Travis County Commissioners Court Agenda Request

Meeting Date: December 6, 2011
Prepared By: Thomas W. Weber **Phone #:** 854-4629
Division Director/Manager: Jon A. White, Director, Natural Resources & Environmental Quality Division

Department Head: Steven M. Manilla, P.E., County Executive-TNR
Sponsoring Court Member: County Judge Samuel T. Biscoe

AGENDA LANGUAGE: Approve setting a public hearing on Tuesday, February 7, 2012 to receive comments regarding the adoption of proposed changes to the Travis County Code to update and strengthen water quality protection requirements, including the repeal of Chapter 108, the repeal of various provisions in Chapter 82, the revision of certain provisions in Chapters 82 and 64, the addition of new Subchapters H – K to Chapter 82, and the addition of new Chapter 104.

BACKGROUND/SUMMARY OF REQUEST:

In the recent past, the Travis County Commissioners' Court adopted rules and policies for the protection of the County's significant and unique water resources. These include requirements for the management of floodplains, the siting of solid waste facilities, the set-aside of lands for natural resource protection, the adoption of a joint development code with the City of Austin, and the setting of "interim" water quality requirements for areas outside of municipal Extra Territorial Jurisdictions (ETJs). Although this is substantial progress, gaps remain in County requirements both geographically and in terms of comprehensiveness. These regulatory gaps should be filled. Furthermore, federal and state requirements mandate that the County update its water quality protection requirements so that they are consistent with recent changes.

Elimination and abatement of polluted storm water runoff from private and public development construction sites has emerged as a regulatory priority across the country and Texas. The U.S. Environmental Protection Agency (EPA) adopted rules effective February 1, 2010 and current proposals by the TCEQ set new standards and expectations on all operators of a municipal separate storm sewer system (MS4). Travis County is a designated small MS4 due to its extensive urbanization and has entered the fifth and final year of implementing a required Storm Water Management Plan (SWMP). Travis County's MS4 permit and its SWMP establish August 12, 2012 as the latest date on which to adopt final rules to set the minimum standards and practices acceptable under the federal/state framework.

The County's MS4 permit sets out a broad mandate requiring the County to implement rules that:

- cover our entire jurisdiction;
- control construction sites disturbing more than one acre of land;
- ensure developments adequately manage runoff after being built;
- eliminate pollutant discharges into our storm sewers from industrial and commercial enterprises;
- reduce pollutants in runoff from road construction; and
- set out enforcement policies that will deter and correct violations.

For all these reasons, these proposed rules are comprehensive and time sensitive.

The components of the proposed rules include:

A. The addition of new Subchapters H – K into existing Chapter 82:
Subchapters H and I specify the requirements under which a plat application, a Basic Development Permit application, or a BMP Maintenance Permit application would be considered, to ensure an approval meets the water quality protection standards. Subchapter J would apply to permitted construction site owners and operators, to ensure Storm Water Pollution Prevention Plans (SWP3s) are carried out as designed. Subchapter K would apply water quality protection standards to County or private roadway and right of way construction projects. Exhibit 1 includes the text of the proposed new Subchapters H - K.

B. The addition of new Chapter 104 into the Travis County Code:
This chapter would specify requirements and prohibitions applicable to any person who discharges pollutants into the County MS4. The chapter describes allowable de minimus pollutant discharges. It also codifies and clarifies the existing enforcement policy TNR utilizes to address violation of water quality protection requirements. Exhibit 2 includes the text of the proposed new Chapter 104.

C. The repeal of Chapter 108 and the repeal of various provisions of Chapter 82:
Under the proposed rules, all of Chapter 108 (Tree Preservation Rules) would be repealed. The essential provisions are incorporated into the new Subchapter K. In Chapter 82, the following would be repealed: Sections 82.204(c)(25)(B), 82.209, 82.211, and 82.302(g). Each of these repealed provisions would be re-numbered as a new section that is either kept substantially the same or modified and updated. Exhibit 3 is a table that lists and describes each provision proposed for repeal and the new section that will replace it, including information on whether the existing provision is being modified.

D. The amendment of various provisions of Chapter 82 and Chapter 64:

1. Some definitions that pertain to water quality protection requirements would be modified or added,

2. Cross references would be added to pertinent standards in Subchapters H – K that apply to development proposals,

3. Development standards pertaining to water quality protection would be added,

4. Various provisions would be "cleaned up" for greater clarity,

5. A new Section 82.302(g) would update the County design standards for driveway approaches to R.O.W., and

6. Amendments to 82.401 would revise and expand construction fiscal security requirements to ensure construction site stabilization.

Exhibit 4 is a "legislative" version showing all proposed insertions and deletions comprising these amendments. Exhibit 5 shows four new construction drawing details proposed for driveway approaches.

STAFF RECOMMENDATIONS:

TNR recommends the setting of a public hearing at Commissioners' Court on February 7, 2012, to provide the public an opportunity to provide comment on the proposed rules. TNR took extensive steps to encourage and invite public comment on this rule making. Today's proposal resulted from significant changes to the rules, based upon internal and external comments received. On March 15, 2011, the Commissioners' Court approved a public participation process to vet the first draft proposal. This included creation of a website and a unique web address for receipt of comments. Due to the sheer volume of proposed changes, the rules were released in three parts in the timeframe of March through May and a schedule for submittal of comments was set. In response to queries, staff extended the timeframe for responding to the draft rules to accommodate stakeholders.

With each of the three releases, an e-mail was sent to a wide spectrum of local interested parties representing municipal and State agencies, advocacy groups for environmental protection, land developers, planners, engineering groups, mining interests, and trade organizations. The e-mail group contained approximately 110 stakeholders. TNR received numerous responses and recommended changes to the rules. TNR staff had several meetings with individual parties that facilitated the resolution of particular issues of concern.

In advance of today's proposal to the Commissioners' Court, TNR staff provided an e-mail to the same group of stakeholders to invite written comment on this proposal. If particular parties are interested, staff also stands ready to meet and discuss this proposal and any concerns with it over the next several weeks leading up to the January 10th public hearing.

ISSUES AND OPPORTUNITIES:

Collectively, the proposed rules would result in greater protection and maintenance of water quality in Travis County rivers, streams, and lakes. These proposals would

also expand consistency between jurisdictions in a manner that should make development design and approval processes more efficient and cost-effective.

The proposed rules would apply to all of Travis County, including all municipal ETJs, except for subdivision development proposals in the City of Austin ETJ, since water quality requirements are already in effect there under Title 30 of the Joint City/County Code. This represents an expansion of the scope of County environmental quality requirements, since the 2005 "interim" rule does not apply in any ETJ, and the 2010 Lake Travis rules only apply within that lake's watershed.

In developing the proposed rules, TNR has reviewed rules of other jurisdictions, particularly the City of Austin (COA) and LCRA, and we have sought to harmonize requirements so that consistency is expanded to greater areas of Travis County. Significant examples include the proposed adoption of the following:

- Adopting the use of technical guidance manuals already prepared by LCRA for western watersheds and COA for eastern watersheds.
- Establishing the same water quality volume requirements as LCRA for western watersheds and the same as COA for eastern watersheds and and a western watershed in the COA ETJ.
- Implementing requirements for storm water personnel qualifications that are derived from COA (with an 18 mo. phase-in period).
- Adopting, in the western watersheds, critical environmental feature and waterway setbacks that are equivalent to existing LCRA requirements.
- Adopting requirements for submittal of an environmental assessment that were derived from COA requirements.
- Adopting fiscal security requirements for construction site stabilization that were derived from the LCRA Highland Lakes Watershed Ordinance (HLWO) requirements.
- Adopting a list of 23 “allowable non-storm water” discharges that are consistent with the TCEQ Storm Water General Permit and that take into consideration COA allowable discharges.

The proposed rules include requirements for water quality protection that are more protective than what the County currently has in place. We believe these more protective requirements requirements are justified based on TNR staff regulatory experience and professional judgment, local topographic challenges, the sensitivity of local aquatic ecosystems, the TCEQ’s construction general permit, TCEQ’s proposed MS4 general permit, new EPA requirements set forth in Title 40, Part 450 of the Code of Federal Regulations, and the EPA-approved Total Maximum Daily Load applicable to the Gilleland Creek watershed. These more rigorous requirements include:

- Additional environmental requirements to that must be included when fair notice of a master development plan is provided.
- A system for TNR issuance of Best Management Practice (BMP) Maintenance Permits that was derived from requirements of Harris County and LCRA, annual renewals, an annual fee, and an alternative method for a permittee to educate workers and residents on pollution prevention in lieu of paying an annual fee.
- Technical standards for control of storm water from construction activities based upon existing technical guidelines developed in Central Texas (LCRA, COA, Edwards Aquifer rules); standards are more rigorous and provide greater environmental protection for more difficult site conditions and larger areas of land disturbance.
- New requirements for the control of mining and quarrying, with an emphasis on site stabilization, post-mining reclamation, and fiscal security. This section is derived from local LCRA and COA requirements and review of rules established in Missouri and Wisconsin.
- Cut and fill requirements that include additional engineering design safeguards and standards relating to fill disposal and the quality of fill material.
- Setbacks from waterways in eastern watersheds that would provide greater protection of headwater streams draining 64 acres or more (existing rules are for 320 acres or greater).
- Subdivision plat notes that prohibit certain activities in setback areas near waterways and critical environmental features.
- Storm water construction site inspection requirements derived from TCEQ general permit requirements and a requirement that certain inspection reports be submitted to TNR program staff.
- Submittal format and construction plan sheet requirements for storm water management details that are on par with existing Chapter 82 standards for roads and drainage ways.
- Requirements for erosion and sediment control and post-construction water quality ponds that would apply to County roadway projects, private roadway and drainage easement projects, and construction of utilities.
- A requirement that as-built drawings be submitted at final inspection of a subdivision or site to facilitate County geo-referencing of structures for our MS4 map.
- Sustainable roadway standards that are alternatives to current practices (road designs without curbs, use of native/drought resistant seed mixes, and use of Low Impact Development techniques)
- A clear standard for unaccepted roadway responsibility.
- A requirement that requires notice of any spill of hazardous materials if the spill could affect a water supply or a county road.

FISCAL IMPACT AND SOURCE OF FUNDING:

Processes and enforcement of the proposed rules will likely challenge existing staff resources in the long-term. The current downturn in development activity greatly

reduces short-term impacts on staff resources. Simultaneous with this rule making, TNR is increasing its efficiency by establishing data systems to manage processing of development requests. The proposed new Section 82.918 would authorize fees payable annually and when re-inspection of a water quality control structure is necessary. A fee schedule will be proposed for Court consideration at the time this rule is adopted. Depending upon the schedule approved, the fees may cover additional staffing necessary to administer and enforce the new BMP Maintenance Permit program.

ATTACHMENTS/EXHIBITS:

Exhibit 1 - Proposed new Subchapters H - K, Chapter 82
Exhibit 2 - Proposed new Chapter 104
Exhibit 3 - Table showing disposition of repealed Code provisions
Exhibit 4 - "Legislative" version with proposed insertions and deletions to Chapter 82 and Chapter 64
Exhibit 5 - Construction drawing details proposed for driveway approaches

REQUIRED AUTHORIZATIONS:

Cynthia McDonald	Financial Manager	TNR	854-4239
Steve Manilla	County Executive	TNR	854-9429
Jon White	Division Director	TNR	854-7212
Julie Joe	Attorney	County Attorney	854-4835

CC:

Thomas Weber	Environmental Program Manager	TNR	854-4629
Dave Fowler	Environmental Project Manager	TNR	854-7590
Anna Bowlin	Development Services Division Director	TNR	854-7561
Teresa Calkins	Development Services Senior Engineer	TNR	854-7569

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Title VII. Improvements -- Subtitle A. Roads

Chapter 82. Standards for Construction of Streets and Drainage in Subdivisior

Subchapter H. Water Quality Protection – General.

Subchapter I. Submittal Requirements and Water Quality Protection Standards.

Subchapter J. Storm Water Pollution Prevention Plan Inspections.

Subchapter K. Roadways and Rights of Way.

82.971. Sustainable Roadways.
82.972. Native Vegetation.
82.973. Tree Preservation.
82.974. Responsibility for Unaccepted Roadways.

Subchapter H. Water Quality Protection – General

82.910. Purpose. The purpose of subchapters H - K is to provide the regulated community and the public a consolidated set of water quality requirements that apply to applications for Travis County development permits, preliminary plans, plats, and construction plans. This chapter includes requirements for the environmental review of applications. These subchapters include the substantive, minimum environmental technical standards and guidelines that can be approved during the application process. The scope of these subchapters includes requirements that will control, reduce, and eliminate the discharge of pollutants into the Travis County storm sewer system and water in the State through the proper management of storm water and drainage while achieving optimal management of floodplains to prevent loss of property and human life.

82.911. Authority

(a) Subchapters H – K are adopted under the authority granted to a County by Texas Local Government Code, Chapter 232, to adopt rules governing plats and subdivisions of land within the unincorporated area of the county to promote the health, safety, morals, or general welfare of the county and the safe, orderly, and healthful development of the unincorporated area of the county.

(b) Subchapters H – K are adopted under the authority granted to this County by Texas Local Government Code, Chapter 573, to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)). The storm water permitting program requires Travis County to develop and implement controls that will reduce or eliminate pollutant discharges in Texas waterways, for the protection of human health and the maintenance and protection of environmental quality.

(c) Subchapters H – K are adopted under the authority granted to a County by Texas Water Code, Chapter 16, to take all necessary and reasonable actions to comply with the requirements and criteria of the National Flood Insurance Program, to promote public health, safety, and general welfare.

82.912. Geographic Scope. Subchapters H – K apply to all unincorporated areas within Travis County, including areas within the ETJ of any municipality, except that requirements are not applicable to a subdivision development within the ETJ of any municipality that has an executed agreement with Travis County that provides for a single office review and where a joint city/county code of subdivision regulations exists pursuant to Section 242.001(d)(4) of the Texas Local Government Code. Requirements of other jurisdictions may be applied to a development beyond those specified in this chapter or in the Travis County Code. An applicant is responsible for determining the requirements of any other applicable federal, state, or local jurisdiction.

82.913. Applicability.

(a) Subchapters H – K apply to the processing of new applications for a preliminary plan, final plat, subdivision construction plan, residential development, single lot development, commercial development, or any development that requires a basic development permit.

(b) Subchapters H – K apply to the processing of applications to amend or propose revisions of an approved preliminary plan, final plat, subdivision construction plan, residential development, single lot development, commercial development, or any development that requires a basic development permit.

(c) Subchapters H – K apply to the construction, operation, and maintenance of roadways, including rights-of-ways.

82.914. Environmental Review.

(a) One complete copy of any application shall be provided when an application is submitted, in addition to any number of copies required by Chapter 64 of the Travis County Code for a basic development permit application, and in addition to any number of copies required by Section 82.201(b) of this chapter.

(b) Development within the Lake Travis Watershed is subject to the provisions of the Highland Lakes Watershed Ordinance promulgated by the Lower Colorado River Authority and the Travis County Code. A person who seeks to engage in development in the Lake Travis Watershed must:

(1) Submit any development application, including revisions to an application and required supporting information, to the Lower Colorado River Authority at the same time as it is provided to the County Executive; and

(2) If additional information is required to be provided to the County Executive as a part of the review process for a development application, submitted the same additional information at the same time to the Lower Colorado River Authority.

82.915. Pre-development Planning. Before submitting an application for a development permit for a Subdivision Development greater than 20 acres in area or a Commercial Development greater than three acres in area, an applicant shall arrange a pre-development/concept plan meeting. The meeting will focus on the proposed land plan, slopes, buffers, critical environmental features, and water quality management practices for construction activities and post-construction storm water management, and may include a site investigation.

82.916. Other Environmental Authorizations Required. The County Executive provides a checklist to assist applicants in determining some of the more typical requirements.

(a) Each applicant seeking a development permit shall submit documentation that demonstrates that the proposed development complies with the following statutes, rules, and regulations:

(1) the LCRA Highland Lakes Watershed Ordinance, if the application includes development in the Lake Travis watershed;

(2) the TCEQ Edwards Aquifer requirements at 30 Texas Administrative Code Chapter 213, if the application includes development that overlies the Edwards Aquifer Recharge Zone or Edwards Aquifer Contributing Zone;

(3) Section 10 of the federal Endangered Species Act;

(4) Section 10 of the federal Rivers and Harbors Act or Section 404 of the federal Clean Water Act;

(5) the requirements of a municipality within an extra-territorial jurisdiction;

(6) The TCEQ industrial or municipal solid waste management requirements under Chapter 361, Health and Safety Code;

(7) Texas Pollutant Discharge Elimination System (TPDES) requirements under Section 402 of the federal Clean Water Act, Section 26.027, Water Code, or Section 26.040, Water Code, including a TCEQ permit for waste discharge into or adjacent to water in the state, a Notice of Intent (NOI) along with a Storm Water Pollution Prevention Plan (SWP3) discharge of storm water from a construction or industrial activity; and

(8) The TCEQ Dam Safety requirements at 30 Texas Administrative Code Chapter 299, if the application includes a proposal to construct a dam to impound water in the State.

