variety is currently listed by the federal government or the state, var. *chorisianus* is listed on List 1B of the CNPS Inventory (i.e., "Plants Rare, Threatened, or Endangered in California and Elsewhere"). In 1998, approximately 100 plants of Choris's popcorn flower were observed within Santa Cruz tarplant Area A by CNPS representatives. These plants could not be satisfactorily identified as to variety. The species has not been observed on the site since 1998, but a seed bank may still be present there.

clustered flower heads with short but prominent yellow ray flowers. The species is federally-listed as threatened and State-listed as endangered (in 2000 and 1979, respectively). It is also listed on List 1B of the CNPS's inventory of rare, threatened, or endangered plants. In 2002, the U.S. Fish and Wildlife Service (USFWS) designated 65 acres of Arana Gulch as critical habitat for the Santa Cruz tarplant. This critical habitat designation provides additional protections for the Santa Cruz tarplant under the Endangered Species Act.

Although degraded by invasive plant species,[23] the Arana Gulch open space area continues to provide important habitat for rare and important species, in particular the Santa Cruz tarplant and three special status animal species. Tarplant has been historically documented in four disjunct areas of the site (see discussion below). In addition, the rest of the meadow area provides appropriate physical habitat for coastal prairie and tarplant despite the lack of documented historical occurrences, and although native plants are not currently growing in much of that area (a current vegetation map of the meadow area might characterize it as non-native grassland or ruderal). The fact that the meadow area provides appropriate physical habitat for tarplant at this location argues that the whole of the meadow be considered tarplant habitat. The site also includes coastal prairie grassland, oak woodland, and a variety of wetland and stream habitats. These habitat areas are easily disturbed and degraded by certain human activities and developments. Therefore, the entire Arana Gulch open space area constitutes an environmentally sensitive habitat area (ESHA) as defined by the Coastal Act.[24] Per the Coastal Act, only resource-dependent development is allowed in ESHAs, and only if the habitat is protected against any significant disruption of habitat values.

In this case, there is little question that the bulk of the Master Plan (see Tab 15 of Exhibit P) pertaining to habitat enhancement measures can be found consistent with the Coastal Act in this respect (e.g., closure of "volunteer" trails with subsequent restoration of these areas, removal of non-native plant species, grazing and other measures to benefit the Santa Cruz tarplant, etc.). The primary ESHA question and the central controversy to date with the proposed project is whether it is appropriate to allow the proposed pathway system to cross the meadow and Hagemann Gulch.[25] The Commission has a long history of approving trail projects, including boardwalks and paved and unpaved paths, within a variety of habitats determined to be ESHA.[26] In general in such approvals, the Commission has found

[23] For example, the dominant plant species on the coastal prairie grassland areas of the site are annual, non-native grasses.

[24] This ESHA area does not include the buffer areas north of the Harbor's dry boat storage parking lot that serves as a habitat buffer area (including per CDP 3-98-113), and does not include connecting trail segments from the proposed bridge to Frederick Street and along the Harbor access road.

[25] Id (other areas are not located in ESHA).

[26] The following is a non-comprehensive list of some of the projects the Commission has approved that include trail development through ESHA. The trails in these projects include paved and unpaved trails and boardwalks. Some provide pedestrian-only access, while others allow multi-use access, including bicycles and wheelchair access: CDP 2-07-018 (Sonoma County Regional Parks – multi-use path consisting of crushed rock, located in coastal scrub habitat containing sensitive plant species); CDP 3-01-101 (Del Monte Beach re-subdivision – boardwalk through dune habitat); 3-01-003 (Grover Beach Boardwalk – boardwalk through dune habitat); CDP 3-87-258 (Asilomar State Beach Boardwalk – boardwalk through dune habitat); CDP A-3-SLO-04-035 (PG&E Spent Fuel Storage – unpaved paths through coastal terrace prairie habitat); CDP 3-05-071 (Morro Bay Harborwalk – paved road and paved trail through dune habitat); CDP A-1-MEN-06-052 (Redwood Coast Public Access Improvements – unpaved paths through rare plant habitat and riparian habitat); 80-P-046-A1 (Humboldt County Public Works Subdivision – compacted gravel trail through riparian habitat); CDP 3-00-092

that although trails through ESHA may cover a portion of an environmentally sensitive habitat to allow for public access to, within, and through the ESHA, trail development can be considered a form of nature study or similar resource-dependent activity because: (1) it is a development type that is integral to the appreciation and comprehension of the biophysical elements that comprise an environmentally sensitive habitat area; and (2) the trail is dependent upon the presence of the natural area resource through which it passes to provide a nature study and interpretive experience. Thus, such trails through ESHA can constitute resource-dependent interpretive trails when they serve an interpretative purpose, including nature study, and thus meet the resource-dependency test of Coastal Act Section 30240. At the same time, such trails by definition provide a functional public access transportation purpose (i.e., providing physical transportation access to, within, and through a particular site). In other words, such trails can constitute resource-dependent interpretive trails at the same time as they provide a 'transportation' function. The Commission has not historically attempted to significantly parse these two functions of such trails to say that if a trail serves more of one purpose than another, then the other purpose is negated in some way. On the contrary, the relevant Coastal Act question in a Section 30240 context is not whether a trail provides a public access transportation function, as all trails do to one degree or another. Instead, the relevant question is whether the trail provides an interpretive and nature study function dependent on the resource in question. It may be that a trail provides for certain public access improvements, and this is often noted and noteworthy for such projects and important in terms of other Coastal Act objectives and requirements. However, this is secondary in a 30240 context and cannot be countenanced to meet Section 30240 requirements by itself. Again, a project first must meet the resource-dependency test of Section 30240 in order to be considered in terms of other Coastal Act Chapter 3 policies. The referenced examples describe a consistent history and practice on the part of the Commission in this respect, and are informative to the consideration of the proposed Arana Gulch project.

As a case-study example, the Commission's approval of CDPs 3-97-062 and 3-00-092 (see footnote above) acknowledged the significant public access transportation benefits of providing for almost two miles of multiuse paved paths between Sand City and the City of Monterey along the shoreline, but such finding was premised on the paths and project being deemed resource-dependent first. In those cases, as in the case before the Commission in Arana Gulch, the projects included habitat restoration and enhancement and also included paved paths through an area deemed ESHA where the paths also provided a non-vehicular alternative transportation function. In approving those paved paths, the Commission acknowledged that the resource in question was ESHA (albeit degraded); the Commission found that the projects were resource dependent, including because the paved paths would provide for interpretation of the dune habitat in this location, and would also enhance habitat for the threatened Western Snowy Plover and the endangered Smith's Blue Butterfly, as well as other native listed coastal dune plant species; and then the Commission also found that the projects would improve non-

(Monterey Dune Recreation Trail and Parking Lot – paved multiuse path through dune habitat); CDP 1-07-005 (Crescent City Harbor Trail North Segment – Class I and Class III multiuse trails involving some wetland fill); CDP 3-97-062 (Sand City bike path – paved path through dune habitat); CDP 3-06-069 (Fort Ord Dunes State Park Improvements – unpaved path through dune habitat); CDPs 3-98-095 and 3-98-095-A1 (Elfin Forest Boardwalk – boardwalk through terrestrial habitat ESHA); CDP 6-06-043 (Otay River Valley Regional Park trails – decomposed granite trails through coastal sage scrub and wetland habitat). The City's binder submittal details some of these cases, including providing the text of relevant Commission findings (see Exhibit P, Tab 7).

automobile public access transportation continuity along the existing Monterey Recreation Trail that extends from Pacific Grove to the City of Marina (including increasing opportunities for bicycle commuting between the Sand City/Seaside areas to Monterey City). The proposed project before the Commission in the Arana Gulch case is similar in many respects to the above-mentioned CDP decisions because the project includes paved paths in ESHA (in degraded tarplant habitat in need of enhancement), and it also includes significant resource-dependent habitat restoration, as well as resource-dependent interpretation components, including those inherent to and accruing by virtue of bringing a range of visitors (including pedestrians, bicyclists, wheelchair users, persons with strollers, etc.) into the habitat itself via use of paved paths, that will provide the public the opportunity to experience the coastal terrace prairie, wetlands, and woodlands habitats. Yes, the project would also improve non-automobile public transportation and trail continuity, including bicycle commuting, along this area of the coast for a wide variety of users (including providing a safe bicycle access connection between the east side of the City of Santa Cruz and the County), but that finding only proceeds from an initial foundation that its resource-dependent features meet the test of Section 30240. The proposed project meets this Section 30240 test because of its relationship to bringing people, including a broad range of visitors precluded from such access now, into this natural environment as a means of better appreciating and learning about it. As such, the proposed project is simply another project in a long list of such projects (such as those referenced in the footnote above) that share this similar and consistently applied theme and logic under the Coastal Act (again, see also the City's annotated examples in Exhibit P, Tab 7).[27] In fact, one of the primary objectives of the proposed project is to maximize opportunities to educate, inform, and inspire users of the trail system so as to enhance their enjoyment of Arana Gulch and its resources, and possibly more importantly to encourage them to take action to help protect such resources here and elsewhere. Interpretive and nature study trail opportunities like this, particularly in close proximity to urban areas with significant numbers of users and potential users, are limited, and thus it is critically important that their interpretive utility in this regard is maximized. Such is even more so the case at Arana Gulch where the Master Plan's proposed resource protection program includes significant opportunities to inform and educate the public regarding pro-active (as opposed to passive "don't touch") management strategies for enhancing sensitive resources (including grazing, mowing, prescribed burns, scraping, etc.) as well as adaptations to these strategies and related experiments and research to maximize resource protection possibilities.

[27] On this point it is noted that some have argued that the Commission's history should be interpreted and understood in terms of before and after the landmark Bolsa Chica decision in 1999 (*Bolsa Chica Land Trust v. Superior Court* 71 Cal.App.4th 493, 507). However, such argument misses the point of the foregoing history and discussion. Namely, *Bolsa Chica* was concerned with ensuring that Section 30240 was appropriately understood as only allowing for development in ESHA that meets the use and disruption tests of Section 30240. *Bolsa Chica* stands for the principle that development is not allowed in ESHA based on an argument that the impacts to developing in ESHA will be offset elsewhere, thus allowing development contrary to the use and disruption requirement of Section 30240. As such, *Bolsa Chica* does not change the fundamental premise articulated that a project in ESHA must be resource-dependent and must not result in significant habitat disruption. As a result, the argument that one should distinguish in this respect regarding the Commission decisions from before and after *Bolsa Chica* is not on point, except to the degree certain cases before 1999 may have been allowed under a finding that wasn't based on resource-dependency and significant disruption. Even if there were to be cases like that before 1999, the history identified would still stand for the premise that the Commission has historically authorized such trail development in ESHA, further limiting the relevance of the *Bolsa Chica* distinction argument. Note, in any case, that the paved trails in the dune ESHA from CDPs 3-97-062 and 3-00-092 highlighted in the preceding finding include one case preceding the *Bolsa Chica* decision and one following after.

In this case, both the existing trail system and the proposed new trail system include components that are located in Arana Gulch ESHA. As previously described, existing trails in Arana Gulch total more than 2.5 miles, and the proposed trail system would total about 2 miles (including connecting segments to 7th Avenue and to Frederick Street), including less than ½ mile (about 2,250 feet) of paved 8-foot-wide multi-use trails, and just over a mile (roughly 6,300 linear feet) of unpaved pedestrian trails. Of the 2,250 feet of new paved trail in the meadow, about 60% (about 1,350 linear feet) would be installed on top of the existing hard pack trail (mostly along the existing Arana Meadow Trail segment and the existing trail segment located adjacent to Hagemann Gulch), and the remaining 40% would be new paved trails connecting paved trail segments (about 900 linear feet). In other words, in meadow ESHA there would be about 1,350 linear feet of new paved trails located on top of an existing hard-packed trail segment, there would be about 900 linear feet of new paved trails located in areas without trails currently, and there would be just over a mile of unpaved trails, of which almost all follow existing trail alignments (i.e., there would be some slight realignments).

In making a determination as to the appropriateness of the proposed trail system in relation to ESHA, it is important to understand the dynamics of that ESHA in relation to the proposed trail system.

Santa Cruz Tarplant[28]

Santa Cruz tarplant historically occurred around the northern and eastern sides of San Francisco Bay from Marin County to Alameda County, and around the northern end of Monterey Bay from Santa Cruz to extreme northern Monterey County, growing in coastal prairie habitats. All known historic native populations in the San Francisco Bay area are now extirpated. About 24 Santa Cruz tarplant populations were known historically from Santa Cruz County. At least 11 of the Santa Cruz County populations are extirpated or possibly extirpated. As of the year 2000, 11 of Santa Cruz County populations were known to be extant. However, most of those populations have declined substantially since the early 1990s and are threatened with extirpation. The main reasons for the decline of Santa Cruz tarplant, and the main threats to its future viability, are conversion of habitat to urban development and agriculture, and alteration of its habitat due to invasion of non-native species and cessation of grazing.

Persistence of the Santa Cruz tarplant in its coastal prairie habitat depends upon successful completion of reproduction and the production of seeds. Viable seeds can probably reside in the soil seed bank for ten years or so,[29,30] awaiting favorable conditions such as adequate moisture, temperature, and light

[28] The following tarplant discussion is based primarily on Arana Gulch Master Plan Draft Environmental Impact Report (DEIR), dated February 2006, and Final Environmental Impact Report (FEIR), dated May 2006.

[29] This is an estimate attributed to an anonymous expert peer reviewer by the federal listing report (Fed. Reg., March 20, 2000). No definitive studies have determined the length of time the Santa Cruz tarplant's seed bank remains viable. For example, Satterthwaite et al (2007) note that long-term data on ray seed survival and germination are unavailable, and could not be readily obtained due to *Holocarpha*'s threatened status and resultant CDFG restrictions. However, it is known that *Holocarpha* seedlings emerged from a pile of soil scraped from a construction site eight years after it last hosted adult *Holocarpha* plants (CDFG, 1995). Also, seeds known to be at least 15 years old have also successfully germinated (Barber, 2002). However, researchers have not determined what proportion of seed bank population remains viable at these ages, or at any ages (e.g., the 15-year old seed may have been the oldest viable seed in history or it could be the average).

before germinating and growing into adult annual plants. These conditions are promoted by periodic disturbance by fire, grazing, and soil surface exposure ("scraping") that can reduce non-native grass cover and thatch, especially when coincident with ample winter rainfall.

Surveys for the Santa Cruz tarplant at Arana Gulch have been done since 1977, when cattle grazing was still ongoing on the site. In the mid-1980s, approximately 115,000 plants, in four distinct patches on the site, were present. These four sub-populations have been designated as Areas A, B, C, and D (see Exhibit P, Tab 13).[31,32] In the late 1980s, cattle grazing ceased on the site. Between 1989 and 1995, Santa Cruz tarplant numbers on the site decreased precipitously. Although the City has attempted to revive the Santa Cruz tarplant population on the site by mowing, scraping, weed-whacking, raking, and controlled burns in certain areas of the site, the numbers have continued to decline (see Exhibit P, Tab 6 for a discussion of City efforts in this regard). No plants have been seen in Areas B or C since 1998; the only time tarplant were observed in these areas since 1989. No plants have been seen in the relatively large Area D since 2004, when two plants were found there. Area A continues to have a population of Santa Cruz tarplant, but their numbers have generally been in decline in Area A since 2004 (see Exhibits O and P (Tab 6) for Santa Cruz tarplant census data). This continued decline and lack of improvement in the face of thus far City-applied tarplant enhancement and management attempts has led to a general consensus and conclusion that cattle grazing may be the last best option available for, and essential to ensuring the enhancement of, the viability of the Santa Cruz tarplant population at Arana Gulch.

