



# City of Round Rock Access Management Plan for State Highways



*Department of Public Works*

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Chapter 1 – Overview.....	1-1
Chapter 2 – Access Management General .....	2-1
2.1 Overview .....	2-1
2.2 Definitions .....	2-3
Chapter 3 – Engineering Analysis .....	3-1
3.1 Overview .....	3-1
3.2 Early Coordination.....	3-1
3.3 Engineering Study vs. Traffic Impact Analysis (TIA) .....	3-2
3.4 Requirements for Engineering Studies and TIA’s .....	3-3
3.5 Engineering Study .....	3-3
3.6 Traffic Impact Analysis (TIA) .....	3-4
3.7 Examples of Levels of Engineering Studies.....	3-4
Chapter 4 – Driveway Spacing Criteria.....	4-1
4.1 State Highways other than Frontage Roads.....	4-1
Connection Spacing Criteria.....	4-1
Corner Clearance.....	4-1
Width of Access.....	4-2
Existing Driveways.....	4-2
Auxiliary Lanes .....	4-3
4.2 Driveway Spacing for Frontage Roads .....	4-5
Connection Spacing Criteria.....	4-5
Existing Driveways.....	4-8
Ramp Location .....	4-10
4.3 Waivers .....	4-11
Chapter 5 – Driveway Permit Application Process .....	5-1
5.1 General .....	5-1
5.2 Limitations.....	5-1
5.3 Permit Application Process .....	5-1
5.4 Construction and/or Reconstruction.....	5-2
5.5 Materials.....	5-3
5.6 Inspection and Maintenance .....	5-3
5.7 Changes .....	5-3
5.8 Design.....	5-3

5.9 Private Driveways .....	5-7
5.10 Public Driveways .....	5-9
5.11 Commercial Driveways.....	5-9
5.12 Indemnification .....	5-10
5.13 Figures .....	5-11
Appendix A – TxDOT Transportation Code Excerpt .....	A-1

## **Chapter 1 - Overview**

Proper access management aids in the protection of the substantial municipal investment in transportation systems by safeguarding roadway efficiency and enhancing traffic safety, resulting in the reduction of the necessity for costly additional improvements. It has been noted that access management practices can promote a more coordinated intergovernmental, long term approach to land use and transportation decisions in the context of quality of life, economic development, livable communities, and public safety. Additionally, access management can significantly lower traffic accidents, personal injury, property damage as well as encouraging the orderly development and community sustainability.

In September 2003, Subchapter C of *Texas Transportation Code* was revised to address the issue of access connections to State Highways (See Appendix A). Included in these revisions was a provision allowing a municipality to include roadways on the state highway system in its local access management plan. The intent of this provision was to allow municipalities, on request to TxDOT, to assume responsibility for issuing permits for access connections to state highways within the jurisdiction of the municipality under a local access management plan when the municipality has the ability to issue permits.

As a result of this revision to Subchapter C of *Texas Transportation Code*, the City of Round Rock prepared this plan to implement access permitting for State Highway System roadways within its jurisdiction and extraterritorial jurisdiction of the City. In preparing this publication, the City used portions of its *Transportation Criteria Manual*, TxDOT's *Access Management Manual*, AASHTO's *Policy of Geometric Design of Highways and Streets* and other sources.

## Chapter 2 - Access Management General

### 2.1 Overview

Proper access management assists in protecting the substantial public investment in transportation by preserving roadway efficiency and enhancing traffic safety, thus reducing the need for expensive improvements. Furthermore, access management can significantly reduce traffic accidents personal injury, and property damage, as well as promote the orderly layout and sustainability of a community. To appreciate how access management fits into the entire spectrum of the roadway network, it should be understood that freeways, arterials, collectors, and local streets serve varying levels of through-traffic movement and access to property (see Figure 2-1).

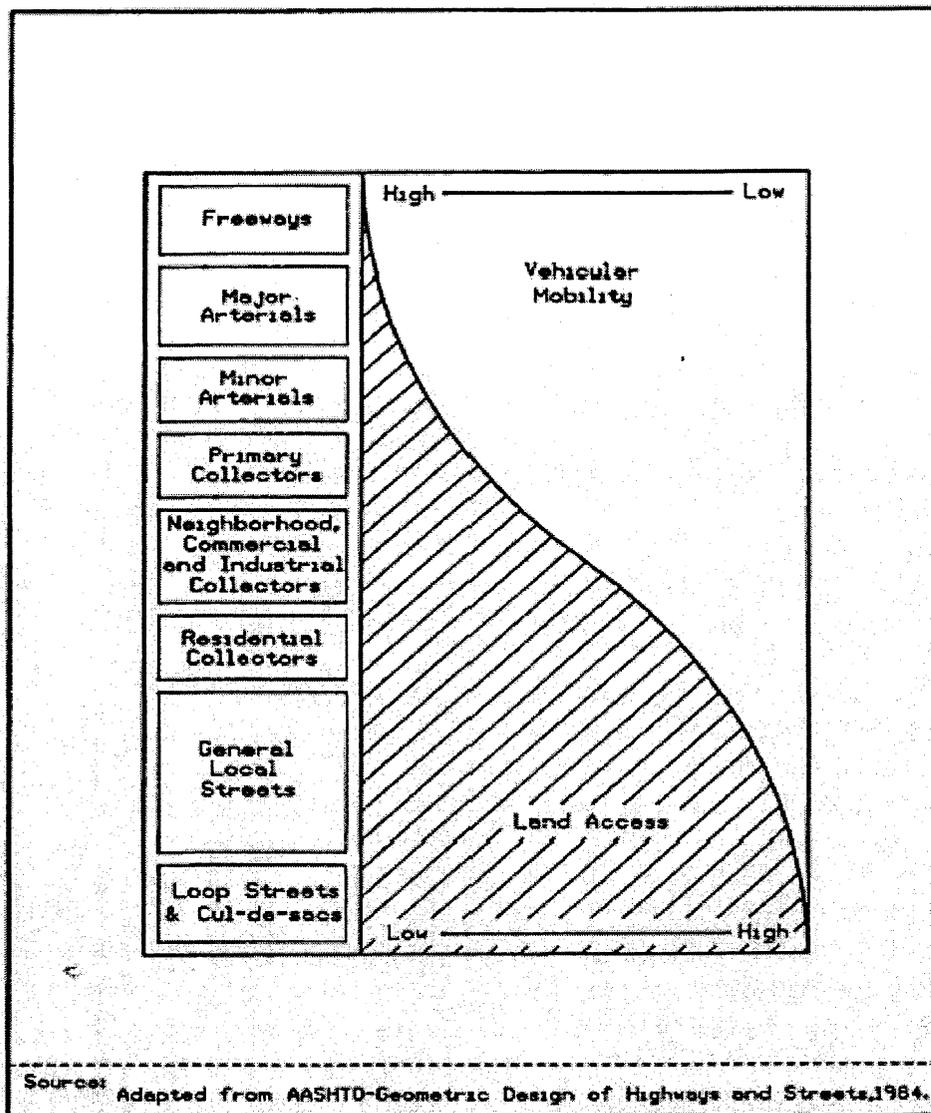
- *Freeways* - provide the highest level of mobility and are intended to carry the greatest amount of traffic at the highest speeds. Accordingly, freeway mainlanes provide no direct access to property and access to the freeway mainlanes is provided only at interchanges and ramps.
- *Arterials* - provide the next highest level of mobility and are intended to carry substantial amounts of traffic over relatively long distances and at relatively high speeds. Direct property access may be provided but must be carefully managed to preserve mobility and avoid creating unsafe and congested conditions.
- *Collectors* - provide lower mobility and are intended to carry lower volumes of traffic at lower speeds. Since most of the trips on collectors are shorter distance local trips, these streets can safely provide a higher amount of property access.
- *Local streets* - provide the lowest level of mobility and are intended to provide direct access to properties, preserve the neighborhood environment and enhance pedestrian and bicycle safety.

### 2.2 Definitions

#### ***Acceleration Lane:***

A speed-change lane, including tapered areas, for the purpose of enabling a vehicle entering a roadway to increase its speed to a rate at which it can more safely merge with through traffic.

Figure 2-1 Access Function



**Access Connection:**

Facility for entry and/or exit such as a driveway, street, road, or highway that connects to the highways under the jurisdiction of the department or local agency.

***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 striped for use as an acceleration lane, or deceleration lane, right-turn lane, or left-turn lane, but not for through traffic use.

***Capacity:***

The number of vehicles that can traverse a point or section of a lane or roadway during a set time period under prevailing roadway, traffic and control condition.

***Connection Spacing:***

The distance between connections, which 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.

***Corner Clearance:***

The distance along the edge of the traveled way from the closest edge of pavement of the intersecting roadway to the closest edge of pavement of the nearest access connection.

***Corner Lot:***

A lot located at the intersection of two roadways that has frontage on each roadway.

***Deceleration Lane:***

A speed-change lane, including tapered areas, for the purpose of enabling a vehicle that is exiting a roadway to leave the travel lanes and slow to a safe exit.

***Directional Median Opening:***

An opening in a nontraversable median that accommodates specific movements, such as U-turn movements and/or left-turn movements from the highway, and physically restricts other movements.

***Divided Highway:***

A highway with a median designed to separate traffic moving in opposite directions.

***Driveway – Commercial:***

A commercial driveway is an entrance to or exit from any commercial business, or similar type establishment adjacent to a state highway.

***Driveway – Private:***

A private driveway is an entrance to or exit from a residential dwelling, farm, or ranch adjacent to a state highway for the exclusive use and benefit of the permittee.

***Driveway – Public:***

A public driveway includes all approaches to a state highway from county or city maintained roads and streets, or an entrance or exit from a public school, a publicly owned cemetery or other publicly owned places or buildings that provide for public access.

***Frontage Road:***

A local street or road along an arterial highway allowing control of access and service to adjacent areas and property. A frontage road may also be referred to as a service road.

***Full Median Opening:***

In a nontraversable median, an opening that allows all turning movements from the highway and the adjacent connection, as well as crossing movements.

