CALIFORNIA COASTAL COMMISSION
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Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-06-091

APPLICANT: Storke Ranch Master Homeowners' Association

AGENT: Kelly Hildner, President of Storke Ranch HOA

PROJECT LOCATION: East End of the Storke Ranch Open Space, west of Sweetwater Way, Goleta, Santa Barbara County

PROJECT DESCRIPTION: Implementation of a Habitat Restoration and Monitoring Plan, including excavation of two vernal pools totaling 0.19 acres, inoculation of vernal pool seed bank into basins, restoration of 10-20 ft. buffers around each vernal pool through weed removal and establishment of native plants, establishment of a southern tarplant population, restoration of upland habitat buffer through placement of soil and revegetation, and 302 cu. yds. of grading (151 cu. yds. cut, 151 cu. yds fill).

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with five special conditions regarding: (1) Wetland Habitat Enhancement and Restoration Monitoring Program; (2) Sensitive Species Surveys and Construction Monitoring; (3) Project Monitoring and Responsibilities; (4) Grading and Erosion Control; and (5) Required Approvals.

The subject site is part of a 12-acre open space area dedicated to the protection of vernal pool, freshwater marsh, and brackish marsh wetlands within the County of Santa Barbara-approved Storke Ranch Subdivision. The project is proposed in the eastern portion of the open space area near delineated vernal pools. The purpose of the project is to create two vernal pool wetlands with native wetland plants in areas that consist, almost entirely, of non-native and invasive vegetation.

The standard of review for the proposed project is consistency with the Chapter 3 policies of the Coastal Act. The proposed project is a voluntary restoration plan initiated by the Storke Ranch Homeowners' Association. The project, as conditioned, will provide a net benefit to wetlands, ESHA, and sensitive species. The project, as conditioned, is consistent with all applicable policies of the Coastal Act.

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Exhibits

Substantive File Documents: Final Storke Ranch East Vernal Pool Restoration and Monitoring Plan, Goleta, California (Hildner and Hubbard, August 17, 2006);County of Santa Barbara Tract Map (TM 14,393) and Revised Development Plan (90-DP-028) Findings and Conditions, February 26, 1997; Environmental Storke Ranch Management Plan (Van Atta Associates and Community Environmental Council)

Local Approvals Received: City of Goleta Conceptual Approval, July 25, 2006 (Case 06-105-SCD).

I. STAFF RECOMMENDATION

MOTION: ***I move that the Commission approve Coastal Development Permit No. 4-06-091 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

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

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

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

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

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

III. SPECIAL CONDITIONS

1. Wetland Habitat Enhancement and Restoration Monitoring Program

A. Prior to issuance of the coastal development permit, the applicant shall submit a Final Habitat Restoration and Monitoring Plan, for the review and approval of the Executive Director, prepared by a qualified biologist, ecologist, or resource specialist, for the proposed restoration project. The Final Habitat Restoration and Monitoring Plan shall be substantially in conformance with the Storke Ranch East Vernal Pool Restoration and Monitoring Plan, dated August 17, 2006 and shall include the following provisions:

(1) Performance criteria consistent with achieving the identified goals and objectives of the restoration project; measures to be implemented if success criteria are not met; and long-term adaptive management of the restored areas for a period of not less than five (5) years. At a minimum, successful site restoration shall be determined when the each plant cover target is reached and is able to survive without additional outside inputs.

(2) The applicant shall submit, on an annual basis for a period of five (5) years, beginning after completion of the proposed grading activity, (but no later than December 31st each year) a written monitoring report, prepared by a qualified resource specialist evaluating the progress and relative success or failure of the restoration project. This report shall also include further recommendations and requirements for additional restoration activities in order for the project to meet the criteria and performance standards. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) indicating the progress of recovery at each of the sites.

(3) At the end of the five year period, a final detailed report on the restoration shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has, in part, or in whole, been unsuccessful, based on the performance standards specified in the restoration plan, the applicants shall be required to submit a revised or supplemental program to compensate for those portions of the original program which were not successful. The revised or supplemental program shall be processed as an amendment to this permit. During the five year monitoring period, all artificial inputs shall be removed except for the purposes of providing mid-course corrections or maintenance to insure the long term survival of the restoration site. If these inputs are required beyond the first two years, then the monitoring program shall be extended for every additional year that such inputs are required, so that the success and sustainability of the restoration is insured. The

restoration site shall not be considered successful until it is able to survive without artificial inputs.

B. The restoration and monitoring shall be implemented by biologists, ecologists, or resource specialists who are experienced in the field of restoration ecology and with qualifications acceptable to the Executive Director. The monitoring plan shall be implemented immediately following planting.

C. The applicant shall undertake development in accordance with the final approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission-approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

2. <u>Sensitive Species Surveys and Construction Monitoring</u>

A. The applicant shall retain the services of a qualified biologist(s) or environmental resource specialist(s) to conduct sensitive species surveys and monitor project operations. At least two (2) weeks prior to commencement of any project operations, the applicants shall submit the name and qualifications of the biologist or specialist, for the review and approval of the Executive Director. The biologist or specialist shall ensure that all project construction and operations shall be carried out consistent with the following:

(1) The environmental resource specialist shall conduct a survey of the project site, to determine presence of sensitive species, prior to any project operations including construction, grading, excavation, vegetation eradication and removal, and hauling activities.

