

Planning, Building & Environmental Services  
Napa County Fire Department

# Napa County Road & Street Standards (RSS)

Alexei Belov, PE, Engineering Manager  
Jason Downs, Fire Marshal



---

# Agenda

- High level overview
- Timeline and regulatory framework
- Design criteria
- Exception process
- Examples
- Questions & Comments



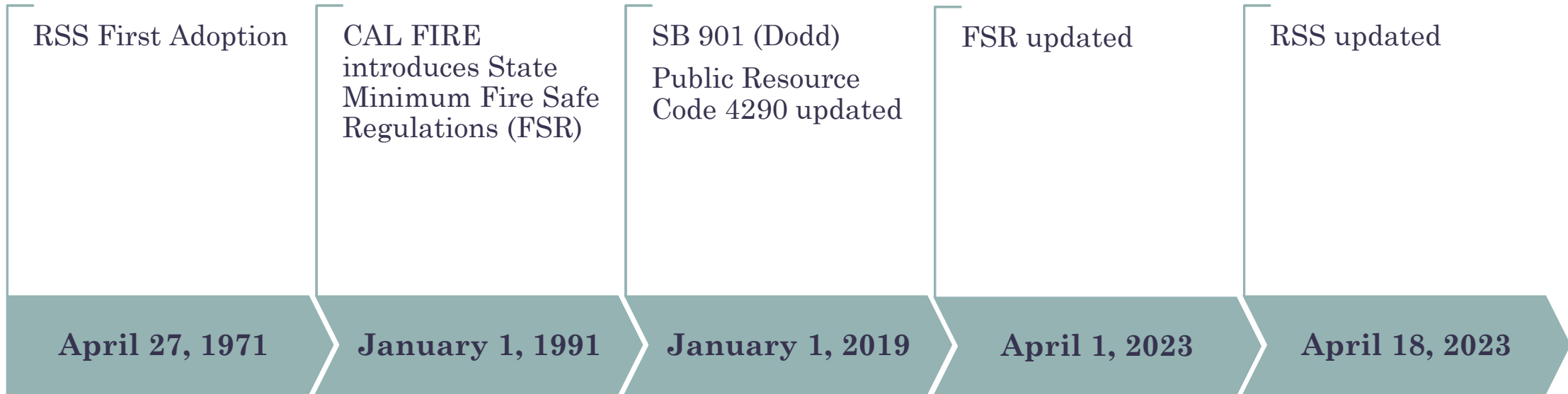
---

# Private Roads

- 450 miles of public roads in the county
- 900-1200 miles of private roads in Napa River watershed
- Estimate 2000-3000 miles within county



# Timeline



# Regulatory Framework

California Legislature



Public Resources Code 4290



Board of Forestry Regulations  
(Minimum Fire Safe Regulations)



