

MENLO PARK FIRE PROTECTION DISTRICT
ORDINANCE NO. 36-2013
DISTRICT FIRE PREVENTION CODE
ADOPTING THE 2012 INTERNATIONAL FIRE CODE WITH CALIFORNIA AND
LOCAL AMENDMENTS
(Version Adopted, Amended and Restated on September 17, 2013)

This Ordinance was introduced and was adopted after the holding of a public hearing pursuant to California Health and Safety Code Section 13869.7 and California Government Code Section 50022.3.

WHEREAS, pursuant to Title 24 of the California Code of Regulations, also known as the California Building Standards Code (“CBSC”) and California Health and Safety Code Section 13869 *et seq.*, a fire protection district may adopt a fire prevention code by reference and may also, when reasonably necessary due to local climatic, geological or topographical conditions, establish more stringent local building standards relating to fire and panic safety than those set forth in the CBSC; and

WHEREAS, the Menlo Park Fire Protection District (the “District”) now desires to adopt by ordinance a new amended and restated District Fire Prevention Code that makes local amendments to the 2013 California Fire Code.

NOW, THEREFORE, the Board of Directors of the Menlo Park Fire Protection District ordains as follows:

Findings and Determinations Pursuant to State of California Health & Safety Code sections 1758 and 17958.5

Pursuant to Section 17958.5 and 17958.7 of the State of California Health and Safety Code, the Board of Directors of the Menlo Park Fire District finds that the above changes or modifications are needed and are reasonably necessary because of certain local climatic, geological and topographic conditions as described below.

Finding 1: Climatic

The District, on average, experiences an annual rainfall of 19.7 inches. This rainfall can be expected between October and April of each year. However, during the summer months there is little, if any measurable precipitation. During this dry period the temperatures are usually between 70 – 95 F degrees with light to gusty westerly winds. These drying winds, combined with the natural and imported vegetation which is dominant throughout the area, create a hazardous fuel condition that can cause extensive encroaching into these wooded and grass covered areas where wind-driven fires can have severe consequences. This has been demonstrated in a number of like climatic areas within the State of California and the western United States.

Because of variable weather patterns, normal rainfall cannot always be relied upon. This can result in water rationing and water allocation programs, as demonstrated in past drought patterns. Water shortages may also be expected in the future due to limited water storage capabilities and increased consumption. The District is bounded by San Francisco Bay on the east and the foothills of the Santa Cruz Coastal Range of mountains on the west. This setting allows for strong gusty winds to blow through the Fire District. These winds are a common occurrence each afternoon during summer months. Wind increases a fire's ability to spread and has been attributed to the rapid spread of both vegetation and structure fires. Automatic fire sprinkler protection as required in buildings specified in Chapter 9 of the Fire Code and the local requirements and standards of Menlo Park Fire Protection District would significantly reduce the fire's ability to spread rapidly, especially when the jurisdiction is affected by the typical wind patterns.

Finding 2: Geologic and Geographic:

A. Geographic Location. The District is located at the southeastern most part of San Mateo County.

B. Seismic Location. The District is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zones. The location makes it particularly vulnerable to damage to taller and older structures caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the District sits between two active earthquake faults, the San Andreas fault and the Hayward/Calaveras fault, and numerous potentially active faults. A majority of the District's land surface is in the high-to-moderate seismic hazard zones, as established by the U.S. Geological Survey.

C. Seismic and Fire Hazards: Fires following an earthquake have the potential of causing greater loss of life and damage than the earthquake itself. A significant portion of the District's residential, commercial and industrial structures are located in seismic risk zones. Should a significant seismic event occur, fire suppression resources would have to be prioritized to mitigate the greatest threat, and may not be available for every structural fire. In such an event, individual structures should be equipped to help in mitigation of the risk of damage.

Other variables could aggravate the situation: (i) the extent of damage to the water system; (ii) the extent of isolation due to bridge and/or freeway overpass collapse; (iii) the extent of roadway damage and/or amount of debris blocking the roadways; (iv) climatic conditions (hot, dry weather with high winds); (v) time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours; and; (vi) the availability of timely mutual aid or military assistance.

D. Waterways. The Fire District's south and east boundary lines are waterways, the south side being the San Francisquito Creek, and the east side being the San Francisco Bay. Both waterways are influenced by tides. The San Francisquito Creek is fed from Searsville Dam, located along the Jasper Ridge, and also collects water from storm drains along its drainage pathway. The creek finally empties into San Francisco Bay, and is therefore influenced by tidal activity. During periods of heavy rainfall in combination with high tides in the Bay, San Francisquito Creek has overflowed its banks, causing floods in both East Palo Alto and Menlo Park. The floods have hampered fire apparatus making a timely response to emergencies and providing needed service to the community. Proper roadway widths as defined in Chapter 5 of the Fire Code and the minimum roadway standards established by Menlo Park Fire District can provide fire apparatus with accessibility while helping to divert excess water flow during rainy seasons.