Notwithstanding such decline per recent monitoring, it is hoped that a seed bank may still be present throughout Arana Gulch, including historic tarplant Areas A through D as have been identified from past monitoring of tarplant occurrences, and where the most recently identified plants have been located. Thus, it is hypothesized that through the application of aggressive and appropriate management measures, like reintroduced grazing, the species could potentially be restored to the area from the dormant seed bank.

Trail Development

It is within this gloomy tarplant context that the project is proposed. As indicated, the portions of the project related to tarplant habitat enhancement have engendered near universal support in concept (see also more below), but there has been much debate over time with respect to trails, including because construction of the proposed paved trails would cover areas of potential tarplant habitat within the paved

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[30] Satterthwaite, W.H, K.D. Holl, G.F. Hayes, and A.L. Barber. 2007. Seed banks in plant conservation: Case study of Santa Cruz tarplant restoration. Biological Conservation 135:57-66; CDFG [California Department of Fish and Game], 1995. Recovery workshop summary, *Holocarpha macradenia* (Santa Cruz tarplant). California Department of Fish and Game, Sacramento; Barber, A., 2002 cited in Satterthwaite et al. 2002; Conservation of a rare California wildflower: a case study of the Santa Cruz tarplant. B.S. thesis, Brown University, 64 p. cited in Satterthwaite et al. 2002.

[31] Id (historic tarplant occurrence areas).

[32] It should be noted that historic tarplant Areas A, B, C, and D were defined without the advantage of the more precise mapping provided by Global Positioning Systems (GPS) or Geographical Information Systems (GIS), and the boundaries of these areas are approximate only.

width of the trail.[33] Other trail improvement activities for both new unpaved trail segments as well as improvements to existing unpaved trail segments and fencing/water supply to allow for cattle grazing, could also impact underlying habitat. The potential for trails to result in habitat fragmentation that could negatively impact tarplant habitat has also been raised.

In terms of unpaved trails, existing unpaved trails pass through Santa Cruz tarplant Areas A, C, and D (see Exhibit P, Tab 13, Map 1). The trails that crisscross the central meadow area, including Area A, would be closed and restored to coastal prairie habitat (see Exhibit P, Tab 13, Map 3). The City's previous proposal included a new realigned replacement unpaved trail following the edge of the meadow to provide loop continuity around Area A (Exhibit P, Tab 13, Map 2). Without the replacement trail, users would need to drop down into the Harbor and then back up the existing unpaved trail. Given the grade change (about 35 feet), and experience with use patterns in such cases, the City was concerned that trail users would track their own trail along the top of the meadow that followed the meadow's edge, even if this area were blocked off. Thus, the City proposed a trail in this location. However, striking a different balance to reduce impacts from trail development on tarplant habitat, this trail has been eliminated in the current proposal (see Exhibit P, Tab 13, Map 3). Other unpaved trail improvements would be limited to minor re-contouring of existing trail segments, including to avoid ongoing resource damage (due to erosion, etc.) as well as relocation of the portion of the existing unpaved coastal prairie loop trail so that it no longer passes through historic tarplant Area D (see Exhibit P, Tab 13, Maps 2 and 3).

In terms of paved trails, the proposed Arana Meadow Trail would be constructed on top of the hard packed existing trail alignment beginning at the Agnes Street entrance, then would veer to the west to avoid historic tarplant Area C (where plants were last observed in 1998), connecting to the existing trail running along the edge of the meadow and onto the Hagemann Gulch bridge crossing, extending around historic tarplant Area B (see Exhibit P, Tab 13, Map 3). The rest of the proposed paved trail through the meadow consists of the proposed Creek View Trail that would connect to the Arana Meadow Trail after it passes Area C (again, see Map 3). The Creek View Trail follows a new alignment intended to address the grade change and erosion problems associated with the existing main trail stem extending to the meadow from the Harbor. This existing eroded trail alignment would be restored, and the new paved alignment installed along a gentler gradient looping back to connect to the main stem at the Arana Meadow Trail. None of the trail sections would extend through any of the four historic tarplant areas, and all existing trails not underlying improved trail segments would be restored as tarplant habitat. The proposed project also includes the installation of interpretive displays and trail signage, and installation of fencing and water supply apparatus to facilitate tarplant meadow habitat enhancement (see Exhibit P, Tabs 2 and 5).

Habitat Fragmentation Issue

Regarding potential habitat fragmentation due to the paved components of the proposed project, there

[33] Additional habitat for 1 to 2 feet outside the paved trail footprint could also be disturbed if pedestrians and bicyclists do not stay strictly within the paved trail width, and some additional disturbance for cut/fill slopes for the trail where it crosses sloped areas (ranging from about 1 foot to 7 feet) is likely (see trail cross sections on pages 2-4 of Exhibit C).

have been contentions, including by CNPS (see Exhibit G), that the proposed Creek View Trail alignment (as shown on Map 3 of Exhibit P, Tab 13) would result in significant fragmentation of tarplant habitat on the coastal terrace, and that this east-west trail orientation in association with the trail connection from Agnes Street will split the habitat into three smaller habitat blocks, which will result in increased edge effects and a decrease in core habitat necessary for the tarplant's survival. CNPS also contends that the paved trail components will present a barrier to effective dispersal of tarplant seed, which is estimated to have a maximum unassisted seed dispersal radius of about 1.5 feet.[34]

In response to these concerns, the City's biological consultant analyzed the potential for the project to result in habitat fragmentation that would be deleterious to the Santa Cruz tarplant (Ecosystems West Consulting Group, July 20, 2010; see Exhibit P, Tab 1). According to this analysis, the classic view of habitat fragmentation "is the breaking up of a large intact area of a single vegetation type into smaller intact units (Lord and Norton 1990)," and it has been argued that habitat fragmentation has not occurred when habitat has been separated by non-habitat where occupancy, reproduction, or survival of the species remains unaffected. The majority of habitat fragmentation studies focus on birds and small mammals, and in many cases the conclusions from these studies do not hold true for seed dispersed plant populations, like tarplant. The City's biological consultant found that, in a relatively uniform landscape such as the Arana Gulch terrace, the presence of a paved corridor is not likely to result in significant changes in habitat conditions on either side of the proposed paved trails. Currently, the vegetation composition adjacent to the proposed east-west trail alignment is dominated by a dense variety of non-native invasive grasses and weedy herbs. Unfortunately, neither the proposed east-west paved path nor the proposed cattle fencing will create a barrier to the persistence or movement of these non-native invasive plant species because there is already a propensity for establishment of these species in disturbed edge areas as well as throughout all of the coastal terrace portions of the site. Fortunately, the trails are also unlikely to impede the restoration of native coastal prairie species that will be the subject of active management. The proposed paved trails will not require significant cut and fill, and thus there will not be much exposure of raw, uncovered soils that are attractive to noxious plant species that are not currently found on the site, such as Spanish and French broom. Also, given that historical Santa Cruz Tarplant Areas A-D already have an isolated distribution in relation to each other, the paved trails would not further contribute to the fragmentation of these historic habitat areas. In fact, assuming an unassisted seed dispersal radius of about 1.5 feet per year,[35] it would take the plants documented in historic tarplant Area A (the area where tarplants have most recently been identified) over 360 years to come into contact with the nearest portion of the proposed east-west trail alignment. Also, animal dispersal of seed is probably much more important and is unlikely to be affected by the trail. In addition, seed is likewise planned for manual dispersal as part of the adaptive management program, and the "core" meadow area (other than that underlying the path area itself) will be actively managed for tarplant, including grazing. As such, the path will not fragment such ability (including because grazing cattle will be moved from one area to another on the site to benefit tarplant). Direct observations of

[34] This estimate is apparently based on the observation of a single seed (Hayes, G. 2003. *Holocarpha macradenia* (Santa Cruz tarplant). Plant community composition, seedling density, pollination, seed dispersal and plant vigor/phenology. A report to California Department of Fish and Game.)

[35] Id (CNPS).

Santa Cruz tarplant habitats in other parts of Santa Cruz County suggest that this species is relatively tolerant of edge effect habitat conditions. One example of this is the Watsonville Airport, where Commission staff observed in early July of 2010 that the Santa Cruz tarplant is thriving (numbers possibly in the millions) on unpaved areas located between and adjacent to the paved runways and other paved areas of the airport. Furthermore, the Santa Cruz tarplant is pollinated by as many as 8 different insect families comprised of many species. These pollinators will not face a physical barrier to crossing a paved path that is bordered by post and wire cattle fencing.

In short, while the path across the meadow raises an obvious question of fragmentation (because it is a classic case of bisecting an area), the facts specific to tarplant habitat indicate that such habitat fragmentation is not a significant concern in this case, and not a significant disruption, thus meeting Section 30240 requirements.

As noted by CNPS, the paved trails will occupy about 0.4 acres of coastal terrace prairie habitat. This habitat overall at Arana Gulch is approximately 27 acres in size, the vast majority of which has been heavily disturbed and invaded by invasive non-native plant species. The potential habitat loss from the proposed paved trails is less than 1.5 percent of the total coastal terrace habitat on the site and no loss would occur within historic tarplant areas A through D. In 1988 (the year with the largest documented occurrence of tarplant individuals), approximately 115,000 Santa Cruz tarplant individuals were found occupying these four distinct (and unconnected) historic occurrence areas of the site, and these areas totaled 2.6 acres or almost ten percent of the total meadow habitat area. The proposed paved trail alignments would be located on terrace habitat that has never been documented to support the Santa Cruz tarplant during the last 20+ years. Therefore, these proposed trail alignments are not likely to result in the loss of significant numbers of viable tarplant seeds, unless most seeds remain viable for a very long time.[36]

It is universally acknowledged that the population of Santa Cruz tarplant in Arana Gulch cannot be maintained or expanded without aggressive and active management and disturbance. Without such activities, the species is not expected to persist at Arana Gulch, including in light of the current non-native and invasive vegetation cover that exists on the site. The proposed project includes an adaptive management program that sets forth potential management actions such as grazing, mowing, scraping, or controlled burning, and includes monitoring protocols and an organizational framework to ensure that the program is carried out over the long term. A main concern is whether the trails would inhibit the ability to implement these management actions on the coastal terrace prairie portions of the site. The City's biological consultant recommends that the north-south paved path component of the Arana Meadow Trail, which begins at the Agnes Street entrance, be realigned to the west to the area of the unpaved portion of the Coastal Prairie Loop Trail (see Map 3 of Exhibit P, Tab 13). Special Condition 2(a) requires such a relocation of the paved Arana Meadow Trail. This trail relocation would provide for a larger northern pasture unit for reintroducing grazing or other large scale management actions such as

[36] The period of viability of tarplant seeds in the seed bank is unknown and there is scant basis for estimation. Seeds at least 15 years old have been germinated and plants appeared in disturbed soil that had last supported adult tarplants 8 years previously (Satterthwaite, et al., Biol. Conser. 135:57-66). An expert peer reviewer for the federal listing worried that the viability of tarplant seed banks could be "extirpated" in a decade (Fed. Reg., March 20, 2000).

mowing and scraping, while still providing a north-south connection to other trails on the site. These management actions would not be constrained by the trails on the site, except for the east-west alignment being the fixed boundary of both the north and south pastures. Cattle or other livestock would be moved freely between the north and south pastures, across the paved east-west trail alignment, which will also provide the potential exchange or movement of tarplant seed from one pasture to the other. These pastures will more than double the size of past management areas on the site, providing a sufficient habitat area for large-scale ongoing management actions.

Grazing and Fencing

As cited above, Coastal Act Section 30240 prohibits any significant disruption of ESHA and limits development within such areas to uses dependent upon the resource. The proposed project includes interpretive and other signage to inform users of the trails about the sensitive nature of the Santa Cruz tarplant habitat areas, and other sensitive resources on the site (see Exhibit P, Tab 2). The proposed habitat restoration activities that pertain to coastal prairie include the removal of non-native grassy vegetation by cattle grazing (see Exhibit P, Tab 5 for more details regarding the City's proposed grazing program), as well as mowing with removal of cut material, prescribed burning, and removal of invasive non-native plant species. The proposed grazing area is about 12.33 acres in size and consists of three separately fenced areas that would encompass the majority of tarplant Area A (which has historically featured the greatest number of tarplants), as well as the majority of historic tarplant Areas C and D (see Map 3 of Exhibit P, Tab 13).[37] The portions of the historic population areas that would not be included within the grazing areas include those portions of Areas A and D where steep slopes preclude grazing; portions of Areas A and D where the grazing area would be aligned to avoid the seasonal wetlands in these historic occurrence areas; a portion of Area C near the trail connection from Agnes Street; a portion of Area D at its most northern reach; and all of Area B.

Some of the areas are appropriately excluded from the grazing regime on the meadow to avoid resource problems, but others are better included in the grazing regime to maximize the potential for tarplant habitat enhancement as follows. With respect to steep slope areas, such exclusion is appropriate to avoid adverse coastal resource impacts. With respect to seasonal wetland avoidance, the Commission's senior ecologist believes that these seasonally wet areas will not necessarily be adversely affected by grazing, and should not automatically be excluded because such grazing in these areas may actually enhance tarplant habitat, and such restoration activities are allowed within these wetlands pursuant to the Coastal Act. The grazing regime should be part of the prescribed adaptive management. With respect to Area B, realigning the grazing area to include Area B would require the paved trail to be moved to the opposite side of Area B, and this would lead to significant adverse impacts to Hagemann Gulch resources because this would require installation of retaining walls, grading, and tree removal to provide a platform for the trail. Given the limited historic documented occurrences in Area B (just 5 plants in 1998, an unknown number of plants in 1989, but no other documented plants in 20+ years), the lack of

[37] The City's original grazing proposal, which was presented to the Commission at the March 2010 hearing, encompassed an area of about 4.59 acres in and around historic tarplant Area A.

precision underlying its identified location,[38] and the additional adverse resource impacts that would accrue with an attempt to include it within the larger grazing area, it is appropriate to exclude this area from the grazing area (but still require it be avoided by any development otherwise; it would also still be part of overall meadow and tarplant enhancement efforts as well). Absent a valid coastal resource reason for excluding the other (minor) areas identified from Areas C and D (none has been identified), these areas must be added to the grazing regime as well. In short, all meadow grassland areas within Arana Gulch that are located within the paved and unpaved trail loop (not counting the "dog free" Marsh Vista Trail) on the periphery of the meadow must be included in the grazing area except for: areas of steep slopes; areas within 5 feet of trails and trail shoulders themselves; areas within 5 feet of benches/interpretive sites; areas within 100 feet of the Hagemann Gulch riparian corridor and related tree canopy; areas within 50 feet of oak trees/oak woodland canopy along the Coastal Prairie Loop Trail; and the area near Agnes Street where the Meadow Overlook interpretive facility is to be located as well as a 25 foot area surrounding the facility (see special condition 2). In this way, the grazing area and benefit to tarplant habitat can be maximized.