***Functional Area (Intersection):***

The area of an intersection necessary to provide all required storage lengths for separate turn lanes and for through traffic plus any maneuvering distance for separate turn lanes. The functional boundary of an intersection includes more than just the physical area of the intersection.

***Functional Classification:***

A system that classifies roadways according to the competing functions of traffic movement and access. The extremes of the classification categories are the fully access-controlled freeway that provides no local access function and the cul-de-sac that provides no through movement.

***Intersection:***

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

***Level of Service (LOS):***

A measure of traffic flow and congestion. *As defined in the Highway Capacity Manual*, it is a qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

***Limited Access Roadway:***

A roadway especially designed for through traffic and over, from, or to which owners or occupants of abutting land or other persons have no right or easement of access by reason) of the fact that their property abuts such limited access facility or for any other reason. Interstate highways, parkways, and freeways are usually developed as limited-access facilities.

***Local Access Road:***

A local public street or road that is generally parallel to a highway under the jurisdiction of the Department. Access for businesses or properties located between the highway and the local access road is provided to the local access road rather than the highway. A local access road may also be called a lateral road, or reverse frontage road, depending on individual location and application.

***Median:***

That portion of a divided highway separating the opposing traffic flows. A median may be traversable or nontraversable.

***Median, Nontraversable:***

A physical barrier in a roadway or driveway that separates vehicular traffic traveling in opposite directions. Nontraversable medians include physical barriers (such as a concrete barrier, a raised concrete curb and/or island, and a grass or a swale median) that prohibit movement of traffic across the median.

***Median, Traversable:***

A median that by its design does not physically discourage vehicles from entering or crossing over it. This may include painted medians.

***Median Opening Spacing:***

The allowable spacing between openings in a non-traversable median to allow for crossing the opposing traffic lanes in order to access property or for

crossing the median to travel in the opposite direction (U-turn). The distance is measured from centerline to centerline of the openings along the traveled way.

***Reverse Frontage Road:***

See "***Local Access Road***".

***Right-of-Way:***

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

***Service Road:***

See "***Frontage Road***".

***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.

***Signal:***

A traffic control signal.

***Stopping Sight Distance (SSD):***

The distance required by a driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the roadway becomes visible. It

includes the distance traveled during driver perception-reaction time and the vehicle braking distance.

***Storage Lane Length:***

The portion of an auxiliary lane required to store the maximum number of vehicles likely to accumulate in the lane during a peak period.

***Temporary Access:***

Time-limited provision of direct access to a roadway. Such access must be closed when permit conditions for access removal are satisfied. Typically, such conditions relate to such time when adjacent properties develop in accordance with a joint access agreement or frontage road plan.

***TMUTCD:***

*Texas Manual on Uniform Traffic Control Devices.*

***TxDOT:***

Texas Department of Transportation

## **Chapter 3 - Engineering Analysis**

### **3.1 Overview**

Conformance with the City of Round Rock’s driveway access policy does not preclude the need for engineering driveway locations. Any changes to drainage or hydraulics on the State Highway System resulting from access connections must be approved by TxDOT prior to any local access connection approval. Consideration also needs to be given to the actual driveway design, utility location (or relocation), traffic control during construction, compliance with the Americans with Disabilities Act (ADA) and Texas Accessibility Standards (TAS), environmental requirements, wetland considerations, if applicable, and the need to follow all applicable State and Federal laws, rules and regulations.

Engineering studies or analyses can be used to assist in the evaluation of future access connections to the State Highway System within the City of Round Rock. In most cases, such as low volume or rural access connections, an engineering study will not be needed; however, the need for an engineering study or a Traffic Impact Analysis (TIA), and the level of detail, will be determined by City of Round Rock.

The purpose of engineering study or TIA is to determine the safety, mobility, and operational impacts that the access connection will have on the highway system. In addition, such studies should illustrate the compatibility between the proposed land use and the transportation network.

In the event a TIA is required, it shall be prepared in accordance with Section 2 of the City of Round Rock’s *Transportation Criteria Manual*.

### **3.2 Early Coordination**

As early as possible in the development process, applicants are encouraged to meet with the Department of Public Works staff to discuss specific requirements associated with obtaining access to the state highway system. This meeting, in addition to bringing all affected parties together regarding access connection issues, will also help to define the requirements of any needed engineering study.

When determining the need for and level of detail of an engineering study, the following questions should be considered:

- Do the proposed driveway(s) meet the minimum spacing requirements per Tables 4-1, 4-2 and/or 4-3?
- Will the proposed driveway(s) require a deceleration or acceleration lane?
- Are there any sight distance or physical obstructions that will result in a safety problem?
- Are there any environmental or hydraulic issues associated with the proposed driveway(s)?
- What are the traffic volume and classifications of the intersecting street at the proposed driveway location?
- Is there an unusual lot configuration?
- Is the number of driveways appropriate for the proposed land use/traffic generation?

The responses to the above list of questions will determine the level of detail required in an engineering study. If necessary, specifics regarding needed level of study, time of day analysis, phasing of development, and project area can be defined and agreed upon at the initial coordination meeting. Additional information and analysis may be required if the access connection cannot meet the minimum spacing requirements, or there is an operational or safety impact. The City of Round Rock will make such determination jointly with the applicant.

### **3.3 Engineering Study versus Traffic Impact Analysis (TIA)**

A Traffic Impact Analysis (TIA) is defined in the requirements described below. The following section outlines the purpose and requirements of an engineering study and a TIA.

In most cases where the access requirements set forth herein are satisfied, a TIA will not be required. However, based on review of the engineering study, the Department of Public Works may, at its sole discretion, may require a TIA to determine specific recommendations to mitigate transportation impacts of site-generated traffic on adjacent roadways and intersections.

Typically, the impacts of an access point along a state facility can be ascertained by means of an engineering study that indicates the forecasted turning movements at the proposed access connections. The forecasted turning movements, used in conjunction with the *TxDOT Roadway Design*

*Manual*, will determine the need for and the required length of left turn and/or right-turn deceleration lanes.

### **3.4 Requirements for Engineering Studies and TIAs**

The intent of this section is to identify the possible criteria for engineering studies and TIAs. It is the intent of the City of Round Rock to require only those elements of an engineering study or TIA that are necessary to answer the specific questions that arise during the permitting process for specific access points. It is not the intent of the City of Round Rock to require an exhaustive TIA for every application for a driveway permit on a State roadway. The early coordination meeting, as discussed above, will be the mechanism to identify whether or not an engineering study or TIA is necessary and, if so, the level of detail that will be required.

### **3.5 Engineering Study**

In the event an engineering study is required, it may include the following elements: trip generation, trip distribution, and traffic assignment at the proposed access points. Additionally, the engineering study may require that existing traffic volume data be collected.

The trip generation will be conducted using the latest edition of the Institute of Transportation Engineer's *Trip Generation* manual unless there is acceptable data that supports the use of another trip generation source. Trip distribution will be performed with input from the local TxDOT District staff (and the local agency, if applicable). The traffic assignment will be conducted to determine the forecasted turning movements attributable to the proposed development. The existing traffic counts will be adjusted, using an annual growth rate as agreed by the Department of Public Works to the build-out year of the proposed development. As an example, if the proposed development will take two years to construct and occupy, the existing traffic volumes will be adjusted by the agreed upon growth factor for two years. The resulting traffic volumes will be used as background traffic volumes, and the assigned forecasted turning movements will be added to the background traffic volumes resulting in the total traffic volumes.

The total traffic volumes will be used to determine the need for left-turn and right-turn lanes. If such lanes are needed, refer to the *TxDOT Roadway Design Manual* to determine their lengths and other design criteria.

### **3.6 Traffic Impact Analysis (TIA)**

In the instances where a TIA is required by the Department of Public Works, it may include the above mentioned elements as well as the same type of data for intersections adjacent to the proposed site (specific study limits to be defined by Department of Transportation Services). Additionally, the TIA may require operational analyses (including LOS and capacity analyses) for the study intersections as determined during the initial meeting between the applicant and the Department of Public Works staff. Furthermore, the applicant's TIA should include recommendations for mitigation measures should the impact of the proposed access point(s) on the state highway system results in unacceptable levels of service. These recommendations include, but are not limited to, the following:

- Roadway Improvements
- Traffic Control Modifications
- Lane Use Controls
- Alternate Modes and Demand Management Options.

In some cases, a combination of these strategies may be necessary.

In the event that such improvements are identified in the TIA to mitigate adverse impacts to the transportation system, the applicant will be fully responsible for such improvements. The City will consider a pro ration of the costs of such improvements if it is determined that the proposed development is not solely responsible for the improvement.

### **3.7 Examples of Levels of Engineering Studies or TIA's**

This section presents examples of scenarios under which an engineering study or TIA would likely be required by the City of Round Rock and the level of detail that would be needed to address the issues associated with the requested access connection. These scenarios are for illustration purposes only and should not be used as thresholds for study level requirements.

1. The *first scenario* involves a request that meets the driveway spacing criteria, but is a major development that consists of more than 200,000 square feet of retail development, along with additional pad-type developments. Even though the driveway spacing criteria (as defined herein) have been met, it is important for the City to understand the

impacts that this large development will have on the adjacent roadway network and the intersections adjacent to the site. The parameters of the engineering study or TIA would be defined by Department of Public Works based on the characteristics of the existing traffic, the major intersections relative to the site access, and other operational or safety concerns.

Additionally, the engineering study or TIA would likely examine multiple phases of development, assuming that the entire site will not be developed at one time. The phased study or TIA would enable the Department of Public Works to determine the necessary mitigation measures for each phase of development and the specific improvements that should be in place to accommodate the development's traffic. As noted previously, the intent of a City-required Engineering Study or TIA is not to determine the compatibility of the land use with the surrounding area, but rather to determine the impact of the development and its associated traffic on the roadway.