E. Transportation. The District is dissected by a major state highway (El Camino Real) and two major interstate freeways (I-280 and U.S. 101). However, the interconnecting road system is significantly less well developed. These conditions are likely to affect response times of fire suppression personnel and apparatus during periods of heavy traffic or conditions of major emergencies.

The Fire District is also split in half by an active railway that serves commuters during daylight hours and transports freight in the evening. There are seven railroad crossings that allow fire apparatus to cross from one side of the Fire District to the other. The railroad limits the Fire District's ability to not only make a timely response to an emergency, but also hampers our ability to provide a safe number of fire fighters to the scene of an emergency to begin operations that are compliant with Cal-OSHA Safety Regulations. Again, a structure's ability to control a fire or emergency condition with fire sprinkler protection, would play a key role in reducing losses.

A single toll bridge connects the Fire District with a substantial workforce that resides in Alameda County. This single point source connection significantly adds to traffic congestion through the jurisdiction during commute hours. With alternative work schedules, commute hours may last from 5:00 am through 7:00 pm, with significant traffic backups also noted during the lunch hour.

F. Soil Conditions. The District lies near the southern end of San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. The alluvium was created by the flooding of the many streams emptying into San Francisco Bay depression, and from intermittent sea water inundation has occurred over the last two or three million years. The areas closest to the Bay are overlain by unconsolidated fine silty clay, known as Bay Mud which varies in thickness from a few feet to as much as 30 feet. Generally, the older more stable alluvium is to the south and the younger less stable material is to the north. Bedrock lies beneath the area at depths generally 300 feet or more. The predominant soils patterns actuate the adverse effects on structures that may be expected from major seismic events.

G. Building Design. Many of the older and taller buildings are of designs which greatly limit accessibility by District resources. This includes large narrow parcels that have been subdivided into “flag-lots” on narrow residential streets.

The infrastructure that supports these buildings is old and not in compliance with current Codes. Some water mains in residential areas deliver water supplies that do not meet fire flow requirements required by Appendix B of the Fire Code. Some fire hydrant locations in both residential and commercial do not meet distance requirements of Appendix C of the Fire Code. This will not only hamper fire suppression operations, but limits building design. When water supplies must be altered to accommodate new construction, Menlo Park Fire District Standards on Underground Water Piping and the Standard on Water Supplies attempt to work with the existing infrastructure to accommodate the needs of fire fighters.

Residential properties in the Fire District consist primarily of one-acre or smaller parcels, flag lots and single and multi-family infill developments. Common to the larger parcels is the development of additional residential or in-law type occupancies for which fire department access is difficult based on existing driveway configurations for the original single- family parcels. Flag lots, for example, typically have driveways in excess of 150 feet, with narrow access, necessitating additional requirements, which the Fire District has added to Section 501.1, by creating Standards for driveways and private roadways that includes minimum driveway widths, fire apparatus turnaround specifications, and minimum vertical clearances. Additionally, fire department response times are increased due to gated access roads, a lack of street or address illumination, and existing vegetation barriers. Section 505.1 provides minimum standards for addresses on buildings and now requires new buildings to have illuminated addressing. However, neighborhood street lighting continues to be an issue.

Proper roadway widths as required by Chapter 5 of the Fire Code, along with minimum Menlo Park Fire District Standards would allow fire apparatus to set up fire suppression operations and access both driveways, that extend greater than 150 feet, and private roadways serving minor developments.

With the aging infrastructure, many water supplies do not meet current fire flow requirements. When redevelopment occurs, compliance to Fire Code Section 507 in addition to Menlo Park Fire District Standards on Water Supplies and on Underground (Piping) Standards is required. The Water Supply Standard provides for the type and size of the approved fire hydrant, its location in relationship to “flag-lots”, and placement of “blue-dots” to indicate their placement.

Due to the close proximity to San Francisco Bay, salt content in the soil is highly corrosive. Menlo Park Fire District’s Underground Standards provides requirements for underground piping of both fire hydrant installations as well as underground piping for automatic fire sprinkler system.

Finding 3: Topographical

The District's topographic conditions are closely associated with the geological /geographical element. With the elevation changes within the District, development has followed the path of least resistance, creating a meandering pattern. This circumstance does not lend itself to a good systematic street and road layout, which would promote easy traffic flow. It has, in fact, resulted in few major cross-town thoroughfares that tend to be heavily congested, primarily during commute hours and seasonal periods of the year. This creates barriers that reduce the response time of fire equipment and other emergency services.

The topography of the District is also challenged by major development patterns. Employment areas are located adjacent to and throughout the jurisdiction. The people who work in these areas have added to the traffic congestion in the District thereby reducing the District's response time capabilities.

Inherent delays caused by these traffic patterns make it necessary to mitigate these problems with greater requirements for built-in automatic fire protection systems, noted in Section 903 of the Fire Code, along with local requirements and standards. In addition, the Fire District has added Fire Alarm maintenance requirements, specifically UL Certification noted in Section 907, to reduce false alarms and insure system reliability.