With the relocation of the paved Arana Meadow trail to the west, and with the increased grazing area described above, the grazing area would be about 13 to 14 acres on the meadow.[39] It is anticipated that 2 to 6 cow/calf pairs would be grazed from approximately January through June initially, with the potential for longer periods as recommended by qualified botanists experienced with grazing regimes and tarplant habitat. To provide for a successful grazing regime, the City proposes to create three main grazing areas by installing over a mile of 4½ to 5-foot tall permanent livestock fencing.[40] Such fencing would include metal or wood poles in concrete footings at corners and stability intervals, metal t-bars between the poles, and 5 strands of alternating straight and barbed wire. The fenced area would include 12-foot gates, and a roughly 100-foot by 75-foot corral near Agnes Street. The City indicates that the fencing is required to contain the cattle, and to ensure separation of the cattle from the public who access Arana Gulch (see additional detail on the City's proposed grazing regime in Exhibit P, Tab 5). The City would also run a water line from the upper Harbor area into each of the three grazing areas to a water trough for cattle.

The proposed permanent cattle fencing and the water line raise a number of issues with respect to potential impacts to Santa Cruz tarplant, and also raise the question of whether the cattle fencing should be temporary, i.e. that the fencing should only be present when the cattle are present, and should be removed for the six months or so of the year when the cattle are not present. The installation of permanent fence posts will remove habitat available to the Santa Cruz tarplant. The use of some type of temporary fencing would likely have the same effect, at least for about six months a year while the temporary fencing was in place. The area around the base of the permanent fence posts would likely be

[38] Id (not GIS based, but rather general observation area noted back in 1989).

[39] The City's proposed project in March 2010 identified a grazing area of 4.59 acres, and as proposed by the City currently (prior to the modifications described above) identified an area of 12.33 acres. Through the conditions requiring expansion of the grazing area to approximately 13 to 14 acres, the grazing area would be almost tripled as compared to the proposed March 2010 project.

[40] With the expanded grazing area, this length will increase by about 600 feet, or a total length of approximately 6,200 linear feet of fencing.

attractive to weedy plant species, given that the cattle would not be likely to graze the areas immediately surrounding the permanent fence posts. However, temporary fencing would also include the installation of some type of stability posts that would have the same effect in terms of weeds. Also, given that the majority of the meadow areas on the site are dominated by non-native invasive grassy and other species, it is likely that there will be some persistence of these species throughout the meadow areas, whether there are fence posts present or not, given that it is extremely difficult to completely eradicate these species, even through the use of grazing and other restoration methods.

If temporary fencing were used, it would need to be installed at the beginning of the cattle grazing season and removed at the end of the cattle grazing season. This would be labor and cost intensive and might incur additional impacts to habitat. Such fencing may be barbed wire, electric, mesh, chain-link, hog-wire, or variations and permutations of each. The City indicates that if temporary fencing were required, they would likely set up smaller pens (roughly 100 feet in diameter) that would be moved multiple times during the grazing season. The City also indicates that the annual additional cost if temporary fencing were required would be roughly $5,000 to $7,000 or more.[41]

The proposed Master Plan restoration components include the ability to adapt and change restoration strategies as new information is gathered over time about what restoration methods are most successful and which are not. The City is proposing cattle grazing as the primary restoration component for the coastal terrace prairie portions of the site. As discussed above, other potential restoration activities to enhance Santa Cruz tarplant habitat could include mowing, scraping, and controlled burning of the meadow areas. Possibly goats could also be used on a shorter-term basis instead of cattle to clear out noxious weeds from the meadow areas. There needs to be flexibility in the Master Plan to allow for a modification of restoration strategies over time to achieve the highest level of restoration possible. Regarding the proposed permanent cattle fencing, there are pros and cons to its use (see more discussion of this issue in the "Visual Resources" section below).

It would be ideal if the cattle could graze absent any fencing, and thus avoid all fencing issues (habitat, visual, and other), but the City has explored alternatives along these lines and it does not appear to be feasible. Cattle need to be contained or they will wander into areas where they should not be (such as the adjacent neighborhoods, the Harbor, the creek areas, etc.). Alternatives that would fence the perimeter of the property to contain cattle would not keep cattle way from trail users and vice versa, would not address creek issues, would require gates and/or cattle grates at trail entrances into the fenced areas, and would be expensive. Temporary fencing shares all of the same issues as permanent fencing when it is in place. It also poses a trade-off because it does not result in such issues when such temporary fencing is not present, but it requires disturbance over and over again to install and remove on a regular basis; and if the City moves the temporary fencing around multiple times during the every cattle-grazing season, there would be even more of these impacts.

[41] Out of an expected annual budget (after initial construction and implementation) of approximately $20,000, $5,000 to $7,000 in additional costs results in a 25%-35% increase in costs for this line item.

If permanent fencing is used, there are a variety of alternative fencing types that could serve the fencing purpose. The City proposes fairly standard t-bar and wire cattle fencing, a fencing type that is fairly common in rural areas. Another option, and one that is more traditional to park-like settings, is split-rail fence. The City indicates that split rail would be problematic because the City is concerned that a wooden split-rail would be insufficient to keep the cattle in (because it may not be sturdy enough to hold the cattle if they press against it), because the wood from the fence is easily vandalized and taken (e.g.., for illegal fires, etc.), because split rail fences are lower and thus easier for people to climb over, and because a split rail fence would be more expensive to install and maintain. In terms of the access issue, it is true that the split rail is likely easier climbed than the wire fencing. However, both types of fence can be fairly readily scaled, and there is little that can be done (absent a much more significant barrier with its own issues) to address this issue. Really, appropriate signage and information about staying out of the grazing areas is about the best that the City can be expected to do with either type of fence. In terms of the issues with wood fencing, it is not clear that any of these reasons are valid in this context, including because there are other split rail fences in parks in this area absent such issues, and because it is unclear that cattle would attempt to push through a wooden fence. In both cases, there are concrete versions of split trail fences that are available on the market. These fences do not look entirely the same as traditional wooden split rail, but they provide a reasonable facsimile for situations where wood cannot be used for whatever reason. As to cost, there is little question that a traditional wooden (e.g., traditionally cedar) split rail fence would cost more to install and maintain than the fencing proposed by the City; if it were a concrete style faux split rail fence, there would probably be less maintenance cost, but the initial materials cost would likely be even higher. Also, installation of split rail fencing may lead to slightly more impact on the meadow because each post would need to be set in concrete.

Thus, ultimately, the fencing question really boils down to two parts: 1) the use of more permanent versus more temporary fencing; and 2) if more permanent fencing is chosen, then what fence design most readily achieves grazing objectives while simultaneously addressing other coastal resource issues, including public viewshed protection issues. On the more permanent versus more temporary question, it appears that it makes the best resource sense to put in a fence that can stay for a longer period of time than one that is installed and removed every season (and possibly moved around multiple times per season). As to the type of fence, this is really a more subjective judgment call for which persons with different aesthetic sensibilities will have different perspectives. On the one hand, the wire strand proposed is fairly traditional for cattle, and it is evocative of a rural and pastoral setting. It is, however, fairly tall (4 ½ to 5 feet tall is proposed), and can lead to a perception of the meadow being segmented and the trails being hemmed in by that scale. That perception would be tempered somewhat by the fact that it is mostly see-through, but reinforced by the barbed wire. On the other hand, split-rail is a traditional park type of fence, it is generally lower (+- 3 feet tall or so) with only two cross members, and could lead to more of a sense of openness as a result as compared to wire fencing for some, but could lead to the same perception of the meadow being segmented for others who might see the bulk of fence members themselves as more of a visual impediment.

In this case, the Commission's judgment is that a more permanent fence is appropriate, and that its design should balance the feasibility and cost issues associated with traditional rural wire fencing and traditional park setting split rail fencing. In this regard, an appropriate middle ground is the use of a

wooden post and wire fence system that will be more aesthetically in tune with public use while still accounting for the City's issues associated with cost and maintenance over time. Such fencing is to consist of round (approximately 4 inch diameter) wooden fence posts strung with wire where the following are all to be limited as much as possible to adequately contain cattle while limiting visual impacts: the number of fence posts, the height of fence posts, the area of post footing, the gauge of wire, the number of wires, and the number of wires that are barbed wires. All gates must be of a similar design, and seamlessly integrate with the fences. The cattle corral near Agnes Street (as distinct from the grazing areas) must be limited in area as much as possible. All fencing and gates shall be sited and designed in the manner most protective of coastal resources. See special condition 2.

With respect to the water lines, there would be an area of initial disturbance when the lines are installed, but after that there would be limited, if any disturbance along, the line alignment. This amount of disturbance is preferred to prohibiting a permanent water source because the alternative to a permanent water source is regular (potentially daily) water delivery for the cattle, which would entail habitat disturbance by a truck or similar vehicle each time water is delivered.

The proposed project also includes the installation of fencing and/or signs or implementation of other strategies to deter off-trail use, closure of unauthorized pathways that transect the coastal prairie habitat, removal of non-native invasive shrubs to prevent further loss of coastal prairie acreage, mowing and prescribed burns. Although the construction of paved trails would result in coverage of tarplant habitat within the width of these trail segments, much of the area has already been impacted by long-term existing trail use along similar alignments (see Exhibit P, Tab 13, Maps 2 and 3 for the existing and proposed trail alignments), with resultant existing impacts to any Santa Cruz tarplant seed bank that might still be located in these areas that are currently used as trails. The shallow soil underlying all of the paved trail segments would be saved to preserve any viable seeds that might be present and used for habitat enhancement elsewhere on the site.

Hydrology and Other

The multi-use trails have also been designed to minimize cut and fill, in order to minimize disturbance to ESHA. The project includes mitigations (see Exhibit F) to protect the historic tarplant occurrence areas during construction by requiring a fenced construction corridor to minimize disturbance to habitat located outside of this corridor, and also by requiring that the corridor width is the minimum necessary to allow trail construction. The multi-use trails would also be constructed to minimize any changes in hydrology, including site drainage or runoff, to avoid drainage impacts to tarplant population areas. To maintain natural surface conditions, the multi-use trail design would include out-sloping to diffuse the runoff down slope and would also include frequent discharge points to minimize runoff concentrations.

In response to concerns raised at the March 2010 hearing regarding the project's potential to modify site hydrology in such a way as to significantly disrupt tarplant habitat, the City's consulting geological firm prepared an analysis of the subsurface drainage conditions in the vicinity of the proposed east-west paved multi-use trail (Cleath-Harris Geologists, Inc. June 15, 2010; see Exhibit P, Tab 4 for this analysis and Exhibit P, Tab 14 for the locations of the boring holes used in the analysis). The results of the subsurface drainage analysis concluded that the trail design would limit disturbance to the upper 10

inches of the subsurface soils, would involve no compaction, and that, as designed, the trail and its location relative to historic tarplant populations would not adversely impact subsurface groundwater flow to mapped tarplant areas. The paths would involve grading roughly the upper foot of soil, which is not nearly to the 3½ to 12½ foot depths where perched groundwater was found (see Tab 4 of Exhibit P). In his capacity as a certified hydrogeologist, the Commission's staff geologist, Dr. Mark Johnsson, concurs with these conclusions. Also, to maintain the natural surface and subsurface flow conditions in the coastal prairie habitat area as much as possible, the City is proposing to use porous asphalt or porous concrete as the surface material for the multi-use trails in Arana Gulch (see Exhibit P, Tab 8). For all these reasons, the proposed project will minimize changes in hydrology, and the changes that do occur will not impact tarplant habitat.

USFWS and CDFG

The U.S. Fish and Wildlife Service (USFWS) reviewed the project initially proposed by the City in March 2010 (see Exhibit P, Tab 13, Map 2), and concluded potential project-related impacts would be acceptable under the federal endangered species act, and that the project would have the potential to improve tarplant habitat at Arana Gulch. In September 2008 USFWS issued a Biological Opinion (see Exhibit L) regarding that project, including with respect to the proposed trail alignments that would traverse tarplant habitat in locations where there are no existing trail alignments. After reviewing the status of the Santa Cruz tarplant and its critical habitat, USFWS concluded that the effects of the City's initially proposed project would not be likely to jeopardize the continued existence of the Santa Cruz tarplant, or adversely modify its critical habitat. USFWS further noted that: 1) the proposed Creek View and Canyon trail alignments will avoid the historic Santa Cruz tarplant colonies in Area A; 2) the direct impacts of these trails would only affect about four-tenths of an acre out of the 65 acres of critical habitat at Arana Gulch; 3) proposed and required measures will reduce the adverse effects of the proposed project on Santa Cruz tarplant and its critical habitat; and, 4) the proposed project may benefit the Santa Cruz tarplant and its critical habitat by improving Santa Cruz tarplant habitat quality at Arana Gulch through the implementation of a tarplant adaptive management program.

As indicated previously, the City's currently proposed project differs from that originally reviewed by USFWS and originally before the Commission in March 2010. In particular, the City has eliminated duplicative path segments and all path alignments within historic tarplant areas, and has instead moved paths further away from historic tarplant areas more to the periphery of the meadow. All paved surfaces would now be permeable as opposed to the non-permeable asphalt previously proposed. The City has also nearly tripled the area within which grazing would be prescribed immediately,[42] including within the area from which paths were moved. USFWS has reviewed the currently proposed project, and visited the site since the March 2010 hearing,[43] and indicates that USFWS is pleased that the currently proposed project further reduces impacts to Santa Cruz tarplant habitat compared to the project that was reviewed and evaluated in the 2008 Biological Opinion. USFWS also indicates that the project as currently proposed will not jeopardize the continued existence of Santa Cruz tarplant in Arana Gulch

[42] And the Commission's requirements will increase this area even more.

[43] Site visit on May 10, 2010 with the City, the City's biological consultants, the Commission's senior ecologist, CDFG, and USFWS.

and, in fact, will likely result in an enhancement to tarplant habitat due to the project's restoration components.[44]

California Department of Fish and Game (CDFG) has also weighed in on the currently proposed project (see Exhibit M). Of CDFG's comments, two appear most germane to the project before the Commission: the need to avoid tarplant habitat fragmentation impacts, and the need for an Incidental Take Permit (ITP) for the project. On the former, and as detailed in the preceding findings, the project should not result in adverse tarplant habitat fragmentation. On the ITP, according to CDFG, the primary criteria for granting that permit would be that Santa Cruz tarplant habitat is, on balance, in no worse condition after completion of the project and the required mitigation than it was before. Given the state of the tarplant habitat at the site today (as described in preceding findings), and given the expected habitat benefit associated with the project, there appears to be almost zero chance that the habitat would be in worse condition post project, and a very good chance that the project would result in habitat improvement. In fact, the premise of the project is to enhance the habitat and given the habitat's perilous state currently, it appears all but certain that it cannot get any worse. In addition, with the modifications incorporated by the City and the modifications required by the Commission, the proposed project should result in an even better habitat outcome than the project reviewed by CDFG. Thus, it appears that CDFG's issues are readily resolved.[45]

[44] Personal communication from Douglas Cooper, USFWS, to Susan Craig, Coastal Commission coastal planner, September 14, 2010.

[45] On these points it is noted that Commission staff attempted repeatedly to engage with CDFG regarding CDFG's comments on the potential project modifications designed to create a better habitat outcome, but CDFG did not respond to such inquiries.