(b) If any of the statutes, rules, or regulations listed in Subsection (a) do not apply to the proposed development, an applicant must submit:

(1) documentation of that fact from the respective entity with enforcement authority over the statute, rule, or regulation, or,

(2) if documentation of that fact from the respective entity with enforcement authority over the statute, rule, or regulation is unavailable, *bona fide* documentation of that fact from a qualified professional along with supporting information.

(c) A copy of the SWP3 identified in paragraph (a)(7) of this section is not required with an application for a preliminary plan or final plat. It shall be submitted for review prior to approving a subdivision or non-residential site development construction plan.

82.917. BMP Maintenance Permit.

(a) Unless the County Executive has waived the requirement for a BMP Maintenance Permit pursuant to subsection (i) of this section, an owner, or to the owner's legally-authorized assignee, must upon completion of the infrastructure for each structural, permanent water quality control required for the authorized development, obtain a BMP Maintenance Permit from the County Executive.

(b) If a subsequent owner, maintenance association, or property owner's association does not accept the assignment of ownership of the permanent water quality control, the owner who developed the site shall remain subject to the terms of the BMP Maintenance Permit until an assignment occurs or until the subsequent owner, maintenance association, or property owner's association accepts responsibility for compliance with a BMP Maintenance Permit.

(c) Along with the engineer's concurrence letter required pursuant to Section 82.953, the owner, or to the owner's legally-authorized assignee shall submit a BMP Maintenance Permit application that includes a maintenance plan, the information necessary to verify that each water quality control is in proper operating condition. An applicant for a BMP Maintenance Permit must remit the required, nonrefundable fee pursuant to Section 82.918.

(d) The holder of the BMP Maintenance Permit must maintain the water quality control in proper operating condition in accordance with the approved Permit maintenance plan and the applicable technical criteria cited in Section 82.933.

(e) Whenever the Inspector determines there are inadequacies requiring corrective action, the permit holder must perform the necessary maintenance actions enumerated by the Inspector to bring the water quality control into proper operating condition.

(f) Not later than 30 days after a change in ownership or operation of a water quality control, the new owner or operator must submit an application for a new BMP Maintenance Permit. When issued, the responsibility for the water quality control transfers from the previous permit holder to the new permit holder.

(g) A BMP Maintenance Permit will be issued for a term not to exceed one year. The owner or operator of record has the continuing obligation to apply for renewal of the BMP Maintenance Permit at least 30 days prior to the permit term's expiration. It is the obligation of the owner or operator to specify in the renewal application whenever any necessary changes in maintenance or operation of the water quality control occur.

(h) Pre-existing Water Quality Control. The owner or operator of a water quality control authorized or completed prior to [insert effective date of this rule] and after August 12, 2007, shall submit an application for a BMP Maintenance Permit no later than

February 28, 2013. If received by February 28, 2013, the initial application fee will be waived.

(i) The County Executive may waive the requirement for a BMP Maintenance Permit in instances when:

(1) a jurisdiction overlaps with the jurisdiction of Travis County and requires a similar permit or authorization from the owner or operator, including an authorization under 30 Texas Administrative Code Chapter 213 (Edwards Aquifer) or the HLWO;

(2) a municipality, including a district, maintains the permanent water quality control; or

(3) the permanent water quality control is within the City of Austin ETJ.

82.918. Fees.

(a) Except as provided by subsection (c), a BMP Maintenance Permit fee is required along with each permit application, including for the initial or renewal application. The fee amount for each application type that shall be remitted is established by the Commissioners Court.

(b) A re-inspection fee is required from the permit holder after on-site inspection of the water quality control whenever it is determined the water quality control has not been maintained in substantial compliance with the maintenance plan provided pursuant to 82.917(c), or when the water quality control is inoperable. The re-inspection fee amount is established by the Commissioners Court. The re-inspection fee shall be remitted within 30 days of notice of the inspection result. Failure to pay a re-inspection fee within the required timeframe or to complete the necessary corrective actions may result in enforcement remedies allowable by law.

(c) A BMP Maintenance Permit renewal fee will be waived when a complete renewal application is submitted along with the required documentation of employee and public outreach as described in Section 82.919.

82.919. Outreach in lieu of Fee.

(a) A person who has been issued a BMP Maintenance Permit pursuant to Section 82.917 of this chapter is encouraged to publish and disseminate information to inform and educate the general public on day-to-day practices that will prevent the deterioration of water quality from sources that drain, or have the potential to drain, to the storm sewer system.

(b) The format of the outreach may be a brochure, newsletter, attachment or hyperlink in an e-mail, or similar method, so long as it is received by each residential owner within a subdivision and, in the case of a commercial development, by all owners, tenants, and employees of the establishments therein.

(c) In a residential subdivision, the information provided should focus on activities and practices of residential households that may cause water pollution if done improperly, such as motor vehicle maintenance, use of lawn and garden chemicals, trash and waste management, painting, and home repair. The information should give advice on proper methods that will prevent runoff of pollutants and the proper disposal methods that prevent pollution.

(d) In a commercial development, the information should focus on activities specific to the establishments that are being operated in the development.

(e) In both residential subdivisions and commercial developments, the outreach materials should describe the maintenance and operation responsibilities of the permit holder, the drainage relationship of individual households or establishments to the permanent water quality control structure, and the responsibility of all to minimize adverse impacts on storm water that is discharged from the control structure.

(f) A renewal fee for a BMP Maintenance Permit will be waived each year that complete documentation of employee or residential outreach is submitted along with a renewal application.

(g) Documentation must include:

(1) A copy of the outreach material disseminated, consistent with the guidelines of this section;

(2) A signed statement from the permit holder certifying the date(s) within the prior twelve month period (permit term) when the materials were disseminated;

(3) A listing of the persons and business owners, as applicable, who were provided the information and the method by which each received it;

(4) For a commercial development, documentation of materials being provided to each business owner or business manager will be adequate, so long as multiple copies are provided, so that the business owner can provide one copy to each employee.

(h) After review and if determined not to be adequate, the permit applicant shall either provide the required fee within 14 days to complete the renewal application, or will be provided 30 days to remedy the deficiency through additional outreach.

82.920. Fiscal Security. Approval of a permit application for a commercial site and for a subdivision development is contingent upon the execution of fiscal security in accordance with the requirements of section 82.401 of the Code.

82.921. Variance.

(a) Any applicant for a permit or plat may apply for a variance from the requirements of this chapter. A variance may be sought only on the basis that the imposition of the requirements of

this chapter for the issuance of a permit to the applicant constitutes an exceptional hardship. Any variance from this chapter's requirements that would also require a variance from the requirements of Chapter 64 of the Code must be considered as separate decisions, even if at the same time, and in addition to the requirements of this section.

(b) An applicant may file a request for variance at any time. However, no variance may be granted after an applicant has complied with the provisions of this chapter. An applicant shall file the application with a written request, must include all information necessary to allow the Commissioners Court to make the findings specified in subsection (c) of this section, and shall additionally include:

(1) The particular requirement from which a variance is sought;

(2) The nature of the hardship presented by the imposition of the requirement;

(3) The proposed alternative method or procedure to be utilized in lieu of the required method, practice or procedure that is proposed;

(4) A justification that describes how the alternative method or procedure will provide at least an equivalent level of environmental protection;

(5) The estimated cost in dollars of complying with the requirement;

(6) The estimated cost in dollars of construction by the proposed alternative method or procedure;

(7) The size, in acres, of the land area or the number of lots affected by the proposed alternative method or procedure;

(c) The Commissioners Court may grant a variance from a requirement of this chapter after determining that:

(1) the requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development;

(2) the variance:

(A) is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

(B) is the minimum change necessary to avoid the deprivation of a privilege given to other property owners, to allow a reasonable,

economic use of the entire property, and to allow a reasonable use of the entire property; and

(C) does not create a significant probability of harmful environmental consequences; and

(3) development with the variance will result in environmental protection that is at least equal to the environmental protection achievable without the variance.

(d) Mere economic or financial hardship alone does not constitute an exceptional hardship that justifies the granting of a variance.

Subchapter I. Submittal Requirements and Water Quality Protection Standards.

82.930. Applicability. The standards and requirements of this subchapter apply to the following development application proposals:

(a) An application for development that proposes 10,000 square feet or greater of impervious cover or where one acre or more of land would be disturbed;

(b) An application for development that would disturb less than one acre or more of land but is a part of a common plan of development where the overall development would disturb one acre or more of land;

(c) An application for subdivision development that proposes 10,000 square feet or greater of impervious cover or where one acre or more of land would be disturbed;

(d) Other development applications, including for utility placement, right of way construction, single lot or parcel construction, a driveway, or an OSSF, that propose less than 10,000 square feet of impervious cover or where less than one acre of land would be disturbed must comply with Section 82.934(a) and (b)(3) – (4), as a minimum, including following technical guidelines for ESC provided by Travis County; and

(e) An amendment or revision of an approved commercial development, subdivision development, or a single lot that includes substantive changes or any application for development that is not defined as redevelopment.

82.931. Submittal Requirements for Environmental Review. In addition to any other requirement of the Code, an application must include the information specified in this section.

(a) For a preliminary plan or a commercial site development plan, the application must include:

(1) Except for small construction projects, an environmental assessment as specified in Section 82.942 including a survey of critical environmental features, waterways, and proposed setbacks that comply with applicable standards;

(2) For a preliminary subdivision plan of ten acres or greater or a commercial site development plan of three acres or greater, a storm water management plan consisting of:

i. Permanent water quality controls and a summary that describes how the proposed permanent water quality controls comply with applicable water quality standards and are compatible with drainage plan standards; and

ii. A preliminary SWP3, in accordance with Section 82.939 , that includes a summary describing how the storm water controls will comply with applicable SWP3 standards for the proposed construction;

(3) Standard subdivision plat notes for a long form final plat that conform to Section 82.946; and

(4) For a commercial site development plan proposing a mine or quarry, an application must include the information specified in paragraphs (1) and (2) and the information required by Section 82.945(c)(4).

(b) For a short form final plat, an application must include the information specified in subsection (a), except that the storm water management plan need only be a general description of the future improvements planned for the site, if no construction improvements are included in the proposal.

(c) For a long form final plat, the plat must show:

(1) Subdivision boundaries, configuration, and extent and lot and easement locations and sizes, all of which must comply with all applicable standards, including all applicable standards regarding critical environmental features;

(2) The location of all critical environmental features and waterways with required buffers and easements in accordance with Section 82.941 of this subchapter;

(3) The location of any required permanent water quality controls, consistency with the drainage plan, and compatibility of the plat with proposed SWP3 controls for construction; and

(4) Standard plat notes required for the applicable site features and design as required by Section 82.946.

(d) For a subdivision or commercial site development construction plan:

(1) The application must include general construction notes that reference the SWP3 and storm water management controls for the project in accordance with Section 82.935(g)(1) and (2) and Section 82.946;

(2) Except for small construction projects, the application must include SWP3 description information in standard format plan sheets or pages in accordance with Section 82.935(a) - (f) and (h) and Section 82.946;

(3) Except for small construction projects, the application must include SWP3 ESC site plan and detail sheets, in accordance with Section 82.935(g)(3), including other BMPs as appropriate, and Section 82.946;

(4) Except for small construction projects, the application must include permanent BMP Plan Sheet(s) showing the design and details of permanent water quality controls compatible with drainage plan standards, in accordance with Section 82.935(g)(4) and Section 82.946;

(5) Except for small construction projects, the application must include fiscal surety documentation for erosion and sediment controls in accordance with Section 82.401 of the Code; and

(6) For a commercial site development that will use an OSSF, the application must include documentation by the applicant that the OSSF construction area will be included in the erosion and sediment controls and SWP3 coverage for the site development project.

(e) Residential construction submittal.

(1) For residential construction on one lot or land parcel with one or more acres of land disturbance:

(A) An applicant must submit a SWP3 Summary prepared in a format approved by the County Executive that includes:

i. The name, signature, and contact information of the primary operator, the owner, and their authorized representatives;

ii. the location, address, and legal description of each parcel or lot where construction disturbance will occur;

iii. the location where the SWP3 will be kept for inspection;

iv. contact information and qualifications of the person(s) who prepared the SWP3 and who will perform the SWP3 inspections;

v. the estimated start and end dates of the construction activities; and

vi. if the applicant is proposing to share coverage using an existing SWP3, the SWP3 Summary must include a statement of eligibility for such coverage from the primary operator and documentation that the authorized representative of the existing SWP3 accepts this arrangement.

(B) A copy of the SWP3, or an approval of the SWP3, is not required to be submitted if the SWP3 Summary is provided in accordance with Subparagraph (A), except that for the following projects the SWP3 must be submitted for approval:

i. a project that includes critical site improvements as that term is defined in Section 82.936(c)(1);

ii. a project proposing a yard, hiking trail, or a recharge basin in a critical environmental feature setback listed in Section 82.941(e);

iii. a project along Lake Travis or the Colorado River downstream from Lady Bird Lake to provide necessary access and appurtenances to a boat dock, pier, wharf, or marina, if the project complies with Section 82.941(j)(2) and is approved by the County Executive; and

iv. a low impact park development if it complies with Section 82.941(j)(3) and is approved by the County Executive.

(C) An applicant must submit a Construction Site Notice (CSN), if construction is to commence within 30 days of permit approval;

(D) An applicant must provide a copy of the Notice of Intent (NOI) to the Texas Commission on Environmental Quality if the land disturbance will be five acres or greater and if construction will commence within 30 days of permit approval; and

(E) The County Executive may waive the requirement for a copy of a CSN and NOI at submittal if the County Executive finds that adequate SWP3 Summary information is provided.

(2) For residential construction on one lot or land parcel with less than one acre of land disturbance, an applicant must submit a County form that specifies that the applicant will implement the proper use of ESC and BMPs to minimize water quality impacts associated with the land disturbance and include with the form a plan for addressing project attributes identified in Section 82.931(e)(1)(B) with appropriate ESC measures.

(3) For residential construction on one or multiple lots located in a common plan of development, an applicant must submit the information specified in Section 82.931(e)(1)(A) – (B), except that if less than one (1) acre of land will be disturbed and there is a single owner or operator, the applicant may request an exemption from the requirements of Section 82.931(e)(1)(A) if the applicant provides adequate documentation of exemption status and the information specified in Section 82.931(e)(2) .

(4) For single lot residential construction of any size within the HLWO area or at any location proposing to add 10,000 square feet or greater of impervious cover within the HLWO area, an applicant shall provide the applicable ESC plan or SWP3 submittal specified in Section 82.931(e)(1)-(3), plus a proposal for any additional permanent BMPs that are necessary to meet the requirements of Section 82.933(c).

(f) Utility or Construction in Right-of-Way Permit:

(1) For a project with less than one acre of land disturbance or a project scope defined as a small construction project, the applicant shall specify use of standard ESC plan BMPs and standard construction details to be used in the construction process, in conformance with Section 82.934(a) and (b)(3) – (4) and Sections 82.970 – 82.974.

(2) For a project with one or more acres of land disturbance, the applicant shall submit information equivalent to that provided with a site development construction plan (pursuant to Subsection (d) of this section), along with a tree assessment, in compliance with Section 82.973.

(g) Driveway Approach Permit:

(1) For a Rural Design Driveway, an applicant must submit documentation specifying use of approved standard details.

(2) For a Curb and Gutter Driveway, an applicant must submit documentation specifying use of approved standard details.

(3) For a Site Development or Commercial Driveway, an applicant must submit the application materials as part of the subdivision or site development construction plan.

82.932. Standards and Requirements for Technical Adequacy. Sections 82.933 – 82.946 and Sections 82.970 – 82.974 describe the standards and requirements that apply to applications under environmental review pursuant to the Code.

82.933. Technical Criteria.

(a) In addition to the other requirements of this chapter, the following technical criteria manuals apply, except that any changes to the manuals subsequent to the effective date of this subsection shall not take effect until approved by the Commissioners Court:

(1) Technical criteria for best management practices and water quality controls in eastern watersheds and in the ETJ of the City of Austin are those contained in the City of Austin Environmental Criteria Manual (effective [insert date of rule adoption]). Alternate technical criteria and standard details may be required, on a case-by-case basis, in consideration of site-specific conditions.

(2) Technical criteria for best management practices and water quality controls in western watersheds, except within the ETJ of the City of Austin, are those in the LCRA HLWO Water Quality Management Technical Manual (effective July 1, 2007), provided that to the extent of any conflict, in watersheds contributing to the Edwards Aquifer the owner may use any equivalent or more stringent technical criteria in TCEQ's Complying

with the Edwards Aquifer Rules: Technical Guidance and Best Management Practices (RG-348).

(b) The County may require alternate technical criteria and standard details may be required, on a case-by-case basis, in consideration of site-specific conditions.

(c) The County may approve alternate technical criteria proposed by an applicant if it finds that the applicant has presented data that demonstrates that the alternative technical criteria are justified by the site constraints and other similar factors and provide equivalent water quality protection to the criteria described in Subsections (a) and (b).

