Exhibit "A"
2024 Internation Fire Code, As Amended

Section 1, Adoptionof the International Fire Code, 2024 Edition, as amended

Pursuant to the Authority conferred by the District and the laws of the State of Colorado, there is hereby adopted by the District, for the purposes of safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises and conditions affecting the safety of firefighters and emergency responders during emergency operations, International Fire Code, 2024 Edition, as promulgated by the International Code Council, being particularly the 2024 Editi on thereof, and the whole thereof including Chapters 1 through 68 in the 2024 International Fire Cede, inclusive, and appendices, save except as any portion of the code or appendices is hereinafter deleted, modified or amended. Not less than two (2) copies of this fire code shall be on file in the office of the Fire Marshal and may be inspected at regular business hours and purchased from the District at a price not to exceed ninety-seven dollars ($97.00) per copy. The provisions of this fire code shall be controlling within the boundaries of the District.

101.1 Amend this section to read **Title**. These regulations shall be known as the Fire Code of the Wellington Fire Protection District, hereinafter referred to as "this code".

101.2.1 Amend this section to read **Appendices**. Provisions in the appendices shall not apply unless specifically adopted. Appendices shall hereby be adopted as outlined in Table101.2.1:

Table 101.2.1- Appendices Adoption Status

APPENDIX	TITLE	STATUS
A	Board of Appeals	Adopted
B	Fire-flow Requirements for Buildings	Adopted, with amendments
C	Fire Hydrant Locations and Distribution	Adopted, with amendments
D	Fire Apparatus Access Roads	Adopted, with amendments
E	Hazard Categories	Adopted
F	Hazard Ranking	Adopted
G	Cryogenic Fluids—Weights and Volume Equivalents	Adopted
H	Hazardous Materials Management Plan (HMMP)	Adopted
I	Fire Protection Systems—Non-compliant Conditions	Adopted

(Cont) Table 101.2.1- Appendices Adoption Status		
J	Building Information Sign	Not Adopted
K	Construction Requirements for Existing Ambulatory Care Facilities	Not Adopted
L	Requirements for Fire Fighter Air Replenishment Systems	Not Adopted
M	High-rise Buildings—Retroactive Automatic Sprinkler Requirements	Not Adopted
N	Indoor Trade Shows and Exhibitions	Adopted
O	Valet Trash And Recycling Collection In Group R-2 Occupancies	Adopted

102.13 Add the following section **Wildland-urban interface areas**. The design and construction of new structures located within wildland-urban interface areas shall comply with the *Colorado Wildfire Resiliency Code.*

103.1 Amend this section to read **Creation of agency**. The Wellington Fire Protection District is hereby created and the official in charge thereof shall be known as the *fire code official*. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

104.8 Amend this section to read **Liability**. The fire code official, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or a mission or by reason of an act or mission in the discharge of official duties, unless such act or a mission is willful and wanton, as provided in the Colorado Governmental Immunity Act, Section 24-10-101, et seq., C.R.S.

104.8.1 Amend this section to read **Legal defense**. Any suit or criminal complaint instituted against any officer or employee because of an actor mission performed by the officer employee in the lawful discharge of duties an under the provisions of this code, unless such act or a mission is willful and wanton, as provided in the Colorado Governmental Immunity Act, Section 24-10-101, et seq., C.R.S. Shall be defended by a legal representative of the jurisdiction until the final termination of the proceedings. The fire code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code: and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of act or omission in the performance of official duties in connection therewith.

112.1 Amend this section to read **Board of Appeals**. 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 to be known as the fire board of appeals. The members of the Welling ton Fire Protection District Board of Directors shall appoint and constitute the fire board of appeals as necessary. The *fire code official* shall be an ex officio member of

said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business in shall render all decisions and findings in writing to the appeal went with a duplicate copy to the *fire code official*. Application for an appeal and all processes and procedures for an appeal shall be as stipulated in 112.1.1.

112.1.1 Add the following section **Procedures**. To request a hearing before the board of appeals, the applicant shall file a request in writing to the fire chief. The fire chief shall arrange for the board of appeals to meet within ten (10) working days from the receipt of the request. All applicable fees as stated in the fire district fee schedule shall be paid at the time the written request is made.

