

**CITY OF LAREDO ORDINANCE NO. 2017-O-061**

AMENDING THE LAREDO LAND DEVELOPMENT CODE OF THE CITY OF LAREDO BY REVISING THE DRAINAGE STANDARDS, ARTICLE III, SECTION 24.59.3.1 THROUGH 24.59.3.3; AND AMENDING APPENDIX A BY ADDING A NEW DEFINITION; PROVIDING FOR PUBLICATION AND EFFECTIVE DATE.

**WHEREAS**, the Laredo Land Development Code currently provides standards and requirements regarding Drainage and,

**WHEREAS**, the amendments proposed herein provide for the orderly and healthful development of the City of Laredo; and,

**WHEREAS**, the amendments of said standards and requirements has been deemed necessary and appropriate; and

**WHEREAS**, the Planning & Zoning Commission, after a public hearing on January 19, 2017 has recommended the City Council of the City of Laredo pass this amendment to the City of Laredo Land Development Code.; and,

**WHEREAS**, the City Council introduced this ordinance on April 17, 2017 on this amendment and finds the ordinance appropriate and consistent with the General Plan of the City of Laredo and in the best interest of the public health safety and welfare.

**NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LAREDO THAT:**

**Section 1:** Article III, Section 24.59.3 of the Laredo Land Development Code is hereby amended to read as follows:

**Section 24.59.3 DRAINAGE STANDARDS**

**Section 24.59.3.1.2 METHOD OF COMPUTING RUNOFF**

The basis of computing runoff shall *either* be the rational formula, or another method *deemed* acceptable by [tø] the City Engineer. Runoff rates for areas greater than one hundred and thirty acres shall use *either* a unit hydrograph methodology, or another method *deemed* acceptable by [tø] the City Engineer.

Where an approved study exists (i.e. FEMA, or other regulatory agency) for areas less than one hundred and thirty acres, the methodology shall match that used in the study unless otherwise dictated by the City Engineer.

In all cases, wet antecedent conditions shall be assumed. Run-off rates shall be computed on the basis of ultimate development of the proposed development/redevelopment, or construction activity. Flows from off-site contributing areas draining to, and/or through, the proposed development / redevelopment or construction activity shall be based on the 25-year existing conditions. *In order to* determine [~~For determination of~~] time of concentration, times shall be calculated on the basis of an improved drainage system upstream from the area under consideration. Run-off coefficients shall be obtained from information presented in the Storm Water Management Guidance Manual.

#### 24.59.3.1.3 OFF-SITE DRAINAGE

- a. The owner or developer of property to be developed/redeveloped shall be responsible for accepting all *predevelopment* storm drainage flowing onto his/her property as calculated [as] *per section 24.59.3.1.2. Predevelopment storm drainage* shall be adequately conveyed through, or around, the property. This responsibility includes all drainage directed to that property by prior development as well as drainage [naturally] flowing *naturally* through the property by reason of topography.
- b. Adequate consideration shall be given to determine how the storm water discharge leaving the proposed development will affect downstream property. In determining downstream effects from storm water management structures and the development/redevelopment, or construction activity on receiving streams known to having flooding or erosion problems, the City Engineer may require, at his/her reasonable discretion, that [the] hydrologic-hydraulic engineering studies be extended downstream, to a point where the proposed development/redevelopment or construction activity represents less than *ten (10)* percent of the total contributing watershed.
- c. Any construction activity that requires off-site grading or encompasses an area in compliance with current EPA/NPDES storm water permitting provisions, where storm water runoff has been collected or concentrated, whether it be by permanent drainage systems or streets, shall not be permitted to drain onto adjacent property except in existing creeks, channels, storm sewers, or streets unless the following is provided:
  - 1) Notarized letter of permission from the affected property owner;
  - 2) Proper drainage easements are obtained;
  - 3) If the owner is unable to acquire the necessary off-site easements, he/she shall provide the City with documentation of his/her efforts, including evidence of a reasonable offer made to the adjacent property owner. By written request for assistance, the City may assist the negotiations to acquire off-site easements. If the negotiations are unsuccessful, the request may, at the developer's option, be submitted to the City Council for consideration of acquisition through condemnation. In either case, the total cost of the acquisition and the [*cost of the*] easements shall be paid by the owner/developer; or
  - 4) If the developer is unable to obtain either (1) or (2) above and chooses not to seek assistance from the City, as outlined in (3) above, he/she shall provide the City with documentation of

his/her efforts. The developer will then execute a notarized letter; said [~~Said~~] letter shall be in a form approved by the City Attorney and shall provide that the developer shall agree to save and hold harmless the City of Laredo from any and all claims or suits for damage arising out of the required grading and/or concentrations of flow. The City reserves the right to require the notarized letter of permission or easement from the affected property owner prior to construction.

