

"A Quality of Life City"

# DRIVEWAY ACCESS AND DESIGN MANUAL ARTICLE V

OF THE STREETS, SIDEWALKS, AND STORM SEWER CHAPTER OF THE CITY OF HURST, TX

ORDINANCE NO. 1306, ADOPTED NOVEMBER 27, 1990

CITY OF HURST
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION
1505 PRECINCT LINE ROAD
HURST, TEXAS 76054
MAIN NO. (817) 788-7076
FAX NO. (817) 788-7097

March 8, 2012

#### DRIVEWAY ACCESS AND DESIGN MANUAL

#### **ARTICLE V**

# OF THE STREETS, SIDEWALKS AND STORM

#### **SEWERS CHAPTER OF THE**

# CODE OF THE CITY OF HURST, TEXAS

#### OCTOBER, 1990

#### Section 20-80 Title

The provisions embraced within the following sections shall constitute, be known as and may be cited as the "Driveway Access Ordinance."

#### Section 20-81 Purpose

- A. It is the purpose of this Article to provide the procedures and standards necessary to protect the public health, safety and welfare, to maintain smooth traffic flow, to maintain street right-of-way drainage, and to protect the functional level of public streets while meeting state, regional, local, and private transportation needs and interests.
- B. This Article addresses the design and location of driveways and other points of access to public streets under the jurisdiction of the City of Hurst. It is based upon the authority granted in the City Charter and considers existing and projected traffic volumes, the functional classification of public streets, the Thoroughfare Plan, drainage requirements, the character of properties adjoining the street, the type and volume of traffic to use the access, other operational aspects of the access, the availability of reasonable vehicular access from other local streets and the public health, welfare and safety.

# **Section 20-82 Permit Required**

A. No person shall construct, reconstruct, relocate, or in any way alter the design or operation of any driveway providing direct vehicular movement to or from any public street without a driveway permit issued by the City Building Official. The issuance of such permit shall be governed by Article II, Section 20 of the Hurst City Code. The written approval of the Engineering Division shall be required for all apartment, commercial and industrial property driveways. No work shall be undertaken on a driveway until the executed permit has been received by the Applicant.

- B. Driveway permits shall be issued only in compliance with this Article and may include terms and conditions authorized by the Article. In no event shall a driveway be allowed or permitted if it is deemed by the Director of Public Works to be detrimental to the public health, welfare, and safety.
- C. Vehicular access to or from property adjoining a public street shall be provided to the general street system. Any application for subdivision plat approval must provide that all lots and parcels created by the subdivision will have access to the City street system in conformance with the purpose and requirements of this Article.
- D. Where in the course of public street reconstruction by the City or by the State of Texas it becomes necessary to alter, relocate, or bring into conformance with this Article an existing driveway, the property owner shall be notified in writing of the required changes. Said changes shall be implemented at the cost of the appropriate public agency, and will not result in denial of reasonable access from the property to the general street system.

# Section 20-83 Changes in Property Use

When an application for building permit or Certificate of Occupancy creates changes in property use which result in changes in the type of driveway operation, and the driveway is not in conformance with this Article, the reconstruction, relocation, or conformance of the access to the Article will be required as a condition of the building permit. One of the following access change conditions must be met before driveway revisions may be required.

- A. The existing use of the driveway is projected to increase in actual or proposed daily vehicular volume by 20 percent or more.
- B. The change in the use of the property or modifications to the property restricts the flow of vehicles entering the property in a manner which is anticipated to disrupt normal traffic flow on the public street, thereby creating a hazard.

Change in property use may include but is not necessarily limited to: change in type of business, expansion in existing business, change in zoning, and subdivision which creates new parcels. It does not include modifications in advertising, landscaping, remodeling, general maintenance or aesthetics that do not affect internal or external traffic flow or safety. The Public Works Department will investigate potential access change conditions and will determine whether or not a traffic impact analysis will be submitted by the applicant.