113.4 Amend this section to read **Violation penalties**. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the *approved construction documents* or directive of the *fire code official*, or of a permit or certificate used under the provisions of this code, shall be guilty of a misdemeanor, and upon conviction shall be subject to the penalties, costs and orders provided by the local enforcement agency and as determined by the District. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

113.5 Add this section in its entirety **Work commencing before permit issuance**. In addition to penalty set forth in section 113.4, any person or firm who, before obtaining the necessary permit(s), commences any construction of, or work on, a building, structure, fire and life safety system(s)that is not otherwise exempted from obtaining a permit, shall be subject to a processing and penalty fee in addition to the standard prescribed permit fee. Such additional fine shall be equal to the permit fee, except that such fine shall not be less than $50 or more than $1000 for the first such violation. A person or firm committing the same violation repeatedly is subject to processing and penalty fees equal to double the amount of the permit be or double the amount of the preceding violation, whichever is greater, for every same such subsequent violation committed thereafter within 180-day period.

307.2.2 Amend this section in its entirety **Time and Atmospheric Restrictions**. Open burning shall only be performed when time and atmospheric conditions comply with the limits set forth in the Open Burning Permit.

307.4.1 Amend this section in its entirety **Bonfires**. A *bonfire* shall not be conducted within 100 (30m) of a structure or combustible material unless the fires is contained in a barbecue pit. Conditions that could cause a fire to spread within 100 ft (30m) of a structure shall be eliminated prior to ignition.

307.4.1.1 Amend this section in its entirety **Bonfire Size**. The fuel package pile for a *bonfire* it must be approved prior to ignition and shall not exceed 10 feet in diameter in 8 feet in height and less approved by the *fire code official*. Based on atmospheric conditions, location, adjacent structures, combustible materials or wildland fire danger rating, smaller fuel package piles may be required period fuels for a bonfire shall be clean, dry, untreated wood products only. Fuel shall not be added to the bonfire once it is ignited without prior approval of the *fire code official*. The use of Class I flammable liquids is prohibited. Class II combustible liquids may only be used prior to ignition and only in accordance with an approved ignition plan.

307.4.3 Amend this section in its entirety **Outdoor Fireplaces**. Outdoor fireplaces shall be used in accordance with the manufacturer's instructions. Outdoor fireplaces shall not be placed closer to combustibles than stated in the manufacturer's instructions and if the manufacturer's instructions are not available, or do not establish a distance, they shall not be operated within 15 feet of a structure or combustible material. Outdoor fireplaces shall not be operated underneath the structure of any type.

308.1.7 Amend this section to read **Sky lanterns.** A person shall not release or cause to be released a tethered or an untethered sky lantern.

503.1 Amend this section in its entirety **Where required**. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1 through 503.1.3 and Appendix D as amended.

503.2 Amend this section in its entirety **Specifications**. Fire apparatus access roads shall be installed an arranged in accordance with Sections 503,2.1 through 503.2.8 and Appendix D as amended.

503.2.1 Amend this section in its entirety **Dimensions**. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for proved security gates in accordance with section 503.6, and in unobstructed vertical clearance of not less than 14 feet.

507.5 Amend this section in its entirety **Fire hydrant systems**. Fire hydrant system shall comply with sections 507.5.1 through 507.5.6 and Appendix C as amended.

606.5 Add this section in its entirety. **Solid-Fuel Fired Appliances**. Solid fuel commercial cooking appliances shall comply with applicable provisions of NFPA 96.

701.2.2 Add section to read **Fire-resistance-rated labeling**. The fire resistance rating of the construction identified in Section 701.2 shall be marked in an approved manner on the following fire resistance rated construction.

701.3.1 Add section to read **Smoke barriers labeling**. The fire-resistance rating and smoke-resistant characteristics of smoke barriers shall be marked in an approved manner on the rated construction feature.

903.2 Amend this section to read **Where required**. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Existing buildings undergoing additions, alterations or remodel work when any resulting aggregate *fire area* of the building exceeds the area thresholds described in Sections 903.2.1 through 903.2.12. (Exception remains)

903.2.1 Amend this section to read **Group A.** An automatic sprinkler system shall be provided throughout buildings as Group A occupancies as provided in this section.

903.2.1.1 Amend this section to read **Group A-1**. An automatic sprinkler system shall be provided throughout buildings containing Group A-1 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 6,000 ft2 (557 m2).
2. The *fire area* has an occupant load of 50 or more.

