



UDC Update Request Application for External Parties
(neighborhoods, external agencies, stakeholders, etc.)

Part 1. Applicant Information

Name: Deborah Reid Organization (if applicable): Greater Edwards Aquifer Alliance
Address: [REDACTED]
Phone: [REDACTED] Email: [REDACTED]
Signature: Deborah Reid Digitally signed by Deborah Reid
(Include title if representing a governmental agency or public/private organization) Date: April 22, 2020
Date: 2020.04.22 16:50:53 -05'00'

Part 2. Basis for Update (check only one)

- ☐ Clarification amendments to provide for ease of interpretation and understanding of the existing provisions of the UDC
(Note: Clarification amendments should not change or alter the intent or meaning of existing UDC provisions)
- ☐ Editing change that does not alter the impact of the provisions being addressed including changes such as spelling,
grammar correction, formatting, text selection, or addition of text in compliance with existing ordinance, statutes or case law
- ☐ Completed Rule Interpretation Determination (RID)
- ☒ Requested by the Zoning Commission, Planning Commission, Board of Adjustment, HDRC, City Council or other appropriate
city board or council (CCR, resolution or signature of the chairperson is required)

Part 3. Reason(s) for Update (check all that apply)

- ☐ Modify procedures and standards for workability and administrative efficiency
- ☐ Eliminate unnecessary development costs
- ☐ Update the procedures and standards to reflect changes in the law or the state of the art in land use planning and urban design
- ☒ See Part 4 (if none of the provided choices in this section apply, please discuss the reasons for the proposed update in Part 4)

Part 4. Summary of Proposed Update with Suggested Text (see application instructions)

In order to reduce cumulative impacts as watershed approach full build-out, this
amendment would make on-site stormwater detention a requirement of participation in the
Regional Stormwater Management Program (RSWMP).

UDC 2021 Proposed Amendment

Amendment 14-6**Applicant:** Greater Edwards Aquifer Alliance**Amendment Title** – 'Appendix H – Storm Water Design Criteria Manual. Chapter 4 – Planning**Amendment Language:**

APPENDIX H - STORM WATER DESIGN CRITERIA MANUAL

CHAPTER 4 - PLANNING

4.2- Regional Drainage Master Plan (Watershed Master Plan)

The Bexar Regional Watershed Management (BRWM) is a partnership among Bexar County, the City of San Antonio, the San Antonio River Authority and 20 suburban cities to address flood management and [water quality concerns on a regional basis](#).

An Inter Local Agreement for Bexar Regional Watershed Management program was approved in May 2003 and amended in April 2010 between the managing partners (Bexar County, the City of San Antonio, and the San Antonio River Authority). The oversight and implementation process for this program includes elected officials, entity staff at all levels, and most importantly, a citizens' advisory process. The program was set up to develop and implement efficient and economic flood control throughout Bexar County.

A number of potential Capital Improvement Projects have been identified through the BRWM Watershed Master Plans. A number of these projects within the Watershed Master Plan have been funded and constructed.

4.3- Regional Storm Water Management Program (RSWMP)

This section represents the policies of the RSWMP and understanding this section will enable the design engineer to provide utility and transportation infrastructure, capital improvement projects, public facilities, and development projects meeting the policies of the UDC.

4.3.1A - RSWMP Overview [and Community Goals](#)

The City of San Antonio determined that regional storm water management [based on a watershed approach](#), is preferable [and will include](#) ~~to~~ site-specific storm water mitigation. [Regional management will be crucial in mitigating drainage and flooding impacts from large storm events and in maintaining the ecological functioning of floodplain systems](#). The regional [portion of the](#) storm water management program provides for the administration, planning, design, construction, and operational management of regional storm water facilities (RSWF). Regional storm water management uses a watershed-wide approach to analyze potential flooding problems, identify appropriate mitigation measures and select site locations and design criteria for RSWF. These RSWF include, but are not limited to, regional detention and retention ponds, watershed protection, land purchase, waterway enlargement, channelization, and improved conveyance structures [utilizing green infrastructure, natural channel design and restoration techniques that will incorporate water quality and debris capture components](#). The regional storm water management program allows developers to participate in the program [to meet requirements greater than those for a twenty-five \(25\) year storm](#) rather than constructing ~~the~~ on-site ~~detention controls required by this section~~, when the City has determined that the increased runoff from the proposed development will not produce a significant adverse impact to other properties ~~as outlined in 4.3.1C~~ [or on those features receiving the runoff discharged from the site](#).

4.3.1B - RSWMP Participation

All developers shall participate in the RSWMP in the following ~~one (1) of three (3)~~ ways:

1. Payment of a fee in lieu of on-site detention in combination with on-site detention as outlined in 2.6.3 (except in areas designated by the Director of TCI as "mandatory detention areas"). The fee schedule is included in UDC Appendix "C," section 35C-109.
2. Construction of on-site water quality facilities where the remainder of runoff will be mitigated by ~~and~~ ~~or~~ off-site measures located within the same sub-watershed (typically storm water detention facilities) to mitigate increases in runoff resulting from the proposed development anticipated from ultimate development of the watershed plus freeboard (based on Table 9.3.14).
3. ~~Construction or~~ Participation in the construction of an off-site RSWF within the same sub-watershed in combination with on-site detention as outlined in 2.6.3 to mitigate increased storm water runoff anticipated from ultimate development of the watershed.

