

FIRE MARSHAL'S OFFICE



COUNTY OF SAN MATEO *FIRE DEPARTMENT*

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April 14, 2022

Susan Payrovi
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SUBJECT: PLN2022-00109
Planning SFD&ADU- 12400 Skyline Boulevard

This is a preliminary design review of your planning case for fire department requirements at time of submittal. When this design is submitted for a building permit, there may be additional requirements according to the actual design submitted and the current codes at time of building permit submittal. This review is neither permission nor approval for final plan check for a permit. Submit the following information to the planner with the Planning & Building Division of San Mateo County under the above permit. I offer the following comments/conditions, which will be applied to this project.

- 1. ADD Note to plans: Smoke Detectors which are hard wired: As per the California Building Code and the State Fire Marshal regulations, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be checked at final.*
- 2. ADD Note to plans: Escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet, 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor. (CFC 1030).*
- 3. Identify rescue windows in each bedroom and verify that they meet all requirements. Add this to plans.*
- 4. ADD Note to plans: New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the San Mateo County Fire*

Department. This remote signage shall consist of a 6 inch by 18-inch green reflective metal sign with 3-inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).

5. *ADD Note to plans: The building is in a Very High Fire Hazard Severity Zone and will require a Class A roof.*
6. *Vegetation Management (SRA) - Add note to plans: The 2016 California Fire Code Chapter 49 and Public Resources Code 4291.
A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees.
Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10' to adjacent trees when fully grown or at maturity.
Remove that portion of any existing trees, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5' of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.*
7. *ADD Note to plans: As per 2016 CFC, Appendix B and C, a fire Department approved fire hydrant (Clow 960) must be located within 500 feet of the proposed single-family dwelling unit measured by way of drivable access. As per 2016 CFC, Appendix B the hydrant must produce a minimum fire flow of 500 gallons per minute at 20 pounds per square inch residual pressure for 2 hours. Contact the local water purveyor for water flow details.*
8. *ADD Note to plans: Fire apparatus roads to be a minimum of 20 ft. wide with minimum of 35 ft. centerline radius and a vertical clearance of 15 ft. CFC503, D103, T-14 1273*
9. *A plan and profile of the driveway/ roadway will be needed. Add to the plans.*
10. *ADD Note to plans: Dead end emergency access exceeding 150 feet shall be provided with width and turnaround provisions meeting California Fire Code appendix D.*
11. *ADD Note to plans: Fire apparatus access roads to be an approved all weather surface. Grades 15% or greater to be surfaced w/ asphalt, or brushed concrete. Grades 15 % or greater shall be limited to 150 ft. in length with a minimum of 500 ft. between the next section. For roads approved less than 20 ft., 20 ft. wide turnouts shall be on each side of 15% or greater section. No grades over 20%. (Plan and profile required) CFC 503.*
12. *Gates shall be a minimum of 2 feet wider than the access road/driveway they serve. Overhead gate structures shall have a minimum of 15 feet of vertical clearance. Locked gates shall be provided with a Knox Box or Knox Padlock. Electric gates shall have a Knox Key Switch. Electric gates shall automatically open during power failures. CFC 503.6, 506. For application and instructions please email smcfdfiremarshal@fire.ca.gov if you need further assistance please contact the San Mateo County Fire Marshal's Office at 650-573-3846.*
13. *Show location of wet draft fire hydrant on site plans with pipe supplying hydrant. A wet draft hydrant with a 2 ½" National Hose Thread outlet with a valve shall be mounted not less than two feet above ground level and within 5 feet of the main access road or driveway, and not less than 50 feet from any portion of any building, nor more than 150 feet from all buildings. Show piping layout on plans, include minimum depth of cover and thrust blocks as needed. The pipe shall be a minimum 4" inside diameter, underground fire service listed. Provide manufacturers cut sheets.*
14. *ADD Note to plans: Wharf Type Hydrant: As per Fire Department ordinance you are required to install a wharf type hydrant located no further than 150 feet from the proposed residence along the driveway access. The wharf hydrant must have a minimum flow of 250 gallons per minute at 20 pound per square inch for a*

minimum of 20 minutes and be supplied by a minimum 4-inch supply line. The plans for this system must be submitted to San Mateo County Planning and Building Division. A building permit will not be issued until plans are received, reviewed and approved. Upon submission of plans, the County or City will forward a complete set of plans to the San Mateo County Fire Department for review and approval.

