

Alexander Tchourbanov 426 E. 30th St.

Tucson, AZ 85713

OCFA Service Request Number #285412

In accordance with Section 104.9 of the 2019 California Fire Code, we are requesting an alternate method of fire protection for the proposed project indicated above.

AM&M Proposal for 20601 Trabuco Oaks Drive in Trabuco Canyon, Orange County, CA

PROJECT DESCRIPTION

The proposed project site is located at 20601 Trabuco Oaks Drive in Trabuco Canyon Orange County CA, APN 842-102-6. The lot is an approximate 10512sqft, the proposed project would grade and create a single family residence. The proposed structure would be 3 levels with an approximately living space of 462 sqft. Garage would be under structure. A small combustible storage shed that now exists on the west end of the property would be replaced with a non-combustible storage shed with no windows. In addition, a new 2nd noncombustible storage shed with no windows will be constructed near the southern property line, west of the main structure. Construction type VN, Occupancy R-3/U1 Single Attached Family Dwelling. This property is located within a Very High Fire Hazard Severity Zone (VHFHSZ). The residence will be equipped with an automatic fire sprinkler system in accordance with 2019 NFPA 13D.

APPLICABLE CODE SECTIONS and INTENT

current code requirements for a VHFHS7

OCFA Guidelines C-05 dated Jan2020 and SRA Fire Safe Regulations; C-05 requires Fuel Modification distance to be 170 feet, the project site will not accommodate this distance. This AM&M request proposes a reduction to those requirements for fuel treatment distance by alternate means and method. To be accomplished by applying improvements to the proposed structure that exceed

Proposed distances north and south will join adjacent properties as a B Zone. Zone A-29ft distance to the east will join Trabuco Oaks Dr. There is 107.49 feet of Fuel Modification to the west PL, this space breaks down as Zone A-20.32ft, Zone B-61ft, Zone C-26.17ft.

The protection of the structure will rely on CBC7A and CRC337 construction principles coupled with mitigation measure, interlocking fuel treatment, and progressive landscape design.

To the west of the structure an existing mature collection of OPUNTIA LITTORALIS PRICKLY PEAR CACTUS will remain. Existing mature oaks will remain. No planting will be introduced that will add to the fuel loading near the parcel lines. Appendix "A" provides an analysis of fire behavior for the site, flame lengths for the area west of the property PL are 30.2 feet. Appendix "B" Provides north and south cross sections. Appendix "C" Site Plan

MITIGATION MEASURES

- No combustible stairs, planter boxes, or garden features will be constructed in Zone "A".
- The use of combustible railroad ties is prohibited in Zone "A" and "B".
- Non-combustible steps and sidewalks will be constructed along the west side yard and along the east side of the upper retaining wall.
- No mulch within 5 ft of structure envelope, plantings not to exceed 2 feet.
- Non-combustible garden terrace retaining wall will serve as a radiant heat wall.

The Fire Behavior depicted in Appendix "A" provides a reasonable measure of safety to the structure envelope in the event of a catastrophic wildland fire. There is no extremely heavy fuel bed that would be exposed to an off-shore wind event for the Tchourbanov residence. From a Fire Behavior stand point there will be multiple starts in receptor fuels ahead of the fire front, as it approaches the Trabuco Community. The Tchourbanov residence will be one of the few with newer construction principles and

In an on-shore wind event flame lengths would be 30.2ft, with best practice doubling will require a minimum 60.4 ft setback from PL to structure envelope. Current design of 107.49 feet to the western PL will meet this requirement.

We appreciate your consideration in reviewing this proposal. Should you find that the proposed items provide an equivalent level of protection to that prescribed in the CFC, we will revise the residential site and fuel modification plans to include a copy of the approved AM&M letter. A copy will also be included on the site plan submitted to the County. If you have any questions regarding this AM&M proposal or the project in general, please do not hesitate to contact Firewise2000, Inc. Contact information is listed on

Sincerely,

Alexander Tchourbanov 426 E. 30th St. Tucson, AZ 85713

OCFA APPROVAL x holl Nick Pivaroff Assistant Fire Marsha

Senior Fire Prevention Specialis

NO ADDITIONAL CONDITIONS OF APPROVAL REQUIRED. ADDITIONAL CONDITIONS OF APPROVAL APPLY. SEE ATTACHED LETTER.

Monty !			
	2000, Inc		
760-533			
vik.tire	wise2000@	spcgiopai	.net

1320 Scenic Drive Escondido, CA 92029 (760) 745-3947 Info@firwise2000.com

Prepared by: FIREWISE2000, INC

APPROVED ALTERNATIVE MEANS & METHODS (AM&M) REQUEST

FIREWISE 2000, LLC

Fuel Modification Plans Design: C-05

ATTACHMENT 2 ntroductory Maintenance Information

January 1, 2020

The FMZ, SMA, RPZ shall be maintained in perpetuity for fire safety purposes, and shall cause a covenant to be recorded and referenced in the CC&Rs or on the property title when there is no HOA involvement.

Emergency access covenants shall be identified on the tract map indicating the reservation and restriction for permanent entry by the HOA or Fire Authority.

Select either Option #1 or #2 below

- Option #1 Maintenance Method: A. On-going maintenance shall occur to preserve the originally approved design found on the approved plans. Attachment 6 spacing is required and only approved planting species and arrangements on the plans are
 - B. The property owner is responsible for all maintenance of FMZ, SMA, and
 - C. <u>Two maintenance activities</u> shall be performed each year.
 - The first during middle- to late-Spring and the second in early- to middle-
 - D. Other activities include:
 - Grasses cut to 4 inches after annual seeding • Dead and dying, all vegetation litter, and Attachment 7 species removed
 - Maintenance of irrigation systems
 - · Replacement of dead or dying vegetation with approved species (proposed changes shall be approved by OCFA) Removal of trees and shrubs not on the approved plans
 - E. If maintained by an HOA, the landscape maintenance company and/or property manager shall inspect the FMZs throughout the year to identify where specific maintenance activities need to take place.
 - F. The OCFA may conduct inspections of established fuel modification areas. Ongoing maintenance shall be conducted a minimum of twice each year regardless of the dates of these inspections.
- G. The property owner shall retain all approved fuel modification plans. The design and information on the plans shall be used as the basis for maintenance.

Option #2 Maintenance Method (when approved by OCFA):

Ongoing maintenance shall occur per the current posted OCFA Vegetation Management Maintenance Guidelines at www.ocfa.org. Distances of FMZ, SMA, and RPZ will always remain required and will be specific to approved Fuel

No mulch or vegetation greater than 2' high will be planted within 5' of the building.

