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Fish & Game

NOV 22 2010

Yountville

MEMORANDUM

To: Valerie Layne, U.S. Fish and Wildlife Service
Stephanie Buss, California Department of Fish and Game

From: Larry P. Stromberg, Ph.D., on behalf of Alton Preserve, LLC

Date: November 18, 2010

Re: Alton North Conservation Bank: Release of CTS Credits for "Gopher Presence"

SUMMARY OF REQUEST.

The purpose of this memorandum is to request that the California Department of Fish and Game ("CDFG") and the U.S. Fish and Wildlife Service ("Service") authorize the release of 4.00 acres of CTS credits for "Gopher Presence," which constitutes the second release of CTS credits in the approved "Table of Credits" for the Alton North Conservation Bank ("ANCB").

In accordance with the approved Table of Credits, this second release is to occur when there is "Gopher presence in disturbed areas post-disturbance." As discussed below, and evident in the attached photos, gopher activity is evident and common throughout the ANCB site since construction.

GOPHER MOUND ABUNDANCE

Gopher mounds were counted on October 13 and, following two days of rainfall, again on October 25. The estimated number of gopher mounds/holes is 240. Assuming that the entire 22.40-acre bank site provides potentially suitable upland habitat for CTS, the density of gopher holes is approximately 11 per acre

The counts likely underestimate the actual number, because water trucks and the equipment used to tackify the pool surfaces (to minimize windblown loss of endangered plant species seed placed in the pools) continually flattened mounds and eliminated surface evidence of gopher holes, making it highly possible to miss many mounds during the counting process and thus rendering any count a conservative or low estimate.

SUMMARY OF GOPHER ACTIVITY ON-SITE

The abundance of active gopher mounds and holes, after construction, at ANCB provides support to the abundance of suitable upland habitat available for use by CTS. While gopher mounds and holes at ANCB do not indicate CTS presence, gophers are the primary architects of below ground habitat for CTS, and the presence of gopher activity indicates that abundant opportunities exists for CTS to access suitable upland habitat both prior to and immediately following construction.

During the first few weeks following construction, counts of gopher mounds and holes were made by Drs. Stromberg and Winfield. The distribution of mounds and holes identified during the counts is shown in Figures 2 through 4. Figure 1 provides an index to the areas shown in Figures 2 through 4. While the gopher mounds tend to have a clumped distribution at the ANCB site, evidence of gopher activity is spread across the entire bank site, including within some pools.

In conjunction with the actual on-site observations, the number of gopher mounds suggests the following:

1. Construction had little impact on the activity of gophers in areas disturbed by grading activities. This result is consistent with observations made elsewhere on the Santa Rosa Plain following wetland construction. At the Hazel Mitigation Bank, Drs. Larry Stromberg and Ted Winfield estimated the density of active gopher mounds and holes in disturbed and undisturbed areas over the entire bank site. Of the total gopher mounds counted, 163 were counted in approximately 29 acres of disturbed ground (approximately 6 per acre) and 134 mounds were counted in approximately 72 acres of undisturbed upland habitat (approximately 2 per acre).
2. The observations made at ANCB corroborate observations made elsewhere following wetland construction and clearly demonstrate that wetland construction does not adversely affect the suitability of upland CTS habitat. Movement corridors remain unblocked and access to below ground habitat remain present and can increase in abundance.

Enc.

TABLE OF CREDITS

ALTON NORTH CONSERVATION BANK

California Tiger Salamander

The 22.67-acre Alton North Conservation Bank ("ANCB") consists of 9.92 acres of undisturbed and 12.75 acres of disturbed habitat. Of the 22.67 acres, 0.27 acre is encumbered by an existing conservation easement in favor of the CDFG, resulting in a total of 22.40 acres of potential CTS habitat. Based on the format agreed upon with the USFWS and CDFG, CTS credits will be released according to the following schedule, immediately upon completion of fee title transfer to the California Department of Fish and Game and the endowment is funded fully.

RELEASE	CONDITIONS OF RELEASE	MAXIMUM ACRES
Initial	Up to 40% of site represented by areas undisturbed during construction (9.92 acres)	4.96
Gophers	Gopher presence in disturbed areas post-disturbance	4.00
Hydrology	An additional 5% when the hydrologic performance criteria for CTS breeding pond is met (inundation through at least May 1st but not longer than July 1st and have a ponding depth of at least 18 inches but not more than 30 inches)	1.12
CTS general	CTS present at site	8.96
CTS and hydrology	CTS presence after breeding pond hydrology achieved	1.12
Final	When CTS and larvae have been documented in the breeding pond, and the larvae successfully develop into juveniles*	2.24
	TOTAL AVAILABLE CTS CREDITS*	22.40

* Any "Gopher", "Hydrology", "CTS general", or "CTS after hydrology" credits not previously released would be released upon meeting final release criteria.