15. *Utilize NFPA 1142 worksheet to determine required amount of water for fire protection.*

- No approved fire hydrant system available (no water district): Wet draft hydrant system required as below. Details and notes to be shown on plans. CFC B103.3*
- Tank size: 7500 gal for up to 3600-ft² single-family dwelling. If larger than 3600-ft² single family dwelling, use NFPA 1142.*
- Tanks have reliable water supply and auto fill. Domestic supply cut-off required.*
- Tanks located at elevation above hydrant to provide positive pressure and water to hydrant.*
- Tank venting: 1.5 times the size of the pipe w/ fine mesh screen.*
- Tanks interconnected by a minimum of 4" pipe.*
- Tanks closer than 30 ft. to lot lines and structures to be non-combustible.*
- Wet Draft Hydrant (WDH) Supply Piping: 4" minimum, C900 or other underground fire service rated pipe. Pipe shall have a minimum of 30-inch depth of cover, 36 inches under drivable areas.*
- Thrust blocks shown on plans as required.*
- All above ground piping for WDH to be metallic, where ground contact occurs, metal pipe shall be double wrapped w/ approved 10-mil pipe tape. All metallic underground fittings shall be protected against corrosion.*
- WDH to be an approved type w/ 4 1/2" NH threaded outlet and shutoff valve. Discharge to be from 30" to 36" above grade.*
- WDH located from 50 ft. to 150 ft. from structure by way of approved fire apparatus access. WDH to be clearly visible, located 3 to 6 ft. from the fire apparatus access, and be protected from damage.*
- WDH shall be placed in a concrete pad, 4" deep and 2 ft. by 2 ft. minimum at base.*
- Wet draft hydrants shall have a permanent sign affixed, red in color with white 1-inch letters stating "Wet Draft Hydrant, # gallons", with the gallons of water available for the hydrant provided.*

16. *A Knox padlock or key switch will be required if there is limited access to property. CFC 506.1. For application and instructions please email smcfdfiremarshal@fire.ca.gov if you need further assistance please contact the San Mateo County Fire Marshal's Office at 650-573-3846.*

17. *ADD Note to plans: Automatic Fire Sprinkler System: (Fire Sprinkler plans will require a separate permit). As per San Mateo County Building Standards, the applicant is required to install an automatic fire sprinkler system throughout the proposed or improved dwelling and garage. All attic access locations will be provided with a pilot head on a metal upright. Sprinkler coverage shall be provided throughout the residence to include all bathrooms, garages, and any area used for storage. The only exception is small linen closets less than 24 square feet with full depth shelving. The plans for this system must be submitted to the San Mateo County Planning and Building Division. A building permit will not be issued until plans are received, reviewed and approved. Upon submission of plans, the County or City will forward a complete set to the San Mateo County Fire Department for review.*

18. *Installation of underground sprinkler pipe shall be flushed and visually inspected by Fire Department prior to hook-up to riser. Any soldered fittings must be pressure tested with trench open. Please call the San Mateo County Fire Department to schedule an inspection. Fees shall be paid prior to plan review.*
19. *Exterior bell and interior horn/strobe: are required to be wired into the required flow switch on your fire sprinkler system. The bell, horn/strobe and flow switch, along with the garage door opener are to be wired into a separate circuit breaker at the main electrical panel and labeled.*
20. *Add note to the title page that the building will be protected by an automatic fire sprinkler system.*
21. *ADD Note to plans: Solar Photovoltaic Systems: These systems shall meet the requirements of the 2016 CFC Section 605.11*
22. ***CRC 2016 Section R337:** This project is located in a **State Responsibility Area** for wildfire protection. Roofing, attic ventilation, exterior walls, windows, exterior doors, decking, floors and underfloor protection shall comply with CRC 2016 Section R337 requirements. You can visit the Office of the Sate Fire Marshal's website at http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland.php and click the new products link to view the "WUI Products Handbook."*
23. *Copy R-337 Worksheet to a plan sized sheet and check appropriate boxes.*
24. *Provide window & door schedule showing it meets R-337 and add it to work sheet. All exterior doors including garage door must meet R-337.*
25. *Provide Eave & Gutter details that meet R-337 include all materials.*
26. *Add R-337 required vents to work sheet.*
27. *ADU will require Fire Sprinklers.*
28. *ADU using the same street address numbers, shall have suite or unit identification posted as required by the San Mateo County Fire Department.*
29. *ADU for rear addressing – When required by the Chief, approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the fire apparatus road at the back of the property.*

Our review is not construed as encompassing the structural integrity of the facility nor abrogating more restrictive requirements by other agencies having responsibility. Final acceptance is subject to field inspection and necessary tests.

All fire conditions and requirements must be incorporated into your building plans, (see attached conditions) prior to building permit issuance. It is your responsibility to notify your contractor, architect and engineer of these requirements.

If you have any questions regarding the above conditions, please call the administration office during normal working hours.

For additional information or to schedule an inspection you may contact the San Mateo County Fire Marshal's Office at 650-573-3846.

Patrick Griffin
Deputy Fire Marshal