FIREWISE 2000 LLC

Wildland/Urban Interface Fire Protection Planning

June 1, 2021, Revised 10/15/2021

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123

Lakeside Fire Protection District
12216 Lakeside Ave.
Lakeside, CA 92040

SUBJECT: FIRE PROTECTION PLAN – REVISED LETTER REPORT
Project Name – Los Coches Plaza
Project Application Number – PDS2020-TM-5640; PDS2020 - MUP-20-006
Location – Los Coches and Ora Belle Lane
APN – 400-381-02-00

This Fire Protection Plan (FPP) - Letter Report was prepared by Firewise 2000, LLC and is being submitted pursuant to the 2019 California Fire Code and County Fire Code to address the adverse environmental effects and Lakeside Community Plan Adopted August 3, 2011. It evaluates potential adverse environmental effects that a proposed project may have from wildland fire and to provide mitigation of those impacts to ensure that the project does not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

PROJECT DESCRIPTION

The Los Coche's Plaza Project (project) site is approximately 3 acres within the northeast quadrant of the Interstate 8/Los Coches Road interchange in the County of San Diego. The project includes development of a fast-food restaurant totaling approximately 2,660 square feet, a 7,385 square foot retail store, and a car wash of 4,110 square feet. These proposed uses will be located adjacent to an existing 4-pump, 8-fueling space gas station. Access to the project site is proposed opposite of the Los Coches Road and Ora Belle Lane intersection.

The project site is partially developed with an existing gas station in the southwest portion of the site. The majority of the site was previously disturbed and used for storage and parking of vehicles and other equipment associated with the existing gas station. The project site is relatively flat with a gently sloping hill down to the north and along the eastern edge of the project. Vegetation within the project site is dominated by Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, eucalyptus woodland, disturbed land, and developed land.

ENVIRONMENTAL SETTING

1. **Location:** The project is in the unincorporated community of Lakeside on the east side of the intersection of Los Coches Road and Ora Belle Lane. It is also adjacent to Interstate 8 in the southeast corner. The land use in this area is a mixture of residential homes and commercial buildings.

2. **Topography:** The terrain is flat within the projects building pad with downhill slopes of 40 to 50 percent on the perimeter to the adjoining properties or roadways located to the north, east and south. The west side along its entire length abuts Los Coches Road. On the southerly property boundary there is a concrete drainage ditch located in a small ravine that slopes to the northeast. See Appendix 'F' for photos and site plans.

3. **Geology:** The project area is accessed directly from Los Coches Road, a four-lane paved highway. There are no known geological features that affect access or building pad design. The site was previously graded that resulted in the perimeter slopes.

4. **Flammable Vegetation:** Most of the parcels current building pad has little vegetation (see Photo No. 1) and is covered by native and non-native weeds and grasses (see Photo No.2). Only the manufactured slopes have significant plant cover. The most representative Fuel Model is a combined model of SCAL18 – Sage/Buckwheat (95 %) and SH2 - Moderate Load, Dry Climate Shrub (5%) for fire behavior planning purposes shall be considered the climax vegetation type.

5. **Climate:** This area is typical of a Mediterranean type of climate where warm wet winters and long, hot and very dry summer seasons frequently occur. Occasional, multi-year droughts cause significant plant dieback. All of the native vegetation is adapted to this climate and to the intense wildfires they need for species regeneration.

   Weather has a dramatic influence on wildland fire behavior. Fire Agencies throughout the western United States rely on a sophisticated system of Remote Automated Weather Stations (RAWS) to monitor weather conditions and aid in the forecasting of fire danger. The data acquired from RAWS is important to modeling wildland fire behavior.

Using data from the closest RAWS, the most critical wind pattern to the project area is an offshore wind coming out of the north/northeast, typically referred to as a Santa Ana wind. Such wind conditions are usually associated with strong (> 50MPH), hot, dry winds with very low (< 15%) relative humidity. Santa Ana winds originate over the dry desert land and can occur anytime of the year; however, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content.

The typical prevailing summertime wind pattern is out of the south or southwest and normally is of a much lower velocity (5-15 MPH with occasional gusts to 30-MPH) and is associated with higher relative humidity readings (> 30% and frequently more than 60%) due to a moist air on-shore flow from the ocean.

All other (northwest, south, west) wind directions may be occasionally strong and gusty however, they are generally associated with cooler moist air and have higher relative humidity (> 40%). They are considered a serious wildland fire weather condition when wind speeds reach > 20-MPH.

PROJECT EXPOSURE TO WILDLAND FIRES

1. Water Supply

The water supply for the project is currently provided by the Helix Water District. See Appendix 'C' for a copy of the Service Availability Form. The amount of water use will likely increase but will be mitigated through water conservation.

Hydrants, mains and water pressures shall be designed to comply with County and Lakeside Fire Protection District (LFPD) requirements. A minimum of three (3) hydrants with a minimum fire flow of 2,500 gpm shall be located along fire access roadways. The approximate locations shall be near the eastern side of the restaurant, near the southwest corner of the auto parts store, and near the northwest corner of the food martAn existing hydrant located on Los Coches across from Ora Bella Lane will need to be relocated as it will be in the planned entrance to the project.

Based on the August 13, 2020 comments and those of September 9, 2021, from the County and the projects earlier redesign, see the Fire Protection Plan Map for approximate hydrant locations. Required fire flow in the water main is 2,500 gallons per minute.

2. Fire Access Roads

Location

The project area is on the east side of Los Coches Road adjacent to Interstate 8. The current site has two entrances onto Los Coches Road. The Developer plans to install a single entrance facing Ora Belle Lane that will have a traffic control signal meeting County Fire Code. See Appendix 'F' for site plan.

Width

All fire access roads serving the project area are county roads with greater than 40 feet in width. All driveways into the structures shall be a minimum 24 feet wide.

Vertical Clearance

The minimum vertical clearance of 13 feet 6 inches must be maintained for the entire required width of the required fire access roads.

Grade

Existing county roadway grades are less than 5%. All roadways within the project are ~~also~~ less than 5%.

Surface

All county access roads are all weather paved AC surfaces. All driveways and parking areas shall be paved AC or concrete. All roadways into the structures shall be a minimum 24 feet wide all-weather surface suitable for travel by 75,000 lb. fire apparatus.

3. Setback from Property Lines:

The minimum setback from any property line is approximately 30 feet. The Car Wash building has a setback of over 50 feet.

4. Building Construction:

All structures shall comply with the ignition resistive construction requirements: Wildland Urban Interface areas of Chapter 7A of the County Building Code such as Class A roofs, fire sprinklers, etc. See Appendix 'E' for details.

All combustible building materials, decks, balconies, patio covers, gazebos and fences will be permanently prohibited in all Fuel Management Zones. These structures may be allowed if constructed with ignition resistant materials as per the San Diego County Consolidated Fire Code. The owner is not restricted from having concrete patios, concrete or stone walkways, etc. within these zones. Refer to Appendix 'D' for photos and descriptions of non-combustible decks, patio covers, and railings.

Mandated protection requirements (access roads and fire hydrants) must be installed prior to any building materials being placed on the site including paving and operable fire hydrants.

5. Fire Protection Systems:

No habitable structures are included in the plan. All commercial structures located in a Very High Fire Hazard Zone shall have fire sprinkler systems designed to NFPA 13 criteria per the San Diego County Consolidated Fire Code and LFPD requirements.