January 1, 2020

SOURCE: OCFA Fuel Modification Guideline C-05, Attachment 8; Dated: January 1, 2020

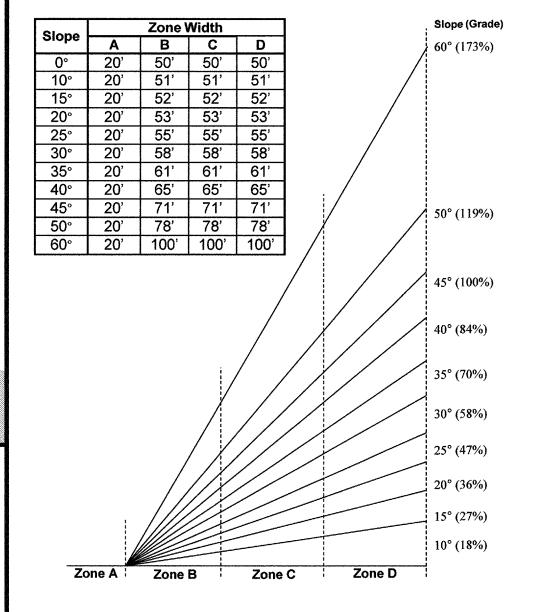
Fuel Modification Plans Design: C-05

Dated: January 1, 2020

Attachment 3

SOURCE: OCFA Fuel Modification Guideline C-05, Attachment 8;

INCLINE MEASUREMENT FOR SELECTED SLOPES (See Attachment 4)



Dated: January 1, 2020

SOURCE: OCFA Fuel Modification Guideline C-05. Attachment 8:

Fuel Modification Plans Design: C-05

Fuel Modification Plans Design: C-05

Separation

Vegetation Less than 2 Feet in Height:

Shrub and Tree Group Size:

Tree Group Spacing:

Shrubs and Trees Less than 10 Feet in Height

Shrubs and Trees 10 Feet in Height or Greater:

Shrubs and Trees 2 Feet in Height or Greater:

Shrub/Tree-form Shrub Group Spacing:

Zone "C/D" grasses can cover the entire area.

Attachment 6

Requirements for Planting Installation in Fuel Modification Zones

(For ongoing requirements, see Attachment 2 and the OCFA

egetation Management Maintenance Guidelines

Horizontal Spacing

• No horizontal spacing or vertical separation is required. Ground cover shall not exceed 2 feet in height. In Zone

"B" ground cover shall cover the entire ground between groups of shrubs, trees, or grasses and grasses are not

considered ground cover. Limited compartments of grasses are acceptable as approved on the planting plans. In

o All Shrubs and Trees can be in groups of 3 specimens or less. No horizontal spacing is required inside the

o Groups of shrubs shall be spaced by the greater of the following two measurements: A distance of 15 feet

o Groups of Trees shall be spaced by a distance of 30 feet minimum regardless of height. In Zone "A" full

minimum (or) 3 times the height of the tallest specimen in any of the groups.

• No vegetation over 2 feet in height is allowed within 15 feet from the edge of tree canopy(s).

growth tree branches are not allowed within 10 feet of enclosed combustible structures.

• When the fuel modification zone is within 30 feet of the structure, a vertical separation of 2 feet minimum is

required from the vegetation below. (Not required if shrubs are farther than 30 feet from structure).

A vertical separation of 4 feet minimum is required to be maintained from the vegetation below

• Trees only: All vegetation located underneath trees, shall be a maximum of 2 feet in

Vertical Separation

Shrubs; (or 30' for

January 1, 202

January 1, 2020

Shrub and Tree Form Shrub Horizontal Grouping and Spacing

Attachment 7 **UNDESIRABLE and INVASIVE PLANT SPECIES**

Certain plants are considered to be undesirable and invasive due to their physical of chemical characteristics. Physical properties that would contribute to high flammabilit include large amounts of dead material retained within the plant, rough or peeling bark and the production of copious amounts of litter. Chemical properties include the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants an notorious for containing these volatile substances.

Plants with these characteristics shall not be planted in any fuel modification zones o anywhere within the area covered by Alternate Methods & Materials agreements (see Section 4). Should these species already exist within these areas, they shall be removed because of their invasiveness or potential threat they pose to structures.

PLANT SPECIES (MANDATORY REMOVAL)

Botanical Name	Common Name		
Adenostoma Fasciculatum	Chamise		
Adenostoma Sparsifolium	Red Shanks		
Anthemix Cotula	Mayweed		
Artemisia Californica	California Sagebrush		
Brassica Nigra	Black Mustard		
Brassica Rapa	Wild Turnip, Yellow Mustard, Field Mustard		
Cardaria Draba	Noary Cress, Perennial Peppergrass		
Cirsium Vulgare	Wild Artichoke		
Conyza Canadensis	Horseweed		
Cortaderia Selloana	Pampas Grass		
Cynara Cardunculus	Artichoke Thistle		
Eriogonum Fasciculatum	Common Buckwheat		
Heterothaca Grandiflora	Telegraph Plant		
Lactuca Serriola	Prickly Lettuce		
Nassella/Stipa tenuissima	Mexican Feathergrass		
Nicotiana Bigelevil	Indian Tobacco		
Nicotiana Glauca	Tree Tobacco		
Ricinus Communis	Castor Bean Plant		
Sacsola Austails	Russian Thistle/Tumblewood		
Salvia Mellifera	Black Sage		
Silybum Marianum	Milk Thistle		
Urtica Urens	Burning Nettle		
Ornamental:			
Arecaceae (all palm species)	Palms		
Cortaderia	Pampas Grass		
Cupressus sp	Cypress		
Eucalyptus sp	Eucalyptus		
Juniperus sp	Juniper		
Pinus sp	Pine		

SOURCE: OCFA Fuel Modification Guideline C-05, Attachment 8; Dated: January 1, 2020

OCFA CHECKLIST

Checklist of Information Required on Conceptual Fuel Modification Plans (per OCFA Guideline C-05 January 1, 2020)

The checked boxes below indicate the adjacent requirement is included in these Conceptual Fuel Modification plans.

- A. Identify the total size of the development by showing all tract boundary lines, property lines, slope contour lines, and structure foundation
- B. Place descriptive notes of the land uses adjoining the development property on all sides (i.e., future construction, existing structures, natural vegetation, restoration plans, roads, parks, etc.).
- of slope. *See AM&M Letter for full response
- D. Select an on-slope option from the choices of FMZs from page 3. Delineate the width as described.
- ☑ E. All plants in fuel mod zones shall be selected from Attachment 8.