Finding 4

The climatic conditions along the Peninsula affect the acceleration, intensity and size of a fire within the jurisdiction. Times of little or no rainfall, low humidity, and high temperatures have created extremely hazardous fire conditions, particularly as they relate to roof fires and conflagrations. The winds experienced in the Fire District can have a tremendous impact upon structure fires by carrying sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. In building fires, winds can literally force the fire back into the structure, creating a blow torch effect, in addition to preventing the natural and cross ventilation efforts of firefighters. In 1997, a fire at Green Oaks School in East Palo Alto resulted in a multi-million dollar loss. The fire's unusually rapid spread was attributed to wind conditions occurring at the time of the fire. Other fires within the jurisdiction's housing tracts have also experienced unusually rapid spread due to the gusty winds that occur daily off the San Francisco Bay.

Finding 5

By the use of automatic early fire detection and suppression systems, the Fire District will have the ability to curb losses of life and property attributed to the local climate's influence on fires. With the use of an early, automatic fire suppression system, major fire losses can be controlled. For example, in 1989, a flammable liquid fire occurred at Romic Environmental Services, a former chemical recycling company that

was located at the south end of the Fire District. The area suspected as the point of the fire's origin was an open-air, unsprinklered building subject to wind conditions. The fire grew rapidly. It was finally brought under control several hours after discovery, with the assistance of neighboring fire departments and resulted in a multi-million dollar loss of property, equipment and product. Two years later, after the area had been rebuilt and retrofitted with an automatic fire sprinkler system, another fire occurred at the same location. This fire was contained to a single piece of equipment and was controlled by one fire crew.

Finding 6

The geological conditions experienced within the Fire District increase the magnitude, exposure and accessibility to fire events. For example, a fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number of people, should a significant seismic event occur. Fire protection resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single-family dwelling or smaller business occupancy fires. Other variable conditions could include damage to the water system, freeway overpass collapse, roadways blocked by debris, and time of day, which could affect traffic patterns during or after the event.

In 1989 a 7.0 magnitude earthquake struck the San Francisco Bay Area via the San Andres Fault. For three hours following the event, firefighters from Menlo Park Fire District responded to over 100 incidents per hour. Though during this event, losses in the Fire District due to fire were minimal, however other neighboring jurisdictions were not as lucky. Had automatic fire sprinkler protection been a requirement at the time, it could have assisted firefighters in setting their priorities and assisting those citizens who needed emergency services the most.

Finding 7

Heavy traffic congestion on city streets already acts as a barrier to the timely response of fire equipment and emergency services. Continued growth, both residential and commercial from both inside and outside the Fire District will only serve to continue the traffic problem. In the event of an accident or other emergency at certain key point intersections, portions of the Fire District could be isolated or response times could be sufficiently slowed, thus increasing the risk of substantial injury and damage.

A year long time study of response times for fire apparatus indicates significant increases in response to emergencies during the commute hours of 6:00 am to 10:00 am and again from 3:00 pm to 7:00 pm. In conjunction with the increased response time, fire losses also showed the same pattern of higher losses for fires starting during commute hours. From 2003 to 2012, the Fire District experienced 22 structural fires where the property loss was greater than \$300,000. Of those fires more than half occurred during

the above noted commute hours, indicating significant losses that could be directly attributed to typical traffic congestion experienced within the Fire District.

If fire apparatus is hindered in their response, automatic fire sprinkler protect will help. According to IFSTA Training Manuals, the temperature inside a structure can go from ambient to an excess of 1,000F within the first ten minutes of a fire. Delay of fire apparatus will only allow the fire to grow, thus making efforts to suppress the fire more difficult. Additionally, the ability to perform an effective rescue is diminished if fire fighters are delayed in their response. With the automatic fire sprinkler protection in place, the fire should be held to a controllable level, allowing the ability of citizens to escape from the burning structure, as well as allowing firefighters to contain the fire in a safe manner, in its beginning stages.

Finding 8

It is due to these climatic, geographical and topographical conditions that the Fire District supports the need for structures within the jurisdiction to at least be capable of initial fire suppression capacity.

Finding 9

For the above reasons, taken individually and cumulatively, that the Board of Directors of the Menlo Park Fire Protection District finds there to be building and fire hazards particular to the jurisdiction that require the increased fire protection detailed as set forth in this Ordinance.

Section 1: Adoption by Reference

Paragraph 1- Title

This set of regulations, including provisions adopted and incorporated by reference, shall be known as the "District Fire Prevention Code" of the Menlo Park Fire Protection District ("the District") and may be cited as such. It is also referred to as "the Code" in these regulations.

