



**Draft
Initial Study and
Mitigated Negative Declaration**

**Ellwood Mesa Coastal Trails
& Habitat Restoration Project**

City Case # 13-039-CUP

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Acronyms

°F	Fahrenheit	mph	miles per hour
ADT	Average Daily Traffic	msl	mean sea level
ALUC	Airport Land Use Commission	MTD	Metropolitan Transit District
ALUP	Airport Land Use Plan	N ₂ O	nitrous oxide
APN	Assessor Parcel Numbers	NCDC	National Climatic Data Center
B.P.	Before Present	NFPA	National Fire Protection Association
BAAQMD	Bay Area Air Quality Management District	NO ₂	nitrogen dioxide
BMP	Best Management Practice	NO _x	nitrogen oxides
CALFIRE	California Department of Forestry and Fire Protection	NPDES	national Pollutant Discharge Elimination System
CAP	Clean Air Plan	NRCS	Natural Resources Conservation Service
CAPCOA	California Air Pollution Control Officers Association	NRHP	National Register of Historic Places
CARB	California Air Resources Board	O ₃	ozone
CBC	California Building Code	PAH	polynuclear aromatic hydrocarbon
CCC	California Coastal Commission	PM ₁₀	particulate matter less than ten microns in diameter
CCIC	Central Coastal Information Center	PM _{2.5}	particulate matter less than 2.5 microns in diameter
CCR	California Code of Regulations	ROC	reactive organic compound
CDFW	California Department of Fish and Wildlife	ROG	reactive organic gases
CFR	Code of Federal Regulations	RWQCB	Regional Water Quality Control Board
CH ₄	methane	SBCAG	Santa Barbara County Association of Governments
CNEL	Community Noise Equivalent Level	SBCAPCD	Santa Barbara County Air Pollution Control District
CO	carbon monoxide	SBCFD	Santa Barbara County Fire Department
CO ₂	carbon dioxide	SBTC	Santa Barbara Trails Council
CO ₂ e	carbon dioxide equivalent	SBUSD	Santa Barbara Unified School District
dBA	A-weighted decibels	SIP	State Implementation Plan
DOGGR	California Division of Oil, Gas, and Geothermal Resources	SO ₂	sulfur dioxide
EIR	Environmental Impact Report	SWP	State Water Project
ESH	Environmentally Sensitive Habitat	SWPPP	Stormwater Pollution Prevention Plan
ESHA	Environmentally Sensitive Habitat Area	SWRCB	State Water Resources Control Board
FEMA	Federal Emergency Management Agency	TAC	toxic air contaminants
FPD	Fire Prevention Division	TDML	Total Daily Maximum Loads
GHG	Greenhouse Gas	UCSB	University of California Santa Barbara
GP/CLUP	General Plan and Coastal Land Use Plan	USACE	U.S. Army Corps of Engineers
GUSD	Goleta Union School District	USC	U.S. Code
GWSD	Goleta West Sanitary District	USDA	U.S. Department of Agriculture
IS-MND	Initial Study-Mitigated Negative Declaration	USEPA	U.S. Environmental Protection Agency
lbs/day	pounds per day	V/C	Volume to Capacity
LCP	Local Coastal Plan		
Ldn	Day-Night Average Noise Level		
Leq	Equivalent Noise Level		
LOS	Level of Service		
mgd	million gallons per day		
MMT	million metric tons		

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1 **CITY OF GOLETA**
2 **DRAFT MITIGATED NEGATIVE DECLARATION**
3 **March 26, 2014**

4 **1. PROJECT TITLE:**

5 Ellwood Mesa Coastal Trails and Habitat Restoration Project Request; City Case # 13-029-CUP

6 **2. LEAD AGENCY NAME AND ADDRESS:**

7 City of Goleta
8 130 Cremona Drive, Suite B
9 Goleta, CA 93117.

10 **3. CONTACT PERSON AND PHONE NUMBER:**

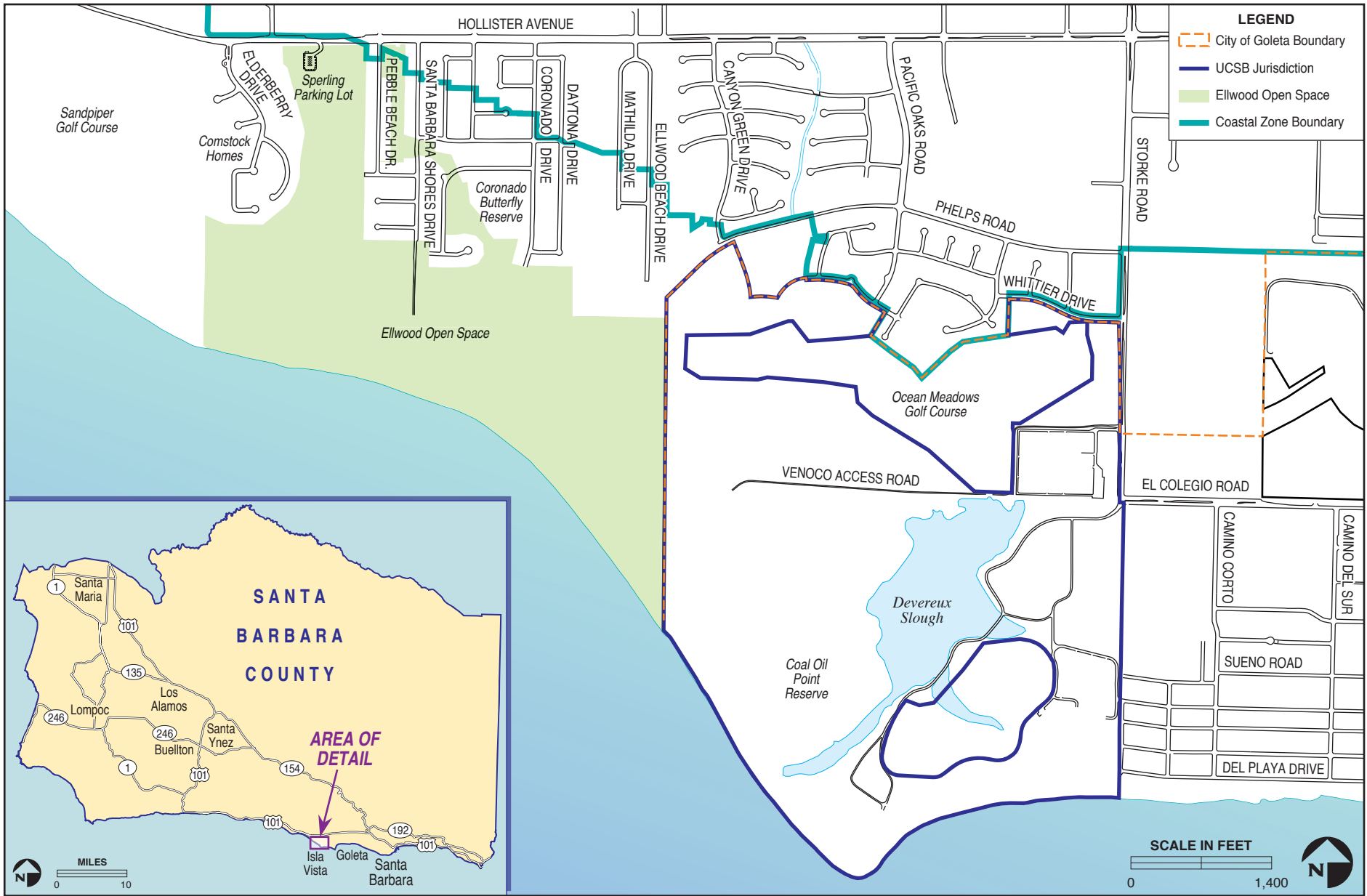
11 Jan Hubbell, Contract Planner
12 jhubbell@cityofgoleta.org
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14 **4. APPLICANT:**

15 Santa Barbara Trails Council (SBTC)
16 3885 Cinco Amigos
17 Santa Barbara, CA 93105

18 **5. PROJECT LOCATION:**

19 The Project location is regionally known as the Ellwood Mesa Open Space Plan Area (Ellwood
20 Mesa), an approximately 224-acre parcel located entirely within the City of Goleta's Coastal
21 Zone and bordered by Hollister Avenue to the north, the Ellwood Shores neighborhood to the
22 north and east, Venoco Ellwood Marine Terminal and Coal Oil Point Nature Reserve to the east,
23 the Comstock Homes (Monarch Point) residential subdivision and Sandpiper Golf Course to the
24 west, and the Pacific Ocean to the south (see Figure 1). The Project site contains Assessor
25 Parcel Numbers (APN) 079-210-024, 079-210-069, 079-210-015, 079-210-014, 079-210-013,
26 079-210-072, 079-210-071, and 079-210-070.



Ellwood Trails Vicinity Map

FIGURE 1

1 **6. PROJECT DESCRIPTION:**

The proposed Ellwood Mesa Coastal Trails and Habitat Restoration Project would enhance approximately 1.56 miles of existing trails by improving drainage and trail tread and restoring native habitats to reduce environmental impacts associated with the use of the existing California Coastal and Juan Bautista de Anza Trails on Ellwood Mesa. The proposed Project would also realign approximately 0.54 miles of trail in substantial conformance with the City of Goleta General Plan and Coastal Land Use Plan to enhance this trail system and include improvements to three drainage crossing and two beach access points.

2 The proposed Ellwood Mesa Coastal Trails and Habitat Restoration Project (Project) would
3 improve approximately 2.1 miles of existing coastal trails on Ellwood Mesa. This would include
4 improvements to 1.56 miles of existing trails as well as drainage improvements to direct surface
5 flows off of trails and improvements in trail tread surface such as leveling and eliminating ruts or
6 ridges within the trail. In addition, approximately 0.54 miles of trail would be realigned around
7 sensitive areas in conformance with the City of Goleta General Plan and Coastal Land Use Plan
8 (GP/CLUP) (see Figure 2). The proposed Project would also include improvements to three
9 drainage crossings (i.e., Gully A, Drainage A, and Devereux Creek), and two existing beach
10 access points (i.e., Beach Access Point E and F). Additionally, habitat restoration is proposed
11 for approximately 13 acres adjacent to the trail and coastal blufftop as envisioned and planned
12 for in the 2004 Ellwood-Devereux Coast Open Space and Habitat Management Plan (Open
13 Space Plan).

14 Project Vicinity and Location

15 The Project area is bounded by Hollister Avenue to the north, the Ellwood Shores neighborhood
16 to the north and east, the inactive Venoco Ellwood Marine Terminal and Coal Oil Point Nature
17 Reserve to the east, the Comstock Homes (Monarch Point) residential subdivision and
18 Sandpiper Golf Course to the west, and Ellwood Beach as well as the Pacific Ocean to the
19 south. Hollister Avenue, a four-lane major arterial, runs in an east-west direction and provides
20 access along its southern side to Sperling Parking Lot, a 40-space public trailhead parking lot at
21 Ellwood Mesa, in close proximity to the Anza Trail, in the City of Goleta, California.

22 Trail Route Under the Proposed Project

23 The existing shared California Coastal (Coastal) Trail and Juan Bautista de Anza Trail (Anza
24 Trail) begins at the Sperling Parking Lot, the public trailhead parking lot located along the
25 southern side of Hollister Avenue. Under the proposed Project the proposed improvements
26 would occur along the existing shared trail until reaching the proposed realigned segment over
27 Gully A and Drainage A. Following the crossing over Drainage A the proposed realigned
28 segment would reconnect with improvements occurring along the existing shared Coastal-Anza
29 Trail heading south to the proposed crossing over Devereux Creek. The existing trail turns
30 southeast along the bluff, where it would split into the existing Anza Trail and a proposed
31 realigned segment of the Coastal Trail that would connect with the existing blufftop segment
32 leading toward the University of California Santa Barbara's (UCSB's) Coal Oil Point Nature
33 Reserve. Additionally, the existing Coastal Loop Route rounds the western end of Ellwood
34 Mesa, adjacent to Sandpiper Golf Course, and continues along the blufftop connecting with the
35 existing Coastal Trail at Beach Access Point F (see Figure 2).
36

1 Project Setting

2 Ellwood Mesa provides one of the largest
3 contiguous open space areas along the
4 South Coast and attracts thousands of
5 visitors per year. The Ellwood Mesa Open
6 Space Plan Area is characterized by
7 coastal mesas and steep coastal bluffs
8 bisected by Devereux Creek and Devereux
9 Slough. Eucalyptus (*Eucalyptus* spp.)
10 woodlands form a dense canopy
11 surrounding Devereux Creek, while salt
12 marsh habitat parallels the margins of the
13 slough. Coastal bluff, dune scrub, and
14 foredune habitats dominate the coastal
15 bluff, and native grassland, non-native
16 annual grassland, and coyote brush
17 (*Baccharis pilularis*) scrub dominate the
18 habitats on the mesa. Additionally, vernal
19 pools are abundant in topographic
20 depressions on Ellwood Mesa. The Ellwood Mesa Open Space Plan Area also includes the
21 Coronado Butterfly Preserve, which is surrounded by the residential development, but is one of
22 the largest monarch butterfly (*Danaus plexippus*) overwintering groves in California (see
23 Figure 6).



The Coastal and Anza trails run between the Comstock Homes Development to the west and the eucalyptus grove to the east.

24 The proposed Project is located entirely within Ellwood Mesa, including 223.6 acres of the Open
25 Space Plan Area that is within the City of Goleta's coastal zone jurisdictional boundary. Project
26 parcels are zoned for Recreation (REC) pursuant to the City of Goleta's Coastal Zoning
27 Ordinance and managed for Open Space/Passive Recreation.

28 Project Objectives

29 The existing Ellwood Mesa trail network, including
30 the two existing Beach Access Points E and F, is
31 impacted by erosional gullies and potholes
32 resulting from past grading and continuous trail
33 use with limited maintenance. Gullied sections of
34 the trail have become a serious problem, resulting
35 in steep grades, which often make the trail difficult
36 to use. These grades present the biggest
37 impediment to trail use at the drainage crossings
38 and beach access points, where the grade can
39 reach 14 and 50 percent respectively. Additionally,
40 trail users often bypass wet and muddy sections of
41 the existing trail during the winter months, creating
42 trail braids, resulting in damage to sensitive
43 habitat (e.g., vernal pools) and exacerbating trail
44 and blufftop erosion.



"Braiding effect" on the existing Ellwood Mesa trail network due to user bypass of poorly drained surfaces.

45

1 The proposed Project would implement the following four major objectives developed during
2 community outreach:

3 1) Improve safe access across gullies and drainage crossings and reduce impacts to
4 riparian habitats in those areas. This includes the engineered crossings (e.g., culverts or
5 boardwalk bridges) over Gully A, Drainage A, and Devereux Creek;

6 2) Restore damaged portions of the existing Coastal and Anza trails, especially along the
7 blufftop portions of the Coastal Trail;

8 3) Provide habitat restoration along the trail corridors and adjacent Environmentally
9 Sensitive Habitat Areas (ESHAs); and,

10 4) Provide safer public access to the beach and improved drainage at Beach Access Points
11 E and F.

12 Trail Construction Techniques

13 A number of different construction techniques would be used to implement the proposed Project
14 improvements within the existing trail corridors and along the proposed trail realignments. The
15 proposed improvements and realignments would incorporate natural materials, tones, and
16 design techniques to the maximum extent feasible while addressing trail network accessibility
17 standards.

18 *Trail Corridor*

19 The proposed Project would make improvements to the existing Coastal and Anza trails within a
20 20-foot wide corridor, within approximately ten feet from the centerline of the existing trails. This
21 would provide flexibility in designing the trail improvements to avoid sensitive habitats, improve
22 erosion control, and to allow for slight adjustments as needed in the future. Where trails would
23 be narrowed, the proposed project would include use of eucalyptus logs, branches or other non
24 structure techniques to guide trail users along a narrowed trail and protected newly revegetated
25 areas. The proposed Project would include the following standards for trail width, which may be
26 narrowed in places if needed to reduce environmental impacts:

27 • **Ten-foot** width in locations where there is high traffic, such as the initial part of the trail
28 leading from Sperling Parking Lot that also serves the Coronado Butterfly Preserve
29 traffic at the far eastern part of the Anza Trail;

30 • **Eight-foot** width for the most heavily traveled Coastal Trail segment from Access
31 Point F east to the boundary with UCSB property (see Figure 2); and,

32 • **Six-foot** width for all other segments of the Coastal and Anza trails to maintain a natural
33 aesthetic while also providing sufficient width to allow users to pass one another
34 comfortably;

35 Changes in trail widths along the existing Coastal and Anza trails would generally involve
36 narrowing wide trails to meet these standards. However, where trail would need to be widened
37 to meet specific requirements, consideration would be given to existing and projected use and
38 sensitivity of adjacent habitats. Where use levels permit and adjacent habitats are sensitive,

1 trails would be permitted to be narrower than these standards to avoid unnecessarily impacting
 2 adjacent habitats.

3 *Construction Equipment and Staging*

4 A mix of heavy construction equipment and hand held tools would be used to restore existing
 5 trail segments as well as to construct proposed realignments, crossings, and proposed beach
 6 access points and drainage improvements.

7 **Table 1: Construction Equipment List**

Construction Equipment	
<ul style="list-style-type: none"> • 36-inch-wide Kubota K-008 tractor • Small haul truck (e.g., pick-up truck) • Roller compactor • Compressors • Hammer drills • Shovels • Pickaxes 	<ul style="list-style-type: none"> • Chainsaws • Loppers • Pry bars • Pulaskis • Other standard trail construction equipment

8 Mobile heavy construction equipment (e.g., small tractor, pick-up truck, and small roller
 9 compactor) would enter and exit the Ellwood Open Space via Santa Barbara Shores Drive;
 10 however, the trail construction crew would park at the Sperling Parking Lot. Construction
 11 equipment would be staged on the existing trail segments or immediately adjacent within
 12 disturbed or unvegetated areas. At the beach access points, construction equipment would be
 13 staged in flat areas adjacent to the trail characterized by disturbed vegetation. All construction
 14 equipment would be removed at the end of the day and stored in the haul truck or at a
 15 designated area with appropriate signage in the Sperling Parking Lot. Overnight equipment
 16 storage areas would be fenced.

17 *Trail Fill Material and Tread*

18 More than 70 percent of the existing Coastal and Anza trails are entrenched (i.e., below the
 19 grade of the surrounding area). The proposed Project would utilize a number of identified
 20 borrow pits at Ellwood Mesa (see Figure 2) for excavation of approximately 900 cubic yards of
 21 native cut and fill material that would be used to bring the trails up to grade or slightly above
 22 grade, allowing water to sheet flow off of the trail surface. These borrow sites include locations
 23 along the blufftop segments of the Coastal Trail on Ellwood Mesa where past grading has
 24 created berms alongside the trails. Removal of these berms would provide native fill material
 25 and in addition, would allow re-establishment of natural drainage flows inland, away from the
 26 bluffs (see Figure 2).

27 *Trail Compaction and Scarification*

28 Following the addition of the 900 cubic yards of native fill material to selected trail segments, the
 29 Project would include the use of a roller compactor to bond the fill material to the existing trail
 30 segments. Additionally, the Project proposes shallow scarification using either a tractor or hand
 31 tools along the trail network to loosen several inches of the trail surface tread to establish a
 32 blended surface with native fill material.

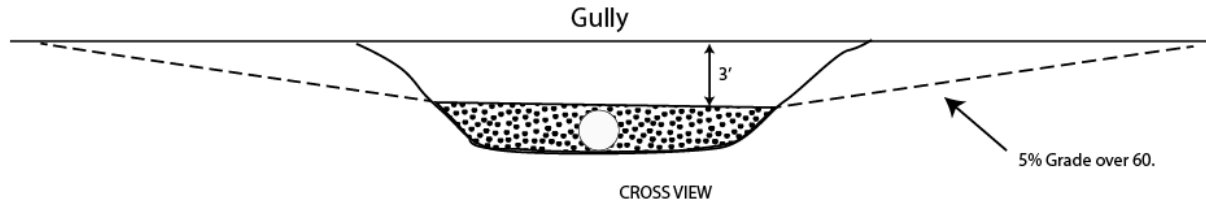
33

1 *Trail Flow and Erosion Control*

2 The proposed Project would create a naturally meandering (i.e., curved) trail alignment along
3 the existing Coastal and Anza trails on Ellwood Mesa in places where these trails are relatively
4 straight for long distances or in places where there are substantial erosion issues. Additional
5 erosion control measures would include the construction of dips or places for the water to flow
6 off the trail at regular intervals. However, erosion control measures included in the proposed
7 Project would focus primarily on elevating the existing trails so that they would be slightly above
8 grade and outsloped, allowing water to flow off of the trail and away from the bluffs rather than
9 ponding on its surface.¹ In some places where trails would be narrowed, eucalyptus logs,
10 branches or other non structure techniques would be used to guide trail users along a narrowed
11 trail and protected newly revegetated areas from damage and erosion. More substantial erosion
12 control measures associated with Beach Access Points E and F are described in detail below.

13 *Gully Crossing and Boardwalk Bridges*

14 The Project proposes the use of a culvert and fill, with rock facing, to span the inactive gully
15 crossing south of Sperling Parking Lot (i.e., Gully A). The existing trail would be sloped into and
16 out of the gully at a grade of five percent over 60 feet using an 18-inch culvert to permit
17 drainage and wildlife passage. By gradually sloping the existing trail down to the gully crossing,
18 the crossing would not be visible from more distant trail segments and would also not require
19 handrails.



21 In addition to the crossing at Gully A, there are two locations, including crossings at Drainage A
22 and Devereux Creek, where boardwalk style bridges would improve accessibility, minimize the
23 need for expensive engineering, and maintain the area's natural aesthetic. The use of screw
24 piling design would allow for the construction of boardwalks with a maximum length of 15 feet
25 approximately 18 to 24 inches above ground level, eliminating the need for handrails.

26 *Beach Access Asphalt Removal and Step Construction*

27 At Beach Access Point E, the asphalt roadbed that once allowed residents from the Santa
28 Barbara Shores neighborhood to drive down to the beach has become a substantial contributor
29 to erosion damage to Beach Access E. The Project proposes to remove approximately 15 cubic
30 yards of the existing aging asphalt along Beach Access Point E, and to reduce the steepness of
31 the grade at this location by creating a curvilinear trail (see discussion associated with
32 Component 7 below). Asphalt would either be reused in drainage improvements at this access

¹ Outslope—to grade the trail so that it slopes at an angle of from five to seven percent to the outside or lower edge, allowing water to sheet flow off the trail and away from it.

1 point or exported from the site. Additionally, in order to address long-term erosion impacts, the
2 proposed Project would establish two bioswales to capture runoff on along segments of the trail.
3 These bioswales would be stabilized with the old asphalt removed from the roadbed or imported
4 rock and revegetated with native species. Runoff captured in these bioswales would be directed
5 into two drain pipes that would outlet on the beach.² The downdrains would be approximately
6 20-30 feet in length and constructed within existing erosional gullies on the bluff face that would
7 be backfilled with native fill material including asphalt, if acceptable, and revegetated with native
8 species. Drainage from these downdrains would be conveyed down to an ungrouted outlet on
9 Ellwood Beach.

10 At Beach Access Point F, where the existing 275-foot beach access trail is narrow and steep,
11 the Project proposes to construct approximately 100 steps over the beach access trail. In order
12 to maintain the natural character of the surrounding area, the steps would be constructed from
13 six- by eight-foot rough sawn wood, treated with non-toxic materials, to form rectangular boxes
14 that vary in length depending on the grade. Decomposed granite filler would be used to blend
15 with the existing natural setting, while providing for durable, long-lasting use of the stairway. In
16 order to address long-term erosion impacts associated with Beach Access Point F, a gravel
17 infiltration trench with a buried perforated pipe and filter sleeve would be established on the
18 eastern side of the trail. Runoff from the proposed stairs would percolate through the gravel
19 trench into the 12-inch perforated filter cloth wrapped pipe and would be conveyed down to an
20 ungrouted outlet on Ellwood Beach.

21 *Beach Ramping/Stairways*

22 At both Beach Access Points E and F where the existing trail ends at the sandy shoreline, the
23 bluff drops off approximately six feet from the lower bluff area down to the sand. At both access
24 points, due to the impacts of poor trail design, erosion has created substantial damage along
25 the lower edge of the bluffs. The Project would create ramps from native fill that would provide
26 safer access to the beach. Ramps would be repaired as needed if damaged by wave action.

² Downdrains would consist of pipes of 12 to 24 inches in diameter.



1 Mitigations Included in the Proposed Project

2 The proposed recontouring and minor realignments of the existing trail system on Ellwood Mesa
3 would proactively include a number of mitigation measures intended to reduce potential impacts
4 associated with the proposed Project. The proposed recontouring and minor realignments would
5 provide safer public access and reduce erosion impacts associated with geological and
6 hydrological resources. Additionally, the proposed trail route as well as the proposed Habitat
7 Restoration Plan (see Attachment 1) included as a part of the proposed Project would reduce
8 potential impacts to biological resources.

- 9 • Newly constructed segments of the Coastal and Anza trails (approximately 0.54 miles)
10 would be routed to avoid ESHA, including vernal pools and riparian habitat, to the
11 maximum extent feasible.
- 12 • The proposed Project would mitigate impacts to ESHA as a result of the construction of
13 the drainage crossings at Drainage A and Devereux Creek along the shared Coastal-
14 Anza Trail at more than a 3:1 mitigation ratio, resulting in approximately 0.05 acres of
15 restoration at Drainage A and 0.19 acres of restoration at the Devereux Creek Crossing.
- 16 • Trail segments, including the beach access points, would be constructed or recontoured
17 with a curvilinear flow that would reduce erosion and would include additional erosion
18 control measures such as trail outsloping and bioswales, which would direct and route
19 runoff away from the trail system and the bluff face.
- 20 • The use of the berms along the blufftops as borrow pits would redirect surface water
21 runoff inland, away from the blufftop and consequently would reduce blufftop erosion.
22 Additionally, the use of bioswales and downdrains at Beach Access Points E and gravel
23 infiltration trenching and perforated drainage pipe at Beach Access Point F would
24 address potential erosion impacts at these locations.
- 25 • The proposed Project would include approximately 13 acres of total habitat restoration
26 including the removal of non-native species and increases in the coverage of native
27 coastal scrub, wetland, and grassland vegetation. Consequently, the ratio of restoration
28 to vegetation removal associated with trail realignments would be a minimum of 25:1
29 under the proposed Project.
- 30 • The proposed restoration would include planting of southern tarplant (*Centromadla*
31 *parryz* ssp. *australzs*), a California Rare Plant Rank (CRPR) 1B.1 species (see Table 4).

32 Proposed Trail Route and Improvements

33 The proposed Project would improve public access to
34 the Ellwood Mesa and associated beach access
35 points. The Project proposes specific trail
36 improvements for seven areas of the existing trail
37 system (refer to Figure 2), including the two beach
38 access points connecting the blufftop to the Ellwood
39 Beach. The trail system as proposed would largely
40 follow the existing trail network, comprising the Coastal and Anza trails. For ease of
41 understanding the treatment of different trail segments, the proposed Project has been divided
42 into seven components (refer to Figure 2):

The proposed trail improvements have been broken down into seven components, which include specific segments of the existing trail. Please refer to Figure 2 for the location of each trail component.

1 *Sperling Parking Lot to Gully Crossings (Component 1)*

2 From the parking lot, the existing shared Coastal-
3 Anza Trail continues for 500 feet to the south to a
4 point where it veers to the southwest. The Project
5 proposes to narrow this existing trail segment to a
6 width of ten feet and to restore the adjacent areas;
7 eucalyptus logs or other natural materials would be
8 installed to guide trails users as needed. At the point
9 where the trail veers to the southwest, the Project proposes to construct 550 feet of new trail
10 through a meadow area along the alignment described in the City of Goleta General Plan and
11 Coastal Land Use Plan (GP/CLUP). Approximately 275 feet along the proposed trail
12 realignment the proposed trail would cross an approximately six-foot deep and 20-foot wide
13 gully (Gully A).

Trail Component 1 would include drainage and tread improvements to the existing shared Coastal-Anza Trail as well as a minor realignment and the installation of drainage crossings over Gully A and Drainage A.



14 The Project proposes to ramp the proposed realigned trail down into and out of the gully at a
15 grade of five percent, using an 18-inch diameter culvert to allow drainage and wildlife passage
16 through the gully (see Figure 3). Native fill material from the trail grade would be used to cover

1 the culvert and rock facing would be used to prevent erosion and reinforce the sides of the
2 proposed trail crossing.

3 Approximately 125 feet past the culvert crossing the proposed realigned trail would cross
4 Drainage A, a channel approximately four feet deep and 25 feet in width. The Project proposes
5 to grade the realigned trail down to a point between 24 and 30 inches above the drainage floor
6 and construct a boardwalk-style crossing utilizing screw piling technology that does not require
7 engineered foundations on either side. Direct impacts—installation of screw pilings, and removal
8 of old fill from the current trail—and indirect impacts—from shading by the 8- by 25-foot
9 boardwalk—would total approximately 0.01 acres; however, the proposed Project would restore
10 approximately 0.05 acres with native vegetation.

11 Immediately after the Drainage A boardwalk style crossing, the proposed trail realignment would
12 reconnect with the existing shared Coastal-Anza Trail and cross another unnamed inactive gully
13 that is divided into two segments by a narrow ridge. From the Drainage A crossing the existing
14 trail would be graded down three feet and the excavated material would be used to fill the first
15 part of the upper inactive gully. The trail would cut through the narrow middle ridge, which would
16 be used for fill in the second part of the inactive gully. Additionally, rock facing would be used to
17 protect the downstream sides of the fill areas within the gullies.

18 *Devereux Creek Crossing (Component 2)*

19 South of the unnamed inactive gully, the existing trail follows the west edge of the eucalyptus
20 grove for 600 feet to Devereux Creek. The Project proposes minor tread work in this area
21 designed to improve water sheet flow off of the existing trail. At the midpoint of this section the
22 trail dips down abruptly at a small drainage crossing then climbs back up abruptly on the other
23 side. The Project proposes sloping at both ends of the dip to achieve a gentler grade.
24 Additionally, near the intersection of the trail with the Coastal Loop Route, the Project proposes
25 adjusting the trail route slightly to the east to create a more direct route that improves
26 accessibility.

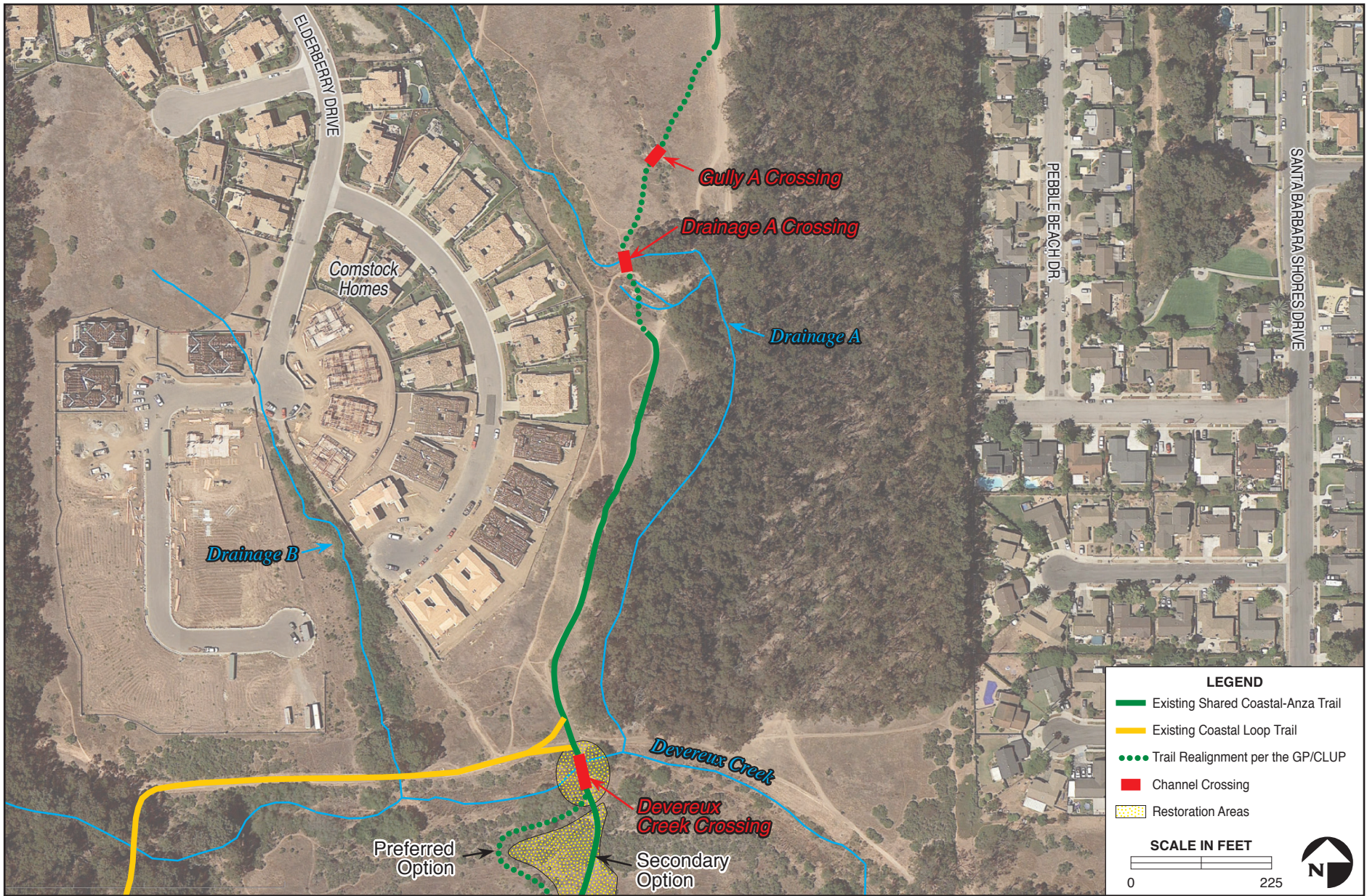
27 Historically, access across Devereux Creek was made easier through the addition of fill with
28 small drainage pipes in the center to create a raised roadway. While much of the drainage has
29 filled in with sediment, the center part of the channel continues to flow through several of the
30 pipes. However, at higher flows the water flows up over the old roadway and continues
31 downstream. This process has created a deeper channel, with the existing trail blocking the
32 normal flow of water. The Project proposes to dredge out the middle of the channel to
33 reestablish a normal creek flow and to replace the current trail with a boardwalk-style crossing
34 using screw piling technology that would not require engineered foundations on either side.
35 Direct impacts—installation of screw pilings, and removal of old fill from the current trail—and
36 indirect impacts—from shading by the eight-foot wide by 60-foot long boardwalk—would total
37 approximately 0.05 acres; however, the proposed Project would restore approximately 0.19
38 acres with native vegetation.
39



1

2 Immediately south of the Devereux Creek crossing,
3 the current route heads steeply uphill at a grade of 12
4 to 14 percent, exceeding accessibility standards and
5 resulting in erosion and damage to the trail tread. The
6 preferred option for the proposed Project would be to
7 re-route the trail in order to reduce the grade to five
8 percent. This would address long-term erosion
9 impacts and improve overall accessibility. Under the
10 preferred option, following the Devereux Creek
11 crossing the proposed trail would turn west traveling approximately 180 feet before curving back
12 to the east and rejoining the existing trail (refer to Figure 2). The switchback segment would
13 avoid native vegetation to the maximum extent possible. Further, where feasible, perennial
14 vegetation intersecting the proposed realigned segment would be relocated. However, the
15 secondary option for this segment would be to restore the trail along its existing alignment.
16 While re-grading along the existing alignment would address some of the existing erosion
17 issues, it would not improve accessibility over the steep grade.

Under the Preferred Option, Trail Component 2 would include a 200 foot-long realignment of the existing trail to improve accessibility. However, under the Secondary Option the proposed Project would only include drainage and tread improvements to the existing shared Coastal-Anza Trail.



1 *Coastal Loop Trail (Component 3)*

2 The existing Coastal Loop Trail intersects
3 with the existing Coastal Trail just a few feet
4 before the Devereux Creek crossing. Due to
5 its less intensive use, the Project does not
6 propose major changes to this existing trail.
7 However, the Project proposes to make
8 improvements to the trail tread and add
9 erosion control measures, including
10 increasing the trail outslope and adding dips
11 where water can be directed off the trail.

12 Near the Sandpiper Golf Course boundary,
13 the trail turns south and crosses Devereux
14 Creek. The drop down into and out of the
15 creek is abrupt and in places roots from the
16 nearby eucalyptus trees present a minor
17 safety hazard. However, because safe
18 accessibility issues have been addressed on the main creek crossing, the Project only proposes
19 sloping the existing trail at these locations rather than constructing an engineered crossing. As
20 the trail reaches the mesa it flattens out and continues along the golf course fence line for 600
21 feet until it reaches the blufftop. Along this segment the Project proposes to create a more
22 natural curvilinear flow. Additionally, trail scarification would be employed to loosen the existing
23 tread and native fill material would be used to bring the tread up to grade.



The proposed Project would remove fennel and mustard within the trail corridor that currently obstructs coastal views from the trail.

24 Once the Coastal Loop Trail reaches the bluffs it turns east and follows the bluffs for 2,200 feet
25 to its intersection with the Coastal Trail route near Beach Access Point F. These sections are
26 characterized by moderate entrenchment (i.e., below grade trail segments) and in some cases
27 an overly wide trail has been created. In addition, invasive species such as fennel (*Foeniculum*
28 *vulgare*) and mustard (*Brassica* spp.) have obstructed views from the bluff and displaced native
29 species. The Project proposes to add native fill in the entrenched areas, narrow the existing trail
30 width to six feet, remove non-native species adjacent to the trail and install eucalyptus logs,
31 branches or other natural material to guide trail users.

32 *Coastal-Anza Connector Trails (Component 4)*

33 Once the shared Coastal-Anza Trail crosses
34 Devereux Creek and climbs onto the mesa, the
35 existing trail follows a diagonal to the east, climbing
36 gradually to the point where the proposed Project
37 would split the trails, with the Anza Trail continuing
38 due east and the realigned Coastal Trail continuing
39 towards the bluffs (refer to Figure 2). Due to the
40 location of several vernal pools along one of the
41 existing routes to the blufftop, Policy OS 5 of the
42 GP/CLUP requires an alignment that avoids the pools by heading southeast to Beach Access
43 Point F (refer to Figure 3-3 in the GP/CLUP). The proposed Project would improve the trail
44 corridor by bringing the existing entrenched trail up to grade, adding dips and other erosion

Trail Component 4 would include drainage and tread improvements to the existing shared Coastal-Anza Trail as well as a minor realignment where the Coastal Trail splits from the Anza Trail. This realignment would avoid sensitive vernal pool habitat, which is currently impacted by existing trail use.

1 control measures, and realigning the shared Coastal-Anza Trail per the GP/CLUP alignment to
2 avoid the sensitive vernal pool areas (refer to Figure 3).

3 Currently, most trail users either continue east on the Anza Trail or take one of the existing
4 connector routes to the blufftop. The main route to the bluffs currently crosses through a vernal
5 pool and, as a result of Policy OS 5 of the GP/CLUP, requires a realignment of the trail so that it
6 diagonals directly to Beach Access Point F. The Project proposes to construct a six foot-wide
7 trail along the GP/CLUP alignment, with tread compaction and restoration along the trail
8 corridor. Because the realignment passes through dense populations of Harding grass (*Phalaris*
9 *stenoptera*) and mustard, the Project proposes to remove non-native vegetation within 50 feet
10 on either side of the trail centerline and replace it with native species (see Attachment 1). Signs
11 and eucalyptus logs, branches or other natural materials would be installed to guide trail users
12 through restored areas and past trails that cross vernal pools.

13 *Juan Bautista De Anza Trail (Component 5)*

14 Emergency access to Ellwood Mesa is provided in this
15 area via Santa Barbara Shores Drive, which enters the
16 mesa from the north, approximately 600 feet east of
17 the proposed divergence of the Coastal Trail and Anza
18 Trail. Under the proposed Project, emergency access
19 would continue to be provided across the Mesa on the
20 existing natural surface trail that connects with Santa
21 Barbara Shores Drive; any future potential improvements to emergency access would be
22 considered separately.

Trail Component 5 would include improvements to the existing Anza Trail as well as a minor realignment to avoid sensitive vernal pool habitat, which is currently impacted by existing trail use.

23 At the proposed point that the Coastal Trail and Anza Trail diverge, the Anza Trail trends east
24 across the middle of Ellwood Mesa for approximately 2,000 feet, primarily along the worn
25 emergency road that has deteriorated into a slightly entrenched double track. The proposed
26 Project would make improvements to the double track sections of the existing trail corridor,
27 bringing the trail up to grade, narrowing the trail width to six feet, and adding dips as well as
28 other erosion control measures.

29 The GP/CLUP also calls for a realignment of the Anza Trail to bypass a number of vernal pools
30 on the eastern end of the Project area per Policy OS 5 (refer to Figure 3-3 in the GP/CLUP).
31 The Project proposes to construct a 1,230 foot long trail segment six feet wide around the vernal
32 pools along the GP/CLUP alignment. Signs and eucalyptus logs, branches or other natural
33 materials would be installed to guide trail users through restored areas and past trails that cross
34 vernal pools.

35 Once the proposed realignment reconnects with the existing Anza Trail, the trail turns from
36 double to single track and winds its way for 600 feet to a wide north-south roadway near the
37 boundary of the Ellwood Mesa with UCSB. The Project proposes to either widen the single track
38 trail to a standard width of six feet or optionally leave this narrow segment intact to minimize
39 impacts to native grassland. If the trail is widened, due to the high density of native grasses in
40 the area, this section would require a detailed restoration plan for removal and transplant of the
41 native grasses elsewhere. The existing Anza Trail turns south and continues along the East
42 Boundary road for 900 feet to a point where it turns east and crosses onto UCSB property. The
43 Project proposes to narrow the boundary road to a width of eight feet and create a more
44 curvilinear trail alignment that allows water to sheet flow off of the trail. Eucalyptus logs,

1 branches or other natural materials would be installed where needed to guide trail users along
2 this narrow segment.

3 *Coastal Blufftop Trail (Component 6)*

4 The main blufftop portion of the existing
5 Coastal Trail stretches from Beach Access
6 Point F for 2,100 feet west to Beach Access
7 Point E and then an additional 600 feet to the
8 point where it crosses onto UCSB property.
9 The Coastal Trail is characterized by deep
10 entrenchment that has resulted in a
11 proliferation of social trails, rough, rutted trail
12 surface, and potholes often filled with muddy
13 water.

14 The Project proposes to use native fill
15 material from a nearby berm to address the
16 existing trail degradation and reduce sheet
17 flow over the blufftop. Fill material would be
18 used to eliminate the entrenchment areas and
19 to implement erosion control measures that
20 would prevent future trail degradation.
21 Eucalyptus logs, branches or other natural
22 materials would be installed where needed to
23 guide trail users past restoration areas.