2. The *Second scenario* involves the application for a driveway for a small development, such as a single residential unit, single retail unit or similar use. The driveway spacing requirements, as set forth herein, are satisfied by the applicant. The existing traffic volumes along the state roadway are relatively low. Neither an Engineering Study nor a TIA would be required in this scenario.
3. A *third scenario* would be the application for a driveway for a moderate-sized development that meets the spacing criteria outlined herein, but there is concern over the proper length of a right turn deceleration lane and if there is a need for a left-turn lane. The Department of Public Works staff may require an Engineering Study to examine these issues. The applicant would need to provide forecasted turning movement volumes at the subject driveway location as well as background traffic volumes that will also pass through the intersection. These forecasted volumes, along with the state roadway's design speed, can then be used in conjunction with the City's *Transportation Criteria Manual* to determine if a right-turn deceleration lane and/or left-turn lane is needed. If it is determined that either are required, an operational analysis can be performed by the applicant to determine the appropriate length of the required turn lane.
4. The *fourth scenario* involves an application for a driveway that does not meet the spacing requirements set forth herein. As necessary, the Department of Public Works may request an Engineering Study or TIA to

determine the operational impacts of the proposed driveway on the existing state roadway and adjacent driveways or intersections. The level of detail of this study or TIA will be dependent upon the intensity of the traffic expected to be generated by the planned development. The study may include trip generation, distribution and assignment, but may also include operational analyses at the proposed driveway and the adjacent intersections and driveways. Further analyses may be necessary to determine the operational and safety impacts of the sub-standard spacing on the overall roadway system.

## Chapter 4 - Driveway Spacing Criteria

### 4.1 State Highways Other Than Frontage Roads

This classification applies to all state highway systems routes that are not new highways on new alignments, freeway main lanes or frontage roads within the city limits of Round Rock.

#### Connection Spacing Criteria

Table 4-1 provides minimum connection spacing criteria for other state systems highways. However, a lesser connection spacing than set forth in this document may be allowed without deviation in the following situations:

- Where land locking of a parcel would result; or
- Replacement or re-establishment of access to the state highway system under highway reconstruction and/or rehabilitation projects.

Table 4-1 – Minimum Connection Spacing

Posted Speed (mph)	Distance (1) (feet)
less than or equal to 30	200
35	250
40	305
45	360
greater than or equal to 50	425

(1) Distances shown are for passenger cars on level grade. These distances may be adjusted for downgrades and/or significant truck traffic.

#### Corner Clearance

Table 4-1 is also to be used to provide minimum corner clearance criteria.

In the event inadequate access connection spacing can not be achieved, the City of Round Rock will allow for lesser spacing, providing that shared access is established with abutting property. Where no other viable alternatives exist, construction of an access connection will be allowed along

the property line farthest from the intersection. This accommodation will provide reasonable access under these conditions as well as provide for safe operation. In such conditions, consideration will be given to designing the connection to allow only right-in turning movement or right-in / right-out turning movements to provide continued flow with minimal interruption.

**Width of Access**

The width of access driveways shall be determined in accordance with Table 4-2. However, in no case shall an individual, undivided driveway width be greater than 35 feet.

Table 4-2 Driveway Dimensions

	Urban			Rural		
	Residential	Commercial	Industrial	Residential	Commercial	Industrial
Minimum Width (ft)	10	15	20	10	15	20
Maximum Width (ft)	30	35	35	30	35	35

The minimum width of commercial driveways applies to one-way operations. In high pedestrian areas, such as in the central business district or in the same block with an auditorium, school, library or similar facility, the maximum basic widths shall be 30 feet. The widths shown are measured along the right-of-way line at the inner limit of the driveway.

The minimum radius for proposed drives shall be determined based on intended usage including volumes and sizes of truck traffic. However, in no case shall the drive return radius be less than 25 feet.

**Existing Driveways**

If a driveway is being reconstructed in its original location, documentation must be submitted verifying the driveways location and width is not being altered for the proposed reconstruction. This documentation can be in the form of a scaled drawing showing the roadway, the existing driveway location, the new location and material proposed for construction.

However, if the reconstruction is due to a change in property usage or zoning, resulting in the modification of the configuration of the driveway, the same policies and procedures will be followed as if the driveway ac-

cess was being requested for the first time. In particular, existing driveways will be evaluated during the site plan process to assure their continued use is in accordance with the provisions of this Plan. In the event that driveways exist on individual properties being combined for new development or use, each driveway will be evaluated for appropriateness for the use and compliance with the provisions of this Plan. However, existing driveways will not be removed unless additional driveway accesses are included in the request for change in land use.

In cases where roadway widening or realignment is necessary at the discretion of the City of Round Rock, relocation or removal of existing driveways will be at the expense of the public entity.

### **Auxiliary Lanes**

This section 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 timings. These problems are especially acute at major highways 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.

Table 4-3 presents thresholds for auxiliary lanes. These thresholds represent examples of where left turn and right turn lanes should be considered. Refer to the TxDOT Roadway Design Manual, Chapter 3, for proper acceleration and deceleration lengths.

Table 4-3 Auxiliary Lane Properties

Median Type	Left Turn to or from Property		Right Turn to or from Property <sup>(5)</sup>	
	Acceleration	Deceleration	Acceleration	Deceleration
Non-Traversable (Raised median)	(2)	All	Right turn egress > 200vph <sup>(4)</sup>	<ul style="list-style-type: none"> <li>• &gt;45mph where right turn volume is &gt; 50vph<sup>(3)</sup></li> <li>• ≤ 45 where right turn volume is 60vph<sup>(3)</sup></li> </ul>
Traversable (Undivided Road)	(2)	(1)	Same as above	Same as above

(1) Refer to Table 3-11, TxDOT Roadway Design Manual, for alternative left-turn bay operation considerations

(2) A left-turn acceleration lane may be required if it would provide a benefit to the safety and operation of the roadway. A left-turn acceleration lane is generally not required where the posted speed is 40 mph or less, or where the acceleration lane would interfere with the left-turn ingress movements to any other access connection.

(3) Additional right-turn considerations:

- Conditions for providing an exclusive right-turn lane when the right-turn traffic volume projections are less than indicated in Table 2-3:
- High crash experience
- Heavier than normal peak flow movements on the main roadway
- Large volume of truck traffic
- Highways where sight distance is limited
- Conditions for NOT requiring a right-turn lane where right-turn volumes are more than indicated in Table 5-3:
- Dense or build-out corridor where space is limited
- Where queues of stopped vehicles would block the access to the right turn lane
- Where sufficient length of property width is not available for the appropriate design

(4) The acceleration lane should not interfere with any downstream access connection.

- The distance from the end of the acceleration lane taper to the next unsignalized downstream access connection should be equal to or greater than the distances found in Table 5-2.
- Additionally, if the next access connection is signalized, the distance from the end of the acceleration lane taper to the back of the 90<sup>th</sup> percentile queue should be greater than or equal to the distances found in Table 5-2.

(5) Continuous right-turn lanes can provide mobility benefits both for through movements and for the turning vehicles. Access connections within a continuous right turn lane should meet the spacing requirements found in Table 5-2. However, when combined with crossing left in movements, a continuous right-turn lane can introduce additional operational conflicts.

## 4.2 Driveway Spacing for Frontage Roads

This subsection describes the spacing of driveways directly accessing Interstate frontage roads as well as the methodology that will be applied for access connections on these facilities. Frontage roads are roadways that are generally constructed parallel to an Interstate Highway, freeway or other controlled access highway.

Frontage roads will be considered in order to provide direct access to abutting properties where:

- alternative access is not available and the would be otherwise landlocked;
- where it is not feasible to purchase access; and
- Where the frontage road allows for improved mobility, together with the property access.

### **Connection Spacing Criteria**

Table 4-4 provides the minimum connection spacing criteria for frontage roads. However, a lesser spacing than set forth in this document may be allowed without deviation in the following situations:

- To keep from land-locking a property; or
- Replacement or re-establishment of access to the State Highway System as part of highway reconstruction / rehabilitation projects.

It should be noted that, for areas with conventional diamond ramp patterns, the most critical areas for operations are between the exit ramp and the arterial street and between the arterial street and the entrance ramp. In "x – ramp" configurations, the most critical areas are between the exit ramp and the subsequent entrance ramp. While Table 4-4 provides minimum connection criteria, the critical areas with respect to the ramp pattern may need greater spacing for operational, safety and weaving efficiencies.

The distance between access connections is measured along the edge of the traveled way from the centerline of the pavement of the first access

connection to the centerline of the second access connection (See Figure 4-1). Additionally, the access connection spacing in the proximity of the frontage road “u-turn” lanes will be measured from the inside edge of the “u-turn” lane to the centerline of the first access connection (See Figure 4-2).

In the situation where frontage roads are provided, access will be controlled for operational purposes, at ramp junctions with frontage roads, through access restrictions to control driveway location and design. Figures 4-3 and 4-4 show recommended access control strategies for planned or existing exit and entrance ramps, respectively, and should be used where practical.

Table 4-4 Frontage Road Connection Spacing Criteria

Posted Speed (mph)	Minimum Connection Spacing (feet) <sup>(1)</sup>	
	One-Way Frontage Road	Two-Way Frontage Roads
less than or equal to 30	200	200
35	250	300
40	305	360
45	360	435
greater than 50	425	510

(1) Distances shown are for passenger cars on level grade. These distances may be adjusted for downgrades and/or significant truck traffic.

The placement of streets and driveways, in the vicinity of freeway ramps or frontage road intersections, will be carefully considered and permitted only after overall local traffic operations are considered. It should be further noted that if a proposed driveway is within the controlled access area of a ramp, the permitting of such a driveway will be coordinated with TxDOT and will require concurrence of the FHWA.