- d. The subdivider shall pay for the cost of all (post-development) drainage improvements *or* [~~oversized facilities~~] *offsite downstream upgrades* required for the development of his/her subdivision; these include, [~~including~~] any necessary off-site channels, or storm sewers, and acquisition of the required easements. In areas where the proposed off-site improvements are to be made within existing City right-of-way(s), an estimate of these off-site costs shall be prepared and submitted with the drainage plans.
- e. Where it is anticipated that additional runoff incident to the construction activity will overload an existing downstream drainage facility, whether natural or man-made, and result in hazardous conditions, the ~~Planning Commission~~ City Engineer may withhold approval of the activity until appropriate provisions has been [~~provision have been~~]made to correct the problem. Plans shall be provided which include all necessary off-site improvements including storm sewer systems, channel grading, driveway adjustments, culvert improvements, etc.

#### 24.59.3.1.4 Finished Floor Requirements

The first floor elevations of all residential and other structures shall be set at a minimum elevation as per the latest adopted International Residential Code.

The approved drainage system shall provide for positive overflow at all low points. The term "positive overflow" means that when the inlets do not function properly or when the design capacity of the conduit is exceeded, the excess flow can be conveyed overland along a grassed or paved course. The approved drainage system shall provide for positive overflow at all low points. Normally, this would mean along a street[~~or~~] alley, or otherwise shall require the dedications of special drainage easements on private property.

Positive overflow sections shall provide a minimum of two (2) feet from the overflow invert adjacent to the structure and the corresponding first floor elevation of all residential and other structures.

All lots affected by positive overflow section shall be labeled and minimum finished floor elevation shall be provided on face of the subdivision plat. The Building Official shall require a finished floor National Flood Insurance Program elevation certificate in compliance with this ordinance as a prerequisite to obtain a Certificate of Occupancy.

When the drainage characteristics of a subdivision are such that a portion of the subdivision is within or adjacent to the 100-year floodplain, the City [~~Building Director~~] Engineer[ ~~may~~] shall require that minimum finished floor elevations be shown on [~~certain~~] all lots contained within or adjacent to the 100-year floodplain. [~~said subdivision~~] These elevations should be based on the

most current flood plain management criteria. The elevations shall be shown on the plat prior to filing the plat for record. The following note shall be added to any plat upon which the City Engineer requires the establishment of minimum finished floor elevations:

*"The City of Laredo reserves the right to require minimum finished floor elevations on any lot contained within this addition. The minimum elevations shown are based on the most current information available at the time the plat is filed and may be subject to change. Additional lots, other than those shown, may also be subject to minimum finished floor criteria."*

#### 24.59.3.2 Drainage Facilities

##### 24.59.3.2.1 Streets and Closed Storm Sewer Systems

Streets may be used for storm water drainage only if the calculated storm water flow does not exceed ten (10) feet per second. Streets and alleys shall be designed on the basis of a ten (10) year frequency storm event. Storm sewer inlets shall be built along paved streets at such intervals that the depth of flow, based upon the 10-year storm, does not exceed the top of curb. By pass flow is allowed and shall not exceed twenty-five (25) percent of the original discharge. Valley gutters shall be placed when surface drainage crosses any local street or in instances when the change in elevation between curbs returns exceeds six (6) inches. Inlets shall be located as necessary to remove the flow based on a ten (10) year storm. At any intersection, only one street shall be crossed with surface drainage; and preferably this street shall be the lower classified street. When an alley intersects a street, inlets shall be placed in the alley whenever flow down that alley would cause the capacity of the intersecting street to be exceeded. Where streets are not capable of carrying storm waters as outlined above, drainage facilities as required by these standards shall be provided.

Where closed storm sewer systems are utilized the ~~entire~~ excess discharge shall be picked up at the point where the street can no longer handle the runoff flowing curb full.

Closed storm sewer pipe size and grade shall be designed based on the following criteria:

- a. Minimum pipe size shall be twenty-four (24") inches in diameter. When circumstances do not allow for a twenty-four (24") inch diameter, the City Engineer may approve an alternate size.
- b. Minimum grade shall be ~~no less than 0.004 ft/ft~~ such that the minimum flow velocities are not less than three (3) feet per second with the pipe flowing full under the design conditions.
- c. Allowable "n" values for design shall be as specified in the Storm Water Management Guidance Manual.
- d. Under normal conditions, pipes shall be designed assuming full flow conditions.
- e. Where conditions or design cause a pipe to flow under pressure, the hydraulic grade line shall be calculated and plotted in profile. In no case shall the hydraulic grade line be closer

than one (1) foot to finished grade unless specifically authorized by the City Engineer.

f. Pipe for storm drains shall be reinforced concrete pipe (RCP) in sizes as shown on the approved plans. All RCP shall be minimum Class III. All Class III RCPs shall have a minimum cover of not less than one (1) foot over the top of the pipe. Where added strength of pipe is needed for traffic loads over minimum cover or for excessive height of backfill, concrete pipe shall be ASTM C14 Extra Strength or ASTM C76, Class IV or Class V.

g. City Engineer may approve alternate pipe materials (HDPE, FIBER GLASS, CMP, etc.) within the private easement, positive overflow area and within the Right-Of-Way (ROW).