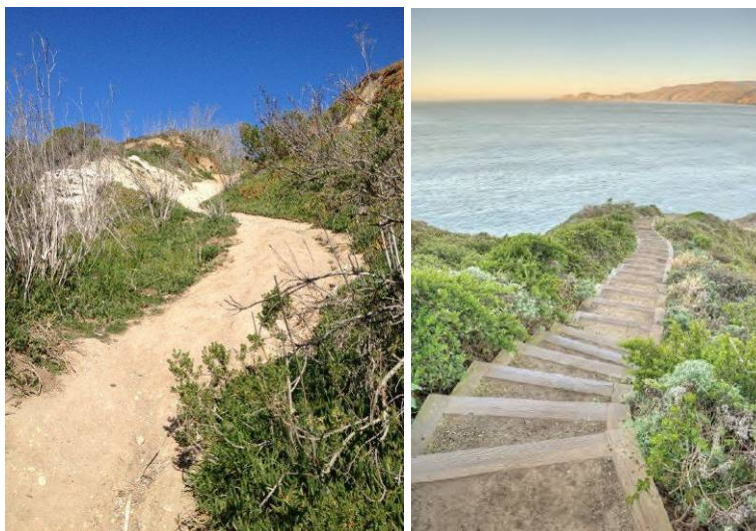


The blufftop trail section of the Coastal Trail is the second most heavily used trail section on Ellwood Mesa. The trail is located very near the bluff edge and is below grade resulting in the creation of gullies and potholes as well as erosion from surface water runoff over the bluff.

24 *Beach Access Points (Component 7)*

25 Beach Access Point E was
26 originally constructed almost 50
27 years ago to provide pedestrian
28 and vehicle access to a
29 recreation area for Santa
30 Barbara Shores neighborhood
31 residents. Over time water
32 flowing down the road from the
33 mesa has caused substantial
34 erosion and damage to the trail
35 as well as the lower bluff edge.

36 The Project proposes to
37 remove the asphalt and
38 restroom foundations (while
39 keeping the red brick post that
40 signals the start of the trail
41 down to the beach) and create
42 a curvilinear trail alignment that
43 allows water flow off of its
44 surface. Additionally, a sloping
45 ramp-style path down to the

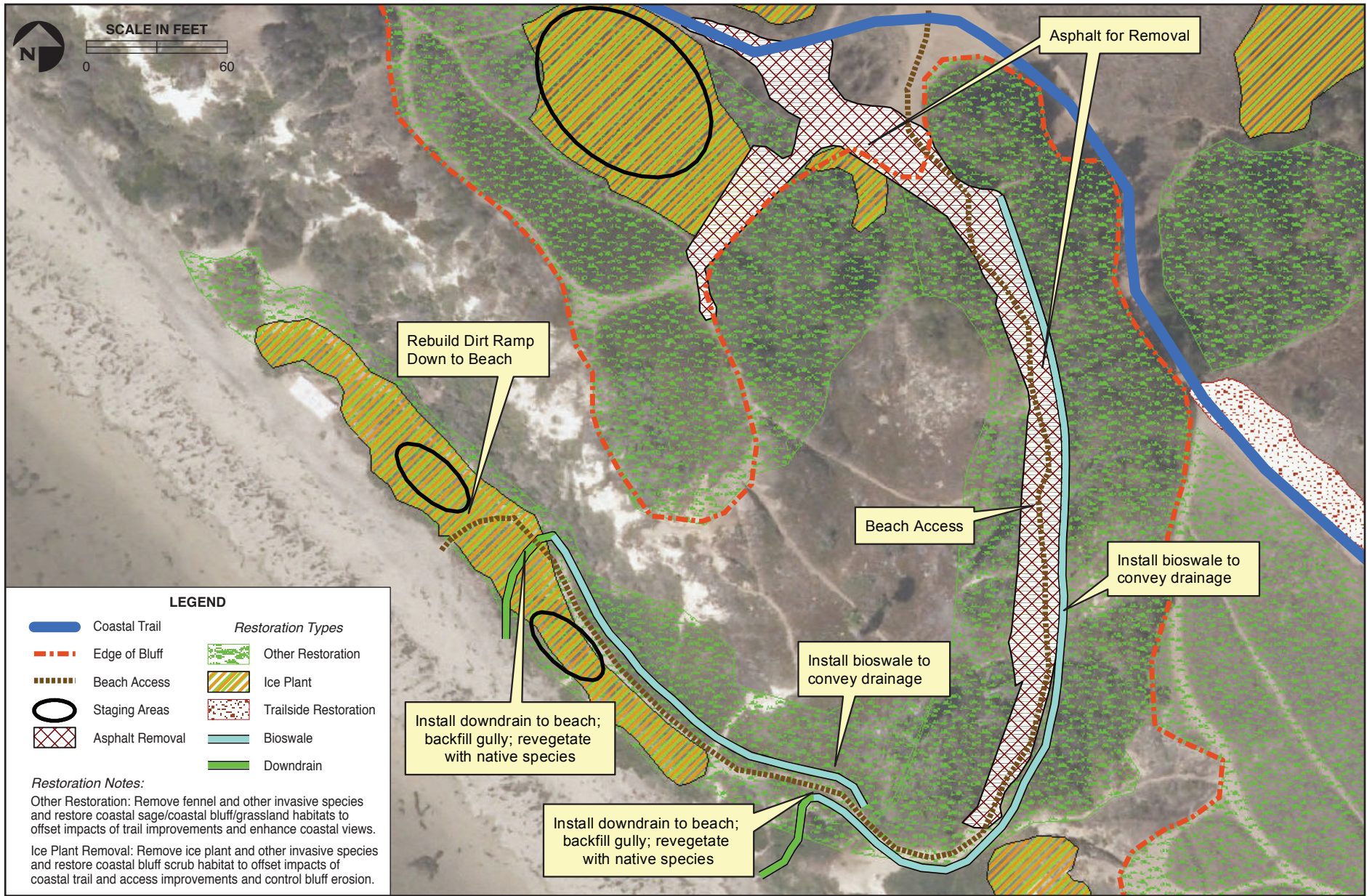


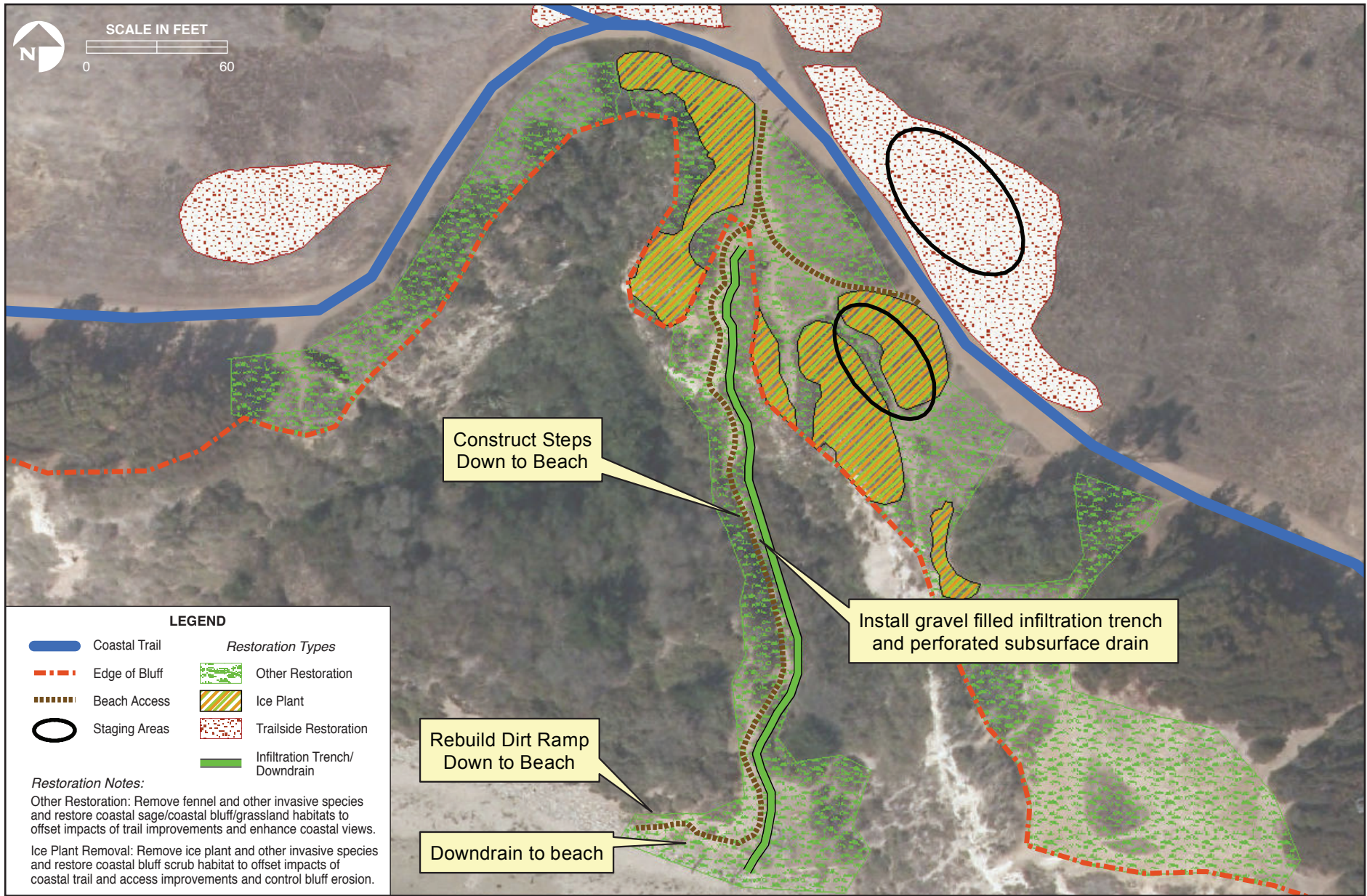
Under the proposed Project, safe beach access would be provided by a stairway, which would be constructed at specifications that meet the natural surroundings of Ellwood Mesa. The stairway (right) would also serve as a permanent solution to erosion and gullying along Beach Access F.

1 sand would be constructed to improve safe access to Ellwood Beach (see Figure 4). As
2 previously described, in order to address long-term erosion impacts, the proposed Project would
3 establish two bioswales to capture runoff from areas adjacent to the access trail and would
4 direct it into two downdrains that would outlet on Ellwood Beach. The downdrains would be
5 approximately 20-30 feet in length and constructed within existing erosional gullies on the bluff
6 face that would be backfilled with native fill material and revegetated with native species.

7 Beach Access Point F was a steep dirt road that was originally constructed to serve oil
8 equipment near the beach. Over time the road has disintegrated and erosion has entrenched
9 the trail to a depth of three to four feet on the top half, with tread that is less than one foot wide
10 in places.

11 The Project proposes to construct a series of steps (approximately 100 steps over 275 feet)
12 through the entrenched areas and to restore the open area at the access point, including the
13 removal of the fire pit and regrading of the sloping ramp to minimize the impacts of trail use and
14 erosion. In addition, the Project proposes restoration and erosion control (e.g., berms) at the top
15 of the trail to divert the majority of water inland, away from the access point so it no longer flows
16 off the mesa and down the trail (see Figure 5). In order to capture the remaining runoff at Beach
17 Access Point F, the proposed Project would construct a gravel infiltration trench with a buried
18 perforated pipe wrapped in filter fabric on the eastern side of the trail. Runoff from the proposed
19 stairs would percolate through the gravel trench into the 12-inch pipe and would be conveyed
20 down to the outlet at the beach.





1 Trail Improvements & Maintenance

2 Approximately 75 percent of trail improvements (i.e.,
3 1.56 miles) would follow the existing trail network and
4 would only require minor grading to improve drainage
5 or narrowing to reduce overly wide trails. A limited
6 amount of earthwork would also be necessary to create
7 standard trail widths as described above. The
8 remainder of the improvements (approximately 0.54
9 miles) would consist of minor realignments, consistent
10 with the GP/CLUP that would pass through open areas of the mesa and would require clearing
11 a corridor six to ten-feet wide, or between approximately 0.31 and 0.51 acres of vegetation
12 removal, with restoration along the trail corridors and the identified borrow sites. Restoration
13 would include the implementation of a five-year monitoring plan (see Attachment 1). Trail
14 construction equipment that would be used during trail construction and maintenance is listed in
15 Table 1. Construction would be performed by experienced trail builders, occurring over
16 approximately three months, in compliance with Goleta standard construction schedule
17 requirements.

Implementation of the proposed Project would include approximately 0.54 miles of realigned trail and up to approximately 0.51 acres of associated vegetation removal. All other trail improvements would follow the existing trail network.

18 Trail work would be scheduled to occur in late fall, winter, or early spring while the soil is still
19 workable. However, implementation of the improvements would be phased in accordance with
20 biological constraints including nesting bird and butterfly aggregation seasons.

21 The proposed trail improvements would incorporate features that minimize erosion, limit
22 downstream sedimentation, and reduce ongoing maintenance requirements using erosion
23 control and minimization best management practices (BMPs) that manage and control water
24 flows affecting the trails. Design would also include features to minimize conflicts between
25 different user groups and enhance user safety (e.g., stairs at Beach Access Point F). In
26 addition, trail construction would include weed eradication and control practices to minimize the
27 spread of non-native species along the trail corridors.

28 Maintenance activities on the Ellwood Trails would focus on trail tread repair, erosion control,
29 trail slumping, and removal of slides, but would also included targeted removal of invasive weed
30 species.

31 Proposed Trail Corridor Restoration

32 In addition to the proposed trail improvements including approximately 900 cubic yards of native
33 cut and fill for proposed recontouring, the Project also proposes to restore approximately 13
34 acres of natural habitat. The Restoration Plan included in the proposed Project (see
35 Attachment 1) would remedy many of the impacts to native vegetation and environmentally
36 sensitive habitats that have resulted from past land uses (e.g., grazing and oil production) at
37 Ellwood Mesa. Additionally, restoration under the proposed Restoration Plan would mitigate
38 impacts resulting from vegetation removal associated with the proposed trail realignments.

39 While the habitat types would largely remain unchanged under the Restoration Plan, major
40 enhancements of the habitat value are proposed for the trail corridors including the area
41 between the Coastal Trail and the blufftop as well as the drainage crossings and beach access
42 points. The restoration activities would be implemented in phases over three years, with the first
43 year being the most intensive. Project monitoring for maintenance activities would occur on a

1 quarterly basis and annual reports would be prepared over a period of five years, documenting
2 the status of the restoration activities relative to the performance standards included in the
3 Restoration Plan.

4 A general description of the proposed restoration activities has been included below. For details
5 regarding the planting list as well as specific restoration activities within each trail component,
6 refer to the Restoration Plan (Attachment 1). However, the details presented in the Restoration
7 Plan are included for environmental review and permitting purposes; the Final Restoration Plan
8 would be reviewed and approved by the City prior to the commencement of any restoration
9 activities.

10 *Environmentally Sensitive Habitat Areas*

11 The Project proposes removal of non-native plant species, including mustard, fennel, iceplant
12 (*Carpobrotus edulis*) and Harding grass, along the trail corridors of the Coastal and Anza trails,
13 the borrow pits, and the entire length of the blufftops on the ocean side. These areas would be
14 replanted with appropriate native species to improve the ESHAs designated in the Ellwood
15 Mesa Open Space Plan Area. Additionally, the proposed Project would restore ESHA in the
16 vicinity of the Drainage A and Devereux Creek crossings, leading to a substantial net increase
17 in native wetland habitat in these drainages (see discussion below).

18 *Coastal Bluff*

19 Coastal bluff scrub is found along the entire blufftop at Ellwood Mesa as well as along the bluff
20 face (see Figure 6). However, this habitat, particularly along the eastern end the bluff face, is
21 highly degraded by erosional gullies and extensive coverage of non-native species. The Project
22 proposes to remove these non-native species located to the south of the Coastal Trail and
23 revegetate with native coastal species. Erosional gullies on the bluff face in these areas would
24 also be revegetated to address bluff erosion.

25 *Riparian Habitats*

26 Riparian habitat occurs along the drainages in the Ellwood Mesa Open Space Plan Area
27 including Devereux Creek, which traverses the western half of the mesa and Ocean Meadows
28 Golf Course before discharging to Devereux Slough at Venoco Road. Riparian habitats within
29 the Ellwood Mesa Open Space Plan Area include freshwater marsh, riparian scrub, and riparian
30 forest. Freshwater marshes occur along drainages where there is seasonal winter flow and
31 prolonged soil moisture. The Project proposes to realign the shared Coastal-Anza Trail to
32 conform to the GP/CLUP alignment so that it skirts the eucalyptus groves south of the parking
33 lot. Additionally, the proposed Project would restore the nearby gully areas, including Drainage
34 A and the Devereux Creek crossing, which have been impacted by overuse from trail users. The
35 proposed Project would install a boardwalk-style bridge across Drainage A disturbing
36 approximately 0.01 acres of wetland habitat. However, the proposed Project would restore
37 approximately 0.05 acres of habitat in this area and would provide a crossing that would
38 discourage future disturbance. Similarly, the proposed Project would install a boardwalk-style
39 bridge across Devereux Creek. In this area the screw pilings and shading from the proposed
40 bridge would impact approximately 0.05 acres of wetland habitat; however, the proposed
41 Project would restore approximately 0.19 acres as a part of the proposed Restoration Plan.
42

1 *Southern Vernal Pools*

2 Prior land uses, including horse grazing as well as oil development, have degraded the vernal
3 pools in the Ellwood Mesa Open Space Plan Area. The Project proposes to enhance the
4 existing vernal pools, realign sections of the Coastal Trail and the Anza Trail to avoid identified
5 vernal pools, and to add several new vernal pools by borrowing material for trail fill and restoring
6 the areas with plants unique to vernal habitats.

7 *Native Grassland*

8 Though native grasslands have very limited distribution in Santa Barbara County due to the
9 introduction of non-native grasses and herbs, livestock grazing, and modification of the natural
10 fire regime, Ellwood Mesa contains one of the largest stands of native grasslands in Santa
11 Barbara County. The Project plan proposes to increase native grasslands at Ellwood Mesa by
12 adding native species along the trail, borrow pits, and other restoration areas. Additionally, any
13 native grasses impacted by trail realignment would be relocated to suitable habitat and/or used
14 in restoration plantings.

15 *Coastal Sage and Scrub*

16 Coastal sage scrub and coastal bluff scrub occur in various locations of the Ellwood Mesa Open
17 Space Plan Area. Small isolated patches of coastal sage scrub frequently intergrade with native
18 and non-native annual grassland and coyote bush. The Project proposes to increase coastal
19 sage and bluff habitats along the entire blufftop at Ellwood Mesa by removing non-native
20 species and planting native coastal species to the south and adjacent to the Coastal Trail.

21 Public Outreach

22 In the spirit of Coastal Act Finding 30006, two
23 public outreach meetings, including a site walk,
24 were conducted during the development of the
25 proposed Project. The goal of these meetings
26 was to review the Project objectives, gather
27 community input, and subsequently demonstrate
28 how community input has been incorporated into
29 the design of the proposed Project. The first
30 outreach meeting was conducted at Ellwood
31 School on 6 September 2012. During this
32 meeting, the SBTC described the current state
33 of the trail system and provided goals as well as
34 conceptual options for improving problematic
35 areas. Additionally, there were breakout
36 sessions during which the community was
37 provided the opportunity to address Project
38 elements specifically, including trail design,
39 habitat restoration, engineered crossings, and
40 beach access. During the second public outreach meeting conducted on 5 December 2012, the
41 SBTC provided a pared down set of specific design options to address the public's goals for the
42 trail system. After much internal discussion among City Staff and the SBTC Project team, six



Following the first public outreach meeting, a site walk was conducted on 8 September 2012. The site walk attracted a diverse group of attendees, including hikers, dog owners, and bicyclists.

- 1 design principles were developed by SBTC for presentation at the second outreach meeting in
2 December 2012.
- 3 1) Trails should be natural, wider in some places and narrower in others, with an average
4 width of six feet in areas without significant traffic and eight feet in more heavily used
5 areas.
 - 6 2) Borders should be natural and include addition of native plants to enhance the habitat
7 along the trail corridors and the trails should have a natural surface composed of native
8 soil.
 - 9 3) The trail design should complement existing parallel trails along the blufftop that allows
10 users to move freely and enjoy views while traveling between and on the parallel trails
11 and the Coastal Trail.
 - 12 4) Restoration along the trail corridors should be designed to improve the natural setting of
13 the Ellwood Mesa-Sperling Preserve and enhance user experience. Non-native plants,
14 such as fennel and mustard, should be removed along the blufftop to improve visibility
15 and to enhance the native habitat, especially in environmentally sensitive areas.
 - 16 5) Gully and creek crossings should include designs that allow for safe passage while at
17 the same time be as non-intrusive and natural as possible. Use of boardwalk-style
18 designs as close to the surrounding surface is important as they would not require use
19 of handrails and have the least impact on the viewshed.
 - 20 6) Alternatives should include options that require the least amount of change possible.
- 21 Additional coordination with stakeholders (e.g., the public, interested parties, and land-owners in
22 the vicinity of the Ellwood Mesa) will also occur during the public review period for this Initial
23 Study-Mitigated Negative Declaration (IS-MND). During the comment period, stakeholders will
24 have the opportunity to voice opinions, concerns, and suggestions prior to implementation of the
25 final design.

1 **7. APPROVAL REQUIRED BY OTHER PUBLIC AGENCIES:**

2 California Coastal Commission (CCC)

3 **8. SITE INFORMATION:**

4 **Table 2: Site Information**

Site Information	
<i>General Plan and Coastal Land Use Plan Designation</i>	<i>Open Space/Passive Recreation</i>
<i>Zoning Ordinance, Zone District</i>	<i>Recreation (REC)</i>
<i>Site Size</i>	<i>223.6 acres</i>
<i>Present Use and Development</i>	<i>Recreational Use as Open Space and Trail</i>
<i>Surrounding Use/Zoning</i>	<i>Design Residential, Planned Residential, Single Family Residential, Industrial Research Park</i>
<i>Access</i>	<i>Sperling Trailhead Parking Lot via Hollister Avenue</i>
<i>Utilities and Public Services</i>	<i>Water Supply: N/A (Water required for restoration planting would be imported to the site.) Sewage: N/A Power: N/A Natural Gas: N/A Telephone: N/A Fire: Santa Barbara County Fire Department (SBCFD) School District: N/A</i>

5 **9. ENVIRONMENTAL SETTING:**

6 Project CEQA Baseline

7 Following the adoption of the Ellwood-Devereux Open Space and Habitat Management Plan in
 8 2004, the Project site was designated as Open Space. The Project site is traversed by the
 9 Coastal Trail and Anza Trail, which begin at the Sperling trailhead parking lot to the north of the
 10 site off of Hollister Avenue. The Project site is also characterized by a number of connector trails
 11 and social trails, which form a larger trail network. However, the trail network is currently
 12 affected by ponding, trail braiding, steep grades, and other signs of degradation, including
 13 severely eroded beach access points, which may prohibit use by some trail users.

14 Surrounding Land Use

15 The Project site (i.e., the Ellwood Mesa Open Space Plan Area) is surrounded by a mix of uses
 16 to the north, including Recreation, Residential, and Industrial land uses as well as Hollister
 17 Avenue. Additionally, the Project site is bordered to the east by the Coal Oil Point Reserve
 18 which is a part of the University of California Reserve System and to the west by the Sandpiper
 19 Golf Course.
 20

1 Slope/Topography

2 Much of Ellwood Mesa is on a gently
3 sloping marine terrace that has been
4 uplifted by the More Mesa Fault
5 System. The marine terrace that forms
6 the mesa is approximately 40-85 feet
7 above sea level. However, stream
8 erosion has dissected the marine
9 terrace to produce isolated mesas and
10 intervening drainages that form most of
11 the upland portions of the Ellwood
12 Mesa Open Space Plan Area. Grades
13 of five to ten percent characterize most
14 of the northern portion of the area, and
15 steepen to more than 30 percent
16 towards Devereux Creek. The sea cliff
17 along Ellwood Mesa is steep to very
18 steep, ranging in grade from 50 to 300
19 percent. Remnants of an old road down
20 to the beach are still present at the
21 southwest end of the Ellwood Mesa
22 Open Space Plan Area. This road is
23 believed to be an old oil field access road from a gas plant formerly located near the top of the
24 bluffs leading to a small road at the base of the bluffs. The road was used to access piers and
25 wells located along the shoreline (City of Goleta 2004).



Topography in the vicinity of the Devereux Creek as well as the gullies within the Ellwood Mesa Open Space Plan Area is characterized by grades exceeding ten percent. These steep grades exceed safety thresholds and can make the trail inaccessible for some users.

26 Flora and Fauna and Surface Water Bodies

27 The habitats and wildlife resources within the Project area reflect those found within the coastal
28 plains of southern California. Previous and existing human activities related to recreation,
29 grazing, oil development, farming, and other land uses are responsible for the large proportion
30 of nonnative species found in the Project area. Grassland and eucalyptus woodland are the
31 dominant habitat types found in the Project area. Several other habitat types also are present in
32 smaller acreages, including southern vernal pools, which form as winter rains fill topographic
33 depressions where underlying claypan layers prevent the water from percolating through to the
34 subsurface. In addition, Devereux Creek and two drainages to the north cut through the Project
35 area in relatively deep channels (City of Goleta 2004).

36 The Project area supports a variety of wildlife species typical of coastal ecosystems. Avian
37 resources are diverse as the eucalyptus and other woodland habitats provide perching, nesting,
38 and roosting areas and grasslands provide foraging resources for a number of bird species.
39 However, urban areas and transportation corridors have created barriers to dispersal for
40 terrestrial wildlife, especially for medium and large carnivores. Additionally, habitats in the
41 Project area are more or less isolated from large expanses of similar habitats in the foothills of
42 the Santa Ynez Mountains. Devereux Creek and its northern tributaries, such as Phelps Ditch,
43 are the last remaining physical linkages between the Ellwood Mesa Open Space Plan Area and
44 relatively undisturbed and unfragmented habitats to the north. However, these may be open,
45 semi-permeable, or impermeable movement corridors for ground-dwelling vertebrates,

1 depending on the species, its body size, dispersal ability, and tolerance for habitat disturbance
2 (City of Goleta 2004).

3 Cultural Resources

4 The Ellwood Mesa Open Space Plan Area under the City of Goleta's jurisdiction has
5 experienced long and significant occupation by humans going back at least 8,000 years. There
6 are a number of remains of this occupation known to be present in the general Project region
7 (City of Goleta 2004). An early Holocene occupation has been identified in the archaeological
8 record that reflects the early emergence of non-agricultural village-based groups in the region.
9 Current archaeological evidence suggests that a relatively small population existed in these
10 areas, but by 2000 years before present (B.P.), populations appear to have expanded
11 considerably into resource-rich coastal and near-shore estuarine environments. By the time of
12 European contact to this area of the California coast, some of the large coastal villages had
13 hundreds of occupants and were engaged in both terrestrial and maritime long distance trade
14 (City of Goleta 2004).

15 **10. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

16 The environmental factors checked below would be potentially affected by this project involving
17 at least one impact that is a "Potentially Significant Impact" as indicated by the checklist and the
18 following analysis.

- | | |
|--|--|
| 19 <input type="checkbox"/> Aesthetics and Visual Resources | 28 <input type="checkbox"/> Land Use and Planning |
| 20 <input type="checkbox"/> Agricultural Resources | 29 <input type="checkbox"/> Mineral Resources |
| 21 <input type="checkbox"/> Air Quality | 30 <input checked="" type="checkbox"/> Noise |
| 22 <input checked="" type="checkbox"/> Biological Resources | 31 <input type="checkbox"/> Population/Housing |
| 23 <input checked="" type="checkbox"/> Cultural Resources | 32 <input type="checkbox"/> Public Services |
| 24 <input checked="" type="checkbox"/> Geology and Soils | 33 <input checked="" type="checkbox"/> Recreation |
| 25 <input type="checkbox"/> Greenhouse Gas Emissions | 34 <input checked="" type="checkbox"/> Transportation/Traffic |
| 26 <input checked="" type="checkbox"/> Hazards and Hazardous Materials | 35 <input type="checkbox"/> Utilities and Service Systems |
| 27 <input checked="" type="checkbox"/> Hydrology and Water Quality | 36 <input type="checkbox"/> Mandatory Findings of Significance |

37 **11. DETERMINATION:**

38 On the basis of this environmental checklist/initial study:

- 39 I find that the project COULD NOT have a significant effect on the environment and a
40 NEGATIVE DECLARATION will be prepared.
- 41 I find that although the project could have a significant effect on the environment, there will
42 not be a significant effect in this case because revision in the project have been made by or

1 agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be
2 prepared.

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

9 I find that although the project could have a significant effect on the environment, because all
10 potentially significant effects (a) have been analyzed adequately in an earlier environmental
11 impact report or mitigated negative declaration pursuant to applicable standards, and (b)
12 have been avoided or mitigated pursuant to that earlier environmental document, including
13 revisions or mitigation measures that are imposed upon the project and that a subsequent
14 document containing updated and/or site specific information should be prepared pursuant to
15 CEQA Sections 15162/15163/15164.

16 I find that although the project could have a significant effect on the environment, because all
17 potentially significant effects (a) have been analyzed adequately in an earlier environmental
18 impact report or mitigated negative declaration pursuant to applicable standards, and (b)
19 have been avoided or mitigated pursuant to that earlier environmental document, including
20 revisions or mitigation measures that are imposed upon the project, nothing further is
21 required.

22 **Mitigated Negative Declaration Determination made on [Date] by Jan Hubbell, Contract**
23 **Planner, City of Goleta Planning and Environmental Services (on file).**

24 **12. EVALUATION OF ENVIRONMENTAL IMPACTS:**

25 (a) All answers must take into account the whole action involved, including project specific,
26 cumulative, construction, operational, onsite, offsite, direct, and indirect impacts. The
27 explanation of each issue should identify the existing setting, any applicable threshold of
28 significance, impacts, mitigation measures, and residual impact statement.

29 (b) A brief explanation is required for all answers except “No Impact”. The discussion must
30 be supported by appropriate information sources. A “No Impact” answer is adequately
31 supported if the referenced information sources show that the impact simply does not
32 apply to requests such as the project.

33 (c) The checklist answers must indicate whether the impact is: Potentially Significant, Less
34 than Significant with Mitigation Incorporated, Less than Significant, or No Impact.

35 (d) A “Potentially Significant” response is appropriate if there is substantial evidence that an
36 effect may be significant. If there are one or more “Potentially Significant” entries when
37 the determination is made, then an EIR is required.

38 (e) A “Less than Significant with Mitigation Incorporated” response is appropriate where such
39 incorporation of mitigation would reduce a potentially significant impact to a less than
40 significant level. If there are one or more “Less than Significant with Mitigation

1 Incorporated” entries when the determination is made, then a Mitigated Negative
 2 Declaration may be prepared.

3 (f) Supporting Information Sources: References and sources should be attached, including
 4 but not limited to, reference documents, special studies, other environmental documents,
 5 and/or individuals contacted.

6 (g) Consistency with Applicable Plans and Policies: The City of Goleta’s adopted General
 7 Plan includes the City’s Coastal Land Use Plan (CLUP), which has not been certified by
 8 the Coastal Commission as of this date. Until CLUP certification, development projects
 9 within the City’s coastal zone are analyzed for consistency with the policies and
 10 regulations of the California Coastal Act. This document references Coastal Act
 11 provisions that are directly applicable to the following resource analyses and also
 12 provides discussion of potential consistency with the City’s adopted General Plan and
 13 CLUP policies.

14 **13. ISSUE AREAS:**

15 **Aesthetics and Visual Resources**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Have a substantial adverse effect on a scenic vista?			×		
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			×		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			×		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				×	

16 **Existing Setting**

17 The Ellwood Mesa Open Space Plan Area is located in the southwestern portion of the City of
 18 Goleta along the Pacific coastline. Regionally, this area consists of coastal bluffs and terraces
 19 rising toward the rocky slopes of the Santa Ynez Mountains, stretches of undeveloped beaches,
 20 parklands, open space, and agricultural lands. High quality views of these resources are
 21 available from U.S. Highway 101, public streets, trails and parks, and the surrounding beaches
 22 (City of Goleta 2004).

1 The proposed Project site has gently undulating topography that is traversed by Devereux
2 Creek. The northern region of the site slopes toward an unnamed drainage channel that is a
3 tributary to Devereux Creek and is bordered on both sides by large eucalyptus stands. South of
4 the drainage, the topography of the coastal mesa rises to a high point and then gently drops
5 toward the creek before rising again to the coastal blufftops, with unobstructed views of the
6 Pacific coast. Vegetative cover on the site is predominantly disturbed non-native grassland with
7 intermittent clumps of native grassland, coastal sage scrub, and chaparral as well as other non-
8 native plants such as fennel. The site also includes large eucalyptus groves, including the
9 Coronado Butterfly Preserve, which serve as a seasonal migration roost for Monarch butterflies.

10 The Project site is surrounded by a variety of
11 uses with varying visual characteristics.
12 Hollister Avenue lies immediately north of the
13 site and is characterized by limited
14 commercial uses including a storage facility
15 and parking lots. Additionally, Ellwood
16 Elementary School lies across Hollister
17 Avenue to the northeast of the Sperling
18 trailhead parking lot. Sandpiper Golf Course
19 is located immediately west of the Project site
20 and is screened to the west of the Comstock
21 Homes Development by a fairly dense
22 windrow of eucalyptus. To the north of the
23 Project site, east of the existing shared
24 Coastal-Anza Trail, is the Santa Barbara
25 Shores residential development. The Santa
26 Barbara Shores neighborhood is screened
27 from the Project site by a dense grove of
28 eucalyptus.



Views to the east of Ellwood Mesa are obstructed by dense eucalyptus, views of the Comstock Home Development to the west of the eucalyptus grove are provided along the northernmost portions of the shared Coast-Anza Trail (left).



The Coastal Trail provides views of the Santa Ynez Mountain Range (left) as well as the Pacific Ocean coastline (right). The Coastal Trail along the blufftop comprises the some of the most heavily used trail segments as they provide the most unobstructed views of the ocean to the south.

29 Views of the Pacific Ocean are available from many locations on the Project site, including the
30 coastal trail which skirts the blufftop on Ellwood Mesa. On a clear day, the Channel Islands are
31 visible in the distance from most locations on the Project site. Views of the Santa Ynez

1 Mountains can also be observed from most locations on the Project site, except where obscured
2 by trees. Adjacent development off Hollister Avenue, including the Santa Barbara Shores
3 neighborhood and the Comstock Homes Development, is also partially visible to the north from
4 certain locations on Ellwood Mesa.

5 Thresholds of Significance

6 A significant aesthetic/visual resources impact would occur if the project resulted in any of the
7 impacts noted in the above checklist (a-d). In addition, per the City's Environmental Thresholds
8 and Guidelines Manual (Thresholds Manual), affirmative answers to the following questions also
9 indicate potentially significant impacts on aesthetic/visual resources:

10 e) Does the project site have significant visual resources by virtue of surface waters,
11 vegetation, elevation, slope or other natural or man-made features which are publicly
12 visible? If so, does the project have the potential to degrade or significantly interfere with
13 the public's enjoyment of the site's existing visual resources?

14 f) Does the project have the potential to impact visual resources of the Coastal Zone or
15 other visually important area (i.e., mountainous area, public park, urban fringe, or scenic
16 travel corridor)? If so, does the project have the potential to conflict with the policies set
17 forth in the Local Coastal Plan, the Comprehensive Plan or any applicable community
18 plan to protect the identified views?

19 g) Does the project have the potential to create a significantly adverse aesthetic impact
20 through obstruction of public views, incompatibility with surrounding uses, structures, or
21 intensity of development, removal of significant amounts of vegetation, loss of important
22 open space, substantial alteration of natural character, lack of adequate landscaping, or
23 extensive grading visible from public areas?

24 Project Specific Impacts

25 a) The Project site is bounded to the north by Hollister Avenue, which is designated as a
26 Local Scenic Corridor, with protected scenic views in the immediate vicinity of Sperling
27 Parking Lot. Further, three additional protected scenic views are located on the Ellwood
28 Mesa blufftop south of Devereux Creek along the California Coastal Trail, two of which
29 are located in the immediate vicinity of Beach Access Points E and F (City of Goleta
30 2006). Policies VH 1.3 and VH 1.4 of the GP/CLUP require that ocean, island, and
31 mountain views from public viewing areas shall be protected through limitations and
32 constraints on development. Additionally, Policy VH 2 requires the protection of Scenic
33 Corridors (City of Goleta 2006).

34 Implementation of the proposed Project would consist of trail improvements, including
35 drainage crossings, beach access point improvements, and minor re-grading. The
36 Project would result in localized and temporary obstruction of views over the three-
37 month trail construction period. During this time, a viewer would see a mix of trail
38 construction equipment along the trails on Ellwood Mesa, particularly concentrated near
39 the proposed crossings and beach access points. Additionally, portions of the California
40 Coastal Trail and Anza Trail may be temporarily closed during trail construction. These
41 impacts would be consistent with temporary impacts that may be experienced during
42 future trail maintenance activities.

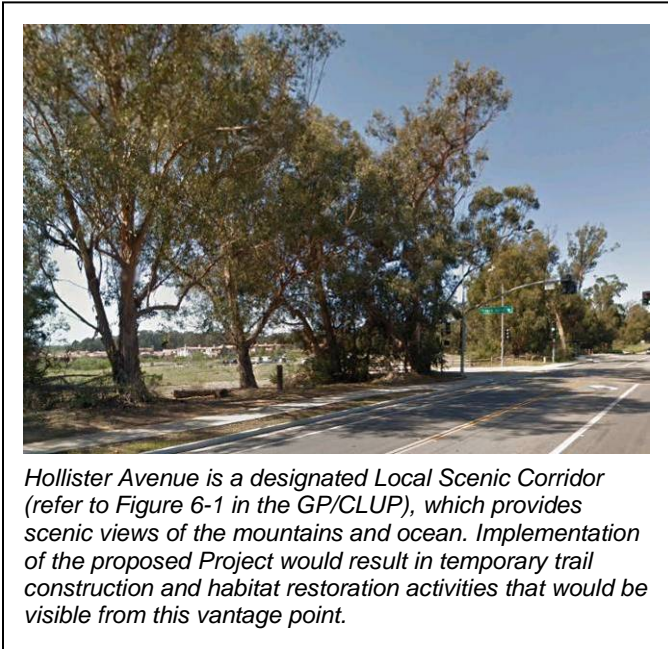
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The proposed Project would not result in any long-term adverse impacts to any of the protected views on Ellwood Mesa, including views of the ocean to the south and the mountains to the north. Removal of the asphalt at Beach Access Point E may result in short-term construction-related impacts to the viewshed from this location. Additionally, construction-related activities at Beach Access Point F may also result in short-term impacts to the viewshed; however, the proposed series of steps down through the entrenched areas of this access point would be constructed using sawn wood and decomposed granite filler to create a natural aesthetic that would be consistent with the character of Ellwood Mesa and therefore consistent with GP/CLUP Policy OS 2.7(b). Consequently, implementation of the proposed Project would improve the view from this area following construction. Further, the proposed crossings at Drainage A and Devereux Creek would be constructed using a board-walk style bridge that would be natural in character and would not substantially detract from the views along the shared Coastal-Anza Trail. Further, the removal of non-native species, including fennel that blocks views of the ocean, would improve the public viewshed and enhance the native habitat in ESHAs. Therefore, these improvements may result in minor long-term beneficial impacts to visual resources within the Project area.



b) The Project area does not contain any rock outcroppings or historic buildings within a state scenic highway; however, it does contain drainage courses as well as a number of native and non-native trees. The proposed Project would result in the removal or trimming of a number of non-native tree species. Additionally, herbicide would be applied to a Monterey cypress (*Cupressus macrocarpa*) tree within the entrenched Beach Access Point F and immature eucalyptus trees (i.e., saplings) at Beach Access Point E would be extensively trimmed in order to remove the existing asphalt. However, no native tree species or mature eucalyptus would be removed as a part of the proposed Project.

Additionally, the views of drainage courses within the Project area would not be substantially altered. The design principles for the proposed crossings utilize natural and non-intrusive structures that would not require handrails. Consequentially, while these crossings would provide safe access for trail users they would not be visible from a distance and would not impacts views of Devereux Creek or its tributaries.

Further, native species, including native trees and riparian vegetation would be planted as a part of restoration proposed within the Project area. Approximately 13 acres of restoration is proposed within the trail corridors, the drainage crossings, borrow pits, and the bluff areas, including a small 0.4-acre Coast Live Oak (*Quercus agrifolia*) woodland south of Devereux Creek. Eradication of the fennel and other non-native plants and

1 revegetation with low-growing coastal plant species native to the Ellwood Open Space
2 Plan Area would enhance the visitor experience at Ellwood Mesa, resulting in overall
3 beneficial impacts to visual resources within the Project area.

4 c) As previously described, pursuant to direction received during the public outreach
5 meetings, the design principles for the proposed Project emphasize minimal change and
6 maintenance of the natural setting that characterizes Ellwood Mesa. Consequently, the
7 proposed Project emphasizes improvements to existing trails, which would generally not
8 constitute a substantial change in its existing visual character. The proposed gully and
9 creek crossings would utilize designs allowing for safe pedestrian passage while
10 appearing as non-intrusive and natural as possible. The Project proposes the use of
11 culvert and fill material, gradually sloping the trail down to the Gully A crossing and then
12 back up, to reduce visibility and eliminate the need for handrails. Two locations, across
13 Drainage A and Devereux Creek, would use boardwalk-style bridge crossings to
14 facilitate accessibility, minimize the need for extensive engineering, and preserve a
15 natural aesthetic trail design. Use of screw-piling design would allow for the construction
16 of lower profile boardwalks approximately 18-24 inches above ground level, eliminating
17 the need for handrails, and reducing the prominence of the crossings. The proposed
18 steps at Beach Access Point F would replace the existing degraded asphalt in this
19 location. As described previously, the steps would be constructed using sawn wood and
20 decomposed granite filler in order to create a natural aesthetic that would be consistent
21 with the character of Ellwood Mesa. Consequently, implementation of the proposed
22 Project would have a less than significant impact on the existing visual character of the
23 Project area.

24 d) The proposed Project would not introduce any new sources of light or glare that would
25 affect daytime or nighttime views in the Project area. All engineered crossings and
26 beach access point improvements would utilize wood or other non-reflective construction
27 materials that would improve safety for trail users while maintaining the natural character
28 of the Project area.

29 Cumulative Impacts

30 Implementation of the proposed Project would result in localized, short-term construction-related
31 impacts to visual resources. Long-term impacts to visual resources would be beneficial and
32 would not contribute considerably to any adverse cumulative impacts with regard to visual
33 resources.

34 Required Mitigation Measures

35 As the impacts associated with aesthetics and visual resources are considered less than
36 significant, no mitigation measures are required or recommended.

37 Residual Impacts

38 Under implementation of the proposed Project, residual impacts associated with aesthetics and
39 visual resources would remain less than significant.

40

1 Agricultural Resources

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Convert Prime Farmland, Unique Farmland, or farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				×	
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				×	
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				×	

2 Note: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the
 3 California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation
 4 as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resource,
 5 including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California
 6 Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range
 7 Assessment Project; and forest carbon measurement methodology provide in Forest Protocols adopted by the California Air
 8 Resources Board (CARB).

9 Existing Setting

10 Portions of the Ellwood Mesa Open Space Plan Area were historically used to cultivate
 11 eucalyptus trees (as evidenced by the remnant groves) that were intended to be used as pier
 12 pilings in the early 1900s by Ellwood Cooper (Tompkins 1976). Additionally, Ellwood Mesa has
 13 been used as rangeland and to grow crops, including dry farming. This trend began with the
 14 arrival of the Spanish missionaries in the late 1700s, escalated in the mid- to late-1800s,
 15 involved the conversion of wetlands to agriculture in the early- to mid-1900s, and ended by the
 16 mid- to late-1960s when urbanization and development in the area effectively removed any
 17 remaining agricultural operations from the subject area (City of Goleta 2004).