903.2.1.2 Amend this section to read **Group A-2**. An automatic sprinkler system shall be provided throughout buildings containing Group A-2 occupancies

1. The *fire area* exceeds 5,000 ft2 (464 m2).
2. The *fire area* has an occupant load of 50 or more.

903.2.1.3 Amend this section to read **Group A-3**. An automatic sprinkler system shall be provided throughout buildings containing Group A- 3 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 6,000 ft2 (557 m2).
2. The *fire area* has an occupant load of 50 or more.

903.2.1.4 Amend this section to read **Group A-4.** An automatic sprinkler system shall be provided throughout buildings containing Group A-4 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 6,000 ft2 (557 m2).
2. The *fire area* has an occupant load of 50 or more.

903.2.1.6 Amend this section to read **Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding 50 for Group A occupancies, an automatic sprinkler system shall be provided throughout buildings in accordance with Section 903.3.1.1 or 903.3.1.2.

903.2.1.7 Amend this section to read **Multiple fire areas.** An automatic sprinkler system shall be provided where multiple *fire areas* of Group A-1, A-2, A-3 or A 4 occupancies share exit or exit access components and the combined occupant load of these *fire areas* is 50 or more.

903.2.2 Amend this section to read **Group B.** An automatic sprinkler system shall be provided for Group B occupancies as follows:

1. Throughout all Group B *fire areas* greater than 6,000 ft2 (557 m2) in area.
2. Where the combined *fire areas* of Group B on all floors, including mezzanines, is greater than 6,000 ft^2 (577 m^2).

903.2.2.1 Amend this section to read **Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire building containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

903.2.3 Amend this section to read **Group E.** An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E *fire areas* greater than 6,000 ft2 (557 m2) in area.
2. The Group E *fire area* is located on a floor other than a level of exit discharge serving such occupancies.
3. The Group E *fire area* has an occupant load of 50 or more.

903.2.4 Amend this section to read **All Group F-1.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F—1- occupancy where one of the following conditions exists:

1. The combined area of all Group F-1 *fire areas*, including any mezzanines exceeds 6,000 ft2 (557 m2).
2. A Group F-1 *fire area* is located more than two stories above grade plane.
3. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 ft2 (232 m2).

903.2.6 Amend this section to read **Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I *fire area*

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
2. An automatic sprinkler system is not required where Group I-4 daycare facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.

903.2.7 Amend this section to read **Group M**. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 6,000 ft2 (557 m2).
2. A Group M *fire area* is located more than two stories above grade plane.

903.2.9 Amend this section to read **Group S-1**. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. The combined area of all Group S 1 fire areas on all floors, including any mezzanines, exceeds 6,000 ft2(557 m2).
2. A Group S-1 *fire area* is located more than two stories above grade plane.
3. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 ft2 (464 m2).
4. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 ft2 (46.4 m2).

903.2.9.1 Amend this section to read **Repair garages.** An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown.

1. Buildings with a fire area containing a repair garage exceeding 6,000 ft2 (557 m2).
2, Buildings with repair garages servicing vehicles parked in basements.
3. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 ft2 (464 m2).
4. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 ft2 (46.4 m2).

903.2.9.2 Amend this section to read **Bulk storage of tires.** Buildings and structures where the area for the storage of tires exceeds 10,000 ft^3 (566 283 m^3) shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

903.2.10 Amend this section to read **Group S-2 enclosed parking garages.** An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the International Building Code where either of the following conditions exists:

1. Where the fire area of the enclosed parking garage exceeds 6,000 ft2 (557 m2).
2. Where the enclosed parking garage is located beneath other groups.
   Exception: Enclosed parking garages located beneath Group R 3 occupancies.
3. Where the fire area of the open parking garage exceeds 6,000 ft2 (557 m2).

903.2.13 Add a new section to read **Mixed Occupancies.** An automatic sprinkler system shall be provided throughout all buildings containing mixed occupancies where one of the following conditions exists:

1. The *fire area* exceeds 6,000 ft^2 (577 m^2).
2. Where the combined *fire areas* of mixed occupancies on all floors including mezzanines and basements is greater than 6,000 ft^2 (577 m^2).

903.2.14 Add a new section to read **Buildings Constructed under the International Residential Code.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be provided throughout all multiple (three or more) attached single-family dwellings (townhouses), complying with the requirements of the International Residential Code.