82.934. General Storm Water Management Requirements for Construction Activities.

(a) Temporary and permanent best management practices shall be employed to prevent polluted storm water runoff from all construction and development activities from entering water in the State during the construction process until final site stabilization is complete.

(b) Responsibilities of an Owner and Operator.

(1) An owner and a primary operator of a property where construction activity occurs are each responsible for implementing approved site plans, construction plans, and specifications, maintaining day-to-day operational control of construction activities, developing and implementing SWP3s, if required, and implementing BMPs in accordance with this section.

(2) An SWP3 must be developed and implemented in accordance with this section for:

(A) Any construction activity or common plan of development for which a Travis County development permit is required and that disturbs one or more acres of land;

(B) An individual lot in a common plan of development that disturbs less than one acre of land; and

(C) any commercial development project that disturbs less than one acre of land.

(3) In those instances where there is less than one acre of land disturbance and neither the owner nor primary operator is required to develop and implement an SWP3, the owner and the primary operator must still implement BMPs appropriate to the scope of the construction activities in compliance with this section.

(4) If sediment escapes a project site, the owner or operator must remove any accumulations that adversely affect off-site property and water in the State. Accumulations must be removed at a frequency that eliminates or minimizes to the maximum extent practicable any adverse impacts, and the removal must be accomplished prior to the next rain event whenever feasible. If the owner or operator does not own or operate the off-site conveyance, the work must be accomplished by working with the owner or operator of the

property to remove the sediment. The removal and remediation work for any off-site sediment impacts proposed by the owner or operator of the construction site must be approved by the off-site property owner and the County Executive, prior to such work being done. The proposal must demonstrate that no further adverse environmental impacts will result from the remediation work.

(5) The primary operator and secondary operator of a property where construction activity occurs are responsible for complying with the conditions outlined in Part III, Section B of TPDES General Permit TXR150000 issued by the TCEQ on February 15, 2008, and these conditions as described in a subsequent renewal or amended permit.

(c) Qualifications for SWP3 Design and Inspection. For any project being constructed after [18 months from effective date] that requires a Travis County development permit and an SWP3, the SWP3 must be designed, certified, inspected, and approved only by individuals with the proper qualifications and certifications, as described below:

(1) Only a Texas-registered professional engineer or a Certified Professional in Erosion and Sediment Control ("CPESC") may design and approve an SWP3.

(2) For projects required by this chapter to prepare a SWP3 and to have an engineer certification of the construction plans, only a Texas-registered professional engineer may seal any engineering calculations that may be required for the SWP3.

(3) Only a CPESC, a Certified Erosion, Sediment, and Storm Water Inspector ("CESSWI"), and a Certified Inspector of Erosion and Sediment Control ("CIESC") may perform SWP3 inspections and sign SWP3 Inspection Reports required by Section 82.951.

(4) An individual who can demonstrate to the County that the individual has experience or certification equivalent to that of a CPESC, CESSWI, or CIESC may perform the SWP3 inspection and sign each SWP3 Inspection Report required by Section 82.951 for a residential project meeting the scope of Section 82.931(e)(1)(A) i. – v. or residential lots in a common plan of development of three acres or less, when the lots are not constructed concurrently.

(d) Each owner and primary operator must comply with all applicable requirements for Storm Water Pollution Prevention Plans (SWP3s) and Best Management Practices (BMPs) for construction activities, as described in Sections 82.935 – 82.940 and Sections 82.970 – 82.974.

82.935. Storm Water Pollution Prevention Plan.

(a) The contents of the SWP3 that must be submitted to the County Executive for approval as part of an application for a development permit must be equivalent to or provide greater environmental protections than the contents required by TPDES General Permit TXR150000 issued by the TCEQ on February 15, 2008 (and any subsequent renewal or amended permit issued by TCEQ) . The contents of the SWP3 must also meet all additional technical standards

specified in Sections 82.936 – 82.940, Sections 82.970 – 82.974, and shall be prepared in the format(s) specified in this section. The SWP3 contents shall be placed within a standard construction plan sheet format or other standard format(s) developed and made available by the County. Until the County SWP3 format is made available, the County will accept the TCEQ and City of Austin ECM SWP3 formats if they include the additional technical standards specified in this section and Sections 82.936 – 82.940. The SWP3 shall include the contents specified in this section.

(b) Site and Project Description. Each SWP3 must include the following general site and project description information:

(1) A description of the nature of the construction activity and a summary of the primary and secondary construction project types and operations planned, including the major construction improvement site features planned;

(2) A summary list or table of potential pollutants, including sediment from runoff, sediment from non-storm water discharges, solid wastes from miscellaneous construction activities, petroleum hydrocarbons from vehicle and equipment maintenance and asphalt operations, and pollutants from miscellaneous industrial and construction materials, their sources, and proposed controls,. For each pollutant and source, the summary or table must specify the section or location in the SWP3 where the controls for the pollutant are listed and described

(3) A description of the intended schedule or sequence of construction activities that will disturb soil for major portions of the site, including the construction sequencing information required in Section 82.301(c)(2)(C) and the following additional information:

(A) Each construction project and each discrete major phase of a multi-phase construction project or common plan of development shall have a detailed sequence of construction and BMP implementation listed in the SWP3;

(B) The detailed sequence of construction and BMP implementation for each project or discrete major project phase shall list major construction operations and site improvements summarized in paragraph (1) of this subsection and the implementation, phasing, and scheduling of all the SWP3 ESC and BMPs required for these operations and improvement features. These include all the erosion source controls, sediment controls, temporary and permanent stabilization controls, and other controls and pollution prevention measures in the approved plans; and

(C) The total months estimated from the start of construction to the completion and final stabilization shall be included for the project, including each discrete major phase, if applicable.

(4) The total number of acres of the entire property and the total number of acres within the entire property where construction activities will occur, including off-site material

storage areas and stockpiles of fill, spoil, and borrow areas that are authorized under the same TCEQ NOI or CSN and Travis County development permit;

(5) The approximate, estimated cubic yards of excess fill material (soil, subsoil, rock) that will be generated by the project cut and fill operations that will require permanent off-site disposal, if any.

(6) A description of existing and post-construction site conditions, including:

(A) The existing soil types at the site, including soil information describing the principal, most extensive soil types in the areas to be disturbed, using reference information from *The Soil Survey of Travis County, Texas*, by the U.S. Dept of Agriculture;

(B) A short, summary description of existing site conditions, including any existing land development features and the approximate percentage of existing grass cover and tree canopy; and

(C) For a SWP3 prepared for a subdivision or commercial site development required to provide a drainage plan, a summary of slope gradients present, including the approximate percentage of the total site acreage proposed to be disturbed from paragraph (4) that is a zero to five percent grade, a five to ten percent grade, and a greater than ten percent grade. As an alternative, composite slope gradients for the individual drainage areas in the site drainage plan may be added on the ESC sheet drainage areas maps required by Subsection (g)(3)(G).

(7) Any existing critical environmental feature and water in the State to which runoff or a pollutant discharge would be conveyed, either on or adjacent to the construction site;

(8) The name, and segment number, if applicable, of receiving waters at or near the site covered by the SWP3 that may receive discharges from disturbed areas of the project, including the USGS stream type: ephemeral, intermittent, or perennial. If any receiving water is on the TCEQ List of Impaired Waters (relating to the CWA section 303(d)), indicate this and the pollutant parameter(s) and designated or presumed use that does not meet the water quality standard;

(9) The location, description, and authorization number or identifier of any support activity authorized under the owner or primary operator NOI or CSN for this project or Travis County development permit, including an asphalt or concrete batching operation, temporary or permanent fill or staging area, and other activities providing support to this construction site that is authorized under the TCEQ general permit; and

(10) Information on whether the SWP3 and construction plans are in compliance with other applicable approved state and local regulations and permitting requirements in addition to the requirements of the County Executive under the Travis County Code, including those authorizations identified in Section 82.916(a).

(c) ESC and BMPs Description. Each SWP3 must include a summary that:

(1) describes all of the ESC and BMPs selected for the project that meet all applicable standards in Sections 82.933 and 82.936;

(2) includes each erosion source control, sediment control, and permanent erosion and soil stabilization control for the project;

(3) lists the individual controls selected and specifies where in the construction plan sheet(s) the details, specifications, schedule of implementation, site plans, and other relevant information for the controls are located;

(4) includes calculations for sediment basins; and

(5) if requested by the County, calculations for sediment controls other than sediment basins.

(d) Each SWP3 must include a summary that:

(1) describes any permanent storm water control or BMP required by this subchapter that will be installed to control pollutants in a storm water discharge that may occur after construction has terminated; and

(2) lists each individual control selected and specifies where in the construction plan sheet(s) the details, specifications, schedule of implementation, site plans, drainage plans, and any other relevant information for the controls are located.

(e) Each SWP3 must include a summary that:

(1) includes a description of any controls and pollution prevention measures selected for the project that meet all applicable requirements in Section 82.937;

(2) addresses:

(A) each non-storm water discharge control;

(B) solid waste and hazardous substance management;

(C) staging and stockpile area management;

(D) fill and spoils management and disposal;

(E) materials inventory and management;

(F) spill prevention and control; and

(G) construction support activity control.

(3) includes the standard requirements and the custom controls selected for the project; and

(4) specifies where in the construction plan sheet(s) any additional details, specifications, schedule of implementation, and site plans are located.

(f) Maintenance and Inspection Description. Each SWP3 must include a summary that describes how the maintenance, training, and inspection requirements for the SWP3 meeting the applicable requirements of this chapter. The summary shall include at least the following:

(1) The general SWP3 implementation and maintenance responsibilities of each responsible primary and secondary operator, including the name and contact information of the responsible part(ies) for the primary operator(s);

(2) The name, qualifications, and contact information of the qualified individual who has been designated by the owner to conduct SWP3 inspections;

(3) The schedule for SWP3 monitoring inspections and reports;

(4) The maintenance and inspection procedures for SWP3 inspection milestones, including: pre-construction, site monitoring, post-rainfall, SWP3 revisions, permanent drainage and water quality system inspections, complaint response, non-compliance, final inspection and final stabilization; and

(5) When the name and contact information for the primary operator with day-to-day operational control of the construction site and the qualified SWP3 inspector are not available at the time of permit application review, it shall be provided at or before the pre-construction conference required under Section 82.950, and included in the SWP3 Site Notebook.

(6) The applicable training requirements for the site personnel who are responsible for implementing the various requirements of the SWP3 during construction, including each person to be trained on their roles and responsibilities, the type and content of the training to be received by each person, and the training schedule and records for each person.

(g) ESC and BMP Site Plan Construction Sheets. Construction plan sheets shall show each site plan, specifications, plan details, and implementation requirements for the ESC and other BMPs selected for the project and be included as part of the SWP3. The construction sheets shall be consistent with Section 82.301(c), relating to Engineer's Construction Plan Requirements, and shall also include the following additional items in order to meet all SWP3 requirements:

(1) Cover Sheet, including a site location map that meets the TCEQ General Permit requirements;

(2) General Notes Sheet:

(A) Travis County General Construction Notes for subdivision and site development construction, and special notes when necessary, shall be consistent with the SWP3 and include standard notes and references to SWP3 plan sheets, implementation, and inspection requirements as specified.

(B) The sequence of construction and BMP implementation shall meet all the requirements listed in paragraph (b)(3) of this section. The sequence of construction may be located in the general notes sheet and referenced in the SWP3 sheets, or *vice versa*, but it must be identical.

(3) ESC and BMPs Sheets. In addition to items listed in Section 82.301(c)(3), the following items shall be included in ESC BMP Sheets in order to meet all applicable requirements of Sections 82.933, 82.936 – 82.940, and Sections 82.970 – 82.974:

(A) A Limits of Construction (LOC) line, clearly showing the areas where soil disturbance will occur;

(B) Existing and proposed slope contours before and after major grading and permanent site construction improvements;

(C) The name and location of each surface water either at, or adjacent to the site that receives storm water discharges from the disturbed areas of the site;

(D) Each structural erosion source control proposed and the location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including drainage diversion and dissipation details. Non-structural erosion source controls applicable to the ESC and BMP sheets shall be included in plan notes, descriptions, and details.

(E) Each sediment control proposed and the location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including each sediment pond with design information, sediment trap, perimeter controls, and interior control;

(F) Each permanent erosion and soil stabilization control proposed and the location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including: temporary stabilization measures, permanent vegetative stabilization measures, and permanent structural erosion control measures;

(G) Drainage area boundaries, the acreage of each drainage area, and flow arrows from the project's proposed drainage plan must be included on the site plan maps for structural erosion source controls, temporary sediment controls, and permanent erosion and soil stabilization controls;

(H) Each permanent water quality control, other permanent BMPs, areas of waterway or critical environmental feature setbacks, and permanent site improvement proposed for the project;

(I) Other controls and pollution prevention measures proposed for which a location on the site plan is necessary and a description of the implementation schedule, plan notes, and plan details as applicable, including each stabilized construction entrance, concrete wash out area, vehicle maintenance and washing area, fuel tankage; dewatering controls for any pond, stream crossings, excavations, and other non-storm water controls.

(J) Depiction of each construction support activity and associated controls on-site or directly adjacent to the site, including each staging and stockpile area, haul road, temporary storage and permanent disposal area for fill and spoil, and asphalt or concrete batching.

(K) Each storm water outfall (existing and planned) and other points, where discharges associated with the construction activities site will occur; and

(L) A complete legend for each symbol used on the plan sheet for the various controls and BMPs, and standard and special specification details and plan notes.

(4) Drainage Layout, Plan and Profile, Detention Water Quality Control Structure, and Construction Detail Sheets. Plan sheets showing drainage layout, plan and profile, detention and water quality pond, and construction detail shall include additional technical standards, setback boundaries, notes, and details necessary for constructing all applicable permanent erosion controls, permanent storm water management and water quality BMPs required by this subchapter. Design details must incorporate the technical criteria requirements referenced in Section 82.933 when applicable.

(h) SWP3 Site Notebook.

(1) The SWP3 Site Notebook shall be maintained and updated by the owner or operator during the construction of a development project. The SWP3 Site Notebook shall be maintained on-site with a copy of the approved construction plans and County development permit, which together constitute the comprehensive SWP3 for the project.

(2) Required SWP3 contents listed in this section will be specified in a SWP3 format made available by the County in accordance with subsection (a) of this section. This format will also indicate which required SWP3 contents may be provided before the start

of construction in the SWP3 Site Notebook instead of within the construction plan sheets approved with the development permit.

(3) The SWP3 Site Notebook must include either an original or a copy of at least the following:

(A) the TCEQ General Permit, each TCEQ notice, signed SWP3 inspection reports, inspection and revision logs, and all adjustments, modifications, and official plan revisions to the approved SWP3 and ESC construction plan sheets and BMPs that occur after the start of construction.

(B) Day-to-day operator and secondary operator information; qualified inspector information; owner and operator SWP3 certifications or delegation letters, if executed; operator site personnel qualifications and training records, if required.

(C) Any additions or modifications to the SWP3's Other Controls and Pollution Prevention Measures, including: non-storm water discharge controls, site materials inventories and records, spill prevention and control procedures, and related records.

(i) For each SWP3, including any revision or change prepared by an owner or operator, a copy shall be submitted to the County in either paper, portable document format (pdf), or other approved electronic format. The SWP3 shall be provided in the format and with contents that conform with requirements of this section, prior to final approval of the applicable Travis County development permit or subdivision construction plan.

(j) Revision of the SWP3.

(1) An implementation schedule for revisions must be described in the SWP3 in accordance with this section and all revisions and adjustments must be documented by the operator's qualified SWP3 inspector in the SWP3 Site Notebook.

(2) The owner or operator must revise or update the SWP3 whenever one or more of the following circumstances occur:

(A) A change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;

(B) A change in site conditions based on updated plans and specifications, amendment of an approved development permit, a new operator, a new area of responsibility for an operator, or a change in a BMP;

(C) A result from an investigation or inspection by the operator, as required by Section 82.951 that indicates the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges; or

(D) A result from an investigation or inspection by an Inspector that indicates the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges.

(3) Revisions to the SWP3 must be completed within seven calendar days following an inspection or within a shorter timeframe as specified by the Inspector.

(4) Revisions and adjustments to the SWP3 may be approved in the field by the Inspector during construction.

(5) SWP3 revisions which require formal County plan review and approval include those which require additional engineering calculations or engineered design changes, although the County Executive reserves the right to require formal plan revisions on construction plan changes or SWP3 changes, based upon site-specific characteristics, ESC and BMP performance issues, or similar factors.

82.936. Erosion and Sediment Control Best Management Practices.

(a) General. Temporary and permanent ESC and BMPs implemented in an SWP3 must include both structural runoff controls and non-structural management practices, and must comply with the design standards described in this section. All control measures must be properly selected, installed, and maintained according to the manufacturer or designer specifications and the approved Travis County development permit, plans, and SWP3. The SWP3 and construction plans must identify the locations, specifications, and timing or sequence for BMP implementation within the schedule of the construction activities.