Napa County Road & Street Standards



Applied during Development Review



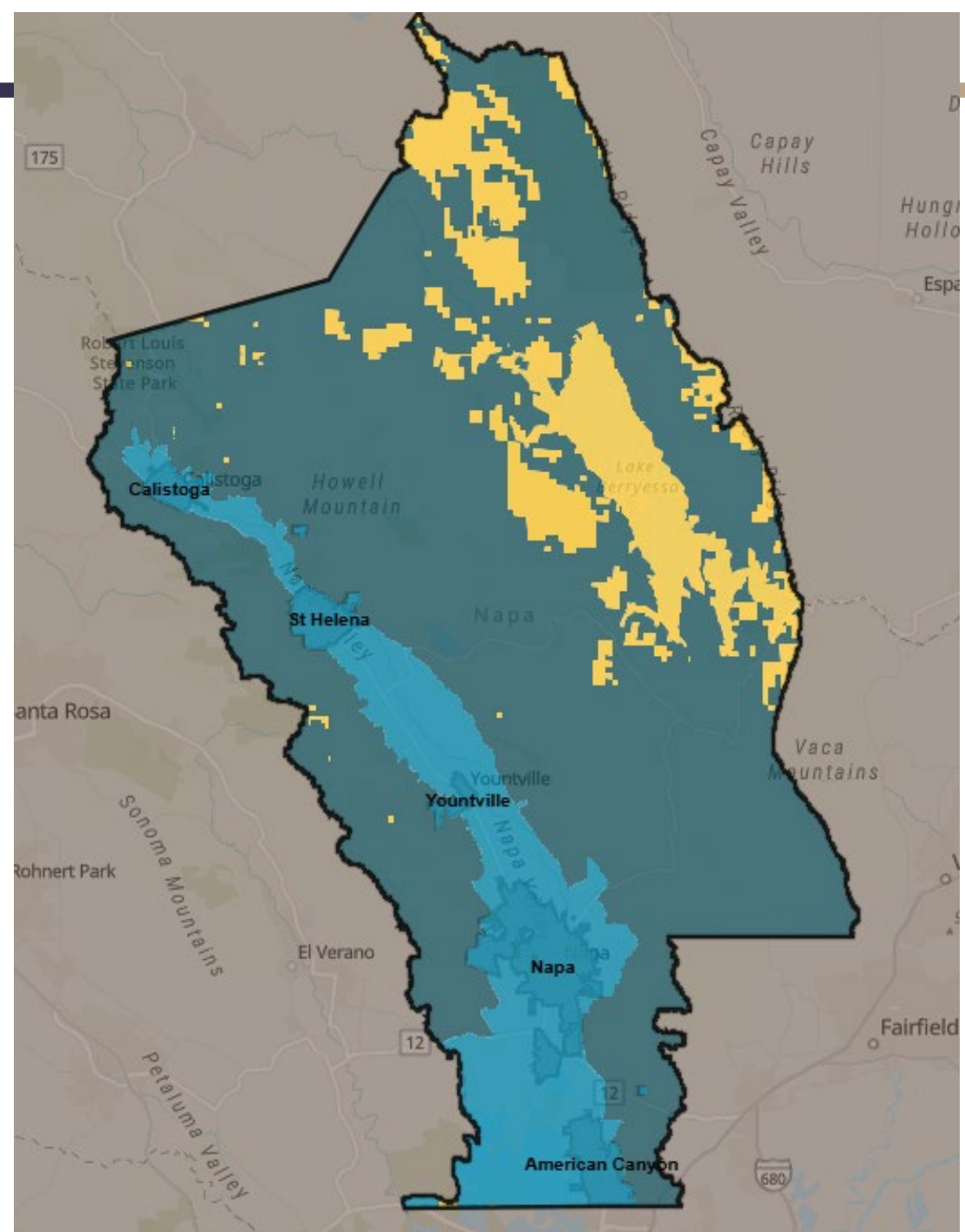
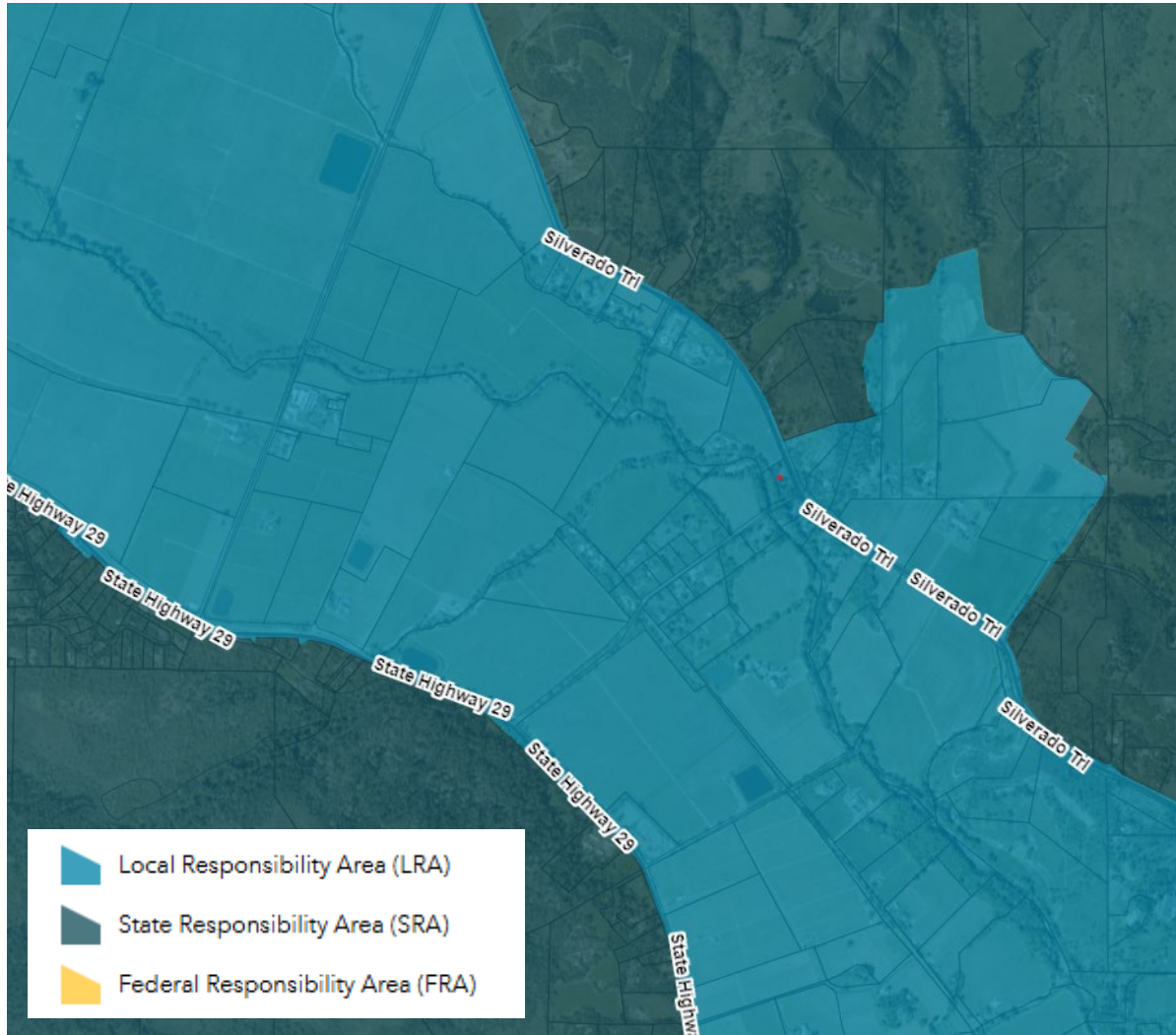


