

Access Management Standards

Section 1: Application of Access Standards

This chapter describes the Department's access management standards for access connections on the county roadway system. The standards in the following sections are designed to preserve roadway safety and to assure that each roadway's importance to countywide mobility will be considered when evaluating requests for access to a roadway under the jurisdiction of the Randall County Road Department. The number, location, spacing, design, and construction of access connections have a direct and often significant effect on the safety and operation of the roadway. The standards are necessary to enable the roadway to continue to function efficiently and safely in the future, while at the same time providing reasonable access to development.

Section 2: Definitions

Access Connection: Facility for entry and/or exit such as a driveway, street, road, or highway that connects to a roadway in the jurisdiction of Randall County.

ADT: The average daily traffic volume. It represents the total two-way traffic on a roadway for some period less than a year, divided by the total number of days it represents, and includes both weekday and weekend traffic. Usually, ADT is adjusted for day of the week, seasonal variations, and/or vehicle classification.

Auxiliary Lane: A lane stripped for use as an acceleration lane, or deceleration lane, right-turn lane, or left-turn lane, but not for through traffic use.

Commercial Driveway: An entrance to, or exit from, any commercial, business, or similar type establishment.

Department: The Randall County Road Department.

Drainage Structure: A circular pipe, elliptical pipe, arch pipe, box culvert, or other similar conduit installed for the purpose of draining the flow of surface water.

Field Driveway: A limited use driveway for the occasional/infrequent use by equipment used for the purpose of cultivating, planting, and harvesting or maintenance of agricultural land.

Intersection: Any at grade connection with a roadway, including two roads or a driveway and a road.

Permit: Authorization for entry to and/or exit from a County roadway and adjacent real property, issued by the Department.

Permittee: A real property owner, or the owner's authorized representative, who receives an access connection permit from the Department to construct or modify an access connection from the owner's property to a roadway on the County roadway system.

Private Driveway: An entrance to or exit from a residential dwelling, farm, or ranch for the exclusive use and benefit of the permittee.

Public Driveway: An approach from a publicly maintained street, road, or highway.

Right of Way: A general term denoting land, property, or interest therein, usually in a strip acquired for or devoted to transportation purposes.

Shared Access: A single connection serving two or more adjoining lots or parcels.

Sight Distance: The distance visible to the driver of a passenger vehicle measured along the normal travel path of a roadway from a designated location and to a specified height above the roadway when the view is unobstructed by traffic.

Section 3: Driveway Permits, Design, and Materials

Overview

Physical obstructions and influence on traffic caused by the presence and use of access driveways to property along the roadways make it necessary that they be controlled for the safe movement of normal roadway traffic. This section describes the Department's criteria for the construction and maintenance of private, public, and commercial driveways. The purpose is to accomplish a coordinated development between the roadway and the abutting property which it serves. It is essential that entrances or exits of adequate design be provided for abutting properties, especially commercial properties, in order that ingress and egress may be made as safe as possible to the traveling public, and to those who patronize the roadside commercial establishments.

Permits

To obtain a permit to construct a driveway or to revise any existing driveway, the applicant should contact the Randall County Road Department. The applicant shall complete and submit to the Randall County Road Department a *Permit to Construct Access Driveway Facilities on Roadway Right of Way*, which must include a description of the proposed work, the applicant's name, mailing address, telephone number and location of the proposed driveway. Applications for permits shall be made by the property owner or their authorized representative, who shall represent all parties in interest. Applications for permits shall be made only for the bona fide purpose of securing or changing access to the owner's property, but not for the purpose of parking or servicing vehicles on County roadway rights of way. The applicant shall pay a \$200.00 processing fee to Randall County for each driveway permit.

No construction work on the driveway shall be undertaken on the right of way until a fully executed driveway permit has been received by the applicant and the applicant has given 24-hour notification to the Randall County Road Department. A driveway must be constructed in accordance with a fully executed driveway permit and all applicable regulations. A Randall County Road Department inspector will review the driveway construction to determine if it is acceptable or if modifications are needed. In subdivisions where a drainage study has been completed, certification from a registered surveyor that the culvert has been installed at the flow line elevation required by the drainage study or plat must be provided. A driveway will be considered an authorized permitted driveway installation only after construction has been completed and the construction has been determined to be satisfactory to the Randall County Road Department.