Exception:
Unless otherwise required by more restrictive local codes, policies, amendments, ordinances, or plat note.

903.3.1.3 Amend this section to read **NFPA 13D sprinkler systems.** Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D and local codes, ordinances, and policies.

903.3.1.4 Add section to read **Core and shell buildings**. Automatic fire sprinkler systems in buildings constructed to house future tenant spaces that are not assigned an occupancy shall have minimum hazard classification of Ordinary Hazard 2 in accordance with NFPA 13.

903.4 Amend this section to read **Sprinkler system supervision and alarms.** Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems valves, pumps, and tanks in one- and two family dwellings.
2. Jockey pump control valves that are sealed or locked in the open position.
3. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
4. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

907.8.5 Amend this section to add **Excessive Fire Alarms**. An excessive number of false alarms shall be defined as two (2) alarm activations for a fire alarm system within a 60-day period provided that any such activations are not the result of a cause reasonably beyond the control of the owner, tenant or operator of the building. In the event of an excessive number of false alarms, the fire code official may order the building owner, tenant or operator of the building, or party responsible for the building to take reasonable actions necessary to prevent false alarms. These actions may include repair or replacement of

the faulty alarm components, addition of tamper proof devices, modification of system design, and repair of other building components which affect alarm system performance. The fire code official may also require the building owner, tenant or operator or party responsible for the building to obtain an approved maintenance contract with a qualified fire alarm maintenance technician as required by NFPA 72 to provide continuous maintenance service of the system.

1103.5.3 Amend this section to read. **Group I-2, Condition 2.** In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2, Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopting ordinance. System to be installed as directed by the *fire code official*.

5704.2.9.6.1 Amend this section to read. **Locations where above ground tanks are prohibited.** Storage of Class I and II liquids in above ground tanks I said buildings is prohibited in accordance with local land use code.

5704.3.3 Amend this section to read. **Indoor storage.** Storage of flammable and combustible liquid inside buildings in containers or portable tank shall be in accordance with sections 5704.4.4.1 through 5704.3.3.10 unless otherwise required by more restrictive local codes, policies, amendments, ordinances, or plat.

Appendix B is deleted in its entirety and readopted to read as follows

APPENDIX B
FIRE-FLOW REQUIREMENTS FOR BUILDINGS

SECTION B101 GENERAL

B101.1 Scope. The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings.

SECTION B102 DEFINITIONS

B102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows.

FIRE-FLOW. The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, that is available for firefighting.

FIRE-FLOW CALCULATION AREA The floor area, in square feet (m^2), used to determine the required fire flow.

SECTION B103 MODIFICATIONS

B103.1 Decreases. The fire chief is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

B103.2 Increases. The fire chief is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.

B103.3 Areas without water supply systems. For information regarding water supplies for fire- fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize NFPA 1142 or the *International Wildland- Urban Interface Code.*

SECTION B104 FIRE-FLOW CALCULATION AREA

B104.1 General. The fire-flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, except as modified in Section B104.3.

B104.2 Area separation. Portions of buildings which are separated by fire walls without openings,

constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

B104.3 Type 1A and Type 1B construction. The fire-flow calculation area of buildings constructed of Type 1A and Type 1B construction shall be the area of the three largest successive floors.

Exception:
Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.

SECTION B105 FIRE-FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One- and two-family dwellings. The minimum fire-flow requirements for one- and two- family dwellings shall be 1,000 gallons per minute in urban areas and 500 gallons per minute in rural areas.

Exception:
A reduction in required fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.

B105.2 Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.

Table B105

APPLICATION	FIRE FLOW REQUIREMENTS (gpm)	SPACING BETWEEN HYDRANTS (feet)[a,b,c]	MAXIMUM DISTANCE FROM THE CLOSEST POINT ON A BUILDING TO A HYDRANT (feet)[e]
Commercial/ Multifamily	1,500	600	300[d]
One- & Two-Family Dwelling - Urban	1,000	800	400
One- & Two-Family Dwelling - Rural	500	800	400

a) Reduce by 100 feet for dead-end streets or roads.
b) Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or are arterial streets, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c) Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d) For buildings equipped with a standpipe, see Section 507.5.1.1.