18 However, no active agricultural operations have existed for over four decades on the Project site
 19 and there are no designated Prime Farmland or lands under Williamson Act present in the
 20 Project area.

21 Thresholds of Significance

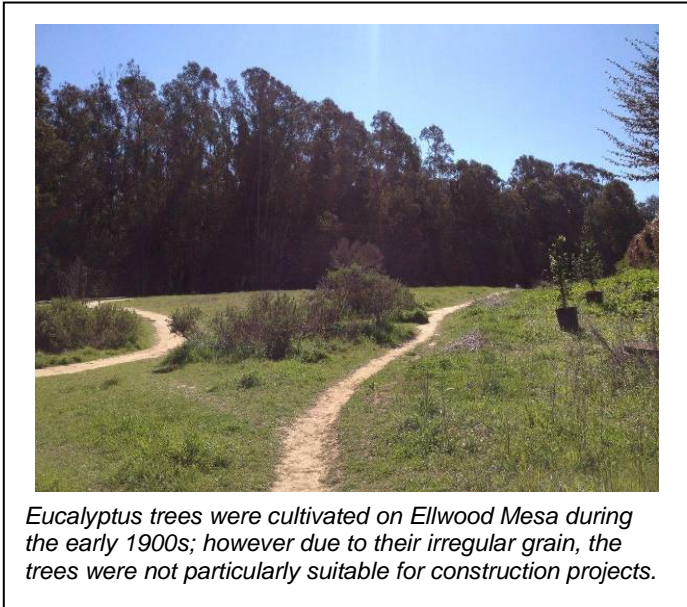
22 A significant impact to agricultural resources would be expected to occur if the project resulted
 23 in any of the impacts noted in the above checklist. Additionally, a project may pose a significant
 24 environmental effect on agricultural resources if it conflicts with adopted environmental plans
 25 and goals of the City or converts prime agricultural land to non-agricultural use or impairs the
 26 agricultural productivity of prime agricultural land.

1 **Project Specific Impacts**

2 a) The proposed Project area would
 3 not convert farmland to non-
 4 agricultural use. The proposed
 5 trail improvements and habitat
 6 restoration would be consistent
 7 with the area's land use
 8 designation for recreation (City of
 9 Goleta 2004).

10 b) The proposed Project would not
 11 conflict with existing zoning for
 12 agricultural use or a Williamson
 13 Act contract (City of Goleta
 14 2004).

15 c) The proposed Project would not
 16 involve changes in the existing
 17 environment, which could result
 18 in conversion of farmland to non-
 19 agricultural use (City of Goleta 2004).



20 **Cumulative Impacts**

21 Implementation of the proposed Project would not result in any adverse impacts associated with
 22 agricultural resources. Therefore, the proposed Project would not contribute to any cumulatively
 23 considerable impacts to agricultural resources.

24 **Required Mitigation Measures**

25 There are no impacts associated with agricultural resources and therefore, no mitigation
 26 measures are required or recommended.

27 **Residual Impacts**

28 Under implementation of the proposed Project, residual impacts associated with agricultural
 29 resources would remain less than significant.

30 **Air Quality**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Conflict with or obstruct implementation of the applicable air quality plan?			×		

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
b) Violate any air quality standard or contribute substantially to an existing or project air quality violation?			×		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			×		
d) Expose sensitive receptors to substantial pollutant concentrations?			×		
e) Create objectionable odors affecting a substantial number of people?				×	

Note: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

1
2

3 Existing Setting

4 *Climate*

5 The City of Goleta is characterized by a Mediterranean climate with warm summers, mild
 6 winters, and moderate rainfall totaling approximately 21 inches annually (National Climatic Data
 7 Center [NCDC] 2011). Average temperatures during the summer range from approximately 59
 8 degrees Fahrenheit (°F) to 74 °F and average temperatures during the winter range from 48 °F
 9 66.1 °F (NCDC 2011). Almost all precipitation occurs between November and April; however,
 10 during these months, the weather is generally sunny for a majority of the time. Cyclic land and
 11 sea breezes are the primary factors influencing the region's mild climate. The daytime winds are
 12 normally sea breezes, predominantly from the west, that flow at relatively low velocities.
 13 Additionally, cool, humid, marine air causes frequent fog and low clouds along the coast,
 14 generally during the night and morning hours in the late spring and early summer (City of
 15 Goleta 2004).

16 *Criteria Pollutants*

17 Air quality at a given location can be described by the concentration of various pollutants in the
 18 atmosphere. The criteria pollutants of primary concern include ozone (O₃), carbon monoxide
 19 (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than ten microns in
 20 diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Also
 21 regulated are sulfates, lead, hydrogen sulfide (H₂S), and vinyl chloride. Ozone air pollution is
 22 formed when nitrogen oxides (NO_x) and reactive organic compounds (ROCs) react in the
 23 presence of sunlight. According to the Santa Barbara County Air Pollution Control District
 24 (SBCAPCD), the major sources of ozone precursor emissions in Santa Barbara County are
 25 motor vehicles, the petroleum industry, and solvent usage (paints, consumer products, and
 26 certain industrial processes). Sources of PM₁₀ include grading, demolition, agricultural tilling,
 27 road dust, mineral quarries, and vehicle exhaust (City of Goleta 2012b).

1 *Ambient Air Quality Standards*

2 The U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board
 3 (CARB) have established federal and state ambient air quality standards as well as emergency
 4 episode criteria for various pollutants. Air quality standards are set at concentrations that
 5 provide a sufficient margin of safety to protect public health and welfare. The significance of a
 6 pollutant concentration is determined by comparing the concentration to an appropriate federal
 7 or state ambient air quality standard.

8 The SBCAPCD is in attainment for all criteria pollutants under federal standards; however, the
 9 County continues to exceed the California 8-hour ozone standard as well as the state standard
 10 for PM₁₀. Santa Barbara County is therefore a non-attainment area for these criteria pollutants.

11 **Table 3: Federal and State Air Quality Criteria**

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O ₃)	8 hour	0.070 ppm	N	0.075 ppm	U/A
	1 hour	0.09 ppm (180 µg/m ³)	-	-	-
Carbon monoxide (CO)	8 hour	9.0 ppm (10 mg/m ³)	A	9.0 ppm (10 mg/m ³)	A
	1 hour	20.0 ppm (23 mg/m ³)	A	35.0 ppm (40 µg/m ³)	A
Nitrogen dioxide (NO ₂)	annual average	0.030 ppm (56 µg/m ³)	A	53 ppb	U/A
	1 hour	0.18 ppm (338 µg/m ³)	A	100 ppb	U/A
Sulfur dioxide (SO ₂)	annual average	-	-	Revoked	-
	24 hour	0.04 ppm (105 µg/m ³)	A	Revoked	-
	1 hour	0.25 ppm (655 µg/m ³)	A	75 ppb	-
Particulate matter (PM ₁₀)	annual arithmetic mean	20 ug/m3	N	Revoked	A
	24 hour	50 µg/m ³	N	150 µg/m ³	A
Particulate matter (PM _{2.5})	annual arithmetic mean	12 µg/m ³	U	15 µg/m ³	U/A
	24 hour	-	-	35 µg/m ³	U/A
Sulfates	24 hour	25 µg/m ³	A	-	-
Lead (Pb)	calendar quarter	-	-	1.5 µg/m ³	A
	30 day average	1.5 µg/m ³	A	-	-
	rolling 3-month average	-	-	0.15 µg/m ³	U

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	A	-	-
Vinyl chloride (chloroethene)	24 hour	0.010 ppm (26 µg/m ³)	-	-	-
Visibility reducing particles	8 hour (1000 to 1800 PST)	-	A	-	-
Notes:					
Units		Attainment Status			
mg/m ³ – milligrams per cubic meter		A – Attainment			
ppb – parts per billion		N – Nonattainment			
ppm – parts per million		U – Unclassified			
µg/m ³ – micrograms per cubic meter		U/A – Unclassifiable/Attainment			

1 Source: SBCAPCD 2012.

2 *Air Quality Planning*

3 State and federal regulations require that jurisdictions that do not meet clean air standards to
 4 develop plans and programs that will bring those areas into compliance. These plans contain
 5 emission reduction measures and attainment schedules to meet specified deadlines. The 2010
 6 Clean Air Plan (CAP), which was adopted as the Santa Barbara County portion of the State
 7 Implementation Plan (SIP), is designed to meet and maintain federal clean air standards
 8 (SBCAPCD 2010). The adopted 2010 CAP incorporates updated data and is currently the most
 9 recent plan aimed at meeting the state ozone standard (SBCAPCD 2010).

10 Thresholds of Significance

11 A significant air quality impact could occur if the project resulted in any of the impacts noted in
 12 the above checklist (a-e). In addition, per the City's Thresholds Manual, a significant air quality
 13 impact could occur, if the project would:

- 14 f) Interferes with progress toward the attainment of the ozone standard by releasing
 15 emissions which equal or exceed the established long-term quantitative thresholds for
 16 NO_x and ROC (same as reactive organic gases [ROG]). Thresholds are 25 pounds per
 17 day (lbs/day) of either NO_x or ROC;
- 18 g) Equals or exceeds the state or federal ambient air quality standards for any criteria
 19 pollutant (as determined by modeling);
- 20 h) Result in toxic or hazardous air pollutants in amounts which may increase cancer risks
 21 for the affected population.

22 *SBCAPCD Thresholds*

23 The following significance thresholds have been established by the SBCAPCD (SBCAPCD
 24 2011). While the City of Goleta has not yet adopted any new threshold criteria, these SBCAPCD
 25 thresholds are considered appropriate for use as a guideline for the impact analysis. SBCAPCD
 26 Operational Impacts Thresholds: The project would result in a significant impact, either
 27 individually or cumulatively, if it would:

- 1) Emit 240 pounds/day or more of ROG (same as ROC) and NO_x from all sources;
- 2) Emit 25 lbs/day or more of unmitigated ROG from any motor vehicles trips only;
- 3) Emit 25 lbs/day or more of unmitigated NO_x from any motor vehicle trips only;
- 4) Emit 80 lbs/day or more of PM₁₀;
- 5) Cause or contribute to a violation of any California or Ambient Air Quality standard (except ozone);
- 6) Exceed the SBCAPCD health risk public notification thresholds adopted by the APCD Board (ten excess cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk); or
- 7) Be inconsistent with Federal or State air quality plans for Santa Barbara County.

The cumulative contribution of project emissions to regional levels should be compared with existing programs and plans, including the most recent Clean Air Plan (SBCAPCD 2010). Due to the County's non-attainment status for ozone and the regional nature of ozone as a pollutant, if a project's emissions from traffic sources of either of the ozone precursors (NO_x or ROC), exceed the operational thresholds, then the project's cumulative impacts are considered significant. For projects that do not have significant ozone precursor emissions or localized pollutant impacts, if emissions have been taken into account in the 2010 CAP growth projections, regional cumulative impacts may be considered to be less than significant.

SBCAPCD Construction Impacts Thresholds

Quantitative thresholds of significance are not currently in place for short-term emissions. However, short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading must be discussed. In the interest of public disclosure, the SBCAPCD recommends that construction-related NO_x, ROC, PM₁₀, and PM_{2.5} emissions, from diesel and gasoline powered equipment, paving, and other activities be quantified. The SBCAPCD uses 25 tons per year for NO_x and ROC as a guideline for determining the significance of construction impacts.

Under SBCAPCD Rule 202 D.16, if the combined emissions from all construction equipment used to construct a stationary source, which requires an Authority to Construct permit, have the potential to exceed 25 tons of any pollutant, except carbon monoxide, in a 12-month period, the permittee shall provide offsets under the provisions of SBCAPCD Rule 804 and shall demonstrate that no ambient air quality standard will be violated. SBCAPCD Rule 345 regulates generation of visible fugitive dust emissions at demolition and construction sites.

Project Specific Impacts

The City's methodology for quantifying criteria pollutant emissions relies upon the URBEMIS 2007 (version 9.2.4) air quality modeling software for identifying short-term construction and long-term operational impacts for the pounds/day unmitigated condition.

1 *Construction Related Impacts*

- 2 a, b) Short-term construction-related air quality impacts generally occur during Project grading
3 activities. Preliminary earthwork quantities for the proposed Project are estimated at 900
4 cubic yards of cut and 900 cubic yards of fill, with approximately 15 cubic yards of
5 exported material (i.e., asphalt proposed for removal from Beach Access Point E and
6 potentially removed from the site if not suitable as fill). As a result, PM₁₀ associated with
7 construction grading is estimated to be approximately 37 lbs/day. Construction-related
8 ROC and NO_x emissions associated with the proposed Project are estimated to be
9 approximately 12 lbs/day and 71 lbs/day respectively (please refer to Attachment 2,
10 URBEMIS daily summer emission summary). Neither the City of Goleta nor the
11 SBCAPCD has adopted any significance thresholds for construction-generated ROC,
12 NO_x, or PM₁₀. However, these emissions have been incorporated into the 2010 CAP in
13 terms of the overall emissions inventory for construction activities. Therefore, air quality
14 impacts associated with Project construction are considered adverse, but less than
15 significant. Further construction-related air quality impacts would be minimized with the
16 implementation of MM AQ-1, -2, and -3, which would reduce PM₁₀ emissions as well as
17 equipment exhaust and diesel exhaust emissions and pollutants.
- 18 d) Fine particulate emissions from diesel equipment exhaust are classified as carcinogenic
19 by the State of California. The CARB has conducted numerous studies which indicate
20 that diesel particulate emissions from diesel engines pose a health risk to sensitive
21 receptors. PM₁₀ exhaust emissions for heavy equipment involved in Project construction,
22 including a small haul truck (e.g., standard bed diesel pick-up truck) exporting fill, are
23 estimated at approximately 8.9 lbs/day. Such temporary Project-generated diesel
24 particulate emissions are not considered substantial and as such, the health risk caused
25 by construction related particulate emissions would be considered adverse but less than
26 significant for sensitive receptors, including the nearby Ellwood Elementary School.
- 27 e) There would be no new paving or other sources of objectionable odors during
28 construction associated with the proposed Project.

29 *Long-term Operational Impacts*

- 30 a, b) There would be no anticipated long-term changes associated with use of the California
31 Coastal Trail or Anza Trail. The number of parking spaces providing access to the
32 Project area would remain unchanged and no other growth inducing measures would be
33 implemented as part of the proposed Project. Consequently, there would be no
34 substantial changes to long-term operational impacts associated with open space users
35 accessing Ellwood Mesa. Further, no point-sources of air emissions would be installed
36 as a result of the proposed Project. Therefore, no long-term operational impacts to air
37 quality would result from implementation of the proposed Project.
- 38 d) As the proposed Project would not introduce any new sources of operational emissions,
39 there would be no long-term change in the exposure of sensitive receptors to pollutant
40 concentration.

41

1 Cumulative Impacts

2 c) Implementation of the proposed Project would result in short-term localized,
3 construction-related impacts to air quality. However, these impacts would be less than
4 significant and would be further reduced with the implementation of MM AQ-1, -2, and
5 -3, which would reduce PM₁₀ emissions as well as equipment exhaust and diesel
6 exhaust emissions and pollutants. Further, implementation of the proposed Project
7 would not result in long-term operational emissions. Consequently, these impacts would
8 not result in cumulatively considerable impacts to air quality.

9 Required Mitigation Measures

10 These mitigation measures are required for all projects involving earthmoving activities
11 regardless of the project size or duration. The measures are based on policies adopted in the
12 1979 Air Quality Attainment Plan for Santa Barbara County. Proper implementation of these
13 measures is assumed to fully mitigate fugitive dust emissions (SBCAPCD 2011).

14 **MM AQ-1** ***PM₁₀ Minimization:** Dust generated during short-term trail construction activities*
15 *associated with the proposed Project must be kept to a minimum consistent with*
16 *the requirements of the SBCAPCD.*

- 17 • *During construction, a water truck (i.e., a light pickup truck with an attached*
18 *water tank) should be used for water suppression. This vehicle should be*
19 *kept in a designated staging area. Water spraying must be used regularly to*
20 *keep all areas of vehicle movement damp enough to prevent dust from*
21 *leaving the site. At a minimum, this should include wetting down such areas*
22 *in the late morning and after work is completed for the day. Increased*
23 *watering frequency should be required whenever the wind speed exceeds 15*
24 *miles per hour (mph). Reclaimed water should be used whenever possible.*
25 *However, reclaimed water should not be used in or around crops for human*
26 *consumption.*
- 27 • *Minimize amount of disturbed area and reduce on site vehicle speeds to 15*
28 *mph or less.*
- 29 • *If importation, exportation, and stockpiling of fill material is involved, soil*
30 *stockpiled for more than two days must be covered, kept moist, or treated*
31 *with soil binders to prevent dust generation. Trucks transporting fill material to*
32 *and from the site must be tarped from the point of origin.*
- 33 • *Gravel pads must be installed at all access points to prevent tracking of mud*
34 *onto public roads.*
- 35 • *After clearing, grading, earth moving or excavation is completed, disturbed*
36 *must be treated area by watering, or revegetation, or by spreading soil*
37 *binders until the area is paved or otherwise developed so that dust*
38 *generation must not occur.*
- 39 • *The City must designate a person or persons to monitor the dust control*
40 *program and to order increased watering, as necessary, to prevent transport*
41 *of dust offsite. The monitor(s) must also ensure that the watering truck is kept*

1 *at the proper staging area when not in use. Their duties must include holiday*
2 *and weekend periods when work may not be in progress. The name and*
3 *telephone number of such persons must be provided to the SBCAPCD prior*
4 *to land use clearance for project grading.*

- 5 • *Prior to land use clearance, the applicant must include these dust control*
6 *requirements as a note on a separate informational sheet to be recorded with*
7 *a map. All requirements must also be shown on grading plans.*

8 **MM AQ-2** **Equipment Exhaust Minimization:** *As required by APCD for all construction*
9 *projects, the following regulatory requirements and control strategies, required by*
10 *state law, must be adhered to throughout grading, hauling, and trail construction*
11 *activities:*

- 12 • *Diesel-powered construction equipment must be registered with the state's*
13 *portable equipment registration program or have an APCD permit.*

- 14 • *Mobile construction equipment is subject to the CARB Regulation for In-use*
15 *Off-Road Diesel Vehicles (Title 13 California Code of Regulations [CCR],*
16 *Chapter 9, § 2449), the purpose of which is to reduce diesel particulate*
17 *matter and criteria pollutant emissions from in use off-road diesel-fueled*
18 *vehicles.*

- 19 • *Commercial diesel vehicles are subject to Title 13 CCR § 2485, limiting*
20 *engine idling time. Idling of heavy-duty diesel construction equipment and*
21 *trucks during loading and unloading must be limited to five minutes; electric*
22 *auxiliary power units should be used whenever possible.*

23 **Plan Requirements and Timing:** *Prior to issuance of either a grading permit*
24 *or land use permit, these required air quality mitigation measures must be*
25 *included on final development plans submitted to the City for review and*
26 *approval. All requirements must be conveyed to trail construction crews by*
27 *the City during a pre-construction meeting held at the site prior to any site*
28 *preparation activities.*

29 **Monitoring:** *City staff must hold a pre-construction meeting prior to any*
30 *construction activity. Additionally, City compliance staff must periodically*
31 *monitor for compliance with these requirements.*

32 **Recommended Mitigation Measures**

33 **MM AQ-3** **Reduction of Diesel Exhaust Pollutants:** *The following recommended control*
34 *strategies should be implemented to the maximum extent feasible in order to*
35 *minimize diesel exhaust per SBCAPCD requirements:*

- 36 • *Diesel construction equipment meeting the CARB Tier 1 emission standards*
37 *for off-road heavy-duty diesel engines must be used. Equipment meeting*
38 *CARB Tier 2 or higher emission standards should be used to the maximum*
39 *extent feasible.*

- 40 • *Diesel-powered equipment should be replaced by electric equipment*
41 *whenever feasible.*

- 1 • *If feasible, diesel construction equipment should be equipped with selective*
- 2 *catalytic reduction systems, diesel oxidation catalysts and diesel particulate*
- 3 *filters as certified and/or verified by USEPA or California.*
- 4 • *Catalytic converters should be installed on gasoline-powered equipment, if*
- 5 *feasible.*
- 6 • *All construction equipment should be maintained in tune per the*
- 7 *manufacturer's specifications.*
- 8 • *The engine size of construction equipment should be the minimum practical*
- 9 *size.*
- 10 • *The number of construction equipment operating simultaneously should be*
- 11 *minimized through efficient management practices to ensure that the smallest*
- 12 *practical number is operating at any one time.*
- 13 • *Construction worker trips should be minimized by requiring carpooling and by*
- 14 *providing for lunch onsite.*

15 **Residual Impacts**

16 Implementation of the proposed Project would result in short-term, construction-related impacts,
 17 which would be considered adverse, but less than significant with the incorporation of MM AQ-1,
 18 -2, and -3, which would reduce PM₁₀ emissions as well as equipment exhaust and diesel
 19 exhaust emissions and pollutants. Consequently, under implementation of the proposed Project,
 20 residual impacts to air quality would remain less than significant.

21 **Biological Resources**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		×			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		×			

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			×		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			×		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			×		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan			×		

1 Existing Setting

2 Due to historic land uses, the Ellwood Mesa Open Space Area is dominated primarily by non-
 3 native annual grassland, which covers approximately 120 acres. Characteristic non-native grass
 4 species within the Project area include wild oats (*Avena* sp.), ripgut grass (*Bromus diandrus*),
 5 barley (*Hordeum* sp.), and fescue (*Vulpia* sp.). However, Ellwood Mesa also contains extensive
 6 stands of native grasses as well as over 40 vernal pools that occur within these grasslands (City
 7 of Goleta 2004; Storrer Environmental Services 2012). Eucalyptus woodlands bound the site on
 8 the north, east, and west, and three small stands of eucalyptus woodland occur along the top of
 9 the bluff above the Pacific Ocean. Devereux Creek bisects the Ellwood Mesa Open Space from
 10 west to east and is vegetated by freshwater marsh, riparian scrub, ruderal (e.g., fennel, iceplant,
 11 mustard, radish), and a small patch of riparian forest. Additionally, the coastal bluffs are
 12 vegetated with a moderately dense growth of coastal bluff scrub and non-native grasslands.

13 The Ellwood Mesa Open Space Plan area includes the Ellwood North Grove, Ellwood West,
 14 and Ellwood Main Grove monarch butterfly aggregation sites and the Sandpiper monarch
 15 butterfly roost. The Ocean Meadows autumnal roost occurs along the eucalyptus windrow on
 16 the eastern boundary of Ellwood Mesa (City of Goleta 2004). In addition to the monarch
 17 aggregation sites, numerous raptor roosts and nests also occur within the eucalyptus
 18 woodlands (City of Goleta 2004; Storrer Environmental Services 2012). Southern tarplant, a
 19 CRPR 1B.1 species, likely occurs within the vernal pools on the mesa and the grasslands likely
 20 support foraging habitat for special-status bats and birds. The western snowy plover (*Charadris*
 21 *alexandrinus nivosus*) has federally designated critical habitat on the beach below the Ellwood

1 Mesa Open Space and are likely to forage in the intertidal areas near the open space.
2 Additionally, western snowy plovers are known to breed and winter on beaches immediately
3 southeast of the Ellwood Mesa Open Space at Coal Oil Point.

4 *Sensitive Habitats*

5 While the Project area is dominated by non-native annual grassland, it also includes a number
6 of ESHAs primarily concentrated along the eastern end of the mesa as well as along the bluff
7 edge and including the eucalyptus groves to the north. These habitat communities, described
8 below, particularly the southern vernal pool and eucalyptus woodlands, support a number of
9 sensitive wildlife species (see Figure 6).

10 **Southern Vernal Pool.** Vernal pools form as winter rains fill topographic depressions where
11 underlying claypan layers prevent the water from percolating through to the subsurface (County
12 of Santa Barbara 1992; Thompson 1981). Eventually these pools become dry due to subsurface
13 drainage, evaporation, and plant evapotranspiration, remaining dry throughout the summer until
14 late fall and winter rains again initiate pool formation. Vernal pools within the Project area, which
15 are located throughout the flat mesa, are generally small in area, only a few inches deep, and
16 are dominated by ephemeral annual and perennial hydrophytes such as wooly heads
17 (*Psilocarphus brevissimus*), coyote thistle (*Eryngium vasey*), common spikerush (*Eleocharis*
18 *macrostachya*), and lowland cudweed (*Gnaphalium palustre*) (City of Goleta 2004).

19 **Native Grassland.** Native grasslands usually occur on fine-textured (often clay) soils, moist or
20 even waterlogged during the winter, but very dry in the summer. Historically, native grasslands
21 were much more widespread throughout California. However, the introduction of non-native
22 grasses and forbs (i.e., wildflowers), livestock grazing, and alteration of the community's natural
23 fire regime have resulted in the displacement of native bunchgrass, other native grasses, and
24 forbs by introduced species. Five native grass species occur in the Project area and include
25 alkali rye (*Leymus triticoides*), purple needlegrass (*Nassella pulchra*), meadow barley (*Hordeum*
26 *brachyantherum*), blue wild rye (*Elymus glaucus*), and California brome (*Bromus carinatus*).
27 Purple needlegrass is the most common native grass and generally grows in relatively pure
28 stands, occasionally intermixing with other native grass species, particularly meadow barley.
29 Native grasslands within the Project area cover approximately 33.5 acres, with a particularly
30 extensive stand of purple needlegrass located along the eastern end of Ellwood Mesa (City of
31 Goleta 2004).

32 **Southern Coastal Bluff Scrub.** This plant community includes dwarf shrubs, herbaceous
33 perennials, and annuals with a varying degree of succulence (Holland 1986). It occurs on
34 exposed bluffs characterized by nearly constant wind with high salt and moisture content. The
35 dominant species within the Project area include Brewer's saltbush (*Atriplex lentiformis* ssp.
36 *breweri*), lemonade berry (*Rhus integrifolia*), and seashore blight (*Suaeda californica* var.
37 *taxifolia*). Other representative native species include coyote brush, sagebrush (*Artemisia* spp.),
38 haplopappus (*Haplopappus venetus*), and seacliff buckwheat (*Eriogonum parvifolium* var.
39 *parvifolium*). Portions of the coastal bluff habitat have been degraded by foot and bicycle traffic
40 where a number of trails provide access to the beach. This disturbed area supports non-native
41 species including fennel, pampas grass (*Cortaderia jubata*), iceplant, and New Zealand spinach
42 (*Tetragonia tetragonioides*) (City of Goleta 2004).

1 **Eucalyptus Woodland.** Eucalyptus
2 woodland is a non-native habitat community
3 dominated by an invasive tree introduced to
4 southern California from Australia. Large
5 stands of mature eucalyptus trees, including
6 blue gum (*Eucalyptus globulus*), lemon-
7 scented gum (*Eucalyptus maculata* var.
8 *citriodora*), and red ironbark (*Eucalyptus*
9 *sideroxylon*), occur within the Project area
10 and comprise winter roosting sites for
11 monarch butterflies. Eucalyptus woodland
12 also forms small stands of wind-sculpted
13 trees on the bluffs (City of Goleta 2004).



Eucalyptus woodland habitat is located immediately to the east of the shared Coastal-Anza Trail and just south of the housing developments to the east. These groves provide habitat for a number of special status species including various raptors and monarch butterflies.

14 **Southern Riparian Scrub.** Southern riparian
15 scrub is often found in very dense thickets
16 adjacent to creeks and ponded areas, and in
17 less dense stands near seeps and areas with
18 high water tables. This habitat is usually
19 associated with areas of loose, sandy
20 alluvium, and requires frequent flooding or scouring to prevent succession to a riparian forest
21 dominated by cottonwoods and sycamores. This habitat occurs along Devereux Creek,
22 tributaries to Devereux Creek, drainage ditches, and gullies, and Phelps Ditch. Dominant
23 species include arroyo willow (*Salix lasiolepis*) shrubs with occasional patches of mule fat
24 (*Baccharis salicifolia*), Himalaya blackberry (*Rubus discolor*), canary grass (*Phalaris*
25 *canariensis*), bristly ox-tongue (*Pichris echioides*), rabbitsfoot grass (*Polypogon monspeliensis*),
26 and curly dock (*Rumex crispus*).

27 *Jurisdiction Water Bodies*

28 **Drainage A.** Drainage A is a tributary to Devereux Creek on the Ellwood Mesa property
29 conveying most of the water from the northern portion of the property south to Devereux Creek.
30 At the proposed trail crossing, Drainage A consists of an ephemeral drainage within an
31 approximately 25-30-foot-wide channel with steep banks approximately 6-10 feet deep. In
32 addition to the main drainage channel, a small internal two-foot wide drainage cuts through the
33 wider Drainage A. No vegetation occurs within the six-foot wide trail that currently crosses
34 Drainage A as this area is heavily disturbed by ongoing trail use. The area adjacent to the
35 channel above the top of bank did not display any wetland features. Dominant vegetation above
36 the top of bank adjacent to the Drainage A channel consisted of upland grasses and
37 interspersed shrubs including slender oat (*Avena barbara*), compact brome (*Bromus rubens*),
38 bull grass (*Bromus hordeaceus*), rat's-tail fescue (*Vulpia myuros*), ripgut brome (*Bromus*
39 *diandrus*), and coyote brush, (*Baccharis pilularis*).

40 Drainage A has a defined channel bed and banks; however, the mean high water line in the
41 vicinity of the proposed crossing was identified to be the two foot wide by two foot deep channel
42 located within the broader erosional feature. This small channel feature contained sediment
43 deposits and drift deposits; no hydrology indicators were identified within the broader banks of
44 Drainage A in the vicinity of the proposed crossing. While Drainage A in the vicinity of the
45 proposed crossing does not support riparian vegetation and does not contain hydric soils it is
46 still considered a wetland using California Coastal Commission (CCC) one parameter criteria
47 (AMEC Environment & Infrastructure, Inc. [AMEC] 2013 [unpublished]).

1 **Devereux Creek.** Devereux Creek is a large, intermittent, flat-bottomed drainage with defined
2 bed and banks. Water runs off slowly, and several low spots along the drainage hold ponded
3 water for a short period of time. The majority of Devereux Creek on Ellwood Mesa is vegetated
4 with wetland plants. Areas that support wetland vegetation meet the California Department of
5 Fish and Wildlife (CDFW) and CCC wetland criteria.

6 This creek has a clearly defined channel bed, has intermittent flow at least seasonally, supports
7 substantial riparian vegetation, and has a watershed that extends from the Sandpiper Golf
8 Course to the Devereux Lagoon. Devereux Creek would be considered jurisdictional by CCC,
9 CDFW, and USACE. This creek is a major water feature on Ellwood Mesa and would require
10 minimum buffers of 100 feet, as described in Policies CE 1.6 and CE 2.3 of the Local Coastal
11 Plan (LCP), and would also be under the appeals jurisdiction of CCC (AMEC 2013
12 [unpublished]).



1 *Wildlife*

2 The Project area supports a variety of wildlife
3 species typical of coastal ecosystems.
4 Common bird species found in upland habitats
5 on Ellwood Mesa include black phoebe
6 (*Sayornis nigricans*), western kingbird
7 (*Tyrannus verticalis*), cliff swallow
8 (*Petrochelidon pyrrhonota*), American crow
9 (*Corvus brachyrhynchos*), western scrub jay
10 (*Aphelocoma coerulescens*), and northern
11 mockingbird (*Mimus polyglottos*). Additionally,
12 many raptor species such as white-tailed kite
13 (*Elanus leucurus*), red-tailed hawk (*Buteo*
14 *jamaicensis*), Cooper's hawk (*Accipiter*
15 *cooperi*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), and great horned owl (*Bubo*
16 *virginianus*) forage within the grassland habitats within the Project area (Storrer and Philbrick
17 1998). Because the southern border of the Project area abuts the Pacific Ocean, a variety of
18 shorebirds and pelagic birds also occur within the vicinity of the Project area, including such
19 common species as western gull (*Larus occidentalis*), western grebes (*Aechmophorus*
20 *occidentalis*), spotted sandpiper (*Actitis macularia*), and willet (*Catoptrophorus semipalmatus*).
21 The federally threatened western snowy plover nests on the beach near the mouth of Devereux
22 Slough, approximately 0.75 miles to the southeast.



The Ellwood Mesa Open Space Plan Area provides habitats for white-tailed kites and includes approximately 11 nests that have been active as recently as 1997. (Photograph courtesy of USFWS)

23 Urban areas and transportation corridors have created barriers to dispersal for terrestrial
24 wildlife, especially for medium and large carnivores; however, small mammal diversity is
25 relatively high due to the expanse of open grassland and shrubland in the Project area (City of
26 Goleta 2004). Small mammals commonly occurring at Ellwood Mesa include Botta's pocket
27 gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), western
28 harvest mouse (*Reithrodontomys megalotis*), house mouse (*Mus musculus*), and California vole
29 (*Microtus californicus*) (Storrer and Philbrick 1998; Storrer Environmental Services 2012).
30 Additionally, reptiles and amphibians that occur within the Project area include Pacific chorus
31 frog (*Pseudacris regilla*), southern alligator lizard (*Gerrhonotus multicarinatus*), western skink
32 (*Eumeces skiltonianus*), and western fence lizard (*Sceloporus occidentalis*) (Storrer and
33 Philbrick 1998; Storrer Environmental Services 2012).

34 *Wildlife Movement*

35 Devereux Creek and its northern tributaries are the last remaining physical linkages between
36 the Ellwood Mesa Open Space Area and relatively undisturbed and unfragmented habitats to
37 the north. However, these linkages are tenuous and may serve only as semi-permeable
38 movement corridors for many species (City of Goleta 2004). The Project area is likely large
39 enough to allow populations of common species to persist; however, in general, populations of
40 small vertebrates in the Project area, such as amphibians, reptiles, and small mammals, may
41 experience dramatic seasonal and annual fluctuations. Populations of medium- to large-size
42 carnivores, such as striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), opossum
43 (*Didelphis virginianus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*) are small and probably
44 could not persist in the Project area without dispersal from outside areas. However, these
45 species have relatively high reproductive rates and can survive in urbanized or otherwise
46 disturbed environments. Movement of these species between foothill and mountain regions and

1 the Project area occurs via the narrow and fragmented habitat linkages provided by Devereux
 2 Creek infrequently because there are many intervening barriers to dispersal, such as
 3 transportation corridors, associated culvert undercrossings and residential development.
 4 Although bird flyways are not traditionally considered wildlife movement corridors, Devereux
 5 Slough, located southeast of the Project area, is an important habitat for bird species during
 6 migration along the Pacific Flyway. Many bird species use this area as an annual stopover
 7 location for several days of rest and feeding prior to continuing migration to their seasonal
 8 destination (City of Goleta 2004).

9 *Special Status Species*

10 Several special-status wildlife species are known to occur in the vicinity of the Project area. The
 11 table below includes known occurrences of special status species within the Dos Pueblos
 12 Canyon 7.5-minute Quadrangle (California Department of Fish and Wildlife [CDFW] 2013).
 13 Species that are documented or have a high potential to occur within the Project area are
 14 described in more detail in the species accounts that follow the table.

15 **Table 4: Special Status Species within the Vicinity of the Project Site**

Common Name	Species Name	Federal Status	State Status	State Rank	CNPS Rank
Invertebrates					
globose dune beetle	<i>Coelus globosus</i>	-	-	S1	-
monarch butterfly	<i>Danaus plexippus</i>	-	-	S3	-
sandy beach tiger beetle	<i>Cicindela hirticollis gravida</i>	-	-	S1	-
Fish					
tidewater goby	<i>Eucyclogobius newberryi</i>	E	SSC	S2S3	-
Amphibians					
California red-legged frog	<i>Rana draytonii</i>	T	SSC	S2S3	-
Reptiles					
western pond turtle	<i>Emys marmorata</i>	-	-	S3	-
Birds					
ferruginous hawk	<i>Buteo regalis</i>	-	-	S3S4	-
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	SSC	S2	-
white-tailed kite	<i>Elanus leucurus</i>	-	FP	S3	-
Plants					
black-flowered figwort	<i>Scrophularia atrata</i>	-	-	S2.2	1B.2
Contra Costa goldfields	<i>Lasthenia conjugens</i>	E	-	S1	1B.1

Common Name	Species Name	Federal Status	State Status	State Rank	CNPS Rank
mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	-	-	S2.1	1B.1
Santa Barbara honeysuckle	<i>Lonicera subspicata</i> var. <i>subspicata</i>	-	-	S2	1B.2
southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	-	-	S2	1B.1
white-veined monardella	<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	-	-	S2S3	1B.3

FEDERAL STATUS
 E = Endangered = Danger of extinction throughout range
 T = Threatened = Likely to become endangered in foreseeable future throughout range

STATE STATUS
 E = Endangered = Applies to a species whose survival and reproduction in the wild are in immediate jeopardy from one or more causes
 T = Threatened = Applies to a species that is existing in small numbers throughout all or a significant portion of its range that it may become endangered
 SSC = Species of Special Concern = California Department of Fish and Wildlife Species of Special Concern
 FP = Fully Protected = Fully protected under the California Endangered Species Act

STATE RANKING from California Natural Diversity Database
 S1 = Critically Imperiled = Critically imperiled in the state because of extreme rarity or because of factor(s) making it especially vulnerable to extirpation from the state
 S2 = Imperiled = Imperiled in the state because of rarity due to factors making it very vulnerable to extirpation from the state
 S3 = Vulnerable = Vulnerable in the state due to factors making it vulnerable to extirpation from the state

CNPS RANKING
 1B = Plants rare, threatened, or endangered in California and elsewhere
 0.1 = Seriously Threatened in California = Over 80% of occurrences threatened/high degree and immediacy of threat
 0.2 = Fairly Threatened in California = 20%- 80% occurrences threatened/high degree and immediacy of threat
 0.3 = Not Very Threatened = <20% of occurrences threatened/low degree and immediacy of threat or no current threat known

1 Source: CDFW 2013.

2 **Southern Tarplant.** Southern tarplant is an annual
 3 herb that germinates during spring and blooms
 4 between June and November. It has yellow, daisy-
 5 like flowers that occur primarily at the ends of its
 6 branches. Although not observed within the Project
 7 area, the southern tarplant occurs in the immediate
 8 vicinity, including populations at the Venoco Ellwood
 9 Marine Terminal and Ocean Meadows Golf Course.
 10 Suitable habitat, including southern vernal pools
 11 occur throughout the study area and consequently
 12 this species has a high potential to occur (City of
 13 Goleta 2004).



14 **Globose Dune Beetle.** The globose dune beetle is
 15 distributed in coastal dunes from British Columbia
 16 southward to northwestern Baja California Norte,
 17 Mexico (Doyen 1976). Throughout most of its range,

1 it is narrowly restricted to foredunes immediately bordering the ocean and is able to withstand
2 frequent inundation of its substrates by sea water. Globose dune beetles occur in foredune
3 habitats along the base of the bluff south of the Ellwood Mesa Open Space eastward to the
4 Coal Oil Point Reserve.

5 **Sandy Beach Tiger Beetle.** The sandy beach tiger beetle is found in open, sandy coastal scrub
6 and beach habitats near estuaries in central and southern California. The adults are
7 carnivorous, feeding on flies and other insects in the high tide zone. The sandy beach tiger
8 beetle has been found on the beach and dunes around the mouth of Devereux Slough on the
9 Coal Oil Point Reserve (Sandoval 2003), and suitable foredune habitat also occurs at the base
10 of the bluffs south of the Santa Barbara Shores and Ellwood Mesa Open Space.

11 **Monarch Butterfly.** Overwintering habitat for this species is protected under Policy CE 4 of
12 GP/CLUP as an ESHA (City of Goleta 2006). Although the monarch butterfly is not threatened
13 with extinction, its wintering sites are highly vulnerable to disturbance. The Ellwood Mesa Open
14 Space Plan Area contains significant wintering habitat for the monarch butterfly. Eucalyptus
15 groves create suitable microclimates due to the protection from winds afforded by the large
16 trees, a relatively constant mild temperature, and a nectar source. Large stands of eucalyptus
17 woodland form windrows on the western and eastern perimeter of Ellwood Mesa Open Space
18 Plan Area. Other woodlands are located along Devereux Creek and its tributary through the
19 Coronado Butterfly Preserve. The eucalyptus groves in the Comstock Homes Development and
20 Ellwood Mesa Open Space Plan area are called the Ellwood Complex. Five monarch butterfly
21 overwintering sites occur in the complex – Sandpiper Aggregation, Ellwood North, Ellwood
22 West, Ellwood Main, and Ocean Meadows Roost. Approximately 50 acres of eucalyptus
23 woodland in the Ellwood Complex support overwintering monarchs on a regular basis.

24 **Western Snowy Plover.** Snowy plover nests on
25 sandy beaches and dunes by creating a shallow
26 depression as a nest, using driftwood, rocks, or
27 bushes as cover. This species has been in
28 decline throughout California, in part due to
29 human disturbance of sandy beaches typically
30 used for nesting and roosting. Federally
31 designated critical habitat occurs to the south of
32 the Ellwood Open Space on Ellwood Beach.
33 Additionally, one of the largest breeding
34 populations in the state occurs along the
35 beaches and dunes 0.5 miles east of Ellwood
36 Mesa within the Coal Oil Point Preserve. The
37 mouth of Devereux Slough and adjacent
38 beaches to the west, are major wintering
39 localities and nesting sites for this species
40 (Sandoval 2003). This species occurs southeast
41 of the Project area and forages along the
42 beaches and intertidal areas fronting the Project
43 area (City of Goleta 2004).



44 **Cooper's Hawk.** Declines in Cooper's hawk populations are attributed to the loss of lowland
45 riparian forests throughout California. Cooper's hawks occur as winter migrants and summer
46 breeders within Santa Barbara County and utilize the eucalyptus woodlands within the Project
47 area. An active Cooper's hawk nest was documented in an eucalyptus tree on eastern edge of

1 the Project area in 2003 during field surveys associated with the Comstock Homes
2 Development. Consequently, this species has a high potential to occur within the Project area
3 (Storrer Environmental Services 2012).

4 **White-tailed Kite.** The white-tailed kite is a state “Fully Protected” species and is protected
5 under Policy CE 8 of the GP/CLUP (City of Goleta 2006). The species occurs as a year-round
6 resident breeder in the Project area, which provides foraging, roosting, and nesting habitat.
7 Roost and nest sites are typically communal and are generally occupied from one year to the
8 next, so that local territories are maintained for several years. One or more kites are regularly
9 observed foraging in grasslands and other open habitats in the Project area (Storrer 2003;
10 Storrer Environmental Services 2012). Observations suggest that the Ellwood Mesa Open
11 Space Plan Area serves as one of the primary foraging territory for kites nesting in the Devereux
12 Slough area (Storrer 2003; Storrer Environmental Services 2012). Kites have also been
13 recorded nesting in the eucalyptus trees within and surrounding the Project area (City of Goleta
14 2004; Storrer Environmental Services 2012).

15 **Turkey Vulture.** Communal turkey vulture (*Cathartes aura*) roost sites are designated ESHA
16 under Policy CE 8 of the GP/CLUP (City of Goleta 2006). Small roosts occur within the large
17 eucalyptus groves on Ellwood Mesa. Foraging territories typically encompass several miles.
18 Turkey vultures are frequently observed foraging and/or roosting throughout the Project area
19 (Storrer 2003; Storrer Environmental Services 2012).

