

RANCH PLAN

Planned Community-Wide

Fire Protection Program



For Use By:

**RMV Community Development, LLC
County of Orange, Planning & Development Services
Orange County Fire Authority**

Approved by Orange County Board of Supervisors
July 31, 2007

**Amendment 1, March 25, 2013
Amendment 2, August 14, 2014**

CONCURRENCE MEMO

Amendment #2 to Ranch Plan Fire Protection Program

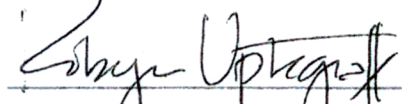
Originally Approved by Orange County Board of Supervisors July 31, 2007

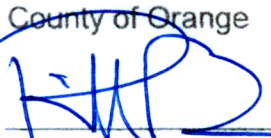
The Ranch Plan Planned Community-Wide Fire Protection Program (RPFPP) originally approved by the OC Board of Supervisors on July 31, 2007, allows any of the three signatory parties (OCFA, OC Planning and/or RMV) to propose modifications to the text or graphics within Exhibit 2 of the RPFPP. The modifications may be amended without requiring an action by the Board of Supervisors upon the mutual written consent of all three parties, per Section D.1 of the RPFPP.

The attached Amendment #2 modifications to text and graphics within Exhibit 2 of the Ranch Plan RPFPP (dated July 21, 2014) are considered minor, and no action by the Board of Supervisors is necessary, as evidenced by the written consent below of all three parties that these modifications are mutually acceptable.

CONCURRENCE:

 Date: 8/6/, 2014
Peter Bonano, Deputy Fire Marshal
Orange County Fire Authority

 Date: 8.14, 2014
Robyn Uptegraff, Assistant Director
OC Public Works
County of Orange

 Date: 8-14, 2014
Richard Broming
Senior Vice President, Planning and Entitlement
RMV Community Development, LLC

CONCURRENCE MEMO

Amendment #1 to Ranch Plan Fire Protection Program


Originally Approved by Orange County Board of Supervisors July 31, 2007


The Ranch Plan Planned Community-Wide Fire Protection Program (RPFPP) originally approved by the OC Board of Supervisors on July 31, 2007, allows any of the three signatory parties (OCFA, OC Planning and/or RMV) to propose modifications to the text or graphics within Exhibit 2 of the RPFPP. The modifications may be amended without requiring an action by the Board of Supervisors upon the mutual written consent of all three parties, per Section D.1 of the RPFPP.

The attached Amendment #1 modifications to text and graphics within Exhibit 2 of the Ranch Plan RPFPP are considered minor, and no action by the Board of Supervisors is necessary, as evidenced by the written consent below of all three parties that these modifications are mutually acceptable.

CONCURRENCE:


Date: 3/22, 2013
Brett Petroff, Deputy Fire Marshal
Orange County Fire Authority


Date: 3/14, 2013
Ignacio Ochoa, Director
OC Public Works
County of Orange


Date: 3/25, 2013
Richard Broming
Senior Vice President, Planning and Entitlement
RMV Community Development, LLC

RANCH PLAN

PLANNED COMMUNITY-WIDE

FIRE PROTECTION PROGRAM

For Use By:
RMV Community Development, LLC
County of Orange, OC Public Works
Orange County Fire Authority

Originally Approved by Orange County Board of Supervisors
July 31, 2007

Amendment #1, March 25, 2013
Amendment #2, August 14, 2013

Table of Contents	Page
Agreement No. D07- 071	1
Recitals	1
Agreement	2

List of Exhibits

Exhibit 1 Description and Depiction of the Property	7
Exhibit 2 Ranch Plan Fire Protection Program	10

Section A. Conditions of Approval	10
Section B. Fire Master Plan Guidelines	14
Section C. Fuel Modification Guidelines	61
Section D. Amendment and Appeal Process	95
Section E. Definitions	97
Section F. Alternative Development Standards	98

List of Tables

Table 1 County and OCFA Responsibilities for Planchecks and Inspections	8
---	---

List of Attachments

1. 24' / 28' Fire Lane No Parking Sign Locations	23
2. Temporary Fire Access	24
3a. Fire Lane Entrance Sign – Public & Private Streets	25
3b. Fire Lane No Parking Sign – Public & Private Streets	26
3c. Fire Lane Begin/End No Parking Sign – Public & Private Streets	27
3d. Mounting Specification for Fire Lane Signs and No Parking Signs	28
3e. Fire Lane Begin / End No Stopping Sign – Public Street	29
3f. Fire Lane Begin / End No Stopping Sign – Private Street	30
3g. Fire Lane Entrance Sign – Public Street	31
3h. Wayfinding Signage for Paseo Addresses	32
3i. Mounting Specification for Fire Lane Signs and No Parking Signs	33
4a. Single-Family Residence Hose Pull	34
4b. Single-Family Residence Hose Pull – With Fire Access	35
4c. R-1 Multi-Family Residence 300' Hose Pull	36
4d. R-1 Multi-Family Residence 300' Hose Pull	37
5a. Engineered Alternate Roadway Access Requirement	38
6a. Street Widths	39
6b. Street Widths	40
6c. Street Widths	41
7. "S" Curves	42
8. Minimum Turnaround and Hammerhead Dimensions	43
9. Minimum Gate Setbacks	44
10. Number and Distribution of Fire Hydrants	45
11. Minimum Required Fire Flow and Duration of Buildings	46
12a. Fire Hydrant Locations	47
12b. Blue Dot Hydrant Marker Location	48

List of Attachments (Cont.)	Page
13. Protection of Hydrants, Detector Checks, Connections, Appurtenances	49
14a. Connection / Detector Check Locations Adjacent to Fire Access Road	50
14b. Fire Sprinkler Riser Valve Locations and Signage	51
14c. Connection Mounted to Building	52
14d. Detector Check / Connection Identification Sign	53
14e. Automatic Fire Sprinkler Requirement for Auxiliary Structures	54
14f. Automatic Fire Sprinkler Requirement for Trash Enclosures	55
15. Radiant Heat and Ember Mitigation Zones	56
15a. Radiant Heat/Ember Mitigation Zone CBC Chapter 7A Screening Form	57
15b. Ember Only Mitigation Zone CBC Chapter 7A Screening Form	58
15c. Radiant Heat/Ember Mitigation Zone CRC R327 Screening Form	59
15d. Ember Only Mitigation Zone CRC R327 Screening Form	60
16. Horizontal Spacing and Vertical Separation	68
17. Undesirable Plant Species	69
18. Fuel Modification Section A	70
19. Fuel Modification Section B	71
20. Fuel Modification Section C	72
21. Fuel Modification Section D	73
22. Fuel Modification Section E	74
23. Fuel Modification Section F	75
24. Fuel Modification Section G	76
25. Fuel Modification Section H	77
26. Fuel Modification Section I	78
27. Fuel Modification Section J	79
28. Fuel Modification Section K	80
29. Fuel Modification Section L	81
30. Fuel Modification Section M	82
31. Fuel Modification Section N	83
32. Fuel Modification Section O	84
33. Fuel Modification Section P	85
34. Template A: Internal Slopes 30-Foot and Higher	86
35. Template B: Internal Slopes 10-Foot to 30-Foot High	87
36. Template C: Internal Street Slope 30-Foot and Higher	88
37. Template D: Internal Street Slope 0-Foot to 30-Foot High	89
38. Template F: Water Quality Basin	90
39. Template G: Slope With Existing Habitat Adjacent to Community Facility	91
40. Template H: Area Adjacent to H.O.A. Recreation Facilities	92
41. Template I: Paseo	93
42. Template J: Base Plant Palette - Maintenance Practices	94

Alternative Development Standards (Attached to Section F)

A-4	Neighborhood Entries	100
A-7	Raised Landscape Islands within Residential Streets	102
A-9	Tapered Streets	106
A-18	Modified Knuckle	109
A-19	Cul-de-Sacs with Raised Landscape Median	111
A-27	Public Street Transition at Parking Lot Turn-Around	113
A-28	Traffic Calming Islands	115
A-32a	Residential Collector with Median	118
A-33	Residential Local with Median	120
B-1	Tapered Intersections	122
B-6	Roundabouts	125
B-8	Alternative Residential Corner Ramp Condition	137
G-3	Private Alley Drive Allowing Emergency Vehicle Access	139
R01	Exterior Wall – Radiant Heat/Ember Mitigation Zone	143
R02	Exterior Wall – Radiant Heat/Ember Mitigation Zone	144
R03	Cantilever Floor (Stucco) – Radiant Heat/Ember Mitigation Zone	145
R04	Cantilever Floor With Trim – Radiant Heat/Ember Mitigation Zone	146
R05	Cantilever Floor With Wood Trim – Radiant Heat/Ember Mitigation	147
R06	Wood Head With Trim (Stucco) – Radiant Heat/Ember Mitigation	148
R07	Window Head With Trim (Wood) – Radiant Heat/Ember Mitigation	149
R08	Window Head With Trim (Wood) – Radiant Heat/Ember Mitigation	150
R09	Dormer Vent Attic Ventilation – Ember Mitigation Zone	151
R10	Cloaked Roof Vent Penetration – Ember Mitigation Zone	152
R11	Roof Valley – Ember Mitigation Zone	153
R12	Eave (Stucco Wall) – Radiant Heat/Ember Mitigation Zone	154
R13	Eave (Fiber-Cement Siding Wall) – Radiant Heat/Ember Mitigation	155
R14	Eave – Exposed Rafter Tails – Radiant Heat/Ember Mitigation Zone	156
R15	Eave – Rafter Tail Sleeve – Radiant Heat/Ember Mitigation Zone	157
R16	Closed Eave (Stucco) – Radiant Heat/Ember Mitigation Zone	158
R17	Closed Eave (Stucco) – Radiant Heat/Ember Mitigation Zone	159
R18	Closed Eave (Fiber-Cement Siding) – Radiant Heat/Ember Mitigation	160
R19	Closed Eave (Fiber-Cement Siding) – Radiant Heat/Ember Mitigation	161
R20	Closed Eave Foam Detail (Stucco) – Radiant Heat/Ember Mitigation	162
R21	Closed Eave (Stucco) – Radiant Heat/Ember Mitigation Zone	163
R22	Closed Eave With Trim (Stucco) – Radiant Heat/Ember Mitigation	164
R23	Rake (Stucco Wall) – Radiant Heat/Ember Mitigation Zone	165
R24	Rake (Fiber-Cement Siding Wall) – Radiant Heat/Ember Mitigation	166
R25	Closed Rake (Stucco) – Radiant Heat/Ember Mitigation Zone	167
R26	Closed Rake (Stucco) – Radiant Heat/Ember Mitigation Zone	168
R27	Closed Rake (Fiber-Cement Soffit) – Radiant Heat/Ember Mitigation	169
R29	Deck with Wood Trim – Radiant Heat/Ember Mitigation Zone	170
R30	Deck with Wood Trim – Radiant Heat/Ember Mitigation Zone	171
R31	Deck with Wood Trim – Radiant Heat/Ember Mitigation Zone	172

OCFA / County / RMV Agreement

AGREEMENT NO. D07- 071

[Agreement between the County, OCFA and RMV Community Development, LLC Regarding the Adoption and Implementation of the Ranch Plan Fire Protection Program]

This Agreement No. D07- 071 ("**Agreement**") is made and entered into this 31st day of July, 2007 (the "**Effective Date**") by and between the County of Orange, a political subdivision organized and existing pursuant to the Constitution and laws of the State of California (the "**County**"), the Orange County Fire Authority, a California joint powers authority ("**OCFA**"), and RMV Community Development, LLC, a California limited liability company ("**RMV**"). The County, OCFA and RMV are hereafter collectively referred to as the "**Parties**" and individually as a "**Party**."

RECITALS

A. On November 8, 2004, the County Board of Supervisors approved a General Plan Amendment (Resolution No. 04-291), Zone Change (Resolution No. 04-292/Ordinance No. 04-014) and Development Agreement (Resolution No. 04-293/Ordinance No. 04-015) establishing a comprehensive land development and conservation plan for the remaining 22,815 acres of the historic Rancho Mission Viejo. The collective elements of the development and conservation plan are commonly known as the "**Ranch Plan**." The property comprising the Ranch Plan project area (the "**Property**") is described and depicted in the attached **Exhibit 1**, said Exhibit incorporated herein by this reference.

B. The collective owners ("**Owners**") of the Property are RMV and DMB San Juan Investment North, LLC, a Delaware limited liability company; RMV Middle Chiquita, LLC, a California limited liability company; RMV Ranch House, LLC, a California limited liability company; RMV Headquarters, LLC, a California limited liability company; RMV San Juan Watershed, LLC, a California limited liability company; RMV San Mateo Watershed, LLC, a California limited liability company; RMV Blind Canyon, LLC, a California limited liability company; and RMV MC Investments, LLC, a California limited liability company.

C. By virtue of agreement between the Owners of the Property, RMV has authority to process and otherwise perfect such agreements, permits and authorizations as are necessary for ensuring the orderly implementation of the Ranch Plan.

D. In approving Ordinance No. 04-014, the County adopted the Ranch Plan Planned Community Program Text ("**PC Text**"). In relevant part, the PC Text establishes a framework for processing development applications for the Ranch Plan and identifies specific conditions for the applicant to satisfy prior to (or concurrent with) the conduct of development activities within the Ranch Plan area.

E. Section I.C. of the PC Text (Condition No. 8) requires the preparation and approval of a fire protection program for the Ranch Plan area that addresses development-related, Ranch Plan-wide fire protection issues. Section II.D. of the PC Text identifies the mandatory elements of the required fire protection program.

F. Consistent with the mandates of Sections I.C. and II.D. of the PC Text, OCFA, the County and RMV have prepared a fire protection program for the Ranch Plan known as the “**Ranch Plan Fire Protection Program**.” A copy of the Ranch Plan Fire Protection Program (or, “**RPFPP**”) is attached hereto as **Exhibit 2** and incorporated herein by this reference.

G. The RPFPP provides a unique, comprehensive approach to the processing of all emergency access and fire safety issues associated with proposed development within the Ranch Plan area. Specifically, the RPFPP has been designed as an all-encompassing regulatory document for the Ranch Plan that replaces the existing County of Orange Standard Conditions and all general OCFA Guidelines relative to the Ranch Plan area with the following components:

- (1) Conditions of Approval
- (2) OCFA/County Responsibilities.
- (3) Fire Master Plan Guidelines.
- (4) Fuel Modification Guidelines.
- (5) Approval and Appeal Procedures and Responsibilities.
- (6) Alternative Development Standards.

H. The County and OCFA have found that (i) the RPFPP is consistent with the County’s General Plan; (ii) adoption of the RPFPP would be in the best interests of the health, safety, and general welfare of the County, its residents, and the public; and (iii) approval of the RPFPP would be consistent with (and in furtherance of) the police powers held by the County and OCFA..

I. The County and OCFA agree that RMV’s commitment to community-wide fire protection enhancement practices (e.g., automatic fire sprinklers, planting limitations, etc.) and early preparation and tracking of Fire Master Plans, as required by the RPFPP, presents a unique opportunity to simplify and apportion responsibilities for plancheck and inspection at subsequent levels of approval.

J. Based on the foregoing, and subject to the terms and conditions hereafter provided, the County, OCFA and RMV desire to enter into this Agreement regarding the adoption and implementation of the RPFPP for the Ranch Plan area.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals of fact, the mutual covenants contained herein, and other consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Adoption of Ranch Plan Fire Protection Program. The County, OCFA and RMV hereby adopt and approve, as appropriate, the RPFPP attached hereto as **Exhibit 2**.
2. The RPFPP is comprised of six (6) parts, namely:
 - Section A: Conditions of Approval
 - Section B: Fire Master Plan Guidelines

- Section C: Fuel Modification Guidelines
- Section D: Amendment and Appeal Process
- Section E: Definitions
- Section F: Proposed Alternative Development Standards.

In addition, **Table 1** (OCFA/County Responsibilities) is attached hereto and incorporated by this reference as part of the comprehensive RPFPP.

2. Satisfaction of Development Conditions. On March 27, 2007, RMV and OCFA entered into two (2) agreements entitled “Secured Fire Protection Agreement – Planning Area 1 (the “PA1 SFPA”) pertaining to fire mitigation responsibilities for that portion of the Ranch Plan/Ranch Plan Property commonly identified as Planning Area 1, and “Secured Fire Protection Agreement – Planning Areas 2 through 10” (the “PA2-10 SFPA”) pertaining to fire mitigation responsibilities for that portion of the Ranch Plan/Ranch Plan Property commonly identified as Planning Areas 2 through 10. The County and OCFA acknowledge and agree that RMV’s execution and delivery of the PA1 SFPA, the PA2-10 SFPA and this Agreement (providing for approval and adoption of the RPFPP) collectively satisfy the fire protection and emergency response conditions set forth in Section I.C. and Section D of the PC Text and all other conditions of approval requiring the establishment of the Ranch Fire Protection Program (including, but not limited to, the establishment of a fuel modification plan and requirements for building construction).

3. Remapping From State Responsibility Area (SRA) to Local Responsibility Area (LRA). The Parties acknowledge and agree that upon issuance of certificates of occupancy for all production housing (excluding custom home lots) within a development Planning Area (PA1-PA5, and PA8), OCFA shall recommend -- and use best commercial efforts to accomplish -- that as part of the State of California Department of Forestry and Fire Protection regular mapping updates, the entire Planning Area be redesignated from State Responsibility Area (SRA) to Local Responsibility Area (LRA) Urbanized/Developed Areas, and that the surrounding approved Fuel Modification Zone be redesignated as Moderate Fire Hazard Zone.

4. Status of Other Fire Control Regulations. As of the Effective Date, the RPFPP shall represent and provide the exclusive set of fire control regulations applicable to the Property and the Ranch Plan. Specifically, upon execution and delivery of this Agreement, the RPFPP shall become the overarching source for all general OCFA emergency access and fire safety guidelines as they pertain to the Ranch Plan Planned Community, replacing the existing County of Orange Standard Conditions, the OCFA Fire Master Plan and Fuel Modification Guidelines. The RPFPP also incorporates some, but not all, OCFA bulletins. The RPFPP does not replace, but does modify, some specific regulations in the California Building Code (effective January 1, 2008), as detailed in RPFPP Section 3. Additionally, the RPFPP does not replace or otherwise modify the California Fire Code. Except as otherwise unanimously agreed to in writing by the Parties or as expressly provided in the RPFPP, no County or OCFA control, design, or building regulations that would otherwise be applicable to the Ranch Plan project area shall be applied to or enforced against the Property or the Ranch Plan.

5. Inspection Obligations and Authority. Upon compliance with RPFPP Conditions of Approval A.2., A.3. and A.4., the County and OCFA shall apportion responsibilities for Ranch Plan planchecks and inspections in accordance with the summary appearing in Table 1. The Parties acknowledge that the apportionment of Ranch Plan plancheck and inspection responsibilities in accordance with Table 1 is in the best interests of the Parties and the citizens and residents (both current and future) of the Ranch Plan project area. Furthermore, the Parties agree to adhere to said apportionment of responsibilities until such time as the Parties unanimously agree in writing to an alternative or modified apportionment.

6. Fire Protection Plan. OCFA intends and agrees that the RPFPP meets the qualifications for, and shall be construed as, a Fire Protection Plan ("FPP") pursuant to Chapter 47 of the California Fire Code. Specifically, OCFA acknowledges that the RPFPP provides appropriate and lawful alternatives for materials, designs, tests and methods of construction for the Ranch Plan Project Area that directly modify -- and shall substitute for -- the provisions of Chapter 7A of the California Building Code. In the event that the RPFPP or any portion thereof is determined to be unlawful or unenforceable, as a FPP or otherwise, RMV shall have the right, but not the obligation, to terminate this Agreement and the RPFPP upon delivery of written notice to OCFA and the County. Notwithstanding, this Agreement shall not be terminated by RMV once construction of any improvement has commenced within an individual Ranch Plan Subarea. In such instance, and subject to applicable law, RMV agrees to complete construction of the individual Subarea consistent with the terms and provisions of this Agreement and the RPFPP. Following completion of said Subarea, RMV may exercise its right to terminate this Agreement and the RPFPP as to any future / remaining portions of the Ranch Plan within which no construction of structures (residential or non-residential) or streets (collector or residential streets less than 40' wide) has commenced. In the event of any such termination, RMV shall be released of all remaining obligations under this Agreement and the RPFPP, and RMV shall have no duty to implement, use or apply any of the alternative materials, design standards, tests or construction methods identified in the RPFPP, and RMV shall thereafter comply with all requirements and standards as apply in the absence of the RPFPP and this Agreement.

7. Amendment. Except as otherwise expressly provided herein, and subject to/consistent with the provisions of Section D of the RPFPP, neither this Agreement nor the RPFPP shall be amended or modified without the prior written consent of RMV, the County and OCFA.

8. Term of Agreement. This Agreement will commence on the Effective Date and shall continue in full force and effect until such time as (i) the RPFPP and this Agreement are terminated by RMV in accordance with the provisions of Section 6, above, or (ii) the Parties shall unanimously agree, in writing, to terminate the Agreement.

9. Notices. All notices, requests and demands hereunder must be in writing to be effective. All notices required to be given hereunder or by operation of law in connection with the performance or enforcement hereof shall be deemed given upon

delivery if delivered personally (which includes notices delivered by messenger or overnight courier) or, if delivered by mail, shall be deemed given three days after being deposited by certified mail in any duly authorized United States mail depository, postage prepaid. All such notices shall be addressed as follows, or to such other address or addresses as the Parties may from time to time specify in writing:

To County: County of Orange
Resources & Development Management Department
300 N. Flower Street, 3rd Floor
Santa Ana, CA 92701
Attn: Director

To OCFA: Orange County Fire Authority
1 Fire Authority Road
Irvine, California 92602

To RMV: RMV Community Development, LLC
P.O. Box 9
San Juan Capistrano, CA 92693
Attn: Senior Vice-President -- Planning and
Entitlement

10. Miscellaneous.

A. Successors and Assigns. This Agreement and the rights and obligations of the Parties hereunder shall inure to the benefit of, and be binding upon, the Parties' respective successors, assigns and legal representatives.

B. Governing Law. This Agreement shall be governed by and construed under the laws of the State of California

C. No Third-Party Rights. Nothing in this Agreement shall be deemed or otherwise construed as granting any rights, benefits or interests to any individual, entity or body who/that is not a Party to this Agreement.

D. Authority and Requisite Action. The individuals executing this Agreement (the "**Signatories**") covenant that they have the legal power, right and authority to enter into this Agreement and to bind their respective principals/entities to the terms and conditions set forth herein. Furthermore, the Signatories covenant that all requisite action has been taken by their respective principals/entities in connection with the entering into this Agreement and the instruments referenced herein, and the consummation of the transactions contemplated hereby.

E. Entire Agreement. This writing constitutes the entire agreement between the Parties, and no modification of this Agreement shall be valid unless prepared, approved and executed by the Parties in accordance with the provisions of Section 7, above. Further, none of the Parties to this Agreement shall be bound by any representations, warranties, promises, statements, or information unless expressly set forth herein.

F. No Waiver. The failure of any Party to enforce against the other a provision of this Agreement shall not constitute a waiver of that Party's right to enforce such a provision at a later time.

G. Captions. The captions of the various Sections in this Agreement are for convenience and organization only, and are not intended to be any part of the body of this Agreement, nor are they intended to be referred to in construing the provisions of this Agreement.

H. Counterparts. This Agreement may be executed in one or more counterparts, and all the counterparts shall constitute but one and the same agreement, notwithstanding that all Parties hereto are not signatories to the same or original counterpart.

WITNESS THE EXECUTION HEREOF on the day and year first hereinabove written.



SIGNED AND CERTIFIED THAT A COPY OF
THIS DOCUMENT HAS BEEN DELIVERED TO
THE CHAIRMAN OF THE BOARD
PER G.O. SEC. 25103, RESO 79-1535
ATTEST:
Darlene J. Bloom
DARLENE J. BLOOM
CLERK OF THE BOARD OF SUPERVISORS
ORANGE COUNTY, CALIFORNIA

COUNTY OF ORANGE,
a political subdivision of the
State of California

By:

Chris Norby
Chris Norby
Chairman
Orange County Board of Supervisors

Approved as to Form
County Counsel

By: Nicholas Schum
Deputy

ORANGE COUNTY FIRE AUTHORITY
a California Joint Powers Authority

By: Chip Prather
Chip Prather, Fire Chief
Orange County Fire Authority

RMV COMMUNITY DEVELOPMENT,
LLC, a California limited liability company

By: RMV COMMUNITY DEVELOPMENT
COMPANY, INC., a California
corporation,
Its: Sole member

APPROVED AS TO FORM:

By: Terry C. Andrus
Terry C. Andrus
General Counsel

By: Donald L. Vodra
Donald L. Vodra,
Chief Operating Officer

By: Richard Bromberg
Richard Bromberg,
Senior Vice President –
Planning and Entitlement

EXHIBIT 1

DESCRIPTION AND DEPICTION OF THE PROPERTY

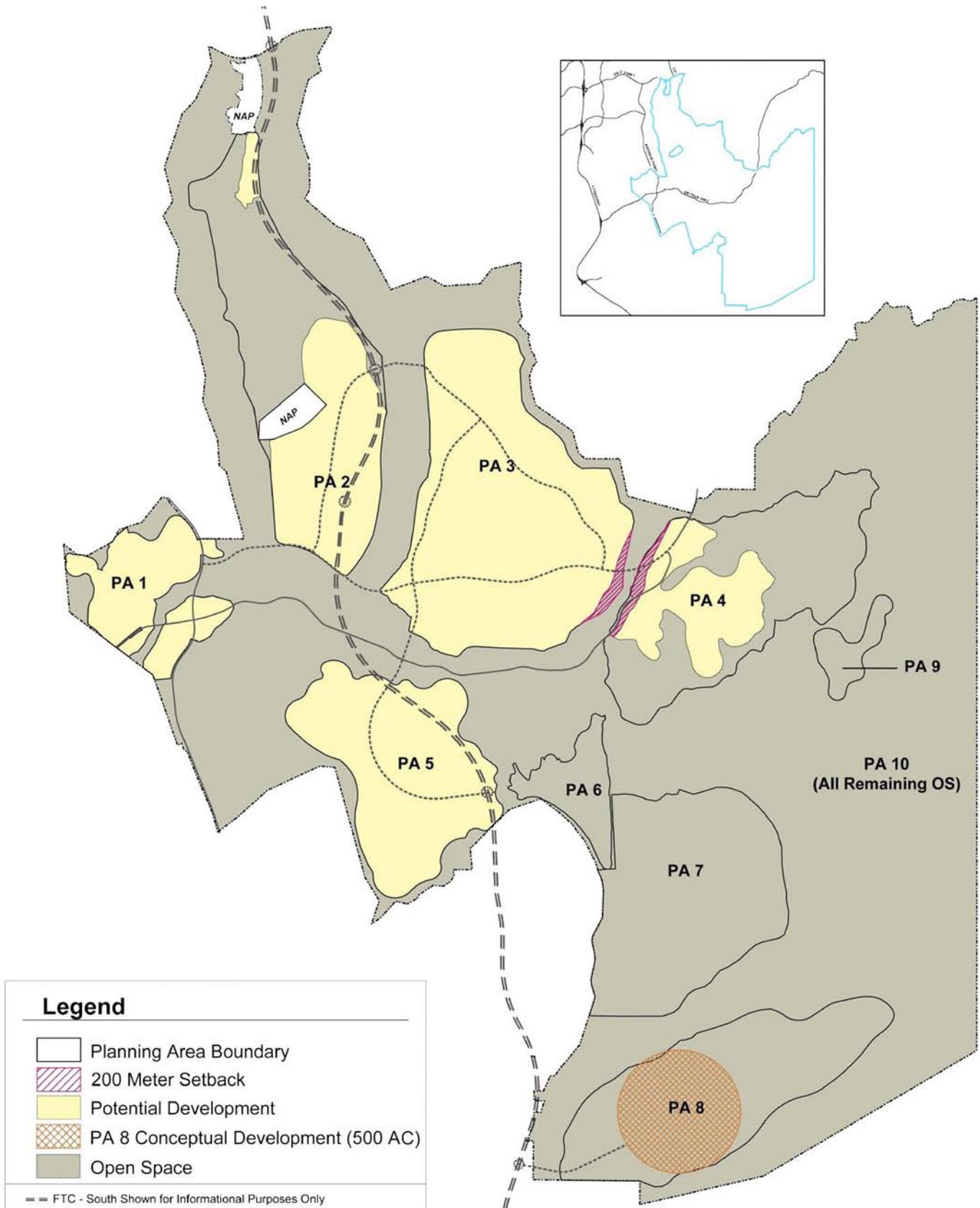


TABLE 1

County and OCFA Responsibilities for Planchecks and Inspections		
	County Responsibility	OCFA Responsibility
Vesting Tentative Tract Maps (“A” and “B” VTTMs) and Site Development Permits, including Fire Master Plans (FMP)	County Representation on Subdivision Committee	OCFA to Review and Concur with VTTMs, Site Dev. Permits, Fire Master Plans. OCFA Representation on Subdivision Committee
Final Tract Map	County Fully Responsible	OCFA to “Restamp” for administrative purposes
Preliminary (GA) Grading Permit	County Fully Responsible	
GA Inspection	County Fully Responsible	
Precise (GB) Grading Permit	County Fully Responsible	
GB Inspection	County Fully Responsible	Additional OCFA Plan-check, If Revisions to FMP (See Notes on Next Page)
Street Improvement Plans	Determine Whether Revisions From VTTM Effect FMP	Additional OCFA Plan-check, If Revisions to FMP (See Notes on Next Page)
Water Improvement Plans	Determine Whether Revisions From VTTM Effect FMP	Additional OCFA Plan-check, If Revisions to FMP (See Notes on Next Page)
Improvement Plan Inspection	County Fully Responsible	OCFA to Inspect FMP Elements
Hydrant Inspection	County & SMWD Responsible for Public Hydrants (No Private Hydrants Proposed)	OCFA to Inspect Public Hydrants for Location Only (No Private Hydrants Proposed)

Building Plancheck	County Responsible for Issuance of Building Permits, including determining compliance with Construction Features included as part of RPFPP Alternative Development Standards Section G.	OCFA Responsible for Determining Compliance with State Fire Marshall Regulated occupancies and CFC Requirements
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Building Inspection	County Fully Responsible	OCFA Responsible for Determining Compliance with State Fire Marshall Regulated occupancies and CFC Requirements
Fire Sprinkler Inspection		OCFA Responsible
Certificate of Occupancy	County Fully Responsible	
Fuel Modification Inspection		OCFA Fully Responsible

Notes: Fire Master Plan Revisions

The following Fire Master Plan revisions trigger OCFA Responsibilities for GB Inspection and/or Street Improvement Plans and Water Improvement Plans:

1. Relocation of fire hydrants by more than five feet, or any movement of hydrants closer to a habitable structure.
2. Modifications that reduce the width of any street or private drive used for OCFA emergency access, as identified on a tentative tract-related Fire Master Plan.
3. Any modifications to a fire lane for OCFA emergency access, as identified on a Site Development Permit-related Fire Master Plan.
4. Modifications that increase the gradient of streets above 10%.
5. Modifications to Fuel Modification areas.
6. Modifications to Building Pad locations.

Conditions of Approval

EXHIBIT 2

RANCH PLAN FIRE PROTECTION PROGRAM

SECTION A. CONDITIONS OF APPROVAL

1. **SPRINKLERS:** Prior to approval of any Tentative Tract Map, Tentative Parcel Map or approval of a Site Development Permit, the applicant shall demonstrate to the Director, OC Development Services, that all new habitable structures (residential, retail, industrial, etc.) within the Ranch Plan Planned Community shall be equipped with the Appropriate Automatic Fire Sprinkler System by Land Use Type (see RPFPP Section E, Definitions), with the following three exceptions:
 - a) All new or relocated agricultural and other existing and on-going structures (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices) shall be reviewed by OCFA on a case-by-case basis, taking into account the historical value and operational factors, prior to a determination by the Fire Chief whether a structure is to be equipped with an automatic fire sprinkler system, or whether equivalent protection can be established.
 - b) All existing agricultural and on-going structures (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices) are not required to be equipped with an automatic fire sprinkler system.
 - c) The following development-related structures are not required to be equipped with an automatic fire sprinkler system: Patio covers, storage sheds, bridges, decks, carports, Neighborhood Electrical Vehicle trellis coverings, greenhouses, wireless facilities, pump stations, trash enclosures, or similar structures (unless specifically required by the Fire Code (as locally adopted)).
2. **FIRE MASTER PLANS:**
 - a) Prior to approval of any "A" Tentative Tract Map the applicant shall provide the Director, OC Development Services with a clearance from OCFA indicating that all applicable Fire Master Plan requirements (see RPFPP Section B, Fire Master Plan Guidelines) have been satisfied as part of the tentative tract map or tentative parcel map to be considered by the Subdivision Committee. All Fire Master Plans addressing "A" Tentative Tract Maps shall also satisfy applicable approved Fuel Modification Plan and construction requirements, allowed within Radiant Heat/Ember Mitigation & Ember Mitigation Only Zones per Section B.7, Attachment 15 and Section F, Construction Features.
 - b) Prior to approval of any "B" Tentative Tract Map, Tentative Parcel Map or approval of a Site Development Permit, the applicant shall provide the Director, OC Development Services with a clearance from OCFA indicating that all applicable Fire Master Plan requirements (see RPFPP Section B, Fire Master Plan Guidelines) have been satisfied as part of the tentative tract map or

Ranch Plan Fire Protection Program

tentative parcel map to be considered by the Subdivision Committee, or included as part of the Site Development Permit to be considered by the appropriate decision maker. All Fire Master Plans addressing "B" Tentative Tract Maps, Tentative Parcel Maps and Site Development Permits shall also satisfy applicable approved Fuel Modification Plan and construction requirements, allowed within Radiant Heat/Ember Mitigation & Ember Mitigation Only Zones per Section B.7, Attachment 15 and Section F, Construction Features.

- c) If applicable to a large lot and/or custom lot "B" tentative tracts, an abbreviated subsequent Single Family Fire Master Plan may be required to address only the following requirements of RPFPP Section B, Fire Master Plan Guidelines:
 - B.1.c.1) and B.1.c.3) and Attachment 4b
 - B.1.g Gradient of accessway
 - B.3 Gates, and attachment 9 (if applicable)
 - B.4 Hydrants
- d) Prior to initiation of combustible construction the following fire master plan improvements shall be verified by site inspection:
 - Emergency access
 - Water Supply
 - Operational Hydrant(s)
- e) All new or relocated agricultural and other existing and on-going structures (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices) shall be reviewed by OCFA on a case-by-case basis, taking into account the historical value and operational factors, prior to a determination by the Fire Chief whether aspects of RPFPP Section B, Fire Master Plan Guidelines, shall be applied or whether equivalent protection can be established.
- f) All existing agricultural and on-going structures (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices) do not require a Fire Master Plan.
- g) Subsequent revisions to an approved Fire Master Plan are to be approved by OCFA staff, and shall not require Subdivision Committee or Site Development Permit decision-maker approval.

3. FUEL MODIFICATION:

- a) A Ranch Plan Planned Community-wide Preliminary Fuel Modification Plan has been approved for the peripheral edge of all Ranch Plan development Planning Areas.
- b) Prior to approval of each Master Area Plan the applicant shall provide the Director, OC Development Services with a clearance from OCFA indicating their

Ranch Plan Fire Protection Program

review and approval of a Preliminary Fuel Modification Plan that either confirms or modifies the assumed 110-foot wide fuel modification zones in the approved Community-wide Preliminary Fuel Modification Plan (per RPFPP Section C.1). If adaptive management tools for controlling the growth of vegetation surrounding Ranch Plan development are not successful and vegetation transitions from Fuel Model 2 (FM2) to Fuel Model 4 (FM4), as classified by the BEHAVE Fire Behavior Fuel Modeling System, OCFA may opt to require Fuel Modification zone widths based on the BEHAVE model anticipated flame lengths plus 20-feet for defensible space.

- c) Prior to any "A" Vesting Tentative Tract Map approval, the applicant shall provide the Director, OC Development Services with a clearance from OCFA demonstrating approval of a Conceptual Fuel Modification Plan (per RPFPP Section C.2, and Attachments 18 through 33). Each Conceptual Fuel Modification Plan shall also include Attachments 15a, 15b, 15c and 15d, the screening forms referencing applicable approved construction details allowed within Radiant Heat/Ember Mitigation & Ember Mitigation Only Zones per Section B.7, C.2.e., Attachment 15 and Section F, Construction Features.
- d) Prior to the issuance of a GB precise grading permit, the applicant shall provide the Director, OC Development Services, with a clearance from OCFA indicating their review and approval of a Precise Fuel Modification Plan per RPFPP Section C.3.
- e) Prior to the issuance of a building permit for construction phases of Vesting Tentative Tract Maps adjoining fuel modification areas, and prior to the County of Orange allowing fuel tanks, generators and/or Lumber Drops (see Section E, Definitions) within the project site, the applicant shall provide the Manager, Building & Safety, with a clearance from OCFA indicating that vegetation has been cleared and maintained at a height of 4 inches or less, or that the appropriate fuel modification thinning and removal of plants from the OCFA Undesirable Plant List has been implemented.
- f) Prior to the issuance of any certificate of use and occupancy, the applicant shall provide the Manager, Building & Safety, with a clearance from OCFA indicating that:
 - 1. Approved "A" Zone planting has been installed and approved irrigation has been activated.
 - 2. Approved fuel modification zone markers have been installed.
 - 3. Accessways every 500 feet (or as approved) have been installed.
 - 4. Approved thinning of the "B" and "C" Zones and removal of plants from the OCFA Undesirable Plant List have been completed.
 - 5. CC&Rs or other approved documents contain provisions for maintaining the fuel modification zones.
- 4. Prior to recordation of each Tract Map, the applicant shall submit a copy of the proposed Tract map to OCFA for administrative approval (verifying that the map remains consistent with previous approvals), and for OCFA's record keeping purposes.

Ranch Plan Fire Protection Program

5. Prior to recordation of each applicable Tract Map, the applicant shall provide the Director, OC Development Services with a clearance from OCFA demonstrating that a financial security (i.e., bonding, letter of credit, etc.) has been secured to address Opticom device at the signalized intersection of _____ and _____.
6. Prior to approval of any GA "Mass Grading Permit", operations that include generators and fuel tanks (up to 10,000 gallons), shall be included as part of the grading plan notes. The applicant commits to the following (a-d) prior to bringing fuel storage or deliver systems within the grading permit area:
 - a) All Weather Surface access, a minimum of 16-feet wide, to within 300 feet of any fuel tank and/or generator.
 - b) No combustible vegetation or combustible structures within 110 feet of any generator with an integral fuel tank, and 300 feet from a fuel tank.
 - c) Only Class II or III combustible liquids are stored or dispensed.
 - d) Prior to actual installation of tanks, RMV agrees to process the required OCFA plan approvals.
7. Upon issuance of 95% of the residential and non-residential certificates of occupancy within each development Planning Area (PA1-PA5, and PA8), OCFA shall recommend -- and use best commercial efforts to accomplish -- that as part of the State of California Department of Forestry and Fire Protection regular mapping updates, the entire Planning Area be redesignated from State Responsibility Area (SRA) to Local Responsibility Area (LRA) Urbanized/Developed Areas, and that the surrounding approved Fuel Modification Zone be redesignated as Moderate Fire Hazard Zone.

Fire Master Plan Guidelines

SECTION B. FIRE MASTER PLAN GUIDELINES

Per Section A of these Ranch Plan Fire Protection Guidelines, Standard Condition No. 2, prior to the approval of any Tentative Tract Map or Tentative Parcel Map, the applicant shall provide the Director, OC Development Services with a clearance from OCFA indicating that a Fire Master Plan has been approved per the following criteria:

1. Fire Access Roadways:
 - a. Fire Lane Identification:
 - 1) No Red curbs
 - 2) "Fire Lane—No Parking" signs shall be posted every 200 feet (see Attachment 1).
 - 3) "Fire Lane—No Parking" signs shall be posted every 100 feet within temporary construction zone, enforced by private security (see Attachment 2).
 - a) Temporary signs may be used as long as they are all-weather and remain legible.
 - 4) "Fire Lane No Parking" sign details shown on Attachments 3a, 3b, 3c, 3d, 3e, 3i.
 - b. Fire lanes:
 - 1) Permanent fire lanes shall be paved with an all weather surface required which supports 68,000 pounds.
 - 2) Temporary fire lanes (per RPFPP Section E, Definitions, All Weather Surface) are defined as paved surfaces, pavers, GrassPave 2, lime-treat or equal, as certified by soils engineer to be capable of withstanding the minimum weight of 68,000 pounds (with 90% compaction) during any type of weather.
 - 3) Bridges required for emergency access must be a minimum width of the roadway leading into the bridge (less parking), and capable of supporting 68,000 pounds.
 - 4) End of Fire Lane Lengths & Identification: Private drives of 150-feet in length or less are allowed, and may be extended by up to 100-feet per the details depicted on Attachments 3f and 3g, including surface weight requirements and "End of Fire Access" signage.
 - c. Hose Pull/Automatic Sprinklers: Because the entire Ranch Plan Planned Community is to be served by automatic sprinklers:
 - 1) The primary entry door serving the interior of a single-family dwelling may be up to 300 feet access distance as measured along an approved route from the fire apparatus road. For all multi-family, a 300-foot hose pull around the structure shall be allowed. See Attachments 4a, 4b and 4c.
 - 2) 225-foot hose pulls are to be provided to all habitable non-residential structures with an increase in fire sprinkler density (retail, office, recreational center, etc., see Attachment 4d), with the stipulation that within the structures

Ranch Plan Fire Protection Program

- not meeting the 225' hose pull requirement (i.e., buildings in the 225' hose-pull range), the automatic sprinkler systems are to be upgraded to one protection level higher than otherwise required by the adopted national standards (e.g. Light Hazard to Ordinary 1, etc. or see Attachment 5a and the NFPA 13 edition in effect at the time of permit application.).
- 3) Emergency access may be taken from any side of the structure, including the addressed side, provided that the access is taken from an approved access road or drive (see Attachments 4a, 4b, 4c, 4d).
 - 4) Installation of "End of Fire Access Sign" allows for up to 100-foot maximum continuation of pavement from end of fire access, with hose pulls extending from the end of fire access. Signage (see Attachments 3f and 3g) alleviates the need for pavement banding.
- d. Secondary Emergency Vehicle Access: Secondary access required if development contains 150 or more residential units. GrassPave 2 or other engineered surface may be used subject to OCFA requirements listed on Attachment 5a.
 - e. For roads less than 150', 20' Minimum width (with no parking) is allowed if secondary access route is used for emergency only ingress/egress purposes. For roads 150-250', provide a 20' width and a 45' long "pop-out" of 28'. For roads over 250' in length, provide a 20' width with a 90' long "pop-out" of 28'. Please add language describing how the road will be secured against public access.
 - f. Fire Lane Widths: All public streets, private streets and alleys shall comply with the following standards:
 - 1) Public Streets, Private Streets, Alleys and Private Drives located within 100-feet of Fuel Modification Zone and/or if demonstrated necessary (per approved Fire Master Plan) as Primary Access to the wildland interface: (see Attachment 6a)
 - a. If parallel parking is allowed on one side of the street only: 28-feet wide (flow-line to flow-line) for streets with vertical curbs, or 27-feet wide (flow-line to flow-line) for streets with 6-inch rolled curbs [Per Alternative Development Standard A-3],
 - b. If parallel parking is allowed on one side of the street only: 24-feet wide (flow-line to flow-line) for streets where head-in parking is provided with maximum parking bay spacing of at least 150' (see Attachment 6b.
 - c. If parking is allowed on both sides of the street: 36-feet wide (flow-line to flow-line) for streets with vertical curbs, or 35-feet wide (flow-line to flow-line) for streets with 6-inch rolled curbs. [Per Alternative Development Standard A-3]
 - 2) Alleys and Private Drives (see ADS G-3a and G-3b): If required as emergency access, 20-feet wide flow-line to flow-line with parallel parking

Ranch Plan Fire Protection Program

located outside the 20-feet on one or both sides (per ADS G-3a). If not required as emergency access, 16-feet wide (per ADS G-3b).

- a. 20' wide Alley or Private Drive allowed if hose-pull lengths reach all sides of structures without staging on Fire Access Drive (see Attachment 6c).
- 3) Public and/or Private Streets: 24-feet wide (flow-line to flow-line), meeting the following criteria:
- a. No on-street parking allowed (or allowed only in parking bays located beyond the flow-line).
 - b. Off-street parking provided in the immediate vicinity per Ranch Plan Planned Community zoning text Section III.K.
 - c. No portion of the alley or private drive may serve as Primary Access to the Wildland/Development Interface (see Attachment 6a), as depicted on an approved Fire Master Plan, unless a fire accessway to the Wildland/Development Interface of at least 24' wide is located within 100' (see Attachment 6a).
 - d. If the 24-foot wide portion is tapered intersection, see ADS B-1 regarding tapered intersections.
- 4) Emergency access, fire lane signs and fire hydrants are not required to serve existing agricultural and on-going uses (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices). Emergency access may be required to serve wireless facilities, pump stations, utility substations or similar structure. This will be decided on a case-by-case basis. If hazardous materials are present in sufficient quantities that require application of the Fire Code, standard fire department access requirements may be applied. (as locally adopted) When allowed, these facilities may otherwise be served by 12-foot wide dirt or gravel access. Access to all new or relocated agricultural structures (as regulated by Section H of the Ranch Plan PC Program Text and the Resource Organization Settlement Agreement defined Existing Agricultural/Ranching Practices) shall be reviewed on a case-by-case basis, taking into account the historical value and operational factors, prior to a determination by the Fire Chief whether the fire lane widths per B.1.3 above are required, or whether equivalent protection can be established.
- 5) Temporary Fire Access
- Delivery of material required to erect a structure, or "lumber drop" (not including small amounts of lumber required for forming the foundation slabs) is allowed prior to initiation of combustible construction only when the following three construction details are addressed by the Fire Master Plan:
- a. Interim emergency access.
 - b. Temporary fire lane signage.

Ranch Plan Fire Protection Program

- c. Interim fire line supply during construction.
 - b) Class 1A fire hydrant within 300 feet of any combustible construction
 - c) Temporary fire hydrants 600 feet minimum between hydrants
 - d) Water may be supplied from existing water line or hydrant with minimum 1,000 gpm at 20 psi for duration of not less than one hour
- g. Vertical Clearance: 13-feet, 6-inches, including overhanging vegetation.
- h. Road Grades: Shall be no more than 10%, but may be up to 15% if specifically approved on a case-by-case basis, per justification)
- i. Turning Radii: ("AutoTurn" software, or equivalent, may be used to demonstrate that turning radii is maneuverable by OCFA apparatus):
 - 1) Inside turning radii 17-feet or greater.
 - 2) Outside turning radii 38-feet or greater.
 - 3) "S" curves eliminated by providing 56-foot straight leg between compound turns (see Attachment 7).
- j. Turnarounds/Hammerheads: Required turnarounds/hammerheads shall meet 17-foot inside and 38-foot outside turning radius requirements (see Attachment 8).
- k. Cul-de-sacs:
 - 1) Minimum cul-de-sac radius is 38-feet with parking allowed, per ADS A-19
 - 2) The maximum cul-de-sac length, dead end drive or street is 1,200-feet without an intersection with mid-point turnarounds/hammerheads.

2. Premises Identification:

- a. Approved numbers or addresses shall be placed on the front elevation of all new or existing buildings in such a position that is plainly visible and legible from the street or road on which the property is addressed.
- b. The numbers shall contrast with their background.
- c. The numbers shall be a minimum of 4 inches or more in height for each unit and 6 inches or more for commercial and multi-family structures with a one-inch stroke or as required by local ordinance, whichever is more restrictive. Building setbacks, elevation and landscaping can affect these minimum size requirements.
- d. Numbers for new buildings shall be internally or externally illuminated to be visible at night. CFC 901.4.4, as amended.
- e. In addition to common requirements specified above, the following additional requirements pertain to each building configuration:
 - 1) Multi-unit buildings: Suite/Apartment numbers shall be placed on or adjacent to the primary entrance for each suite/apartment and any other door providing access to fire department personnel during an emergency. Multiple residential and commercial units having entrance doors not visible from the street or road shall, in addition, have approved numbers grouped

Ranch Plan Fire Protection Program

for all units within each structure and positioned to be plainly visible from the street or road. CFC 901.4.4, as amended.

- 2) Placement of Unit Address Numbers: Unit address sign with 4-inch tall lettering to be placed at front door of each individual unit.
- 3) Placement of Building Identification Numbers (Addresses): Building identification sign with 6-inch tall minimum lettering
- 4) Wayfinding Signage: In instances where dwelling units are not located immediately adjacent to a street, wayfinding signage shall be provided per the details depicted on Attachment 3h.

Notes:

- Building numbers attached to building in contrasting color per OCFA specifications.
- Minor adjustments shall be allowed in the field, per the discretion of OCFA field inspector.

3. Gates (see Attachment 9):

- a. The current approved type of locking device is a Knox key switch (models 3501, 3502 and 3503) or the weatherproof padlock (model 3750, 3751 and 3752). Authorization forms are required by the Knox Company and may be obtained from OCFA Planning and Development Services.
- b. Openings for both ingress and egress of vehicles shall be a 13-foot minimum clear width, or as approved by the Chief. The vertical clearance shall not be less than 14-feet.
- c. The minimum inside turning radius is 17-feet, with an outside radius of 38' for the exterior and interior approach to the gate.
- d. Gates shall be located a minimum of 56-feet from the street for commercial property and gated communities. Private driveways serving one single-family residence are exempt from this requirement. If existing conditions prevent installation with a 56-foot setback, a letter documenting an acceptable alternative to facilitate emergency ingress (without endangering the public and/or emergency response) must be submitted for review and approval by the Chief. (see Attachment 9)
- e. Electrically Operated Gates: The design and installation of all electrically operated gates shall be in accordance with the following criteria: (see Attachment 9)
 - 1) The gate control shall be operable by an approved emergency override key switch that is an integral part of the mechanism. In the event of a power failure, the gate shall automatically be transferred to a fail-safe mode allowing the gate to be pushed open without the use of special knowledge or equipment.
 - 2) The key switch shall be labeled with a permanent red sign with not less than 1/2-inch contrasting letters reading "Fire Dept" or a "Knox" decal.

Ranch Plan Fire Protection Program

- 3) A transmitter-operated gate shall have a key switch on the right side of the gates opening approximately 48-inch above the roadway surface. It shall be visible and easily accessible with a label as specified above. See detail below.
- 4) Upon activation of the key switch, the gate shall remain open until returned to normal operation by means of the key switch.
- 5) A 27-foot minimum unobstructed setback is required from a gate to the first right turn to allow for apparatus clearance.
- 6) OCFA requires "Opticom" or Click2Enter opening devices on all new electric gates. These systems open gates for a minimum of 60 seconds when the emergency responder clicks an 800 MHz radio receiver (Click2Enter) or through a coded strobe light (Opticom). OCFA's preference is that RMV Community Development selects a standard technology applied throughout the entire Ranch Plan community.

4. Hydrant and Water Availability Requirements:

- a. Fire Flows: Applicants must provide documentation that hydrants are provided in the quantity and spacing described in California Fire Code (CFC) Appendix III-B and are capable of delivering the amount of water required by CFC Table A-III-A-I. Attachments 10, 11 and 12 specify the hydrant flow, duration, number and spacing requirements. This information shall be included on all Fire Master Plans to assist in the determination of the fire flow requirement.
- b. Water Availability: Prior to tentative tract map approval the applicant must fill out an OCFA Water Availability form and obtain a Santa Margarita Water District (SMWD) will serve letter, including a fire flow modeling calculation and an SMWD signature on the last section on the Water Availability form. No fire flow test is required until all applicable curbs and gutters have been installed. Blue-line the completed form or data sheets onto your plans or include the original with each Tract Map/Fire Master Plan submittal.
- c. Fire Area – Fire area is used to determine the potential fire load present at a site and the resultant water supply necessary to effectively combat a fire of that size and protect adjacent structures. Typically, multiple buildings of similar construction located within 20 feet of each other are considered to be part of the same fire area, unless otherwise separated in accordance with Table 5-A of the CBC or provided with an unpierced four hour area separation walls. The floor area of each floor in multi-story buildings must be included in the fire area calculation. *Exception: The fire area of buildings constructed of Type I or II-FR construction shall be the area of the three largest successive floors.* Adjacent, accessory structures of non-combustible construction (e.g., covered walkways, metal shade structures, concrete block trash enclosures) need not be included in fire area calculations.

Ranch Plan Fire Protection Program

- d. Hydrant Location – Hydrants shall be provided along the length of the fire access roadway in the quantities and up to the maximum distances prescribed in CFC Table A-III-B-1. (See Attachments 10, 11 and 12a).
 - 1) Hydrants must be located no more than five feet from the edge of a fire access roadway and cannot be located in areas where they will be visually or operationally obstructed (behind fences or walls, in bushes, behind parking spaces, etc.). Where hydrants cannot be placed within five feet of a fire access roadway, they may be placed up to ten feet away, provided there is a 10' wide clear walkable surface with the hydrant clearly visible from the roadway. Clearance shall be provided to a distance no less than three feet from the perimeter of the hydrant.
 - 2) The hydrant outlets must face the fire access roadway.
 - 3) The hydrant shall be located at least 40 feet from the building(s) it serves; 20 feet from buildings less than three stories. Where it is impractical to locate the hydrant 40 feet from adjacent structures, it may be located closer provided that nearby walls do not contain openings and the hydrant is not otherwise located where it can be rendered inoperable due to damage from collapsed walls, debris, or excessive heat.
 - 4) Hydrants and fire department connections (FDCs) shall be located so that a hose line running between the hydrant and the FDC does not cross driveways, obstruct roads or fire lanes, or otherwise interfere with emergency vehicle response and evacuation of a site. This requirement may be waived by OCFA in instances where the following criteria are met:
 - a) Multiple exits are available
 - b) Hose line would not be crossed.
 - 5) Hydrants and fire department connections shall not be located behind parking stalls or in other locations where they are likely to be blocked by vehicles or other objects.
 - 6) Where tapered intersections are present, this is a preferable location due to the lack of parked vehicles.
- 2) Protection of Hydrants – Where hydrants are located such that they are exposed to potential damage from vehicular collision, they shall be protected by curbs or bollards. See Attachment 13.
 - 1) If vehicles can approach the hydrant from more than one direction, the hydrant shall be protected by four bollards of concrete-filled pipe four inches in diameter and mounted in concrete in a square around the hydrant. The bollards need to be spaced a minimum of three feet from the perimeter of the hydrant. The bollards must be placed so that their location does not impede access to or use of the hydrant. Two bollards may protect hydrants that can be approached from only one side.
 - 2) Hydrants may not require protection by bollards if they are located such that the potential for collision is minimal or if they are sufficiently protected by a standard concrete curb six inches or greater in height.

Ranch Plan Fire Protection Program

- 3) Hydrant Markers – Blue reflective pavement markers shall be used to identify fire hydrant locations. Blue reflective markers used for any other purpose should be removed. See Attachment 12b.
 - 1) Two-way streets and roads – Markers shall be placed six inches from the edge of the painted centerline or from the approximate center of streets without a painted centerline on the side nearest the hydrant.
 - 2) Streets with left turn lanes at the intersection – Markers shall be placed six inches from the edge of the painted white line on the side nearest the hydrant.
 - 3) Streets with continuous two-way left turn lane – Markers shall be placed six inches from the edge of the painted yellow barrier on the side nearest the fire hydrant.
5. Access Walkways Multi-family Projects:
 - a. Second story or higher rescue windows shall remain clear of vegetation that would impede access to or laddering of rescue windows and the required walkable surface to these areas shall remain clear of items, such as condensers and other obstructions. Equipment, storage units, furniture, fences, locked gates, and other obstructions. A 5-foot walkable surface is to be provided a distance from the building determined by the formula “rescue window height divided by 5 plus 2-feet”.
 - b. Path of Travel Obstructions – The path of travel exit walkways shall remain clear of tall vegetation that would impede access these areas shall remain clear of items, such as condensers, equipment, storage units, furniture, fences, locked gates, and other obstructions.
6. Fire Authority Connection and Sprinkler Riser Valves:
 - a. If Detector Check serves as Primary Intake Valve (PIV), water control may be located up to 15’ from the fire access drive or right-of-way (see Attachment 14a).
 - b. Fire Department Connections (FDC) may be mounted on the address side of building with signage mounted on FDC or on a wall next to the FDC (see Attachment 14c)
 - c. Sprinkler Riser Valve Locations and Signage may be located within a utility room, with identification sign visible from exterior of building (see Attachment 14b)

Ranch Plan Fire Protection Program

7. Building Construction Features:

All proposed structures within the Ranch Plan Planned Community shall comply with the latest adopted CBC Chapter 7A or the latest adopted CRC Chapter R327, as listed on the applicable Fire Protection Program Screening Forms, depending on whether the structure is located within the Radiant Heat/Ember Mitigation area or the Ember Mitigation Zone only.

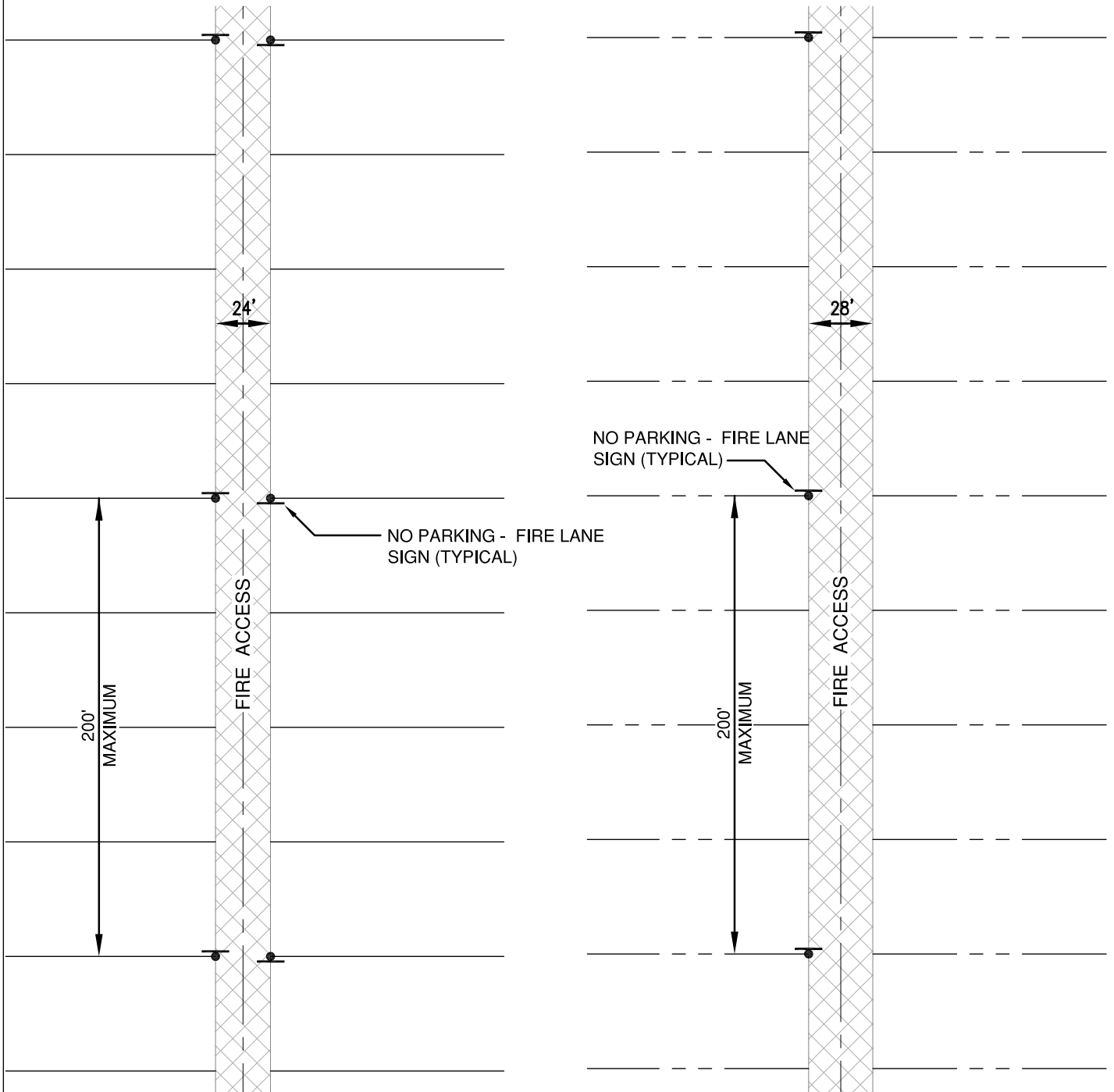
Fire Master Plans shall be approved prior to any "A" Tentative Tract Map per Condition of Approval 2.a. (RPFPP Section A.2.a.), and prior to any "B" Tentative Tract Map per Condition of Approval A.2.b. All Fire Master Plans shall include the location of the Radiant Heat/Ember Mitigation & Ember Mitigation Only zones per Attachment 15, and also show the appropriate Chapter 7A and R327 screening forms per Attachments 15a, 15b, 15c and 15d. The screening forms will be on the plan, and construction details R1 through R31 are referenced in Section F.

Attachment 15 and each applicable Fire Master Plan and Conceptual Fuel Modification Plan (per Conditions of Approval A.2.a, A.2.b and A.3.c and Section C.2) shall identify two science-based classifications:

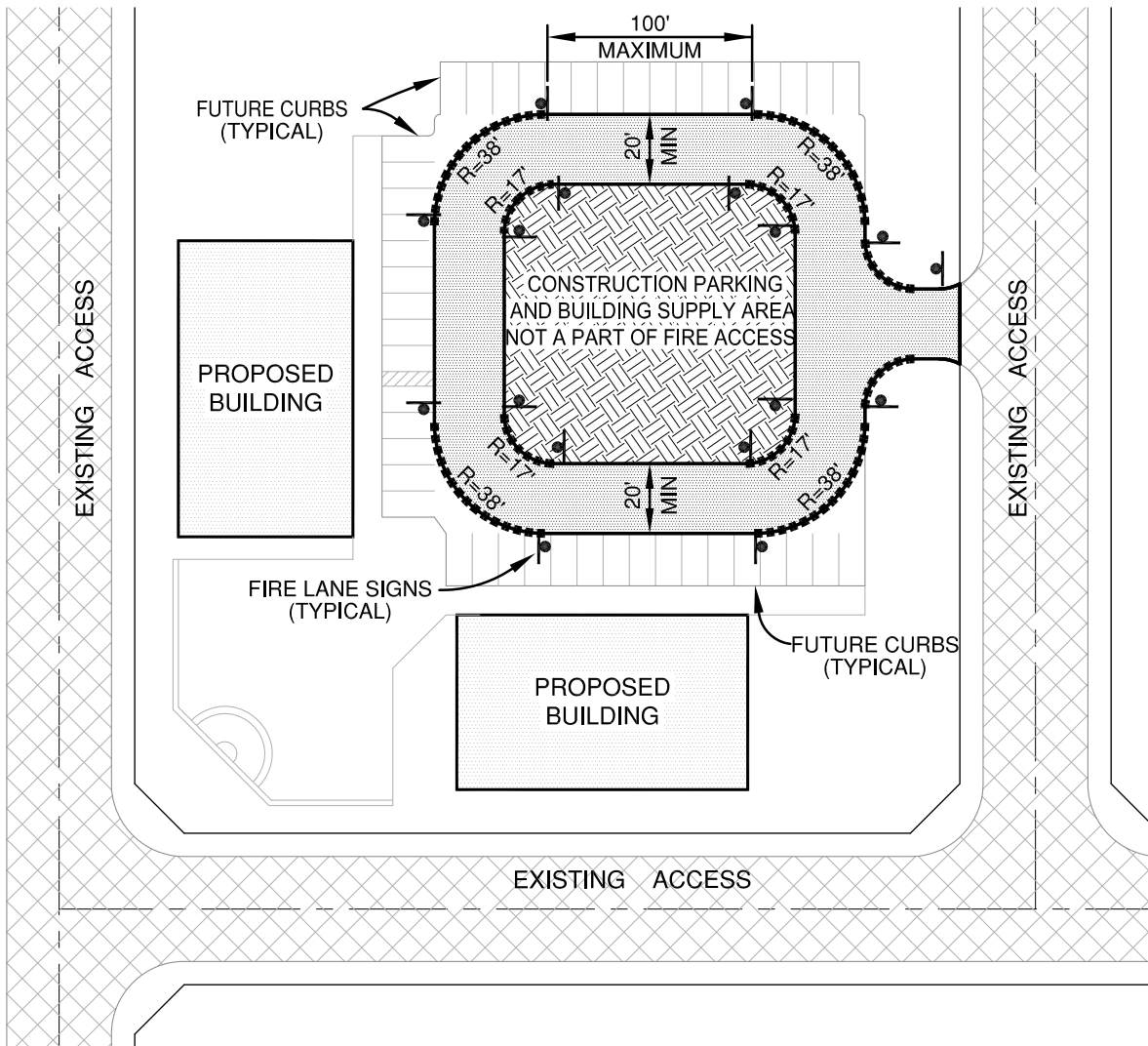
- **Radiant Heat/Ember Mitigation:** In areas vulnerable to radiant heat a classification would be created and maintained around the perimeter of each Planning Area (effecting all structures within 100' of the fuel modification zone or within 100' of community perimeter common areas designed to meet Section C.2.F) where special construction features are required in order to reduce impacts from radiant heat from a wildfire event (walls, windows and decks) and impacts from ember intrusion from a wildfire event (venting, decks and ornamental vegetation) to a scientifically-based level of non-significance.
- **Ember Mitigation Only:** All Ranch Plan development areas are potentially vulnerable to ember intrusion. Therefore, all construction within the Ember Mitigation Only zone shall require special construction features (venting, decks and ornamental vegetation) intended to reduce impacts from ember intrusion from a wildfire event to a scientifically-based level of non-significance.

8. Interior Landscaping: Per Ranch Plan Planned Community Program Text Condition of Approval No. 8 and Section II.D.1, all new landscaping plans proposed within the Ranch Plan Planned Community (development areas and fuel modification zones) shall be devoid of eucalyptus, juniper, cedar, cypress, acacia (*Acacia redolens* – Desert Carpet is allowed), pine trees, *Artemisia California* – California Sagebrush, *Adenostoma fasciculatum* - Chamise, *Eriogonum fasciculatum* – California Buckwheat, *Salvia mellifera* – Black Sage and *Salvia apiana* – White Sage (*Salvia leucantha* - Mexican Bush Sage and *Salvia greggi* species – Autumn Sage is allowed). This landscape palette restriction is to be recorded as part of all applicable CC&R documents and applies to all interior zones, not just within the Radiant Heat or Ember Mitigation Zones.

