TITLE 14 MASON COUNTY BUILDING CODE
CHAPTER 14.17 Standards for Fire Apparatus Access Roads
Effective March 12, 2019

14.17.010 – This Ordinance shall apply to roads, driveways, or other means of access serving structure, facilities, buildings or portions of buildings hereafter constructed, altered, moved into or within the jurisdiction and developed under permit from Mason County.

14.17.020 - Plans for fire apparatus access roads shall be submitted to the fire marshal for review and approval prior to construction.

14.17.025 – Before issuing a permit, the Fire Marshal is authorized to, and may examine, or cause to be examined buildings, structures and sites for which an application has been filed to determine compliance requirements for the purpose of providing a reasonable level of life safety and property protection from hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety to fire fighters and emergency responders during emergency operations. The inspection fee will be as set forth in the adopted fee schedule by Mason County for site inspections/site investigations.

14.17.030 - When required by the Fire Marshal, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof.

14.17.040 - Roadways shall be constructed/designed with an all-weather driving surface (gravel, crushed rock, concrete or asphalt) and the ability to support the imposed load requirements of fire apparatus.

14.17.050 - Fire apparatus access roads shall extend to within 150-ft. of all portions of the exterior wall of any residential or commercial structure, and within 50-ft. of at least 25% of the exterior wall of any commercial structure.

14.17.060 - A fire apparatus access road shall be a minimum unobstructed width of 20-ft. for commercial structures, or 4 or more parcels or building sites. The access road may be reduced to 12-ft. of unobstructed width with a minimum 10-ft.wide driving surface for 1-3 parcels or building sites on approval of the Fire Marshal.

14.17.070 - A fire apparatus access road shall have an unobstructed vertical clearance of not less than thirteen feet and six-inches (13’6”) for the full width of the road.

14.17.080 - A 10-ft.wide fire apparatus access road exceeding 300-ft. in length will be required to make provisions for the passing of fire apparatus by providing approved pullouts. Pullouts shall be reasonably located, based on sight distance, road curvature, and grade; and shall be a minimum size of 8-ft.wide and 30-ft. long with tapered ends.
14.17.090 – A dead end fire apparatus access road longer than 300-ft. is required to provide provisions for the turning around of fire apparatus within 150-ft. of any facility or structure. See exhibit A – Hammer Head Turn Around, B – Modified Hammer Head, C – Cul De Sac Turn Around, D & E – Pullouts, for examples of accepted turnarounds and pullouts.

14.17.100 – The turning radius of a fire apparatus access road shall be a minimum of 25-ft. interior, 45-ft. exterior centerline radius.

14.17.110 – A fire apparatus access road, which is newly constructed or existing, and which is in excess of 14% grade, and which is greater than 150-ft. from a primary access point intersecting with a County or State road Right of Way, to new residential or commercial structures will require an automatic fire sprinkler system to be installed.

14.17.120 – Where more than 50 units are designed in a residential development, either single family, multifamily, retirement or similar, there shall be a minimum of two access points to the county road system. Such access points shall be located so as to provide for general circulation, alternate emergency vehicle access routes, through access, and general transportation design considerations. One of these access points may be for emergency vehicle use only where the number of units does not exceed 100. Design of an “emergency vehicle use only” access must be approved by the local fire district and Fire Marshal.

14.17.130 – When buildings are completely protected with an automatic fire sprinkler system, the provisions of these standards maybe modified by the Fire Marshal.

14.17.140 – When a bridge is required as part of a fire apparatus access road, it is to be constructed and maintained in accordance with nationally recognized standard. It shall have designed live loading capacity sufficient to carry the imposed load of fire apparatus. An evaluation by a professional engineer will be required to determine the imposed load rating for all of the responding fire districts fire apparatus and shall be approved by the Fire District and Fire Marshal. The load rating of the bridge shall be posted in an approved location with an approved weather resistant designed sign.

14.17.150 – When access roads cannot be installed to these standards due to topography, waterways, nonnegotiable grades or other similar conditions, the Fire Marshal is authorized to require additional fire protection or mitigation as specified (see 2015 IFC 901.4.4). The Fire Marshal may also approve access roads that do not meet these requirements if the road provides reasonable access under the individual facts of the case.

14.17.160 – Approved numbers or addresses pertaining to any and all new commercial or residential buildings shall be placed consistent with Chapter 14.28, Addressing Ordinance.

14.17.170 – Traffic calming measures on fire apparatus roads (speed bumps, etc.) shall be approved by the Fire Marshal before installation.
14.17.180- Security/Access Gates. Where security gates are installed, they shall have an approved means of emergency operation. Manual gates may be equipped with approved fire department lock boxes. Electronic gates shall have approved fire department key switches.

14.17.190-Obstruction of fire apparatus access roads and lanes. Fire apparatus access roads and lanes shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in 14.17.60 and 14.17.70 shall be maintained at all times,

14.17.195- Marking. Where required by the fire marshal, approved signs or other approved notices or markings that include the words NO- PARKING- FIRE -LANE shall be provided for the fire apparatus access roads to identify such roads of prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all time and be replaced or repaired when necessary to provide adequate visibility.

14.17.200- Street or road signs. – Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until a permanent approved sign is placed.
Modified Hammer Head

Direction may be right or left direction (left direction is shown)

OVERHANG AREA - Driving surface in this area is not required.
No obstructions greater than twelve (12) inches in height are allowed

Area required for turnaround located at a single residence. In this special case, the area could, for instance, consist of pasture adjacent to the building and will to continue to function as a viable turn around in adverse weather conditions (ie remains solid in any weather).

Requirements for roads 20' in width and commerical sites

Requirements for roads 12' in width
Hammer Head Turn Around

Direction may be right or left direction (left direction is shown)

OVERHANG AREA - Driving surface in this area is not required.
No obstructions greater than twelve (12) inches in height are allowed

Area required for turnaround located at a single residence. In this special case, the area could, for instance, consist of pasture adjacent to the building and will to continue to function as a viable turn around in adverse weather conditions (ie remains solid in any weather).

Requirements for roads 20' in width and commerical sites

Requirements for roads 12' in width
Cul De Sac Turn Around

Area required for turnaround located at a single residence. In this special case, the area could, for instance, consist of pasture adjacent to the building and will to continue to function as a viable turn around in adverse weather conditions (ie remains solid in any weather).

Requirements for roads 20' in width and commerical sites

Driving surface in this area is not required

Requirements for roads 12' in width

Driving surface in this area is not required
Turnouts

Any dead end fire apparatus access road longer than 300 feet shall have provisions for the turning around of fire apparatus within 150 feet of any structure or facility and have approved provisions for the passing of fire apparatus.

If turnouts are used to accommodate the passing of fire apparatus, they shall be reasonably located based on sight distance, road curvature and grade. Turnouts shall be a minimum of 8 feet wide and 30 feet long with tapered ends.

Note: Only access roads which do not maintain continuous width of 20 feet or more need turnouts.

Turnouts may be placed on either side of the access road. Adequate sight distance between turnouts must be maintained.