(2) In the event that any sensitive wildlife species are found, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

(3) The environmental resource specialist shall be present during all construction, grading, excavation, vegetation eradication and removal, hauling, and maintenance activities. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. The environmental resource specialist(s) shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-06-091 occur. If significant impacts or damage occur to sensitive habitats or to wildlife species, the applicants shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. Any native vegetation which is inadvertently destroyed or damaged during implementation of the project shall be replaced in kind at a 3:1 or greater ratio. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

3. Project Responsibilities

It shall be the applicant's responsibility to assure that the following occurs during project operations:

(a) The work area shall be flagged to identify limits of construction and identify natural areas off limits to construction traffic.

(b) No construction materials, debris, or waste shall be placed or stored where it may be subject to erosion and dispersion.

(c) Any and all debris resulting from project activities shall be removed from the project area on a daily basis.

(d) Herbicide shall not be used during the establishment or maintenance of the project as specified in the Final Habitat Restoration and Monitoring Plan.

4. Grading/Erosion Control

A. No grading shall take place during the rainy season (November 1 – March 31).

B. The applicant shall immediately stabilize any stockpiled fill with geofabric covers or other appropriate cover and shall install silt fencing to ensure that stockpile material does not enter sensitive habitat areas.

C. The applicant shall immediately plant graded areas, pursuant to the approved final restoration plan to stabilize cut/fill areas and minimize erosion.

D. Erosion control measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment dispersal during construction. All sediment should be retained on-site unless removed to an appropriate approved dumping location either outside the coastal zone or to a site within the coastal zone permitted to receive fill.

E. The applicant shall implement temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. All disturbed areas shall be seeded with native species. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

F. All excavated material shall be contained within the designated deposition sites.

5. Required Approvals

Prior to issuance of the coastal development permit, the applicants shall provide all necessary state and federal permits and/or approvals for all aspects of the project described in CDP 4-06-091 or evidence that no authorization is required, for the review

and approval of the Executive Director. Prior to issuance of the coastal development permit, the applicant shall obtain written approval for project activities at the donor vernal pool sites from the Isla Vista Recreation and Park District.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION

The proposed project consists of the creation of two vernal pools of approximately 0.1-acre and 0.09-acre in the 12-acre open space area within the Storke Ranch Subdivision in the City of Goleta, Santa Barbara County (Figure 1). The applicant has submitted the Storke Ranch East Vernal Pool Restoration and Monitoring Plan, dated August 17, 2006, which specifies project details and outlines criteria to determine the project's success at fulfilling restoration goals and objectives. The project includes restoration of a 10-20 ft. buffer around each vernal pool through weed removal and establishment of native plants, inoculation of vernal pool seed bank into basins, establishment of a southern tarplant population, restoration of upland habitat buffer through placement of soil and revegetation, and 302 cu. yds. of grading (151 cu. yds. cut, 151 cu. yds fill). The restoration is planned for the eastern vernal pool area in the easternmost portion of the open space that runs through the center of the complex (Figures 1 and 2). The open space area, which is owned by the homeowner's association, is protected by an open space easement which is held by the City of Goleta. The applicant has obtained the City's authorization to implement the proposed project within the easement. The area to be excavated for these new vernal pools is disturbed, consisting of non-native grassland. The project area is surrounded by a complex of disturbed vernal pools and scattered wetland plants.

The project will restore vernal pool hydrology by excavating two depressions in areas currently dominated by invasive grasses. In the vernal pool margins and the buffer areas adjacent to the pools, weeds shall be removed and appropriate native plants shall be planted as described below (Figure 4). The pools will be excavated using a small skiploader, and the excavated areas will be inoculated with seed bank material obtained from surface scrapings of vernal pools at the Camino Corto Open Space and Del Sol Vernal Pool Reserve. A variety of vernal pool annuals and perennials would be effectively introduced into the vernal pool basins as a result of the inoculation. The collection will be designed to introduce the following species: *Plagiobothrys undulatus*, *Psilocarphus brevissimus*, *Crassula aquatica*, *Elatine brachysperma, Callitriche marginata, Epilobium pygmaeum, Alopercurus howellii, Phalaris lemmonii, Pilularia Americana, Eryngium vaseyi, Eleocharis macrostachya, and Eleocharis acicularis*.

Soil excavated during the creation of the vernal pools will be removed to two nearby sites within the vernal pool buffer area, covering areas currently dominated by introduced grasses. Soil will be mounded to a maximum height of 3 feet and planted

with additional coastal scrub and oak woodland species to enhance the buffer area. These upland mounds will be located next to the developed pathway, between the path and the restored vernal pools. Fill areas will not encroach near existing scattered landscape trees in the buffer area. Coconut netting will be used to secure the edges to prevent erosion and silt fencing will be used as needed to prevent erosion into the wetland areas.

The existing non-native plants along the margins of the newly excavated vernal pools will be removed by a combination of solarization with black plastic and hand-weeding in a 10-20 foot wide swath around each pool. Herbicide will not be used within the vernal pool or vernal pool buffer area. The margins will be revegetated with native plants and seeds to define the edges of the vernal pools and also provide a buffer against weed invasion. The margins will specifically be planted with a population of southern tarplant, a sensitive plant species.