# **Section 20-84 Indemnification and Enforcement**

- A. The Applicant shall hold harmless the City of Hurst, its officials, appointed agents, and employees against any action for personal injury or property damage sustained by reason of the exercise of a permit issued hereunder.
- B. The City may install barriers across or remove any driveway providing direct access to a City Street which is constructed without a driveway permit after the effective date of this Article. The property owner shall be sent written notice of the City's action within ten days. When practical, the City will notify the property owner and/or illegal access user of pending action. Any person who drives a vehicle onto or from any City Street except at existing legal and proper driveways or at permitted new access locations commits an enforceable traffic offense.
- C. When a permitted driveway is constructed or used in violation of this Article, permit terms and conditions, the City may obtain a court order enjoining violation of the Article, permit terms and conditions. Such driveway permits may be revoked by the City if, at any time, the permitted driveway and its use fail to meet the requirements of the Article or the terms and conditions of the permit.

#### **Section 20-85 Definitions**

For the purpose of the Article the following definitions apply:

- A. An Apartment Property is one that contains four (4) or more dwelling units.
- B. An <u>Applicant</u> is any owner, authorized agent, lessee, contractor, or developer who desires to construct, enlarge, relocate, or in any way alter the design or operation of one or more driveways.
- C. An <u>Arterial</u> roadway is any existing or future roadway classified as a Principal or Minor Arterial in the Thoroughfare Plan. For purposes of this Article, a Freeway Frontage Road shall be included as an Arterial roadway.
- D. An <u>Auxiliary Lane</u> is a separate right turn lane, left turn lane, deceleration lane, or acceleration lane.
- E. A <u>Commercial</u> Property is one in which the structure, either wholly or partially, is used for offices or the wholesale or retail sales of goods or services. In addition, for purposes of this Ordinance all properties other than residential, apartment, or industrial shall be considered a commercial property.

- F. A <u>Continuous Deceleration Lane</u> is a deceleration lane that serves two (2) or more driveways, or one (1) or more driveways and a public street.
- G. A <u>Deceleration Lane</u> is a lane, including tapered areas, in advance of a driveway or public street used to allow turning vehicles to exit the thru traffic lane and slow before making the turn.
- H. The Director is the Director of Public Works of the City of Hurst or his designee.
- I. A <u>Driveway</u> is any driveway approach or access that connects private property to the public street. The driveway is primarily located on public right-of-way but may be considered to extend onto private property when necessary to ensure safe operation of the driveway/street intersection.
- J. <u>Driveway Throat Width</u> is the shortest distance between the parallel edges of a driveway, generally measured at the property line.
- K. An <u>Industrial Property</u> is one in which the structure is used as warehousing or manufacturing.
- L. An <u>Internal Driveway</u> is a private road or accessway on private property that connects buildings or abutting ground to the driveway.
- M. A <u>Major Street Facility</u> is any freeway frontage road, major or minor arterial street, or major collector street.
- N. A <u>Median Type Driveway</u> is a driveway having ingress and egress drives divided by a raised median of ten (10') feet or less in width.
- O. A Residential Property is one that contains three (3) or less dwelling units.
- P. A <u>Shared Driveway</u> is a driveway constructed on or near a common property line between two or more properties and providing access to all such properties.
- Q. <u>Street Class</u> is the functional classification of a street as defined in the Thoroughfare Plan or as defined by the Director for those streets not shown in the Thoroughfare Plan.
- R. <u>Traffic Impact Analysis (TIA)</u> is a study prepared and signed by a Registered Professional Engineer that provides information on the projected traffic likely to be generated by a proposed development. A TIA determines the impact of expected traffic generated on the roadway in the immediate proximity of a proposed development.

# Section 20-86 Design Criteria

The following standards shall be followed in the design and construction of driveways within the City of Hurst.

A. <u>Design Standards</u>: The values in the following table represent minimum and/or maximum standards to be applied in designing and locating driveways on City streets. For each driveway, the Director may require a specific combination of dimensions within these ranges based on the anticipated traffic flow and safety characteristics of the driveway and public street.