-NA- F. Label all interior slopes and all common areas as "Special Maintenance Areas" (SMA) and "Roadside Protection Zones" (RPZ), as applicable. If SMA planting plans are designed, they shall be submitted with the conceptual FMZ plans. If not designed yet, place a note that all planting plans require plan review and approval (see Section 5 for more information). When a SMA or RPZ is within 100 feet of a structure, the SMA or RPZ will be considered a defensible space area. The defensible space area shall comply with Attachments 2, 6 and 7. Alternative design methods may be approved through the Alternate Materials & Methods

- G. SMA and RPZ shall not have plants from Attachment 7.
- -NA- H. Delineate RPZ with either a maximum irrigated 50-foot wide FMZ "B" when on community perimeter areas or SMA when roads are interior to
- ☑ I. Each FMZ, SMA, and RPZ shall be symbolized and referenced on the plan and on a distinct legend.
- ☑ J. Notate every FMZ, SMA, and RPZ as irrigated or non-irrigated
- ☑ K. Place a note when an irrigation system shutoff valve is required to separate and isolate non-required irrigation systems beyond the 50-foot wide FMZ "B".
- ☑ L. Provide the name of the entity/entities responsible for maintenance of all FMZ, SMA, and, RPZ.
- ☑ M. Show name and location of any existing plant species you are proposing to retain. (If no existing plant species are shown, existing vegetation shall be removed from the site entirely.)
- -NA- N. Design dedicated emergency and maintenance access paths on commonly owned property, from the street frontage to lettered lots, to facilitate access behind the homes. This requires:
- 1. Paths every 500 lineal feet of FMZ or SMA length to have access, with a minimum 7-foot clear width and a dedicated flat path. 2. Covenants for FMZ and SMA access and maintenance to be recorded concurrently with all planning maps and referenced in Covenants, Conditions & Restrictions (CC&Rs).
- NA- O. Covenants will be required to be recorded for FMZ, SMA, and RPZ located on private homeowner lots prior to precise fuel modification plan approval (place as a note on plan if applicable).
- P. Copy Attachment 2, 3, 6, and 7 on the plans for on-going maintenance requirements.
- Q. If there are limited areas in which you cannot meet fuel modification distance requirements, follow the plan submittal requirement directions in Section 4.
- R. OCFA required notes 1-6 on the plans. See sheet FM1
- S. For certain projects, photographs of existing vegetation may be
- ☑ T. Provide the degree or percentage of slope on the plan at the location of the zone markers to indicate the actual distance. The marker shall be placed when using Attachment 3.

PROJECT LOCATION MAP

TRABUCO CANYON

OCFA NOTES

1. OCFA SERVICE REQUEST #285412

- 2. All fire codes shall comply from 2019 California Building Codes (CBC) 2019 California Fire Codes (CFC) and National Fire Code Association (NFPA) standards and local amendments including fuel modifications from PR 125 OCFD guidelines
- 3. This project is in the Very High Fire Severity Zone (VHFSZ) State Responsibility Area (SRA) and the building construction features shall comply with 2019 California Building Code (CBC) Chapter 7A and Residential Code Section 337
- 4. The January 1, 2020 edition of the OCFA Fuel Modification Guidelines C-05 have been applied to these Fuel Modification documents.
- 5. The FIRE MANAGEMENT PLAN and ALTERNATIVE MEANS & METHODS Request is submitted concurrently with these FUEL MODIFICATION PLANS

PROPERTY INFORMATION

PROPERTY OWNER: Mr. Alexander Tchourbanov Mailing Address: 426 E. 30th St. Tucson, AZ 85713

Email: achurbanov@gmail.com

PROPERTY ADDRESS 20601 Trabuco Oaks Dr. Trabuco Canyon, CA 92678

LEGAL DESCRIPTION APN 84210206 County of Orange, CA Legal Description: Lot 33 North and THR N Lot 31 Tract 926

PROJECT DESCRIPTION

AREA CALCULATIONS

SITE/BUILDING DATA

10,512 Sq. Ft Zoning: R 1 SRA FIRE ZONE (TOR DISTRICT) TRABUCO OAKS RESIDENTIAL CONSTRUCTION TYPE: OCCUPANCY: R-3 /U1 SINGLE ATTACHED FAMILY DWELLING 3 LEVELS (LOFT ABOVE AND CARAGE BELOW THE MAIN LIVING AREA) NUMBER OF FLOORS:

LOT AREA CALCULATIONS

Actual Building Footprint is 462 sf from 10,512 sf lot = 3% building footprint ratio Actual Landscape (less building/driveway/walks/stairs) = 91% landscape ratio

BUILDING AREA:	GARAGE	STORAGE	LIVING	DECK	ENTRY CO
GARAGE LOWER LEVEL (SUBTERRAN)	462.0 SF	75.0 SF	0.0	0.0	0.0
IST LEVEL (MAIN DWELLING)			462.0 SF	131.0	112.0
LOFT STORAGE LEVEL (UPPER LEVEL)		236.0 SF	0.0	0.0	0.0
total living area:			462.0 SF	131.0	112.0

PROJECT HISTORY

approved (Recording document 91—698513) but never followed to execute the work.

NEW PROPOSAL (BRIEF SCOPE)

Located at a small rural neighborhood immediately off Trabuco Canyon Road, the project initials placing on a vacant site a new small 3 level dwelling (storage loft above and a subterranean garage below the main living space), Built into an embankment, the new proposed family dwelling has I bedroom with an folding division wall, 1 bath, and laundry with a open space for the kitchen, dining and living space that sits on the 2 car garage below.

This vacant hillside lot comprising of 10,512 square feet of cactus, live oaks, olive along with low growth vegetation. The toe of slope starts at street and uniformly slopes up above to 65 feet at upper rear corner of site. Combination of building retaining walls and site retaining walls offer grades to step down as tiers to accommodate the new infrastructure of the subterranean garage and depressed

The project is in the Very High Fire Severity Zone (VHFSZ) State Responsibility Area (SRA) and the building construction features shall comply with 2019 California Building Code (CBC) Chapter 7A and Residential Code Section 337

JOHN A. SALAT Architects HTTP://ZenArchitect.com 22386 Woodgrove Road Lake Forest, CA 92630 Attn: John Salat E-mail: freeingwinds@earthlink.net Ph 949-235-4847 FAX 888-608-4934

PROJECT DESIGN TEAM

STRUCTURAL ENGINEERING Stephen Peter, PE President

1519 Calle Valle, San Clemente, CA 92672 (949) 492-3735 Office (949) 492-1891 Fax 949) 370-6655 Cell Web: www.peterassoc.com Émail: steve@peterassoc.com