Paragraph 2- Authority

The District Fire Prevention Code is adopted pursuant to the Fire Protection District Act of 1987 (California Health and Safety Code Sections 13800 *et seq.*) and in particular the following provisions of that Act:

- Section 13861(h), which empowers the District to adopt ordinances;
- Section 13861(i), which empowers the District to establish and enforce rules and regulations for the administration, operation and maintenance of the governmental services which it is authorized to provide;

- Section 13862, which empowers the District to provide certain governmental services including fire protection services;
- Section 13869, which empowers the District to adopt a fire prevention code by reference; Section 13870, which empowers the District's authorized representatives to order correction or elimination of fire and life hazards;
- Section 13871(b), which provides that failure to correct or eliminate a fire or life hazard after a duly issued order is a misdemeanor;
- Section 13872, which empowers the District's authorized representatives to issue citations for certain violations;
- Section 13873, which provides that the District's employees shall have the powers of peace officers while engaged in the prevention and suppression of fires and the preservation of life and property; and,
- Sections 13916, 13917, 13918 and 13919, which, among other things, empower the District's Board of Directors (the "Board" or "Board of Directors") to charge a fee to cover the cost of any services, which the District provides and the cost of enforcing any regulation for which a fee is charged.

Paragraph 3- Adoption by Reference of the California Fire Code, which Code Adopts by Reference the 2012 Edition of the International Fire Code With Necessary Amendments.

The California Fire Code (California Code of Regulations, Title 24, Part 9), (the "CFC") which adopts by reference the 2012 edition of the International Fire Code ("IFC") with necessary State amendments (which codes shall collectively be referred to in the District's Fire Prevention Code as "the IFC Code" or the "IFC"), is adopted by reference and incorporated into the District Fire Prevention Code in its entirety, including appendix items, except to the extent portions of the CFC may be deleted, modified or amended by Paragraph 4 of this Code. This ordinance shall take effect January 1, 2014.

Paragraph 4- Amendments, Modifications and Deletions to the CFC

The following Sections of the CFC have been amended, modified or deleted as follows:

**CHAPTER 1
SCOPE AND ADMINISTRATION
DIVISION I
CALIFORNIA ADMINISTRATION**

1.11.9 Stop Work Order. This Section is replaced with Section 111 and modified as indicated below in Section 111.4.

**DIVISION II
ADMINISTRATION**

101 General

[A] **101.1 Title.** These regulations shall be known as the District Fire Prevention Code of Menlo Park Fire Protection District hereinafter referred to as “the Code.” See also Paragraph 3 of this ordinance.

105 Permits

[A] **105.6.4 Carnivals and fairs.** An operational permit is required to conduct a carnival or fair. Carnivals and fairs shall be in accordance with Menlo Park Fire Protection District Standard “Requirements to Conduct Public Assemblages and Events” (See Chapter 80 of this ordinance).

[A] **105.6.13 Exhibits and trade shows.** An operational permit is required to operate exhibits and trade shows. Exhibits and trade shows shall be in accordance with Menlo Park Fire Protection District Standard “Requirements to Public Assemblages and Events” (See Chapter 80 of this ordinance).

105.6 30 Open Burning.

[A] **105.6.30 Open burning.** When allowed by the Bay Area Air Quality Management District, an operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

108 Board of Appeals

[A] **108.1 Board of appeals established.** In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals.

Any person who is aggrieved within the meaning of this paragraph by an action of an authorized representative of the District may appeal the action to the Fire District’s Board of Directors. The appeal must be in writing, must fully describe the action sought to be appealed and must be filed with the Clerk of the District Board within 30 days of the date of the action appealed. The Board of Directors shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

[A] **108.2 Limitations on authority.** A person shall be deemed to be aggrieved within the meaning of this Section if the person is the applicant or the permittee or is otherwise directly affected by the action in question. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent method of protection or safety is proposed. The action in question may also involve the approval or disapproval of a permit application submitted to the District, the grant or denial of a permit, or a decision concerning the interpretation, construction, operation or enforcement of the District's Fire Prevention Code. The Board shall have no authority to waive requirements of this code.

[A] 108.3 Qualifications. The Board of Appeals shall consist of the Fire District Board of Directors. The Fire Chief shall be an ex officio member of said Board but shall have no vote on any matter before the Board.

109 Violations

[A] 109.4 Violation Penalties. Persons who shall violate a provision of a fire prevention code or a district ordinance shall be guilty of an infraction, which shall be punishable by a fine in accordance with Sections 17(d) of the currently adopted California Penal Code. Any person who fails or refuses to correct or eliminate a fire or life hazard after written order of the District Board or its authorized representative is guilty of a misdemeanor, which shall be punishable by fine or imprisonment or both in accordance with Section 19 of the currently adopted California Penal Code. The imposition of a punishment pursuant to this paragraph shall neither excuse the violation, nor shall it authorize the violation to continue or preclude the District from taking other action to enforce compliance with a fire prevention code or district ordinance. All violations shall be corrected within a reasonable time regardless of whether a conviction is obtained. Each day that a violation continues after due notice has been served, shall be deemed a separate offense.

The District shall be entitled to recover all of its actual expenses incurred to correct violations and to obtain compliance with the District's Fire Prevention Code. If the violation has not been corrected, the District shall begin charging an hourly Code Enforcement charge for additional follow up inspections until the violation has been corrected. Code Enforcement charges shall be in accordance with the Fire District's fee schedule, account #41310.