REQUIREMENTS	STREET CLASS	RESIDENTIAL DRIVEWAY	APARTMENT- COMMERCIAL DRIVEWAY	INDUSTRIAL DRIVEWAY
Driveway Throat Width	Residential	12-25 feet	25-35 feet	25-35 feet
	Minor Col.	12-25 feet	25-35 feet	25-35 feet
	Major Col.	12-25 feet	25-35 feet	25-35 feet
	Arterial	12-25 feet	25-35 feet	25-35 feet
Driveway	Residential	9.5 feet	30 feet	30 feet
Curb Radius	Minor	9.5 feet	30 feet	30 feet
	Major Col.	9.5 feet	30 feet	30 feet
	Arterial	9.5 feet	30 feet	30 feet
Minimum	Residential	22 feet	100 feet	100 feet
Centerline	Minor Col.	32 feet	100 feet	100 feet
Driveway Spacing	Major Col.	80 feet	150 feet	150 feet
Along Roadway	Arterial	100 feet	250 feet	250 feet
	Residential	30 feet	30 feet	30 feet
Minimum Distance From Driveway to Intersection Along:	Minor	50 feet	30 feet	30 feet
	Major Col.	100 feet	30 feet	30 feet
	Arterial	100 feet	30 feet	30 feet

# **NOTES:**

- 1. The requirements for Driveway Throat Width and Driveway Curb Radius are for standard undivided two-way operation and may be varied by the Director if traffic volumes, truck usage, shared driveways, and other factors warrant such.
- 2. Driveways served by deceleration lanes shall be spaced at 200 foot minimum intervals.
- 3. Measured as the angle of intersection of the tangent portion of the centerline of the driveway with the tangent portion of the public street curb line, extending a minimum of twenty (20') feet from the curb line.
- 4. Distance measured from intersection of extended curb lines to centerline of driveway.

# B. General Design Criteria:

- 1. The driveway for any apartment, commercial, or industrial property that connects to a major street facility shall extend onto private property a minimum distance of 18 feet from the right-of-way line before intersecting any internal driveway.
- 2. The use of shared driveways shall require the dedication of a joint-use private access easement on each affected property. Said dedication shall be provided on the final plat of the subject properties, or be filed by separate instrument with Tarrant County and the City. When the center of the easement is offset from the common lot line, the easement must extend past the lot line a minimum distance of one (1) foot. The combined size of the access easement must be a minimum of twelve (12') feet wide and fifteen (15') feet deep for residential property, and a minimum of twenty-five (25') feet wide and forty-eight (48') feet deep (as measured from the right-of-way line) for all other land uses. As a minimum, the easement width shall encompass the entire width of the future planned driveway plus two (2) feet (one foot on both sides of the drive).
- 3. If a street curb is to be left out for later installation of a driveway, a letter from the Applicant shall be submitted to the Director's office agreeing to repair the stand-up curb in a method authorized by the Director if the left-out portion is not used as a driveway. Prior written consent of the Director or his designee is required. The driveway shall be poured within six (6) months, or the curb shall be replaced.

- 4. No portion of any driveway shall be located within four (4') feet of any fire hydrant, electrical pole, or any other surface public utility. The Applicant, at his expense, may have the surface utility moved, if the public utility agency determines that the move will not detrimentally affect the service.
- 5. The driveway curb return at the point of tangency with the street curb shall not be located within (a) five (5') feet of the downstream edge, nor ten (10') feet of the upstream edge, of a straight curb inlet or inlet extension, nor (b) within ten (10') feet of a recessed inlet, without prior permission of the Director.
- 6. All vehicle maneuvering on apartment, commercial, and industrial properties into a parking space or up to a loading dock or into any other area shall be accomplished by off-street maneuvering areas and internal driveways. No back-in or back-out vehicle maneuvering from a driveway shall be allowed to occur on any public street or right-of-way with the exception of residential drives on local streets.
- 7. A site plan showing all existing right-of-way, easements, curbs, storm drain inlets, flumes, underground and overhead utilities, trees and sidewalks shall be required for each non-residential driveway permit application. The proposed driveway grade profile shall also be shown for a minimum distance of fifteen (15') feet past the right-of-way line. All driveways and median openings within 150 feet of the subject property on both sides of each abutting street shall be shown on the site plan. If an adjacent street contains a raised median, showing driveway(s) on the opposite side of the street shall not be required unless a median opening is present or proposed.
- 8. Driveways may be prohibited where adequate sight distance is not available for the established speed limit, or the design speed of a future street improvement, if higher. Sight distances shall be calculated in accordance with the latest edition of the AASHTO "A Policy on Geometric Design of Highways and Streets." If a field inspection indicates that driveway sight distance may be insufficient, the Applicant will be required to submit vertical and horizontal information to the City that verifies adequate sight distance is available for the proposed driveway location.
- 9. Temporary driveways shall only be permitted when a contractual agreement is executed between the property owner and the City. Said agreement shall require annual reviews of driveway use, and the City may require removal of driveway at no cost to the City. The Director may require an escrow fee be provided to the City for the removal of the driveway and related expenses.