24.59.3.2.1.1 Manholes:

Manholes (inlets and junction boxes) shall be provided at sewer intersections, and at a maximum of five hundred (500) feet on straight lines. Design of manholes shall conform to the City of Laredo Design Standards, as periodically amended.

24.59.3.2.2 Open Channels

Open Channels shall be designed for subcritical flow under normal conditions. If supercritical flow exists, energy dissipation will be required to return flow to subcritical flow conditions. Open channels shall be designed to convey, at a minimum, the twenty five (25) year frequency design storm event.

The maximum allowable velocities in constructed channels shall be based on the channel type. The following velocity chart shall be used for scour protection and to determine the maximum velocities for a given type of channel lining:

<u>Channel Type</u>	<u>Maximum Velocity</u>
Grass Lined	5 fps
Concrete Lined	> 5 fps

Other methods of bottom and slope protection may be substituted for conditions where concrete lining is required upon the approval of the City Engineer. Requests for substitution shall be accompanied by an engineering analysis of the equivalency to concrete, reasons for substitution, and an evaluation of maintenance issues.

Grass-lined channels shall include slope protection in bends, unless the radius of curvature is greater than twice the channel top width.

Open channels shall provide a minimum of one (1) foot of freeboard above design flow depth. Additional freeboard shall be provided where design conditions warrant as outlined in the Storm Water Management Guidance Manual. All channels shall have a minimum eight (8) foot bottom width to facilitate maintenance operations. Where the calculated depth of normal flow is less than the required freeboard, the City may consider reducing

channel widths (valley gutter, concrete swale) or alternate configurations.

#### 24.59.3.2.3 Culvert and Bridge Crossings

All roadway culvert crossings shall be designed for a twenty five (25) year frequency storm event. Crossings located within flood hazard zones shall be designed to ensure compliance with FEMA regulations. The hydraulic capacity of proposed culverts shall be such that headwater depth is at least one (1) foot below the minimum roadway elevation. Proposed bridges shall have a low chord elevation at least one (1) foot above the design storm water surface elevation. All culverts located or expected to be located under paving and bridges shall be structurally designed for an HS-20 loading. Hydrologic and hydraulic calculations for all crossings must be included in the permit application to ensure compliance with this Code.

All culvert and bridge crossing(s) need to have the flood gauge installed by the developer before acceptance by the City.

#### 24.59.3.2.4 Hydraulic Structures - Energy Dissipation

Where hydraulic structures are included in the design of storm water drainage systems, energy dissipation shall be included in the structure as outlined in the Storm Water Management Guidance Manual. Hydraulic structures may include, but are not limited to: pipe outlets, spillways, drop structures, and culvert headwalls. All energy dissipators should be designed to facilitate maintenance. At the reasonable discretion of the City Engineer, the design of outlet structures in or near parks, and/or residential areas ~~{at the reasonable discretion of the City Engineer}~~ must give special consideration to aesthetics.

#### 24.59.3.2.5 Retention/Detention Facilities

The following are minimum criteria for detention facilities within the City of Laredo and its extraterritorial jurisdiction. These criteria do not supersede or replace requirements established by the State of Texas for dam safety, dam construction plan review, and/or the impoundment of State Waters. Where the State of Texas requirements apply, the owner/developer and/or engineer shall provide evidence of compliance prior to final approval of the facility by the City of Laredo.

##### 24.59.3.2.5.1 Allowable Discharge - (Pre/Post Analysis for Retention/Detention Facilities)

The ultimate one hundred (100) ~~50~~-year design storm event shall be used in determining the required retention/detention volume for the development site. The discharge rate from the facility shall be such that the pre-development discharge rate from the site is not exceeded in the post-developed condition for the design storm event. The precondition discharge rate shall be calculated assuming the proposed site is in a natural state. Upstream adjacent properties shall be considered at their existing conditions, provided that the downstream receiving stream/channel/detention pond can accept additional storm water runoff volume without causing flooding as determined by the City Engineer.

#### 24.59.3.2.5.2 Storage

The design storage shall be the volume of the design storm event hydrograph that exceeds the allowable discharge rate noted above. Basins without upstream detention areas and with drainage areas of one hundred thirty (130) acres or less may calculate storage using the Modified Rational Method as described in the Storm Water Management Guidance Manual. Basins with drainage areas greater than one hundred thirty (130) acres, or where the Modified Rational Method is not applicable, shall be designed using an approved method as described in the Storm Water Management Guidance Manual.

#### 24.59.3.2.5.3 Impoundment Design Criteria

The steepest side slope permitted shall be 4:1 for a vegetated earth embankment, 2:1 for a rock dam, or as determined by a geotechnical investigation that is certified by a licensed professional engineer and approved by the City Engineer.