24' / 28' FIRE LANE NO PARKING SIGN LOCATIONS



TEMPORARY FIRE ACCESS



LEGEND



ALL WEATHER ACCESS ROAD
(SEE DESCRIPTION BELOW)



PARKING AND BUILDING SUPPLIES



EXISTING PAVED FIRE ACCESS



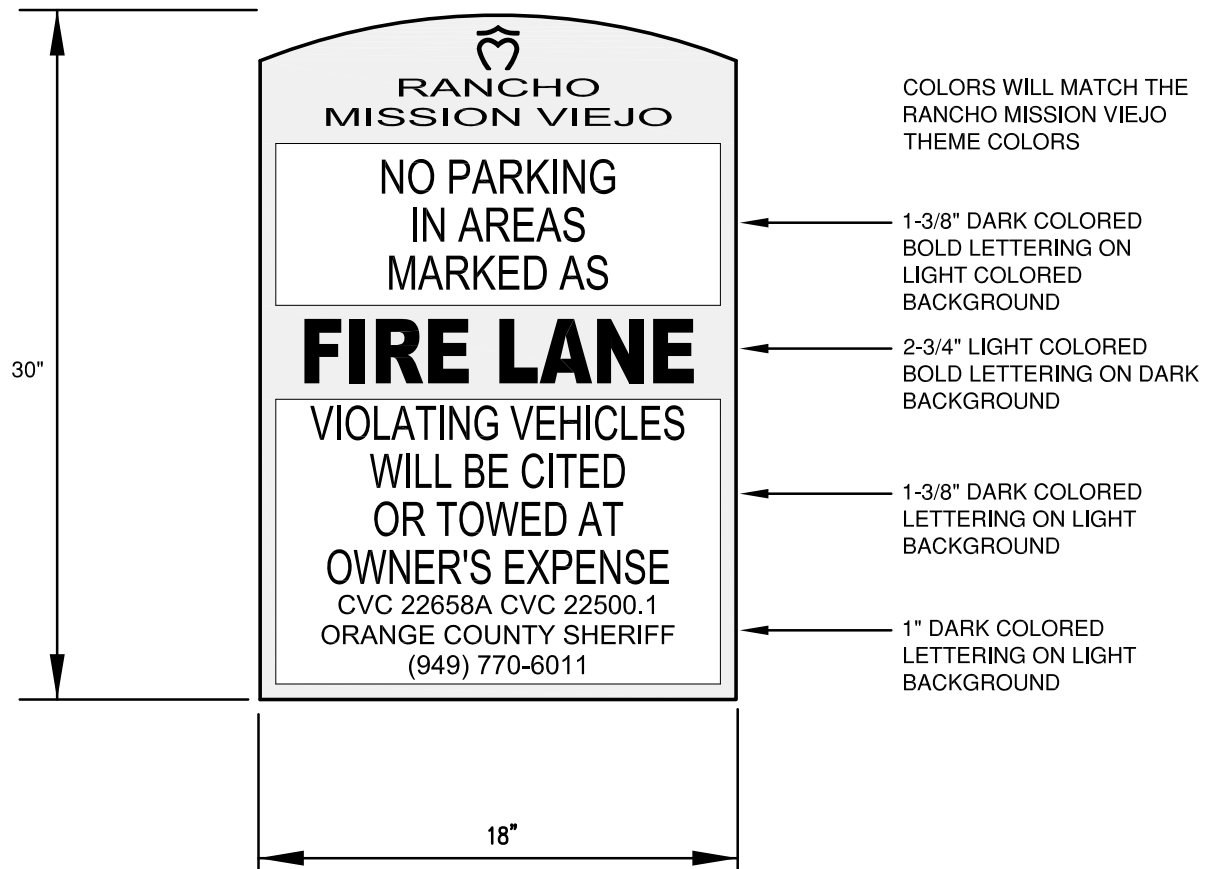
INSTALL SINGLE ROW SAND
BAGS, 2-HIGH ON TURNS



FIRE LANE SIGN (POST MOUNTED)
TEMPORARY ALL-WEATHER SIGNS
MAY BE USED DURING
CONSTRUCTION

- ALL-WEATHER ACCESS ROAD: PER DEFINITION IN RANCH PLAN FIRE PROTECTION GUIDELINES (SHEETS 2 OF 11 OF THE RANCH PLAN FIRE PROTECTION PROGRAM), SECTION F, DEFINITIONS.
- ALL-WEATHER SURFACE IS DEFINED AS PAVED SURFACES, PAVERS, GRAVEL-CRETE, LIME-TREAT OR EQUAL, AS CERTIFIED BY SOILS ENGINEER TO BE CAPABLE OF WITHSTANDING THE MINIMUM WEIGHT OF 68,000 POUNDS (WITH 90% COMPACTION) DURING ANY TYPE OF WEATHER.

FIRE LANE
ENTRANCE SIGN
-PUBLIC & PRIVATE STREETS-



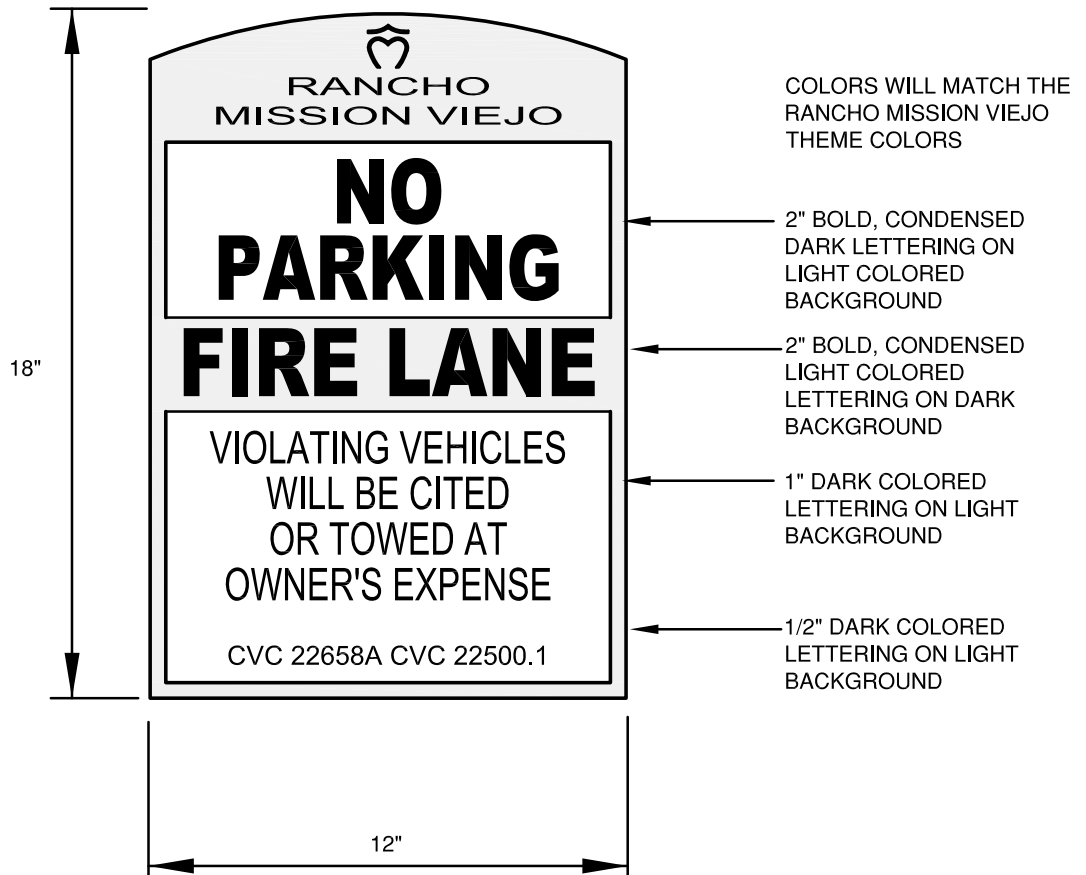
NOTES:

ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

THIS SIGN SHALL BE POSTED AT VEHICLE ENTRANCES TO PLANNING AREAS WITH FIRE LANE "NO PARKING" SIGNS. ADDITIONAL ENTRY SIGNS NOT REQUIRED TO INTERIOR PROJECTS WITHIN PLANNING AREAS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER RPFPP ATTACHMENT 3i.

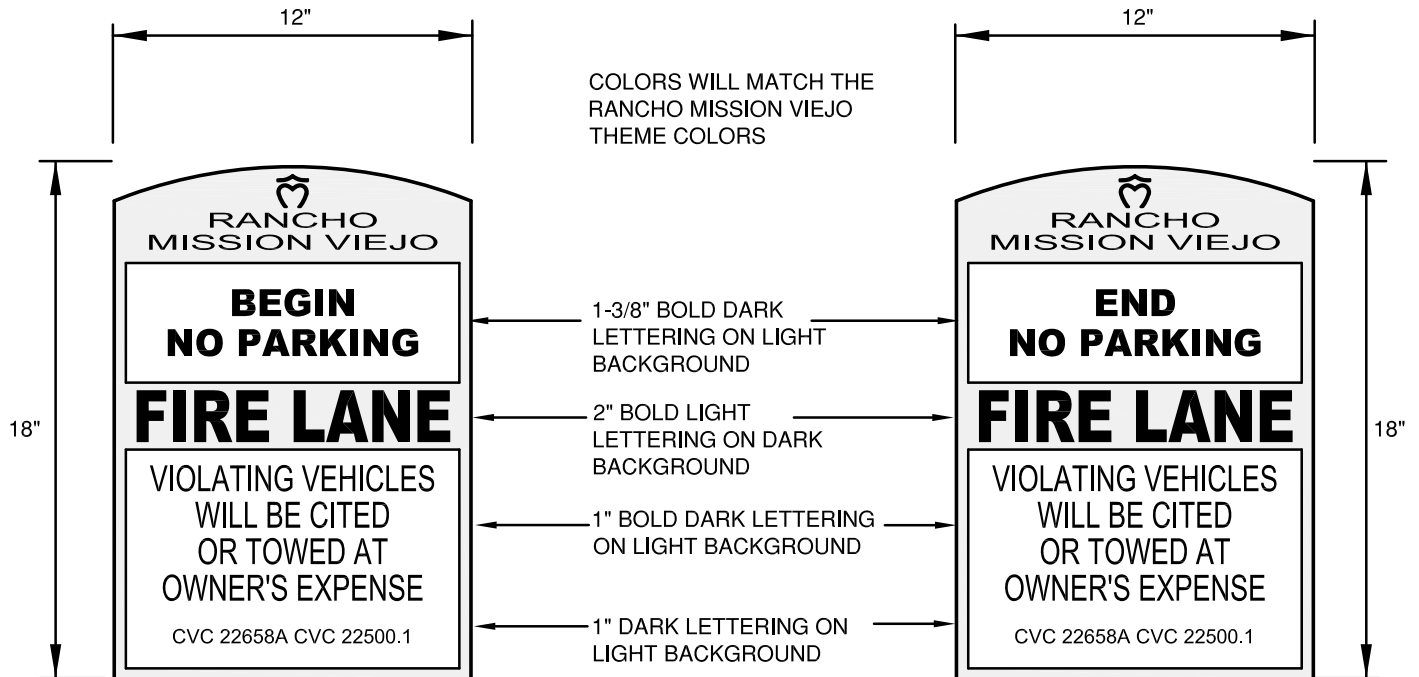
FIRE LANE
NO PARKING SIGN
-PUBLIC & PRIVATE STREETS-



ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER RPFPP ATTACHMENT 3i.

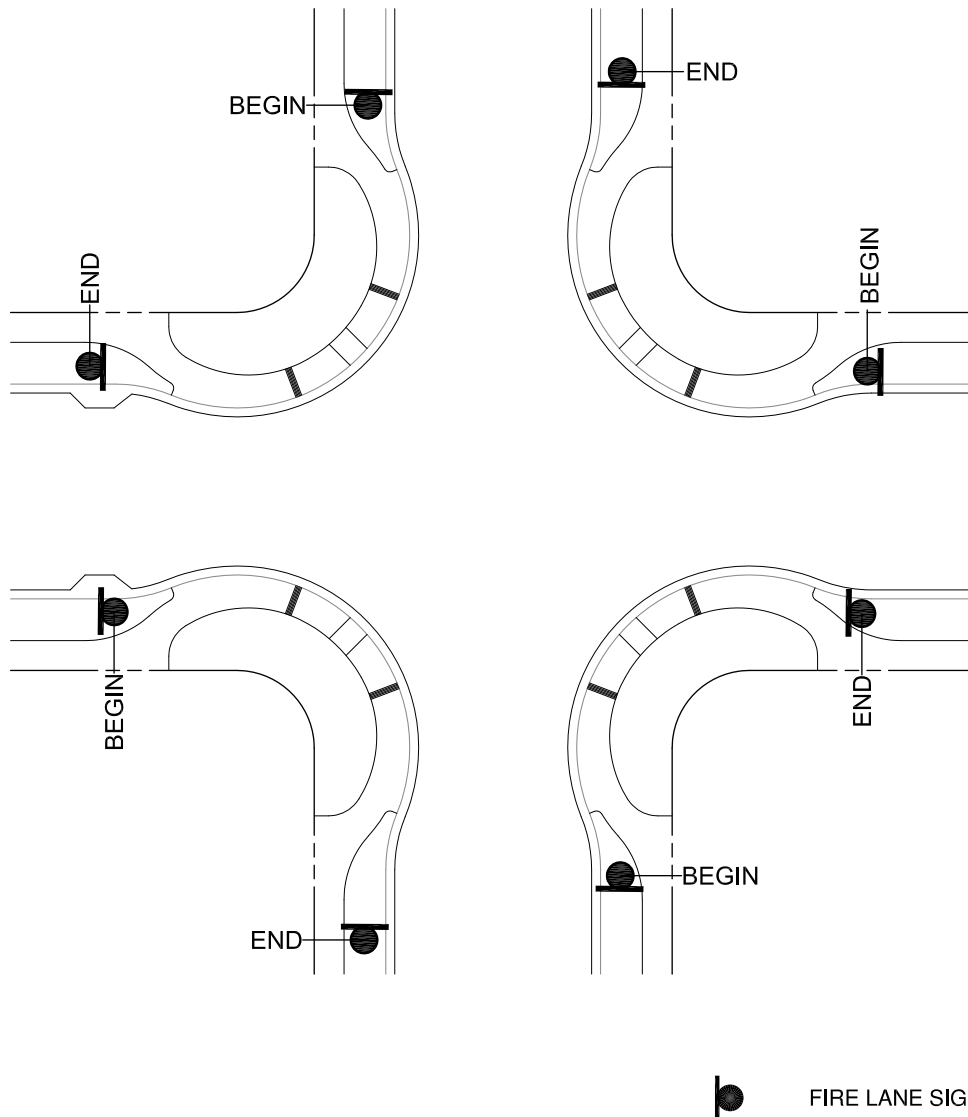
FIRE LANE
BEGIN / END NO PARKING SIGN
-PUBLIC & PRIVATE STREETS-



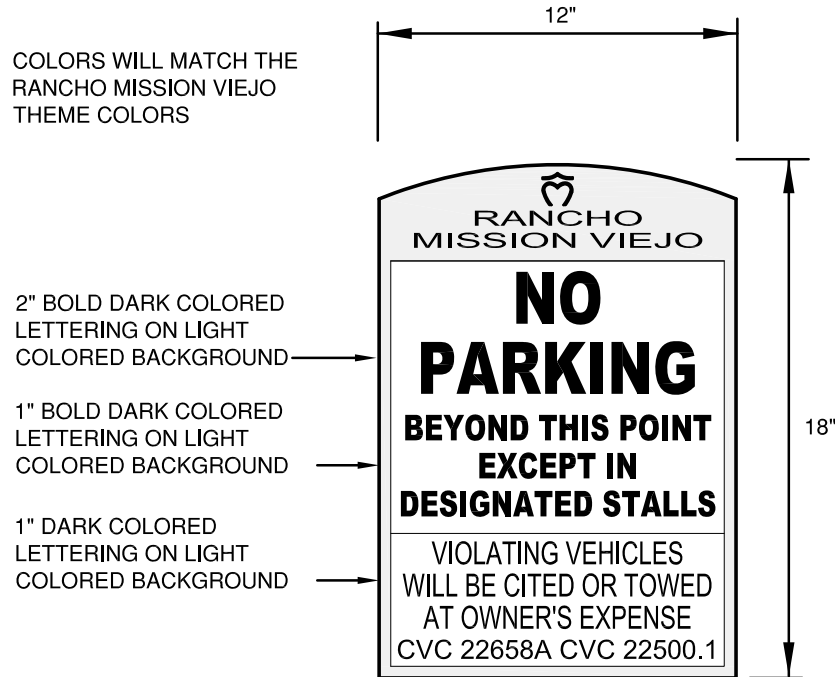
ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER RPPFP ATTACHMENT 3i.

FIRE LANE AT TAPERED INTERSECTION
BEGIN / END - NO PARKING SIGN
-PUBLIC & PRIVATE STREETS



FIRE LANE PARKING IN DESIGNATED AREAS



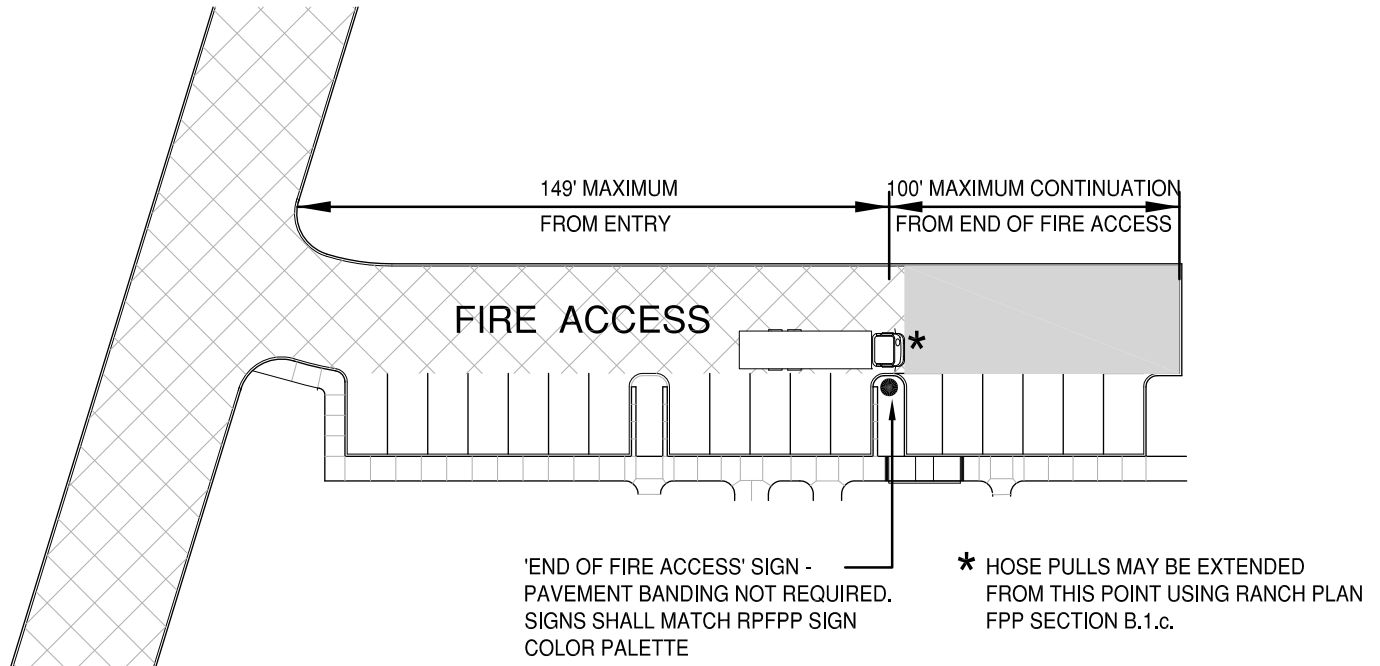
NOTES:

ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

THIS SIGN MAY BE USED IN LIEU OF NO PARKING SIGNS WHERE IDENTIFIED PARKING STALLS ARE PRESENT BEYOND THE AREA OF THIS SIGN'S PLACEMENT

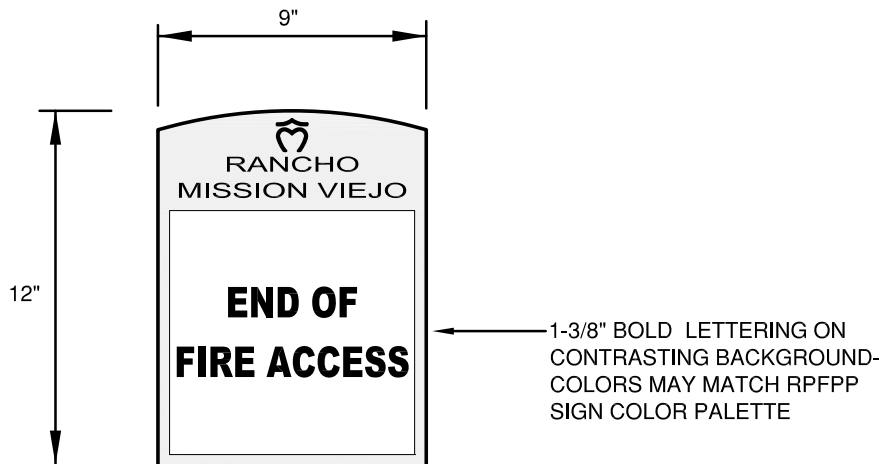
SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER RPFPP ATTACHMENT 3i.

END OF FIRE LANE LENGTHS & IDENTIFICATION



'END OF FIRE ACCESS' SIGN

12" X 9" SIZE



LEGEND



FIRE ACCESS ROAD



NOT A PART OF FIRE ACCESS
- SURFACE CONSTRUCTED
TO ACCEPT OCFA WEIGHT
REQUIREMENTS

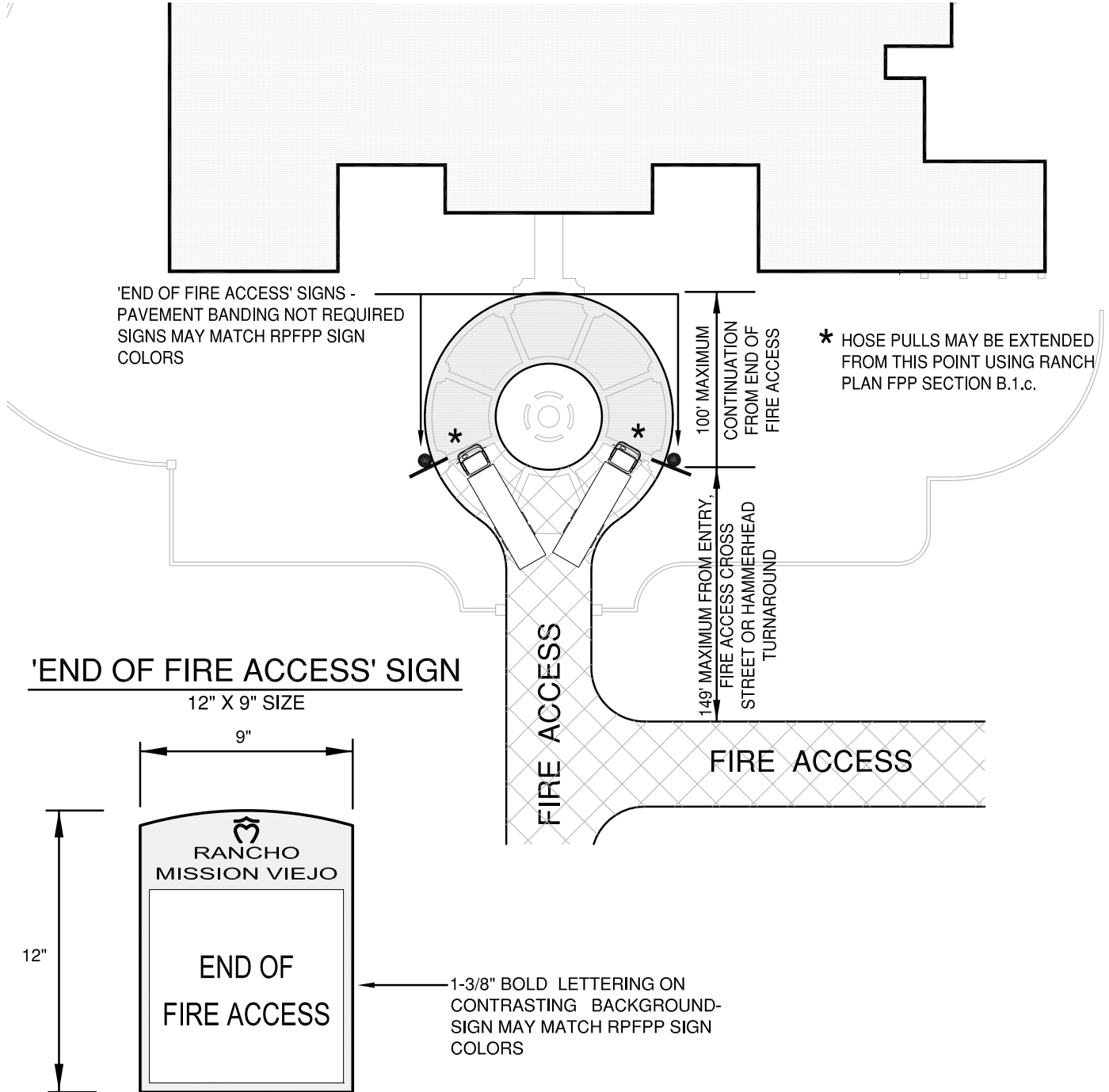


'END OF FIRE ACCESS' SIGN

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION
OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC
ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF
DURABLE MATERIAL AND INSTALLED PER ATTACHMENT 3i.



END OF FIRE LANE IDENTIFICATION



LEGEND



FIRE ACCESS ROAD



NOT A PART OF FIRE ACCESS
- SURFACE CONSTRUCTED
TO ACCEPT OCFA WEIGHT
REQUIREMENTS



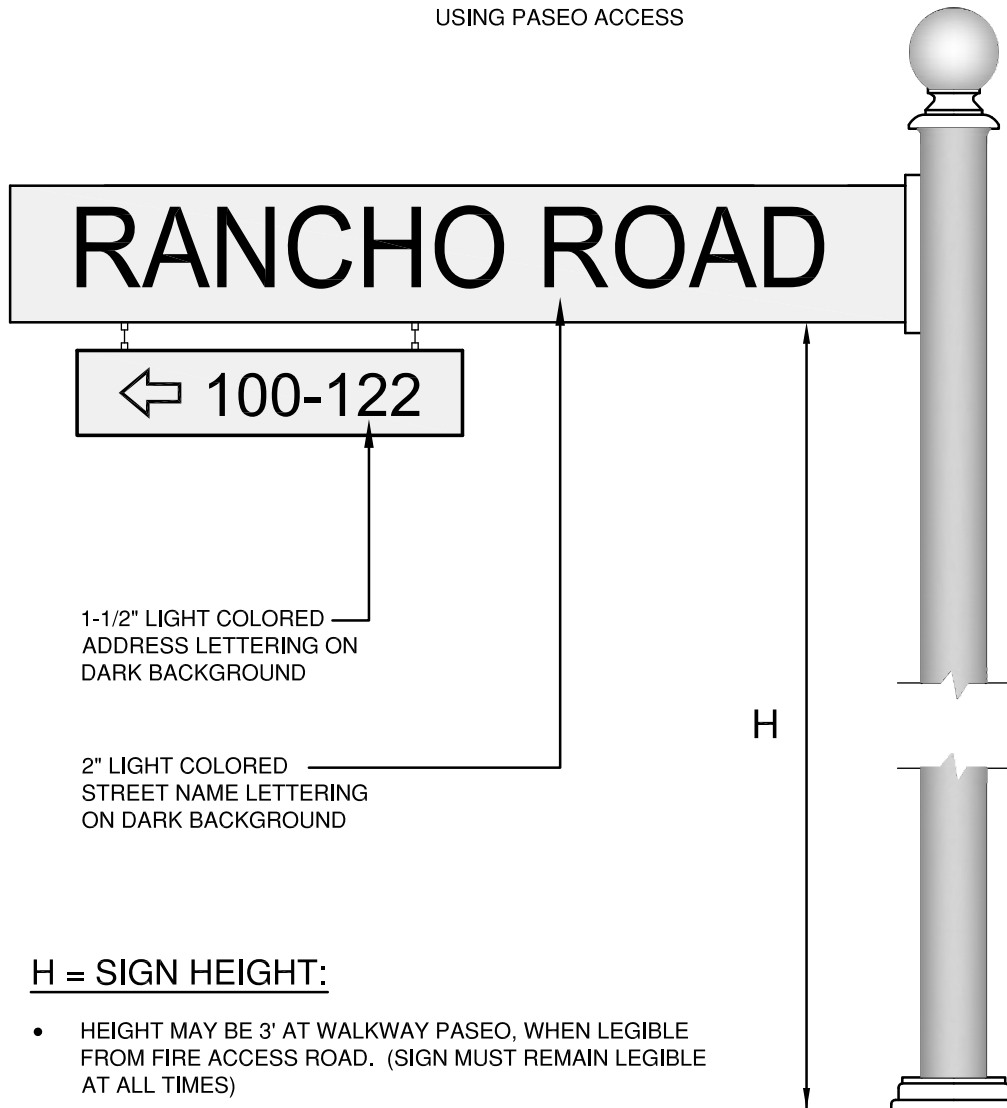
'END OF FIRE ACCESS' SIGN

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER ATTACHMENT 3i.



WAYFINDING SIGNAGE FOR PASEO ADDRESSES

FOR USE IN IDENTIFYING UNITS
USING PASEO ACCESS



NOTES:

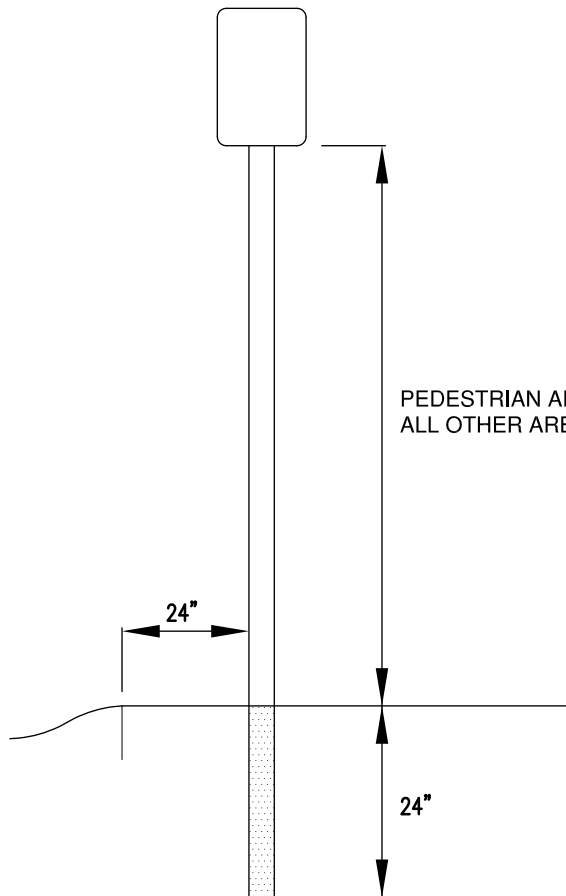
ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

COLORS WILL MATCH THE RANCHO MISSION VIEJO THEME COLOR.

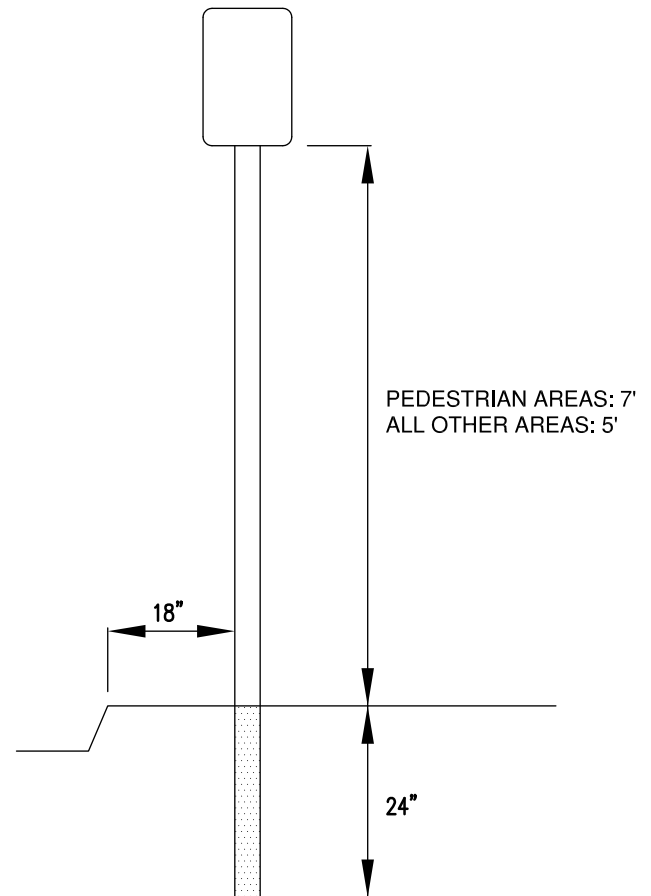
ILLUSTRATED SIGN IS AN EXAMPLE FOR SIGN & FONT DIMENSIONS. FINAL DESIGN OF SIGN BY DEVELOPER.

SIGNS SHALL BE SECURELY MOUNTED AND CLEARLY VISIBLE FROM PASEO ENTRY. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER ATTACHMENT 3i EXCEPT FOR BUILDING HEIGHTS AS SHOWN ON THIS DETAIL.

MOUNTING SPECIFICATIONS FOR FIRE LANE SIGNS AND NO PARKING SIGNS



ROLLED CURB



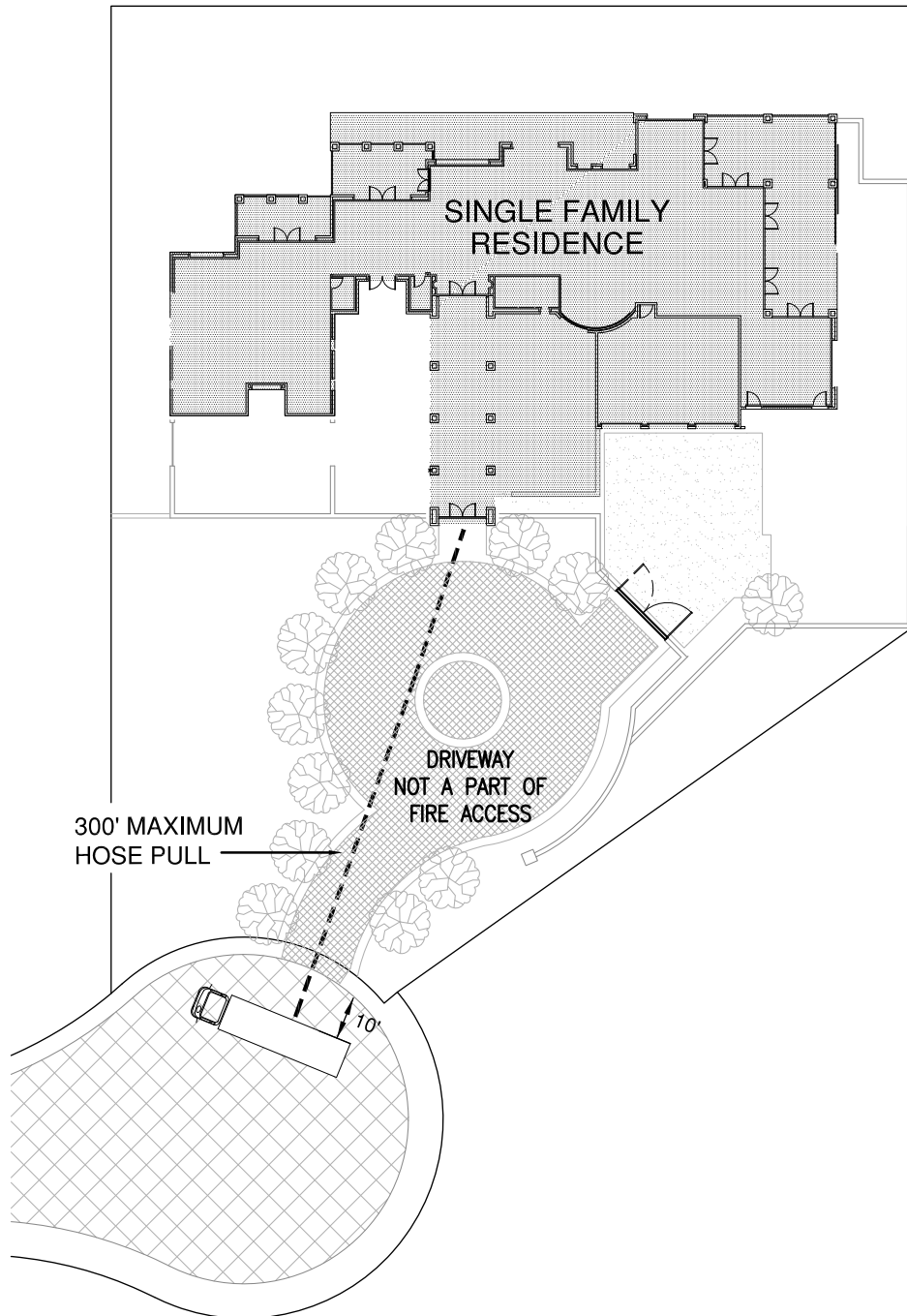
STANDARD CURB

SIGN SHALL BE MOUNTED FACING THE DIRECTION OF VEHICULAR TRAVEL.

SIGNS MAY BE MOUNTED ON EXISTING POSTS OR BUILDINGS IF CENTERLINE OF SIGN IS NO MORE THAN 24 INCHES FROM EDGE OF ROADWAY.

DEPTH OF BURY SHALL BE A MINIMUM OF 24".

SINGLE FAMILY RESIDENCE HOSE PULL



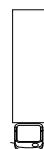
LEGEND



NOT A PART OF FIRE ACCESS



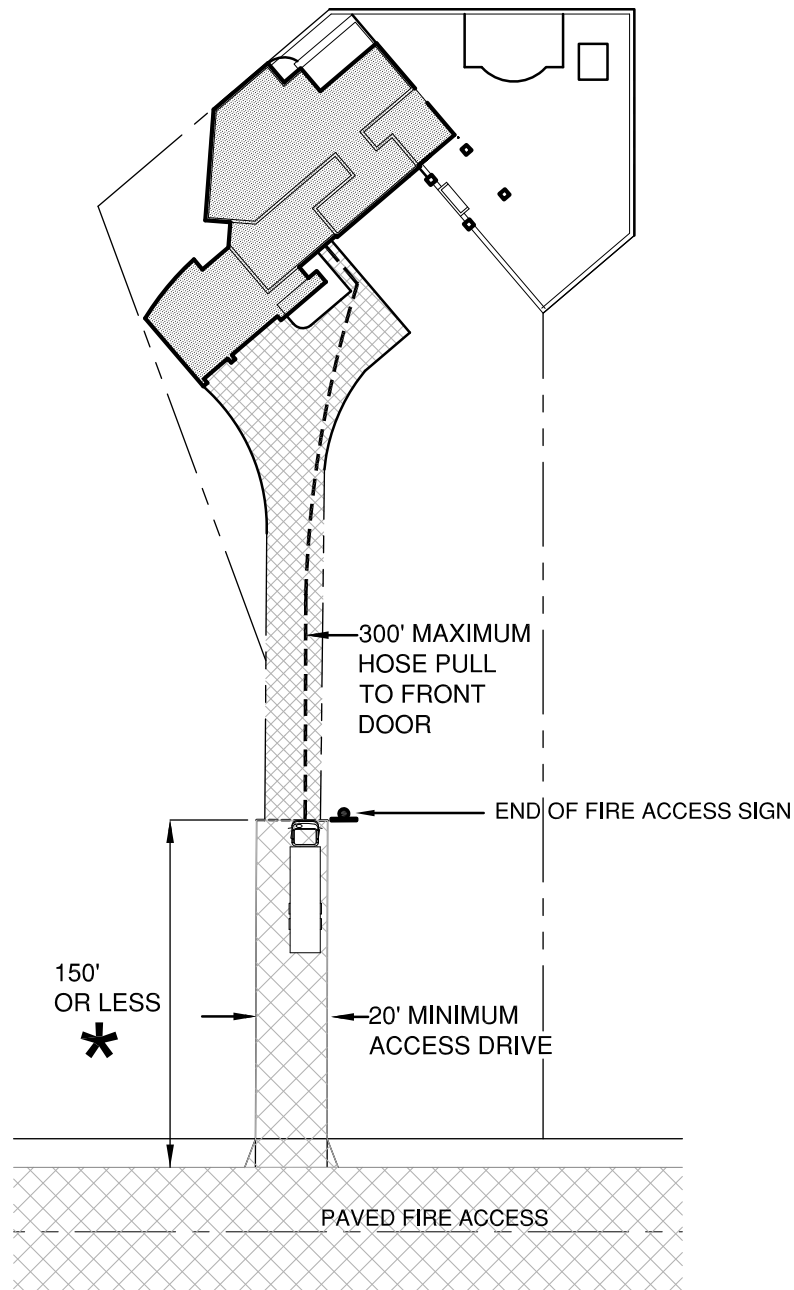
PAVED FIRE ACCESS (CONSTRUCTED TO ACCEPT 68,000 LBS AT 90% COMPACTION)



300' HOSE PULL PATH TO FRONT DOOR



SINGLE FAMILY RESIDENCE HOSE PULL WITH DRIVE ACCESS



LEGEND



NOT A PART OF FIRE ACCESS



PAVED FIRE ACCESS (CONSTRUCTED TO ACCEPT 68,000 LBS AT 90% COMPACTION)



END OF FIRE ACCESS SIGN



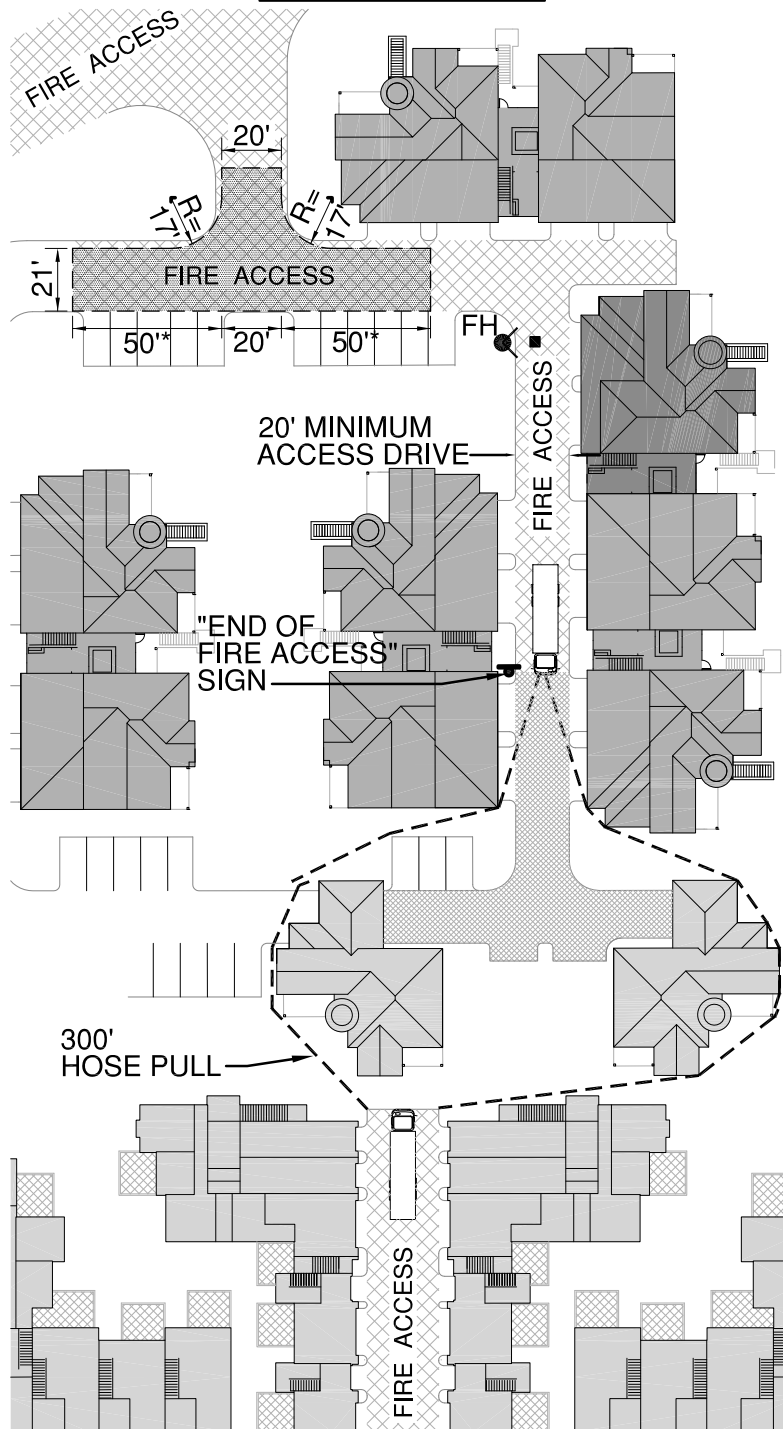
NOTE: ANY DRIVE OVER 150' SHALL BE PROVIDED WITH FIRE DEPARTMENT TURNAROUND



300' HOSE PULL PATH TO FRONT DOOR



MULTIPLE FAMILY RESIDENCE HOSE PULL



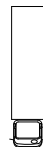
LEGEND



NOT A PART OF FIRE ACCESS



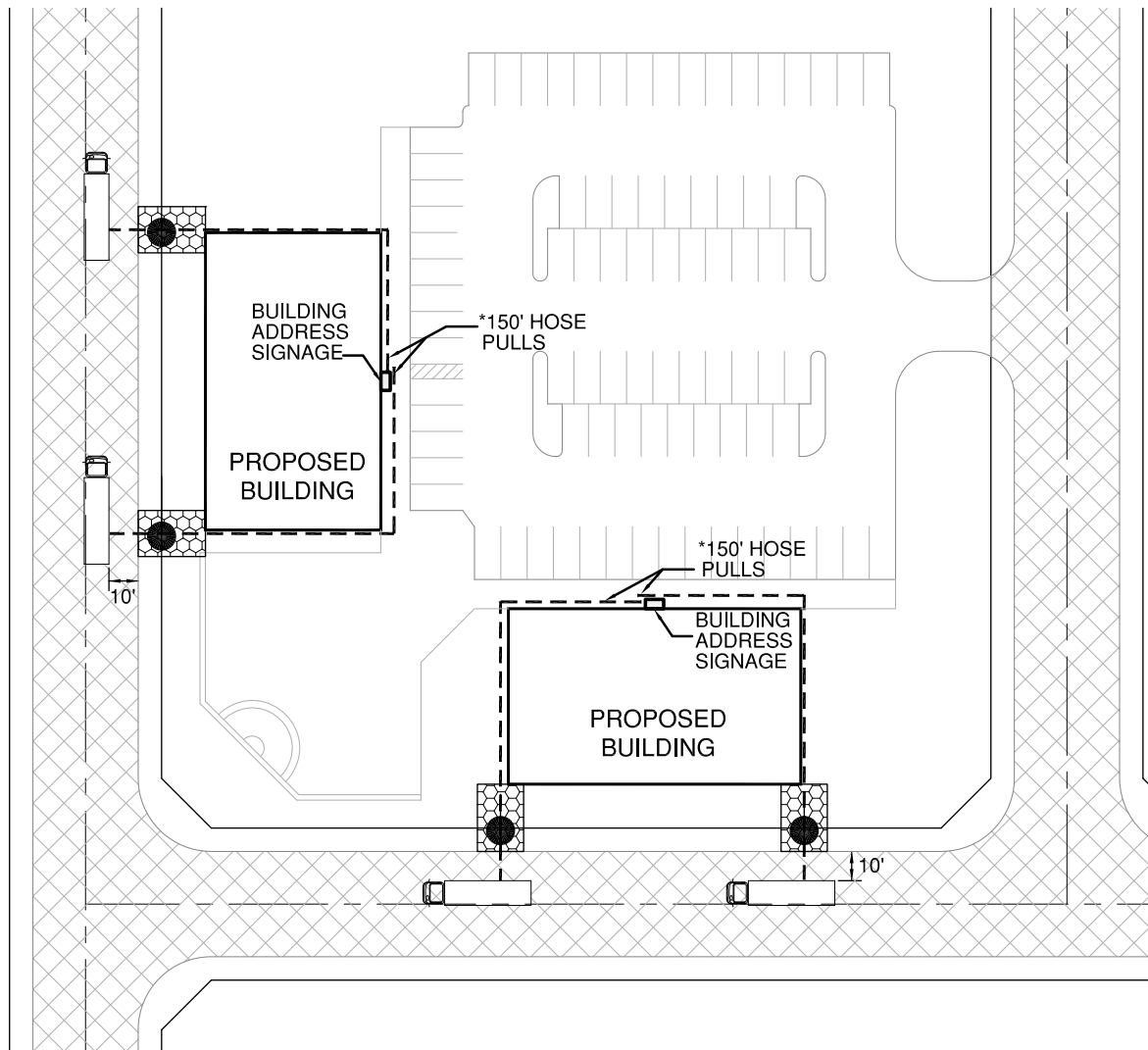
PAVED FIRE ACCESS (CONSTRUCTED TO ACCEPT 68,000 LBS AT 90% COMPACTION)



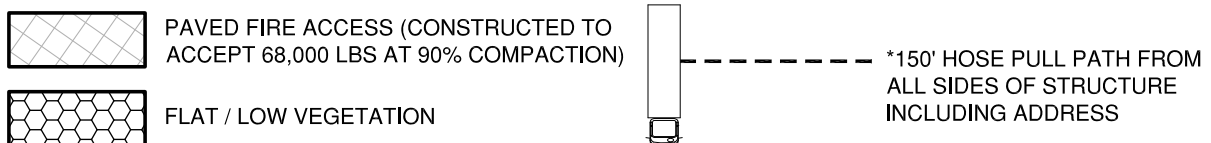
300' HOSE PULL PATH FROM ALL SIDES OF STRUCTURE INCLUDING ADDRESS



NON-RESIDENTIAL EMERGENCY ACCESS HOSE PULL



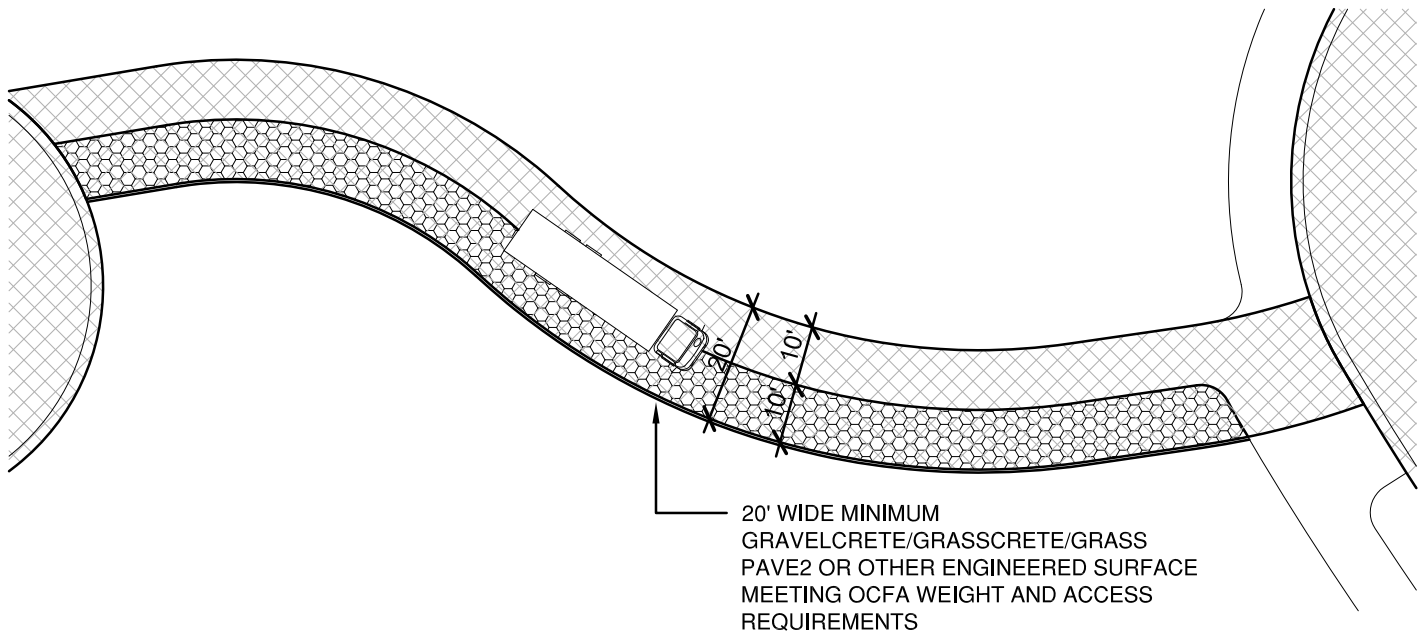
LEGEND



- BUILDING IDENTIFICATION LOCATIONS
- 5' WALK THROUGH GATE SHALL BE PROVIDED IF FENCE IS INSTALLED THROUGH ACCESS

* NOTE:
HOSE PULLS NOT MEETING THE 150' HOSE PULL REQUIREMENT MAY BE INCREASED TO 225' LENGTH WITH AN INCREASE IN FIRE SPRINKLER DENSITY OF ONE PROTECTION LEVEL HIGHER THAN REQUIRED BY THE ADOPTED NATIONAL STANDARDS.

ENGINEERED ALTERNATE ROADWAY ACCESS REQUIREMENT



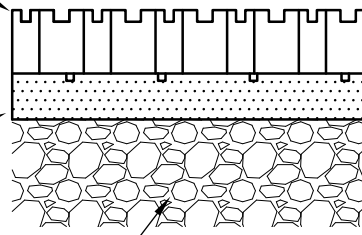
GRASS PAVE2, GRAVELCRETE OR
APPROVED EQUAL

5/8" SOD PLANTING LEVEL INSIDE
PAVER GRIDWORK

SAND PLANTING BASE TO RECEIVE
PAVER GRIDWORK PER
MANUFACTURER'S SPECIFICATIONS

HEAVY VEHICLE SUB-BASE 3/4" CRUSHED ROCK
OR CLASS 2 ROAD BASE, OR AS RECOMMENDED
BY MANUFACTURER, AND/OR GEOTECHNICAL
SOIL ENGINEER'S RECOMMENDATIONS. VERIFY
WITH LOCAL FIRE AUTHORITY REQUIREMENTS

SECTION



MINIMUM 4" WIDE CURB OR
PAVING CONSTRUCTED TO
ACCEPT OCFA 68,000 LBS
WEIGHT REQUIREMENTS.

12"
MIN.

NOTE: CONFIRM GRAVEL BASE
DIMENSIONS WITH GEOTECH SOILS
REPORT PRIOR TO INSTALLATION.

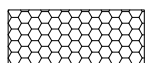
NOTES FOR GRAVELCRETE/GRASSCRETE/GRASS-PAVE2 INSTALLATION:

- GRAVELCRETE, GRASS-PAVE2 OR OTHER ENGINEERED SURFACE WILL BE INSTALLED TO ACCEPT OCFA WEIGHT STANDARDS OF 68,000 LBS AT 90% COMPACTION
- MAXIMUM GRADE FOR GRAVELCRETE/GRASS-PAVE2 DRIVE PER MANUFACTURE'S SPECIFICATION OF 5% MAXIMUM FOR FIRE ACCESS DRIVES
- GRAVELCRETE/GRASS-PAVE2 WILL HAVE A MINIMUM 4" WIDE CONCRETE BORDER, CAPABLE OF ACCEPTING OCFA WEIGHT STANDARDS OF 68,000 LBS AT 90% COMPACTION
- SURFACE WILL BE MAINTAINED TO KEEP DRIVE IN OPERABLE CONDITION, AS IS SUBJECT TO OCFA FIELD INSPECTION AT ALL TIMES.
- DRIVE LENGTH MAY BE A MAXIMUM OF 300' IN LENGTH

LEGEND



FIRE ACCESS ROAD



GRAVELCRETE/GRASS-PAVE 2 OR OTHER OCFA
APPROVED ENGINEERED ALTERNATE SURFACE

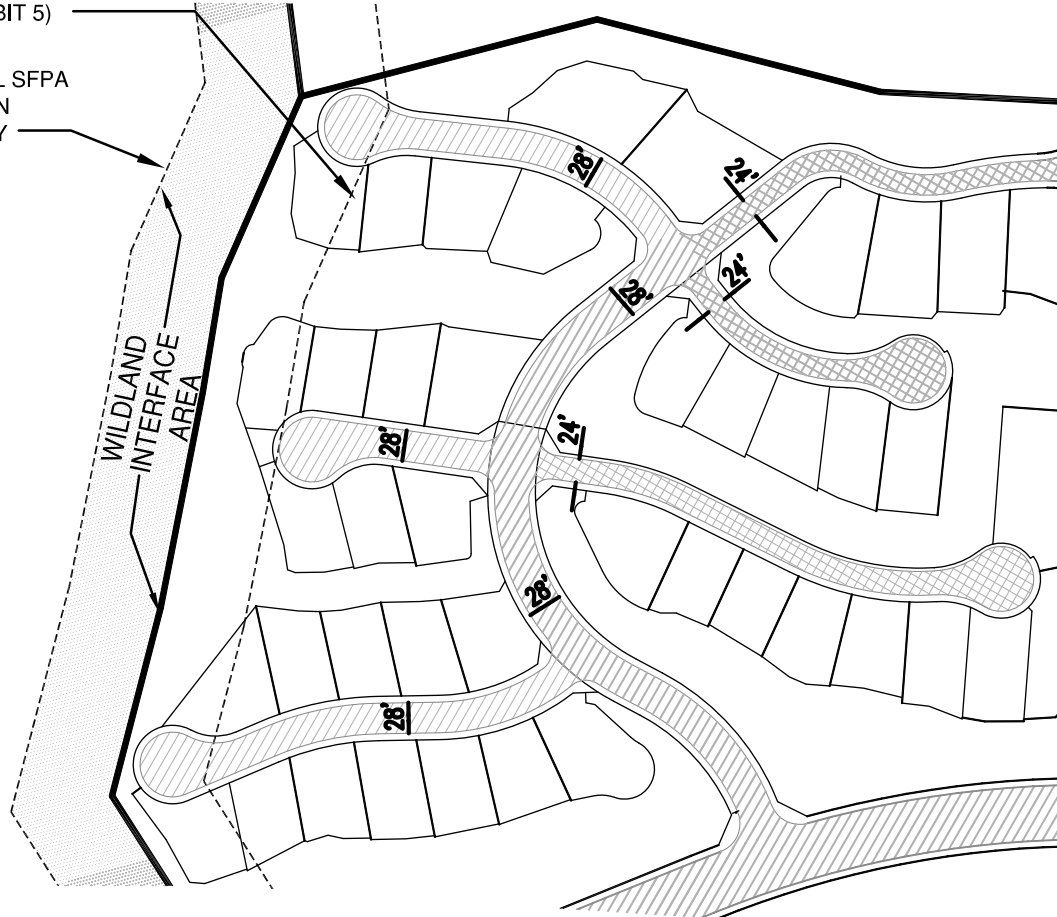


RANCHO MISSION VIEJO

STREET WIDTHS

100' SET BACK AREA FROM
FUEL MODIFICATION ZONE
(SEE EXHIBIT 5)

POTENTIAL SFPA
EXCLUSION
BOUNDARY



LEGEND



NOT A PART OF PRIMARY ACCESS
TO WILDLAND INTERFACE AREA
20' TO 24' STREET WIDTHS
ACCEPTABLE (NO STREET
PARKING)



PRIMARY ACCESS
TO WILDLAND INTERFACE AREA
28' MINIMUM STREET WIDTHS
ACCEPTABLE -WITH PARKING ON
ONE SIDE OF STREET
36' MINIMUM DRIVE WIDTHS
ACCEPTABLE
-WITH PARKING ON BOTH SIDES OF
STREET

FIRE ACCESS ROAD WIDTHS MINIMUM FIRE ACCESS STAGING OPERATION



LEGEND



FIRE ACCESS ROAD



20' MINIMUM DRIVE FOR FIRE ACCESS. DRIVE WILL NOT BE USED FOR FIRE STAGING OPERATIONS



150' MAXIMUM HOSE PULL PATH FROM ALL SIDES OF STRUCTURE

MINIMUM FIRE ACCESS DRIVE WIDTH

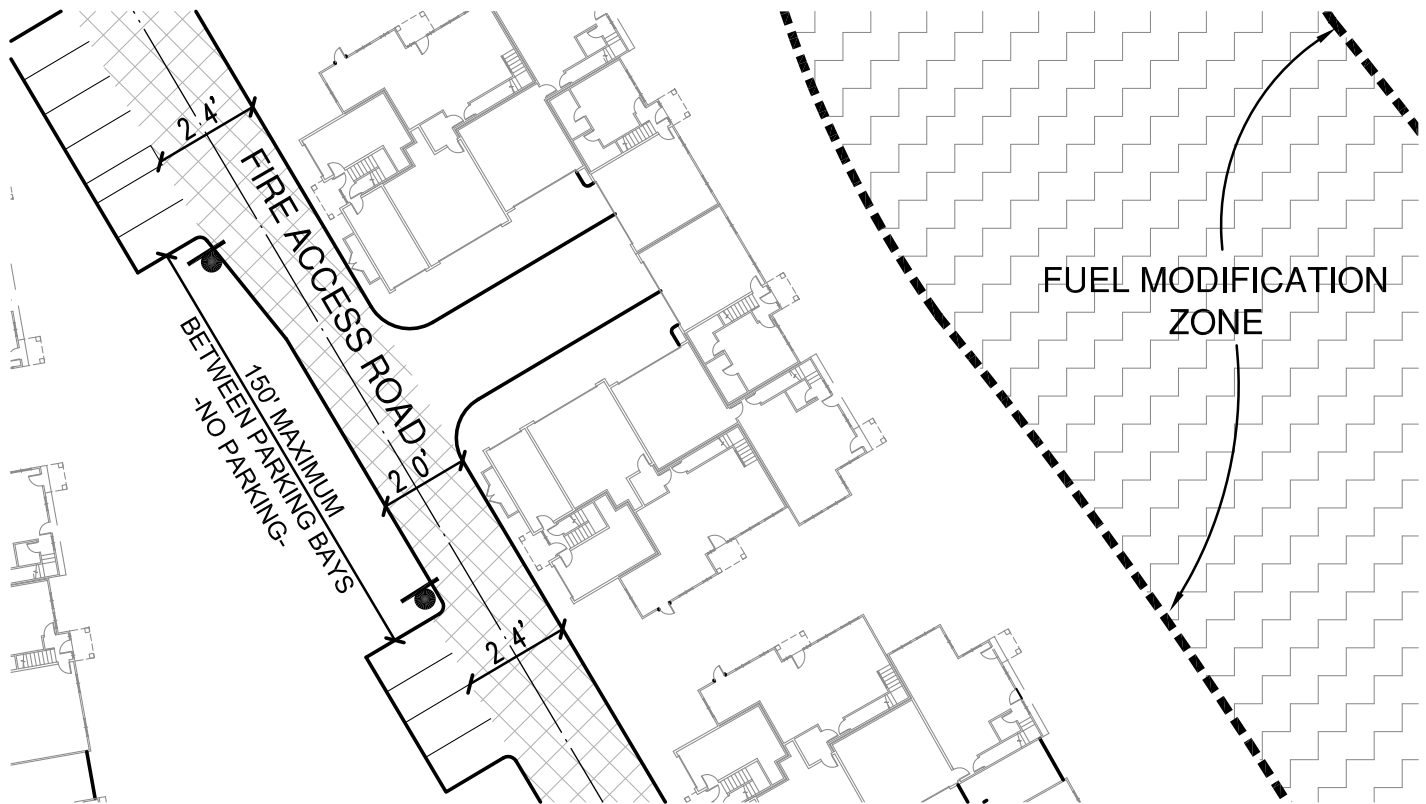
20' WIDE MINIMUM DRIVE MAY BE USED AS FIRE ACCESS

WHEN:

- HOSE PULL LENGTH REACHES ALL SIDES OF STRUCTURE WITHOUT STAGING ON DRIVE



FIRE ACCESS ROAD WIDTHS ADJACENT TO FUEL MODIFICATION ZONES



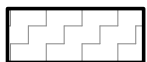
MINIMUM FIRE ACCESS DRIVE WIDTHS

- 24' WIDE WHERE HEAD-IN PARKING IS PROVIDED WITH MAXIMUM PARKING BAY SPACING AT 150'
- 28' WIDE WITH PARALLEL PARKING

LEGEND



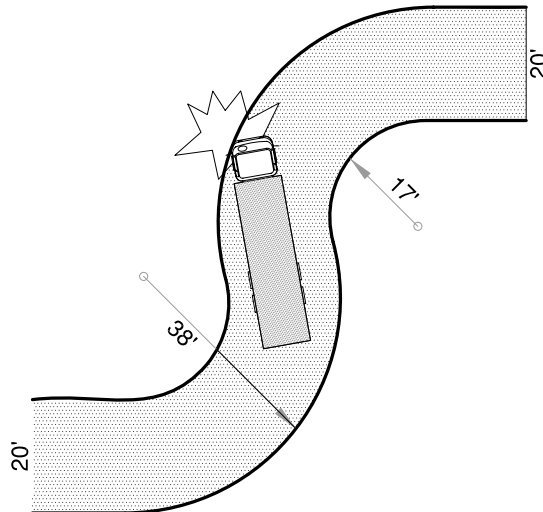
FIRE ACCESS ROAD



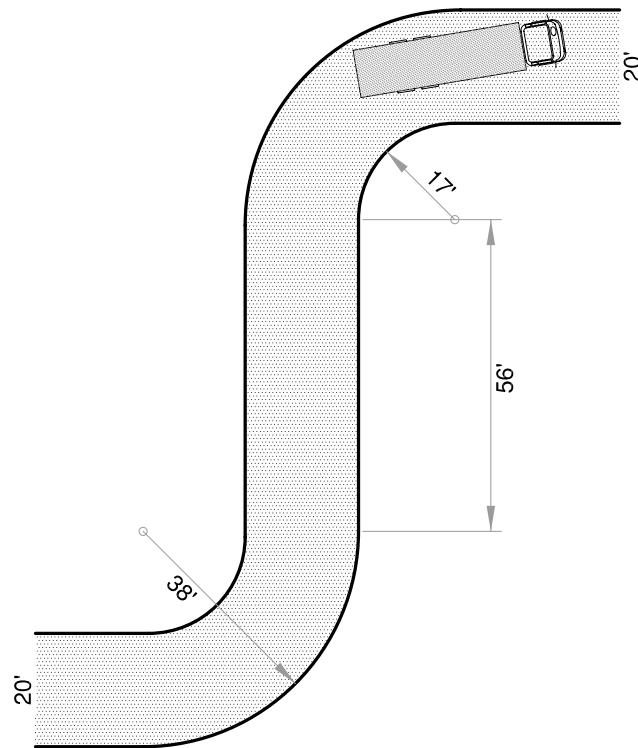
FUEL MODIFICATION ZONE
ADJACENT TO PROJECT



'NO PARKING' FIRE LANE SIGN

"S" CURVES

OCFA APPARATUS MAY BE UNABLE TO NEGOTIATE TIGHT "S" CURVES SUCH AS THE ONE AT LEFT. AUTO TURN SOFTWARE (OR EQUIVALENT) MAY BE USED TO DEMONSTRATE THAT TURNING RADII IS MANEUVERABLE BY OCFA APPARATUS.