# State Minimum Fire Safe Regulations

California Department of Forestry and Fire Protection (CAL FIRE)



# Responsibility Areas

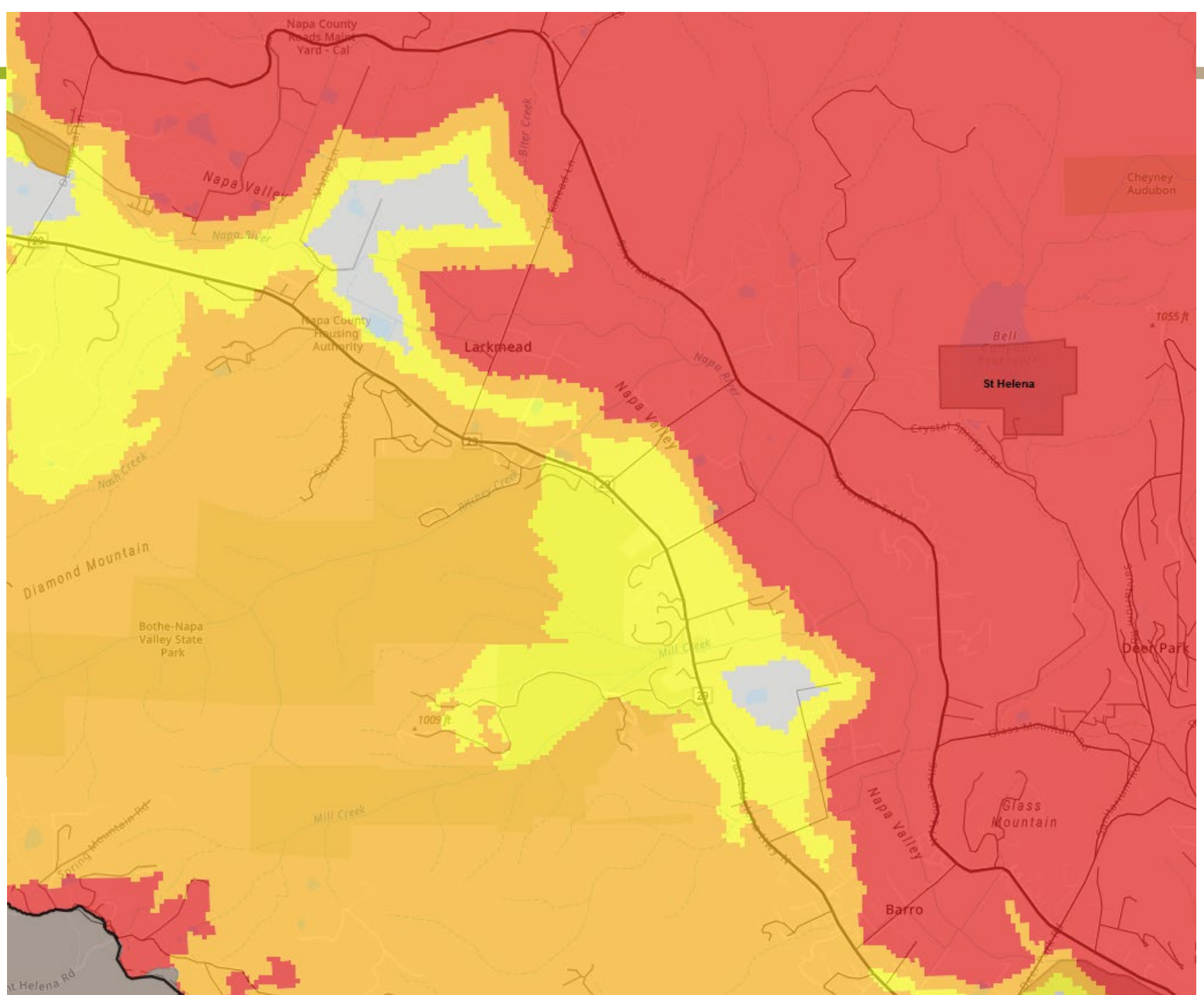
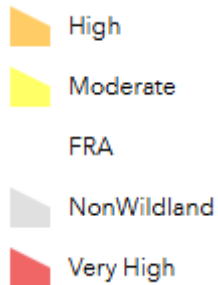


# LRA VHFHSZ

Very High Fire Hazard  
Severity Zone

Updated in 2025

Excellent fact sheet on  
Napa County Fire  
Department website  
[NapaCounty.gov](http://NapaCounty.gov)



# Development Review



Planning, Building &  
Environmental Services  
Engineering Division



Fire Marshal's Office



# Title 14, Division 1.5, Chapter 7, Subchapter 2

- Article 1 – Administration
- Article 2 – Ingress & Egress
- Article 3 – Signing and Building Numbering
- Article 4 – Emergency Water Standards
- Article 5 – Building Siting, Setbacks, and Fuel Modification



# Intent

- §1273.00 – Intent

Provide for safe access for emergency wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency.