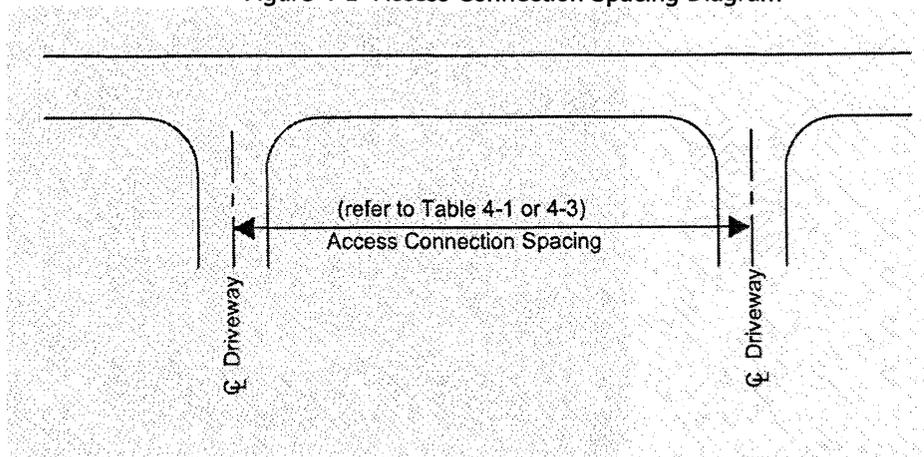
Table 4-5 shows the spacing to be used between exit ramps and driveways, side streets or cross streets, if applicable. The number of weaving lanes is defined as the total number of lanes on the frontage road downstream from the ramp.

Table 4-5 Desirable Spacing between Exit Ramps and Driveways

Total Volume (Frontage Rd. + Ramp) (vph)	Driveway or Side Street Volume (vph)	Spacing (feet)		
		Number of Weaving Lanes		
		2	3	4
< 2500	<250	460	460	560
	>250	520	460	560
	>750	790	460	560
	>1000	1000	460	560
> 2500	<250	920	460	560
	>250	950	460	560
	>750	1000	600	690
	>1000	1000	1000	1000

Driveway or side street access on the frontage road in close downstream proximity to exit ramp terminals increases the weaving that occurs on the

Figure 4-1 Access Connection Spacing Diagram



frontage road and may lead to operational problems. For this reason, it is important to maintain appropriate separation between the intersection of the exit ramp and the frontage road travel lanes, and downstream driveways or side streets, where practical.

It is recognized that there are occasions when meeting these exit ramp separation distances may not be possible due to the nature of existing development, such as a high number of closely spaced driveways and/or side streets, especially when in combination with closely spaced interchanges. **In these cases, at least 250 feet of separation should be provided between the intersection of the exit ramp and the**

**frontage road travel lanes and the downstream driveway or side street.** Inasmuch as the use of only 250 feet of separation distance may negatively impact the operation of the frontage road, exit ramp, driveway and/or side street traffic, careful consideration should be given to its use. When the 250 feet separation distance cannot be obtained, consideration should be given to channelization methods that would restrict access to driveways within this 250 foot distance. Refer to the *Texas Manual of Uniform Traffic Control Devices* (TMUTCD) for specific types of channelization. The City will coordinate the use of such devices with TxDOT to assure that maintenance of the State Highway System is not negatively impacted.

There will be similar occasions when meeting the entrance ramp separation distances may not be possible due to the same existing development conditions associated with exit ramps. In these cases, at least 100 feet of separation distance should be provided between the intersection of the entrance ramp and the frontage road lanes and the upstream driveway or side street.

Since the use of only 100 feet of entrance ramp separation distance may also negatively impact the operation of the frontage road, entrance ramp, driveway and/or side street traffic, careful consideration should be given to its use. As with exit ramps, when the 100 foot entrance ramp separation cannot be obtained, consideration should be given to channelization methods that would restrict access to driveways within this 100 foot distance. Refer to the TMUTCD for specific types of channelization. The City will coordinate the use of such devices with TxDOT to assure that maintenance of the State Highway System is not negatively impacted.

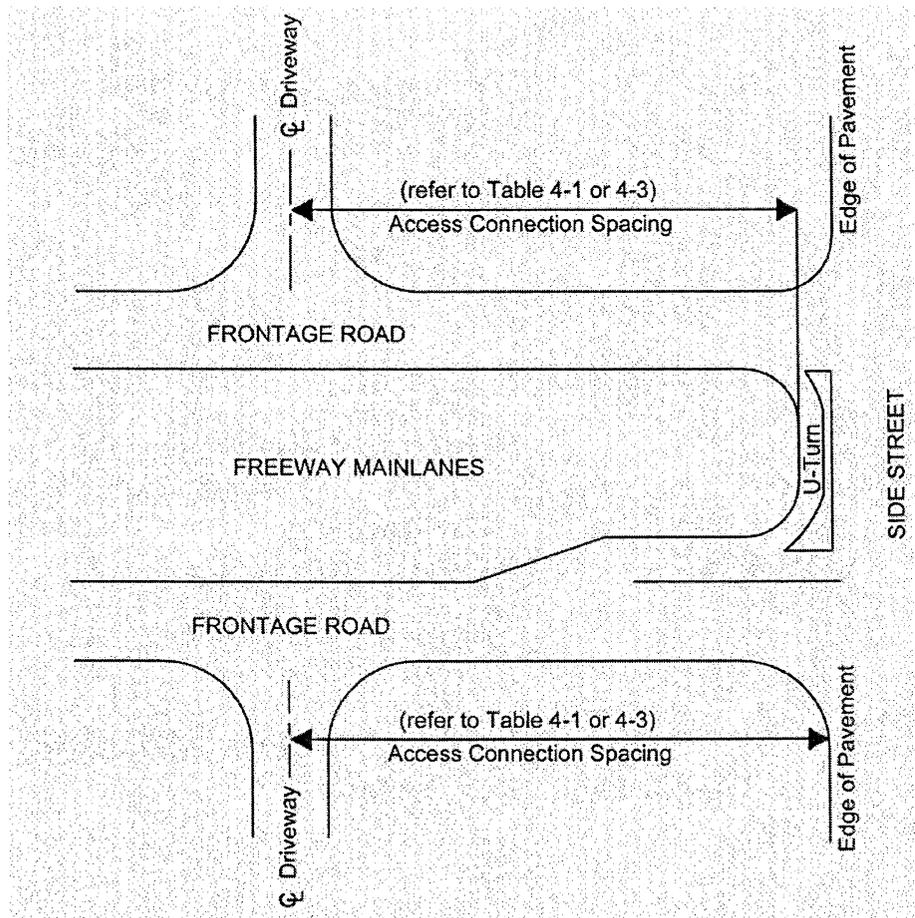
### **Existing Driveways**

If a driveway is being reconstructed in its original location, documentation must be submitted verifying the driveways location and width is not being altered for the proposed reconstruction. This documentation can be in the form of a scaled drawing showing the roadway, the existing driveway location, the new location and material proposed for construction.

However, if the reconstruction is due to a change in property usage or zoning, resulting in the modification of the configuration of the driveway, the same policies and procedures will be followed as if the driveway access was being requested for the first time. In particular, existing driveways will be evaluated during the site plan process to assure their contin-

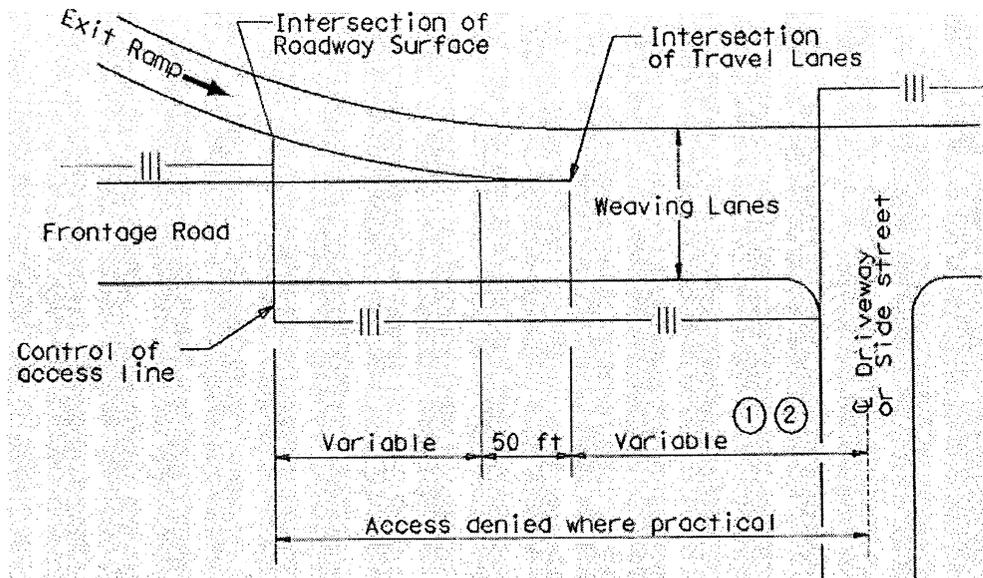
ued used is in accordance with the provisions of this Plan. In the event that driveways exist on individual properties being combined for new development or use, each driveway will be evaluated for appropriateness for the use and compliance with the provisions of this Plan. However, existing driveways will not be removed unless additional driveway accesses are included in the request for change in land use.

Figure 4-2 Frontage Road U-Turn Spacing Diagram



In cases where roadway widening or realignment is necessary at the discretion of the City of Round Rock or TxDOT, relocation or removal of existing driveways will be at the expense of the public entity.

Figure 4-3 Recommended Access Control at Exit Ramp Junction with Frontage Road



- (1) For exit ramps to driveway, side street or cross street spacing, see Table 4-2.
- (2) When the recommended minimum separation distance cannot be obtained, consideration should be given to channelization methods that would restrict access to driveways within the minimum separation distance.