6. Defensible Space:

A minimum 100-foot Fuel Management Zone will be established and maintained around all structures over 250 square feet in size. No off-site clearing is required or authorized. Nearly all off-site properties are residential homes with irrigated ornamental landscapes that are individually maintained. The adjacent gas station is surrounded by asphalt pavement. The Fuel Management Zones can be achieved by on-site fuel treatment and intertying them to adjacent residential and business development, paved parking areas and roadways. On-site fuel treatments shall consist of Fuel Modification Zone 1, which is described below.

7. Vegetation Management:

The property owner shall be responsible for maintaining the fuel modification zones. In the event the property is repossessed, the unit/agency holding title will be responsible for the maintenance.

Prescribed Defensible Space will be maintained at least annually or more often as needed. Plants used in the Defensible Space will be from an approved plant list that is maintained by the County of San Diego, Department of Planning and Land Use Building Division (see Appendix 'A')

All combustible building materials, decks, balconies, patio covers, gazebos and fences will be permanently prohibited in Fuel Management Zones. These structures may be allowed if constructed with Fire Resistive materials as per the Fire Marshal. Refer to Appendix 'D' for photos and descriptions of non-combustible decks, patio covers, and railings.

7.1 Fuel Modification Zone 1 – Owner Maintained

Defined

The fuel modification zone comprises the entire project area that is commonly called the defensible space zone**.** It is an irrigated zone and shall be free of all combustible construction and materials.

Required Landscaping

- The fuel modification zone will be cleared of all existing native vegetation and replanted with drought tolerant and irrigated fire-resistant lawns, ground covers, trees, and shrubs.

- Landscaping shall be irrigated and primarily consist of fire resistant, maintained native or ornamental plantings usually less than 18 inches in height. However, this zone may contain occasional fire-resistant trees, and single well-spaced ornamental shrubs up to 48 inches in height, intermixed with ground covers and lawns.
- Shrubs and ground covers may be located no closer than 5 feet from any structure provided these plants will not carry fire to the structure.
- All newly planted trees must be sited so that when they reach maturity the tips of their branches are at least 10 feet away from any structure, 20 feet from the crown of an adjacent tree, and must have a minimum of 6 feet of vertical separation from low growing irrigated vegetation beneath the canopy of the tree.
- ***Plants in this zone need to be fire resistant and should not include any pyrophytes that are high in oils and resins such as pines, eucalyptus, cedar, cypress or juniper species.*** Thick, succulent or leathery leaf species with high moisture content are the most "fire resistant".
- For proper plant selection refer to Appendix 'A' for the County approved plant list and Appendix 'B' for San Diego County Prohibited Plant list .
- Non-flammable concrete or stone patios, driveways, walkways, parking areas, boulders, rock, and gravel can be used to break up fuel continuity within Zone A.

Required Maintenance

- The project shall be maintained year-round by the property owner as required by this FPP or the LFPD.
- Shrubs and trees are to be annually maintained free of dead material. Crowns of mature trees located within defensible space shall maintain a minimum horizontal clearance of 10 feet for fire resistant trees and 30 feet for non-fire resistive trees.
- Mature trees shall be pruned to remove limbs to maintain a vertical separation of three times the height of the lower vegetation or 6 feet, whichever is less, above the ground surface adjacent to the trees.
- Dead wood and litter shall be regularly removed from trees.
- Ornamental trees shall be limited to groupings of 2-3 trees with canopies for each grouping separated horizontally by 10 feet. All trees must be maintained to the current ANSI A300 standards [*Tree, Shrub, and Other Woody Plant Maintenance —Standard Practices (Pruning)*] see the following for detailed information: http://www.tcia.org/TCIA/Build_Your_Business/A300_Standards/A300_Standards.aspx?hkey=96ef3b27-af56-4ada-8670d848787d1e30&WebsiteKey=b9a41e1f-978d-4585-9172-c411c78c5c14.

8. Fire Behavior Computer Modeling:

A Computer Fire Behavior Model is not required for this FPP – Letter Report per the LFPD Fire Marshal. *Fire*wise 2000, LLC conducted such modeling to determine the fuel hazard and effectiveness of the fuel treatments prior to writing of this report.

_____	10-15-2021	Herbert Spitzer,	Senior Wildland Fire Associate Firewise 2000, LLC
Prepared By (Signature)	Date	Printed Name	Title
_____	10-15-2021	Melvin Johnson,	Owner Firewise 2000, LLC, Certified CEQA Wildland Fire Consultant
Certified By (Signature)	Date	Printed Name	Title
_____	_____	_____	_____
Property Owner (Signature)	Date	Printed Name	Title

Appendix 'A'

COUNTY OF SAN DIEGO

ACCEPTABLE PLANTS FOR DEFENSIBLE SPACE

IN FIRE PRONE AREAS

ALL NATIVE PLANTS ON THE FOLLOWING LIST are considered to be drought-tolerant in the particular climate zone they are found. Those that grow best in riparian areas, as indicated by the "R", are generally the least drought-tolerant plants on the list.

SPECIAL NOTE: When planting, it is necessary to water deeply to encourage the plant roots to seek natural moisture in the soil. This watering should continue for at least three years to allow the plants to naturalize. More water should be provided in summer and less (if any) in the winter. These plants should be weaned off the supplemental irrigation and become less dependent on it over the establishment period.

No plant is totally fire resistant. The plants listed were chosen to due to their high-water content, minimum amount of flammable resins and/or low fuel volume.

Definitions:

Defensible Space: The area around a structure, where material capable of causing fire has been cleared, reduced or changed, to act as a barrier between an advancing fire and the structure.

Drought-Tolerant Plant Materials: Trees, shrubs, groundcovers, and other vegetation capable of sustained growth and reproduction with only natural moisture. Occasional supplemental irrigation is necessary only in extreme drought situations.

Establishment Period: The time it takes for a plant to become drought resistant. This is usually a period of three years and is the time when supplemental irrigation is necessary.

Native or Naturalizing Plant Species: Plant species native to the region or introduced which, once established, are capable of sustaining growth and reproduction under local climatic conditions without supplemental irrigation.

Firewise 2000, LLC Note: The plant list which follows was developed using the plants found on the San Diego County approved plant list. This list was then compared to those plants which are suitable for the climatic zone in which the project is located. Only those plants suitable for the project area listed below. The list is therefore shorter than that provided by the County. By providing this custom list, plants that are likely to be killed or seriously damaged by frost or will not perform in hot dry conditions have been eliminated. **Firewise 2000, LLC** believes that the planting of species suited to the site is essential to fire management goals and is an environmentally sound practice.