Tarplant Conclusion

In summary, with respect to Santa Cruz tarplant habitat, one of the main purposes of this proposal is to enhance existing Santa Cruz tarplant habitat, both through direct habitat restoration and through enhanced public access management and education. Moreover, the installation of interpretive and other signage and information in concert with multi-use trails and unpaved trails that explicitly direct public access to remain on the approved trails and inform the public of the sensitive nature of the site, as well as the proposed closure of numerous unauthorized trails with subsequent restoration of these areas, should substantially reduce the impacts on tarplant habitat that currently occur on the site. No new trail alignments will be located in the historic tarplant habitat areas (Areas A-D), and existing trail alignments that pass through the historic tarplant areas will be removed and the areas restored. The trails have been designed to minimize cut and fill in order to minimize disturbance to coastal prairie habitat, and to minimize changes to hydrology by maintaining natural surface and subsurface flow conditions, including through the use of porous paving materials. Appropriate mitigations are required to protect tarplant habitat during construction. As discussed above, the project is conditioned to require relocation of the Arana Meadow Trail to the west to provide a more easily managed restoration area in the northern part of the project site, to increase the grazing area, and to require specific fencing parameters. All of these changes should translate into increased habitat enhancement.

In addition, the Master Plan requires continued experimental research directed toward refining understanding of the management regime that maximizes long-term success of the tarplant at Arana Gulch, as well as ongoing monitoring on an annual basis to determine the success of the management measures, to monitor the overall well-being of tarplant colonies on the site, and to identify potential threats to tarplant persistence on the site. Revision of the management prescriptions and remedial actions to enhance long-term viability of the tarplant are also required if necessary. The project includes an adaptive management plan for the Santa Cruz tarplant, including a number of management strategies such as mowing, scraping, prescribed burns, and cattle grazing. Of these management strategies, cattle grazing appears to promise the greatest benefit to the Santa Cruz tarplant.[46] Given that the tarplant numbers have been declining in recent years and concern that any remaining seed bank may not be viable much longer, it is critical that adaptive management that includes grazing be instituted as soon as possible.

To conclude with respect to Coastal Act Section 30240, this section only allows resource dependent development in the tarplant ESHA, and only when such development will not result in any significant disruption of habitat values. In essence, Section 30240 presents a two-part conformance test. In terms of resource dependency, it is clear that one of the primary objectives of the proposed project is to maximize opportunities to educate, inform, and inspire users of the trail system so as to enhance their enjoyment of Arana Gulch and its resources, and possibly more importantly to encourage them to action in helping to protect such resources here and elsewhere. Interpretive and nature study trail opportunities like this, particularly in close proximity to urban areas with significant numbers of users and potential users, are

[46] And the City has experience with using grazing in management of the Moore Creek Preserve property, which is located on the west side of town and contains habitats similar to Arana Gulch.

limited, and thus it is critically important that their interpretive utility in this regard is maximized. Such is even more so the case at Arana Gulch where the Master Plan's proposed resource protection program includes significant opportunities to inform and educate regarding pro-active (as opposed to passive "don't touch") management strategies for enhancing sensitive resources (including grazing, mowing, prescribed burns, scraping, etc.) as well as adaptations to these strategies and related experiments and research to maximize resource protection possibilities. The path system, including the paved components, is dependent upon the presence of the tarplant habitat area through which it passes to provide a relevant tarplant habitat interpretive and nature study experience. Thus, the proposed pathway system, including the paved sections of it, is dependent on the ESHA resource for it to function as an interpretive and nature study path. In that respect, the proposed pathway system meets the first test of Coastal Act Section 30240.

As to the second test, it is indisputable that the pathway system extends through the identified tarplant habitat area (although not through areas of historically documented occurrence). And it is likewise indisputable that the paved portions of it would cover a portion of the habitat area with pavement. However, implementation of the Master Plan, including the limited measures necessary to maintain the existing unpaved footpaths, the realignment of one unpaved trail segment to avoid existing areas where tarplant has historically been identified, and the installation of the paved path, will not result in any significant disruption of habitat values. The habitat information in this respect has been evaluated by the Commission's senior ecologist, Dr. John Dixon, and his professional opinion is that although there will inevitably be some disruption of habitat values in the habitat areas, the proposed project will not result in a significant disruption of habitat values as that term is understood in a Section 30240 context. There are multiple reasons that indicate that to be the case.

First, with respect to the unpaved path segments, the realignment of the portion of the existing Coastal Prairie Loop Trail to avoid historic Tarplant Area D and a portion of the Marsh Vista Trail to avoid seasonal wetland areas (see also below) will move trail use out of areas where tarplant have been historically located and where wetland features have been identified, respectively. For the Coastal Prairie Loop Trail, the realigned path will generally be moved to the existing path that parallels this segment. There will be very small areas of new unpaved path in the meadow, though, to connect the path back to its existing alignment outside of Area D, and the same goes for the path change to avoid the wetland. Installation of the realigned footpath in these limited areas will disturb an area of habitat not currently disturbed, but this area of disruption is extremely limited, and the footpath will not cover the soils with pavement. In fact, the immediate soil horizon, including any potential tarplant seed bank, along the realigned path alignment would be scraped free and used to enhance tarplant habitat on the site. In terms of the maintenance of this realigned segment and of existing unpaved trail segments, the limited maintenance proposed (minimal trail realignments as necessary for erosion control and safety, etc.) will simply maintain these areas as passable for foot traffic. These measures with respect to the unpaved path segments should not lead to any new disruption of habitat values, and may, in fact, lead to some enhancement as the seed bank may be freed to germinate along the edge of these path segments. In tandem with Master Plan habitat enhancement components, including removing and restoring about a half mile of redundant paths, including paths that currently extend through areas historically identified with tarplant specimens, the net effect as it relates to the unpaved path segments is habitat enhancement,

and certainly not significant disruption.

Second, with respect to the paved path segments, the paved sections will cover tarplant habitat. As such, there is no doubt that there will be a disruption of habitat values in these areas. However, by avoiding Areas A through D, the paved paths will not cover any areas with documented occurrences of tarplant. Furthermore, as indicated above, shallow soils and any associated seed bank will be salvaged for use in resource enhancement measures for the meadow. In addition, the new paved path segments that cross the meadow in areas where there has not been existing trail use are limited to a linear area of about 900 feet, and the rest of the paved path in the meadow, about 1,350 linear feet, would be installed atop existing trail alignments. All told, the approximate 2,250 linear feet in total of paved path will occupy a very small area on the meadow, in a configuration that should lead to a limited disruption of habitat values confined to those alignments. In addition, the paths have been designed to limit impacts to shallow subsurface hydrology, thus protecting against impacts in relation to hydrologic function and the habitat. And, when considered in tandem with Master Plan habitat enhancement components, it seems clear that the project will result in a net enhancement of tarplant habitat values. In fact, even when taken out of context (i.e. if the paved paths were to be installed without the adaptive tarplant management program of the Master Plan), the paved paths would result in limited disruption of the habitat values of the habitat area, and would not result in significant disruption of those habitat values of the tarplant area.

In short, implementation of the Master Plan, including the paved path component, will not result in a significant disruption of the habitat area. As a result, the proposed pathway system meets the second test of Coastal Act Section 30240(a). Thus, and as detailed in the preceding findings, the proposed project, including the paved path segments, is consistent with Coastal Act Section 30240(a).

In terms of Section 30240(b), and for similar reasons, the portions of the proposed project located adjacent to the habitat areas (but not inside of them) have likewise been sited and designed in such a way as to not significantly degrade such habitat areas, and are compatible with the continuance of such habitat areas. Again, the pathway system will be located near such habitat areas, but there is adequate separation, including near Hagemann Gulch and Arana Creek (see also below), to provide effective buffering for the habitat areas in such a way that impacts that might significantly degrade those areas are not expected. In fact, potential impacts to these areas due to adjacency issues are limited by siting, design, and management implementation over time (including enforcing access restrictions into these areas of the path, avoiding lights along the path, adequately addressing path runoff, limiting path access to daytime use, etc.). Thus, the proposed project, including the paved path segments, is consistent with Coastal Act Section 30240(b), and thus consistent with Section 30240 overall.

Thus, if the proposed Master Plan is fully and rigorously implemented, including with respect to adaptive tarplant and related habitat management over time, where the objective is maximum resource enhancement, and including with respect to maximizing interpretive utility, then the proposed project represents an appropriate development within ESHA, including in terms of its trail components that are resource-dependent interpretive trails that will not significantly disrupt habitat values. To ensure that this is the case, Special Condition 2 requires submission of project plans that relocate the paved Arana Meadow Trail to the west in the area of the existing unpaved Coastal Prairie Loop Trail, that maximize

the area available for restoration in the central meadow, and that require reduced scale wooden post and wire fencing. This condition also specifies the measures that will be taken to remove and restore existing paths that crisscross the tarplant habitat. Special Condition 3 requires submittal of an Arana Gulch Habitat Management Plan that includes the habitat monitoring and management protocols as typically required by the Commission. Special Condition 6 requires that construction site documents and a construction coordinator be available during construction of the path system. As conditioned, the project should result in significant interpretive and resource enhancement in Arana Gulch.

As conditioned, and with respect to the Santa Cruz tarplant, the Commission finds the proposed development consistent with the cited resource protection policies of the Coastal Act.

Other Sensitive Habitats and Species

The primary habitat areas of concern in addition to the tarplant habitat issues discussed above are in relation to Arana Creek and its related wetland area, and Hagemann Gulch.

Arana Creek

In terms of the Arana Creek area, the unpaved Marsh Vista Trail and the portion of the paved Creek View Trail adjacent to the dry boat storage area would be the closest trail segments to this area. The Marsh Vista Trail (access limited to pedestrians only; no dogs allowed) would provide interpretation of this area as it skirts along the contour of the edge of the meadow area along the existing unpaved trail alignment. The trail is located at least 40 feet from Arana Creek in an area where there are existing "volunteer" trails.

As originally proposed, the alignment of the unpaved Marsh Vista Trail was located directly adjacent to an area of seasonal wetland[47] near the Agnes Street entrance to Arana Gulch (see Exhibit P, Tab 13, Map 2). Similarly, as originally proposed, a portion of the unpaved Coastal Prairie Loop Trail was located within a few feet of a second seasonal wetland (shown as the wetland in Area D on Exhibit P, Tab 13, Map 3). There is, however, adequate space on the site to avoid these seasonal wetlands while maintaining effective trail continuity and minimizing potential wetland habitat impacts from the proposed trail segments. In the current proposal (see Exhibit P, Tab 13, Map 3), the City has relocated these trail segments to avoid the wetlands and to provide at least a 100-foot buffer from them in each case. In terms of the Marsh Vista Trail, the trail is realigned so that it ascends a slope located at least 100 feet to the west of these wetlands. In terms of the Coastal Prairie Loop Trail, the trail is both moved out of historic tarplant Area D (as previously described) as well as over 100 feet away from the seasonal wetland area. These seasonal wetland setbacks should provide adequate protection of these wetland areas.

The paved Creek View Trail would extend to within about 10 feet of Arana Creek where it enters into the four, six-foot-in-diameter culverts that extend under the Harbor's dry boat storage area and Harbor parking lot and empties into Harbor waters. In other words, this portion of the trail would cross the

[47] The wetland delineations on the site were based on Coastal Act (and Coastal Commission) wetland delineation criteria.

historic fill that created the Harbor in the first place, on top of the culverts that are currently buried and topped by the Port District's dry boat storage area. There would also be an overlook with an interpretive display at this location. The proposed trail in this area is located outside the boundaries of the seasonal wetlands associated with Arana Creek, and the trail will be located above the creek, along the edge of the Harbor's dry boat storage area in an alignment similar to an existing unpaved trail. There would be no bridge over Arana Creek or fill within the adjacent wetlands associated with the creek. To protect steelhead that may be found in the creek, the project includes appropriate best management practices to minimize sediments from entering the stream system during construction (see Exhibit F for the project's required mitigation measures).

Questions have been raised by Friends of Arana Gulch (FOAG) about whether it is a good idea to extend a path over the existing fill at Arana Creek, given that the creek area inland of the fill is subject to tidal scour that has contributed to long-term sedimentation problems in the creek (affecting habitat there) and the harbor (affecting boating, and requiring dredging to maintain depths). The sedimentation issues associated with tidal scour and, to a larger degree, upstream development have been an issue for decades, and the Port District and various groups (including FOAG, and including the federal Natural Resources Conservation Service (NRCS), the Santa Cruz County Resource Conservation District (RCD), Arana Gulch Watershed Alliance (AGWA), Santa Cruz County, and others) have been pursuing projects to reduce such problems for many years. Many such projects have been brought to fruition, including multiple significant projects in the Creek's upper watershed area (and outside of Arana Gulch), but the identified sedimentation problem remains an issue demanding continuing attention and perseverance. FOAG contends that the path development atop the fill is inappropriate because it does not address the sedimentation issue, and it could prejudice future options to address the issue that could involve development in the same area (such as replacement of the existing culverts).

Although it would be optimum if the City's proposed project could also fix the long-standing sedimentation issue, it is hardly the responsibility of the City to fix a decades old problem that is more regional and watershed based in nature, as well as based in large measure on the construction and development of the Harbor itself in what was historically (pre-Harbor) Woods Lagoon fed by Arana Creek. Such issues are real, to be sure, but their connection to the City's project is more limited. From another point of view, the City's project within Arana Gulch should, if anything, reduce sedimentation within Arana Creek by removing multiple trails (including significant erosional trails) and restoring grades, and by better managing trails as part of the project. As to whether the City's project could prejudice a future potential project designed to redo the connection of Arana Creek to the Harbor (such as replacing the existing culverts with larger culverts, bridging the connection, etc.), such an outcome is speculative. It is true that if such a project came to fruition after the City's project were constructed, then such project would need to also account for the path too. However, the existing fill area extends a minimum of 350 feet from the Creek to the Harbor water, and this area is already covered by significant development, including the Harbor's dry boat storage area, the access road around the Harbor, and a parking lot. The proposed trail would cover at most a 15-foot wide area and would be a minor addition to the existing development in this area. Again, it would be ideal if the trail and any such larger project designed to redo the fill area coincided, but it is certainly not required and the City's project is not inappropriate in terms of a potential future project associated with the fill area. In addition, the proposed

Master Plan also includes resource management strategies to enhance the habitat of the Arana Creek riparian and wetland areas, including restoration of the eroded gully in the northern portion of Arana Creek, removal of non-native invasive vegetation, closure of unauthorized pathways that currently exist within the wetland and riparian habitat areas, and, if necessary, installation of fencing and/or signs to deter off-trail use in these areas.

Finally, construction of a portion of the Creek View Trail near Arana Creek could affect special-status roosting bats (Western red bat) due to construction activities. Although no trees are proposed for removal to install this section of trail, if trimming of trees is ultimately required, this could also impact roosting bats. The proposed project includes appropriate mitigations to protect the special-status Western red bat in case tree trimming is required, including conducting surveys prior to the establishment of bat maternity colonies, and consultation with CDFG if an active roosting site is found.

