

**TETON COUNTY
FIRE PROTECTION RESOLUTION FOR NEW SUBDIVISIONS
2008 Edition**

**Chapter I
General Provisions**

SECTION 1.1: TITLE. This Resolution shall be known as the Teton County Fire Protection Resolution For New Subdivisions.

SECTION 1.2: AUTHORITY. The Teton County Fire Protection Resolution For New Subdivisions is authorized by Sections 18-5-201 and 18-5-301, Wyoming Statutes, 1977, as amended. The provisions listed herein are based upon the International Fire Code as adopted by Teton County, and other nationally recognized fire protection standards, such as those standards promulgated by the National Fire Protection Association.

SECTION 1.3: PURPOSE. It is the purpose of this Resolution that, through the application of the County's authority to review and approve residential and commercial subdivisions and planned unit developments, adequate fire protection measures be required in all such developments in order to protect the public health, safety and welfare. This purpose shall be achieved through the implementation of the fire protection provisions of this Resolution in the form of fire department access design; fire lane design; adequate year round water supply; sprinkler provisions; plan review submittal; and fire resistive roof coverings and building materials for all residential subdivisions, all commercial subdivisions, and all residential subdivisions or planned unit developments with commercial areas. It is further the purpose of this Resolution that all provisions herein be subject to Fire Department review and approval prior to installation.

SECTION 1.4: JURISDICTION. The territorial jurisdiction of the Fire Protection Resolution For New Subdivisions shall include all of the non-incorporated non-federal lands within Teton County, Wyoming. All subdivisions of land in Teton County and all planned unit developments shall comply with the fire protection requirements set forth in this Resolution.

SECTION 1.5: APPLICABILITY. For the purpose of this Resolution, the term "subdivision" shall be defined as any division of a plat, tract, parcel or lot of land into two (2) or more parts by means of platting in accordance with the procedures and standards of Article VI, Platting and Land Records, Jackson/Teton County Comprehensive Plan. For the purpose of administering the provisions of this Resolution, if the subdivision is to be developed in two or more phases, the number of lots shall be the total number of lots in all phases.

SECTION 1.6: SUBDIVISION APPROVAL CONDITIONED ON COMPLIANCE. No subdivision or Planned Unit Development Permits shall be issued to any applicant unless they comply with the Fire Protection Requirements of Chapter II of this Resolution.

**Chapter II
Fire Protection Features**

SECTION 2.1: FIRE DEPARTMENT ACCESS DESIGN. The provisions of this section shall constitute design requirements for fire department access roads. Alternate methods may be considered by the Fire Department where allowed by the International Fire Code, or other nationally recognized standards.

2.1.1 Road Width: The minimum road width for fire department access roads shall be 20 feet.

2.1.2 Surface: The surface shall be an all weather type capable of supporting the imposed loads of fire apparatus.

2.1.3 Turn Radius: The minimum turn radius shall be 50 feet on center line.

- 2.1.4 Vertical Clearance:** The unobstructed height shall be not less than 13 feet 6 inches.
- 2.1.5 Grade:** Where sustained grades exceed 8% **, special fire protection may be required as listed below:
- 2.1.5.1** Protection of all occupancies by an automatic sprinkler system installed in accordance with the *International Fire Code*, Chapter 9, Section 903, 2006 Edition.
 - 2.1.5.2** Protection of all occupancies by an automatic fire alarm system installed in accordance with the *International Fire Code*, Chapter 9, Section 907, 2006 Edition.
 - 2.1.5.3** Not less than one additional water source, in addition to the requirements of Section 2.3 of this Resolution, for those areas accessed by grades in excess of 8% **.
 - 2.1.5.4** Other forms of protection, provided sufficient documentation is provided to substantiate an equivalent level of protection is proposed.
- ** For the purpose of this section, a sustained grade of 8% may include sections not to exceed 15% for not more than 200 feet, provided those sections in excess of 10% are not on curves.
- 2.1.6 Dead Ends:** Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with and approved area for turning around fire apparatus. Turnarounds may consist of Cul-de-Sacs with a minimum radius of 45 feet, Hammerhead Tee, Wye, or Dog Leg each with legs not less than 60 feet measured to center line. The width of legs shall be not less than 20 feet.
- 2.1.7 Bridge Design:** Bridges shall be engineered to support the imposed loads of the largest fire apparatus which may use it, and shall meet the minimum design requirements of the *AASHTO Standard Specification for Highway Bridges*, Standard H-15.
- 2.1.8 Bridge Width:** The minimum drive surface of a bridge shall be not less than 14 feet.
- 2.1.9 Private Driveways:** The minimum width of drive surface of a private drive shall be not less than 12 feet. A clear width of not less than 16 feet shall remain free of all obstructions, including vegetation in excess of 12 inches in height. Driveways in excess of 150 feet in length shall be provided with turnarounds. Driveways in excess of 200 feet in length, and less than 20 feet in width shall be provided with turnouts in addition to turnarounds.
- 2.1.9.1 Turnouts:** Driveway turnouts shall be an all-weather surface at least 10 feet wide and 30 feet long. Turnout locations shall be approved by the Fire Department.
- 2.1.10 Security Gates:** The installation of security gates across a fire apparatus access road shall be approved by the Fire Department. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times.
- 2.1.11 Gated Communities:** The Fire Department may require additional fire protection in accordance with 2.1.5.1 - 2.1.5.4 of this section where all structures within a subdivision are accessed through security gates.
- 2.1.12 Additional Access:** The Fire Department may require more than one fire apparatus access road where the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors could limit access.