(b) Design Storm Standards for the SWP3. ESC and BMPs must be developed and implemented in the SWP3 to prevent and minimize off-site discharge of sediment and other pollutants. The design must ensure retention of sediment and other potential pollutants associated with the construction activity on-site, in accordance with the required design storm standard, to the maximum extent practicable.

(1) A sediment basin must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm until final stabilization of the site.

(2) Flows from stabilized areas and on-site or off-site undisturbed areas are not required to be included in the basin calculations if the flows are diverted around the disturbed areas of the site and the sediment basin.

(3) Design of ESC and BMPs must be consistent with the approved technical criteria established for the site location as set forth in Section 82.933.

(c) Site Specific Criteria for ESC Plan Design. The site specific factors identified in paragraphs (1) – (5), where applicable, must be given primary consideration and priority in selecting the types and amounts of the three primary categories of ESC listed in subsection (d)

of this section and applicable BMPs from section 82.937 of this subchapter and Section 82.970 of this chapter for each construction site:

(1) Special Definitions. In this Chapter:

(A) "Critical Site Characteristics" means the primary site-specific topographic factors that must be evaluated and considered in the design of an ESC plan and must be addressed with suitable measures and BMPs; these factors include the total area disturbed in combination with the slope steepness, the slope lengths, the soil erosiveness, the run-on drainage, the total drainage area size, and the proximity to water in the State.

(B) "Critical Site Improvements" means specific improvements on a construction site that are prone to greater erosion and sediment discharge and therefore require greater amounts and types of ESC for sediment control and final stabilization in the ESC plan design; these include: construction site features in areas with increased levels of critical site characteristics, cut slopes and fill embankment slopes exceeding ten percent (10%) grade, side slopes of permanent storm water ponds, designed drainage channels, drainage swales and concentrated flows, bridges and culverts and their approaches, storm water outfalls, and areas with seed and topsoil installed undergoing re-vegetation with grades greater than five percent (5%).

(2) Critical Site Characteristics. ESC plan design measures must address and correspond to critical site characteristics of a disturbed soil area. The ESC plan design must minimize the potential adverse off-site discharge impacts to the maximum extent practicable, and at the very least, must address the priority areas described in subparagraphs (A) – (C) of this paragraph.

(A) For all disturbed soil areas, as the level and combination of the critical site characteristic factors increase, erosion and off-site sediment discharge potential also increases, requiring increased amounts and types of ESC in the ESC plan design.

(B) Disturbed soil areas with slopes greater than five percent, and disturbed channels with slopes two percent or greater require increased amounts and types of ESC than comparable areas of lesser slope. ESC amounts necessary for these areas must further increase as drainage area, slope length, and slope steepness increase.

(C) Stream crossings to water in the State (including intermittent or perennial surface water, or a groundwater recharge conduit) and disturbed areas and outfalls located within 150 feet of water in the State or a critical environmental feature, are areas where increased amounts and types of erosion and sediment controls will be necessary in the ESC plan design.

(3) Construction Project Type. The type of project being constructed must guide the applicant in the selection of the ESC and BMP controls that are the most effective for the characteristics of the site and typical industry practices common to each primary type of construction project type. Primary construction project types include: site construction including buildings and parking areas, residential homes, construction support areas, construction maintenance activities, and linear construction, including streets, drainage, and underground utilities.

(4) Construction Features and Critical Site Improvements. Construction features that must be considered in the ESC plan design include: all disturbed areas, fill embankments, cut slopes, temporary and permanent stream crossings, roadways, underground utilities, residential lots, bridges, culverts, storm sewer systems, channels, inlets, basins, outfalls; temporary entrances, roads, and stockpiles. All critical site improvements must be addressed as required in the ESC Plan design.

(5) Construction Duration, Phasing, and Sequence. The length of time from start of construction to final stabilization, the construction site phasing, and the construction sequence for each phase must be considered for each construction project. Projects extending over longer periods of time will typically require increased site phasing and construction sequence considerations in the ESC plan design, especially larger and more complex construction projects, and projects with increased levels of critical site characteristics and critical site improvements.

(d) Primary ESC Categories and Functions. Each SWP3 ESC plan must include the three primary types of ESC. Erosion Source Controls, Sediment Controls, and Permanent Erosion/Soil Stabilization Controls. All ESC plans shall be designed to include a combination of all three primary types of ESC in order to control storm water volume and velocity within the construction site, minimize the discharge of sediment and other pollutants, and effectively perform the following functions.

(1) Erosion Source Controls. Each SWP3 ESC plan must include structural and non-structural erosion source controls in order to minimize the amount of soil particles that can potentially become mobilized by erosion during construction activities. The erosion source controls listed in (A)-(E) must be included in the ESC Plan, where feasible, and implemented to the maximum extent practicable to reduce erosion and increase the effectiveness of the sediment controls and permanent erosion/soil stabilization controls in the ESC Plan:

(A) Minimize Soil Disturbance and Compaction. Soil disturbance shall be minimized in areas with critical site characteristics. Required setbacks for protection of all streams, floodplains, and critical environmental features shall remain undisturbed. Within a developed or disturbed area of the site, existing vegetation and desirable environmental features should be preserved where feasible. Disturbance of steeper and longer slopes should be minimized. Soil compaction should be minimized and surface roughening or texturing should be undertaken in disturbed soil areas where appropriate.

(B) Phase Soil Disturbance and Stabilization. The total amount of disturbed soil exposed at one time shall be limited through phasing of major portions of the construction project, to the maximum extent practicable. Temporary protection or permanent stabilization of disturbed soil areas must be accomplished as required by paragraph (3) of this subsection, and as specified in the detailed construction sequence for each project or project phase.

(C) Managing Staging Areas, Site Grading, and Fill Material. The staging and stockpile area management requirements listed in Section 82.937(b)(3) must be used to minimize discharges from such areas during the construction process. The fill and spoils management and disposal requirements listed in Section 82.937(b)(4) must be used to effectively manage the soil material excavated, transported, and placed on or off the construction site to minimize it as a source of sedimentation. During the site grading process, the operator shall implement placement of temporary soil grades, sumps, and berms that will act to inhibit runoff and promote infiltration on site to the maximum extent practicable, in addition to required structural controls.

(D) Drainage Diversion. Run-on drainage to disturbed soil areas shall be diverted around disturbed areas, whenever feasible through temporary or permanent structural diversions, or through the use of other BMPs, including construction of all or parts of the permanent drainage conveyance systems and structures designed for the site as early as possible in the sequence of construction.

(E) Drainage Dissipation. Storm water discharges, including both peak flow rates and total storm water volume, shall be controlled to dissipate drainage flow, minimize erosion within the site and at drainage outlets, and to minimize downstream channel and stream bank erosion. Velocity dissipation devices are to be used as site interior controls and must slow velocities, spread out flows, and promote sedimentation. Velocity dissipation devices at drainage discharge locations and along the length of any outfall channel must provide a non-erosive flow velocity from the structure to a water course. Velocity dissipation devices must prevent degradation of natural physical and biological characteristics and functions.

(2) Sediment Controls. Structural sediment controls must be designed to protect all disturbed soil areas from discharging sediment off of the construction site. Sediment control structures must capture and temporarily detain the required storm water runoff volume and must effectively retain sediment from the range of soil particle sizes expected to be present at the construction site, to the maximum extent practicable. In addition, sediment controls must meet the following standards:

(A) Drainage volume calculations for sediment controls shall be prepared in accordance with the guidelines in the Austin Drainage Criteria Manual.

(B) Sediment control structures are to be redundant and placed at perimeter and interior locations within the construction site to maximize sediment trapping areas and temporary runoff capture volume to maximize sedimentation and address all applicable site factors and priorities described in subsection (c) of this section.

(C) Each structural sediment control shall be designed and placed so that runoff flows, including flows exceeding the design storm, will discharge or overtop the structure in a controlled manner at planned outlet points, without breaching of the sediment control structure, without causing uncontrolled discharge, and without causing flooding of adjacent property. Longer lengths of structural sediment controls will typically require perpendicular dissipation structures, especially when such controls cannot be placed along the contour. Low points in the sediment control structure which develop into runoff outlet points must be further redesigned or reinforced as necessary before the next runoff event to prevent breaching and uncontrolled discharges. Where feasible within the limits of construction, storm water should be directed to vegetated areas to increase sediment removal and maximize infiltration.

(D) Primary Types of Structural Sediment Controls. The primary types of Structural Sediment Controls include:

(i) Sediment basin. Unless a sediment basin is not feasible due to the factors listed in Sub-clause a., a sediment basin is required for disturbed drainage areas of five or more acres in order to minimize sediment discharges. If a site design includes a permanent water quality control pond, the pond must be used as a temporary sediment basin during construction, unless it is not feasible due to the factors listed in Sub-clause a.

a. Feasibility. Factors in determining whether a sediment basin is necessary or appropriate include critical site characteristics, as well as the available area, public safety, precipitation patterns, site geometry, site location, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. If a sediment basin is not feasible, the applicant shall document the reason and utilize equivalent control measures, which may include a series of smaller sediment basins or traps, increased perimeter and interior sediment controls, and other ESC BMPs.

b. A sediment basin and outlet shall be designed to maximize sedimentation, including sedimentation of the finest sediment particles to the maximum extent practicable and shall have a reinforced spillway for overflow discharges. Sediment must be removed from the sediment basin no later than the time that design

volume has been reduced by greater than ten percent. Basin de-watering must comply with section 82.937(b)(1)(c).

c. Disposal of sediment removed from a basin may require special handling, in accordance with TCEQ requirements, when coagulants, flocculants, or other treatment chemicals are used.

d. Sequence. A temporary sediment basin or permanent water quality control pond serving initially as a construction sediment basin, must be installed first during the sequence of construction.

(ii) Sediment traps. A sediment trap is a small sediment basin or impoundment area located at strategic areas on the construction site where the runoff volume can safely be temporarily detained to increase capture volume, to maximize sedimentation effects, and to retard runoff velocity.

(iii) Perimeter Sediment Controls. Silt fencing or equivalent sediment controls are required for all down slope boundaries of the disturbed construction site area where runoff can discharge off-site.

(iv) Interior Sediment Controls. Structural sediment controls of various types shall be placed at locations within the construction site interior to address critical site characteristics, construction project type, construction site features and critical site improvements, and construction length, phasing, and sequence.

(v) Temporary sediment control structures must be maintained in accordance with the plans and specifications throughout the construction process and removed along with accumulated sediment when final site stabilization is completed for the entire site or the site phase.

(3) Permanent Erosion and Soil Stabilization Controls. Each permanent structural and vegetative erosion control design plan must prevent long term erosion of site improvements, reduce runoff velocities; and achieve full, permanent vegetation coverage and final site stabilization, including prioritizing the stabilization of critical site improvements. When phasing and implementing site stabilization in the SWP3, the operator must adopt the following priorities and meet the following standards and minimum schedule of initiation and completion:

(A) The operator must give first priority for stabilization to portions of the construction site that have critical site improvements. These critical site improvements will typically require greater amounts of permanent erosion control measures to achieve effective final stabilization, such as mulch, soil blankets, or riprap, as appropriate. If feasible, the operator must implement stabilization of other portions of the construction site early in the sequence of construction and

initiate and complete re-vegetation of the remainder of the construction site as soon as practicable before submittal of the engineer's concurrence letter.

(B) Topsoil meeting the applicable technical criteria in Section 82.933 and the approved plans shall be placed as required prior to permanent seeding and mulching activities for re-vegetation. Existing native site topsoil shall be stockpiled and reused for this purpose whenever it is feasible.

(C) Seed, mulch, soil retention blanket, fertilizer, irrigation for vegetation establishment, and other measures used for re-vegetation of disturbed areas shall meet the applicable technical criteria in Section 82.933 and shall be specified in the approved plans. The primary operator must follow irrigation schedules and methods that will result in successful and rapid germination and growth of the seeded or planted vegetation, and take advantage of optimum seasonal, time-of-day, and temperature conditions.

(D) Stabilization of disturbed areas must, at a minimum, be initiated by the primary operator immediately whenever an applicable milestone in the approved sequence of construction has been reached, or whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. The primary operator may not delay final stabilization of completed site sections or critical site improvements solely for the purpose of mobilizing re-vegetation operations for the entire site at a later date.

(E) The primary operator must take advantage of optimum seasonal planting dates, times-of-day, and temperatures to the greatest extent practicable to complete permanent re-vegetation of required site areas in a timely manner. The primary operator shall plan for early spring as the first priority planting date for required permanent vegetation, to the maximum extent practicable, unless otherwise specified in the approved plans

(F) When the irrigation water supply and irrigation schedule are restricted as a result of drought conditions, vegetative stabilization measures must be initiated by the primary operator as soon as practicable but no later than the 14th day after construction activity has temporarily or permanently ceased in portions of the site.

(G) Successful stabilization initiated for a portion of the site identified in either the approved sequence of construction or by the actual cessation of earth disturbing activities described in subparagraph (D) of this paragraph must be completed by the primary operator within the following time periods from the required date of initiation, as identified during construction by the Inspector or the qualified SWP3 inspector and documented in the SWP3 Inspection Report:

(i) Initial Stabilization Activities. Non-vegetative stabilization controls and initial vegetative seeding activities in the identified portion of the site must be substantially completed within seven days of the required date of initiation.

(ii) Temporary stabilization must be substantially completed either in accordance with the approved sequence of construction, if applicable; within seven days after the date of initiation for non-vegetative controls, such as mulch; or within 60 days after the date of initiation for temporary vegetation growth from seeding.

(iii) Permanent final stabilization must be substantially completed either in accordance with the approved sequence of construction, if applicable; within ten days after the date of initiation for sodding; or within 120 days after the date of initiation for permanent seeding.

(iv) Extensions to the completion time periods listed in clauses (i) – (iii) will only be considered for approval if the operator can demonstrate that they are justified by the applicable technical criteria of Section 82.933 or by truly exceptional circumstances, including: time delays to reach optimal warm or cool season planting dates, exceptional characteristics of an individual site, extended periods of exceptionally severe heat or cold, official declaration of a water restriction of the primary irrigation water supply, or use of approved alternative vegetation or seed mixes. A request for a time extension must include interim stabilization or protection measures that will adequately prevent discharges during the extension period, including additional measures necessary for critical site improvements.

(H) The operator must achieve final stabilization of the entire site in accordance with the approved plans, specifications, and applicable technical criteria, including the required vegetation cover percentage, prior to submittal of the engineer's concurrence letter required by Section 82.953 and termination of the SWP3 permit coverage, unless the project meets the criteria described in paragraph (4) of this subsection for a developer's contract. Temporary stabilization measures may not be substituted for required final stabilization measures. The County may consider alternate final stabilization measures for future building pad areas of two percent grade or less if equivalent stabilization is achieved. Fiscal security for erosion control shall be refunded only upon completion of final stabilization, including removal of all temporary sediment controls and accumulated sediments.

(4) Developer's Contract.

(A) A separate, written agreement to ensure final stabilization known as a developer's contract may be executed between the County Executive and an owner if maintenance responsibility for constructed facilities is accepted for County maintenance, if the County approves an owner's or temporary use or occupancy of

a project, facility, building, or commercial septic system before the required re-vegetation coverage is complete.

(B) A developer's contract, unless extended in writing by the County Executive, is effective for up to 120 days after the date it is executed by the County Executive and the owner, and must be secured by fiscal surety that the County will use for final site stabilization if the owner fails to achieve final stabilization within the contract period.

(C) To be considered for a developer's contract, an owner must have:

(i) followed the approved plan for phasing and sequence of construction;

(ii) followed the approved plan for temporary and permanent stabilization;

(iii) substantially completed all permanent water quality controls and other inspection punch list items;

(iv) initiated permanent re-vegetation in all required areas; and

(v) submitted the engineer's concurrence letter required by Section 82.953.

82.937. Other Controls and Pollution Prevention Measures for Construction Activities.

(a) In addition to ESC and BMPs for construction activities, an owner must design, install, implement, and maintain other controls and pollution prevention measures in accordance with this section. These controls and measures must eliminate and effectively minimize the off-site transport of pollutants from the construction site by means other than direct storm water runoff. An owner must address activities that can cause contamination on-site and increase the potential for subsequent pollutant discharge from runoff with other controls and pollution prevention measures.

(b) Other controls and pollution prevention measures include:

(1) Non-Storm Water Discharge Controls. Non-storm water discharge controls must be described in the SWP3 and be consistent with the following standards:

(A) Vehicle Tracking. Controls and measures must minimize the off-site vehicle tracking of sediments and the clean up of any public roads or off–site areas adversely affected.

(B) Dust Control. Controls and measures must minimize the generation and migration of dust.

(C) De-Watering. Controls and measures for de-watering must minimize the offsite transport of suspended sediments and other pollutants if it is necessary to

pump or channel standing water from the site, including from sediment ponds. When discharging from a basin or impoundment, an outlet structure that withdraws water from the surface must be used whenever possible. A discharge from dewatering activities, including a discharge from dewatering of a trench or excavation, is prohibited unless effective sedimentation, collection and disposal, or a similarly effective treatment occurs prior to discharge.