The basins of the vernal pools (0.19 acres) will be revegetated with seed bank inoculum collected from established vernal pools in the vicinity. The 10-20 foot wide margins around these excavated areas, and the planted portions of the buffer area, will be planted primarily with nursery stock (3000 plants). Native plant seeds will also be scattered to enhance the seed bank and encourage further native recruitment. Plants for the project will be propagated in cooperation with Growing Solutions Restoration Education Institute at the Isla Vista Nursery (Isla Vista Recreation and Parks District) and onsite from locally collected seeds. Plug trays and 2-inch pots will mostly be used in the installation, and planting will occur during the rainy season to facilitate establishment. The project will not use irrigation.

The Storke Ranch Homeowner's Association will provide ongoing annual maintenance and weed control of the site. This will include weed-whipping of invasive grasses in the buffer area outside the split-rail fence and hand-weeding of invasive perennials (fennel, curly dock, wild radish, and smilo grass) both in the buffer and within the fenced areas. A guide to native and invasive plants in the area, including best management practices for when to conduct weed control activities will be created to educate workers and future homeowners about open space maintenance. This guide will also be provided to Goleta West Sanitary District along with an addendum with recommendations specific to maintenance and management for the sewer right-of-way and suggestions for minimizing impacts to the vernal pools.

B. BACKGROUND

Storke Ranch is a planned residential development in Goleta, CA that was built in 1998 on former ranch land that had primarily been used for cattle grazing. The site includes approximately 12 acres of natural open space including several ecologically sensitive wetland communities that are protected by an open space easement which is held by the City of Goleta. However, the University of California and Goleta West Sanitary

District also maintain sewer easements through the open space area, effectively bisecting the open space into north and south segments.

On February 26, 1997, the County of Santa Barbara approved the Tract Map, Development Plan, and Coastal Development Permit which created the Storke Ranch subdivision, subject to conditions. The approval required an open space easement over the site's wetland areas to be granted to the County (now held by the City of Goleta). Lots 96 and 117 would preserve an existing freshwater march located on the western boundary of the site. Lots 98 and 120, in the southeastern corner of the site would preserve the brackish marsh. Lots 97, 118, and 119, roughly located in the center of the site, would preserve the vernal pool and freshwater marsh. Additionally, the approval required that a wetland/open space long-term management plan be prepared.

C. WETLANDS, ENVIRONMENTALLY SENSITIVE HABITAT AREAS, AND WATER QUALITY

Section 30230 of the Coastal Act states that:

> ***Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.***

Section 30231 states:

> ***The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.***

Section 30233 of the Coastal Act states, in part:

> ***(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:***
>
> ***(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.***

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

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

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

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

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

(7) Restoration purposes.

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

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the l9 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a

> ***coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.***

Section 30240 states:

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

Coastal Act Section 30230 states that marine resources shall be maintained, enhanced and where feasible restored and that special protection shall be given to areas and species of special biological significance. Section 30231 of the Coastal Act states, in part, that the quality of coastal waters, streams, and wetlands shall be maintained and where feasible restored. Section 30233 of the Coastal Act states, in part, that the diking, filling, or dredging of wetland areas shall not be allowed with the exception of development for incidental public services, restoration purposes, and nature study or aquaculture. Further, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas (ESHAs) shall be protected and that only uses dependent upon such resources shall be allowed in such areas. Section 30240 also requires that development in areas adjacent to ESHA shall be sited and designed to prevent impacts that would significantly degrade such areas. ESHAs are defined as areas in which plan 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.

The Storke Ranch wetlands consist of a freshwater wetland, 2 vernal pool areas, and an area of brackish water marsh (Figure 2). The wetlands on the site have been degraded by past agricultural activities, disturbance associated with the installation of several sewer lines over 40 years ago, and invasion by non-native weeds. The proposed restoration site is in the eastern portion of the eastern vernal pool area near Sweetwater Way. The eastern vernal pool area is approximately 1.5 acres (2.5 including the buffer area) and contains approximately 0.5 acres of vernal wetlands that support some native species. There is a vernal pool in the western portion of the site along the sewer easement, and there are some areas of vernal wetland that are largely dominated by weeds.

The eastern vernal pool area is surrounded by a split rail fence. Outside the fence is a footpath with coastal scrub and oak woodland species on either side that were planted as part of the original residential development. This area is a mix of coast live oak (*Quercus agrifolia*), California sage (*Artemisia californica*), coyotebrush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), and lemonade berry (*Rhus integrifolia*), with scattered California sunflower (*Encelia californica*). Surrounding these shrubs and trees

are extensive areas dominated by weedy grasses and forbs with some California ragweed (*Ambrosia psilostachya*) present. Common species include ripgut grass, Bermuda grass, wild oat, English plantain, wild radish, sheep's sorrel, and curly dock.

The project includes restoration of two vernal pools of approximately 0.1-acre and 0.09-acre in the eastern portion of the open space, one north and one south of the sewer easement that runs through the center of the open space (Figure 3). The vernal pools in this area are degraded primarily as a result of installation of the sewer mains and over a century of agricultural practices, mainly involving cattle grazing. Both restoration sites are currently dominated by invasive grasses, primarily Italian rye grass and Bermuda grass, with Mediterranean barley, ripgut grass, wild oat, brome fescue, curly dock, sheep's sorrel, English plantain, cutleaf geranium, scarlet pimpernel, and wild radish. The shallow depth of these areas, possibly resulting from fill or sedimentation during sewer main installation, results in short inundation periods, which have allowed non-native plants to become established. The only native plant present in the areas to be excavated is a small patch of common spike rush (*Eleocharis macrostachya*) in the southern site. Some adjacent areas contain denser stands of common spike rush, and there are scattered small patches of southern tarplant (*Centromadia parryi* ssp. *australis*, a sensitive plant on the California Native Plant Society List 1B.1) and cyperus (*Cyperus eragrostis*), primarily along the sewer right-of-way.