A 56' STRAIGHT LEG MAY BE REQUIRED BETWEEN THE TURNS IN A COMPOUND CURVE TO PROVIDE SUFFICIENT RECOVERY DISTANCE FOR THE APPARATUS. ALTERNATIVELY, THE LENGTH OF THE STRAIGHT LEG MAY BE REDUCED IF THE ROAD WIDTH AND/OR TURNING RADII ARE INCREASED TO ALLOW FOR A WIDER TURN. AUTO TURN SOFTWARE (OR EQUIVALENT) MAY BE USED TO DEMONSTRATE THAT TURNING RADII IS MANEUVERABLE BY OCFA APPARATUS.

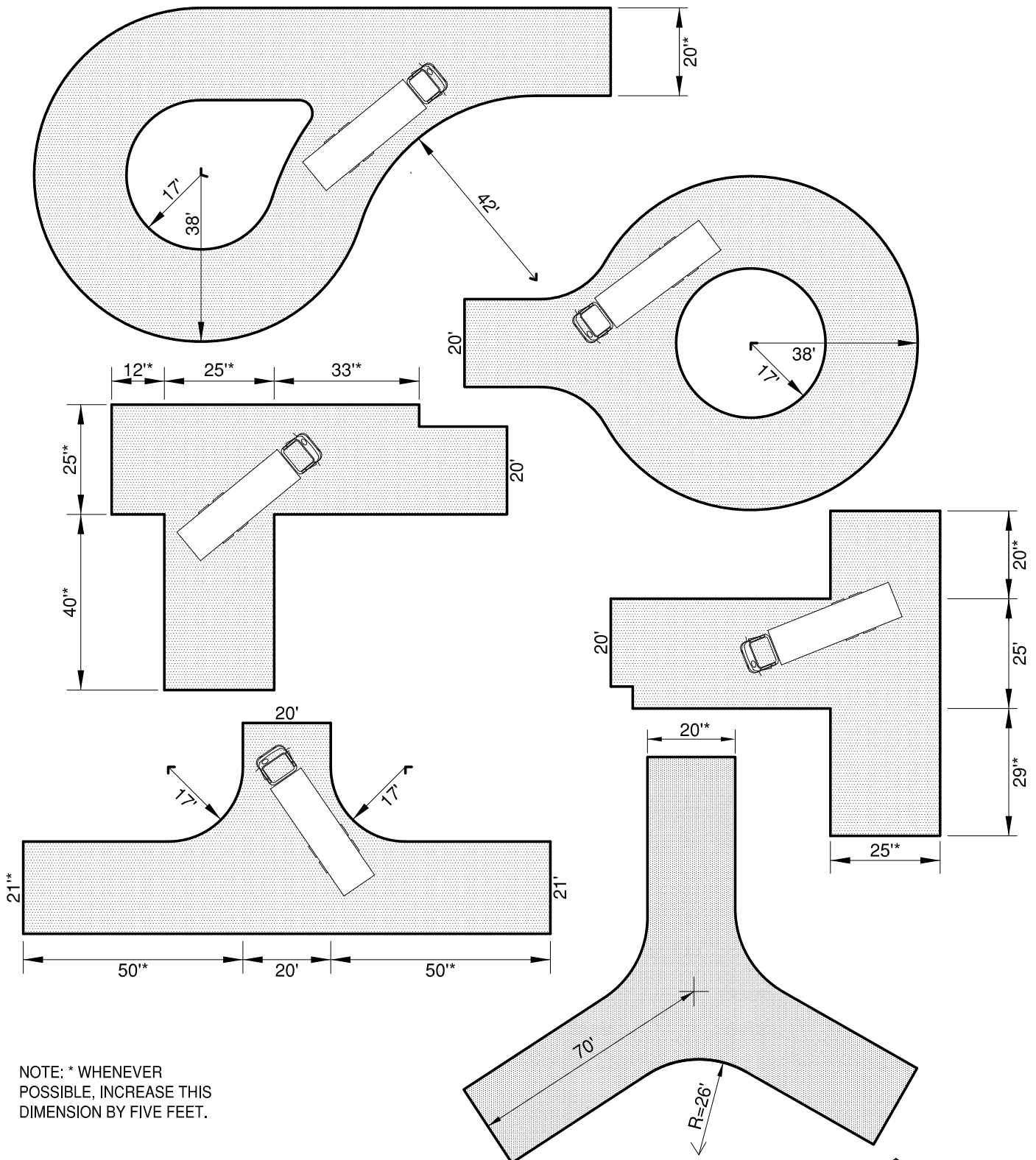
NOTE:

PARKING IS NOT PERMITTED WITHIN 20 FOOT FIRE ACCESS. SEE SECTION B.I.E. FOR FIRE LANE WIDTHS.



RANCHO MISSION VIEJO

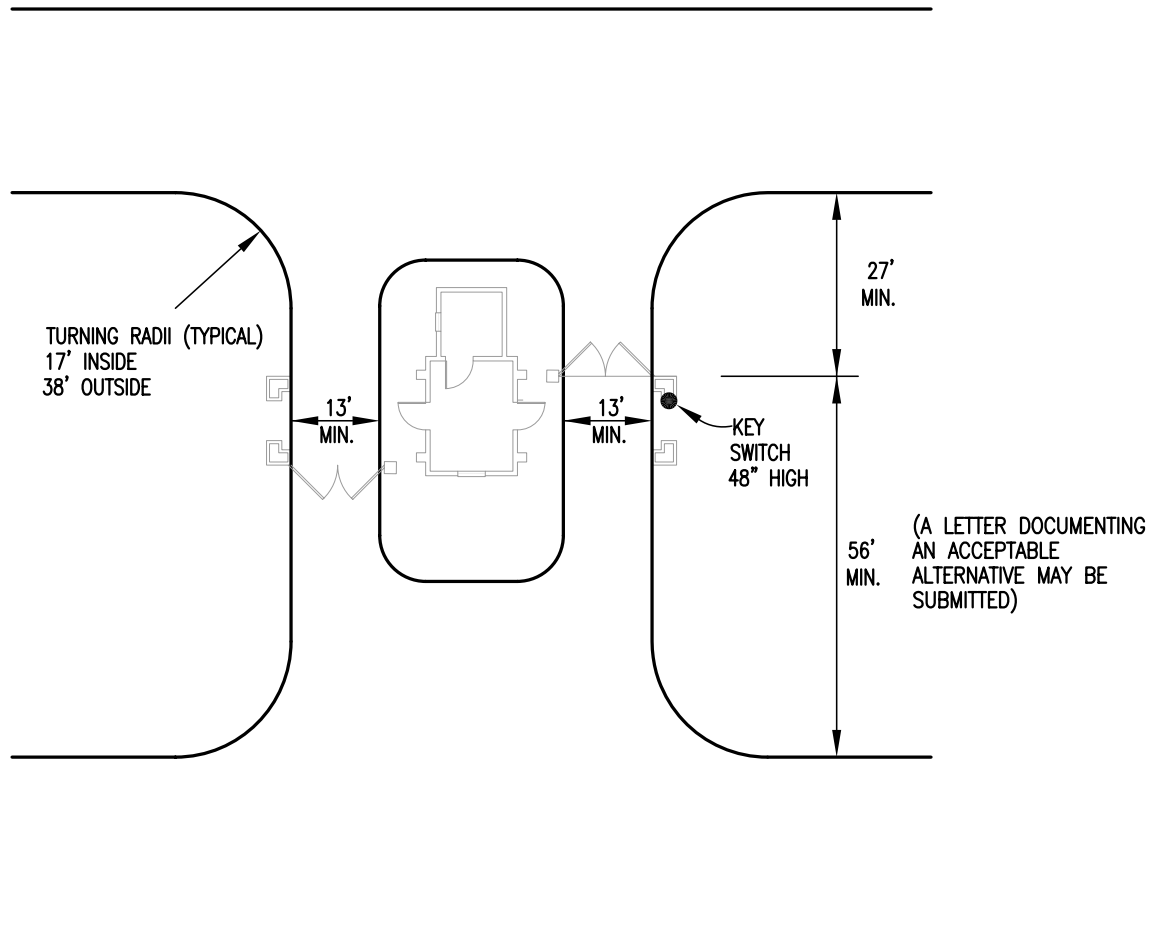
MINIMUM TURNAROUND AND HAMMERHEAD DIMENSIONS



MINIMUM GATE SETBACKS

SPECIAL NOTES:

1. SETBACK FROM STREET TO GATE SHALL BE A MIN. OF 56'
2. SETBACK FROM GATE TO FIRST TURN SHALL BE A MIN. OF 27' AND SHALL BE CLEAR AND UNOBSTRUCTED.



Ranch Plan Planned Community
Number and Distribution of Fire Hydrants
(All Buildings Equipped With Automatic Sprinklers)

Based on California Fire Code Table A-III-B-I

Note: In residential (R-3 Occupancy) subdivisions,
maximum hydrant spacing is 600'

FIRE FLOW REQUIREMENT	Minimum Number of Hydrants	Average Hydrant Spacing (feet) See Footnotes 1,2,3	Maximum Distance to Hydrant (feet) See Footnote 6, 7
0 to 1,750	1	500	250
1,751 to 2,250	2	450	225
2,251 to 2,500	3	400	
2,501 to 3,000		350	210
3,001 to 4,000	4	300	180
4,001 to 5,000	5	250	150
5,001 to 5,500	6	200	120
5,501 to 6,000			
6,001 to 7,000	7		
7,001+	8 or more (see Note 5)		

Footnotes:

1. Reduce by 100 feet for dead-end streets or roads.
2. Where streets are provided with median dividers that can be crossed by firefighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.
3. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire incidents, fire hydrants shall be provided at spacing not to exceed 1,500 feet (alternating at 750' on opposite sides of street where median dividers are present as noted in Footnote 2) to provide for transportation hazards.
4. On suspended roadways with no combustible structures, hydrant spacing may be increased to 1,800 feet.
5. One hydrant for each 1,000 gallons per minute or fraction thereof.
6. Fire hydrants shall be minimum of 40 feet from any building with the exception of detached one- and two-family dwellings.
7. Reduce by 50 feet for dead-end streets or roads.



Ranch Plan Planned Community

Minimum Required Fire Flow and Duration for Buildings (All Equipped With Automatic Sprinklers)

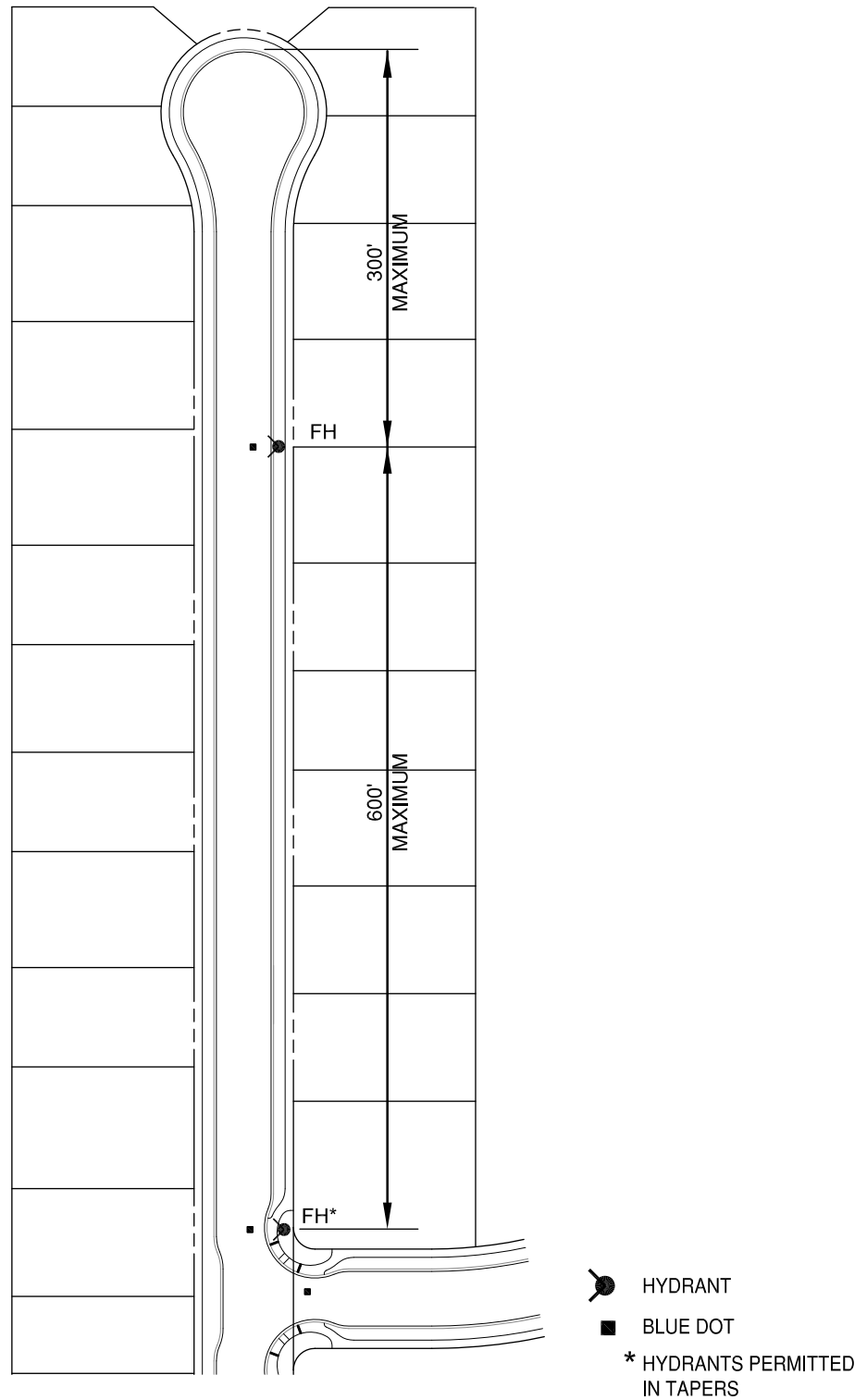
Based on California Fire Code Table A-III-A-I

FIRE AREA (square feet)					Fire Flow (gallons/min)	Flow Duration
Types of Construction, based on CBC (actual base construction type without CBC 508 sprinkler substitution equivalency)						
Type I-FR, Type II-FR	Type II-1 hr, Type III-1 hr	Type IV, Type V-1 hr	Type II-N, III-N	Type V-N	Measured at 20 psi	
0 to 22,700	0 to 12,700	0 to 8,200	0 to 5,900	0 to 3,600	1,000/1,500*	2
22,701 to 30,200	12,701 to 17,000	8,201 to 10,900	5,901 to 7,900	3,601 to 4,800	1,500	
30,201 to 38,700	17,001 to 21,800	10,901 to 12,900	7,901 to 9,800	4,801 to 6,200	1,500	
38,701 to 48,300	21,801 to 24,200	12,901 to 17,400	9,801 to 12,600	6,201 to 7,700	1,500	
48,301 to 59,000	24,201 to 33,200	17,401 to 21,300	12,601 to 15,400	7,701 to 9,400	1,500	
59,001 to 70,900	33,201 to 39,700	21,301 to 25,500	15,401 to 18,400	9,401 to 11,300	1,500	
70,901 to 83,700	39,701 to 47,100	25,501 to 30,100	18,401 to 21,800	11,301 to 13,400	1,500	3
83,701 to 97,700	47,101 to 54,900	30,101 to 35,200	21,801 to 25,900	13,401 to 15,600	1,625	
97,701 to 112,700	54,901 to 63,400	35201 to 40,600	25,901 to 29,300	15,601 to 18,000	1,750	
112,701 to 128,700	63,401 to 72,400	40,601 to 46,400	29,301 to 33,500	18,001 to 20,600	1,875	
128,701 to 145,900	72,401 to 82,100	46,401 to 52,500	33,501 to 37,900	20,601 to 23,300	2,000	4
145,901 to 164,200	82,101 to 92,400	52,501 to 59,100	37,901 to 42,700	23,301 to 26,300	2,125	
164,201 to 183,400	92,401 to 103,100	59,101 to 66,000	42,701 to 47,700	26,301 to 29,300	2,250	
183,401 to 203,700	103,101 to 114,600	66,001 to 73,300	47,701 to 53,000	29,301 to 32,600	2,375	
203,701 to 225,200	114,601 to 126,700	73,301 to 81,100	53,001 to 58,600	32,601 to 36,000	2,500	
225,201 to 247,700	126,701 to 139,400	81,101 to 89,200	58,601 to 65,400	36,001 to 39,600	2,625	
247,701 to 271,200	139,401 to 152,600	89,201 to 97,700	65,401 to 70,600	39,601 to 43,400	2,750	
271,201 to 295,900	152,601 to 166,500	97,701 to 106,500	70,601 to 77,000	43,401 to 47,400	2,875	
295,901+	166,501+	106,501 to 115,800	77,001 to 83,700	47,401 to 51,500	3,000	
		115,801 to 125,500	83,701 to 90,600	51,501 to 55,700	3,125	
		125,501 to 135,500	90,601 to 97,900	55,701 to 60,200	3,250	
		135,501 to 145,800	97,901 to 106,800	60,201 to 64,800	3,375	
		145,801 to 156,700	106,801 to 113,200	64,801 to 69,600	3,500	
		156,701 to 167,900	113,201 to 121,300	69,601 to 74,600	3,625	
		167,901 to 179,400	121,301 to 129,600	74,601 to 79,800	3,750	
		179,401 to 191,400	129,601 to 138,300	79,801 to 85,100	3,875	
		191,401+	138,301+	85,101+	4,000	

* Minimum flow for a sprinklered R-3 dwelling unit of less than 3,600 square feet is 1,000

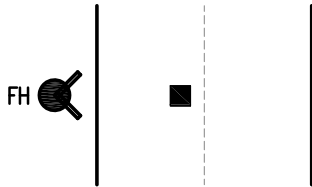
** Minimum flow for all other structures (including any R-3 greater than 3,600 square feet) is 1,500

FIRE HYDRANT LOCATIONS

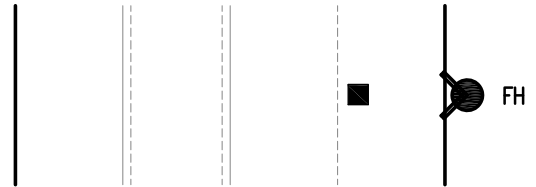


BLUE DOT HYDRANT MARKER LOCATION

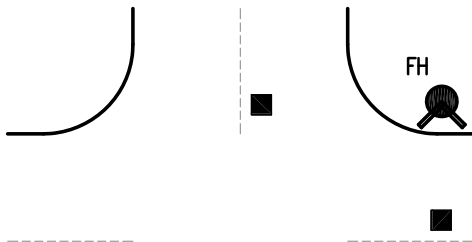
TWO LANE STREET



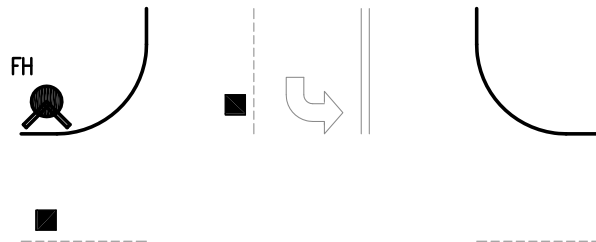
MULTI-LANE STREET



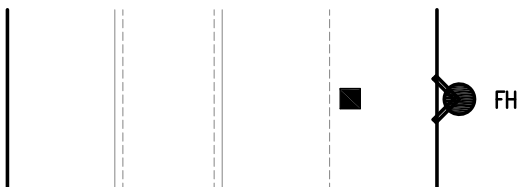
INTERSECTION



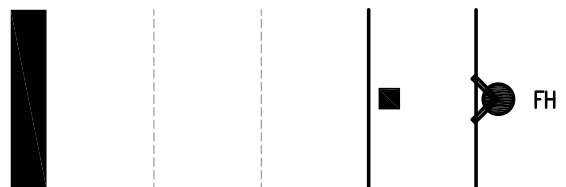
INTERSECTION WITH TURN LANES



MULTI-LANE STREET WITH TURN LANE

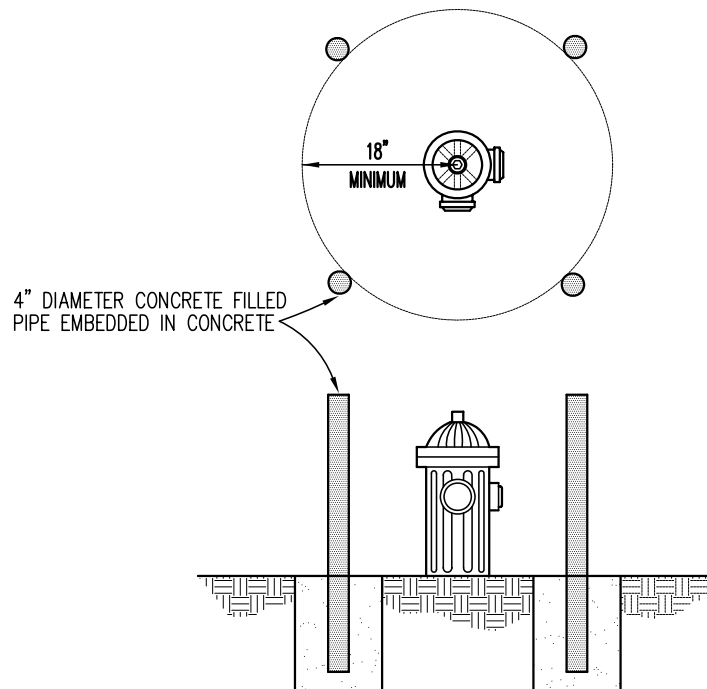


FREEWAYS AND EXPRESSWAYS

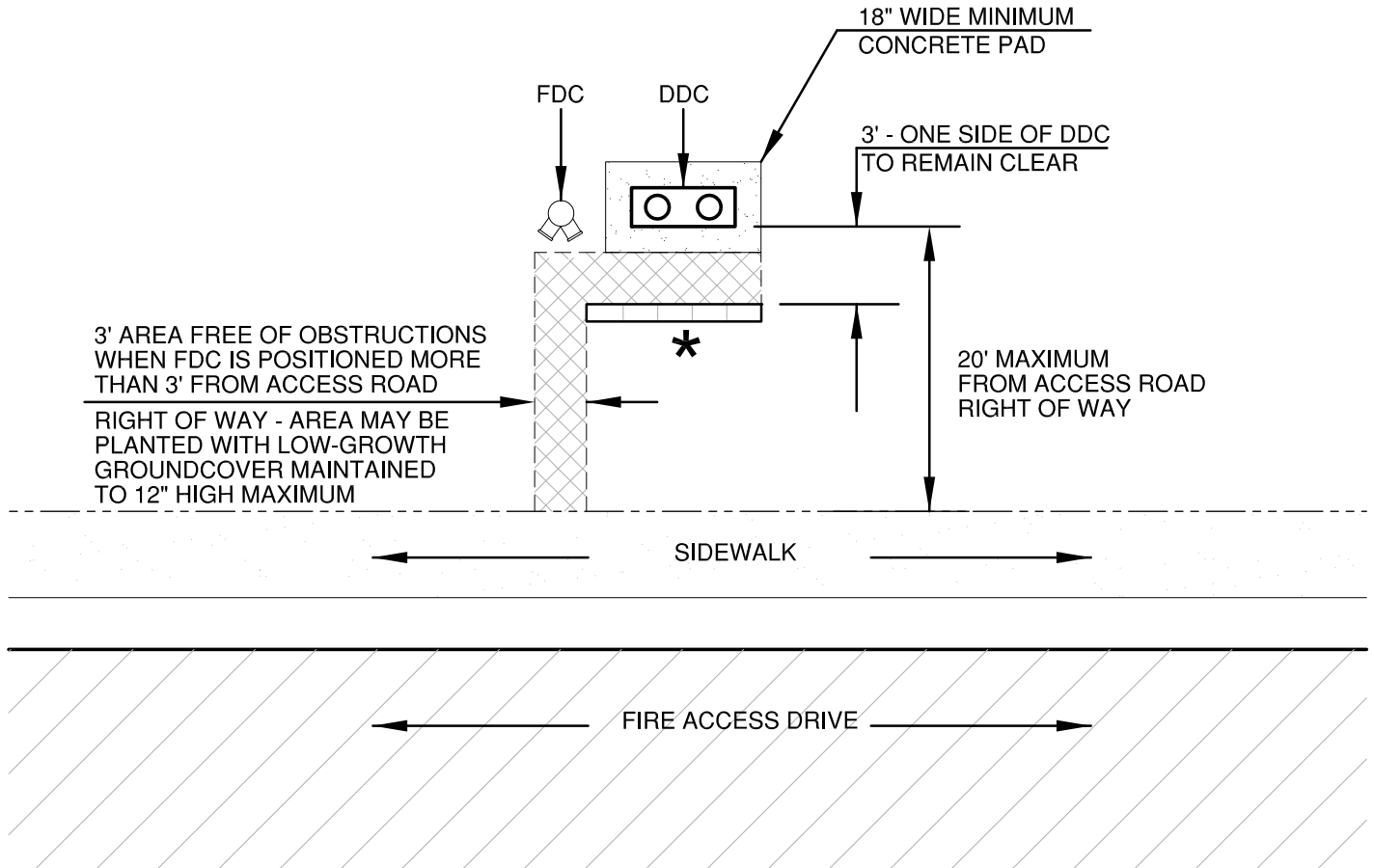


THE DEVELOPER MAY CONTACT THE LOCAL WATER COMPANY TO ARRANGE THE INSTALLATION OF THE BLUE DOTS. IF THE WATER AGENCY DOES NOT PARTICIPATE IN THE BLUE DOT PROGRAM, THE DEVELOPER IS STILL RESPONSIBLE TO INSTALL THE DOTS IN AN APPROVED MANNER.

PROTECTION OF HYDRANTS, DETECTOR CHECKS,
FIRE DEPARTMENT CONNECTIONS
AND OTHER APPURTENANCES



FIRE DEPARTMENT CONNECTION / DETECTOR CHECK LOCATIONS ADJACENT TO FIRE ACCESS ROAD



A MINIMUM 3' CLEARANCE SHALL BE PROVIDED ON AT LEAST ONE SIDE OF DETECTOR CHECK ASSEMBLY TO ALLOW PROPER OPERATION OF THE DEVICE. THE FRONT OF FDC FACING FIRE ACCESS ROADWAY SHALL BE FREE OF OBSTRUCTIONS

* WALL OR SHRUBS MAY BE PLACED BETWEEN FIRE APPARATUS AND FIRE ACCESS ROAD, BUT IDENTIFICATION SIGN INDICATING BUILDINGS SERVED MUST REMAIN VISIBLE AT ALL TIMES FROM ROADWAY

LEGEND



FIRE ACCESS ROAD



INDICATES DOUBLE DETECTOR CHECK



AREA TO REMAIN CLEAR OF OBSTRUCTIONS



INDICATES FIRE DEPARTMENT CONNECTION

DDC

DOUBLE DETECTOR CHECK

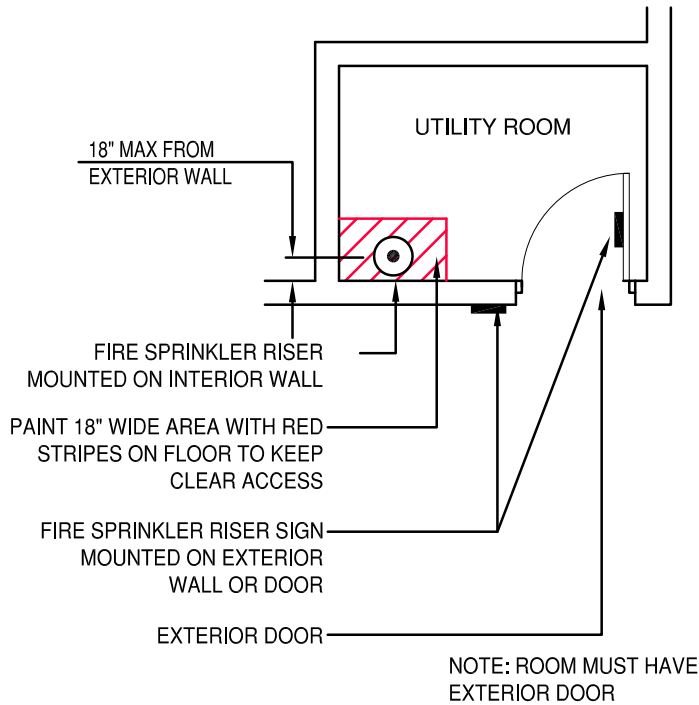
FDC

FIRE DEPARTMENT CONNECTION

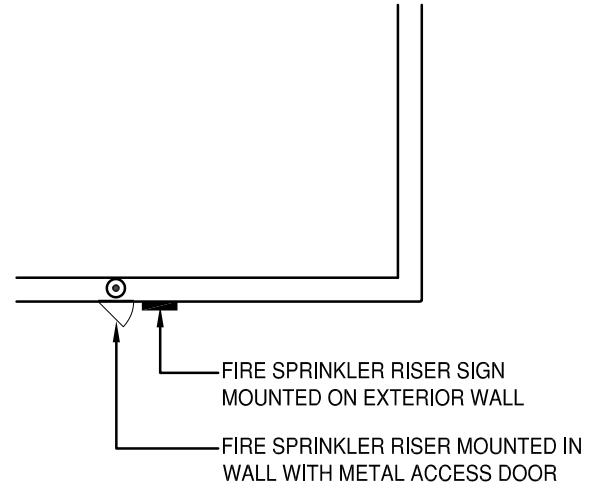


FIRE SPRINKLER RISER VALVE LOCATIONS AND SIGNAGE

SHARED UTILITY ROOM INSTALLATION



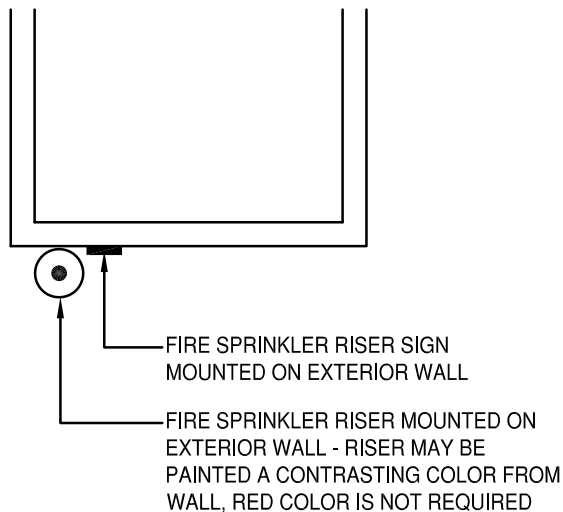
INSIDE WALL INSTALLATION WITH METAL DOOR ACCESS



METAL ACCESS DOOR MINIMUM SIZES:

4" RISER PIPE	=	14"W X 18"H DOOR
6" RISER PIPE	=	16"W X 18"H DOOR
8" RISER PIPE	=	20"W X 18"H DOOR

EXTERIOR WALL INSTALLATION



SIGN EXAMPLES

FIRE SPRINKLER
RISER INSIDE

SIGN INSTALLED ON WALL OR DOOR FOR RISER INSTALLATION INSIDE UTILITY ROOM OR INSIDE METAL DOOR

FIRE SPRINKLER
RISER

SIGN USED FOR RISER INSTALLATION ON EXTERIOR WALL

1/2" MINIMUM HEIGHT LETTERING WITH COLOR CONTRASTING WITH SIGN BACKGROUND. SIGN MAY BE ALUMINUM COLOR, CLEARLY LEGIBLE FROM BUILDING EXTERIOR. RED LETTERING IS NOT REQUIRED

LEGEND



AUTOMATIC FIRE SPRINKLER RISER



IDENTIFICATION SIGN



FLOOR STRIPING FOR CLEAR ACCESS AROUND RISER

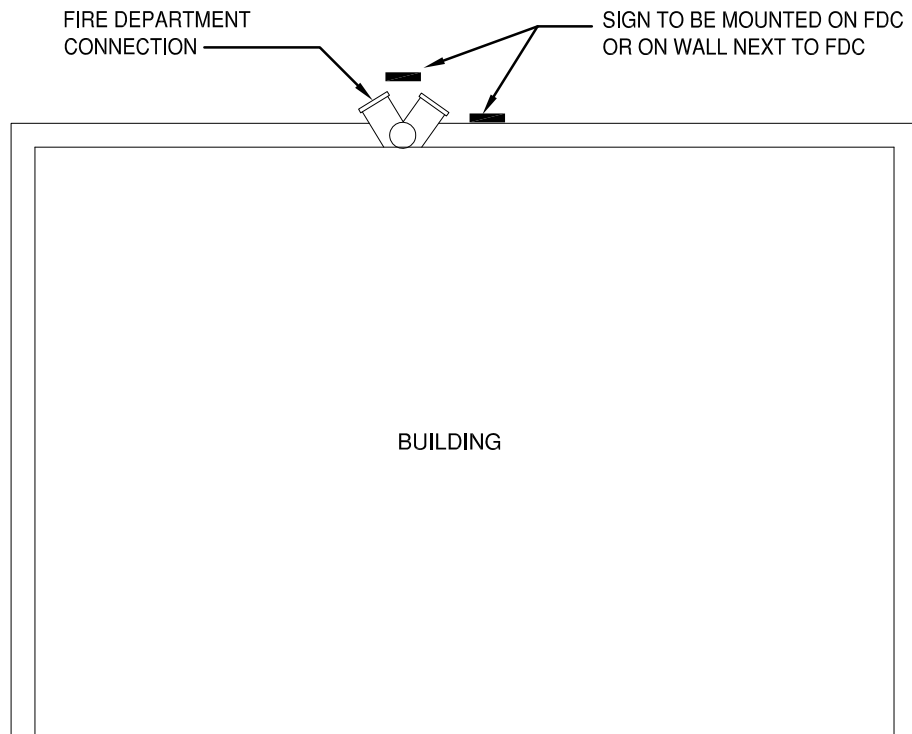
SHRUBS OR WALLS MAY BE INSTALLED BETWEEN EXTERIOR ACCESSED RISER AND ACCESS ROAD IF:

1. IDENTIFICATION SIGN IS VISIBLE FROM EXTERIOR BUILDING.
2. A WALKABLE PATH TO RISER IS MAINTAINED AT ALL TIMES. PATH MAY BE PLANTED WITH A LOW-GROWTH GROUND COVER MAINTAINED AT 12" HIGH MAXIMUM.



RANCHO MISSION VIEJO

FIRE DEPARTMENT CONNECTION MOUNTED ON BUILDING



ADDRESS SIGN EXAMPLE

FDC SERVING
1 REBECCA WAY

SIGN TO BE MOUNTED ON FDC
OR ON WALL NEXT TO FDC

1/2" MINIMUM HEIGHT LETTERING WITH COLOR
CONTRASTING SIGN BACKGROUND.
LETTERING IS NOT REQUIRED TO BE RED

NOTES:

1. FIRE DEPARTMENT CONNECTION SHALL BE ON ADDRESS SIDE OF BUILDING & FACE ACCESS ROAD.
2. FRONT OF FIRE DEPARTMENT CONNECTION SHALL BE FREE OF OBSTRUCTIONS
3. CHECK VALVE MUST BE ACCESSIBLE FROM THE EXTERIOR OF BUILDING BY DIRECT ACCESS, ACCESS DOOR OR PANEL
4. SHRUBS OR WALLS MAY BE INSTALLED BETWEEN WALL-MOUNTED RISER AND ACCESS ROAD IF:
 - A. IDENTIFICATION SIGN IS VISIBLE FROM ACCESS ROAD
 - B. A WALKABLE PATH TO RISER IS MAINTAINED AT ALL TIMES. PATH MAY BE PLANTED WITH A LOW-GROWTH GROUND COVER, MAINTAINED TO 12" HIGH MAXIMUM.

LEGEND



INDICATES FIRE DEPARTMENT CONNECTION

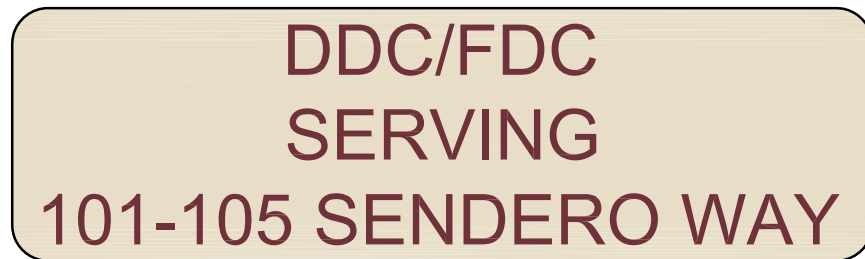


IDENTIFICATION SIGN

FDC

FIRE DEPARTMENT CONNECTION

DETECTOR CHECK/FIRE DEPARTMENT CONNECTION
IDENTIFICATION SIGNS

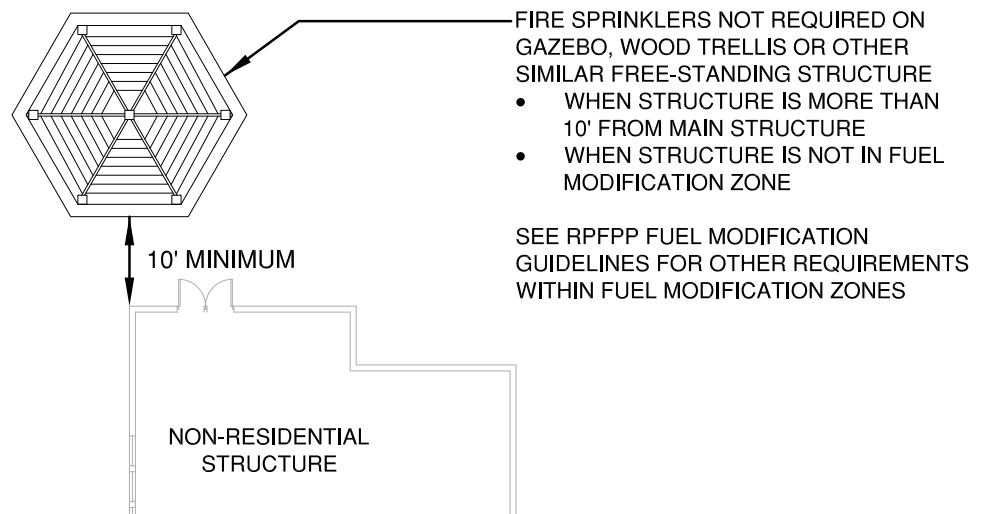


1/2" LETTERING CONTRASTING FROM BACKGROUND COLOR.
COLORS WILL MATCH THE RANCHO MISSION VIEJO
PROJECT THEME COLORS
SIGNS SHOWN ARE SAMPLES - FINAL DESIGN MAY VARY

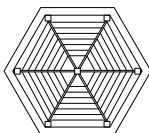
ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND
CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA.
SIGNS SHALL BE MADE OF DURABLE MATERIAL.

AUTOMATIC FIRE SPRINKLER REQUIREMENT
NON-RESIDENTIAL STRUCTURE WITH GAZEBO / WOOD TRELLIS
OR OTHER AUXILIARY STRUCTURES



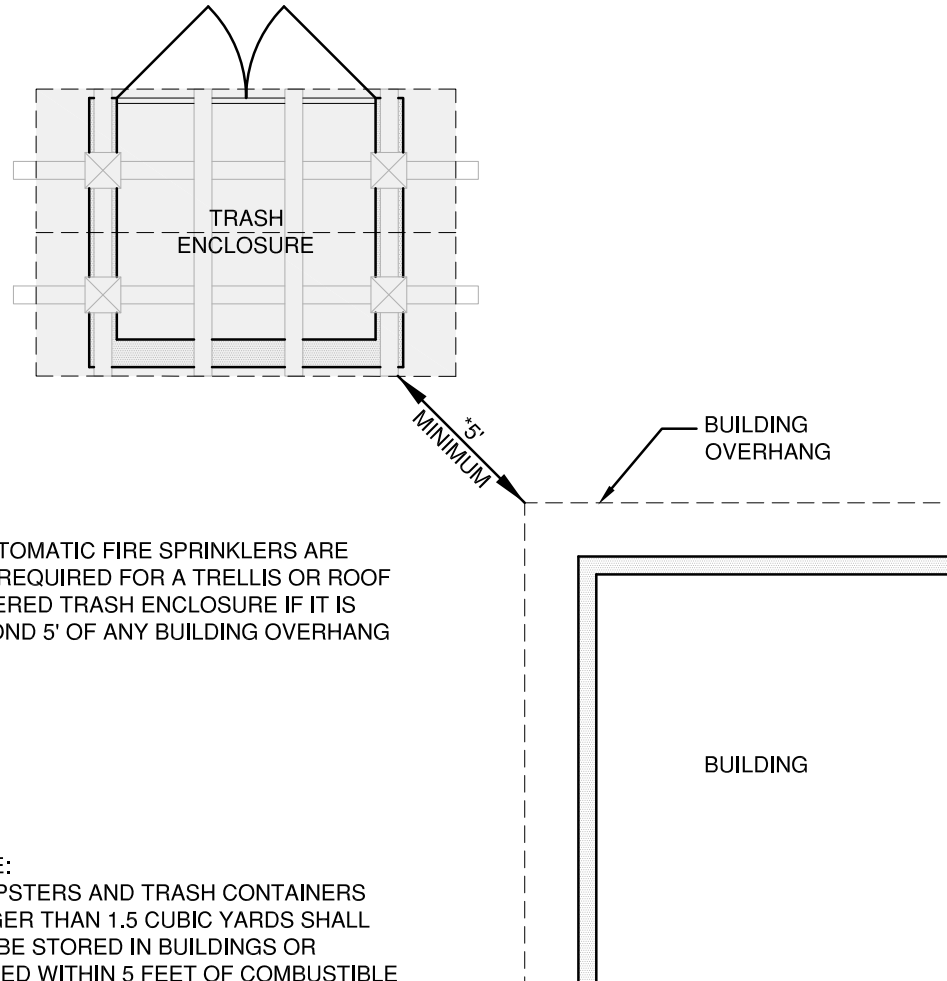
LEGEND



REPRESENTS UNENCLOSED STRUCTURE



AUTOMATIC FIRE SPRINKLER REQUIREMENT TRASH ENCLOSURE CONSTRUCTION

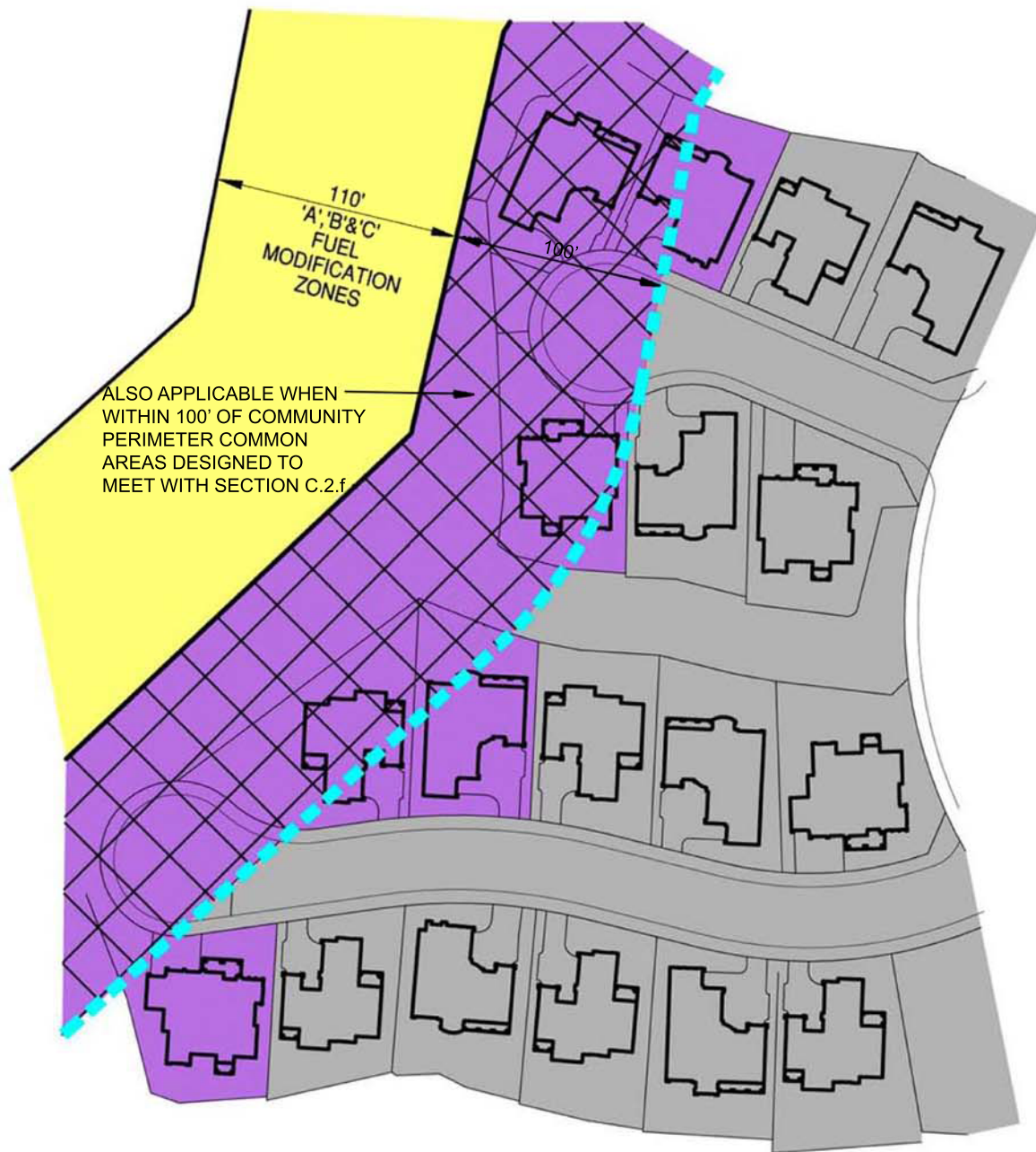


* AUTOMATIC FIRE SPRINKLERS ARE NOT REQUIRED FOR A TRELLIS OR ROOF COVERED TRASH ENCLOSURE IF IT IS BEYOND 5' OF ANY BUILDING OVERHANG

NOTE:
DUMPSTERS AND TRASH CONTAINERS LARGER THAN 1.5 CUBIC YARDS SHALL NOT BE STORED IN BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM

RANCH PLAN FIRE PROTECTION PROGRAM RADIANT HEAT AND EMBER MITIGATION ZONES

Attachment 15



LEGEND



RADIANT HEAT / EMBER MITIGATION ZONE -
REFER TO RANCH PLAN FIRE PROTECTION
PROGRAM SECTION B-7 FOR CONSTRUCTION
REQUIREMENTS



110' FUEL MODIFICATION ZONE



EMBER MITIGATION ONLY ZONE -
REFER TO RANCH PLAN FIRE PROTECTION
PROGRAM SECTION B-7 FOR CONSTRUCTION
REQUIREMENTS



RADIANT HEAT LINE



RANCHO MISSION VIEJO

Ranch Plan Fire Protection Program
Fire Protection Plan 2013 CBC Chapter 7A Screening Form
Radian Heat/Ember Mitigation Zone

Attachment 15a

'Detail' Legend (Architectural Details from Approved RPFPP):

A: Details R01 thru R05 Exterior walls/Floor Projections	B: Details R06 thru R08 Windows
C: Details R09 thru R11 Attic Ventilation/Valley Detail	D: Details R12 thru R15, R23 & R24 Open Roof Eaves and Rakes
E: Details R16 thru R22 & R25 thru R27 Clodes Eaces and Rakes	F: Details R28 thru R31 Decks

Chapter 7A Code Section	Yes	No	Details	OCFA has approved the following:
703A.2 Testing Qualifications	X			
703A.3 Approved Agency	X			
703A.4 Labeling	X			
703A.5 Weathering and Surface Protection	X			
703A.7 Standards of Quality	X			
704A.2 Ignition Resistant Material (or) see 704A.3	X			
704A.3 Alternative for 704A.2 above	X			
705A.1 Roofing General	X		C, D, E	
705A.2 Roof Coverings	X		C, D, E	
705A.3 Roof Valleys	X		C, D, E	
705A.4 Roof Gutters	X		C, D, E	
706A.1 Vents General	X		C, D, E	
706A.2 Vents Requirements	X		C, D, E	
706A.3 Vents Eaves and Cornices	X		C, D, E	
707A.2 Exterior Covering General	X		A	
707A.3 Exterior Walls	X		A	
707A.3.1 Extent of Exterior Wall Covering	X		A	
707A.4 Open Roof Eaves	X		D	
707A.5 Enclosed roof Eaves and Roof Soffits	X		E	
707A.6 Exterior Porch Ceilings	X			
707A.7 Floor Projections	X		A	
707A.8 Underfloor Projection	X		A	
707A.8 Underside of Appendages	X		A	
708A.2.1 Exterior Window and Glazed Doors	X		B	
708A.2.2 Structural Glass Veneer	X			
708A.3.1 Exterior Door Glazing	X			
708A.3 Exterior Doors	X			
709A.3 Decking Surfaces	X		F	
710A.1 Accessory General	X			
710A.2 Accessory Structures	X			
710A.3 Location of Accessory Structures	X			
710A.4 Requirements Construction Type	X			

If separate buildings within the same Tract have different responses above, then you must submit additional Screening Form(s) for each portion of the development that has different designs.

Name of Community: RMV-Ranch Plan-Radiant Heat/Ember Mitigation Zone

List the final tract and lot numbers on the lines below that this form is associated to:

Print and Sign Project Owner's Name, Contact Phone, and Date

Ranch Plan Fire Protection Program
Fire Protection Plan 2013 CBC Chapter 7A Screening Form
Ember Mitigation Zone Only

Attachment 15b

'Detail' Legend (Architectural Details from Approved RPFPP):

A: Details R01 thru R05 Exterior walls/Floor Projections	B: Details R06 thru R08 Windows
C: Details R09 thru R11 Attic Ventilation/Valley Detail	D: Details R12 thru R15, R23 & R24 Open Roof Eaves and Rakes
E: Details R16 thru R22 & R25 thru R27 Clodes Eaces and Rakes	F: Details R28 thru R31 Decks

Chapter 7A Code Section	Yes	No	Details	OCFA has approved the following:
703A.2 Testing Qualifications	X			
703A.3 Approved Agency	X			
703A.4 Labeling	X			
703A.5 Weathering and Surface Protection	X			
703A.7 Standards of Quality	X			
704A.2 Ignition Resistant Material (or) see 704A.3	X			
704A.3 Alternative for 704A.2 above	X			
705A.1 Roofing General	X		C, D, E	
705A.2 Roof Coverings	X		C, D, E	
705A.3 Roof Valleys	X		C, D, E	
705A.4 Roof Gutters	X		C, D, E	
706A.1 Vents General	X		C, D, E	
706A.2 Vents Requirements	X		C, D, E	
706A.3 Vents Eaves and Cornices	X		C, D, E	
707A.2 Exterior Covering General		X		
707A.3 Exterior Walls		X		
707A.3.1 Extent of Exterior Wall Covering		X		
707A.4 Open Roof Eaves		X		
707A.5 Enclosed roof Eaves and Roof Soffits		X		
707A.6 Exterior Porch Ceilings		X		
707A.7 Floor Projections		X		
707A.8 Underfloor Projection		X		
707A.8 Underside of Appendages		X		
708A.2.1 Exterior Window and Glazed Doors		X		
708A.2.2 Structural Glass Veneer		X		
708A.3.1 Exterior Door Glazing		X		
708A.3 Exterior Doors		X		
709A.3 Decking Surfaces	X		F	
710A.1 Accessory General		X		
710A.2 Accessory Structures		X		
710A.3 Location of Accessory Structures		X		
710A.4 Requirements Construction Type		X		

If separate buildings within the same Tract have different responses above, then you must submit additional Screening Form(s) for each portion of the development that has different designs.

Name of Community: RMV-Ranch Plan-Ember Mitigation Only Zone

List the final tract and lot numbers on the lines below that this form is associated to:

Print and Sign Project Owner's Name, Contact Phone, and Date

Ranch Plan Fire Protection Program
Fire Protection Plan 2013 CRC Section R327 Screening Form
Radian Heat/Ember Mitigation Zone

Attachment 15c

'Detail' Legend (Architectural Details from Approved RPFPP):

A: Details R01 thru R05 Exterior walls/Floor Projections	B: Details R06 thru R08 Windows
C: Details R09 thru R11 Attic Ventilation/Valley Detail	D: Details R12 thru R15, R23 & R24 Open Roof Eaves and Rakes
E: Details R16 thru R22 & R25 thru R27 Clodes Eaces and Rakes	F: Details R28 thru R31 Decks

Chapter 7A Code Section	Yes	No	Details	OCFA has approved the following:
R327.3.2 Testing Qualifications	X			
R327.3.3 Approved Agency	X			
R327.3.4 Labeling	X			
R327.3.5 Weathering and Surface Protection	X			
R327.3.7 Standards of Quality	X			
R327.4.2 Ignition Resistant Material (or) see 704A.3	X			
R327.4.3 Alternative for 704A.2 above ?	X			
R327.5.1 Roofing General	X		C, D, E	
R327.5.2 Roof Coverings	X		C, D, E	
R327.5.3 Roof Valleys	X		C, D, E	
R327.5.4 Roof Gutters	X		C, D, E	
R327.6.1 Vents General	X		C, D, E	
R327.6.2 Vents Requirements	X		C, D, E	
R327.6.3 Vents Eaves and Cornices	X		C, D, E	
R327.7.2 Exterior Covering General	X		A	
R327.7.3 Exterior Walls	X		A	
R327.7.3.1 Extent of Exterior Wall Covering	X		A	
R327.7.4 Open Roof Eaves	X		D	
R327.7.5 Enclosed roof Eaves and Roof Soffits	X		E	
R327.7.6 Exterior Porch Ceilings	X			
R327.7.7 Floor Projections	X		A	
R327.7.8 Underfloor Projection	X		A	
R327.7.9 Underside of Appendages	X		A	
R327.8.2.1 Exterior Window and Glazed Doors	X		B	
R327.8.2.2 Structural Glass Veneer	X			
R327.8.3.1 Exterior Door Glazing	X			
R327.8.3 Exterior Doors	X			
R327.9.3 Decking Surfaces	X		F	
R327.10.1 Accessory General	X			
R327.10.2 Accessory Structures	X			
R327.10.3 Location of Accessory Structures	X			
R327.10.4 Requirements Construction Type	X			

If separate buildings within the same Tract have different responses above, then you must submit additional Screening Form(s) for each portion of the development that has different designs.

Name of Community: RMV-Ranch Plan-Radiant Heat/Ember Mitigation Zone

List the final tract and lot numbers on the lines below that this form is associated to:

Print and Sign Project Owner's Name, Contact Phone, and Date

Ranch Plan Fire Protection Program
Fire Protection Plan 2013 CRC Section R327 Screening Form
Ember Mitigation Zone Only

Attachment 15d

'Detail' Legend (Architectural Details from Approved RPFPP):

A: Details R01 thru R05 Exterior walls/Floor Projections	B: Details R06 thru R08 Windows
C: Details R09 thru R11 Attic Ventilation/Valley Detail	D: Details R12 thru R15, R23 & R24 Open Roof Eaves and Rakes
E: Details R16 thru R22 & R25 thru R27 Clodes Eaces and Rakes	F: Details R28 thru R31 Decks

Section R327 Code Section	Yes	No	Details	OCFA has approved the following:
R327.3.2 Testing Qualifications	X			
R327.3.3 Approved Agency	X			
R327.3.4 Labeling	X			
R327.3.5 Weathering and Surface Protection	X			
R327.3.7 Standards of Quality	X			
R327.4.2 Ignition Resistant Material (or) see 704A.3	X			
R327.4.3 Alternative for 704A.2 above ?	X			
R327.5.1 Roofing General	X		C, D, E	
R327.5.2 Roof Coverings	X		C, D, E	
R327.5.3 Roof Valleys	X		C, D, E	
R327.5.4 Roof Gutters	X		C, D, E	
R327.6.1 Vents General	X		C, D, E	
R327.6.2 Vents Requirements	X		C, D, E	
R327.6.3 Vents Eaves and Cornices	X		C, D, E	
R327.7.2 Exterior Covering General		X		
R327.7.3 Exterior Walls		X		
R327.7.3.1 Extent of Exterior Wall Covering		X		
R327.7.4 Open Roof Eaves		X		
R327.7.5 Enclosed roof Eaves and Roof Soffits		X		
R327.7.6 Exterior Porch Ceilings		X		
R327.7.7 Floor Projections		X		
R327.7.8 Underfloor Projection		X		
R327.7.9 Underside of Appendages		X		
R327.8.2.1 Exterior Window and Glazed Doors		X		
R327.8.2.2 Structural Glass Veneer		X		
R327.8.3.1 Exterior Door Glazing		X		
R327.8.3 Exterior Doors		X		
R327.9.3 Decking Surfaces	X		F	
R327.10.1 Accessory General		X		
R327.10.2 Accessory Structures		X		
R327.10.3 Location of Accessory Structures		X		
R327.10.4 Requirements Construction Type		X		

If separate buildings within the same Tract have different responses above, then you must submit additional Screening Form(s) for each portion of the development that has different designs.

Name of Community: RMV-Ranch Plan-Ember Mitigation Only Zone

List the final tract and lot numbers on the lines below that this form is associated to:

Print and Sign Project Owner's Name, Contact Phone, and Date

Fuel Modification Guidelines

SECTION C. FUEL MODIFICATION GUIDELINES

As required by the Orange County Board of Supervisors per Conditions of Approval of the Ranch Plan Planned Community Program Text Section I.C.8 and 2.D.1 and 2, prior to approval of each Master Area Plan a Preliminary Fuel Modification Plan must be prepared based upon the BEHAVE Fire Behavior Fuel Modeling System. As recommended by the April 2006 Interface Management Services report (submitted separately) and the Wildland Fire Management Plan (Appendix J-5 of Final Program EIR 589), unless the BEHAVE model does not support this distance, all fuel modification zones will be assumed to be 110 feet wide, consisting of three zones per the requirements described below:

1. Preliminary Fuel Modification Plans

- A. A Ranch Plan Planned Community-wide Preliminary Fuel Modification Plan has been approved for the peripheral edge of all Ranch Plan development Planning Areas, to be updated per Condition of Approval A.3.b. for each development Planning Area prior to Master Area Plan approval.
- B. Zone widths (unless shown otherwise on previously approved Preliminary Fuel Modification Plans):
 - 1) Zone A – 20 feet wide
 - 2) Zone B – 50 feet wide
 - 3) Zone C – 40 feet wide
 - 4) There is no Zone D
- C. To be re-verified prior to each Master Area Plan approval, based upon the ultimate proposed development edge and the BEHAVE Fire Behavior Fuel Modeling System.
- D. Section C.8 plans could voluntarily be provided to satisfy the timing requirements of Section C.3.D.

2. Conceptual Fuel Modification Plans

- A. Per Condition of Approval A.3.c, to be approved for each subsequent development Planning Area prior to an "A" Vesting Tentative Tract Map approval, the applicant shall provide the Director, OC Development Services with a clearance from OCFA demonstrating approval of a Conceptual Fuel Modification Plan, consistent with the previously approved Preliminary Fuel Modification Plan for that Planning Area and Fuel Modification Sections (RPFPP Attachments 18 through 33).
- B. Zone widths: Unless the BEHAVE model does not support this distance, all fuel modification zones will be assumed to be 110 feet wide, consisting of three zones per the requirements described below:
 - 1) Zone A – 20 feet wide
 - 2) Zone B – 50 feet wide
 - 3) Zone C – 40 feet wide
 - 4) There is no Zone D
- C. Existing vegetation removal and thinning details:
 - 1) Maintained by the Ranch Plan master maintenance corporation per CC&Rs recorded against all property within master maintenance corporation ownership, requiring specifically budgeted funds sufficient to meet the ongoing maintenance obligations of the applicable fuel modification requirements.
 - 2) Emergency and maintenance access easements every 500 lineal feet.
- D. Each Conceptual Fuel Modification Plan shall comply with Condition of Approval A.3.c, Section B.7, Attachment 15 and Section F, Construction Features per Section B.7 with the applicable screening forms (Attachments 15a through 15d) and ADS R-1 through R-31.
- E. Tract-wide Plan and Section Template Location Map and/or Planting Plans could voluntarily be provided to satisfy the timing requirements of Section C.3.D.
- F. When proposed fuel modification zones are not immediately adjacent to the nearest private property containing habitable structures on the perimeter of development, landscaping occurring within the last 100 feet of Rancho MMC common area or slope adjacent to habitable structures is subject to Section C.3.D and Section C.8, and structures must comply with Attachment 15, 15a, and 15c.

Ranch Plan Fire Protection Program

3. Precise Fuel Modification Plans (Per RPFPP Section A.3.d required to be approved prior to issuance of a GB precise grading permit).

- A. Irrigation plans and specifications.
- B. All applicable maintenance requirements and assignment of responsibility.
- C. CC&R and/or deed restrictions relative to fuel modifications: Once per Planning Area RMV shall provide OCFA with the appropriate page(s) of the Ranch Plan Covenants, Codes and Restrictions (CC&Rs) only to verify Section C fuel modification maintenance language is present.
- D. Prior to precise fuel modification plan approval within each “A” Tentative (master) Tract Map, a location map shall indicate the RPFPP design template selected and symbolize each location defined by Section C.8.
- E. Each Precise Fuel Modification Plan shall show the approved location of the Radiant Heat/Ember Mitigation & Ember Mitigation Only zones per Attachment 15, and also show the appropriate Chapter 7A screening forms (Attachments 15a through 15d) per Condition A.3.d and Section C.2.a.
- F. Prior to County of Orange approval of applicable Landscape Plans, the planting plans for Section C.8 areas shall be provided to OCFA. Written acceptance of Section C.8 planting plans by OCFA results through stamping “Reviewed” on each planting plan sheet, acknowledging that RMV may pursue County of Orange approval of the landscape plans. RMV shall scan the planting plan sheets stamped “Reviewed” and provide PDF copies to both OCFA and the master maintenance corporation (Rancho MMC). Only the planting plan sheets within the plan set shall be provided.

NOTE: Submittal of C.8 planting plans does not include landscaping within private homeowner lots, unless Rancho MMC refers a homeowner to OCFA for review of Zone A on private lots. Rancho MMC maintains a process to screen the 10-foot Zone A plant species on private lots in addition to the screening of RPFPP Section B.8 species.

Ranch Plan Fire Protection Program

4. **Plant Palette:** All plants in Zones A-C shall be from the OCFA list and zones shall be maintained with the intent of the approved Precise Fuel Modification Plan.
5. **Zone A – Setback Irrigated Zone (20 feet)**
 - A. 10-foot minimum flat, outside private homeowner lots.
 - B. Groundcover shall be installed and maintained at a height not to exceed 2 feet.
 - C. Apply irrigation rates to maintain healthy vegetation with high moisture content.
 - D. Trees not allowed within 10 feet of combustible structures (measured from the edge of a full growth crown).
 - E. Tree and tree-form shrub pruning and spacing per Attachment 16.
 - F. In order to maintain proper coverage, native grasses shall be allowed to go to seed and be cut after annual seeding. Cut heights shall be approximately 4 inches.
 - G. Complete removal of dead and dying vegetation.
 - H. Complete removal of undesirable plant species from RPFPP Attachment 17, including: Cedar species, Acacia Species other than Desert Carpet, and White Sage.
 - I. Maintenance includes the replacement of plant material in accordance with the originally approved plans.
 - J. Devices that burn solid fuels are not permitted in any fuel modification zone.
 - K. No combustible construction shall be allowed within Zone A.

Ranch Plan Fire Protection Program

6. Zone B – Irrigated Zone (50 feet)

- A. Groundcover shall be installed and maintained at a height not to exceed 2 feet.
- B. Apply irrigation rates to maintain healthy vegetation with high moisture content.
- C. Trees not allowed within 10 feet of combustible structures (measured from the edge of a full growth crown).
- D. Tree and tree-form shrub pruning and spacing per Attachment 16, unless orchards, which are to be planted and maintained per Section C.8.d and Design Template 35.
- E. In order to maintain proper coverage, native grasses shall be allowed to go to seed and be cut after annual seeding. Cut heights shall be approximately 4 inches.
- F. Complete removal of dead and dying vegetation.
- G. Complete removal of undesirable plant species from RPFPP Attachment 17, including: Cedar species, Acacia Species other than Desert Carpet, and White Sage.
- H. Maintenance includes the replacement of plant material in accordance with the originally approved plans.
- I. Devices that burn solid fuels are not permitted in any fuel modification zone.
- J. No combustible construction shall be allowed within Zone B.

7. Zone C – Thinning Zone – Non-Irrigated (40-foot plus)

- A. Groundcover shall be maintained at a height not to exceed 2 feet.
- B. Tree and tree-form shrub pruning and spacing per Attachment 16, unless orchards, which are to be planted and maintained per Section C.8.d and Design Template 35.
- C. In order to maintain proper coverage, native grasses shall be allowed to go to seed and be cut after annual seeding. Cut heights shall be approximately 4 inches.
- D. Complete removal of dead and dying vegetation.
- E. Complete removal of undesirable plant species from RPFPP Attachment 17, including: Cedar species, Acacia Species other than Desert Carpet, and White Sage.