San Diego County

Customized Acceptable Plant List
For The Los Coches Business Park

No.	Type	Genus	Species	Common Name
1	Annual	Lupinus spp.	nanus	Lupine
2	Groundcover	Achillea	millefolium	Yarrow
3	Groundcover	Arctostaphylos spp.		Manzanita
4	Groundcover	Cerastium	tomentosum	Snow-in-Summer
5	Groundcover	Coprosma	kirkii	Creeping Coprosma
6	Groundcover	Cotoneaster spp.		Redberry
7	Groundcover	Drosanthemum	hispidum	Rosea Ice Plant
8	Groundcover	Dudleya	pulverulenta	Chalk Dudleya
9	Groundcover	Dudleya	virens	Island Live-Forever
10	Groundcover	Eschscholzia	californica	California Poppy
11	Groundcover	Ferocactus	viridescens	Coast Barrel Cactus
12	Groundcover	Gaillardia	grandiflora	Blanket Flower
13	Groundcover	Gazania spp.		Gazania
14	Groundcover	Helianthemum spp.		Sunrose
15	Groundcover	Lantana spp.		Lantana
16	Groundcover	Lasthenia	californica	Common Goldfields
17	Groundcover	Lasthenia	glabrata	Coastal Goldfields
18	Groundcover	Lupinus spp.		Lupine
19	Groundcover	Myoporum spp.		Myoporum
20	Groundcover	Pyracantha spp.		Firethorn
21	Groundcover	Rosmarinus	officinalis	Rosemary
22	Groundcover	Santolina	chamaecyparissus	Lavender Cotton
23	Groundcover	Trifolium	frageriferum	O'Connor's Legume
24	Groundcover	Verbena	rigida	Verbena
25	Groundcover	Viguiera	laciniata	San Diego Sunflower
26	Groundcover	Vinca	major	Periwinkle
27	Groundcover	Vinca	minor	Dwarf Periwinkle
28	Perennial	Coreopsis	gigantea	Giant Coreopsis
29	Perennial	Coreopsis	grandiflora	Coreopsis
30	Perennial	Coreopsis	maritima	Sea Dahlia
31	Perennial	Coreopsis	verticillata	Coreopsis
32	Perennial	Heuchera	maxima	Island Coral Bells
33	Perennial	Iris	douglasiana	Douglas Iris

34	Perennial	Kniphofia uvaria	Red-Hot Poker
35	Perennial	Lavandula spp.	Lavender
36	Perennial	Penstemon spp.	Penstemon
37	Perennial	Satureja douglasii	Yerba Buena
38	Perennial	Sisyrinchium	bellum Blue-Eyed Grass
39	Perennial	Sisyrinchium	californicum Golden-Eyed Grass
40	Perennial	Solanum xantii	Purple Nightshade
41	Perennial	Zauschneria	‘Catalina’ ? Catalina Fuschia
42	Perennial	Zauschneria	californica California Fuschia
43	Perennial	Zauschneria cana	Hoary California Fuschia
44	Shrub	Agave americana	Desert Century Plant
45	Shrub	Agave Amorpha	fruticosa False Indigobush
46	Shrub	Agave deserti	Shaw’s Century Plant
47	Shrub	Agave shawii	NCN
48	Shrub	Agave Century	Plant
49	Shrub	Arbutus menziesii	Madrone
50	Shrub	Arctostaphylos	spp. Manzanita
51	Shrub	Atriplex	canescens Hoary Saltbush
52	Shrub	Atriplex	lentiformis Quail Saltbush
53	Shrub	Baccharis	pilularis Coyote Bush
54	Shrub	Baccharis	salicifolia Mule Fat "R"
55	Shrub	Carissa	macrocarpa Natal Plum
56	Shrub	Ceanothus spp.	California Lilac
57	Shrub	Cistus spp.	Rockrose
58	Shrub	Cneoridium	dumosum Bush rue
59	Shrub	Comarostaphylis	diversifolia Summer Holly
60	Shrub	Convolvulus	cneorum Bush Morning Glory
61	Shrub	Dalea attenuata v	orcuttii Orcutt’s Delea
62	Shrub	Elaeagnus	pungens Silverberry
63	Shrub	Encelia	californica Coast Sunflower
64	Shrub	Encelia farinosa	White Brittlebush
65	Shrub	Eriobotrya	deflexa Bronze Loquat
66	Shrub	Eriophyllum	confertiflorum Golden Yarrow
67	Shrub	Escallonia spp.	Escallonia
68	Shrub	Feijoa sellowiana	Pineapple Guava
69	Shrub	Fouqueria	splendens Ocotillo
70	Shrub	Fremontodendron	californicum Flannelbush
71	Shrub	Fremontodendron	mexicanum Southern Flannelbush
72	Shrub	Galvezia juncea	Baja Bush-Snapdragon
73	Shrub	Galvezia	speciosa Island Bush-Snapdragon
74	Shrub	Garrya elliptica	Coast Silktassel
75	Shrub	Garrya	flavescens Ashy Silktassel
76	Shrub	Heteromeles	arbutifolia Toyon
77	Shrub	Lantana spp.	Lantana
78	Shrub	Lotus scoparius	Deerweed
79	Shrub	Mahonia spp.	Barberry
80	Shrub	Malacothamnus	clementinus San Clemente Isle Bush Mallow
81	Shrub	Malacothamnus fasciculatus	Mesa Bush Mallow
82	Shrub	Melaleuca spp.	Melaleuca

83	Shrub	Mimulus spp. Monkeyflower		
84	Shrub	Nolina parryi	Parry's Nolina	
85	Shrub	Photinia spp.	Photinia	
86	Shrub	Pittosporum	crassifolium NCN	
87	Shrub	Pittosporum	rhombifolium	Queensland Pittosporum
88	Shrub	Pittosporum tobira	'Wheeleri' Wheeler's	Dwarf
89	Shrub	Plumbago auriculata	Cape Plumbago	
90	Shrub	Prunus caroliniana	Carolina Laurel Cherry	
91	Shrub	Prunus ilicifolia	Hollyleaf Cherry	
92	Shrub	Prunus lyonii	Catalina Cherry	
93	Shrub	Puncia granatum	Pomegranate	
94	Shrub	Pyracantha spp.	Firethorn	
95	Shrub	Rhamus alaternus	Italian Buckthorn	
96	Shrub	Rhamus californica	Coffeeberry	
97	Shrub	Rhaphiolepis spp.	Rhaphiolepis	
98	Shrub	Rhus continus	Smoke Tree	
99	Shrub	Rhus integrifolia	Lemonade Berry	
100	Shrub	Rhus laurina Laurel	Sumac	
101	Shrub	Rhus ovata	Sugarbush	
102	Shrub	Rhus trilobata	Squawbush	
103	Shrub	Romneya coulteri	Matilija Poppy	
104	Shrub	Rosa californica	California Wild Rose	
105	Shrub	Rosa minutifolia	Baja California Wild	Rose
106	Shrub	Salvia spp. Sage		
107	Shrub	Sambucus spp.	Elderberry	
108	Shrub	Symphoricarpos	mollis Creeping	Snowberry
109	Shrub	Syringa vulgaris	Lilac	
110	Shrub	Teucrium fruticans	Bush Germander	
111	Shrub	Verbena lilacina	Lilac Verbena	
112	Shrub	Xylosma congestum	Shiny Xylosma	
113	Shrub	Yucca schidigera	Mojave Yucca	
114	Shrub	Yucca whipplei Foothill	Yucca	
115	Tree Acer	Acer macrophyllum	Big Leaf Maple	
116	Tree Acer	saccarum Sugar	Maple	
117	Tree Acer	saccharinum Silver	Maple	
118	Tree Alnus	rhombifolia White	Alder "R"	
119	Tree	Arbutus unedo	Strawberry Tree	
120	Tree	Brahea armata Blue	Mexican Palm	
121	Tree Carob	Brahea edulis	Guadalupe Palm 122	Tree Ceratonia siliqua
123	Tree Cercis	occidentalis Western	Redbud	
124	Tree	Cerdidium floridum	Blue Palo Verde	
125	Tree	Cornus nuttallii	Mountain Dogwood	
126	Tree	Cornus stolonifera	Redtwig Dogwood	
127	Tree	Elaeagnus	angustifolia Russian	Olive
128	Tree	Eriobotrya japonica	Loquat	
129	Tree	Gingko biloba	"Fairmount" Fairmount	Maidenhair Tree
130	Tree	Gleditisia triacanthos	Honey Locust	
131	Tree	Juglans californica	California Walnut	