The proposed project consists of the creation of two vernal pools in an existing open space area, encompassing vernal pool wetlands and their buffers. The project will restore vernal pool hydrology by excavating two depressions in areas currently dominated by invasive grasses, requiring approximately 151 cu. yds. of soil excavation. The pools will be excavated using a small skiploader, and the excavated areas will be inoculated with seed bank material obtained from surface scrapings of vernal pools at the Camino Corto Open Space and Del Sol Vernal Pool Reserve. Vernal pools restored in this way have been found to be self-sustaining and to "provide a broad array of ecosystem functions similar to those of naturally occurring vernal pools" (hydrology, vegetation, invertebrates, and vertebrates) within ten years of restoration (Ferren et al. 1998). A variety of vernal pool annuals and perennials would be effectively introduced into the vernal pool basins as a result of the inoculation. The collection will be designed to introduce the following species: *Plagiobothrys undulatus*, *Psilocarphus brevissimus*, *Crassula aquatica*, *Elatine brachysperma, Callitriche marginata, Epilobium pygmaeum, Alopercurus howellii, Phalaris lemmonii, Pilularia Americana, Eryngium vaseyi, Eleocharis macrostachya, and Eleocharis acicularis*. Southern tarplant would not be anticipated within the vernal pool basin itself, but would be established in the margins.

An approximate 10-20 ft. buffer around each created pools will be weeded and then seeded and planted with appropriate wetland plants as further described below (Figure 4). The existing non-native plants along the margins of the newly excavated vernal pools will be removed by a combination of solarization with black plastic and hand-weeding in a 10-20 foot wide swath around each pool. Herbicide will not be used within the vernal pool or vernal pool buffer area. The margins will be revegetated with native plants and seeds to define the edges of the vernal pools and also provide a buffer

against weed invasion. The margins will be planted with a population of southern tarplant.

Approximately 151 cu. yds. of soil excavated during the creation of the vernal pools will be removed to two nearby sites within the vernal pool buffer area, covering areas currently dominated by introduced grasses. Soil will be mounded to a maximum height of 3 feet and planted with additional coastal scrub and oak woodland species to enhance the 100-ft buffer area.

The 10-20 foot wide margins around these excavated areas, and the planted portions of the buffer area, will be planted primarily with nursery stock (3000 plants). Native plant seeds will also be scattered to enhance the seed bank and encourage further native recruitment. Plants for the project will be propagated in cooperation with Growing Solutions Restoration Education Institute at the Isla Vista Nursery (Isla Vista Recreation and Parks District) and onsite from locally collected seeds. Plug trays and 2-inch pots will mostly be used in the installation, and planting will occur during the rainy season to facilitate establishment. The project will not use irrigation.

The Storke Ranch Homeowner's Association will provide ongoing annual maintenance and weed control of the site. This will include weed-whipping of invasive grasses in the buffer area outside the split-rail fence and hand-weeding of invasive perennials (fennel, curly dock, wild radish, and smilo grass) both in the buffer and within the fenced areas. A guide to native and invasive plants in the area, including best management practices for when to conduct weed control activities will be created to educate workers and future homeowners about open space maintenance. This guide will also be provided to Goleta West Sanitary District along with an addendum with recommendations specific to maintenance and management for the sewer right-of-way and suggestions for minimizing impacts to the vernal pools.

The proposed project includes excavation of approximately 0.19 acres of wetland area to provide for improved vernal pool habitat within the designated open space of the Storke Ranch subdivision. Approximately 10-20 feet of the margins of the created vernal pools would be weeded and restored and a small portion of upland habitat within the 100-ft buffer would also be weeded and restored with native vegetation. The restoration area is currently impacted by maintenance of the two sewer easements, which were on the site prior to the Coastal Act and non-native vegetation. As proposed, planting of native vegetation would immediately follow all cut and fill operations and all grading would occur in the dry season so as to prevent erosion and polluted runoff into neighboring wetland areas. The project includes the installation of silt fencing prior to any grading on site in order to delineate the adjacent sensitive habitat so that construction would not inadvertently impact these areas through equipment intrusion or erosion.

Restoration and enhancement of the wetland area will involve approximately 151 cu. yds. of excavation. Vernal pools/wetlands will be excavated to average depths of 7-9 inches, and maximum depth of twelve inches. Topography of the resulting basins will be

variable to allow for a variety of microhabitats with different inundation periods within the created pools. A Restoration and Monitoring Plan has been submitted as part of the coastal development permit application that provides for the collection of native seeds from local vernal pool areas and revegetation of the subject vernal pool on site with appropriate native wetland vegetation. The Commission finds that the proposed grading will serve to restore and enhance existing degraded wetland resources and therefore, such grading is consistent with Section 30233 of the Coastal Act.