Stephen Peter, PE President 1519 Calle Valle, San Clemente, CA 92672 (949) 492-3735 Office (949) 492-1891 Fax (949) 370-6655 Cell Web: www.peterassoc.com

Émail: steve@peterassoc.com T-24 CALCULATIONS **Hummingbird Energy Services** Contact: Denise Kowal Email: info@HummingbirdTitle24.com P.O. Box 68315, Oro Valley, AZ 85737

Ph 530-536-0448 ARBORIST CONSULTANT

Peter C. Harnisch Consulting Arborist Contractors license #515552, ISA Certified Arborist #0773 TCIA Tree Care Professional #756 + membe of ASCA 1022 Santa Ana St., Laguna Beach, CA. 92651 (626) 945-3176 Email: peter@harnischtreecare.com

LANDSCAPE ARCHITECT (FUEL MODIFICATION) Frederick Thomas Hume Principal: Rick Hume, FASLA licensed Architect 2984 Mountain View Dr, #A Laguna Beach, CA 92651

Phone: 949.376.3998 Email: FTH2N0V8@cox.net FIRE ASSESMENT/FIRE PREVENTION PLANNING FIREWISE 2000, LLC

Monty Kailyn 1320 Scenic Dr, Escondido, CA 92029 Phone: 760-745-3947 Email: mk.firewise2000@sbcglobal.net



DATE: Oct. 30, 2019

FM 2

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REVISIONS: \ March 20, 2020; ¹ 2nd Plan Check Submittal May 11, 2020 OCFA Plan Check

A July 1, 2020 OCFA Plan Check

SHEET OF

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Attachment 8

FUEL MODIFICATION ZONE PLANT LIST

OCFA Fuel Modification Guideline C-05, Dated: January 1, 2020 /1 (Note: Legend and Qualification information can be found on pages 28-29)