Earth embankments used to temporarily impound the required detention volume shall be constructed according to standard specifications for fill. These specifications should be, at a minimum, adequate for levee embankments and be based on the City of Laredo standard specifications for embankment, topsoil, sodding, and seeding.

Where permanent impoundment is to be provided a geotechnical investigation is required. Based on the geotechnical report more stringent specifications may be required.

Embankments, spillways and other appurtenances shall be designed to withstand the pressures of the impounded storm water.

Excavated detention facilities must provide positive drainage with a minimum bottom grade of three tenths of a percent, 0.3% (0.003 /ft). A low flow [~~pilot channel~~] concrete valley gutter shall also be provided.

#### 24.59.3.2.5.4 Freeboard and Emergency Spillway

The top of the embankment shall be a minimum of [~~two (2) feet~~] one (1) foot above the [~~50~~] one hundred (100) year maximum design elevation. An emergency spillway, or overflow area, shall be provided above the maximum design elevation to ensure that the State of Texas Dam Safety overflow requirements or the one hundred (100) year frequency event, whichever is more stringent, does not overtop the embankment.

If the emergency spillway capacity is to be provided over the embankment, the spillway will be structurally designed to prevent erosion and consequent loss of structural integrity. The spillway or the dam portion of the pond shall be constructed of reinforced concrete or with concrete lining. Alternate materials may be approved by the City Engineer.

#### 24.59.3.2.5.5 Outflow Structure

Where the outflow structure conveys flow through the embankment in a conduit, the conduit shall be reinforced concrete or other material to be approved by the City Engineer designed to support the external loads with an adequate factor of safety. It shall withstand the internal hydraulic pressures without leakage under full external load or settlement. It must convey water at the designed velocity without damage to the interior surface of the conduit.

#### 24.59.3.2.5.6 Fence

- 1) Security fencing with a minimum height of six (6) feet shall encompass the detention and maintenance area when required, as determined by the City Engineer, due to potential safety hazards created by prolonged storage of floodwater.
- 2) Design shall be such that it does not restrict the inflow or outfall of the basin.
- 3) Adequate access for maintenance equipment shall be provided.
- 4) In basins to be used for recreation areas during dry periods, pedestrian access may be provided with the approval of the City Engineer.

#### 24.59.3.2.5.7 Floatable Controls

All Detention facilities shall incorporate some type of floatable controls (baffles, skimmers, etc.) to ensure that discharge of floatables from the facility is limited to the maximum extent practicable as determined by the City Engineer. As part of the ongoing detention facility maintenance, the detention facilities shall be regularly checked and any floatables removed. A maintenance regimen for the removal of floatables shall be part of the maintenance schedule submitted for permit review and approval.

#### 24.59.3.2.5.8 Maintenance Access Requirements

A minimum fifteen (15) foot wide maintenance area shall be provided [~~around~~] to serve the detention facility. The crown (top of berm) shall have a minimum width of ten (10) feet unless used for primary maintenance of the detention facility, in which case it shall have a minimum width of fifteen (15) feet.

Access must be provided into detention basins designed for periodic desilting and debris removal. Basins with permanent storage must include dewatering facilities to provide for maintenance.

#### 24.59.3.2.5.9 Municipality Participation.

When the City Engineer determines that additional storage capacity beyond that required by the



applicant for on-site storm water management is necessary in order to enhance or provide for the public health, safety and general welfare, to correct unacceptable or undesirable existing conditions or to provide protection in a more desirable fashion for future development, the City Engineer may:

- 1) Require that the applicant grant any necessary easements over, through or under the applicant's property to provide access to or drainage for such a facility;
- 2) Require that the applicant attempt to obtain from the owners of property over, through or under where the storm water management facility is to be located, any easements necessary for the construction and maintenance of same (and failing the obtaining of such easement the City may, at its option assist in such matter by purchase, condemnation, dedication or otherwise, and subject to paragraph (3) below, with any cost incurred thereby to be paid by the City); and/or
- 3) Participate financially in the construction of such facility to the extent that such facility exceeds the required on-site storm water management as determined by the City Engineer.
- 4) The City may assume maintenance of the facility as a storm water management facility.

To implement this provision both the municipality and developer must be in agreement with the proposed facility that includes the additional storage capacity, and jointly develop a cost sharing plan which is agreeable to all parties.

#### 24.59.3.2.5.10 Fee in-lieu-of Detention

City Engineer may waive the detention requirement for small plat (less than five (5) acres) with the options of fee in-lieu-of detention when the downstream receiving stream/channel/detention pond can accept additional storm water runoff volume without causing erosions. The calculation will be based on the combination of the construction cost and land cost of the proposed detention facility and may include the maintenance cost for two (2) years.

#### 24.59.3.2.6 Regional Storm Water Management Facilities

For the purposes of this Code a regional storm water management facility shall be any facility constructed on a channel or waterway whose total drainage area is greater than one hundred thirty (130) acres and serves more than one (1) development. Regional storm water management facilities may be maintained by the City.

