

FIRE APPARATUS ACCESS

To provide effective emergency response, fire apparatus must be able to reach all buildings, structures, hazardous occupancies, or other premises within the District by way of approved access roads, driveways, and bridges. The following guidelines provide the minimum design standards considered necessary for unobstructed fire apparatus.

SCOPE

Fire apparatus access roads should extend to within one-hundred-fifty (150) feet of a significant structure as measured from the rear of the structure. A fire apparatus should be able to park and deploy firefighters with a 150-foot length of firehose and reach all exterior parts of the building without obstruction.

SURFACE STANDARDS

- All-weather travel surface
- All materials should meet WSDOT standard specifications for road construction
- Twenty (20) foot minimum unobstructed width with the following elements:
 - Twelve (12) foot minimum finished driving surface width should be provided and maintained.
 - Four (4) foot shoulder – each side – is recommended in sloped landscapes, as shoulders provide lateral support of elevated roadway surfaces and provide an “operations zone” around parked emergency services vehicles on the roadway.
- Six (6) inch minimum ballast or gravel base, which may need to be increased depending on the suitability of native material, with two (2) inch minimum depth of compacted crushed surfacing top course.
- Two (2) percent crown slope at the centerline.
- Compaction of the material to a load capacity of 75,000 pounds.
- Cut and fill slopes, including ditches, should be designed to provide 2:1 slope gradient.

GRADE STANDARDS

- Maximum grade should not exceed twelve (12) percent.
 - A gradient greater than twelve (12) percent may require mitigation measures.
- Gradient changes or transitions should be limited to seven (7) percent or less, to accommodate the wheelbase of fire apparatus and the body frame beyond the rear axle.

CLEARANCE STANDARDS

- Brush and landscaping clear width should be fourteen (14) feet horizontally and vertically
- The approach to any constructed public roadway should meet an approved seventy-five (75) to one-hundred-fifty (150) degree approach angle, to include brush clearance for line of sight at any “stop and yield” controlled intersection with a constructed public road, and include an approved apron.
- Any curvature and departures in the roadway should have a minimum of twenty-eight (28) foot interior radius.
- Traffic calming measures (speed bumps, etc.) require approval of the Fire Chief or authorized designee prior to installation.

TURNAROUNDS AND TURNOUTS

- For dead-end access roads over 250 feet in length, turnarounds should be provided, to allow fire apparatus to turn around without having to back-out the length of the roadway. Turnarounds should be designed consistent with IFC, appendix D.

- For access roads greater than 1,000 feet, intermediate turnouts should be provided to allow for passing fire apparatus. Turnouts should be reasonably located, based on sight distance, road curvature, and grade.
 - A formal off-highway turnaround at the access road entrance should be provided to allow fire apparatus to turn around without having to back onto the public right of way.

PRIVATE ROADS

- Private roads connecting a fire apparatus access road or driveway to a constructed public road should be designed and constructed in conformance with the standards of Jefferson County Department of Public Works.
 - Road signs and traffic control signs should be installed in conformance with the standards of Jefferson County Department of Public Works.
- Where property is served over a roadway easement, including multi-party use of an access, a recorded document should prescribe necessary ingress/egress provisions required by Jefferson County standards and should include a maintenance agreement.

PRIVATE BRIDGES

- If a bridge or elevated surface is part of an access road it should be designed and constructed in conformance with the standards of Jefferson County Department of Public Works.
 - Bridge design and construction must be certified by a licensed engineer.
- Private bridges will not be used by District fire apparatus unless documentation is on file showing that the bridge has been inspected by a qualified engineer within the past 60 months and is sufficient to carry the imposed loads of emergency apparatus.
 - Vehicle load limits should be posted at both ends of a bridge.
 - District apparatus exceeding the posted load limits will not be permitted to cross such bridges.

GATES

Gates, fences, bollards, and other roadway obstructions are obstacles to efficient emergency services delivery and create width constrictions.

- Any such assemblies should be a minimum of eleven (11) feet in opening width.
- If such obstacles are locked, they should have an approved lock-box system installed.
- Security gates using electric gate operators should have an approved means of emergency operation.

ADDRESSING STANDARDS

Jefferson County has developed the E911 Emergency Locator System to provide a uniform addressing system to assist emergency response personnel to determine the location of people and property in emergencies.

- Every residence, business, industrial site, institutional building, general assembly building, and utility site in the district must have an E911 address assigned to it.
 - The E911 address is a combination of an 'emergency locator number' and a full street name.
- Emergency locator numbers must be posted on an approved address sign issued by Jefferson County Department of Community Development.
 - The emergency locator sign must be displayed where the property or structure's access intersects with the road on which the property or structure is addressed.
 - The sign shall be posted three feet above the roadway and positioned so the numbers can be seen from both directions.
 - On long driveways with multiple intersections, it may be necessary for multiple emergency locator number signs to be placed to ensure adequate emergency response.