Driveway Design

All parts of entrances and exits on roadway right of way, including the radii, shall be confined within the permittee's property frontage. Frontage is that portion of the right of way lying between two most distant possible lines drawn perpendicularly from the centerline of the roadway to the permittee's abutting property line.

When the permittees of two or more adjoining properties agree to combine their property frontage for a shared access driveway, the combination would be encouraged and authorized under the applicable regulations. The frontage will then be the portion of the right of way lying between the two most distant possible lines of the combined frontage drawn perpendicularly from the centerline of the highway to the permittees' abutting property lines.

At any intersection of a county road with another road or street where the existing right of way is flared or widened to allow for additional sight distance, no access driveway will be permitted within the flared or widened right of way section.

Fixed objects will not be allowed in the roadway right of way.

The angle of the driveway from the county road pavement shall be 75 to 90 degrees.

The width of a private residential driveway shall not exceed 24 feet measured at right angles to the centerline of the driveway, except as increased by permissible radii. The radius connecting the driveway to the highway pavement shall not be less than 15 feet.

A typical design for a private farm/ranch driveway should provide a 25-foot return radii and a 20-foot throat width. The distance from the edge of the highway pavement to a gate must be sufficient to store the longest vehicle, or combination of vehicles anticipated for use of the property. At a minimum, this distance should accommodate a pickup truck with trailer.

Field driveways will be permitted where the field has no other reasonable access. Typically, one field driveway to a property under the same ownership or controlling interest may be granted; additional field driveways may be permitted if the necessity for such additional access (due to topography or ongoing agriculture activities) is demonstrated. Field driveways will be kept to the minimum necessary in order to provide reasonable access. A permit for a field driveway will state the conditions as to its use by agricultural equipment only. A change in the use of the property may require a reevaluation of the access permit as determined by the Department.

The width of a commercial driveway and the radius of curvature connecting the driveway to highway pavement may vary in size depending on traffic and location. Applications for such driveways must include a design report justifying the width, radius, and placement of the driveway.

Drainage

Drainage in roadway side ditches shall not be altered or impeded. When drainage structures are required, the size and other design features shall be approved by Randall County Road Department.

Access driveways shall be constructed to match the grade of the roadway pavement edge or the shoulder edge if a shoulder is present. The driveway shall be designed and constructed in such a manner as to not impede the flow of water away from the roadway pavement.

If the driveway is approved to be constructed at grade through the roadside ditch or natural grade of the roadside, the driveway shall be paved with a stabilized all weather surface material acceptable to Randall County Road Department to conform to the cross section shape of the ditch or other natural grade of the roadside to form a stable driveway.

Safety end treatments will be used for all driveways with drainage structures constructed within the roadway right of way. The side slopes of the driveways must not be greater than the slope of the required safety end treatment and shall match the slope of the safety end treatment at the junction of the two. The design requirements of the safety end treatments are as follows:

- There shall be no culvert headwalls or similar vertical ends.
- Ends shall be sloped at 6:1 (6 horizontal to 1 vertical) or flatter, with concrete riprap to prevent erosion and to protect the pipe end.
- The access driveway embankment slope shall be 6:1 maximum, with 8:1 preferred beginning at the edge of the driveway pavement.
- For pipes greater than 30 inches in diameter or multiple pipes with individual diameters greater than 24 inches, grates shall be provided with maximum slope of 6:1 or a preferred slope of 8:1. Cross-pipes are not required on small (single pipes having a diameter of 30 inches or less) structures regardless of end location with respect to the horizontal clearance requirements; the ends of small structures shall be sloped and provided with concrete riprap as described above.

Materials

The permittee shall furnish all materials necessary for the construction of the access driveways and all appurtenances authorized by the permit. All materials shall be of satisfactory quality and shall be subject to inspection and approval by Randall County Road Department. Access driveways shall be paved with a stabilized all weather surface material acceptable to Randall County Road Department to prevent tracking mud onto the roadway and to prevent damage to the edge of the roadway from vehicles using the driveway.

Section 4: Number, Location, and Spacing of Access Connections

Overview

The access connection distances in the following subsections are based on stopping sight distance and are intended for passenger cars on a level grade. These distances may be increased for downgrades, truck traffic, or where otherwise indicated for the specific circumstances of the site and the roadway. In other cases, shorter distances may be appropriate to provide reasonable access and such decisions should be based on safety and operational factors supported by an engineering study.