4	Code	Botanical Name	Common Name	Plant Form
1.	W	Abelia x grandiflora	Glossy Abelia	Shrub
2.	n	Acacia redolens desert carpet	Desert Carpet	Ground Cover
3.	0	Acer macrophyllum	Big Leaf Maple	Tree
4. 	X	Achillea millefolium	Common Yarrow	Low Shrub
5. C	W	Achillea tomentosa	Woolly Yarrow	Low Shrub
6. 7.	X	Aeonium decorum Aeonium simsii	Aeonium	Ground cover Ground cover
7. 8.	 ^	Agave attenuata	no common name Century Plant	Succulent
9.	W	Agave shawii	Shaw's Century Plant	Succulent
10.	N	Agave victoriae-reginae	no common name	Ground Cover
11.	X	Ajuga reptans	Carpet Bugle	Ground Cover
12.	W	Alnus cordata	Italian Alder	Tree
13.	0	Alnus rhombifolia	White Alder	Tree
14.	N	Aloe arborescens	Tree Aloe	Shrub
15.	N	Aloe aristata	no common name	Ground Cover
16.	N	Aloe brevifoli	no common name	Ground Cover
17.	W	Aloe Vera	Medicinal Aloe	Succulent
18.	W	Alogyne huegeii	Blue Hibiscus	Shrub
19.	0	Ambrosia chammissonis	Beach Bur-Sage	Perennial
20. 21.	W	Amorpha fruticosa Anigozanthus flavidus	Western False Indigobush	Shrub Berennial/essent
21. 22	0	Anigozaninus ilavidus Antirrhinum nuttalianum ssp.	Kangaroo Paw no common name	Perennial/accent Subshrub
<u></u> 23.	X	Aptenia cordifolia x 'Red Apple'	Red Apple Aptenia	Ground cover
24.	W	Arbutus unedo	Strawberry Tree	Tree
25. 25.	W	Arctostaphylos 'Pacific Mist'	Pacific Mist Manzanita	Ground Cover
26.	W	Arctostaphylos edmundsii	Little Sur Manzanita	Ground Cover
27.	0	Arctostaphylos glandulosa ssp.	Eastwood Manzanita	Shrub
 28.	l w	Arctostaphylos hookeri 'Monterey	Monterey Carpet Manzanita	Low Shrub
		Carpet'		
29. 20.	N	Arctostaphylos pungens	no common name	Shrub
30.	N W	Arctostaphylos refugioensis	Refugio Manzanita	Shrub Ground Cover
31. 32.	W	Arctostaphylos uva-ursi Arctostaphylos x 'Greensphere'	Bearberry Greensphere Manzanita	Ground Cover Shrub
32. 33.	N	Arctostaphylos x 'Greensphere' Artemisia caucasica	Greensphere Manzanita Caucasian Artesmisia	Ground Cover
33. 34.	X	Artemisia caucasica Artemisia pycnocephala	Beach Sagewort	Perennial
35.	X	Atriplex canescens	Four-Wing Saltbush	Shrub
36.	X	Atriplex lentiformis ssp. breweri	Brewer Saltbush	Shrub
37.	0	Baccharis emoyi	Emory Baccharis	Shrub
38.	Wo	Bacharis pilularis ssp. Consanguinea	Chaparral Bloom	Shrub
39. 40	X	Baccharis pilularis var. pilularis Baccharis salicifolia	Twin Peaks #2 Mulefat	Ground Cover Shrub
40. 41.	O N	Baileya Multiradiata	Desert Marigold	Ground Cover
42.	N n	Bougainvillea spectabilis	Bougainvillea	Shrub
43.	'''	Brickellia californica	no common name	Subshrub
44.	Wo	Bromus carinatus	California Brome	Grass
45.	0	Camissonia cheiranthifiloa	Beach Evening Primrose	Perennial Shrub
46.	N	Carissa macrocarpa	Green Carpet Natal Plum	Ground Cover/Shrub
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47.	X	Carpobrotus chilensis	Sea Fig Ice Plant	Ground Cover
48. 49.	W	Ceanothus gloriosus 'Point Reyes' Ceanothus griseus 'Louis Edmunds'	Point Reyes Ceanothus Louis Edmunds Ceanothus	Shrub Shrub
49. 50.	W	Ceanothus griseus horizontalis	Yankee Point	Ground Cover
51.	w	Ceanothus griseus var. horizontalis	Carmel Creeper Ceanothus	Shrub
52.	W	Ceanothus griseus var. horizontalis	Yankee Point Ceanothus	Shrub
53.	0	Ceanothus megarcarpus	Big Pod Ceanothus	Shrub
54.	w	Ceanothus prostratus	Squaw Carpet Ceanothus	Shrub
55.	0	Ceanothus spinosus	Green Bark Ceanothus	Shrub
56.	w	Ceanothus verrucosus	Wart-Stem Ceanothus	Shrub
 57.	l w		Snow-in-Summer	
•	1	Cerastium tomentosum	1 STORE WY COMMISSION	Ground cover/Shrub
<u></u>	1	Cerastium tomentosum	0	Ground cover/Shrub
	W	Ceratonia siliqua	Carob Western Redhud	Tree
59.	W	Ceratonia siliqua Cercis occidentalis	Western Redbud	Tree Shrub/Tree
59. 60.	 	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum		Tree
59. 60. 61.	w x	Ceratonia siliqua Cercis occidentalis	Western Redbud Oxeye Daisy	Tree Shrub/Tree Ground Cover
59. 60. 61.	W X W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus	Western Redbud Oxeye Daisy no common name	Tree Shrub/Tree Ground Cover Ground Cover
59. 60. 61. 62.	W X W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus	Western Redbud Oxeye Daisy no common name White Rockrose	Tree Shrub/Tree Ground Cover Ground Cover Shrub
59. 60. 61. 62. 63.	W X W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus	Western Redbud Oxeye Daisy no common name White Rockrose no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub
59. 60. 61. 62. 63. 64.	W X W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Shrub Shrub Shrub
59. 60. 61. 62. 63. 64. 65. 66.	W X W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Shrub Tree
59. 60. 61. 62. 63. 64. 65. 66.	W X W W W W W O	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Shrub Tree Annual
59. 60. 61. 62. 63. 64. 65. 66. 67. 68.	W X W W W W O O	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Shrub Tree Annual Shrub
58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69.	W X W W W W O O O	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70.	W X W W W W W O O O WO	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71.	W X W W W W W O O O N	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Shrub
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70.	W X W W W W W O O O WO	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 70. 71. 72.	W X W W W W W O O O N	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Shrub
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 70. 71. 72.	W X W W W W W O O O W O W W W O O	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Cover/Shrub Low shrub Annual Annual
59. 60. 61. 62. 63. 64. 65. 66. 67. 69. 71. 72. 73.	W X W W W W W O O O O W O W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 70. 71. 72. 73. 74. 75.	W X W W W W W W O O O W W W W N	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76.	W X W W W W W W O O O O W O W W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Corea pulchella Cotoneaster buxifolius	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 71. 72. 73. 74. 75. 76. 77.	W X W W W W W W O O O W O W W W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang'	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77.	W X W W W W W W O O O W O W W W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Cotoneaster aprneyi	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Shrub Annual Shrub Shrub Shrub Shrub Shrub Shrub Shrub Shrub Shrub Ground Cover/Shrub
59. 60. 61. 62. 63. 64. 65. 66. 67. 70. 71. 72. 73. 74. 75. 76. 77. 80.	W X W W W W W W O O O O W O N W W W W W X	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Cotoneaster aprneyi Crassula lactea	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81.	W X W W W W W W W O O O W O W W W W W X X	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Crassula lactea Crassula multicava	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Ground Cover Ground Cover Shrub Ground Cover Shrub Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 69. 70. 71. 72. 73. 74. 75. 76. 77. 80. 81. 82. 83.	W X W W W W W W O O O O W O N W W W W W X X X	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Crassula lactea Crassula multicava Crassula ovata	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Ground Cover Ground Cover Shrub Ground Cover Shrub Ground Cover Shrub Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83.	W X W W W W W W W O O O O W O W W W W W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Crassula lactea Crassula multicava Crassula tetragona	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 71. 72. 73. 74. 75. 76. 77. 80. 81. 82. 83. 84.	W X W W W W W W O O O O W O N W W W W W X X X X X W O	Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Crassula lactea Crassula multicava Crassula ovata Crassula tetragona Croton californicus	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califlornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name California Croton	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 80. 81. 82. 83. 84. 85.	W X W W W W W W W O O O O W O N W W W W W X X X X X X	Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Crassula lactea Crassula multicava Crassula tetragona Croton californicus Delosperma 'alba'	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califiornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name California Croton White trailing Ice Plant	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover/Shrub Shrub Ground Cover Ground Cover Shrub Ground Cover Ground Cover Shrub Ground Cover Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 70. 71. 72. 73. 74. 75. 76. 77. 80. 81. 82. 83. 84. 85.	W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster aprneyi Crassula lactea Crassula multicava Crassula tetragona Croton californicus Delosperma 'alba' Dendromecon rigida	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califlornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name California Croton White trailing Ice Plant Bush Poppy	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 71. 72. 73. 74. 75. 76. 77. 80. 81. 82. 83. 84. 85. 86.	W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster congestus 'Likiang' Cotoneaster aprneyi Crassula lactea Crassula multicava Crassula tetragona Croton californicus Delosperma 'alba' Dendromecon rigida Dichelostemma capitatum	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califfornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name California Croton White trailing Ice Plant Bush Poppy Blue Dicks	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover/Shrub Shrub Ground Cover Ground Cover Shrub Ground Cover
59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 70. 71. 72. 73. 74. 75. 76. 77. 80. 81. 82. 83. 84. 85.	W	Ceratonia siliqua Cercis occidentalis Chrysanthemum leucanthemum Cistus Crispus Cistus hybridus Cistus incanus Cistus incanus ssp. Corsicus Cistus salviifolius Cistus x purpureus Citrus species Clarkia bottae Cneoridium dumosum Collinsia heterophyllia Comarostaphylis diversifolia Convolvulus cneorum Coprosma kirkii Coprosma pumila Coreopsis californica Coreopsis lanceolata Corea pulchella Cotoneaster buxifolius Cotoneaster aprneyi Crassula lactea Crassula multicava Crassula tetragona Croton californicus Delosperma 'alba' Dendromecon rigida	Western Redbud Oxeye Daisy no common name White Rockrose no common name no common name Sageleaf Rockrose Orchid Rockrose Orchid Rockrose Citrus Showy Fairwell to Spring Bushrue Chinese Houses Summer Holly Bush Morning Glory Creeping Coprosma Prostrate Coprosma Califlornia Coreopsis Coreopsis Australian Fuscia no common name Likiang Cotoneaster no common name no common name Jade Tree no common name California Croton White trailing Ice Plant Bush Poppy	Tree Shrub/Tree Ground Cover Ground Cover Shrub Shrub Shrub Shrub Tree Annual Shrub Annual Shrub Ground Cover/Shrub Low shrub Annual Ground Cover Ground Cover Ground Cover Shrub Ground Cover