20 Thresholds of Significance

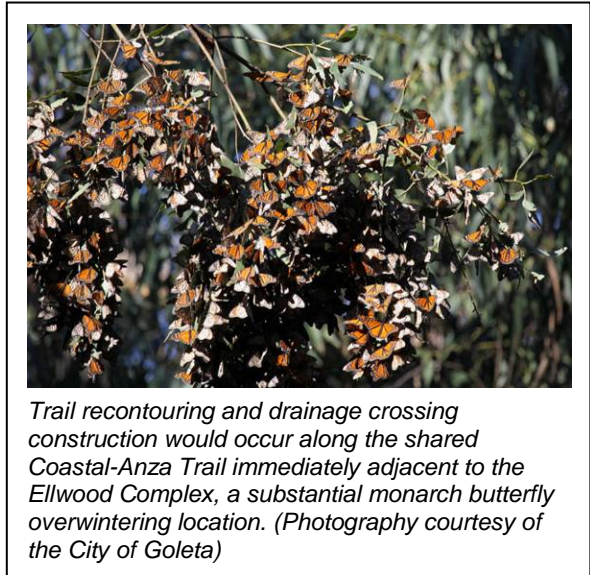
21 A significant impact on Biological Resources would be expected to occur if the project resulted
22 in any of the impacts noted in the above checklist. Additionally, per the City’s *Environmental*
23 *Thresholds & Guidelines Manual* a project would pose a significant environmental impact(s) on
24 biological resources in any of the following would result from project implementation:

- 25 a) A conflict with adopted environmental plans and goals of the community where it is
26 located;
- 27 b) Substantial effect on a rare or endangered plant or animal species;
- 28 c) Substantial interference with the movement of any migratory or resident fish or wildlife
29 species;
- 30 d) Substantial diminishment of habitat for fish, wildlife, or plants.

31 Project Specific Impacts

- 32 a) Implementation of the proposed Project would include trail recontouring and the
33 installation of drainage crossings as well as beach access point improvements.
34 Additionally, the proposed Project would result in minor realignment of the shared
35 Coastal-Anza Trail as well as the Anza Trail on the eastern end of the Project area.
36 These Project components may have adverse direct or indirect construction-related
37 impacts to a number of special-status species, including southern tarplant, monarch
38 butterfly, federally threatened western snowy plover, and special status raptors.

1 Construction of the proposed trail
 2 realignments could result in the loss of
 3 habitat for the southern tarplant. Although
 4 this CRPR 1.B.1 plant species was not
 5 encountered during previous surveys
 6 associated with the Comstock Homes
 7 Development, it is found less than one
 8 mile to the east and southeast of the
 9 Ellwood Mesa Open Space Area in
 10 similar habitat types. Additionally, trail
 11 improvements, including trail realignment
 12 per the GP/CLUP as well as the
 13 installation of drainage crossings, would
 14 occur in the immediate vicinity of raptor
 15 nests within the eucalyptus groves in the
 16 northern region of the Project area. This
 17 area includes a red-tailed hawk nest and
 18 two white-tailed kite nests near Devereux
 19 Creek, which would potentially be disturbed
 20 during construction activities. However,
 21 these impacts would be less than significant
 22 with the incorporation of MM BIO-1, which
 would require a sensitive species survey to
 reduce disturbance and direct impacts to
 these species.



23 Additionally, implementation of the proposed Project would result in long-term beneficial
 24 impacts to a number of these special status species. Trail realignment per the GP/CLUP
 25 would relocate the shared Coastal-Anza Trail such that it avoids the eucalyptus grove to
 26 the north, reducing the long-term exposure of this riparian area to recreational use.
 27 Additionally, the proposed Project includes habitat restoration with objectives including
 28 the establishment of southern tarplant within the Ellwood Mesa Open Space Area using
 29 techniques utilized by the UCSB Cheadle Center for Biodiversity an Ecological
 30 Restoration, a center under the Office of Research provides stewardship and restoration
 31 of campus lands as well as preservation and management of natural collections .
 32 Consequently, implementation of the proposed Project may result in long-term beneficial
 33 impacts to sensitive species.

34 b) Implementation of the proposed Project would involve the realignment of trail segments
 35 per the GP/CLUP (refer to Figure 2). Construction of these trail segments would remove
 36 small areas of existing habitat within the corridor (see Table 5). However, implementation
 37 of the proposed Project would result in approximately 13 acres of total restoration
 38 adjacent to the trail corridor, which would result in mitigation at a 25:1 ratio (i.e., 25 acres
 39 of restored habitat for every acre of disturbed habitat).

40 **Table 5: Vegetation Removal Associated with the Realigned Trail Segments**

Habitat Type	Area of Vegetation Removal (Acres)
Coyote Bush Scrub	0.07
Disturbed Vegetation	< 0.01
Native Grassland	0.03

Habitat Type	Area of Vegetation Removal (Acres)
Non-Native Grassland	0.42
Venturan Coastal Sage Scrub	0.01

Note: Calculations include vegetation that would be removed as a part of the preferred option for the switchback following the Devereux Creek Crossing.

Trail construction along the edge of the eucalyptus grove to the north would involve work in designated ESHA habitat. Additionally, the construction of drainage crossings over Drainage A and Devereux Creek, as well as the proposed beach access point improvements would also occur within designated ESHA habitat. However, implementation of the proposed Project is consistent with GP/CLUP policies regarding ESHA as resource restoration and enhancement projects are permitted within ESHA under Policy CE 1.6. Any incremental impacts to ESHAs as a result of trail recontouring would be mitigated onsite, consistent with Policy CE 1.7, through the implementation of the Restoration Plan included as a part of the proposed Project. Any potential adverse impacts associated with restoration planting would be reduced to less than significant levels with the implementation of MM BIO-2, which would establish native plant requirements. Additionally, the proposed Project would improve degraded ESHA habitat including the blufftop habitat in the immediate vicinity of Beach Access Points E and F, which is characterized by surface water erosion and non-native plant species. Removal of native fill from the berms to the north of the blufftop trail would reduce surface water runoff, which currently contributes to blufftop erosion. Further, realignment of the Anza Trail on the eastern end of the Project site would relocate the existing trail, which currently passes through southern vernal pool habitat, to the north, outside of any designated ESHA. Consequently, implementation of the proposed Project would have less than significant construction-related impacts on ESHA as well as long-term beneficial impacts associated with habitat restoration and trail realignment.

- c) Implementation of the proposed Project would include the construction of boardwalk style crossings over Drainage A and Devereux Creek as well as the installation of an 18-inch concrete culvert in Gully A. Gully A is not considered a jurisdictional wetland (AMEC 2013 [unpublished]); however, Drainage A and Devereux Creek have been delineated as jurisdictional wetlands (City of Goleta 2004; AMEC 2013 [unpublished]). Construction of a boardwalk style bridge over each of these drainages would result in approximately 0.01 acres of indirect impacts to wetland habitat in Drainage A and 0.05 acres of indirect and direct impacts to wetland impact in Devereux Creek. However, restoration efforts within these areas would restore approximately 0.05 acres of wetland habitat in Drainage A and 0.19 acres of wetland habitat in Devereux Creek. Further, the boardwalk bridges would reduce long-term disturbance of these habitats and a drainage analysis that was conducted for the proposed crossings demonstrated that the proposed boardwalk bridges would increase the drainage capacities of Drainage A and Devereux Creek. The proposed Project would also include the relocation of the existing Anza Trail around an existing vernal pool on the eastern end of the Project site as well as the restoration of this area. Potentially adverse impacts to these surface water bodies, including the vernal pools on Ellwood Mesa, may result from sedimentation during trail recontouring and construction as well as construction of the proposed improvements. However, these impacts would be reduced to less than significant levels with implementation of mitigation measures for impacts to *Hydrology and Water Quality* and *Geology and Soils* (MM WAT-

1 1, -2, -3, and -4 as well as MM GEO-3), which would require a storm water permit,
2 Stormwater Pollution Prevention Plan (SWPPP), Notice of Intent, and Notice of
3 Termination as well as other related BMPs required by the City. Further, long-term
4 impacts to biological resources associated with the proposed Project would be beneficial
5 as the proposed Project would enhance southern vernal pool habitat, restore wetland
6 habitat within jurisdiction wetlands, and remove segments of the shared Coastal-Anza
7 Trail that pass through the high water marks of Drainage A and Devereux Creek.

8 d) Apart from the eastern end of the Project area, which is characterized by isolated native
9 grassland, the Ellwood Mesa Open Space Area is characterized by disturbed non-native
10 grassland habitat. Consequently, Ellwood Mesa provides limited opportunities for
11 dispersal of ground-dwelling wildlife between the Project site and suitable habitat to the
12 north, east, or west. The proposed Project would affect three small drainages; however,
13 these drainages do not appear to be significant corridors for wildlife movement within the
14 parcel and do not provide habitat connections to points north (City of Goleta 2004).
15 Consequently, Project-related impacts to wildlife movement between on-site and off-site
16 areas to the north, east, and west would be less than significant.

17 e) The proposed Project would not conflict with local policies or ordinances protecting
18 biological resources, including those outlined in the Coastal Act or the Goleta GP/CLUP.
19 Impacts to biological resources would be associated with construction activities and
20 would be mitigated to less than significant levels with the incorporation of BIO-1 and -2,
21 which would require sensitive species surveys and would establish native plant
22 requirements; however, long-term impacts to biological resources within the Ellwood
23 Mesa Open Space Area would be beneficial as the Project would protect and enhance
24 biological resources including ESHA and special status species. Consequently, the
25 proposed Project would meet the intent of the Conservation Element within the
26 GP/CLUP and would not conflict with other applicable measures protecting biological
27 resources.

28 f) Implementation of the proposed Project would be consistent with the Ellwood-Devereux
29 Coast Open Space and Habitat Management Plan and would not conflict with any other
30 adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other
31 approved local, regional, or state habitat conservation plan.

32 Cumulative Impacts

33 Implementation of the proposed Project would result in less than significant construction-related
34 impacts to biological resources with the incorporation of mitigation measures for impacts to
35 *Hydrology and Water Quality* (MM WAT-1, -2, -3, and -4), which would require a storm water
36 permit, SWPPP, Notice of Intent, and Notice of Termination. In addition, a mitigation measure
37 for impacts to *Geology and Soils* (i.e., GEO-3), which would require BMPs, and the mitigation
38 measures for impacts to *Biological Resources* (i.e., BIO-1 and -2), which would require sensitive
39 species surveys and would establish native plant requirements, would further reduce less than
40 significant construction-related impacts to biological resources. However, long-term impacts to
41 biological resources would be beneficial as it would reduce impacts to sensitive habitats and
42 sensitive species. Consequently, the proposed Project would not result in any considerable
43 contribution to adverse cumulatively considerable adverse impacts to biological resources.

44

1 Required Mitigation Measures

2 **MM BIO-1 Sensitive Species Survey:** *An Applicant-funded special status species survey*
3 *must be conducted by a City-approved biologist immediately prior to*
4 *construction. Depending on the timing of trail construction activities, the survey*
5 *must include the following components:*

6 • *If trail-construction activities on the shared Coastal-Anza Trail or the trail*
7 *segments along the eastern and western eucalyptus windrows would occur*
8 *within the raptor breeding season (January 1 through September 15), a raptor*
9 *survey must be conducted in these areas to establish the current breeding*
10 *status of resident raptors adjacent to the relevant trail segments. This survey*
11 *component must include recommendations regarding minimizing impacts*
12 *during construction per GP/CLUP Policy CE 8.2, including setbacks and*
13 *restrictions on construction scheduling. If nests are documented, construction*
14 *work within a 300-foot of active nest(s) must be suspended until the young*
15 *have fledged the nest per GP/CLUP Policy CE 8.4.*

16 • *If trail-construction activities within 100 feet of the edge of the eucalyptus*
17 *groves that host known monarch butterfly aggregation sites would occur*
18 *during the overwintering season for monarch butterflies (October 1 through*
19 *March 31), a City-approved biologist must survey all eucalyptus trees within a*
20 *100-foot distance of the relevant trail and habitat restoration areas (i.e., along*
21 *the shared Coastal-Anza Trail and the western extent of the Coastal Loop*
22 *Trail) to determine use by monarchs per GP/CLUP Policy CE 4.5. If butterfly*
23 *aggregations are found within 100 feet of the work area, trail-construction*
24 *must be halted until a City-approved biologist has determined monarchs have*
25 *left the site.*

26 • *If trail-construction activities would occur within the blooming period for*
27 *southern tarplant (June 1 through September 30), a pre-construction survey*
28 *must be conducted for southern tarplant. Recommendations must be made to*
29 *reroute the trail around recorded individuals, limiting disturbance to the*
30 *maximum extent feasible. If disturbance cannot be avoided then potentially*
31 *affected individuals would be relocated and/or additional southern tarplant*
32 *individuals would be planted as a part of mitigation associated with the*
33 *proposed Project.*

34 • *Prior to the commencement of any construction-related activities at the toe of*
35 *beach access points (i.e., the interface of the bluff face and beach habitats),*
36 *visual surveys for globose dune beetle and sandy beach tiger beetle must be*
37 *conducted. If either of these sensitive species is observed within the footprint*
38 *of the proposed trail recontouring or habitat restoration footprint individuals*
39 *must be captured and relocated to adjacent suitable habitat.*

40 **Plan Requirements and Timing.** *The pre-construction survey must be reviewed*
41 *and approved by City of Goleta prior the issuance of a grading permit and the*
42 *commencement of construction activities. The Applicant must adhere to all*
43 *recommendations in the survey and trail construction crews must not encroach*
44 *within any setbacks from identified active bird nests.*

1 **Monitoring.** The City of Goleta must review and approve all grading and final
 2 trail construction plans prior to issuing the grading permit. The City of Goleta
 3 must discuss any restrictions with trail crews during the pre-site construction
 4 meeting and must inspect the site for compliance with survey recommendations.

5 **MM BIO-2** ***Native Plant Requirements:*** *In order to protect the genetic integrity of the native*
 6 *plant populations on the undeveloped portions of the subject property, the Final*
 7 *Restoration Plan must explicitly prohibit the use of non-locally collected native*
 8 *plants and seed materials restoration within or adjacent to open space areas. All*
 9 *seed or plant material must come from sources within the Devereux Creek*
 10 *watershed per GP/CLUP Policy OS 5.4(d). The Final Restoration Plan for the*
 11 *proposed Project must prohibit buried irrigation infrastructure; all temporary*
 12 *irrigation components must be placed above ground in open space areas. The*
 13 *potential for damage to the pipe by vandalism or exposure is considered*
 14 *insufficient to offset the environmental damage caused by trenching to install*
 15 *pipes and structures and subsequent digging to remove pipes and structures.*
 16 *Pipes must be inspected monthly for leaks and all leaks must be repaired*
 17 *promptly to avoid erosion, weed establishment, or other environmental damage.*

18 **Plan Requirements and Timing.** The Final Restoration Plan, including irrigation
 19 components, must be prepared by a City-approved biologist and reviewed and
 20 approved by City staff prior to issuance of either a grading permit or land use
 21 permit.

22 **Monitoring.** City staff must verify compliance with the Restoration Plan in the
 23 field before and during trail construction activities. Further the Final Restoration
 24 Plan must include a five-year monitoring component.

25 Residual Impacts

26 Implementation of the proposed Project may result in short-term, construction-related impacts;
 27 however with implementation of MM BIO-1 and -2, which would require sensitive species
 28 surveys and would establish native plant requirements, these impacts would be less than
 29 significant. Additionally, long-term impacts associated with habitat restoration under the
 30 proposed Project would be beneficial to biological resources. Consequently, under
 31 implementation of the proposed Project, residual impacts to biological resources would remain
 32 less than significant.

33 Cultural Resources

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				×	

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		×			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		×			
d) Disturb any human remains, including those interred outside of formal cemeteries?		×			

1 **Existing Setting**

2 *Prehistoric and Historic Overview*

3 The creeks, river valleys, and flood plains in Santa Barbara County, along with the fringing
 4 coastline, have supported a continuous cultural occupation dating back at least 8,000 years
 5 (City of Goleta 2004). The Ellwood Mesa Open Space Plan Area has experienced long and
 6 significant occupation as is evidenced by archeological resources known to be present in the
 7 general Project vicinity (City of Goleta 2004). An early Holocene occupation has been identified
 8 in the archaeological record that reflects the early emergence of non-agricultural village-based
 9 groups in the region. Current archaeological evidence suggests that a relatively small population
 10 existed in these areas, but by 2,000 years B.P., populations appear to have expanded
 11 considerably into resource-rich coastal and near-shore estuarine environments (City of Goleta
 12 2004; Dillon 1990).

13 The first known European entry into the area was the expedition of Juan Cabrillo who sailed
 14 north along the California coast from Mexico in 1542. In the 1760s, the Spanish government
 15 decided to establish a series of military establishments called presidios and missions along the
 16 California coast between the two natural harbors of San Diego and San Francisco (City of
 17 Goleta 2004; Weber 1982). A presidio was established at Santa Barbara in 1782 to fill the gap
 18 between the previously established presidios in Monterey and San Diego. This established a
 19 permanent European presence in the area, and was shortly followed by the establishment of the
 20 Santa Barbara Mission in 1786. This mission had a strong effect on the Chumash in the vicinity
 21 of the Project area. It seems certain that a number of the Chumash left for the missions, though
 22 chapels were built for those remaining in rancherias in the Goleta area (City of Goleta 2004).
 23 The Chumash who moved to the missions worked in agriculture or herding, and steps were
 24 taken to assimilate them to European styles of life. This also proved to be dangerous to the
 25 health of the Chumash populations, as they were exposed to European diseases from which
 26 they lacked immunity.

27 The period of California history known as the Rancho Period began as a class of wealthy
 28 landowners known as ‘rancheros’ controlled the state. The Project area was originally located
 29 within the Rancho de los Dos Pueblos land grant, which was later subdivided into a number of
 30 different ranches.

31 *Previously Recorded Cultural Resources*

32 The Project area was previously surveyed for cultural resources in 1991 (City of Goleta 2004).
 33 The GP/CLUP indicates that no sensitive historic or cultural resources have been identified
 34 within the Project area (City of Goleta 2006). Additionally, there are no sites on the National
 35 Register of Historic Places (NRHP) or the California State Historic Resources Inventory in the

1 Project area (City of Goleta 2004). However, a file and records search, which was conducted at
2 the Central Coastal Information Center (CCIC) of the California Historical Resources Information
3 System in 2004, showed a single prehistoric archaeological site previously recorded in the
4 Project area.

5 The prehistoric site within the Project area, CA-SBA-1321, was originally recorded in 1974, and
6 was initially seen as a surface scatter of marine shell and ground stone artifacts (City of Goleta
7 2004). Oil wells and an oil refining operation were conducted within the site area and have
8 apparently heavily damaged the site. Test excavations were conducted on the site (City of
9 Goleta 2004; Onken 1997) for the Santa Barbara County Parks Department. Results of this
10 work show that deposits extend to a depth of 60 centimeters but that they have been heavily
11 disturbed by the oil extraction operations. This disturbance and the sparse returns of material
12 prompted the evaluation that this site is not eligible for the California Register of Historic
13 Resources (CRHR) (City of Goleta 2004; Onken 1997).

14 Thresholds of Significance

15 A significant impact on cultural resources would be expected to occur if the project resulted in
16 any of the impacts noted in the above checklist. Additional thresholds are contained in the City's
17 Thresholds Manual. The City's adopted thresholds indicate that a project would result in a
18 significant impact on a cultural resource if it results in the physical demolition, destruction,
19 relocation, or alteration of the resource or its immediate surroundings such that the significance
20 of such a resource would be materially impaired.

21 Project Specific Impacts

22 a-d) As discussed previously, the Project area was surveyed for cultural resources in 1991
23 and no sensitive historic or cultural resources were identified. A known prehistoric site,
24 CA-SBA-1321, is located within the Project area; however, this site is heavily damaged
25 and is no longer intact, nor eligible for the California Register of Historic Resources.

26 The proposed Project would include minor ground disturbing activities (e.g., planting)
27 over approximately 13 acres, including approximately 900 cubic yards of cut from the
28 identified borrow sites (refer to Figure 2), recontouring within the trail corridor, and
29 planting associated with restoration activity. No significant historical, archaeological, or
30 paleontological resources are known to occur within these areas of ground
31 disturbances/excavations. Additionally, the proposed borrow sites have been previously
32 disturbed by historic land use. Therefore, Project construction is not expected to
33 adversely impact cultural resources including prehistoric or historic artifacts. However,
34 given the historical presence of Chumash in the Santa Barbara area, there is a
35 possibility for unknown resources to be encountered onsite during improvements.
36 Potentially significant impacts to archaeological, paleontological, and historical resources
37 could result. Mitigation measures, MM CR-1 and MM CR-2, which require a Cultural
38 Resources Monitoring Plan and establish a protocol for the handling of human remains,
39 would ensure that impacts would be less than significant.

40 Cumulative Impacts

41 Continued loss of cultural resources on a project-by-project basis could result in significant
42 cumulative impacts to such resources over time; however, the Project area is not known to
43 contain any archeological or historic resources. Additionally, implementation of MM CR-1 and

1 MM CR-2, which require a Cultural Resources Monitoring Plan and establish a protocol for the
2 handling of human remains, would ensure that the Project's potential to impact cultural
3 resources would not be cumulatively considerable in the event that any unknown cultural
4 resources are uncovered during the implementation of the proposed Project.

5 Required Mitigation Measures

6 **MM CR-1** ***Cultural Resource Monitoring Plan:** In the unlikely event that historical,
7 archaeological, or paleontological resources are encountered during grading,
8 work must be stopped immediately or redirected until a qualified Registered
9 Professional Archaeologist and Native American representative are retained by
10 the applicant to evaluate the significance of the find pursuant to Phase 2
11 investigation standards set forth in the City Archaeological Guidelines. If remains
12 are found to be significant, they must be subject to a Phase 3 mitigation program
13 consistent with City Archaeological Guidelines and funded by the Applicant.*

14 **Plan Requirements and Timing:** This requirement must be printed on all
15 approved final grading and trail construction plans submitted for grading and land
16 use permits.

17 **Monitoring:** City staff must convey this requirement to trail construction crews
18 during a pre-construction meeting and conduct periodic field inspections to verify
19 compliance during ground disturbing activities.

20 **MM CR-2** ***Handling of Human Remains:** In the event human remains are encountered
21 during grading, work must be stopped immediately and the remains must be
22 treated in accordance with Health and Safety Code Section 7050.5 and CEQA
23 Guidelines (Title 14 CCR Division 6, Chapter 3) Section 15064.5(e).*

24 **Plan Requirements and Timing:** This requirement as well as an appropriate
25 point of contact to be contacted in the event that human remains are discovered
26 must be printed on all final grading and trail construction plans submitted to the
27 City for grading and land use permits.

28 **Monitoring:** City staff must convey this requirement to trail construction crews
29 during a pre-construction meeting and conduct periodic field inspections to verify
30 compliance during ground disturbing activities.

31 Residual Impacts

32 With implementation of MM CR-1 and MM CR-2, which require a Cultural Resources Monitoring
33 Plan and establish a protocol for the handling of human remains, residual Project-specific
34 impacts as well as the Project's contribution to cumulative impacts on historical, archaeological,
35 paleontological resources, as well as human remains, would be less than significant.
36

1 **Geology and Soils**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		×			
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		×			
ii. Strong seismic ground shaking?		×			
iii. Seismic-related ground failure, including liquefaction?			×		
iv. Landslides?		×			
b) Result in substantial soil erosion or the loss of topsoil?		×			
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				×	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				×	

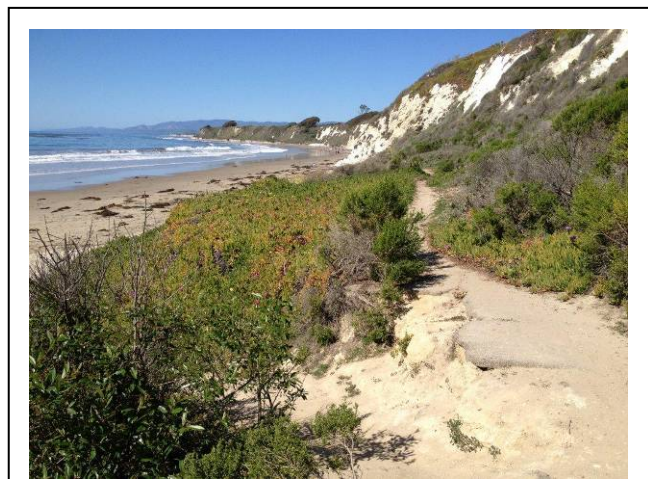
Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal alternative water disposal systems where sewers are not available for the disposal of wastewater?				×	

1 **Existing Setting**

2 *Topography*

3 The Ellwood Mesa Open Space Plan Area is located within a shallow, east-west trending valley
 4 between the Santa Ynez Mountains and the low coastal mesa (City of Goleta 2004). The
 5 topography of Ellwood Mesa is characterized by an elevated marine terrace that has been tilted
 6 and folded by uplift on the North Branch of the More Ranch fault (Minor et al. 2009). Elevations
 7 within the Project area range from just above mean sea level (msl) at the base of the bluffs to 85
 8 feet above msl atop the mesa (City of Goleta 2004). The topography of the uplifted terrace
 9 surface is gently sloping but undulating, and has been incised by and is controlled by Devereux
 10 Creek and, to a lesser extent, smaller drainages. The uplift and warping of the terrace has also
 11 created vernal pools (i.e., topographic depressions) in several locations on the Ellwood Mesa to
 12 the south of the fault. Grades of five to ten percent characterize most of the northern portion of
 13 the Project area, and steepen to more than 30 percent towards Devereux Creek (City of Goleta
 14 2004). Devereux Creek has incised a broad canyon, including several tributary ravines, which
 15 limit access as grades in these areas exceed 15 percent. Additionally, the seacliff along the
 16 Ellwood Mesa Open Space Plan Area is very steep, ranging in grade from 50 to 300 percent
 17 (City of Goleta 2004).

18 Land clearing for grazing and agriculture
 19 activities between the 1800s and early
 20 1900s resulted in erosion and gulying of
 21 several areas within the Project area.
 22 Additionally, grading for roadways, paved
 23 beach access, and oil development activities
 24 all resulted in a highly altered environment.
 25 Remnants of an old road down to the beach
 26 are still present at the southeast end of the
 27 Ellwood Mesa Open Space Plan Area, at
 28 Access Point E. This road is believed to
 29 originally be an old oil field access road from
 30 a gas plant formerly located near the top of
 31 the bluffs leading to a small road at the base
 32 of the bluffs (City of Goleta 2004). The
 33 asphalt road once allowed residents from



Beach Access Point E is characterized by remnants of a degraded asphalt road (right) that conveys surface water runoff contributes to erosion of the bluff.

1 the Santa Barbara Shores neighborhood to drive down to the beach; however, this road is
 2 severely degraded and currently serves as a conduit for runoff erosion.

3 *Soils*

4 Soils within the Project area can be grouped into associations that have formed on foothill and
 5 coastal terraces, in canyons and coastal plains, and in wetland habitats. The Milpitas-Positas-
 6 Concepcion association is composed of nearly level to steep, moderately well drained fine
 7 sandy loams on terraces. The Ayar-Diablo-Zaca association is composed of gently sloping to
 8 very steep, well-drained clays on uplands. The Camarillo-Aquepts association is composed of
 9 nearly level, poorly drained and very poorly drained fine sandy loams on low flood plains and
 10 tidal flats. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service
 11 (NRCS) has mapped the soils located within the region (Shipman 1981). The soils in the Project
 12 area are listed below and shown in Figure 7. The Diablo clay has a Capability Class II
 13 designation as prime agricultural land. However, the State Department of Conservation
 14 Important Farmlands mapping program, indicates that the Project area does not meet the
 15 criteria for prime farmland (City of Goleta 2004; County of Santa Barbara 1992).

16 **Table 6: Soil Types within the Project Area**

Soil Name	Slope	Erosion Hazard	Runoff	Restrictions for Paths or Trails
Beach Sand (BE)	0-2	Severe	Very Slow	Moderate
Camarillo fine sandy loam (Cb)	0-2	Slight	Very Slow	Moderate
Concepcion fine sandy loam (CgA)	0-2	Slight	Very Slow	Slight
Concepcion fine sandy loam (CgC2)	2-9	Moderate	Rapid	Slight
Concepcion fine sandy loam (CgE2)	15-30	Very High (Gullying)	Rapid	Moderate
Diablo clay (DaC)	2-9	Slight	Medium	Moderate
Diablo clay (DaD)	9-15	Moderate	Medium	Moderate
Milpitas-Positas fine sandy loam (MeC)	2-9	Moderate	Medium	Slight
Milpitas-Positas fine sandy loam (MeD2)	9-15	High	Rapid	Slight

17 Source: Shipman 1981

18 *Geology and Geological Hazards*

19 The Ellwood Mesa Open Space Plan Area is located on the southern flank of the Santa Ynez
 20 Mountains, in the western portion of the Transverse Ranges Geomorphic and Structural
 21 Province (California Geological Survey 2002). The combined effects of repeated, large sea level

1 changes in the Quaternary (i.e., past 1.8 million years) and tectonic uplift of the coastal plain on
2 the More Ranch fault system have resulted in uplifted marine terraces, including Ellwood Mesa,
3 which has been dated at approximately 45,000 years B.P.

4 The general geology of the coastal mesa consists of a thin veneer of Quaternary marine and
5 non-marine terrace deposits overlying Tertiary sedimentary rocks. The Miocene and Pliocene
6 Bedrock formations of the Project area are mostly overlain by Holocene and older alluvial
7 terrace deposits (Dibblee 1966). The bedrock lithology of most of the Project area is composed
8 of Monterey shale (Tm). This Miocene-age shale is well exposed along the seacliffs, and
9 exhibits whitish gray, finely laminated bedding planes that are steeply dipping to the south in
10 most places. Older Alluvium (Qoa) forms the surficial strata over most of the upland terrace
11 mesas. It consists of marine and non-marine terrace deposits (Dibblee and Ehrenspeck 1966;
12 Dibblee 1987). Recent landslide deposits (Qls) are locally found along the seacliff. Younger
13 Alluvium (Qa) is common along Devereux Creek and its tributaries, as well as other low-lying
14 areas (Dibblee 1966).

15 Geological hazards present in the Ellwood Mesa Open Space Plan Area include steep slopes,
16 expansive soils, differential ground settlement, and fault rupture. The seacliff along the Ellwood
17 Mesa Open Space Plan area is 80 feet in height and characterized by a very steep grade.
18 Several small landslides have occurred along the seacliffs which, along with debris flows and
19 rock falls, pose hazards at the base of the bluffs, particularly under saturated conditions or as
20 the result of earthquake loading. Two small slides have previously taken out portions of an old
21 road that descends from the top of the bluff to the beach. Additionally, steep slopes also pose a
22 fall hazard, both along the seacliffs and in inland erosion areas where steep gullies exist.
23 Ground surfaces along the steep drainage ravine banks have little vegetation and show a high
24 potential for slope failure during heavy rainfall.

25 The southern property boundary is composed of sheer seacliffs broken by two steep ravines
26 leading to the beach. Expansive soils are mapped in the western portion of the site (Diablo clay-
27 mapping units DaC and DaD on Figure 7). Portions of this area have been excavated for soil
28 remediation associated with a former gas plant. Differential settlement may occur across the
29 footprint of the excavation if the soils were not properly recompacted upon completion of former
30 remediation activities. All three branches of the More Ranch fault cross the property. Two small
31 slumps occur at the seacliff where the Middle Branch of the More Ranch fault meets the cliff.
32 The easternmost of these two slumps appears to be an older feature, whereas the western
33 slump exhibits more recent morphology and may still be active. Given that both the North
34 Branch and the Middle Branch are potentially active, ground rupture hazard exists. However,
35 due to the thin layer of alluvial material, relatively deep ground water, and the lack of sandy
36 soils, the liquefaction potential on the Ellwood Mesa Open Space Plan area is considered to be
37 low (City of Goleta 2004).



1 Thresholds of Significance

2 A significant impact on geology/soils would be expected to occur if the project resulted in any of
3 the impacts defined in the above checklist. The City's Thresholds Manual assumes that a
4 project would result in a potentially significant impact on geological processes if the project,
5 and/or implementation of required mitigation measures, could result in increased erosion,
6 landslides, soil creep, mudslides, and/or unstable slopes. In addition, impacts are considered
7 significant if the project would expose people and/or structures to major geological hazards such
8 as earthquakes, seismic related ground failure, or expansive soils capable of creating a
9 significant risk to life and property.

10 Project Specific Impacts

11 a) As previously discussed, the Ellwood Mesa Open Space Plan Area is traversed by the
12 More Ranch Fault, which closely follows Devereux Creek, located to the south of the
13 home developments (see Figure 8). An earthquake along a nearby fault could result in
14 significant ground shaking and possibly rupture of the More Ranch Fault within the
15 Project area. Peak ground accelerations on bedrock of 0.6 g or greater may occur at the
16 site (City of Goleta 2004). Consequently, existing as well as any proposed structures,
17 including drainage crossings, beach access steps, and drainage improvements, would
18 be subject to potentially significant impacts from earthquake events. While only habitable
19 structures are subject to Alquist-Priolo fault hazard zone setbacks in California,
20 engineering designs for the stream crossings and steps at Beach Access Point F would
21 be required to incorporate reinforcement and materials that would withstand seismic
22 activity effects related to credible ground acceleration factors. Given that these
23 measures are regulated by the California Building Code (24 Cal. Code Regs., § 1, CBC)
24 and Safety Element within the GP/CLUP, the measures would be required as part of
25 standard plan check review of the proposed Project by the City of Goleta.
26 Implementation of these measures would reduce the potential impacts of earthquake
27 ground shaking and ground rupture to less than significant.

28 b) Trail construction activities and
29 drainage improvements associated with
30 the proposed Project would result in
31 minor changes to the topography along
32 the Coastal Trail and Anza Trail
33 corridors, particularly at the drainage
34 crossings and beach access points.
35 However, these improvements would
36 be managed to be consistent with
37 GP/CLUP Policy OS 5.3, *Public Access
38 and Recreation*. Additionally, the
39 grading necessary to bring the trail
40 network up to grade and address
41 surface water erosion issues is
42 relatively minor (i.e., approximately 900
43 cubic yards of cut and fill). Further, the
44 grading would generally be spread
45 across a large gently-sloping area, and
46 the trail grade would be constructed



Implementation of the proposed Project would result in minor recontouring and the construction of drainage crossings that would bring the grade along the trail to five percent, which would create safer accessibility conditions.

1 pursuant to established CBC and City of Goleta Grading Ordinance standards (i.e.,
2 Chapter 15.09 of the City of Goleta Municipal Code Grading, Erosion and Sediment
3 Control). Regardless, the grading during trail construction activities would expose
4 underlying soils over the short-term and would potentially cause substantially increased
5 erosion and sedimentation of Devereux Creek and its tributaries. Similarly, the
6 construction of drainage improvements at the beach access points would expose soils
7 on the blufftop and bluff face. Further, removal of non-native species associated with the
8 Restoration Plan as described in the Project Description would result in temporary
9 exposure of underlying soils until the proposed vegetation and/or trail surfacing materials
10 could stabilize these areas. However, as described in the Restoration Plan (see
11 Attachment 1), planting would commence within 60 days of any soil disturbance, and
12 erosion control blankets, or natural biodegradable materials would be installed on slopes
13 as needed for bank stabilization.

14 While short-term construction impacts may increase the potential for erosion, long-term
15 impacts of the proposed Project would result in beneficial impacts related to erosion
16 within the Ellwood Mesa Open Space Plan Area. The Project would reduce the trail
17 grade to improve accessibility standards and would make the trail less susceptible to
18 sheet flow erosion, which can cause rills and gulying. The Project proposes to include
19 erosion control methods that would focus on elevating the Coastal and Anza trails
20 slightly so that they would be above grade and outsloped, thus allowing water to flow off
21 the trail system rather than ponding. Additionally, trail design would include dips and
22 additional erosion control measures to divert water off of the trail surface. Further, the
23 proposed Project would address uncontrolled runoff from blufftop and beach access
24 trails, which appears to be contributing to erosion of the coastal bluffs. Several areas of
25 the lower bluffs have been severely eroded as a result of water flowing down the
26 degraded asphalt roadway at Beach Access Point E as well as the severely entrenched
27 trail at Beach Access Point F. The proposed Project would remove the degraded asphalt
28 at Beach Access Point E and create a curvilinear trail with erosion control measures.
29 Additionally, the Project would install stairs at Beach Access Point F and the trail would
30 be ramped down to the sand. As previously described, the proposed Project would
31 include the construction of two bioswales at Beach Access Point E that would funnel
32 water into two downdrains (see Figure 8). Similarly, the proposed Project would include
33 a gravel infiltration trench with a buried perforated pipe and filter sleeve at Beach Access
34 Point F. These drainage improvements would convey runoff away from the access
35 points and would reduce long-term erosion impacts to the bluff face fronting Ellwood
36 Beach. Additionally, removal of berms within the borrow sites would provide fill material
37 for regrading and also improve drainage patterns, directing water inland, away from the
38 adjacent blufftops. Further, the Project would remove non-native species and revegetate
39 these areas with native coastal species.

40 Consequently, the short-term impacts of the proposed Project would be less than
41 significant with the incorporation of MM GEO-3, which requires the implementation of
42 Best Management Practices. However, the long-term impacts of the Project would be
43 beneficial with regard to erosion.

44 c) Given the gently sloping topography across the majority of Ellwood Mesa, recontouring
45 of the Coastal and Anza trails, including the construction of drainage crossings and
46 realigned trail segments, would not be anticipated to create unstable slopes. As
47 discussed previously, implementation of the proposed Project would reduce grade in
48 areas where it exceeds accessibility standards (e.g., following the Devereux Creek

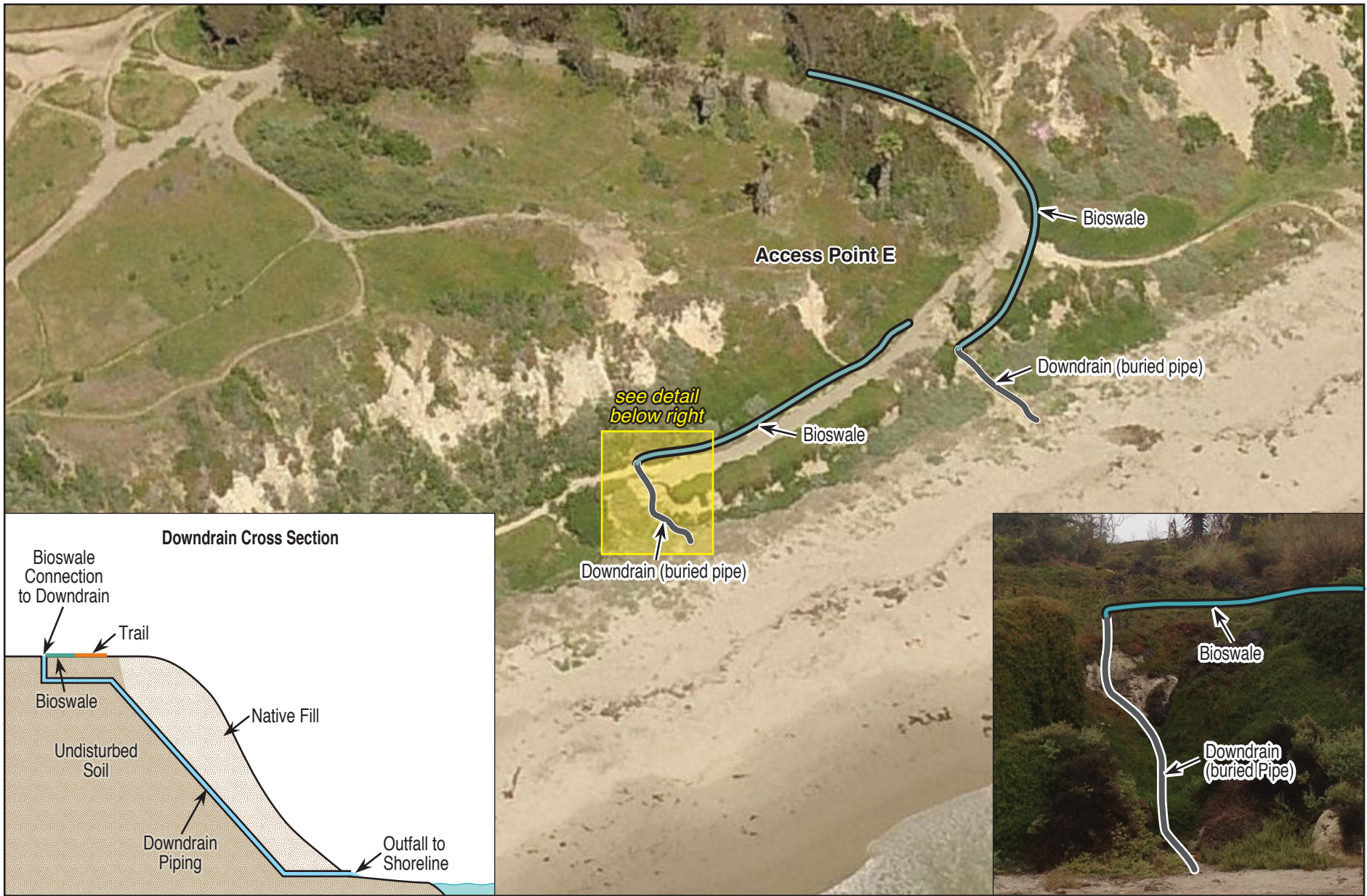
1 crossing). Landslide potential associated with the proposed blufftop trail components is
2 relatively low, although small mudflows or minor slumps are evident along the bluff, such
3 as the two that have previously damaged portions of the asphalt road at Beach Access
4 Point E. The Coastal Trail along the blufftop overlies Concepcion series soils that are
5 well drained and form low terraces that parallel the coastline. Runoff on these soils is low
6 and the hazard of erosion is slight. Additionally, the restrictions for construction trails or
7 pathways on this soil are slight (Shipman 1981). Further, drainage improvements
8 associated with the proposed project, particularly outslowing of the trail away from the
9 blufftop, would reduce blufftop runoff and erosion as well as the potential for small
10 landslides. Consequently, it is unlikely that proposed improvements of Beach Access
11 Point E and F within this area may be adversely impacted by landslides. Regardless,
12 engineered slopes included in the Project (e.g., Beach Access Points E and F) would be
13 required to meet established standards in the CBC and grading requirements in Chapter
14 15.09 of the City of Goleta Municipal Code. Impacts associated with the proposed
15 Project would be less than significant with the incorporation of MM GEO-1, which would
16 require compliance with design and grading standards.

17 d) Expansive soils (i.e., Diablo clay) are mapped in the western portion of the Project site,
18 south of the Comstock Homes Development (City of Goleta 2004). While trail
19 recontouring is proposed through this area, no structures (e.g., drainage crossings)
20 would be constructed within these soil types. Consequently, there would be no impact to
21 expansive soils.

22 e) The proposed Project would not require the use of septic tanks or wastewater disposal
23 systems. Additionally, the proposed Project would not impact the existing sanitary sewer
24 lines within the Project area. Therefore, there would be no impact to septic systems or
25 alternative wastewater treatment systems as a result of the project.

26 Cumulative Impacts

27 Implementation of the proposed Project would result in short-term adverse construction-related
28 erosion impacts, particularly in the immediate vicinity of the drainage crossings. However, long-
29 term impacts associated with the proposed Project would be beneficial as the Project would
30 address erosion of the trail system and contribute to a reduction in coastal blufftop erosion.
31 Consequently, implementation of the proposed Project would have a beneficial impact and
32 would not result in cumulative adverse impacts.