- 10. Driveway approaches shall be paved with reinforced concrete from the street curb line or existing edge of pavement line to the property line or other minimum distance as is specifically required by this ordinance.
- 11. The Director may deny access or a specific driveway location to any abutting public street if said access cannot be provided in a reasonable and safe manner, and other public access is available to the subject property
- 12. The Director may authorize variances from the design criteria contained herein whenever such variances are considered necessary to preserve the safe and efficient movement of traffic.

# C. Residential Standards:

- 1. Circular drives are allowed on residential lots not fronting on arterial or collector thoroughfares. Such circular drives will have both access points on the same street frontage. The drive openings shall be the minimum 12 feet in width. There shall be 25 feet of stand-up curb between the two curb radii. The minimum lot frontage required to construct a circular drive is 70 feet.
- 2. A residential driveway shared by two or more properties shall have a minimum throat width of twelve (12') feet. A joint-use private access easement shall also be required as described in Section 20-86.B.2.
- 3, Driveway access to a residential lot from any major street facility shall not be permitted unless that lot has no other public access. If such a driveway is approved on a major street facility, an off-street maneuvering area approved by the Director shall be provided to ensure that vehicles will not back into the public street. Driveway access to a residential lot from a minor collector street may be denied if either (a) the lot has access to a local street or (b) the proposed access would create a traffic flow or safety problem.
- 4. Shared residential driveways may be required for adjoining residential lots on major streets facilities to reduce the number of access points on those roadways.
- 5. A minimum twenty-five (25') feet of driveway space shall be required between the street right-of-way and all garages or other structures served by the driveway. A minimum twenty-four (24') foot maneuvering space shall be required for all rear-entry garages and may extend into any access easement or alley

#### D. Auxiliary Lanes:

- 1. As a condition of a Driveway Permit, the Director may require the Applicant to provide a deceleration lane for any driveway located on an arterial street if the right turn ingress volume exceeds 50 vehicles in the design hour (150 vehicles if the design hour occurs on a Sunday). If the existing or future speed limit on the street facility exceeds 40 MPH, a deceleration lane may be required if 40 right turn ingress vehicles occur in the design hour (100 vehicles if the design hour occurs on a Sunday). Such calculation shall be made by the Director unless a Traffic Impact Analysis is provided by the Applicant.
- 2. When a driveway is approved within the separate right turn lane of a public street intersection, the lane shall be extended a minimum of fifty (50') feet in advance of the driveway. No driveway shall be permitted within the transition area of any separate right turn or deceleration lane.
- 3. A continuous deceleration lane may be required as a condition of a driveway permit when two or more deceleration lanes are planned and their proximity necessitates that they be combined for proper traffic flow and safety. The transition taper for a continuous deceleration lane shall not extend into or beyond a public street intersection.
- 4. On undivided arterial roadways, a left turn lane and taper may be required as a condition of the driveway permit when the product of the projected left turn ingress volume and the opposing volume per land exceeds 50,000 in any design hour. In such cases the Director will analyze the present and future traffic volumes to verify that the left turn lane is necessary to maintain minimum levels of traffic flow and safety.
- 5. On divided arterial roadways, the Director may require, as a condition of the driveway permit, construction of a left turn lane at an existing public street median opening when the proposed driveway will be served by such median opening and no left turn lane exists in the median.
- 6. The Director may require a temporary auxiliary lane to be constructed on existing arterial roadways that are planned for future improvement. If a construction cost for the auxiliary lane for the future street section is greater than that for the existing roadway, the property owner shall place escrow funds with the City for the difference in the costs.
- 7. In the event the Applicant is allowed to locate a driveway with deceleration lane within one hundred (100') feet of an Arterial intersection, he may be required to extend the deceleration lane to such intersection. The one hundred (100') feet shall be measured from the