SECTION 2.2: FIRE LANE DESIGN. Fire lanes, or roadways dedicated to fire department use only,

may be required in close proximity to structures where access may be difficult due to traffic congestion, size of the building, proximity of other structures, etc.. Fire lanes required by the Fire Department shall meet the following minimum design requirements:

- 2.2.1 Width:** Fire lanes shall be not less than 20 feet in width.
- 2.2.2 Surface:** The surface shall be an all weather type.
- 2.2.3 Vertical Clearance:** The unobstructed vertical height shall be not less than 13 feet 6 inches.
- 2.2.4 Turn Radius:** The minimum turn radius for fire lanes shall 25 feet inside radius and 50 feet outside radius.
- 2.2.5 Grade:** Grades shall not exceed 8%.
- 2.2.6 Signage:** Fire lanes shall be signed with approved signs that prohibit parking within the required width of the lane.
- 2.2.7 Distance to Structure:** The minimum distance from the closest edge of the fire lane to the structure shall be approved by the fire department based on the structure's square footage, height, and proximity to exposures.

SECTION 2.3: FIRE PROTECTION WATER SUPPLIES. A year round water source for fire fighting purposes shall be provided for subdivisions. All systems shall be subject to Fire Department review and approval prior to installation.

2.3.1 Subdivisions with 3 to 10 Residential Lots:

2.3.1.1 Subdivisions with 3 to 10 residential lots, where average densities are 1 unit to 3 or more acres, shall provide a water source in the form of:

- a central main system with hydrants; **OR**
- one fire well with pump, hydrant, and reliable power source; **OR**
- storage tank with hydrant; **OR**
- one dry hydrant with cistern type storage (provided the water table is capable of year round flow); **OR**
- other approved type suitable for year round use.

2.3.2 Subdivisions with 11 to 29 Residential Lots:

2.3.2.1 Subdivisions with 11 to 29 residential lots, where average densities are 1 unit to 3 or more acres, shall provide a water source in the form of:

- a central main system with hydrants; **OR**
- up to two fire wells with pump, hydrant, and reliable power source; **OR**
- storage tank(s) with hydrants; **OR**
- dry hydrants with cistern type storage (provided the water table is capable of year round flow); **OR**
- other approved type suitable for year round use.

2.3.2.2 Subdivisions with 11 to 29 residential lots, where average densities are 1 unit to less than 3 acres, or where clustering is allowed, shall provide a water source in the form of:

- a central main system with hydrants; **OR**
- up to two fire wells with pump, hydrant, and reliable power source.

2.3.3 Subdivisions with 30 or more Residential Lots:

2.3.3.1 Subdivisions with 30 or more residential lots, where average densities are 1 unit to 3 acres or more, shall provide a water source in the form of:

- a central main system with hydrants; **OR**
- fire wells with pumps, hydrants and reliable power source; **OR**
- storage tanks with hydrants; **OR**
- dry hydrants with cistern type storage (provided the water table is capable of year round flow); **OR**
- other approved type suitable for year round use.

Where fire wells, storage tanks, or dry hydrants are used, a minimum of **two** such sources shall be provided for the first 30 lots and **one additional** source for each additional 15 lots, or fraction thereof.

2.3.3.2 Subdivisions with 30 or more residential lots, where average densities are 1 unit to less than 3 acres, or where clustering of units is allowed, shall provide a water source in the form of:

- a central system with hydrants.

2.3.4 Commercial Subdivisions or Residential Subdivisions with Commercial Areas:

Commercial subdivisions or residential subdivisions with commercial areas shall provide a fire fighting water supply based upon the type of businesses present, type of construction, size of the buildings, proximity to exposures, fire flow requirements, access, etc.. Each system will be reviewed to the specific hazard and may necessitate upgrading existing systems to provide adequate supply when changes of use occur.