(D) Work in Surface Waters. Controls and measures for working in or directly adjacent to a waterway must prevent and minimize discharges into such water, including the location of a temporary or permanent stream crossing.

(E) Concrete Wash-out. Controls for wastewater discharges from concrete washout and water well drilling operations must contain wash outs on land surfaces without discharge to water in the State. Concrete wash out without appropriate pollution prevention measures is prohibited.

(F) Wash Water. Controls must completely prevent the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials. Pollution prevention measures must include collection, storage, and off-site disposal of these wastes in accordance with all TCEQ requirements.

(G) Vehicle Washing. Controls for vehicle washing must minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge; discharges of soaps or solvents used in vehicle and equipment washing are prohibited.

(H) Any additional, anticipated non-storm water discharges must be listed in the SWP3 with specified ESC and BMP measures. All non-storm water discharges are subject to the requirements of Chapter 104 of the Code and TCEQ discharge requirements.

(2) Solid Waste and Hazardous Substance Management. A description must be provided in the SWP3 of construction solid waste and hazardous substances expected to be generated or stored on-site. Controls and measures must be implemented to eliminate and prevent pollutant discharges from solid waste and hazardous substance handling, including recycling and disposal as appropriate. In preparing the SWP3, an applicant shall consider how to eliminate and prevent pollutant discharges from materials such as the following: trash, litter, construction or demolition debris, residual or surplus construction materials of all types, surplus containers of chemical or hazardous substances, soil contaminated from an oil or hazardous substance spill, cut or uprooted vegetation such as trees and brush, and waste from sanitary facilities provided for personnel.

(3) Staging and Stockpile Area Management. Staging areas include all areas necessary for equipment, materials, fill storage and stockpiles, temporary offices, vehicle

parking, vehicle maintenance, and the associated haul roads for these areas and the construction site. Controls and measures for these areas shall include:

(A) Restricting the size of these areas to the minimum necessary for the operator to perform the typical industry practices necessary and appropriate to the primary construction project type, in accordance with approved construction plans and as revised and approved during construction by the Inspector;

(B) Locating the area(s) within the approved limits of construction and not within setback areas for waterways and critical environmental features, floodplains, tree drip lines, areas with pass-through drainage, and steep slopes; and

(C) Using structural controls such as run-on drainage diversion and sediment controls and appropriate non-structural BMPs.

(4) Fill Management and Disposal. In addition to the cut and fill requirements of Section 82.943, designated areas for excavated soil fill and spoils material from the construction site (topsoil, subsoil, rock) shall be planned, designed, and described in the SWP3. The owner must use a reasoned estimate of the quantity of net cut and fill balance to determine how much and how many areas to reserve on site for temporary storage and permanent disposal and to plan for any necessary off-site fill disposal or the importing of any necessary fill material required for the site. Excavated fill material must be handled using the following minimum controls and practices:

(A) Temporary Stockpiling. Fill material temporarily stockpiled in place as excavation occurs shall be located in areas protected by sediment controls and shall use erosion source controls whenever feasible, such as fill placement using existing topography and excavated features to minimize erosion and runoff potential. Applicable temporary stabilization requirements described in Section 82.936(d)(3) must be implemented for temporary stockpiles.

(B) Removal and Disposal. Fill material must be removed from the point of excavation to the designated temporary storage or permanent disposal area described in the approved plans and SWP3 as soon as feasible after excavation occurs.

(C) Permanent Fill Disposal. Fill material shall be permanently disposed of as described in the approved plans and SWP3 and must comply with Section 82.943(d), which, among other things, prohibits solid waste from being mixed or buried with fill material. No person may engage in off-site disposal of fill material in Travis County unless the person has received a Travis County development permit that specifically authorizes the off-site disposal. Before engaging in off-site disposal of fill material, a person may have to obtain other applicable development or regulatory permits, an additional SWP3 or, revisions to an existing SWP3.

(5) Materials Inventory and Management. Measures are required to be developed and implemented to minimize the exposure of the following materials to precipitation and storm water runoff: building materials, building products, construction waste, landscape materials, fertilizers, pesticides, herbicides, detergents, petroleum products, automotive fluids, sanitary waste, and other construction and industrial materials present on the site.

(A) Each material and hazardous substance that will be on the site during the construction activities, from the start of construction to the final stabilization and final inspection release, must be listed and described along with the management practices to be followed for each. These material management practices shall include: limiting inventory to the minimum necessary, storage in a secure site location with compatible materials, storage in original containers, proper disposal of surplus materials and containers, inspection monitoring, and training of personnel handling the materials

(B) A description of storage, management, and maintenance practices is required for each petroleum product at a construction site, including: on-site fuel, oil, other motor vehicle fluids, and asphalt. Discharges of fuels, oils, and other pollutants used in vehicle and equipment operation and maintenance are prohibited

(6) Spill Prevention and Control. The SWP3 shall include a description of spill prevention measures, and spill response, clean-up, and reporting procedures to prevent and minimize the discharge of pollutants, to the maximum extent practicable, from spills and leaks of oil and hazardous substances on the site. The plan must follow all TCEQ and local regulations. Spill response procedures must include training, product and safety information, and be adjusted as necessary for improvement and to prevent particular types of spills from reoccurring. Spill clean-up materials must be used, spills must be cleaned up, and waste residue must be properly disposed of. Reporting must occur whenever a spill threshold quantity is exceeded.

(7) A description of potential pollutant sources from areas on the project site, other than construction areas, is required in the SWP3. These other sources include construction support and maintenance areas and activities dedicated to construction site operations, including dedicated asphalt and concrete batch operations. A description of controls and measures that will be implemented for these activities shall detail how pollutant discharges will be prevented and eliminated.

82.938. Erosion and Sediment Control Maintenance Requirements for Construction Activities.

(a) All ESC, BMP, and protective measures identified in the approved plans and SWP3 must be maintained by the primary operator in effective operating condition. If, through inspections or other means, the owner, primary operator, or Inspector determines that a BMP is not operating effectively, then the owner or primary operator shall perform maintenance as necessary to make the storm water controls effective.

(b) The owner or primary operator shall carry out the inspection requirements of Section 82.951 to ensure the ESC and BMPs are implemented and maintained in compliance with the approved plans and SWP3 throughout construction.

(c) The owner or operator must promptly take any corrective action specified in the Inspector's findings to ensure proper maintenance of ESC and BMPs. Items requiring corrective action must be corrected by the owner and operator within timeframes specified by the Inspector. If corrective actions are not performed as required, the County Executive will consider use of further measures, including a stop work order and progressive enforcement.

(d) Necessary corrective actions must be accomplished within seven days or as specified in the inspection report prepared by the Inspector. When consecutive runoff events occur within 24 to 48 hours, corrective actions must be accomplished prior to the next rain event, to the maximum extent practicable. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the Operator SWP3 inspection report and maintenance must be scheduled and accomplished as soon as practicable. ESC that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

(e) Whenever it is discovered that a control or BMP has been used incorrectly, is performing inadequately, or is damaged, then the owner or primary operator must immediately replace or modify the control or BMP. Revisions to SWP3 controls and BMPs must be coordinated with the Inspector and performed in accordance with Section 82.935.

82.939. Preliminary Storm Water Pollution Prevention Plan. The storm water management plan required pursuant to Section 82.931(a)(2)(ii) for a preliminary plan or commercial site development plan shall include a SWP3 summary describing the proposed construction phase of the project. The summary must be consist with the ESC and BMP technical standards described in Sections 82.936 – 82.938, 82.940, and 82.970. The SWP3 summary shall describe the following items, with a plan view map where applicable:

(1) The design storm standard required by Section 82.936(b).

(2) The ESC and BMPs to be used to address site specific considerations including critical site characteristics; construction project type; the construction site features and critical site improvements; and the construction length, phasing, and sequence, as required in Section 82.936(c).

(3) The ESC measures and BMPs to be used in the ESC plan to meet the requirements for erosion source control, sediment control, and permanent erosion and soil stabilization control for the construction activities, as required in section 82.936(d) and applicable standards required in Sections 82.940 and 82.970.

(4) The other controls and pollution prevention measures as required in Section 82.937, to be used to limit the off-site transport of pollutants that have the potential to

discharge by means other than direct storm water runoff, and activities that can cause on-site contamination and increase the potential for pollutant discharge from runoff.

(5) The actions to be taken during construction to ensure full SWP3 implementation and address water quality concerns as they occur, including: self-monitoring, inspection, inspection reports, BMP maintenance, evaluation of BMP effectiveness, SWP3 revisions and updates, recordkeeping, and other applicable items as specified in Subchapter J.

(6) A plan view map of the proposed site improvements with the location and description of applicable proposed measures, including drainage area boundaries, acreage, flow paths, and outfalls.

82.940. Effluent Quality. [Reserved]

82.941. Setbacks from Critical Environmental Features and Waterways.

(a) Drainage patterns for a development must be designed to protect all critical environmental features and waterways from the effects of runoff from developed areas, and to maintain the catchment areas of recharge features in a natural state. Controls shall be sufficient to avoid the effects of erosion, sedimentation, and high rate of flow.

(b) Setbacks for critical environmental features and waterways shall be included within protective, platted easements and shall not be within areas disturbed by construction activities.

(c) The following minimum setbacks are established around each critical environmental feature:

(1) For a cave, sinkhole, spring, and wetland, the minimum width of the setback is 150 feet from the edge of the critical environmental feature.

(2) For a point recharge feature, the required setback coincides with the topographically defined contributing surface drainage area to the feature, except that the width of the setback from the edge of the critical environmental feature must not be less than 150 feet and the setback need not extend greater than 300 feet, depending on the boundaries of the surface drainage area.

(3) For a bluff or canyon rimrock feature, the minimum setback must be 50 feet.

(d) Except as provided in subsection (e) below, within a critical environmental feature setback:

(1) the natural vegetation cover must be retained to the maximum extent practicable;

(2) construction and related activities are prohibited; and

(3) wastewater disposal or irrigation is prohibited.

(e) Subsection (d) does not apply to a yard, hiking trail, or a recharge basin designed to discharge to a point recharge feature without polluting ground water if the yard, hiking trail, or recharge basin is located at least 50 feet from the edge of the critical environmental feature.

(f) The setback from a bluff or rimrock shall not apply adjacent to the Pedernales River if:

(1) all lots fronting the Pedernales River have a minimum frontage of 200 feet and a minimum size of one acre and best management practices are employed to achieve a level of water quality and environmental protection equivalent to the 50 foot setback; or

(2) the County Executive grants an exception allowing a setback of no less than 25 feet based on a demonstration that a level of water quality and environmental protection equivalent to the 50 foot setback will be achieved through enhancement of natural vegetative cover within the setback, low impact site design, or other best management practices.

(g) Waterway Setbacks in an Eastern Watershed. The following setbacks apply in an eastern watershed, except as specified in subsection (j):

(1) Waterways are classified as follows:

(A) A minor waterway has a drainage area of at least 64 acres and not more than 320 acres;

(B) an intermediate waterway has a drainage area of more that 320 acres and not more than 640 acres;

(C) a major waterway has a drainage area of more than 640 acres

(2) A protected zone is established along each classified waterway as a waterway setback. A setback for a waterway shall be included within protective, platted easements.

(A) For a minor waterway, the boundary of the setback is located 100 feet from the centerline of the waterway.

(B) For an intermediate waterway, the boundary of the setback is located 200 feet from the centerline of the waterway.

(C) For a major waterway except for the Colorado River downstream from Lady Bird Lake, the boundary of the setback is located 300 feet from the centerline of the waterway.

(D) For the Colorado River downstream from Lady Bird Lake, setbacks of 300 feet are established along and parallel to the shorelines of each bank of the river, beginning at the ordinary high water mark, as defined by Title 33, Code of Federal Regulations, Section 328.3. The setbacks also include the inundated areas that constitute the Colorado River.

(h) Waterway Setbacks in a Western Watershed. The following setbacks apply in a western watershed, except as specified in subsection (j):

(1) Except as described in paragraph (2), a waterway setback shall comply with either option 1 or option 2, as described in subparagraphs (A) and (B).

(A) Option 1: Distance-Based Setback.

(i) Creeks or swales draining 40 or fewer acres but more than five acres, excluding roadside swales, shall have a minimum setback width of 25 feet from the centerline of the creek or swale.

(ii) Creeks or swales draining 128 or fewer acres but more than 40 acres shall have a minimum setback width of 75 feet from the centerline of the creek or swale.

(iii) Creeks draining 320 acres or fewer acres but more than 128 acres shall have a minimum setback width of 100 feet from the centerline of the creek or swale.

(iv) Creeks draining 640 or fewer acres but more than 320 acres shall have a minimum setback width of 200 feet from the centerline of the creek or swale.

(v) Creeks draining more than 640 acres shall have a minimum setback width of 300 feet from the centerline of the creek or swale.

(B) Option 2: Floodplain-based Setback.

(i) For creeks or rivers draining 40 square miles or less but more than five acres, excluding roadside swales, the setback shall extend a minimum of 25 feet from the 100-year floodplain boundary paralleling each side of the creek or swale. The 100-year floodplain shall be based on the fully developed conditions using the LCRA Technical Manual standards.

(ii) For creeks or rivers draining more than 40 square miles, the setback shall be considered equal to the 100-year floodplain as designated by Federal Emergency Management Agency or by an engineered

floodplain study approved by LCRA, using the LCRA Technical Manual standards.

(2) The shoreline boundary of the waterway setback for Lake Travis coincides with the 681.0 foot mean sea level contour line. The width of the setback, measured horizontally inland, is 100 feet, or, for a detached single-family residential use, 75 feet.

(i) Limitation of Activity in Waterway Setbacks. The following requirements apply to waterway setbacks established in subsections (g) – (h) of this section:

(1) Setbacks shall remain free of construction, development, and other alterations except for approved utility and roadway crossings.

(2) Wastewater collection lines and lift stations are prohibited from running along the setback zone parallel or sub-parallel to the waterway. A wastewater collection line may cross the setback zone in a perpendicular or similar orientation, when necessary for optimal system function. The depth of a wastewater line crossing shall be calculated using the City of Austin Erosion Hazard Zone determination methodology.

(3) No golf courses, on-site wastewater systems or wastewater irrigation shall be located in a waterway setback.

(4) Before reaching a setback area, drainage patterns from a development shall be designed to prevent erosion, maintain infiltration and recharge of local seeps and springs, attenuate the harm of contaminants collected and transported by storm water, and dispersed into a sheet flow pattern. When possible, the natural drainage features and patterns should be maintained.

(5) No part of a residential lot with a lot size of 5,750 square feet or less may be located within a waterway setback.

(j) Exceptions to the Waterway Setbacks. A request for an exception to a waterway setback must be included as a part of the application submittal required by Section 82.931. Exceptions that may be approved include:

(1) Limited utility and roadway crossing may be approved by the County Executive. The number of crossings through a setback zone shall be minimized according to the guidance located in the LCRA Technical Manual or City of Austin Environmental Criteria Manual, as applicable to the watershed.

(2) The County Executive may approve necessary access and appurtenances to a boat dock, pier, wharf, or marina, along the Colorado River downstream from Lady Bird Lake and along Lake Travis, except along the Lake Travis shoreline in the setback of a swale, creek, or river. The access and appurtenances must follow a

route through the setback area and a design that minimizes short-term and long-term erosion and runoff impacts, minimizes the clearing of vegetation, and minimizes additional impervious cover.

(3) The County Executive may approve a low impact park development that is limited to trails, picnic facilities, open space not used as a parking lot, and similar construction that does not significantly alter the existing vegetation, drainage patterns, or increase erosion. A low impact park development cannot include a stable or corral for animals.

(4) Drainage retention basins and floodplain alterations are permitted in a waterway setback if they comply with the requirements of Chapter 64 of the Code.

(5) In an eastern watershed:

(A) A reduction of the setback width, up to a minimum of 50 feet from a minor waterway, may be permitted so long as the overall surface area of the setback is the same or greater than the surface area that would be provided without this exception.

(B) Innovative water quality controls, as specified in Section 1.6.7 of the City of Austin Environmental Criteria Manual, may be placed within the outermost one-half of the setback of an eastern waterway.

(k) An application for development is also subject to the requirements of Chapter 64 of the Code.

82.942. Environmental Assessment.

(a) An applicant shall submit an environmental assessment for any proposed development that is:

(1) a residential or non-residential subdivision development of ten acres or greater;

(2) a commercial development of three acres or greater;

(3) not a small construction project, but:

(A) includes land within the existing FEMA 100-year flood plain; or

(B) the development includes land with a gradient of more than 15%.

(b) An environmental assessment provided by an applicant must:

(1) identify critical environmental features and propose protection measures for the features;

(2) identify any habitat of a federally-listed endangered species or Texas-threatened species within the area to be developed as well as within 500 feet outside the property line;

(3) provide an environmental justification for spoil disposal locations and roadway alignments;

(4) propose methods to achieve overland flow and justify enclosed storm sewers;

(5) include a hydrogeologic report that:

(A) describes the topography, soils, and geology of the site;

(B) identifies springs and significant point recharge features on the site;

(C) demonstrates that proposed drainage patterns will protect the quality and quantity of recharge at significant point recharge features; and

(D) includes a water well survey of the site and properties adjacent to the site for a radius of 150 feet, inclusive of recorded water wells and a field survey of the area.