- center of the driveway to the intersection of the extended property lines of the arterial intersection.
- 8. The Applicant shall be responsible for the design, right-of-way, adjustment of utilities, and construction costs of any auxiliary lane and street widening required as a condition of the driveway permit. If for any reason an auxiliary lane required under this Ordinance cannot be constructed in conjunction with the driveway by the Applicant, the Applicant may be required to place all necessary funds in escrow with the City.

# E. Signalized Driveways

- 1. As a condition of a driveway permit on a major street facility, the Director may require the Applicant to submit driveway volume and capacity information when signalization is requested or expected at the driveway intersection. When signal warrants are met and an overall public benefit is shown, the Director may require as a condition of the permit that the Applicant pay for the traffic signal installation costs necessary to serve the subject driveway. The Applicant may also be required to construct improvements necessary to provide proper alignment, adequate signal capacity, smooth traffic flow, and safety for the public street/driveway intersection.
- 2. If a driveway is installed at an existing or proposed signalized intersection, the Applicant must construct such driveway using continuous-pour procedures (without expansion joints) from the street curb to a point sixty (60') feet from the property line. A traffic signal access easement (minimum 20 feet wide x 60 feet deep) must be provided to allow the City to install and/or maintain the signal detectors placed in the concrete.
- 3. If a driveway is permitted and installed at an existing signalized intersection, the Applicant shall pay any costs necessary to modify the existing signal to accommodate the new driveway.

# F. **Special Driveway Designs:**

1. The Director may require the Applicant to submit a Traffic Impact Analysis for any arterial driveway projected to serve 1,000 or more vehicles per day, or 100 ingress vehicles in the peak hour. Based on the need created by such driveway, the Director may require internal driveway improvements, turning movement prohibitions, auxiliary lanes, and traffic control devices to address safety and/or capacity problems with the

property which will have a detrimental effect on the adjacent public street system.

- 2. All driveways on undivided arterial roadways having a projected exiting left turn volume that will operate at a poor level-of-service may be required to be constructed with a left turn egress control median. Likewise, any driveway having a projected ingress left turn volume that will have a level-of-service "E" or worse may be required to have a left turn ingress control median. If both are required, a right in/right out driveway design may be required by the Director.
- 3. Driveways having a projected design volume of 5,000 or more vehicles per day shall have a minimum of one hundred (100') feet continuous approach length without adjacent parking stalls or vehicular cross flow.

#### Section 20-87 Drainage Design

In the vicinity of existing drainage structures, no driveway shall be permitted which impairs the effectiveness of the existing drainage facilities.

The surface of the driveway at the throat (tangent point of the driveway radius to the edge of the driveway) shall be six (6") inches or greater above the pavement at the outer line. Driveways shall not be constructed at such locations or in such manner that water is diverted from the street onto private property.

Drainage in side ditches shall not be significantly altered or impeded by any driveway. When drainage structures are required, the size of the culvert or opening and other design features shall be approved by the Director. A minimum pipe size of an eighteen (18") inch diameter shall be required. The restricted areas adjacent to the driveways may be filled in, provided the requirements herein are fully complied with.

- A. Proper provisions shall be made for surface drainage so that all surface water on any filled area shall be carried away from the street roadbed in a suitable manner.
- B. The drainage system underneath the filled area shall be adequate to carry the water in the side ditches.
- B. The filled area shall extend from the sidewalk, or when no sidewalk exists, from the right-of-way line, to the shoulder line, or curbed pavement, as the case may be, provided that other limits may be specified by the City Engineer to provide conformance with proposed future improvements to the existing highway section.

