

MENLO PARK FIRE PROTECTION DISTRICT
ORDINANCE NO. 46-2019
DISTRICT FIRE PREVENTION CODE
For the unincorporated San Mateo County areas
served by the Menlo Park Fire Protection District

AN ORDINANCE OF THE MENLO PARK FIRE PROTECTION DISTRICT ADOPTING THE
2018 EDITION OF THE INTERNATIONAL FIRE CODE WITH THE 2019 CALIFORNIA FIRE
CODE AND LOCAL AMENDMENTS.

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 safety than those set forth in the CBSC; and

WHEREAS, the Menlo Park Fire Protection District (the “District”) now desires to adopt by ordinance an amended and restated District Fire Prevention Code that makes local amendments to the 2018 Edition of the International Fire Code with California Amendments, and

WHEREAS, 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.

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

SECTION 1: LOCAL CLIMATIC GEOLOGICAL AND TOPOGRAPHICAL CONDITIONS

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 below changes or modifications are needed and are reasonably necessary because of certain local climatic, geological and topographic conditions as follows:

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 the San Francisco Bay depression, and from intermittent sea water inundation occurring 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 purveyors and water mains in residential and commercial 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 503, by creating Standards for driveways and private roadways that includes minimum driveway widths, fire apparatus turnaround specifications, and minimum vertical clearances. Areas in the District have older narrow roads, less than 20 feet wide and unimproved sidewalks or gutters, and allow parking on both sides. Parking is a regional issue which plagues the streets causing streets to be narrow allowing only one vehicle to pass. Regional traffic has increased causing neighborhoods to be flooded with increased pass through traffic, reducing alternative emergency response routes. Neighborhoods are increasing traffic control measure installations which also increase emergency response times. 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 Romac 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, un-sprinklered 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. From 2013 to July 2016, 40% of dollar loss occurred during commute traffic time. A \$2,561,485 loss of \$6,389,086 during this time, 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 protection 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 an automatic fire sprinkler protection system 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 2: TITLE, ENFORCEMENT & RECORDKEEPING

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 "Fire Code" in these regulations.

- A. No section of the Fire Prevention Code shall impose a mandatory duty of enforcement on the Fire District, or on any officer, official, agent, employee, board, or commission thereof. Instead, if any section purports to impose a mandatory duty of enforcement, said section shall be deemed to invest the Fire District, and the appropriate officer, official, agent, employee, board, council, or commission with discretion to enforce the section, or not to enforce it.
- B. A copy of the Fire Prevention Code, as defined herein, shall be kept on file in the office of the Clerk of the Board.

SECTION 3: 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:

- A. Section 13861(h), which empowers the District to adopt ordinances;
- B. 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;

- C. Section 13862, which empowers the District to provide certain governmental services including fire protection services;
- D. 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;
- E. Section 13871(b), which provides that failure to correct or eliminate a fire or life hazard after a duly issued order is a misdemeanor;
- F. Section 13872, which empowers the District's authorized representatives to issue citations for certain violations;
- G. 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,
- H. Sections 13916, 13917, 13918 and 13919, which, among other things, empower the District's 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.

SECTION 4: ADOPTION BY REFERENCE

The 2019 California Fire Code, California Code of Regulations, Title 24, Part 9, (CFC) which adopts by reference the 2018 edition of the International Fire Code (IFC) with necessary State amendments, which prescribes regulations governing conditions to life and property from fire or explosion through building standards and non-building standards, is adopted by reference and incorporated into the District Fire Prevention Code, including Chapter 1, Division II, Appendix Chapter 4, Appendix B, Appendix C, Appendix D and Appendix H, except to the extent portions of the CFC may be added, deleted, modified or amended by Section 6 (Local Amendments) of this Code.

SECTION 5: AUTHORITY AND DUTIES OF THE BUREAU OF FIRE PREVENTION AND LIFE SAFETY

The International Fire Code and the California Fire Code, including International Fire Code Standards as adopted and amended herein, shall be enforced by the Menlo Park Fire Protection District and managed by the Bureau of Fire Prevention and Life Safety, and shall operate under the direction of the Fire Chief and the Fire Marshal of the Menlo Park Fire Protection District. Both Fire Officers shall be known as the Fire Code Officials.

SECTION 6: LOCAL AMENDMENTS, MODIFICATIONS AND DELETIONS TO THE CALIFORNIA FIRE CODE

Based upon the findings of the Board of Directors of the Menlo Park Fire Protection District regarding local climatic, topographical, and geological conditions, the following sections and/or subsections of the California Fire Code and the International Fire Code are amended or modified as set forth in this section. If a section is not referenced below, it remains unchanged.

SECTION 101 SCOPE AND GENERAL REQUIREMENTS is *amended* to read as follows:

101.1 Title. These regulations shall be known as the 2019 CALIFORNIA FIRE CODE, and with amendments adopted by the Menlo Park Fire Protection District, will be referred to herein as the “CODE,” and/or the “FIRE PREVENTION CODE.”