	Code	Botanical Name	Common Name	Plant Form
92.	Х	Drosanthemum hispidum	no common name	Ground Cover
93.	X	Drosanthemum speciosus	Dewflower	Ground Cover
94. 95.	0	Dudleya lanceolata Dudleya pulverulenta	Lance-leaved Dudleya Chalk Dudleya	Succulent Succulent
96. 96.	W	Elaeagnus pungens	Silverberry	Shrub
97.	0	Encelia californica	California Encelia	Small Shrub
98.	0*	Epilobium canum [Zauschneria	Hoary California Fuschia	Shrub
99.	<u></u>	californica]	Mojave Woolly Star	Annual
100.	O N	Eriastrum Sapphirinum Eriobotrya japonica	Loquat	Tree
101.	0	Eriodictycon crassifolium	Thick Leaf Yerba Santa	Shrub
102.	0	Eriodictycon trichocalyx	Yerba Santa	Shrub
103.	Wo	Eriophyllum confertiflorum	no common name	Shrub
104.	W	Erythrina species	Coral Tree	Tree
105. 106.	N Wo	Escallonia species Eschscholzia californica	Several varieties California Poppy	Shrub
106.	X	Eschscholzia californica	Mexican Poppy	Herb
108.	N	Euonymus fortunei	Winter Creeper Euonymus	Ground Cover
109.	N	Feijoa sellowiana	Pineapple Guava	Shrub/Tree
110.	N	Fragaria chiloensis	Wild Strawberry/Sand Strawberry	Ground Cover
111.	0	Frankenia salina	Alkali Heath	Ground Cover
112.	w	Fremontondendron californicum	California Flannelbush	Shrub
113.	Х	Gaillardia x grandiflora	Blanketflower	Ground Cover
114.	W	Galvezia speciosa	Bush Snapdragon	Shrub
115.	W	Garrya ellipta	Silktassel	Shrub
116.	X	Gazania hybrids	South African Daisy Training Gazania	Ground Cover
117. 118.	X	Gazania rigens leucolaena Gilia capitata	Training Gazania Globe Gilia	Ground Cover Perennial
118. 119.	o W	Gilia capitata Gilia leptantha	Showy Gilia	Perennial
120.	W	Gilia tricolor	Bird's Eyes	Perennial
121.	w	Ginkgo biloba	Maidenhair Tree	Tree
122.	0	Gnaphalium californicum	California Everlasting	Annual
123.	w	Grewia occidentalis	Starflower	Shrub
124.	0	Grindelia stricta	Gum Plant	Ground Cover
125.	Nn	Hakea suaveolens	Sweet Hakea	Shrub
126.	W	Hardenbergia comptoniana	Lilac Vine	Shrub
127.	N	Heliathemum muutabile	Sunrose	Ground Cover/Shrub
128.	0	Helianthemum scoparium	Rush Rose	Shrub
129.	0	Heliotropium curassavicum	Salt Heliotrope	Ground Cover
130. 131.	X W	Helix Canariensis Hesperaloe parviflora	English Ivy Red Yucca	Ground Cover Perennial
132.	o n	Heteromeles arbutifolia	Toyon	Shrub
133.	X	Hypericum calycimum	Aaron's Beard	Shrub
134.	N	Iberis sempervirens	Edging Candytuft	Ground Cover
135.	N	Iberis umbellatum	Globe Candytuft	Ground Cover
136.	0	Isocoma menziesii	Coastal Goldenbush	Small Shrub
137.	0	Isomeris arborea	Bladderpod	Shrub
138.	W	Iva hayesiana	Poverty Weed California Black Walnut	Ground Cover Tree
139. 140.	N o	Juglans californica Juncus acutus	Spiny Rush	Perennial
140. 141.	0	Keckiella antirrhinoides	Yellow Bush Penstemon	Subshrub
142.	0	Keckiella cordifolia	Heart Leaved Penstemon	Subshrub
143.	0	Keckiella ternata	Blue Stemmed Bush Penstemon	Subshrub
144.	W	Kniphofia uvaria	Red Hot Poker	Perennial
145.	W	Lagerstroemia indica	Crape Myrtle	Tree
146.	W	Lagunaria patersonii	Primrose Tree	Tree
147.	X	Lamprathus aurantiacus	Bush Ice Plant	Ground Cover
148. 149.	X	Lampranthus filicaulis Lampranthus spectabilis	Redondo Creeper Trailing Ice Plant	Ground Cover Ground Cover
149. 150.	W	Lampranthus spectabilis Lantana camara cultivars	Yellow Sage	Shrub
150. 151.	W	Lantana montevidensis	Trailing Lantana	Shrub
152.	0	Lasthenia californica	Dwarf Goldfields	Annual
153.	W	Lavandula dentata	French Lavender	Shrub
154.	W	Leptospermum laevigatum	Australian Tea Tree	Shrub
155.	W	Leucophyllum frutescens	Texas Ranger	Shrub
156. 157	0 N	Leymus condensatus	Giant Wild Rye Texas privet	Large Grass
157. 158.	N X	Ligustrum japonicum Limonium pectinatum	Texas privet	Shrub Ground Cover
156. 159.	$\frac{1}{x}$	Limonium perezii	Sea Lavender	Shrub
160.	Wn	Liquidambar styraciflua	American Sweet Gum	Tree
161.	W	Liriodendron tulipfera	Tulip Tree	Tree
162.	Х	Lonicera japonica 'Halliana'	Hall's Japanese Honeysuckle	Vining Shrub
163.	0	Lonicera subspicata	Wild Honeysuckle	Vining Shrub
164.	Х	Lotus corniculatus	Bird's Foot Trefoil	Ground Cover
165.	0	Lotus hermannii	Northern Woolly Lotus	Perennial
166. 167	0 W	Lunique arizonicus	Desert Lunine	Shrub Annual
167. 168.	W	Lupinus arizonicus Lupinus benthamii	Desert Lupine Spider Lupine	Annual
168. 169.	0	Lupinus bicolor	Sky Lupine Sky Lupine	Flowering annual
			Loosely Flowered Annual Lupine or	
170. 	0	Lupinus sparsiflorus	Coulter's Lupine	Annual
171.	w	Lyonothamnus floribundus ssp. Asplenifolius	Fernleaf Ironwood	Tree
172.	W	Macadamia integrifolia	Macadamia Nut	Tree
173.	w	Mahonia aquifolium 'Golden	Golden Abundance Oregon Grape	Shrub
170. 174.	W	Abundance' Mahonia nevenii	Nevin Mahonia	Shrub
174. 175.	0 W	Mahonia nevenii Malacothamnus fasciculatus	Nevin Mahonia Chapparal Mallow	Shrub
175. 176.	X	Malephora luteola	Training Ice Plant	Ground Cover
	W	Maytenus boaria	Mayten Tree	Tree
177.	 	Melaleuca nesophila	Pink Melaleuca	Shrub
	W	inclaicada ricooprilia		1
178.	N	Metrosideros excelsus	New Zealand Christmas Tree	Tree
177. 178. 179. 180.	 	· · · · · · · · · · · · · · · · · · ·		

