

Memo

To Demian Hardman, Planner, Contra Costa
County Department of Conservation &
Development,
From Angie Harbin-Ireland, Senior Biologist, AMEC
Date 15 October 2012

**Subject Valley Elderberry Longhorn Beetle Survey for Creekside Memorial Park,
Corrie Development Corp., Contra Costa County, California.**

INTRODUCTION

Creekside Memorial Park, a proposed new cemetery to be developed by Corrie Development Corp., encompasses a total area of approximately 221 acres located in the Tassajara Valley in unincorporated Contra Costa County, California. The proposed project site is located along Camino Tassajara about 1 mile south of the intersection with Highland Road. Elevation of the site ranges from about 540 to 950 feet above mean sea level. Current usage is rural residential and grazing, with the majority of site being non-native grassland with scattered valley oaks, and with ephemeral riparian drainages along Camino Tassajara (Tassjara Creek), the south side of the property, and along the northern boundary.

Contra Costa County circulated a Draft Environmental Impact Report (DEIR) for the proposed project in September 2011. Comment letters from resource agencies including the U.S. Fish and Wildlife Service and California Department of Fish and Game were received in October 2011. The County is currently preparing the Final EIR document for the project. In order to assist them in responding to resource agency comments on the DEIR, the County recently requested that surveys be conducted on the site for the valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*). The valley elderberry longhorn beetle is federally listed as Threatened and is protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*); it was listed on August 8, 1980 (Federal Register 45: 52803-52807). It is a wood-boring beetle whose entire life cycle is dependent upon its host, the elderberry plant (*Sambucus* spp.). Adult beetles consume the foliage, and lay eggs on stems and branches. The larvae bore into the stems and tunnel through the pith for a period of between 1 to 2 years before emerging as adults, leaving a highly characteristic exit hole; emergence generally coincides with flowering. Blue elderberry shrubs (*Sambucus nigra* ssp. *caerulea*) were documented as occurring on the site during biological resource surveys conducted between 2002 and 2008. VELB has not been previously documented by biologists working onsite. However, a complete inventory of the shrubs and survey for VELB was not previously conducted.

AMEC Environment & Infrastructure, Inc. (AMEC) Wildlife Biologist Angie Harbin-Ireland visited the proposed project site on September 14 and 15, 2012 to assess potential habitat and the presence of VELB. Method and results of the survey are described below.

METHODS

A protocol level survey was conducted by biologist Angie Harbin-Ireland on September 14 and 15, 2012 in accordance with *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*¹. The entire 221 acre project site was walked on foot to identify and locate all blue elderberry shrubs present. The location of each elderberry shrub was mapped using GPS, and the number and size of stems having a basal diameter of 1" or more was recorded according to the USFWS protocol size classes. Each shrub was examined for the presence or absence of VELB exit holes. The habitat type (riparian or non-riparian) was also recorded.

RESULTS

A search of the California Natural Diversity Database (CNDDDB; accessed 1 October 2012) found the closest known observation of VELB to be about 20.5 miles ESE of the proposed project area. The focused survey identified a total of 29 blue elderberry shrubs on the site, with roughly about half occurring in the riparian area on the southeast corner of the site (Tassajara Creek). The remaining shrubs are scattered along the north facing hillside and adjacent to the unvegetated tributary to Tassajara Creek. All shrubs adjacent to the unvegetated tributary occur above top of bank with the exception of shrub number 2. Locations of elderberry shrubs are shown in Figure 1. No adult VELB or VELB exit holes were observed. The trunk of one shrub, number 13, was noted to be rotted out with many holes, but these ranged in size from ¼" to 1" in diameter. While VELB cannot be ruled out, the size range is beyond the 0.2-0.4" that is typical for a VELB exit hole, and most were irregular in outline at the exit. The trunk was not observed to be alive, thus lacking the soft pith tissues on which VELB larvae feed. The lack of definitive exit holes on other nearby elderberry shrubs suggests that the holes found on shrub 13 probably resulted from the actions of other organisms. Results of the survey are summarized in Table 1.

Table 1. Location and stem count of *Sambucus* shrubs (elderberry) on proposed Creekside Memorial Park development site.

Shrub #	Habitat	# Exit Holes	Stem Diameter		
			1" to < 3"	3" to < 5"	5" or >
1	non-riparian	0	3	4	1
2*	non-riparian	0	0	0	1
3	non-riparian	0	0	0	5
4	non-riparian	0	0	0	1
5	non-riparian	0	2	5	3

¹ U.S. Fish and Wildlife Service. *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*. July 9, 1999.