101.6 Standards and Guidelines Manual is *added* to read as follows:

101.6 Standards and Guidelines Manual. The Bureau of Fire Prevention and Life Safety Standards and Guidelines Manual (“Standards and Guidelines Manual”) shall serve as a supplemental instruction and interpretation manual for the Fire Prevention Code. The Standards and Guidelines Manual may be amended from time to time by the Fire Marshal.

SECTION 106 FEES is adopted and *amended* to read as follows:

106.1 The fees for the permits and other services shall be established by resolution of the Menlo Park Fire Protection District Fire Board Fee Schedule (“Fee Schedule”). The fee shall be set to cover the cost of the Fire District to review and inspect the intended activities, operations or functions.

Exception: Fees for a permit may be waived at the discretion of the Fire Chief when the work or event to be conducted is for the Town of Atherton, City of East Palo Alto, City of Menlo Park or County of San Mateo.

106.1.2 All fire permits and fire construction permits shall have a set number of inspections per permit as set forth by the Fee Schedule. Additional inspections and additional re-inspections will be billed at an hourly rate consistent with the Fee Schedule.

106.1.3 “After Hours” inspections shall be billed at a rate of one and one-half time the normal hourly rate. “After hours” inspections will be billed at a rate of four hours minimum. “After hours” inspections are defined as follows: Inspections conducted Monday – Friday, prior to 6am and after 6pm, Saturday and Sunday and observed holidays.

106.1.4 Application for “event” type permits (i.e. Pyrotechnic, Tents, Carnivals and Fairs, etc.) shall be submitted 14 days prior to the event date. Applications submitted within 13 days prior to the event date shall be charged double the regular permit rate as established by the Fee Schedule.

SECTION 109 BOARD OF APPEALS is *amended* to read as follows:

109.1 Board of Appeals. All decisions and rulings of the Fire Code Official are final and any appeals shall be made through the legal process.

SECTION 110 VIOLATIONS is *added* to read as follows:

110.4.1 Abatement of violation. In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or stop an illegal act, conduct of business or occupancy of a structure on or about any premise.

SECTION 113 SERVICE UTILITIES is *added* to read as follows:

113.1 Authority to disconnect service utilities. The fire code official shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate an immediate hazard. The fire code official shall notify the serving utility and, where possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, then the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

SECTION 202 GENERAL DEFINITIONS are amended to *add* the following:

All Weather Driving Surface. A roadway designed to carry the imposed weight loads of fire apparatus complete with all underground utilities, curbs, gutters, and a minimum surface finish of one layer of asphalt or concrete or road pavers.

Driveway. Access road from the public way to a structure that is used for public or private vehicular access, including fire and emergency apparatus.

Essential Service Facility. Shall mean that building or structure which has been designated by the local government to house facilities that are necessary for emergency operations.

Fire Code Official. The 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.

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

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 structural change 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.

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, City of Menlo Park, Town of Atherton, San Mateo County Sheriff's Department, and the California Highway Patrol.

Substantial Alteration. The renovation of any structure and/or which combined with any additions to the structure, affects a *gross floor area* which exceeds fifty percent (50%) of the existing floor area of the structure. This may include but is not limited to:

1. Removal of electricity to the building or structure.
2. Removal of water supply and /or sanitation to the building or structure
3. 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 rooms 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.

SECTION 403.12 SPECIAL REQUIREMENTS FOR PUBLIC SAFETY is *added* in its entirety.

403.12 Special requirements for public safety. Special requirements for public safety shall be in accordance with Sections 403.12.1 through 403.12.3.3.

SECTION 503 BUILDINGS AND FACILITIES is added in entirety and *amended* to read as follows:

SECTION 503.1 is *amended* to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and according to Menlo Park Fire District Fire District Policy Manual.

503.1.1 Buildings and Facilities. Every building and facility shall be accessible to Fire Department apparatus by way of all-weather access roadways prior to combustible construction. The fire apparatus access roads shall comply with the requirements of this section and extend within 150 ft. of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. The access road shall have a minimum unobstructed width of 20 ft. and shall be required to have a minimum ‘first lift’ of pavement applied which shall support the imposed load of a fire apparatus. The developer shall be required to provide the Fire Chief with a site plan showing the location, width, grades, and cross section of the proposed access roads to be used during construction. Permits shall not be issued and combustible construction shall not be allowed on the site until this site plan is reviewed and approved and stamped by the Fire Department.

Exceptions

1. The Fire Chief is authorized to increase the dimension of 150 ft. where any of the following conditions occur:
 - 1.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
 - 1.3. There are not more than two Group R-3 or Group U occupancies.
2. Where approved by the Fire Chief, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.1.2 is *added* to read as follows: Nothing in the California Fire Code shall prevent the Town or City from designating or maintaining a street as a “Fire Lane” which does not meet the requirements of a fire apparatus access road under the California Fire Code.

503.1.2 – 503.6 {CFC text not modified}

503.7 - Restrictions and requirements as specified in the California Vehicle Code shall apply to fire lanes established by this section.