Hagemann Gulch

The proposed project includes a 340-foot bridge over Hagemann Gulch (see page 5 of Exhibit D). The bridge will accommodate interpretive displays and nature viewing areas. Riparian scrub and oak woodland are found in Hagemann Gulch. The proposed bridge and trail construction would not result in direct removal of riparian scrub habitat and would result in minimal removal of woodland habitat. No abutments would extend into the intermittent creek located at the bottom of Hagemann Gulch; only one non-heritage oak tree (less than 14 inches in diameter at chest height) would need to be removed to provide for installation of the bridge; and a limited number of tree branches would need to be trimmed back. Ground disturbance during construction would occur only in the vicinity of the bridge abutments on either side of the bridge, located at the edge of the oak woodland area; this disturbance is expected to be fairly minor and confined to the immediate area at the top of the gulch. San Francisco dusky-footed woodrat nests have been documented within the riparian scrub habitat of Hagemann Gulch. However, all bridge construction activities and equipment staging will occur outside the riparian scrub habitat. To ensure that construction of the bridge does not impact nesting birds, the project mitigations include nesting and roosting surveys to be performed by a qualified biologist from March to July. If an active nest is found, the City will consult with the appropriate resource agencies (including CDFG and USFWS) to determine appropriate construction buffers or other avoidance measures. Finally, the proposed project includes appropriate construction best management practices to reduce potential erosion and sedimentation into Hagemann Gulch during bridge construction.

The proposed Master Plan also includes resource management strategies to enhance the habitat of the Hagemann Gulch riparian woodland area, including removal of non-native understory species to the extent feasible, containing the expansion of eucalyptus trees by pruning the lower branches of established eucalyptus trees and removing smaller trees and saplings, and by closing unauthorized pathways within Hagemann Gulch.

No lighting would be installed along the trails within the meadow area of Arana Gulch. Low-level lighting would be installed at the Hagemann Gulch Bridge and the portion of the Creek View Trail that is located on Harbor property. The City indicates that such lighting would be necessary in these areas for safety reasons because of tree cover that would limit light in these areas during early morning hours

and at sunset (the paths would be open from sunrise to sunset). The Master Plan envisions the use of low-level, down-shielded lighting in these areas, but provides no further specifics or details regarding lighting.

It is likely, if not expected, that such lighting will adversely impact wildlife habitat values in these areas, and that it should be minimized to the degree possible, including by eliminating it entirely if feasible. In tandem with necessary refinements to ensure the pathway system is open during daylight hours (see public access findings that follow), some lighting may be required. However, in order to find the project consistent with the habitat protection policies of the Coastal Act, it should be eliminated or reduced as much as possible. See special condition 2.

Arana Creek and Hagemann Gulch Conclusion

As with tarplant issues discussed above, if the proposed Master Plan is fully and rigorously implemented, including with respect to construction best management practices, creek related habitat management over time (where the objective is maximum resource enhancement), and maximizing interpretive utility, then the proposed project represents an appropriate development with respect to Arana Creek and Hagemann Gulch, including in terms of its trail components that can and should be considered resource-dependent interpretive trails that will not significantly disrupt habitat values and thus meet the tests of Section 30240(a). Likewise, in terms of Section 30240(b), and for similar reasons, the portions of the proposed project located adjacent to the habitat areas (but not inside of them) have been sited and designed in such as way as to avoid significantly degrading such habitat areas, such that they will be compatible with the continuance of such habitat areas. Again, the pathway system will be located near such habitat areas, but there is adequate separation, including near Hagemann Gulch and Arana Creek, to provide effective buffering for the habitat areas in such a way that impacts that might significantly degrade those areas are not expected. In fact, potential adverse impacts to these areas due to adjacency issues are limited by siting, design, and management implementation over time (including enforcing access restrictions into these areas off the path, avoiding lights along the path, addressing path runoff, limiting path access to daytime use, etc.). The project is conditioned to further protect these habitat areas. Thus, the proposed project, including the paved path segments, is consistent with Coastal Act Section 30240(b), and thus consistent with Section 30240 overall.

To ensure that this is the case, the project is conditioned to require a lighting plan premised on avoiding lighting altogether or limiting lighting to the maximum extent feasible.

As conditioned, and with respect to Arana Creek and Hagemann Gulch issues, the Commission finds the proposed development consistent with the cited resource protection policies of the Coastal Act.

3. ESHA Conclusion

As conditioned, the proposed project represents an appropriate resource-dependent development in ESHA that will not result in a significant disruption of habitat values. Development adjacent to the ESHA areas has been sited and designed in such as way as not to significantly degrade such habitat areas, and to be compatible with the continuance of such habitat areas. Again, the proposed project should result in overall habitat enhancement for the special resources at Arana Gulch coincident with interpretive access enhancement in the same area, including allowing more and different user groups to experience such resources effectively and appropriately. The proposed project is consistent with Coastal Act Section 30240 and the other cited resource protection policies of the Coastal Act.

In making this finding, and as previously indicated, the Commission continues to recognize that the paved path portion of the Master Plan project has engendered much debate and controversy over the years. In particular, because any paved path alignment through the Arana Gulch meadow area will cover Santa Cruz tarplant habitat, albeit degraded habitat, any alternative that includes such a paved option includes such an impact. Such is the case with the proposed project.

As discussed above, the paved path portion of the project is both dependent on the ESHA resource for it to function as an interpretive path, and its installation is not expected to result in any significant disruption of habitat values. In addition, it has been sited and designed to prevent impacts that would significantly degrade the habitat areas in question. In short, the paved path can be found consistent with Coastal Act Section 30240. That said, although the path will not result in the level of impacts prohibited by Section 30240, it will result in some habitat impacts. As a result, some have asked whether there are appropriate path alternatives that can avoid all such impacts altogether. As explained below, the trail alignments required by this CDP have the fewest environmental impacts of the feasible options that implement the project objectives.

Alternatives to the Proposed Project

The EIR for the Master Plan evaluated four alternatives: 1) No Project Alternative; 2) Reduced Creek View Trail Alternative; 3) Unpaved Trail System with Hagemann Gulch Bridge Alternative; and 4) Unpaved Trail System without Hagemann Gulch Bridge Alternative.

The No Project Alternative would keep the site in its existing condition. Under this alternative, the Master Plan and the tarplant adaptive management program would not be implemented. While the No Project Alternative would eliminate potential adverse impacts associated with the proposed project, this alternative would not provide the benefits offered by the proposed project, such as long-term resource management strategies, including the tarplant adaptive management program, or new interpretive trail connectivity and access. The site would remain in its current state with existing unpaved trails, some of which have created erosion problems. As such, the No Project Alternative would not support achievement of the project objectives, would not protect and enhance coastal resources, including ESHA and public access, as directed by the Coastal Act, and is not the preferred project alternative under the Act.

The Reduced Creek View Trail Alternative would include all of the project-proposed trail system within the City-owned property, but the paved trail segment within the Harbor's property along the northern edge of the Harbor's dry boat storage area would be eliminated. Unpaved trail access from the Harbor to Arana Gulch would continue to be provided by the existing trail segment along the western edge of the dry boat storage area.[48] This alternative would have similar impacts to those of the proposed project, except that any impacts associated with trail construction on Harbor property would be eliminated. No retaining wall would be constructed in the vicinity of the existing culverts at the base of Arana Creek, and therefore this alternative would result in fewer impacts in that area than the proposed project. However, this alternative would not meet the project objective of providing an ADA-compliant trail through the Harbor's property to connect to the other proposed ADA-compliant trails, and would thus lessen the interpretive utility of the trail system significantly, including because such ADA and other wheeled access (i.e., strollers, walkers, etc.) would be blocked to and from the Harbor area and by extension the Santa Cruz County side of the project. As such, the project would retain almost all impacts, but the coastal resource benefits, including in terms of interpretive access, would be significantly diminished. The Reduced Creek View Trail Alternative is not the Coastal Act preferred project alternative either.

The Unpaved Trail System with Hagemann Gulch Bridge Alternative would provide the same trails as proposed by the project, but none of the trails would be paved. This alternative would provide public access for pedestrians and some bicyclists, but would not comply with ADA requirements, and would not facilitate access for other user groups (again, such as caregivers pushing strollers, persons with walkers, persons unable to navigate uneven surfaces, persons disinclined to traverse uneven surfaces, etc.). While the cost of construction would be significantly reduced if trail surfacing remained unpaved, it is uncertain whether state and federal transportation grants previously received by the City would fund the Hagemann Gulch bridge if the multiuse paths were not paved. If the bridge were not funded by these grants, it is also uncertain if the bridge would be constructed unless a new funding source was secured. Funding for the Santa Cruz tarplant adaptive management program would also be uncertain. This alternative would have impacts similar to those of the proposed project, except that there would be fewer impacts associated with construction of paved trails. It was assumed that the Harbor's property would not be used for trail construction and that the existing unpaved trail at the edge of the upper Harbor would remain. Thus, impacts associated with the proposed retaining walls in this area would be eliminated. Again, as with the previous alternative, this alternative maintains many of the same project impacts, albeit somewhat reduced without paving, but the project's coastal resource benefits are correspondingly reduced even more, and significant uncertainty regarding critical components, such as with respect to tarplant habitat enhancement, are introduced. The Unpaved Trail System with Hagemann Gulch Bridge Alternative is a reasonable alternative to consider, including because it is premised on many of the same concepts as the proposed project (including eliminating duplicative and resource damaging trail segments, controlling public access, etc.), but it misses a fundamental premise of the project and a large part of why it meets Section 30240 tests. Namely, the proposed project maximizes the ability of the public to access the site for nature study and interpretation, including user groups who

[48] And the existing footpath trail running along the dry boat storage fence line would likewise continue to provide pedestrian access.

cannot access it currently, whereas this alternative again precludes these users from access, preferring to satisfy only pedestrians and a subset of bicyclists (those able to handle the uneven surfaces). In addition, unpaved trail segments will not be covered in pavement, but will be packed down similar to existing trails and will not serve a habitat function either. As with previously considered alternatives, this alternative strikes a balance that is less than optimum under the Coastal Act than the proposed project.

The Unpaved Trail System without Hagemann Gulch Bridge Alternative would be similar to the preceding discussed alternative, but impacts associated with bridge construction would be eliminated, thus reducing impacts from the project overall. Again, though, as with the previously discussed alternative and for similar reasons, this alternative again strikes a less optimum Coastal Act balance, including as the utility of the project overall is even further reduced without the western connection.

The City's EIR concluded that the No Project Alternative would not be the environmentally superior alternative because the site would be left without an effective management plan that includes implementation measures to protect onsite resources. Of the three remaining alternatives, the City considered the Unpaved Trail System without Hagemann Gulch Bridge Alternative to be the environmentally superior alternative because it would result in the least amount of construction at the site. Thus, onsite resources, such as Santa Cruz tarplant habitat and other habitats, would be least affected by such construction. However, that means that these resources would also be least affected in a good way as well. In other words, leaving the tarplant habitat alone without active restoration and enhancement would mean the tarplant habitat is likely to cease to exist at this location. In addition, this alternative would not meet the project objectives of providing ADA-compliant, multi-use trails, and would not provide a new west entrance and connection to the Seabright neighborhood. Thus, interpretive access within Arana Gulch would be significantly limited, both in terms of maximizing access opportunities, including for a wider range of user groups, and in terms of the utility of the interpretive experience thus provided as compared to the proposed project. In short, and under the Coastal Act, the project as a whole, including as adjusted herein, most appropriately responds to project objectives at the same time as recognizing the context of the habitat and its needs, and the best manner of providing access in and through this area that can serve a useful nature study and interpretive function.

The City's EIR did not evaluate an off-site alternative that would provide a trail connection from the Seabright neighborhood in the City of Santa Cruz to the unincorporated County because the intent of the proposed project was to develop a Master Plan for the 67.7-acre Arana Gulch property, and any off-site alternative would not meet this intent. Clearly, however, if the objective is simply to get from point A in Santa Cruz County to point B in the City of Santa Cruz (i.e., the elusive "Broadway-Brommer" connection) more quickly than is currently the case (including for pedestrians, bicyclists, wheelchair users, etc.) then there are other alternatives that can meet this objective without placing paved paths in Arana Gulch. In fact, there are multiple permutations of projects that can achieve such an objective outside of Arana Gulch, including several that have been considered by the City and/or identified over time as the paved path project has been pursued by the City. These include adding recreational trail access across the Union Pacific train trestle immediately inland of the Murray Street Bridge across the

Harbor;[49] improving recreational trail connectivity on Murray Street Bridge itself;[50] improving bike lanes along Soquel Drive/Avenue inland of Arana Gulch;[51] constructing a trail segment that enters the Upper Harbor from Brommer and extends through the Harbor proper and then connects to Frederick Street Park through a switchback trail or ramp of some sort; connecting Frederick Street Park to Stagg or Mello Lanes (which extend perpendicularly from 7th Avenue and dead end at the bluff above the Harbor) via a new recreational trail (only) bridge; and variations and permutations of each of those options.

There is little doubt that such projects, alone or together, could facilitate such cross-town connectivity, and could do it without paved paths in Arana Gulch. However, and although the original paved path concept of about 15 years ago was largely driven by such circulation connectivity concerns, the objective for the project currently before the Commission cannot be distilled to only, or even mostly, one of getting across town more quickly in this way. Rather, the objective is much broader than that and includes both comprehensive resource management and enhancement in Arana Gulch and a strong desire to provide an interpretive path system that can help foster an awareness and appreciation of this special open space area, including for users for whom access to this area is currently unavailable altogether or is difficult (including those in wheelchairs, those less physically able to traverse uneven footpaths, caregivers with strollers, etc.). In other words, although the paved trail component will facilitate cross-town connectivity, including for bicyclists, it is likewise intended to provide a much richer interpretive experience of the Arana Gulch area for a much wider spectrum of the general public than is currently the case. As such, the range of "Point A to Point B" alternatives does not and cannot meet such an objective.

At the Commission's March 2010 hearing on the project, an alternative alignment of the east-west multi-use paved path was submitted to the Commission by the California Native Plant Society (CNPS) (see Exhibit G and also see Exhibit P, Tab 13, Map 4). The Commission expressed interest in better understanding this alternative, and requested an analysis of the impacts of the CNPS alternative in comparison to the impacts of the City's proposed east-west paved path alignment. Specifically, the CNPS alternative would pave the Coastal Prairie Loop Trail from Agnes Street along the perimeter of the Arana Gulch property and through the southernmost portion of the Arana Gulch property. The CNPS

[49] The Murray Street bridge extends across the Harbor about a half-mile towards the ocean from the Arana Gulch site, separating the Upper Harbor area (inland of the bridge) from the Lower Harbor area (seaward of the bridge). The Union Pacific Railroad trestle is immediately inland of the bridge. The Santa Cruz County Regional Transportation Commission (RTC) has been actively pursuing acquisition of the railroad corridor through Santa Cruz County for many years, and the California Transportation Commission (CTC) has indicated its support for this acquisition. Ultimately, it is envisioned that such acquisition would allow for new recreational trail improvements along this corridor throughout the County, including at this location. On June 30, 2010 CTC unanimously approved the RTC's application to purchase the Santa Cruz Branch Rail Line from Union Pacific using Proposition 116 bond funds. Following CTC approval, the RTC board approved a purchase agreement for the Branch Line on Aug.19, 2010. Acquisition of right of way is expected to occur following future bond sales, not yet scheduled.

[50] The City of Santa Cruz is separately pursuing a CDP to upgrade the Murray Street Bridge, and it is anticipated that such upgrades will include such recreational trail improvements. Currently, the Murray Street Bridge includes a sidewalk on one side, and limited bike lane area.