B105. Water supply for buildings equipped with an automatic sprinkler system. For buildings equipped with an approved automatic sprinkler system, the water supply shall be capable of providing the greater of:

1. The automatic sprinkler system demand, including hose stream allowance.
2. The required fire-flow.

Appendix C is deleted in its entirety and readopted to read as follows:

APPENDIX C
FIRE HYDRANT LOCATIONS AND DISTRIBUTION

SECTION C101 GENERAL

C101.1 Scope. Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed or moved into the jurisdiction.

SECTION C102 LOCATION

C102.1 Fire hydrant locations. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets.

SECTION C103 NUMBER OF FIRE HYDRANTS

C103.1 Fire hydrants available. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table B105 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

SECTION C104 CONSIDERATION OF EXISTING FIRE HYDRANTS

C104.1 Existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads.

SECTION C105 DISTRIBUTION OF FIRE HYDRANTS

C105.1 Hydrant spacing. The average spacing between fire hydrants shall not exceed that listed in Table B105. Regardless of the average spacing, fire hydrants shall be located such that all points on streets and access roads adjacent to a building are within the distances listed in Table B105.

Exception:
The fire chief is authorized to accept a deficiency of up to 10 percent where existing fire hydrants provide all or a portion of the required fire hydrant service.

Appendix D is deleted in its entirety and readopted to read as follows

APPENDIX D
FIRE APPARATUS ACCESS ROADS

SECTION D101 GENERAL

D10l.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the International Fire Code.

SECTION D102 REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds (36,287 kg).

D102.2 Access road construction. All access roadways must be all weather driving surfaces capable of supporting fire apparatus. Surface shall be asphalt, concrete, or compacted road base and engineered for the imposed loads.

D102.2.1 Temporary emergency access. Compacted road base or chip shall only be used for a temporary emergency access Temporary access shall be available as long as the site is under construction. Thereafter permanent fire lanes shall be accessible and unobstructed at all times.

D102.2.2 Permanent emergency access. All permanent points of access shall be hard decks consisting of asphalt or concrete designed to HS 20 or support 40 tons (36,287 kg). Compacted road base or other surfaces engineered and capable of supporting the imposed loads may be approved for ground mounted solar installations, cell towers and similar isolated facilities and structures when approved by the fire code official.

D102.2.2 Installation timing. All required access roads must be installed and serviceable before aboveground construction begins.

SECTION D103 MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7,925 mm) exclusive of shoulders.

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. Exception: Grades steeper than 10 percent as approved by the fire code official. (See section D105.5 for aerial fire apparatus access roads.)

D103.3 Turning radius. The minimum turning radius shall be 25 feet inside radius and 50 feet outside radius.

D103.4 Angle of Approach/Departure. Grade changes upon a Fire Apparatus Access Road or when entering or exiting from or to a Fire Apparatus Access Road shall not exceed a 10 percent Angle of Approach or Angle of Departure.