(6) include a vegetation report describing existing site vegetation, the site's dominant plant communities (such as grassland, riparian, woodland, palustrian, or savanna), a list of the scientific and common names of the dominant species of identified communities, demonstrating that the proposed development preserves to the maximum extent practicable the significant trees and vegetation on the site and provides maximum erosion control and overland flow benefits from the vegetation; and

(7) include a wastewater report that provides an environmental justification for any sewer line proposed to be located in a waterway setback described in Section 82.941, and describes construction techniques and standards for wastewater lines.

(c) If an applicant is required to prepare a tree assessment pursuant to Section 82.973, the applicant shall submit it as a part of the environmental assessment required by this section.

82.943. Cut and Fill.

(a) Land Balancing. Except as provided by subsection (b) of this section, a proposal for cut and fill land balancing must meet the following requirements:

(1) All cut and fill land balancing is limited to a maximum of eight vertical feet. This includes eight vertical feet maximum of excavated cut, eight vertical feet maximum placement of fill, or an eight vertical feet maximum combination of cut and fill.

(2) Applicable fill containment, temporary controls, and permanent stabilization standards specified in Sections 82.936, 82.937, and 82.970 must be followed.

(3) A retaining wall shall not exceed one foot above the material being retained.

(4) A retaining wall over five feet in height shall be detailed in construction plans or plans sealed by a Texas registered professional engineer and submitted with the application for the site development permit. For residential construction, it is the responsibility of the owner to ensure a retaining wall over five feet in height is engineered, constructed, and permanently stabilized according to these standards, if plans for the retaining wall are not required to be submitted to the County for approval prior to issuance of the development permit.

(5) Cut or fill may not be located on a slope with a gradient of more than 15 percent.

(6) Cut and fill may not be located within 100 feet of a waterway classified in Section 82.941.

(7) Any cut or fill proposal must be designed so that it complies with the requirement in Chapter 64 of the Code that flood plain storage must not be reduced.

(8) Design plans and specifications for the fill areas shall be prepared by a Texas-registered professional engineer if the proposal exceeds 10,000 square feet in surface area and there is a change in grade that is four feet or greater.

(b) There are no limitations to the maximum height of cut or fill for the construction of permanent water quality controls, storm water detention ponds, streets, a building or parking structure's footprint, or driveways. Applicable fill containment, temporary controls, and permanent stabilization standards contained in Sections 82.936, 82.937, and 82.970 must be followed. Additional TCEQ requirements for the construction of a dam may apply.

(c) Fill Disposal.

(1) No fill or excess fill from a construction site may be placed on any lot or land parcel unless the placement of the fill is authorized in an approved subdivision construction plan or development permit.

(2) This subsection does not apply to the placement of fill or topsoil less than twelve inches deep as part of an existing residential home landscaping activity that does not:

(A) Alter existing on-site or off-site drainage or the FEMA 100-year floodplain; or

(B) Encroach upon or affect rights-of-way, easements, other platted setbacks, waterways, or adjoining properties.

(3) Temporary placement of fill shall be removed prior to acceptance of streets and drainage in a subdivision and in accordance with the approved construction plan, SWP3, and development permit.

(4) Before removing fill from a permitted construction site, the owner or operator shall notify the Inspector of the destination of the fill.

(5) A development permit that proposes temporary storage of fill material as the primary construction activity, and that is not associated with a separately permitted primary construction project underway with a coordinated projected completion date for both permits, expires twelve months after the date of issuance. A development permit for permanent fill disposal as the primary construction activity expires on the sooner date of either completion of the planned fill, or after 12 months of inactivity based upon documentation showing the dates of receipt of fill material. The County Executive has discretion as to whether to grant an applicant's request for renewal or extension of such permits for temporary or permanent fill storage, in consideration of the compliance history of the site with the development permit and the requirements of this section.

(6) Applicable fill containment, temporary controls, and permanent stabilization standards specified in Sections 82.936, 82.937, and 82.970 must be followed for all fill disposal activities.

(d) Quality of Fill material. Only uncontarninated earthen material or inert construction rubble may be used as fill. Protruding metal must be removed from concrete or rubble. The use of garbage, new asphalt, non-weathered asphalt, or soils containing non-weathered asphalt residue, or any material other than industrial solid waste that is Class 3 waste is strictly prohibited. All fill material must be inert and essentially insoluble. The applicant may be required to submit chemical analyses from a NELAC-certified laboratory to verify the fill material is inert, if the fill material has an odor, texture or appearance indicating that it is not inert and essentially insoluble.

82.944. Permanent Water Quality Control.

(a) Each development that is subject to the requirements of this subchapter must provide permanent water quality control for storm water in accordance with the standards applicable to its watershed location. Each application for a preliminary plan must include a storm water management plan that demonstrates permanent water quality structural and non-structural BMPs which will comply with this section and shows their locations and dimensions. The storm water management plan may be included as part of a drainage plan under Section 82.207.

(b) This subsection applies to development that is located in a western watershed and outside the ETJ of the City of Austin:

(1) Water Quality Volume. Each development project shall provide water quality volume in accordance with the approved BMPs found in the LCRA Technical Manual. The minimum required water quality volume is based on the one-year, three-hour storm runoff volume as defined in the LCRA Technical Manual. In addition, development projects can use low impact development methodologies as identified in the LCRA Technical Manual to reduce or avoid storm water storage volume.

(2) In the Lake Travis watershed, the owner of a project for which a Travis County development permit is required must also obtain a LCRA BMP Maintenance Permit in accordance with Section 4, Subchapter A, Paragraph (d) of the LCRA HLWO effective March 1, 2007.

(3) Alternate Standards. A subdivision development project that meets the criteria in (A) and a commercial development project subject to this section that meets the criteria in (B) need not comply with paragraphs (1) – (2), except as specified in paragraph (4).

(A) Subdivision Development.

(i) The gross impervious cover is 15 percent or less and the cluster development sections have 20 percent or less gross impervious cover, as defined in the LCRA Technical Manual.

(ii) A street and drainage network is designed to include the use of open-roadway sections, ribbon curb, maintenance of sheet flow, and employs the applicable permanent erosion control and stabilization standards specified in Sections 82.936, 82.937, and 82.970.

(iii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods will be considered during the application review to gain compliance as defined in the LCRA Technical Manual.

(B) Commercial Development.

(i) Projects less than three acres in area that use vegetated filter strips and flow spreading methodologies as identified in the LCRA Technical Manual.

(ii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods will be considered during the application review to gain compliance as defined in the LCRA Technical Manual.

(4) The County Executive may require that the water quality volume specified in paragraph (1) of this subsection be provided for a portion or portions of a development utilizing the alternate standards of paragraph (3), in consideration of a proposal that would create localized points of erosion or pollutant discharges sources, including lot sizes in the subdivision, location and proximity of impervious cover sections of the development to the 691 foot mean sea level contour line, extent to which the development site is able to preserve or achieve sheet flow and sustain effective permanent site stabilization and vegetative cover, and the intensity of slopes to be developed at a site.

(c) This subsection applies to development that is located in an eastern watershed or within the ETJ of the City of Austin:

(1) A water quality control must be designed in accordance with the City of Austin Environmental Criteria Manual.

(A) The control must provide at least the treatment level of a sedimentation / filtration system described in the City of Austin Environmental Criteria Manual.

(B) An impervious liner is required in an area where there is surface runoff to groundwater conductivity. If a liner is required and controls are located in series, liners are not required for the second or later in the series following sedimentation, extended detention, or sedimentation / filtration.

(2) A water quality control must capture, isolate, and treat the water draining to the control from the contributing area. A water quality control must be placed when 10,000 square feet or greater of impervious cover is proposed. The required capture volume is:

(A) the first one-half inch of runoff; and

(B) for each ten percent increase in impervious cover over 20 percent of gross site area, an additional 0.1 inch of runoff.

(3) The location of a water quality control:

(A) must avoid recharge features to the greatest extent possible; and

(B) must be shown on the slope map, preliminary plan, site plan, subdivision construction plan, or development permit application, as applicable.

(d) Operation and Maintenance. In both an eastern and a western watershed, the owner or operator shall be responsible for maintaining and shall maintain all permanent water quality controls in a proper manner and consistent with County and other applicable standards, including the BMP Maintenance Permit requirements of Section 82.917.

82.945. Requirements for Quarries and Mines.

(a) This section applies to proposals to develop land for the purpose of mining or quarrying. This section addresses best management practices for the control of pollutants discharged in storm water as a result of mining or quarrying activities. The following activities are exempt from the requirements of this section, but such activities must comply with all other applicable requirements of this Chapter and Chapter 64 of the Code:

(1) Excavations or grading solely for domestic or farm use when carried out at a residence or farm;

(2) Excavations or grading conducted for the construction, re-construction, maintenance, or repair of a roadway, railroad, airport facility, or other transportation facility where the excavation or grading is entirely within the property boundaries or easement of the facility;

(3) Excavations for building construction purposes conducted on a building site; and

(4) Quarry or mine sites where less than one acre of total affected acreage occurs over the life of the quarry or mine.

(b) An applicant must schedule a pre-proposal concept plan meeting with the County regarding any quarry or mine proposal that will disturb five or more acres of land surface. The meeting must focus on potential disturbed areas, slopes, buffers, water diversions, and water quality management practices, and may include a site investigation. If the proposal is within the geographic boundary of a groundwater conservation district, the applicant should notify the district of the plan prior to initiating a quarry or mining facility.

(c) Water Quality Management. A permit application shall address each of the following requirements and standards of this subsection.

(1) For a project area not discharging to a pit:

(A) For the protection of water quality, mine and quarry projects subject to these performance standards shall provide water quality volume in accordance with the requirements of Section 82.944.

(B) The water quality volume requirements of Section 82.944 apply to parking lots, drives, buildings, and other development similar to typical land development projects. In addition, mine and quarry projects can use low impact development methodologies as identified in the LCRA Technical Manual to reduce or avoid storm water storage volume requirements. A plan shall be prepared that describes the proposed operational and maintenance needs for the water quality control facilities.

(C) For areas of exposed material stockpiles and non-stabilized active areas not draining to the pit, the quarry or mine project shall provide water quality volume in accordance with the requirements of Section 82.944.

(2) For a project area discharging to the pit:

(A) An applicant for a quarry or mine development permit must demonstrate that each pit intended to be used as a permanent BMP is of sufficient size to contain the runoff volume of the10-year, 24-hour storm without discharge during such a rain event.

(B) The runoff volume is derived from contributing drainage area to the excavation.

(C) An applicant shall use drainage diversions or other BMPs as necessary to prevent sediment from discharging into karst features.

(D) Recharge features with a surface opening greater than 0.25 square feet in area that are located on the floor of a quarry or mine must be sealed or protected in order to prevent sediment from infiltrating with storm water runoff.

(3) Other Local, State, and Federal Regulations. An applicant must comply with Section 82.916 relating to other environmental authorizations required for the quarry or mine. In addition, the applicant must provide copies of, or access to all applicable plans, reports, and approvals from other regulatory agencies, for the following:

(A) A Spill Prevention Control, Containment, and Countermeasures Plan required by the U.S. Environmental Protection Agency.

(B) A Hazard Communications Plan as required by the Mine Safety and Health Administration (MSHA);

(C) A Marl, Sand, and Gravel Mining Permit required by the Texas Parks and Wildlife Department for mining in public water of the State, if applicable; and

(D) Documentation of compliance with groundwater conservation district requirements, if applicable.

(4) On a case-by-case and limited basis, the County Executive may waive the requirement for an applicant to submit one or more components of the following supplemental information. The determination will depend upon the significance of the site conditions, planned quarry or mine activities, size of the quarry or mine, and depth of excavation. Submittals that are waived will be determined in the pre-quarry/mine planning meeting specified in subsection (b) The determination will be based upon professional standards for the appropriate submittals and the project's potential impacts

on water quality. Unless waived by the County Executive, an applicant must submit the following:

(A) A hydrologic report prepared by a Texas-licensed professional engineer defining impoundments, streams, floodplains, and proposed drainage diversions including water quality BMPs within the proposed mine or quarry property boundaries.

(B) A hydrogeologic report prepared by a Texas-licensed professional geoscientist containing the aquifer identification, aquifer characteristics, DRASTIC classification, recharge zones, any karst features and depth to water on the site, well inventory, springs within one mile of the proposed mine or quarry property boundary, and identification of measures to protect groundwater recharge. The applicant must demonstrate compliance with setbacks from recharge features and public water supply wells in accordance with the TCEQ source water protection program and, if applicable, groundwater conservation district requirements.

(C) A surface water monitoring plan to supplement the TCEQ Industrial Multi-Sector General Storm Water Permit requirements. The owner or operator can use the TCEQ Multi Sector General Storm Water Permit as the plan, but shall monitor four events per year and provide data in the annual report. Parameters tested in the monitoring plan must include but are not limited to total suspended solids, pH, oil and grease, and total organic carbon.

(D) A groundwater monitoring plan in accordance with paragraph (7) requiring monitoring wells for water levels and water quality determinations including background and down-gradient conditions.

(5) Erosion and sedimentation shall be controlled by the owner and operator throughout the quarry and mine process and during closure and reclamation in accordance with Sections 82.934 – 82.940 and 82.970 – 82.974. Additional controls shall include best management practices that address operations related to potential storm water pollutants, such as vehicle washing, vehicle wash-out, particle washing, dust control, batch plant operation and building operations.

(6) The requirements for setbacks from critical environmental features and waterways specified in Section 82.941 apply to a mine or quarry proposal. An applicant who must obtain a Sand, Gravel, Shell, and Marl permit from the Texas Parks and Wildlife Department or authorization from the US Army Corps of Engineers may be eligible for a variance from the setback requirements in Section 82.941.

(7) Groundwater Monitoring. Depending on site conditions, proposed activity, hydrogeologic report, and the potential interrelationship of groundwater to surface water quality, the required monitoring of water wells for water levels and water quality

determination must include characterization of background and down-gradient conditions. As part of its application for a development permit, an applicant must propose a groundwater sampling plan that is based on professional practices regulated by the Texas Board of Professional Geoscientists or the Texas Board of Professional Engineers and that has parameters that include static water level, and levels of pH, nitrate-nitrogen, total suspended solids, volatile organic carbon, total organic carbon, and total dissolved solids. If a groundwater conservation district has jurisdiction, the sampling plan shall be designed to comply with the groundwater conservation district's guidelines

(8) Design Criteria.

(A) Excavation limits. All excavations may operate at a vertical slope but it is recommended that during excavation activities, side slopes not exceed a 2-horizontal to 1-vertical unit ratio on the portion of the site adjacent to or within a waterway setback in order to prevent a breach of a natural water body.

(B) Portions of haul roads that drain into resource extraction excavations do not require water quality controls.

(C) Temporary Stabilization Requirements. Any disturbed area that is observed to be the source of dust or sediment in runoff, including topsoil stockpiles, shall be re-vegetated to prevent erosion or runoff of sediment-laden storm water to natural water bodies, in accordance with Section 82.936(d)(3).

(9) Pit Backfill Requirements.

(A) All pit side slopes must be stabilized at a 3-horizontal to 1-vertical unit ratio slope for reclamation to prevent erosion and to maintain overland sheet flow. However, the County Executive may approve a steeper incline if an applicant can demonstrate through either a field plot that is approved as part of a reclamation plan or a site-specific engineering analysis performed by a Texas-licensed professional engineer that the steeper slope will be sufficiently stable to prevent erosion and maintain overland sheet flow.

(B) Fill material must conform to Section 82.943(d) and should be compacted from the bottom of the excavation to within five feet of final grade. The method of compaction must be in accordance with accepted engineering best practices and specified in the reclamation plan.

(C) If an open pit is partially backfilled, then the side slopes must be restored to a final slope of a 3-horizontal to 1-vertical unit ratio in order to provide a stable angle of repose for re-vegetation, to prevent erosion, and to maintain overland sheet flow.

(D) The final grade of backfilled areas may not exceed the pre-existing natural grade of the site prior to the initiation of extraction operations. An exception may be granted by the County Executive for future use as a roadway right-of-way or other fill that is outside of the 100-year floodplain and a waterway.

(10) Resource Extraction Plan. A resource extraction plan shall be prepared by a Texas-licensed professional engineer and submitted with the permit application. Each resource extraction plan must:

(A) Show the location and approximate depth of the proposed resource extraction in plan and profile view. Plan view must include two foot contour (or less) interval topography at a scale no greater than one inch equals 400 feet. The submittal shall be a 24-inch by 36-inch document.

(B) Include a general description of material to be extracted on a cross-section profile.

(C) Show the location of all haul roads, equipment, office and facilities, and materials handling areas.