Ranch Plan Fire Protection Program

- F. Devices that burn solid fuels are not permitted in any fuel modification zone.
 - G. No combustible construction shall be allowed within Zone C.
8. **Interior Common Area and Slopes** – Landscaping occurring within the last 100 feet of Rancho MMC common area or slope adjacent to habitable structures are subject to Section C.3.D and the following requirements to ensure structures are reasonably protected from flying embers that may be initiated by a wildland fire.
- A. Not a part of fuel modification, and planting could also be per the OCFA BIA Subcommittee Preferred Plant List in effect at the time of providing the Section C.8 plans in accordance with Section C.3.D.
 - B. 100% irrigated and planted.
 - C. No installation of and complete removal of undesirable plant species from RPFPP Attachment 17, including Cedar species, Acacia Species other than Desert Carpet, and White Sage.
 - D. Industry standard spacing allowed for orchards is required including areas outside of the 100 feet as described in Section C.8, if the vegetative under story is maintained such that it does not create a fuel ladder or create the potential for ground fires, and subject to control of grasses, invasive shrubs and removal of non-viable groves (see Design Template 35).
 - E. Existing eucalyptus trees, existing and new orchards (citrus and avocado), and other large trees may be retained, if the vegetative under story is maintained such that it does not create a fuel ladder or create the potential for ground fires. Trees shall be limbed up to two and one-half times the height of the understory and dead and dying is removed from the tree.
 - F. Prior to precise fuel modification plan approval within each “A” Tentative (master) Tract Map, a location map shall indicate the RPFPP design template selected and symbolize each location defined by Section C.8.
 - G. Prior to County of Orange approval of applicable Landscape Plans, the planting plans for Section C.8 areas shall be provided to OCFA. Written acceptance of Section C.8 planting plans by OCFA results through stamping “Reviewed” on each planting plan sheet, acknowledging that RMV may pursue County of Orange approval of the landscape plans. RMV shall scan the planting plan sheets stamped “Reviewed” and provide PDF copies to both OCFA and the master maintenance corporation (Rancho MMC). Only the planting plan sheets within the plan set shall be provided. Once per Planning Area RMV shall provide OCFA with the appropriate page(s) of the Ranch Plan Covenants, Codes and Restrictions (CC&Rs) only to verify Section C fuel modification maintenance language is present.

Ranch Plan Fire Protection Program

9. **Conditions of Approval** -- Prior to Building Permit Issuance and Certificate of Occupancy, conditions of approval "3.e" and "3.f" in RPFPP Section A shall be satisfied.
10. **Annual Inspection and Maintenance:** Ranch Plan master maintenance corporation (Rancho MMC) is responsible for annual inspections and all maintenance of Zones A through C, as well as all Section C.8 defined areas and requirements, per CC&Rs recorded against all property within master maintenance corporation ownership, requiring specifically budgeted funds sufficient to meet the ongoing maintenance obligations.

These areas are to be annually inspected and maintained by the Ranch Plan master maintenance corporation (Rancho MMC) in perpetuity, including maintenance of:

- A. Plant types.
- B. Vertical and horizontal grouping and spacing.
- C. Replanting per the accepted design plans to maintain the original design and replacement of dead or dying vegetation with approved materials.
- D. Removal of undesirable species from RPFPP Attachment 17.
- E. Irrigation systems.
- F. Section C.4-7 requirements for fuel modification zones and Section C.8 requirements for Interior Common Area and Slope areas.

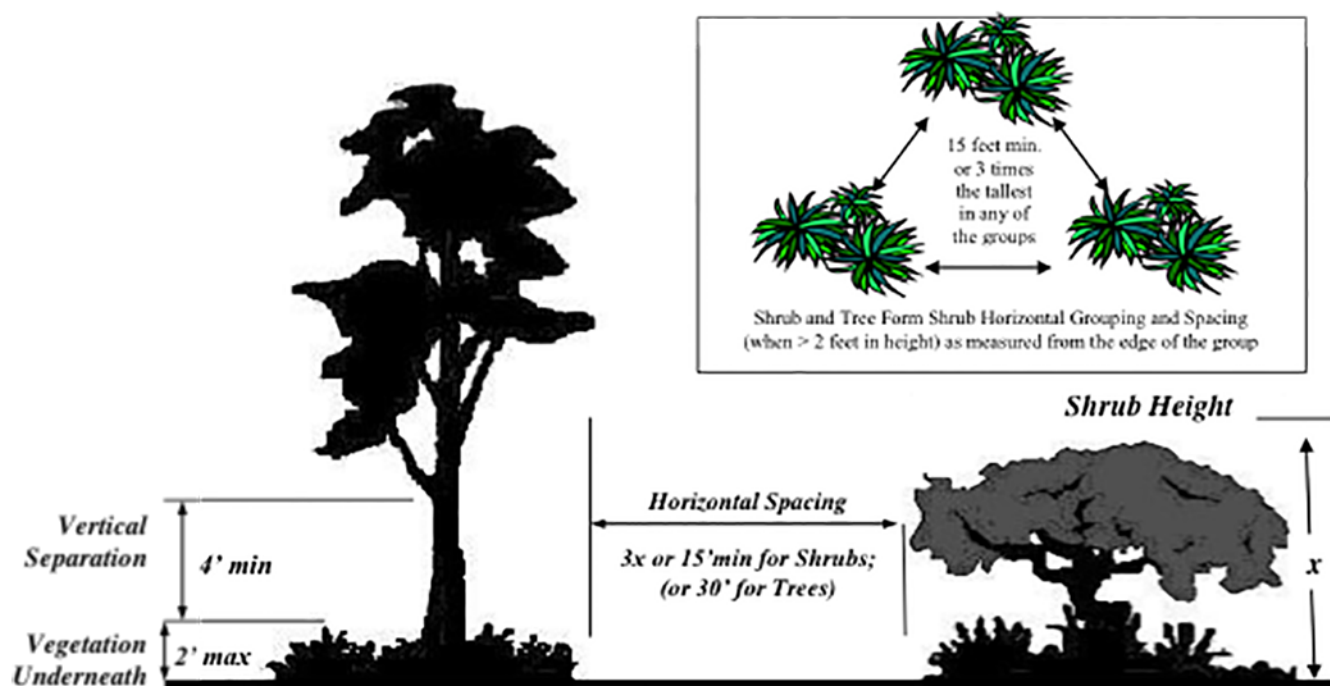
This generally includes a minimum of two growth reduction maintenance activities each year (spring and fall). Ongoing maintenance shall be conducted regardless of the date of inspections.

Subject to an annual inspection conducted by a representative of the Fire Chief in order to assure that the Fuel Modification Zone continues to be maintained in compliance with the applicable fuel modification requirements.

Subject to a reasonable fee, to be established by the Fire Chief from time to time that may be charged to the master maintenance corporation subject to the fuel modification requirements to offset the costs of the annual inspection.

Approved and accepted plans for Section C.4-7 and C.3.D are to be used for the inspection and retained by the master maintenance corporation (Rancho MMC) as a record in perpetuity in case inspections by Rancho MMC or OCFA determine that these landscaped areas shall be returned to their original design. It is the responsibility of the master maintenance corporation (Rancho MMC) to forward copies of all approved landscape plans to the currently contracted maintenance company and property management company, and any newly contracted property management company maintenance company.

Horizontal Spacing and Vertical Separation Requirements for Installation and Maintenance in All Fuel Modification Zones



Horizontal Spacing

Vegetation Less than 2 Feet in Height:

- No horizontal spacing or vertical separation is required in all zones. Ground cover in Zone B should cover the entire ground between groups of shrubs, trees, or grasses. Ground cover shall not exceed 2 feet in height.

Shrubs and Trees 2 Feet in Height or Greater:

Shrub and Tree Group Size:

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

Shrub / Tree-form Shrub Group Spacing:

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

Tree Group Spacing:

- Groups of Trees shall be spaced by a distance of 30 feet minimum regardless of height.

Vertical Separation

Shrubs and Trees Less than 10 Feet in Height:

- 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 further than 30 feet from structure).

Shrubs and Trees 10 Feet in Height or Greater:

- 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 height.

UNDESIRABLE PLANT SPECIES (Target Species)

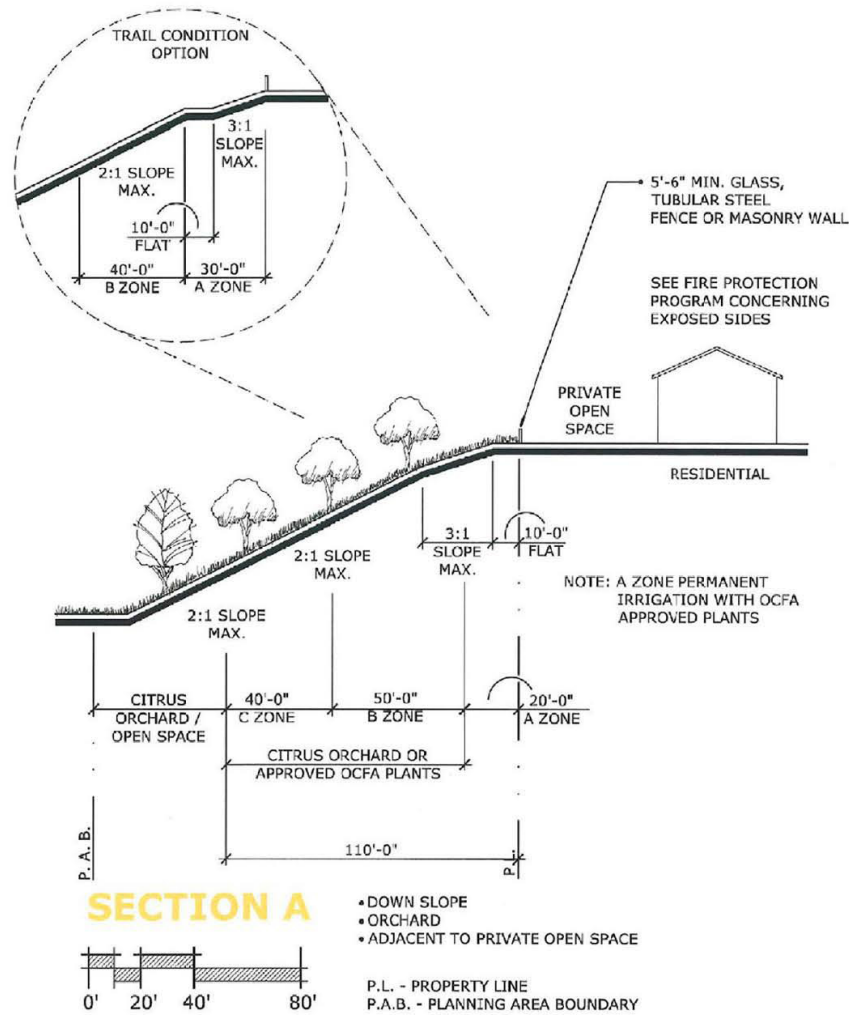
Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be either physical or chemical. Physical properties that would contribute to high flammability include large amounts of dead material retained within the 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 are notorious for containing these volatile substances.

Plants with these characteristics shall not be planted in any fuel modification zones. Should these species already exist within these areas, they shall be removed because of the potential threat they pose to any structures. They are referred to as target species since their complete removal is a critical part of hazard reduction. These fire-prone plant species include (but not limited to):

FIRE PRONE PLANT SPECIES (MANDATORY REMOVAL)

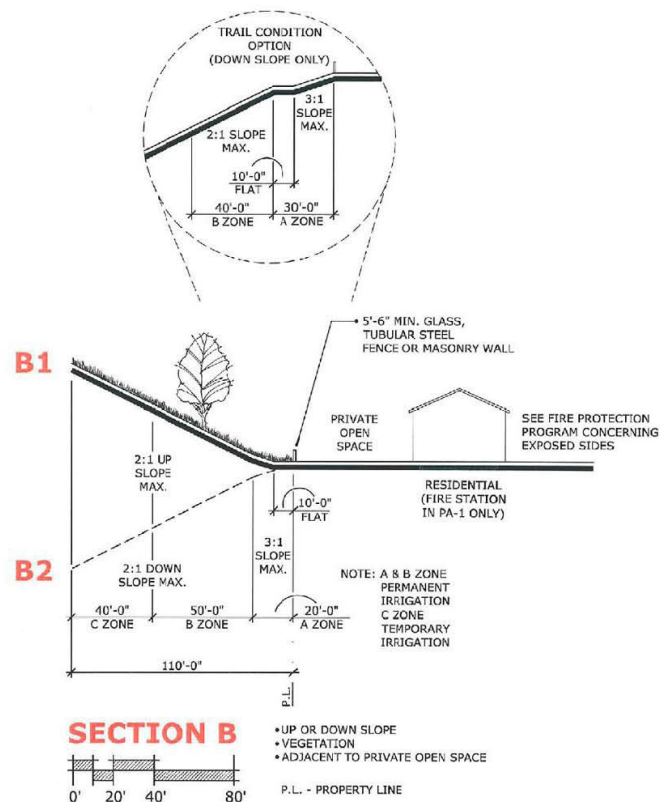
<u>Botanical Name</u>	<u>Common Name</u>
Cynara Cardunculus	Artichoke Thistle
Ricinus Communis	Castor Bean Plant
Cirsium Vulgare	Wild Artichoke
Brassica Nigra	Black Mustard
Silybum Marianum	Milk Thistle
Saccolola Austalis	Russian Thistle/Tumbleweed
Nicotiana Bigelovii	Indian Tobacco
Nicotiana Glauca	Tree Tobacco
Lactuca Scariola	Prickly Lettuce
Conyza Canadensis	Horseweed
Heterotheca Grandiflora	Telegraph Plant
Anthemix Cotula	Mayweed
Urtica Urens	Burning Nettle
Cardaria Draba	Noary Cress, Perennial Peppergrass
Brassica Rapa	Wild Turnip, Yellow Mustard, Field Mustard
Adenostoma Fasciculatum	Chamise
Adenostoma Sparsifolium	Red Shanks
Cortaderia Selloana	Pampas Grass
Artemisia Californica	California Sagebrush
Eriogonum Fasciculatum	Common Buckwheat
Salvia Mellifera	Black Sage
<u>Ornamental:</u>	
Cortaderia	Pampas Grass
Cupressus sp	Cypress
Eucalyptus sp	Eucalyptus
Juniperus sp	Juniper
Pinus sp	Pine
Areaceae (all palm sp)	Palms

Rev. 09/2013



A) Modified 110-foot FMA. Vegetation adjacent to the FMA is citrus orchard (FM 9) and coastal sage scrub and/or grass beyond (FM 2). Downslope from structures. A Zone starts at the rear property line. B Zone is irrigated landscaping on a manufactured slope. C Zone is comprised of maintained citrus orchard. Fire behavior is equal to or less than the maximum predicted in the WFMP.

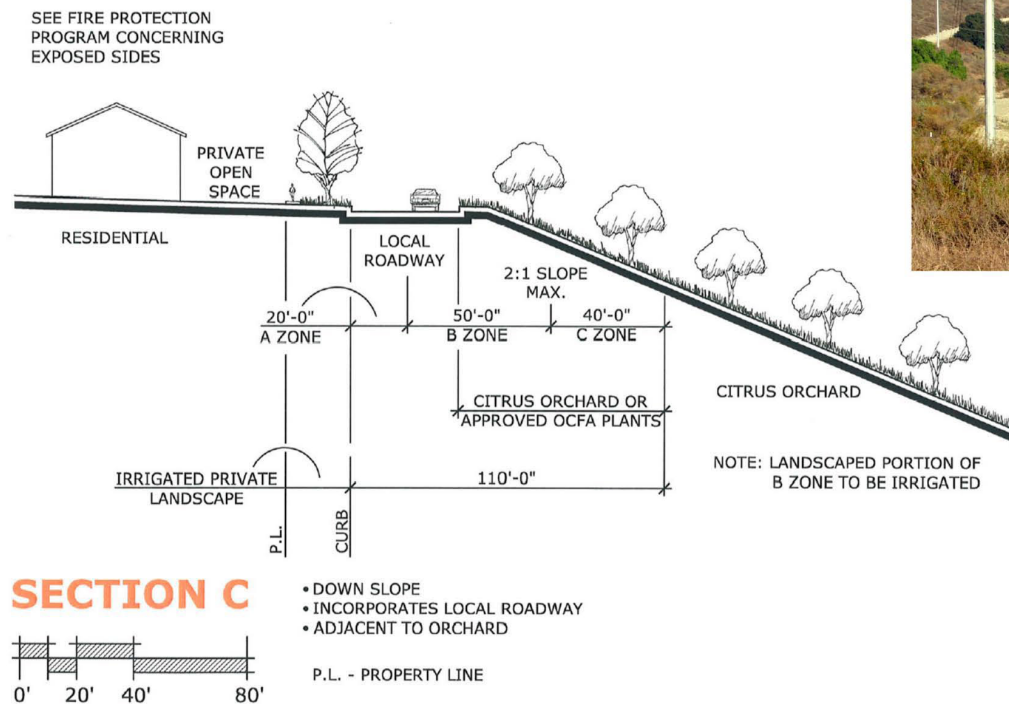
**PRELIMINARY FUEL
MODIFICATION PLAN**



B1) Modified 110-foot FMA. Vegetation adjacent to the FMA is coastal sage scrub and/or grass (FM 2). Upslope from structures. A Zone starts at the rear property line. B Zone is irrigated landscaping on a manufactured slope. C Zone is comprised of thinned native vegetation or OCFA plants. Fire behavior is equal to or less than the maximum predicted in the WFMP.

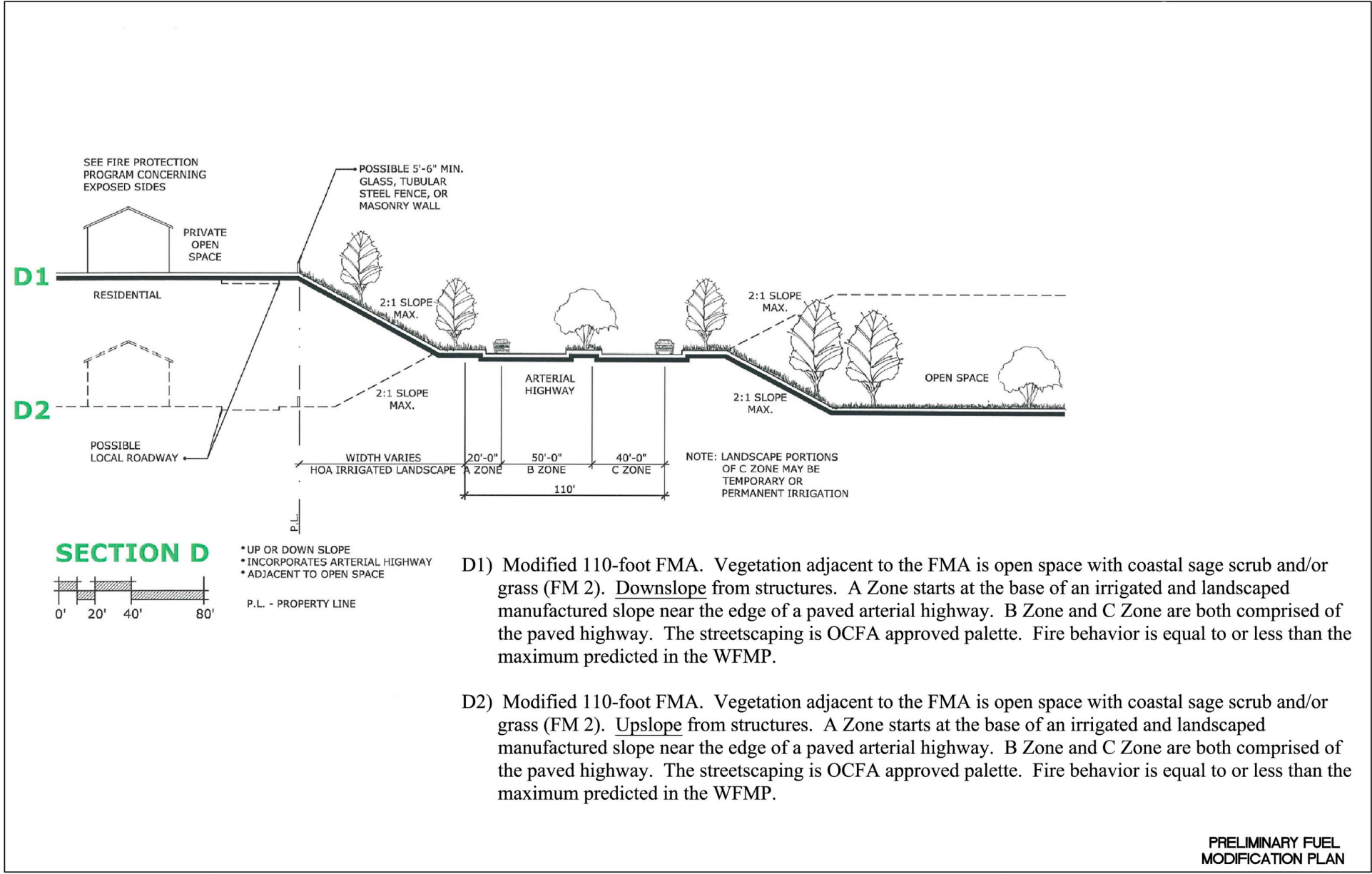
B2) Modified 110-foot FMA. Vegetation adjacent to the FMA is coastal sage scrub and/or grass (FM 2). Downslope from structures. A Zone starts at the rear property line. B Zone is irrigated landscaping on a manufactured slope. C Zone is comprised of thinned native vegetation or OCFA plants with temporary irrigation. Fire behavior is equal to or less than the maximum predicted in the WFMP.

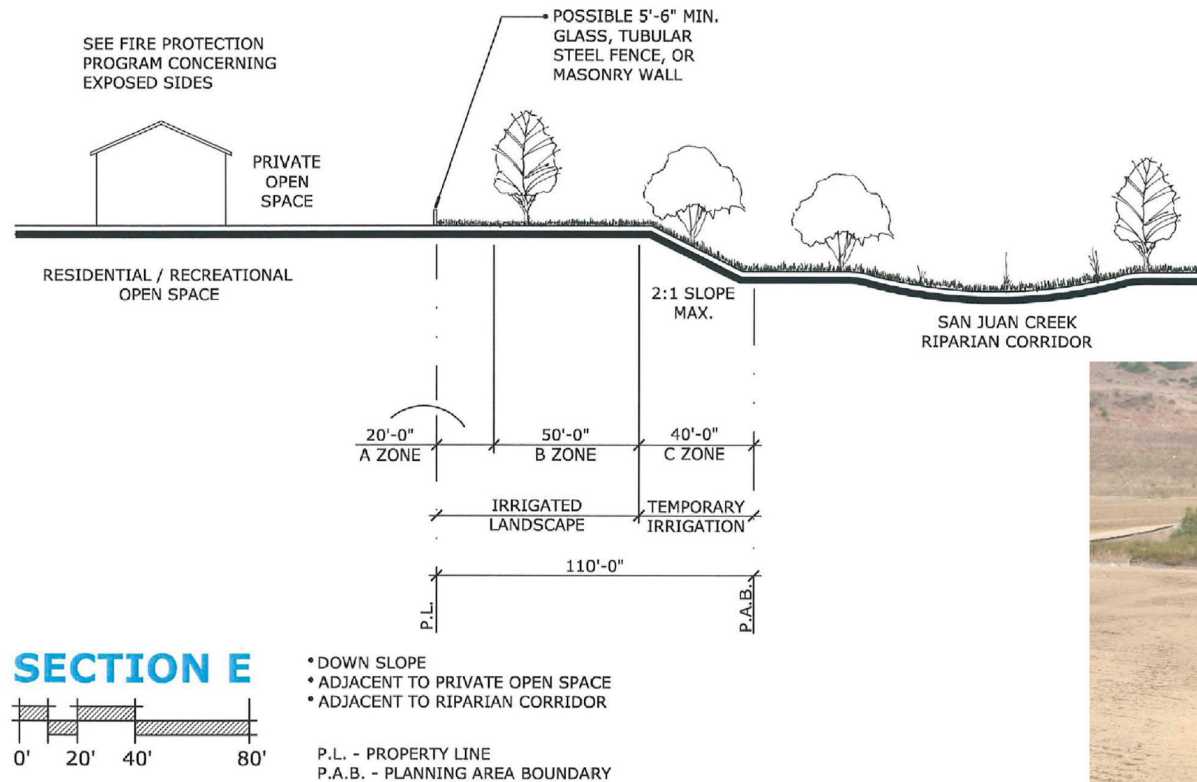
**PRELIMINARY FUEL
MODIFICATION PLAN**



C) Modified 110-foot FMA. Vegetation adjacent to the FMA is citrus orchard (FM 9) and coastal sage scrub and/or grass beyond (FM 2). Downslope from structures. A Zone starts at the adjacent paved local roadway. B Zone is comprised 20 feet of the 40-foot wide roadway and irrigated landscaping on a manufactured slope below. C Zone is comprised of maintained citrus orchard or OCFA plants with temporary irrigation. Fire behavior is equal to or less than the maximum predicted in the WFMP.

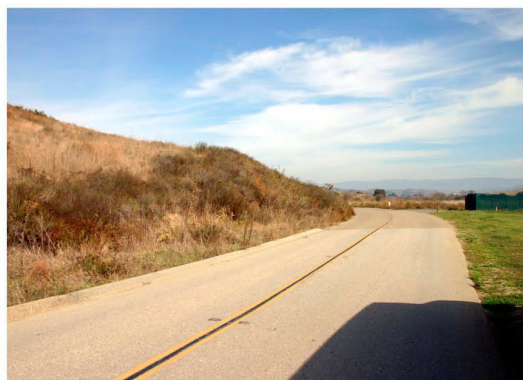
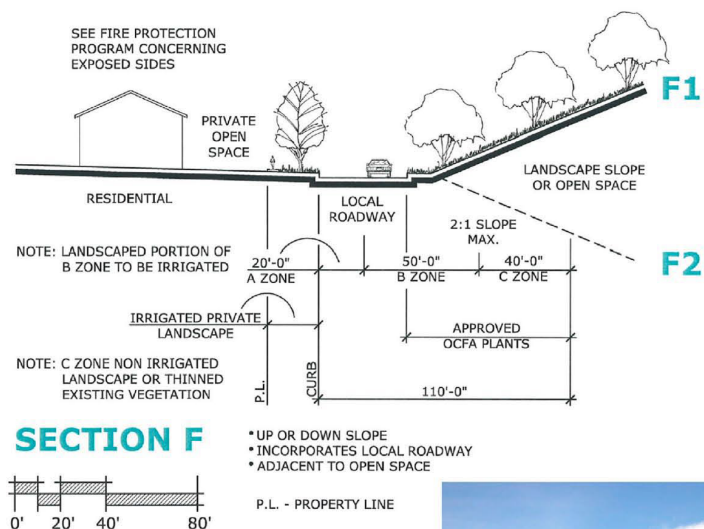
PRELIMINARY FUEL
MODIFICATION PLAN





E) Modified 110-foot FMA. Vegetation adjacent to the FMA is riparian in the San Juan Creek drainage (FM 5 & 9). Downslope from structures. A Zone is level and starts at the rear property line. B Zone is level irrigated landscaping. C Zone is temporarily irrigated landscaping on a manufactured slope. Fire behavior is equal to or less than the maximum predicted in the WFMP.

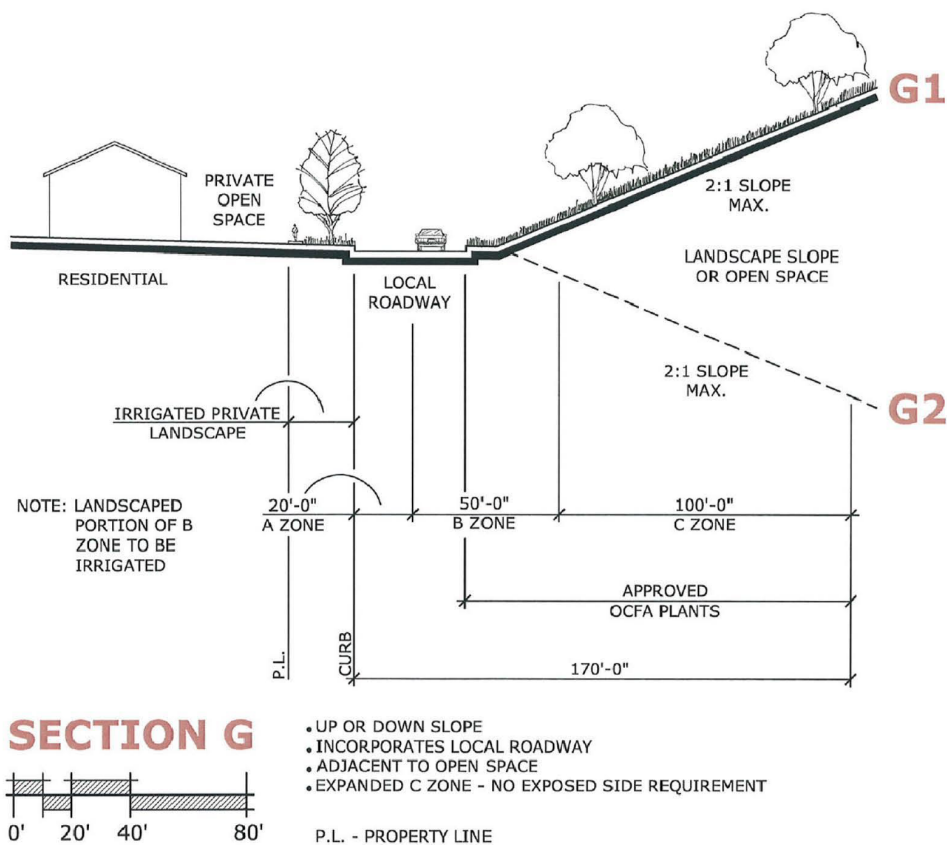
PRELIMINARY FUEL
MODIFICATION PLAN



F1) Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM 2). Upslope from structures. A Zone starts at the adjacent paved local roadway. B Zone is comprised 20 feet of the roadway and irrigated landscaping on a manufactured slope above. C Zone is comprised of non-irrigated OCFA plants or thinned native vegetation. Fire behavior is equal to or less than the maximum predicted in the WFMP.

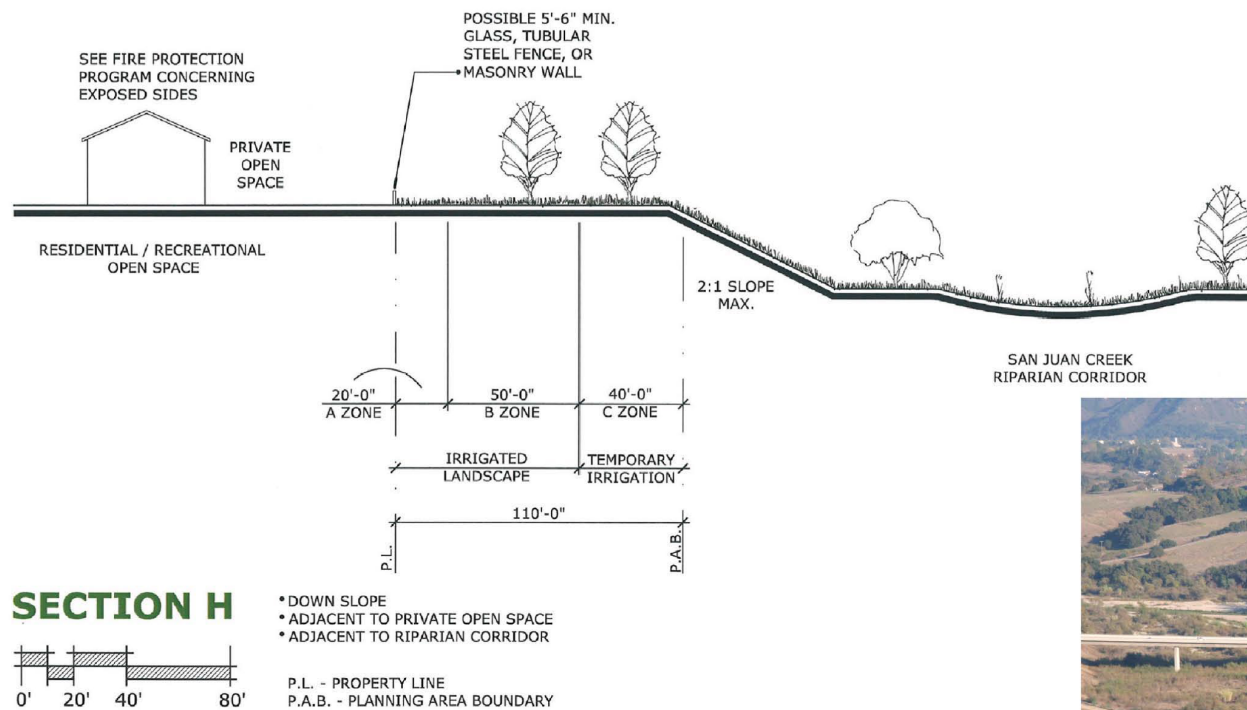
F2) Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM 2). Downslope from structures. A Zone starts at the adjacent paved local roadway. B Zone is comprised 20 feet of the roadway and irrigated landscaping on a manufactured slope below. C Zone is comprised of non-irrigated OCFA plants or thinned native vegetation. Fire behavior is equal to or less than the maximum predicted in the WFMP.

PRELIMINARY FUEL
MODIFICATION PLAN

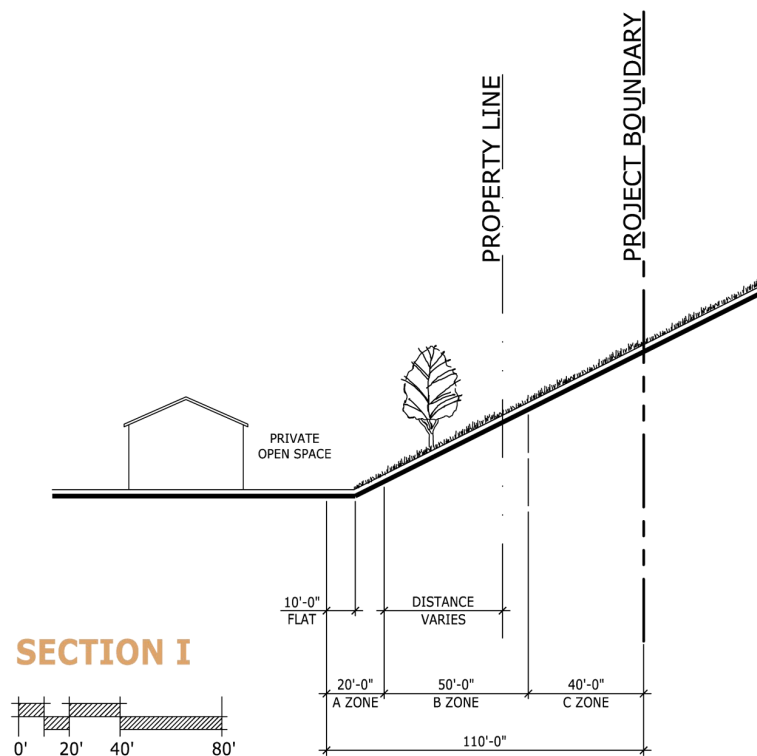


G1) Extended 210-foot FMA: 20-foot A Zone; 50-foot B Zone; 140-foot C Zone. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM 2). Upslope from structures. A Zone starts at the adjacent paved local roadway. B Zone is comprised 20 feet of the roadway and irrigated landscaping on a manufactured slope above. C Zone is comprised of landscaping or thinned native vegetation. Fire behavior is equal to or less than the maximum predicted in the WFMP.

PRELIMINARY FUEL
MODIFICATION PLAN

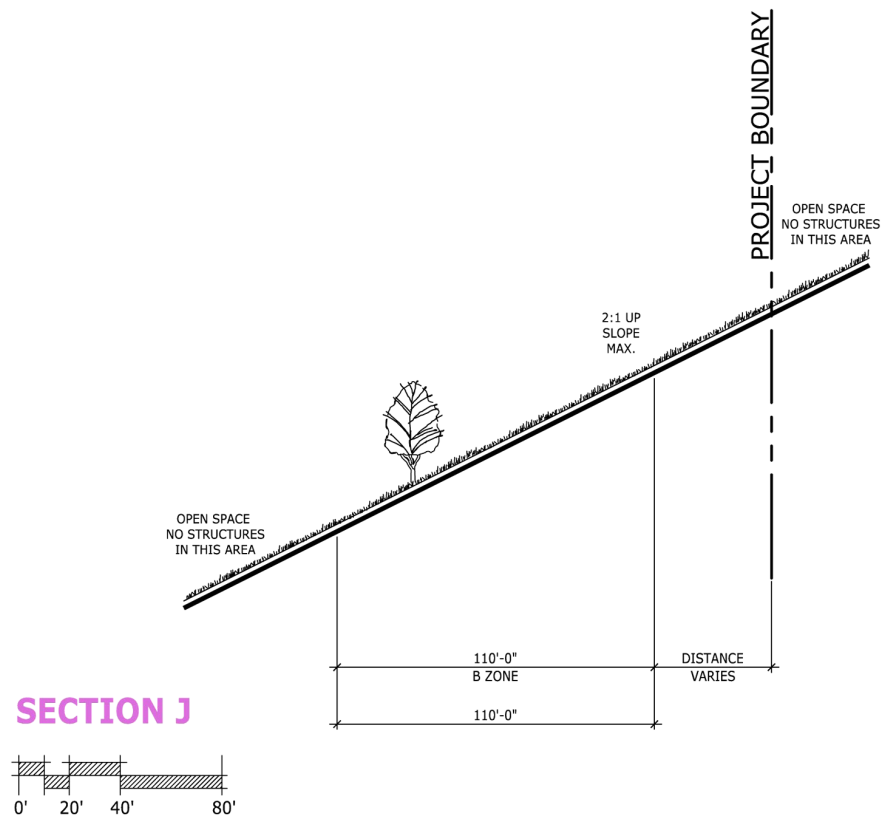


H) Modified 110-foot FMA. Vegetation adjacent to the FMA is riparian and oak woodland in the San Juan Creek drainage (FM 5 & 9). Downslope from structures. A Zone is level and starts at the rear property line. B Zone is level irrigated landscaping. C Zone is temporarily irrigated landscaping on level terrain. Fire behavior is equal to or less than the maximum predicted in the WFMP.



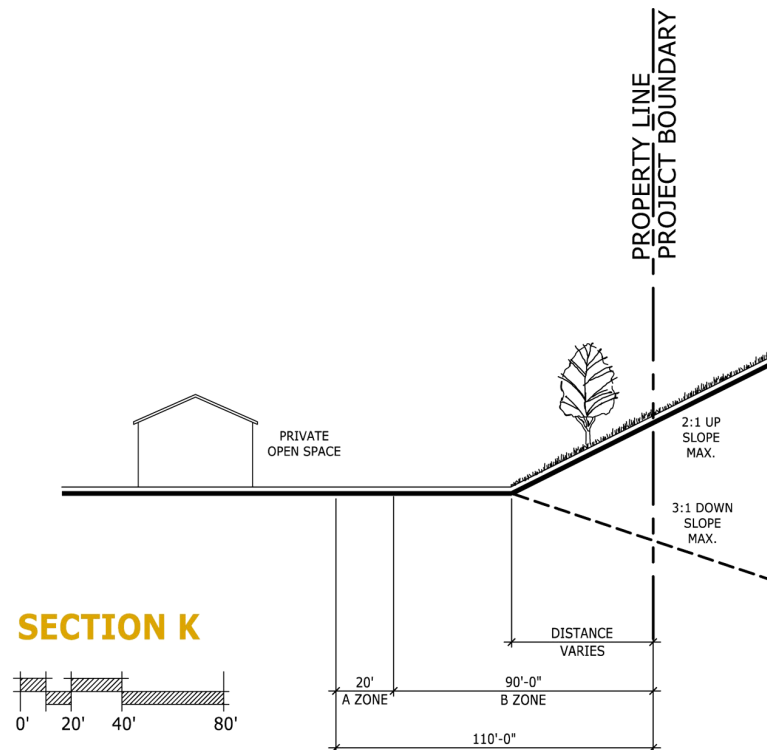
- I** Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope from structures. B zone is irrigated landscaping on a manufactured slope, begins on home owners property exactly 110' from the project boundary. C zone is comprised of thinned native vegetation or OCFA plants. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**



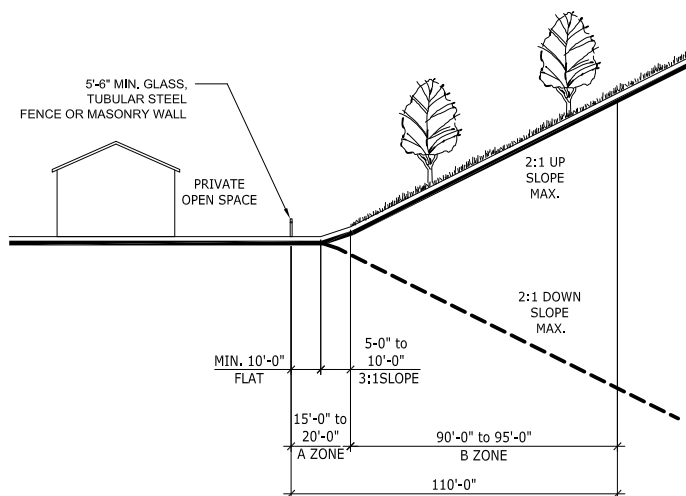
- J** Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope from open space. B zone is irrigated landscaping on a manufactured slope, begins exactly 110' from the project boundary. C zone is comprised of thinned native vegetation or OCFA plants. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**

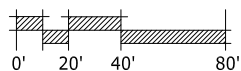


K Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone is 20' adjacent structure beginning 110' from property line/project boundary. B zone is irrigated landscaping on flat area on the homeowners property and a manufactured slope, begins on homeowners property exactly 90' from the property line/project boundary. FMA is total distance of 110' from property line/project boundary.

**PRELIMINARY FUEL
MODIFICATION PLAN**

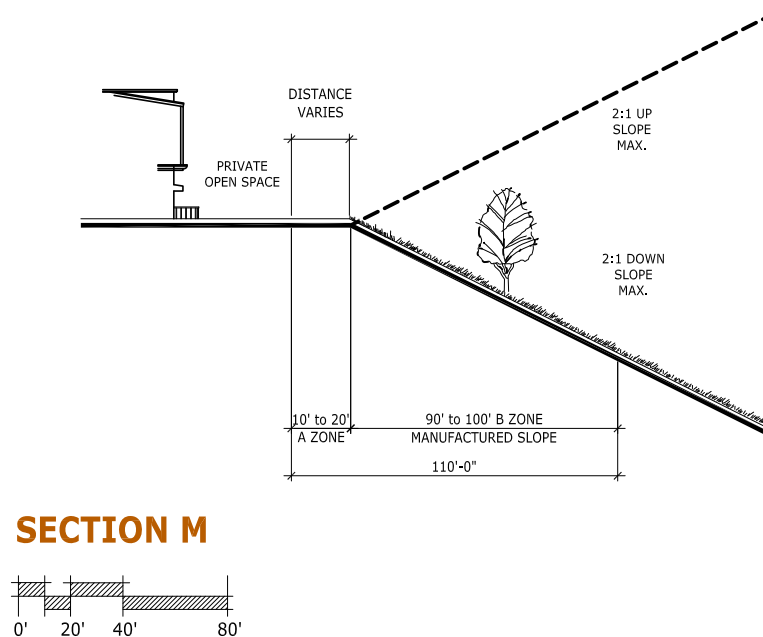


SECTION L



- L** Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone starts at the side yard property line and is 15' to 20'. B zone is irrigated landscaping on a manufactured slope. FMA is fully irrigated total distance of 110'. Fire behavior is equal to or less than the maximum predicted in the WFMP.

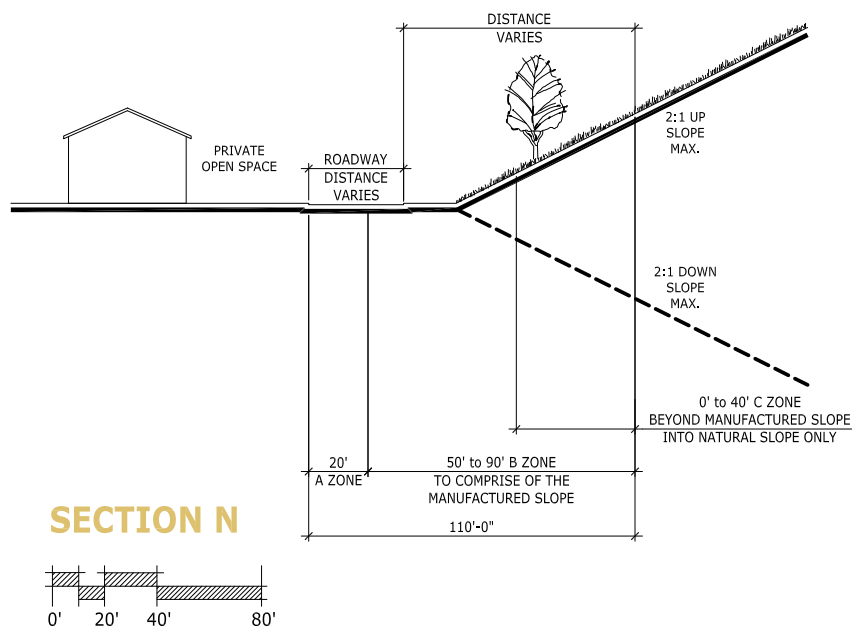
**PRELIMINARY FUEL
MODIFICATION PLAN**



SECTION M

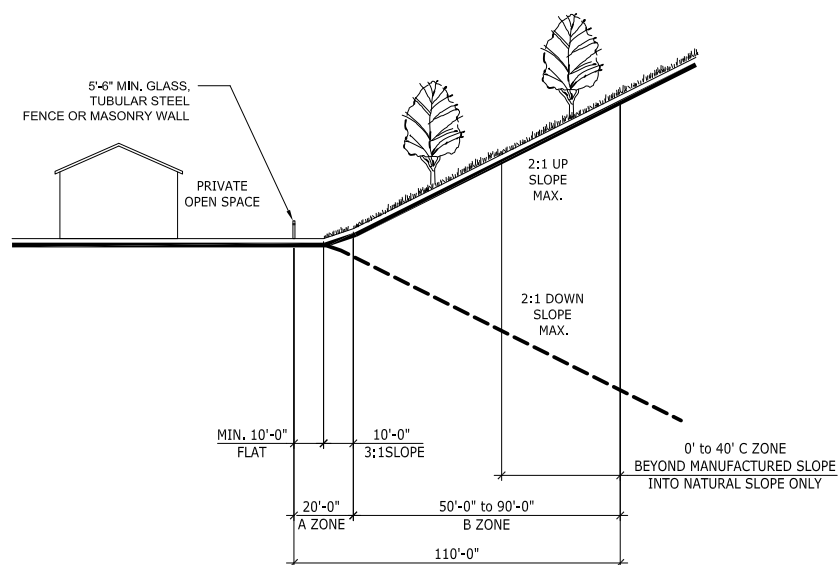
M Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone is 15' to 20' adjacent to the structure beginning a minimum of 10' / maximum 36' from the top of slope into the pad area. B zone is irrigated landscaping on the flat pad area or on a manufactured slope. FMA is fully irrigated total distance of 110'. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**

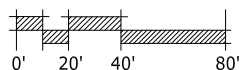


N Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone starts at curb and is 20'. B zone is irrigated landscaping on a manufactured slope only. C Zone is comprised of thinned native vegetation within the natural slope only. FMA is a total distance of 110'. No C Zone will be used if the B Zone is 90' and within the irrigated manufactured slope. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**

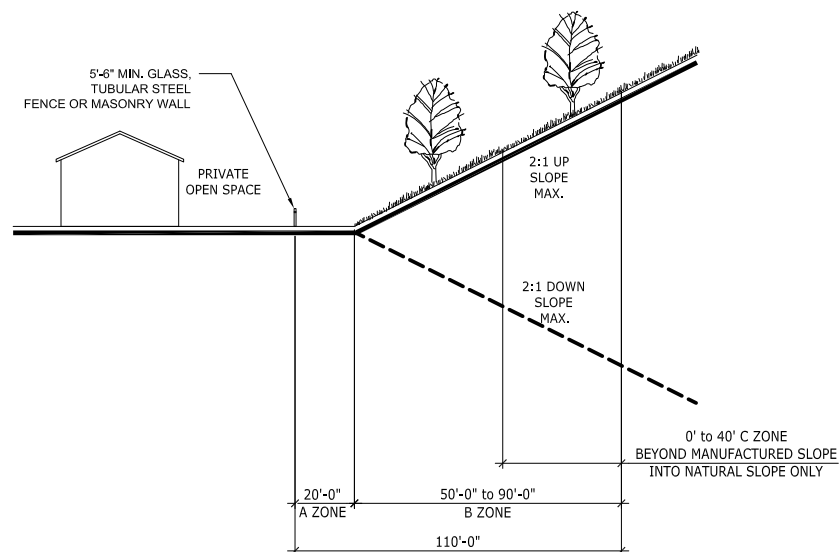


SECTION O

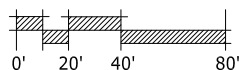


- O** Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone starts at the rear yard or side yard property line and is 20'. B zone is irrigated landscaping on a manufactured slope only. C Zone is comprised of thinned native vegetation within the natural slope only. FMA is a total distance of 110'. No C Zone will be used if the B Zone is 90' and within the irrigated manufactured slope. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**



SECTION P



- P** Modified 110-foot FMA. Vegetation adjacent to the FMA is open space with coastal sage scrub and/or grass (FM2). Upslope or downslope from structures. A zone starts at the rear yard or side yard property line and is 20'. B zone is irrigated landscaping on a manufactured slope only. C Zone is comprised of thinned native vegetation within the natural slope only. FMA is a total distance of 110'. No C Zone will be used if the B Zone is 90' and within the irrigated manufactured slope. Fire behavior is equal to or less than the maximum predicted in the WFMP.

**PRELIMINARY FUEL
MODIFICATION PLAN**

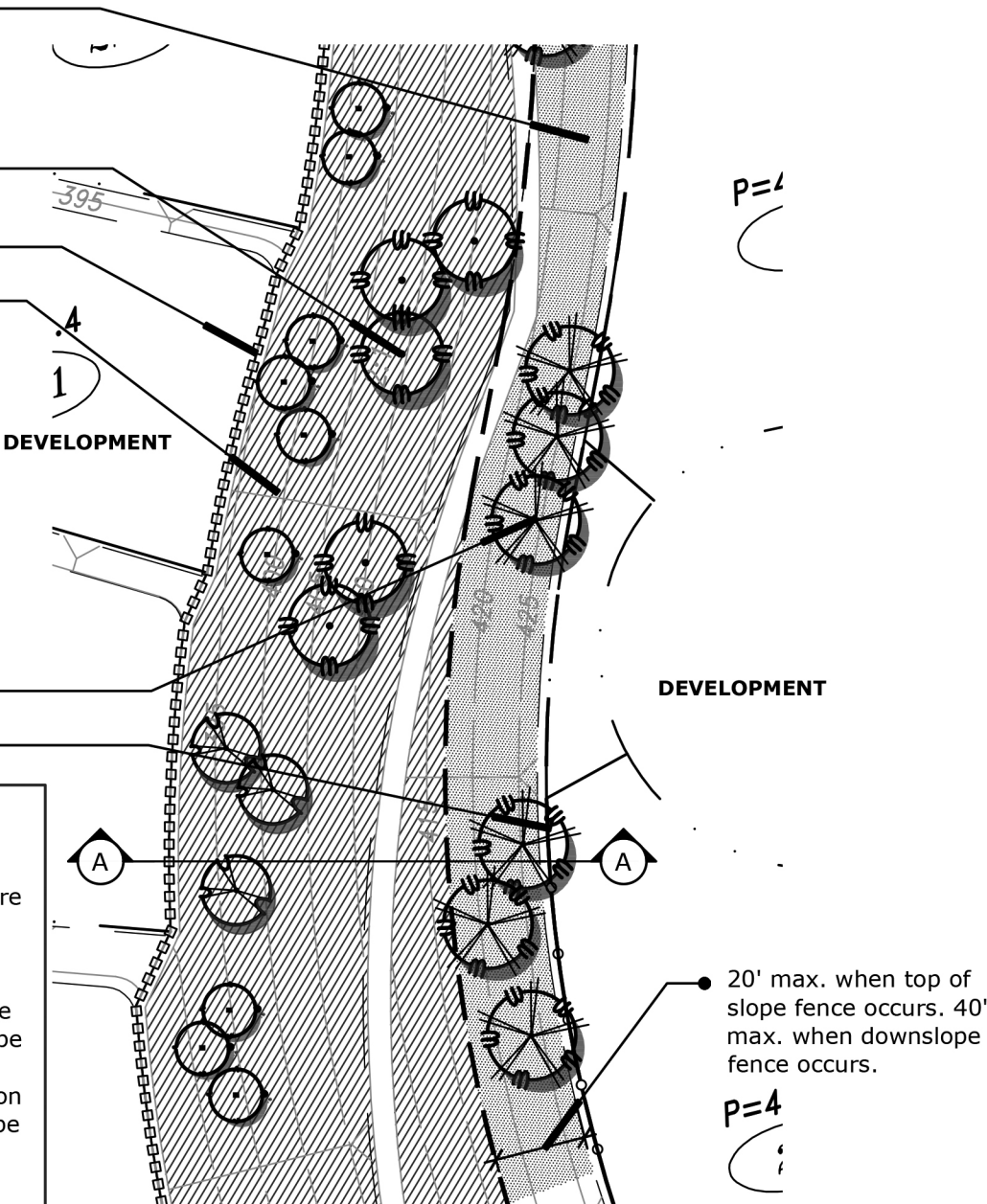
When a downslope fence occurs, the area within 40' max. from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max. from the top of slope must meet the following criteria*

- *Various species of shrub, grass or hydroseed massings:
- Natural growth habit is to be 2'-0" or less.
 - Height of massing must be maintained at 2'-0" or less.
 - No native, seasonal grasses

Typical tree massing
Toe of slope mow curb, wall, or fence where occurs.

- Shrub Massings:
- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
 - Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
 - Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

Tree species at top of slopes
Top of slope mow curb, wall, or fence where occurs.

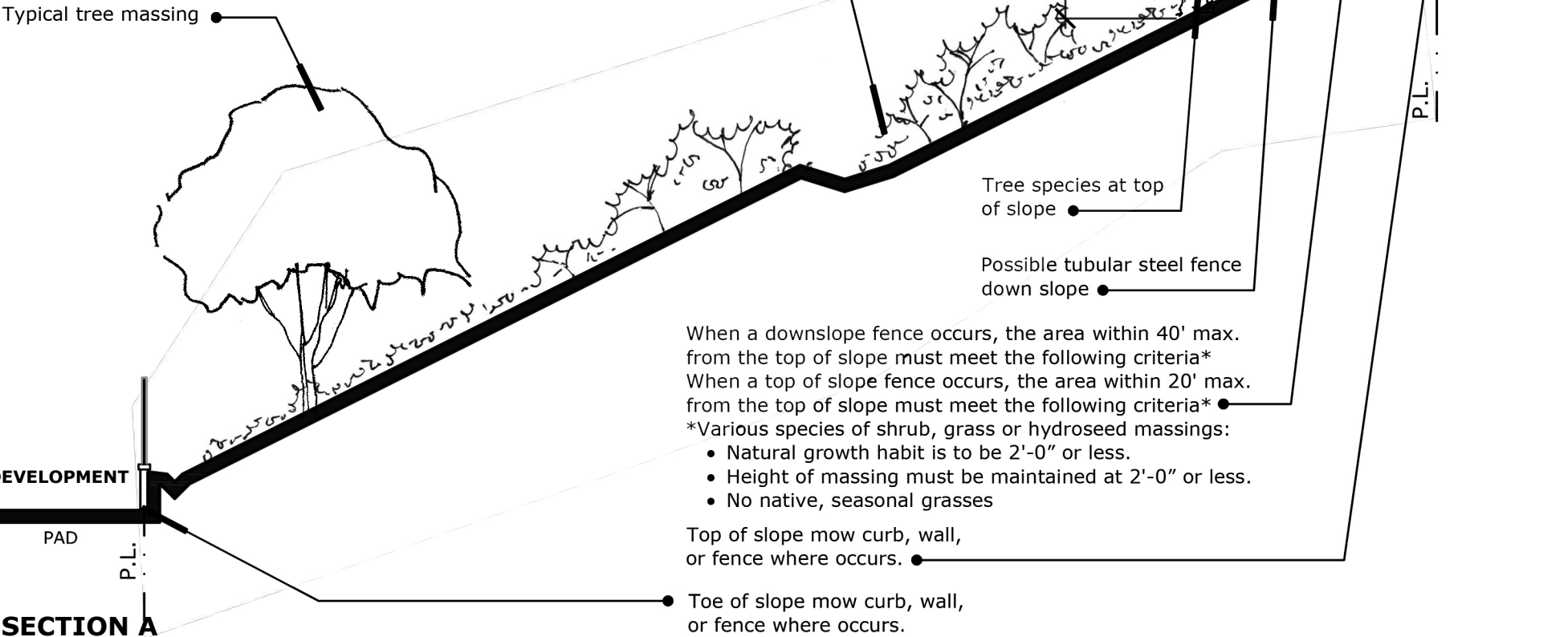


NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Homeowners will be required to sign special covenants for maintenance of the area within the down slope fence. Maintenance of this area will be strictly enforced by the H.O.A. through CC&R's.
- Neighborhood Builder will be responsible for the landscape and irrigation installation of the area within the down slope fence. Plant species will be dictated by the Master Developer and plans will be reviewed and approved by the Rancho MMC Architectural Review Committee. Final installation will be reviewed and approved by the H.O.A.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.

PLAN
SCALE: 1" = 40'-0"

- Shrub Massings:
- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
 - Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
 - Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.



SECTION A
SCALE: 1" = 10'-0"

INTERNAL SLOPES 30'-0" AND HIGHER
DESIGN Template A

RPFPP SECTION C

RANCH PLAN PLANNED COMMUNITY

When a downslope fence occurs, the area within 40' max. from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max. from the top of slope must meet the following criteria*

- *Various species of shrub, grass or hydroseed massings:
- Natural growth habit is to be 2'-0" or less.
 - Height of massing must be maintained at 2'-0" or less.
 - No native, seasonal grasses

Top of slope mow curb, wall, or fence where occurs.

Tree species at top of slopes

Toe of slope mow curb, wall, or fence where occurs.

Typical tree massing

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Homeowners will be required to sign special covenants for maintenance of the area within the down slope fence. Maintenance of this area will be strictly enforced by the H.O.A. through CC&R's.
- Neighborhood Builder will be responsible for the landscape and irrigation installation of the area within the down slope fence. Plant species will be dictated by the Master Developer and plans will be reviewed and approved by the Rancho MMC Architectural Review Committee. Final installation will be reviewed and approved by the H.O.A.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.

PLAN

SCALE: 1" = 40'-0"



When a downslope fence occurs, the area within 40' max. from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max. from the top of slope must meet the following criteria*

- *Various species of shrub, grass or hydroseed massings:
- Natural growth habit is to be 2'-0" or less.
 - Height of massing must be maintained at 2'-0" or less.
 - No native, seasonal grasses

Shrub Massings:

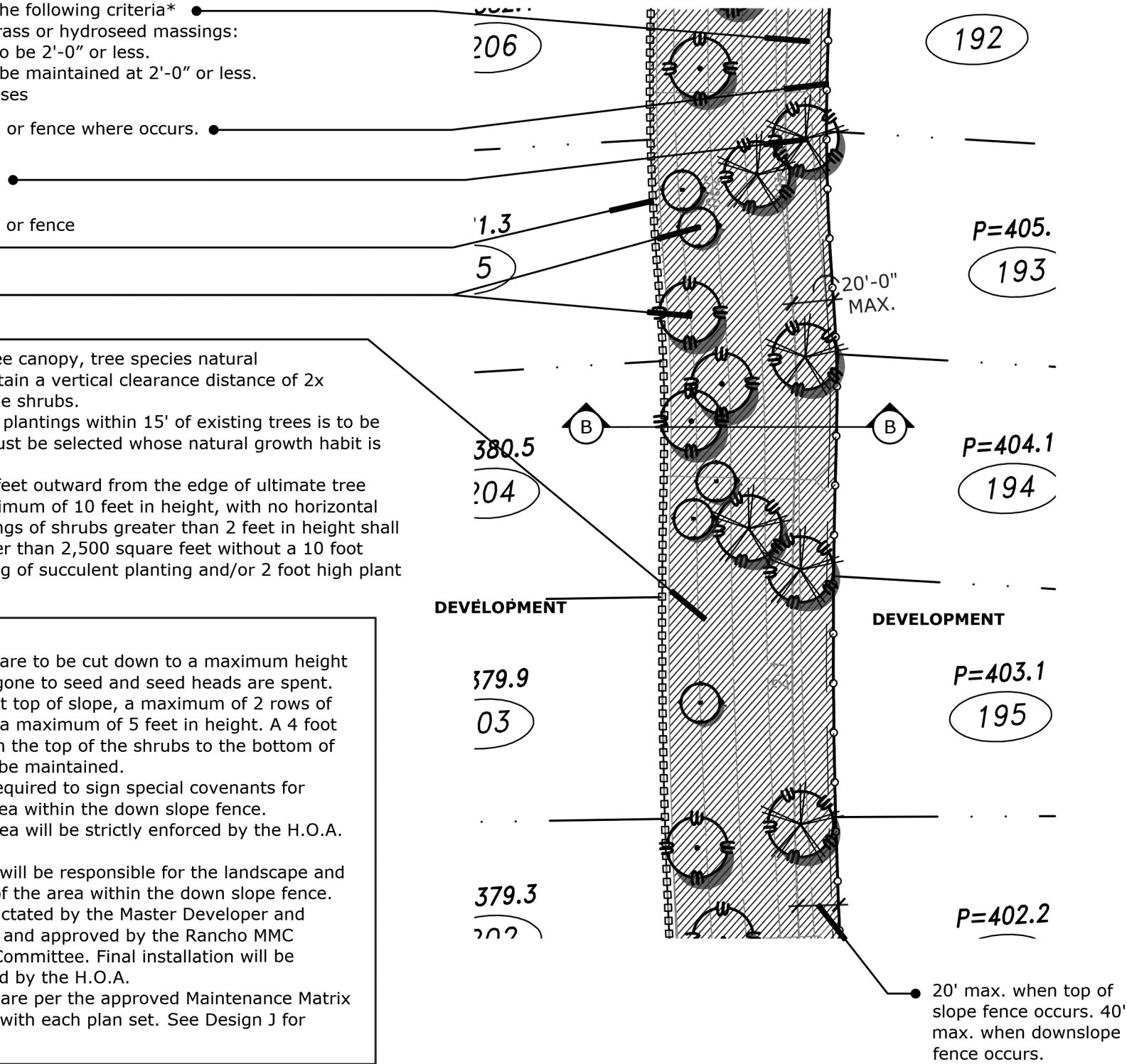
- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

Typical tree massing

Toe of slope mow curb, wall, or fence where occurs.

SECTION B

SCALE: 1" = 10'-0"



- Shrub Massings:
- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
 - Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
 - Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

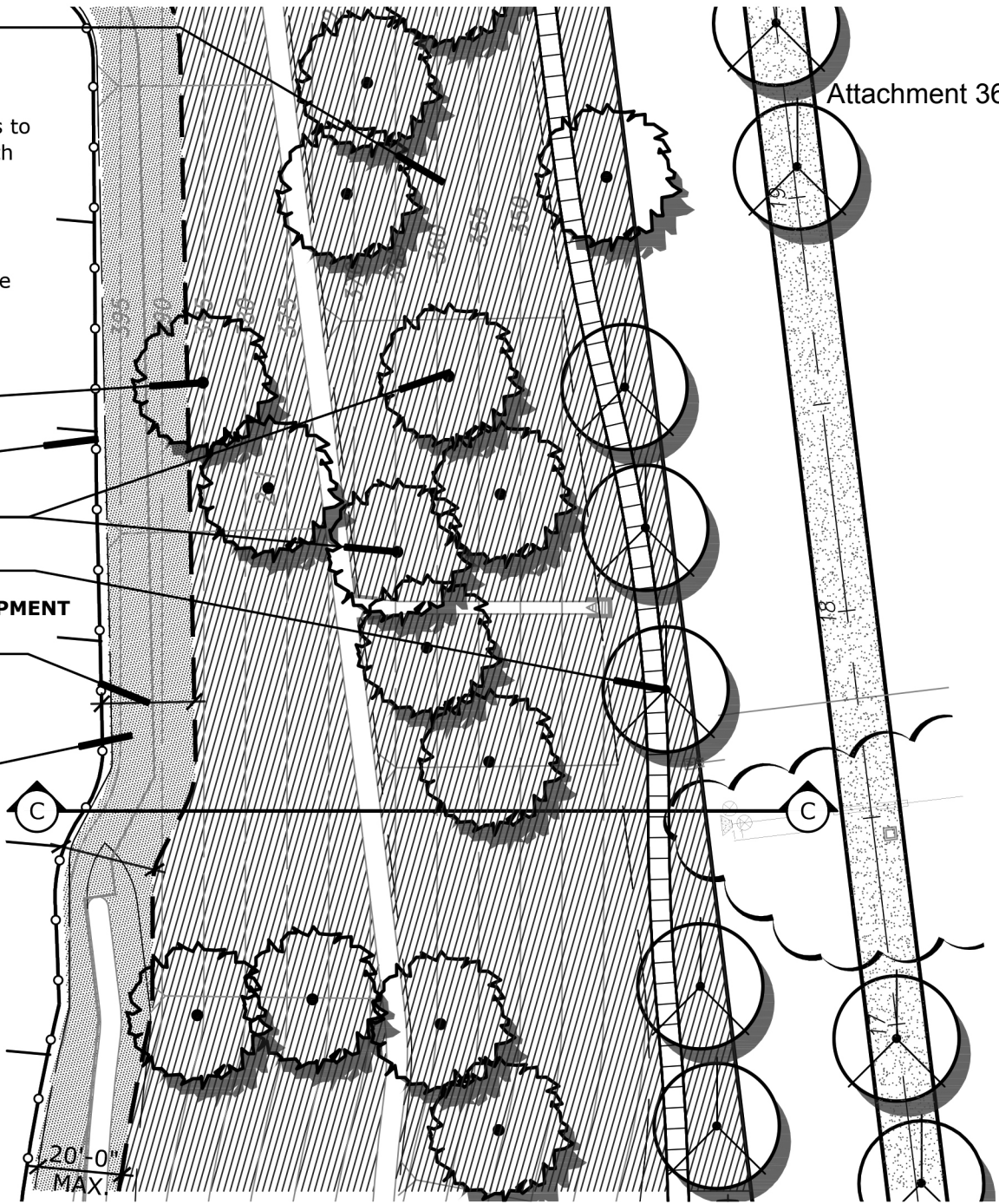
- Tree species at top of slopes
- Top of slope mow curb, wall, or fence where occurs.
- Intermittent tree canopy massing
- Parkway tree
- 20' max. when top of slope fence occurs.
40' max. when downslope fence occurs.

When a downslope fence occurs, the area within 40' max. from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max. from the top of slope must meet the following criteria*
*Various species of shrub, grass or hydroseed massings:

- Natural growth habit is to be 2'-0" or less.
- Height of massing must be maintained at 2'-0" or less.
- No native, seasonal grasses

NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Homeowners will be required to sign special covenants for maintenance of the area within the down slope fence. Maintenance of this area will be strictly enforced by the H.O.A. through CC&R's.
- Neighborhood Builder will be responsible for the landscape and irrigation installation of the area within the down slope fence. Plant species will be dictated by the Master Developer and plans will be reviewed and approved by the Rancho MMC Architectural Review Committee. Final installation will be reviewed and approved by the H.O.A.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.



