## EASTERN SUMMIT COUNTY

# 11-6-8: INFRASTRUCTURE STANDARDS: <sup>©</sup>



## A. Fire Protection Standards:

1. All development, including a single-family dwelling on an individual lot or parcel, which does not have year round access or is located within the wildland fire urban interface zone, is subject to the fire protection measures required by the 2006 Utah wildland fire urban interface code and the respective fire district and/or fire warden.

The wildland urban interface (WUI) zone map was developed using the roads to the outside of the valley floors as a simplified boundary. The areas within the valley floors typically have a water supply or are in areas with irrigated fields/modified vegetation and are in the vicinity of maintained roads that lower the wildland fire potential, and are therefore excluded from the WUI zone. Areas within two hundred fifty feet (250') of these road centerlines are also excluded from the WUI zone, as fire equipment can typically access these buildings within National Fire Protection Association (NFPA) requirements for hose length. The two hundred fifty foot (250') buffer is to be measured from centerline of the road across the ground to the build(s) by way of the normal access provided.

For wildland/urban fire requirement purposes, the following criteria shall be used by the applicable fire district when reviewing development applications in eastern Summit County:

- a. Location of building with respect to designated wildland urban interface (WUI) area based on the county and state approved map.
- b. Response time for responding fire units.
- c. Access, including road and bridge weight limits.
- d. Space at the building for sufficient fire equipment to adequately and safely fight or defend the building(s).
- e. Type and density of vegetation around the buildings.
- f. Separation of buildings from vegetation as to prevent a building fire from spreading to wildland.
- g. Type of road or driveway, length, and grade, as well as type of access (seasonal versus year round).
- h. Distance from established water supply and the ability to get that water to the fire based on pump capacity, access, and space at the building and turnarounds.

- i. Other criteria that shall be used are the following state adopted laws and rules:
- (1) The state fire code adoption act.
- (2) Utah code subsection 65A-8-203(3)a (re: cooperative fire protection agreements with counties).
- (3) Utah administrative code R652-122-200 minimum standards for wildland fire ordinance.
- (4) Utah administrative code R309-550-5 water main design.
- (5) 2006 Utah wildland urban interface code.
- (6) Other provisions of this title.
- (7) The 2009 international fire code (IFC) or newer as adopted by the state of Utah.

Based on this review, applicants may be required to enact a variety of measures to minimize the level of fire hazard. The fire protection measures may include the following:

- a. Connection to a community or private water system, well or spring with a minimum five thousand (5,000) gallon water storage tank, pond, or other accessible water body with a dry hydrant.
- b. Defensible space around each dwelling.
- c. Noncombustible roofing materials.
- d. Internal fire sprinkler systems.

Based upon specific site characteristics (e.g., a meadow or irrigated field within the WUI zone) and the applicant's ability to provide an adequate combination of the above listed building or on site improvements, the fire district may waive certain requirements.

All applicants for new development shall, at the time of application, acknowledge that they have reviewed the "Summit County Living With Fire" information pamphlet and consulted the building department, insurance companies, builders and fire districts/fire warden regarding fire protection.

#### B. Wildfire Hazard Guidelines:

1. All proposed developments within the AG-100 and AG-160 zone districts shall be analyzed and rated on its wildfire risk using the fire hazard severity scale developed by the state, division of state lands and forestry. A development shall be rated based on the following criteria. The

composite score will categorize the hazard level of the proposed development as moderate, high, or extreme. This rating, based on the following, shall be submitted to the county as part of any sketch plan:

- a. Slope of the site on which the development is proposed;
- b. Aspect, or the general direction in which the surface of the ground faces;
- c. Response time of the responsible fire agency as measured in minutes;
- d. Vegetation density to measure the fuel loading of the area; and
- e. Type of vegetation to identify rates of spread, resistance to control and other factors.
- 2. Hazardous fuels in the form of native vegetation will be cleared around structures and around the perimeter of subdivisions where appropriate to assist in wildfire prevention. Fuel breaks are not intended as complete vegetation removal; but rather, they shall serve as a change in fuel continuity, type of fuel, and degree of flammability of fuel in a strategically located area to reduce or hinder the rate of fire spread. The amount of vegetation to be removed/left within a fuel break area shall be recommended by the appropriate fire district. Fuel breaks around residential dwelling units shall be in place before the issuance of a certificate of occupancy.
- 3. Fuel break clearing limits shall be as follows:

Type	Moderate	<u>High</u>	<u>Extreme</u>	
Structures	30 feet	50 feet	75 feet	
Development perimeter	None	75 feet	100 feet	

4. As part of a recorded plat for a subdivision in the AG-100 and AG-160 zone districts, fuel break easement shall be identified and a note shall be placed on the plat stating the following:

The fuel break easement is granted for the benefit of the Utah state area forester. Fuel breaks shall be maintained by the landowner or homeowners' association. Failure of the landowner to maintain the fuel break shall cause the area forester to cause the maintenance of the fuel break and charge the landowner for costs incurred.