The design of regional storm water management facilities shall assume that all contributing areas are fully developed in accordance with approved future land use plans. A plan of the contributing area will be submitted as part of the permitting process indicating conveyance easements through the property being developed sufficient to convey post development flows to the facility. If the proposed development is upstream of the regional storm water management facilities, pass through conveyance systems shall be included in the design of the development.

24.59.3.2.6.1 Lakes and Dams

In the event that a property owner or developer desires to modify an existing pond or lake, or desires to impound stormwater by filling or constructing an above-ground dam, thereby creating a lake, pond, lagoon or basin as part of the planned development of that property – the criteria listed below shall be met before City approval of the impoundment can be given. Ponds or lakes created by excavation of a channel area without erecting a dam above natural ground elevation or instream, low water checkdams are also subject to the criteria listed below with the exception of spillway capacity requirements. The City Engineer has the final authority to determine the design criteria for a proposed dam, checkdam, or excavated lake. The requirements of the State of Texas must also be met for the construction of dams, lakes, and other impoundments.

The design criteria for a dam is dependent on the size and hazard classification of the dam. The size and hazard classification will be based on Chapter 12 of the Texas Water Code. The following criteria will be used to classify a dam:

1. Size

The classification for size is based on the height of the dam and storage capacity, whichever gives the larger size category. Height is defined as the distance between the top of the dam (minus the freeboard) and the existing streambed at the downstream toe. Storage is defined as the maximum water volume impounded at the top of the dam (minus the freeboard).

Spillway Design Flood (SDF)

<u>Hazard</u>	<u>Size</u>	<u>SDF</u>
Low	Minor	100-year
	Small	1/4 PMF
	Intermediate	1/4 PMF to 1/2 PMF
	Large	PMF
Significant	Small	1/4 PMF to 1/2 PMF
	Intermediate	1/2 PMF to PMF
	Large	PMF
High	Small	PMF
	Intermediate	PMF
	Large	PMF

In all cases, the minimum principal spillway design capacity is the one hundred (100) year design flood. In certain cases, a dam breach analysis may be required to determine the proper classification of the structure. For all structures requiring a spillway design flood equal to the

Probable Maximum Flood (PMF), a dam breach analysis is required to determine the downstream consequences of a failure. All dams designed for a Spillway Design Flood (SDF) of half (1/2) PMF or less shall be constructed with a minimum freeboard of two (2) feet above the SDF elevation.

#### 24.59.3.2.7 Retaining Walls in Waterways

1. All retaining structures/walls located within a *one hundred* (100) year floodplain shall be constructed of reinforced concrete or other materials approved as designed for the specific on-site conditions. Special structural designs shall be submitted with supporting calculations to the City Engineer for approval.
2. Retaining walls shall be designed to achieve a minimum factor of safety of *two* (2) against overturning and *one and an half* (1.5) against sliding.
3. The criteria/parameters used in considering the adequacy of the retaining wall design shall be as outlined in the Storm Water Management Guidance Manual.
4. Any wall taller than four (4) feet in height will require a building permit and an engineer's certification that the wall is structurally sound, and built as per the plan specifications.

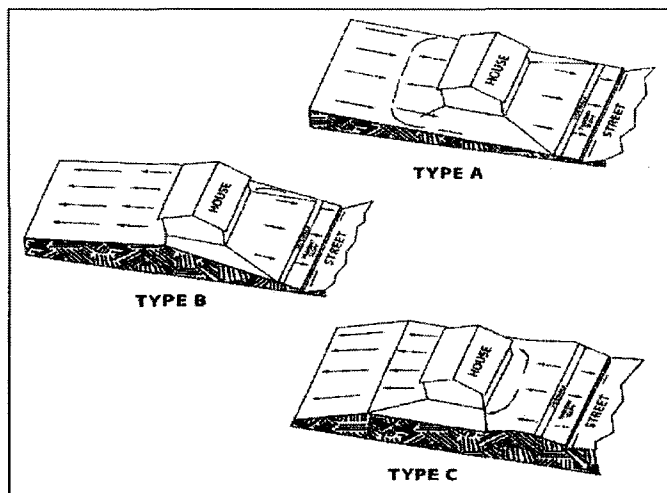
#### 24.59.3.3 Easements

Property development/redevelopment that includes **detention** and/or drainage facilities shall dedicate easements to the City. The minimum width of easements shall be determined by the City Engineer, based on the examples set out in the Storm Water Management Guidance Manual. Final plats shall contain standard language addressing the easements and management areas, and on-ground monumentation as outlined below:

1. Floodway easements are to be dedicated for open waterways in nonresidential areas. They will be maintained by the property owner.
2. Drainage easements are to be dedicated for manmade drainage channels, closed storm sewer systems, or drainage structures in areas not owned by the City, but to be maintained by the City.
3. Detention basins shall be maintained in detention area easements. Detention basins constructed through private development activities shall be maintained by the property owner or neighborhood association. Detention basins constructed for the City, or constructed as a regional facility approved by the City, shall be maintained by City personnel.
4. **All detention easements and drainage easements shall include provisions for adequate maintenance such as dedicated and maintained access easements. These access easements shall be sufficient to provide ingress and egress for maintenance. The minimum width shall be fifteen (15) feet. Access easements are needed only when the area to be maintained does not border a public right-of- way.**

24.59.3.3.1 Easements for Enclosed Storm Sewers, Positive Overflow Areas and Lot Drainage

A grading plan shall be prepared and submitted to the City, which indicates typical lot grading for all lots in the subdivision using typical FHA lot grading types (A,B, and C). See Figure 24.59.3.3.1- Typical FHA lot grading.



