## **ORDINANCE NO. 2019-36**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS AMENDING THE CITY OF BASTROP STORMWATER DRAINAGE DESIGN MANUAL, SECTION 2, - "STORMWATER DRAINAGE POLICY," B -"STORMWATER DRAINAGE DESIGN PROCESS"; AND PROVIDING FOR FINDINGS OF FACT, AMENDMENT, ENFORCEMENT, A REPEALER, AND SEVERABILITY; ESTABLISHING AN EFFECTIVE DATE; AND PROPER NOTICE AND MEETING.

WHEREAS, House Bill 3167 of the 86th Session of the Texas Legislature requires that a subdivision development plan, subdivision construction plan, site plan, land development application, site development plan, preliminary plat, general plan, final plat, and replat be approved, approved with conditions, or disapproved by staff and/or Planning & Zoning Commission within 30 days of submission or it is deemed approved by inaction; and

WHEREAS, Texas Local Government Code Chapter 212, Subchapter A. Regulation of Subdivisions, Section 212.002. Rules grants authority to a governing body of a municipality, after conducting a public hearing on the matter, to adopt rules governing plats and subdivisions of land within the municipality's jurisdiction to promote the health, safety, morals, or general welfare of the municipality and the safe, orderly, and healthful development of the municipality; and

WHEREAS, City Council adopted a Stormwater Drainage Design Manual dated May 2019.

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

#### **SECTION 1. FINDINGS OF FACT**

The foregoing recitals are incorporated into this Ordinance by reference as findings of fact as if expressly set forth herein.

## **SECTION 2. AMENDMENT**

That the City of Bastrop Stormwater Drainage Design Manual, Section 2 – Stormwater Drainage Policy, B. Stormwater Drainage Design Process, is amended to read as described and attached hereto as Exhibit "A."

#### **SECTION 3. REPEALER**

In the case of any conflict between other provisions of this Ordinance and any existing Ordinance of the City, the provisions of this Ordinance will control.

### **SECTION 4. SEVERABILITY**

If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, that invalidity or the unenforceability will not affect any other provisions or applications of this Ordinance that can be given effect without the invalid provision.

### **SECTION 5. ENFORCEMENT**

The City shall have the power to administer and enforce the provisions of this ordinance as may be required by governing law. Any person violating any provision of this ordinance is subject to suit for injunctive relief as well as prosecution for criminal violations, and such violation is hereby declared to be a nuisance.

Nothing in this ordinance shall be construed as a waiver of the City's right to bring a civil action to enforce the provisions of this ordinance and to seek remedies as allowed by law and/or equity.

## **SECTION 6. EFFECTIVE DATE**

This Ordinance shall be effective immediately upon passage and publication.

## **SECTION 7. OPEN MEETINGS**

It is hereby officially found and determined that the meeting at which this Ordinance was passed was open to the public, and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Texas Government Code, Chapter 551.

READ & ACKNOWLEDGED on First Reading on the 14th day of August 2019.

READ & APPROVED on the Second Reading on the 27th day of August 2019.

APPROVED:

Connie B. Schroeder, Mayor

ATTEST:

Ann Franklin, City Secretary

APPROVED AS TO FORM:

Alan Bojorquez, City Attorney

## City of Bastrop

# **Stormwater Drainage Design Manual**

#### **SECTION 2 STORMWATER DRAINAGE POLICY**

## **B. Stormwater Drainage Design Process:**

- 1. Preliminary Conference and Conceptual Plan Review.
- a. Preliminary Conference, also known as a "Pre-Submittal Meeting" or "Pre-Submittal Meeting for Subdivision". Refer to Code of Ordinances, Chapter 10 Subdivision Ordinance, Section 5.02.01 Development Process. As a part of the Enhanced Permit Review Process, applicants shall consult with and present a proposed plan (conceptual plan) to the Development Review Committee (DRC) members as required for comments and guidance of the procedures, specifications, and standards for permits required by the following sections of the Code of Ordinances:
  - §3.16.001: Permits for moving of structures, demolition, and site work
  - §3.18.002: Permits for construction, alteration or extension; construction or occupancy of permanent structures.
  - §3.20.051: Permit to erect or install a sign
    - b. Before submitting the regulating and conceptual site drainage plan, the Applicant should discuss with the planning and development department and City Engineer the procedure set for the adoption of a subdivision plat and the requirements of the "Design Standards," the iSWM TM Design Manual and of any pertinent City ordinances. The planning and development department staff and City Engineer shall also advise the Applicant of existing conditions which may affect the proposed subdivision, such as existing or proposed streets, adjacent subdivisions or properties, floodplain and drainage, sewage, fire protection, reservation of land, and similar matters, referring the Applicant to the proper agencies if services are not provided by the City.
    - c. Concept Plan Review. Concept plan review will normally be accomplished by submission of supporting plan material and a conference with the Director of Planning and Development.
      - (1) Three (3) copies of the Conceptual Plan.
      - (2) Two (2) copies of the Site Analysis and Conceptual Site Drainage Plan, in accordance with the requirements described below.
- 2. Site Analysis: Using field and mapping techniques approved by the City Engineer, the developer's engineer shall collect and review information on the existing site conditions and map the following features:

- a. Topography
- b. Drainage patterns and basins
- c. Intermittent and perennial streams on-site and off-site that contribute to or receive water from the site
- d. Soil types and their susceptibility to erosion
- e. Property lines, adjacent areas and easements
- f. Wetlands and critical habitat areas
- g. Boundaries of wooded areas and tree clusters (tree survey)
- h. Existing FEMA (or best available data) floodplain and floodway boundaries and base flood elevations
- i. Ground cover and vegetation, particularly unique or sensitive vegetation areas to be protected during development
- j. Existing development
- k. Existing stormwater facilities on-site and off-site that will receive discharges from the proposed development
- Steep slopes
- m. Required buffers and setbacks along waterbodies
- n. Proposed stream crossing locations

## 3. Conceptual Drainage Plans

Based on the Site Analysis, the design engineer shall prepare a Conceptual Drainage Plan for the proposed site layout to give the developer and the City Planning and Engineering staff an initial look at the project as a part of a mandatory Pre-Development meeting. This plan will be submitted along with the Concept Plan. A copy of the Concept Drainage Plan submittal checklist is included in Appendix A. The Design engineer should typically follow the following steps:

- a. Use applicable LID techniques to develop the site layout, including:
  - (1) Preserving the natural feature conservation areas defined in the site analysis
    - (a) Preserve undisturbed natural areas
    - (b) Preserve riparian buffers
    - (c) Avoid floodplains
    - (d) Avoid steep slopes
    - (e) Minimize siting on porous or erodible soils
  - (2) Use lower impact site design techniques
    - (a) Fit design to the terrain
    - (b) Locate development in less sensitive areas
    - (c) Reduce limits of clearing and grading
    - (d) Use open space development
    - (e) Consider creative designs
  - (3) Reducing impervious surface areas

- (a) Reduce roadway lengths and widths
- (b) Reduce building footprints
- (c) Reduce the parking footprint
- (d) Use fewer or alternative cul-de-sacs
- (e) Create parking lot stormwater "islands"
- (4) Preserving and using the natural drainage system wherever possible
  - (a) Use buffers and undisturbed areas
  - (b) Use natural drainage ways instead of storm sewers
  - (c) Use vegetated swale instead of curb and gutter
  - (d) Drain rooftop runoff to pervious areas

While implementation of LID techniques is not mandated, the developer is strongly encouraged to consider the above-referenced LID techniques.

- b. Calculate conceptual estimates for the design requirements for the 2-year 24-hour storm volume, 25-year 24-hour storm volume and 100-year, 24-hour storm volume events.
- c. Determine any appropriate temporary and permanent structural stormwater controls and identify potential locations on the site.

## 4. Preliminary Drainage Plans

This step builds on the data developed and LID standards provided in the Conceptual Drainage Plan by ensuring that requirements and criteria are met, opportunities have been taken to minimize adverse effects of the development and providing more detail. The Preliminary Drainage Plan will be submitted in compliance with Article 10.03 Subdivision Ordinance, Section 4 Platting Procedure, 4.10.6.a. Preliminary Plat, and shall consist of maps, plan sheets, narrative and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater system. A copy of the Preliminary Drainage Plan submittal checklist is included within Appendix B.

## 5. Final Drainage Plans

This step builds on the data developed and LID standards provided in the Preliminary Drainage Plan. The Final Drainage Plan and Construction Plans shall be submitted to and approved by the City Engineer prior to submitting a Public Improvement Plan and a Site Development Plan in accordance with Code of Ordinances, Chapter 14 Sec. 42 and Chapter 10, Section 5.05 – Public Improvement Plan Requirements. A final drainage plan is also required for a Minor Plat. A copy of the Final Drainage Plan submittal checklist is included within Appendix C.

#### 6. Operations and Maintenance Plan

An Operations and Maintenance Plan shall be submitted along with the Final Drainage Plans to clearly state which entity has responsibility for the operation and maintenance of temporary and permanent stormwater controls and drainage facilities to ensure that they will function in the future. The O&M plan shall include, but not be limited to:

- a. Responsible party for all facilities and tasks in the plan
- b. Inspection and maintenance requirements
- c. Maintenance of permanent stormwater controls and drainage facilities during construction
- d. Cleaning and repair of permanent stormwater controls and drainage facilities before transfer of ownership
- e. Frequency of inspections for the life of the permanent facility
- f. Funding source for long-term maintenance
- g. Description of maintenance tasks and frequency
- h. Access and safety issues