#### Section 20-88 Restricted Areas

All parts of the street right-of-way between the street curb or shoulder pavement and the parallel property line along the Grantee's property frontage, except the areas contained in driveways,

shall be defined as restricted areas. Curbs shall be installed by the Grantee as may be deemed necessary to the Director or the City Engineer to prohibit vehicle parking and access in restricted areas. Internal curbs shall be concrete, asphalt, or masonry barrier type curbs, six (6") inches in height. These internal curbs shall be continuously poured in place. This internal curbing shall be painted to prevent traffic hazards when so determined by the Director.

# Section 20-89 Adjacent Parking Areas

Where an off-street parking area is located adjacent to a public parking area, a concrete inner curb shall be constructed to separate the parking area from the right-of-way. The curb shall be set back from the property line so that no part of a vehicle that is parked on the parking lot shall extend over adjacent property or over public property, right-of-way, street, or sidewalks. Any such curb or block shall be a minimum of six (6") inches wide, six (6") inches high, and shall be permanently and securely anchored. The property owner shall replace any damaged or missing curbs or vehicle blocks as necessary, or as required by the Director, City Engineer, or Building Official.

# Section 20-90 Vehicle Service Features

The minimum distance from the right-of-way line to the edge of service pumps, vendor stands, tanks, water hydrants, or any other vehicle service equipment shall be fourteen (14') feet. To permit free movement of large vehicles, and in certain instances to insure that said vehicles will be parked entirely off the street right-of-way while being serviced, a greater distance may be required by the City Engineer or by the Director.

#### **Section 20-91 Maintenance and Reservations**

Maintenance of all driveways, islands, and other driveway appurtenances on right-of-way shall be the responsibility of the Grantee. The City of Hurst reserves the right to inspect these installations at the time of construction and at all times thereafter. The City may require changes, maintenance, or repairs as may at any time be considered necessary to provide for protection of life and property on or adjacent to the Street. The cost of changes, maintenances, and repairs shall be borne by the Grantee.

# Section 20-92 Variances

Variances are strongly discouraged. However, they may be granted by the Director, City Engineer, or Building Official for the particular area of responsibility controlled by such official under unique circumstances whenever needed to preserve the health, safety, and welfare of the public.

# **Section 20-93 Construction Requirements and Specifications**

The following general criteria shall be followed during driveway installation within the City of Hurst:

- A. All driveway construction and maintenance shall have traffic control devices installed and maintained in accordance with the latest City of Hurst <u>Barricade</u> Manual.
- B. All driveways shall be poured and completed between the street and the property line within forty-eight (48) hours after the curb cut has been made. If safety is impaired, the Director may require replacement of curb and gutter, sidewalks and other improvements and leveling of the soil. All costs for such remedial work shall be borne by the Applicant.
- C. The Grantee shall perform all work and pay all costs in connection with the construction of any driveway and their appurtenances on the right-of-way. All work shall be subject to inspection and approval of the Building Official.
- D. All driveways shall be paved from the street curb line to the property line.
- E. All materials used in construction of a driveway on the right-of-way shall be of satisfactory quality and shall be subject to approval of the Director.
- F. The grade, a minimum of one foot, below the driveway including one (1') foot outside of the outer edge of the driveway shall be compacted to 95% Standard Proctor Density. All driveways shall have a bedding of two (2") inches compacted, clean, cushion sand.
- G. Driveways shall be poured in sections of the lengths indicated on the plans; in general, they shall have contraction joints not more than fifteen (15") feet apart both transversely and longitudinally. One-half inch expansion joint shall be placed on the property line between the approach and the driveway. The joints shall be filled with ½ inch redwood or premolded bituminous expansion joint filler and shall extend the entire depth and length of the concrete sections.
- H. Concrete for driveways shall be a minimum 5 sack mix 3000 p.s.i. in 28 days concrete. Reinforcing steel shall have a minimum yield strength of 40,000 p.s.i.