The project requires approximately 302 cu. yds. of grading (151 cu. yds. of cut and 151 cu. yds. of fill). The Commission finds that this grading is necessary for successful implementation of the proposed habitat restoration and enhancement project. However, the Commission further notes that the proposed project may result in potential adverse effects to surrounding habitat due to unintentional disturbance from construction equipment and grading activity. In order to ensure that any potential adverse effects to adjacent wetland habitat from construction activities are minimized, **Special Condition Two (2)** requires the applicant to retain the services of a qualified biologist or environmental resource specialist to be present on site during all construction, grading, excavation, vegetation eradication and removal, hauling, and maintenance activities. The monitor shall immediately notify the Executive Director if unpermitted activities occur or if wetland or upland habitat is removed or impacted beyond the scope of the work outlined in the Final Storke Ranch East Vernal Pool Restoration and Monitoring Plan. If significant impacts or damage occur to any wetland or upland resources on site beyond the scope of work allowed for under this coastal development permit, all work will temporarily cease and the monitor shall immediately contact the Executive Director. The applicant shall be required to submit a revised, or supplemental, restoration program to adequately mitigate such impacts. The revised, or supplemental, restoration program may be processed as an amendment to this permit.

In addition, the proposed project includes the removal of invasive and non-native vegetation and revegetation with native plant species in order to enhance existing degraded wetland and upland habitat areas on site. However, the Commission finds that the proposed project may still result in potential adverse effects to the existing adjacent wetland areas on site from increased erosion and sedimentation, if revegetation of areas where all existing vegetation has been removed is not successful. Erosion adjacent to surface waters can result in increased sedimentation, thereby reducing the biological productivity and quality of coastal waters. Sedimentation directly affects wetland ecology by changing the topography of the wetland and increasing water turbidity. Turbidity reduces the penetration of sunlight needed by aquatic vegetation, which translates to negative effects on plant establishment and overall productivity, which in turn impacts aquatic species that depend on such vegetation for food and cover. In addition, aquatic animals are affected by turbidity in the following ways: reduced visibility for visual predators, such as birds and mammals; and inhibited feeding effectiveness for benthic filter feeding organisms.

Therefore, to ensure that the proposed wetland and upland restoration and enhancement program is successful and that the subject area is adequately

revegetated, **Special Condition One (1)** requires that the applicant submit a Final Habitat Restoration and Monitoring Plan, for the review and approval of the Executive Director, prepared by a qualified biologist, ecologist, or resource specialist, for the proposed restoration project that is substantially in conformance with the Storke Ranch East Vernal Pool Restoration and Monitoring Plan, dated August 17, 2006. The Final Restoration and Monitoring Plans shall include a five-year monitoring program. The applicant shall submit, on an annual basis for a period of five years, beginning after the proposed grading is completed (but no later than December 31st each year), a written report prepared by a qualified biologist or resource specialist, for the review and approval of the Executive Director, evaluating the extent of the success or failure of the restoration project. This report shall include further recommendations and requirements for additional revegetation activities in order for the project to meet the specified criteria and performance standards. At the end of a five-year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If the final report indicates that the revegetation component of the enhancement and restoration program has in part, or in whole, been unsuccessful, based on the approved performance standards, the applicant shall be required to submit a revised or supplemental program to compensate for those portions of the original program which were not successful.

In addition, the applicant has proposed several best management practices to reduce polluted runoff and erosion on the project site. In order to ensure that coastal waters are not impacted from erosion from the construction site, **Special Conditions Three (3) and Four (4)** require the applicant to implement the proposed best management, such as limitations on grading to the dry season, implementation of temporary erosion control practices, and flagging of off-limits areas during construction.

The applicant conducted botanical surveys of the project area in May 2006 and identified the presence of southern tarplant, a CNPS List 1B species, in the vicinity of the proposed project. The proposed project was specifically designed to avoid the tarplant. Most of the tarplant throughout the open space area is scattered, with the exception of one large tarplant population in the vicinity which occurs as a result of a vernal pool restoration enhancement demonstration project initiated in 2005, which consisted of weed removal, planting native wetland plants, and establishment of southern tarplant specimens. Though this was the only sensitive species noted in the area, it is possible for rare, threatened, endangered, or sensitive wildlife and plant species may be present in the project area during the time of construction. In order to ensure that the proposed activities minimize impacts on sensitive species, **Special Condition Two (2)** also requires the applicant to obtain the services of an environmental resource specialist to survey the site prior to construction, and remain on site to monitor all project activities. Special Condition Two (2) also requires the applicant to cease work should any breach in permit compliance occur, should any sensitive wildlife species be identified on site, or if other unforeseen sensitive habitat issues arise. Special Condition Two (2) further stipulates that if significant impacts or damage occur to sensitive habitats or to wildlife species, the applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts.

As described above, the project includes the collection of seed bank material from surface scrapings of vernal pools at the Camino Corto Open Space and Del Sol Vernal Pool Reserve. These areas have been used for similar collection purposes to establish vernal pools in the region. The applicant has submitted a study which indicates that there are no appreciable changes to species cover or diversity in the collection sites one year after collection. These proposed collection areas are owned and managed by the Isla Vista Recreation and Park District (IVRPD). However, the applicant has not submitted evidence that IVRPD has authorized the collection of material in these areas. **Special Condition Five (5)** requires the applicant to submit evidence that applicant has received all applicable agency authorizations or permits necessary to carry out this project prior to issuance of the coastal development permit, including IVRPD authorization for seed collection.