[51] Such improvements were recently completed by the City.

alternative would provide a connection between the City of Santa Cruz and the County by retaining the proposed Hagemann Gulch Bridge and the paved portion of the Creek View Trail that would connect to Brommer Street in the County.[52]

The City hired an engineering design company experienced in designing environmentally sensitive trails in open space areas to compare the CNPS alternative to the City's proposed alternative. The alignment comparison includes only those sections of trail from the proposed Hagemann Gulch Bridge to the trail terminus at the existing path that leads into Arana Gulch from the Harbor (see Exhibit P, Tab 14 for the preliminary trail alignment studies and for the trail alignment cross sections; see Exhibit P, Tab 12 for the City's written comparison between the CNPS trail alignment and the City's proposed trail alignment). The alignment comparison was based on trail configurations that would allow for ADA access.

The City's proposed east-west trail alignment was designed to match the existing terrain to achieve ADA compliance with the least impact to the open space area in terms of grading, the need for retaining walls, drainage impacts, etc. Thus, the construction footprint and the amount of grading necessary for the City's proposed alignment are minimized and drainage is not affected. The CNPS alternative, however, would be located at the interface of the coastal terrace prairie edge where it slopes down and transitions into the oak woodland area, and thus the trail would be located in an area where the existing contours and gradients are more variable and steeper than in the City's proposed east-west alignment, with more trees and related obstacles to account for. According to the City comparison, the CNPS alternative would be 647 feet longer than the City's east-west alignment (1,841 lineal feet versus 1,194 lineal feet). If the CNPS version were on-grade, then it would require significant cut and fill and retaining wall slopes to achieve required grades, all of which would occur within the meadow area and/or within the existing oak woodland area along the knoll of the site above the Harbor at its most southerly boundary. Due to the steep grade, the CNPS alternative (on-grade) would require 1,030 linear feet of retaining walls (extending up to 7 feet high above grade) with guardrails, which would be visible from the adjacent Santa Cruz harbor (the City's east-west alignment requires no retaining walls). If the CNPS version were on a boardwalk, it would either require the same or similar grading to allow the boardwalk to be installed or, if caissons or equivalent were installed to avoid such grading, it would require significant elevation above existing sloping topography, and in most areas would require railings to be installed. Such an alternative would significantly alter the existing unpaved pedestrian-only trail experience extending along the loop (which is proposed to be retained in the City's project) and turn it into an overly-engineered trail facility that would significantly alter its interpretive public access utility. If boardwalks on caissons were used, the CNPS alternative would also provide an attractive area that would facilitate illegal camping underneath the boardwalks, a problem that has long been an issue in Arana Gulch, and it is not clear to what degree elevation above the slopes and habitat areas would facilitate vitality of then underlying habitat.

[52] The CNPS alternative in Exhibit G does not show this connection between the County and the City of Santa Cruz, but CNPS has indicated that it intends for this east-west connection between the City and the County to be part of its alternative proposal (personal communication Vince Cheap, CNPS Conservation Committee Santa Cruz County Chapter to Susan Craig, Coastal Commission coastal planner, September 21, 2010).

The City's east-west alignment would not require storm drainage infrastructure as the natural gradients in this alignment would continue to allow sheet flow across the site. The CNPS alternative, however, if it were constructed on grade would require 160 lineal feet of drainage pipe, 910 lineal feet of earthen swales and 24 dissipation structures. As such, the CNPS on-grade alternative would have a construction impact zone twice as great as the City's (15,804 sq. ft. versus 32,064 sq. ft) and would result in almost twice as much cut and fill as the City's alignment (736 cubic yards versus 441 cubic yards) with a maximum depth of excavation more than three times that of the City's alignment (7 feet versus 2 feet). As indicated above, if the CNPS alternative were on an elevated boardwalk these impacts could likely be reduced, but only if the boardwalk were significantly elevated above grade to a sufficient height as to allow the existing grade to be mostly left alone. Eleven trees would need to be removed under the CNPS alternative, while only one tree would need to be removed under the City's proposed alignment.

A number of majestic, old, and stately oak trees are located in the area of the proposed CNPS alignment. To preserve these trees, the CNPS alignment would need to be moved at least partially onto the main meadow habitat, requiring the removal of approximately 3,000 square feet of coastal terrace prairie habitat. Such an alignment would likely require that the City re-consult and obtain a revised Biological Opinion from USFWS. The City's proposed project retains the existing unpaved trail at the meadow transition to the oak woodland area nearer the top of the slope and around the coastal terrace prairie habitat; therefore environmental impacts to these areas will not occur under the City's proposal.

The City's proposed east-west alignment is shorter in length than the CNPS alternative and will provide a more direct connection between the County and the City of Santa Cruz than the CNPS alternative, thus reducing the amount of meadow area used for trail, and reducing the potential for cut-through use of the meadow area. Under the City's proposal, tree removal is reduced compared to the CNPS alternative, as are grading and construction impacts, and no retaining walls or drainage structures would be required. Because fragmentation issues associated with the City's proposed alignment are not significant (see previous fragmentation findings), there would not be a significant reduced fragmentation benefit associated with aligning the east-west trail on the periphery per the CNPS alternative, and its increased adverse impacts overall as compared to the City's proposal make this option a poor alternative to the proposed project with respect to Coastal Act requirements.

According to the City, an alignment very similar to the proposed CNPS alternative was evaluated by the City very early in the Master Plan process, in consultation with USFWS, and was eliminated from further consideration when it was determined that this alignment would have significant environmental impacts. The engineering analysis shown in Exhibit P, Tab 14 supports this determination and demonstrates that the CNPS alternative would have significant impacts to visually and environmentally sensitive resources and would result in a much greater need for landform alteration than the City's proposed east-west trail alignment.

Similarly, the Friends of Arana Gulch (FOAG) proposes an alternative trail alignment (see pages 1-2 of Exhibit K). In the FOAG alternative, there would be no east-west connection between the County and the City (i.e., there would be no bridge over Hagemann Gulch and no paved pathway adjacent to the Harbor property to connect to 7th Avenue/Brommer Street in the County). All paths would remain

unpaved, although the existing path leading from the Agnes Street entrance would be reconfigured as a 6-foot-wide decomposed granite or boardwalk type of surface to provide ADA access into Arana Gulch. This path would continue to the vicinity of historic tarplant Area B, where there would be a small turnaround. Certain other existing trails would remain, including the portion of the Coastal Prairie Loop Trail that traverses the southern portion of the site, as well the alignment of the proposed Marsh Vista Trail that avoids historic Tarplant Area D. Interpretation would be provided at various points along these trails. Other trails would be closed to public use for restoration purposes, and fencing would be installed as necessary to prevent off-trail use of the meadow area.

While it is true that the FOAG alternative would have fewer potential impacts than the City's proposed project, this alternative would not provide the level of public access present in the City's proposal or in the CNPS alternative. For example, the FOAG alternative would not meet the City's objectives of providing an east-west connection between the County and the City to provide easy access into, within, and through Arana Gulch for a wider variety of users than can currently access this area (including wheelchair users, caregivers with strollers, pedestrians with walkers, etc.). Also, one of the City's main objectives is to provide ADA access to and through a large portion of Arana Gulch. The FOAG proposal would limit this access to the existing path that begins near the Agnes Street entrance and travels along the western boundary of the site to the vicinity of Tarplant Area B. The City's proposal (as modified by Special Condition 2) would provide ADA access from Agnes Street that would connect to the east-west alignment that would cross the meadow and connect the Hagemann Gulch Bridge to the paved path along the Harbor's property that would ultimately lead into the County. Thus, a much larger portion of the site would be available to those in wheelchairs and other user groups needing a more even surface as opposed to the FOAG proposal. Also, decomposed granite erodes with use and rain and has to be re-graded and compacted often. Thus, additional regular maintenance would be necessary to ensure that the decomposed granite path proposed by FOAG would remain usable by those in wheelchairs. If boardwalk materials were used, railings would also be required if the boardwalk were built above the existing ground level, leading to increased visual impacts. Also, boardwalk materials are not slip resistant and cannot be used in sloped areas without elevation,[53] and maintenance frequency and costs for boardwalk materials are high. Finally, the 6-foot-wide paths proposed by FOAG would be rather narrow and would not easily accommodate a variety of users at the same time, such as bicyclists, wheelchair users, hikers, persons with leashed dogs, persons with walkers, etc. For all these reasons, the FOAG alternative is not preferable to the City's proposed project, as conditioned by this approval.

As to alternative siting and designs within Arana Gulch for the paved path, there are obviously options. For example, the path segments could be made more direct (i.e., with less meander) and could be made narrower. Such options would result in reducing habitat coverage to a limited degree. However, such options do not make sense at this location in relation to the project before the Commission. In terms of straighter line segments, the path alignments chosen are fairly straight in most respects, and loops and variations are in place to avoid noted habitat areas (like Area A in the main meadow area, the location of the highest concentration of tarplant individuals in recent surveys) and to provide gentler gradients for the path to both facilitate ADA and other user access, as well as to reduce the potential for erosion,

[53] Id (see also CNPS boardwalk discussion in previous findings).

sedimentation, and other related adverse impacts associated with steeper path segments,[54] such as those associated with portions of the proposed CNPS alignment. With respect to using a pathway narrower than 8 feet in width, this would also be possible. However, an 8-foot path width is a reasonable width to allow two-way use, including when pedestrians, bicyclists, wheelchair users, strollers, leashed dogs, and others are all using the path in question. In fact, some might argue that a wider path width is necessary to avoid potential user conflicts along the paved path segments, and that 8 feet is too narrow in this respect. In this case, the Commission finds that the proposed 8-foot-wide paved path width strikes a reasonable balance, and will allow adequate path utility while avoiding enough coverage as to avoid a significant disruption of habitat values.

In short, the proposed project, as conditioned, represents the most appropriate alternative to meet project objectives and to find consistency with the Coastal Act, including Section 30240.

C. Public Access and Recreation

1. Applicable Policies

Coastal Act Sections 30210 through 30224 specifically protect public access and recreation. Applicable policies include:

> ***30210.*** *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*
>
> ***30211.*** *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*
>
> ***30212(a)(1).*** *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,*
>
> ***30213.*** *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. …*
>
> ***30214.*** *(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics. (2) The capacity of the site to sustain use and at what level of intensity. (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses. (4) The need to provide for the*

[54] As is currently the case with the main access path from the Harbor up to the meadow.

management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter. (b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution. (c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

In addition, Coastal Act Section 30252(3) requires new development to maintain and enhance public access opportunities by providing non-automobile circulation:

Section 30252: *The location and amount of new development should maintain and enhance public access to the coast by… (3) providing non-automobile circulation within the development…*

Finally, Coastal Act Section 30240(b), previously cited, also protects parks and recreation areas, and states:

30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

These overlapping Coastal Act policies require that public recreational opportunities be maximized, while ensuring that natural resources are protected.

In addition, the following certified City of Santa Cruz LCP policies, although not the standard of review, can provide pertinent information and guidance:

Land Use Element Policy 3.5: *Protect coastal recreation areas, maintain all existing coastal access points open to the public, and enhance public access, open space quality and recreational enjoyment in a manner that is consistent with the California Coastal Act.*

Land Use Element Policy 3.5.5: *Develop and implement plans to maximize public access and enjoyment of recreation areas along the coastline.*

For that portion of the project in Santa Cruz County, LCP Circulation (LUP Chapter 3) policies encourage a coordinated recreational circulation system for access to beach recreational areas and give priority to road improvements that provide access to coastal recreational resources, including:

LUP Policy 3.8.7 Recreation. *Plan bicycle routes to facilitate access to recreational areas such as regional parks, beach areas, and major tourist commercial/recreational facilities. Promote recreational bicycle routes to promote "eco tourism".*

LUP Policy 3.14.1 Capacity. *Reserve capacity on the existing County road system for recreational traffic.*

The County's LCP Parks, Recreation, and Public Facilities (LUP Chapter 7) policies and programs generally protect existing public access and encourage public access and recreational enhancements such as public parking, trails, and other facilities to increase enjoyment of coastal resources and to improve access within the Live Oak coastal region, including:

LUP Objective 7.1a Parks and Recreation Opportunities*. To provide a full range of public and private opportunities for the access to, and enjoyment of, park, recreation, and scenic areas, including the use of active recreation areas and passive natural open spaces by all ages, income groups and people with disabilities with the primary emphasis on needed recreation facilities and programs for the citizens of Santa Cruz County.*

LUP Objective 7.7a Coastal Recreation. *To maximize public use and enjoyment of coastal recreation resources for all people, including those with disabilities, while protecting those resources from the adverse impacts of overuse.*

LUP Objective 7.7b Shoreline Access. *To provide a system of shoreline access to the coast with adequate improvements to serve the general public and the coastal neighborhoods which is consistent with the California Coastal Act, meets public safety needs, protects natural resource areas from overuse, protects public rights and the rights of private property owners, minimizes conflicts with adjacent land uses, and does not adversely affect agriculture, subject to policy 7.6.2.*

LUP Program 7.7f (Establish Access Signing). *Establish an access signing program which: (1) Removes incorrect, misleading, and confusing signs. (2) Develops, installs, and maintains standard signs for primary destinations and neighborhood accessways and designates appropriate locations for these signs. (Responsibility: County Parks, Public Works)*

LUP Policy 7.6.3 Utilization of Existing Easements. *Seek to utilize existing publicly owned lands where possible to implement the trail system, subject to policy 7.6.2.*

LUP Policy 7.6.8 Trail Funding and Construction. *When utilizing roadside betterment funds in*

the development of bicycle, pedestrian and equestrian trails, construct such trails off the pavement within the public right-of-way and separated from traffic by an appropriate distance. Include trail design and construction in all public road development projects on designated trail routes, subject to policy 7.6.2.

LUP Policy 7.7.1 Coastal Vistas. *Encourage pedestrian enjoyment of ocean areas and beaches by the development of vista points and overlooks with benches and railings, and facilities for pedestrian access to the beaches…*

LUP Policy 7.7.4 Maintaining Recreation Oriented Uses. *Protect the coastal blufftop areas and beaches from intrusion by nonrecreational structures and incompatible uses to the extent legally possible without impairing the constitutional rights of the property owner, subject to policy 7.6.2.*

2. Analysis

The proposed Arana Gulch master plan includes a trail system within Arana Gulch and connecting to Frederick Street and 7th Avenue that would be approximately 2 miles in length (see Exhibit P, Tab 13, Map 3). The trail system would include almost a mile total of paved 8-foot-wide multi-use (pedestrian, bicycle, wheelchair, and other use) trails (a total of about 4,450 linear feet, including 2,250 feet in the meadow, and about 2,200 feet connecting to 7th Avenue and Frederick Street, the latter across the Hagemann Gulch bridge) and unpaved pedestrian-only trails (just over a mile in the meadow). The proposed trail system also includes a multi-use bridge across Hagemann Gulch that would provide new access from the City's eastside neighborhoods adjacent to the Arana Gulch area into Arana Gulch (there presently is no direct access from these neighborhoods into Arana Gulch). Interpretive displays and overlook areas would be located along the trail routes at locations that minimize impacts to sensitive habitats. Limited bench seating will be provided at important interpretive junctions and scenic overlooks. Additional signage would be installed as needed to discourage off-trail use. Signage would state that access into the Arana Gulch open space area would be allowed between sunrise and sunset. See Exhibit P, Tab 2 for the proposed interpretive program.