	Code	Botanical Name	Common Name	Plant Form
183.	W	Myoporum insulare	Boobyalla	Shrub Ground Cover
184. 185.	W	Myoporum parvilfolium Myoporum 'Pacificum'	no common name	Ground Cover Ground Cover
186.	0	Nassella (stipa) lepidra	Foothill Needlegrass	Ground Cover
187.	0	Nassella (stipa) pulchra	Purple Needlegrass	Ground Cover
188.	0	Nemophilia menziesii	Baby Blue Eyes	Annual
189.	Х	Nerium Oleander	Oleander	Shrub
190.	0	Nolina cismontana	Chapparal Nolina	Shrub
191.	N	Nolina species	Mexican Grasstree	Shrub
192. 193.	W N	Oenothera belandieri Oenothera hookeri	Mexican Evening Primrose California Evening Primrose	Ground Cover Flower
193.	W	Oenothera speciosa	Show Evening Primrose	Perennial
195.	X	Ophiopogon japonicus	Mondo Grass	Ground Cover
196.	0*	Opuntia littoralis	Prickly Pear	Cactus
197.	0 *	Opuntia oricola	Oracle Cactus	Cactus
198.	0*	Opuntia prolifera	Coast Cholla	Cactus
199.	W	Osmanthus fragrans	Sweet Olive	Shrub
200.	X	Osteospermum fruticosum	Training African Daisy Mexican Palo Verde	Ground Cover Tree
201. 202.	X W	Parkinsonia aculeata Pelargonium peltatum	Ivy Geranium	Ground Cover
203.	X	Penstemon species	Beard Tongue	Shrub
204.	w	Photinia fraseria	no common name	Shrub
205.	w	Pistacia chinesis	Chinese Pistache	Tree
206.	Х	Pittosporum undulatum	Victorian Box	Tree
207.	0	Plantago erecta	California Plantain	Annual
208.	**	Plantago insularis	Woolly Plantain	Annual
209.	Х	Plantago sempervirens	Evergreen Plantain	Ground Cover
210.	W	Plantanus racemosa	California Sycamore	Tree
211. 212.	W	Plumbago auritulata	Plumbago Cape Western Cottonwood	Shrub Tree
212. 213.	O X	Popolus fremontii Portulacaria afra	Elephant's Food	Shrub
213.	0	Potentilla glandulosa	Sticky Cinquefoil	Subshrub
215.	X	Potentilla tabernaemontanii	Spring Cinquefoil	Ground Cover
216.	Х	Prunus caroliniana	Carolina Cherry Laurel	Shrub/Tree
217.	0	Prunus ilicifolia ssp. Ilicifolia	Holly Leafed Cherry	Shrub
218.	Х	Prunus Iyonii	Catalina Cherry	Shrub/Tree
219.	N	Punica granatum	Pomegranate	Shrub/Tree
220.	W	Puya species	Puya	Succulent/Shrub
221.	W	Pyracantha species	Firethorn	Shrub
222. 223.	0 0 n *	Quercus agrifolia Quercus berberdifolia	Coast Live Oak California Scrub Oak	Tree Shrub
223. 224.	0 n*	Quercus dumosa	Coastal Scrub Oak	Shrub
225.	X	Quercus engelmannii	Engelmann Oak	Tree
226.	Х	Quercus suber	Cork Oak	Tree
227.	Х	Rhamnus alaternus	Italian Buckthorn	Shrub
228.	0	Rhamnus californica	California Coffee Berry	Shrub
229.	0	Rhamnus crocea	Redberry	Shrub
230.	0	Rhamnus crocea ssp. Ilicifolia	Hollyleaf Redberry	Shrub
231. 232.	N o	Rhaphiolepis species Rhus integrifolia	Indian Hawthorne Lemonade Berry	Shrub Shrub
232. 233.	N	Rhus lancea	African Sumac	Tree
234.	o n	Rhus ovata	Sugar bush	Shrub
235.	0	Ribes aureum	Golden Currant	Shrub
236.	0	Ribes indecorum	White Flowering Currant	Shrub
237.	0	Ribes speciosum	Fuschia Flowering Gooseberry	Shrub
238.	W	Ribes viburnifolium	Evergreen currant	Shrub
239.	0*	Romneya coulteri	Matilija Poppy	Shrub
240.	Х	Romneya coulteri 'White Cloud'	White Cloud Matilija Poppy	Shrub
241.	Wn	Rosmarinus officinalis	Rosemary	Shrub
242.	Wn	Salvia greggii	Autums Sage	Shrub
243. 244.	Wn	Salvia sonomensis Sambucus mexicana	Creeping Sage Mexican Elderberry	Ground Cover Tree
244. 245.	w v	Sambucus mexicana Santolina chamaecyparissus	Lavender Cotton	Ground Cover
245. 246.	W	Santolina virens	Green Lavender Cotton	Shrub
247.	0	Satureja chandleri	San Miguel Savory	Perennial
248.	0	Scirpis scutus	Hard Stem Bulrush	Perennial
249.	0	Scirpus californicus	California Bulrush	Perennial
250.	Х	Sedum acre	Goldmoss Sedum	Ground Cover
251.	X	Sedum album	Green Stonecrop	Ground Cover
252.	X	Sedum confusum	no common name	Ground Cover
253. 254.	X	Sedum lineare Sedum x rubrotinctum	no common name Pork and Beans	Ground Cover Ground Cover
254. 255.	X	Sedum x rubrotinctum Senecio serpens	no common name	Ground Cover Ground Cover
255. 256.	0	Sisyrinchium bellum	Blue Eyed Grass	Ground Cover Ground Cover
250. 257.	0	Solanum douglasii	Douglas Nightshade	Shrub
258.	0	Solanum xantii	Purple Nightshade	Perennial
259.	w	Stenicarpus sinuatus	Firewheel Tree	Tree
260.	W	Strelitzia nicolai	Giant Bird of Paradise	Perennial
261.	W	Strelitzia reginae	Bird of Paradise	Perennial
262.	0	Symphoricarpos mollis	Creeping Snowberry	Shrub
263.	W	Tecoma stans (Stenolobium stans)	Yellow Bells	Shrub/Small Tree
264.	Х	Tecomaria capensis	Cape Honeysuckle	Ground Cover
265.	N	Teucarium chamedrys	Germander	Ground Cover
266.	N	Thymus serpyllum	Lemon Thyme	Ground Cover