111 Stop Work Order

[A] 111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition shall be liable to a Code Enforcement charge as set forth in the Fire District's fee schedule under account #41310. See also Section 109.4 above.

113 Fees

[A] 113.6 Permit Fees to Public Agencies. Fees shall be charged to other public agencies for services provided by the District. The District Board may, by resolution, establish policies and procedures by which waivers from payment of fees may be allowed by the Board, when payment of a fee would not be in the public interest.

Exception: No fees shall be charged to another public agency for the construction of public improvements, or public facilities, or for operational permits.

CHAPTER 2 DEFINITIONS

202 General Definitions

FIRE CODE OFFICIAL. The fire code official shall mean the District's Fire Chief, employees of the District's Fire Prevention and Fire Suppression Divisions and such other representatives of the District as may be authorized by the Menlo Park Fire District Board of Directors or the Fire Chief

[B] FLOOR AREA, GROSS. The floor area within the inside perimeter of the *exterior walls* of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors, stairways, closets, the thickness of interior walls, columns or other features. The floor area of a building, or portion thereof, not provided with surrounding *exterior walls* shall be the usable area under the horizontal projection of the roof or floor above. The gross floor area shall not include shafts with no openings or interior courts. For residential occupancies, square footage does not include an attached garage (U Occupancy) or attached carport.

Areas to be included in the square footage calculation include:

- 1- Garages or carports if under a habitable space, or covers egress per NFPA 13D 8.6.6
- 2- New attached garage
- 3- All additions
- 4- Total square footage of any room that received alterations or additions.
Removing sheetrock exposing structural framing or any change to structural in a room involves the total square footage of that room.

Existing square footage may be obtained from the San Mateo County Tax Assessor's Office or may be submitted by a licensed architect.

[A] JURISDICTION. Jurisdiction shall mean the territorial boundaries of the Menlo Park Fire Protection District. In that case "Jurisdiction" would mean, as appropriate, the County of San Mateo, the City of East Palo Alto, the City of Menlo Park and the Town of Atherton. The Fire District's map book shall be adopted by reference to indicate the territorial boundaries of the Menlo Park Fire Protection District.

Except where in the code the term "jurisdiction" is used in a context which implies the ability to exercise governmental powers, such as "the authority having jurisdiction," then in that context "jurisdiction" shall mean the particular public agency authorized to and exercising that governmental power.

LOCAL LAW ENFORCEMENT. Local law enforcement" shall mean the local police departments of the City of East Palo Alto, the City of Menlo Park, the Town of Atherton, the San Mateo County Sheriff's Department, and the California Highway Patrol.

SUBSTANTIAL ALTERATION. The renovation of any structure, which combined with any additions to the structure, affects a *gross floor area* which exceeds fifty percent of the existing floor area of the structure. This may include but is not limited to :

- a. Removal of electricity to the building or structure.
- b. Removal of water supply and /or sanitation to the building or structure
- c. Removal of exterior walls and/or roof assembly

When any structural changes are made to the building, such as walls, columns, beams or girders, floor or ceiling joists and covering, roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor area of all room affected by the changes shall be included in computing floor areas for purposes of applying this definition. This definition does not apply to the replacement and upgrading of residential roof coverings.

CHAPTER 4 EMERGENCY PLANNING AND PREPAREDNESS

401 General

401.5 Making false report. It shall be unlawful for a person to give, signal or transmit a false alarm. A false report may include signals from a fire alarm system, including signals caused during fire alarm maintenance without prior Fire District notification. Making a false report shall be liable to a charge as set forth in the Fire District fee schedule under account # 41320 False Alarm Response, Engine or account #41325 False Alarm Response, Inspector.

CHAPTER 5 FIRE SERVICE FEATURES

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this Chapter, Appendix D, and Menlo Park Fire Protection District Standards on Designation and Marking of Fire Lanes, Private Roads and Driveways, Traffic Calming Devices, Underground Water Piping, Water Supplies and Fire Fighter Air Systems. (See Chapter 80 of this ordinance)

503 Fire Apparatus Access Roads

503.3 Marking. Where required by the *fire code official*, *approved* signs and markings designating fire lanes shall comply with California Vehicle Code section 22500.1. The designation shall be indicated (1) by a sign posted immediately adjacent to, and visible from, the designated place clearly stating in letters not less than one inch in height that the place is a fire lane, (2) by outlining or painting the place in red and, in contrasting color, marking the place with the words "FIRE LANE", which are clearly visible from a vehicle, or (3) by a red curb or red paint on the edge of the roadway upon which is clearly marked the words "FIRE LANE". Signs and markings shall not be obstructed, and shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4.1. Traffic calming devices. Traffic calming devices are prohibited unless approved by the *fire code official*. Traffic calming devices shall not be installed on designated fire apparatus response routes. When approved, traffic calming devices shall be installed in accordance with Menlo Park Fire District's "Traffic Calming Devices" Standard, which includes a map of designated response routes and installation requirements.