### **Ramp Location**

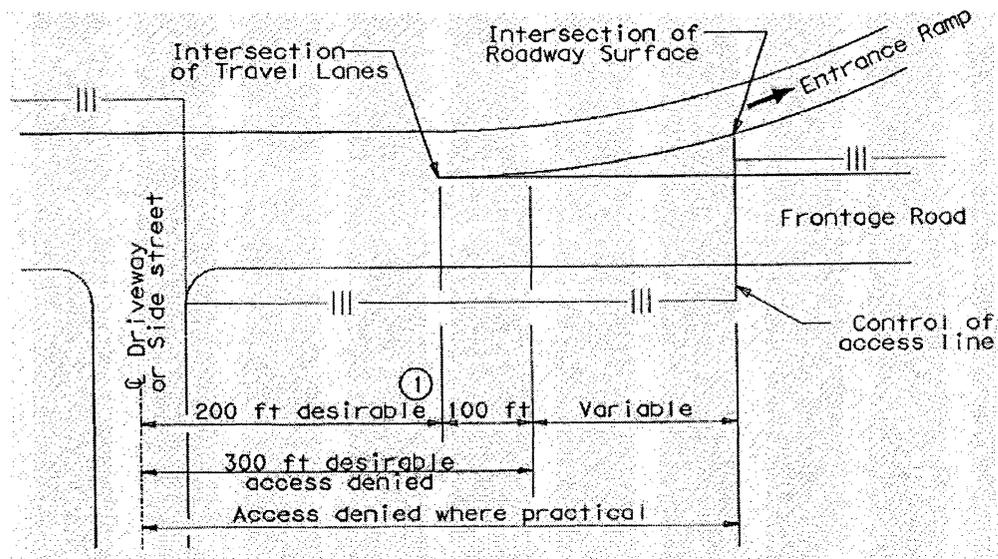
In the preparation of schematic drawings, care should be exercised to develop design in sufficient detail to accurately show locations of ramp junctions with frontage roads and the location of access control limits. These drawings may be displayed at meetings and/or hearings and could become the basis for right-of-way instruments or, in some cases, the City's regulation of driveway location(s).

In some cases, ramps must be shifted to satisfy level of service considerations or geometric design controls. As necessary, the access control limits should also be shifted if rights-of-way have not been previously purchased.

### 4.3 Waivers

In the event circumstances, no matter the reason, do not allow the preceding criteria to be met, a waiver from the criteria may be requested. The documentation required for application for a waiver be determined by the Chief of Public Works Operation, or his designee in accordance with the Section 3.1 entitled **Overview**.

Figure 4-4 Recommended Access Control at Entrance Ramp Junction with Frontage Road



- (1) For entrance ramps to driveway, side street or cross street spacing, see Table 4-2.
- (2) When the recommended minimum separation distance cannot be obtained, consideration should be given to channelization methods that would restrict access to driveways within the minimum separation distance.

Inasmuch as other potential factors may exist that could be sufficient to warrant consideration for an exception to the policy, the Department of Public Works should be consulted for a recommendation as to specific documentation requirements.

While the City of Round Rock is responsible for the approval/disapproval of individual waivers to the provisions of this Plan, such actions will be coordinated with TxDOT, prior to the resolution, to evaluate potential impacts to the State Highway System.

## **Chapter 5 - Driveway Permit Application Process**

### **5.1 General**

Applications for driveway permits within the jurisdictional limits of the City of Round Rock shall be submitted to the Department of Public Works, which will review applications for driveway permits to ascertain their impact on vehicular traffic, pedestrian traffic and safety; approval of such applications will be based on these applications.

Applications 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 state highway rights of way.

### **5.2 Limitations**

Access shall not be allowed to the main traffic ways or exit and entrance ramps of controlled access highways such as freeways or expressways. Due to safety concerns and traffic flow on non-controlled access highways, it is desirable to restrict access in the vicinity of ramp gore areas.

Any impacts to drainage on the state highway system resulting from installation of access driveways must be coordinated with and approved by TxDOT prior to any approval by the City of Round Rock.

Consideration also needs to be given to driveway geometrics, utility location or relocation, environmental requirements, wetlands considerations (if appropriate) and the need to follow all applicable state and federal laws, rules and regulations. Compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Texas Accessibility Standards (TAS) is required.

The intent of these limitations is to assure maximum safety to the traveling public.

### **5.3 Permit Application Evaluation**

In making a final determination on a driveway permit application, the following factors will be evaluated:

1. Topography of site;
2. Land use (including the intensity of the proposed development and trip attraction and/or generation potential, mix of vehicles and turning movements);
3. Function of public street (including number of lanes, medians (if any), median openings, vertical and horizontal alignment, sight distance, operating speeds, existing and projected traffic volumes, entrance and/or exit ramps and frontage roads);
4. Location of nearby streets and driveways;
5. Proposed Site Plan (including on-site circulation, delineation of intended paths, parking stalls, location of buildings and location of loading areas);
6. Physical constraints of the site;
7. Unusual lot configurations;
8. Actual or anticipated increases in vehicular traffic resulting from the permit application, which will be routed on to adjacent streets;
9. Potential traffic movements which are unsafe or will have an adverse effect on traffic operations; and,
10. Joint access, at the time of subdivision or site approval, for abutting lots which have insufficient frontage to allow for a driveway approach for each lot.

No driveway permit shall be issued unless the design of the driveway approach is in accordance with the City's *Traffic Criteria Manual* as well as *Standard Specifications and Criteria Manual* or is established in accordance with a City-approved site plan.

#### **5.4 Construction and/or Reconstruction**

All new access driveways, following permit approval, shall be constructed in conformance with the applicable regulations. Any existing access driveway structures which are destroyed or removed in the construction or re-

construction of a section of highway will be reestablished by TxDOT to the extent necessary to provide reasonable access.

## **5.5 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 the City of Round Rock.

## **5.6 Inspection and Maintenance**

The City of Round Rock reserves the right to inspect driveway installations at the time of construction and at all times thereafter, and to require such changes, maintenance, and repairs as may at any time be considered necessary to provide protection of life and property on or adjacent to the highway.

The cost of changes, maintenance and repairs of private and commercial driveways, islands and other access driveway appurtenances on the right of way will be the responsibility of the permittee, except as provided under Construction and Reconstruction herein. In the event a permittee fails to make corrective measures as directed, the City of Round Rock may perform the necessary work and hold the permittee financially responsible.

## **5.7 Changes**

No access driveway, approach, or other improvement constructed on the right of way shall be rebuilt, relocated, enlarged or otherwise modified without a duly executed permit from the City of Round Rock.

## **5.8 Design**

Design requirements for access driveways are as follows:

1. All parts of entrances and exits on highway 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 highway to the permittee's abutting property line.

When two or more adjoining permittees 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.

2. Locations of access driveways shall be selected to provide maximum safety for highway traffic and for users of the access driveway.
3. The design of access driveway spacing shall be as follows:
  - a) Access driveways to all highways other than frontage roads shall be in accordance with access spacing and corner clearance criteria specified in Table 4-1 of this Manual. However, a lesser connection spacing may be allowed without deviation in the following situations:
    - To keep from land-locking a property where such landlocking is solely the result of action by TxDOT or the City of Round Rock (for example, design and construction modifications which physically prevent a driveway installation due to grade changes, retaining walls, or barrier installations) where TxDOT does not control the access; or,
    - Replacement or re-establishment of reasonable access to the state highway system under highway reconstruction / rehabilitation projects.
  - b) Access driveways to all frontage roads shall be in accordance with access spacing and corner clearance criteria specified in Table 4-3 of this Manual. However, a lesser connection spacing may be allowed without deviation in the following situations:
    - To keep from land-locking a property where such landlocking is solely the result of action by TxDOT or the City of Round Rock (for example, design and construction modifications which physically prevent a driveway installation due to grade changes, retaining walls, or barrier installations) where TxDOT does not control the access; or
    - Replacement or re-establishment of reasonable access to the state highway system under highway reconstruction / rehabilitation projects.

- c) Access driveways to rural highways outside of metropolitan where there is little, if any, potential for development and ADT volumes are below 2,000 will be located and designed based on safety and traffic operation considerations. Such considerations may include traffic volumes, posted speed, turning volumes, presence or absence of shoulders, roadway geometrics and sight distances.
- 4. At any intersection of a state highway with another highway, 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.
- 5. Radii for all access driveways in urban areas shall be not less than five feet, and in rural areas it shall be not less than ten feet.
- 6. All driveway construction shall comply with ADAAG/TAS requirements and standards. The applicant shall provide appropriate access as determined by TxDOT regardless of the presence of adjacent sidewalks. Sidewalk requirements include, but are not limited to, 2 percent maximum sidewalk cross-slope and 4-foot minimum width (5-foot width is preferred).
- 7. Drainage in highway side ditches shall not be altered or impeded. When drainage structures are required, the culvert size and other design features shall be approved by TxDOT.
- 8. The roadside area of the highway right of way, the area between the curb or shoulder line and the right-of-way line along the permittee's property frontage, except the areas contained in the access driveways, may be filled-in, if approved, and the following conditions are met:
  - a. Surface drainage shall be provided so that all surface water on the filled-in area shall be carried away from the highway roadbed in a suitable manner.
  - b. The drainage conduit underneath the filled-in area shall be adequate to carry the design flow of water in the highway ditches.
  - c. The filled-in area shall be sufficiently delineated and, where required by the City of Round Rock, delineation or other satisfactory methods shall be used to prevent the use of the area for parking or travel. The area shall be kept free of obstructions.

- d. The filled-in area shall extend from the right-of-way line to the edge of pavement, edge of shoulder or back of curb as the case may be. Other requirements may be imposed by TxDOT for filled-in areas in order to conform with planned future improvements to the existing highway section.
9. Access driveways shall be paved with a stabilized all weather surface material acceptable to TxDOT to prevent tracking mud onto the highway and to prevent damage to the edge of the roadway from vehicles using the driveway.
10. Access driveways shall be constructed to match the grade of the highway pavement edge or the shoulder edge if a shoulder is present. The driveway shall be sloped to provide positive drainage away from the highway pavement.
11. If a valley gutter is used in lieu of a culvert, the valley gutter shall be centered in the roadside ditch and the valley section shall be paved with a stabilized all weather surface material acceptable to TxDOT to conform to the cross-sectional shape of the ditch.
12. The minimum and maximum design limits herein should not be considered absolute. The City of Round Rock may require any design such as acceleration and/or deceleration lanes in order to provide reasonable safety, depending upon type, speed, and volume of highway traffic and to provide for reasonable access for the permittee. Acceleration and/or deceleration lanes may also be required for access to temporary commercial or industrial sites such as temporary concrete plants, temporary quarries, etc.
13. Drainage structures (circular pipe, elliptical pipe, arch pipe, box culvert, paved valley gutter, etc.) constructed within the highway horizontal clearance shall be designed to be traversable by an errant vehicle without abrupt change in speed or rollover. Current Horizontal Clearance standards are listed in TxDOT's Design Manual. Minimum guidelines for design of the end of the drainage structure (safety end treatment) for access driveways within the Horizontal Clearance are as follows:
  - a) There shall be no culvert headwalls or similar vertical ends.
  - b) 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.