4.4 - Adverse Impact

To determine a significant adverse impact for the purposes of this section, the following criteria will be used to analyze the receiving storm water facilities within two thousand (2,000) linear feet of the project, to the nearest downstream RSWF, or to the nearest floodplain with an ultimate analysis accepted by the city, whichever is less. For lots less than three (3) acres in size, adverse impact analyses need only extend to where tributary drainage areas equal one hundred (100) or more acres.

1. The storm water surface elevation (WSE) in receiving facility [natural or improved] drainage systems within two thousand (2,000) linear feet of the proposed development may not be increased by the proposed development unless the increased WSE is contained within easements or rights-of-way or the receiving systems have sufficient capacity to contain the increased WSE without increasing flooding to habitable structures.
2. Ultimate development runoff at low water crossings during regulatory (five (5), twenty-five (25), and one hundred (100) year frequency) storm events must not classify the low water crossing as "Dangerous to Cross" based on Figure 4.3.1.C. If the ultimate WSE exceeds this criterion, the crossings may be improved to the standards of this chapter in lieu of providing onsite storm water control measures or paying a fee.
3. Three (3) development conditions shall be analyzed with each adverse impact analysis.

Existing Conditions. This refers to current development conditions in the watershed and on site. This shall be used as the baseline for determining the impact of the development of the site, or the watershed, to other properties or drainage systems.

Proposed Conditions. This refers to existing conditions with the proposed development added. This shall be used to determine if the increased runoff from the proposed development results in an adverse impact to other properties or drainage systems including the physical impacts due to erosion, scour and deposition associated with increased frequency and volume of runoff that negatively alters the ecological functioning of the receiving water body. The NRCS allowable velocity and shear stress method will be used to calculate impact and capacity of the receiving water body/floodplain within the watershed at ultimate conditions.

Ultimate Conditions. This refers to ultimate development conditions within the watershed. In addition to being used to design proposed drainage facilities (subsection "4.3.2 System Criteria," below), this condition shall also be used to determine if the increased runoff from the ultimate development of the watershed results in an adverse impact to other properties or drainage systems.

In addition to verifying low water crossing capacity (item 2, above), this analysis shall be used to assist the city in identifying watershed wide storm water management issues.

4. Minimum standards for identifying Dangerous Roadway conditions are identified in Figure 4.3.1C below.

Note: The City of San Antonio contends that any runoff crossing a roadway creates a potentially

dangerous condition. Figure 4.3.1C represents the maximum flow depth over roadways that the City will accept in adverse impact analyses signed and sealed by the licensed professional engineers.

Figure 4.3.1C 1 - Roadway Flow Depth vs. Velocity

5. The City of San Antonio may reject a developer's request to participate in the RSWMP by payment or mitigation and require on-site detention. The City's decision will be based on the knowledge of significant adverse impacts that would be created by ultimate development of the watershed regardless of the distance from the development to the area of concern. The City may also reject a request for participation when it is not in the best interests of the RSWMP. The developer is recommended to meet with TCI Storm Water Division to discuss participation options prior to commencing design of a project. This preliminary meeting in no way relieves the developer of his responsibility to prepare the necessary engineering documentation to support his request for participation.

4.3.1D - Fee in Lieu of

The storm water development fee in lieu of ~~on-site detention~~ must be paid prior to a plat being released for recordation by the City of San Antonio or the issuance of a building permit. The fee shall be determined in accordance with the provisions of UDC Section 35-C109, storm water management fees.

4.4.11- Infill Development Zone (IDZ)

A development within the IDZ area shall comply with the storm water management standards with the following exception. The reuse of an existing building ~~or the development of an existing parcel or lot of less than ten thousand (10,000) square feet~~ where there is not increase in impervious surfaces. The development within an IDZ area is exempt from the FILO fee.

4.12- Maintenance Standards

- D. Design of new channels or alterations to existing channels shall consider future maintenance requirements. A maintenance schedule for any private channel shall be submitted to and approved by the Director of TCI prior to approval of construction plans. Maintenance requirements of concrete channels consist of de-silting activities, prevention of vegetation establishment in construction joints, and repair of concrete as necessary. Maintenance of earthen channels includes regular observation and repair, as necessary, of erosion, scouring, and removal of silt deposits, as necessary to maintain design parameters. Developers shall be responsible for maintaining newly planted channels until coverage is established throughout eighty-five percent (85%) of the area. This area shall include slopes, floor, and any attendant maintenance easement. New earthen channels shall be planted with drought resistant, low growth, native species grasses, which will allow unobstructed passage of floodwaters. Johnson grass, giant ragweed and other invasive species shall not be allowed to promulgate in channels. Suggested species shall include, but are not limited to, common bermuda, coastal bermuda, buffalo grass, sideoats grama, seep mulch, little bluestem, and indian grass. Channel design must accommodate for sufficient growth to maintain healthy and effective vegetative cover from the selected species. Mowing frequencies vary with the vegetation growth rates, but is required when the grass exceeds the design roughness coefficient of the channel.