505 Premises Identification

505.1 Address identification. New and existing buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Said numbers shall be either internally or externally illuminated (lighted) from dusk to dawn in all new construction, or with *substantial alterations* or repairs of existing structures. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Commercial structures 20 to 50 feet in height shall have the address a minimum of 8 inches high with lettering a minimum of 1 inch stroke wide. When the structure is more than 50 feet in height the address shall be a minimum of 12 inches high with lettering a minimum of 2.5 inch stroke wide.

505.1(a) Addressing of Multi-Tenant Buildings. When a structure has individual tenant spaces, numbers or letters shall be placed on the interior doors on all occupancies inside the building. Size of the numbers shall be a minimum of 4 inches high with lettering not less than ¼ inch stroke width on a contrasting background. Said addresses or numbers shall be posted at a height not greater than 5 feet, 6 inches above the finished floor. Directional address numbers or letters shall be provided.

505.1(b) Rear Addressing. When required by the fire code official, 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 any fire apparatus road at the back of a property. Number stroke and size shall comply with Section 505.

506 Key Boxes

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. Key boxes shall be mounted on the building near the main entrance and shall be located a minimum of 60 inches and not higher than 72 inches above the finished floor, in a location approved by the fire code official. Additional key boxes may be required at rear entrances to buildings. A decal shall be provided to the fire

code official for placement. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official.

506.2.1 Keys. The key(s) provided in the key box shall be a master key to all spaces including multi-tenant spaces. Additional keys shall be included for elevator control, fire alarm control panels and fire sprinkler control valve access. Except for electronic locks that release upon loss of power, electronic card keys and codes may not be utilized as a substitute for manual keys.

511 Firefighter Air Systems

511 Firefighter Air Systems. When required by the fire code official, a firefighter air system shall be installed in new buildings four or more stories in height and in existing buildings greater than 75 feet in height, not later than December 31, 2005, and any underground structures that are two or more floors below grade. Installation shall be in accordance with this ordinance and Menlo Park Fire Protection District Standard, "Firefighter Air Systems," see Chapter 80.

Exception: R-3 Occupancies.

CHAPTER 6 BUILDING SERVICES AND SYSTEMS

605.11 Solar photovoltaic power systems

605.11.1 Marking. Marking is required on interior and exterior direct-current (DC) conduit, enclosures, raceways, cable assemblies, junction boxes, combiner boxes and disconnects.

Exception: Marking is not required if a ground mounted shut-off, capable of de-energizing the photovoltaic system has been installed at a location at or near the main electric panel. A ground level shut off, specific for the photovoltaic power system shall be labeled as such.

CHAPTER 9 FIRE PROTECTION SYSTEMS

901.1 Scope. The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all fire protection systems.

In addition to the requirements of Chapter 9, automatic sprinkler systems and fire alarm systems shall be installed, operated, and maintained in accordance with Menlo Park Fire Protection District Standards referenced in Chapter 80 of this ordinance. If there is a

conflict between Menlo Park Fire District’s local requirements and other provisions of the Code, the more restrictive requirement shall apply.

903 Automatic Sprinkler Systems

City of Menlo Park

903.2 Where required. Approved automatic sprinkler systems shall be installed in accordance with the then current edition of NFPA 13 (“Standard For the Installation of Sprinkler Systems,” published by the National Fire Protection Association) throughout all buildings and structures in the District except as follows:

~~i. Automatic sprinkler systems shall not be required in detached, single family residences. This item is preempted by 2011 State legislation.~~

ii. Automatic sprinkler systems shall not be required in new buildings or structures if the new building or structure:

- a. Has a total floor area of 5,000 square feet or less, regardless of whether area separation walls exist; and
- b. Is less than four stories in height; and
- c. Has a height of forty feet or less measured from the point of lowest access to the building or structure by District emergency vehicles.

City of East Palo Alto, Town of Atherton, County of San Mateo Areas

903.2 Where required. Approved automatic fire sprinkler systems in new buildings and structures shall be provided in all Group A, B, E, F, S, and U Occupancies greater than 1,000 square feet and in locations described in this section.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 712 of the *International Building Code*, or both.

Approved automatic fire sprinkler system in existing buildings and structures shall be provided as described in section 903.6.

Sections and Subsections of 903.2.1, 903.2.3, 903.2.4, 903.2.7 and 903.2.9, 903.2.10 of Chapter 9 of the code are deleted in their entirety.

903.2.7 Group M. Automatic fire sprinkler systems shall be provided throughout buildings containing a Group M occupancy with a fire area greater than 1,000 square feet and any Group M occupancy used for the display and sale of upholstered furniture.

903.2.7.1 High-piled storage. To remain unchanged

903.2.11 Specific building areas and hazards. In all occupancies an *automatic sprinkler system* shall be installed for building design or hazards in the locations set forth in sections 903.2.11.1 through 903.2.11.6.

903.2.11.1 Stories and basements without openings. Automatic sprinkler systems shall be installed in every building where the basement fire area exceeds 250 square feet.

Exception: For the Town of Atherton, any new building or structure having a basement shall be provided with an automatic fire sprinkler system throughout the building or structure, regardless of the building or structure's square footage.