For the reasons stated above, the Commission, therefore, finds that the proposed project, as conditioned, is consistent with the wetland, environmentally sensitive habitat area, and water quality protection policies of the Coastal Act, including Sections 30230, 30231, 30233, and 30240.

D. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act states that:

> ***Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a local program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).***

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the project and accepted by the applicants. As conditioned, the proposed development will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the City's ability to prepare a Local Coastal Program for Goleta which is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604(a).

E. CALIFORNIA ENVIRONMENTAL QUALITY ACT

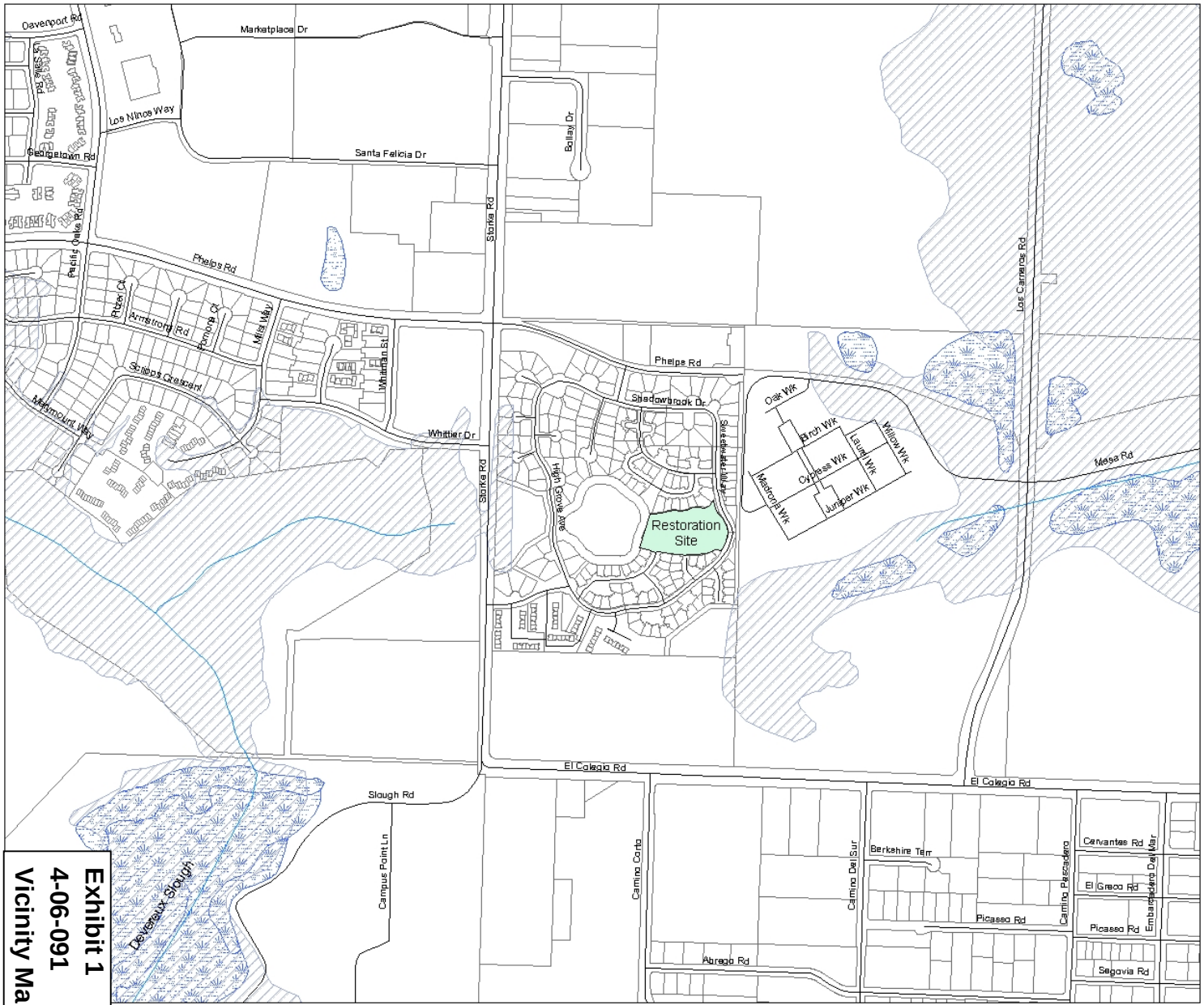
Section 13096(a) of the Commission's administrative regulations requires Commission approval of Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect, which the activity may have on the environment.

The Commission finds that, the proposed project, as conditioned will not have significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.

Figure 1. Storke Ranch East Vernal Pool Restoration Vicinity Map

Prepared by:
K. Kelly Hildner, Ph.D.
Restoration Coordinator
6823 Silkberry Lane
Goleta, CA 93117
(805) 685-3621

Revised: June 15, 2006



Restoration Site
Roads
100 Year Flood Hazard
Watercourses
Parcels
Wetlands (NWI)

N

500 Feet

Road, flood hazard, watercourse, and parcel data were provided by Santa Barabara County 6/2006. Wetlands data are from the USFWS National Wetlands Inventory published 3/2004.