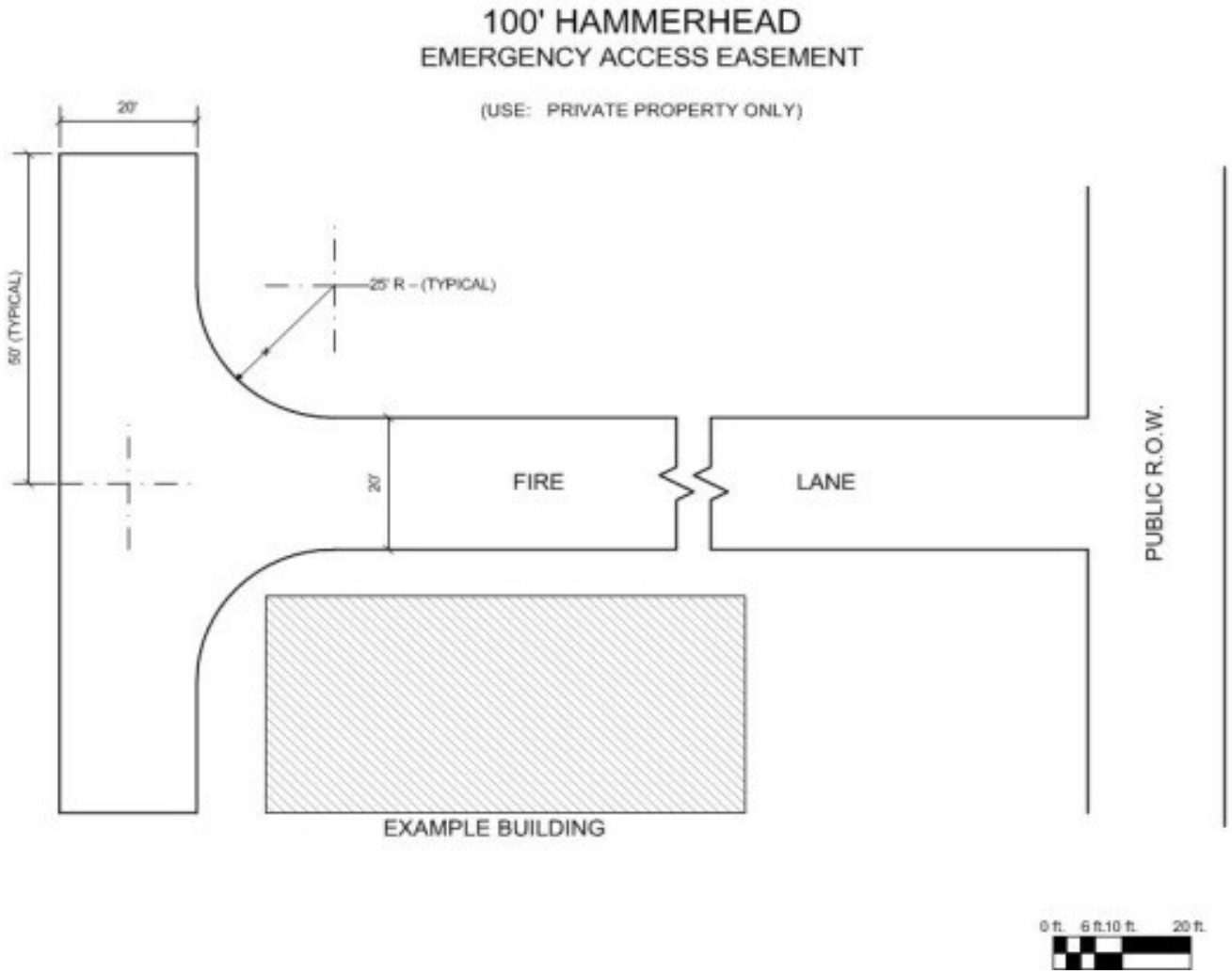

Figure D103.1

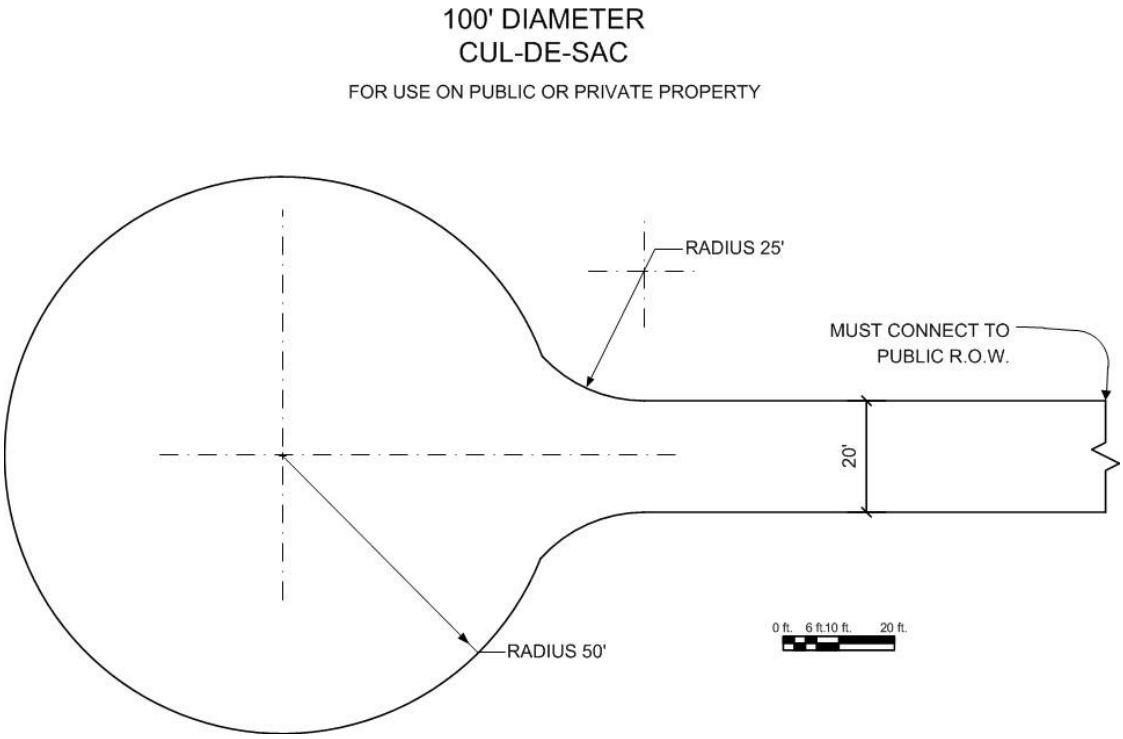

Figure D103.1 (cont.)

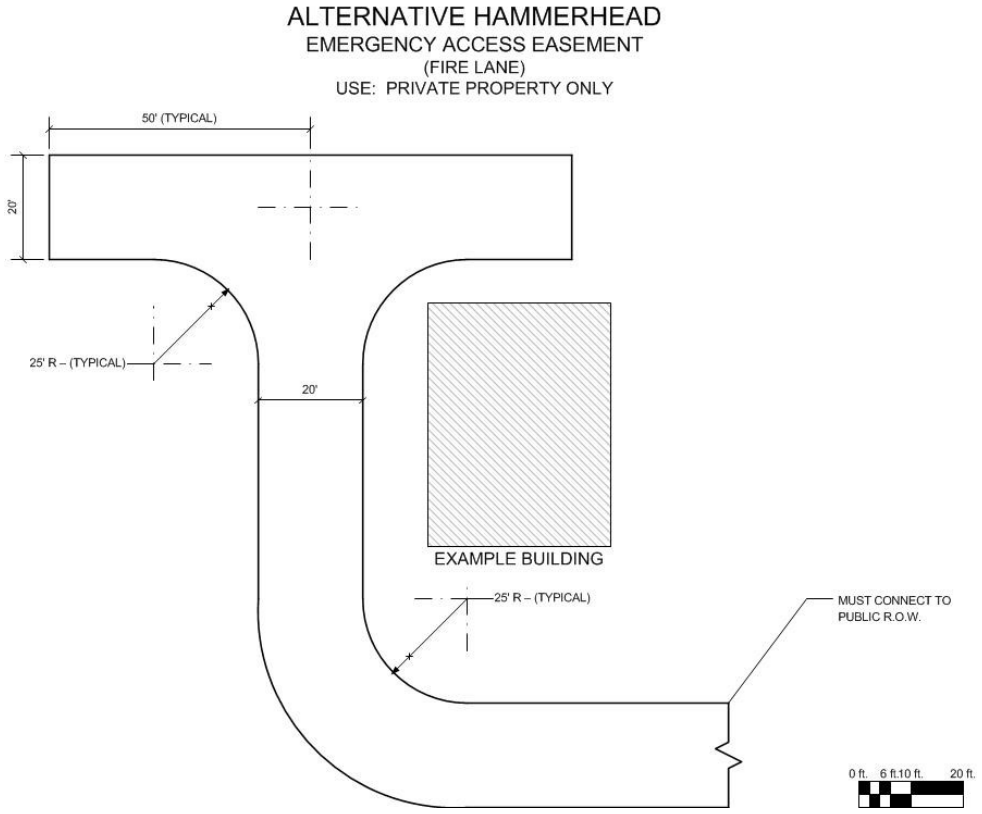

Figure D103.1 (cont.)

D103.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (46 m) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE 103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-660	20	100-foot hammerhead, 100-foot cul-de-sac in accordance with Figure D103.1
Over 660	Special Approval Required	

D103.5.1 Second Point of Access Required. A second point of access shall be required when the primary access roadway exceeds 660 feet (201 m) in length.

Exception: Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from two directions shall not be required.

D103.5.2 Third Point of Access Required. A third point of access will be required when any access road exceeds a distance of 1320 feet (1/4 mite) (402 m) in length.

Exception:

Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1,903.3.1.2 or 903.3.1.3.3, access from only two directions shall be required.

D103.5.3 Fourth Point of Access Required. A fourth point of access will be required when access road exceeds a distance of 2640 feet (1/2 mile) (804 m) in length.

Exception:

Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from only three directions shall be required.

D103.5.4 Access location. Where two or more points of access are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line.