# Article 2 – Ingress & Egress

- §1273.01 Width
- §1273.02 Road Surface
- §1273.03 Grades
- §1273.04 Radius
- §1273.05 Turnarounds
- §1273.06 Turnouts
- §1273.07 Structures
- §1273.08 Dead-End Roads
- §1273.09 Gate Entrances



# Roads vs. Driveways §1270.01

- Roads – vehicular pathway to more than 4 dwelling units or to **any** industrial or commercial occupancy.
- Driveway – vehicular pathway that serves no more than 4 dwelling units and any number of non-industrial or non-commercial Utility or Misc Group U building on each parcel. A driveway shall not serve commercial or industrial uses at any size or scale.



# Ag Roads vs. Special Purpose

- Agricultural Road – Serves agricultural related single use facilities which cumulatively generate less than or equal to 40 ADT along it's access. Turnouts must be intervisible. **This access is not applicable to winery uses.**
- Special Purpose Way – The applies to access utility and misc. Group U buildings, secondary access roads, emergency roads, bicycle paths, equestrian trails and other similar facilities when required by either the Fire Marshal, County Engineer, or County Code. The design will depend on each particular situation and be approved by the County Engineer and Fire Marshal.



# §1273.01 Width

- Road

- FSR – Two 10' traffic lanes not including shoulder & striping.
- RSS – Two 10' traffic lanes and minimum of 1' of shoulder on each side.

\*Last update 2016 18' → 20'