1 Required Mitigation Measures

2 **MM GEO-1** *Design and Grading Standards: Final grading and trail construction plans*
3 *submitted to the City of Goleta for review and approval must be consistent with*
4 *applicable established CBC and City of Goleta Grading Ordinance standards per*
5 *City of Goleta Municipal Code § 15.09. The plans must include the location of the*
6 *More Ranch Fault system and demonstrate that all structures are designed in*
7 *compliance with earthquake standards for CBC Seismic Zone 4.*

8 **Plan Requirements and Timing:** Final grading and trail construction plans must
9 be submitted and approved prior to issuance of a grading permit. The grading
10 permit must be issued based on compliance with all applicable laws, ordinances,
11 and regulations.

12 **Monitoring:** The City must review and approve final grading and trail
13 construction plans and must inspect site to ensure compliance.

14 **MM GEO-2** *Blufftop Erosion Monitoring: The City shall monitor natural seacliff erosion and*
15 *retreat shall be monitored every ten years and after every El Niño winter. The*
16 *City must manage the relocation of the Coastal Trail if unsafe conditions exist*
17 *along the bluffs as the result of landslides, erosion, and cliff retreat.*

18 **Plan Requirements and Timing:** The City of Goleta must monitor and document
19 Coastal Trail and beach access trail conditions at a minimum of every ten years
20 or after every El Niño storm season to ensure unsafe conditions do not exist.
21 Flagging, photo documentation, or other methods must be used by the City of
22 Goleta to manage relocation of Coastal Trail, if needed, for safety.

23 **Monitoring:** The City of Goleta must monitor the condition of the Coastal Trail
24 and beach access trails at a minimum of every ten years or after every El Niño
25 storm season to ensure unsafe conditions do not exist, and to monitor seacliff
26 retreat rates through time.

27 **MM GEO-3** *Best Management Practices (BMPs): Implementation of the proposed Project*
28 *must include the following:*

29 • *Other than what has been described for installation of the boardwalk and*
30 *other improvement activities, grading must be prohibited within 50 feet of the*
31 *Devereux Creek top-of-bank.*

32 • *The Applicant must limit excavation and grading to the dry season (April 15 to*
33 *November 1) unless a Building and Safety-approved erosion control plan is in*
34 *place and all measures therein are in effect.*

35 • *BMPs must be employed to control erosion, including temporary siltation*
36 *protection devices such as silt fencing, straw bales, and sand bags. These*
37 *must be placed at the base of all cut and fill slopes and soil stockpile areas*
38 *where potential erosion may occur. The final grading plan must include*
39 *erosion control measures including types and locations of BMPs. The plan*
40 *must be approved by the City of Goleta prior to the commencement of*
41 *grading operations.*

- 1 • *The City must periodically inspect the drainage crossings and beach access*
 2 *points during the wet season to ensure structural integrity and avoidance of*
 3 *flood hazards or scouring. Maintenance and repairs must be performed as*
 4 *needed.*

5 **Plan Requirements and Timing:** Final grading and trail construction plans for
 6 the Ellwood Mesa Open Space Plan Area must be submitted for review and
 7 approval by the City of Goleta prior to the issuance of either a grading permit or
 8 land use permit.

9 **Monitoring:** The City of Goleta must inspect construction sites and monitor
 10 effectiveness of all erosion control BMPs and other requirements. If and when
 11 erosion controls are damaged during a storm event, they must be replaced prior
 12 to resuming work in the Project area.

13 **Residual Impacts**

14 With implementation of MM GEO-1, -2, and -3, which would require design and grading
 15 standards, blufftop erosion monitoring, and other associated BMPs, residual Project-specific
 16 impacts as well as the Project's contribution to cumulative impacts on geological resources
 17 would be less than significant.

18 **Greenhouse Gas Emissions**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			×		
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			×		

19 **Existing Setting**

20 Global climate change involves alterations to long-term average weather trends (i.e., climate),
 21 which can be measured by changes in temperature, wind patterns, and precipitation (U.S.
 22 Climate Change Science Program 2009). Certain gases in the earth's atmosphere, classified as
 23 greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature.
 24 Solar radiation enters the Earth's atmosphere and a portion of the radiation is absorbed by the
 25 Earth's surface. This absorbed radiation is then emitted from the Earth as low-frequency
 26 infrared radiation, which is absorbed and re-emitted by GHGs, which absorb and emit radiation
 27 in the infrared spectrum. As a result, infrared radiation that otherwise would have escaped back
 28 into space is trapped, resulting in a warming of the atmosphere. This phenomenon, known as
 29 the greenhouse effect, is responsible for maintaining a habitable climate on Earth; however,
 30 scientific consensus has identified human-related emission of GHGs above natural levels as a

1 significant contributor to global climate change (U.S. Climate Change Science Program 2009).
2 GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ground-
3 level O₃, and fluorinated gases such as chlorofluorocarbons and hydrochlorofluorocarbons
4 (USEPA 2013).

5 In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the United States
6 Supreme Court ruled that the USEPA has the authority to regulate GHGs as pollutants under
7 the Clean Air Act (42 U.S. Code [USC] 7401 et seq.) (Center for Climate and Energy Solutions
8 2013). However, unlike criteria pollutants and toxic air contaminants (TACs), which are
9 pollutants of regional and local concern, GHGs are pollutants of global concern. Whereas
10 criteria pollutants and TACs with localized air quality effects have relatively short atmospheric
11 lifetimes, GHGs have long atmospheric lifetimes. GHGs persist in the atmosphere for long
12 enough time periods to be dispersed around the world. Although the exact lifetime of any
13 particular GHG molecule is dependent on multiple variables, it is understood that currently more
14 CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other
15 forms of sequestration (Seinfeld and Pandis 1998).

16 Emissions of GHGs contributing to global climate change are attributable in large part to human
17 activities associated with the transportation, industrial/manufacturing, electric utility, residential,
18 commercial, and agricultural sectors (CARB 2009). In California, the transportation sector is the
19 largest emitter of GHGs, followed by electricity generation (CARB 2009). California experienced
20 a statewide GHG reduction from 464 million metric tons (MMT) of CO₂ equivalent (CO₂e) in
21 2000 to 457 MMT of CO₂e in 2009, resulting in a decrease of 1.5 percent between 2000 and
22 2009. The 2009 levels are the lowest in the ten-year period while the highest level of 489 MMT
23 of CO₂e was experienced in 2007. Since 1990 GHG emissions have increased approximately
24 5.5 percent through 2009. A 5.8 percent decrease in emissions from 2008 through 2009
25 occurred but has been attributed to the slower economy. This decreasing trend is also reflected
26 in the national emissions decrease of 6.1 percent for the same period (CARB 2011). For
27 comparison, the national total GHG emissions in 2009 were 6,633 MMT of CO₂e (USEPA
28 2011), of which California's emissions represents 6.9 percent.

29 Thresholds of Significance

30 As directed by SB 97 and noted above, the California Natural Resources Agency adopted
31 amendments to the CEQA Guidelines that became effective on March 18, 2010. These new
32 CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions
33 in CEQA documents. According to the amendments made to Appendix G of the CEQA
34 Guidelines, the project would have a significant impact if it would:

- 35 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a
36 significant impact on the environment.
- 37 b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing
38 the emissions of greenhouse gases.

39 The adopted CEQA amendments require a Lead Agency to make a good-faith effort based, to
40 the extent possible, on scientific and factual data in order to describe, calculate, or estimate the
41 amount of greenhouse gas emissions resulting from a project. They give discretion to the Lead
42 Agency whether to:

1 • Use a model or methodology to quantify greenhouse gas emissions resulting from a
 2 project, and which model or methodology to use; and/or

3 • Rely on a qualitative analysis or performance-based standards.

4 In addition, a Lead Agency should consider the following factors, among others, when
 5 assessing the significance of impacts from greenhouse gas emissions on the environment:

6 • The extent to which the project may increase or reduce greenhouse gas emissions as
 7 compared to the existing environmental setting;

8 • Whether the project emissions exceed a threshold of significance that the Lead Agency
 9 determines applies to the project; and

10 • The extent to which the project complies with regulations or requirements adopted to
 11 implement a statewide, regional, or local plan for the reduction or mitigation of
 12 greenhouse gas emissions.

13 The amendments call on Lead Agencies to establish significance thresholds for their respective
 14 jurisdictions.

15 Currently, neither the State of California nor the City of Goleta has established CEQA
 16 significance thresholds for GHG emissions. Indeed, many regulatory agencies are sorting
 17 through suggested thresholds and/or making project-by-project analyses. This approach is
 18 consistent with that suggested by CAPCOA in its technical advisory entitled “*CEQA and Climate
 19 Change: Addressing Climate Change through the California Environmental Quality Act Review*
 20 (California Air Pollution Control Officers Association [CAPCOA] 2008):

21 *“...In the absence of regulatory standards for GHG emissions or other specific data to clearly
 22 define what constitutes a ‘significant project’, individual lead agencies may undertake a project-
 23 by-project analysis, consistent with available guidance and current CEQA practice.”*

24 In June 2010, the Bay Area Air Quality Management District (BAAQMD) became the first
 25 regulatory agency in the nation to approve guidelines that establish thresholds of significance
 26 for GHG emissions (BAAQMD 2010).

27 **Table 7: Bay Area Air Quality Management District Guidelines for GHG Emissions**

GHG Emission Source Category	Operational Emissions
Other than Stationary Sources	1,100 MT CO ₂ e/yr OR 4.6 MT CO ₂ e/yr/SP*/yr (residents + employees)
Stationary Sources	10,100 MT CO ₂ e/yr
Plans	6.6 MT CO ₂ e/yr/SP*/yr (residents + employees)

28 Note: SP* - Service Population

29 The BAAQMD threshold is a promulgated CEQA threshold that has undergone full public review
 30 and comment, with approval by the BAAQMD governing board, and technical support by

1 BAAQMD staff. It applies to a nine-county portion of northern California that includes very
2 diverse populations and land uses.

3 Some areas of the BAAQMD jurisdiction resemble land use patterns in the Goleta area. The
4 climatic regime in the Goleta-Santa Barbara area that governs energy demand for space
5 heating and cooling is also very comparable to that occurring in the BAAQMD. Additionally, in
6 June 2010, the Santa Barbara County Planning and Development Department released a
7 memorandum “*Support for Use of Bay Area Air Quality Management District Greenhouse Gas*
8 *Emissions Standards,*” providing evidentiary support for reliance on the proposed BAAQMD
9 standards as interim thresholds of significance in Santa Barbara County (SBCACPD 2010). The
10 memorandum notes that certain counties in the Bay Area are similar to Santa Barbara County in
11 terms of population growth, land use patterns, GP/CLUP policies, and average commute
12 patterns and times.

13 Accordingly, given that the City of Goleta does not have established thresholds of significance
14 for GHG emissions, and as the City is located in Santa Barbara County, the rationale for
15 applicability of the BAAQMD thresholds would generally apply. Therefore, the City has applied
16 the following two thresholds of significance to the project. Would the project:

17 1) Exceed the daily significance threshold adopted by the Bay Area Air Quality
18 Management District, i.e., of 1,100 MT CO₂e/yr, for operational GHG emissions and/or
19 result in significant GHG emissions based on a qualitative analysis.

20 2) Employ reasonable and feasible means to minimize GHG emissions from a qualitative
21 standpoint, in a manner that is consistent with the goals and objectives of AB 32.

22 The use of the BAAQMD threshold does not imply that it is a threshold that the City of Goleta
23 has formally adopted, or should adopt, as a GHG significance threshold for all present or future
24 project analyses.

25 *Sea Level Rise*

26 The chief potential impact of climate change on the project is a rise in sea level such that the
27 project would be impacted by coastal flooding events whose intensity is enhanced by sea level
28 rise. However, accurate assessment of the impact of climate change on the project is a highly
29 speculative activity. Published scientific articles indicate that there is no commonly-accepted
30 methodology that exists at this time for determining such impacts. There is lack of scientific
31 consensus as to how potential future climate change will influence future coastal flooding storm
32 events, and any such analysis would rely on the selection of hypothetical climate change
33 scenarios whose predictive accuracy cannot be confirmed. Quantitative estimates of future
34 climate impacts at any particular site are speculative and not subject to accurate evaluation at
35 this time. In addition to the speculative nature of inquiry into the impacts of climate change on
36 development projects, there is no requirement under CEQA that such impacts be reviewed.
37 Impacts associated with sea level rise are therefore not analyzed in this document.

38 Project Specific Impacts

39 a, b) The proposed Project would generate GHGs during Project construction activities,
40 including excavation and grading of fill material as well as the construction of drainage
41 crossings and steps at Beach Access Point F. Based on construction model runs
42 conducted using the URBEMIS 2007 (version 9.2.4) air quality modeling software for the

1 2008 unmitigated condition (see Attachment 2), it is anticipated that Project construction
2 generated CO₂ emission levels would be approximately 3.81 metric tons per day.
3 Assuming that construction would occur over the course of a three-month period, the
4 Project's total GHG emissions due to construction would be approximately 249 metric
5 tons. The City of Goleta has not adopted significance criteria for construction activities,
6 and neither has the BAAQMD. However, this level of GHG emissions is not considered
7 significant because the emissions would be temporary and finite in nature.

8 Implementation of the proposed Project would not include the development of facilities
9 that would result in direct consumption of fossil fuels or indirect operational GHG
10 emissions. Further, as discussed below in *Transportation and Traffic*, implementation of
11 the proposed Project would not result in any changes to the transportation network or
12 increases in available parking. Consequently, the proposed Project would not result in
13 increased trip generation resulting in increased transportation related GHG emissions.

14 The proposed Project's short-term construction-related GHG emissions would be minor
15 and would not be significant. Additionally, the proposed Project would not conflict with
16 any other plan, policy, or regulation of an agency adopted for the purpose of reducing
17 GHG emissions. Therefore, Project GHG emissions impacts would be less than
18 significant.

19 Cumulative Impacts

20 GHG emissions from the proposed Project, as well as GHG emissions from other projects in the
21 area would be incremental and represent a small percentage of California's GHG emissions.
22 Additionally, the proposed Project would only result in construction-related GHG emissions as
23 there are no proposed facilities that would consume fossil fuels and emit GHGs over the long-
24 term. Consequently, the incremental impact of the proposed Project would not contribute to a
25 cumulatively considerable impact with regard to GHGs.

26 Required Mitigation Measures

27 As the impacts associated with GHGs would be less than significant, no mitigation measures
28 are required or recommended.

29 Residual Impacts

30 Residual impacts as a result of GHG emissions would remain less than significant.

31

1 **Hazards and Hazardous Materials**

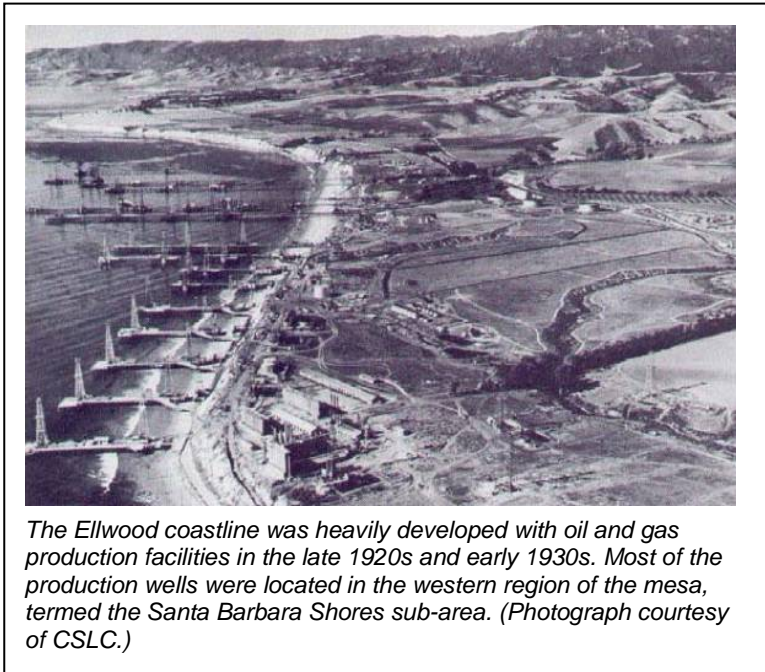
Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?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

2 **Existing Setting**

3 The Ellwood Mesa Open Space Plan Area is located in a region of historic oil and gas
 4 development comprising what was once one of the most productive oil fields in the region

1 between 1928 and 1931 (City of
2 Goleta 2004). Abandonment of
3 some of the onshore wells in the
4 Project area may have occurred as
5 early as the 1930s; however, as a
6 result of oil and gas production
7 activities, petroleum hydrocarbon
8 and petrochemical contaminants
9 associated with historic oil wells,
10 tanks, flowlines or sumps, and
11 other oil field-related equipment
12 have been identified on Ellwood
13 Mesa (City of Goleta 2004).

14 Seven historically producing
15 abandoned oil wells have been
16 identified within the Project area.
17 Oryx Energy Company "Doty" Oil
18 Wells #1, #2, #3, #7, and #8 were
19 identified as producing wells,
20 located on the beveled surface at
21 the top of the bluff. Additionally, a Phase I ESA conducted in 1986 identified Doty #4 and #5 as
22 well as four other areas of potential concern on Ellwood Mesa, including an oil well sump and
23 drill cuttings stockpile, oil field debris, crude-oil impacted soil, and an area of petroleum-
24 impacted soil located adjacent to a suspected crude oil pipeline (City of Goleta 2004). Further, a
25 surface water pond exists on the coastal bluff at Beach Access Point E, located south of Santa
26 Barbara Shores Drive. The depression for this pond appears to have been artificially created by
27 grading that was done in the past in order to extinguish a fire (City of Goleta 2004). However,
28 the possibility exists for oil, methane, or toxic gases to migrate up through this subsurface
29 feature and to release into the environment (City of Goleta 2004).



The Ellwood coastline was heavily developed with oil and gas production facilities in the late 1920s and early 1930s. Most of the production wells were located in the western region of the mesa, termed the Santa Barbara Shores sub-area. (Photograph courtesy of CSLC.)

30 In 1997, Secor International Incorporated (Secor) and OHM Remediation Services Corporation
31 conducted remediation activities at the Santa Barbara Shores Park property on the eastern end
32 of the Project area between July and October 1997. During this time, OHM Remediation
33 Services Corporation excavated approximately 60,000 cubic yards of in-situ, overburden,
34 suspect, and hydrocarbon-impacted soil from within Devereux Creek, Doty Oil Well #1, Doty Oil
35 Well #8, and the former processing plant (City of Goleta 2004) Of the total volume excavated,
36 approximately 23,000 cubic yards of hydrocarbon-impacted soil was transported offsite and
37 approximately eight cubic yards of lead-impacted soil was transported offsite (Secor 1997).
38 Additionally, mitigation measures associated with the implementation of the Ellwood-Devereux
39 Open Space Plan required appropriate well abandonment through the Fire Prevention Division
40 (FPD) and the California Division of Oil, Gas, and Geothermal Resources (DOGGR) prior to the
41 issuance of a Land Use Permit for the Comstock Homes Development. These mitigations
42 required that the applicant perform the necessary abandonment and receive FPD and DOGGR
43 verification that the mitigations were implemented and abandonment had been completed in
44 accordance with the approved plans. Further, soil management plans were required for the trail
45 construction areas to provide guidance for the proper handling, onsite management, and
46 disposal of impact soil that may be encountered during construction activities. Consequently,
47 hazardous materials associated with abandoned wells would not be expected to remain within
48 the Project area.

1 Thresholds of Significance

2 A significant impact with regard to hazards and hazardous materials would be expected to occur
3 if the project resulted in any of the impacts noted in the above checklist. In addition, the City's
4 Thresholds Manual addresses public safety impacts resulting from involuntary exposure to
5 hazardous materials. These thresholds focus on the activities that include installation of or
6 modification to facilities that handle hazardous materials, transportation of hazardous materials,
7 or non-hazardous land uses in proximity to hazardous facilities. Since the project is not a
8 hazardous materials facility, the City's risk based thresholds are not particularly applicable.
9 However, for the purposes of this analysis, the project would pose a significant impact if it
10 results in the exposure of people to a variety of hazards or hazardous materials as listed above.

11 Project Specific Impacts

12 a, b) Hazardous materials used at the
13 Project site would be limited to those
14 associated with heavy construction
15 equipment and herbicides used
16 during Project-related trail
17 construction and habitat restoration
18 activities. These potential impacts
19 would be temporary and less than
20 significant with the incorporation of
21 MM HAZ-1 which would require
22 coordination with SBCFD FPD.
23 Following the completion of trail
24 construction activities, there would
25 be no long-term impacts associated
26 with routine use or transport of
27 hazardous materials.

28 Additionally, soils in this area have
29 the potential to be impacted by
30 hazardous materials associated with
31 past oil development activities.
32 Contaminants of concern include
33 petroleum hydrocarbons (i.e.,
34 benzene, crude oil, waste oil, and
35 light petroleum distillates), metals,
36 volatile organic compounds, semi-volatile organic compounds, and polynuclear aromatic
37 hydrocarbons (PAHs). Several areas in the Ellwood Mesa Open Space Plan Area have
38 been impacted by past oil development and have been assessed and remediated as
39 required by mitigations associated with the Comstock Homes Development. Disturbance
40 of surface soils associated with native cut and fill for trail recontouring could potentially
41 uncover impacted soils and expose trail construction workers and recreational users of
42 the site to potential health hazards. Further, abandoned oil wells and oilfield debris are
43 present within the Ellwood Mesa Open Space Plan Area and pose physical hazards to
44 public health and safety. Debris consists of concrete, steel cables, piping, wood, wire,
45 steel plates, etc. There are a number of areas throughout the Open Space Plan Area
46 that have not been examined at all or have only had limited evaluation. Consequently,
47 implementation of the proposed Project could potentially result in significant short-term



Limited heavy construction equipment would be required for recontouring of the trail surface (such as the equipment shown above, used for minimal trail disturbance at Lake Los Carneros). (Photograph courtesy of Ray Ford)

- 1 impacts associated with unknown hazardous materials; however these impacts would be
2 less than significant with the incorporation of MM HAZ-1, which would require
3 coordination with SBCFD FPD.
- 4 c) The Ellwood Mesa Open Space Plan Area is located immediately south of Ellwood
5 Elementary School. However, as described in the preceding discussion, implementation
6 of the proposed Project would not result in long-term increases of hazards emissions or
7 hazardous materials on the Project site and would not directly or indirectly impact the
8 school. Therefore, implementation would result in no impacts to Ellwood Elementary
9 School or any other school proximate to the Project site.
- 10 d) The Project area is not located on a site that is known to be included on a list of
11 hazardous materials sites compiled pursuant to Government Code Section 65962.5 (City
12 of Goleta 2004). Therefore, implementation of the proposed Project would not create a
13 significant hazard to the public or the environment.
- 14 e, f) There are no private airstrips in the vicinity of the Project site. The Project site is located
15 outside of the Santa Barbara Municipal Airport approach zone as defined by the Santa
16 Barbara County Airport Land Use Plan; therefore, no measurable impact to public safety
17 would result from implementation of the proposed Project.
- 18 g) Implementation of the proposed Project would not physically interfere with an adopted
19 emergency response plan or emergency evacuation plan; however, new trail design
20 could potentially affect current emergency access to the Ellwood Mesa Open Space
21 Area due to potential changes to onsite emergency access road width. Emergency
22 access is currently provided to Ellwood Mesa by Santa Barbara Shores Drive, which
23 enters the Project area from the north where it becomes an unpaved road and meets an
24 unnamed weathered access road, which includes segments of the Anza Trail.
25 Implementation of the proposed Project would recontour this segment of trail and reduce
26 its width to approximately six feet. However, implementation of MM HAZ-1, which
27 requires coordination with the SBCFD and ensures that emergency access requirements
28 would be met, would reduce this impact to a less than significant level.
- 29 h) The proposed Project area is located outside of the fire hazard severity zones, as
30 defined by California Department of Forestry and Fire Protection (CALFIRE) (CALFIRE
31 2007; City of Goleta 2012a). However, the Project area is characterized as open space
32 with short, sparse dry climate grass fuels and very high load, dry climate timber shrub
33 fuels that pose low to moderate fire hazards (City of Goleta 2012a). The greatest fire
34 hazard in the Project area is associated with the eucalyptus groves to the north, which
35 pose extreme fire hazards (City of Goleta 2012a). Approximately 20 fire hydrants are
36 located to the north of the Project area, 12 of which are located within the adjacent
37 Santa Barbara Shores neighborhood. The Ellwood Mesa Open Space Area is included
38 in the City of Goleta Community Wildfire Protection Plan (City of Goleta 2012a), which
39 includes measures for fuel reduction to reduce wildfire hazards to nearby residences
40 associated with the nearby eucalyptus groves. Short-term project improvement activities
41 could involve the use of heavy equipment, which could pose a minor ignition risk;
42 however, implementation of MM HAZ-2, which would limit heavy equipment operation,
43 would reduce this risk to less than significant levels.

44

1 Cumulative Impacts

2 Implementation of the proposed Project would result in a minor contribution to the potential for
3 construction related upset and release of hazardous materials. However, given the size of the
4 proposed Project and the limited number of heavy equipment pieces involved in construction-
5 related activities, this impact would be incremental. Additionally, the implementation of MM
6 HAZ-1 and -2, which would require hazard identification and would limit heavy equipment
7 operation, would reduce the Project's contribution to any cumulative impacts to a less than
8 significant level.

9 Required Mitigation Measures

10 **MM HAZ-1** ***Hazard Identification:** Prior to the issuance of either a grading or land use*
11 *permit, the Applicant must coordinate with the SBCFD FPD to ensure that*
12 *emergency access and hazards or hazardous materials concerns of FPD are*
13 *addressed.*

14 **Planning Requirements and Timing:** Prior to the issuance of either a grading
15 permit or land use permit, the Applicant must demonstrate proof of coordination
16 with FPD, including the identification of all potentially hazardous areas on final
17 plans.

18 **Monitoring:** City staff must ensure that emergency access and potentially
19 hazardous areas to be avoided are documented on final grading and trail
20 construction plans for the proposed Project.

21 **MM HAZ-2** ***Heavy Equipment Operation:** Heavy equipment must not be operated in open*
22 *space areas on days when red flag warnings are issued by the SBCFD unless*
23 *FPD provides an exception given inclusion of construction-related fire*
24 *suppression measures during trail improvement. Additionally, all equipment used*
25 *on site must be properly maintained such that no leaks of oil, fuel, or residues*
26 *take place. Provisions must be in place to remediate any accidental spills. All*
27 *equipment must only be stored in the appropriate equipment staging areas and*
28 *construction vehicles must be confined to a pre-defined equipment access path*
29 *no greater than the minimum width necessary to complete necessary*
30 *construction activities.*

31 **Plan Requirements and Timing:** Prior to issuance of either a grading permit or
32 land use permit, these requirements must be included on final grading and
33 construction plans submitted for approval by the City.

34 **Monitoring:** City staff must convey these requirements to trail construction crews
35 during a pre-construction meeting held prior to any trail construction or site
36 preparation activities. Additionally, City staff must periodically monitor for
37 compliance with these requirements on days of high fire hazard.

38 Residual Impacts

39 With implementation of MM HAZ-1 and -2, which would require hazard identification and would
40 limit heavy equipment operation, residual Project-specific impacts as well as the Project's
41 contribution to cumulative impacts would be less than significant.

1 **Hydrology and Water Quality**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Violate any water quality standards or waste discharge requirements?		×			
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				×	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			×		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			×		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			×		
f) Otherwise substantially degrade water quality?		×			
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				×	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			×		
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?			×		
j) Inundation by seiche, tsunami, or mudflow?			×		

1 Existing Setting

2 *Regional Hydrology*

3 The Project area is located within the Devereux Creek Watershed, which is bounded by the
4 foothills of the Santa Ynez Mountains to the north, Storke Road and Isla Vista to the east, the
5 Pacific Ocean to the south, and Ellwood Canyon to the west. The watershed encompasses
6 2,240 acres, and ranges from 0 to 580 feet above msl (UCSB 2010). Lower areas of the
7 watershed are generally urbanized, and the upper reaches consist primarily of native coastal
8 sage scrub, chaparral vegetation, and agricultural lands (City of Goleta 2004). Hydrologic
9 features within the Project area include Devereux Creek, which spans the entire Project area
10 from west to east, and drainages that flow into Devereux Creek. In addition, numerous wetland
11 features (i.e., vernal pools) are present in the Project area.

12 *Surface Water*

13 The west branch of Devereux Creek flows through the eastern section of Sandpiper Golf Course
14 before entering the Ellwood Open Space Plan Area. Water flow in Devereux Creek is
15 intermittent and generally lasts no more than a few days beyond any particular rainfall event
16 (City of Goleta 2004). The configuration of the channel is broadly U-shaped with a relatively
17 level bed and gently sloping sides; however, a concrete channel forms the northern bank of the
18 creek downstream east of Coronado Drive (City of Goleta 2004).

19 Within the Ellwood Mesa Open Space Plan area, there are no other substantial creeks or
20 channels. However, the Project area receives seasonal stormwater flows from development
21 north of Hollister Avenue via two culverts (referred to as Drainages A1 and A2) under Hollister
22 Avenue. Although the two channels formed by these culverts begin over 400 feet apart, they
23 come to a confluence within 1,000 feet south of Hollister Avenue, east of the Comstock Homes
24 Development. The channel is referred to as Drainage A downstream of the confluence of A1
25 and A2. From this confluence, a deep gully is formed and flows southeast, joining a tributary to
26 Devereux Creek within the Ellwood Mesa Open Space Plan area (refer to Figure 6). A second
27 gently sloping swale, referred to as Drainage B, also discharges into Devereux Creek at the
28 southern edge of the Comstock Homes Development, east of Drainage A. Flows in Drainage B
29 are ephemeral and generally contain surface water for brief periods only during rain events.
30 These intermittent aquatic habitats, totaling 1.4 acres, meet the definition of wetlands subject to
31 regulation by the CCC and CDFW; however, only Drainage A1, A2, and A are U.S. Army Corps
32 of Engineers (USACE) jurisdictional wetlands (City of Goleta 2004).

33 Ponding occurs on the central and southeastern portions of the Ellwood Mesa Open Space Plan
34 Area. Depressions in the surface topography (i.e., vernal pools) collect runoff after periods of
35 heavy precipitation. The water remains intermittently in these depressions due to the presence
36 of an impermeable clay layer that typically ranges from 23 to 30 inches below the surface of the
37 ground (City of Goleta 2004). Ponding and associated vernal pool habitats are more fully
38 discussed in the Biological Resources section.

39 The primary source of water pollution within the Devereux Creek Watershed is associated with
40 untreated runoff from surfaces exposed to rain (City of Goleta 2004). Drainages in the
41 watershed collect animal waste, oil and rubber residue from cars, asbestos and metals from
42 brake linings, pesticides, silt, and various types of vegetation. These inputs may contain high
43 bacteria counts and viruses that may be toxic to aquatic life.

1 The County of Santa Barbara's Project Clean Water has taken several samples of water quality
2 in the lower Devereux Creek watershed. Between 1999 and 2001, nine samples were taken at
3 Devereux Creek at the upstream end of the culvert underneath the Ocean Meadows Golf
4 Course service road between the Ocean Meadows Golf Course and Devereux Slough.
5 Analytical results for these samples exceeded applicable water quality standards for pesticides,
6 metals, and bacteria. Additionally, Devereux Creek was recently listed on the 2010 California
7 303(d) List of Impaired Waters under the Clean Water Act. Approximately, 1.2 miles of the creek
8 are listed for fecal coliform and low dissolved oxygen; however, these pollutants are being
9 addressed through the implementation of USEPA-approved total maximum daily loads
10 (TMDLs), which limit the maximum amount of a pollutant that a waterbody can receive and still
11 safely meet water quality standards (State Water Resources Control Board [SWRCB] 2010).

12 *Groundwater*

13 The Devereux Creek Watershed is on the south limb of a large anticline exposing a thick section
14 of Tertiary age strata (City of Goleta 2004). The strata consist largely of marine sandstone,
15 siltstone, and shale, but beds of terrestrial origin also occur in the section. The chief aquifers
16 underlying the Project area include the alluvium of Quaternary age and the Monterey Shale,
17 Vaqueros Formation, and Sespe Formation of Tertiary age. In the older undifferentiated
18 formation of Tertiary age, groundwater occurs chiefly in fractures and in beds of loosely
19 cemented sandstone (City of Goleta 2004).

20 Groundwater recharge to the watershed is primarily derived from the deep infiltration of rainfall.
21 Some recharge, however, is derived by seepage from streams during flood events and by
22 infiltration of water imported to the area for irrigation. Groundwater from the mountainous area
23 moves generally southward in the watershed toward the coast at a steep hydraulic gradient. At
24 the barrier formed by the impermeable mudstone of the Rincon Shale unit, groundwater is
25 seasonally forced to the surface and discharges into upstream tributaries of Devereux Creek
26 and serves as an important source of seasonal flow to Devereux Slough (City of Goleta 2004).

27 Groundwater studies have been conducted at the Ellwood Mesa site, which have demonstrated
28 that groundwater quality within the Project area is generally poor. The shallow unconsolidated
29 terrace deposits, where petroleum contaminated soils have been found, are located
30 topographically higher than Devereux Creek and do not contain groundwater (City of Goleta
31 2004). Groundwater in the alluvium and Monterey Shale aquifers do not exhibit evidence of
32 hydrocarbon contamination; however, the groundwater in these aquifers is highly mineralized.

33 *Floodplains*

34 Areas subject to flooding within the Project vicinity include the beach, portions of the Devereux
35 Slough, and the lower reach of Devereux Creek within Ocean Meadows Golf Course (Federal
36 Emergency Management Agency [FEMA] 2012). Within the Ellwood Mesa Open Space Area,
37 the 100-year flood area is closely associated with Devereux Creek as well as the tributary to
38 Devereux Creek that flows through the Coronado Butterfly Preserve (FEMA 2012). The
39 floodplain increases in width from west to east, and is approximately 500 feet in width to the
40 east of the Project area. However, observed high water marks for Devereux Creek suggest that
41 high flows during normal rainfall events do not exceed two to three feet in depth and generally
42 are confined within the creek channel (City of Goleta 2004, 2012).

43

1 *Tsunamis*

2 Tsunamis, though rare in Santa Barbara County, may be generated by distal sources in other
3 parts of the Pacific Rim, or by coseismic displacements on local faults, such as the Channel
4 Islands Thrust fault system. Local earthquake events may trigger large-scale slope failures in
5 the Santa Barbara Channel that can result in moderate to large local tsunami events. Borrero et
6 al. (2001) determined that purely tectonically generated tsunamis could result in a run-up of
7 approximately seven feet, whereas combinations of tectonic sources and submarine mass
8 movements could generate local tsunami run-up as high as about 50 feet. The California Office
9 of Emergency Services has been provided with a recommended tsunami evacuation zone of 33
10 feet above sea level for coastal portions of southern Santa Barbara County. While tsunami run-
11 up of 50 feet is theoretically possible (Borrero et al. 2001), tsunami hazard is low within the
12 majority of the Ellwood Mesa Open Space Plan area (City of Goleta 2004).

13 Thresholds of Significance

14 A significant impact on hydrology and water quality would be expected to occur if the project
15 resulted in any of the impacts noted in the above checklist. In addition, the City's Thresholds
16 Manual assumes that a significant impact on hydrology and water resources would occur if a
17 project would result in a substantial alteration of existing drainage patterns; alter the course of a
18 stream or river; increase the rate of surface runoff to the extent that flooding, including
19 increased erosion or sedimentation occurs; create or contribute to runoff volumes exceed
20 existing or planned stormwater runoff facilities; or substantially degrade water quality.

21 Project Specific Impacts

22 a) The Project area is traversed by Devereux Creek, which is included on the Clean Water
23 Act Section 303(d) list of impaired waters (SWRCB 2010). During construction-related
24 activities, particularly those associated with the construction of the drainage crossings,
25 implementation of the proposed Project would result in exposed sediments that may
26 erode during storm events causing localized siltation and sedimentation of Devereux
27 Creek. However, this impact would not result in violations of any water quality standards
28 and would be less than significant with the incorporation of MM WAT-1, -2, -3, and -4,
29 which would require a storm water permit as well as a Notice of Intent, SWPPP, and a
30 Notice of Termination. Additionally, there would be no wastewater generated as a result
31 of the proposed Project and over the long-term, erosion and associated water quality
32 impacts would be reduced as a result of improvements to the trail system on Ellwood
33 Mesa.

34 b) Any water used during construction activities (e.g., soil watering and habitat restoration)
35 would be imported to the Project site (see *Utilities and Service Systems*). The proposed
36 Project would not require the use of groundwater. Additionally the proposed Project
37 would not measurably interfere with groundwater recharge. Consequently, the proposed
38 Project would have no impact on groundwater underlying the Ellwood Mesa Open Space
39 Area.

40 c, d) Implementation of the proposed Project would not result in any alteration to the course
41 of Devereux Creek or its tributaries as proposed trail recontouring and construction
42 would be consistent with GP/CLUP Policy OS 5.3(d). However, an 18-inch diameter
43 culvert would be constructed within Gully A, north of Devereux Creek. This channel is

1 not an active drainage and therefore, installation of the culvert would not interfere with
2 drainage during heavy storm events. Additionally, the proposed Project would result in
3 the removal of the berms along the blufftop segments of the Coastal Trail. These berms
4 would be used for fill which would slightly alter the topography of the blufftop and result
5 in an incremental increase in surface water drainage toward Devereux Creek. However,
6 there would be no substantial long-term increase in the rate or amount of erosion or
7 surface water runoff which would result in flooding of Devereux Creek or its tributaries
8 on- or off-site. Additionally, Drainage A and Devereux Creek would be spanned by
9 boardwalk style crossings that would have beneficial impacts on wetland habitat and
10 drainage (refer to *Biological Resources*). Consequently, these impacts would be less
11 than significant.

12 e) Implementation of the proposed Project would not result in the construction of
13 impermeable surfaces within the Project area. There would be beneficial impacts
14 associated with the removal of impermeable surfaces (i.e., asphalt) at Beach Access
15 Point E. Additionally, the proposed Project would slightly raise the grade of the Coastal
16 and Anza trails, which would allow water to run off of the trail rather than pond; however,
17 this runoff would likely percolate into the groundwater or flow into Devereux Creek.
18 Consequently, implementation of the proposed Project would not exceed the capacity of
19 any existing or planned stormwater drainage systems or provide substantial additional
20 sources of polluted runoff. Therefore, implementation of the proposed Project would
21 result in a less than significant impact.

22 f) During construction, implementation of the proposed Project would potentially expose
23 the Project area to pollution from construction vehicles. Some common sources of
24 construction site pollution include spilled oil, fuel, and fluids from vehicles and heavy
25 equipment; construction debris; sediment created by erosion; runoff containing
26 pesticides; and materials such as used motor oil or antifreeze. Although a release of
27 hazardous pollutants during trail grading and other construction related activities could
28 be potentially significant, incorporation of MM HAZ-2, which would limit heavy equipment
29 operation, would reduce this impact to less than significant levels.

30 g) The proposed Project does not include the construction of habitable structures.
31 Consequently, the proposed Project would not locate housing within a 100-year flood
32 hazard area.

33 h) Implementation of the proposed Project would include the construction of two boardwalk-
34 style crossings across Drainage A and Devereux Creek as well as an 18-inch culvert
35 over Gully A. A drainage analysis was prepared for the proposed Project to address the
36 impacts of the proposed structures on flood flows within Devereux Creek, which has a
37 designated 100-year flood zone (FEMA 2012). FEMA FIRM mapping and 100-year peak
38 flow rates adjacent to the crossing location at Devereux Creek were used to determine
39 the maximum water depth during 100-year peak flow events. The effects of
40 improvements in the floodway were measured by calculating the conveyance of
41 floodwater, as specified in the FEMA Certification Requirements. The conveyance
42 calculation in the drainage analysis revealed that the implementation of the proposed
43 Project would increase conveyance capacity, indicating that there would be no rise in the
44 100-year storm flow water surface elevation after the construction of the proposed
45 improvements (Flowers & Associates, Inc. 2013).

1 i, j) There are no levees or dams in the vicinity of the Project area. Additionally, all proposed
2 trail improvements within the flood zone would be constructed pursuant to Goleta
3 Municipal Code § 15.10.160 *Floodplain Management Standards of Construction*.
4 Consequently, the proposed Project would not expose people or structures to a
5 significant risk of loss, injury, or death involving flooding. While tsunami run-up of 50 feet
6 is theoretically possible (Borrero et al. 2001), tsunami hazard is low within the majority of
7 the Ellwood Mesa Open Space Area (City of Goleta 2004). Consequently, impacts
8 associated with flooding or tsunami hazard would be less than significant.

9 Cumulative Impacts

10 Implementation of the proposed Project would result in a minor contribution to the potential for
11 construction-related erosion and impacts to water quality. However, these impacts would be
12 short-term and the implementation of MM WAT-1, -2, -3, and -4, which would require a storm
13 water permit, SWPPP, Notice of Intent, and Notice of Termination, as well as MM HAZ-2, which
14 would limit heavy equipment operation would reduce these impacts to less than significant
15 levels. Consequently, the implementation of the propose Project would only incrementally
16 contribute to cumulative impacts to hydrology and water quality.

17 Required Mitigation Measures

18 **MM WAT-1 Storm Water Permit:** *The Applicant must submit documentation of a National*
19 *Pollutant Discharge Elimination System (NPDES) Storm Water Permit from the*
20 *California Regional Water Quality Control Board (RWQCB) or must submit*
21 *documentation of an exemption from permit requirements.*

22 **Plan Requirements and Timing:** The Applicant must submit the documentation
23 of the NPDES permit from the RWQCB to City staff for review and approval prior
24 to the issuance of either a grading permit or land use development permit.

25 **Monitoring:** City staff must review the documentation prior to the issuance of
26 either a grading permit or a land use development permit.

27 **MM WAT-2 Notice of Intent:** *Prior to the initiation of construction or site-preparation*
28 *activities, the Applicant must file a NOI to the RWQCB pursuant to 40 Code of*
29 *Federal Regulations (CFR) 122 and Goleta Municipal Code § 15.09.100.*

30 **MM WAT-3 Storm Water Pollution Prevention Plan:** *The Applicant must prepare a SWPPP*
31 *in accordance with the guidelines adopted by the State Water Resources Control*
32 *Board (SWRCB) covering all phases of grading and construction activities and*
33 *including all requirements of the City's erosion and sediment control plan per*
34 *Goleta Municipal Code § 15.09.290. The SWPPP must be prepared and*
35 *submitted, along with final with grading and trail construction plans, to the City*
36 *prior to the issuance of grading permits.*

37 **Plan Requirements:** The SWPPP must be prepared by a licensed civil engineer
38 and incorporate all appropriate City-approved BMPs necessary to mitigate short-
39 term construction impacts and control the discharge of material from the Project
40 site. BMP methods may include, but would not be limited to, the use of temporary
41 detention basins, straw bales, sand bagging, mulching, erosion control blankets,
42 silt fencing, and soil stabilizers.

1 **Monitoring:** City staff must review the documentation prior to the issuance of
 2 either a grading or land use permit.

3 **MM WAT-4 Notice of Termination:** *The Applicant must file a notice of termination of*
 4 *construction with the RWQCB implementing a SWPPP closure and identifying*
 5 *how pollution sources were controlled during trail construction activities.*

6 Residual Impacts

7 With implementation of MM WAT-1, -2, -3, and -4, which would require a storm water permit,
 8 SWPPP, Notice of Intent, and Notice of Termination, residual Project-specific impacts as well as
 9 the Project’s contribution to cumulative impacts would be less than significant.