- c) The access driveway embankment slope shall be 6:1 maximum, with 8:1 preferred beginning at the edge of the driveway pavement.
  - d) 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; however, the ends of small structures shall be sloped and provided with concrete riprap as described in (b) above.
  - e) Length of pipes under driveways, where required, shall conform to the requirements shown in Table 5-1.
14. Divided driveways having a one-way in and a one-way out, must provide for a raised separation (6-inch maximum height) between the entry and exit lanes. The separation area may be landscaped or may contain a surface material having a contrasting color to the driveway pavement that will be highly visible to motorists. An excessively wide raised separator may be confusing to motorists and may appear to be two closely spaced two-way driveways. To avoid this problem, the maximum allowable width of a raised separator in a divided driveway is 12 feet. Fixed objects will not be allowed in the highway right of way.

## **5.9 Private Driveways**

### *1. Construction.*

Cost of materials and installation of all private driveways shall be the responsibility of the permittee.

### *2. Width.*

The width, measured at right angles to the centerline of the driveway, except as increased by permissible radii, shall comply with the requirements of Table 4-2

### *3. Angle.*

The angle of the driveway from the highway pavement shall be 75 to 90 degrees, except that one-way 45 to 90 degree angle driveways will be permitted for connections to one-way frontage roads or lane divided highways.

4. *Maintenance.*

Maintenance of all private driveways shall be the responsibility of the permittee. If drainage or safety problems related to private driveways occur, it is the permittee’s responsibility to take corrective action as directed by TxDOT. If the permittee fails to take corrective action, TxDOT may make the necessary alterations and hold the permittee financially responsible.

Table 5 - 1

Diameter of Pipe	Depth of Pipe *	Minimum Required Pipe Length
18"	2' - 0"	Driveway Width + 6'
18"	2' - 6"	Driveway Width + 12'
18"	3' - 0"	Driveway Width + 18'
18"	3' - 6"	Driveway Width + 24'
18"	4' - 0"	Driveway Width + 30'
24"	2' - 6"	Driveway Width + 6'
24"	3' - 0"	Driveway Width + 12'
24"	3' - 6"	Driveway Width + 18'
24"	4' - 0"	Driveway Width + 24'
30"	3' - 0"	Driveway Width + 6'
30"	3' - 6"	Driveway Width + 12'
30"	4' - 0"	Driveway Width + 18'
30"	4' - 6"	Driveway Width + 24'
36"	3' - 6"	Driveway Width + 6'
36"	4' - 0"	Driveway Width + 12'
36"	4' - 6"	Driveway Width + 18'
36"	5' - 0"	Driveway Width + 24'
42"	4' - 0"	Driveway Width + 6'
42"	4' - 6"	Driveway Width + 12'
42"	5' - 0"	Driveway Width + 18'
42"	5' - 6"	Driveway Width + 24'

\* Refer to Figure 5-5 for Details

## **5.10 Public Driveways**

### *1. Construction.*

Installation of all public driveways shall be the responsibility of the permittee.

### *2. Width*

The width of public driveways (City streets, County roads or other publicly-owned access), measured at right angles to the centerline of the driveway, except as increased by permissible radii, shall comply with the requirements of Table 4-2.

### *3. Angle*

The angle of public driveways from the pavement shall be 75 to 90 degrees, except that one-way 45 to 90 degree angle driveways will be permitted to one-way frontage roads or lane divided highways.

### *5. Maintenance.*

TxDOT shall maintain all portions of public driveways which lie within the highway right of way.

## **5.11 Commercial Driveways**

### *1. Construction.*

Cost of materials and installation of all commercial driveways shall be the responsibility of the permittee.

### *2. Width.*

The width of commercial, measured at right angles to the centerline of the driveway, except as increased by permissible radii, shall comply with the requirements of Table 4-2.

3. *Angle.*

The angle of commercial driveways from the pavement shall be 75 to 90 degrees, except that one-way 45 to 90 degree angle driveways will be permitted to one-way frontage roads or lane divided highways.

4. *Maintenance.*

Maintenance of all commercial driveways shall be the responsibility of the permittee. If drainage or safety problems related to commercial driveways occur, it is the permittee's responsibility to take corrective action as directed by TxDOT. If the permittee fails to take corrective action, TxDOT may make the necessary alterations and hold the permittee financially responsible.

5. *Roadside Zones.*

All parts of the highway right of way between the edge of pavement, edge of shoulder or curb and the right of way line along the permittee's property frontage, except the areas contained in the commercial driveway, shall be a Safety Zone.

Spacing between access driveways should be not less than the minimum shown in this Manual.

Delineation or other devices as approved by the City of Round Rock shall be installed as necessary to prevent the use of the area for parking or travel. The area shall be kept free of obstructions.

6. *Vehicle Service Fixtures.*

The distance from the right of way line to the near edge of gas pumps, buildings, tanks, etc. should be a minimum of 12 feet to allow for the free movement of vehicles and to ensure they are entirely off the highway right of way while being serviced.

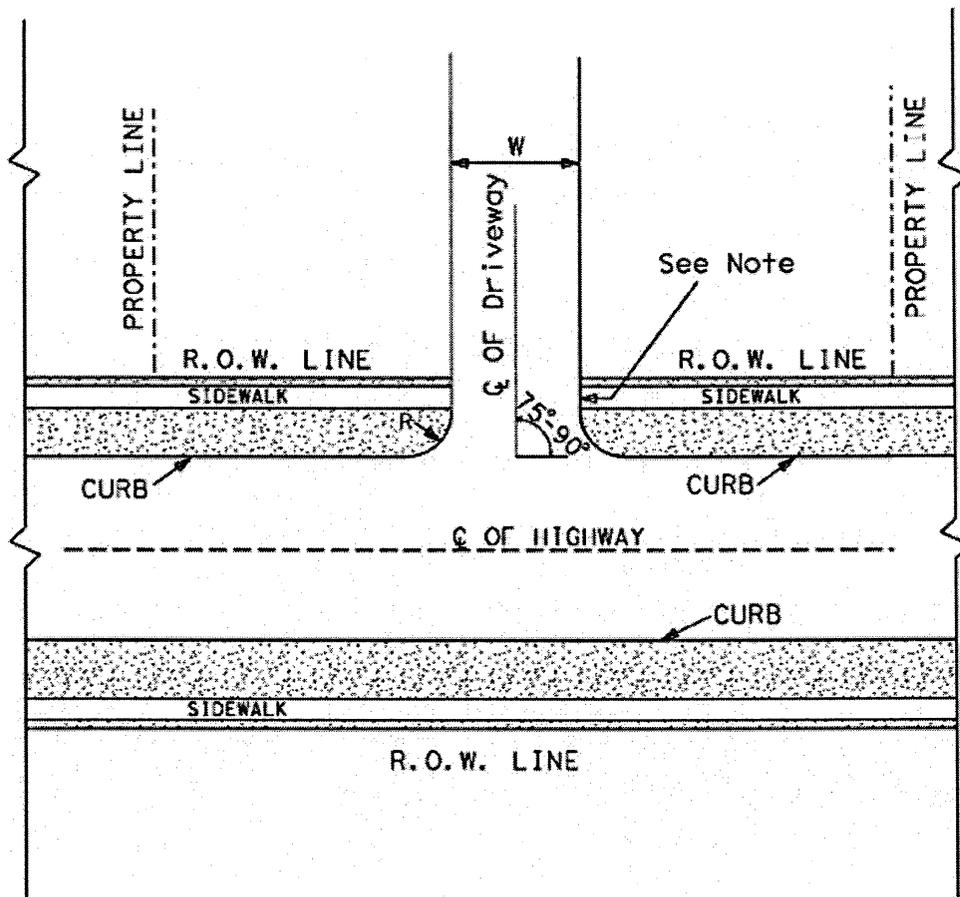
### **5.12 Indemnification**

The permittee shall hold harmless the City of Round Rock and TxDOT and their duly appointed agents and employees against any action for personal injury or property damage sustained by the exercise of a permit.

### 5.13 Figures

The following figures illustrate the various control dimensions that are to be used with the latitude permitted by this Manual:

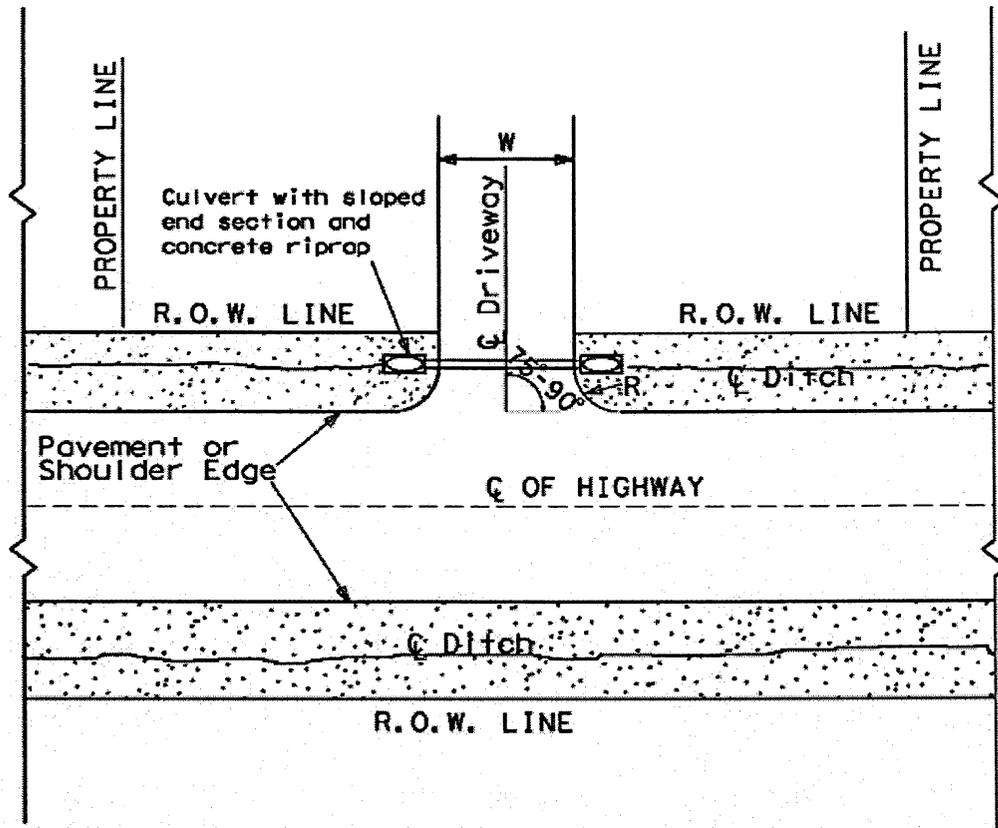
**Figure 5-1 Driveway Detail – Urban Roadway**