The proposed trail system and associated improvements are for the specific purpose of expanding and enhancing public recreational interpretive access, including in terms of low-cost access opportunities, in the public open space area of Arana Gulch. Coastal Act policies demand that maximum public recreational access opportunities and low-cost recreation facilities be protected, encouraged, and provided. The proposed project, including the proposed improved trail system that will provide access for a variety of users (i.e., pedestrians, bicyclists, persons in wheelchairs or using strollers, etc.) will further Coastal Act goals in the City of Santa Cruz and Santa Cruz County. The 8-foot wide multi-use paths are adequately sized to handle the expected flow of users, while the unpaved pedestrian-only paths will provide a slower-paced, lower key experience in Arana Gulch.

In addition to providing interpretive opportunities to view nature and wildlife, the proposed trail system would also provide multi-use trail connections from adjacent communities through Arana Gulch to the coast and the Monterey Bay Sanctuary Scenic Trail (Sanctuary Scenic Trail), a component of the

California Coastal Trail (CCT). The Sanctuary Scenic Trail is a recreational and interpretive trail system that links existing and proposed trail segments into a continuous coastal trail around the Monterey Bay, and provides a multi-use path for walkers, joggers, bicyclists, local residents, and visitors. The Sanctuary Scenic Trail also provides for appropriate loop and off-shoot segments from the main backbone of the trail, including, in this area, the Santa Cruz Harbor trail that circles the Harbor. The proposed project will connect these Harbor trails to Arana Gulch trails, thus extending the utility and value of the Sanctuary Scenic Trail and the CCT, in addition to providing enhanced public access into Arana Gulch itself.

In addition, the proposed project will fill a relative gap in access between Frederick Street and 7th Avenue, thus allowing a direct trail connection between these two areas and facilitating overall non-automobile circulation, including a primary bicyclist connection.

As proposed, the trail system would be open to the public from sunrise to sunset. Typically, however, the Commission has required that public access amenities be open to general public use from one hour prior to sunrise to one hour after sunset. This timing makes best use of all daylight hours, including the early morning and early evening hours when there is some light in the sky but the sun is not officially "up," and does not unduly penalize early morning and sunset users making use of such facilities.

The fencing proposed (post and wire – see Tab 5 of Exhibit P) for grazing could lead to adverse impacts on the recreational access experience provided for the same reasons as discussed in the ESHA findings. To address this issue, certain requirements articulated in that finding are also access requirements, such as the requirement for the fencing to be wood post and wire that is limited as much as possible; the requirement for a 5-foot separation between fencing and the path, path shoulder, and benches/interpretive sites; and the requirement for a 25-foot separation between fencing and the Meadow Overlook interpretive facility (near Agnes Street) (see Special Condition 2).

If the proposed Master Plan is fully and rigorously implemented, including with respect to maximizing public recreational access utility (such as appropriate siting for benches, overlooks, bicycle parking at the three main entrances to Arana Gulch, and related features), providing clear signage and direction, and providing access during daylight hours from one hour before sunrise to one hour after sunset, then the proposed project represents a valuable public recreational access project. To ensure that this is the case, Special Condition 4 requires an access management plan that specifically describes all public access amenities associated with the proposed trail system, including interpretive and other signage, number of benches and their locations, trash cans, bicycle racks at entrances to the Arana Gulch open space area, hours of use from one hour prior to sunrise to one hour after sunset, etc. With these amenities, the project will make the Arana Gulch open space area more accessible, educational, and enjoyable for a wider variety of users. This condition also requires that the public access signage reflects that these trails are components of the CCT and Sanctuary Scenic Trail, and that the signs recognize the local and state agencies, including the City, the County, and the Commission, that have made these trails possible.

The project will further the goals and intent of the applicable LCP and Coastal Act policies and standards by improving public recreational access and low-cost visitor-serving amenities in and around the Arana Gulch open space area. The project will enhance access and recreation opportunities by providing multi-use, non-motorized paths capable of accommodating a greater number of persons, including those with disabilities, in a manner that will allow them to experience and better understand the resources in Arana Gulch. It will also provide an improved connection with the existing Harbor portions of the multi-use Sanctuary Scenic Trail/CCT. As conditioned, the Commission finds the proposed development consistent with the cited public recreational access policies of the Coastal Act.

D. Visual Resources

1. Applicable Policies

Coastal Act Section 30251 states:

> ***Section 30251.*** *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

Coastal Act Section 30240(b), previously cited, also protects the aesthetics of coastal recreation areas such as Arana Gulch and the Harbor. Section 30240(b) states:

> ***Section 30240(b):*** *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

In addition, the following certified City of Santa Cruz LCP policies, although not the standard of review, can provide pertinent information and guidance:

> ***Community Design Element Policy 2.1:*** *Preserve natural features providing visual definition to an area within the City.*
>
> ***Community Design Element Policy 2.1.5:*** *Protect and enhance unique natural areas including… Arana Gulch Flood Plain…*

Likewise, the County's LCP is protective of coastal zone visual resources. The LCP states:

> ***Objective 5.10.a Protection of Visual Resources.*** *To identify, protect, and restore the aesthetic values of visual resources.*

Objective 5.10.b New Development in Visual Resource Areas. *To ensure that new development is appropriately designed and constructed to minimal to no adverse impact upon identified visual resources.*

LUP Policy 5.10.2 Development Within Visual Resource Areas. *Recognize that visual resources of Santa Cruz County possess diverse characteristics…. Require projects to be evaluated against the context of their unique environment and regulate structure height, setbacks and design to protect these resources consistent with the objectives and policies of this section.…*

LUP Policy 5.10.3 Protection of Public Vistas. *Protect significant public vistas…from all publicly used roads and vistas points by minimizing disruption of landform and aesthetic character caused by grading operations,… inappropriate landscaping and structure design.*

LUP Policy 5.10.6 Preserving Ocean Vistas. *Where public ocean vistas exist, require that these vistas be retained to the maximum extent possible as a condition of approval for any new development.*

LCP Section 13.20.130(b)(1) Entire Coastal Zone, Visual Compatibility. *The following Design Criteria shall apply to projects site anywhere in the coastal zone: All new development shall be sited, designed and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas.*

LCP Section 13.20.130(d)(1) Beach Viewsheds, Blufftop Development. *The following Design Criteria shall apply to all projects located on blufftops and visible from beaches: Blufftop development and landscaping…in rural areas shall be set back from the bluff edge a sufficient distance to be out of sight from the shoreline, or if infeasible, not visually intrusive.*

The LCP also explicitly recognizes the Live Oak area (i.e., the area on the east side of Arana Gulch, including the access road into the Harbor) as a special area. The LCP states:

Objective 8.8, Villages, Towns and Special Communities. *To recognize certain established urban and rural villages as well as Coastal Special Communities for their unique characteristics and/or popularity as visitor destination points; to preserve and enhance these communities through design review ensuring the compatibility of new development with the existing character of these areas.*

LUP Policy 8.8.1 Design Guideline for Unique Areas. *Develop specific design guidelines and/or standards for well-defined villages, towns and communities…. New development within these areas listed in Figure 8-1…shall conform to the adopted plans for these areas, as plans become available.*

Figure 8-1 Areas with Special Design Criteria or Guidelines*.…Area: Live Oak Planning Area; Design Guideline Source: Live Oak Community Plan (to be completed)…*

2. Analysis

The project site is located in and adjacent to the Arana Gulch open space area in the City of Santa Cruz. The natural setting of the Arana Gulch open space area provides a visual respite from the surrounding more urbanized areas of the City and County (see Exhibit B for an aerial photograph of the Arana Gulch open space area and the surrounding urban environment). As discussed above, the site contains a variety of habitats, such as coastal prairie/tarplant habitat, riparian and wetland habitat, and riparian woodland. The riparian corridors are associated with Arana Creek and Hagemann Gulch, located on the east and west sides of the site respectively. In general, Arana Gulch has relatively low visibility from nearby roads and other surrounding public viewpoints because of the heavy vegetation and terrain of Hagemann Gulch on the west and Arana Creek on the east.

There are views of the Upper Harbor from a large portion of the project site, including from the central meadow area. Residential uses are visible from the northern portion of the site and parts of the central meadow area of the site. There are generally limited views from other parts of the site because of topography and heavy vegetation. The long-range views from the site include scenic views of the mountains when looking north from many points on the site, especially the meadow area.

In general, and in part due to its undeveloped nature and in part due to the habitats previously discussed, the Arana Gulch area is a significant visual resource. Its importance in this regard is only magnified by the fact that it is located in the midst of a fairly urbanized area, but one can escape to Arana Gulch and in a very short time find oneself immersed in the natural world with only limited vestiges of urban development visible along its edges.

The project includes less than ½ mile of 8-foot-wide paved multi-use paths and just over a mile of unpaved paths in the meadow (see Exhibit D for photographic simulations of the proposed paths). The proposed trail access improvements (except for the bridge over Hagemann Gulch and the retaining wall near Arana Creek) are at-grade facilities, so their visual impact will be minimal, i.e. neither long-range views of the hills nor scenic views of the Upper Harbor will be impacted by the proposed project. Also, the paved paths will be colored a neutral tone to better blend with the surrounding coastal prairie environment.

The proposed project includes closing selected existing unauthorized pathways and restoring these areas. These improvements, plus the proposed habitat restorations and enhancements, will improve the visual experience for pedestrians, bicyclists, and wheelchair users alike. Likewise, the habitat enhancement portion of the proposed project should enhance visual resources as well as habitat resources.

The proposed project includes a new bridge over Hagemann Gulch and retaining walls along the Canyon View Trail (see Exhibit D for existing conditions and photographic simulations of these project components). The bridge and the railings at this location represent one of the most prominent visual features of the proposed project. This 8-foot-wide section of trail would be paved for bicycle, pedestrian, and wheelchair access. The railings for the bridge would be made of steel pipe with a galvanized finish to match the neutral tones of the paved bridge pathway. The proposed bridge will obstruct no views. One tree will be required to be removed to construct the bridge, and a limited number of tree branches

will need to be pruned back to allow for construction. Although the bridge will be visible from certain points in the Arana Gulch open space, the relatively low profile of the bridge and the neutral finishes should not significantly degrade the site's visual character.

Construction of the portion of the Creek View Trail on Harbor property would require associated retaining walls and railings adjacent to Arana Creek (see page 2 of Exhibit D). The trail, the retaining walls, and the railings would be visible from the Upper Harbor and from a portion of the southern end of Arana Gulch. The introduction of a human-made structure into the natural landscape of this portion of the Arana Gulch open space area would result in a change in the visual character of this area.

Fortunately, the paths and related design have been proposed to be sensitive to these aesthetics. Provided the siting, design, and materials (including structural elements, finishes, and landscaping) are chosen to be subordinate to this setting, they can be found consistent with the Coastal Act's visual resource protective policies (see special condition 2). The same cannot be said for the proposed fence on the inland side of the trail skirting the Harbor. Such fence, even if mesh, as proposed, will serve to create a "chute" effect for the trail extending from the Harbor access road to the entrance to Arana Gulch where the path alignment extends up to the meadow because it would be matched on the southern side by the existing dry boat storage chain link fence. The proposed mesh fence in this area, while proposed for a good reason (to help keep path users out of the buffer area along the upper Harbor dry boat storage area), will have a significant adverse impact on public views and enjoyment of this trail segment. The Master Plan includes adequate provisions to address the need to keep users on paths, and the fence can safely be removed without impacting this objective. See Special Condition 2.

The proposed project also includes over a mile of permanent livestock fencing consisting of post and wire, with 5 strands of wire (alternating straight and barbed wire). Posts will be 6-foot-tall metal t-bar that will be installed with about 5 feet of the post above ground and about 1 foot below ground. The fencing is proposed to provide a barrier between cattle and the public. This amount and type of fencing, and the fact that it would be permanent, would have a deleterious impact on the visual aesthetic of this open space area. To address this issue, certain requirements articulated in the preceding ESHA and public access findings are also visual resource requirements, such as the requirement for the fencing to be wood post and wire that is limited as much as possible; the requirement for a 5-foot separation between fencing and the path, path shoulder, and benches/interpretive sites; the requirement for a 25-foot separation between fencing and the Meadow Overlook interpretive facility (near Agnes Street) (see Special Condition 2).

The project also includes interpretive and other signage that will extend above grade, though the purpose of the proposed signage is to direct access and educate the public, so some visibility is necessary. However, in order to ensure that the signs minimize visual intrusion and are compatible with the open space setting, Special Condition 2 requires the Applicant to submit plans that describe the overall dimensions of the signage and the type of materials to be used. Likewise, the Applicant is required to provide a signing detail for the required interpretive displays that will inform the public of the site's sensitivities.

In conclusion, the proposed project primarily involves low-lying, at-grade development that will not obstruct long-range views. The proposed paved paths will be neutral in color. The proposed restoration components of the project, including habitat restoration and removal of unauthorized trails, will improve the existing visual resources of Arana Gulch. Other elements of the project, including the Hagemann Gulch Bridge and the portion of the Creek View Trail on the Harbor's property will be more visible but have been designed, and can be conditioned, to be as low profile and neutral in color and tone as possible to minimize visual impacts. The cattle grazing and associated fencing and water trough, as conditioned, will blend with the rural aesthetic of Arana Gulch. This approval is conditioned to require submission of a public access amenities plan (including signage, benches, etc.) to ensure that these amenities do not impact sensitive resources, including visual resources. The Commission therefore finds the proposal, as conditioned to address visual resource impacts, consistent with Section 30251 of the Coastal Act.

E. Transportation

Section 30253(d) of the Coastal Act requires that new development shall:

Minimize energy consumption and vehicle miles traveled.

Together with the Hagemann Gulch bridge trail segment, the trail segment extending from the bridge to Frederick Street, and the trail segment extending along the Harbor access road to 7th Avenue, the trails would provide a continuous west-east multi-use trail connection between Broadway in the City of Santa Cruz and Brommer Street in the unincorporated Live Oak portion of Santa Cruz County. The Arana Meadow Trail (as modified in Special Condition 2) would improve the existing unpaved north-south trail route that extends from Agnes Street to the upper Harbor, and would connect to the east-west trail alignment as well.

The proposed project will offer local residents and visitors a recreational opportunity to bike, walk, and run through Arana Gulch and will provide the first ADA access in a City open space area. The proposed project will also provide a connection between the City and the County for commuting bicyclists who wish to avoid the Soquel Avenue and Murray Street connections between the City and County due to concerns over the safety of bike lanes on those relatively narrow and busy thoroughfares. Written comments received regarding the project (see Exhibits I and K), as well as discussion at the March 2010 hearing on the project, stated that because the project provides this bicycle commuting option, the project is therefore a transportation project and is not a resource-dependent interpretive project that can be found consistent with Coastal Act Section 30240 regarding development in ESHA. Others commented that the proposed paved paths would encourage more bicycle commuter type of use, thus reducing the use of automobiles in the City and the County, leading to a reduction in automobile traffic and gas consumption (see Exhibits H and J).

It is clear that the nature of the proposed trails provides for both types of uses, i.e. the more reflective, natural interpretive experience, as well as the use of the paved paths as a through non-automobile transportation alternative. These two uses are not mutually exclusive and other Commission-approved

projects that have trail components in ESHA provide access to both types of users (e.g., the Sand City and City of Monterey paved paths in dune habitat). In fact, reducing vehicle miles traveled and energy consumption is a stated objective of the Coastal Act, including as a means to address issues associated with global climate change, and the project furthers such objectives.