(D) Describe all necessary measures and installations for diversion and drainage of runoff from the site to prevent pollutant discharges to water in the state and describe all runoff diversions that may drain to a neighboring property.

(E) Provide notes on operational storm water controls for all areas of land disturbance and a list of BMPs proposed for mined out areas that will be used as temporary sedimentation basins.

(F) Show proposed mine or quarry boundaries, property limits, mining limits, approximate mining depths, drainage plan, creek crossings, and diversions.

(G) Describe topsoil and topsoil substitute material management, including removal, determination of volumes relative to reclamation needs, storage, and containment procedures for accepting fill material and restoration methods.

(11) Reclamation Plan. Each application for a development application must include a reclamation plan prepared by a Texas-licensed professional engineer. The reclamation plan must describe how the site will be restored using final measures to protect water quality once the mining or quarrying activities are complete. The plan must address all areas affected by mining or quarrying, and show the steps that the applicant will take to restore the site to a condition that is stable, safe, and suitable for the applicant's proposed post-mining land use. Contemporaneous reclamation shall be conducted, whenever feasible, to minimize the area disturbed by mining or quarrying and to provide for

reclamation of the site while mining or quarrying continues on other portions of the site. Each reclamation plan shall describe:

(A) The overall plan for the mine or quarry reclamation activities including methods (such as contemporaneous reclamation), proposed phases of reclamation for particular areas of the site, and a time schedule, including interim milestones and final completion.

(B) The location of components of the proposed reclamation plan such as protected riparian corridor areas, restoration of disturbed areas, areas of re-vegetation, and areas where future development is planned.

(C) Specific methods to establish vegetative cover within one-year of completion of each phase of excavation to restore areas to conditions that existed prior to the excavation, except on quarry walls and flooded areas, including within one-year of final completion of all resource extraction at the permitted site.

(D) Specific methods for reclamation of all structures, haul roads, and storage areas within one-year of completion of each phase of excavation and within one-year of final completion of all resource extraction at the permitted site.

(E) A re-vegetation plan for the site that is consistent with the SWP3 requirements of Section 82.936 or a plan developed in accordance with the U.S. Department of Agriculture Natural Resources Conservation Service's Conservation Practice Standard entitled "*Land Reconstruction, Abandoned Mined Land*" and referenced as Code 543.

(F) The measures that will be used, such as re-seeding or placement of erosion blankets, temporary irrigation, and other soil stabilization practices.

(G) The source of uncontaminated material and the procedures to be used in accepting off-site material for backfill, in accordance with TCEQ guidance from TCEQ's Rule Interpretation Summary Form 330-4.001.

(H) The methods for placing backfill material, the methods for compaction of backfill material, and the methods for placing topsoil and topsoil substitute materials.

(I) When applicable, the restoration methods and materials for reclamation as a constructed wetland and migratory fowl habitat must follow the criteria of the U.S. Army Corps of Engineers Regulatory Guidance Letter No. 02-2, December 24, 2002, "*Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899*".

(J) A detailed cost estimate for the construction that is necessary to completely implement the mine or quarry reclamation plan and that is consistent with the requirements of subsection (d).

(d) Fiscal Security. The following requirements are in addition to the requirements and procedures specified in Section 82.401.

(1) Filing. Following approval of the mine or quarry reclamation plan, and as a condition of the development permit, the applicant shall file fiscal security payable to Travis County. The fiscal security shall provide that the operator shall faithfully perform all requirements for construction of temporary erosion and sediment controls, permanent site stabilization, including complete implementation of the mine or quarry reclamation plan, in accordance with this Chapter.

(2) Amount and Duration. The amount of fiscal security shall equal as closely as possible the cost to the County Executive of hiring a contractor to complete either final reclamation or progressive reclamation according to the approved reclamation plan. The amount of the fiscal security will be reviewed periodically by the County Executive to assure it equals outstanding reclamation costs. The County Executive may accept a lesser amount if a permittee initiates a process to continuously increase the amount of fiscal security until it is adequate to complete reclamation. The period of fiscal security is dictated by the period of time approved of in the reclamation plan to establish the post-mining land use. The time period may extend beyond the development permit if required to accomplish successful and complete implementation of the reclamation plan.

(3) Certification of Completion and Release. The operator shall file a notice of completion with the County at the time the operator determines that reclamation of any portion of the mining or quarry site or the entire site is complete. The site, or portion thereof that was the subject of the notice of completion, shall be inspected by the County to determine if reclamation has been carried out in accordance with the reclamation plan. A partial release of the fiscal security can occur if the County determines that compliance with a portion of the reclamation plan has been achieved and requires no waiting period. After the County determines that reclamation is complete, a certificate of completion will be issued to allow release of the fiscal security

(e) Assessment of Reclamation Success.

(1) The criteria for assessing when reclamation is complete and, therefore, when the fiscal security may be released shall be specified in the reclamation plan. Criteria to evaluate reclamation success shall be quantifiable.

(2) Completion of the re-vegetation success standards in the approved reclamation plan shall be determined by on-site inspection, reports presenting results, data, photo documentation, and other evidence that the criteria approved in the reclamation plan to ascertain success have been met, or a combination of inspections and reports.

(3) In those cases where the post-mining land use specified in the reclamation plan requires a return of the mining site to its pre-mining condition, the operator shall obtain baseline data on the existing plant community prior to site development and mining. These data will be used in the evaluation of reclamation success.

(4) Re-vegetation success may be determined by comparison to an appropriate reference area, comparison to baseline data acquired at the mine or quarry site prior to its being affected by mining, or comparison to an approved alternate technical standard.

(f) Responsibilities of the Owner and Operator. The owner and operator have the continuing obligation to operate and maintain a mine or quarry in accordance with all approved plans, specifications, and permit conditions. All approved closure, reclamation, and re-vegetation must be implemented by the owner and operator once active mining is concluded. Any substantial change in an approved plan for closure, reclamation, and re-vegetation requires the approval of a revised development permit application.

82.946. Subdivision Plat Notes.

(a) The following plat notes related to requirements in this Subchapter shall be included on a final subdivision plat. Additional notes may be required to more accurately reflect individual subdivision plat conditions.

(1) No cut or fill on any lot may exceed eight feet, excluding driveways, a building structure's footprint, or a parking area footprint, in accordance with the Travis County Code.

(2) As depicted on the plat, each protective easement from a critical environmental feature, including a cave, sinkhole, point recharge feature, bluff, canyon rimrock feature, wetland, and spring must remain in its existing, undeveloped, natural state. Natural vegetative cover must be retained. Construction activities, wastewater disposal, and wastewater irrigation are prohibited within a protective easement. A residential lawn or hiking trail is allowable if it is a setback from a critical environmental feature in accordance with the Travis County Code.

(3) As depicted on the plat, the setback area identified for each waterway is a protective easement that must remain undeveloped and activities must be limited within the easement. The protective easement must remain free of construction, development, or other alterations except when specifically approved in a Travis County Development Permit.

(4) Before beginning construction activities on a subdivision lot, an owner or operator must be authorized under a Travis County Development Permit and a Storm Water Pollution Prevention Plan (SWP3). The SWP3 requires implementation of temporary and permanent Best Management Practices (BMPs), including erosion and sediment controls, for protection of storm water runoff quality, in accordance with the Travis County Code.

(5) The owner is responsible for maintaining and operating all permanent water quality controls in a proper manner consistent with all standards and requirements of the Travis County Code.

(6) Any activities that may adversely affect an existing tree of eight inches or more in trunk diameter in a County right-of-way must comply with all standards and requirements in the Travis County Code.

(b) The subdivision final plat must depict the following information related to the requirements of this chapter:

(1) Clearly marked and labeled, the location and dimensions of each protective easement pertaining to a setback from any critical environmental feature;

(2) Clearly marked and labeled, the location and dimensions of each protective easement pertaining to a setback from any waterway;

(3) Clearly marked and labeled, the location and dimensions of any waterway or karst buffer zone easement required by the Texas Commission on Environmental Quality, Edwards Aquifer Protection Program, pursuant to 30 TAC, Chapter 213;

(4) The location and dimensions of any permanent water quality control required by the Travis County Code, or permanent water quality control required by another jurisdiction;

(5) The easement locations listed in paragraphs (1) – (4) shall be integrated into the drainage, floodplain, and other easements.

Subchapter J. Storm Water Pollution Prevention Plan Inspections.

82.950. Pre-Construction Conference Required.

(a) Except as described in Subsection (i), this section applies when a development application that requires a SWP3 is approved.

This section is applicable to a development application that requires a SWP3, upon the approval of the application.

(b) The requirements of this section are in addition to the pre-construction conference requirements of Section 82.603(d) if those requirements also apply to the development project.

(c) The owner of a project, or owner representative, shall participate in a pre-construction conference with the designated Inspector before starting construction under an approved site plan or subdivision construction plan.

(d) An owner, or owner's representative, shall request to schedule the pre-construction conference when the owner determines that site construction will commence.

(e) The owner or owner's designated representative shall provide notice of the conference to the following persons or entities not later than the second business day before the conference:

(1) primary operator with operational control of the plans and specifications;

(2) designated Inspector(s);

(3) design engineer or representative for the approved plans and SWP3;

(4) contractor(s) and primary operator(s) with day to day operational control of the construction site;

(5) designated qualified inspector for the operator responsible for preparing the SWP3 inspection reports

(6) municipal development review representatives, as appropriate; and

(7) affected utility representatives.

(f) At least two business days before convening a pre-construction conference, the owner or owner's representative shall distribute approved plans for the development to each person identified in subsection (e) of this section receiving notice of the conference.

(g) The SWP3 pre-construction conference may be a discrete meeting or a subset of a larger project pre-construction conference, but must include an on-site inspection and approval of the installation of the first phase of the project's erosion and sediment controls before the construction activities can commence. The designated Inspector shall provide participants with a

SWP3 Operator Compliance Checklist which summarizes the storm water management tasks which must be performed by the operator during construction. The Inspector shall briefly explain and discuss the SWP3 requirements with the participants. The conference participants shall discuss as a minimum, the following items in the approved permit, plans, and SWP3:

(1) the approved phasing of the project, the non-structural erosion source controls, the detailed sequence of construction and BMP implementation, start dates, and schedule of events;

(2) sediment control installation, phasing of the various perimeter and interior controls throughout construction, including structural erosion source controls such as diversion and dissipation, and maintenance requirements;

(3) the adequacy of the initial installation and future control phases to address site conditions;

(4) temporary and permanent stabilization and re-vegetation requirements and phasing schedule throughout construction, including critical site improvements and priority re-vegetation areas;

(5) on or off-site temporary and permanent spoil and fill disposal areas, haul roads, and staging areas;

(6) permanent water quality structural controls and related grading and drainage construction;

(7) special conditions or provisions of plans or specifications, such as future homebuilding on lots, protection of waterways, critical environmental features, and trees to be saved;

(8) observation and documentation of existing site conditions adjacent to and downstream from the limits of construction prior to soil disturbing activities, including waterways and potential outfall discharge routes, rights-of-way and easements, buffer zones, and critical environmental features;

(9) site supervision of the SWP3 implementation by the Primary Operator's designated on-site project manager, including roles, responsibilities, and coordination when more than one operator is charged with tasks in implementing a shared SWP3;

(10) monitoring inspections of the SWP3 by the operator's qualified inspector, and SWP3 inspections by the Inspector, and a schedule for submittal of the SWP3 Inspection Reports;

(11) rain gage location or rainfall information source to be used during construction and reporting, when applicable;

(12) the potential necessity for adjustment and revision of ESC and SWP3 controls;

(13) exchange of telephone numbers and other contact information for the primary and secondary operators, designated qualified SWP3 inspector for the owner, and designated Inspector;

(14) final inspection and acceptance requirements; and

(15) publishing and distribution of minutes of the conference.

(h) The owner's consulting engineer shall prepare and distribute minutes of the preconstruction conference within three working days of completion of the conference.

(i) The requirement for a pre-construction conference does not apply to construction on a single family residential lot, unless so specified in the Travis County Development Permit, based upon the size or potential impact on water quality of the activities approved for construction.

82.951. Owner and Primary Operator SWP3 Inspections.

(a) General. The requirements of this section are in addition to the applicable technical criteria in Section 82.933 and the requirements in Section 82.601.

(b) Owner and Operator SWP3 Inspection Responsibilities. An owner or operator shall comply with the following requirements in the implementation and inspection of construction projects and associated recordkeeping subject to a SWP3 and County development permit:

(1) The owner or operator shall post at the construction site a copy of the TCEQ CSN and, if the project disturbs five or more acres a copy of the NOI. No later than seven days before the start of construction, the owner or operator must provide to the County Executive a copy of the TCEQ CSN and a copy of the NOI, if any.

(2) The owner or operator shall designate an on-site project manager and personnel with the necessary experience, qualifications, and training who will be responsible for performing and monitoring the SWP3 ESC, BMPs, and construction activities to ensure specified practices and structural controls are continuously implemented and maintained in effective operating condition throughout construction. The Owner or Operator must perform any ongoing inspections, monitoring, and actions necessary to maintain compliance, including preparing a signed SWP3 Inspection Report on the schedule described in paragraph (4) of this subsection. Any necessary corrective action identified shall be recorded on the SWP3 Inspection Report. The owner or operator shall ensure any corrective action is promptly performed in accordance with the SWP3 and requirements of this Chapter.

(3) The owner or operator shall designate a qualified inspector familiar with the SWP3 and possessing the required certification as specified in Section 82.934(c) to conduct an SWP3 inspection of the site and prepare the signed SWP3 Inspection Report. The

designated project manager and the qualified SWP3 inspector are to coordinate with the Inspector on a regular basis during construction to help ensure the SWP3 controls and measures are properly implemented.

(4) SWP3 Inspection and Report Schedule. From the start of construction site soil disturbing activity until the entire site is temporarily or finally stabilized, the SWP3 inspections shall be conducted at least once every seven calendar days on a specifically defined day. In addition, a SWP3 inspection shall also be conducted within 48 hours of the end of a storm event of 0.5 inches or greater, unless the seven day inspection falls within the 48-hour period. Information from this post-storm event inspection shall be included in the signed SWP3 Inspection Report required every seven calendar days.

(5) When the entire site has been finally or temporarily stabilized, inspections must be conducted at least once every month until final inspection release. This also applies to discrete areas or phases of a larger active site which are finally or temporarily stabilized. Unfinished sites finally or temporarily stabilized but inactive for three months or longer must be inspected once every two months as a minimum.

(6) Long, narrow, linear construction activities where access is limited may be inspected on an alternate schedule, with representative inspections in accordance with the TCEQ General Permit, when approved by Travis County following submittal of documentation in support of the alternative.

(7) In the event of flooding or other uncontrollable situations which prohibit access to the inspection sites, the inspection must be conducted as soon as access is practicable.

(8) The SWP3 inspection must include inspection of the site for compliance with all applicable SWP3 requirements. Areas of the construction site shall be inspected to determine whether ESCs and BMPs are in full operating condition and to determine if there is evidence of, or the potential for, pollutants entering the drainage system and discharging off-site. Areas to be inspected include each:

(A) disturbed area that has not been finally stabilized and the approved limits of construction, including any area undergoing permanent vegetation establishment or temporary stabilization measures, and evaluation of the compliance of these areas with the approved sequence of construction, stabilization, and cessation of construction activities;

(B) area used for storage of materials and equipment that is exposed to precipitation;

(C) temporary or permanent fill and spoil storage or disposal area;

(D) outfall discharge location and the area immediately downstream of each outfall location;

(E) structural control, including any sediment pond, sediment trap, and drainage diversion;

(F) perimeter and interior sediment control measure;

(G) haul road and location where vehicles enter or exit the site, and each adjacent roadway for evidence of off-site sediment tracking;

(H) waterway crossing and each area adjacent to a surface water or critical environmental feature; and

(I) concrete wash out area, non-storm water discharge control, and any other control or pollution prevention measure applicable, including control measures for dust, solid waste, de-watering, material spills, vehicle maintenance and washing, and wash water discharges.

(9) The SWP3 must be revised as necessary based on any inspection result by the primary operator or Inspector for Travis County, in a manner that will eliminate or minimize, to the maximum extent practicable, the discharge or potential discharge of pollutants in runoff. The owner or operator must revise the SWP3 as necessary in accordance with Section 82.935(j).

(10) Final Inspection and Certificate of Compliance. The owner or operator shall schedule a final inspection with the Inspector when all SWP3 and related construction plan requirements are completed. Completion of the SWP3 includes final site stabilization, removal and proper disposal of all sediment controls and accumulated sediment, and proper construction of each permanent storm water management control and drainage system. When required for the project, the final inspection must be preceded by submittal of the design engineer's concurrence letter, as required by Section 82.953.

(A) If the findings of the inspection demonstrate to Travis County that the SWP3 and construction plan requirements have been fully completed, a Certificate of Compliance will be issued for the project and any fiscal security for erosion and sedimentation controls or permanent storm water management facilities shall be released.

(B) If re-vegetation coverage is not fully completed, a Developers Contract as described in Section 82.936(d)(4) may be issued at the discretion of Travis County for eligible projects with fiscal security posted for erosion and sedimentation controls, as a conditional acceptance until the required vegetation coverage is attained.