D103.6 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6,096 mm). Where a fire apparatus road consists of a divided roadway, the gate shall be not less than 12 feet (3,658 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices must be approved by the fire code official.
6. Methods of locking the gate must be approved by the fire code official.
7. Manual opening gates shall not be locked with a padlock or chain and padlock unless the padlock is approved by the fire code official and is compatible with the approved Key Boxes in use by the fire department.
8. Gate design and locking device specifications shall be submitted for approval by the fire code official prior to installation.
9. Electric gate operators, where provided, shall be listed in accordance with UL325.
10. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F 2200.

D103.7 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING-FIRE LANE signs complying with Figure D 103.6 or other approved sign. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) 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.

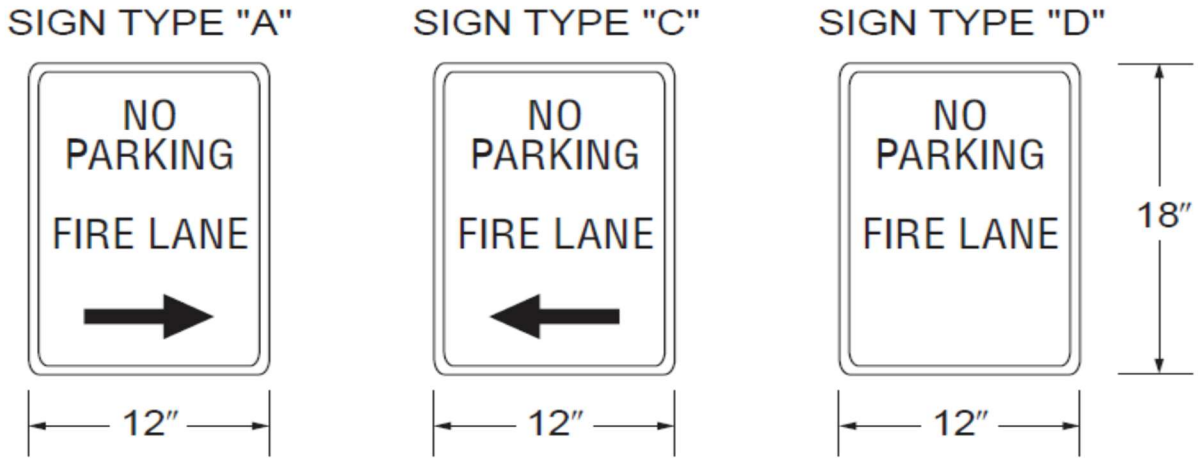

FIGURE D103.7
FIRE LANE SIGNS

D103.7.1 Roads 20 to 26 feet in width. Fire lane signs as specified in D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6,096 to 7,925 mm).

D103.7.2 Roads more than 26 feet in width. Fire lane signs as specified in D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7,925 mm) and less than 32 feet wide (9,754 mm).

D103.7.2 Minimum Overhead Clearance. Fire access roads shall have a minimum overhead clearance for the entire width of the access road of not less than 14 feet (4,267 mm).

SECTION D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9,144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

Exception:

Buildings or facilities exceeding 30 feet (9,144 mm) or three stories in height may have a single approved fire apparatus access road when the buildings are equipped with approved automatic sprinkler systems.

D104.2 Buildings exceeding 62,000 ft2 in area. Buildings or facilities having a gross building area of more than 62,000 ft2 (5,760 m*) shall be provided with two separate and approved fire apparatus access roads.

Exception:

Projects having a gross building area of up to 124,000 ft^2 (11520m2) that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.

D104.3 Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

SECTION D105 AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9,144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7,925 mm), exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9,144 mm) in height if the fire access road is not a dead end. Dead end fire apparatus access roads for aerial apparatus access shall be a minimum of 30 feet (9,144 mm) wide.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4,572 mm) and a maximum of 30 feet (9,144 mm) from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the fire code official.

D105.5 Grade. Aerial fire apparatus access roads adjacent to the building shall not exceed five percent in grade.

SECTION D106 MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception:
Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3 1.1.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

SECTION D107 ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads and that comply with Section Dl03.4.4.

Exceptions:

Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from two directions shall not be required.

D107.2 Future Connections. The number of dwelling units on a single fire apparatus access road shall not exceed 30 dwelling units unless fire apparatus access roads will connect with future development, as determined by the fire code official.