132	Tree	Juglans hindsii	California Black Walnut			
133	Tree	Lagerstroemia indica	Crape Myrtle			
134	Tree	Ligustrum lucidum				
135	Tree	Liquidambar	styraciflua			
136	Tree	Liriodendron	tulipifera			
137	Tree	Lyonothamnus	floribundus ssp Asplenifolius			
138	Tree	Melaleuca spp.				
139	Tree	Myoporum spp.				
140	Tree	Nerium	oleander			
141	Tree	Parkinsonia	aculeata			
142	Tree	Pistacia	chinensis			
143	Tree	Pistacia	vera			
144	Tree	Pittosporum	phillyreoides			
145	Tree	Platanus	acerifolia			
146	Tree	Platanus	racemosa			
147	Tree	Populus	alba			
148	Tree	Populus	fremontii			
149	Tree	Populus	trichocarpa			
150	Tree	Prunus	caroliniana			
151	Tree	Prunus	cersifera ‘Newport’			
152	Tree	Prunus	ilicifolia			
153	Tree	Prunus	lyonii			
154	Tree	Prunus	serrulata ‘Kwanzan’			
155	Tree	Prunus	xblireiana			
156	Tree	Prunus	yedoensis ‘Akebono’			
157	Tree	Quercus	agrifolia			
158	Tree	Quercus	engelmannii			
159	Tree	Quercus	suber			
160	Tree	Rhus	lancea			
161	Tree	Salix spp.	parvifolia			
162	Tree	Ulmus	pumila			
163	Tree	Ulmus	californica			
164	Tree	Umbellularia	californica			
165	Vine	Antigonon	leptopus			
166	Vine	Distictis	buccinatoria			
167	Vine	Keckiella	cordifolia			
168	Vine	Lonicera	japonica ‘Halliana’			
169	Vine	Lonicera	subspicata			
170	Vine	Solanum	jasminoides			

Note: Additional plants not found on this list may be utilized with the approval of the LFPD.

APPENDIX ‘B’

Prohibited /Invasive Plant List

APPENDIX 'B'

UNDESIRABLE/PROHIBITED PLANT LIST

The following species are highly flammable and must be avoided when planting within 50 feet of a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio.

BOTANICAL NAME	COMMON NAME
Abies species	Fir Trees
Acacia species	Acacia (trees, shrubs, groundcovers)
Adenostoma sparsifolium**	Red Shanks
Adenostoma fasciculatum**	Chamise
Agonis juniperina	Juniper Myrtle
Araucaria species	Monkey Puzzle, Norfolk Island Pine
Artemesia californica**	California Sagebrush
Bambusa species	Bamboo
Cedrus species	Cedar
Chamaecyparis species	False Cypress
Coprosma pumila	Prostrate Coprosma
Cryptomeria japonica	Japanese Cryptomeria
Cupressocyparis leylandii	Leylandii Cypress
Cupressus forbesii**	Tecate Cypress
Cupressus glabra	Arizona Cypress
Cupressus sempervirens	Italian Cypress
Dodonea viscosa	Hopseed Bush
Eriogonum fasciculatum**	Common Buckwheat
Eucalyptus species	Eucalyptus
Heterotheca grandiflora**	Telegraph Plant
Juniperus species	Junipers
Larix species	Larch
Lonicera japonica	Japanese Honeysuckle
Miscanthus species	Eulalia Grass
Muehlenbergia species**	Deer Grass
Palmae species	Palms
Picea species	Spruce Trees
Pickeringia Montana**	Chaparral Pea
Pinus species	Pines
Podocarpus species	Fern Pine
Pseudotsuga menziesii	Douglas Fir
Rosmarinus species	Rosemary
Salvia mellifera**	Black Sage
Taxodium species	Cypress
Taxus species	Yew
Thuja species	Arborvitae
Tsuga species	Hemlock
Urtica urens**	Burning Nettle

** San Diego County native species

APPENDIX 'B' References:

Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

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County of Los Angeles Fire Department. 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable

County of San Diego, Department of Planning and land Use – Building Division. Fire, Plants, Defensible Space and You. June 3, 2004. DPLU #199.

APPENDIX ‘C’

Water and Fire Availability and Forms

County of San Diego, Planning & Development Services

PROJECT FACILITY AVAILABILITY - WATER

ZONING DIVISION

Please type or use pen

LMSSM, LLC — 760-736-2040
Owner's Name — Phone

C/O Spear & Assoc., 475 Production Street
Owner's Mailing Address — Street

San Marcos — CA — 92078
City — State — Zip

ORG_____
ACCT_____
ACT_____
TASK_____
DATE_____

W

AMT $_____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION — TO BE COMPLETED BY APPLICANT

A. [X] Major Subdivision (TM) [ ] Specific Plan or Specific Plan Amendment
[ ] Minor Subdivision (TPM) [ ] Certificate of Compliance:_____
[ ] Boundary Adjustment
[ ] Rezone (Reclassification) from_____ to _____ zone.
[ ] Major Use Permit (MUP), purpose:_____
[ ] Time Extension...Case No._____
[ ] Expired Map...Case No._____
[ ] Other_____

B. [ ] Residential . . . . . Total number of dwelling units_____
[X] Commercial . . . . . Gross floor area_____
[ ] Industrial . . . . . Gross floor area_____
[ ] Other . . . . . Gross floor area_____

C. [X] Total Project acreage 2.90 Total number of lots 5

D. Is the project proposing the use of groundwater? [ ] Yes [X] No
Is the project proposing the use of reclaimed water? [ ] Yes [X] No

Assessor's Parcel Number(s)
(Add extra if necessary)

400-381-02	

Thomas Guide Page 1232 Grid D-7

8445 Los Coches Road
Project address — Street

El Cajon — 92021
Community Planning Area/Subregion — Zip

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: Ray Spear (RAY SPEAR) Date: 3-13-2020

Address C/O Spear & Assoc. 475 Production St. San Marcos 92078 Phone 760-736-2040

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

SECTION 2: FACILITY AVAILABILITY — TO BE COMPLETED BY DISTRICT

District Name: HELIX WATER DISTRICT Service area JOHNSTON / T. HILL / HOMELANDS, HGL=932'

A. [X] Project is in the district.
[ ] Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
[ ] Project is not in the district and is not within its Sphere of Influence boundary.
[ ] The project is not located entirely within the district and a potential boundary issue exists with the _____ District.

B. [X] Facilities to serve the project [X] ARE [ ] ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached_____. (Number of sheets)

[ ] Project will not be served for the following reason(s):_____

C. [X] **District conditions are attached. Number of sheets attached:** 4
[ ] **District has specific water reclamation conditions which are attached. Number of sheets attached:**_____
[ ] **District will submit conditions at a later date.**

D. [ ] **How far will the pipeline(s) have to be extended to serve the project?**_____

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized Signature: [signature] Print Name ANGELO ANUE

Print Title ASSOCIATE ENGINEER Phone 619-667-6273 Date 3/20/20

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT
On completion of Section 2 and 3 by the District, applicant is to submit this form with application to:
Planning & Development Services – Zoning Counter, 5510 Overland Ave, Suite 110, San Diego, CA 92123

STANDARD WATER DISTRICT'S
CONDITIONS BEFORE APPROVAL OF A PROJECT

W01 ☒ The plans and specifications for the installation of a water system to serve each lot independently with public water must be approved by the serving water district.