10 Land Use and Planning

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Physically divide an established community?				×	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for purpose of avoiding or mitigating an environmental effect?			×		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				×	

11 Existing Setting

12 The Project area is located at the southwest end of the City of Goleta, on the South Coast of the
 13 County of Santa Barbara, along the south-central coast of California. The Ellwood Mesa Open
 14 Space Plan Area is located within the jurisdiction of the City of Goleta and within the Coastal
 15 Zone of the State of California. Surrounding land uses include Recreation, Residential, and
 16 Industrial land uses to the north, Coal Oil Point Reserve to the east, and Sandpiper Golf Course
 17 to the west.

18 The Project area is a vacant, undeveloped public open space except for a 45-space off-street
 19 public parking area at Hollister Avenue (see *Recreation*). The GP/CLUP land use designation of
 20 the Project area within the Land Use Element is Open Space/Passive Recreation (REC).
 21 According to Land Use Policy LU 9.4, these lands are subject to deed restrictions that require
 22 the use of the property to be restricted in perpetuity to passive recreational activities and habitat
 23 protection. An extensive coastal access trail system shall be maintained and any trail
 24 improvements shall be designed to maintain the natural, low-impact appearance of the existing
 25 informal trails (City of Goleta 2006). Related Policy OS 5 requires that the area be managed to

1 provide coastal access and passive, coastal-dependent recreational opportunities consistent
2 with protection and enhancement of the site's ESHAs and other environmental and scenic
3 resources.

4 The Project area also falls within an ESHA overlay for riparian corridors and monarch butterfly
5 overwintering habitat (City of Goleta 2006).

6 Additionally, the Project area is located within the planning boundary of the Airport Land Use
7 Plan (ALUP) prepared by the Santa Barbara County Airport Land Use Commission (ALUC)
8 (Santa Barbara County Association of Governments [SBCAG] 1993). The ALUP addresses
9 compatible land uses in the vicinity of Santa Barbara Airport. The ALUP establishes protection
10 zones and planning boundaries around each airport to ensure public safety and appropriate
11 management of aircraft noise impacts. The Project area is located outside of the General Airport
12 Traffic Pattern Zone, but is located in the Airport Influence Area as identified in the ALUP.

13 Thresholds of Significance

14 A significant land use and planning impact would be expected to occur if the project resulted in
15 any of the impacts noted in the above checklist.

16 Project Specific Impacts

17 a) Implementation of the proposed Project would result in trail improvements and habitat
18 restoration within the Ellwood Mesa Open Space Plan Area which is zoned for
19 Recreation (REC) under Chapter 35 Article II of the City of Goleta's Coastal Zoning
20 Ordinance. Consequently, implementation of the proposed Project would be consistent
21 with the zoning designation and would not physically divide an established community.

22 b) The purpose of the recreation zoning within the Ellwood Mesa Open Space Plan Area is
23 to provide open space for various forms of outdoor recreation. The permitted uses for
24 areas zoned for Recreation (REC) include outdoor public and/or private recreational
25 uses, such as parks, riding, hiking, bike, and walking trails. The proposed Project meets
26 the intent of the zoning designation and all proposed improvements under the Project
27 are permitted uses in the recreation zone. Additionally, the proposed Project would make
28 the trail network more consistent with the City's land use policies as it would realign two
29 segments of the shared Coastal-Anza Trail as well as one segment of the Coastal Trail,
30 consistent with the adopted GP/CLUP alignment (refer to Figure 2). Consequently, the
31 proposed Project would result in a beneficial impact with regard to consistency with the
32 GP/CLUP.

33 c) The proposed Project would be consistent with the adopted Ellwood-Devereux Open
34 Space and Habitat Management Plan and would not conflict with any other applicable
35 habitat conservation plans or natural community conservation plans. Additionally, the
36 proposed Project would be consistent with GP/CLUP Policy LU 6.2, which describes the
37 intent of open space/passive recreation areas to preserve and enhance areas with
38 significant environmental values or resources.

39 Cumulative Impacts

40 Implementation of the proposed Project would not result in any adverse impacts to land use
41 within the Project area. As previously discussed, the proposed Project would realign two

1 segments of the existing trail system, which would make them consistent with the GP/CLUP and
 2 therefore result in a minor beneficial impact to land use. Therefore, any minor contribution to
 3 cumulative impacts associated with the proposed Project at Ellwood Mesa would be beneficial.

4 **Required Mitigation Measures**

5 The impacts associated with Project would be beneficial; therefore, no mitigation measures are
 6 required or recommended.

7 **Residual Impacts**

8 There would be no adverse residual impacts associated within implementation of the proposed
 9 Project.

10 **Mineral Resources**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				×	
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				×	

11 **Existing Setting**

12 As described under Hazards and
 13 Hazardous Materials, the Ellwood Oil
 14 Field was historically one of the most
 15 productive oil fields in the area. The
 16 boundaries of the Ellwood Oil Field as
 17 well as other gas fields are within and in
 18 the vicinity of the Project area; however,
 19 the onshore portions of these sites are
 20 no longer used for petroleum or gas
 21 extraction. No known economically
 22 recoverable mineral resources are
 23 located within the Ellwood Mesa Open
 24 Space Plan Area under the jurisdiction
 25 of the City of Goleta (City of Goleta
 26 2004; Santa Barbara County Energy
 27 Division 1998).



The Ellwood Marine Terminal, operated by Venoco, is located adjacent to the west of the Project area, occupies 17.5 acres, and receives and stores crude oil.

28 The Ellwood Marine Terminal, located to

1 the east of the Project area, has been operational since the early 1930s and consists of a
2 network of former and active tanks, pipelines, roads, buildings, ponds/sumps, and other oil
3 related ancillary facilities. However, the facility is no longer active and is scheduled to be
4 removed when the current lease with the University expires.

5 In addition, California State Lands Commission lease PRC 421 historically tapped the Ellwood
6 Oil Field from wells located on the beach near Venoco's Ellwood Onshore Facility. Venoco
7 currently has an application pending for the resumption of production from this lease.

8 Thresholds of Significance

9 A significant impact on mineral resources would be expected to occur if the project resulted in
10 any of the impacts noted in the checklist above.

11 Project Specific Impacts

12 a, b) As previously discussed, no known economically recoverable mineral resources are
13 located within the Ellwood Mesa Open Space Plan Area under the jurisdiction of the City
14 of Goleta (City of Goleta 2004; Santa Barbara County Energy Division 1998). Further,
15 the Project area is not designated under GP/CLUP as an important mineral resources
16 recovery site (City of Goleta 2006). Consequently, the proposed Project would not be
17 expected to impact mineral resources (City of Goleta 2004).

18 Cumulative Impacts

19 The proposed Project would not contribute to cumulative impacts associated with mineral
20 resources.

21 Required Mitigation Measures

22 No mitigation measures are required or recommended for the proposed Project.

23 Residual Impacts

24 As implementation of the proposed Project would not be expected to adversely impact mineral
25 resources, there would be no residual impacts to as a result of the proposed trail improvements
26 and habitat restoration.
27

1 **Noise**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			×		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			×		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				×	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		×			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			×		
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				×	

2 **Existing Setting**

3 The most common approach to describe varying noise levels is to define the Equivalent Noise
 4 Level (Leq) for a specific period of time. The Leq is a single value that represents the same total
 5 sound energy as a varying noise during the same time period. Leq values are usually computed
 6 for one-hour periods, but longer or shorter time periods may be specified. Roadway noise is
 7 evaluated as the Day-Night Average Noise Level (Ldn), expressed as decibels using the A-
 8 weighted frequency distribution that duplicates the response of the human ear (dBA). The Ldn is
 9 a 24-hour average noise level based on hourly equivalent noise levels during the daytime and
 10 nighttime periods. The measure includes an adjustment or penalty of an extra ten decibels
 11 during the nighttime hours to account for the added nuisance of noise during this period. The
 12 Ldn is similar to the Community Noise Equivalent Level (CNEL), which includes an additional
 13 penalty for noise during the evening hours. The limit of acceptable noise exposure for sensitive
 14 noise receptors within an open space area is typically 60 dBA per GP/CLUP (City of Goleta
 15 2006).

1 The primary noise source in the
2 vicinity of the trailhead is roadway
3 traffic on Hollister Avenue and
4 U.S. Highway 101 to the north.
5 Additional contributors to the
6 noise environment include trains
7 as well as airplanes in the vicinity
8 of the Project area. Based on an
9 average daily traffic (ADT)
10 volume of 6,500 on Hollister
11 Avenue adjacent to the Project
12 area, the CNEL at 50 feet from
13 the center of the roadway is
14 approximately 66 dBA (City of
15 Goleta 2004). Consequently, only
16 the first 200 feet of the shared
17 Coastal-Anza Trail closest to
18 Hollister Avenue experience
19 CNEL values up to 65 dBA (City
20 of Goleta 2004, 2009). The
21 remaining portions of the Ellwood
22 Mesa Open Space Plan Area to the south exhibit quieter noise levels, consistent with Policy NE
23 1 of the City's GP/CLUP.



The trailhead parking lot is located just south of Hollister Avenue, which is the primary source of noise in the vicinity of the Project area. However, further south of Hollister Avenue, Ellwood Mesa experiences noise levels less than 58 dBA CNEL.

24 The City's GP/CLUP Noise Element indicates that the maximum noise levels from passing
25 trains reach approximately 96 dBA to 100 dBA at a distance of 100 feet from the tracks (City of
26 Goleta 2006). The average CNEL values at 100 feet from the tracks range between 70 and 75
27 dBA and the distance to the 65 dBA CNEL contour ranges from approximately 315 to 1,000 feet
28 (City of Goleta 2004). Consequently, the northern portion of the Ellwood Mesa Open Space
29 Plan Area contains CNEL values that range from approximately 61 to 66 dBA. However,
30 approximately 200 feet south of the northern boundary, the CNEL values drop to a range of 60
31 to 65 dBA (City of Goleta 2004).

32 The Santa Barbara Airport is located approximately 2.5 miles to the east of the Project area.
33 Runway 7-25 is oriented in an east-west direction and is the primary runway used by
34 commercial flights at the airport. Most departures use Runway 25, and fly toward the west,
35 passing over the property, or turn to the south before reaching this area. The northern region of
36 the Project area, in the vicinity of the Comstock Homes Development, is located approximately
37 4,500 feet west of the western point of the 60 dBA CNEL contour for the airport (City of Goleta
38 2004). Although this location is well outside of the 60 dBA CNEL contour and nearly two miles
39 from the western edge of the airport itself, aircraft departing toward the west are audible. Typical
40 aircraft overflight noise levels measured at this distance from the airport range from 60 to 65
41 dBA for short periods. At its closest point, along its eastern boundary, the Project area lies
42 approximately 3,000 feet outside of the 60 dBA CNEL contour of the Santa Barbara Airport.
43 (City of Goleta 2004).
44

1 Thresholds of Significance

2 A significant noise impact would be expected to occur if the project resulted in any of the
3 impacts noted in the above checklist. Additional thresholds are contained in the City's
4 Thresholds Manual. The City's adopted thresholds assume that outdoor CNEL noise levels in
5 excess of 65 dBA are considered potentially significant noise impacts on sensitive receptors.

6 Project Specific Impacts

7 *Construction Related Impacts*

8 b) The proposed Project would not expose neighboring sensitive receptors to excessive
9 groundborne vibration or groundborne noise levels since construction associated with
10 the trail improvements would be limited primarily to minor excavation and recontouring.
11 Additionally, the construction of improvements including the culvert over Gully A, small
12 boardwalk crossings over Drainage A and Devereux Creek, and steps at Beach Access
13 Point F would not require techniques that would generate a substantial amount of
14 groundborne vibration or noise, such as the driving of foundation piles. Consequently,
15 there would be a less than significant impacts associated with groundborne noise and
16 vibration on sensitive receptors in the area.

17 d) Construction activities associated with implementation of the proposed Project would
18 occur throughout the Ellwood Mesa Space Open Plan Area along the California Coastal
19 Trail and Anza Trail corridors as well as at Beach Access Points E and F. During the
20 proposed three-month construction period, construction noise would be generated from
21 excavation and grading activities as well as construction associated with the drainage
22 crossings and steps at Access Point F. The City's Thresholds Manual notes construction
23 noise poses a potentially significant impact on sensitive receptors if such receptors are
24 within 1,600 feet of the construction site. Noise associated with heavy equipment
25 operation and construction activities can average as high as 95 dB or more measured 50
26 feet from the source. The construction of the drainage crossings would occur within 200
27 feet of the nearest residents within the Comstock Homes Development. Consequently,
28 sensitive receptors within this residential neighborhood may hear peak noise levels
29 exceeding 65 dBA during construction of the crossings. Additionally, open space users
30 visiting in the area during excavation and grading activities may also be exposed to
31 noise levels exceeding 65 dBA. However, these noise levels would be reduced through
32 the implementation of BMPs. Consequently, impacts associated with construction noise
33 would be less than significant with implementation of MM NOI-1, -2, and -3, which would
34 limit construction timing, shield noise, and implement BMPs.

35 *Operational Noise Impacts*

36 a, c) As previously discussed, the limit of acceptable noise exposure for sensitive noise
37 receptors within an open space area is typically 60 dBA per the Noise Element of the
38 GP/CLUP (City of Goleta 2006). The Project area experiences maximum CNEL values
39 of approximately 64 dBA near Hollister Avenue, where the 65 dBA noise contour covers
40 approximately 1.5 acres, including Sperling Parking Lot (City of Goleta 2004). However,
41 the remaining portions of the Ellwood Mesa Open Space Plan Area to the south exhibit
42 much quieter noise levels within the 60 dBA threshold (City of Goleta 2004, 2009a). No
43 new long-term sources of noise would be anticipated under the proposed Project, which

1 is limited to trail improvements and habitat restoration that would be consistent with the
2 Ellwood Mesa Open Space Plan. The Ellwood Mesa Open Space Plan is intended to
3 promote passive recreational use consistent with existing use land use patterns.
4 Consequently, no new future noise generating activities are anticipated as a result of
5 continued long-term public use of the Project area (City of Goleta 2004). Further, there
6 would be a less than significant impact with regard to the exposure of persons (i.e., trail
7 users) to noise levels in excess of the standards described in the GP/CLUP as almost all
8 of the Ellwood Mesa Open Space Area, except for the northernmost 1.5 acres, is located
9 outside of the 65 dBA noise contour.

10 e) The Ellwood Mesa Open Space Area is located outside of the Santa Barbara Municipal
11 Airport Approach Zone and approximately 3,000 feet outside of the 60 dBA contour
12 associated with the airport. As with the other parcels in the area, this area is also subject
13 to noise from aircraft departing towards the west from the Santa Barbara Airport. For
14 relatively short periods ranging aircraft noise levels may range generally from 60 to 65
15 dBA in this area; however occasional noise intrusions for open space users are
16 considered less than significant as Ellwood Mesa experiences average noise levels
17 below the 60dBA threshold for sensitive receptors.

18 f) There are no private airstrips within the vicinity of the Project site.

19 Cumulative Impacts

20 Implementation of the proposed Project would result in an incremental contribution to
21 cumulative construction-related noise. However, within implementation of MM NOI-1, -2, and -3,
22 which would limit construction timing, shield noise, and implement BMPs. the proposed Project's
23 contribution would be minor. Additionally, noise as result of construction-related activity would
24 be short-term and no long-term increases in noise would result.

25 Required Mitigation Measures

26 **MM NOI-1** ***Construction Timing:** The operation or maintenance of heavy construction*
27 *equipment within 500 feet of residential developments must be limited to the*
28 *maximum extent feasible. Additionally, the operation or maintenance of heavy*
29 *construction equipment must not occur in this area on State holidays (e.g.,*
30 *Thanksgiving, Labor Day).*

31 **Plan Requirements and Timing:** One sign stating these restrictions must be
32 provided by the Applicant and posted on site. This requirement must be printed
33 on final grading and construction plans prior to the issuance of either a grading
34 permit or a land use development permit. The sign must be in place prior to
35 beginning of and throughout grading and construction activities.

36 **Monitoring:** City staff must convey these requirements to trail construction crews
37 during a pre-construction meeting held prior to the commencement of any
38 construction or site-preparation activities. City staff must also conduct periodic
39 field inspections to verify compliance during construction activities.

40 **MM NOI-2** ***Construction Equipment:** Stationary construction equipment used on the*
41 *northern segments of the shared Coastal-Anza Trail that would generate noise in*
42 *excess of 65 dBA at the Project boundaries must be shielded and located as far*

1 *towards the interior of the construction site as practical to minimize the noise*
2 *levels at the Comstock Homes Development and the golf course to the west.*

3 **Plan Requirements and Timing:** The equipment area must be designated on
4 final grading and trail construction plans. Equipment and shielding must remain in
5 the designated location throughout construction activities.

6 **Monitoring:** City staff or designee must conduct periodic field inspections to
7 verify compliance during construction activities.

8 **MM NOI-3** **Best Management Practices (BMPs):** *The following measures must be*
9 *incorporated into final grading and trail construction plans to reduce the impact of*
10 *construction noise per GP/CLUP Policy NE 6.5:*

- 11 • *The Applicant must ensure that construction equipment is properly*
12 *muffled according to manufacturer's specifications or as required by the*
13 *City, whichever is more stringent.*
- 14 • *The Applicant must place noise-generating construction equipment and*
15 *locate construction staging areas away from noise-sensitive activities,*
16 *where feasible, to the satisfaction of City staff.*
- 17 • *The Applicant must implement noise attenuation measures which may*
18 *include, but are not limited to, changing the location of stationary*
19 *construction equipment, shutting off idling equipment, and installing*
20 *acoustic barriers around significant sources of stationary construction*
21 *noise.*

22 **Plan Requirements and Timing:** Final grading and trail construction plans must
23 identify BMPs to be implemented during construction. BMPs must be identified
24 and described for submittal to City staff for review and approval prior to the
25 issuance of either a grading permit or land use permit. BMPs must be adhered to
26 for the duration of the Project.

27 **Monitoring:** City staff must convey these requirements to trail construction crews
28 during a pre-construction meeting held prior to the commencement of any
29 construction or site-preparation activities. City staff must also conduct periodic
30 field inspections to verify compliance during construction activities.

31 Residual Impacts

32 During trail construction activities, residual impacts associated with construction-related noise
33 would remain; however, these impacts would be short-term and less than significant with the
34 incorporation of MM NOI-1, -2, and -3, which would limit construction timing, shield noise, and
35 implement BMPs.

36

1 **Public Services**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of these public services:					
i. Fire protection?				×	
ii. Police protection?				×	
iii. Schools?				×	
iv. Parks?				×	
v. Other public facilities?				×	

2 **Existing Setting**

3 The Project area is served by the City of Goleta Police Department (contracted by Santa
 4 Barbara County Sheriff's Department), which has a jurisdiction that covers over 2,744 square
 5 miles, including 118 miles of coastline (Santa Barbara Sheriff's Department 2007). The Sheriff's
 6 Department currently provides law enforcement services to the incorporated area in the Project
 7 vicinity via a mutual services agreement with the City of Goleta. The Sheriff's Department has a
 8 staff of approximately 30 sworn peace officers in the incorporated area of Goleta. The main
 9 station is located at 4434 Calle Real in Goleta and is staffed with 32 full time staff (Santa
 10 Barbara Sheriff's Department 2013). The Sheriff's Department's service area includes
 11 unincorporated areas from Gaviota in the north. The Sheriff's Department tries to maintain an
 12 officer-to-population ratio of 1:1,200; an optimal ratio would be 1:1,000. This ratio rises and falls
 13 with the Sheriff's Department budget. The Department reports a relatively low level of calls from
 14 the area, with most calls related to domestic or neighborhood disputes. However, the Sheriff's
 15 Department has not identified any unusual issues relating to the Project area. Additionally, the
 16 overall crime rate in Santa Barbara County has dropped in recent years, reflecting the trend
 17 across the state (City of Goleta 2004).

18 *Fire Department*

19 The Santa Barbara County Fire Department (SBCFD) provides fire protection services to the
 20 Project area under contract with the City of Goleta. Stations Number 11, 12, 14, and 17
 21 currently provide service in the Project area. The station closest to the Ellwood Mesa Open
 22 Space Plan Area is Station 11, which is located on Storke Road and serves as the primary
 23 response unit. Station 11 has an engine company with a staff of three personnel, consisting of
 24 an engine company captain, engineer, and firefighter (City of Goleta 2004). This engine
 25 company provides immediate response on incidents as determined by the type of call. Station

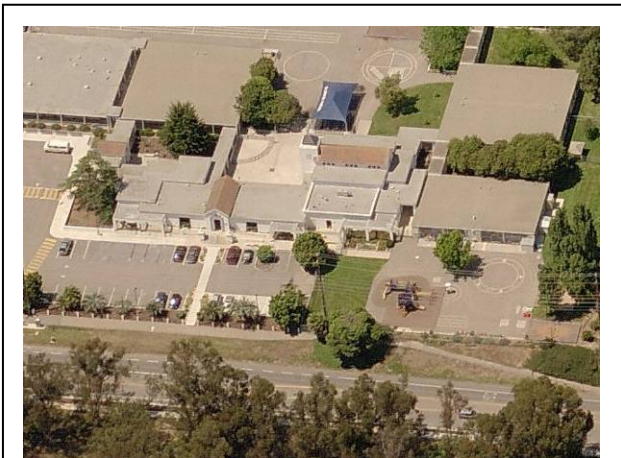
1 11 also houses a truck company (i.e., ladder truck), which is staffed with three additional
2 personnel. This truck company is designated a countywide emergency response rescue vehicle
3 and is not solely dedicated to serve Station 11. As such, Truck Company 11 is not relied on to
4 provide immediate response for the service population in the Station 11 district (City of Goleta
5 2012a).

6 The SBCFD serves an area of approximately 2,700 square miles and includes the
7 unincorporated sections of the County. The SBCFD is comprised of 15 fire stations. In general,
8 all firefighters are trained as emergency medical technicians. Criteria used to determine
9 adequacy of fire protection services include a five-minute response time, ratio of firefighters to
10 population, and the population served.

11 The five-minute response standard is used for urban areas, and refers to the time it takes for a
12 unit to reach a call and set up equipment after leaving the station. Response times under five
13 minutes are considered adequate and over five minutes are substandard. Response time from
14 Fire Station 11 to the Project area is typically within five minutes (City of Goleta 2012a).

15 *Schools*

16 Public education services are provided within
17 Goleta and the remainder of the Goleta Valley
18 by the Goleta Union School District (GUSD)
19 and the Santa Barbara Unified School District
20 (SBUSD). These schools include Isla Vista
21 Elementary School at 6875 El Colegio Road,
22 Ellwood Elementary School at 7686 Hollister
23 Avenue, Goleta Valley Junior High School at
24 6100 Stow Canyon Road, and Dos Pueblos
25 High School at 7266 Alameda Avenue (City of
26 Goleta 2012b).



Ellwood Elementary school is located north of Hollister Avenue adjacent to the Project site.

27 Thresholds of Significance

28 A significant impact on public services would
29 be expected to occur if the project resulted in
30 any of the impacts noted in the above
31 checklist. While the National Fire Protection Association (NFPA) and SBCFD criteria shown
32 above are not adopted thresholds of significance, they provide a guideline for determining
33 significance. In addition, the City's Thresholds Manual includes thresholds of significance for
34 potential impacts on area schools. Specifically, under these thresholds any project that would
35 generate enough students to generate the need for an additional classroom using current State
36 standards, would be considered to result in a significant impact on area schools.

37 Project Specific Impacts

38 a) Implementation of the proposed Project would be limited to trail restoration
39 improvements to an existing area designated for recreation, which may enhance existing
40 conditions but would not generate significant new demand for public services. There
41 would be no provision of new government facilities that would necessitate additional
42 public services (e.g., fire protection, police protection, schools, parks, etc.). Therefore,
43 implementation of the proposed Project would not result in impacts to public services.

1 **Cumulative Impacts**

2 The proposed Project would not contribute to cumulative impacts associated with public
 3 services.

4 **Required Mitigation Measures**

5 No mitigation measures are required or recommended for the proposed Project.

6 **Residual Impacts**

7 There would be no residual impacts to public services as a result of the proposed Project.

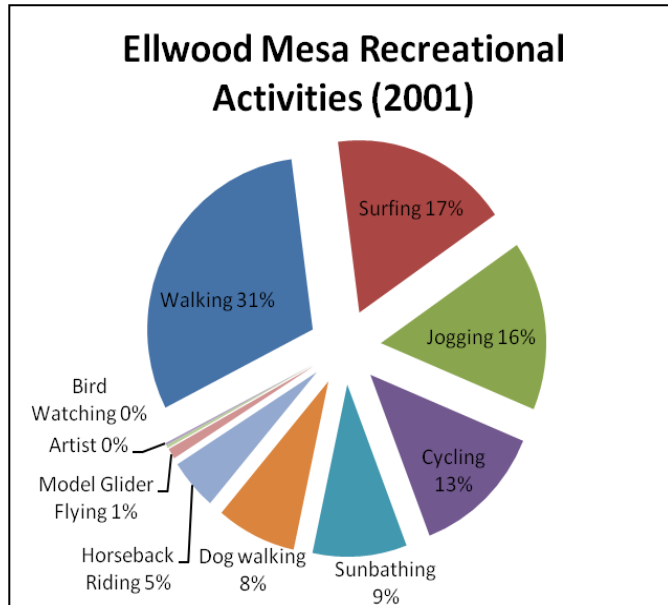
8 **Recreation**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			×		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		×			

9 **Existing Setting**

10 The Project area under the jurisdiction of the City of Goleta is a multiple-use, passive recreation
 11 area. Ellwood Mesa and the greater Devereux Slough ecosystem are in close proximity to the
 12 communities of Goleta and Isla Vista. Additionally, Ellwood Mesa provides two coastal access
 13 points, which also attracts visitors. Recreational activities currently take place over most of the
 14 proposed Ellwood Mesa Open Space Plan Area; however, these activities vary according to
 15 season as fewer recreational users utilize Ellwood Mesa during wet periods (City of Goleta
 16 2004).

1 In September and October 2001, a visitor
2 count and data from a survey
3 questionnaire were gathered by public
4 agency staff. Respondents to the survey
5 questionnaire were asked to rank the
6 importance of a variety of the area's uses.
7 Walking was ranked by 78 percent of the
8 respondents as a very important activity,
9 followed by dog-walking, jogging, biking,
10 and sunbathing with each being ranked as
11 important by about one-third of survey
12 respondents (City of Goleta 2004). The
13 survey response indicated that there are
14 diverse users of the Ellwood Mesa Open
15 Space Plan Area, with walkers
16 characterized as the most dominant user
17 group.



18 Parking for recreational users is provided
19 by Sperling Parking Lot, which includes 45
20 parking spaces including 3 handicapped
21 spaces. A trailhead restroom is also
22 located within the parking lot. Further, the
23 main trailhead access point contains a
24 dog “mutt mitt station”, trash receptacles,
25 signage, and a “Save Ellwood Mesa”
26 brochure box. The parking area is
27 surrounded by a split-wood fence and
28 gate with hours posted at the entrance.
29 Signage prohibits motorcycle and
30 motorized vehicle uses on the property.
31 Signs are also in place to identify priority
32 public uses of the area (i.e., which trails
33 are appropriate for equestrian use and/or
34 hiking)



35 The Coronado Butterfly Preserve, which is
36 located within the Ellwood neighborhood
37 on Coronado Street, is a major attraction at Ellwood Mesa. The Preserve entrance provides a
38 connection to the Coronado Open Space Trail that leads towards the Ellwood Main Monarch
39 Grove (Goleta Butterfly Grove) via a footbridge over a tributary of Devereux Creek. The Ellwood
40 Main Monarch Grove is a 217-acre site that consists of undeveloped open space that can be
41 accessed by an existing trail network via foot, bike, or horse along several trails. There are two
42 main butterfly viewing areas currently protected by a low-profile rope fence, with posted signs
43 prohibiting horses and bicycles, and signage advising visitors on appropriate use of the area.
44 This area is heavily used by hikers during the peak butterfly season.

45 Several major north-south and east-west oriented trails, including the Coastal Trail and the Anza
46 Trail, currently exist on Ellwood Mesa. These trails cross Devereux Creek or tributaries to the
47 creek at different locations and provide access across the mesa. Several interconnected,
48 unimproved trails are also located on the Ellwood Mesa, which provide informal access between

1 the Coastal and Anza trails. In addition, two coastal access trails (i.e., Beach Access Point E
2 and F) are provided off of the Coastal Trail along the bluff. These trails provide access to
3 Ellwood Beach at the base of the bluffs. Ellwood Beach is used by equestrian operators and
4 tours that serve the Bacara Resort and Spa. Signage is located at Access Point D (on
5 University-owned land) requesting that equestrian users remain out of the critical habitat
6 designation area for the western snowy plover located near this access point.

7 Thresholds of Significance

8 A significant impact on Recreation would be expected to occur if the proposed project resulted
9 in any of the impacts noted in the above checklist.

10 Project Specific Impacts

11 a) Implementation of the proposed Project would result in improvements to the Coastal and
12 Anza trails, including the beach access points on Ellwood Mesa. The proposed Project
13 would recontour the trail system to create safer access on Ellwood Mesa. Additionally,
14 the proposed Project would remove the degraded asphalt road at Beach Access Point E
15 and install steps at Beach Access Point F, which would reduce surface water runoff and
16 improve access to Ellwood Beach at the base of the bluffs, consistent with Sections
17 30210 and 30211 of the California Coastal Act. The proposed Project would not include
18 the construction of additional parking spaces or additional facilities that would directly
19 accommodate more visitors. The Ellwood Open Space Area is managed for passive
20 recreation activities. Therefore, by maintaining these activities, there would be a less
21 than significant impact with regard to use of the Ellwood Mesa Space Open Plan Area
22 following implementation of the proposed Project.

23 Implementation of the proposed Project would result in a beneficial impact to the Ellwood
24 Mesa Open Space Area trail network, as the Coastal and Anza trails are currently
25 degraded by persistent water erosion, ponding, and trail braiding. The proposed Project
26 would recontour and slightly elevate the trail surfaces allowing water to run off rather
27 than pond, which indirectly results in trail braiding as trail users avoid the puddles.
28 Additionally, the proposed Project would remove the berms at the borrow pit locations,
29 which currently direct surface water toward the blufftop contributing to blufftop erosion.
30 Further, the proposed Project would include drainage improvements at both of the beach
31 access points. These improvements would reduce erosion within the Project area and
32 improve the overall condition of the trail network. The Project would also include the
33 installation of drainage crossings including a boardwalk style crossing across Devereux
34 Creek. These improvements would increase access across the Ellwood Mesa Open
35 Space Area as they would ensure that the trails have safer accessibility.

36 As previously discussed in the *Land Use and Planning* section, these improvements
37 would be consistent with the area's land use designation for recreation. The proposed
38 Project would assure the long-term availability of this coastal property for public
39 recreational use. Consequently, the proposed Project would have a beneficial impact to
40 recreation.

41 b) As previously discussed, implementation of the proposed Project would result in long-
42 term improvements to the existing trail system on Ellwood Mesa. However,
43 implementation of the proposed Project would result in potentially adverse short-term
44 construction impacts, including temporary closure of some trail segments during the

1 proposed three-month construction period as well as short-term effects upon biological
2 resources, hydrology and water quality, and geological resources. However,
3 implementation of the MM REC-1, which would require a Construction-related
4 Temporary Trail Closure Plan, in addition to those required for the other resource areas
5 would reduce construction-related impacts to less than significant levels.

6 Long-term beneficial impacts on the Ellwood Mesa Open Space Area would include the
7 overall reduction in erosion associated with the trail network including the removal of the
8 berms which direct surface water flow toward to the blufftops. Additionally, the proposed
9 Project would improve the quality of ESHA, consistent with the intent of GP/CLUP Policy
10 OS 5.4, as it would include habitat restoration along the trail corridor and realignment of
11 the Coastal and Anza trails per the GP/CLUP to avoid sensitive riparian and southern
12 vernal pool habitat.

13 Consequently, while the proposed Project would result in short-term impacts that would
14 be less than significant with the incorporation of mitigation measures, the trail
15 improvements and habitat restoration associated with the proposed Project would result
16 in long-term beneficial impacts to the physical environment.

17 Cumulative Impacts

18 The proposed Project, in combination with other proposed projects and a general increase in
19 population and use intensity in the Ellwood Mesa Open Space Plan Area, could cumulatively
20 add to a long-term trend of increased public use, access or activities in the Ellwood-Devereux
21 Open Space Plan Area. However, implementation of the proposed Project would not result in
22 the construction of new parking spaces or other facilities that would directly induce additional
23 use of Ellwood Open Space Area. Implementation of the Open Space Plan would include
24 measures (e.g., defined trails, trail maintenance, and interpretive/educational signs and
25 trailhead information) designed to increase public awareness and appreciation of natural,
26 cultural, and recreational resources, thus partially offsetting this impact by reducing the risk of
27 unintentional or intentional deterioration of recreational resources. Consequently,
28 implementation of the proposed Project would not contribute to considerable long-term adverse
29 cumulative impacts.

30 Required Mitigation Measures

31 Mitigation measures previously discussed for the proposed Project, including MM BIO-1 and -2,
32 MM WAT-1, -2, -3-, and -4, and MM GEO-1, -2, and -3 would reduce the effect of the proposed
33 Project to recreation resources to a less than significant level. Additionally, MM REC-1 would
34 ensure public access to the beach from Ellwood Mesa throughout trail-construction activities.

35 **MM REC-1** ***Construction-related Temporary Trail Closure Plan:** The Applicant must*
36 *prepare a construction-related temporary trail closure plan, which must outline*
37 *construction timing and the duration of necessary construction-related temporary*
38 *trail closures. Temporary trail closures must be limited to the maximum extent*
39 *feasible during trail construction and habitat restoration activities. Areas that*
40 *necessitate temporary closure for trail recontouring must be roped off to protect*
41 *public safety in these areas. During construction of the shared Coastal-Anza Trail*
42 *realignment, safe access to Ellwood Mesa must be provided via another route.*
43 *Similarly, beach access point improvements must not be constructed*
44 *simultaneously; at least one access point must remain open at all times.*

1 **Plan Requirements and Timing.** The Trail Closure Plan must be reviewed and
 2 approved by the City of Goleta prior to issuance of either a grading permit or land
 3 use permit.

4 **Monitoring.** The City of Goleta will conduct additional site investigations, as
 5 appropriate.

6 **Residual Impacts**

7 During trail construction activities, residual impacts associated with construction-related
 8 activities would remain; however, these impacts would be short-term and less than significant
 9 with the incorporation of MM REC-1, which would ensure public access to the beach from
 10 Ellwood Mesa throughout trail-construction activities, as well as the mitigation measures
 11 discussed for the other resource areas.

12 **Transportation and Traffic**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		×			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			×		
c) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			×		
d) Conflict with and applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			×		

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
e) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				×	
f) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				×	
g) Result in inadequate emergency access?		×			
h) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				×	

1 **Existing Setting**

2 The circulation system in the vicinity of Ellwood Mesa is comprised of regional highways, arterial
 3 streets, and collector streets. The principal components of this street network include U.S.
 4 Highway 101, Storke Road, Winchester Canyon Road, and Hollister Avenue.

5 Within Santa Barbara County, U.S. Highway 101 is a four to six-lane highway providing access
 6 between the City of Goleta and the cities of Santa Barbara, Carpinteria, and Ventura to the
 7 south as well as Buellton and Santa Maria to the north. Primary access between U.S. Highway
 8 101 and Ellwood Mesa is provided via the Hollister Avenue-Winchester Canyon Road
 9 interchange to the west, with secondary access provided via the Storke Road interchange to the
 10 east (City of Goleta 2004). The U.S. Highway 101/ Hollister Avenue interchange is controlled by
 11 stop signs, and the U.S. Highway 101/Glenn Annie Road intersection is signalized. Hollister
 12 Avenue is a two- to four-lane arterial street which serves as the major east-west surface street
 13 route in the Goleta area. Hollister Avenue extends to the east from its terminus at the U.S.
 14 Highway 101 interchange adjacent to Winchester Canyon Road through the City of Goleta. East
 15 of the Goleta area, Hollister Avenue connects to State Street, which extends into the City of
 16 Santa Barbara. West of Storke Road, Hollister Avenue extends as a four-lane arterial with left
 17 turn lanes to Pebble Beach Drive, where it narrows to two lanes. Within the immediate vicinity of
 18 the Project area, Hollister Avenue is signalized at Storke Road/Marketplace Drive, Pacific Oaks
 19 Road, Entrance Road, and Ellwood School. The intersections within the immediate vicinity of
 20 the Project area all operate at Level of Service (LOS) C or better, except for the intersection of
 21 Storke Road and Hollister Avenue, which operates at LOS D during the p.m. peak hour
 22 according to the Transportation Element of the City's GP/CLUP (City of Goleta 2006).

23 The Project area is also served by Metropolitan Transit District (MTD) Bus Line 25, which
 24 provides a connection between the Project area, the Camino Real Marketplace, and the
 25 University. MTD bus stops are located on the north and south side of Hollister Avenue at Palo
 26 Alto Drive, Santa Barbara Shores Drive, Viajero Drive, and the Sandpiper Golf Course, with
 27 service provided every 60 minutes. Connections to downtown Goleta and downtown Santa

1 Barbara are provided via additional MTD bus lines that connect to Bus Line 25 at the Camino
 2 Real Marketplace and University transfer stations.

3 Additionally, a Class II bike lane is present on Hollister Avenue from the U.S. Highway
 4 101/Hollister Avenue interchange to beyond the east of Storke Road. Curb, gutter, and
 5 sidewalks are also constructed along the south side of Hollister Avenue eastward from Santa
 6 Barbara Shores Drive to Storke Road. On the north side, curb, gutter, and sidewalk are partially
 7 provided between Pacific Oaks Road and Viajero Drive (City of Goleta 2004).

8 Thresholds of Significance

9 A significant project generated traffic impact would be expected to occur if the project resulted in
 10 any of the impacts noted in the above checklist. Additional thresholds of significance are set
 11 forth in the City’s Thresholds Manual and include the following:

- 12 1) The addition of project traffic to an intersection increases the volume to capacity (V/C)
 13 ratio by the value provided below or sends at least five, ten, or 15 trips to intersections
 14 operating at LOS F, E or D respectively.

15 **Table 8: City of Goleta Transportation and Traffic Thresholds**

Level of Service (including the project)	Increase in V/C
A	> .20
B	> .15
C	> .10
Or the Addition of	
D	15 trips
E	10 trips
F	5 trips

- 16 2) Project access to a major road or arterial road would require a driveway that would
 17 create an unsafe situation or a new traffic signal or major revisions to an existing traffic
 18 signal.

- 19 3) Project adds traffic to a roadway that has design features (e.g. narrow width, road side
 20 ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives
 21 use which would be incompatible with a substantial increase in traffic (e.g. rural roads
 22 with use by farm equipment, livestock, horseback riding, or residential roads with heavy
 23 pedestrian or recreational use, etc.) that will become potential safety problems with the
 24 addition of project or cumulative traffic.

- 25 4) Project traffic would utilize a substantial portion of an intersection(s) capacity where the
 26 intersection is currently operating at acceptable levels of service (A-C) but with
 27 cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial
 28 is defined as a minimum change of 0.03 for intersections which would operate from 0.80

1 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90,
2 and 0.01 for intersections operating at anything lower.

3 Project Specific Impacts

4 a, c, d) During the construction, implementation of the proposed Project would potentially result
5 in an incremental increase in traffic along Hollister Avenue and a minor reduction in
6 available parking spaces at Sperling Parking Lot associated with the presence of
7 construction workers and construction equipment. Additionally, a limited number of haul
8 truck (e.g., pick-up truck) trips would be required to transport approximately 15 cubic
9 yards of degraded asphalt to the granite recycling facility at 5336 Debbie Lane. The haul
10 route from the Project site would follow Hollister Avenue east to Patterson Avenue,
11 where it would turn toward south to access the site. However, construction related
12 transportation impacts would be short-term and would not result in substantial changes
13 to circulation or available parking within the vicinity of the Ellwood Open Space Area.
14 Implementation of MM TT-1 and -2, which would require a traffic and pedestrian
15 management plan and a construction schedule, would reduce this short-term impact to
16 less than significant levels.

17 Additionally, implementation of the proposed Project would not result in any substantial
18 long-term changes to transportation within the Project vicinity. The Project does not
19 include any changes to the transportation network or increases in available parking that
20 would result in congestion or increased trip generation rates. Consequently, the
21 proposed Project would not conflict with any applicable plans or policies regarding the
22 effectiveness of performance of the circulation system. Additionally, the proposed
23 Project would not conflict with the 2009 Santa Barbara County Congestion Management
24 Program, a transportation planning program that emphasize projects aimed at
25 congestion relief (SBCAG 2009).

26 b) As described previously in *Land Use and Planning*, the Project area is located within the
27 planning boundary of the ALUP prepared by the Santa Barbara County ALUC (SBCAG
28 1993). However, implementation of the proposed Project would have no impact on air
29 traffic patterns. Additionally, implementation of the proposed Project would not result in
30 increases to safety risks associated with air travel.

31 c) The proposed Project would not result in long-term changes to the layout of the
32 transportation network. Consequently, the proposed Project would not result in any
33 increased hazards due to design features or incompatible uses.

34 d) Emergency access within the Ellwood Mesa Open Space Plan Area is provided by
35 Santa Barbara Shores Drive, which accesses the Project area from the north. During
36 excavation and recontouring activities, implementation of the proposed Project could
37 result in heavy equipment blocking access to the bluff approximately 250 feet south of
38 where Santa Barbara Shores Drives becomes a dirt road. This could potentially result in
39 safety hazards during construction; however these impacts would be less than
40 significant with the incorporation of MM HAZ-1, which requires hazard identification.

41 e) Implementation of the proposed Project would not conflict with adopted policies or plans
42 regarding public transit. However, the proposed Project, specifically trail improvements
43 along the Coastal and Anza trails on Ellwood Mesa, would constitute improvements to
44 pedestrian facilities consistent with Policy TE 10, which encourages increased walking
45 for recreational and other purposes. Implementation of the proposed Project would

1 improve safety and access throughout the trail corridor, particularly at the drainage
2 crossings and beach access points.

3 Cumulative Impacts

4 b) Implementation of the proposed Project would result in short-term construction related
5 impacts associated with an increase in construction-related traffic and use of Sperling
6 Parking Lot. Implementation of the proposed Project would require approximately five
7 round trips from haul truck with a three cubic yard haul capacity. These trips would
8 incrementally increase traffic within the vicinity of the Ellwood Mesa Open Space Plan
9 Area. Additionally, approximately five to ten parking spaces would be occupied during
10 construction activities. However, these impacts would be short-term and minor and
11 would not considerably contribute to adverse cumulative impacts.

12 Required Mitigation Measures

13 **MM TT-1** ***Traffic and Pedestrian Management Plan:** The Applicant must prepare a*
14 *Traffic and Pedestrian Management Plan that must include, but not be limited to,*
15 *designated construction worker vehicle parking and access routes, maintenance*
16 *of clear trail routes (e.g., with signage) on Ellwood Mesa during construction*
17 *activities, maintenance of at least one beach access point route at all times*
18 *during construction, nightly removal of equipment to a designated area. The City*
19 *must also provide the public with contact information in order to report immediate*
20 *hazards related to the Project. This information must be provided in a public*
21 *notice posted prominently on-site prior to the commencement of any Project-*
22 *related activities.*

23 **Plan Requirements and Timing:** Prior to the issuance of either a grading permit
24 or land use permit, the Applicant must prepare a Traffic Management Plan and
25 submit it for review and approval by City staff.

26 **Monitoring:** City staff must verify compliance prior to issuance of either a
27 grading or land use permit as well as periodically monitor for compliance with the
28 approved Traffic and Pedestrian Management Plan during construction.