Exhibit 1
4-06-091
Vicinity Map

Figure 2.
Storke Ranch Wetlands
Overview Map

Exhibit 2
4-06-091
Aerial Overview

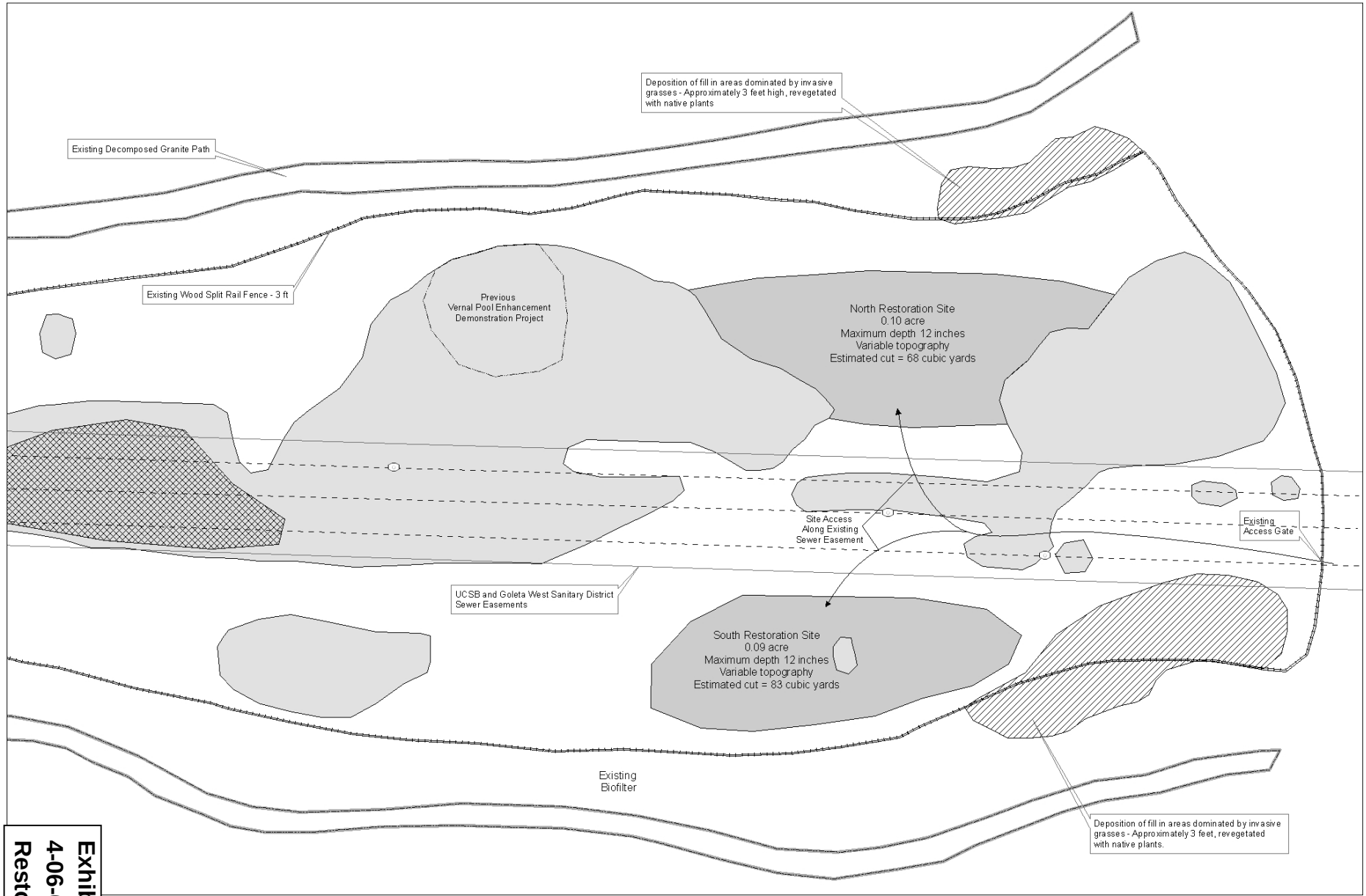
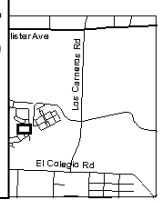


Exhibit 3
4-06-091
RestorationPlan



Trees: There are no trees inside the split rail fence. There are some scattered coast live oak and blue elderberry trees in the buffer areas that were planted when the complex was built. These areas will be enhanced with additional shrubs and trees as part of this restoration project. No trees will be removed.

Topography: Topographic relief < 2 ft within vernal pool area.

0 10 20 40 Feet

N

- Proposed Excavation Sites
- Proposed Fill Areas
- Best Existing V.P. Habitat
- Previous V.P. Enhancement
- Existing Wetland Natives
- Existing D.G. Path
- Existing Split Rail Fence
- Sewer Line
- Sewer Manhole
- Sewer Easement

Figure 3. Storke Ranch East Vernal Pool Restoration Site Plan

Applicant:
Storke Ranch Homeowner's Association
Kelly Hildner, President
(805) 685-3621

Management Company:
Bartlein & Company, Inc.
James Nguyen
(805) 569-1121

Storke Ranch Open Space
Goleta, CA 93117
Assessor's Parcel Numbers:
073-12A-026
073-12A-027

Consulting Biologist:
David Hubbard
Coastal Restoration Consutants
(805) 685-8427