C. Road Standards: Public and private roads in subdivisions shall meet the following minimum right of way, surface and shoulder width standards. Road surfaces shall be capable of providing all weather, year around access as approved by the appropriate fire district and the county.

## 1. Width Of Surface:

		Design Volume					
Design Speed	<25	25- 250	251- 699	700- 999	1,000- 2,499	2,500- 5,000	5,000+
20 mph	14	16	20	22	22	24	24
30 mph	16	18	20	22	22	24	24
40 mph	18	20	22	22	22	24	24
50 mph		20	22	22	22	24	24+

Roads designed to carry a large traffic volume per day at higher speeds may be required to be wider than described. This will be based on a determination of the specific design volume, speed, terrain and other characteristics to be calculated at the time of development application. Public roads, to be owned and maintained by the county, shall be a minimum of twenty four feet (24') of paved surface width.

## 2. Width Of Shoulder:

		Design Volume					
Design Speed	<25	25- 250	251- 699	700- 999	1,000- 2,499	2,500- 5,000	5,000+
All speeds	1' to 2'	1' to 4'	2' to 4'	2' to 6'	2' to 6'	2' to 6'	2' to 8'

Shoulders may be required to be compacted road base, asphalt or other suitable hard surface, or a combination thereof.

- 3. Width Of Right Of Way: The minimum right of way width for a public road shall be sixty feet (60'). The requirements may increase as the paved surface width increases due to traffic volumes, as described above. The minimum right of way for private roads shall be double the driving surface of the road.
- D. Road Grades: The maximum road grade of an arterial road shall be eight percent (8%). On all other roads, a grade of less than eight percent (8%) is encouraged and preferred. However, road grades in excess of eight percent (8%), up to a maximum of ten percent (10%), may be allowed for short distances when, in the opinion of the county, it is in the best interest of preserving the

natural environment and when approved by the appropriate fire district. Short distances shall not exceed five hundred feet (500') within any one thousand foot (1,000') segment.

- E. Intersections: The road grade at an intersection shall not exceed four percent (4%) for a minimum distance of one hundred feet (100') on each leg of the intersection, and flatter grades are desired.
- F. Turnaround/Cul-De-Sacs: Cul-de-sacs will be a maximum of one thousand three hundred feet (1,300') in length for developments with a moderate fire hazard rating, nine hundred feet (900') in high fire hazard rated areas, and five hundred feet (500') in areas of extreme fire hazard. No cul-de-sac shall have a driving surface width of less than twenty feet (20'), and twenty four feet (24') from public roads. All cul-de-sacs shall have a turnaround of not less than sixty feet (60') in diameter, or as otherwise approved by the fire district, and ninety feet (90') from public roads. All cul-de-sacs must have a sign indicating that the road is a "dead end" road, to be located within one hundred feet (100') of the outlet.
- G. Bridges And Culverts: Bridges and culverts on public roads shall be designed to support an HS-20 highway loading requirement. Permanent culverts will be installed at all intermittent and perennial stream crossings. Specifications for bridges, culverts and other stream crossings shall take into account at least the 100-year frequency storm for bridges and the 25-year frequency storm for culverts.
- H. Driveway Access: The maximum grade of a driveway shall not exceed ten percent (10%). Twelve percent (12%) grades may be allowed for up to but not to exceed two hundred fifty (250) linear feet. The minimum width of a driveway shall be twelve feet (12').
- I. Irrigation Ditch Easements: An unobstructed easement at least sixteen feet (16') in width shall be provided and shown on the subdivision plats or site plans, to ensure proper access and maintenance of irrigation ditches and canals.
- J. Water Storage For Firefighting Purposes: New development shall be required to meet the minimum water storage requirements for firefighting purposes as established by the appropriate fire district.

K. Revised Standards Applicable: Development is subject to revised general engineering standards and ordinances which are in effect at the time the application is submitted for review and approval by the county. (Ord. 751, 1-12-2011)