6	non-riparian	0	1	2	3
7	non-riparian	0	1	1	4
8	non-riparian	0	3	2	0
9	non-riparian	0	1	0	0
10	non-riparian	0	0	0	2
11	non-riparian	0	0	0	5
12	non-riparian	0	2	0	2
13 [@]	non-riparian	0	0	1	3
15	non-riparian	0	0	0	3
16	riparian	0	0	0	1
17	riparian	0	0	2	0
18	riparian	0	0	0	1
19	riparian	0	4	4	3
20	riparian	0	0	0	1
21	riparian	0	0	2	1
22	riparian	0	0	0	1
23	riparian	0	6	3	3
24	riparian	0	0	1	1
25	riparian	0	0	2	2
26	riparian	0	0	0	1
27	riparian	0	2	0	0
28	riparian	0	0	1	0
29	riparian	0	0	0	1
30	riparian	0	0	1	0

* Shrub 2 was located below top of bank of the unvegetated tributary to Tassajara Creek.

@ The trunk of shrub 13 was old wood, in a rotted out condition, with many irregularly shaped holes of a size not consistent with VELB exit holes.

CONCLUSIONS

The valley elderberry longhorn beetle has not historically been documented to occur on or near the project site. Suitable habitat is present, *i.e.*, the presence of elderberry shrubs, particularly in association with riparian habitat, but a focused protocol survey did not detect the presence of

VELB adults or diagnostic exit holes in elderberry stems. Therefore, VELB are presumed absent from the project site.

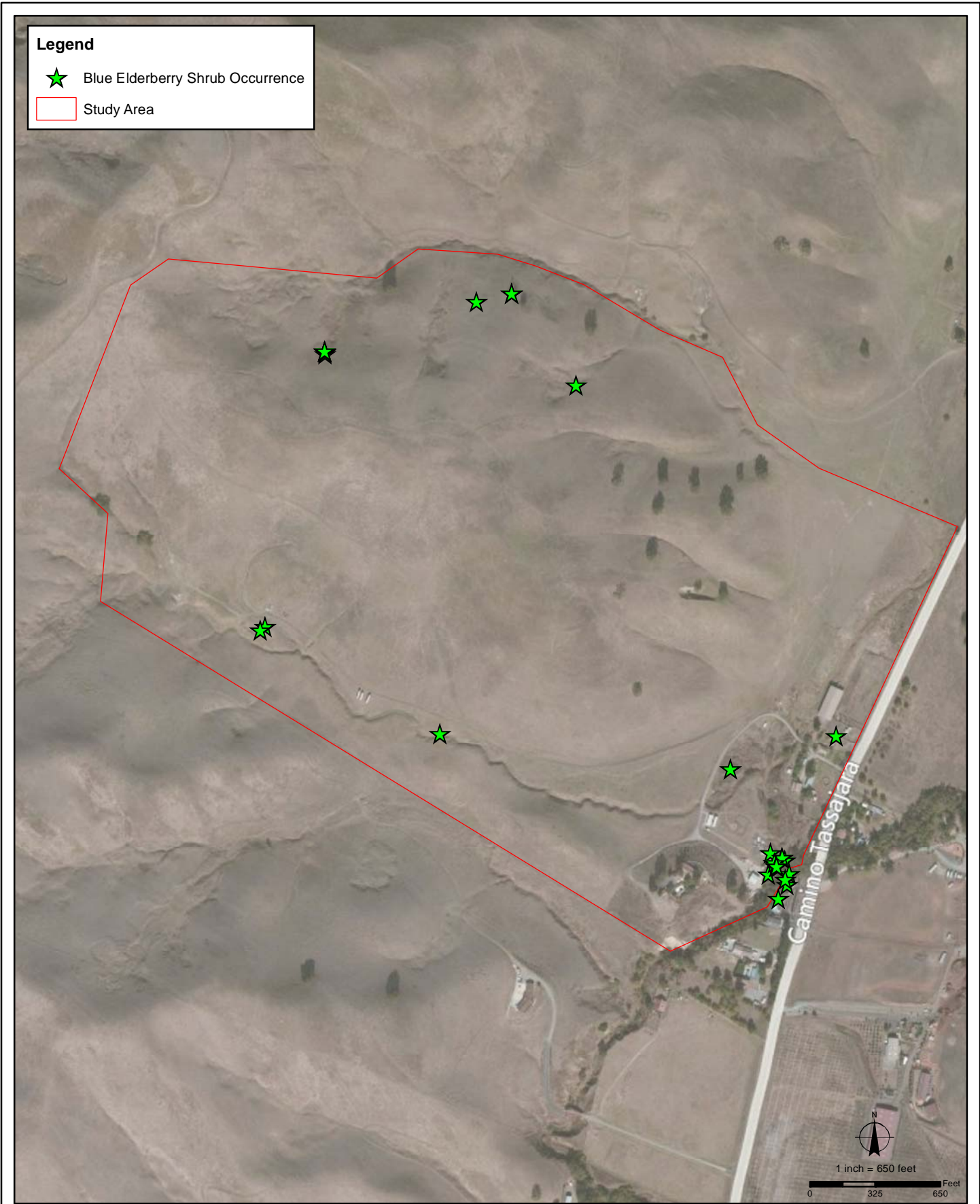
Most of the elderberry shrubs present on site will be avoided by permanent and temporary project impacts. As shown on Figure 2, only numbers 1 and 15 will be removed for project grading activities. The shrubs located in upland areas are well removed from grading activities. Per DEIR Mitigation Measure 3.4-2d, a minimum 100 foot setback will be maintained for the other individual shrubs located within riparian areas, which is consistent with the USFWS conservation guidelines. This measure also requires that plantings in the Enhanced Riparian Corridor be restricted to native species indigenous to the area, thus blue elderberry shrubs would be incorporated into the project Landscape Plan.