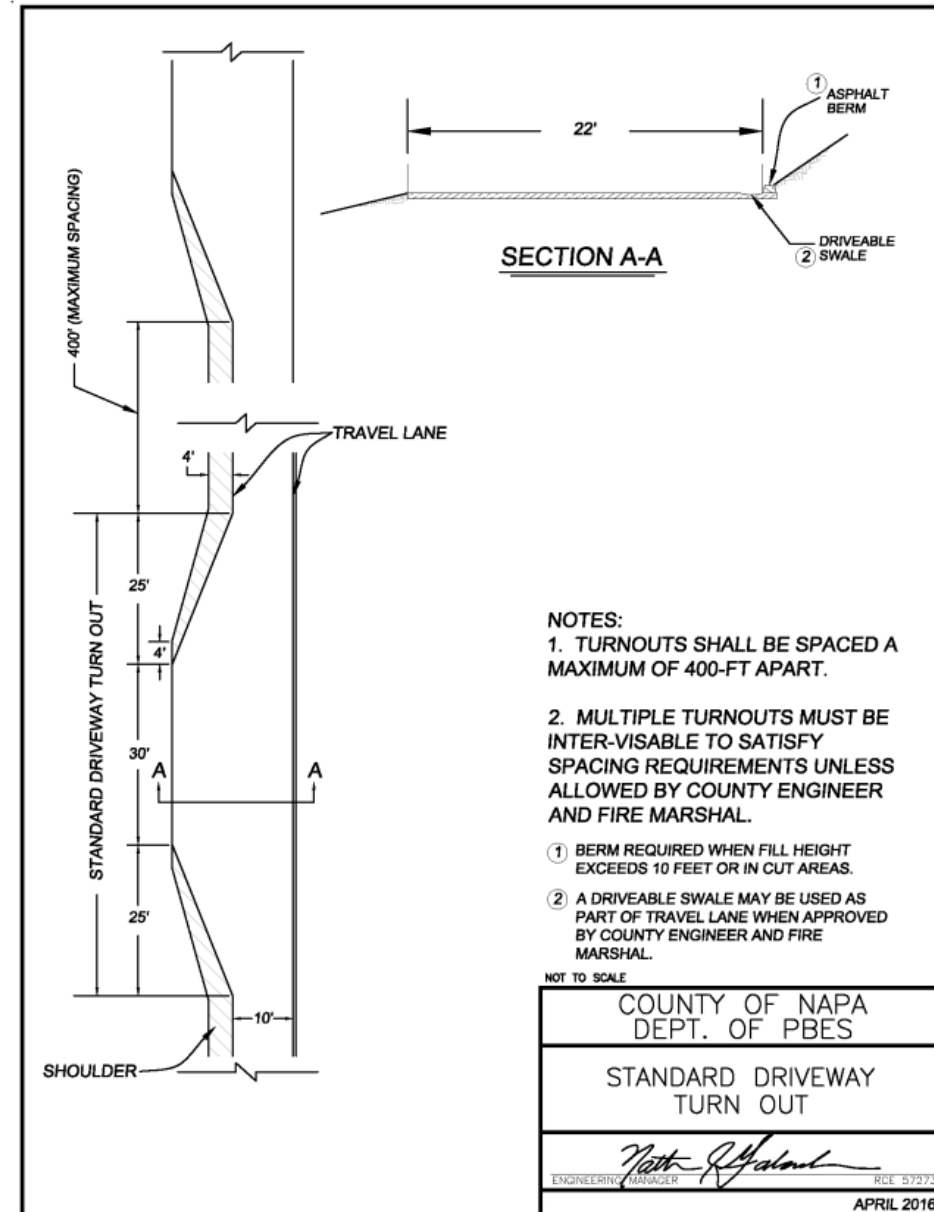
- Driveway

- FSR – One 10' traffic lane and 14' of unobstructed horizontal clearance.
- RSS – One 10' traffic lane and 4' of drivable shoulder.



# §1273.06 Turnouts

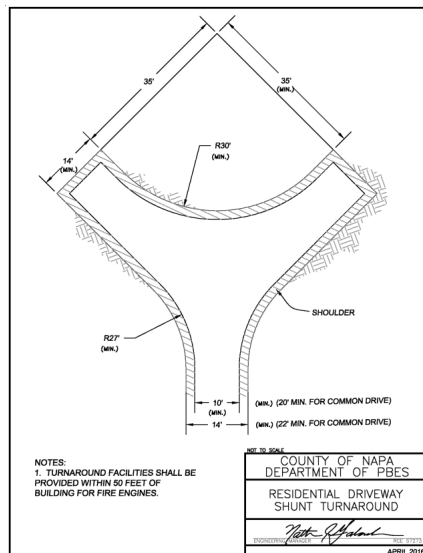
- Allows vehicle passage at certain intervals
- Provides 22' width for a distance of 30'
- Required every 400' on residential driveways, spacing reduced depending on how many residences being served



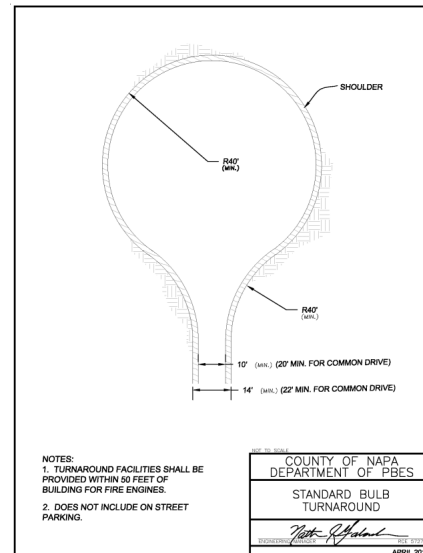
DETAIL C-11

# §1273.05 Turnarounds

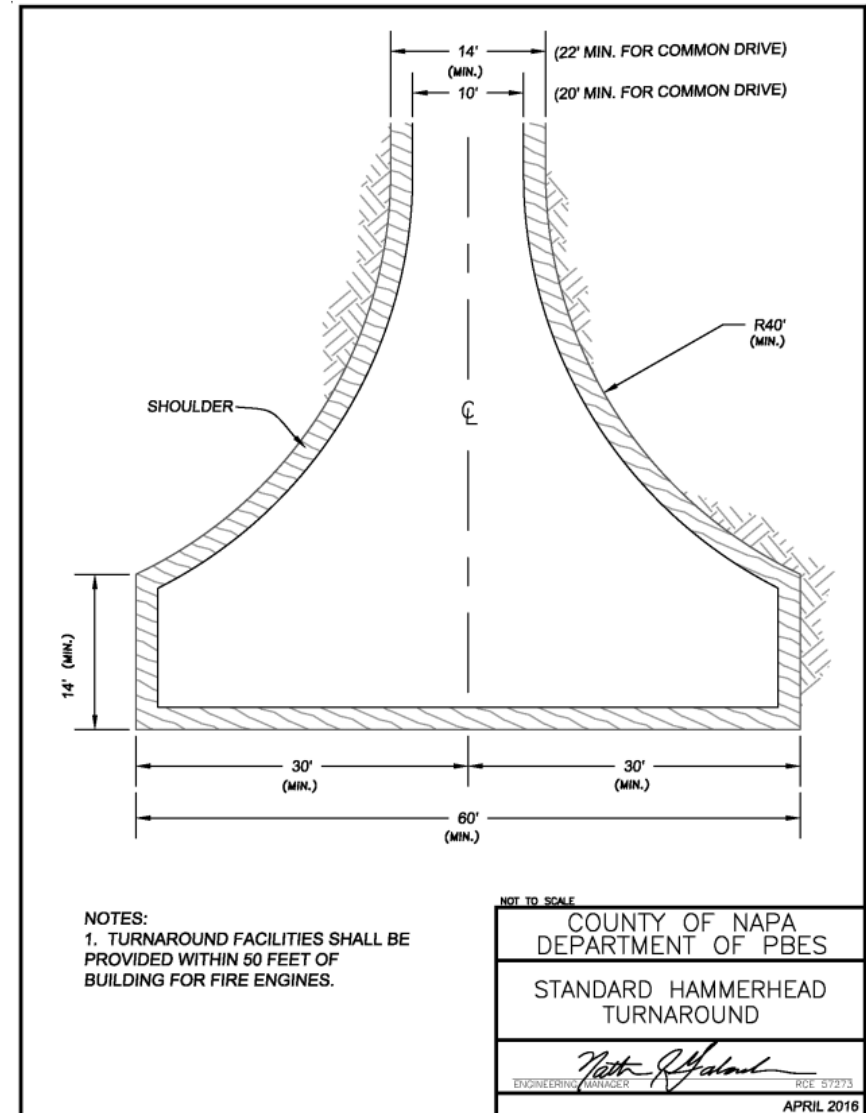
- Required on driveways exceeding 300'
- Required on dead-end roads, parcels zoned for 5 acres or larger required every 1320'
- Shall be located within 50' of the building