**TABLE OF CREDITS FOR PLANTS
ALTON NORTH CONSERVATION BANK**

Lasthenia burkei (Burke's goldfields) and Blennosperma bakeri (Sonoma sunshine)

The 5.91 acres of created vernal pools and 1.33 acres of enhanced seasonal wetlands, for a total of 7.24 acres will be inoculated with *Lasthenia burkei* and *Blennosperma bakeri* seeds from the nearby Alton Lane Preserve.

Based on the format agreed upon with the U.S. Fish and Wildlife Service ("USFWS") and California Department of Fish and Game ("CDFG"), credits will be released according to the following schedule, immediately upon completion of fee title transfer to the California Department of Fish and Game and the endowment is funded fully.

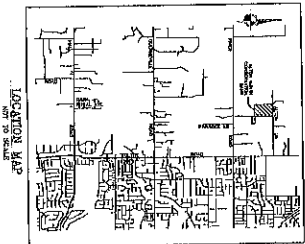
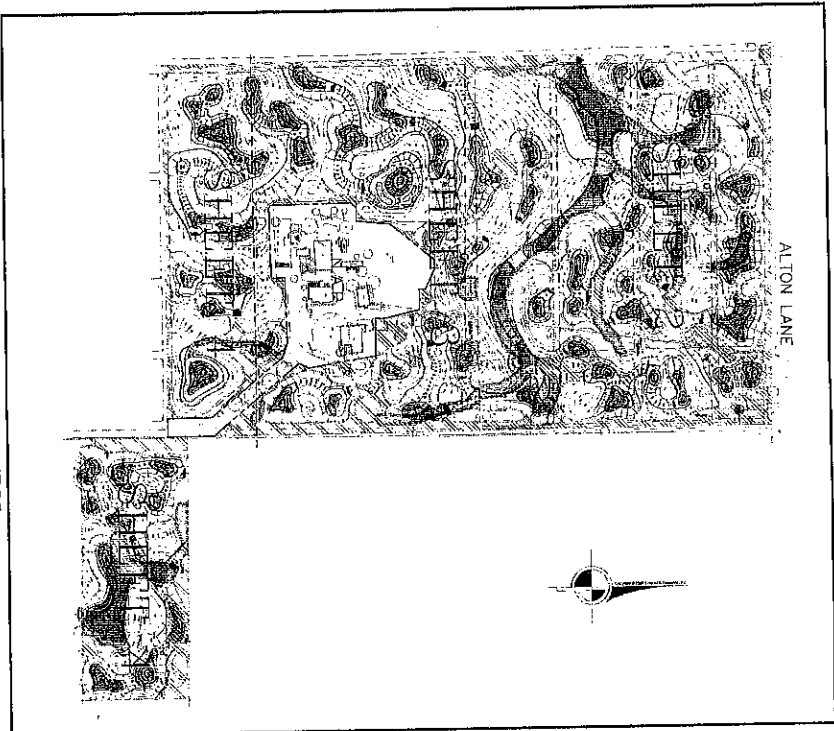
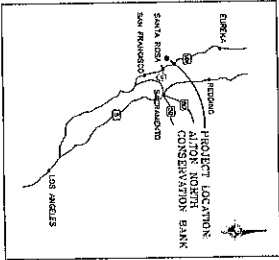
The total plant establishment acreage *Lasthenia burkei* and/or *Blennosperma bakeri* cannot exceed 7.24 ac without authorization of USFWS and CDFG.

RELEASE SCHEDULE FOR LABU AND BLBA

RELEASE	CONDITIONS OF RELEASE	MAXIMUM ACRES
Initial	50% of total wetland area (7.24 ac) to be constructed/enhanced	3.62
Second	Second allotment of credits will be determined at the end of the fourth year following construction, based on the criteria established by the USFWS and CDFG.	3.62
	TOTAL MAXIMUM PLANT CREDITS	7.24

GOPHER HOLE LOCATIONS

ALTON NORTH CONSERVATION BANK
2795 PINER ROAD, SANTA ROSA, CA



INDEX TO SHEETS

- Sheet No. _____ Title _____
1. GENERAL AND WETLAND DESIGN PLAN
 2. CONSTRUCTION AND MAINTENANCE PLAN
 3. CONSTRUCTION AND MAINTENANCE PLAN
 4. CONSTRUCTION AND MAINTENANCE PLAN

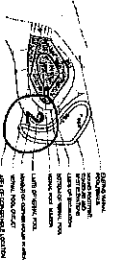
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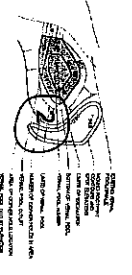