SECTION 505 ADDRESS IDENTIFICATION is *amended* to read as follows:

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 numerals or alphabet letters. Said numbers shall be either internally or externally illuminated in all new construction. Numbers shall be as follows:

1. Minimum of one-half inch (1/2") stroke by eight inches (8") high.
Exception: Single-Family dwelling minimum of one-half inch (1/2") stroke by four inches (4") high.
2. When the structure is more than fifty (50) feet from the street or fire apparatus access, a minimum of one-inch (1") stroke by twelve inches (12") high is required.

SECTION 505.1.1 Multi-tenant buildings is *added* to read as follows:

505.1.1 Multi -Tenant Buildings. Numbers or letters shall be designated on all occupancies within a building. Size shall be one-half inch (1/2") stroke by four inches (4") high and on a contrasting background. Directional address numbers or letters shall be provided. Said addresses or numbers shall be posted at a height no greater than 5 feet, 6 inches (5' 6") above the finished floor and shall be either internally or externally illuminated in all new construction.

SECTION 505.1.2 Rear Addressing is *added* to read as follows:

505.1.2 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 the fire apparatus road at the back of a property or where rear parking lots or alleys provide an acceptable vehicular access. Number stroke and size shall comply with 505.1.

SECTION 506 KEY BOXES is *amended* to read as follows:

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. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. Where a new gate or barrier is installed on a fire access roadway, the fire department shall have emergency access. Gates or barriers shall have a Knox® key switch.

SECTION 506.1.1.1 Key Box contents requirements is *added* to read as follows:

506.1.1.1 Key box contents requirements. The keys provided shall be a master key to all spaces including multi-tenant spaces. Additional keys shall be included for card access, elevator control, fire alarm control panels, and fire sprinkler control valve access.

Exceptions:

1. Multi-tenant spaces which provide a key box for each tenant and installed per Section 506.1.
2. Electronic card keys and codes may not be utilized as a substitute for manual keys.

SECTION 510.3 Emergency Responder Radio Coverage Permit required is *added*

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS is *amended* as follows:

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 subsections 903.2.2, 903.2.5, 903.2.6, 903.2.8, 903.2.11, 903.2.12. Sections and Subsections of 903.2.1, 903.2.3, 903.2.4, 903.2.9, 903.2.10, and 903.2.11.3 of Chapter 9 of the code are deleted in their entirety.

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

Exceptions:

1. Independent solar carports or structures, non-combustible carports or shade structures.
2. Canopies over motor vehicle fuel dispensing facilities when constructed in accordance with Section 406.7.2 of the 2019 California Building Code.

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 {CFC text not modified}

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.

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.

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.

903.3.3 Obstructed locations. Automatic sprinklers shall be installed with due regard to obstructions that will delay activation or obstruct the water distribution pattern. Automatic fire 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.

Exceptions:

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.

903.3.10 Partial Systems in new buildings or structures. 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.

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:

1. Where the *gross floor area* of a proposed alteration, addition, or combination of alterations and additions and the *gross floor area* of any alterations, additions, or combination of alterations and additions exceeds 50% of the existing *gross floor area* of the building or 50% of the existing *gross floor area* of the building for R-3 occupancies.

Exception: Buildings or structures less than 1,000 square feet.

2. 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.

3. 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.

903.6.1.2 Partial Systems in existing buildings and structures. Automatic fire sprinkler systems that only protect a portion of the building shall not be allowed.

Exception: A phased installation of an automatic fire sprinkler system may be as an alternate materials and method application, as prescribed in Section 104.9, when different tenant spaces in the same building are occupied, and the installation of a fire sprinkler system may disrupt business. Not to exceed five (5) years for final completion from initial permit date.

907 FIRE ALARM AND DETECTION SYSTEMS is *amended* to read as follows:

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. When an alteration to any existing building or structure requires an upgrade or new fire alarm system, multiple fire alarm systems shall be approved by the fire code official.

SECTION 901.6.3 RECORDS REPORTING is *added* to read as follows:

901.6.3.2 Records Reporting. Fire detection, alarm and extinguishing systems, shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Non-required fire protection systems and equipment shall be inspected, tested, and maintained or removed. All inspection, testing and maintenance reports shall be forwarded to the Fire Department using electronic media. No paper (hard copy) reports shall be permitted.

Appendix B of the 2019 California Fire Code is *amended* to read as follows:

Table B105.1(2) {CFC text not modified}

Table B105.2

TABLE B105.2 REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOMES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the California Fire Code	50% of the value in Table B105.1(2) ^a	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the California Fire Code	50% of the value in Table B105.1(2) ^b	Duration in Table B105.1(2) at the reduced flow rate
For SI: 1 gallon per minute = 3.785L/m a. The reduced fire flow shall not be less than 1,000 gallons per minute b. The reduced fire flow shall not be less than 1,500 gallons per minute		

B105.2 – B106 {CFC text not modified}

Appendix L REQUIREMENTS FOR PIPED AIR SCBA REFILLING SYSTEMS is *added* as follows:

For buildings more than 10 stories in height, shall install Firefighter Air Replenishment System per Menlo Park Fire Protection District Standards and Guidelines Manual.

SECTION 7: DATE OF EFFECT

This ordinance shall take effect and be in full force on January 1, 2020.

SECTION 8: PUBLIC POSTING

This ordinance shall be publicly posted in the following 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, and published pursuant to law