Automatic sprinkler systems shall be installed in every story of all buildings where the floor area exceeds 1000 square feet and where the following type of exterior wall opening is not provided.

1. Openings entirely above the adjoining ground level totaling at least 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on at least one side.

Section 903.2.11.1.3 of Chapter 9 of the Code is deleted.

Section 903.2.11.3 of Chapter 9 of the Code is deleted.

903.3.1.2 NFPA 13R sprinkler systems. Where in the code a NFPA 13R sprinkler system is allowed, a NFPA 13 sprinkler system shall be used.

903.3.1.3 NFPA 13D sprinkler systems. *Automatic sprinkler systems* installed in one and two-family *dwelling*s, Group R-3 and R-4 congregate living facilities and *townhouses* shall be permitted to be installed throughout in accordance with NFPA 13D. Automatic sprinkler systems installed in one and two-family dwellings shall be installed throughout the occupancy in accordance with NFPA 13D and the Menlo Park Fire District Standard, "Fire Protection Systems, Installation of Residential Sprinklers." See also Chapter 80 of this ordinance.

903.3.3 Obstructed locations. Automatic sprinklers shall be installed with due regard to obstructions that will delay activation or obstruct the water distribution pattern. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands, laboratory fume hoods, bio safety cabinets that use flammable liquids in processes, or equipment that exceeds 4 feet (1219 mm) in width. Not less than a 3-foot (914 mm)

clearance shall be maintained between automatic sprinklers and the top of piles of combustible fibers. Sprinklers shall be provided in all areas including combustible or noncombustible concealed spaces, 6 inches or more.

Exception: 1. Combustible or noncombustible concealed spaces if the building owner and the fire code official agree in writing that combustible or noncombustible concealed spaces, 6 inch or less are unlikely to change in the future.

2. Kitchen equipment under exhaust hoods protected with a fire-extinguishing system in accordance with Section 904.

903.3.8 Partial Systems in new buildings or structures. Unless approved in writing by the fire code official, automatic fire sprinkler systems that only protect a portion of the building shall not be allowed.

903.6 Where required in existing buildings and structures. An *automatic sprinkler system* shall be provided in existing buildings and structures where required in Chapter 11 or when improvements are conducted in accordance with this section.

903.6.1 Where required due to improvements to buildings and structures. The provisions of this section are intended to provide a reasonable degree of fire safety in existing structures by requiring installation of an automatic fire-extinguishing system.

City of Menlo Park

903.6.1.1 Where Required. Automatic sprinkler systems shall be required in existing buildings or structures when the cost or value of the improvements made to the premises as a result of one or more improvement projects exceeds 50% of the assessed valuation of the building or structure, as of the effective date of the adoption of Menlo Park Fire District Ordinance No. 11, which was passed and adopted on May 14, 1984; and in no case shall automatic sprinkler systems be required in any existing building or structure, if pursuant to Section 903.2 Subparagraph ii. above, such systems would not be required in a new building or structure of the same size and configuration as the existing building or structure in question.

City of East Palo Alto, Town of Atherton, and County of San Mateo Areas

903.6.1.1 Where Required. All existing buildings and structures, regardless of type of occupancy or area, shall be provided with an automatic fire sprinkler system when any of the following conditions occur:

(A) Alterations or additions that exceed 50% of the existing *gross floor area* of the building. Alterations or additions shall accrue over any 10 year time period. Exception: Buildings or structures less than 1,000 square feet.

(B) When a change in occupancy classification, as defined within the Building Code, results in an increased fire hazard or risk due to business operations and/or number of occupants permitted in the building.

(C) When an existing occupancy constructs a basement that is 250 square feet or larger, a fire sprinkler system shall be provided throughout the basement and the rest of the building or structure.

Exception: For the Town of Atherton, when an existing occupancy constructs a basement of any size an automatic fire sprinkler system shall be provided throughout the basement and the rest of the building or structure.

All Areas of Menlo Park Fire District

903.6.1.2 Partial Systems in existing buildings and structures. Unless approved in writing by the fire code official, automatic fire sprinkler systems that only protect a portion of the building shall not be allowed.

907 Fire Alarm and Detection Systems

907.2 Where required—new buildings and structures. An *approved* fire alarm system installed in accordance with the provisions of this code, NFPA 72, and Menlo Park Fire Protection District Standards (see Chapter 80) shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code. Multiple fire alarm systems within a single protected premises shall not be permitted.

A minimum of one manual fire alarm box shall be provided in an *approved* location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions: 1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.

2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the *fire code official* to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is accessible to the public.

907.7 Acceptance tests and completion. Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested in accordance with NFPA 72. Fire alarms systems in commercial structures shall obtain a UL Certificate for the system prior to final inspection.

907.9 Where required in existing buildings and structures. An *approved* fire alarm system shall be provided in existing buildings and structures where required in Chapter 11. Installation of such systems shall be in accordance with NFPA 72 and Menlo Park Fire Protection District Standards (see Chapter 80). When an alteration to any existing building or structure requires an upgrade or new fire alarm system, multiple fire alarm systems within a single protected premises shall not be permitted.

CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

5704 Storage

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by local law. See the Planning Department for the City of Menlo Park, Town of Atherton, City of East Palo Alto or the County of San Mateo for the zones in which such storage is prohibited.

5706 Special Operations

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by law. See the Planning Department for the City of Menlo Park, Town of Atherton, City of East Palo Alto or the County of San Mateo for the zones in which such storage is prohibited.

CHAPTER 58 FLAMMABLE CRYOGENIC FLUIDS

5806 Flammable Cryogenic Fluids

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by local law. See the Planning Department for the City of Menlo Park, Town of Atherton, City of East Palo Alto or the County of San Mateo for the zones in which such storage is prohibited.

CHAPTER 61 LIQUIFIED PETROLEUM GASES

6104 Location of LP-Gas Containers

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L). See the Planning Department for the City of Menlo Park, Town of Atherton, City of East Palo Alto or the County of San Mateo for the zones in which such storage is prohibited.

CHAPTER 80 REFERENCED STANDARDS

The following additional local Standards are added to this Chapter:

Designation and Marking of Fire Lanes. Installation and placement of signs, markings and designating fire lanes, shall be in accordance with Menlo Park Fire Protection District Standard, “Fire Lane Requirements”. See also Appendix D and the Menlo Park Fire Protection District Standard, “Private Roads and Driveways”, for roadway specifications.

Fire Alarm and Detection Systems. Installation of fire alarm and detection systems shall be in accordance with Section 907 and the Menlo Park Fire District Standard, “Standard for the Installation of Fire Alarm and Detection Systems.”

Fire Sprinkler Systems. Installation of fire sprinkler systems shall be in accordance with Section 903 and the Menlo Park Fire District Standard, “Fire Protection Systems, Installation of Fire Sprinkler Systems”.

Fire Sprinkler Systems, Residential. Installation of residential fire sprinkler systems shall be in accordance with Section 903 and the Menlo Park Fire District Standard, “Fire Protection Systems, Installation of Residential Sprinklers”.

Firefighter Air Systems. When required by Section 512 of this ordinance, the installation of a Firefighter Air System shall be in accordance with the Menlo Park Fire District Standard, “Section 512 Firefighter Air Systems”.

Private Roads and Driveways. Installation of private roads and driveways shall be in accordance with Menlo Park Fire Protection District Standard “Private Roads and Driveways”. See also Appendix D and the Menlo Park Fire Protection District Standard, “Fire Lane Requirements”, for required signs.

Public Assemblages and Events. Carnivals, Fairs, Exhibits and Trade Shows shall be in accordance with the Menlo Park Fire Protection District Standard, “Requirements to Conduct Public Assemblages and Events”.

Traffic Calming Devices. The installation of any traffic calming device shall be in accordance with Federal, State, and County guidelines and the requirements set forth in Section 503 of the fire code and the Menlo Park Fire Protection District Standard, “Traffic Calming Devices”.

Underground Water Piping. Installation of underground water supply piping for fire suppression use shall be in accordance with the Menlo Park Fire District Standard, “Underground Standards”.

Water Supplies. Basic requirements for fire hydrants and their locations shall be in accordance with Menlo Park Fire District Standard, “Water Supplies, Fire Hydrants.”

APPENDIX A BOARD OF APPEALS

Menlo Park Fire Protection District shall omit Appendix A from the code. See Chapter 1, Section 108.

APPENDIX D FIRE APPARATUS ACCESS ROADS

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Menlo Park Fire Protection District Standard, “Fire Lane Requirements”, see Chapter 80. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (45mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

D103.7 Traffic Signal Control Devices. When a government agency requires an Encroachment Permit at any intersection and new or existing traffic signals are involved, the traffic signals shall be provided with a traffic signal control device that is operated from the fire apparatus.

Section 2: SEVERABILITY

If any section, subsection, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Directors of the Menlo Park Fire Protection District hereby declares that it would have adopted this ordinance and each section, subsection sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more section, subsection, sentence, clause, phrase or portion may be declared invalid or unconstitutional.

Section 3: DATE OF EFFECT:

Pursuant to Section 36937 of the Government Code of the State of California, this ordinance shall take effect and be in full force and affect thirty (30) days after its final passage.

Section 4: PUBLIC POSTING:

This ordinance shall be posted on the bulletin boards at the following three public places (1) Front Door of the Menlo Park Fire Protection District; (2) Bulletin Board in Front of the Classroom at the Menlo Park Fire Protections District; (3) Menlo Park Fire District Website.

Introduced the 20th day of August 2013, public hearing was held on September 17, 2013.

PASSED AND ADOPTED as an Ordinance of the Menlo Park Fire Protection District at a regular meeting thereof held on the 17th day of September 2013.

AYES: NACHTSHEIM, NELSON, IANSON, SILANO, AND KIRALY

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

Stephen Nachtsheim, President

ATTEST:

Michelle Radcliffe, Clerk of the Board