PLAN
SCALE: 1" = 40'-0"

DEVELOPMENT

PAD

P.L.

Possible tubular steel fence down slope

Top of slope mow curb, wall, or fence where occurs.

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

When a downslope fence occurs, the area within 40' max. from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max. from the top of slope must meet the following criteria*
*Various species of shrub, grass or hydroseed massings:

- Natural growth habit is to be 2'-0" or less.
- Height of massing must be maintained at 2'-0" or less.
- No native, seasonal grasses

Tree species at top of slopes

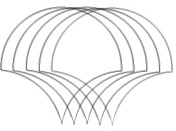
Intermittent tree canopy massing

Parkway tree

5'-0" **SIDEWALK**

R.O.W.

SECTION C
SCALE: 1" = 20'-0"



INTERNAL STREET SLOPE 30'-0" AND HIGHER
DESIGN Template C

RPFPP SECTION C

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

Tree species at top of slopes

Intermittent tree canopy massing

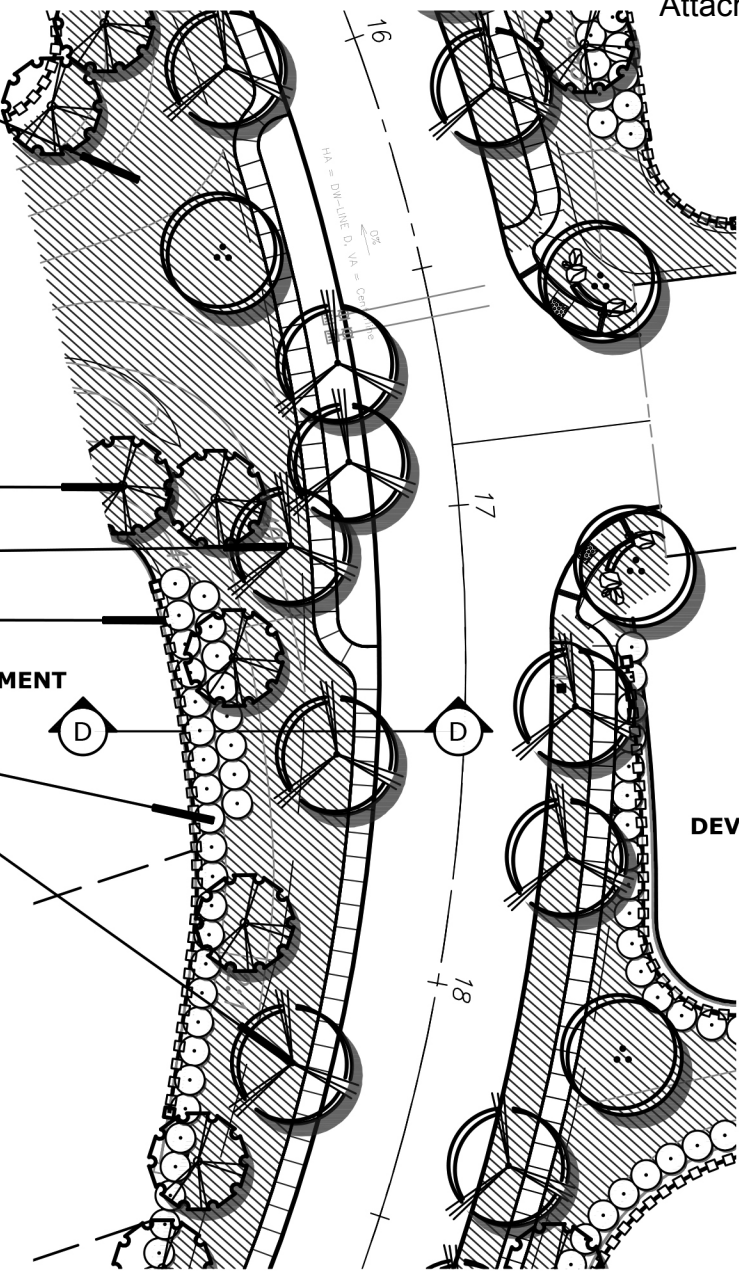
Full height block wall

Shrub massings to soften project walls where occurs. No understory clearance required for two rows of shrubs immediately adjacent to the wall. Shrub height to be maintained below the height of the wall.

Parkway tree

NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Mature tree canopies along roadways are to be maintained per County of Orange OCPW standard 1700.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.



PLAN

SCALE: 1" = 40'-0"



Tree species at top of slopes

Shrub massings to soften project walls where occurs. No understory clearance required for two rows of shrubs immediately adjacent to the wall. Shrub height to be maintained below the height of the wall.

Top of slope mow curb, wall, or fence where occurs.

DEVELOPMENT

PAD

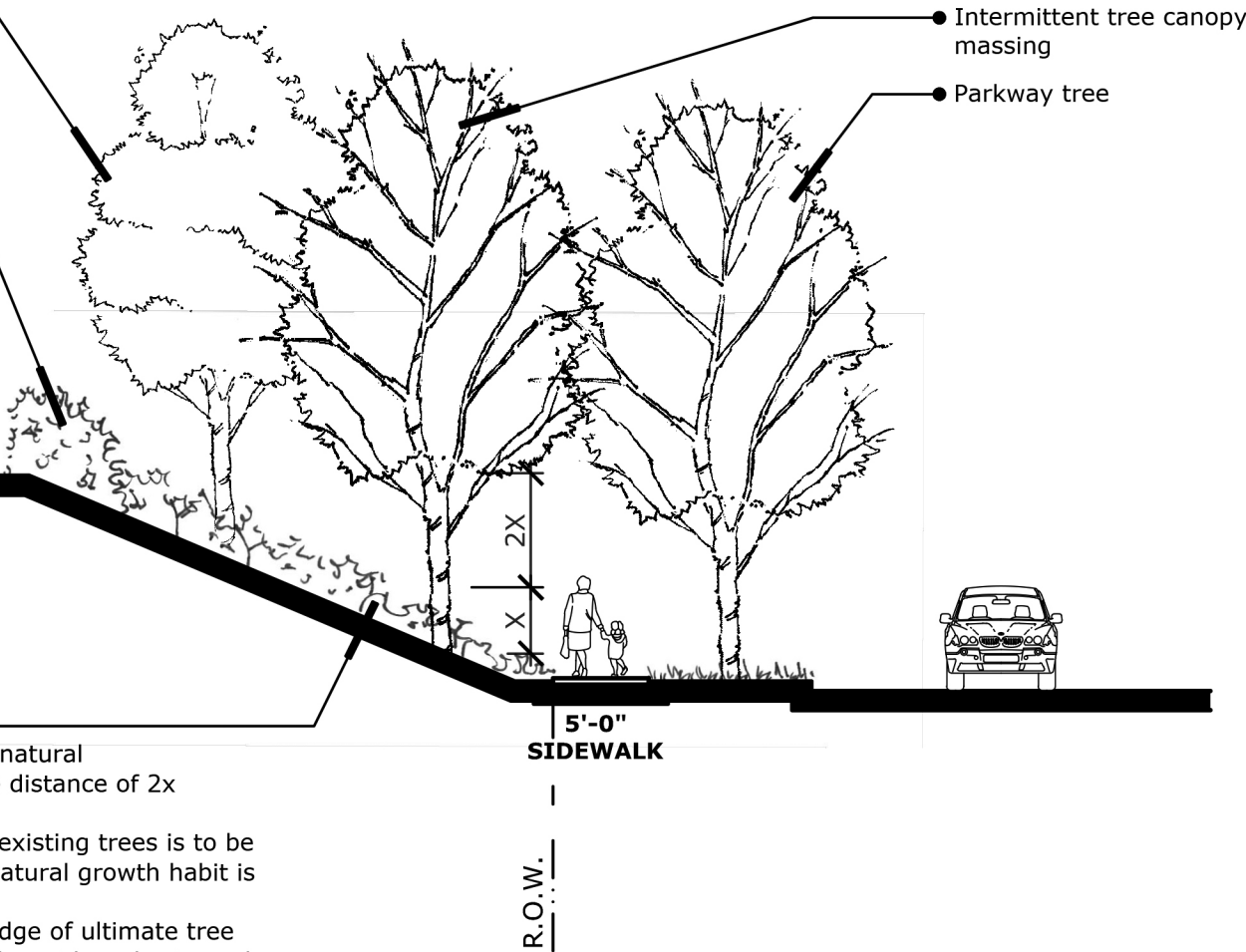
P.L.

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

SECTION D

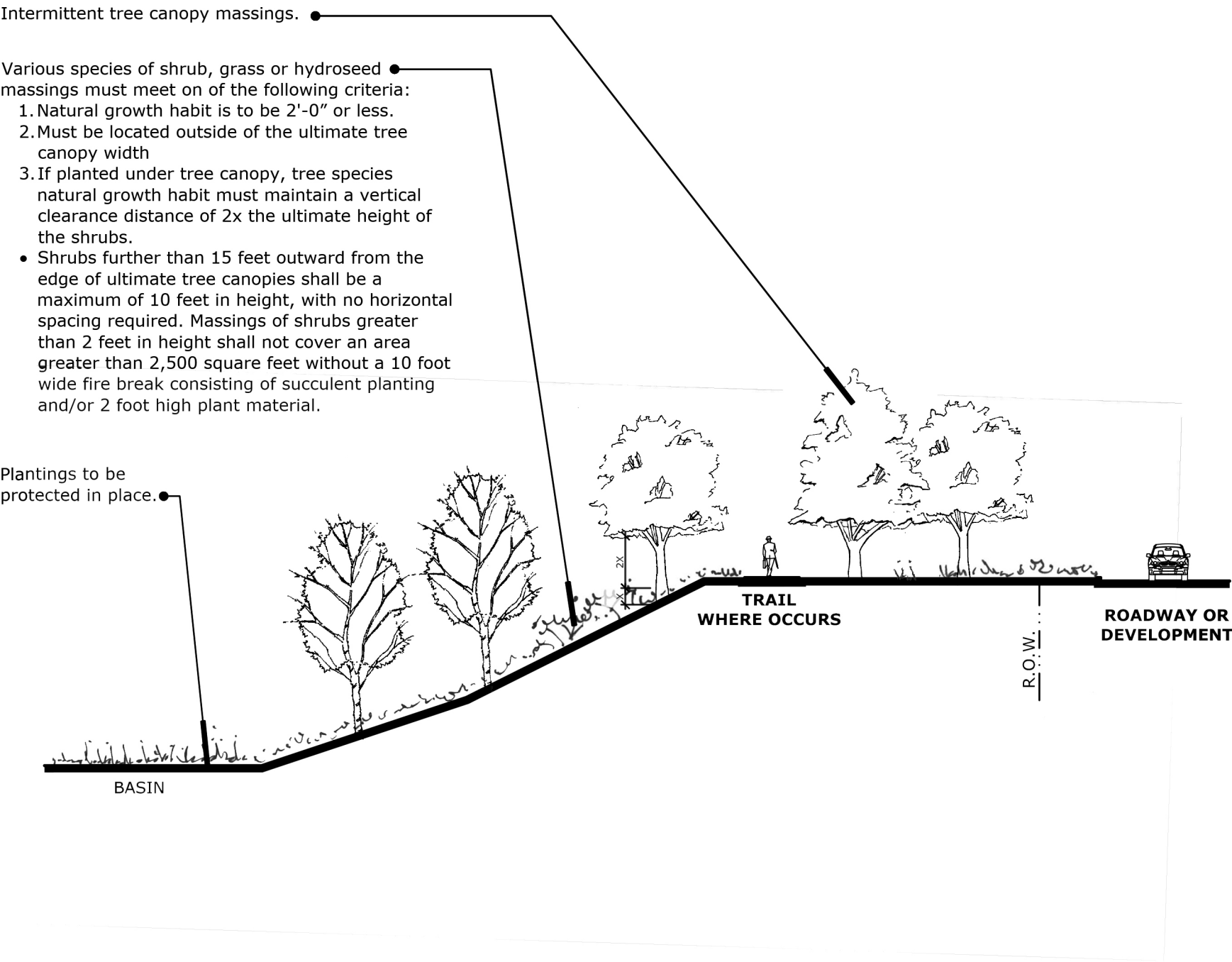
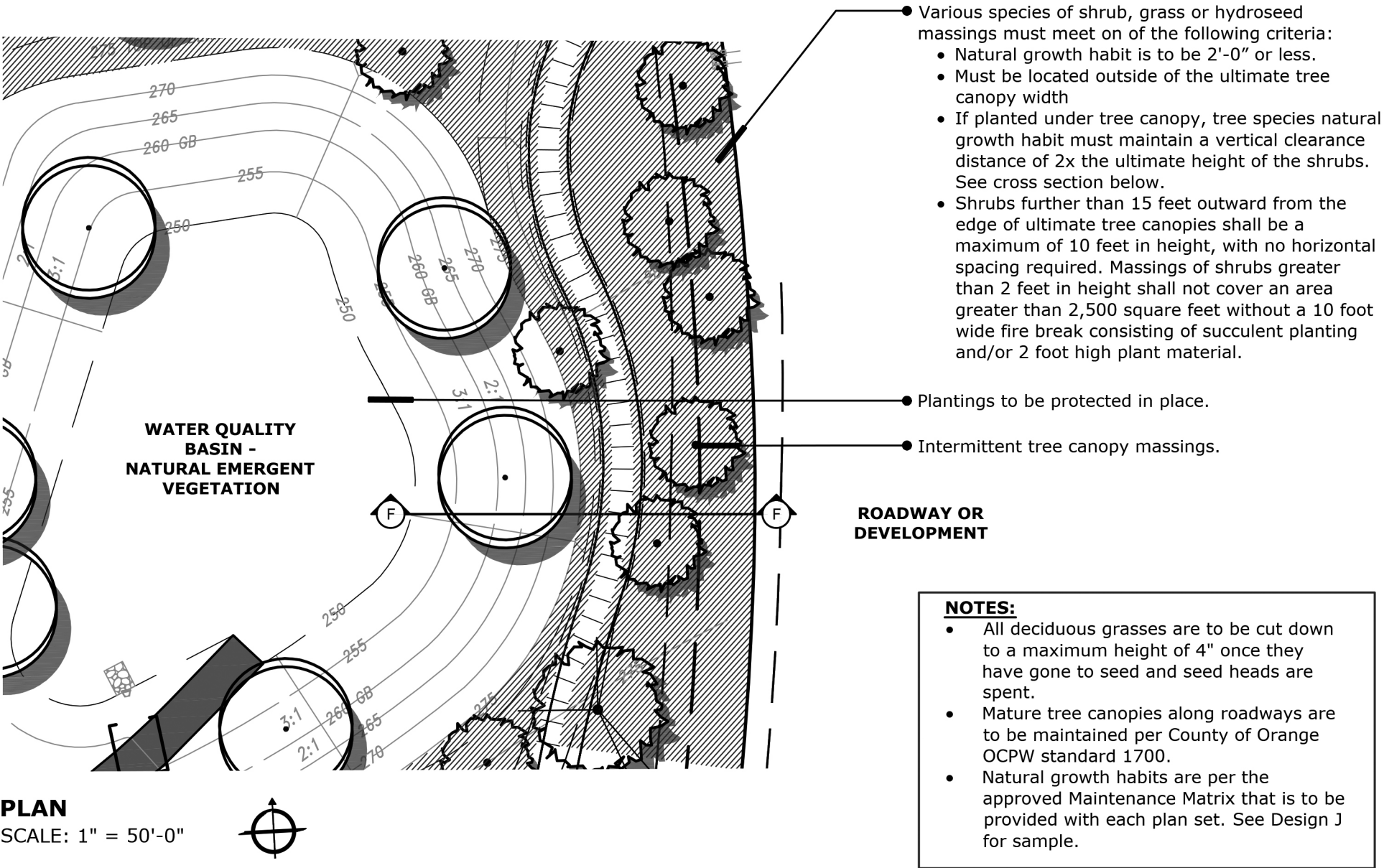
SCALE: 1'-0" = 10'-0"



INTERNAL STREET 0' - 30'-0" HIGH
DESIGN Template D

RPFPP SECTION C

RANCH PLAN PLANNED COMMUNITY



SECTION F
SCALE: 1" = 20'-0"

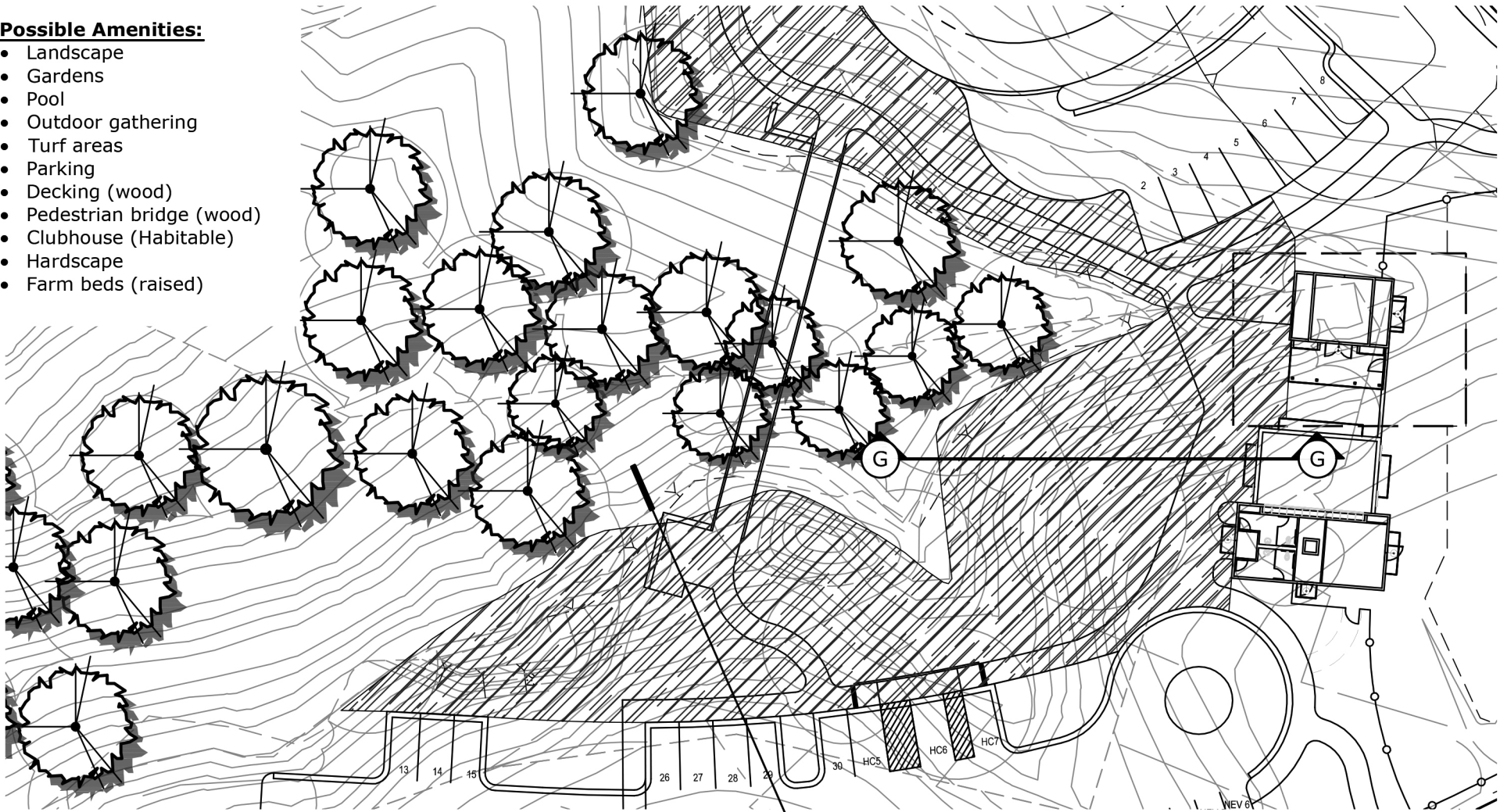
BUILDING PERIMETER -

- No plant species from the OCFA Undesirable List allowed.
- All landscape within 100' of habitable structures to be permanently irrigated and maintained per the guidelines described on this template.
- Maintenance requirements apply to existing stands of vegetation within 100 feet of habitable structures.



Possible Amenities:

- Landscape
- Gardens
- Pool
- Outdoor gathering
- Turf areas
- Parking
- Decking (wood)
- Pedestrian bridge (wood)
- Clubhouse (Habitable)
- Hardscape
- Farm beds (raised)



PLAN
SCALE: 1" = 40'-0"



Possible Amenities:

- Pedestrian bridge
- Oaks (existing)
- Trail
- Lighting
- Signage
- Benches

- Plantings to be protected in place and meet the following criteria:
 - Intermittent irrigation if needed to insure long term viability of the plant material
 - Area devoid of any species from the OCFA Undesirable Plant List
 - Removal of dead and dying plant material within the area
 - Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
 - Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

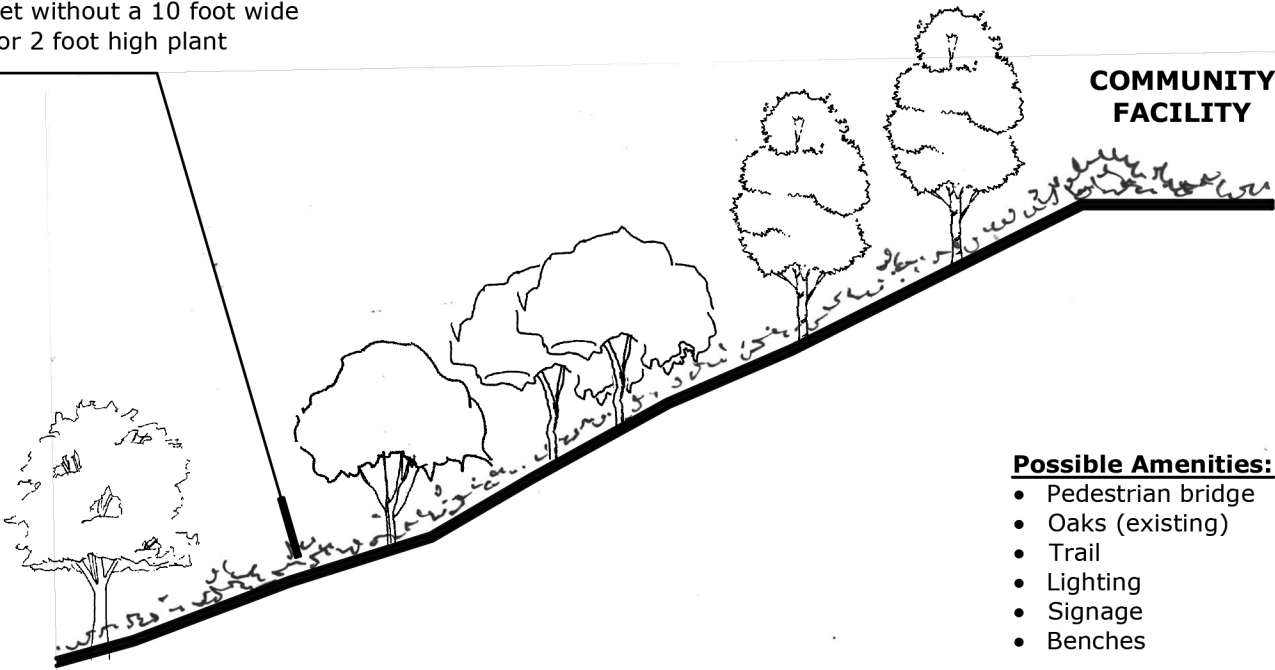
THIS TEMPLATE REGULATES ALL PLANTINGS
WITHIN 100' OF EACH HABITABLE STRUCTURE

Plantings to be protected in place and meet the following criteria:

- Intermittent irrigation if needed to insure long term viability of the plant material
- Area devoid of any species from the OCFA Undesirable Plant List
- Removal of dead and dying plant material within the area
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.



Possible Amenities:

- Pedestrian bridge
- Oaks (existing)
- Trail
- Lighting
- Signage
- Benches

SECTION G
SCALE: 1" = 20'-0"

**SLOPE WITH EXISTING HABITAT ADJACENT TO
COMMUNITY FACILITY**

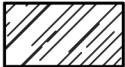
DESIGN Template G

RPFPP SECTION C

THIS TEMPLATE REGULATES ALL PLANTINGS
WITHIN 100' OF EACH HABITABLE STRUCTURE

BUILDING PERIMETER -

- No plant species from the OCFA Undesirable List allowed.
- All landscape within 100' of habitable structures to be permanently irrigated and maintained per the guidelines described on this template.
- Maintenance requirements apply to existing stands of vegetation within 100 feet of habitable structures.

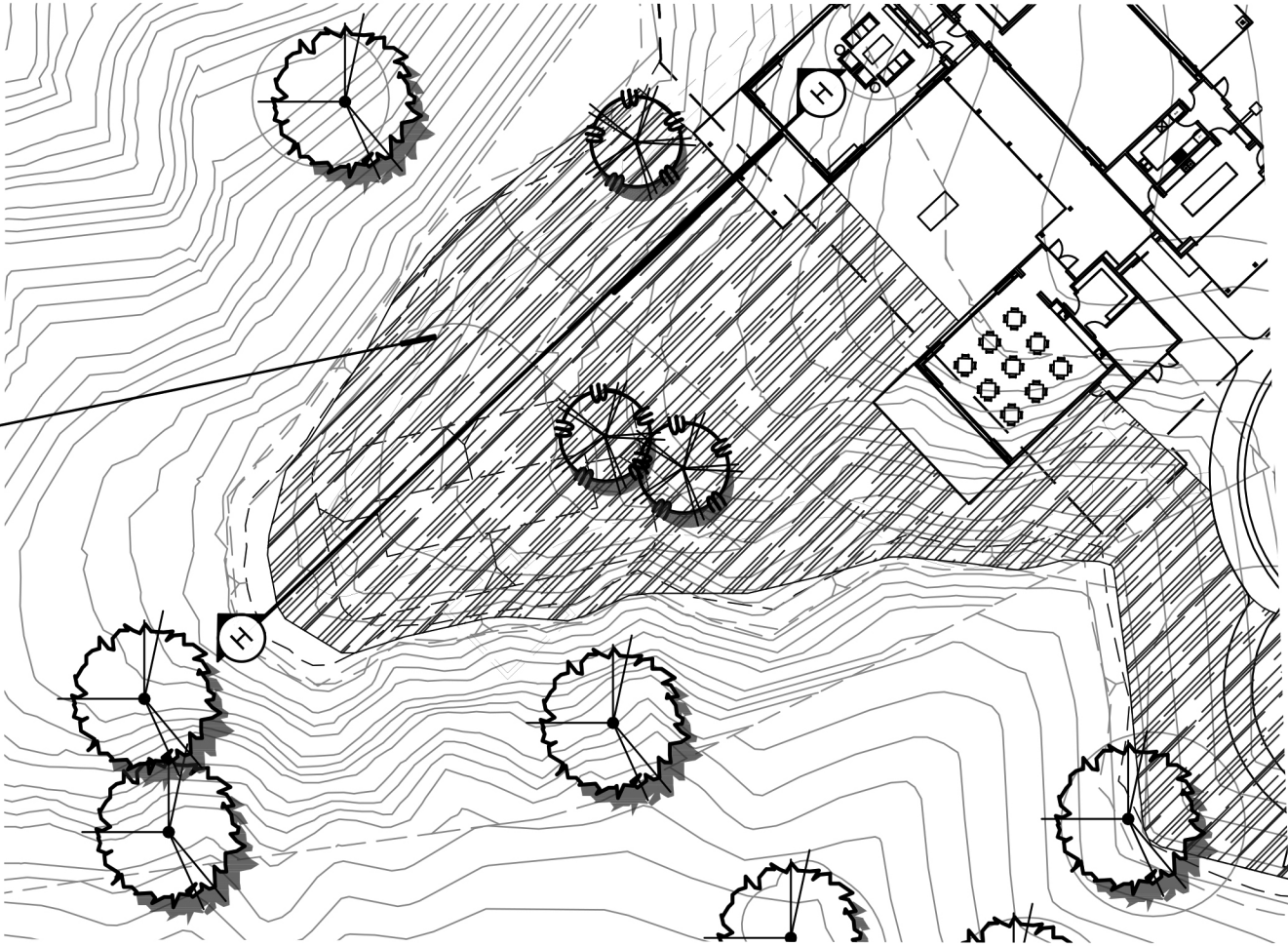


Possible Amenities:

- Landscape
- Gardens
- Pool
- Outdoor gathering
- Turf areas
- Parking
- Decking (wood)
- Pedestrian bridge (wood)
- Clubhouse (Habitable)
- Hardscape
- Farm beds (raised)

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.



PLAN

SCALE: 1" = 40'-0"



NOTES:

- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
- If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
- Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design J for sample.

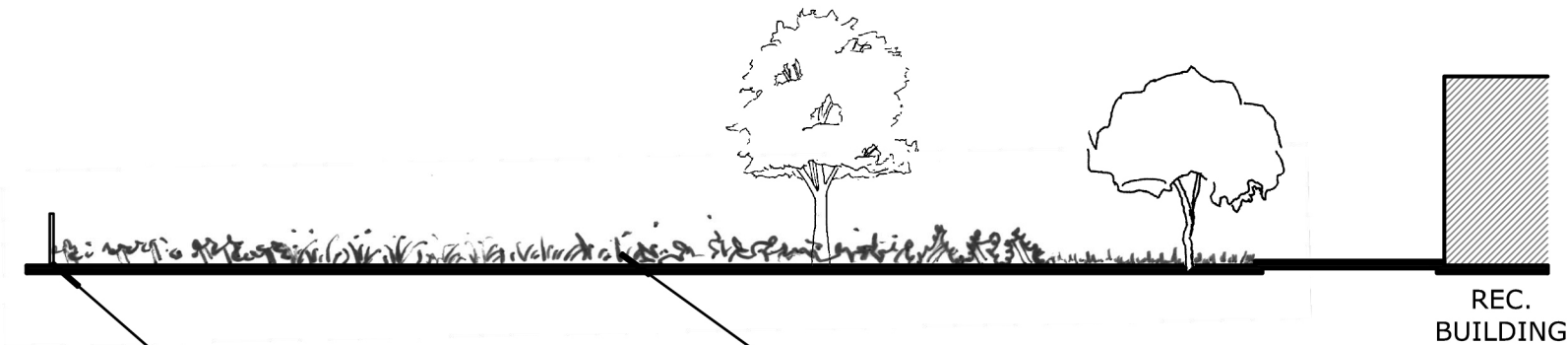
THIS TEMPLATE REGULATES ALL PLANTINGS
WITHIN 100' OF EACH HABITABLE STRUCTURE

BUILDING PERIMETER -

- No plant species from the OCFA Undesirable List allowed.
- All landscape within 100' of habitable structures to be permanently irrigated and maintained per the guideline described on this template.
- Maintenance requirements do not apply to existing stands of vegetation.

Possible Amenities:

- Landscape
- Gardens
- Pool
- Outdoor gathering
- Turf areas
- Parking
- Decking (wood)
- Pedestrian bridge (wood)
- Clubhouse (Habitable)
- Hardscape
- Farm beds (raised)



SECTION H

SCALE: 1" = 20'-0"

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

- Property line, mow curb, wall or fence where occurs.

**AREA ADJACENT TO H.O.A. RECREATION
FACILITIES**

DESIGN Template H

RPFPP SECTION C

RANCH PLAN PLANNED COMMUNITY



LAND CONCERN

LANDSCAPE ARCHITECTURE
1750 East Deere Avenue, Santa Ana, CA 92705
949.250.4822, F 949.752.2469

20' max. when top of slope fence occurs. 40'
max. when downslope fence occurs.

When a downslope fence occurs, the area within 40' max.
from the top of slope must meet the following criteria*
When a top of slope fence occurs, the area within 20' max.
from the top of slope must meet the following criteria*
*Various species of shrub, grass or hydroseed massings:

- Natural growth habit is to be 2'-0" or less.
- Height of massing must be maintained at 2'-0" or less.
- No native, seasonal grasses

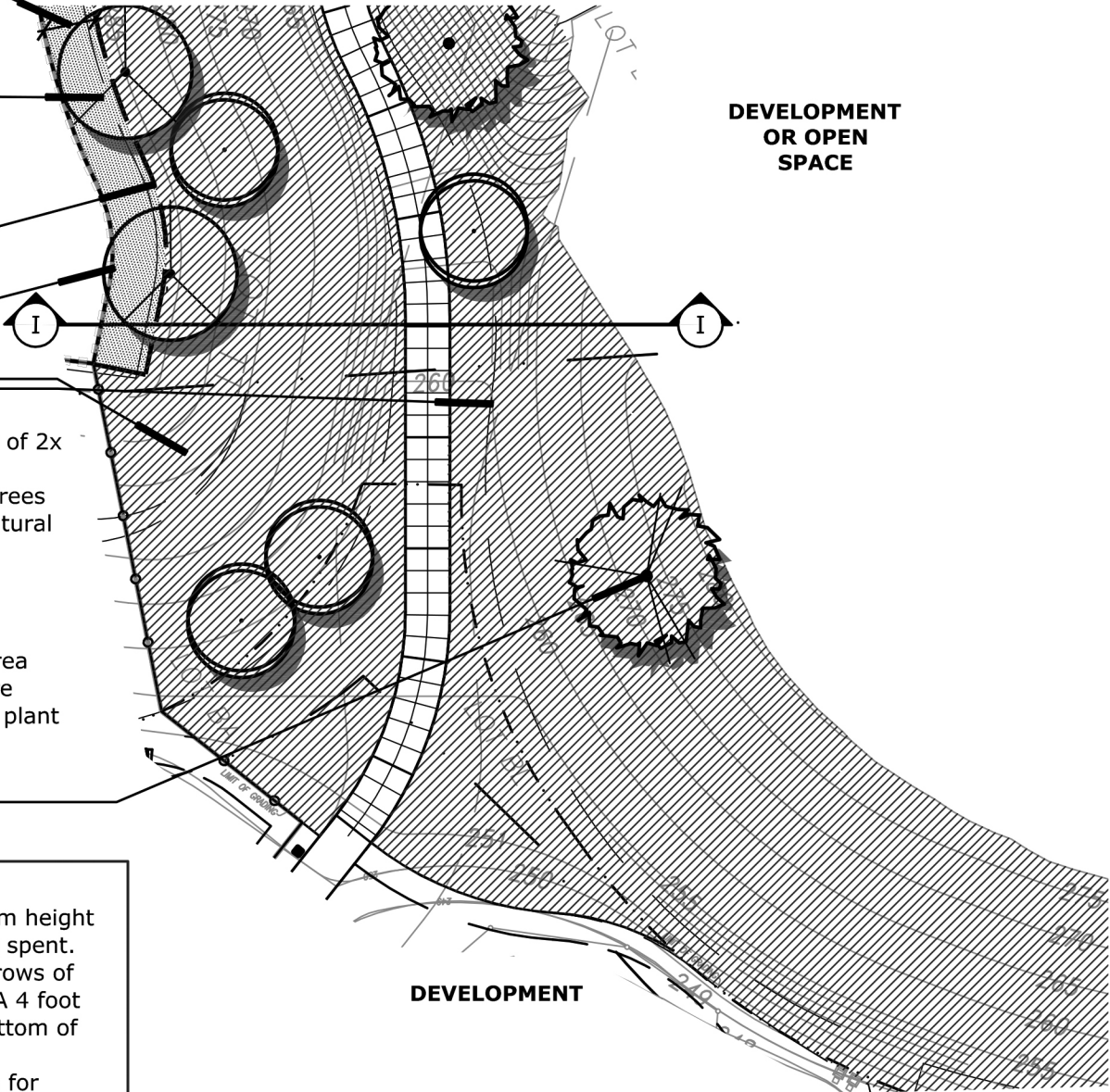
Tree species at top of slopes

Top of slope mow curb, wall, or fence
where occurs.

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

Intermittent tree canopy massing



PLAN
SCALE: 1" = 40'-0"

- NOTES:**
- All deciduous grasses are to be cut down to a maximum height of 4" once they have gone to seed and seed heads are spent.
 - If a solid wall occurs at top of slope, a maximum of 2 rows of shrubs are allowed at a maximum of 5 feet in height. A 4 foot vertical clearance from the top of the shrubs to the bottom of the tree canopies will be maintained.
 - Homeowners will be required to sign special covenants for maintenance of the area within the down slope fence. Maintenance of this area will be strictly enforced by the H.O.A. through CC&R's.
 - Neighborhood Builder will be responsible for the landscape and irrigation installation of the area within the down slope fence. Plant species will be dictated by the Master Developer and plans will be reviewed and approved by the Rancho MMC Architectural Review Committee. Final installation will be reviewed and approved by the H.O.A.
 - Natural growth habits are per the approved Maintenance Matrix that is to be provided with each plan set. See Design Template J for sample.

Intermittent tree canopy massing

Tree species at top
of slope

Possible tubular steel fence
down slope

When a downslope fence occurs, the
area within 40' max. from the top of
slope must meet the following criteria*
When a top of slope fence occurs, the
area within 20' max. from the top of
slope must meet the following criteria*
*Various species of shrub, grass or
hydroseed massings:

- Natural growth habit is to be 2'-0" or less.
- Height of massing must be maintained at 2'-0" or less.
- No native, seasonal grasses

DEVELOPMENT

Top of slope mow curb, wall,
or fence where occurs.

Shrub Massings:

- Where planted under tree canopy, tree species natural growth habit must maintain a vertical clearance distance of 2x the ultimate height of the shrubs.
- Maximum height of new plantings within 15' of existing trees is to be 2'-0" or less. Species must be selected whose natural growth habit is 2'-0" or less.
- Shrubs further than 15 feet outward from the edge of ultimate tree canopies shall be a maximum of 10 feet in height, with no horizontal spacing required. Massings of shrubs greater than 2 feet in height shall not cover an area greater than 2,500 square feet without a 10 foot wide fire break consisting of succulent planting and/or 2 foot high plant material.

**DEVELOPMENT
OR OPEN
SPACE**

SECTION I
SCALE: 3/4" = 10'-0"

**10'-0" TRAIL
WHERE
OCCURS**

NOTE:
THIS TEMPLATE HAS
BEEN DEVELOPED FOR
FUTURE APPLICATIONS

PASEO
DESIGN TEMPLATE I
RPFPP SECTION C

Base Plant Palette - Maintenance Practices

BOTANICAL NAME	COMMON NAME	ULTIMATE GROWTH HEIGHT	ULTIMATE GROWTH WIDTH	INITIAL PLANT SPACING	STREETSCAPE - GENERAL	STREETSCAPE - FOCAL PT.	SLOPE - GENERAL	SLOPE - FOCAL PT.	FUEL MOD	GRASSLAND RESTORATION	CREEK EDGE	LINEAR PARK	PARK	REC CENTER	SPECIALTY GARDEN	PRIVATE RESIDENCE	HEIGHT TO BE MAINTAINED	WIDTH TO BE MAINTAINED	MINIMUM UNDERSTORY CLEARANCE TO BE MAINTAINED AT MATURITY	ADDITIONAL MAINTENANCE REQUIREMENTS	
TREES																					
Alnus rhombifolia	White Alder	90'	40'	30'	X						X	X	X				70'	40'	8' *	* Bottom of canopy is to be at a height that equals 2x the height of the plant material below it Removal of all dying and dead wood as needed Thinning and pruning to promote new, healthy growth while maintaining natural form Thinning and pruning to avoid wind damage Removal of leaf litter and debris as needed	
Platanus racemosa	California Sycamore	80'	35'	30'	X	X	X	X	X		X	X	X	X	X		65'	40'	6' *		
Quercus agrifolia	Coast Live Oak	60'	60'	30'	X	X	X	X	X	X		X	X	X			45'	60'	6' *		
SHRUBS																					
Acacia redolens 'Desert Carpet'	NCN	3'	12'	10'	X		X		X			X	X	X	X	X	24"	10' +	--	Thinning and pruning to promote new, healthy growth while maintaining natural form Highlighted plant material is to be maintained at a 2' - 0" height + Allow to mass * Maintain at 30" when massed and 6' when screening Replace dead shrubs as needed	
Cotoneaster horizontalis	Rock Cotoneaster	24"	12'	12'					X			X	X	X	X	X	24"	12' +	--		
Dietes bicolor	Fortnight Lily	24"	4'	6'			X					X			X	X	36"	36"	--		
Melaleuca nesophila	Pink Melaleuca	20'	18'	12'	X	X	X	X				X	X	X	X	X	15'	15'	--		
Pittosporum t. 'Variegata'	Variegated Tobira	10'	10'	6'				X				X	X	X	X	X	8'	8'	--		
Pittosporum tobira	Mock Orange	10'	10'	8'					X			X	X	X	X	X	8'	8'	--		
Pyracantha koidzumii 'Santa Cruz Prostrata'	Firethorn	3'	8'	6'	X	X	X		X			X	X	X	X	X	24"	10' +	--		
Rhapheolipis indica 'Pinkie'	Indian Hawthorn (Pink)	4'	4'	4'	X							X	X	X		X	4'	4'	--		
Rhaphiolepis 'Majestic Beauty'	Indian Hawthorn	20'	8'	8'			X					X	X	X	X	X	8'	8'	--		
Rosmarinus officinalis 'Huntington Carpet'	Rosemary	18"	4'	24"	X				X			X	X	X		X	24"	6' +	--		
Rosmarinus officinalis 'Tuscan Blue'	Rosemary	6'	24"	6'	X							X	X	X		X	*	4'	--		
Salvia greggii hybrids	Autumn Sage	3'	3'	36"		X		X				X	X	X	X	X	24"	36"	--		
Viburnum tinus	Laurustinus	8'	10'	8'		X		X				X	X	X	X	X	8'	8'	--		
Xylosma congestum 'Compacta'	Compact Shiny Xylosma	8'	8'	5'	X		X					X	X	X		X	5'	5'	--		
VINES & ESPALIERS																					
Bignonia cherere	Trumpet Vine	20'	20'	15'	X								X	X	X	X	15'	15'		Pruning to maintain desired spread on adjacent wall or structure	
Distictus 'Rivers'	Royal Trumpet Vine	20'	20'	15'	X		X					X	X	X		X	15'	15'	--		
Trachelospermum asiaticum	Asian Star Jasmine	20'	20'	15'	X								X	X	X	X	15'	15'			
GRASSES																					
Festuca mairei	Maire's Fescue	24"	24"	36"				X				X	X	X	X	X	24"	24"	--	Mow in late fall or early winter	
Pennisetum setaceum 'Rubrum'	Purple Fountain Grass	5'	5'	5'				X	X			X	X	X	X	X	5'	5'	--		
CACTUS & SUCCULENTS																					
Agave attenuata	NCN	4'	4'	36"	X		X	X	X	X	X	X	X	X	X		3'	+	--	+ Allow to mass Remove flowering stems as needed Thin out and replace dead plants as needed	
Agave desmetiana	Smooth Agave	30"	30"	4'	X		X	X	X	X	X	X	X	X	X		3'	+	--		
Senecio mandraliscae	NCN	18"	24"	12"		X		X			X	X	X	X	X	X	18"	+	--		
CALIFORNIA NATIVES																					
SHRUBS																					
Baccharis pilularis 'Pigeon Point'	Dwarf Coyote Brush	24"	6'	10'			X		X		X				X	X	2'	12' +		Removal of all dying and dead wood as needed Highlighted plant material is to be maintained at a 2' - 0" height + Allow to mass Thinning and pruning to promote new, healthy growth while maintaining natural form	
Heteromeles arbutifolia	Toyon	10'	10'	10'			X										10'	10'	3'		

Amendments, Appeals, Definitions

SECTION D. AMENDMENT AND APPEAL PROCESS

1. **Amendments Per Mutual Consent Only:** Except as provided in subsection “3” below, the RPFPP may be amended only upon the mutual written consent of OCFA, County of Orange Planning and Development Services (“PDS”) and RMV. Any of the three parties (OCFA, PDS and/or RMV) may propose modifications to the text or graphics within Exhibit 2, Ranch Plan Fire Protection Program. A modification is considered minor, and no action by the Board of Supervisors is necessary, if it is acceptable to all three parties, as evidenced by a Concurrence Memo, detailing the proposed modifications, and signed by OCFA (Deputy Fire Marshal), the County of Orange (Director of PDS) and RMV. If mutual agreement cannot be reached between the three parties, processing of the otherwise minor modification shall proceed per subsection 2 below.
2. **Staff Resolution of RPFPP Guideline Issues:** Disagreements may arise between RMV, OCFA and/or PDS regarding interpretation of the RPFPP as it applies to development applications. Upon the occurrence of a disagreement, any party may issue a written notice to the other parties requesting that the parties engage in discussions to resolve the disagreement. Upon delivery/receive a written notice, the parties shall work together in good faith to seek amicable resolution of the disagreement. In the instance that the parties are unable to achieve resolution of the outstanding issue(s) within fifteen (15) days following the commencement of discussions, proceed to subsection 5, below.
3. **Superior Regulation Amendments:** During the review period prior to the adoption of each three-year cycle of amendments to the California Fire Code (CFC) and California Building Code (CBC), it is the intention of RMV and OCFA to agree upon any necessary revisions to the RPFPP prior to adoption of the new State Codes. In the event that a superior State regulation ("Superior Regulation") is enacted after the effective date of the RPFPP without a prior agreement between OCFA and RMV as to how that Superior Regulation will affect the RPFPP, and OCFA intends to apply the Superior Regulation in a manner that will affect the RPFPP, OCFA shall contact RMV to ensure that there is an awareness of the forthcoming Superior Regulation. Following contact by OCFA, representatives of OCFA, RMV and the County (as appropriate) shall meet for the purpose of discussing the Superior Regulation and how it may impact the RPFPP. At the conclusion of the discussion(s), RMV shall have sixty (60) days to prepare and submit to the Fire Chief and the Director, PDS, a proposed amendment to the RPFPP that addresses the Superior Regulation and responds to any issues raised or otherwise addressed during the discussion(s). Within thirty (30) days following OCFA's and the County's receipt of the proposed RPFPP amendment, the Fire Chief and Director, PDS, shall either (i) provide written notice to RMV approving the proposed RPFPP amendment or (ii) advise RMV, in writing, of any desired changes or modifications to the proposed RPFPP amendment. In the absence of any written response from the Fire Chief and the Director, PDS, within the identified review period, the proposed RPFPP amendment shall be deemed approved and effective as of the review period expiration date. If the parties are unable to agree upon language incorporating the Superior Regulation into the RPFPP within fifteen (15) days of completing the steps above, proceed to subsection 5 below.

4. **Non-Superior Regulation Amendments:** Notwithstanding the provisions of subsection 3, above, any party may propose an amendment to or modification of the provisions of this RPFPP by providing written notice of said request ("Notice of Request") to the other parties. The parties receiving the Notice of Request shall have thirty (30) days to respond to the request by either (i) accepting the changes or modifications or (ii) requesting a meeting with the other parties to address the proposed changes or modifications. If approved by the parties receiving the Notice of Request, the proposed amendments or modifications shall be incorporated into the RPFPP and the amendments/modifications shall be effective as of the date of acceptance by the parties receiving the Notice of Request. Alternatively, in the instance that one or both of the parties receiving the Notice of Request asks for a meeting to discuss the proposed amendments or modifications, the parties shall meet and confer within fifteen (15) days of the request to meet and shall work in good faith to amicably resolve all outstanding issues relative to the proposed RPFPP amendment/modification. In the instance that the parties are unable to achieve resolution of the outstanding issues within ten (10) days following the commencement of discussions, proceed to subsection 5, below.
5. **Appeal Process:** The parties shall submit any unresolved issue(s) (as may exist following completion of the steps/requirements identified in subsections 2, 3 and 4 above) to the Orange County Board of Supervisors for review and resolution. The Orange County Board of Supervisors shall consider the outstanding issue(s) at their next regularly scheduled public hearing. The decision of the Orange County Board of Supervisors shall be final and binding upon the parties.
6. **During Appeal Process:** Pending acceptance or approval of any proposed RPFPP amendment, the terms of the existing/approved RPFPP shall remain in full force and effect and shall be binding upon the parties.
7. **Building Permits Binding:** Upon issuance of a building permit(s), the terms of the existing/approved RPFPP shall remain in full force and effect, and shall be binding upon the parties, for the applicable building site(s) and all emergency accessways serving the applicable building site(s).

SECTION E. DEFINITIONS

Appropriate Automatic Fire Sprinkler System by Land Use Type:

- National Fire Protection Association (NFPA) 13D for single-family residential (one or two family dwelling units), unless building and/or fire codes specify otherwise.
- NFPA-13R for multi-family (three or more attached units, up to four stories), unless building and/or fire codes specify otherwise.
- NFPA 13 complete systems required for commercial (retail, industrial, etc.), unless building and/or fire codes specify otherwise.

All Weather Surface: Paved surfaces, crushed miscellaneous concrete material base (CMB), pavers, gravel-crete, lime-treat or equal, as certified by soils engineer to be capable of withstanding the minimum weight of 68,000 pounds (with 90% compaction) during any type of weather.

Development Planning Areas: Ranch Plan Planning Areas 1, 2, 3, 4, 5 and 8

Emergency Access: Differs from OCFA requirements only per specific details in Section B of the Ranch Plan Fire Protection Guidelines

Fire Lanes: Differs from OCFA requirements only per specific details in Section B of the Ranch Plan Fire Protection Guidelines

Lumber Drop: Delivery of material required to erect the structure. Does not include small amounts of lumber required for forming the foundation slabs.

Primary Access to the Wildland Interface Area: As shown on Attachment 6, any roadway which provides primary access to the interface between fuel modification boundaries surrounding development areas and surrounding permanent open space.

Unenclosed Accessory Structure: A structure with a roof and no more than one side and structures having no roof or other covering.

Weed Free, Non-Combustible and Safe: Vegetation within Ranch Plan Planning Areas to be maintained at a height not to exceed 12 inches.

Wildland Urban Interface (WUI): 1) the area where development and wildland fuels meet at a well defined boundary (NFPA 299); 2) the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (National Wildfire Coordinating Group); 3) the geographical meeting point of two diverse systems, wildland and structures; at this interface, structures and vegetation are sufficiently close that a wildland fire could spread to structures or a structure fire ignite vegetation (California Fire Plan, March 1996 (current)).

Alternative Development Standards

SECTION F. ALTERNATIVE DEVELOPMENT STANDARDS

A-3. Rolled-Curb Streets

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow public local residential street with 6-inch rolled curbs (see ADS G-9 for detail, Standard Plan 1201). Measured from 6-inches back of curb the rolled curb streets shall be the same width as vertical curb streets. Utilizing Orange County Fire Authority methodology (Flowline-to-flowline) the rolled curb streets may be one foot less in width than typically required, due to automatic sprinklers being required in the entire Ranch Plan planned community:

- 35-foot wide double loaded local residential street
- 27-foot wide single loaded local residential street

Performance Standards:

- Automatic fire sprinklers throughout entire neighborhood.

Project Benefits:

- A rural village aesthetic
- Equivalent drainage when compared to vertical curbs.
- Equivalent long-term maintenance cost for County of Orange.

Ranch Plan Fire Protection Program

A-4. **Neighborhood Entries** **At Work in Ladera**

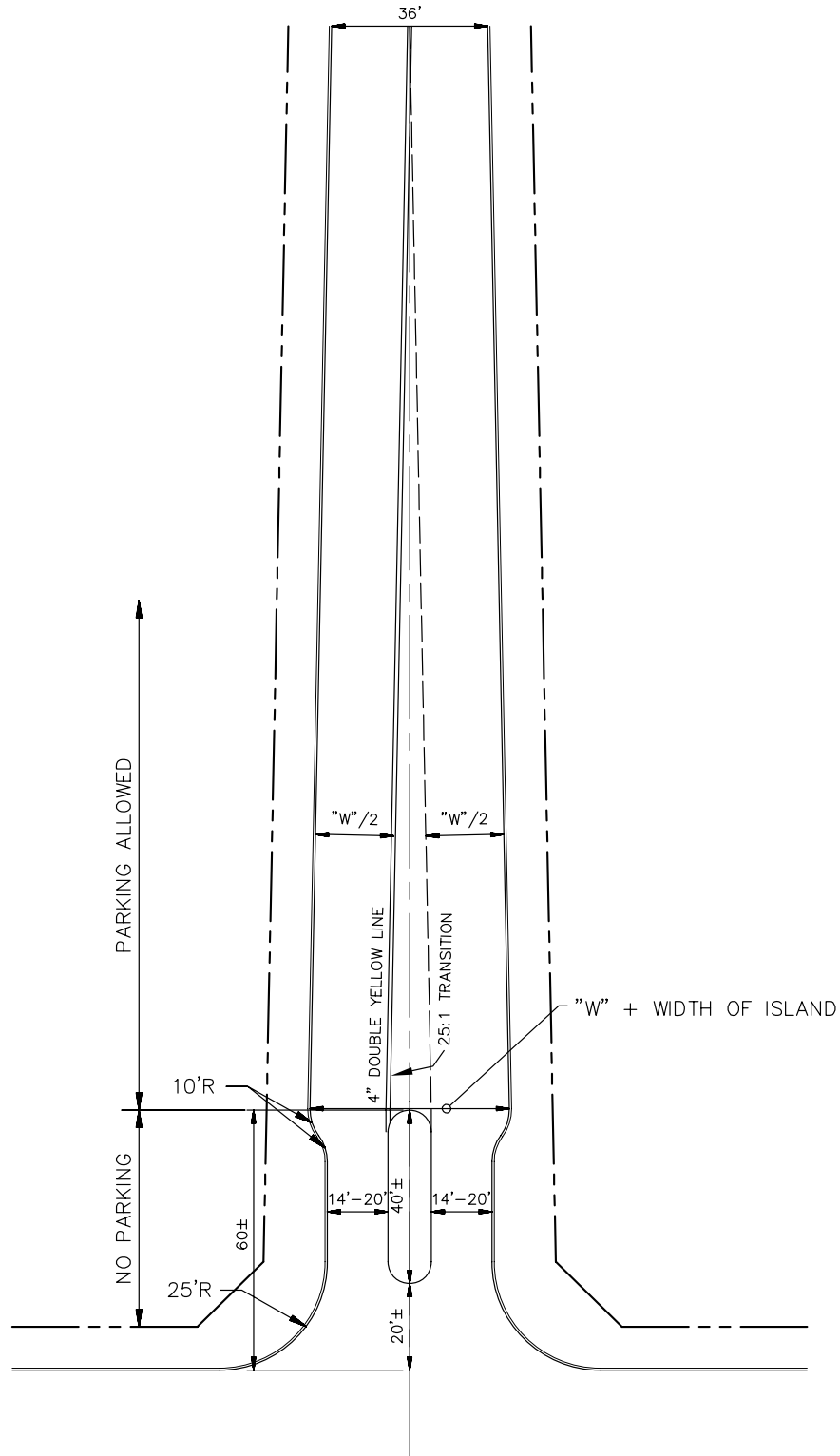
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow neighborhood entryways with traffic levels of up to 800 ADT. No parking would be allowed along neighborhood entryways, so emergency access may be accommodated by the two separate travel lanes of a width to accommodate breakdowns. In cases where the parkway adjacent to neighborhood entryways exceeds the standard 8-foot width, or where special landscape treatments are proposed, the Master Maintenance Corporation (HOA) will be responsible for maintenance.

Project Benefits:

- Equivalent or better access for fire and emergency vehicles.
- Equivalent ease of circulation and traffic safety.

Performance Standards:

- Superior aesthetic appearance.
- Only allowed on local residential streets with less than 800 ADT.
- Design speed of 25 miles per hour.
- Appropriate signage and striping must be provided.



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

NEIGHBORHOOD ENTRY

Page 100

ADS

A-4

SHEET 1 OF 1

Ranch Plan Fire Protection Program

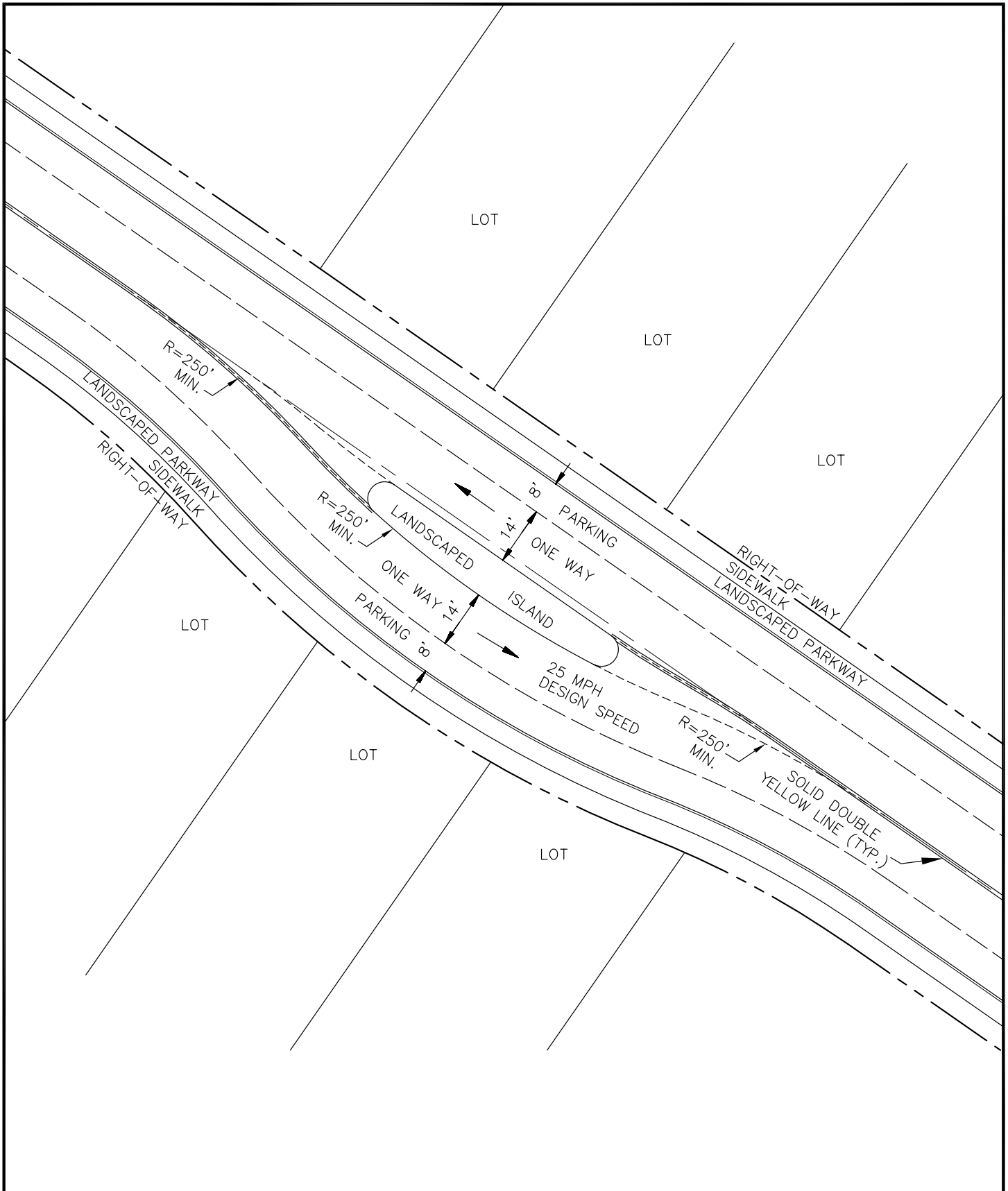
- A-7. **Raised Landscape Islands within Residential Streets At Work in Ladera** (Modified)
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow raised landscaped islands within public local residential street rights-of-way, including in the center of public cul-de-sacs (see Alternative Development Standard A-19) and within the roadway of public residential streets. See Exhibits on following pages.

Project Benefits:

- Traffic calming.
- A residential village ambiance with less uninterrupted hardscape.
- Equivalent or better access for fire and emergency vehicles.
- Equivalent ease of circulation and traffic safety.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association.

Performance Standards:

- Maximum landscape island length of three residential lots.
- Only allowed on local residential streets with less than 500 ADT.
- Regularly occurring such that the drivers are not “surprised.”
- Design speed of 25 miles per hour.
- Parking accessibility and travel path for lots adjacent to island must be adequately maintained.
- Appropriate signage, including no-parking signage, and striping must be provided.
- Adequate maneuvering must be demonstrated for all driveways backing onto streets adjacent to raised landscape islands.



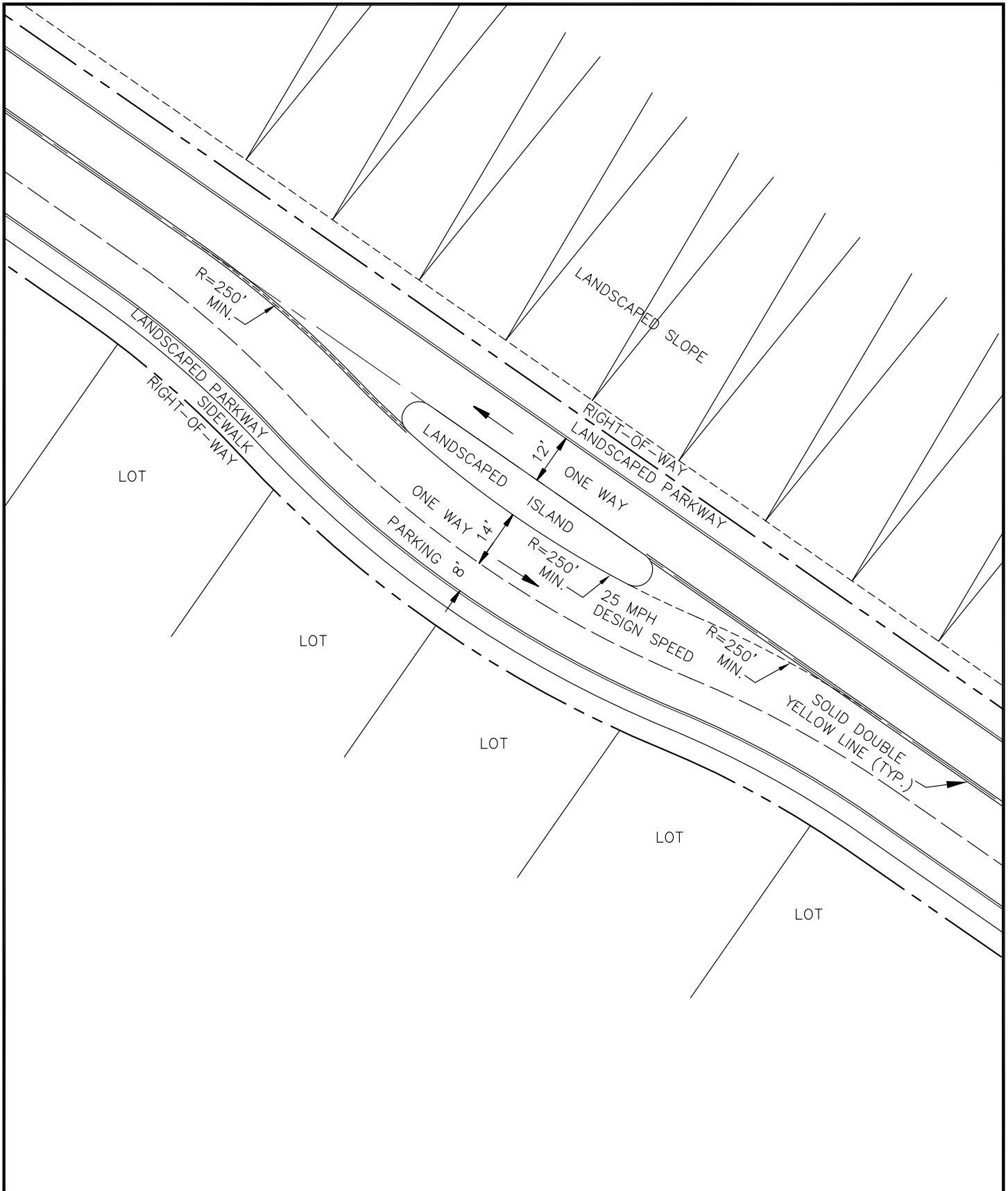
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**RAISED PLANTERS WITHIN RESIDENTIAL STREETS
DOUBLE LOADED STREET WITH MEDIAN LANDSCAPE ISLAND**

ADS

A-7

SHEET 1 OF 3



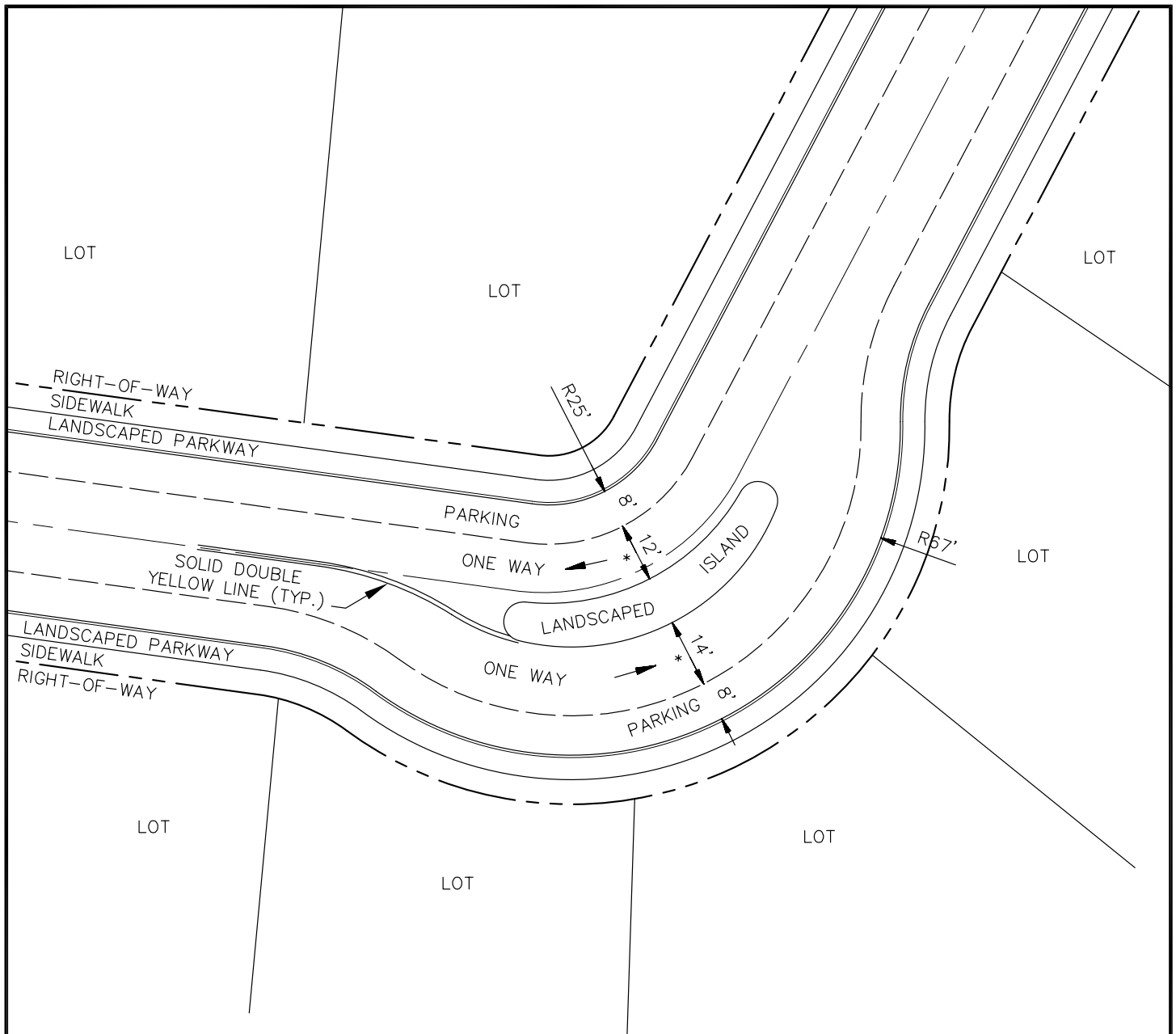
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**RAISED PLANTERS WITHIN RESIDENTIAL STREETS
SINGLE LOADED STREET WITH MEDIAN LANDSCAPE ISLAND**

ADS

A-7

SHEET 2 OF 3



* AT ISLAND ONLY

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

RAISED PLANTERS WITHIN RESIDENTIAL STREETS

DOUBLE LOADED KNUCKLE/EYEBROW WITH MEDIAN LANDSCAPE ISLAND

ADS

A-7

SHEET 3 OF 3

Ranch Plan Fire Protection Program

A-9. Tapered Streets At Work in Ladera

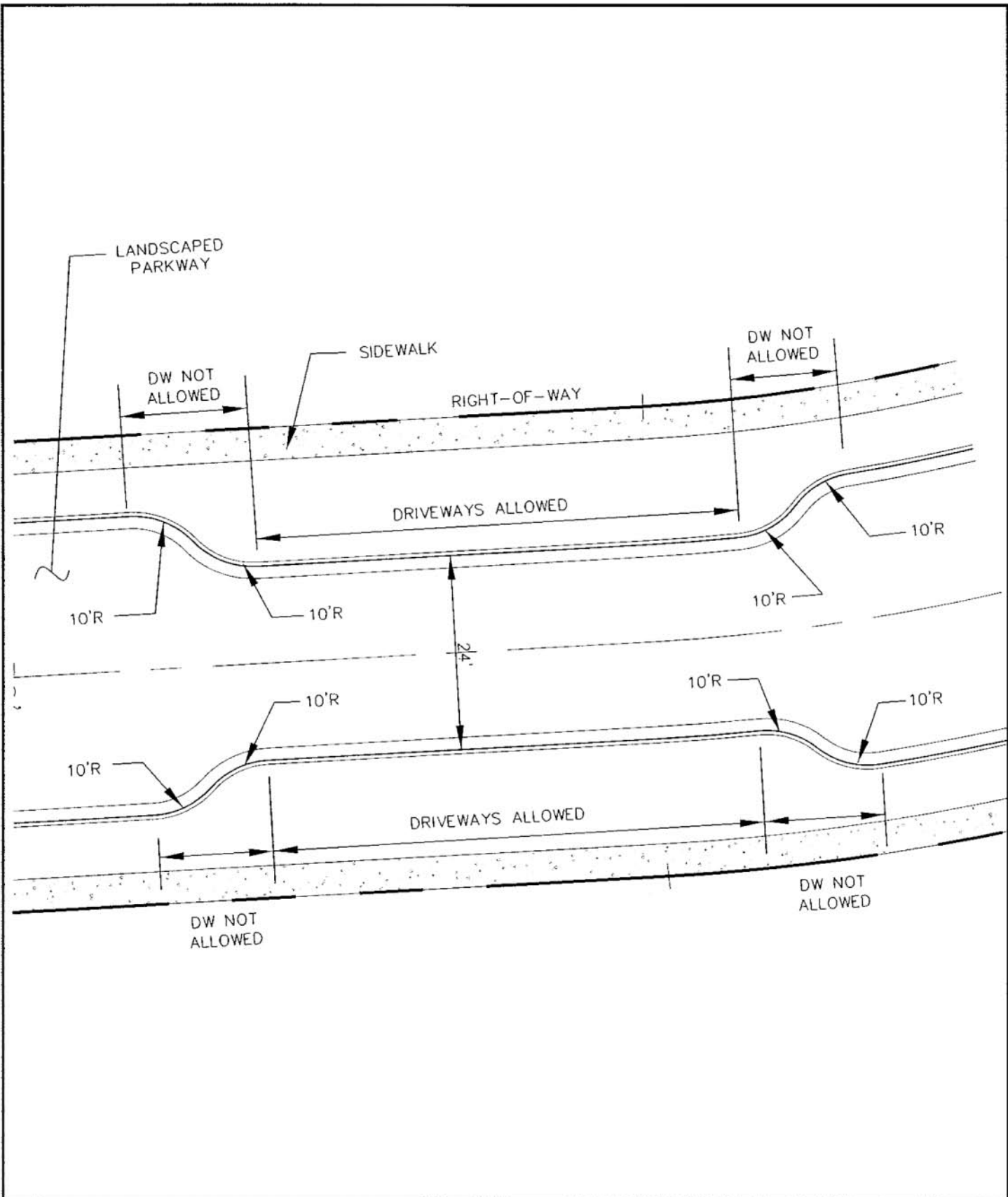
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow limited stretches of 24-foot wide roadways on both single loaded and double loaded public local residential streets (see Exhibits on following pages).