Prepared by:
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Restoration Coordinator
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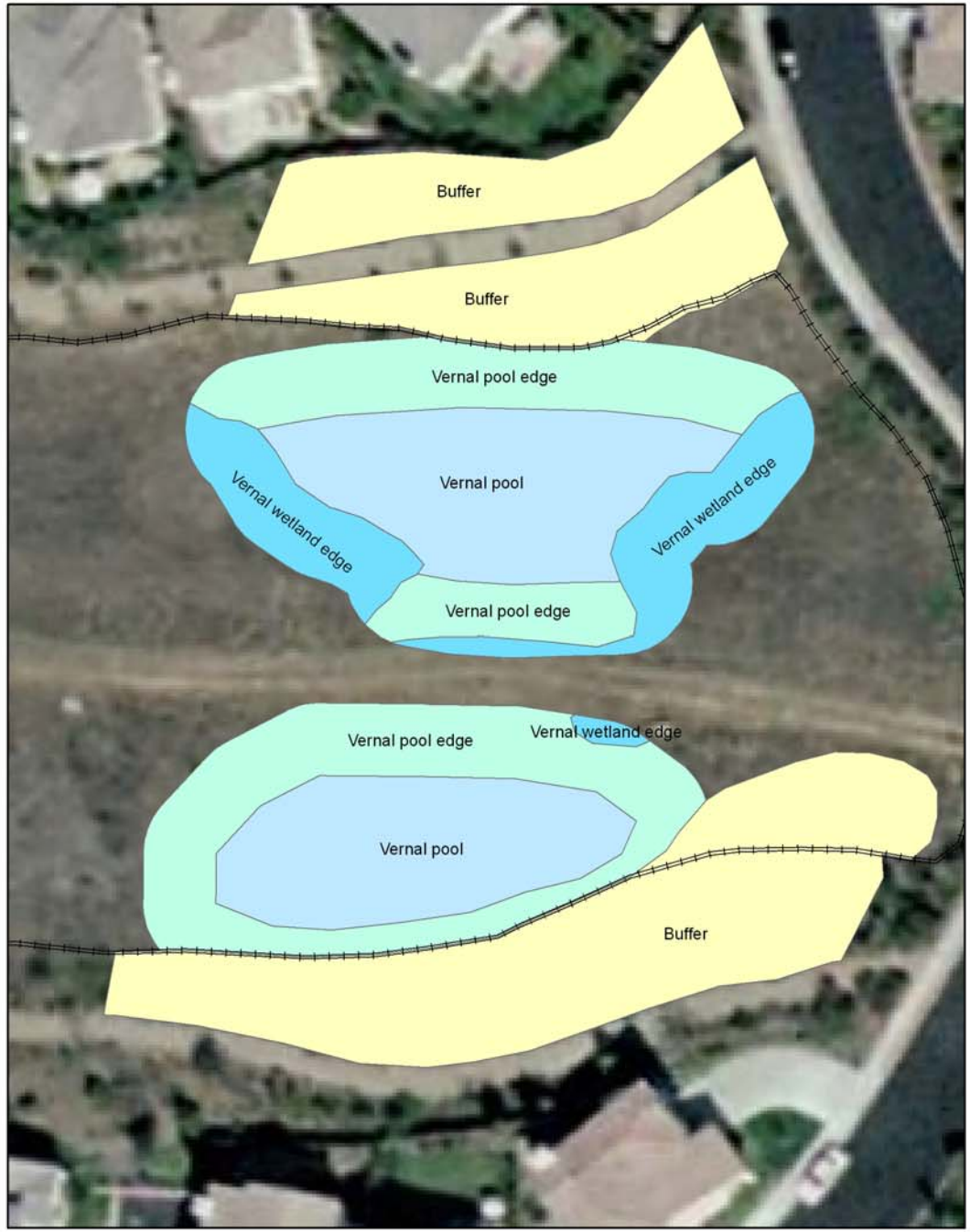
Goleta, CA 93117
(805) 685-3621

Revised: September 19, 2006

Figure 5.
Storke Ranch Vernal Pool Restoration Planting Plan

Buffer	
Artemesia californica	California sagebrush
Baccharis pilularis	coyotebrush
Encelia californica	California encelia
Gnaphalium bicolor	bicolored everlasting
Gnaphalium californicum	California everlasting
Isocoma menziesii	coast goldenbush
Rhus integrifolia	lemonade berry
Sambucus mexicana	blue elderberry
Sisyrinchium bellum	blue-eyed grass
Vernal Pool	
Inoculum	
Vernal Pool Edge	
Centromadia parryi australis	southern tarplant
Eryngium armatum	prickly coyote-thistle
Grindelia camporum	gumplant
Hordeum brachyantherum ssp. *brachyantherum*	meadow barley
Hordeum brachyantherum ssp. *californicum*	California barley
Juncus occidentalis	western rush
Juncus phaeocephalus	brown-headed rush
Nassella pulchra	purple needle grass
Sisyrinchium bellum	blue-eyed grass
Vernal Wetland Edge	
Centromadia parryi ssp. *australis*	southern tarplant
Eleocharis macrostachya	common spikerush
Eryngium armatum	prickly coyote-thistle
Juncus phaeocephalus	brown-headed rush



Existing Split Rail Fence

Planting Plan

- Buffer
- Vernal Pool
- Vernal Pool Edge
- Vernal Wetland Edge

N

0 50 100 Feet

Created by Kelly Hildner
Revised September 18, 2006

Exhibit 4
4-06-091
Planting Plan