W02 ☒ The developer shall install the water system according to the serving water district standards, and dedicate to the serving water district the portion of the water system which is to be public water.

W03 ☒ The developer shall comply with the County and serving water district standards and policies, and conditions contained in a secured agreement to install the water system concurrent with project need.

W04 ☒ The developer shall dedicate to the serving water district all necessary easements for that portion of the water system which is to be public water.

W05 ☒ Adequate water service shall be committed for this project prior to final approval/map recordation of the subdivision map and shall be available concurrent with project need.

W06 ☒ All buildings in this project shall be connected to public water according to the water permit and approval process of the serving water district.

W07 ☐ The developer shall apply for and pay the costs of annexing all the land within the project to the serving water district for operation and maintenance of the public water system.

W08 ☒ Water and sewer lines shall not be laid in the same trench in any part of this project development.

W09 ☒ Water and sewer lines must have 10-foot horizontal separation in this project.

W10 ☒ _____ PVC water main required and _____ -6" fire hydrants with _____ -2 1/2" and _____ -4" outlets as required by the _____.

W11 ☐ Upgrade existing fire hydrant with new head with _____ -2 1/2" and _____ -4" outlets as required by the _____.

W12 ☒ Install _____ -6" fire hydrant(s) with _____ -2 1/2" and _____ -4" outlets as required by the San Miguel Consolidated Fire Protection District.

W13 ☒ Backflow prevention will be required on all water meters, properties with fire sprinkler systems, properties served by a well, and/or on landscape irrigation water meters.

SECTION 4.11 WATER CONSERVATION AND DEVELOPMENT/REDEVELOPMENT PROCEDURE FOR WATER EFFICIENCY

4.11-1 GENERAL

Helix Water District hereby establishes a comprehensive water conservation and water efficiency program for new development or redevelopment within the district.

The district finds that water conservation and water efficiency in all new domestic or commercial development or redevelopment is essential to the district's continued ability to provide water to new and redeveloped areas and to avoid or minimize the effects of any future shortage.

4.11-2 REQUIREMENTS

All new commercial and domestic developments or redevelopments shall install only high-efficiency appliances, use only high-efficiency watering technologies and landscape using water-wise principles as follows:

A. Install the following indoor fixtures in all residential (houses, condominiums, apartments) and commercial/industrial areas (if applicable):

1. High-efficiency toilets (1.28 gallons or less per flush).
2. High-efficiency dishwashers (Energy Star, WaterSense or equivalent).
3. High-efficiency clothes washers (meets or exceeds the CEE Tier 1 standard).
4. Low-flow shower heads (1.8 gallons per minute or less).

B. Design and install landscaping in all parks, common areas, commercial, industrial, multi-family and residential landscapes in compliance with the most recent Department of Water Resources model ordinance or the water efficient landscape ordinance and the Maximum Applied Water Allowance set forth by the local land use agency, as applicable.

C. Install dedicated meters for outdoor water use:

1. In single-family residences with one or more acre(s) of irrigated landscape.
2. In all parks and common areas.

3. In commercial/industrial/government/multi-family sites with 5,000 square feet or more of irrigated landscape.

D. Enroll all new irrigation meters (except those at single-family residences) in the Helix Water District water budget program and provide documentation of irrigated landscape area at the time of meter purchase.

E. Install automatic irrigation controllers with automatic rain delay that utilize either evapotranspiration (weather-based) or soil moisture data at all homes (residential areas), common areas, parks and commercial/industrial landscapes.

F. If using overhead spray to irrigate, high-efficiency, matched-precipitation rate sprinkler nozzles are required at all homes (residential landscapes), common areas, parks and commercial/industrial landscapes.

Any project that requires a permit, plan check or design review by local planning agencies is considered a redevelopment.

4.11-3 COMPLIANCE AND MONITORING

A. Ensure that covenants, conditions and restrictions pertaining to the proposed subdivision/development do not prohibit the use and maintenance of low-water-use plant materials, and/or the use of artificial turf.

B. Certify that all units, common areas and parks comply with all of the above requirements.

C. Schedule inspection for compliance with water efficiency requirements.

D. Provide water-use efficiency data upon request to the district for six years following installation/development.

4.11-4 PROCEDURE

Executive Order B-29-15 required the Department of Water Resources to update the existing model water efficient landscape ordinance established pursuant to the Water Conservation in Landscaping Act (California Government Code Section 65591 and following) and AB 1881. The updated Department of Water Resources model ordinance serves as a model ordinance for all cities and counties to adopt mandatory water efficient landscape ordinances for new and rehabilitated landscaping projects. EB B-29-15 makes the DWR model ordinance automatically applicable within the jurisdiction of each city and county that has not adopted its own water efficient landscape ordinance or the DWR model ordinance. Effective December 1, 2015, new

and rehabilitated landscape projects shall comply with the provisions of the most recent DWR model ordinance or the water efficient landscape ordinance as adopted or implemented by the applicable local land use agency.

County of San Diego, Planning & Development Services
PROJECT FACILITY AVAILABILITY - FIRE
ZONING DIVISION

F

Please type or use pen

Applicant: OnPoint Development 410-960-2918
Owner's Name Phone

7514 Girard Ave. #1515
Owner's Mailing Address Street

La Jolla, CA 92037
City State Zip

ORG_____
ACCT_____
ACT_____
TASK_____
DATE_____ AMT $_____
DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION **TO BE COMPLETED BY APPLICANT**

A. [X] Major Subdivision (TM) [ ] Specific Plan or Specific Plan Amendment
[ ] Minor Subdivision (TPM) [ ] Certificate of Compliance:_____
[ ] Boundary Adjustment
[X] Rezone (Reclassification) from Caltrans R/W to be acquired to C36 zone.
[X] Major Use Permit (MUP), purpose: Car Wash, Car Wash, Drive through restaurant, auto parts retail
[ ] Time Extension...Case No.:_____
[ ] Expired Map...Case No._____
[ ] Other_____

B. [ ] Residential ..... Total number of dwelling units_____
[X] Commercial ..... Gross floor area 20,570 SF
[ ] Industrial ..... Gross floor area_____
[ ] Other ..... Gross floor area_____

C. Total Project acreage 2.9 Total lots 5 Smallest proposed lot 14,060 SF

Assessor's Parcel Number(s)
(Add extra if necessary)

400-381-02-0	

Thomas Guide. Page _____ Grid _____
8445 Los Coches Rd.
Project address Street
Unincorporated County, Lakeside Planning Area, City of El Cajon 92021
Community Planning Area/Subregion Zip

OWNER/APPLICANT AGREES TO COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: _____ Date: 3/20/20
Address: 7514 Girard Ave. #1515 La Jolla, CA 92037 Phone: 410 960 2918
(On completion of above, present to the district that provides fire protection to complete Section 2 and 3 below.)