2.3.5 Special Provisions: In all residential subdivisions, except those with commercial areas, regardless of densities, the water source requirements may be reduced provided all structures within the subdivision are protected by an approved automatic sprinkler system. When water source requirements are reduced by use of sprinkler provisions, the minimum number and type of sources shall be determined based upon road system design, topography, exposure protection requirements, densities, travel distance to established water sources, etc., and shall be subject to Fire Department approval. The water source requirements shall not be reduced to less than 500 gallons per minute in all circumstances.

2.3.6 System Designs: All required water supply systems shall be subject to Fire Department approval and shall meet the design requirements of nationally recognized standards and shall be installed to meet said standards with the following as minimum requirements:

2.3.6.1 Central Mains with Hydrants:

2.3.6.1.1 A central hydrant system shall be capable of providing a minimum of 1000 gallons per minute for not less than 2 hours at a residual pressure of 20 psi. Systems may provide 500 gallons per minute for not less than two hours at a residual pressure of 20 psi when installed in subdivisions where all residential occupancies are protected by approved automatic residential sprinkler systems.

2.3.6.1.2 System mains shall be not less than 6 inch for looped lines, 8 inch for dead end lines, subject to engineered hydraulic analysis. Hydrants shall be serviced by a branch line not less than 6 inches in diameter with a gate valve located on the branch line. Main size may be down-sized accordingly to system demand when all residential occupancies are protected by approved automatic residential sprinkler systems.

2.3.6.1.3 Hydrants shall be dry barrel type with two 2 1/2 inch outlets and one 4 1/2 inch outlet, all with National Standard Thread.

2.3.6.1.4 Hydrants shall be located adjacent to roadways, preferably on corners, with the 4 1/2 inch outlet facing the road. Hydrants may be placed not greater than 10 feet from the edge of the roadway. Hydrants shall be spaced not more than 500 feet apart in subdivisions with densities of 1 unit on less than 3 acres and 1000 feet apart in subdivision with densities of 1 unit on 3 or more acres.

2.3.6.2 Fire Wells: Fire wells shall be capable of supplying a minimum of 500 gpm for not less than 2 hours at a residual pressure of not less than 20 psi. Fire pumps shall be automatic on demand and shall be provided with a reliable power source, which may include utility power, on-site emergency generator, engine driven pumps, or other approved system. One hydrant shall be provided with a minimum of two 2 1/2 inch male outlets with national standard thread.

2.3.6.3 Storage Tank with Hydrant: Storage tanks shall be sized to provide the minimum required fire flow for not less than 2 hours. Tanks may be underground, surface or elevated where allowed, and may consist of one or multiple tanks. One hydrant shall be provided with a minimum of one 4 1/2 inch male outlet for underground tanks or two 2 1/2 inch outlets for surface or elevated tanks, each with national standard thread.

2.3.6.4 Dry Hydrant with Cistern Type Storage: Dry hydrants with cistern type storage shall be designed specifically to the aquifer in which it will be used, but will be designed to flow a minimum of 500 gpm for not less than 2 hours. One hydrant shall be provided with a minimum of one 4 1/2 inch outlet with national standard thread.

2.3.7 Responsibility to Provide Binding Documentation: It shall be the responsibility of the developer to provide adequate water supply, and system design information to allow the fire department to review and approve any system design. When down-grading of the water supply system by use of sprinkler systems throughout the subdivision is requested by the developer, adequate documentation shall be provided by the developer to ensure minimum requirements will be met.

SECTION 2.4 URBAN-WILDLAND INTERFACE. Subdivisions where the urban-wildland interface exists may be at risk of a devastating wildfire. Those subdivisions approved within the urban-wildland interface shall comply with the *International Wildland-Urban Interface Code, 2006 Edition*.

SECTION 2.5: ADMINISTRATIVE PROVISIONS

2.5.1 Enforcement: The Fire Chief of Jackson Hole Fire/EMS, also referred to as the Fire Code Official, shall be responsible for the interpretation and enforcement of the provisions of this resolution, pursuant to the authority vested in him by the most recently adopted edition of the International Fire Code.

In carrying out these responsibilities, the Fire Chief shall review all applications for proposed residential and commercial subdivisions and planned unit developments, whether referred by the Administrator of Planning or the permit applicants, and shall submit a written report to the Administrator of Planning setting forth the requirements of this resolution that must be met by the applicant in order to receive Fire Department approval. All such fire protection requirements will be incorporated into the Planning staff review of each application and shall be stated as required conditions that the applicant must meet. Upon approval by the Board of County Commissioners of the final plat of a subdivision or the final master plan of a planned unit development, the conditions of such approval that relate to fire protection shall be enforced by the Fire Chief of the Jackson Hole Fire/EMS.

List of Revisions

Original May 29, 1991

1st Revision-February 21, 1995, 2nd Revision-January 20, 1998, 3rd Revision-December 28, 2003, 4th Revision-March 22, 2008