DETAIL C-1-4



DETAIL C-1-2



DETAIL C-1-3



# Scope of Standards

- (a) Application for a Building Permit for new construction (as defined in Section 4), not relating to an existing structure.
- (b) Reserved
- (c) Application for a Use Permit or any modification thereto resulting in an increase in average daily trips (ADT) and/or proposing an affected activity described in subsections (a), (d), and (e).
- (d) A change of use and/or occupancy classification of an existing structure resulting in a higher hazard, based on life and fire risk as defined in the California Fire Code.
- (e) Road construction, including construction of a new road that does not currently exist, or the extension of an existing road, construction or extension of an existing road that was not legally established, or the construction of a new parking lot.
- (f) New subdivisions created by Parcel Map or Final Map
- (g) Conditional certificates of compliance.
- (h) Left turn lane warrant and/or other public road improvement required by the Director of Public Works.
- (i) Application for an Administrative Permit proposing an affected activity described in subsection (a), (d), and (e) above.



# Exemption

Subchapter 2 does not apply where an application for a Building Permit is filed after January 1, 1991, for Building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, **to the extent that conditions relating to the perimeters and access to the Buildings were imposed by the parcel map or tentative map approved prior to January 1, 1991.**



# Exceptions to Standards

- Process
  - Submit written request to Director of PBES with development or entitlement application.
  - State specific section(s) for which an exception is requested.
  - Material facts supporting the contention of the developer.
  - Details of mitigating measures proposed.
  - Map/plans showing the proposed location and siting of mitigating measures.
- SRA + LRA VHFHSZ
  - Demonstrate Findings (section 3(d))
  - Demonstrate Same Practical Effect
- LRA
  - May apply for an exception without demonstrating specific findings per section 3(d).
  - Does not need to demonstrate same practical effect but must provide measures for safe access of emergency apparatus, safe civilian evacuation, and avoidance of delays in emergency response.



# Findings

- i. The exception will **preserve unique features of the natural environment** which includes, but is not limited to, natural water courses, steep slopes, geological features, heritage oak trees, or other trees of at least six inches in diameter at breast height (dbh) and found by the decision maker to be of significant importance, but **does not include human altered environmental features such as vineyards and ornamental or decorative landscaping**, or artificial features such as, rock walls, fences or the like;
- ii. The exception is necessary to accommodate physical site limitations such as grade differentials; and/or
- iii. The exception is necessary to accommodate other limiting factors such as recorded historical sites or legal constraints.

**Monetary hardship alone shall not be considered as a basis for an exception.**



# Same Practical Effect

Means an exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including, but not limited to:

- (a) Access for emergency wildland fire equipment,
- (b) Safe civilian evacuation,
- (c) Signing that avoids delays in emergency equipment response,
- (d) Available and accessible water to effectively attack wildfire or defend a structure from wildfire, and
- (e) Fuel modification sufficient for civilian and fire fighter safety.