SECTION 2: FACILITY AVAILABILITY **TO BE COMPLETED BY DISTRICT**

District Name: LAKESIDE FIRE PROTECTION DISTRICT

Indicate the location and distance of the primary fire station that will serve the proposed project:
STA. # 3, 14008 I-8 BUSINESS, EL CAJON 92021 2MILES

A. [X] Project is in the District and eligible for service.
[ ] Project is not in the District but is within its Sphere of Influence boundary, owner must apply for annexation.
[ ] Project is not in the District and not within its Sphere of Influence boundary.
[ ] Project is not located entirely within the District and a potential boundary issue exists with the _____ District.

B. [X] Based on the capacity and capability of the District's existing and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the proposed project. The expected emergency travel time to the proposed project is 4 minutes.
[ ] Fire protection facilities are not expected to be adequate to serve the proposed development within the next five years.

C. [ ] District conditions are attached. Number of sheets attached:_____
[X] District will submit conditions at a later date.

SECTION 3. FUELBREAK REQUIREMENTS

Note: The fuelbreak requirements prescribed by the fire district for the proposed project do not authorize any clearing prior to project approval by Planning & Development Services.

[X] Within the proposed project 100 feet of clearing will be required around all structures.
[ ] The proposed project is located in a hazardous wildland fire area, and additional fuelbreak requirements may apply. Environmental mitigation requirements should be coordinated with the fire district to ensure that these requirements will not pose fire hazards.

EXPIRES 2 YEARS FROM DATE SIGNED BY FIRE DISTRICT

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

_____ JEREMY DAVIS, FIRE PREVENTION OFFICER 619-390-2350 EXT. 009 3/23/2020
Authorized Signature *Print Name and Title* *Phone* *Date*

On completion of Section 2 and 3 by the District, applicant is to submit this form with application to:
Planning & Development Services – Zoning Counter, 5510 Overland Ave, Suite 110, San Diego, CA 92123

APPENDIX ‘D’

Non-combustible & Ignition Resistant Building Materials

Appendix D

Non-Combustible & Fire-Resistant Building Materials For Balconies, Carports, Decks, Patio Covers and Floors

Note: The Office of the State Fire Marshal (SFM) Fire Engineering Division administers licensing programs and performs engineering functions affecting consumer services and product evaluation, approval and listing. The following link is to the State Fire Marshal's office for more information on the Building Material List for non-combustible and fire resistant building materials: https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/bmlsearch-building-materials-listing.

Examples of non-combustible & fire-resistant building materials for balconies, carports, decks, patio covers, and floors are listed below. These are only examples, and materials listed here must meet local fire and building codes and are not an endorsement of any brand or manufacturer.

I. NON-COMBUSTIBLE HEAVY GAGE ALUMINUM MATERIALS - *Metals USA Building Products Group - Ultra-Lattice*

Ultra-Lattice Stand Alone Patio Cover

Ultra-Lattice Attached Patio Cover

Ultra-Lattice Solid Patio Cover

Ultra-Lattice Vs. Wood

II. FRX EXTERIOR FIRE-RETARDANT TREATED WOOD

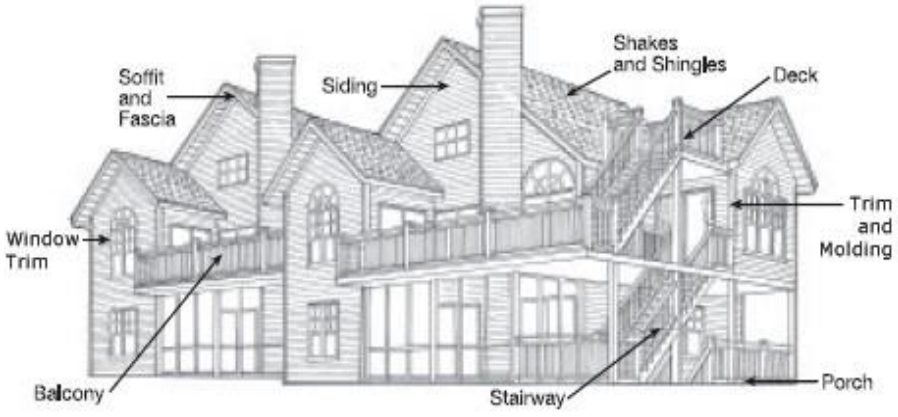
FRX® fire retardant treated wood may be used in exterior applications permitted by the codes where: public safety is critical, other materials would transfer heat or allow fires to spread, sprinkler systems canno easily be installed, corrosive atmospheres necessitate excessive maintenance of other materials, or fire protection is inadequate or not readily available. The International Building, Residential and Urban Wildland Interface Codes and regulations, permit the use of fire-retardant treated wood in specific instances. See below for typical exterior uses and typical residential uses.

Typical Exterior Uses

- Wall coverings
- Balconies
- Decks
- Stairways
- Fences
- Sheds
- Gazebos
- Roof coverings
- Open-air roof systems
- Canopies and awnings
- Storefronts and facades
- Eaves, soffits and fascia
- Agricultural buildings and horse stalls
- Scaffolding and scaffold planks
- Construction staging
- Various other residential and commercial uses

Property owners and Architects: See this 2-minute video and the illustration below.

Typical Residential Uses



Rising concerns over fire damage and the adoption of urban-wildland interface codes have increased the use of FRT wood in residential structures.

For information on fire retardant treated wood for exterior uses, visit www.frxwood.com.

III. DECKING MATERIALS

Trex Company, Inc. – "Trex Transcend®, Trex Select® and Trex Enhance® wood and polyethylene composite deck board, nominal ranging in size from 1" x 5-1/2" to 1-3/8" x 5-1/2" installed per manufacturer maximum edge-to-edge gap of 3/16". All Trex decking products meet or exceed the SFM 12-7A-4A testing protocol.

Trex combines both beauty and fire defense. A few examples of installations are shown below:

IV.

SOLID "WOOD" DECKING

Company Name: Various Manufacturers
Product Description: Solid "Wood" decking, when installed over minimum 2" x 6" solid "Douglas Fire" or better joists, space 24" or less on center, and decking and joints comply with American Softwood Lumber Standard PS2o as follows:

Minimum nominal 5/4"thick and nominal 6" wide decking boards with a maximum 3/8" radius edges made of solid wood species "Redwood", "Western Red Cedar", "Incense Cedar", "Port Orford Cedar", or "Alaska Yellow Cedar" having a Class B Flame Spread rating when tested in accordance with ASTM E84. Lumber grades; construction common, commercial or better grade for Redwood; 3 common, commercial or better grades for Cedars.

V. Vents

Examples of Ember Resistant Approved Vents

Brandguard

O'Hagin Fire & Ice® Line – Flame and Ember Resistant

An available option for all O'Hagin attic ventilation products, this attic vent not only features all the same design, construction elements and color choices as the O'Hagin Standard Line, but also features an interior stainless-steel matrix that resists the intrusion of flames and embers. This patent-pending attic vent is accepted for use by many local fire officials for installation in Wildland Urban Interface (WUI) zones.