Private Driveway	Commercial Driveway
W = 24-foot maximum	W = 45-foot maximum
R = 5-foot minimum	R = 10-foot minimum
R = 30-foot maximum	R = 30-foot maximum

**Note:** *Driveway must provide for continuation of accessible pedestrian travel in compliance with Americans with Disabilities Act and Texas Accessibility Standards. Sidewalk requirements include, but are not limited to, 2% maximum cross slope and a 4-foot minimum width.*

Figure 5-2 Driveway Detail – Rural Roadway



Private Driveway

W = 24-foot maximum  
 R = 10-foot minimum  
 R = 30-foot maximum

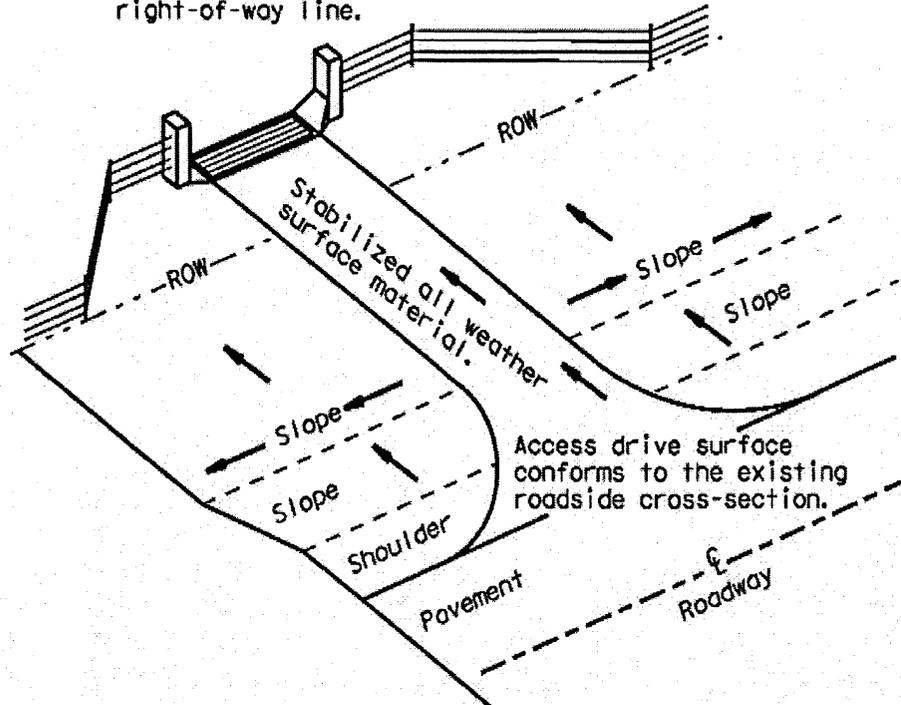
Commercial Driveway

W = 45-foot maximum  
 R = 10-foot minimum  
 R = 30-foot maximum

**Note:** Driveway must provide for continuation of accessible pedestrian travel in compliance with Americans with Disabilities Act and Texas Accessibility Standards. Sidewalk requirements include, but are not limited to, 2% maximum cross slope and a 4-foot minimum width.

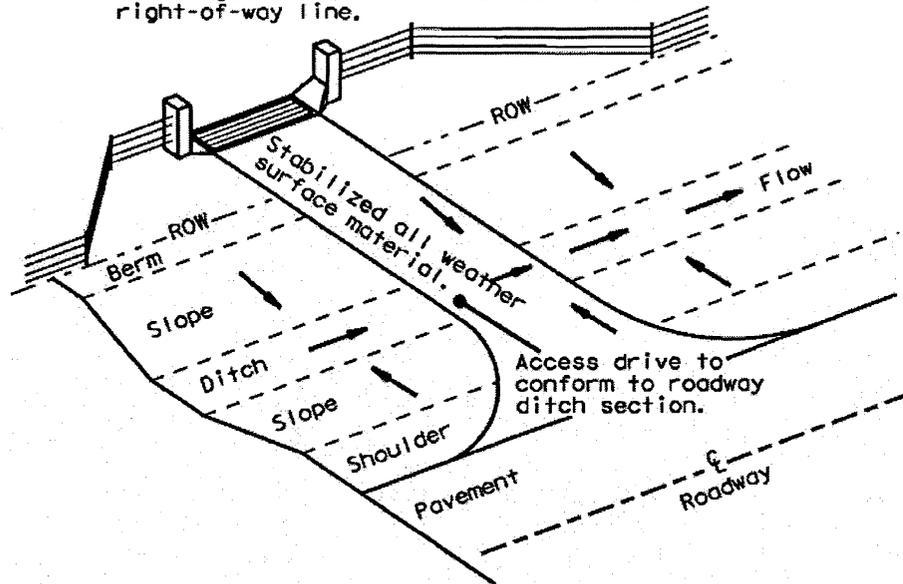
**Figure 5-3 Driveway Located at Drainage Divide in Ditch**

Note: It is desirable to set gate back of right-of-way line. Gates located on right-of-way line shall be constructed to open inward only toward property. Cattle guard shall be installed back of right-of-way line.



**Figure 5-4 Driveway Utilizing Valley Gutter**

Note: It is desirable to set gate back of right-of-way line. Gates located on right-of-way line shall be constructed to open inward only toward property. Cattle guard shall be installed back of right-of-way line.



**Figure 5-5 Typical Driveway Cross Section (with Pipe Culvert)**

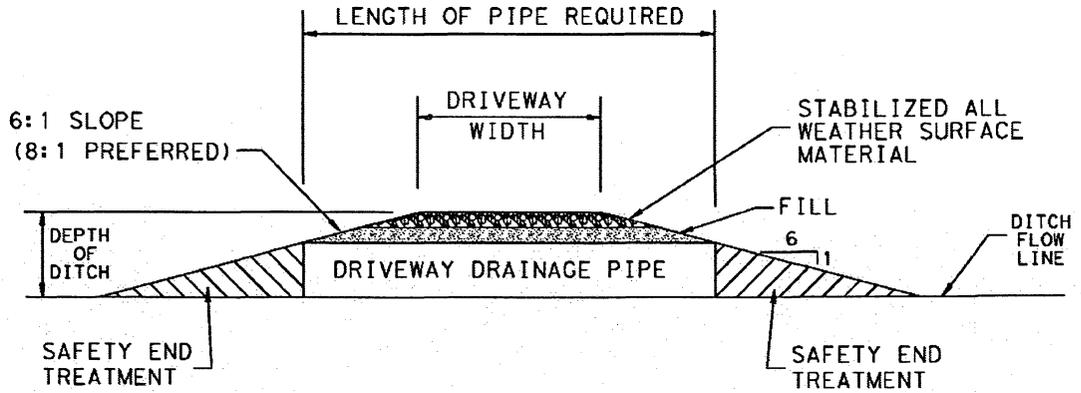
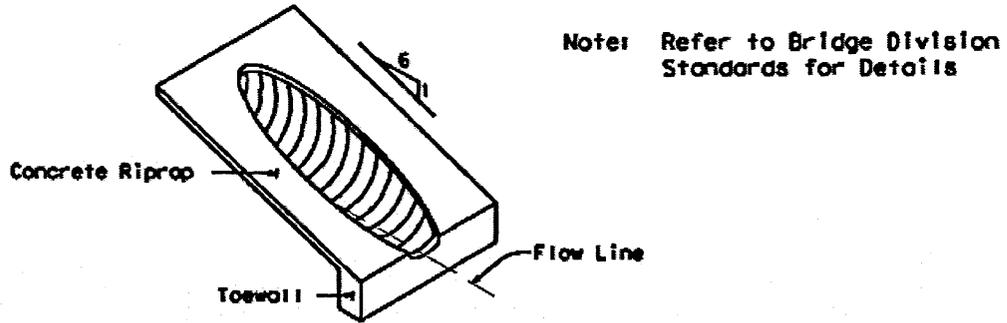
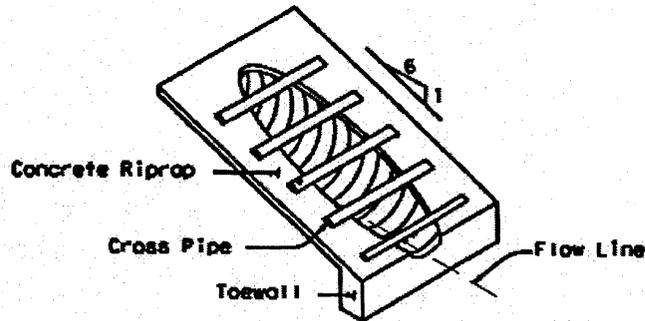