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area within the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Standards:

- Tapered street landscaped areas would be allowed only after the following criteria are met, thereby resulting in equivalent vehicular safety and circulation, off-street parking and access for fire and emergency vehicles:
 - a. Maximum taper length of 100 feet, not including transition areas.
 - b. On single-loaded streets, minimum street width is 30-feet.
 - c. Maximum spacing to be no closer than 1,000 lineal feet on any street. Tapers allowed closer than 1,000 feet (as "crow flies") if located on a separate street.
 - d. No parking is allowed along 24-foot street width sections. Appropriate decorative signage designating "no parking" areas shall be installed at the beginning and end of each taper.
 - e. Provide for street drainage per current County standards.
 - f. Only allowed on local residential streets with less than 500 ADT.
 - g. Prior to the issuance of any precise grading permits, the applicant shall provide evidence of adequate parking meeting the requirements of the Orange County Zoning Code and the Ranch Plan Planned Community Development Regulations in a manner meeting the approval of the Manager, Current Planning. Should revisions within the right-of-way be deemed necessary by the Manager, Current Planning, the applicant shall make the necessary changes administratively, in a manner meeting the approval of the Manager, Subdivision and Grading Services.



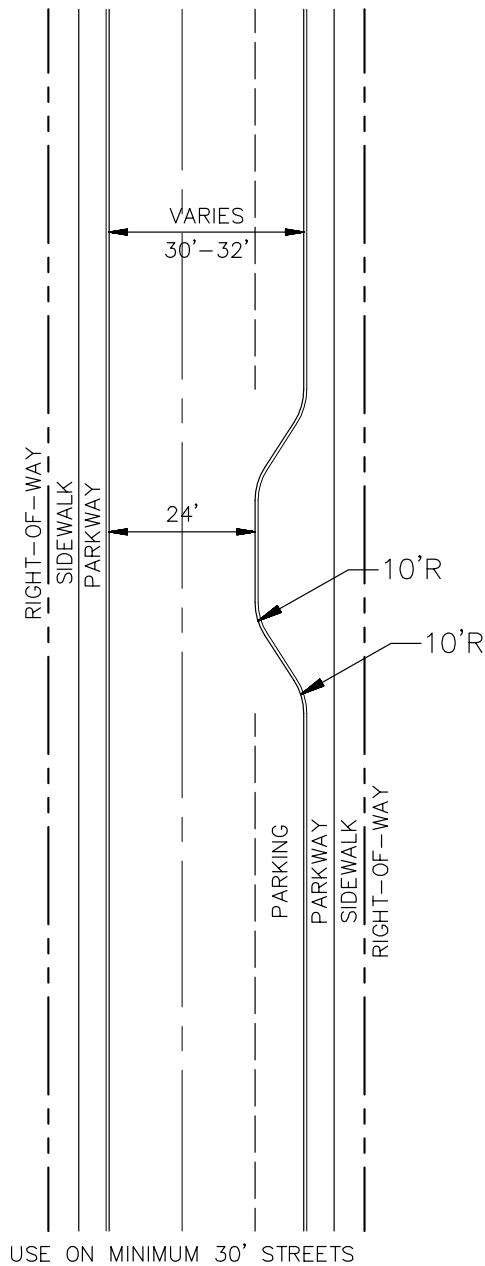
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**TAPERED STREETS
DOUBLE LOADED**

ADS

A-9

SHEET 1 OF 1



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**TAPERED STREETS
SINGLE LOADED**

ADS

A-9

SHEET 2 OF 2

Ranch Plan Fire Protection Program

A-18. **Modified Knuckle At Work in Ladera**

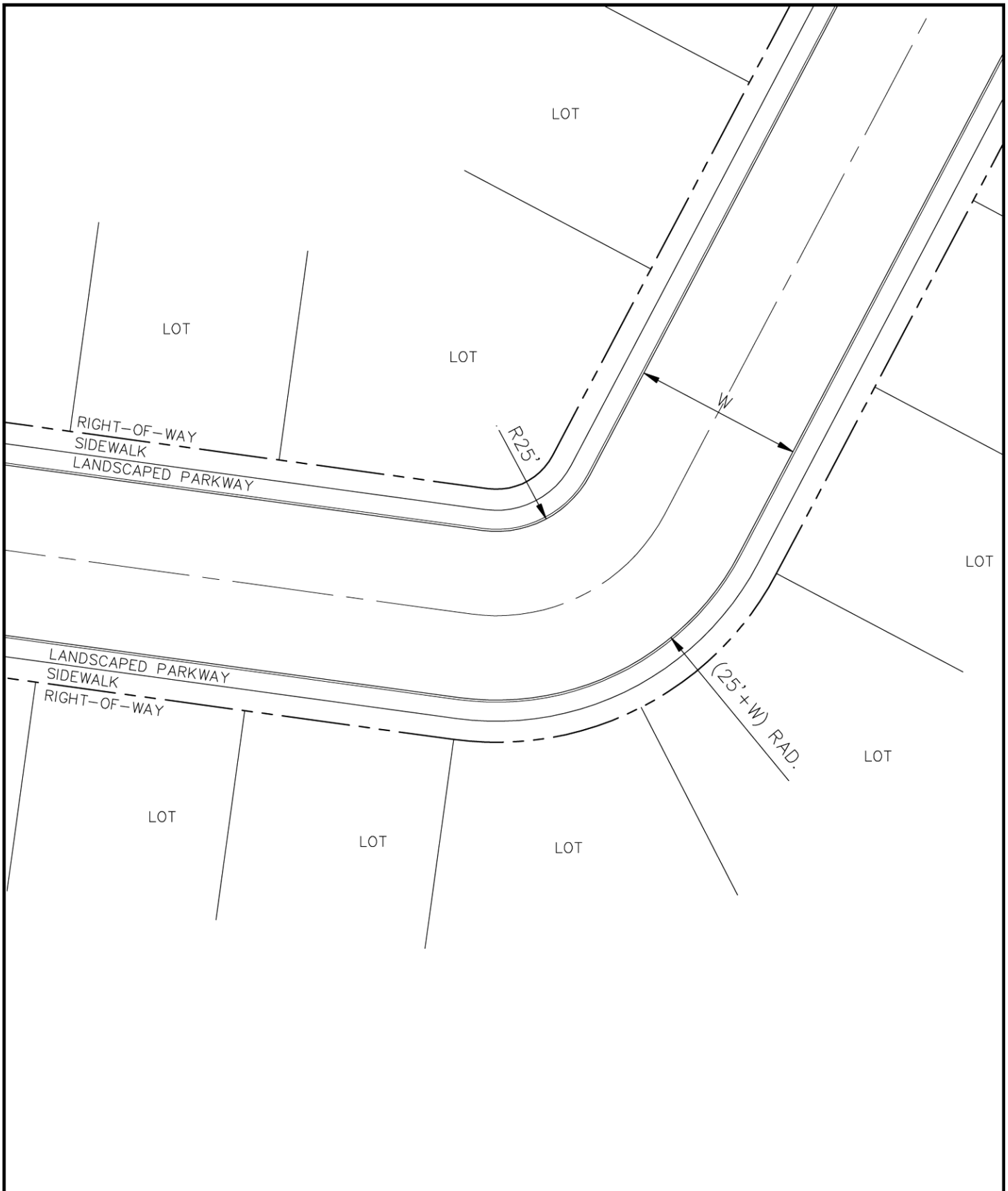
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1112 to allow reduced curb return radii at knuckles, as shown on following page:

Project Benefits:

- Traffic calming.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Criteria: The modified knuckle must still conform to County criteria regarding:

- Parking
- Lot frontage
- Guest parking
- Normal traffic movements



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

MODIFIED KNUCKLE

ADS

A-18

SHEET 1 OF 1

Ranch Plan Fire Protection Program

A-19. **Cul-de-Sacs with Raised Landscape Median** **At Work in Ladera** (Modified)

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plans 1107 and 1113 to allow raised landscaped medians in the center of cul-de-sacs. Raised landscape medians in the center of cul-de-sacs shall be allowed only when all of the following criteria are met:

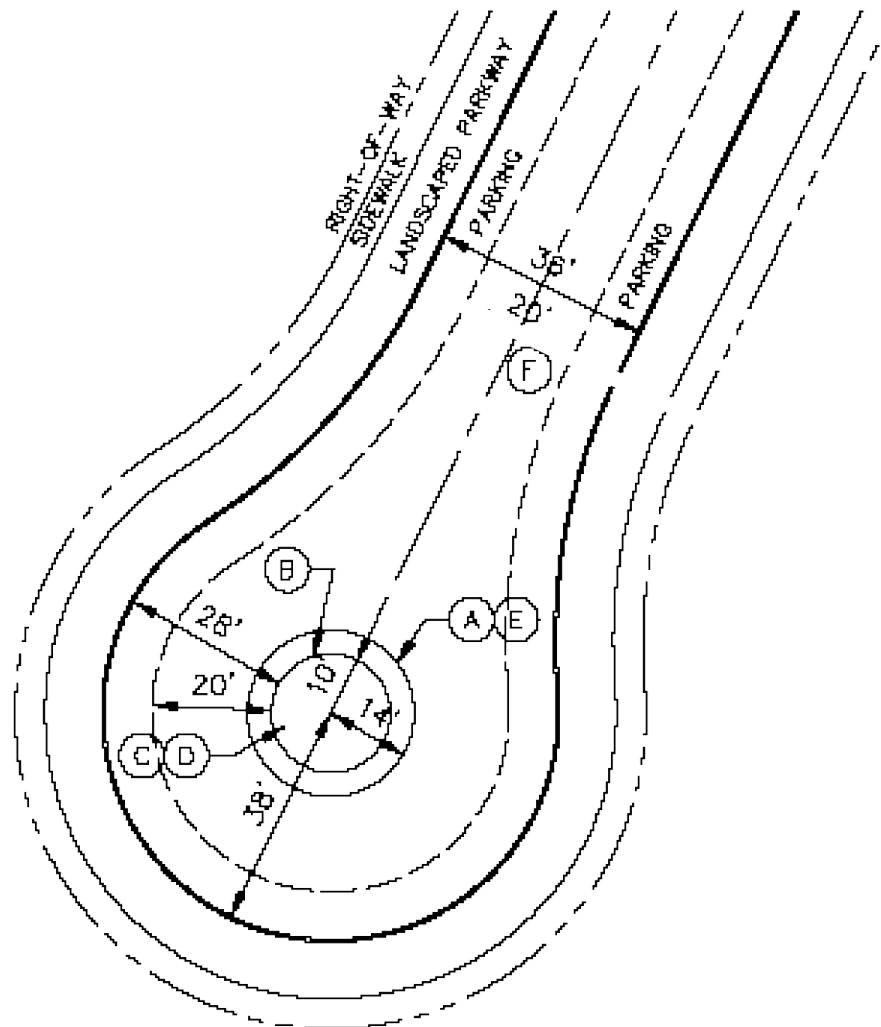
Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area within the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Standards for Standard 38-foot Radius Cul-de-Sac*

- a. Maximum 14-foot radius rock/paving stone apron, allowing for full weight of fire apparatus (4' wide, sloping up to height of 7").
- b. Maximum 10-foot radius landscaped median.
- c. Trees allowed in landscaped median shall have a mature canopy diameter of 34-feet or less. The appropriate landscape maintenance authority shall keep the canopy height outside the curb line of the median trimmed to at least 14-feet.
- d. Ground cover in landscaped median shall be of a type which will not damage fire apparatus tires.
- e. Special landscaped median designed to allow a modified "3-point" hammerhead configuration whereby all but the largest OCFA vehicles could perform a "3-point" turn in front of the landscaped island (38' outside turning radius).
- f. Minimum 20-foot fire lane must provide access to each driveway on the cul-de-sac.
- g. Sprinklers are required for each home (including attic spaces) on the cul-de-sac street.
- h. Parking is allowed around the cul-de-sac.

* Landscape median may be increased if cul-de-sac bulb is larger than standard 38-foot radius.



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Cul-de-Sacs with Raised Landscape Median

ADS

A-19

Ranch Plan Fire Protection Program

A-27. Public Street Transition at Parking Lot Turnaround

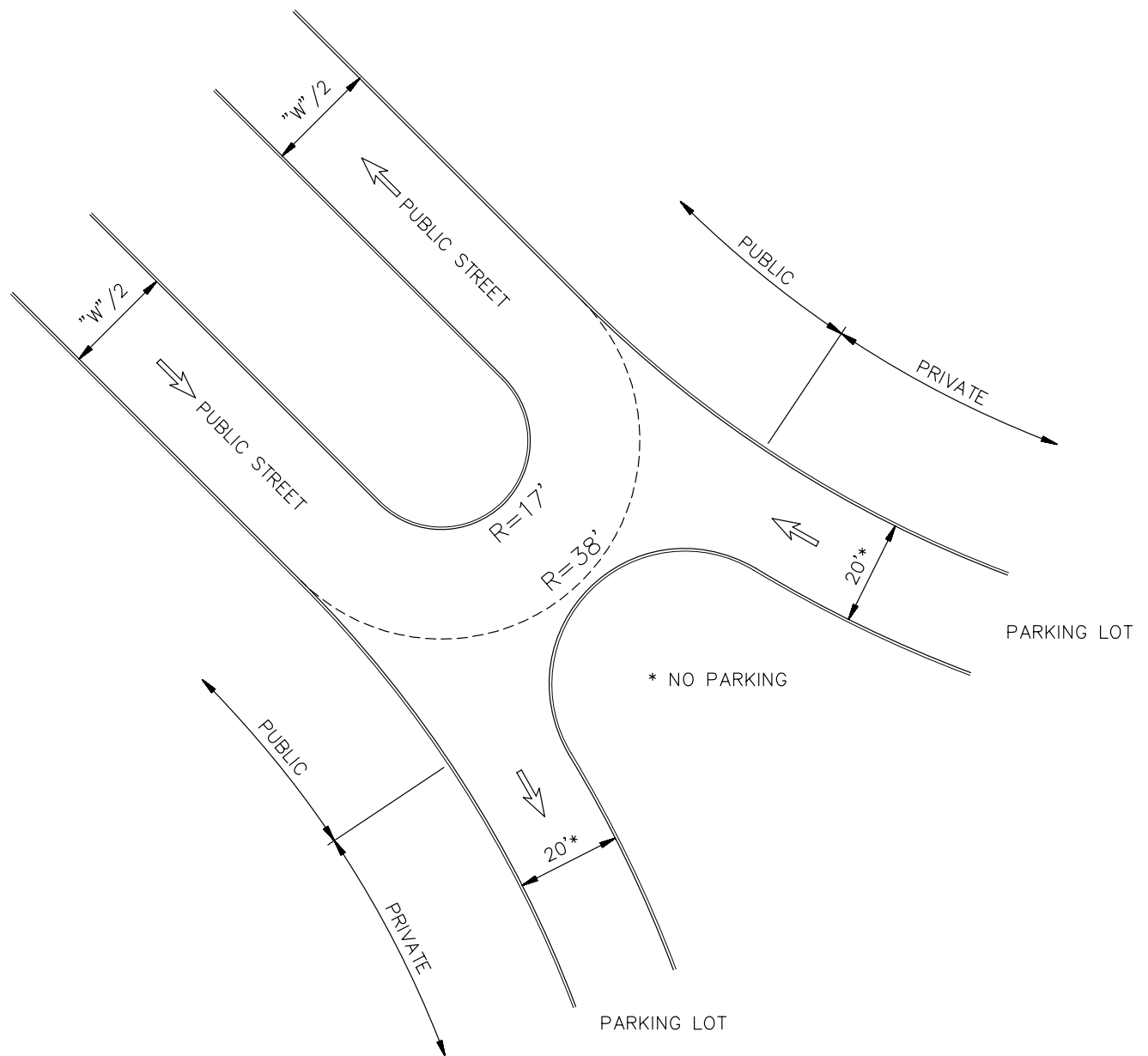
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify Standard Plan 1107 to allow Public Street Transition at Parking Lot Turnaround, as shown on the following page:

Project Benefits:

- Combines a cul-de-sac / turnaround function at the end of a public street with a private parking lot entry.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Standards:

- Parking is not allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- Provide for street drainage per current County standards.



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

PUBLIC STREET TRANSITION AT PARKING LOT TURN-AROUND

ADS

A-27

SHEET 1 OF 1

Ranch Plan Fire Protection Program

A-28. Traffic Calming Islands

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify Standard Plan 1107 to allow traffic calming islands, as shown on the following page:

Project Benefits:

- An enhanced residential village ambiance due to a increased landscaping within the neighborhood.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Standards:

1. Applicant/engineer must meet with County Traffic staff for pre-approval conceptual approval of ADS A-28 prior to roadway engineering.
2. Allowed only on streets of 400 Average Daily Trips (ADT) or less.
3. Not allowed to occur after a vehicle has the ability to build up speed (for example, not allowed after a straightaway, sweeping curve, or sustained downgrade of 1,250-feet or more).
4. Not allowed on through streets – best located on streets serving local residential traffic.
5. Spacing is important – best located so in proper sequence with intersections and other ADS A-28 traffic calming islands so as to minimize “surprises” and minimize the ability of vehicles to build up speed.
6. Appropriate signage is required. Striping is optional.
7. Length of island not to exceed 150 feet.

ARMOR PAVEMENT (A.P.):

1. MUST BE CAPABLE OF SUPPORTING OCFA EQUIPMENT TRAFFIC (68,000 LB).
2. MAY BE STAMPED OR TEXTURED ASPHALT CONCRETE (AC) OR PORTLAND CEMENT CONCRETE (PCC); GROUTED RIVER ROCKS OR COBBLES; OR OTHER PAVEMENT MATERIAL AS APPROVED BY COUNTY.
3. SURFACE TEXTURE SHALL HAVE VISUALLY—OBVIOUS VERTICAL RELIEF (E.G., BUMPS, RUMBLE STRIPS, DEEPLY AND WIDELY INCISED PATTERN STAMPING, PROTRUDING COBBLES, ETC.) SUFFICIENT TO SIGNIFICANTLY DISCOURAGE AUTOMOBILE TRAFFIC, WHILE FUNCTIONING AS ARMOR FOR TRUCK AND OCFA EQUIPMENT RUN—OUT.

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**RAISED PLANTERS
WITHIN RESIDENTIAL STREETS**

ADS

A-28

SHEET 2 OF 2

Ranch Plan Fire Protection Program

A-32a. Residential Collector With Median

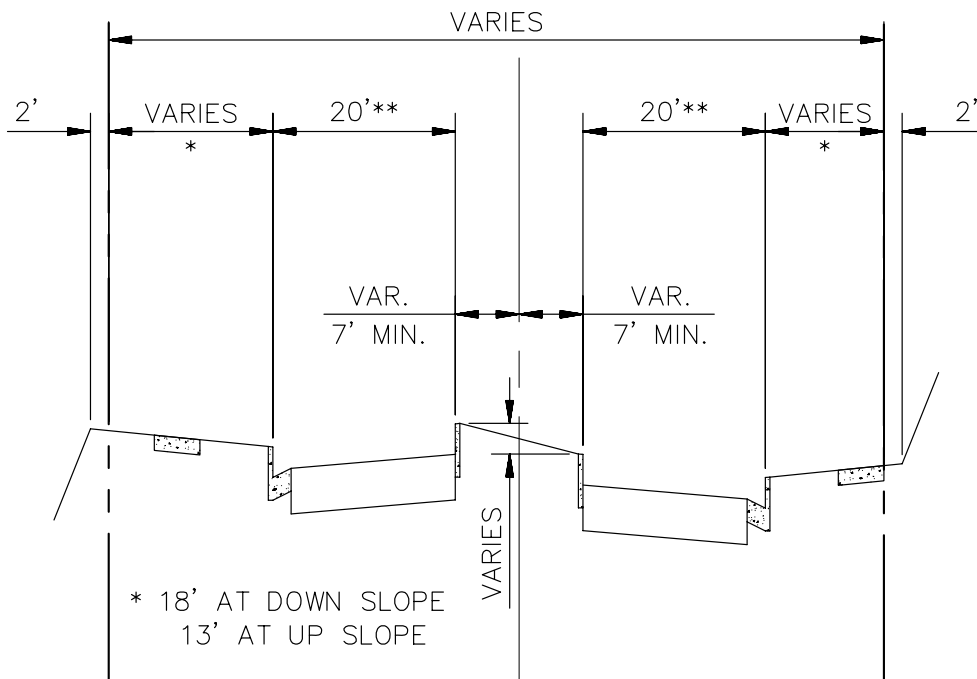
Per the approval of the County Chief Engineer, modify Standard Plan 1107, as shown on the following page:

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area as seen from the intersection looking into the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent or better parking serving surrounding residential neighborhoods.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- No parking is allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- Residential single-family home driveway frontage would be allowed in limited locations, per 22-foot width to allow backing distance.
- 1,200 to 6,000 ADT allowed
- Cross over drives every 850 feet to allow OCFA vehicles to turn around, per the following criteria: 4" dropped curb, paving or grass-crete to withstand 68,000 pounds with 90% compaction, inside turning radii 17-feet and outside turning radii 38-feet or greater.
- Parking pockets every 500' to allow for landscape maintenance vehicles, per the following criteria: 4" dropped curb, 4.5-feet deep, 25-feet long, paving or grass-crete (no weight limit).
- Residential Collectors with median with 20-foot street width sections not allowed within 100-feet of Fuel Modification/Wildland Interface Area (see Attachment 6).



RESIDENTIAL COLLECTOR WITH MEDIAN

35 MPH MINIMUM DESIGN SPEED
ACCESS BY LOCAL STREETS OR PRIVATE COMMON DRIVEWAYS
ADT 1200-6000

** STREET WIDTH TO BE INCREASED WHERE ON-STREET PARKING IS NECESSARY

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

STREET SECTIONS RESIDENTIAL COLLECTOR WITH MEDIAN

ADS

A-32a

SHEET 1 OF 1

Ranch Plan Fire Protection Program

A-33. Residential Local With Median

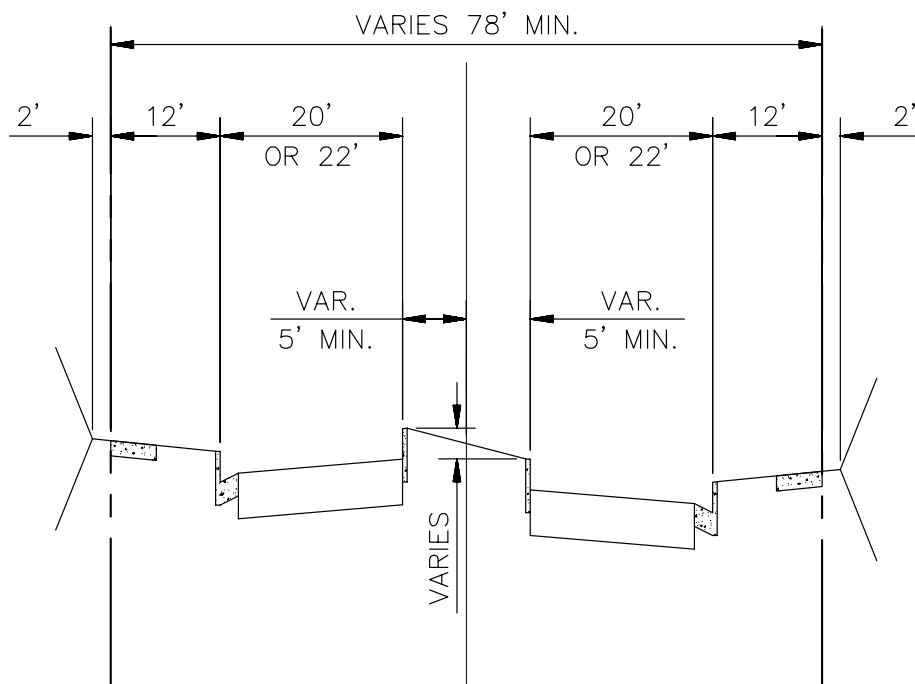
Per the approval of the County Chief Engineer, modify Standard Plan 1107, as shown on the following page:

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area as seen from the intersection looking into the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent or better parking serving surrounding residential neighborhoods.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- No parking is allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- Residential single-family home driveway frontage would be allowed in limited locations, per 22-foot width to allow backing distance.
- 500 to 1,200 ADT allowed
- Parking accessibility and travel path for lots adjacent to island must be adequately maintained.
- Appropriate signage and striping must be provided.
- Adequate maneuvering must be demonstrated for all driveways backing onto streets adjacent to raised landscape islands.



RESIDENTIAL LOCAL WITH MEDIAN

25 MPH MINIMUM DESIGN SPEED
 DRIVEWAYS ALLOWED BOTH SIDES
 ADT 500-1200

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

STREET SECTIONS RESIDENTIAL LOCAL WITH MEDIAN

ADS

A-33

SHEET 1 OF 1

Ranch Plan Fire Protection Program

B. Intersections

Some components of the Ranch Plan neighborhood village design philosophy require modifications to **Public Street Intersection** development standards in the Ranch Plan Planned Community Text and to appropriate County Standard Plans. These modifications include special residential intersection designs, limited tree planting in sightlines, modified sidewalk treatments at arterial intersections and other unique design solutions identified by the following Items #B-1 through B-8.

B-1. Tapered Intersection At Work in Ladera

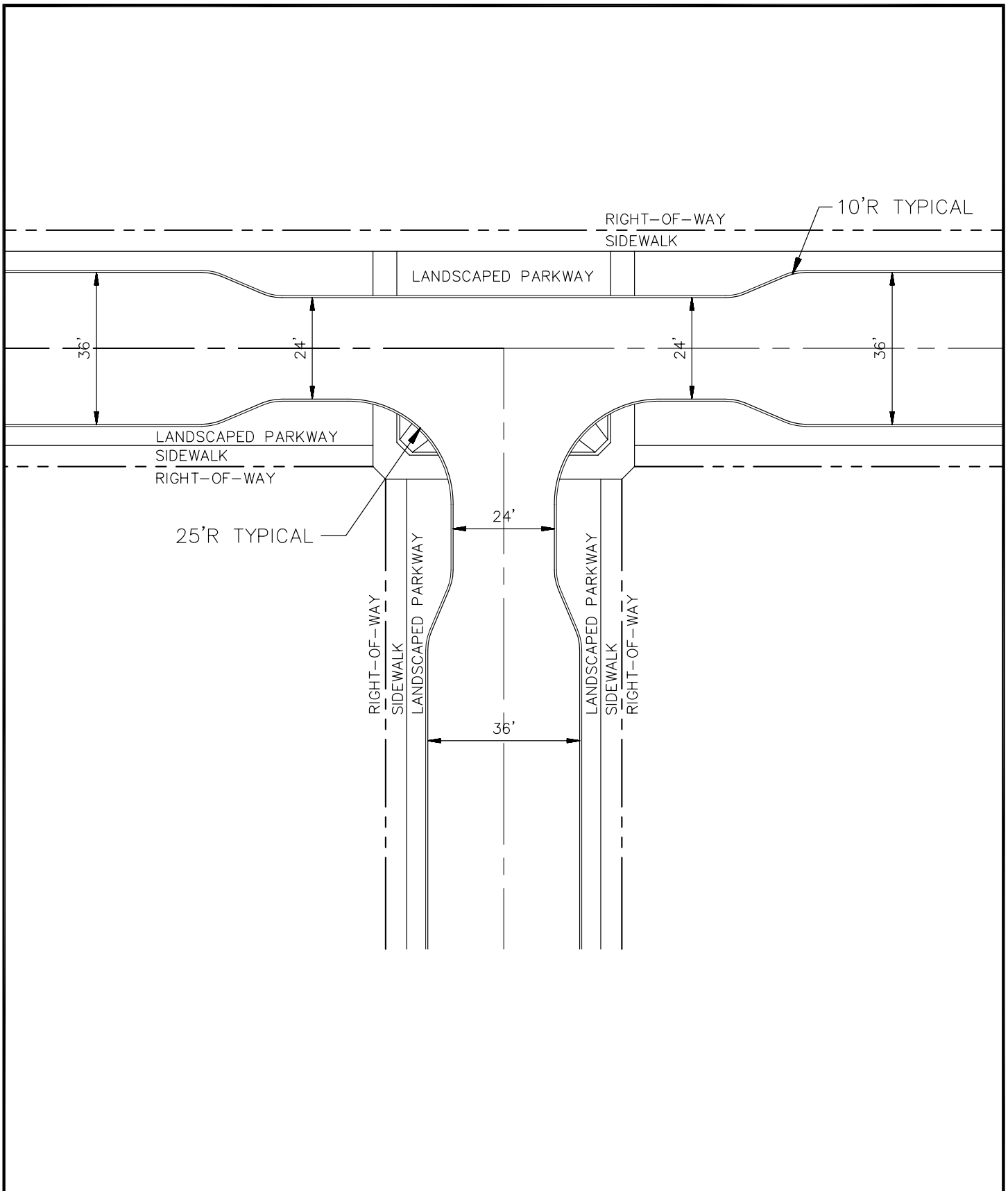
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow special residential intersection treatments at three-way and four-way intersections of local residential public streets, as shown on the following pages.

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area as seen from the intersection looking into the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Criteria:

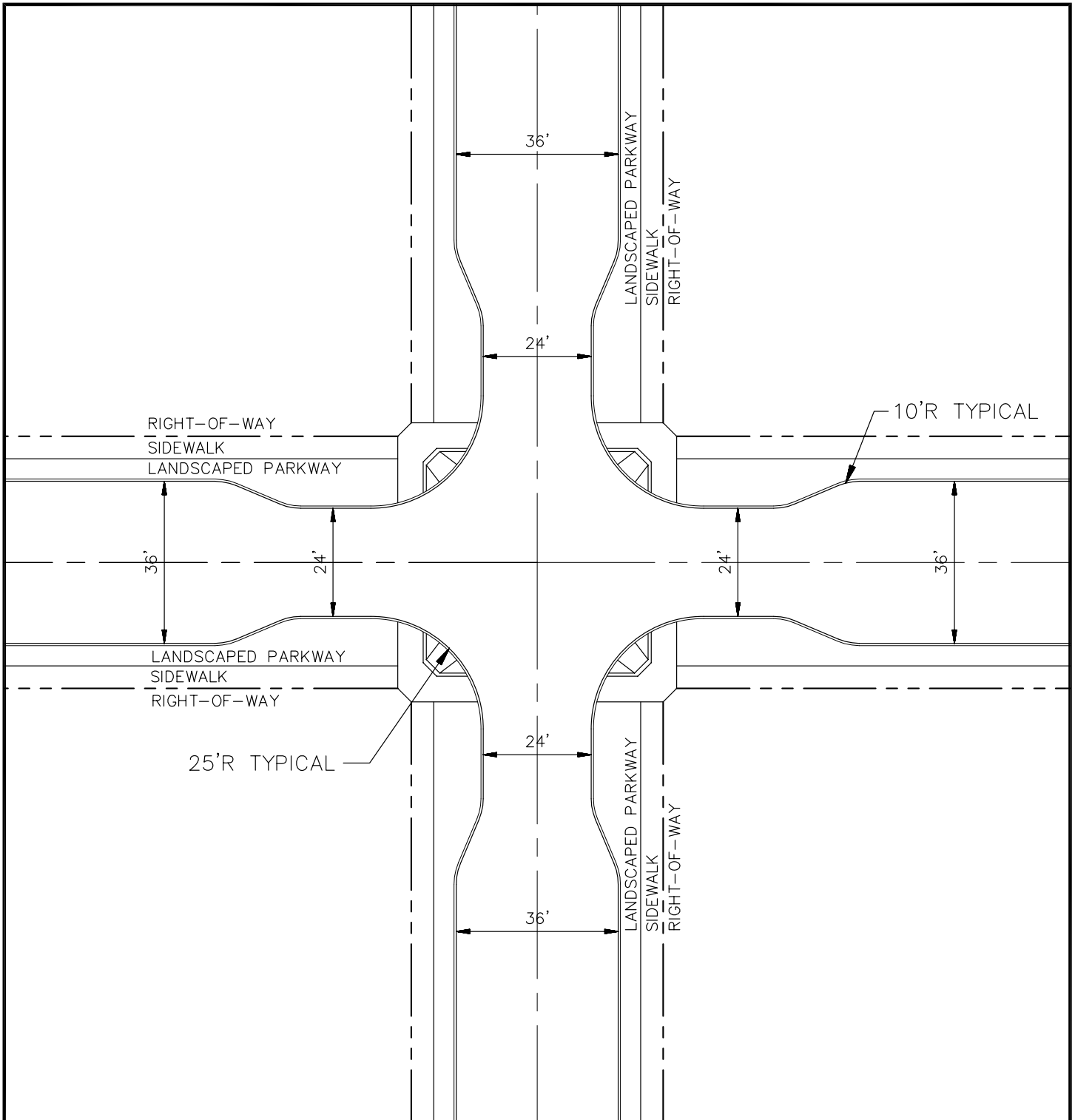
- No parking is allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- 800 ADT on through streets, 500 ADT on intersection streets.
- County turning radius template must be met for CA Legal-65 vehicles.
- Additional County staff review required prior to implementation near a drop-off zone for a school or other high peak-hour traffic generating uses.



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ALTERNATIVE RESIDENTIAL INTERSECTIONS
REDUCED PAVEMENT WIDTH AT THREE-WAY INTERSECTION

ADS
B-1
SHEET 1 OF 2



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ALTERNATIVE RESIDENTIAL INTERSECTIONS
REDUCED PAVEMENT WIDTHS AT FOUR-WAY INTERSECTION

ADS

B-1

SHEET 2 OF 2

Ranch Plan Fire Protection Program

B-6. Roundabouts **At Work in Ladera** (Modified)

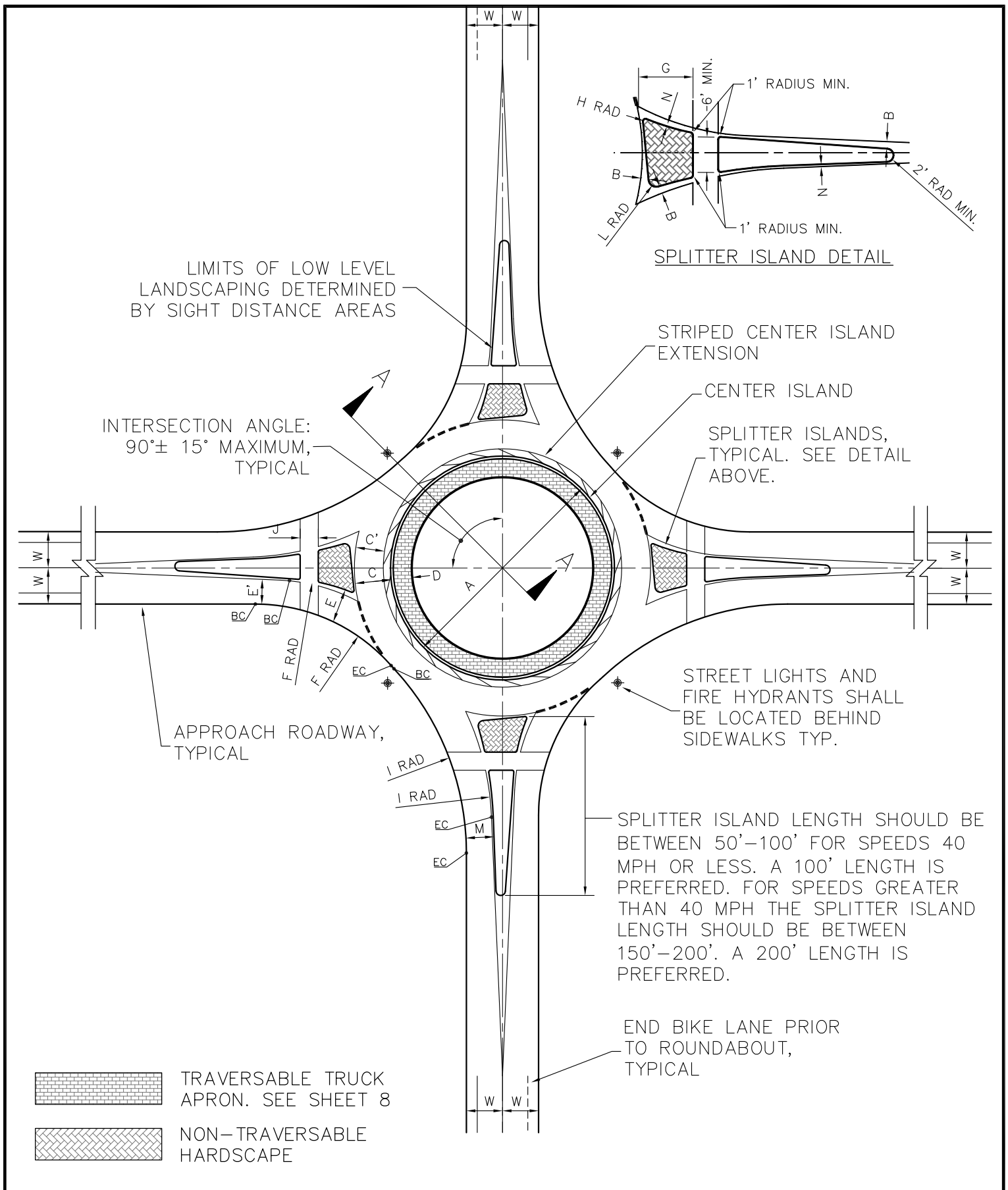
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow construction of four optional configurations of three-way or four-way roundabouts at intersections of arterial, collector and neighborhood streets:

Project Benefits:

- Improved traffic flow.
- A strengthened residential village ambiance due to enhanced landscaping at the roundabout intersection.
- Equivalent or better impacts on public health, safety and general welfare.
- Equivalent or better impacts on the immediately adjacent property and other permitted uses in the vicinity.

Performance Standards:

1. Applicant/engineer must meet with County staff to determine appropriate design speed.
2. Armoring (cobbled surface, per #11 below) at entry streets in order to achieve selected design speed.
3. Typical dimensions are identified on the Roundabout Dimension Table (see Sheet 7 of 10)
4. Angled Intersections: Not less than a 75-degree angle allowed.
5. Multiple lanes may be allowed only based on detailed review by County Chief Engineer, per appropriate capacity analysis methodology.
6. Neighborhood Electrical Vehicle (NEV) access: Allowed in traffic lane at or below roundabout design speeds of 25 miles per hour (assuming approaching streets are 35 mph or lower).
7. "Autoturn" software (or equivalent) shall be used to confirm maneuverability of CA Legal-65 vehicles (moving vans, sod-hauling trucks, etc.), which in turn ensures maneuverability by largest OCFA emergency vehicles and the largest trash hauling vehicles (assuming use of armored aprons).
8. Line-of-sight issues addressed per Roundabout Limited Use Areas exhibit 6d. Required sight distance dimensions based on design speed of approach roadway per County standards.
9. Street lights and hydrants locations not per County standard, but located in order to minimize likelihood of impact (not within armored areas).
10. Bikes are allowed in traffic lane. Ramp to sidewalk also provided.
11. Armoring to be of a cobbled surface (see Roundabout Details, Sheet 10 of 10), capable of supporting OCFA emergency vehicles (68,000 pounds)

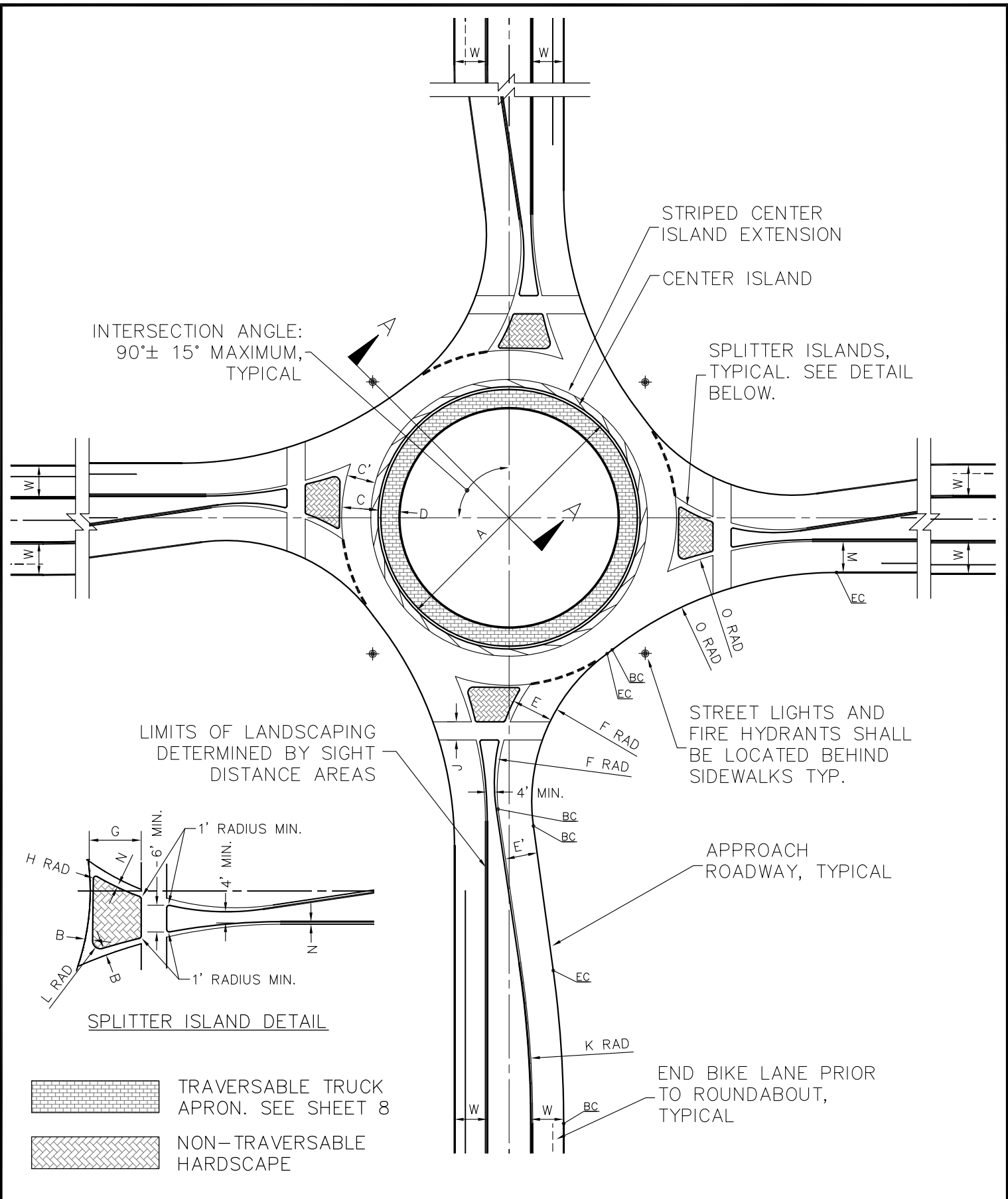


THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT WITHOUT MEDIANS ON APPROACHING ROADWAYS

Page 125

ADS
B-6
SHEET 1 OF 11



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT WITH MEDIANS
ON APPROACHING ROADWAYS

Page 126

ADS

B-6

SHEET 2 OF 11

ROUNDBABOUT DIMENSIONS					
DIMENSION	DESCRIPTION	ROUND ABOUT WITHOUT MEDIAN	ROUND ABOUT WITHOUT MEDIAN	ROUND ABOUT WITH MEDIAN	ROUND ABOUT WITH MEDIAN
A	DIAMETER	100'	120'	120'	140'
B	CURB SETBACK	3'	3'	3'	3'
C	CIRCULATING PAVEMENT WIDTH	20'	20'	20'	20'
C'	CIRCULATING LANE WIDTH	16'	16'	16'	16'
D	TRAVERSABLE TRUCK APRON	7' – 10'	7' – 10'	7' – 10'	7' – 10'
E	APPROACH PAVEMENT WIDTH	15' – 20'	15' – 20'	15' – 20'	15' – 20'
E'	APPROACH LANE WIDTH	12'	12'	12'	12'
F	ENTRY RADIUS	50' – 100'	50' – 100'	50' – 100'	50' – 100'
G	X-WALK SETBACK	SEE NOTE 1	SEE NOTE 1	SEE NOTE 1	SEE NOTE 1
H	RADIUS	2'	2'	2'	2'
I	EXIT RADIUS	100' – 200'	100' – 200'	–	–
J	X-WALK WIDTH	10'	10'	10'	10'
K	APPROACH RADIUS	–	–	600'	600'
L	RADIUS	3'	3'	3'	3'
M	DEPARTURE LANE WIDTH	16' MIN.	16' MIN.	16' MIN.	16' MIN.
N	CURB SETBACK	1'	1'	1'	1'
O	EXIT RADIUS	–	–	100' – 200'	100' – 200'
W	ROADWAY WIDTH	20'	20'	18' – 20'	18' – 20'

NOTES:

1. CROSSWALK SETBACKS SHOULD BE 35 TO 40 FEET FROM THE OUTSIDE EDGE OF THE CIRCULATING ROADWAY FOR COLLECTOR ROADS. IN CASES WHERE THE ROUNDBABOUT IS IN THE VICINITY OF A SCHOOL CAMPUS, RECREATIONAL, OR COMMERCIAL AREA CROSSWALK SETBACKS SHOULD BE 40 TO 50 FEET FROM THE OUTSIDE EDGE OF THE CIRCULATING ROADWAY. SETBACKS FOR SECONDARY HIGHWAYS SHOULD BE 40 TO 50 FEET FROM THE OUTSIDE EDGE OF THE CIRCULATING ROADWAY.

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

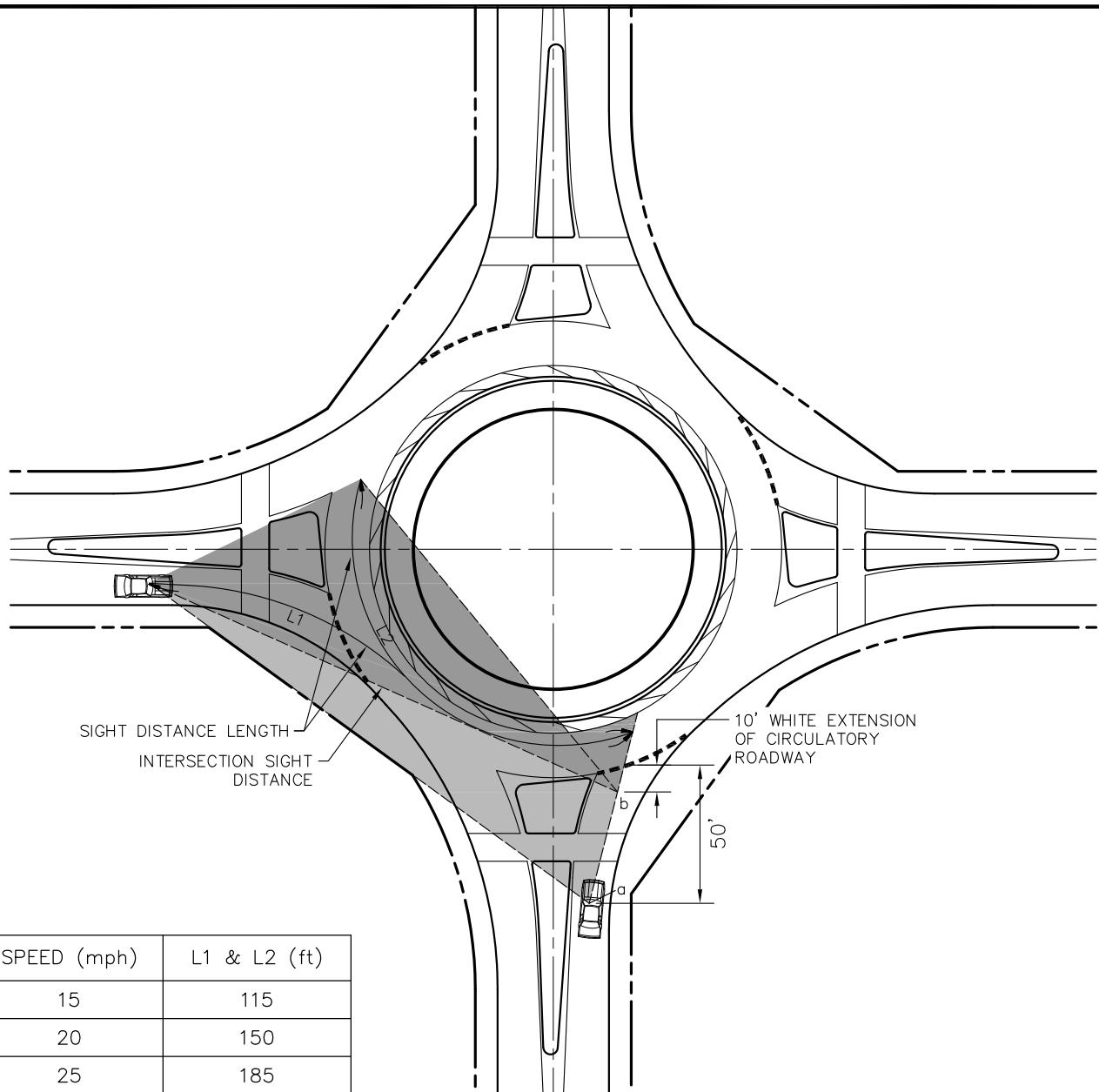
**ROUNDBABOUT
DIMENSION TABLE**

Page 127

ADS

B-6

SHEET 3 OF 11



SPEED (mph)	L1 & L2 (ft)
15	115
20	150
25	185
30	225
35	260

- L1 SIGHT DISTANCE FROM DRIVER'S EYE TO APPROACHING VEHICLE FROM THE LEFT; USE SPEED OF APPROACH.
- L2 SIGHT DISTANCE FROM DRIVERS EYE TO APPROACHING VEHICLE IN ROUNDABOUT; USE DESIGN SPEED OF ROUNDABOUT.

ROUNDABOUT SIGHT DISTANCE

25 MPH MAXIMUM DESIGN SPEED



AREA FREE OF SIGHT OBSTRUCTIONS



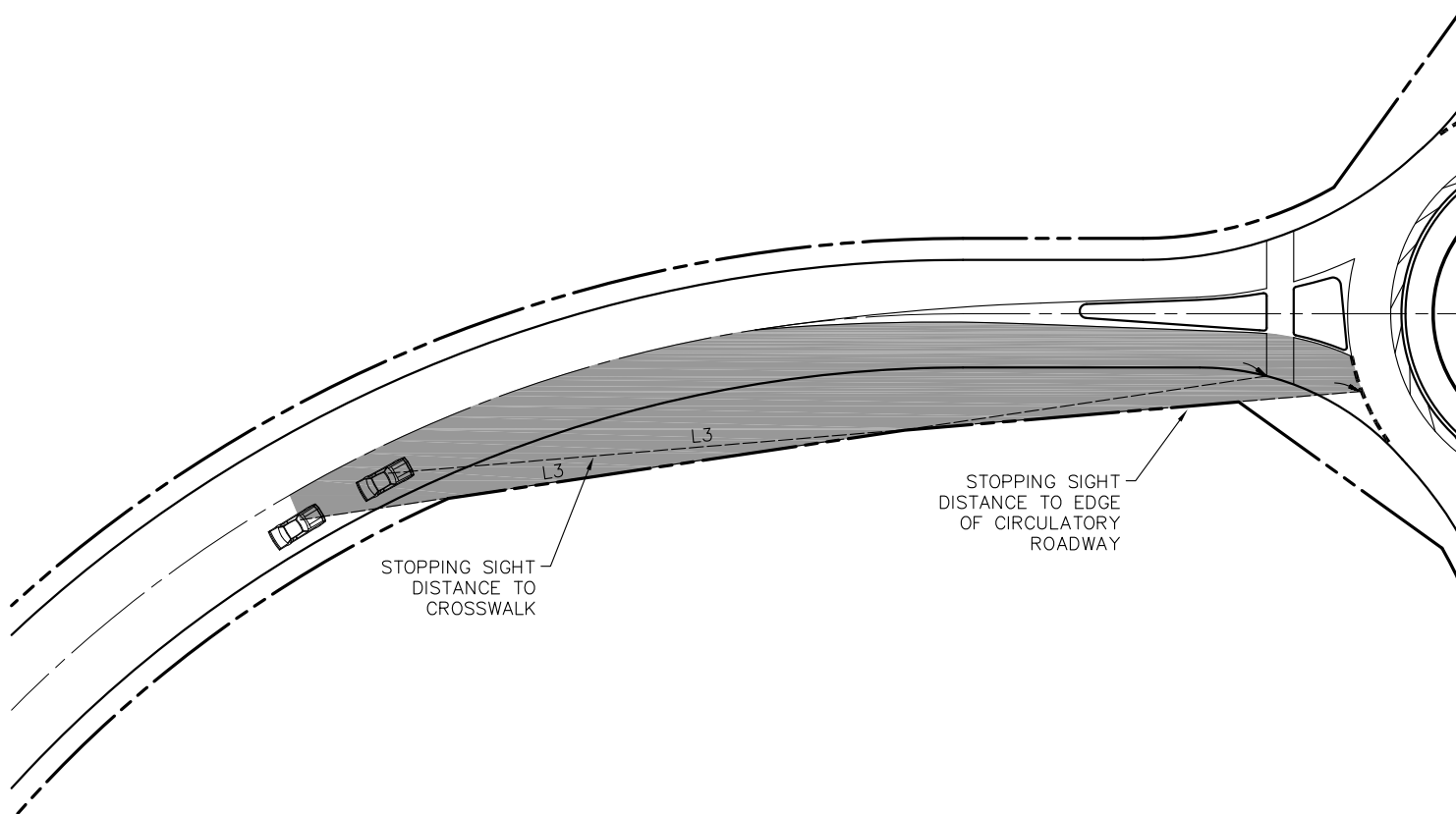
AREA WITH MINIMAL SIGHT OBSTRUCTIONS

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT SIGHT DISTANCE

Page 128

ADS
B-6
SHEET 4 OF 11



SPEED (mph)	L3 (ft)
15	77.0
20	112.4
25	152.7
30	197.8
35	247.8
40	302.7
45	362.5
50	427.2
55	496.7

L3 SIGHT DISTANCE FROM DRIVER'S EYE TO CROSSWALK AND/OR OUTSIDE EDGE OF THE CIRCULATING ROADWAY.

ROUNDABOUT SIGHT DISTANCE



AREA FREE OF SIGHT OBSTRUCTIONS

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

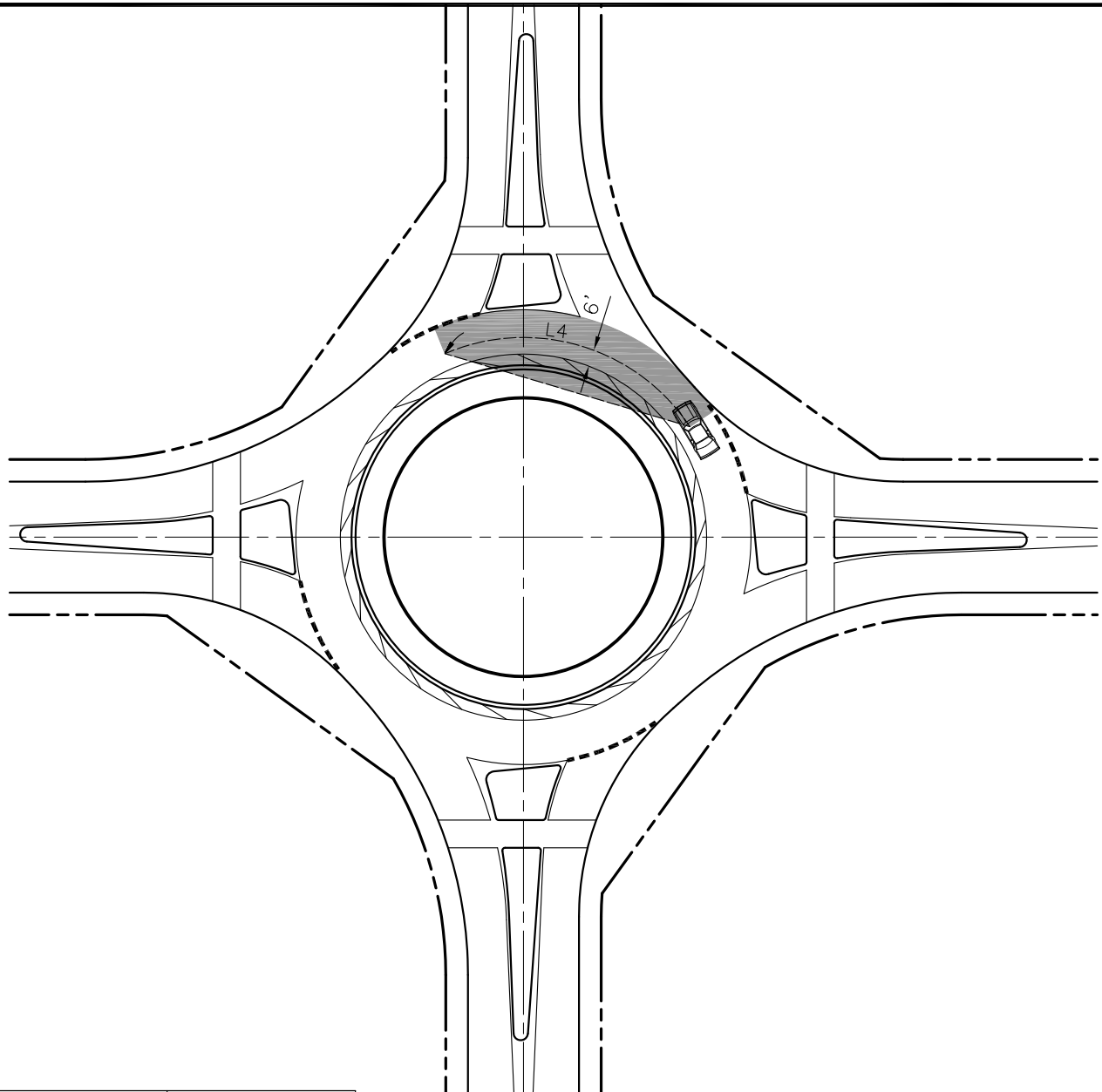
ROUNDABOUT SIGHT DISTANCE

Page 129

ADS

B-6

SHEET 5 OF 11



SPEED (mph)	L4 (ft)
10	46.4
15	77.0
20	112.4

L4 SIGHT DISTANCE FROM DRIVER'S EYE RELATED TO CIRCULATORY ROADWAY STOPPING CONDITION BASED ON CIRCULATORY ROADWAY SPEED.