# Vine Cliff Winery Existing

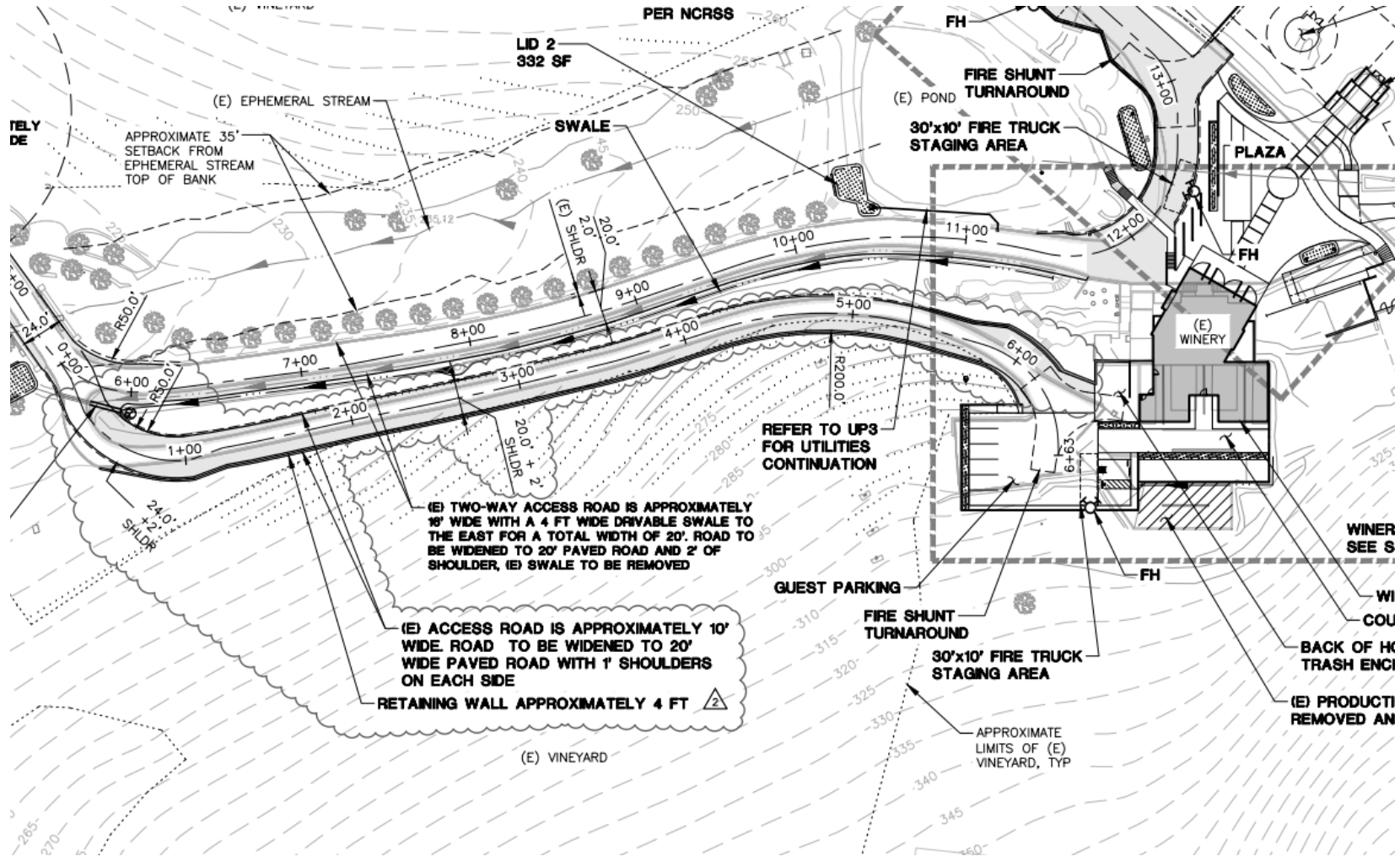
P24-00191



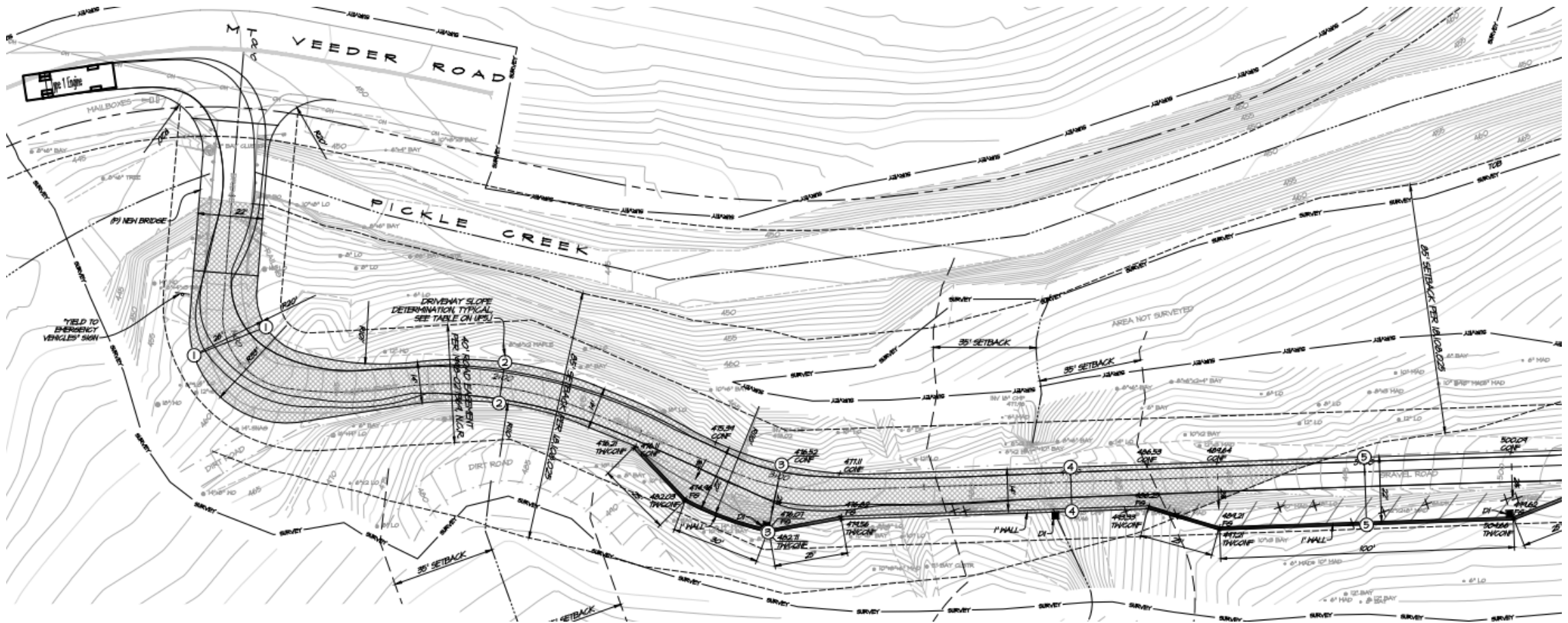
# Vine Cliff Winery

## Approved

# P24-00191

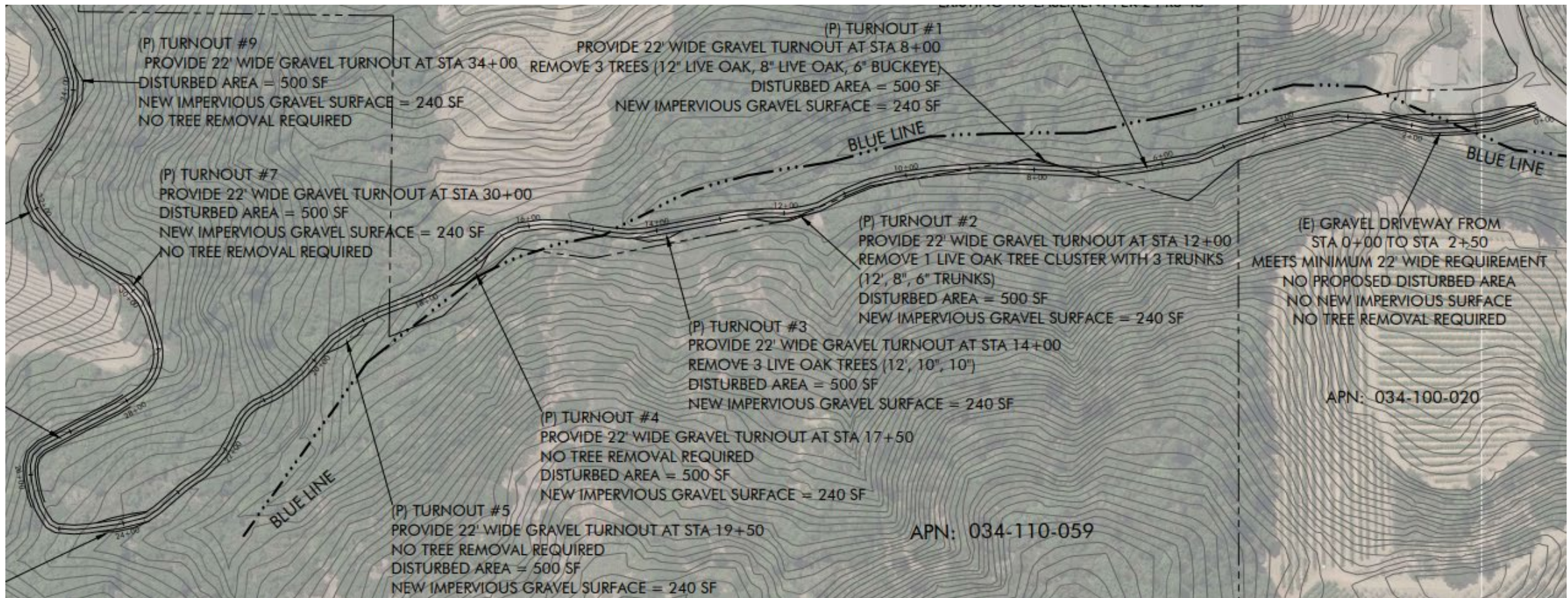


# Mt. Veeder Winery P22-00248



# Hillwalker Vineyards

# P23-00101





# Key Takeaways

- RSS largely reflects design criteria outlined in the State FSR.
- State FSR apply within SRA and LRA VHFHSZ.
- Same process but different criteria for evaluating exceptions based on project location.



---

# Thank you

Alexei Belov, PE

[Alexei.Belov@countyofnapa.org](mailto:Alexei.Belov@countyofnapa.org)

707-299-2177

Jason Downs

[Jason.Downs@countyofnapa.org](mailto:Jason.Downs@countyofnapa.org)

707-299-1467



@countyofnapa