	Code	Botanical Name	Common Name	Plant Form
268.	0	Trichosstems lanatum	Woolly Blue Curls	Shrub
269.	Х	Trifolium hirtum 'Hyron'	Hyron Rose Clover	Ground Cover
270.	Х	Trifolium fragerum 'O'Connor's'	O'Connor's Legume	Ground Cover
271.	0	Umbellularia californica	California Laurel	Tree
272.	0	Verbena lasiostachys	Western Vervain	Perennial
273.	N	Verbena peruviana	no common name	Ground Cover
274.	Х	Verbena species	Verbena	Ground Cover
275.	Х	Vinca minor	Dwarf Periwinkle	Ground Cover
276.	0	Vitis girdiana	Desert Wild Grape	Vine
277.	Х	Vulpia myuros 'Zorro'	Zorro Annual Fescue	Grass
278.	W	Westringia fruticosa	no common name	Shrub
279.	W	Xannithorrhoea species	Grass Tree	Perennial, Accent shrub
280.	W	Xylosma congestum	Shiny Xylosma	Shrub
281.	Х	Yucca Species	Yucca	Shrub
282.	0	Yucca whipplei	Yucca	Shrub

Symbol Legend

- X = Plant species prohibited in wet and dry FMZs adjacent to reserve lands. Acceptable on all other fuel modification locations and zones.
- W = Plant species appropriate for use in wet FMZs adjacent to reserve lands. Acceptable in all other wet and irrigated dry (manufactured slopes) fuel modification locations and zones.
- o = Plant species native to Orange County. Acceptable in all fuel modification wet and dry zones in all locations.
- N = Plant species acceptable on a limited basis (maximum 30% of the area) in wet FMZs adjacent to reserve lands. Acceptable on all other FMZs.
- * = If locally collected.
- ** = Not native, but can be used in all zones.
- n = Plant species acceptable on a limited use basis. Refer to qualification requirements following plant palette.

Approved Plant Palette Qualification Statements for Select Plant Species

- 2. Acacia redolens desert carpet: May be used in the furthest ½ of the "B" FMZ from the structure, and no closer than 25 feet from the edge of the zone nearest the structure. The plants may be planted with a minimum spacing at 10-foot on center, maximum spacing in meandering zones not to exceed a mature width of 24 feet and mature height of 24 inches. If acacia redolens desert carpet is used in the roadway protection zone, it shall be maintained a minimum of 25 feet from the curb face. At the time of precise plan review, the mature spacing shall be accounted for.
- 42. Bougainvillea spectabilis (procumbent varieties): Procumbent to mounding varieties may be used in the mid "B" FMZ. The plants may be planted in groups at 6-foot on center spacing not to exceed eight plants per group. Mature spacing between individual plants or groups shall be 30-foot minimum.
- 125. Hakea suaveolens: May be used in the mid "B" FMZ. The plants shall be used as single specimens with mature spacing between plants of 30-foot minimum.
- 132. Heteromeles arbutifolia: May be used in the mid to lower "B" FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be 30-foot minimum.
- 160. Liquidambar styraciflua: May be used in the mid "B" FMZ. The plant shall be used as single specimens with mature spacing between trees and 30-foot minimum.
- 223. Quercus berberdifolia: Additional information may be required as directed by the OCFA unless approved on the plan as shown.
- 224. Quercus dumosa: May be used in the mid to lower "B" FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be 30-foot minimum.
- 234. Rhus ovata: May be used in the mid to lower "B" FMZ of inland areas only. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be 30-foot minimum.
- 241. Rosmarinus officinalis: When used as a ground cover, it shall be maintained at 2 feet in height. Additional information may be required as directed by the OCFA.
- 242. Salvia greggii: Additional information may be required as directed by the OCFA unless approved on the plan as shown.
- **243.** Salvia sonomensis: May be used in the mid to upper "B" FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be 15-foot minimum.

NOTES

1) Section 3 - PLANT PALETTE INFORMATION

A. The OCFA plant list provided here is was approved by various resource agencies responsible for environmental protection. All plants installed shall be selected from this list and be grouped and spaced for initial installation in accordance with Attachment 6 (Sheet FM-2). Specific installation requirements are included for various plant species (see plant code, legend, and qualification statements included on this sheet).

Existing vegetation to be retained is noted on the conceptual FMZ plans. (Sheet FM-1) See above for plant palette legends demonstrated for plan design.

B. Proposing Alternate Species:

If alternate plant species are proposed, the landscape architect shall provide photographs and data on the size, fire resistive characteristics, and invasiveness for installation criteria. A maximum of 10 alternate species can be proposed per project.

Alternative species need to have similar/equal properties to the plants from Attachment 8. OCFA will make a case-by-case determination as to acceptability of the proposed species. Some species that are equal in combustibility to pre-approved species on the list may not be allowed due to the invasiveness of the species. The proposed species must be spaced based on size and characteristics.

If the plant materials are proposed to be planted within 300 feet of reserve lands (except plants on the interior of the tract), concurrence from the permitting resource agencies would be required. If the proposed plants have received previous resource agency approval, no concurrence letter will be required. Contact OCFA prior to your submittal if needed.

THOMAS FREDERICK

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REVISIONS: March 20, 2020; 2nd Plan Check Submittal

DATE: Oct. 30, 2019

FM 3

SOURCE: OCFA Fuel Modification Guideline C-05, Attachment 8; Dated: January 1, 2020

SHEET OF



CONCRETE
/ RETAINING WALL

FUEL MODIFICATION ZONE - A

PAVED DRIVEWAY

PUBLIC STREET

0 1" SCALE: 1/4" = 1'-0"

 $1\sqrt{2}\sqrt{3}$

SOUTH ELEVATION

GARDEN TERRACE 8' FLAT

DEWLLING FF LEVEL

GARAGE FF LEVEL

ZONE - A

DWELLING

GARAGE

DWELLING FF LEVEL

GARAGE FF LEVEL





OV RESIDENCE
Landscape Arcounce Oaks Dr.
Von, CA 92678
Laguna Beac

TCHOURB/
20601

CONCEPTUAL FUEL MODIFICATION PLAN PHOTOS & SECTION

REVISIONS:

March 26, 2020;
2nd Plan Check

May 11, 2020
OCFA Plan Check

June 11, 2020
OCFA Plan Check

DATE: Oct. 30, 2019

FM 4

SHEET OF