ROUNDABOUT SIGHT DISTANCE



AREA FREE OF SIGHT OBSTRUCTIONS

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

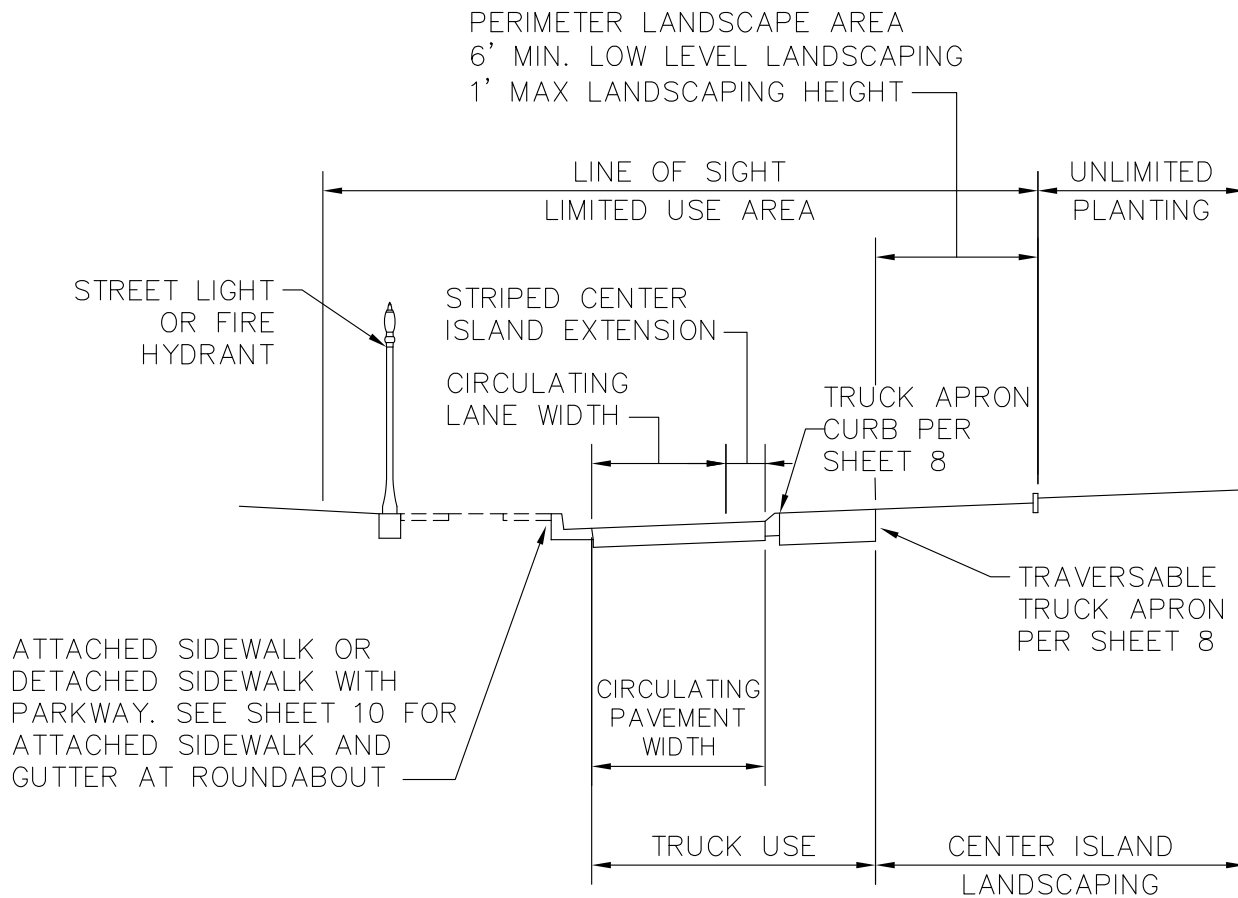
ROUNDABOUT SIGHT DISTANCE

Page 130

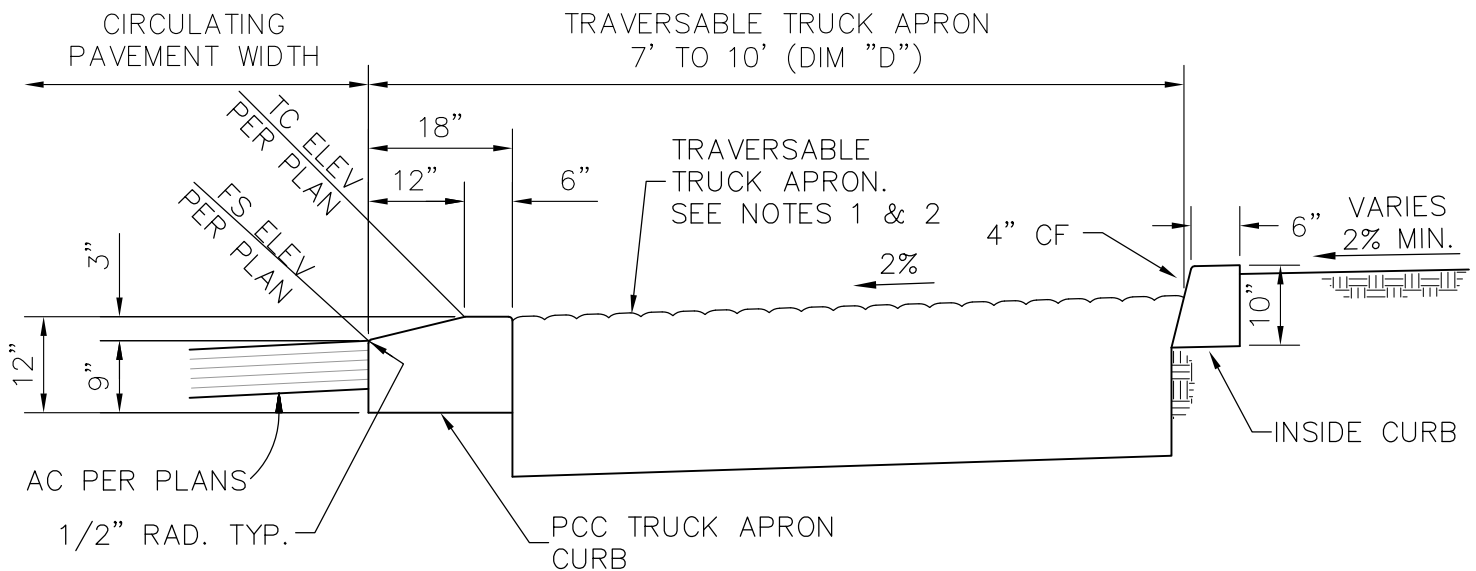
ADS

B-6

SHEET 6 OF 11



**SECTION A-A
TYPICAL SECTION**



TRUCK APRON DETAIL

NOTE:

1. TRAVERSABLE TRUCK APRON MUST BE CAPABLE OF SUPPORTING OCFA EQUIPMENT TRAFFIC (68,000 LB).
2. MAY BE STAMPED OR TEXTURED PORTLAND CEMENT CONCRETE (PCC); "DRIVEABLE GRASS/TURFBLOCK/GRASSCRETE/ GRASS PAVE"; CONCRETE PAVERS; OR OTHER PAVEMENT MATERIAL AS APPROVED BY COUNTY.

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

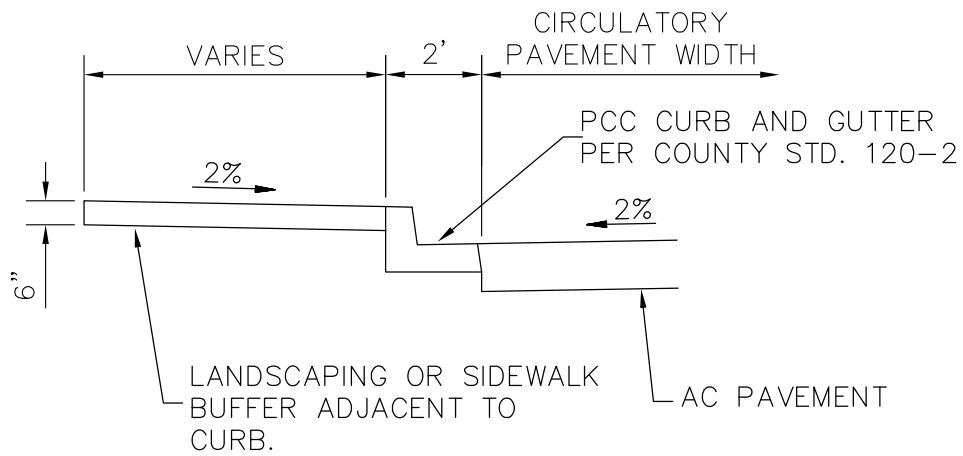
ROUNABOUT DETAILS

Page 132

ADS

B-6

SHEET 8 OF 11



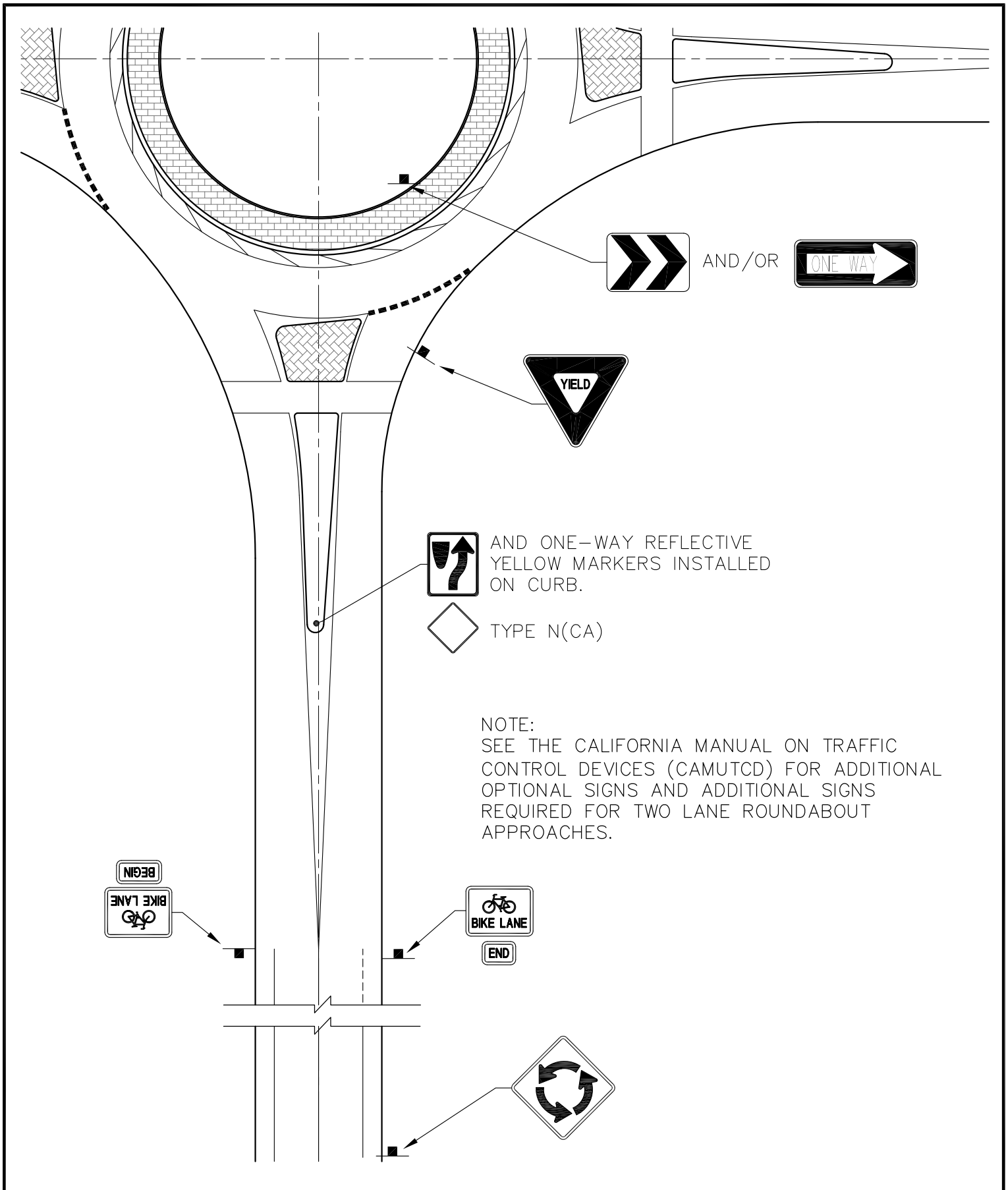
CONCRETE CURB, GUTTER, AND SIDEWALK AT ROUNDABOUT

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT DETAILS

Page 133

ADS
B-6
SHEET 9 OF 11

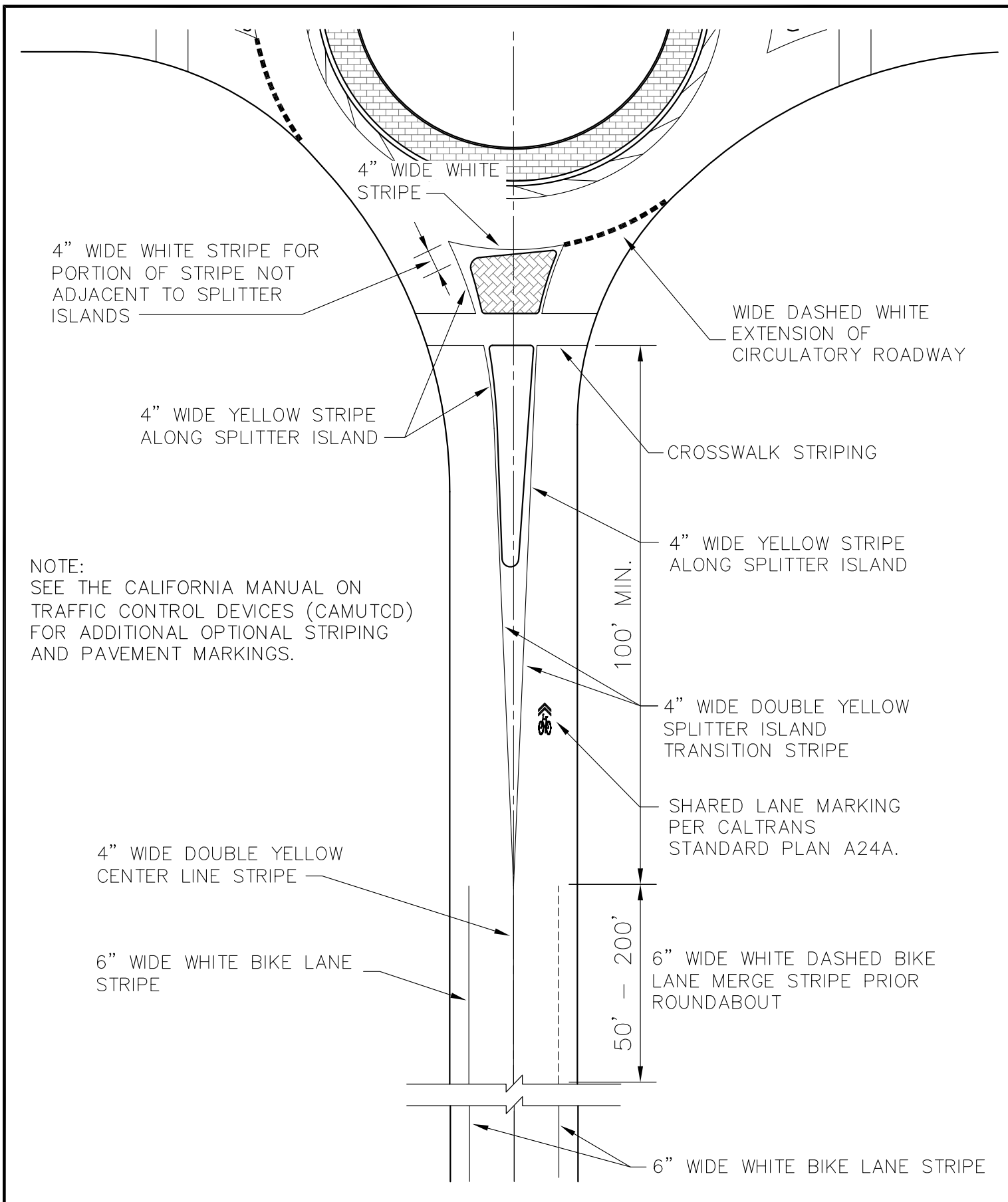


THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

TYPICAL ONE LANE ROUNDABOUT APPROACH SIGNS

Page 134

ADS
B-6
 SHEET 10 OF 11



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

TYPICAL ONE LANE
ROUNDABOUT APPROACH STRIPING

Page 135

ADS

B-6

SHEET 11 OF 11

Ranch Plan Fire Protection Program

B-8 Alternative

Alternative Residential Intersection • 10-Foot Radius Curb

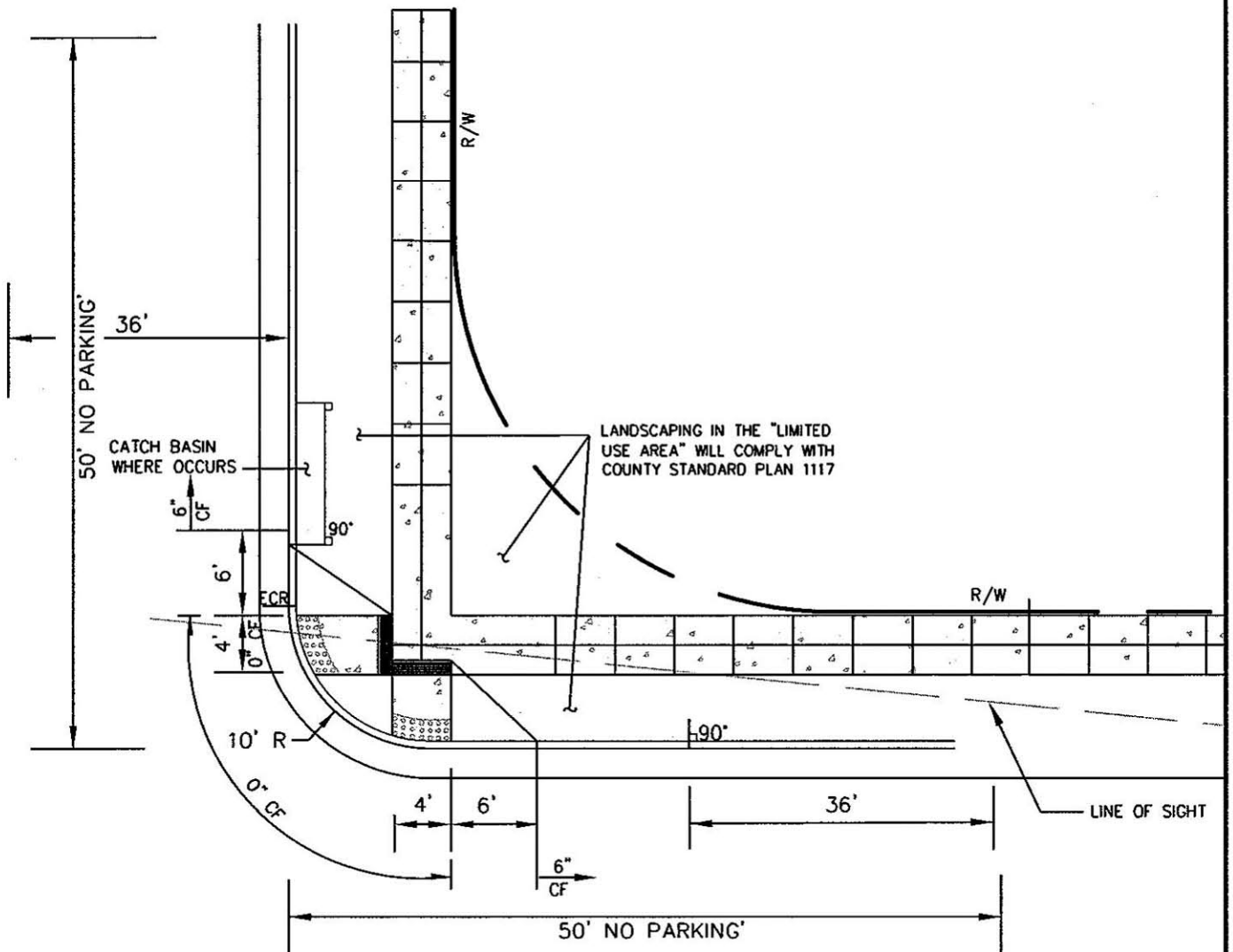
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow 10-foot radius curbs at corners of local residential street intersections (with and without tapers), as shown on the exhibits on the following pages:

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area as seen from the intersection looking into the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Criteria:

- 36-foot street width at non-tapered intersections.
- “Autoturn” software (or equivalent) shall be used to confirm maneuverability of CA Legal-65 vehicles (moving vans, sod-hauling trucks, etc.).
- Additional County staff review required prior to implementation near a drop-off zone for a school or other high peak-hour traffic generating uses.



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**ALTERNATE CORNER RAMP CONDITION
AT TYPICAL INTERSECTION**

ADS
B-8
ALT

SHEET 1 OF 1

Ranch Plan Fire Protection Program

G-3a. **Private Alley Drive Allowing Emergency Vehicle Access**

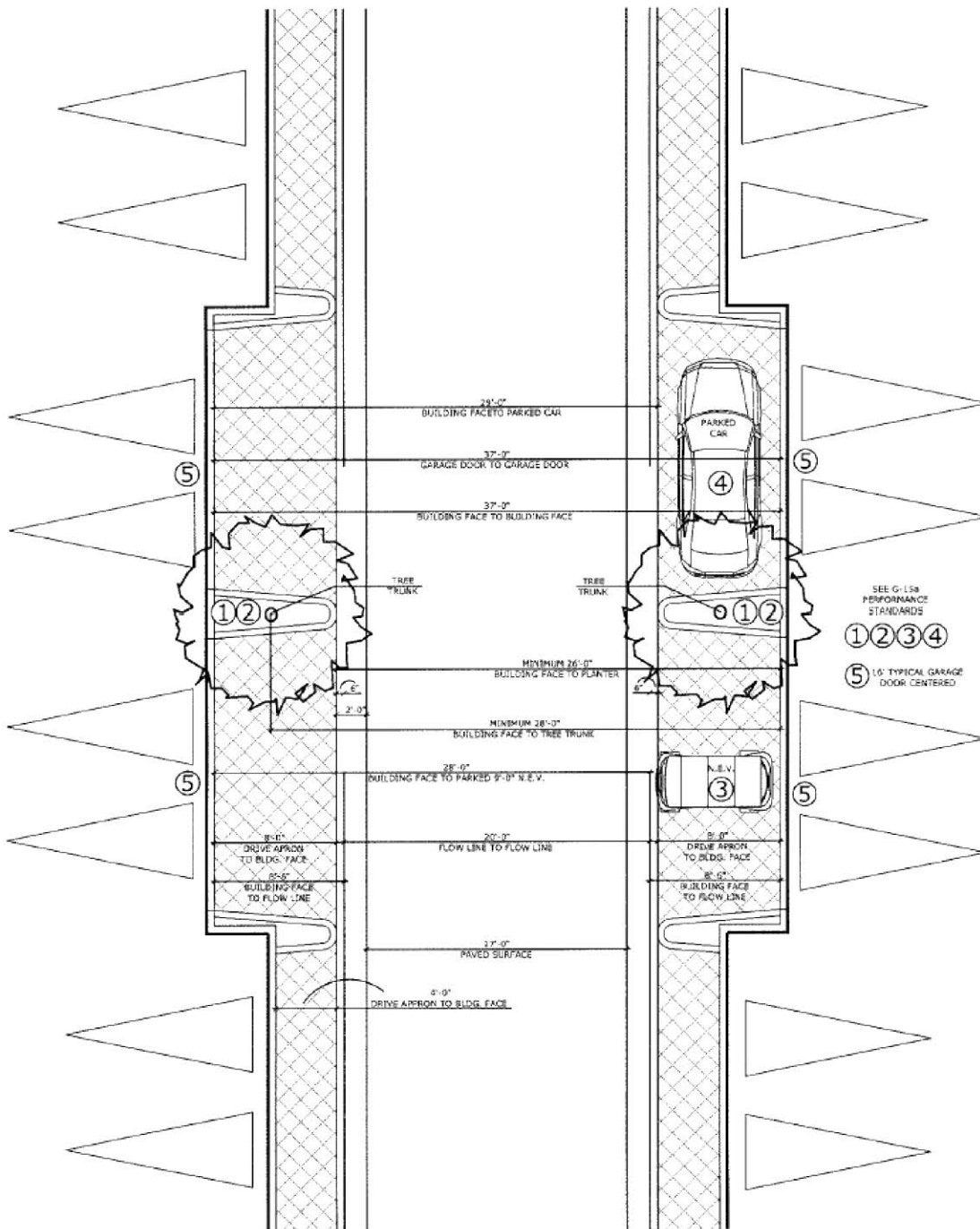
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow for emergency access in private alleys, as shown on the Exhibit below:

Project Benefits:

- An enhanced ambiance due in the alley-load areas of the neighborhood, due to the ability to plant trees and other landscaping outside of the maneuvering area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- County turning radius template for large vehicles must be met.
- One rescue window serving each dwelling unit from alley, addressing location of mature trees and OCFA ladder access to rescue window.
- See Exhibit for the following plan-specific criteria:
 - 1) Shape and length of landscaped peninsula to allow garaged car to begin to turn wheel as soon as possible ("Autoturn" software or equivalent may be used to confirm maneuverability)
 - 2) Trees may be located anywhere within this landscaped peninsula, as long as canopy does not impact OCFA emergency access (13' 6" vertical clearance within 20' OCFA accessway, plus ladder access to rescue window).
 - 3) Neighborhood Electrical Vehicles (NEVs) of 9-foot in length or less may park perpendicularly in front of garage doors.
 - 4) Full sized autos may parallel park in front of garage doors, but no credit shall be granted for these spaces.
 - 5) 16-foot garage door.



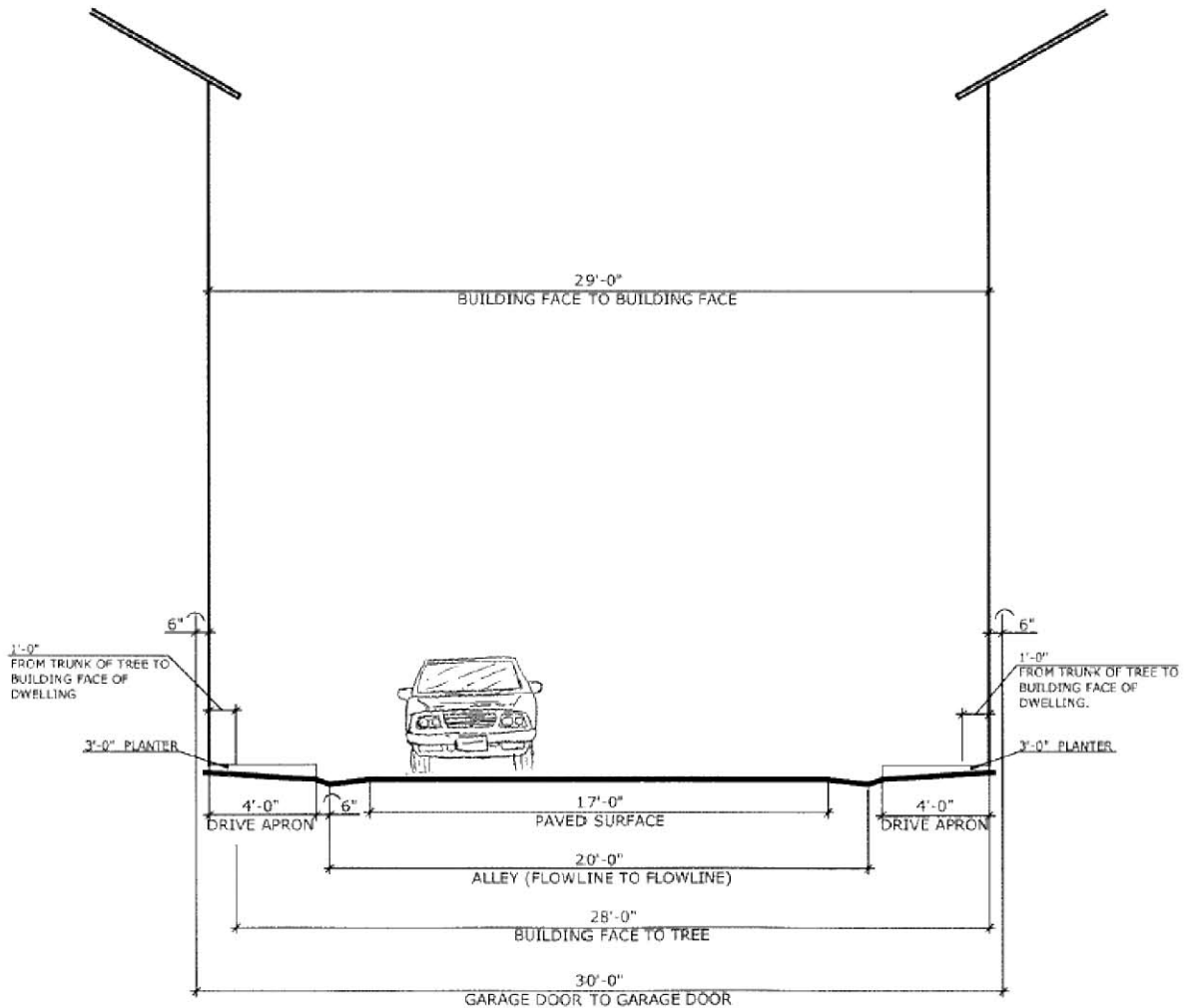
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Alleys, Private Drives and Courts (Emergency Access Required)

ADS

G-3a

Plan View



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Alleys, Private Drives and Courts (Emergency Access Required)

ADS
G-3a
Section View

Ranch Plan Fire Protection Program

G-3b. Private Alley Drive With No Requirement for Emergency Vehicle Access

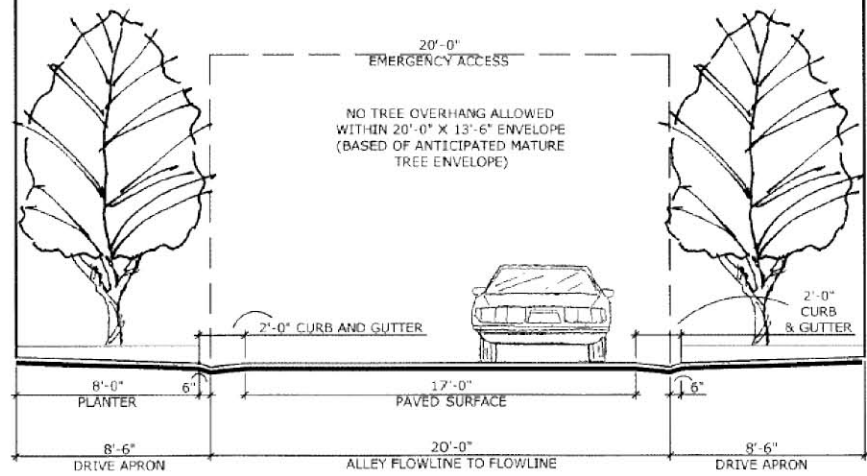
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow for private alleys (where no emergency vehicle access is required, as shown on the Exhibit below:

Project Benefits:

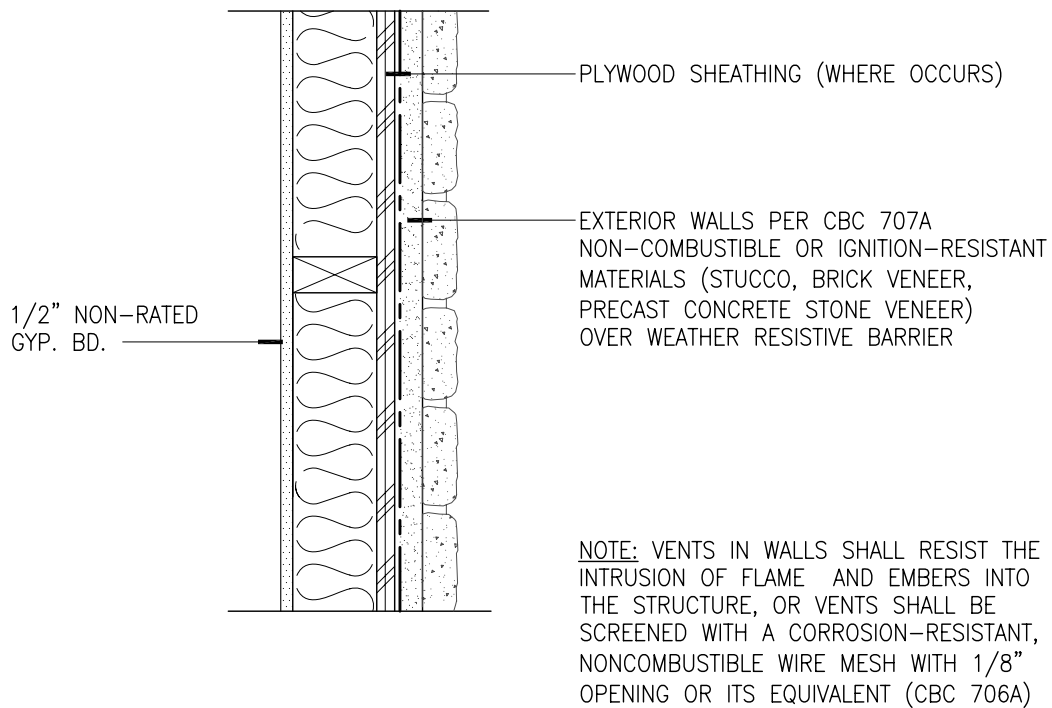
- Traffic calming.
- An enhanced ambiance due in the alley-load areas of the neighborhood, due to the ability to plant trees and other landscaping outside of the maneuvering area.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- County turning radius template for large vehicles must be met (no emergency vehicle access required)



THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS	
Alleys, Private Drives and Courts (No Emergency Access Required)	ADS
	G-3b



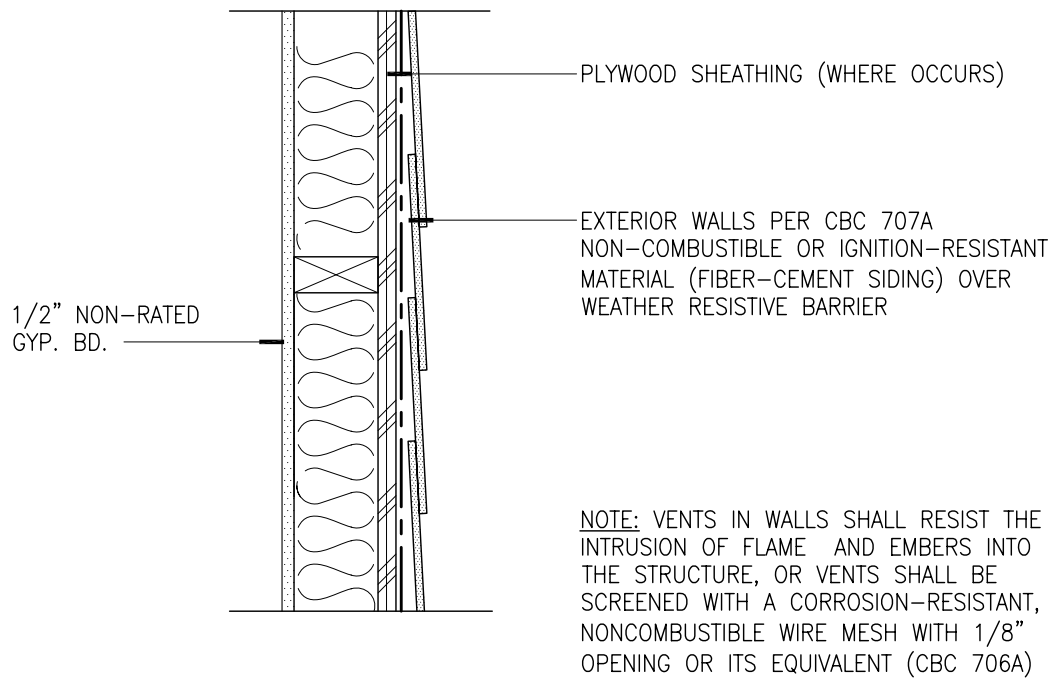
EXTERIOR WALL RADIANT HEAT/EMBER MITIGATION ZONE

R01

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H01



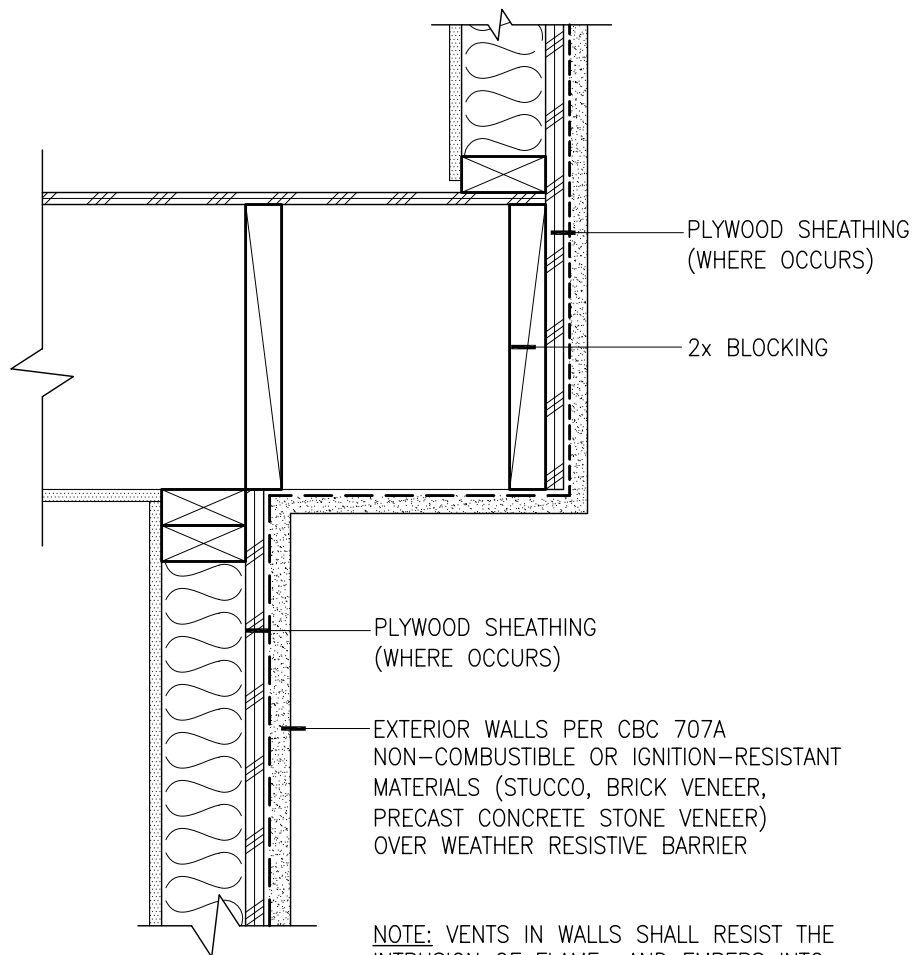
EXTERIOR WALL RADIANT HEAT/EMBER MITIGATION ZONE

R02

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H02



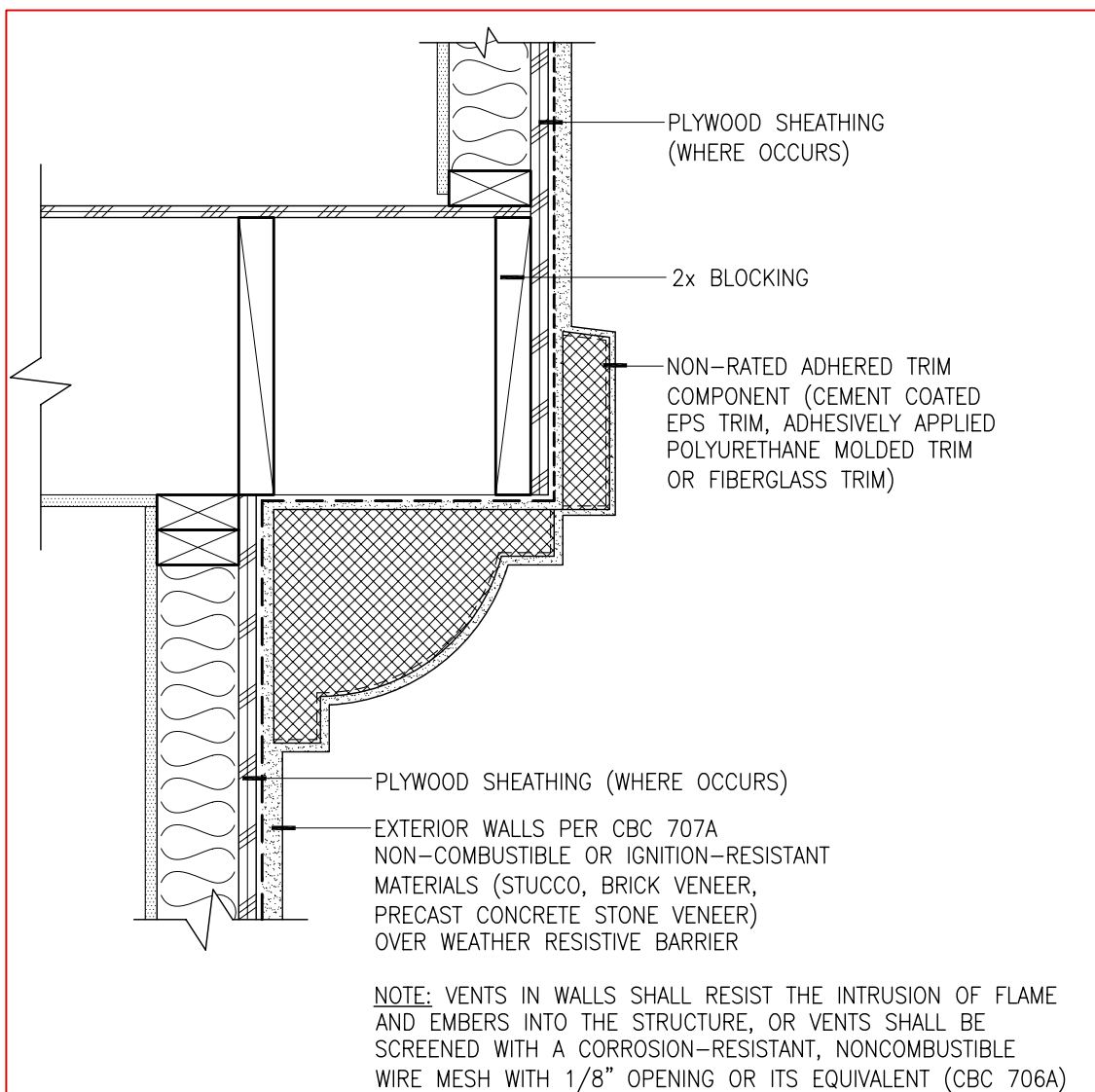
CANTILEVER FLOOR (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R03

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H03



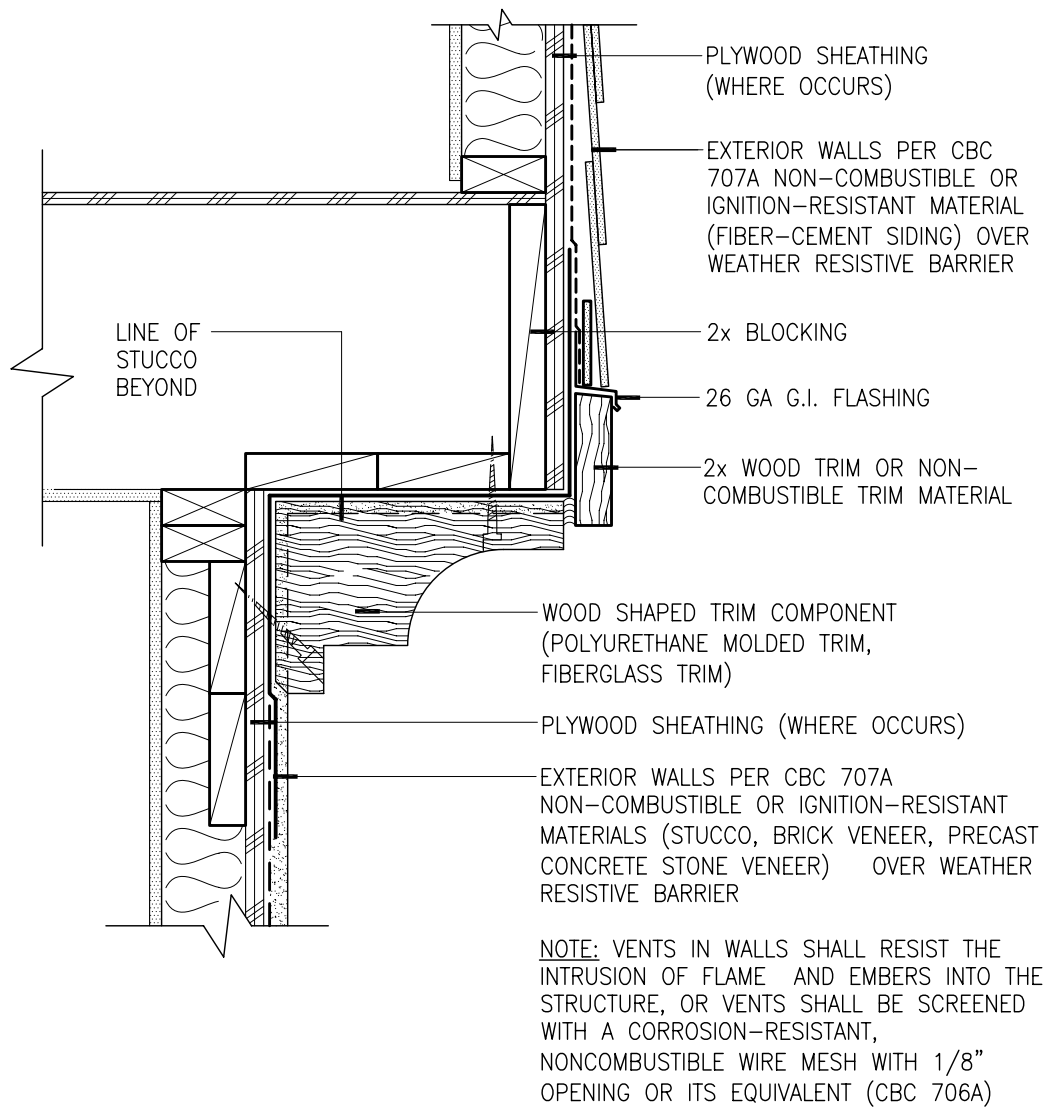
CANTILEVER FLOOR WITH TRIM RADIANT HEAT/EMBER MITIGATION ZONE

R04

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H04



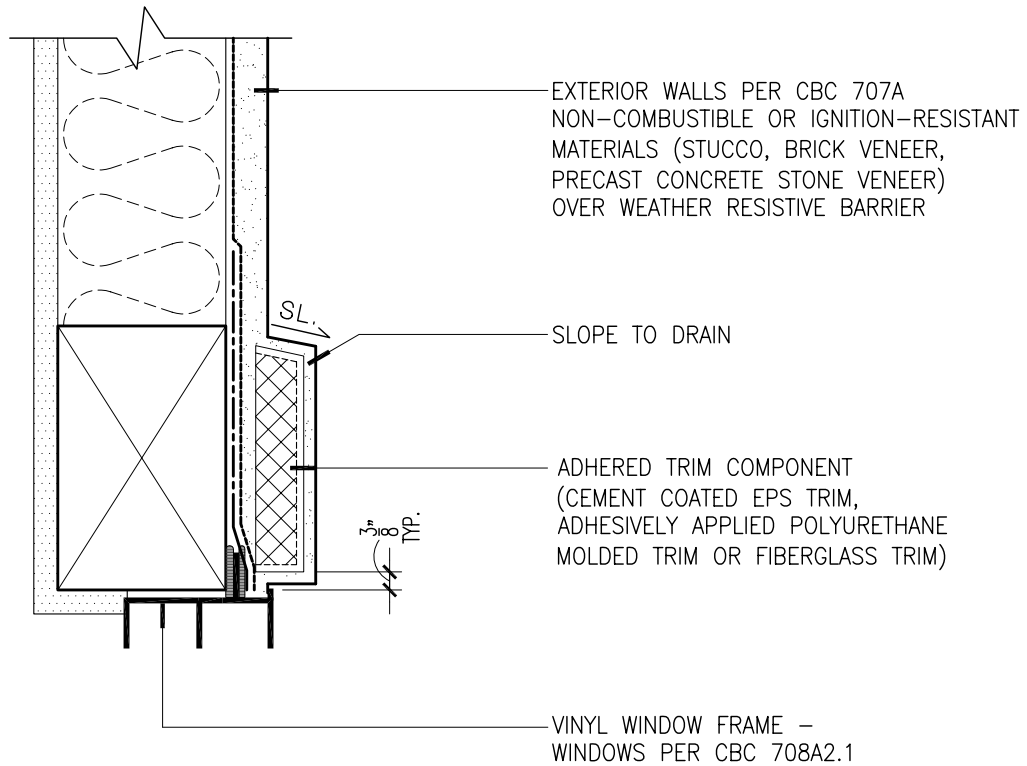
CANTILEVER FLOOR WITH WOOD TRIM RADIANT HEAT/EMBER MITIGATION ZONE

R05

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H06



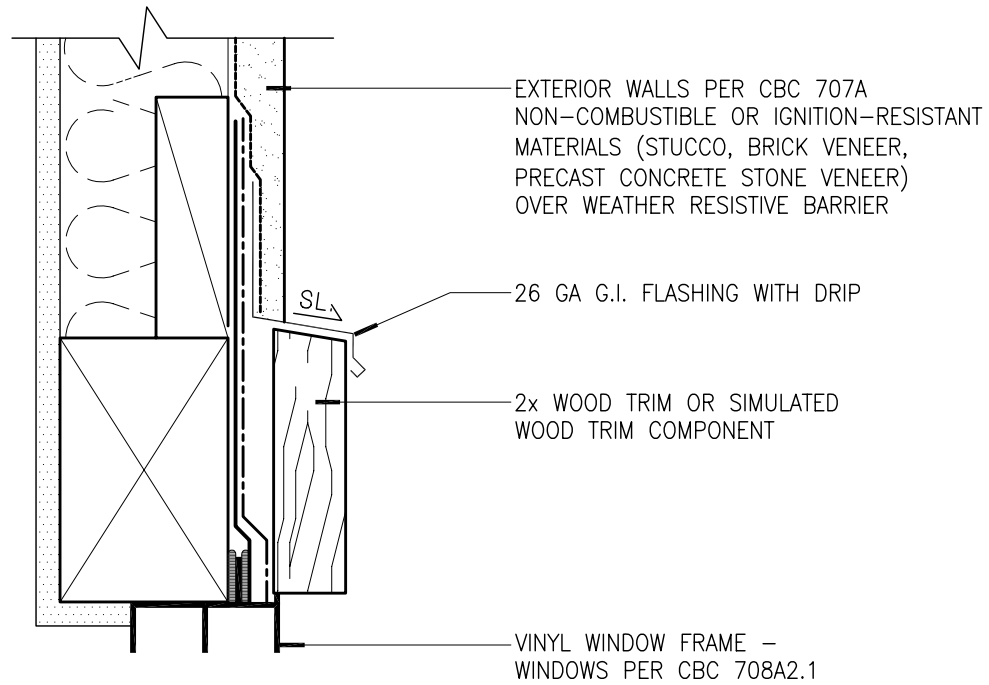
WINDOW HEAD WITH TRIM (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R06

DATE: 11-01-12

SCALE: 3"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPF: H08



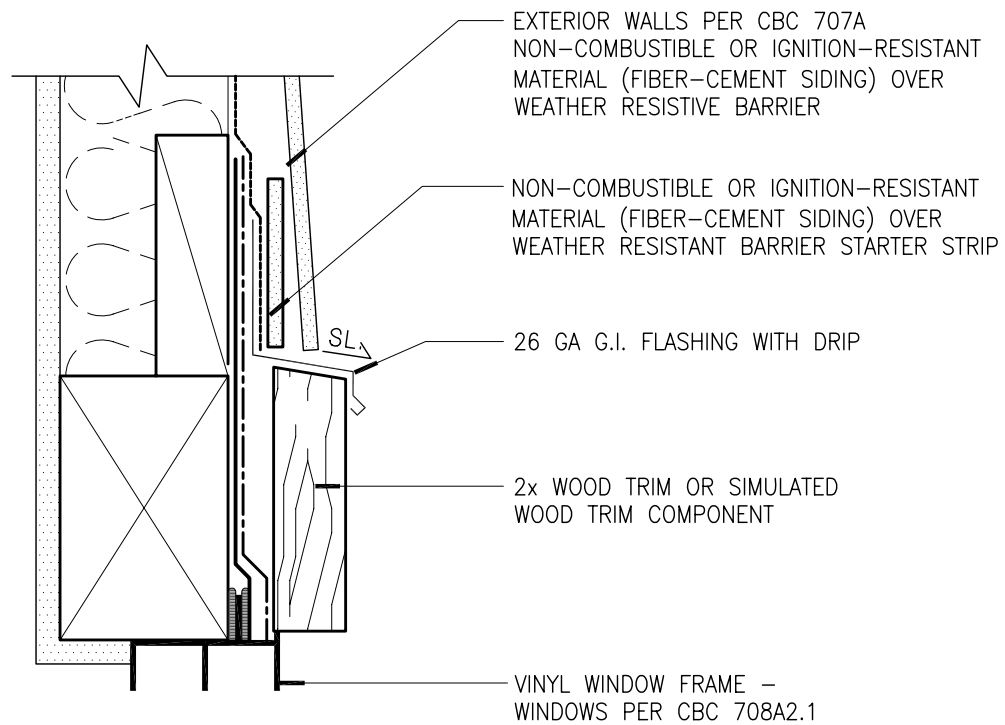
WINDOW HEAD WITH TRIM (WOOD) RADIANT HEAT/EMBER MITIGATION ZONE

R07

DATE: 11-01-12

SCALE: 3"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H10



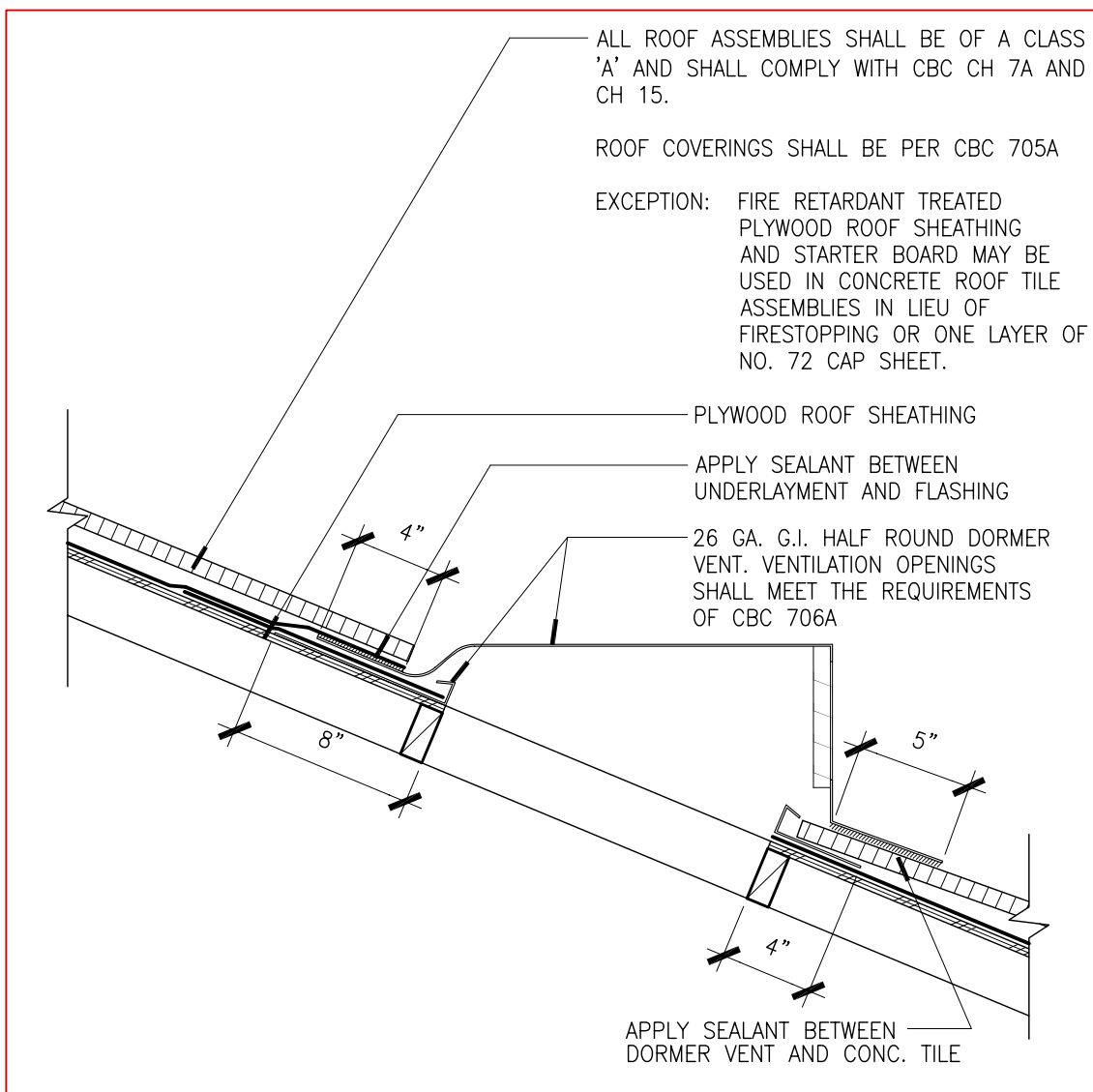
WINDOW HEAD WITH TRIM (WOOD) RADIANT HEAT/EMBER MITIGATION ZONE

R08

DATE: 11-01-12

SCALE: 3"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H12



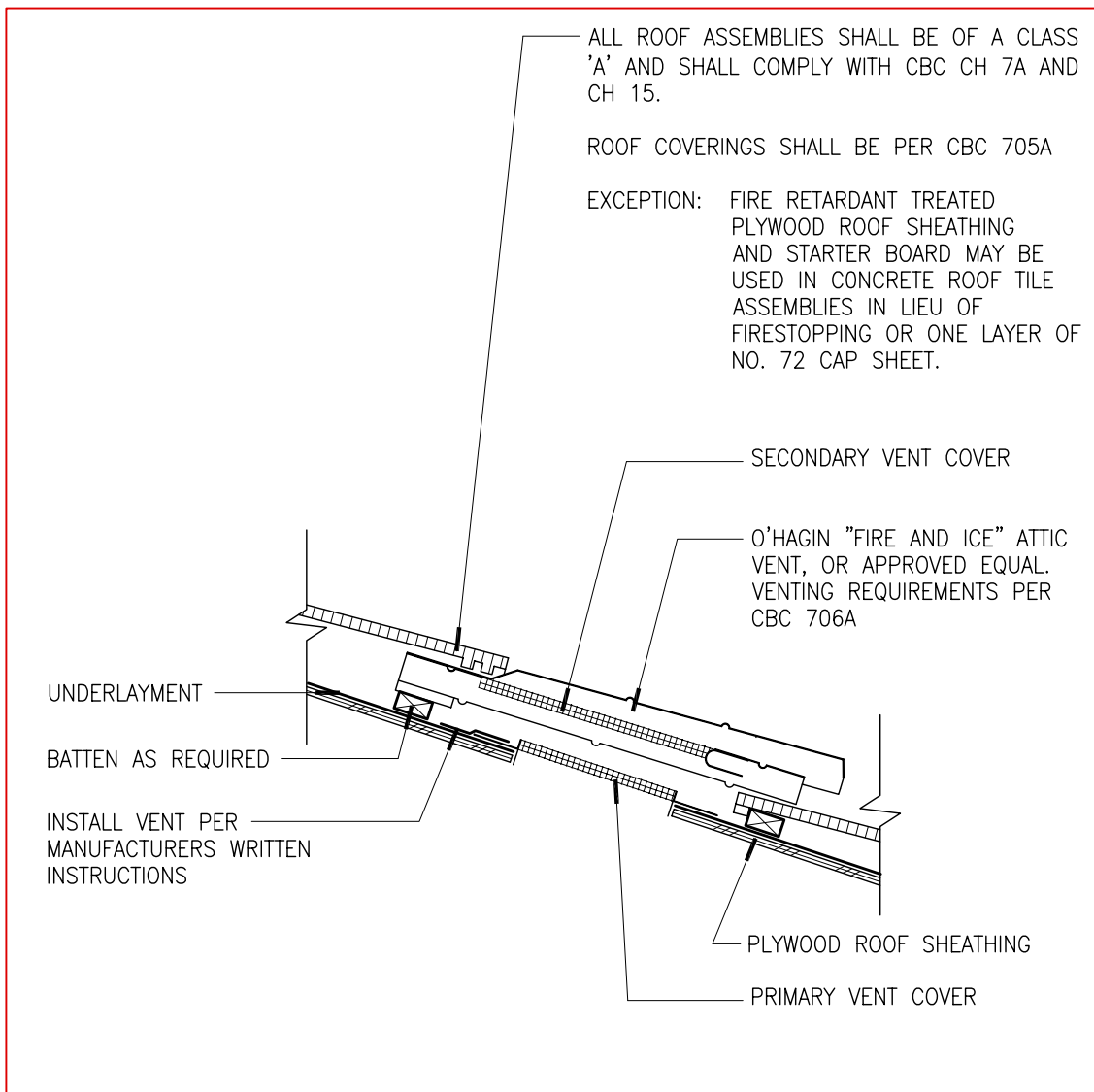
**DORMER VENT ATTIC VENTILATION
EMBER MITIGATION ZONE
RADIANT HEAT/EMBER MITIGATION ZONE**

R09

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H18



**CLOAKED ROOF VENT PENETRATION
EMBER MITIGATION ZONE
RADIANT HEAT/EMBER MITIGATION ZONE**

R10

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H19

ALL ROOF ASSEMBLIES SHALL BE OF A CLASS 'A' AND SHALL COMPLY WITH CBC CH 7A AND CH 15.

ROOF COVERINGS SHALL BE PER CBC 705A

EXCEPTION: FIRE RETARDANT TREATED PLYWOOD ROOF SHEATHING AND STARTER BOARD MAY BE USED IN CONCRETE ROOF TILE ASSEMBLIES IN LIEU OF FIRESTOPPING OR ONE LAYER OF NO. 72 CAP SHEET.

MIN. CONT. 26 GA. METAL X 24" WIDE VALLEY FLASHING WITH STANDING SEAM SPLASH PER TILE MANUFACTURER

36" WIDE SWEAT SHEET

UNDERLAYMENT BASKET WOVEN UNDER VALLEY METAL

ROOF SHEATHING

DIM
PER TILE
MFR.

ROOF FRAMING
SEE STRUCTURAL

NOTE:
PENETRATIONS & INTERRUPTIONS
AT METAL VALLEY FLASHING NOT
PERMITTED.