SHEET INDEX

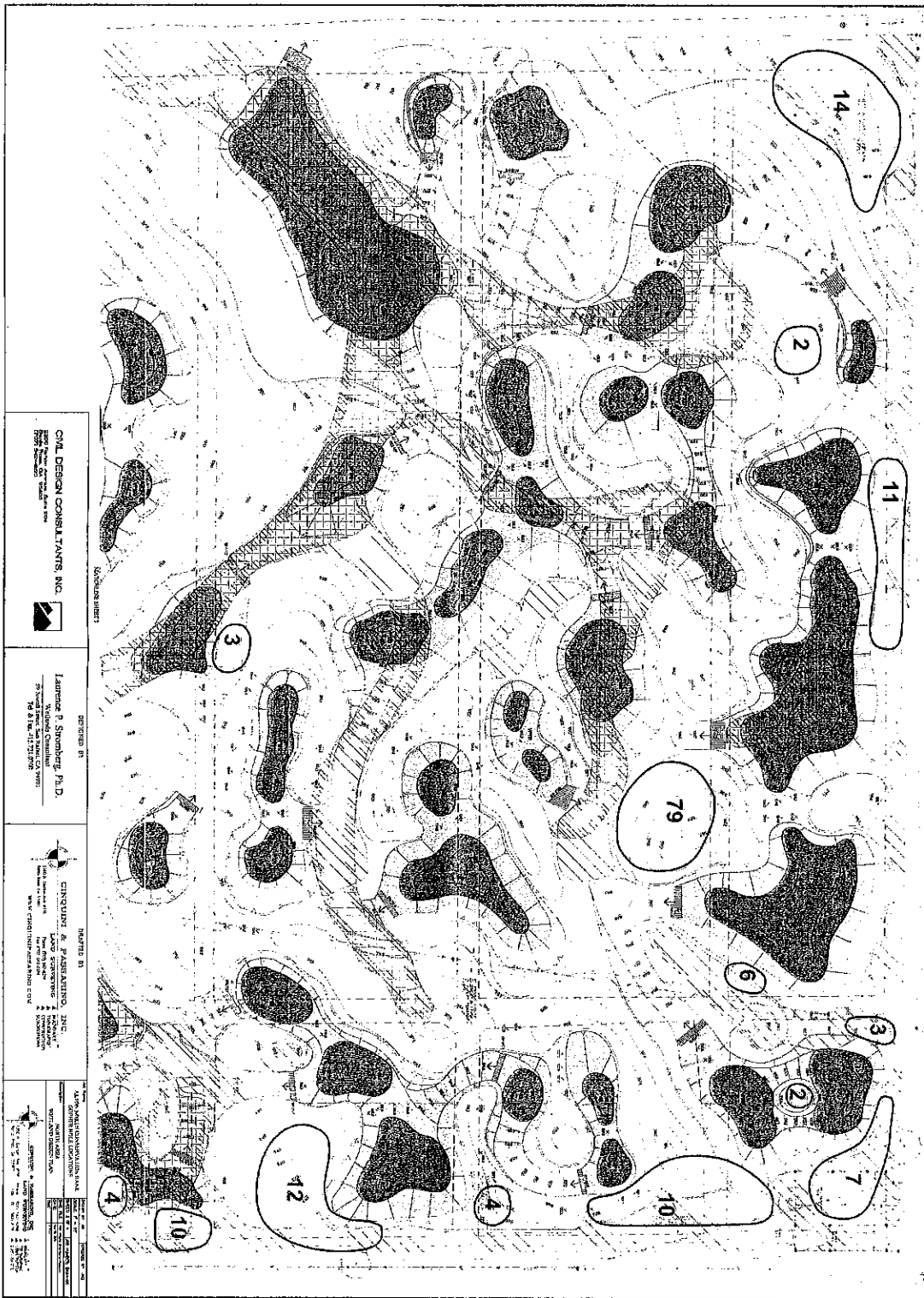
NOT TO SCALE

<p>Prepared by Lawrence P. Stromberg, P.E. Wildlife Consultant 3020 17th Street, Suite 100 Santa Rosa, CA 95403 (707) 539-1111</p>	<p>Checked by CINQUINI, A. BARRASANO, INC. 3020 17th Street, Suite 100 Santa Rosa, CA 95403 (707) 539-1111</p>
<p>Approved by CIVIL DESIGN CONSULTANTS, INC. 3020 17th Street, Suite 100 Santa Rosa, CA 95403 (707) 539-1111</p>	<p>Approved by CIVIL DESIGN CONSULTANTS, INC. 3020 17th Street, Suite 100 Santa Rosa, CA 95403 (707) 539-1111</p>

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ALTON NORTH CONSERVATION BANK WETLANDS



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DATE: 01/20/2005
SCALE: 1" = 100'
PROJECT: ALTON NORTH CONSERVATION BANK WETLANDS CONSTRUCTION PLANS
SHEET: 14200