24.59.3.3.1- Typical FHA lot grading (NTS)

All storm sewer conduits to be dedicated to the City shall be located in an easement dedicated to the City of Laredo at the time of final platting of the property. The easement shall be at least fifteen (15) feet wide for storm sewers, or wider if the City Engineer requires it for maintenance or other purposes. Special drainage easements for positive overflows on private property shall be a minimum of ten (10) feet wide, or wider if the City Engineer requires it, for maintenance or other purposes.

Accumulated drainage from more than one residential lot (or more than one lot equivalent in the case of staggered or offset lots) shall be contained within a Special Drainage Easement. This easement shall be dedicated to the City at the time of final platting of the property. This shall be a special drainage easement on private property and shall be a minimum of ten (10) feet wide. The easement may be shared with underground utility easements provided those facilities do not impede the calculated runoff. Front to rear lot drainage shall not exceed a maximum slope of five percent (5%). No flow restricting fences, buildings, structures, or other improvements which impede flow shall be placed within these easements.

Single front to rear residential lot drainage, or one lot equivalent in the case of staggered, or offset lots do not require Special Drainage Easement. Front to rear lot drainage shall not exceed a maximum slope of five percent (5%). All lots draining and/or receiving runoff will be identified with a plat note. Flow restricting fences or other structures installed between these lots shall be constructed to the specifications of the engineer of record. Said specifications shall be located on the recorded grading plan. Additionally, the homebuilder shall install a 20' wide sod strip along entire rear property line of lots draining onto other lots (10' strip on upgradient lot & 10' strip on downgradient lot).

WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance does not imply that properties shall always be free from flooding or flood damage, surface water stagnation or nonpoint source pollution or that all flood control and water treatment projects to control the quantity and quality of runoff can be constructed effectively. Nothing whatsoever in this ordinance should be construed as or be deemed to create additional duties, on the part of the city, to hold the city liable for any damages incurred in a flood or from adverse water quality, due to drainage runoff. Nothing in this ordinance shall be deemed to waive the city's immunity under State law or reduce the need or necessity for flood insurance.

**Section 2:** Appendix A of the Laredo Land Development Code, Chapter 24 is hereby amended to include:

***Special Drainage Easement*** – For the purpose of Section 24-59 Storm Water Management, shall mean:

***A drainage easement over private residential property that is at least ten (10) feet wide which the City of Laredo shall enforce and the private property owner shall maintain. No flow restricting fences, buildings, structures, or other improvements which impede flow shall be placed within this easement. The maintenance of Private Drainage Facilities shall be provided for by the property owner or assigned agent. The City shall be kept advised of the responsible agent.***

**Section 3:** This ordinance shall be published in a manner provided by Section 2.09 (D) of the Charter of the City of Laredo.

**Section 4:** This ordinance shall become effective as and from the date of publication specified in Section 3.

**Section 5:** Severability

If any provision, section subsection, sentence, clause, or phrase of this ordinance, or the application of the same to any person or set of circumstances is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this ordinance or their application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the City Council in adopting this ordinance that no portion hereof or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality, voidness or invalidity or another portion hereof, and all provisions of this ordinance are declared to be severable for that purpose.

**Section 5:** Open Meeting

The City Council officially finds, determines, recites and declares that a sufficient written notice of the date, hour, place and subject of this meeting of the City Council was posted at a place convenient to the public at the city hall of the City for the time required by law preceding this

meeting as required by the Open Meeting Law, Article 6252-17, Texas Revised Civil Statutes Annotated; and that this meeting has been open to the public as required by law at all times during which this ordinance and the subject matter approves and confirms such written notice and the contents and posting hereof.