29 **MM TT-2** ***Construction Schedule:** The Applicant must provide Ellwood Elementary*
30 *School with a construction activity schedule and construction routes as well as*
31 *the name and telephone number of a contact person responsible for the*
32 *construction schedule no less than 14 days in advance of commencement of*
33 *construction activities. Any alterations or additions must require a minimum*
34 *seven day notification.*

35 **Plan Requirements and Timing:** The Applicant must submit a copy of the
36 schedule to City staff no less than 14 days prior to initiation of any earth
37 movement. The plan must schedule truck hauling trips to avoid peak traffic hours
38 if feasible (peak hours defined as 7:30 - 8:30 a.m. and 4:30 - 5:30 p.m.).

39 **Monitoring:** City staff must perform periodic site inspections to verify compliance
40 with activity schedules.

41

1 **Residual Impacts**

2 With implementation of MM TT-1 and -2, which would require a traffic and pedestrian
 3 management plan and a construction schedule, residual Project-specific impacts as well as the
 4 Project's contribution to cumulative impacts would be less than significant.

5 **Utilities and Service Systems**

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				×	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				×	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				×	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?				×	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				×	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			×		
g) Comply with federal, state, and local statutes and regulations related to solid waste?			×		

6 **Existing Setting**

7 Several streets in the Project area, including Storke Road and Hollister Avenue provide utility
 8 corridors for water, sewer, stormwater, electricity, natural gas, and communications lines.
 9 Potable and reclaimed water mains are located under both Hollister Avenue and Storke Road,
 10 including a 12-inch main that runs down Hollister (City of Goleta 2004). Aboveground utilities in
 11 this area include electrical lines and associated power poles along the west side of Storke

1 Road. Storm drains and culverts are located at various locations throughout the Project area.
2 The Goleta Water District provides potable and reclaimed water to the Project area (City of
3 Goleta 2004). The District serves the University, the unincorporated area between Santa
4 Barbara and Goleta, Santa Barbara, the Santa Barbara Airport, schools, recreational facilities,
5 and the City of Goleta. The District produces water from a variety of sources including the
6 Cachuma Project, recycled water, State Water Project (SWP) water, and groundwater (City of
7 Goleta 2004).

8 The Project area is bisected from east to west by a buried 24-inch sanitary sewer trunk line. The
9 Goleta West Sanitary District (GWSD) line is located along the lowlands adjacent to Devereux
10 Creek and includes associated manholes located on the north bank of Devereux Creek. The
11 Devereux Creek main trunk line traverses the Project area and Ocean Meadows Golf Course to
12 Storke Road (City of Goleta 2004) and handles existing sewer service from the residential
13 communities located south of Hollister. Further, another main trunk line traverses Hollister
14 Avenue to the north of the Project area.

15 Municipal sanitary waste flows to the GSD's Wastewater Treatment Plant, which is located
16 southeast of the Santa Barbara Airport. This facility has a current treatment capacity of 9.7
17 million gallons per day (mgd), a permitted discharge limitation of 7.64 mgd, and current
18 throughput averages 5.5 mgd. Municipal sanitary wastes are typically treated through a blended
19 secondary treatment process and discharged via an ocean outfall located approximately one
20 mile offshore of Goleta Beach in 95 feet of water. The GWSD also has a program underway to
21 install various stormwater appurtenances in the City of Goleta, including certain new stormwater
22 components to be installed in the Ellwood Mesa area. This project is in coordination with the
23 County Water Agency, as part of the County's Project Clean Water (City of Goleta 2004).

24 Thresholds of Significance

25 A significant impact on utilities and service systems would be expected to occur if the project
26 resulted in any of the impacts noted in the above checklist. In addition, under the City's
27 *Environmental Thresholds and Guidelines Manual*, a project that would generate 196 tons of
28 solid waste/year, after receiving a 50 percent credit for source reduction, recycling, and
29 composting, would result in a project specific, significant impact on the City's solid waste
30 stream. Any project generating 40 tons/year, after receiving a 50 percent credit for source
31 reduction, recycling, and composting would be considered to make an adverse contribution to
32 cumulative impacts to the City's solid waste stream.

33 Project Specific Impacts

34 a, b, e) Implementation of the proposed Project would be limited to trail improvements and
35 habitat restoration activities. Consequently the proposed Project would not result in an
36 exceedance of wastewater treatment requirements as use of these systems would not
37 be necessary.

38 c) Implementation of the proposed Project would not result in an impact to or require the
39 construction of any storm water drainage facilities. Storm water would percolate into the
40 groundwater or be drained via Devereux Creek and its tributaries.

41 d) No residential water services exist on site or are proposed as a part of the Project. There
42 would be no long-term change to water use under the proposed Project and expanded
43 water supply entitlements would not be required. Imported water would be used

1 temporarily for soil BMPs and habitat restoration planting. Some areas may benefit from
2 temporary irrigation systems, which can be attached to a small truck with a portable
3 pump. A water storage tank with a 5,000 gallon capacity may be positioned on the south
4 side of Ellwood Eucalyptus Grove at the Santa Barbara Shores road extension to
5 facilitate irrigation system watering from a mobile water source.

6 f, g) The Project would require disposal of approximately 15 cubic yards of degraded asphalt
7 proposed for removal from Beach Access Point E. The asphalt would be hauled to the
8 granite recycling plant located at 5335 Debbie Lane and disposed of in compliance with
9 all applicable federal, state, and local regulations. Consequently, there would be a less
10 than significant impact associated with solid waste disposal.

11 Cumulative Impacts

12 The proposed Project would not contribute to cumulative impacts associated with utilities and
13 service systems.

14 Required Mitigation Measures

15 As the implementation of the proposed Project would not result in any potentially significant
16 adverse impacts to utilities and service systems no mitigation measures are required or
17 recommended for the proposed Project.

18 Residual Impacts

19 There would be no residual impacts to utilities and service systems as a result of the proposed
20 Project.
21

1 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			×		
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?			×		
c) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			×		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			×		

1 **14. PREPARERS OF THE DRAFT MITIGATED NEGATIVE DECLARATION, CONTACTS,**
2 **AND REFERENCES:**

3 This document was prepared by AMEC Environment & Infrastructure, Inc. under the direction of
4 the City of Goleta Public Works Department and Planning and Environmental Services
5 Department staff.

6 AMEC

7 Rita Bright, Project Manager

8 Nick Meisinger, Environmental Scientist/Biologist

9 City of Goleta

10 Steve Wagner, Director, Public Works Department

11 Anne Wells, Planning Manager, Planning and Environmental Services Department, Advanced
12 Planning Division

13 Jan Hubbell, Contract Planner, Planning and Environmental Services Department

1 **15. SUMMARY OF MITIGATION MEASURES**

2 **MM AQ-1** ***PM₁₀ Minimization:** Dust generated during short-term trail construction activities*
3 *associated with the proposed Project must be kept to a minimum consistent with*
4 *the requirements of the SBCAPCD.*

5 • *During construction, a water truck (i.e., a light pickup truck with an attached*
6 *water tank) should be used for water suppression. This vehicle should be*
7 *kept in a designated staging area. Water spraying must be used regularly to*
8 *keep all areas of vehicle movement damp enough to prevent dust from*
9 *leaving the site. At a minimum, this should include wetting down such areas*
10 *in the late morning and after work is completed for the day. Increased*
11 *watering frequency should be required whenever the wind speed exceeds 15*
12 *miles per hour (mph). Reclaimed water should be used whenever possible.*
13 *However, reclaimed water should not be used in or around crops for human*
14 *consumption.*

15 • *Minimize amount of disturbed area and reduce on site vehicle speeds to 15*
16 *mph or less.*

17 • *If importation, exportation, and stockpiling of fill material is involved, soil*
18 *stockpiled for more than two days must be covered, kept moist, or treated*
19 *with soil binders to prevent dust generation. Trucks transporting fill material to*
20 *and from the site must be tarped from the point of origin.*

21 • *Gravel pads must be installed at all access points to prevent tracking of mud*
22 *onto public roads.*

23 • *After clearing, grading, earth moving or excavation is completed, disturbed*
24 *must be treated area by watering, or revegetation, or by spreading soil*
25 *binders until the area is paved or otherwise developed so that dust*
26 *generation must not occur.*

27 • *The City must designate a person or persons to monitor the dust control*
28 *program and to order increased watering, as necessary, to prevent transport*
29 *of dust offsite. The monitor(s) must also ensure that the watering truck is kept*
30 *at the proper staging area when not in use. Their duties must include holiday*
31 *and weekend periods when work may not be in progress. The name and*
32 *telephone number of such persons must be provided to the SBCAPCD prior*
33 *to land use clearance for project grading.*

34 • *Prior to land use clearance, the applicant must include these dust control*
35 *requirements as a note on a separate informational sheet to be recorded with*
36 *a map. All requirements must also be shown on grading plans.*

37 **MM AQ-2** ***Equipment Exhaust Minimization:** As required by APCD for all construction*
38 *projects, the following regulatory requirements and control strategies, required by*
39 *state law, must be adhered to throughout grading, hauling, and trail construction*
40 *activities:*

- 1 • Diesel-powered construction equipment must be registered with the state's
2 portable equipment registration program or have an APCD permit.
- 3 • Mobile construction equipment is subject to the CARB Regulation for In-use
4 Off-Road Diesel Vehicles (Title 13 California Code of Regulations [CCR],
5 Chapter 9, § 2449), the purpose of which is to reduce diesel particulate
6 matter and criteria pollutant emissions from in use off-road diesel-fueled
7 vehicles.
- 8 • Commercial diesel vehicles are subject to Title 13 CCR § 2485, limiting
9 engine idling time. Idling of heavy-duty diesel construction equipment and
10 trucks during loading and unloading must be limited to five minutes; electric
11 auxiliary power units should be used whenever possible.

12 **MM AQ-3** **Reduction of Diesel Exhaust Pollutants:** The following recommended control
13 strategies should be implemented to the maximum extent feasible in order to
14 minimize diesel exhaust per SBCAPCD requirements:

- 15 • Diesel construction equipment meeting the CARB Tier 1 emission standards
16 for off-road heavy-duty diesel engines must be used. Equipment meeting
17 CARB Tier 2 or higher emission standards should be used to the maximum
18 extent feasible.
- 19 • Diesel-powered equipment should be replaced by electric equipment
20 whenever feasible.
- 21 • If feasible, diesel construction equipment should be equipped with selective
22 catalytic reduction systems, diesel oxidation catalysts and diesel particulate
23 filters as certified and/or verified by USEPA or California.
- 24 • Catalytic converters should be installed on gasoline-powered equipment, if
25 feasible.
- 26 • All construction equipment should be maintained in tune per the
27 manufacturer's specifications.
- 28 • The engine size of construction equipment should be the minimum practical
29 size.
- 30 • The number of construction equipment operating simultaneously should be
31 minimized through efficient management practices to ensure that the smallest
32 practical number is operating at any one time.
- 33 • Construction worker trips should be minimized by requiring carpooling and by
34 providing for lunch onsite.

35 **MM BIO-1** **Sensitive Species Survey:** An Applicant-funded special status species survey
36 must be conducted by a City-approved biologist immediately prior to
37 construction. Depending on the timing of trail construction activities, the survey
38 must include the following components:

- 1 • *If trail-construction activities on the shared Coastal-Anza Trail or the trail*
2 *segments along the eastern and western eucalyptus windrows would occur*
3 *within the raptor breeding season (January 1 through September 15), a raptor*
4 *survey must be conducted in these areas to establish the current breeding*
5 *status of resident raptors adjacent to the relevant trail segments. This survey*
6 *component must include recommendations regarding minimizing impacts*
7 *during construction per GP/CLUP Policy CE 8.2, including setbacks and*
8 *restrictions on construction scheduling. If nests are documented, construction*
9 *work within a 300-foot of active nest(s) must be suspended until the young*
10 *have fledged the nest per GP/CLUP Policy CE 8.4.*

- 11 • *If trail-construction activities within 100 feet of the edge of the eucalyptus*
12 *groves that host known monarch butterfly aggregation sites would occur*
13 *during the overwintering season for monarch butterflies (October 1 through*
14 *March 31), a City-approved biologist must survey all eucalyptus trees within a*
15 *100-foot distance of the relevant trail and habitat restoration areas (i.e., along*
16 *the shared Coastal-Anza Trail and the western extent of the Coastal Loop*
17 *Trail) to determine use by monarchs per GP/CLUP Policy CE 4.5. If butterfly*
18 *aggregations are found within 100 feet of the work area, trail-construction*
19 *must be halted until a City-approved biologist has determined monarchs have*
20 *left the site.*

- 21 • *If trail-construction activities would occur within the blooming period for*
22 *southern tarplant (June 1 through September 30), a pre-construction survey*
23 *must be conducted for southern tarplant. Recommendations must be made to*
24 *reroute the trail around recorded individuals, limiting disturbance to the*
25 *maximum extent feasible. If disturbance cannot be avoided then potentially*
26 *affected individuals would be relocated and/or additional southern tarplant*
27 *individuals would be planted as a part of mitigation associated with the*
28 *proposed Project.*

- 29 • *Prior to the commencement of any construction-related activities at the toe of*
30 *beach access points (i.e., the interface of the bluff face and beach habitats),*
31 *visual surveys for globose dune beetle and sandy beach tiger beetle must be*
32 *conducted. If either of these sensitive species is observed within the footprint*
33 *of the proposed trail recontouring or habitat restoration footprint individuals*
34 *must be captured and relocated to adjacent suitable habitat.*

35 **MM BIO-2** ***Native Plant Requirements:** In order to protect the genetic integrity of the native*
36 *plant populations on the undeveloped portions of the subject property, the Final*
37 *Restoration Plan must explicitly prohibit the use of non-locally collected native*
38 *plants and seed materials restoration within or adjacent to open space areas. All*
39 *seed or plant material must come from sources within the Devereux Creek*
40 *watershed per GP/CLUP Policy OS 5.4(d). The Final Restoration Plan for the*
41 *proposed Project must prohibit buried irrigation infrastructure; all temporary*
42 *irrigation components must be placed above ground in open space areas. The*
43 *potential for damage to the pipe by vandalism or exposure is considered*
44 *insufficient to offset the environmental damage caused by trenching to install*
45 *pipes and structures and subsequent digging to remove pipes and structures.*
46 *Pipes must be inspected monthly for leaks and all leaks must be repaired*
47 *promptly to avoid erosion, weed establishment, or other environmental damage.*

- 1 **MM CR-1** **Cultural Resource Monitoring Plan:** *In the unlikely event that historical,*
2 *archaeological, or paleontological resources are encountered during grading,*
3 *work must be stopped immediately or redirected until a qualified Registered*
4 *Professional Archaeologist and Native American representative are retained by*
5 *the applicant to evaluate the significance of the find pursuant to Phase 2*
6 *investigation standards set forth in the City Archaeological Guidelines. If remains*
7 *are found to be significant, they must be subject to a Phase 3 mitigation program*
8 *consistent with City Archaeological Guidelines and funded by the Applicant.*
- 9 **MM CR-2** **Handling of Human Remains:** *In the event human remains are encountered*
10 *during grading, work must be stopped immediately and the remains must be*
11 *treated in accordance with Health and Safety Code Section 7050.5 and CEQA*
12 *Guidelines (Title 14 CCR Division 6, Chapter 3) Section 15064.5(e).*
- 13 **MM GEO-1** **Design and Grading Standards:** *Final grading and trail construction plans*
14 *submitted to the City of Goleta for review and approval must be consistent with*
15 *applicable established CBC and City of Goleta Grading Ordinance standards per*
16 *City of Goleta Municipal Code § 15.09. The plans must include the location of the*
17 *More Ranch Fault system and demonstrate that all structures are designed in*
18 *compliance with earthquake standards for CBC Seismic Zone 4.*
- 19 **MM GEO-2** **Blufftop Erosion Monitoring:** *The City shall monitor natural seacliff erosion and*
20 *retreat shall be monitored every ten years and after every El Niño winter. The*
21 *City must manage the relocation of the Coastal Trail if unsafe conditions exist*
22 *along the bluffs as the result of landslides, erosion, and cliff retreat.*
- 23 **MM GEO-3** **Best Management Practices (BMPs):** *Implementation of the proposed Project*
24 *must include the following:*
- 25
 - *Other than what has been described for installation of the boardwalk and*
26 *other improvement activities, grading must be prohibited within 50 feet of the*
27 *Devereux Creek top-of-bank.*
- 28
 - *The Applicant must limit excavation and grading to the dry season (April 15 to*
29 *November 1) unless a Building and Safety-approved erosion control plan is in*
30 *place and all measures therein are in effect.*
- 31
 - *BMPs must be employed to control erosion, including temporary siltation*
32 *protection devices such as silt fencing, straw bales, and sand bags. These*
33 *must be placed at the base of all cut and fill slopes and soil stockpile areas*
34 *where potential erosion may occur. The final grading plan must include*
35 *erosion control measures including types and locations of BMPs. The plan*
36 *must be approved by the City of Goleta prior to the commencement of*
37 *grading operations.*
- 38
 - *The City must periodically inspect the drainage crossings and beach access*
39 *points during the wet season to ensure structural integrity and avoidance of*
40 *flood hazards or scouring. Maintenance and repairs must be performed as*
41 *needed.*
- 42 **MM HAZ-1** **Hazard Identification:** *Prior to the issuance of either a grading or land use*
43 *permit, the Applicant must coordinate with the SBCFD FPD to ensure that*

- 1 *emergency access and hazards or hazardous materials concerns of FPD are*
2 *addressed.*
- 3 **MM HAZ-2** **Heavy Equipment Operation:** *Heavy equipment must not be operated in open*
4 *space areas on days when red flag warnings are issued by the SBCFD unless*
5 *FPD provides an exception given inclusion of construction-related fire*
6 *suppression measures during trail improvement. Additionally, all equipment used*
7 *on site must be properly maintained such that no leaks of oil, fuel, or residues*
8 *take place. Provisions must be in place to remediate any accidental spills. All*
9 *equipment must only be stored in the appropriate equipment staging areas and*
10 *construction vehicles must be confined to a pre-defined equipment access path*
11 *no greater than the minimum width necessary to complete necessary*
12 *construction activities.*
- 13 **MM WAT-1** **Storm Water Permit:** *The Applicant must submit documentation of a National*
14 *Pollutant Discharge Elimination System (NPDES) Storm Water Permit from the*
15 *California Regional Water Quality Control Board (RWQCB) or must submit*
16 *documentation of an exemption from permit requirements.*
- 17 **MM WAT-2** **Notice of Intent:** *Prior to the initiation of construction or site-preparation*
18 *activities, the Applicant must file a NOI to the RWQCB pursuant to 40 Code of*
19 *Federal Regulations (CFR) 122 and Goleta Municipal Code § 15.09.100.*
- 20 **MM WAT-3** **Storm Water Pollution Prevention Plan:** *The Applicant must prepare a SWPPP*
21 *in accordance with the guidelines adopted by the State Water Resources Control*
22 *Board (SWRCB) covering all phases of grading and construction activities and*
23 *including all requirements of the City's erosion and sediment control plan per*
24 *Goleta Municipal Code § 15.09.290. The SWPPP must be prepared and*
25 *submitted, along with final with grading and trail construction plans, to the City*
26 *prior to the issuance of grading permits.*
- 27 **MM WAT-4** **Notice of Termination:** *The Applicant must file a notice of termination of*
28 *construction with the RWQCB implementing a SWPPP closure and identifying*
29 *how pollution sources were controlled during trail construction activities.*
- 30 **MM NOI-1** **Construction Timing:** *The operation or maintenance of heavy construction*
31 *equipment within 500 feet of residential developments must be limited to the*
32 *maximum extent feasible. Additionally, the operation or maintenance of heavy*
33 *construction equipment must not occur in this area on State holidays (e.g.,*
34 *Thanksgiving, Labor Day).*
- 35 **MM NOI-2** **Construction Equipment:** *Stationary construction equipment used on the*
36 *northern segments of the shared Coastal-Anza Trail that would generate noise in*
37 *excess of 65 dBA at the Project boundaries must be shielded and located as far*
38 *towards the interior of the construction site as practical to minimize the noise*
39 *levels at the Comstock Homes Development and the golf course to the west.*
- 40 **MM NOI-3** **Best Management Practices (BMPs):** *The following measures must be*
41 *incorporated into final grading and trail construction plans to reduce the impact of*
42 *construction noise per GP/CLUP Policy NE 6.5:*

- 1 • *The Applicant must ensure that construction equipment is properly*
2 *muffled according to manufacturer's specifications or as required by the*
3 *City, whichever is more stringent.*

- 4 • *The Applicant must place noise-generating construction equipment and*
5 *locate construction staging areas away from noise-sensitive activities,*
6 *where feasible, to the satisfaction of City staff.*

- 7 • *The Applicant must implement noise attenuation measures which may*
8 *include, but are not limited to, changing the location of stationary*
9 *construction equipment, shutting off idling equipment, and installing*
10 *acoustic barriers around significant sources of stationary construction*
11 *noise.*

12 **MM REC-1** **Construction-related Temporary Trail Closure Plan:** *The Applicant must*
13 *prepare a construction-related temporary trail closure plan, which must outline*
14 *construction timing and the duration of necessary construction-related temporary*
15 *trail closures. Temporary trail closures must be limited to the maximum extent*
16 *feasible during trail construction and habitat restoration activities. Areas that*
17 *necessitate temporary closure for trail recontouring must be roped off to protect*
18 *public safety in these areas. During construction of the shared Coastal-Anza Trail*
19 *realignment, safe access to Ellwood Mesa must be provided via another route.*
20 *Similarly, beach access point improvements must not be constructed*
21 *simultaneously; at least one access point must remain open at all times.*

22 **MM TT-1** **Traffic and Pedestrian Management Plan:** *The Applicant must prepare a*
23 *Traffic and Pedestrian Management Plan that must include, but not be limited to,*
24 *designated construction worker vehicle parking and access routes, maintenance*
25 *of clear trail routes (e.g., with signage) on Ellwood Mesa during construction*
26 *activities, maintenance of at least one beach access point route at all times*
27 *during construction, nightly removal of equipment to a designated area. The City*
28 *must also provide the public with contact information in order to report immediate*
29 *hazards related to the Project. This information must be provided in a public*
30 *notice posted prominently on-site prior to the commencement of any Project-*
31 *related activities.*

32 **MM TT-2** **Construction Schedule:** *The Applicant must provide Ellwood Elementary*
33 *School with a construction activity schedule and construction routes as well as*
34 *the name and telephone number of a contact person responsible for the*
35 *construction schedule no less than 14 days in advance of commencement of*
36 *construction activities. Any alterations or additions must require a minimum*
37 *seven day notification.*

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1

Attachment 1

2

Habitat Restoration Plan

APPENDIX "A"

HABITAT RESTORATION PLAN

The Ellwood Mesa contains numerous Environmentally Sensitive Habitat Areas (ESHA), in addition to the spectacular vistas valued by users of the trails and beach. In addition to the proposed trail improvements, the project also proposes to restore natural habitats and resources. Ellwood Mesa is one of the largest undeveloped open space areas along the Santa Barbara coast and includes a diverse assemblage of plant and wildlife species. As such, it is a remarkable resource that merits careful protection, habitat restoration, and management. Approximately 13 acres in the trail corridors, between the California Coastal Trail and the bluff, and portions of the bluff face and dunes are proposed for restoration. The restoration plan refers to the Figures found in the main document of the Project Description. The relevant maps for Environmentally Sensitive Habitat Areas (ESHA) and Habitat Restoration Plan Map are found under separate cover.

The Native Grassland, composed largely of purple needlegrass, *Stipa pulchra*, is the largest expanse of native bunchgrass grassland on the south coast. Southern Vernal Pools are scattered throughout the mesa. Southern Coastal Bluff Scrub is a rare habitat type identified in the Natural Community Diversity Database (California Department of Fish and Wildlife). Southern Dune Scrub is present at the base of the eastern bluffs, as are Southern Foredunes. Devereux Creek and the drainages to the north contain Southern Riparian Scrub and Riparian Forest. Monarch Butterfly Habitat is present in the adjacent eucalyptus grove, but is not part of this trail improvement and habitat restoration project.

Although these remarkable natural resource ESHAs are present, many areas are degraded by the presence of invasive plant species such as fennel, mustard, harding grass, cape ivy, and invasive shrubs and trees such as myoporum and olive trees. Some of these species have been spreading in recent decades, compromising the existing native vegetation. Fennel also obscures the ocean view from the Coastal Trail in many areas. This has been a factor in the creation of many of the social trails so that visitors can see the ocean; this further degrades the native vegetation, can be hazardous if the blufftop fails, and exacerbates erosion.

Approximately one-half of the mile-long segment of the Coastal Trail at Ellwood Mesa is located within 100 feet of the bluff-top. Lack of management of the bluff-top portion of the trail has resulted in serious degradation to the trail. This includes gulying, erosion, expansion of the trail width as users route themselves around uneven terrain, thereby damaging surrounding vegetation and sensitive habitats.

Trail entrenchment causes puddling during rain events, as the water cannot easily flow off the trail. Trail users then walk around the puddles, further degrading native habitat adjacent to the trail. Several trails go through vernal pools, disturbing the native vegetation and altering

the hydrology of the pools. The trails going through Devereux Creek and other drainages cause soil compaction and loss of riparian vegetation.

The Ellwood Mesa Coastal Trails and Habitat Restoration Design Project proposes to remedy many of these impacts to the native vegetation and environmentally sensitive habitats at Ellwood Mesa. For example, a section of the De Anza trail is proposed for realignment, as designated in the City of Goleta General Plan, to avoid the vernal pools.

To address trail entrenchment, the project proposes to utilize native soil from the onsite berms that line many of the trail segments, as a result of past trail grading. This soil can bring the trails up to grade, to allow for drainage off the trails and reduce ponding. The resulting at-grade barren areas will be revegetated with native plant species. The area of the donor fill sites identified that may be used as needed for fill totals 78,228 square feet, or approximately 1.8 acres.

Environmentally Sensitive Habitat Areas (ESHAs):

The Ellwood-Devereux Coast Open Space and Habitat Management Plan (OSHMP) Area includes several environmentally sensitive habitat areas (ESHA).³ ESHAs are protected against any significant disruption of habitat values. Only uses dependent on resources within an ESHA are allowed. Development in areas adjacent to ESHAs and parks and recreation areas must be sited and designed to prevent impacts that would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The project proposes removal of non-native plant species (such as mustard, fennel, iceplant and Harding grass) along the trail corridors of the Coastal and De Anza trails, the fill areas, and the entire length of the blufftops on the ocean side of the trail to improve the ESHA habitats.

The ESHA map, provided under separate cover, shows the Classifications of Environmentally Sensitive Habitats in the OSHMP Area and Ellwood Mesa. Below are described the habitat types within the proposed project area. For example, Monarch Butterfly Habitat is found in the eucalyptus grove, but is not within the project area of the proposed Coastal Trails and Habitat Restoration design project.

Riparian Habitats:

Riparian habitat occurs along the drainages in the OSHMP Area. Refer to Figure 3 for a map

³ The CA Coastal Act provides specific protection for "environmentally sensitive areas." These are defined as areas 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.

of drainage locations. The major drainage at Ellwood Mesa is Devereux Creek, which traverses the western half of the Open Space Plan Area and Ocean Meadows Golf Course before discharging to Devereux Slough at Venoco Road. The major tributary to Devereux Creek is Phelps Ditch/El Encanto Creek, east of the project area on University property.

Riparian habitats within the Open Space Plan Area include freshwater marsh, riparian scrub, and riparian forest. Freshwater marshes occur along drainages where there is seasonal winter flows and prolonged soil moisture. The project proposes to realign the Coastal-De Anza Trail to conform to the General Plan alignment so that it skirts the Eucalyptus groves south of the parking lot, restore the nearby gully areas impacted by overuse, as well as those areas impacted adjacent to the Devereux Creek crossing. The active channel in the drainage—Gully 2A—will be traversed by a boardwalk with screw pilings, as will the Devereux Creek crossing.

Southern Vernal Pools:

Prior land use has damaged or destroyed vernal pools, including horse grazing in the Ellwood Mesa/Santa Barbara Shores area and historic oil development. The project proposes to enhance the existing vernal pools, realign specific sections of the Coastal Trail and the De Anza trail to avoid identified vernal pools. Two vernal pools will be enhanced, where the De Anza Trail is to be realigned per the General Plan, and a vernal pool on the eastern boundary where the Coastal Trail enters Ellwood Mesa.

Native Grassland:

Ellwood Mesa contains one of the largest stands of native grasslands in Santa Barbara County, composed largely of purple needlegrass, *Stipa pulchra*. The project plan proposes to increase native grasslands at Ellwood Mesa by adding native species along the trail corridors, fill areas and other restoration areas. Where minor trail modifications are made for drainage improvements, for example, some purple needlegrass and grassland associate blue-eyed grass may be disturbed. These plants will be salvaged and replanted in the adjacent trail corridor.

Coastal Sage Scrub:

Coastal sage scrub habitat occurs in various locations of the Open Space Plan Area. Small isolated patches of coastal sage scrub frequently intergrade with native and non-native annual grassland and coyote bush. The project plan proposes to increase coastal sage, primarily in the trail corridor for the planned new Coastal Trail Realignment (Refer to Figure 6) and in the donor fill sites on both sides of the Santa Barbara Shores road extension.

Coastal Bluff and Beach:

Coastal Bluff Scrub, Southern Dune Scrub and Southern Foredunes are habitats found along the entire blufftop, the bluff face and the beach interface. Especially on the east end the bluff face is highly degraded with erosions gullies, extensive non-native iceplant, and a row of myoporum shrubs at the base of the bluff. The project proposes to remove non-native species including eradication of iceplant and myoporum at Ellwood Mesa and revegetate with native

Coastal species south of the Coastal Trail. Erosion gullies on the bluff face in these areas will be revegetated to address bluff erosion; some of these gullies have been used as paths, further exacerbating erosion. Extensive iceplant is present on the eastern bluff face and foredunes.

Western Snowy Plover:

The beach at Ellwood as far west as Access F is designated Critical Habitat by the US Fish and Wildlife Service for the Western Snowy Plover. Plovers roost and breed in sparsely vegetated or unvegetated sand dunes or sandy beach habitat. The foredunes at Ellwood are infested with iceplant and thus currently poor habitat, but are potential habitat with iceplant eradication as proposed by this project.

Existing Conditions

The ESHA map, under separate cover, shows the habitat types and extent of native grasslands and vernal pools in particular, as they exist pre-project. The Devereux-Ellwood Open Space Plan and several Environmental Impact Reports have studied and identified the natural resource values of the Ellwood Mesa.

Proposed Restoration Activities

The habitat types and acreages are not proposed to change with this project with one exception. The project proposes to create a small 0.4-acre Coast Live Oak woodland south of Devereux Creek. There are currently scattered coast live oak trees in the riparian areas, but most are found in the understory of non-native eucalyptus trees. We also propose planting individual and small groups of oaks near the drainages. Historically extensive oak woodlands were reported, likely where the eucalyptus forest is now found.

While the habitat types will largely remain unchanged, major enhancements of the habitat value are proposed in the Restoration Plan, in the trail corridors, the crossings in Devereux Creek and the drainages, where fill material is proposed for removal to improve the trails, between the Coastal Trail and the bluff, and the bluff in areas surrounding the two beach access points. Approximately 13 acres of restoration/ enhancement is proposed as part of this project.

The Habitat Restoration Plan Map shows the proposed restoration areas. The target species of invasive plant removal, and techniques proposed for removal, are listed first, then a narrative of restoration activities that follow the trail improvements as described in the Project Description.

The Habitat Restoration Map identifies areas along the trails where berms of soil, accumulated by grading of trails in the past, will be excavated to grade for fill of entrenched trails. These berms are largely vegetated with non-native grasses, mustard, and fennel. Many adjacent

areas have native cover, such as native grasslands and grassland associates, suggesting that the fill donor sites, absent the fill, will support native vegetation. The Plan identifies the restoration plan for various donor fill sites, largely native grasslands along the Coastal Trail.

The area between the Coastal Trail and the Coastal Loop Trail are proposed for restoration. In many areas non-native fennel obstructs the views of the ocean from the trail. Eradication of the fennel and other non-native plants and revegetation with low-growing coastal plant species native to the Devereux-Ellwood Open Space Plan area will enhance the visitor experience. Where erosion or non-native vegetation is found just over the blufftop, native shrubs and bunchgrass will be planted to help stabilize the bluff face without obstructing views from the blufftop.

The bluff face and beach dunes east of Access F is highly degraded with extensive iceplant and is proposed for eradication of iceplant and revegetation with native coastal bluff scrub, coastal dune scrub and foredune vegetation. The coastal bluff face can be returned to a high ecological value while stabilizing the bluff to reduced erosion.

The trail improvements and associated restoration are likely to be implemented in phases, and Final Restoration Plans will be completed with each phase. The details presented here will allow for environmental review and permitting. A plan for supplemental watering, maintenance and performance standards will be provided.

Restoration Guidelines

All plant species to be installed in this project will be species found in the Devereux-Ellwood Open Space Plan area. The plant propagules—seeds, rhizomes or cuttings—will be collected from the same Open Space area. Some caution is needed in that some past restoration projects have used species or genotypes from outside the area, and collection from those areas or species should be avoided. For example, in what is now Coal Oil Point Reserve, a mitigation revegetation project below the Venoco oil tanks planted bush lupine with yellow flowers rather than our local purple, and tall coast goldenbush is different from the two varieties native to the Open Space area.

In the 1997 a contaminated soil removal project at what is now Ellwood Mesa included restoration plantings in Devereux Creek above and below the current trail crossing. Some wetland plants were salvaged and replanted, however other plants were grown and planted by community volunteers. The plant sources were "local" but some species were collected from outside the Devereux-Ellwood Plan area, which is specified for this project. Reference "2nd Monitoring Report for Santa Barbara Shores County Park Revegetation Project at Devereux Creek", Dougal House, February 1999. Thus caution must be used in collecting from this area for the proposed restoration project.

Revegetation will have spacing varying from 2.2' to 5' on center, for grassland and shrub plantings, respectively. The average plant density is about 4' on center. In most areas except the fill borrow sites, native species are present and infill planting only is planned. Spacing for individual installed plants will meet the recommendations, for areas cleared of invasive, non-native plants. Some of the iceplant areas will require intensive planting as few natives have survived.

Exhibit 1 has conceptual plant species and numbers for the restoration project sites proposed in this project. Container plants will be used for most revegetation, approximately 33,500 plants in total. One gallon shrubs, leach tubes for grasses, coast live oaks from 1-gal tree tubes to 15-gallon where blocking a former trail alignment is desirable. Leach tubes, 7" Super-tubes, will be used for native grass plants, and for some species such as coast goldenbush (prostrate form), coast morning glory and California fuchsia, especially for planting on the bluff face.

In some locations, where noted, seeds will supplement container planting, for these species:

Southern Tarplant	<i>Centromadia parryi ssp. Australis</i>	Annual; CNPS-listed
Gum Plant	<i>Grindelia camporum</i>	
Bush Lupine	<i>Lupinus arboreus</i>	
Coast Goldenbush	<i>Isocoma menziesii</i>	Upright & prostrate genotypes
California Sagebrush	<i>Artemisia californica</i>	
California Sunflower	<i>Encelia californica</i>	
Seacliff Buckwheat	<i>Eriogonum parviflorum</i>	

The project proposes to use the technique utilized by the UCSB Cheadle Center for establishing Southern tarplant: collect dried plants at the end of the growing season in a container such as a garbage can, crush the plants, and spread the crushed material which includes the seed in the area where Southern tarplant is desired. The seeds of this annual species are very spiny and thus difficult to collect by hand.

Following the experience of Coal Oil Point Reserve, we plan to use direct seed only for Southern Fore-dune restoration following iceplant eradication. Species proposed for the beach dune restoration; the seeds would be collected at Coal Oil Point Reserve:

Beach Evening Primrose	<i>Camissonia cheiranthifolia</i>
Beach Morning-Glory	<i>Calystegia soldanella</i>
Beach Saltbush	<i>Atriplex leucophylla</i>
Pink Sand Verbena	<i>Abronia umbellata</i>
Red Sand Verbena	<i>Abronia maritima</i>

Sprigs of frankenia will be planted in Devereux Creek, upstream of the boardwalk where weeds are cleared. Arroyo willow cuttings will be used in the spaces between *Arundo* rhizomes, after cutting and herbicide treatment, in Access F.

In a few areas, native vegetation will be removed for the installation of a new trail alignment or widening. Where bunchgrass and grassland associates are removed, these will be salvaged and immediately planted in the adjacent or nearby trail corridor. For purple needlegrass and blue-eyed grass, the most common plants to be disturbed during the trail improvements, similar relocation was nearly 100% successful at Coal Oil Point Reserve during Pond Trail improvements several years ago. The restoration plantings (6650 purple needlegrass) will more than compensate for the minimal impacts to native vegetation.

The installation of boardwalks with screw piling supports is proposed for Devereux Creek and the active channel gully in the main drainage south of the parking lot. Both of these areas are ESHA, and the disturbance to wetland vegetation will require at least 3:1 replacement of impacted vegetation. Direct disturbance—for placement of the screw pilings, and removal of old trail fill from Devereux Creek, as recommended by Natasha Lohmus of California Dept. of Fish and Wildlife—and indirect impact of shading by the boardwalk, will both be mitigated at least 3:1. See specific sections for details.

Non-native vegetation will be removed from the restoration sites prior to planting. Species-specific removal techniques are described below. Maintenance and monitoring of each site, likely installed in phases, will be for three years. The first year will be most intensive, as the weed seed bank is depleted by monthly weeding during the growing season. For the second and third year, at least twice a year weeding of planting areas will be accomplished. Project monitoring for maintenance needs will be done quarterly.

All planting will be done during the winter rainy season November – April, to take advantage of the winter rains for establishment. This is also the preferred time for trail work, when the moist soil can be worked. Planting will commence within 60 days of any soil disturbance, and erosion control blankets, or natural bio-degradable materials will be installed on slopes as needed for bank stabilization. This is more likely in the re-contoured slopes in the inactive drainage channels of the drainage south of the parking lot.

Supplement water is likely to be needed, depending on the rainfall pattern following plant installation for each phase. Most plantings will occur, except on the bluff, on the downslope side of the trail, which will benefit from runoff. Some areas may benefit from temporary irrigation systems, which can be attached to a small truck with a portable pump. A water storage tank, suggested size 5000 gallons, to facilitate hand and irrigation system watering from a mobile water source may be placed in an area of disturbed vegetation on the south side of Ellwood Eucalyptus Grove at the Santa Barbara Shores road extension, which will

maintain vehicle access for City staff and emergency vehicles. This tank can be filled periodically by a water truck. The Cheadle Center has 2 5000-gallon tanks at UCSB South Parcel, filled by Aqua Truck Inc periodically, utilizing a UCSB fire hydrant. The Venoco Ellwood Marine Terminal, slated for dismantling, has a large water tank filled by a hard water line. If UCSB retains this line and tank for restoration, the City could negotiate during the Devereux-Ellwood Open Space management meetings for shared use of this resource for habitat restoration. Supplemental water options such as siting of a tank will be discussed with City staff.

Performance standards. As an enhancement project, establishment of 75% native cover will be criteria of success by the end of three years. While non-native grasses will be removed to aid establishment of the installed native plants, these are common at Ellwood Mesa and will continue to be present. From the planting areas, 100% eradication of Iceplant is planned. Fennel, mustard, thistle, and Russian thistle will be removed from the planting sites during maintenance, but some regrowth from the seedbank is anticipated. Monitoring will be done once a year during and at the end of the maintenance period, using photo-monitoring and estimation of % native cover in grassland, riparian, and bluff scrub habitats. 75% survival of Coast Live Oak and Santa Barbara Honeysuckle will be success. Annual reports will be prepared by December each year, including an as-built description in the year one report (for each phase), for the first 3 years of the project (or each phase).

Invasive Plant Removal

Fennel. *Foeniculum vulgare* is widespread on Ellwood Mesa, and has been expanding over the past 20 years. This invasive, exotic species is proposed for removal between the Coastal Trail and the bluff, where it obstructs views and displaces native blufftop vegetation, and from the trail corridors. A dense fennel patch is proposed for removal south of Devereux Creek, where the trail will be realigned to provide an accessible 5% grade and control erosion. Several techniques are recommended for control of fennel on the site depending on several factors: fennel density, presence/absence of native vegetation, and adjacent soil disturbance for trail rehabilitation.

In dense patches of fennel, a brush mower or brush cutter can be used to cut the standing dead and live stalks. Volunteers can cut and bag seedheads to reduce entry into the seedbank. Fresh cuts immediately painted (within 5 minutes) with glyphosate 50% or 100% is effective, and has no overspray to native vegetation. Alternatively, fennel can be allowed to regrow and bushy growth 1-2 ft in height can be sprayed with glyphosate and surfactant; RoundUp in upland areas, or with Agridex near wetland areas.

Large clumps can be dug out when a small excavator or other equipment is being used to re-contour the trail and fennel is in the disturbance area. Small fennel can be dug out with a

sharpshooter shovel when the soil is moist. This is a good volunteer project and protective of adjacent natives, such as the extensive Blue-eyed grass south of Devereux Creek.

Mustard. Most of the mustard on Ellwood Mesa is the annual black mustard, *Brassica nigra*. Mustards reportedly produce allelopathic chemicals that can inhibit germination of native plants. Hand pulling mustard is effective. Mowing or weedwhacking plants when flowering and in seed, but before seeds are inflated, can reduce the competition. Without viable seed, the plants can be left on the ground as mulch and may reduce germination of the mustard seedbank. Where there is a monoculture of mustard, tarping of young plants can kill the seedlings in a few weeks. This is suggested as a "grow-and-kill" treatment prior to planting, especially in creation of the new connector trail to Access F, which traverses a dense mustard stand.

Harding grass. *Phalaris aquatica* is a rhizomatous perennial best controlled with herbicides. Cultivation is not effective, as pieces of rhizomes spread the plant as well as the seedbank. Glyphosate and grass-specific herbicides such as Fusilade, which can be used around native shrubs, are effective, but follow-up treatment is required. Mowing the grass and treating the actively growing grass is more successful. Dense stands of harding grass interfere with raptor foraging on the mesa. Raptors including the White-tailed kite are visual predators, so that in native bunchgrass stands there are usually bare areas, raptors can see their rodent prey, but the rodents can safely hide in dense stands of harding grass.

Cape Ivy. Hand removal of cape ivy, *Delairea odorata*, is proposed; this is a good volunteer project with professional supervision. Follow-up is always needed, as some rhizomes break in the soil and some regrowth is common. While cape ivy is wide-spread in the eucalyptus groves, and control is proposed but not part of this project, only one significant infestation occurs in the project area: a mesic site with native trees and shrubs immediately north of the trail at Access E. A small infestation was observed along the Coastal Alternative Trail north of the creek. Removal of these infestations will protect the mesa from further infestation, as seeds are wind-dispersed, and the vines can overtop and kill native trees and shrubs.

Iceplant. Integrated pest management is proposed for iceplant; the most common species at Ellwood Mesa is *Carpobrotus edulis*. Black plastic tarping is preferred where feasible, such as relatively flat, sunny areas without significant native plants. Two months of warm weather required to kill iceplant. Hand pulling is proposed in shaded areas as under the Eucalyptus canopy of Access E and around native shrubs. On the bluff, herbicide treatment is often the best environmental choice, so as not to destabilize the bluff. Square feet of iceplant recommended for removal as part of this project: 173,392 square feet, or almost four acres. On the beach dunes, tarping after September 30--when the Western Snowy Plover breeding season officially ends--may be feasible, otherwise herbicide treatment is necessary, outside of the March 1-September 30 window. Contractors will be utilized for treatment of Iceplant on

the bluff face and herbicide treatment. Volunteer groups can implement tarping and manual removal.

