Botanical Survey Addendum to Biological Report

for

Brynildson Residence APN 046-031-033

Old Creek Road

PRE2018-00056 San Luis Obispo County



Prepared for

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by

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May 2019

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1 INTRODUCTION

1.1 Purpose

This report serves as an addendum to the *Biological Report for Brynildson Residence APN 046-031-033* (Althouse and Meade, Inc. 2018) and provides information regarding botanical resources associated with an approximately 56-acre portion (Study Area) of a 162-acre parcel in San Luis Obispo County, California (refer to Figures 1 and 2 of Biological Report). As described in the Biological Report, a survey of the Study Area in September 2018 identified 31 species, subspecies, and varieties of vascular plants. No rare plants were detected in September 2018, however an appropriately timed (i.e., spring) botanical survey was recommended based on the potential for four (4) special status plants to occur in the Study Area. Survey methodology, results, and plant and animal evaluation of the effect of the proposed project on botanical resources is included.

1.2 Location

The Study Area is a 56-acre portion of an approximately 162-acre parcel (APN 046-031-033) located in western San Luis Obispo County, approximately 1.8 miles south of the intersection of Highway 46 and Old Creek Road. Approximate coordinates for the center of the Study Area are 35.508611, -120.847828 (WGS84) in the United States Geological Survey (USGS) 7.5-minute topographic quadrangle.

2 METHODS

Focused surveys of the Study Area for botanical resources were conducted on April 2 and 18, 2019 by Principal Biologist Jason Dart according to agency protocols. The survey period was selected based on the known blooming periods of the four special-status plant species that were determined to have potential to occur in the Study Area (refer to Table 3 of Biological Report), as well as an evaluation of weather trends and the phenological status of plant populations in the area. The survey focused on potential impact areas shown on the April 23, 2018 site plans (Appendix A of Biological Report), including the access road and proposed structure locations. They survey was conducted on foot utilizing meandering transects to compile species lists and search for special status plants. All vascular plant species observed in the Study Area were identified and recorded. Identification of botanical resources included field observations and laboratory analysis of collected material.

Botanical nomenclature used in this document follows the Jepson Flora Project (Jepson Flora Project (eds.) 2019). A full description of the literature review and mapping methodologies is provided in the Biological Report (2018).

A complete list of all plant species detected within the Study Area to date was compiled and includes plants identified during the focused botanical survey, as well as the general biological survey in September 2018 and wetland and waters delineation surveys conducted in February and April 2019.

TABLE 1. SURVEY DATES

Date	Surveyor(s)	Weather Observations	Activities
September 27, 2018	Lisa Gadsby Mike Hill	63 to 80 °F, clear skies, calm winds	General biological survey
February 25, 2019	Jacqueline Tilligkeit Jessica Boone Jason Dart	50 °F, partly cloudy, winds 4-7 mph	Delineation of wetlands and waters
April 2, 2019	Jason Dart	59 °F, partly cloudy, calm	Botanical Survey
April 18, 2019	Jason Dart	55 °F, drizzly rain, cold	Botanical Survey
April 23, 2019	Jacqueline Tilligkeit Kristen Andersen	72 °F, clear skies, calm	Delineation of wetlands and waters

3 RESULTS

A total of 84 vascular plant species, subspecies, and varieties were identified within the Study Area between September 27, 2018 and April 23, 2019 (Table 2). Approximately 60 percent of the species are native, with the remaining 40 percent being planted or introduced. No special-status plant species were detected.

Common Name	Scientific Name	Special Status	Origin
Trees - 6 Species			
Big-leaf maple	Acer macrophyllum	None	Native
California buckeye	Aesculus californica	None	Native
Madrone	Arbutus menziesii	None	Native
Cypress	Hesperocyparis sp.	None	Planted
California bay	Umbellularia californica	None	Native
Coast live oak	Quercus agrifolia var. agrifolia	None	Native
Shrubs - 9 Species			
Agave	Agave sp.	None	Planted
Arroyo willow	Salix lasiolepis	None	Native
Blue elderberry	Sambucus nigra ssp. caerulea	None	Native
California fuchsia	Epilobium canum	None	Native
Coffeeberry	Frangula californica	None	Native
Coyote brush	Baccharis pilularis	None	Native
Poison oak	Toxicodendron diversilobum	None	Native
Saw-toothed goldenbush	Hazardia squarrosa	None	Native