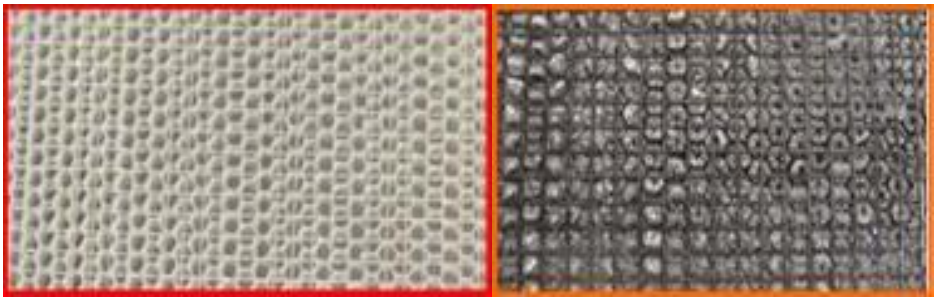
Vulcan Vents

The founders of Gunter Manufacturing have been working closely over the last two years, with the scientists and inventors of Vulcan Technologies to bring to market this incredible product.

Combining our quality vent products with the fire-stopping honeycomb matrix core designed by Vulcan has produced unique and remarkable results.

At Gunter manufacturing has over 50 years of combined sheet metal manufacturing experience. Special orders are not a problem. Their vent frames are industry standard frames so there is little or no learning curve for installers and contractors. Their stated goal is to provide people with the vents they need to secure their homes with additional safety against wildfires and give them piece of mind from knowing that their home or structure is protected by a product that works!

The core of their fire and ember safe vents are manufactured out of hi-grade aluminum honeycomb and coated with an intumescent coating made by FireFree Coatings. The intumescent coating is designed to quickly swell up and close off when exposed to high heat. The expanded material acts as an insulator to heat, fire, and embers



Before **After**

After the cells close off, they are extremely well insulated, and fire or embers cannot penetrate.

Even before the cells close off, the vent is designed to protect against flying embers. In many cases embers will attack a structure before fire ever comes near, so this feature is very important.

Close-up of the coated honeycomb matrix.

Fire easily passes through a standard vent, on the left, but stops cold when it comes up against a Vulcan Vent shown on right.

APPENDIX ‘E’

Ignition Resistant Construction Requirements

APPENDIX 'E'

Ignition Resistant Construction Requirements

The following is a summary of the current requirements for ignition resistant construction for high fire hazard areas under Chapter 7A of the California Building Code (CBC) 2019 edition. However the requirements listed below are not all inclusive and all exterior building construction including roofs, eaves, exterior walls, doors, windows, decks, and other attachments must meet the current CBC Chapter 7A ignition resistance requirements, the California Fire Code, and any additional County and/or City codes in effect at the time of building permit application. See the currrent applicable codes for a detailed description of these requirements and any exceptions.

1. All structures will be built with a Class A Roof Assembly and shall comply with the requirements of Chapter 7A and Chapter 15 of the California Fire Code. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

2. Roof valley flashings shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide (914 mm) running the full length of the valley.

3. Attic or foundation ventilation louvers or ventilation openings in vertical walls shall be covered with a minimum of 1/16-inch and shall not exceed 1/8-inch mesh corrosion-resistant metal screening or other approved material that offers equivalent protection.

4. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be fire stopped with approved materials or have one layer of a minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

5. Enclosed roof eaves and roof eave soffits with a horizontal underside, sloping rafter tails with an exterior covering applied to the under-side of the rafter tails, shall be protected by one of the following:
    - noncombustible material
    - Ignition-resistant material
    - One layer of $^{5}/_{8}$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit
    - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
    - Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.

- Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

  Exceptions: The following materials do not require protection:

  1. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails. 2. Fascia and other architectural trim boards.

6. The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:
   - Noncombustible material, or
   - Ignition-resistant material, or
   - One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck, or
   - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association fire Resistance Design Manual.

     Exceptions: The following materials do not require protection:

     1. Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).

     2. Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).

     3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails. 4. Fascia and other architectural trim boards.

7. Vents - ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:

   A. Vents listed to ASTM E2886 and complying with all the following:

      i. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test. ii. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test. iii. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

   B. Vents shall comply with all the following:

      i. The dimensions of the openings therein shall be a minimum of $^{1}/_{16}$-inch (1.6 mm) and shall not exceed $^{1}/_{8}$-inch (3.2 mm).

      ii. The materials used shall be noncombustible.

      Exception: Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.

      iii. The materials used shall be corrosion resistant.

8. Vents shall not be installed on the underside of eaves and cornices.

   Exceptions:
   1. Vents listed to ASTM E2886 and complying with all the following:
      - There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
      - There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
      - The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
   2. The enforcing agency shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
   3. Vents complying with the requirements of Section 706A.2 shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:

      3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,

      3.2. The exterior wall covering, and exposed underside of the eave are of noncombustible materials, or ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the requirements

9. All chimney, flue or stovepipe openings that will burn solid wood will have an approved spark arrester. An approved spark arrester is defined as a device constructed of nonflammable materials, having a heat and corrosion resistance equivalent to 12-gauge wire, 19-game galvanized steel or 24-gage stainless steel. or other material found satisfactory by the Fire Protection District, having ½-inch perforations for arresting burning carbon or sparks nor block spheres having a diameter less than 3/8 inch (9.55 mm). It shall be installed to be visible for the purposes of inspection and maintenance and removeable to allow for cleaning of the chimney flue.

10. All multi-family structures will have automatic interior fire sprinklers installed according to the National Fire Protection Association (NFPA) 13R 2019 edition - *Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*.

11. The exterior wall covering or wall assembly shall comply with one of the following requirements:
    - Noncombustible material, or
    - Ignition resistant material, or
    - Heavy timber exterior wall assembly, or
    - Log wall construction assembly, or
    - Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact expose test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1 of the California Building Code, or
    - Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section including;

- One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, or
- The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Associate Fire Resistance Design Manual.

12. Exterior walls shall extend from the top of the foundation to the roof and terminate at 2-inch nominal solid blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

13. No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas.

14. All projections (exterior balconies, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections) or structures less than five feet from a building shall be of non-combustible material, one-hour fire resistive construction on the underside, heavy timber construction or pressure-treated exterior fire-retardant wood. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain same fire-resistant standards as the exterior walls of the structure.

15. Deck Surfaces shall be constructed with one of the following materials:
    - Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726, or
    - Ignition-resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723, or
    - Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5, or
    - Exterior fire retardant treated wood, or
    - Noncombustible material, or
    - Any material that complies with the performance requirements of SFM Standard 12-7A-4A when the attached exterior wall covering is also composed of noncombustible or ignition resistant.

16. Accessory structures attached to buildings with habitable spaces and projections shall be in accordance with the Building Code. When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas and exterior wall construction in accordance with Chapter 7A of the Building Code.

17. Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:

- Be constructed of multiplane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
- Be constructed of glass block units, or
- Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
- Be tested to meet the performance requirements of SFM Standard 12-7A-2.

18. All eaves, fascia and soffits will be enclosed (boxed) with non-combustible materials. This shall apply to the entire perimeter of each structure. Eaves of heavy timber construction are not required to be enclosed as long as attic venting is not installed in the eaves. For the purposes of this section, heavy timber construction shall consist of a minimum of 4x6 rafter ties and 2x decking.

19. Detached accessory buildings that are less than 120 square feet in floor area and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2 of the California Building Code.
    Exception: Accessory structures less than 120 square feet in floor area located at least 30 feet from a building containing a habitable space.

20. All rain gutters, down spouts and gutter hardware shall be constructed from metal or other noncombustible material to prevent wildfire ignition along eave assemblies.