**PASSED BY THE CITY COUNCIL AND APPROVED BY THE MAYOR ON THIS THE**  
7<sup>th</sup> **DAY OF** June, 2017.

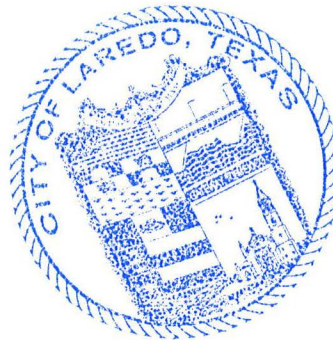


PETE SAENZ  
MAYOR

ATTEST:



HEBERTO L. RAMIREZ  
ACTING CITY SECRETARY



APPROVED AS TO FORM:



KRISTINA K. LAUREL-HALE  
ACTING CITY ATTORNEY

**City Council-Regular**

**Meeting Date:** 05/01/2017

**Initiated By:** Horacio De Leon, Assistant City Manager

**Staff Source:** Ramon E. Chavez, P.E. Building Development Services Director

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**SUBJECT**

**2017-O-061** Amending Article III, Section 24.59.3.1 through 24.59.3.3 of the City of Laredo Land Development Code; by revising the drainage standards for: finished floor requirements; open channels; floatable controls; fee in lieu of detention; lakes and dams; and freeboard and emergency spillway; amending appendix a to add the definition of special drainage easement; providing for related matters; providing for a repealing clause; providing for severability; providing for publication; and providing for an effective date.

**PREVIOUS COUNCIL ACTION**

On April 3, 2017 the City Council approved a motion to adopt the drainage ordinance as proposed by the Technical Review Board Ad-Hoc Committee with an effective date of July 1, 2017.

**BACKGROUND**

The Storm Water Management Ordinance was last reviewed by City Council in 2012. Ordinance 2012-O-101 made the last revisions to this ordinance.

**COMMITTEE RECOMMENDATION**

Technical Review Ad Hoc Committee recommends approval. Planning and Zoning Commission recommends approval.

**STAFF RECOMMENDATION**

Staff does not recommend approval.

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**Fiscal Impact**

**Fiscal Year:**

**Budgeted Y/N?:**

**Source of Funds:**

**Account #:**

**Change Order: Exceeds 25% Y/N:**

**FINANCIAL IMPACT:**

N/A

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## Attachments

2017-O-061

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# GES

MODELING 406



## WEDAS REMODELING

roof  
plumbing, painting,  
textures, block  
& carpentry 20+  
years  
of experience!  
FREE ESTIMATES  
956-635-4393



Popcorn Ceiling  
Removal  
Wallpaper Installation  
Interior-Exterior  
Painting  
Call Martin Pacheco  
744-2221

WELDING 425



## "EDDIE'S WELDING"

REPARACION DE SOLDADURA  
(956) 235-2352



## BUENO WELDING SERVICE

Commercial & Residential  
types welding, pipes, pipes  
etc.  
(956) 939-5010  
Laredo, Tx.

56) 728-2527

## SPECIAL NOTICES 31

Consejera Espiritual  
Marsol, Lecturas de Cartas  
Tarot, amarras,  
desamarras,  
endulzamiento de amor,  
retiro mal expuestos,  
envidia, salaciones,  
levanto empresas y  
negocios, y retiro  
enfermedades  
desconocidas,  
(956) 401-3707

## HOMES FOR SALE 61

### RH Reliant Homes

NEW HOMES, 3bed/2ba -  
\$84,950 On your Lot  
NEW -1403 Hazelnut  
3/2 - \$145,000  
(956) 237-1105

114 DATE PALM DR.  
FOR SALE, 3/2/2,  
move in ready,  
SALLY F. GONZALEZ  
REALTOR,  
EXIT REALTY  
LAREDO  
956-324-1956

420 JAZMIN 3/2,  
palapa, portable,  
fenced, \$139,500.  
Call  
(956) 645-6336

603 Paul Revere,  
3 bedrooms, 2  
baths, 1,610 sq.  
ft. L.A., like-new,  
MUST SEE!  
\$146,000,  
(956) 251-0614

1006 Cortez,  
3bd/2ba/carport,  
\$90,000,  
(956) 726-4754  
BROKER/REALTOR  
OWNED

1434 Wilfrano Dr. CASA  
NUEVA 3Rec, 2Baños,  
Granito, Garantia 2-10.  
\$1029Mo\* Compradores  
con Credito Calificado  
\*WAC 7% Dwn 30Yr  
3.99% Int. \$3000 Ayuda  
p/costos de cierre  
limitada 9567236655  
Resplendent Homes

3809 Century Dr.  
3 bedrooms, 2  
baths, Newly re-  
modeled! Asking  
Price \$120,000.  
(956) 251-0614

## HOMES FOR SALE 61

4448 Vientos Rd. CASA  
NUEVA 3Rec, 2Baños,  
Granito, Garantia 2-10.  
\$987Mo\* Compradores  
con Credito Calificado  
\*WAC 7% Dwn 30Yr  
3.99% Int. \$3000 Ayuda  
p/costos de cierre  
limitada 9567236655  
Resplendent Homes

FOR SALE OR LEASE  
104 Grove, 4/2/2,  
w/pool, oversized lot.  
SALLY F. GONZALEZ  
REALTOR,  
EXIT REALTY  
LAREDO  
956-324-1956

For Sale or Rent  
Large beautiful 4  
bedroom, 4 full + 2 1/2  
bathrooms, pool and  
walkway to the lake  
232 Lake Powell  
Open Concept  
817-657-8498