ATTACHMENTS

Figure 1. Valley Elderberry Longhorn Beetle Survey Findings

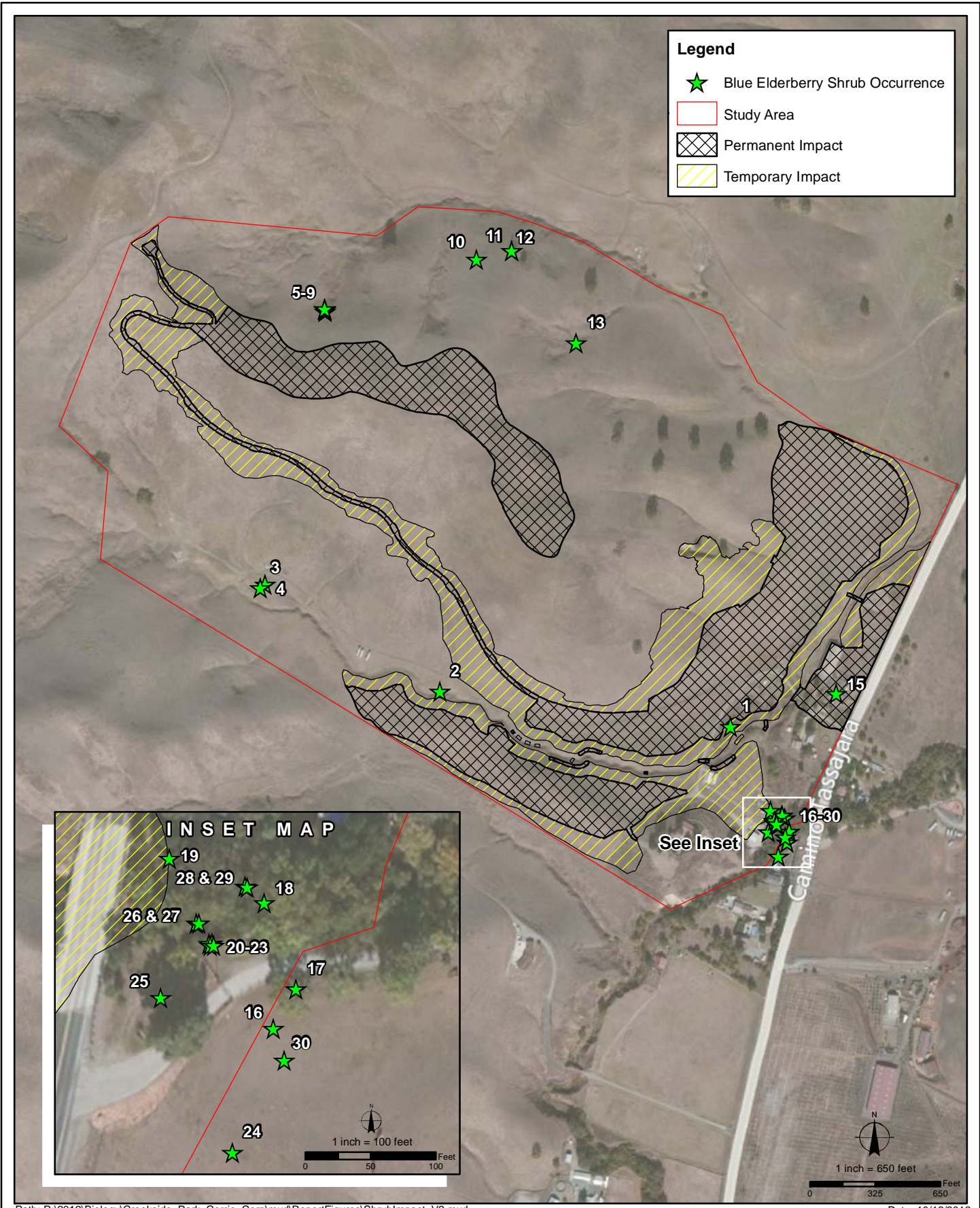
Figure 2. Impacts to Blue Elderberry Shrubs

cc: Jim Parsons, PA Design Resources
Pete Klein, Corrie Development Corp.



Valley Elderberry Longhorn Beetle Survey Findings
Creekside Memorial Park
Corrie Development Corporation
Tasajara Valley, Contra Costa County, California

FIGURE
1



**Impacts to Blue Elderberry Shrubs
Creekside Memorial Park**

**Corrie Development Corporation
Tasajara Valley, Contra Costa County, California**

FIGURE

2