Arundo donax. There is one stand of giant reed, *Arundo donax*, in the Access F canyon, approximately 1000 square feet. This is best treated with cut-stump treatment with 50% or 100% glyphosate applied within 5 minutes of cutting. Bundling the stems and raising the bundles up the bluff is likely to minimize the disturbance to surrounding native vegetation.

Pampas Grass. *Cortaderia selloana* is proposed for eradication at Access E; there are approximately 14 plants (individuals hard to count in groups). Where equipment can access plants, they will be removed entirely. Where inaccessible to equipment, herbicide treatment will kill the pampas grass plants, and after death, the dry leaves will be cut and disposed of off site.

Myoporum, Tamarisk, Olive trees. Several myoporum, one medium-sized olive tree and one tamarisk are found along the Coastal Alternative Trail near the bluff and the golf course. These, as outliers to others on the Ellwood Mesa, are proposed for cut-stump treatment with glyphosate or Garlon as recommended by a Registered Herbicide Applicator. Material may be cut fine as in "lop-and-drop" where removal is a disturbance, or hauled to a site for chipping, especially if coordinated with other tree trimming activities at the City park property. Several Myoporum are found in the Eucalyptus on the eastern boundary and are proposed for removal. Scattered olive trees, all young or stunted are found on the Mesa, and those in the vicinity of the Coastal and De Anza Trails are proposed for removal, also by cut-stump treatment.

Cypress tree. One Monterey cypress tree, *Cypressus macrocarpa*, in the Access F canyon is recommended for drill-and-fill treatment to kill it in place, as removal of the dead material would disturb surrounding native vegetation. Other cypress trees, including one in the tree/shrubland near Access E, will remain. Although not native to this part of California, White-tailed kites roost in the tree, and Cypress trees near the Eucalyptus grove can be utilized by Monarch butterflies, according to Dr. Daniel Meade (personal communication).

Other annual weeds. Other annual weeds, such as Italian and Russian thistle, annual non-native grasses, will be removed by hand, or can be cut with a mower or weed-eater for site preparation or large expanses where native vegetation will not be disturbed. Debris from weed removal will be disposed of off-site where viable weed seeds are present. Other weeds will be used as mulch around plantings, for a natural look.

RESTORATION PROJECT PROPOSALS**COMPONENT 1:****SPERLING PARKING LOT TO GULLY CROSSINGS**

Segment 1 (Refer to Figure 3). The initial trail segment will be re-contoured for runoff to the east and narrowed to 10' and planted with low growing plants tolerant of the partial shade and allelopathic chemicals of the adjacent Eucalyptus trees. About 1500 square feet will be planted with Purple Needlegrass and grassland associates, with scattered *Hazardia* and coast morning glory, 150 plants.

Segments 2-3 (Refer to Figure 3). A new trail heads southwest to cross gullies and aligns with the General Plan. Most of the trail will traverse non-native grasses; the few native grasses will be relocated in the trail corridor. The trail bed will be cut for 5% grade approaching and leaving Gully 1. The 45° banks will be vegetated with about 400 grasses and blue-eyed grass. An existing clump of blue-eyed grass about 25 ft² will be disturbed, and all will be replanted on the cut slopes of the new trail. After installation of the culvert and fill, moisture-loving plants sanicle, verbena and alkali ryegrass will be planted in the gully.

Segments 4-5 (Figure 3, 3A). Drainage with gullies. Gully 2A is an active channel with native wetland *Carex* in the invert. To protect the ESHA, minimizing disturbance, a boardwalk will be installed with screw pilings, approximately 8' x 25'. The wetland plants directly disturbed will be relocated east of the eucalyptus trees in the active channel. This revegetation area will be ~2000 ft², significantly larger than 3:1 compensation for direct and indirect (shading) from the boardwalk. A brush fascine will be constructed on the downstream side of the planting area, to retain water and limit erosion in this planting area, which will scarified to uncompact soil from the current trail for plant establishment of 400 plants. Plant palette will include Alkali ryegrass and relocated *Carex*. Mulefat will be planted downstream of the brush fascine for stabilization; this species provides nectar for overwintering Monarch butterflies. One Eucalyptus trunk which is horizontal on the ground will be cut and relocated in the current trail tread to aid rerouting the trail. No trees will be removed, but some limbing up will done, outside of raptor breeding season (before February).

The inactive gullies will have fill, provided by re-contouring the slopes of the gully to facilitate planting. Erosion control blankets, natural fibers only, will be installed on these re-contoured slopes as needed before planting. Giant Ryegrass, Coast Morning Glory, California Sagebrush and California Brome will dominate the planting palette of these slopes. The total plantings will 1500 plants, including coast live oak trees north and south where the trail is closed for rerouting. The new trail will be lowered as at Gully 1, and a patch of blue-eyed grass a maximum size of 100 ft² will be salvaged and planted on the trail corridor slopes.

COMPONENT 2:

DEVEREUX CREEK CROSSING

Segment 1 (Refer to Figure 4). The trail between the drainage and the creek will be relocated to reduce grade with limbing of a horizontal limb of a eucalyptus tree. Less than 400 ft² will be revegetated with oaks and understory species, 50 plants total.

Segment 2 (Refer to Figure 4). The Devereux Creek crossing will have a boardwalk with screw pilings, to protect the ESHA. Direct impact—installation of screw pilings, and removal of old fill from the current trail—and indirect impact—from shading from the 8' x 60' boardwalk--will total approximately 700 ft². The total boardwalk and restoration totals 8,428 ft² with an area 4000 ft² in the creek invert upstream enhanced by weed removal, *Frankenia* sprigging, relocation of salvaged plants and container planting. Mulefat plants will be installed along the toe of the creekbanks, which is a good Monarch butterfly nectar source. Invasive control in the creek invert, with some infill planting of 300 plants, will mitigate disturbance to the wetland plants.

Segment 3 (Refer to Figure 4). Trail re-route: The area where the switchbacks will be created to reduce the grade and control erosion is dominated by non-native fennel. Existing coast live oak, coyote bush and giant ryegrass can be preserved with some trimming and minimal removal. After control of the invasive fennel, the 17,185 ft² area will have an oak woodland established, along with understory species for erosion control and habitat diversity utilizing 20 oaks and a total of 800 plants.

COMPONENT 3:

COASTAL LOOP TRAIL

Segments 1-2 (Refer to Figure 5). The Coastal Loop Trail heads west on the northern edge of Devereux creek and crosses the creek near the western boundary of Ellwood Mesa. Invasive weed control, especially around existing native vegetation, is the only restoration planned for this section. This involves mostly hand removal of mustard, thistles and non-native grasses, and treatment some fennel. One planted, non-native oak is proposed for removal from the creekbed. In the creek, just east of the trail crossing, the largest known patch of Santa Barbara Honeysuckle at Ellwood Mesa and a likely source of seeds for nursery-grown plants.

Segment 3 (Refer to Figure 5). This segment of loop trail parallels the Sandpiper Golf Course Fence, and is proposed for three areas of invasive plant removal, all outliers. A small patch of cape ivy will be removed by hand. Harding grass covers about 300 ft², and will require

herbicide treatment for eradication. In a coyote brush shrubland toward the bluff east of the trail, cut-stump treatment for 2 *Myoporum* shrubs and 1 small olive tree is proposed. These eradications will protect the western part of Ellwood Mesa from infestation.

Segment 4 (Refer to Figure 5). The western bluff trail has two areas of the bluff proposed for infill restoration, totaling 24,737 ft² area. On the western edge there are several non-native shrubs, 4 *myoporum* and one tamarisk, and one 15-foot cypress tree proposed for removal by cut-stump treatment. Between the trail and the bluff are two large patches of fennel totaling 2850 ft², proposed for removal with herbicides, and planted with natives along with gaps in the native blufftop vegetation. Scattered fennel north of the trail in the trail corridor will also be treated. Non-natives to be removed include Australian saltbush, mustard and vetch. Infill planting will total 600 container plants, with expansion of purple needlegrass and grassland associates where present, and sub-shrubs where dense mustard and fennel are present.

Segment 5 (Refer to Figure 5). Blufftop restoration totaling 22,812 ft² and three fill donor sites totaling 13,584 ft² north of the trail are located in Segment 5. The westernmost fill site has a patch of purple needlegrass 8'x15', which will be left in place or plants salvaged and replanted after the fill is removed. The rest of the fill donor sites consist of non-native vegetation; the sites will be revegetated at 2.2' oc with 2000 plants of purple needlegrass, blue-eyed grass, coastal poppies, the prostrate form of coast goldenbush, and some yard rush, found in the vicinity.

The narrow bluff will be cleared of a patch of Harding grass (herbicide), some mustard and Australian saltbush. Dense non-native grasses will be cleared only for infill planting sites to maintain bluff integrity. One area near the old fence has some head cutting into the trail and a drainage with mesic native vegetation, and 3 *myoporum* which will be removed with cut-stump technique. Existing natives include Pacific sanicle, foothill melic grass, bee plant under California sagebrush. Working with the trail crew, the erosion gully will be addressed and 1-2 brush fascines installed in the gully. Large native shrubs such as lemonadeberry will replace the *myoporum*, existing natives will be protected and expanded. Plantings on the bluff will number 700 infill plants.

COMPONENT 4:

COASTAL-DE ANZA CONNECTOR TRAILS

Segment 1 (Refer to Figure 6). This trail segment will be reconfigured slightly for drainage improvements. No restoration plantings are planned on this section of trail, although any disturbed native plants such as blue-eyed grass will be salvaged and relocated in the trail corridor. Native plants in the corridor will be weeded to foster expansion.

Segment 2 (Refer to Figure 6). A new Coastal Trail Alignment is planned, according to the General Plan trail plan, to protect vernal pools along existing trails. This trail corridor is proposed as 60-feet in width, as it is very weedy, to the north just annual grasses, then perennial invasive harding grass, then robust non-native mustard. Herbicide treatment of the Harding grass is planned, and several mowing sessions or tarping of the mustard to reduce the seedbank. Given the weed seedbank and the weed species, shrubs and subshrubs are planned, with low-growing plants immediately adjacent to the trail. At the outer margins of the corridor, seeds of the upright coast goldenbush will be direct seeded, anticipating that this will spread into the adjacent disturbed habitat. The total restoration area is 49,000 ft², and 2700 container plants are planned. The planting palette will include California sunflower, California sagebrush, sawtooth goldenbush and coast morning glory. At the trail border, California fuchsia, coastal poppy and California brome are planned.

COMPONENT 5:

JUAN BAUTISTA DE ANZA TRAIL

Olive trees are invasive and expanding on Ellwood Mesa, and the project proposes that the twelve 8-12 ft. trees in the vicinity of the De Anza Trail be removed as part of this project. Cut-stump treatment with Garlon, and removal of the brush for chipping is recommended.

Segment 1 (Refer to Figure 7). The existing double-track trail is to be narrowed and brought up to grade at 6 feet width, using fill material from 7 areas along this trail west of the Santa Barbara Shores extension road. The fill areas, north and south of the trail, total 17,782 ft². Fennel patches will be treated, protecting the interspersed blue-eyed grass. Three thousand plants will be installed to narrow the trail and revegetate the fill donor sites with native species, predominantly Purple Needlegrass and grassland associates.

Segment 2 (Refer to Figure 7). This General Plan Trail realignment will avoid and protect a large vernal pool which the current trail traverses, as well as dense native grasslands. The realigned trail winds through native shrubs to the south with limited impact to the native vegetation for a length of 1230 feet. Any purple needlegrass and blue-eyed grass that is disturbed will be salvaged and replanted in the trail corridor or in the existing footpath. Some trimming of native coyote bush will be required.

The existing footpath will be restored with native species to reduce human disturbance to protect the vernal pools and native bunchgrass in the area. The footpath will be scarified to uncompact the soil. In the vernal pool scarification will be by hand only—such as with a shovel, between the vegetation. Coyote thistle is densest within the existing footpath. Shrubs will be planted at the trail junctions—5 areas in all—to discourage ingress. Each planting area will be approximately 25' and the trail width of 8', so 200 ft²; 25 plants will be installed to restore

each trail tread. In the vernal pool buffer direct seeding of annual wetland plants will occur: gum plant and the sensitive southern tarweed, the latter by raking in crushed dried plants collected at the end of the season. On the surfaces between the planted trail junctions the upright coast goldenbush seed will be direct-seeded. Shrubs at the trail junctions will be California sagebrush, Santa Barbara honeysuckle, coast goldenbush—upright—and purple needlegrass; about 125 container plants.

Segment 3 (Refer to Figure 7). This single track trail is to be widened from 2 feet to 6 feet. Most of the dense native bunchgrasses and shrubs are on the north side of the existing trail tread. Recommend trail expansion to the south—one exception where a patch of purple needlegrass is to the south. All purple needlegrass and blue-eyed grass to be disturbed shall be salvaged and relocated on the south side of the trail corridor, to create a denser grassland border.

Segment 4 (Refer to Figure 7). The east boundary roadway is 900 feet from the east-west De Anza Trail at Ellwood and the east-west trail connection to UCSB property. The average width is 11.7 feet; the project proposed to narrow this restore to 8 feet and improve drainage off the trail. The restoration is approximately 3000 ft², primarily on the east side of the trail, occasionally to the west where the trail drains to the west. Removal is proposed of 3 Myoporum shrubs and one olive tree from eucalyptus understory. Plantings will be primarily grasses—western ryegrass in the understory and purple needlegrass on the western trail margin with occasional shrubs to delineate trail—such as sawtooth goldenbush and Santa Barbara honeysuckle. Five hundred container plants are planned.

Segment 5 (Refer to Figure 7). The connector trail connector between De Anza Trail and Coastal Trail is approximately 360 feet in length. The project proposes to narrow the trail to 8 feet from the current 12-14 feet width. Three hundred container plants are proposed for the restoration area for narrowing the trail, approximately 1600 ft².

COMPONENT 6:

COASTAL BLUFFTOP TRAIL

The eastern blufftop bluff face and dunes totals almost six (5.88) acres. Intensive restoration is proposed for this area. Coastal Bluff Scrub is a sensitive habitat and this area is degraded by extensive iceplant and erosion gullies. The total iceplant east of Access E is approximately 108,153 square feet (almost 2-5 acres) The blufftop has a Southern Vernal Pool at the eastern boundary of Ellwood Mesa, and a mosaic of native and non-native vegetation on the blufftop south of the Coastal Trail.

Vernal Pool (Refer to Figure 8). A vernal pool of 9409 ft² is located on the eastern boundary where the Coastal Trail enters from the University property. The Habitat Restoration map shows the Coastal Trail as it comes from University property to be in the vernal pool. This is not consistent with the vegetation observed in April 2013 (a dry year), although the trail is in the buffer. However, a trail that heads south from the Coastal Trail to the bluff does bisect the vernal pool, with the wetland species common spikerush and meadow barley observed west of the trail. If the City would like to realign the Coastal Trail and perhaps the informal trail to avoid the vernal pool and expand the buffers, a current Wetland Delineation is suggested. Even if the trail alignment is to remain in its current location, the vernal pool can be enhanced with these measures:

- a) Remove 2 myoporum trees south of the vernal pool, at the edge of the eucalyptus trees.
- b) Hand-weed around the existing coyote thistle, and weed-whack and rake the non-native grasses to reduce their density in the pool. Recommended twice a year for several years, when grasses are first flowering, and again when regrowth is flowering (personal communication *Johanna Kisner, URS*).
- c) Rake duff from the center of the best vernal pools at Ellwood Mesa during the dry season and spread the duff in this pool to expand species diversity.
- d) Plant meadow barley and common spikerush in the vernal pool.
- e) Plant natives in the buffer: verbena, gum plant, purple needlegrass and the prostrate form of coast goldenbush. Direct seed Southern tarweed as previously described.

A total of 725 container plants plus seed are proposed.

Segment 1 (Refer to Figure 8). The eastern Coastal Trail has an area of 99,461 ft² between the Coastal Trail and the blufftop (area includes the vernal pool) which is a mosaic of native bunchgrass, scattered native shrubs, fennel and mustard, and non-native grasses, with a well-defined social trail near to the blufftop. Restoration is proposed as a mosaic, with removal of the fennel and mustard, and removal of non-native grasses only in clusters where natives are existing or are to be planted. 2000 container plants will be used for infill between existing native vegetation, which will be weeded. Purple needlegrass and grassland associates will predominate the plant palette, with scattered bush lupine and sub-shrubs such as cliff aster.

Eastern Bluff Face & Beach Dunes. Coastal Bluff Scrub and Southern Dune Scrub are sensitive habitat designations, and the bluff and beach dunes east of Access E are dominated by iceplant, with erosion gullies, some of which have been used as footpaths, exacerbating the bluff-face erosion. The low dunes on the beach are vegetated by invasive iceplant, and the bluff face has a mosaic of native shrubs and iceplant. The total area is 137,201 ft². Eradication of iceplant and planting and natural expansion of the native vegetation will be a major enhancement of the area. The beach is Critical Habitat for the Western Snowy Plover, but areas infested with iceplant are not suitable roosting or breeding habitat for plovers. This

iceplant will need to be sprayed with herbicide or covered with black plastic tarping after September 30 when the plover breeding season ends—perhaps not enough warm weather to kill the iceplant (generally 8 weeks required). Direct seeding is best for establishment of dune vegetation—seed to be collected at adjacent Coal Oil Point Reserve: beach evening primrose, beach morning glory, beach saltbush, and pink and red sand verbena.

Coal Oil Point Reserve staff have expressed an interest in assisting with the bluff face/ dune restoration to complement COPR dune restoration to benefit the Western Snowy Plover (personal communication, Dr. Cristina Sandoval).

Near the base of the bluff there is a row of large myoporum trees, which are a major infestation in coastal habitats. The project proposes removal of approximately 15 trees by cut-stump treatment. Access D on University property may be more accessible to brush removal than Access E. Quail bush and Lemonadeberry would be good replacement species. On the bluff face, herbicide treatment will minimize soil disturbance for eradication of Iceplant. Several erosion gullies occasionally used as social trails contribute to bluff erosion and should be restored with native plantings. This is contractor work due to steepness, and small container plants, grown in leach tubes, will be more easily installed on the bluff face, except for the large shrubs such as quail bush and lemonadeberry. A total of 2600 plants will be used to infill the areas now bare and where Iceplant will be eradicated. Dudleya and deerweed will be included in the plant palette.

High berms north of the Coastal Trail are dominated by invasive grasses and mustard with two patches of Iceplant. The fill donor site along the northern edge of the trail totals 10,493 ft² (inclusive of iceplant) and borders a large expanse of native bunchgrass, which will be expanded. Two thousand plants will be used in revegetation of the fill donor sites.

Segment 2 (Refer to Figure 8). Coastal Trail between beach access points. The area between the trail and the bluff has three areas proposed for restoration, totaling 17,341 ft². A portion is currently infested with iceplant. Infill planting with 1500 low-growing sub-shrubs and bunchgrasses is planned. Quailbush and lemonadeberry will be planted in barren areas just over the blufftop, to stabilize the bluff. On the north side, berms from four areas totaling 13,798 ft² will be removed for fill, and densely revegetated with low shrubs and purple needlegrass, 1500 container plants.

COMPONENT 7:

BEACH ACCESS POINTS

Beach Access E (Refer to Figure 9). The extensive Eucalyptus trees will need to be limbed up in order to remove the blacktop from the old road to the beach; this will reduce erosion and also

facilitate understory restoration with species tolerant of eucalyptus, such as western ryegrass and cliff aster. No trees are proposed for removal in this project area. The Palm trees on the bluff terrace and the Australian Tea Trees (shrubs) at the western top of the bluff will be retained. Extensive iceplant is also present in the 128,793 ft² area, and over an acre of iceplant will be eradicated (approximately 47,826 ft²). All techniques for iceplant eradication will be utilized in this project area. All Pampas Grass will also be eradicated. Planting of 4500 container plants will be supplemented by direct seed in the relatively flat area in the central bowl where iceplant will be eradicated; species to be seeded will include: Coast goldenbush—prostrate, bush lupine, California sagebrush, seacliff buckwheat. The bluff and former fire pit area will be planted with species such as quailbush, lemonadeberry, California fuchsia, bush lupine, purple needlegrass and the prostrate form of coast goldenbush. wooly sea-blite will be expanded at the base of the bluff.

Enhancement habitats north of Beach Access E. A mesic area with elderberry, coyote bush and understory species is infested with cape ivy. The cypress tree will be retained, as it is utilized as a perch by White-tailed Kites. Manual removal of the cape ivy and minor annual weeds is the restoration actions proposed for this 9,086 ft² area. Extensive understory natives are present and are expected to expand into the cleared areas. Adjacent is a patch of iceplant, 3,526 ft² which will be tarped with black plastic to eradicate the iceplant. As it is surrounded by native shrubs, once the iceplant is dead the area will be direct-seeded shrub species such as California sagebrush, California sunflower and southern tarplant.

The trail junction site north of Access E is currently dominated by iceplant, which will be eradicated with tarping; the area is 2,659 ft². Plantings will be low shrubs and coastal morning glory for a total of 450 container plants.

Beach Access F (Refer to Figure 10). The beach access in the central portion of Ellwood Bluff is proposed steps to improve access and safety in reaching the beach from the mesa. The restoration area is 28,811 ft², with major iceplant eradication and planting of native species. The iconic yucca on the bluff will remain. Iceplant on level ground can be killed with black plastic tarping. Under shrubs, in the shade, manual removal is proposed. On the steep bluff faces, herbicide treatment is the environmentally preferred option to maintain bluff stability. Native plants will be planted in disturbed areas along the stairway, and where iceplant is eradicated; 3000 plants are proposed for this infill.

One patch of *Arundo* in the drainage and is proposed for removal via cut stump treatment. The 1000 ft² area will be planted with 50 arroyo willow stakes between rhizomes, to allow for retreatment as needed. One cypress tree is located in the drainage, and is proposed for drill-and-fill treatment, and left in place as a snag. It is not close to the proposed stairway and thus does not pose a danger to visitors.

A second blufftop and bluff face area associated with Access F to the east is 11,843 ft² in size. A beach overlook is accessed through the eucalyptus trees. Plantings around the overlook and infill planting on the bluff face are proposed; 500 plants are planned. A donor site for fill north of Access F covers 6,700 ft²; shrub and subshrubs are proposed for planting, 400 container plants supplemented by seed of southern tarweed.

ADDITIONAL:

Additional Fill Donor Sites. The extension of Santa Barbara Shores Drive has extensive berms on both sides, totaling 15,033 ft²; 8,872 on the west side and 6,161 on the east side. The lush non-native grasses and forbs on and adjacent to the berms suggest that native bunchgrasses would be out-competed in this area. Therefore, the plant palette is Coastal Sage Scrub species, 1200 container plants. Deleted from this planting area is approximately 2000 ft² which is already included in the construction and corridor plantings for the proposed Coastal Trail Realignment (Refer to Figure 6).

SUMMARY HABITAT RESTORATION PLAN

Thirteen acres of habitat restoration are proposed in association with the proposed trail improvements at Ellwood Mesa. While the 13 acres is less than 6% of the total 224 acres of the Preserve, the enhanced visitor experience and enhanced natural resource value is disproportionately large. Along the blufftop, the area between the Coastal Trail and Coastal Loop Trail and the bluff will be improved with removal of non-native fennel that blocks views of the ocean, removal of other non-native vegetation and planting with native coastal plants that are low-growing species that help hold the soil and are visually appealing but do not block ocean views.

Other areas proposed for restoration are the cleared areas where soil is extracted from the trail-side berms for addressing trail entrenchment. The eastern bluff face and dunes at the base of the bluff are degraded with iceplant and myoporum which are proposed for removal and replacement with native vegetation. Access improvements crossing the drainages and Devereux Creek will also benefit the riparian habitats, with restoration in the creek and drainages and upland vegetation along the new trails.

The "Ellwood Mesa Coastal Trails and Habitat Restoration Design Project" is designed to retain the natural, rural feel of Ellwood Mesa while improving the access for trail and beach users while enhancing the natural resource values of the site.

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Ellwood Mesa Restoration Project

EXHIBIT 1

Preliminary Plant Layout

5/2/2013

Common Name	Scientific name	Plant Family	COMPONENT 1				COMPONENT 2			COMPONENT 3			COMP 4	COMPONENT 5					COMPONENT 6					COMPONENT 7					ADDITIONAL		Totals	Comment
			1. Trail Sperring parking lot realignment	2.3. Gully 1	4.5. Drainage	1. Trail to creek	2. Devereux Creek	3. Trail Re-route S creek	4. Coastal Loop Trail bluff, West	5. Coastal Loop Trail -3 fill sites	5. Coastal Loop Trail East	2. Coastal Trail Realignment--constructed	1. De Anza Trail Mesa--fill sites	2. De Anza trail realignment--reveg	4. De Anza Trail N-S eastern border narrow	5. Connector De Anza Trail & Coastal Trail-- narrow	Vernal pool eastern border	1. Coastal Blufftop E end	1. Buff face and dunes E end	1. Coastal Trail E. fill sites	2. Coastal Trail to bluff-between E&F	2. CT fill areas n side--between E&F	Access E	Area between trails, n Access E (keplant)	Blufftop & bluff face e of Access F; below E&F; in fill	Access F; in fill	Fill donor site N Access F	Fill donor sites E & W 50 Shores Drive extension	15,033	561,075		
TOTALS			150	400	1500	50	300	800	600	2000	700	2700	3000	125	500	300	725	2000	2600	2000	1500	1500	4500	450	500	3000	400	1200	33,500			
														+seed		+seed		+seed														
Common Name	Scientific name	Plant Family	1,500	2,129	18,366	391	8,428	17,185	24,737	13,584	22,812	49,000	17,782	6,000	3,000	1,600	9,409	99,461	139,352	10,493	17,341	13,798	128,793	2,659	11,843	28,811	6,700	15,033	561,075	13		
Alkali ryegrass	<i>Leymus triticoides</i>	Poaceae		100	200		100																							400	direct cuttings	
Arroyo Willow	<i>Salix lasiolepis</i>	Salicaceae																												50		
Bee Plant/California Figwort	<i>Scrophularia californica floribunda</i>	Scrophulariaceae			25		50	25										25											50	175		
Blue eyed grass	<i>Sisyrinchium bellum</i>	Iridaceae	25	60	100		50	50	200			200	300					200		200	100									1485		
Bush Lupine	<i>Lupinus arboreus</i>	Fabaceae																150					100							350		
Bush Monkey Flower	<i>Mimulus longiflorus</i>	Scrophulariaceae	10						25			15	100					50				100	100	50				100	600			
California Brome	<i>Bromus carinatus</i>	Poaceae			200	32		100																						832		
California Sunflower	<i>Encelia californica</i>	Asteraceae			25	10		50										100	300			200	300				200	100	200	1785		
California Coastal Poppy	<i>Eschschotzia californica var. maritima</i>	Papaveraceae	40						50	200		300	300					50			200		300	100		200		100	100	1840		
California Fuchsia	<i>Epilobium canum</i>	Onagraceae					75	25			25	300	100					100			100		100	50	50	50	100	25	100	1200		
California Goldenrod	<i>Solidago californica</i>	Asteraceae			50		100																							200		
California Sagebrush	<i>Artemisia californica</i>	Asteraceae			50		50					300		25		30	20		25	200			250			100	100	100	100	1250		
Coast Goldenbush	<i>Isocoma menziesii var. menziesii</i>	Asteraceae											300	seed																300		
Coast Goldenbush, prostrate form (bluffs)	<i>Isocoma meziessi var. sedoides</i>	Asteraceae						100	450	200								50	300	300	200	300	400	50	150	300				3000		
Coast Live Oak	<i>Quercus agrifolia</i>	Fagaceae			15	3		20																							38	
Coastal Morning-glory	<i>Calystegia macrostegia ssp. cyclostegia</i>	Convolvulaceae	15	15	100		50	35	100	50	200	200	200	20	30	20		200	150	100	100	200	250	50	50	200	50	100		2285		
Comon Spikerush	<i>Eleocharis macrostachya</i>	Cyperaceae																100														
Deer Weed	<i>Lotus Scoparius</i>	Fabaceae																100	100	100		100	100	50			25	50	725			
Frankenia	<i>Frankenia salina</i>	Frankeniaceae					100																							100	sprigs	
Giant Rye Grass	<i>Leymus condensatus</i>	Poaceae			50		40			10																				150		
Gum Plant	<i>Grindelia camporum</i>	Asteraceae																		seed										150		
Lemonade Berry	<i>Rhus integrifolia</i>	Anacardiaceae							15	15												150								50	580	
Meadow Barley	<i>Hordeum brachyantherum ssp. brachyantherum</i>	Poaceae																													100	
Mugwort	<i>Artemisia douglasiana</i>	Asteraceae			100		100																								570	
Mulefat	<i>Baccharis salicifolia</i>	Asteraceae					25																								25	
Narrowleaf Milkweed	<i>Asclepias fascicularis</i>	Asclepiadaceae	20		25		40						100																		185	
Pacific Sanicle	<i>Sanicula crassicaulis</i>	Apiaceae		10	25								25																		60	
Purple Needle Grass	<i>Stipa pulchra</i>	Poaceae	25	200	200		200	1000	250			900	25	125	75	200	400	300	1000	350	350	550	100			400				6650		
Quailbush	<i>Atriplex lentiformis</i>	Chenopodiaceae																	200												650	
Rock Lettuce	<i>Dudleya lanceolata</i>	Crassulaceae																	200		50										300	
Salt Grass	<i>Distichlis spicata</i>	Poaceae																													200	
Santa Barbara Honeysuckle	<i>Lonicera subspicata var. subspicata</i>	Caprifoliaceae			25	5	10	25					100	10	35	15														50	275	
Sawtooth goldenbush	<i>Hazardia squarrosa var squarrosa</i>	Asteraceae	15									300	200																	50	740	
Seacliff Buckwheat	<i>Eriogonum parviflorum</i>	Polygonaceae						50		85								100	250		200	200	450		100	275	50	100		1860		
Seacliff Daisy	<i>Malacothrix saxatilis tenuifolia</i>	Asteraceae																													150	
Seacliff Daisy	<i>Malacothrix saxatilis var saxatilis</i>	Asteraceae											200	200																	1650	
Sedge, Santa Barbara	<i>Carex barbarae</i>	Cyperaceae			10		15																								25	
Sedge, unidentified	<i>Carex sp.</i>	Cyperaceae			50																										50	
Spanish clover	<i>Lotus purshianus</i>	Fabaceae										100	200																		600	
Yard Rush	<i>Juncus occidentalis</i>	Juncaceae			25		25			50																					100	
Western Rye	<i>Elymus glaucus</i>	Poaceae			200																										900	
Western vervain	<i>Verbena lasiostachys var lasiostachys</i>	Verbenaceae		15	25		25	50	25																						315	
Woolly Sea-bitte	<i>Suaeda taxifolia</i>	Chenopodiaceae																													500	

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1

Attachment 2

2

URBEMIS Summary

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name:

Project Name: Ellwood Trail Improvements

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2007 TOTALS (lbs/day unmitigated)	8.21	54.13	30.29	0.01	32.53	3.43	35.96	6.80	3.16	9.95	4,351.81
2008 TOTALS (lbs/day unmitigated)	12.87	71.15	71.20	0.03	32.65	4.66	37.31	6.84	4.28	11.12	8,401.68

1

Attachment 3

2

Ellwood Gap Analysis



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- DRAFT -

GAP ANALYSIS

ELLWOOD MESA COASTAL TRAILS AND HABITAT RESTORATION PROJECT



Prepared for: Santa Barbara Trails Counsel
3885 Cinco Amigos
Santa Barbara, CA 93105

Prepared by: Storrer Environmental Services
2565 Puesta Del Sol Road #3
Santa Barbara, CA 93105

Submitted: July 18, 2012



2565 Puesta Del Sol Road #3
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Ray Ford
Santa Barbara Trails Council
3885 Cinco Amigos
Santa Barbara, CA 93105

October 30, 2012

Re: Alternative to Trail Segment 1 – Ellwood Mesa Coastal Trails and Habitat Restoration Project

Dear Mr. Ford

The following is a supplement to the Gap Analysis that I prepared for the referenced project (July 18, 2012 submittal). You asked that I comment on an alternative to the proposed segment of the trail leading from the public parking lot on Hollister Avenue to the crossing of a minor tributary (“gully”) to Devereux Creek referenced as “Segment 1” in the plan currently under consideration. The alternative would utilize an existing trail through the eucalyptus grove east of the “Bluffs” residential development, rather than the gully crossing as currently planned for Segment 1. The discussion focuses on potential effects on biological resources that might result from the alternative route.

I am very familiar with the path through the eucalyptus grove east of the "Bluffs" residential development. I agree with your assertion that more people use this route than crossing through the gully, simply because it's easier to negotiate.

The environmental sensitivities within the eucalyptus grove are primarily nesting birds (in particular raptors) and an autumnal (short-term) monarch butterfly aggregation site. I have observed red-tailed hawk, red-shouldered hawk, Cooper's hawk, white-tailed kite, and great-horned owl nesting in this grove in recent years. The kites, I believe have nested there nearly every year since 2005. Kites have been present through the nesting season (late winter through early summer) for the past seven years but nesting has been confirmed (at least by me) only twice. There was an active Cooper's hawk nest there in spring of 2006. Interestingly, that nest structure remains at the same location, approximately 60 feet above the woodland trail. Its present condition suggests that the

nest has been used since 2006, although I cannot confirm that. The kites tend to nest deeper in the grove, further east toward the Santa Barbara Shores subdivision. There is also a turkey vulture roost in this same grove (near the SB Shores subdivision) that has been used on and off for several years. I counted 60 turkey vultures lifting off from that roost at sunrise on 24 October 2012. The monarch butterfly aggregation site is also near the center of the grove.

In my experience, neither raptor nesting nor monarch aggregating has been deterred by the current or "historic" level of foot traffic through the grove. There are a few lateral foot paths that connect to a trail that follows the eastern boundary of the grove, but the use here is minimal and does not seem to adversely affect the monarch aggregation, raptor nests, or the turkey vulture roost.

I agree that this trail is a better option than trying to cross the two gullies. It provides for more even terrain, is equally or more scenic, and would eliminate the need for a bridge.

In summary, I do not think that the "eucalyptus grove alternative" would result in significant adverse biological impacts.

Please call me if you have any questions concerning this supplement to the original Gap Analysis.

Regards,

John Storrer
Consulting Biologist

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Introduction

The subject report (“Gap Analysis”) was prepared in support of Santa Barbara Trails Counsel’s (SBTC) proposal for a trail rehabilitation and habitat restoration project (“Project”) on the Sperling Preserve, Goleta, California. The report was prepared by John Storrer of Storrer Environmental Services, under contract to SBTC.

Details of the project are provided in a report submitted to the City of Goleta (“City”), requesting initiation of environmental review and permitting (SBTC 2012). The purpose of the GAP Analysis is to verify that biological resources along the proposed trail network are as mapped and described in various environmental documents and previous studies (e.g. 2004 Ellwood Open Space Plan and related studies).

The proposed route of the Coastal and De Anza Trails were evaluated (surveyed) in the field, using previous resource maps for comparison. These include maps prepared by Jones & Stokes (2008) and SAIC (2000) used as a basis for the 2004 Open Space Plan.

This report describes in general, the nature and condition of biological resources transected by the proposed trail system with particular attention to Environmentally Sensitive Habitat Areas (ESHA). Discrepancies or inconsistencies with previous documents are noted. General planning recommendations for future trail design and construction (e.g. trail realignment, trail rehabilitation, habitat restoration) are provided.

Method

The alignments of the Coastal and De Anza trails as shown in the project description (SBTC 2012) were surveyed on 13 and 14 July 2012. Resource maps prepared in conjunction with previous studies on Ellwood Mesa were used for reference. These include a composite map showing approximate locations of ESHA (Jones & Stokes 2008) and a map of jurisdictional wetlands (SAIC 2000). Features such as vernal pools, stands of native grasslands, and trees offering potential habitat for raptors and monarch butterflies were confirmed. Potential difficulties with resource protection and avoidance and/or conflicts with applicable land use policies were noted. Recommendations for modification to preliminary trail alignment or design were recorded.

Results

The following narratives provide an overview of resource sensitivities and constraints for the primary trail alignments. The project description (SBTC 2012) divides the Coastal and De Anza Trail system into fourteen (14) segments. That convention is followed here.

Segment 1 - Parking Lot to Gully Crossing

This combined segment of the Coastal/De Anza Trail crosses two gullies that drain into Devereux Creek. The overstory is comprised almost entirely of bluegum eucalyptus. The gullies have been degraded by persistent erosion and inappropriate trail use.

This large grove of bluegum provides nesting habitat for raptors (e.g. white-tailed kite, red-tailed hawk, red-shouldered hawk, Cooper's hawk). This could present seasonal constraints on trail construction and maintenance.

Segment 2 - Gully to Devereux Creek

Segment 2 borders the same stand of bluegum as Segment 1.

The same seasonal constraints regarding potential raptor nesting would apply.

Segment 3 - Alternate Coastal Trail to Devereux Creek

This segment follows the Goleta Sanitation District sewer line easement along the north side of Devereux Creek. This segment of Devereux Creek was excavated during a soil remediation project in 1997 and the subsequent restoration effort was very successful. A tributary drainage that originates on the Comstock Homes development site crosses the trail at its approximate mid-point.

Seasonal constraints on trail construction and maintenance include raptor nesting (great-horned owl, red-tailed hawk) and an autumnal monarch butterfly aggregation site at the west end of Segment 3 (at its intersection with Devereux Creek)

Segment 4 - Creek to Mesa Top

Habitat at the Devereux Creek crossing consists primarily of eucalyptus woodland. Understory vegetation within the creek channel is poorly developed and is impacted by regular trail use.

Seasonal constraints on trail construction and maintenance are the same as those listed for Segment 3 (e.g. autumnal monarch butterfly aggregation, raptor nesting).

Segment 5 – Sandpiper Boundary

There are no apparent resource constraints along this segment paralleling the eastern boundary of Sandpiper Golf Course. Mature eucalyptus trees here have supported raptor nesting (e.g. Cooper's hawk) in the past.

Segment 6 – Alternate Coastal Trail Bluff-top

Proximity to the edge of the bluff and potential for trail erosion is an issue with Segment 6, as noted in the project description (SBTC 2012). This segment is further constrained by vernal pools and a small stand of native grassland. The existing trail bisects both jurisdictional wetlands (vernal pools) and the native grassland. This would appear to place limitations trail improvements, in that widening or altering topography (i.e. crowning the trail surface) could affect pool hydrology and existing native grassland.

The presence of all these features (e.g. bluff edge, wetlands, and native grassland) poses problems for trail realignment.

Trail Segment 7 – Devereux Creek to Mesa Top

The existing trail crossing at Devereux Creek is equipped with a culvert surrounded by earthen fill. This section of Devereux Creek was subject to restoration in 1997 and it presently supports high quality riparian vegetation.

The project proposes to relocate the creek crossing to the east to reduce grade. The culvert would be replaced with a bridge. The bridge would be preferable to the current crossing because of its narrow width and under-sized culvert. The existing crossing could be re-vegetated to compensate for removal of riparian habitat for construction of the bridge.

Trail Segment 8 – Bluff-top to De Anza-Coastal Trail Split

Segment 8 does not appear to have significant resource constraints. There are scattered occurrences of native grasses, but the trail does not intersect mapped wetlands or native grassland.

Trail Segment 9 – Coastal Trail Mesa Top to Bluffs

There is a mapped vernal pool near the south end of Segment 9 that lies adjacent to the trail. Trail improvements would have to be done in a manner that does not affect pool hydrology.

Trail Segment 10 – Coastal Trail Bluff-tops

Constraints associated with Segment 10 include proximity to the edge of the bluff, in addition to vernal pools. The existing and proposed trail passes immediately adjacent to a large vernal pool at the east end of Segment 10. Trail improvements would have to consider effects on pool hydrology. It might be necessary to separate pools from the trail by fencing to avoid inadvertent impacts from recreational use.

Trail Segment 11 – De Anza to UCSB Boundary

The eastern portion of Segment 11 bisects native grasslands and runs very close to vernal pools. This is especially problematic at the east end of Segment 11 where the alignment corresponds to what is presently a narrow (approximately two-foot wide) foot trail. Westward of its approximate mid-point, Segment 11 follows a two-track road that is approximately eight feet in width. This trail/road bisects a vernal pool. A realignment of the trail is proposed to avoid the vernal pool. Presence of native grasslands poses constraints on trail realignment. Plans to widen the trail to six feet will impact native grasslands in the eastern portion of Segment 11. Moving westward from the approximate

midpoint of Segment 11, the prevailing vegetation is annual grassland and there are no vernal pools in proximity to the trail alignment.

Trail Segment 12 – De Anza UCSB Boundary to Bluff-top

There are native grasslands adjoining the existing trail on its western edge for most, if not the entire distance of Segment 12. The existing trail (a former two-track road) should provide ample space to make trail improvements while avoiding native grasslands. The eucalyptus windrow on the east edge of Segment 12 is potential nesting habitat for raptors - red-tailed hawk, white-tailed kite, and American kestrel have nested in these trees in the past. Season timing of trail construction and maintenance would avoid conflicts with nesting raptors.

Segment 13 – Beach Access F

This westernmost of the two proposed beach access points has significant issues with grade and soil erosion, as described in the project description (SBTC 2012). Vegetation consists primarily of coastal bluff scrub. Impacts to native vegetation should be avoided as much as possible in making trail improvements, both to preserve habitat value and promote soil stability. Stabilizing the trail using an “engineered” approach as proposed would provide the best solution to soil erosion and habitat preservation.

Segment 14 – Access Point E

The easternmost beach access point also presents significant erosion issues, as described in the project description (SBCT 2012). There are remnants of an old asphalt road and non-native vegetation (e.g. eucalyptus, palms, iceplant). Trail design should consider preservation of coastal bluff vegetation and removal of iceplant.

Conclusions

Field survey of the proposed Coastal and De Anza Trails on the Sperling Preserve indicates that previous resource maps (Jones & Stokes 2008, SAIC 2000) accurately depict the location of ESHA.

The proposed alignments for the Coastal and De Anza trail system conforms to existing trails. While preferable to creating new trails, it does present some conflicts with resource protection and land use policies where existing trails bisect ESHA. The extensive ESHA overlay on the Sperling Preserve presents challenges with avoidance of sensitive resources through trail realignment. Proposed trail improvements (e.g. widening, raising or “crowning”) could result in direct and indirect impacts to native grasslands and vernal pools.

These trail segments or sub-segments are most constrained by biological resource issues: western portion of Segment 6; Segment 10; and western portion of Segment 11.

Recommendations

- Where feasible, the trail alignment should be adjusted (realigned) to avoid ESHA.
- Trail design should consider possible effects on vernal pool hydrology.
- Closure and restoration of some existing trails may provide opportunity for compensatory mitigation for impacts to native grassland that may occur through trail widening.
- Seasonal timing of trail construction and maintenance should be considered with respect to nesting birds, in particular raptors, and monarch butterflies.

References

Jones & Stokes. 2008. Environmentally Sensitive Habitats. Scale: 1 inch = 200 feet.

SAIC, Inc. 2000. Wetlands – Santa Barbara Shores Monarc Point Property. 1 inch = 200 feet.

Santa Barbara Trails Counsel. 2012. Ellwood Mesa Coastal Trails and Habitat Restoration Project Request. Submitted to City of Goleta Community Services Department. May 12.