NOTE:
REFER TO ROOF MANUFACTURERS
SPECIFICATIONS FOR INSTALLATION
OF CONC. TILE

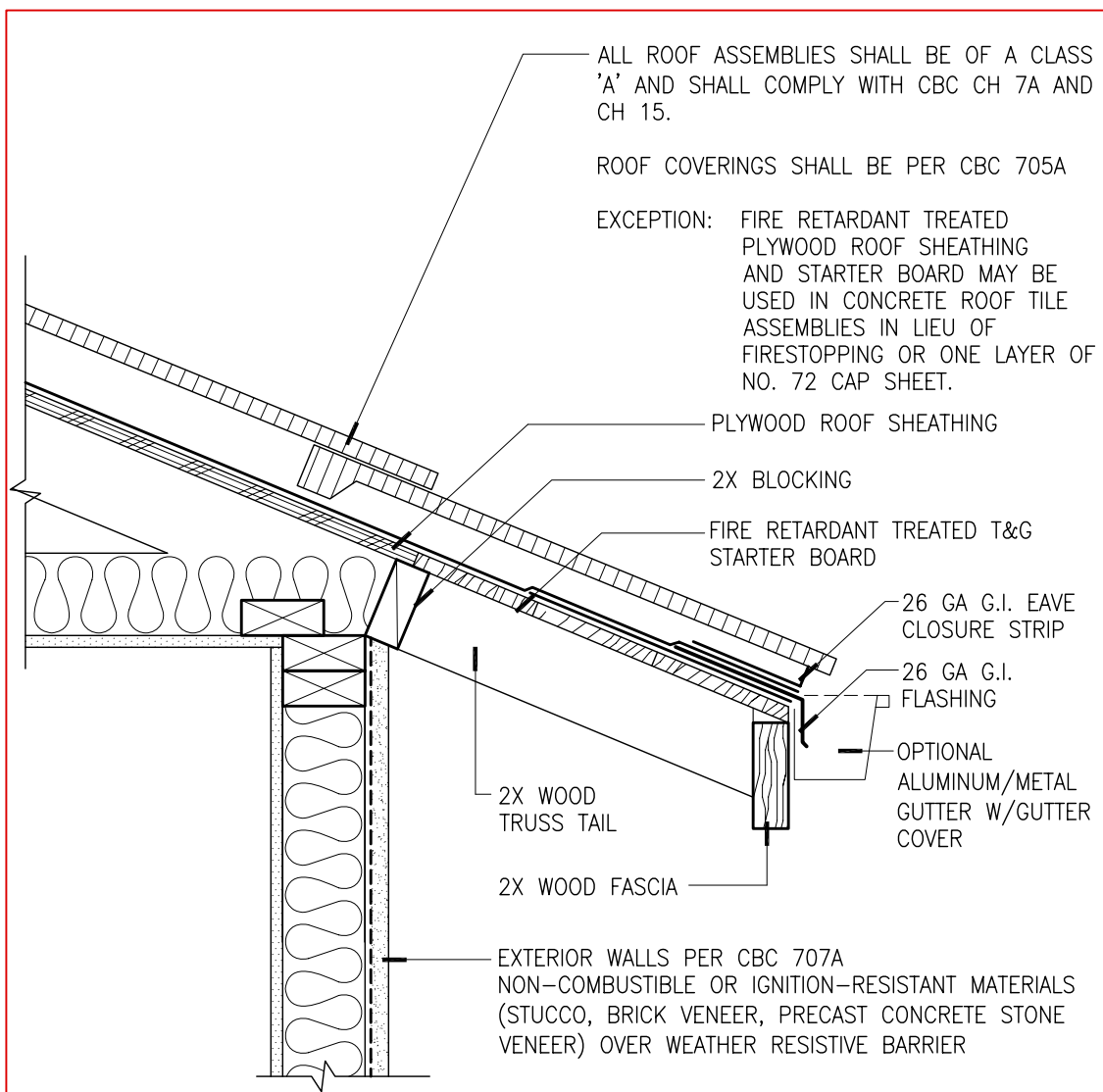
ROOF VALLEY EMBER MITIGATION ZONE RADIANT HEAT/EMBER MITIGATION ZONE

R11

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: N/A



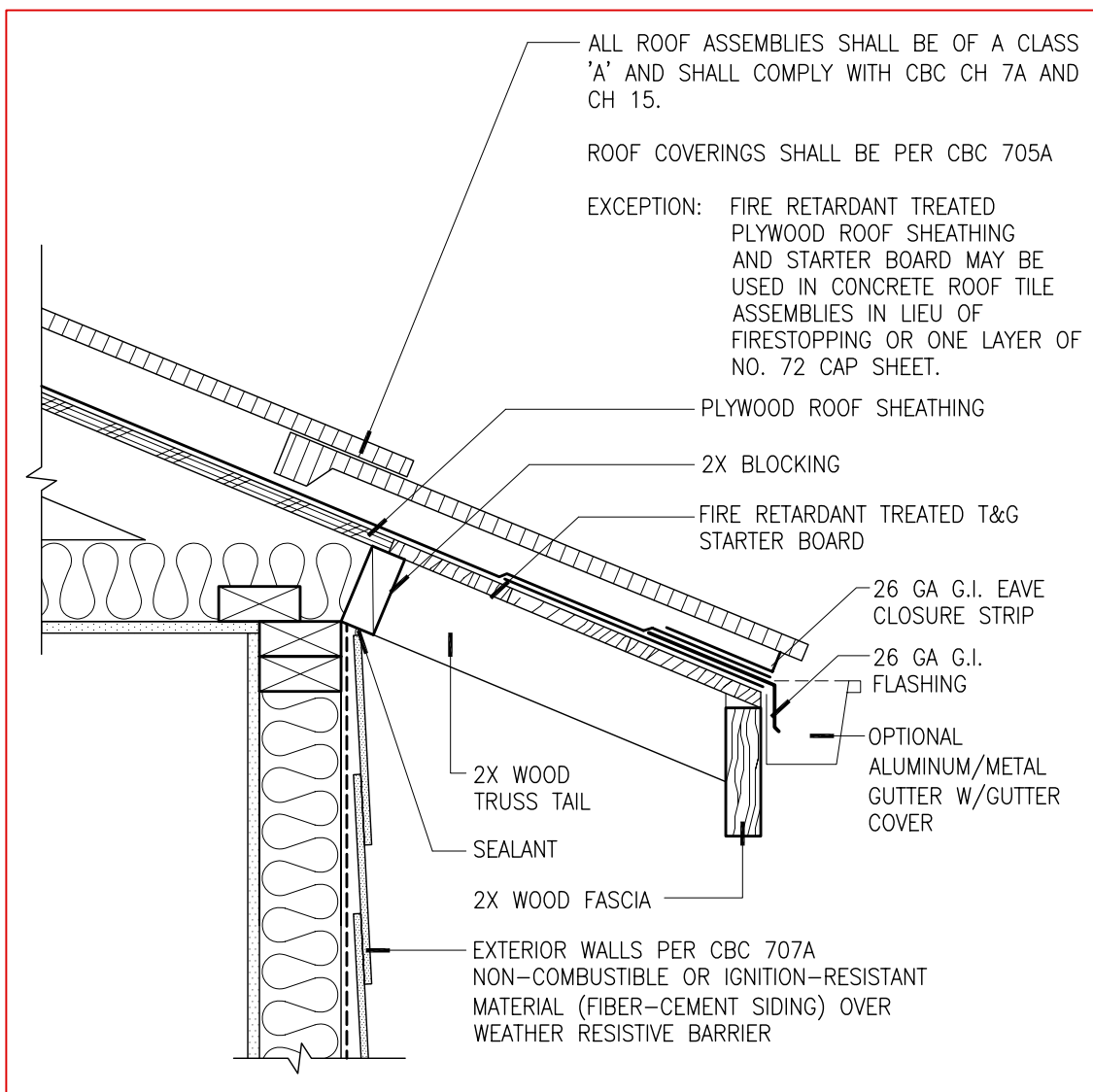
EAVE - (STUCCO WALL) RADIANT HEAT/EMBER MITIGATION ZONE

R12

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H20



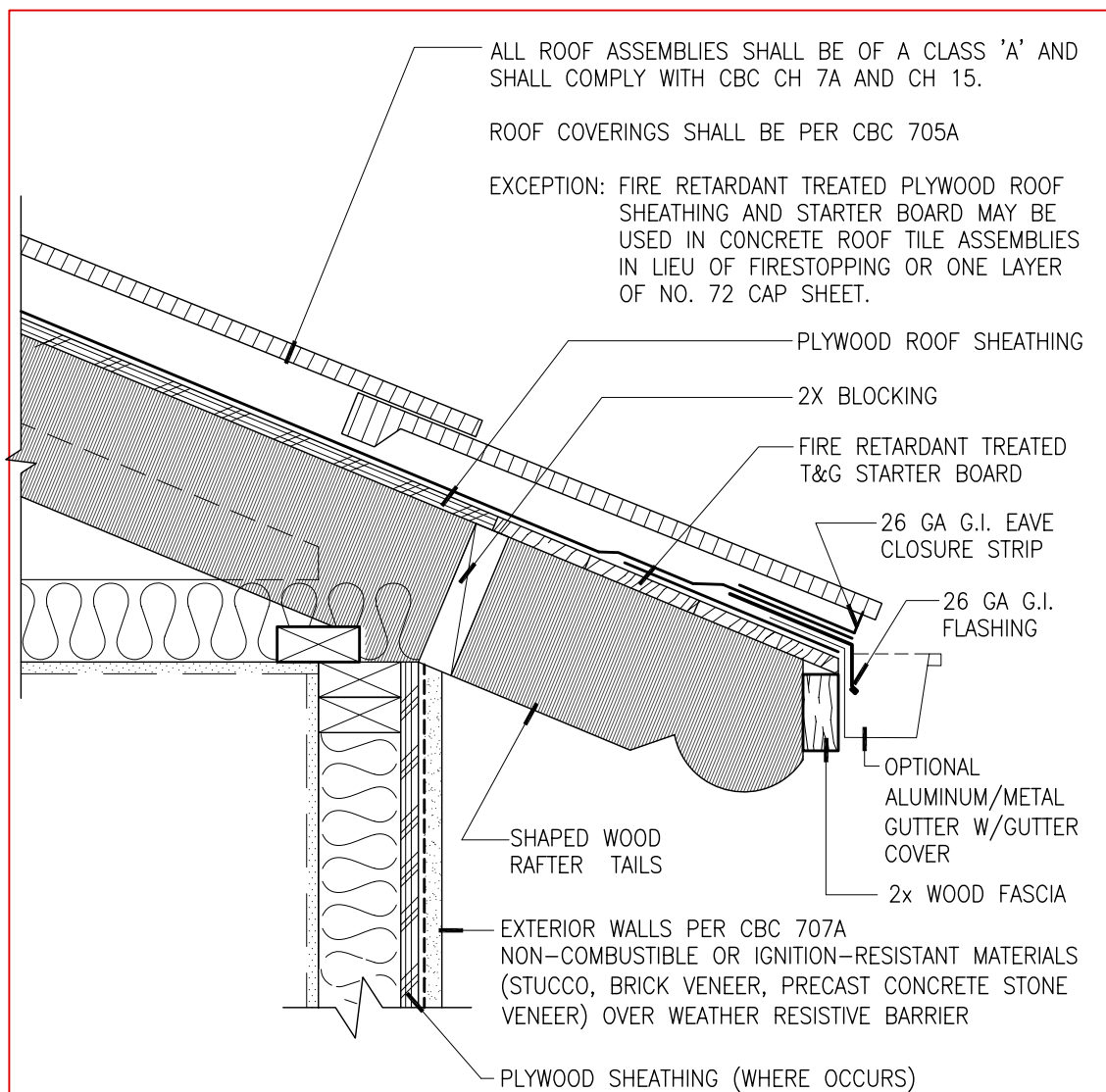
EAVE (FIBER-CEMENT SIDING WALL) RADIANT HEAT/EMBER MITIGATION ZONE

R13

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H22



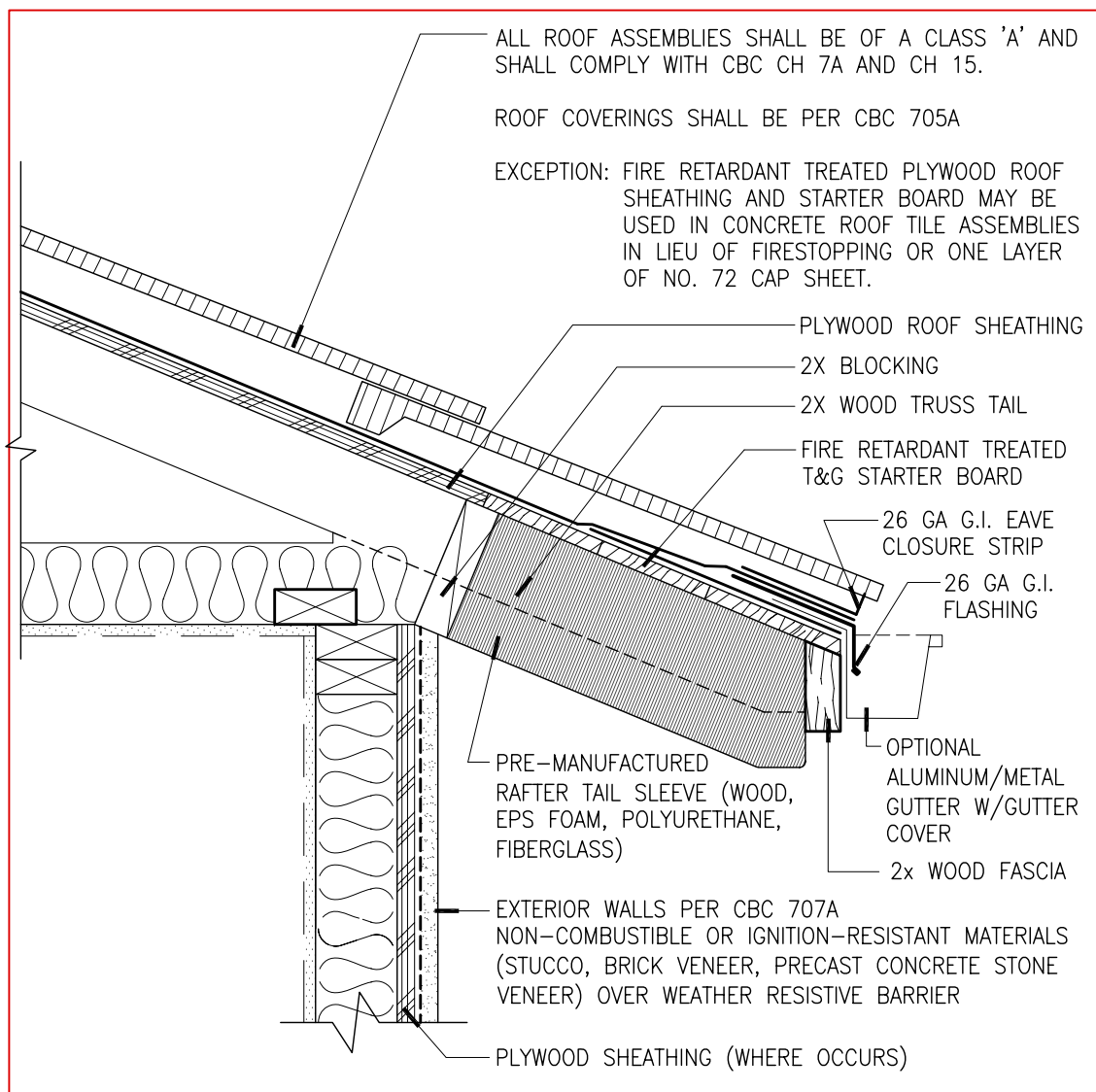
EAVE - EXPOSED RAFTER TAILS RADIANT HEAT/EMBER MITIGATION ZONE

R14

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H24



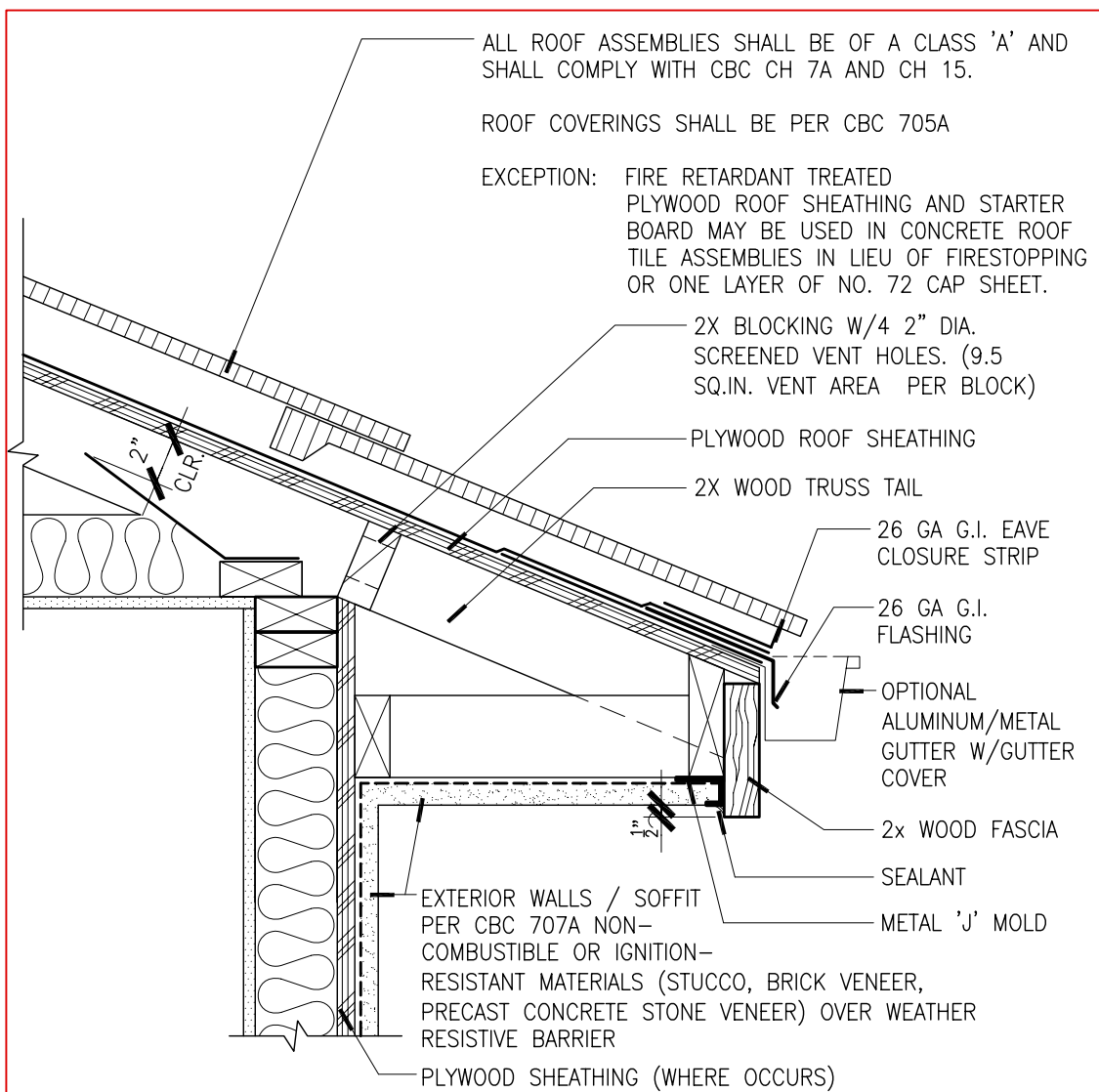
EAVE - RAFTER TAIL SLEEVE RADIANT HEAT/EMBER MITIGATION ZONE

R15

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H26



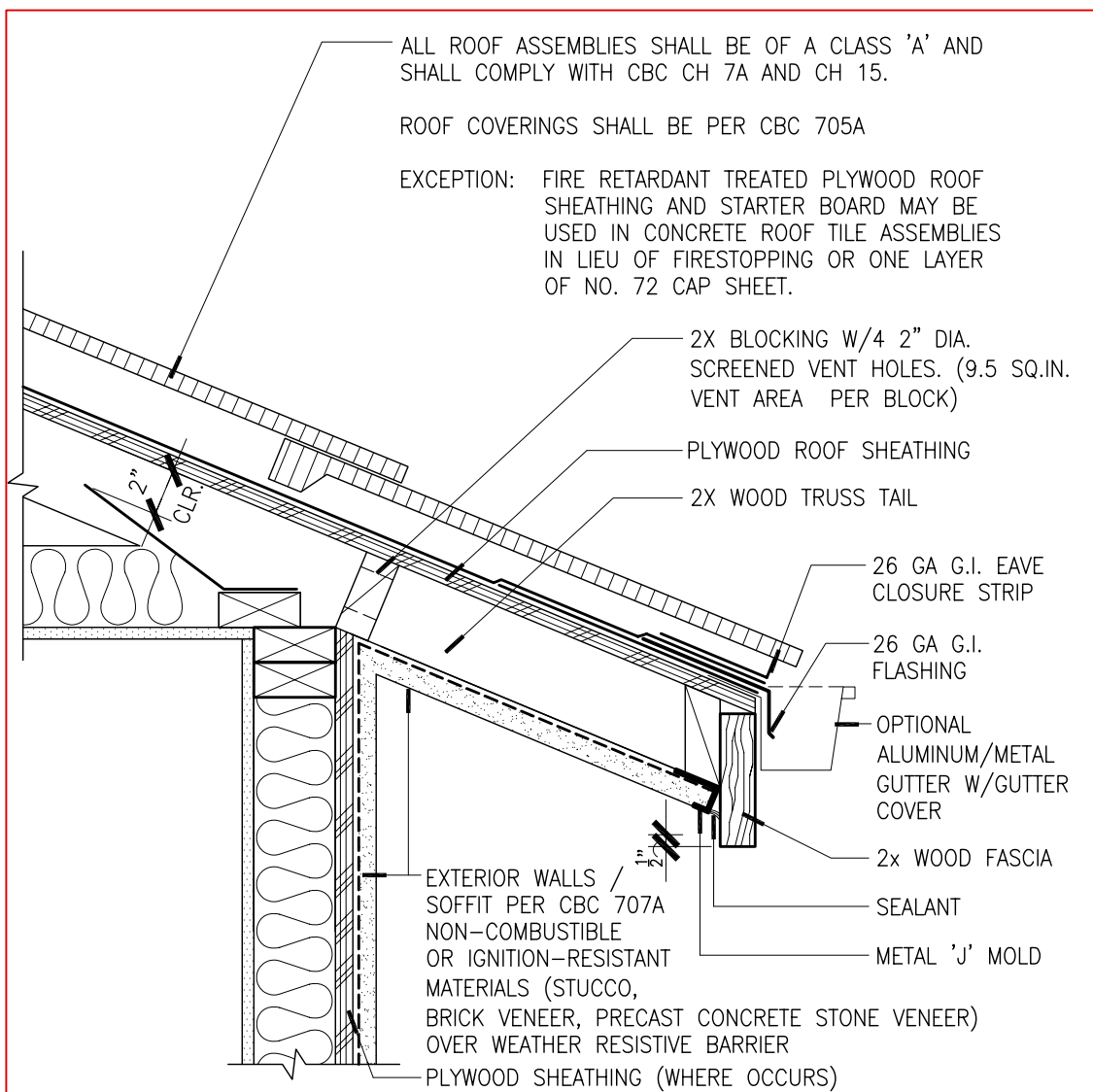
CLOSED EAVE (STUCO) RADIANT HEAT/EMBER MITIGATION ZONE

R16

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RFPFP: H28



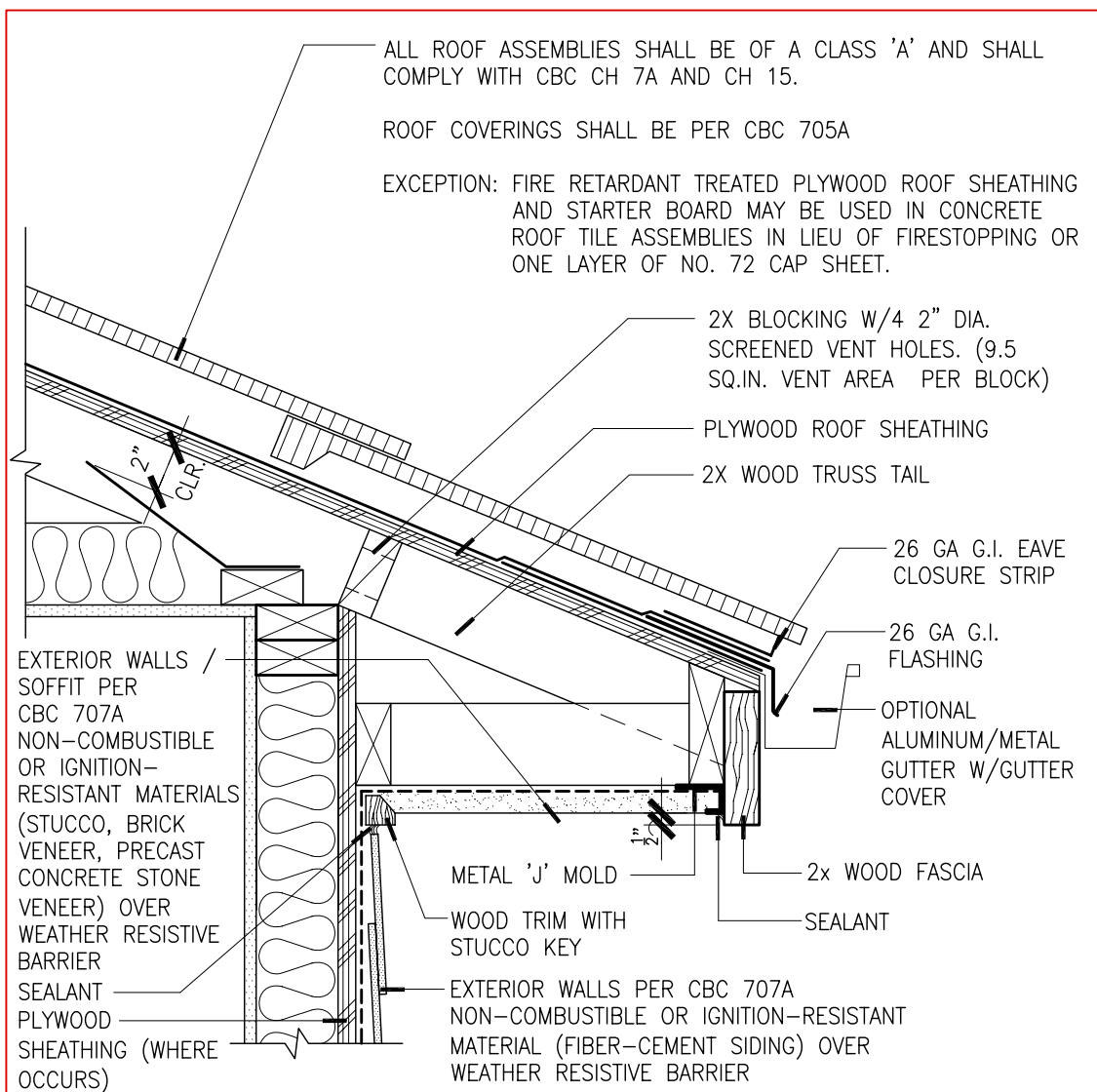
CLOSED EAVE (STUCO) RADIANT HEAT/EMBER MITIGATION ZONE

R17

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RFPFP: N/A



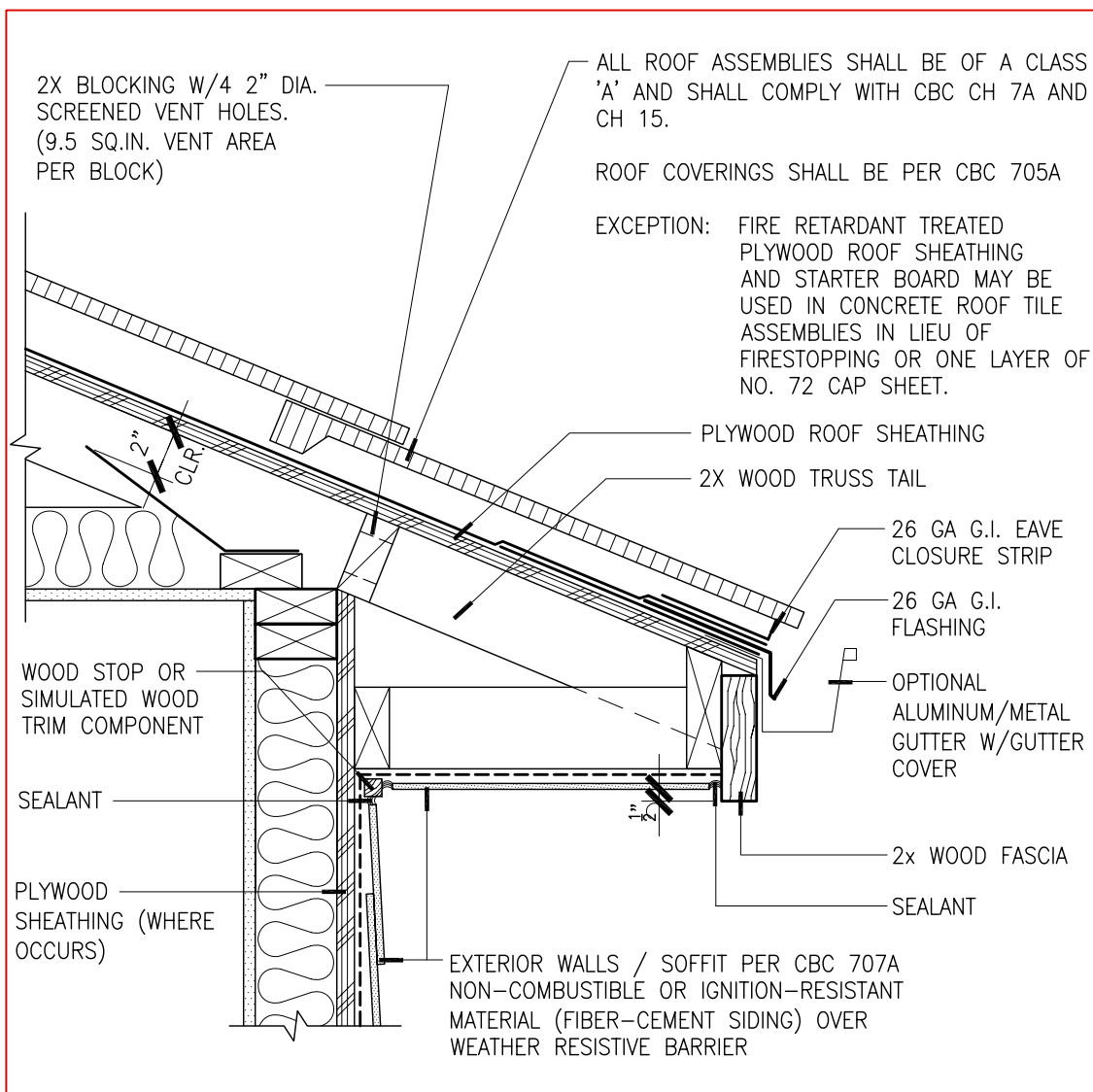
CLOSED EAVE (FIBER-CEMENT SIDING) RADIANT HEAT/EMBER MITIGATION ZONE

R18

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H30



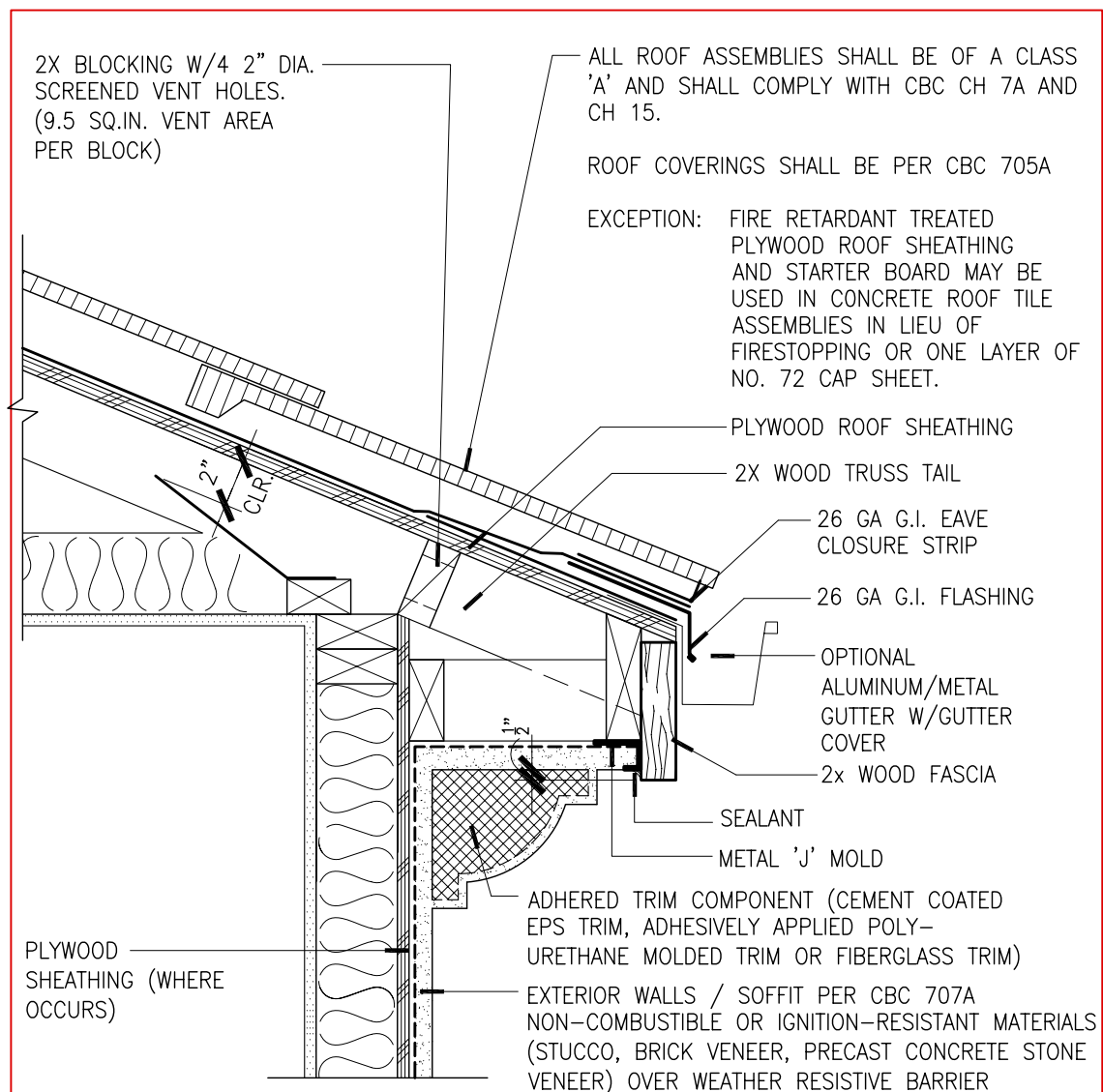
CLOSED EAVE (FIBER-CEMENT SIDING) RADIANT HEAT/EMBER MITIGATION ZONE

R19

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H32



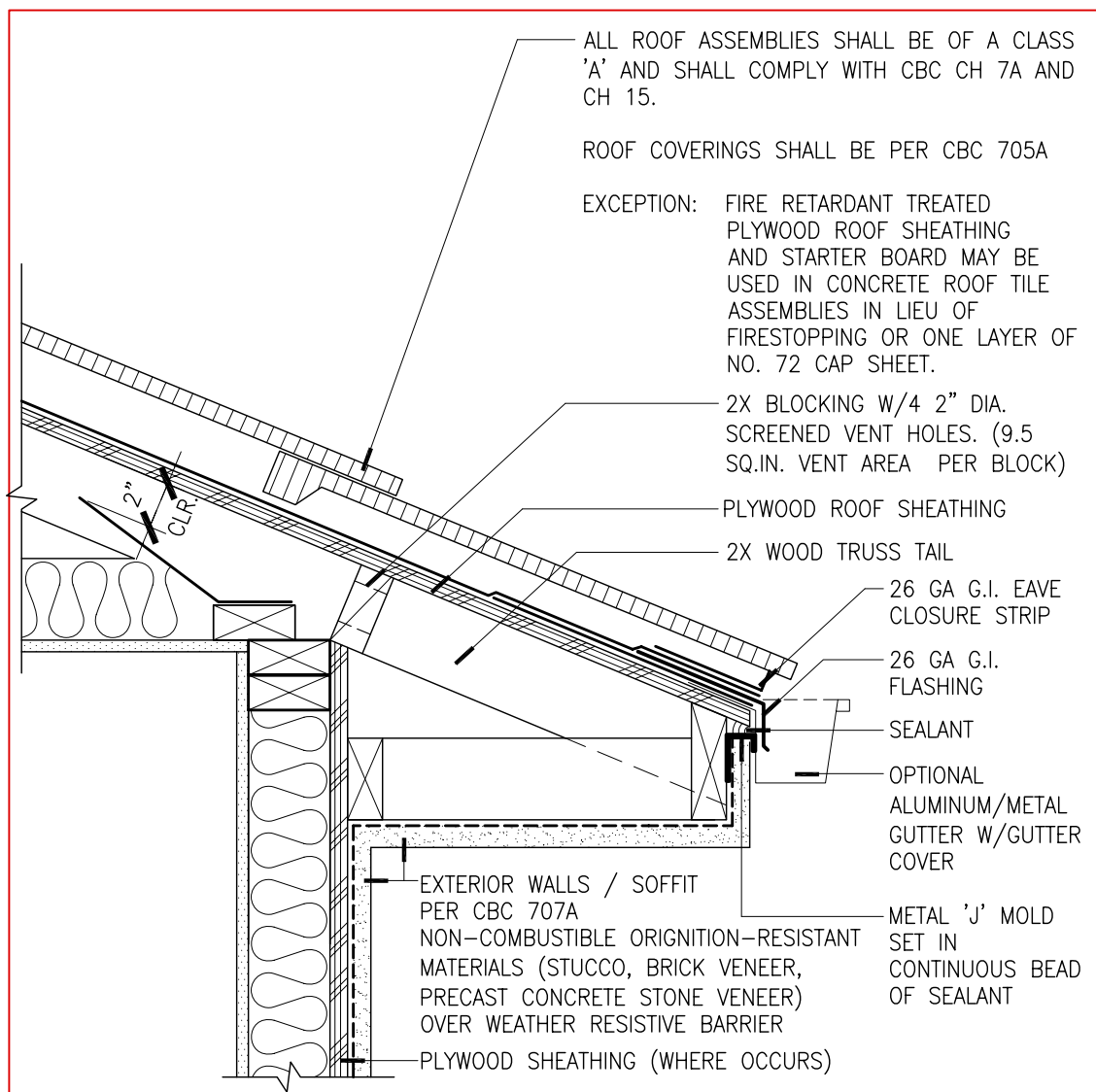
CLOSED EAVE FOAM DETAIL STUCCO RADIANT HEAT/EMBER MITIGATION ZONE

R20

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RFPFP: H34



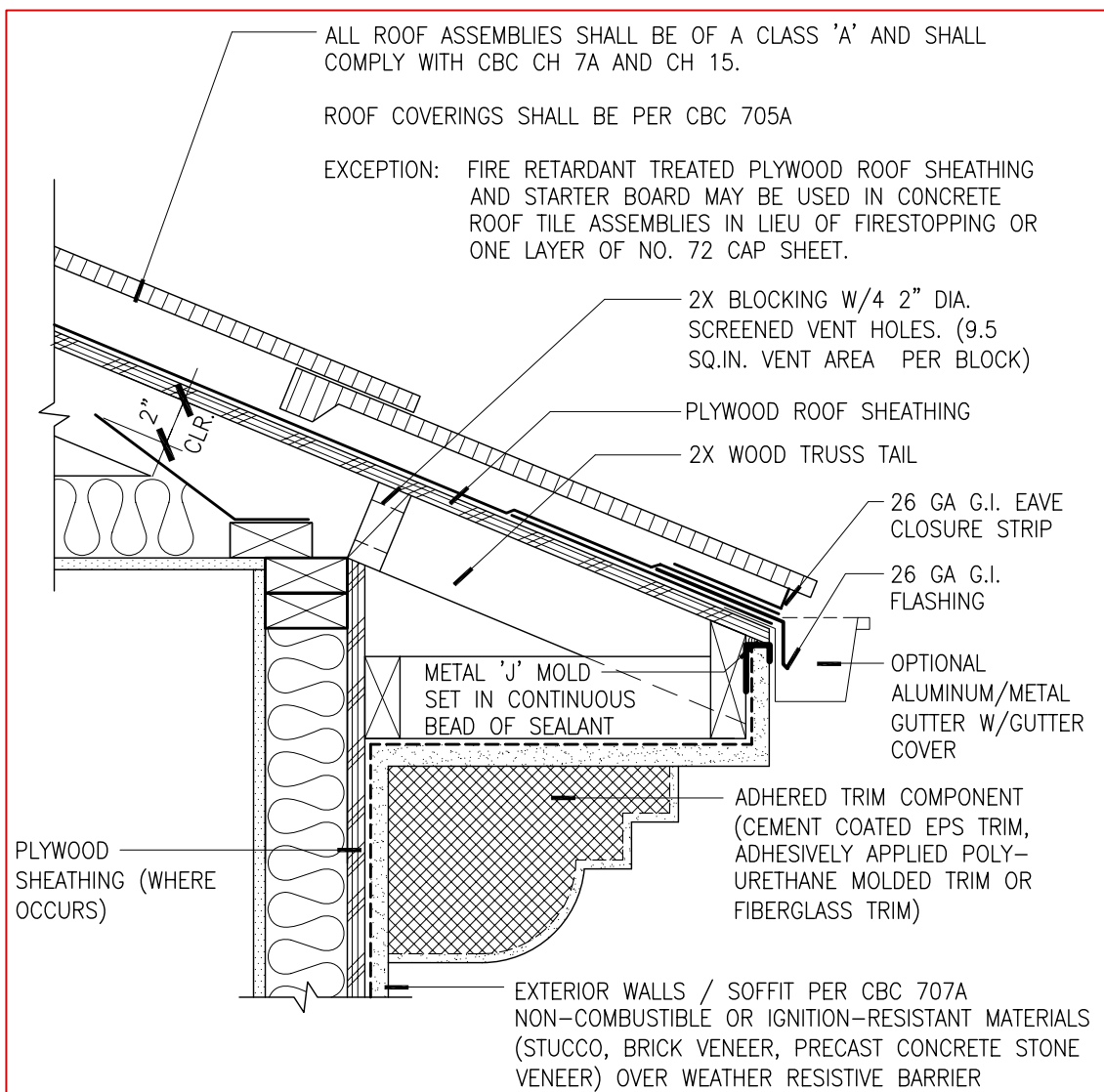
CLOSED EAVE (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R21

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H36



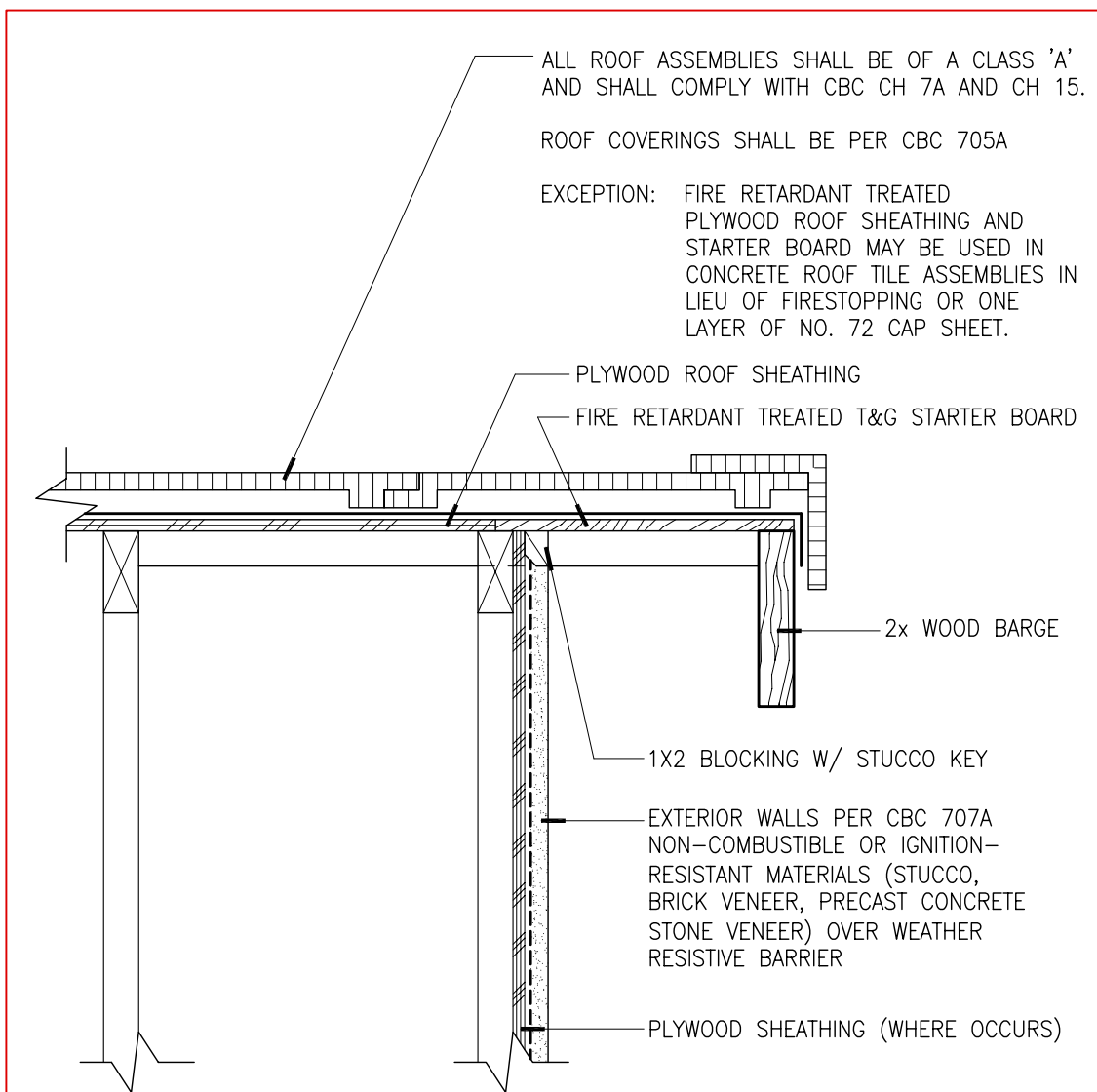
CLOSED EAVE WITH TRIM (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R22

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPF: H37

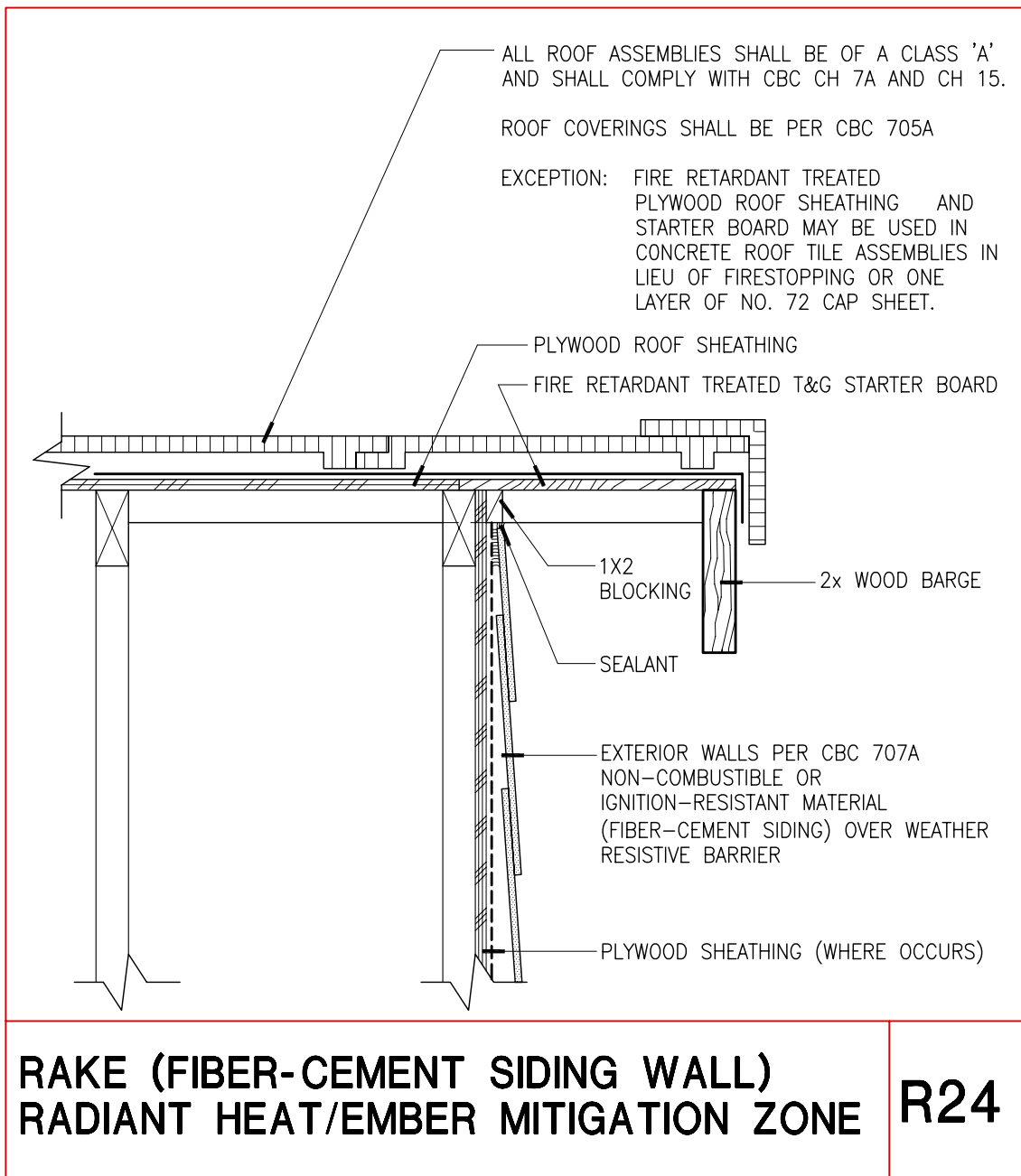


RAKE (STUCCO WALL) RADIANT HEAT/EMBER MITIGATION ZONE **R23**

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

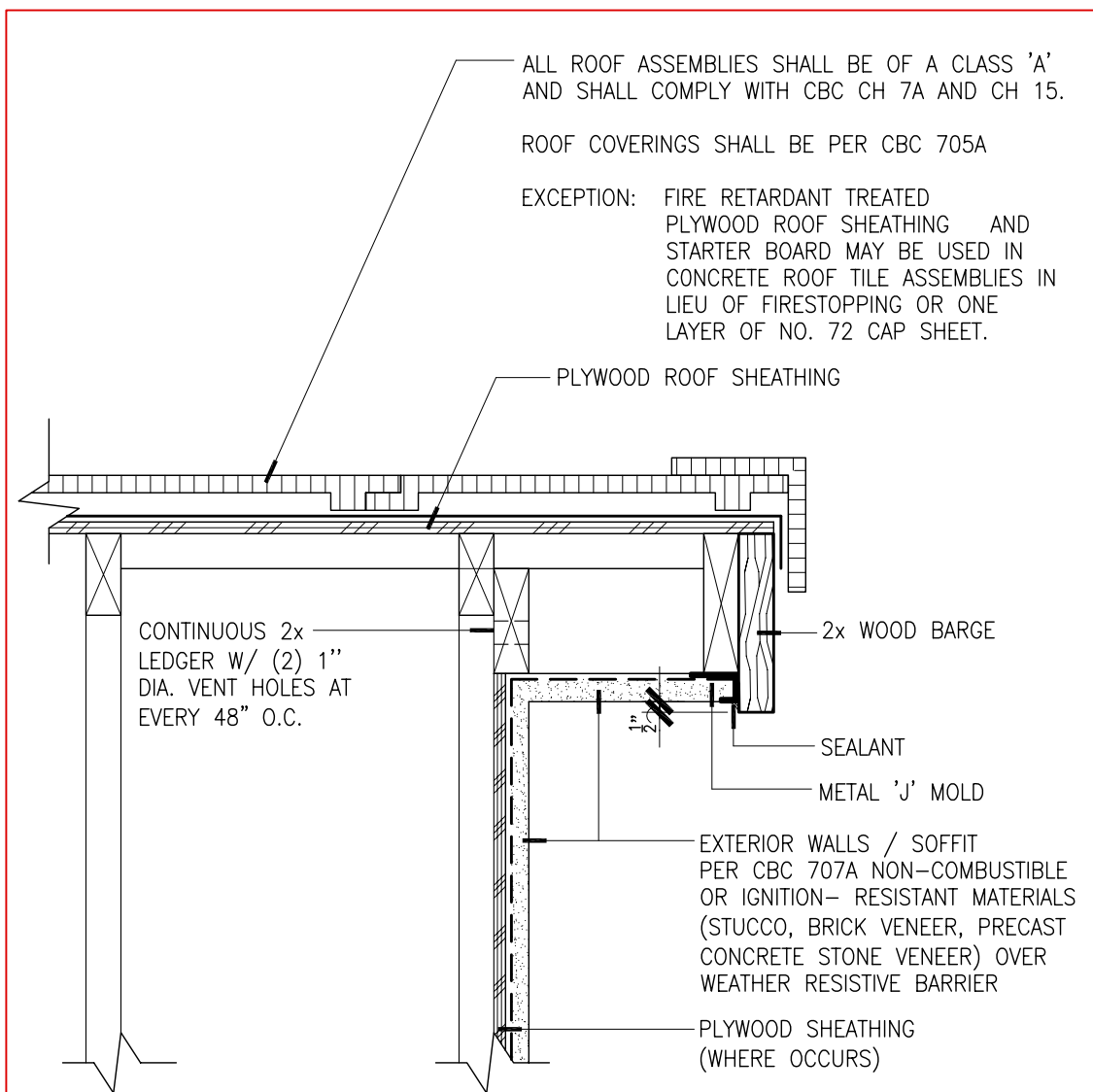
REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: N/A



DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: N/A

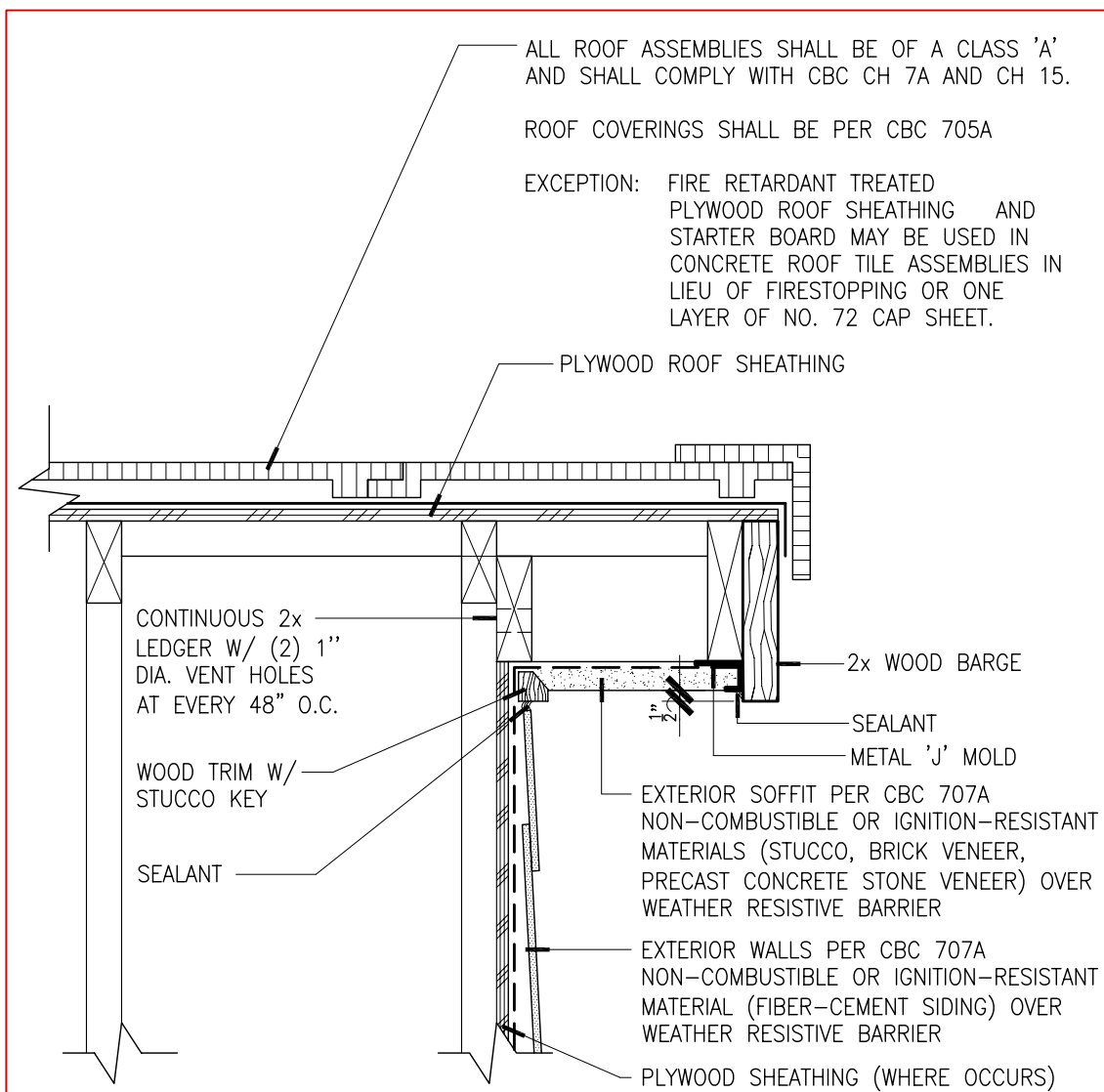


CLOSED RAKE (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE **R25**

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H39



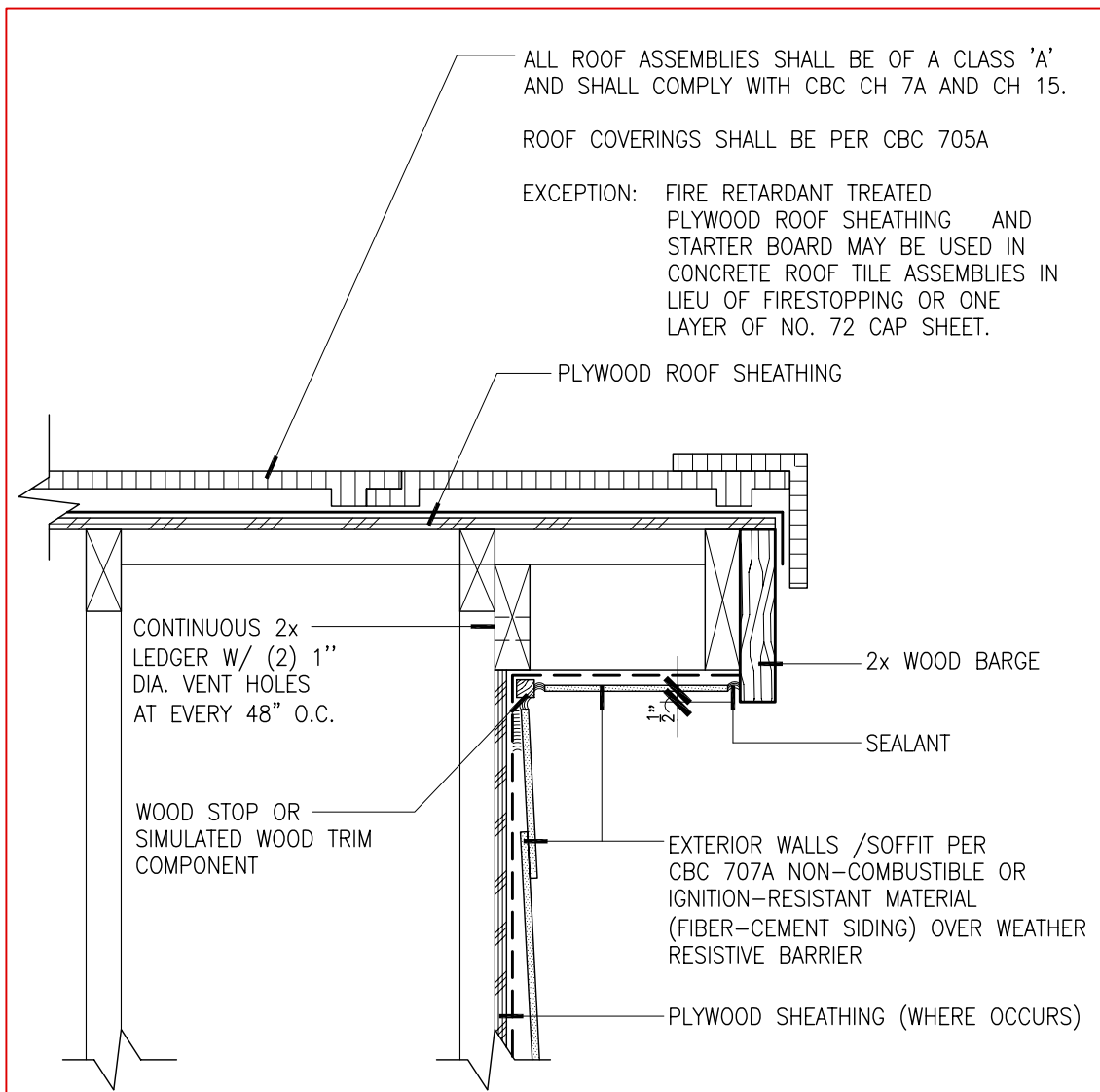
CLOSED RAKE (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R26

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPF: H41



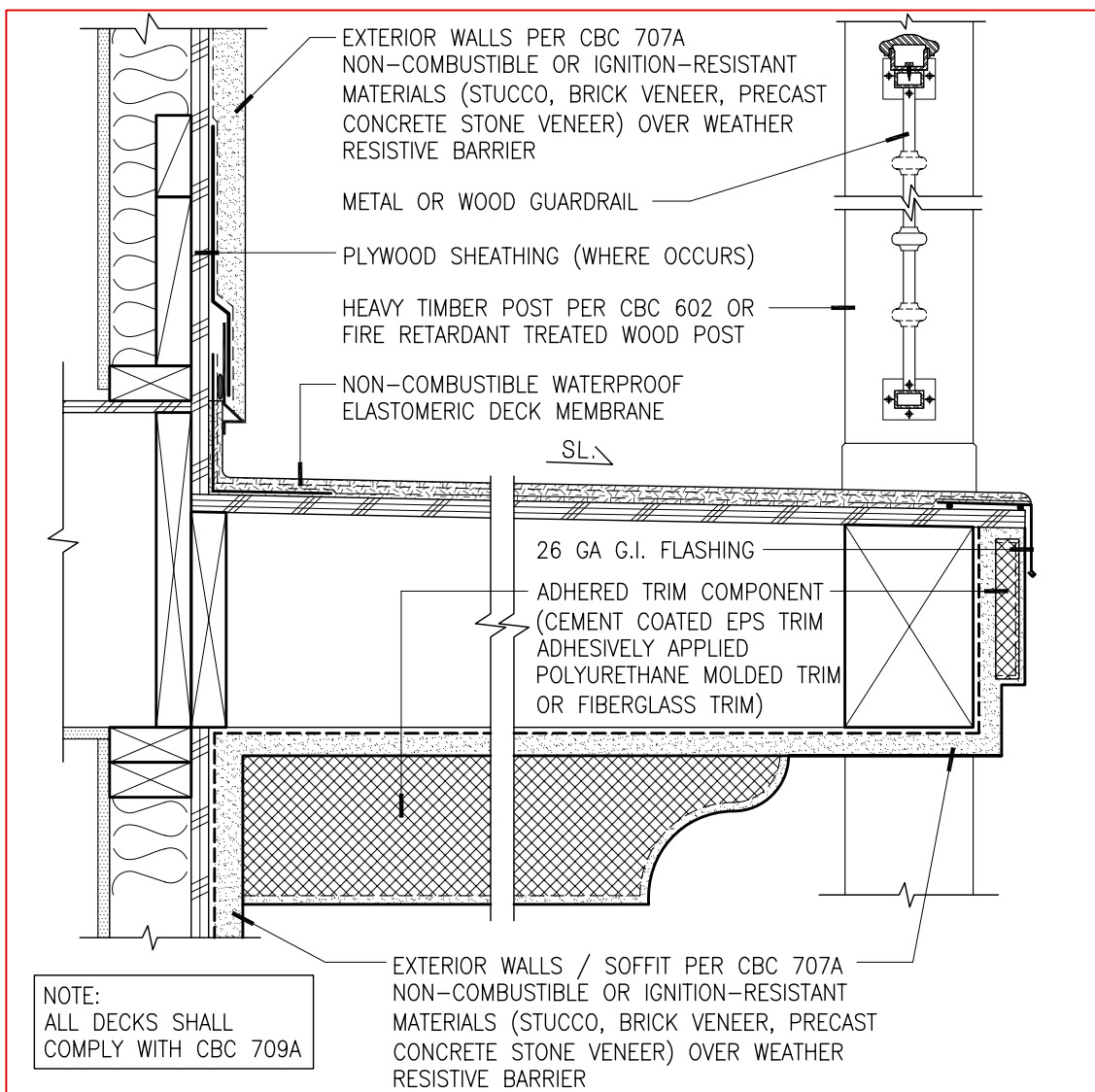
CLOSED RAKE (FIBER-CEMENT SOFFIT) RADIANT HEAT/EMBER MITIGATION ZONE

R27

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H43



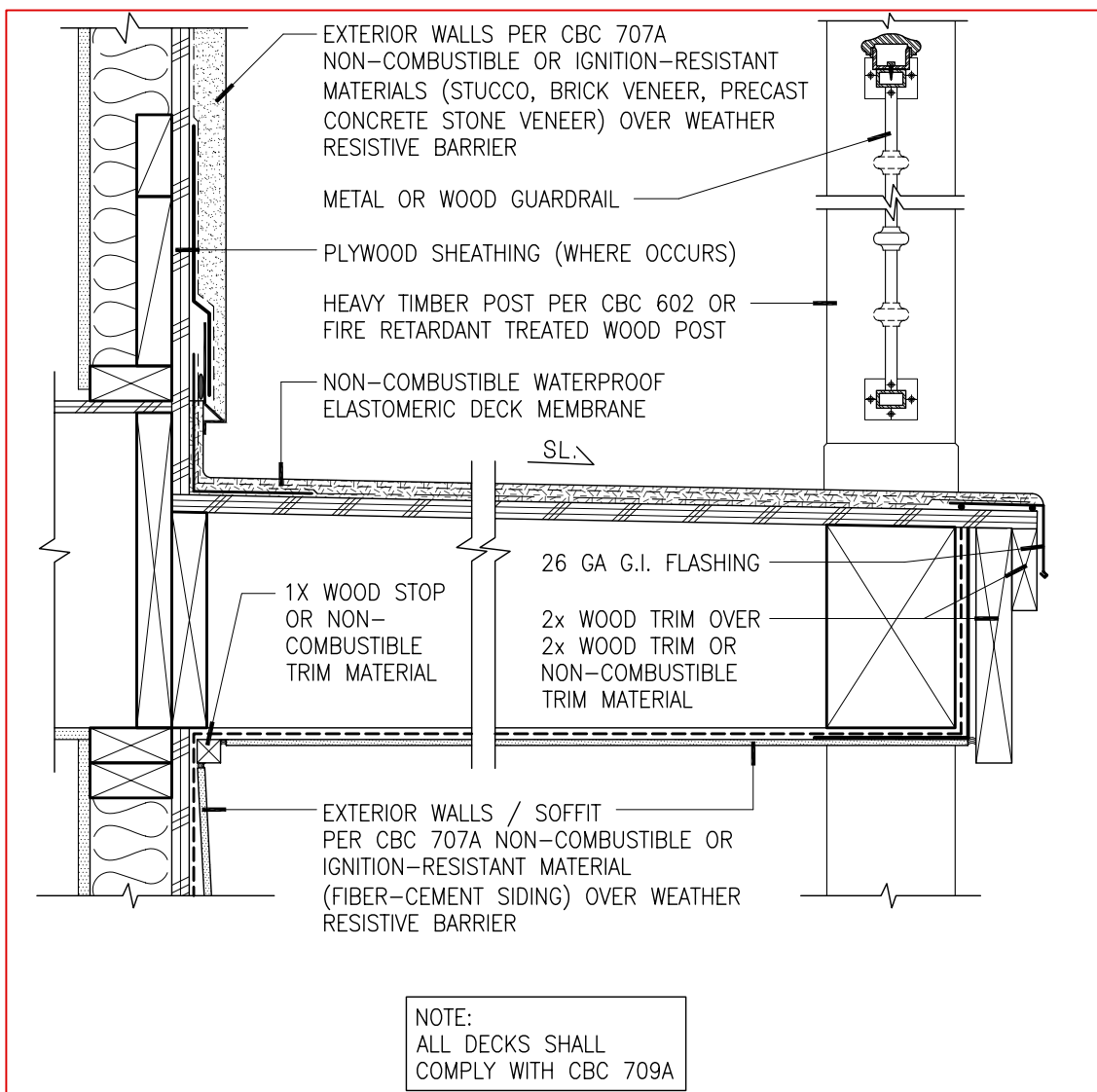
DECK (STUCCO) RADIANT HEAT/EMBER MITIGATION ZONE

R29

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H46



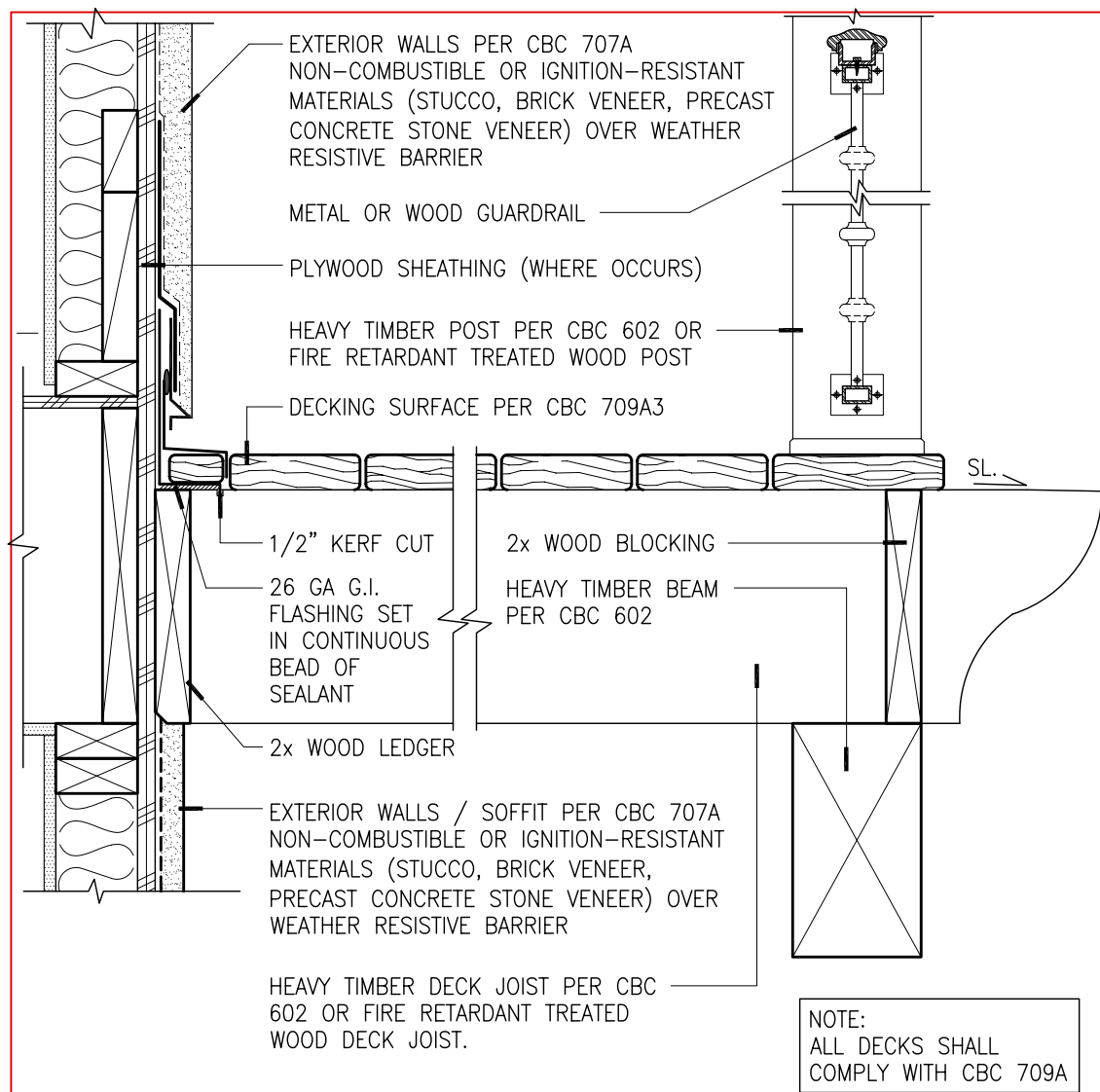
DECK WITH WOOD TRIM RADIANT HEAT/EMBER MITIGATION ZONE

R30

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RFPFP: H47



DECK WITH WOOD TRIM RADIANT HEAT/EMBER MITIGATION ZONE

R31

DATE: 11-05-12

SCALE: 1-1/2"=1'-0"

REFERENCED CONSTRUCTION FEATURE FROM APPROVED RPFPP: H48