For Sale: 3 Homes on  
2 Lots (11,576 S.F.)  
Must Sell Together,  
2020 & 2018 W. Anna  
Ave. Income produc-  
ing property. 2 homes  
presently rented and  
larger home is vacant.  
Call Pete Bustamante  
for more info  
(956) 740-7729

Tere Santos  
REAL ESTATE  
Office: (956) 791-5458

GRANITE,  
QUARTZ CTR.  
TOPS, SINKS,  
& FAUCETS,  
SHOWER  
DOORS,  
RANGE  
HOODS  
FREE  
ESTIMATES!  
753-3000  
237-1105

House for sale,  
4bd/3.5 bath, 2 car  
garage, 7608 Agatha  
Christie Dr. in  
D&J Alexander  
Subdivision.  
(956) 791-6060

## HOMES FOR SALE 61

New home for sale in  
College Heights by LCC  
South, 3/2, 1,150 sqft,  
down payment  
assistance available.  
Call Chuck Garza with  
Lerma Real Estate  
(956) 949-7221  
chuckgarzahomes.com

Owner Finance.  
2/1, \$118,000.  
20K Down,  
Mines Road,  
Platinum Realty,  
(956) 324-2977

OWNER FINANCE!!  
503 Cambridge  
Loop.  
\$185,000.00  
\$25,000 down.  
Term/Negotiable  
763-3062  
728-8299

Rio Gulf Coast Invest-  
ments, LLC. 1920 E. Saun-  
ders St. Office for Sale.  
Zone B-4 Perfect For  
Medical Offices, Restau-  
rant or any kind of Busi-  
ness!!! Located Near Mercy  
Hospital!!! Make Your Ap-  
pointment TODAY!! CALL  
Jose "Corky" Gonzalez  
(956) 324-0507

Rio Gulf Coast Invest-  
ments, LLC. 2710 Glover  
for Sale. Beautiful Home  
being Built by Trautmann  
Construction, LLC!!! One  
Lot Still Available (2708  
Glover Loop) in Quail Run  
Subdivision!! The  
"GREENS" Coming SOON!!  
RESERVE YOUR LOT TO-  
DAY!! CALL Jose "Corky"  
Gonzalez (956) 324-0507  
for more information.

Rio Gulf Coast Invest-  
ments, LLC. Home for Rent  
\$ 1,400. 426 St. Thomas  
Dr. 3Bd, 2Bth, 2 Car Gar-  
age 1,464 Living Area. Tile  
Throughout living area.  
Laminate Floors in the  
Bedroom. Home is Cen-  
trally Located. Make Your  
Appointment TODAY!!  
CALL Jose "Corky" Gon-  
zalez (956) 324-0507

LEGALS 250

## CONDOS FOR SALE 64

3 bed, 2.5 ba, 1,300  
sq ft, fully furnished,  
NEW fridge & stove,  
flat screen TVs, washer/  
dryer, intersection of  
359 & Loop 20, \$120,000  
OBO, owner financing,  
Call for appointment.  
(956) 326-8734

602 Basswood  
Brand New 2 bed, 2.5  
bath, granite counter  
tops, large kitchen,  
financing available  
for qualified buyers,  
3% down, no closing  
costs. Call 237-2556  
or 206-0290

Coming Soon! Martingale  
Condo, 2bed/2bath,  
downstairs unit, great private  
section & with secured front  
& back door, close to  
swimming pool, just painted,  
very clean, ready to move in,  
JR Realty (956) 725-0577 or  
Elma (956) 286-8368

OWNER FINANCING  
AVAILABLE  
\$10,000 Down! VERY NICE!  
GATED 2story Townhome,  
private backyard, 3bd, 2.5ba,  
A/C, 201 Abigail Dominguez Ct.  
Unit #3 (Close to Loop 20 on  
HWY 359)  
Cash price \$105,000.  
Call (956) 740-0700

Rio Gulf Coast Invest-  
ments, LLC. Condo for  
Sale 1101 Shiloh 3Bd, 2.5  
Bth 1,737 living area.  
Large Master Bedroom,  
Sprinkler system in front  
and Community Swimming  
Pool. Sale Price \$140,990.  
Call Jose "Corky" Gon-  
zalez (956) 324-0507

## LOTS FOR SALE 70

2118 Napoleon  
St. (South  
Laredo)  
46x138.8  
Lot, Serious  
Inquiries Only  
(956) 763-2825

CITY OF LAREDO ORDINANCE  
NO. 2017-0-061  
AMENDING THE LAREDO LAND  
DEVELOPMENT CODE OF THE  
CITY OF LAREDO BY REVISING  
THE DRAINAGE STANDARDS,  
ARTICLE III, SECTION 24.59.3.1  
THROUGH 24.59.3.3; AND  
AMENDING APPENDIX A BY  
ADDING A NEW DEFINITION;  
PROVIDING FOR PUBLICATION  
AND EFFECTIVE DATE  
L-35