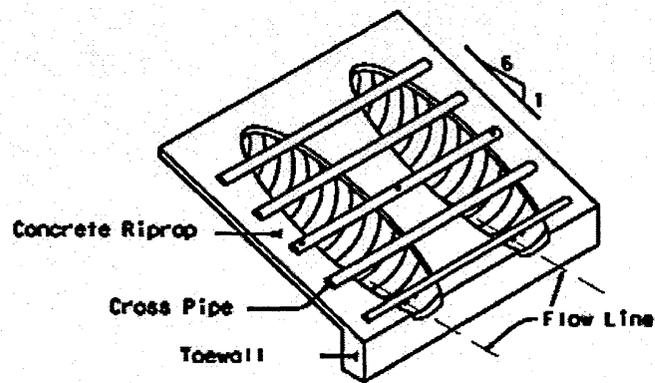
Figure 5-6 Typical Safety End Treatments for Driveway Culverts



ONE PIPE INSTALLATION  
WITH DIAMETER LESS THAN 30"



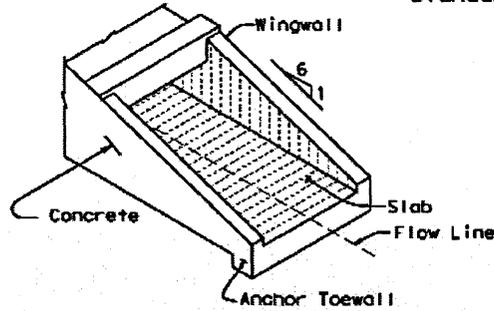
ONE PIPE INSTALLATION  
WITH DIAMETER 30" OR GREATER



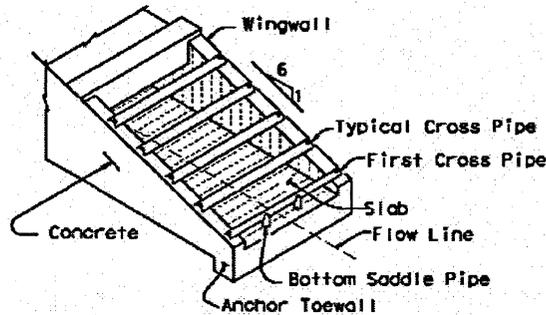
TWO PIPE INSTALLATION

**Figure 5-6 (Cont'd) Typical Safety End Treatments for Driveway Culverts**

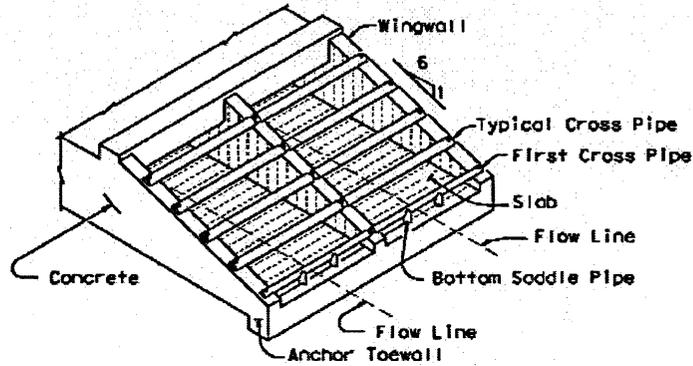
Note: Refer to Bridge Division Standards for Details



SINGLE BOX CULVERT  
INSTALLATION LESS THAN 30" WIDE



SINGLE BOX CULVERT INSTALLATION  
30" AND GREATER IN WIDTH



MULTIPLE BOX  
CULVERT INSTALLATION

Texas Department of Transportation

SUBCHAPTER C. ACCESS CONNECTIONS TO STATE HIGHWAYS

§11.50. Access Management.

(a) Purpose and need. Access management is an engineering and planning method of balancing the needs of mobility and safety on a highway system with the needs of access to adjacent land uses. Access management is one method of preserving the substantial public investment in the ground transportation system by preserving the roadway level of service. Further, access management can significantly enhance traffic safety by reducing traffic accidents, personal injury, and property damage. It has been noted that access management practices can promote a more coordinated intergovernmental, long term approach to land use and transportation decisions in the context of quality of life, economic development, livable communities, and public safety. Given the benefits to the ground transportation system and public safety, it is the intention of the department to promote the use of access management on the state highway system.

(b) Applicability. This subchapter applies to all new access connections constructed on highways on the state highway system. It also applies to existing access connections that may be reconstructed or otherwise as part of a department project.

(c) Effective date. The provisions of this subchapter are effective January 1, 2004.

(d) Transition period. Prior to January 1, 2005, exceptions to the provisions of this subchapter may be granted access connection requests where significant prior commitments have been made based on previous department policy.

§11.51. Definitions.

The following words and terms, when used in this subchapter, shall have the following meanings, unless otherwise noted:

Appendix A - TxDOT Transportation Code

(1) Access connection-- Facility for entry and/or exit such as a driveway, street, road, or highway that connects to a highway on the state highway system.

(2) Commercial driveway--An entrance to, or exit from, any commercial, business, or similar type establishment.

(3) Commission--The Texas Transportation Commission.

(4) Department--The Texas Department of Transportation.

(5) Engineering study--An appropriate level of analysis as determined by the department, which may include a traffic impact analysis, that determines the expected impact that permitting access will have on mobility, safety, and the efficient operation of the state highway system.

(6) Local access management plan--A plan or guideline in a formally adopted municipality rule or ordinance that is related to the application of access management within the municipality's jurisdiction.

(7) Local access road--A local public street or road, generally one parallel to a highway on the state highway system to which access for businesses or properties located between the highway and the local access road is provided as a substitute for access to the highway. A local access road may also be called a lateral road or reverse frontage road, depending on individual location and application.

(8) Permittee--A property owner or its authorized representative who receives an access connection permit from the department to construct or modify an access connection from the property to a highway on the state highway system.

(9) Private driveway--An entrance to or exit from a residential dwelling, farm, or ranch for the exclusive use and benefit of the permitted.

(10) Public driveway--An approach from a county or city maintained road or street or an entrance or exit from a public school, a publicly owned cemetery, or other publicly owned places or buildings that provide for public access.

(11)Traffic impact analysis--A traffic engineering study to the level of analysis determined by the department that determines the potential current and future traffic impacts of a proposed traffic generator and is signed, sealed, and dated by an engineer licensed to practice in the State of Texas.

§11.52. Delegation of Access Permit Authority to Municipalities.

(a) Intent. A municipality may include highways on the state highway system in its local access management plan. The intent of the department is to allow municipalities, upon request, to assume responsibility for issuing permits for access connections to state highways within the jurisdiction of the municipality under a local access management plan when the municipality has the ability to issue permits.

(b) Precedence. A local access management plan supersedes an order of the commission under Transportation Code, §203.031(a)( ) or (4) to the extent that they conflict, unless:

- (1) the United States Department of Transportation Federal Highway Administration notifies the department that enforcement of the local access management plan would impair the ability of the state or the department to receive funds for highway construction or maintenance from the federal government; or
- (2) the department owns the access rights.

(c) Application. The department will apply a local access management plan under this section when the municipality provides its local access management plan to the department with an indication of its desire that the plan be applied within its jurisdiction and an implementation date. The department will implement any subsequent changes to the local access management plan when the municipality submits the changes to the department with a proposed implementation date for the change.

(d) Local access permitting function. A municipality that desires to undertake the access permitting process on highways on the state highway system shall submit its proposed permitting procedures

to the department. If the department determines that the proposed procedures adequately address the requirements in subsection (f) of this section, it will transfer to the municipality the access permitting function within the municipality's jurisdiction. The municipality shall submit to the department a copy of each approved access permit on the state highway system within ten working days of its approval.

(e) Assumption of permitting function optional. Municipalities are not required to take over the access permitting function for state highways within their jurisdiction.

(f) Engineering. Granting access location permit authority to municipalities does not preclude the need to properly engineer access locations. Any impacts to drainage or hydraulics on highways on the state highway system resulting from access connections must be coordinated with the department prior to any local access approval. Issuance of access permits by a municipality must address driveway geometrics, utility location or relocation, compliance with the Americans with Disabilities Act (ADA) and Texas Accessibility Standards (TAS), environmental requirements, wetland considerations if appropriate, and all other applicable state and federal laws, rules, and regulations.

§11.53. Locations Where the Department Controls the Access.

(a) Access purchase requests. Where new access connections are requested on highways where the adjacent owner has no existing right of access, requests to purchase access will be considered under the provisions of this section. The request must include an engineering study acceptable to the department.

(b) Approval. The commission will make the final determination concerning new access connections under this section. The commission may consider the findings of the engineering study and the mobility and safety of the highway system, or any other relevant factors.

Appendix A - TxDOT Transportation Code

(c) Documentation. When the commission approves the sale of access to the owner of property adjoining the highway facility, the sale will be accomplished under Transportation Code, Chapter 202, Subchapter B. Access points approved by the commission under this section will be specifically described by a metes and. bounds property description.

§11.54. Construction and Maintenance of Access Connection Facilities.

(a) For commercial and private driveways, the cost of materials, installation, and maintenance shall be the responsibility of the permittee.

(b) For public driveways, the cost of materials and installation shall be the responsibility of the permittee. The department shall maintain all portions of public access driveways that lie within the state highway right of way and that connect to highways that are maintenance responsibility of the department.

(c) Any existing access connections that are destroyed or removed in the construction or reconstruction of a section of highway will be reestablished by the department to the extent necessary to provide reasonable access.

(d) The department may undertake actions deemed necessary to correct drainage or safety problems related to existing or new access connection facilities.

§11.55 Local Access Roads.

(a) If local access roads are necessary to restore circulation or to resolve a landlock condition on a remaining parcel of land, or will otherwise benefit the state highway system, local access roads may be included in a department project on a standard participation basis as established in Appendix A of §15.55 of this title (relating to Construction Cost Participation).

(b) Commission approval must be obtained prior to the department entering into any agreements to provide local access roads in conjunction with a department project.

(c) Local access roads will not be considered service projects as defined in §15.56 of this title (relating to Local Financing of Highway Improvement Projects on the State Highway System).

Appendix A - TxDOT Transportation Code

This agency hereby certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 26, 2003.

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Richard D. Monroe  
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Texas Department of Transportation