The distance between access connections is measured along the edge of the traveled way from the closest edge of pavement of the first access connection to the closest edge of pavement of the second access connection (Refer to Figure 4-1).

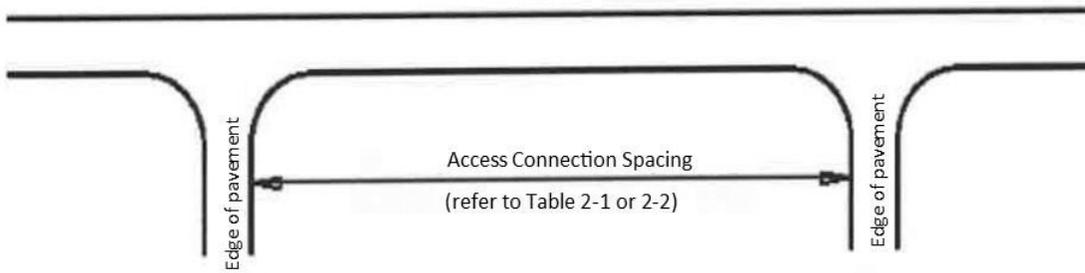


Figure 4-1. Access Connection Spacing Diagram

Conditions for granting access to the county road system will be stated in the access permit. Violation of the conditions under which the permit was granted, as determined by the Department, may require reevaluation of the access by the Randall County Road Department.

Where topography or other existing conditions make it inappropriate or not feasible to conform to the connection spacing intervals, the location of reasonable access will be determined with consideration given to topography, established property ownerships, unique physical limitations, and/or physical design constraints. The selected location should serve as many properties and interests as possible to reduce the need for additional direct access to the highway. In selecting locations for full movement intersections, preference will be given to public roadways that are on local thoroughfare plans.

In the absence of any safety or operational problems, additional access connections may be considered. Any additional access must not interfere with the location, planning, and operation of the public street system. Where the property abuts or has primary access to a lesser function road, to an internal street system, or by means of dedicated access easement, any access to the county roadway will be considered as an additional access.

Table 4-1: Connection Spacing Criteria

Minimum Connection Spacing	
Posted Speed (mph)	Distance (ft)
≤30	100
35	250
40	305
45	360
≥50	425

(1) Distances are for passenger cars on level grade. These distances may be adjusted for downgrades and/or significant truck traffic. Where present or projected traffic operations indicate specific needs, consideration may be given to intersection sight distance and operational gap acceptance measurement adjustments.

(2) Concrete, dip type entryways shall be required to be constructed on all streets where lots are less than 165 feet in width, with such width to be measured along the right of way and shall be the part fronting on the street rather than on a side street. Where drainage concerns require ditches to be deeper than 15 inches as measured at the deepest point along a straight line from the edge of the pavement to the property line, concrete or steel culverts may be used for entryways. If culverts are indicated by construction plans, then a common culvert for each two lots will be required so as to maintain the maximum distance between culverts to facilitate maintenance.

(3) When these values are not attainable, refer to the variance process as described in Section 2, Subsection 5 of the Permit to Construct Access Driveway Facilities on County Right of Way document.

(4) Access spacing values shown in this table may not apply to rural highways where there is little, if any, potential for development with current ADT levels below 2000. Access connection spacing below the values shown in this table may be approved based on safety and operational considerations as determined by the Randall County Road Department.

Auxiliary Lanes

This subsection describes the basic use and functional criteria associated with auxiliary lanes. Auxiliary lanes consist of left-turn and right-turn movements, deceleration, acceleration, and their associated transitions and storage requirements. Left-turn movements may pose challenges at driveways and street intersections. They may increase conflicts, delays, and crashes and often complicate traffic signal timing. These problems are especially acute at major intersections where heavy left-turn movements take place but also occur where left-turn movements enter or leave driveways serving adjacent land development. As with left-turn movements, right-turn movements pose problems at both driveways and street intersections. Right-turn movements increase conflicts, delays, and crashes, particularly where a speed differential of 10 mph or more exists between the speed of through traffic and the vehicles that are turning right.

The necessity of auxiliary lanes will be determined on a case by case basis. The overall design criteria will be evaluated in accordance with TxDOT standards.

Emergency Access

Direct emergency access (to be used by authorized emergency vehicles only) may be permitted if it is not feasible to provide adequate emergency access to a secondary roadway. A written explanation with references to local criteria from an appropriate government public safety official will be included with the permit application.