21. Gutters shall be provided with the means to prevent the accumulation of leaf litter and debris within the gutter that contribute to roof edge ignition.

22. All side yard fence and gate assemblies (fences, gate and gate posts) when attached to the home shall be of non-combustable material. The first five feet of fences and other items attached to a structure shall be of non-combustible material.

23. Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8 inch. Gaps between doors and door openings shall be controlled by one of the methods listed in this section.
    - Weather-stripping products made of materials that:
      (a) have been tested for tensile strength in accordance with ASTM D638 (Standard Test Method for Tensile Properties of Plastics) after exposure to ASTM G155 (Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials) for a period of 2,000 hours, where the maximum allowable difference in tensile strength values between exposed and non-exposed samples does not exceed 10%; and (b) exhibit a V-2 or better flammability rating when tested to UL 94, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.
    - Door overlaps onto jambs and headers.
    - Garage door jambs and headers covered with metal flashing.

24. Exterior doors shall comply with one of the following:
    1. The exterior surface or cladding shall be of noncombustible material or,
    2. The exterior surface or cladding shall be of ignition-resistant material or,
    3. The exterior door shall be constructed of solid core wood that complies with the following requirements:
        3.1. Stiles and rails shall not be less than 1-3/8 inches thick.
        3.2. Panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than 3/8 inch thick.
    4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252 or,
    5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707 or,
    6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1.

25. Fire access tunnels shall have two hour rated walls consisting of two layers of 5/8" Type 'X' gypsum wallboard panels on each side of the studs. The EZ Taping Systems "Fire Tape" product or equivalent should be used as an alternative to convention joint tape when:
    1. Two or more layers of listed Type 'X' gypsum wallboard are applied vertically with joints staggered and joints of the face board are":
        a. Tightly butted and taped with EZ Taping Systems "Fire Tape" or equivalent product or
        b. Finished with joint compound of EZ Taping Systems "Fire Tape" or equivalent product if the gap between gypsum wallboard panels are visible at the joint.
    2. Two or more layers of USG "Sheetrock" Fire code C gypsum wallboard are applied (horizontally or vertically).
    3. Gypsum panels shall be attached with Type S drywall screws, placed 8" oc to vertical edges and 12" oc to top and bottom runners and intermediate studs.
    4. Fire Tape shall be nominal 2" wide and applied on the vertical joints at studs.

** FAHJ – Fire Authority Having Jurisdiction
SFM – State Fire Marshal
NFPA – National Fire Protection Association

APPENDIX ‘F’

Photos and Fuel Modification Plan

Appendix ‘F’
Site Photos and Site Plan

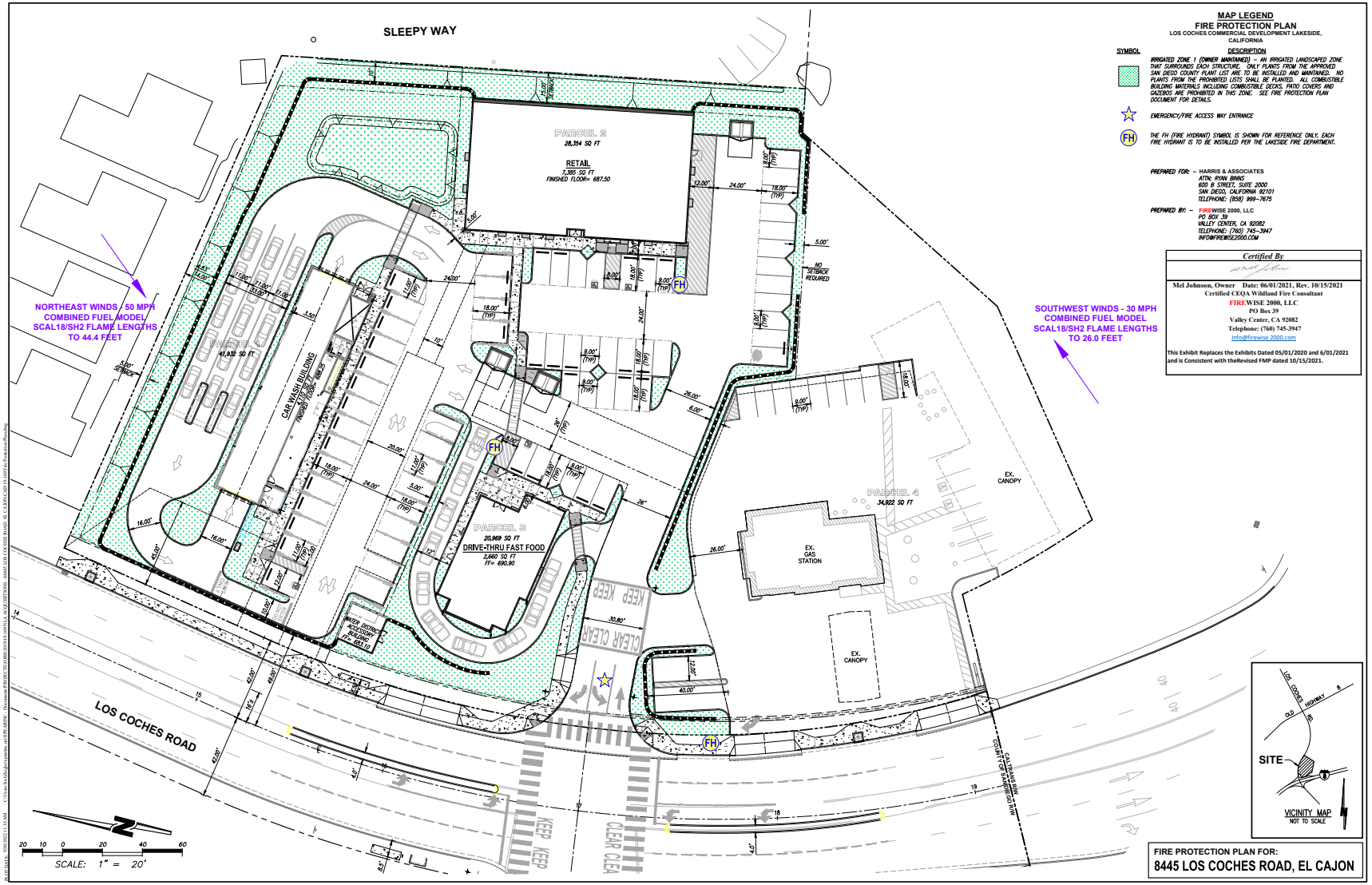
Photo #1 - Looking Southwest From Near the Southern Project Boundary Along the Western Boundary That Abuts Los Coches Road

Photo #2 - Looking West along the Northern Project Boundary Showing the Hillside that Will Require Fuel Treatment.

Photo #3 – Looking East Along the Cal Trans Right-Of-Way for Interstate 8. The Southern Project Boundary is Located Along the Drainage Ditch. Coastal Sage Scrub and Grass are the Main Fuels That Would Carry a Wildfire.

Photo #4 – Looking North Along the Eastern Boundary. Sleepy Way is the Roadway Located Along the Eastern Boundary Below the Slope.

Photo #5 – Aerial Photo of the Project Site. Interstate 8 and an Off-ramp Are Located in the Lower Right Corner of the Photo.



Brush Management Plan Map. See Full Sized Map for a more Detailed View. *FIREWISE* 2000, LLC

Photos and Site Plan Revised 10/15/21