TABLE 2: VASCULAR PLANT LIST

Orbs - 54 Species Nunual stinging nettle Urtica urens None Native Black mustard Brassica nigra None Introduces Blue dicks Dichelostemma capitatum None Native Bull thistle Cirsium vulgare None Introduces California aster Corethrogyne filaginifolia None Native California bee plant Scrophularia californica None Native California buttercup Ranunculus californica None Native California dandelion Agoseris grandiflora None Native Chickweed Stellaria media None Native Chorka Clarkia purpurea None Native Conmon pineapple weed Matricaria discoidea None Introducee Common sheep sorrel Rumex actosella None Introducee Common sheep sorrel Rumex crispus None Introducee Common sheep sorrel Rumex crispus None Introducee Condon verbena Verbena lasiostachys	Common Name	Scientific Name	Special Status	Origin
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Ainer's lettuce Claytonia perfoliata None Native	Miniature lupine	Lupinus bicolor	None	Native
	Milk thistle	Silybum marianum	None	Introduced
AugwortArtemisia douglasianaNoneNative	Miner's lettuce	Claytonia perfoliata	None	Native
	Mugwort	Artemisia douglasiana	None	Native

Common Name	Scientific Name	Special Status	Origin
Oriental hedge mustard	Sisymbrium orientale	None	Introduced
Pacific sanicle	Sanicula crassicaulis	None	Native
Poison hemlock	Conium maculatum	None	Introduced
Prickly sow thistle	Sonchus asper	None	Introduced
Redstem filaree	Erodium cicutarium	None	Introduced
Rose clover	Trifolium hirtum	None	Introduced
Roughleaf aster	Eurybia radulina	None	Native
Rusty haired popcorn flower	Plagiobothrys nothofulvus	None	Native
Scarlet pimpernel	Lysimachia arvensis	None	Introduced
Sharp toothed sanicle	Sanicula arguta	None	Native
Shooting stars	Primula clevelandii	None	Native
Smooth cat's ear	Hypochaeris glabra	None	Introduced
Stinging nettle	Urtica dioica	None	Native
Tocalote	Centaurea melitensis	None	Introduced
Wild geranium	Geranium dissectum	None	Introduced
Wild mustard	Hirschfeldia incana	None	Introduced
Willow lettuce	Lactuca saligna	None	Introduced
Wood mint	Stachys sp.	None	Native
Woodland strawberry	Fragaria vesca	None	Native
Yellow star-thistle	Centaurea solstitialis	None	Introduced
Yerba buena	Clinopodium douglasii	None	Native
Graminoids – 13 Species			
Annual beard grass	Polypogon monspeliensis	None	Introduced
Annual bluegrass	Poa annua	None	Introduced
Annual fescue	Festuca microstachys	None	Native
Brown-headed rush	Juncus phaeocephalus	None	Native
California brome	Bromus carinatus	None	Native
Common toad rush	Juncus bufonius	None	Native
Foxtail barley	Hordeum murinum	None	Introduced
Giant wild rye	Leymus condensatus	None	Native
Italian rye grass	Festuca perennis	None	Native
Red-top brome	Bromus madritensis subsp. rubens	None	Introduced
Ripgut brome	Bromus diandrus	None	Introduced
Purple needlegrass	Stipa pulchra	None	Native
Wild oat	Avena fatua	None	Introduced

Common Name	Scientific Name	Special Status	Origin
Ferns - 2 Species			
Bracken fern	Pteridium aquilinum var. pubescens	None	Native
California wood fern	Dryopteris arguta	None	Native

4 RECOMMENDATIONS

Appropriately timed botanical surveys did not detect any special-status plant species within the Study Area; therefore, no further botanical studies are recommended. If modifications to the project design occur that will impact areas not included within the Study Area for this report, additional surveys should be conducted to evaluate those areas.