In short, the proposed project will provide options for a variety of types of recreational and interpretive uses in Arana Gulch, and will also provide a safer non-automobile alternative transportation option for those who wish to move from one side of Arana Gulch to the other between the City and the County. As such, the proposed project will reduce vehicle miles traveled and energy consumption, and by extension address issues associated with global climate change. Therefore, the Commission finds the proposed project consistent with Coastal Act Section 30253.

3. Conditions of Approval

A. Standard Conditions

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

B. Special Conditions

1. **Approved Project.** Subject to these standard and special conditions (including modifications to the project and/or the project plans required by them), this coastal development permit authorizes implementation of the Arana Gulch Master Plan and related trail and other improvements extending from Frederick Street to 7th Avenue, including: management and restoration of habitat areas; improvements to the existing trail system, including new paved and unpaved paths, improvement

and realignment of existing unpaved paths, and removal and restoration of existing paths to be abandoned; construction of a new bridge over Hagemann Gulch; installation of interpretive displays and trail signage; installation of fencing, including to allow limited cattle grazing, all as more specifically described in the proposed project materials (see Exhibits C, D, E, F, and P).

2. **Final Project Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two copies of Final Project Plans to the Executive Director for review and approval. The Final Project Plans shall be substantially in conformance with the proposed project materials (see Exhibits C, D, E, F, and P) except that they shall be revised and supplemented to comply with the following requirements:

   (a) Path Modifications.

   1. **Arana Meadow Trail.** The paved Arana Meadow Trail that leads into Arana Gulch from the Agnes Street entrance shall be relocated to the west to the area of the existing unpaved portion of the Coastal Prairie Loop Trail.

   2. **Unpaved Paths.** The Final Project Plans shall include specific details, including representative cross sections, clearly identifying all measures to be taken to create the new unpaved path segments as well as to modify the existing unpaved path segments. All unpaved path segments shall be made to match as much as possible in appearance.

   3. **Abandoned/Restored Paths.** All paths that are not part of the designated path system shall be abandoned, and the area restored as part of the habitat in which it is located. All such paths shall be clearly identified on the Final Project Plans, and all measures to be taken to effectuate the abandonment/restoration shall be clearly identified.

   4. **All Paths Clearly Shown.** All path segments, including those extending to the Broadway/Frederick Street intersection from the Hagemann Gulch bridge and including those extending from near Arana Creek to the Brommer Street/7th Avenue intersection shall be clearly identified. These extending path segments shall be sited and designed to match the aesthetics of the rest of the path system as much as possible in siting, design, and flow, including being constructed in as curvilinear a manner as possible, and including native and non-invasive landscaping areas adjacent to them to help separate them visually and physically from adjacent uses and development, including vehicular use areas.

   5. **Path Maintenance.** All measures to be taken to ensure that the path system is maintained in its approved state in perpetuity shall be clearly identified.

   (b) Grazing/Fencing Detail. All meadow grassland areas within Arana Gulch that are located within the paved and unpaved trail loop (except the “dog free” Marsh Vista Trail) extending around the periphery of the main meadow area shall be included in the grazing area except for: areas of steep slopes; areas within 5 feet of trails; areas within 5 feet of benches/interpretive sites; areas within 100 feet of the Hagemann Gulch riparian corridor and related tree canopy;

areas within 50 feet of oak trees/oak woodland canopy along the Coastal Prairie Loop Trail; and the area near Agnes Street where the Meadow Overlook interpretive facility is to be located as well as a 25 foot area surrounding the facility. The grazing area shall be demarcated by a wood post (round and approximately 4-inch diameter) and wire fence where the following shall be limited as much as possible to limit visual impacts: the number of fence posts, the height of fence posts, the area of post footing, the gauge of wire, the number of wires, and the number of wires that are barbed wires. All gates shall be steel and shall be designed so that they are complementary to, and seamlessly integrated with, the wood post and wire fence. The cattle corral near Agnes Street (as distinct from the grazing area) shall be limited in area as much as possible. All fencing and gates shall be sited and designed in the manner most protective of coastal resources.

(c) Other Fencing/Barrier Detail. All other fencing and barriers (i.e., other than the grazing and corral fencing) shall be clearly identified in site plan and elevation views. All such fencing and barriers shall be limited to that that is conclusively shown to be necessary to protect habitat and direct path system users, and shall be sited and designed to minimize to the maximum degree possible visual impacts, including though use of a consistent fencing and barrier design throughout the project. All fencing/barriers along that portion of the Creek View Trail adjacent to the Upper Harbor area shall be eliminated with the exception of a railing near Arana Creek if conclusively shown to be required to adequately ensure public safety, and if it is designed to limit view blockage (e.g., limited rails, cable-rails, etc).

(d) Lighting Detail. Lighting shall be prohibited with the exception of low-level lighting at the entrance locations into the path system, and with the exception of low-level lighting otherwise conclusively shown to be required to adequately ensure public safety associated with authorized trail use, where such public safety lighting is limited to the greatest degree possible. Any lighting shown on the Final Project Plans shall be accompanied by justification for it, and clear identification of its parameters (i.e., luminosity, glare field, expected times when it would be on, etc.). All approved lighting shall be sited and designed to minimize impacts on habitat areas to the maximum degree possible.

(e) Entrance Detail. All improvements associated with entrance locations into the path system, including at Agnes Street and at the northern end of the Upper Harbor, shall be clearly identified in cross section and elevation views. All associated development (e.g., fencing, signs, benches, trash cans, recycling cans, bike racks, etc.) shall be clearly identified.

(f) Design. The Final Project Plans shall clearly identify all measures that will be applied to ensure that the project design, including all structures and including all other project elements (e.g., bridge, paved paths, unpaved paths, fencing and barriers, retaining walls, railings, benches, lighting, signs, water troughs, landscaping, etc.) clearly reflects a rural open space theme and aesthetic (i.e., simple, spare, and utilitarian lines and materials; natural materials (wood, stone, brick, etc.); corten (weathered) steel or equivalent; earth tone colors; etc.) with a pedestrian-oriented form and scale. At a minimum, the plans shall clearly identify all structural elements,

materials, and finishes (including through site plans and elevations, materials palettes and representative photos, product brochures, etc.).

(g) Minor Adjustments. The Final Plans shall provide that minor adjustments to final plans may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

The Permittee shall undertake development in accordance with the approved Final Project Plans.

3. **Arana Gulch Habitat Management Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit for Executive Director review and approval three copies of a final Arana Gulch Habitat Management Plan (HMP). The HMP shall provide for the restoration, enhancement, and long-term management of all Arana Gulch habitat areas (including, as referenced by the Arana Gulch Master Plan, the Coastal Prairie/Tarplant Management Area, the Arana Gulch Riparian and Wetland Management Area, and the Hagemann Gulch Riparian Woodland Management Area) as self sustaining and functioning habitats in perpetuity. The HMP shall be prepared by a qualified expert in restoration ecology for each of the habitat types, and shall take into account the specific conditions of the site as well as restoration, enhancement, and management goals. The HMP shall be substantially in conformance with the Master Plan documents submitted to the Coastal Commission, including the August 1, 2005 document entitled "A Management Program for Santa Cruz Tarplant (*Holocarpha macradenia*) at Arana Gulch"), including that it can be submitted in a package that includes relevant Master Plan documentation with an addendum that addresses this condition, provided all language is modified to be directive (e.g., "shall" rather than "should") and it complies with the following requirements and includes:

(a) A baseline assessment, including photographs, of the current physical and ecological condition of the restoration and enhancement areas. All existing topography, wet features, and vegetation shall be depicted on a map.

(b) A description of the goals of the plan, including in terms of topography, hydrology, vegetation, sensitive species, and wildlife usage.

(c) A description of planned site area preparation and invasive plant removal.

(d) Any planting either of seeds or container plants shall be made up exclusively of native taxa that are appropriate to the habitat and Arana Gulch region. Seed and/or vegetative propagules shall be obtained from local natural habitats so as to protect the genetic makeup of natural populations. Horticultural varieties shall not be used.

(e) A plan for monitoring and maintenance of habitat areas in perpetuity, including:

- A schedule.
- A description of field activities, including monitoring studies.

- Monitoring study design for each habitat type, including, as appropriate: goals and objectives of the study; field sampling design; study sites, including experimental/revegetation sites and reference sites; field methods, including specific field sampling techniques to be employed (photo monitoring of experimental/re-vegetation sites and reference sites shall be included); data analysis methods; presentation of results; assessment of progress toward meeting success criteria; recommendations; and monitoring study report content and schedule.

- Adaptive management procedures, including provisions to allow for modifications designed to better restore, enhance, manage, and protect habitat areas.

- Provision for submission of reports of monitoring results to the Executive Director for review and approval in perpetuity, beginning the first year after initiation of implementation of the plan. Such Monitoring Reports shall be submitted annually until success criteria are met, and then shall be submitted on an every 3-year basis after that. Each Monitoring Report (annual and 3-year) shall be cumulative and shall summarize all previous results. Each report shall clearly document the condition of the habitat areas, including in narrative (and supporting monitoring data) and with photographs taken from the same fixed points in the same directions as the baseline assessment and prior Monitoring Reports. Each report shall include a performance evaluation section where information and results from the monitoring program are used to evaluate the status of the restoration, enhancement, and long-term management in relation to the interim performance standards and final success criteria. To allow for an adaptive approach, each report shall also include a recommendations section to address changes that may be necessary in light of monitoring results and/or other information, including with respect to current restoration information and data related to the habitat areas in question, and to ensure progress toward and achievement of success criteria. Actions necessary to implement the recommendations shall be implemented within 30 days of Executive Director approval of each Monitoring Report, unless the Executive Director identifies a different time frame for implementation.

(f) Final success criteria.

(g) Implementation procedures, cost estimates, identification of funding, and related reporting procedures.

(h) Provisions for minor adjustments to the HMP by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

PRIOR TO COMMENCEMENT OF CONSTRUCTION, the HMP shall be implemented by establishing the Adaptive Management Working Group (AMWG), receiving prioritized first-year management recommendations from the AMWG, and initiating implementation of the highest priority recommendations in the field.

The Permittee shall undertake development in accordance with the approved Arana Gulch Habitat Management Plan.

4. **Public Access Management Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit for Executive Director review and approval two sets of a full-scale public access management plan (Access Plan). The Access Plan shall clearly describe the manner in which general public access associated with the approved project is to be managed and provided, with the objective of maximizing public access to the public access areas of the site (including all pathways) and all related areas and public access amenities (i.e., overlooks, interpretive signs and facilities, bench seating, etc.) described in this special condition. The Access Plan shall be substantially in conformance with the proposed project materials (see Exhibits C, D, E, F, and P)), except as modified by these special conditions, and shall at a minimum include the following:

   a. **Clear Depiction of Public Access Areas and Amenities.** All public access areas and amenities, including all of the areas and amenities described above, shall be clearly identified as such on the Access Plans (including with hatching and closed polygons so that it is clear what areas are available for public access use).

   b. **Amenities.** Public access amenities (such as benches, bicycle racks, trash and recycling receptacles, etc.) shall be provided, including at a minimum: at least five benches at dispersed locations throughout the path system designed to best utilize views and interpretation possibilities; at least five overlook areas designed to best utilize views and interpretation possibilities, where the overlooks do not necessarily need to correspond to the bench locations; and adequate bicycle racks and trash/recycling receptacles at entrance locations into the path system, including at Agnes Street and at the northern end of the Upper Harbor.

   c. **Public Access Signs/Materials.** The Access Plan shall identify all signs, handouts, brochures, and any other project elements that will be used to facilitate, manage, and provide public access as part of the approved project, including identification of all public education/interpretation features that will be provided on the site (educational displays, interpretive signage, etc.). Sign details showing the location, materials, design, and text of all public access signs shall be provided. The signs shall be designed so as to provide clear information without impacting public views and site character. At a minimum, public access directional signs shall be placed at each entrance into the path system and at each path intersection. At a minimum, appropriate (to Arana Gulch and Santa Cruz Harbor issues, information, habitat, and history) public access interpretive signs, displays, and/or features shall be placed at each entrance into the path system and at each overlook location. Public access signage shall acknowledge the participants in the design and provision of the Arana Gulch Master Plan (including its interpretative access components) including the City, the County, the Port District, the California Coastal Commission, and other applicable entities, and shall clearly reflect that the path system is a component of the California Coastal Trail and the Monterey Bay Sanctuary Scenic Trail.

   d. **No Public Access Disruption.** Development and uses within the public access areas that disrupt and/or degrade public access (including areas set aside for private uses, and barriers to public

access such as trash enclosures, temporary structures, private use signs, etc.) shall be prohibited. The public use areas shall be maintained in a manner that maximizes public use and enjoyment.

e. Public Access Use Hours. All public access areas and amenities shall be available to the general public free of charge during at least daylight hours (i.e., one hour before sunrise to one hour after sunset).

f. Minor Adjustments. The Access Plans shall provide that minor adjustments may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

g. Public Access Areas and Amenities Maintained. The public access components of the project shall be maintained in their approved state in perpetuity.

The Permittee shall undertake development in accordance with the approved Public Access Plan, which shall govern all general public access to the site pursuant to this coastal development permit.

5. **Construction Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two sets of a Construction Plan (in full-size format with a graphic scale) to the Executive Director for review and approval. The Construction Plan shall, at a minimum, include the following:

(a) Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, all storage areas, all construction access corridors (to the construction site and staging areas), and all areas where development is prohibited. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to minimize construction impacts on habitat areas.

(b) Construction Methods and Timing. The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separated from all areas where development is prohibited (including using unobtrusive fencing or equivalent measures to delineate construction areas). All erosion control/water quality best management practices to be implemented during construction and their location shall be noted.

(c) Construction Requirements. The Construction Plan shall include the following construction requirements specified by written notes on the Construction Plan. Minor adjustments to the following construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

- All work shall take place during daylight hours. Lighting habitat areas is prohibited.
- Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.

- The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the site; etc.).

- All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.

- The Permittee shall notify planning staff of the Coastal Commission's Central Coast District Office at least 3 working days in advance of commencement of construction, and immediately upon completion of construction.

The Permittee shall undertake development in accordance with the approved Construction Plan.

6. Construction Site Documents & Construction Coordinator. DURING ALL CONSTRUCTION:

(a) Construction Site Documents. A copy of the signed coastal development permit shall be maintained in a conspicuous location at the construction job site at all times, and such copy shall be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the coastal development permit, and the public review requirements applicable to it, prior to commencement of construction.

(b) Construction Coordinator. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and the coordinator's contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with an indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

4. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effects which the activity may have on the environment.

In July 2006, the City of Santa Cruz, acting as the lead CEQA agency, certified an EIR for the project and adopted a Statement of Overriding Considerations for the project regarding an unavoidable significant environmental impact on Santa Cruz tarplant habitat. The EIR has been upheld in two legal challenges.

As explained in the alternatives section above (in the ESHA finding), the City considered four alternatives to the proposed project and the proposed trail alignments and determined that the proposed project was the only alternative that met all of the project objectives, including constructing or restoring paths and implementing the Santa Cruz Tarplant Adaptive Management Program and other habitat-enhancing measures within Arana Gulch. The City did not evaluate off-site alternatives for providing an east-west trail connection between the City and the unincorporated County because any off-site alternative would not meet the intent of developing a Master Plan for the City's Arana Gulch property.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This staff report has discussed the relevant coastal resource issues with the proposal, and has recommended appropriate suggested modifications to avoid and/or lessen any potential for adverse impacts to said resources. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. Thus, if so modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).