(c) SWP3 Inspection Report Contents and Format.

(1) For each scheduled SWP3 inspection required by subsection (b) of this section, the designated, qualified inspector shall prepare and sign a SWP3 Inspection Report, certifying whether the site is in compliance with the SWP3, and describing any corrective actions necessary based on inspection of areas identified in paragraph (b)(8) of this section. The SWP3 Inspection Report shall contain notations on inspection findings as specified in this paragraph. The report contents shall include:

(A) all locations of discharge of sediment or other pollutants from the site and each disturbance beyond the approved limits of construction;

(B) all locations of a BMP that requires maintenance, including any BMP location identified in the previous SWP3 Inspection Report needing maintenance or revision that was not accomplished;

(C) all locations of a BMP that failed to operate as designed or proved inadequate for a particular location;

(D) all locations where an additional ESC or BMP is needed; and

(E) a notation of all other SWP3 inspection findings, including: the site's compliance status with: the approved phasing, sequence of construction, temporary and permanent stabilization schedule, areas where construction has temporarily or permanently ceased, temporary and permanent spoil and fill disposal areas, and all applicable other controls and pollution prevention measures.

(2) SWP3 Site Notebook and Records. The SWP3 Site Notebook and contents, as described in Section 82.935(h), shall be maintained by the primary operator or the qualified inspector at the construction site, and it shall be readily available upon request. All SWP3 records must be kept by the owner or primary operator for a minimum of three years after site completion.

82.952. Submittal of SWP3 Operator Inspection Reports. At the request of the Inspector, the owner or operator shall periodically submit each SWP3 Inspection Report that is required by this subchapter. Each submittal shall be in a format and at a frequency agreed upon by the owner or operator and Inspector.

82.953. Submittal of Engineer's Concurrence Letter. At the time of substantial completion of construction in accordance with the approved construction plan, SWP3, and Travis County development permit, the design engineer shall submit a concurrence letter to Travis County and the owner which states the project has been substantially completed in conformance with the approved plans and development permit. The concurrence letter shall request a final inspection and approval that the project is complete. The concurrence letter must address completion of final stabilization as required by Section 82.936(d)(3)(H). These requirements are in addition to any applicable requirements of Section 82.604.

82.970 Erosion and Sedimentation Control for Roadways and Drainage Easements. Temporary and permanent erosion control design for roadway right-of-way and drainage easement areas shall follow the technical criteria and standards in Sections 82.933, 82.936, 82.937, and 82.940 as a minimum, as well as the additional requirements outlined in this section. These standards apply to the construction of new roadways, improvements to existing roadways, and construction of utilities or other improvements within existing roadways.

(a) The temporary ESC plan during construction shall be sufficient to minimize the discharge of sediment and pollutants to prevent sedimentation of drainage structures, off-site areas, surface waters, adverse impacts to aquatic life, reduced flow capacity, excessive stream bank erosion, erosion around structures, or damage of adjoining property.

(b) The permanent erosion control and stabilization plan design shall be in conformance with the Austin Drainage Criteria Manual and Environmental Criteria Manual requirements for velocities to be below erosive values for the particular soil conditions. All structures must be designed and constructed to withstand the forces of the 25-year, 24-hour storm event.

(1) The plan must ensure permanent stabilization of all disturbed soil areas with permanent vegetation, including any slope and embankment including the following special considerations:

(A) Disturbed roadside slopes in excess of ten percent grade must be covered with temporary mulch or soil retention blanket or equivalent methods in addition to seeding to achieve permanent vegetative stabilization, whenever the slope's length and runoff volume have the potential to result in substantial erosion of the slope during or after the vegetation establishment period.

(B) The methods specified in (A) shall also be used on disturbed slopes around cross culvert and bridge crossings.

(2) The plan must prevent erosion from runoff velocity exiting at an outlet of a culvert, bridge, storm sewer, and channel through use of a dissipater, rip-rap, level spreader, lining, gabion, or similar BMP, and erosion control protection of the inlets to such structures where necessary;

(3) The plan must prevent gullying and scouring of a roadside or outfall channel from high shear stress, through vegetation, lining, soil retention blanket, retard, drop structure, or similar BMP, both during and after the vegetation re-establishment period;

(4) The plan must adequately address the slope of an open channel, as follows:

(A) An open channel with a flow line grade of two percent or greater must be protected from erosion using temporary or permanent soil cover measures in addition to seeding to achieve permanent soil stabilization.

(B) Adequate soil cover measures in addition to seeding must be used to achieve permanent soil stabilization in an open channel less than two percent grade where the channel geometry, volume, velocity, or shear stress will result in erosion during or after the vegetation establishment period.

(C) Open channels with flow line grades between two to five percent must also consider structural hardening for flow line protection in addition to the measures described in subparagraph (A), if flow volume, velocity, and shear stress will result in channel erosion both during and after the vegetation establishment period.

(D) The considerations of subparagraph (C) are mandatory when the open channel grade exceeds five percent.

(E) When uneven soil conditions or geometry are present in the open channel, such as exposed bedrock or subsoil layers of varying hardness, these additional measures or alternatives must be used to achieve effective final stabilization.

(F) Channel volume, velocity, or shear stress calculations may be performed by the engineer to propose alternate channel stabilization measures, and these calculations are mandatory for channels required to be designed using the Austin Drainage Criteria Manual.

(5) The plan must protect the integrity of any structural improvement and prevent excessive continuing sedimentation from an unstable right-of-way area into any drainage structure and roadside channel; and

(6) The plan must stabilize a driveway approach to prevent erosion and achieve proper drainage conveyance on a rural design roadside, using a standard driveway approach detail approved by the County Executive.

(c) A stream crossing design for a roadway shall employ spanning, bridging, structural containment, or similar design methods to the maximum extent practicable to minimize the amount and the proximity of erodible fill soil for roadside embankments, approaches, and slopes adjacent to the stream crossings. Design and alignment for a proposed crossing of a waterway through a waterway setback may require approval of an exception in accordance with Section 82.941. Sediment controls and permanent erosion control design considerations for all stream crossing construction shall follow the applicable standards of this section and Sections 82.936 and 82.937.

82.971. Sustainable Roadways.

(a) The County Executive may approve the use of alternative design criteria for selected roadside areas and local roadways to support the use of low impact development ("LID") techniques for enhanced water quality and runoff mitigation if the design can substantially meet the traffic safety and drainage conveyance design standards in Section 82.302 and can be maintained on a long-term basis. Design criteria and LID techniques shall use the applicable

technical standards in section 82.933. Alternate design criteria that may be approved include: ribbon curb without roadside drainage swales; grassed roadside drainage swale systems instead of curb and gutter; vegetative filter strips; storm water infiltration techniques; storm water wetlands; natural area preservation; reuse of native topsoil; native grasses and vegetation; and soil amendment and conservation landscaping. Alternative and LID designs must also demonstrate long-term maintenance feasibility.

(b) Applicability of Standards.

(1) Travis County improvements and maintenance to County-owned or leased land, easements, and rights-of-way shall follow the standards in this section where applicable. This includes capital improvement projects or any construction improvements to County roads, bridges, parks, drainage, utilities, buildings, and parking facilities. This also includes County road, park, or facilities operation and maintenance activities, including maintenance construction.

(2) Development permit and plat applications of any type that include proposed development activities in an existing or a proposed County right-of-way or easement shall follow the standards in this section.

(3) County right-of-way areas being regularly maintained by the property owners directly adjacent to such areas shall implement the native vegetation standards specified in section 82.972 whenever feasible, but may generally follow the landscape character and maintenance standards of the adjacent developed areas, or as agreed upon by local residents or neighborhood associations, or in accordance with any maintenance or license agreements entered into with Travis County.

82.972. Native Vegetation. The applicant should consider the use of native plants and grass cover for the re-vegetation of construction areas wherever it is feasible

(a) In determining whether to use native vegetation for re-vegetation and landscaping, an applicant shall consider the existing site conditions and planned uses of the area; the degree of urbanization versus the undeveloped, natural character of the area; the limitations of the available water supply for irrigation, and the owners and parties responsible for ongoing maintenance of the area

(b) An applicant should consider selected native vegetation and grass cover for areas that are more rural and natural in character, less urbanized and developed, and areas where regular landscape maintenance is less practicable are more suited to native vegetation, as well as any areas where it is desired to achieve a more natural, low-maintenance landscape condition.

(c) Seasonal native wildflowers should be considered for the roadsides and open spaces of Travis County, if it is feasible.

(d) An applicant should consider the use of sustainable designs with native plants to maintain or reduce long-term maintenance costs.

82.973. Tree Preservation.

(a) Applicability. This section applies to Travis County improvements and maintenance to County-owned or leased land, easements, and rights-of-way. This includes capital improvement projects or any construction improvements to County roads, bridges, parks, drainage, utilities, buildings, and parking facilities. This also includes County road, park, and facility operation and maintenance activities, including maintenance construction. This section also applies to applications for development permits and plats as described in subsection (c) below.

(b) County Project Implementation. The County is responsible for ensuring the design and implementation of an applicable project is completed in conformance with the requirements of this section. The person responsible for the County project must prepare and submit a tree assessment to the County Executive for review.

(c) Development Application Requirements. Development permit and plat applications of any type that include proposed development activities affecting trees in an existing or proposed County right-of-way shall follow the standards in this section. The applicant must prepare and submit a tree assessment in accordance with subsection (d), when applicable, as part of the development permit review process.

(d) Tree Assessment.

(1) The applicant or the applicable Travis County department proposing a development must submit a tree assessment that evaluates areas proposed for development on County-owned land, County-leased land, and County road right-of-way. The detailed tree survey area extent in the tree assessment must include the proposed right-of-way and easement areas on the site as a minimum. The assessment should include explanations of any alternate right-of-way corridor options considered to save any particularly valuable trees, and the rationale and feasibility of the corridor selected.

(2) The tree assessment must be consistent with the guidelines of the City of Austin *Environmental Criteria Manual, Section 3 – Tree and Natural Area Preservation* (effective [Insert effective date of rule]). The assessment must include a tree survey, identification of significant trees, proposed measures to preserve significant trees, and mitigation measures for significant trees that would not be preserved.

(3) The tree assessment must be prepared by a person qualified in the identification of trees and tree condition.

(4) When a tree assessment is required, a development permit applicant proposing activities affecting trees in a right-of-way or easement shall submit tree assessment information that includes: trunk location and diameter, tree species, proximity to the proposed construction activities to a tree(s), proposed pruning or removal activities, and proposed protection measures. Subdivision and commercial site development

construction shall include tree assessment information as part of the engineered, surveyed construction plan submittal.

(e) The tree assessment will be reviewed as a part of the application review process, or in response to a County departmental request. A determination will be made as to whether the tree assessment:

(1) is sufficiently complete and prepared consistent with the City of Austin Environmental Criteria Manual ("ECM") guidelines;

(2) identifies significant trees and sufficiently avoided them in the development design;

(3) includes an analysis of design constraints and alternatives; and

(4) proposes sufficient mitigation measures when necessary.

(f) The approved tree assessment, the design constraints, tree protection measures, and mitigation become a part of the approved development plan, and shall be implemented in accordance with the approved permit and construction plans.

82.974. Responsibility for Unaccepted Roadways.

(a) The use of any private property by the general public as a roadway is the responsibility of the owner and may be restricted or prohibited by the owner in any lawful manner.

(b) An owner of an unaccepted roadway is the person responsible for pollution or the discharge of pollutants, or excessive storm water drainage impacts that may be caused by the operation of the roadway.

(c) The owner of a roadway whose operation is observed to be causing pollution, the discharge of pollutants, or excessive storm water drainage discharge impacts must mitigate such effects. Erosion mitigation measures, if required, shall follow sediment control and permanent erosion control and stabilization standards contained in Section 82.970 and Sections 82.933 - 82.940.

EXHIBIT 2

Title VIII. Environmental

Chapter 104. Discharge Prohibitions and Enforcement.

Chapter 104. Discharge Prohibitions and Enforcement.

104.001. Application.

(a) This subchapter applies to any illicit discharge and to any discharge of a pollutant into a conveyance, water in the state, or into the Travis County Municipal Separate Storm Sewer. This chapter describes the prohibitions and standards that will eliminate the discharge of unauthorized waste into the Travis County storm sewer system and waters in the State.

(b) This subchapter is adopted pursuant to the authority granted by Sec. 573.002(a) of the Texas Local Government Code, which provides Travis County the authority to take any necessary or proper action to comply with the requirements of the storm water permitting program established under Section 402, Federal Water Pollution Control Act (33 U.S.C. section 1342) and the authority to develop and implement controls to reduce the discharge of pollutants from any conveyance or system of conveyance owned by the county and the authority

104.002. Definitions.

(1) "Best management practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the state or the Travis County MS4. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the Lake Travis watershed, BMP means those practices, including but not limited to those described in LCRA's Technical Manual, that effectively manage storm water runoff quality and volume.

(2) "Conveyance" means curbs, gutters, man-made or natural channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport storm water runoff.

(3) "Discharge" or "To discharge" means to either deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

(4) "Hazardous substance" means any substance designated as such by the administrator of the Environmental Protection Agency pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Sec. 9601 et seq.), regulated pursuant to Section 311 of the federal Clean Water Act (33 U.S.C. Sec. 1321 et seq.), or designated by the Texas Commission on Environmental Quality.

(5) "Illicit connection" means a man-made drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter a municipal separate storm sewer including but not limited to any conveyance which allows sewage, process wastewater, wash water, or cooling water to discharge to a municipal separate storm sewer

regardless of whether the connection had been previously allowed, permitted, or approved by an authorized enforcement agency or, any drain or conveyance connected from a commercial or industrial site to a municipal separate storm sewer which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

(6) "Illicit discharge" means any discharge to a conveyance or a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a TPDES permit (other than the TPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

(7) "Industrial activity" means manufacturing, processing, material storage, and waste material disposal areas (and similar areas where storm water can contact industrial pollutants related to the industrial activity) at an industrial facility described by the TPDES Multi Sector General Permit, TXR050000, or by another TCEQ or TPDES permit.

(8) "Municipal Separate Storm Sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(A) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States;

(B) designed or used for collecting or conveying storm water;

(C) which is not a combined sewer; and

(D) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

(9) "Non-storm water discharge" means any discharge to the Municipal Separate Storm Sewer that is not composed entirely of storm water.

(10) "Operator" means the person responsible for the overall operation of a site or facility.

(11) "Owner" means the owner of real property subject to a proposed or existing subdivision, site, parcel of land, or development.

(12) "Person" means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

(13) "Person responsible" or "responsible person" means:

(A) the owner, operator, or demise charterer of a vessel from which a spill emanates;

(B) the owner or operator of a facility from which a spill emanates; or

(C) any other person who causes, suffers, allows, or permits a spill or discharge.

(14) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the state. The term includes:

(A) tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone as defined by Texas Water Code, Section 26.502; or

(B) rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Texas Water Code, Section 26.502; and

(C) the term does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated rangeland, pastureland, and farmland that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

(15) "Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(16) "Premises" means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

(17) "Storm water" and "storm water runoff" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

(18) "Storm Water Pollution Prevention Plan" or "SWPPP" or "SWP3" means a document which describes the Best Management Practices and activities to be implemented by a person to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Water in the State, a Conveyance or a Municipal Separate Storm Sewer to the Maximum Extent Practicable. The contents of the SWP3 shall include all practices and activities required by the relevant TCEQ permit as well as including additional requirements derived from the Travis County Code.

(19) "TCEQ" means Texas Commission on Environmental Quality or any successor agency.

(20) "Texas Pollutant Discharge Elimination System" or "TPDES" means the state program for issuing, amending, terminating, monitoring, and enforcing permits authorizing the discharge of pollutants to water in the State of Texas, and imposing and enforcing pretreatment requirements, under Clean Water Act §§ 307, 402, 318 and 405, the Texas Water Code and Texas Administrative Code regulations.

(21) "Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, or other waste, as the terms are defined in Texas Water Code, Section 26.001.

(22) "Water" or "water in the state" means groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

104.003. Discharge Prohibitions.

(a) No person may cause, suffer, allow, or permit the discharge of any waste or of any pollutant, or the performance or failure of any activity other than a discharge, in violation of this subchapter.

(b) No person may discharge or cause to be discharged into the Municipal Separate Storm Sewer or into a water in the State any pollutant that causes or contributes to a violation of applicable water quality standards, other than storm water authorized by permit or similar authorization issued by the TCEQ. The commencement, conduct or continuance of any illicit discharge is prohibited except as described in subsections (c) and (d).

(c) The following discharges are allowed so long as they do not substantially contribute pollutants in storm water runoff:

(1) water line flushing, excluding discharges of hyper-chlorinated water, when the water is first de-chlorinated and discharges are not expected to adversely affect aquatic life;

(2) water line breaks, so long as sediment in the discharge is controlled such that there is no impact to aquatic life;

(3) water line hydrant testing, so long as rust deposits and chlorine levels do not result in an impact to aquatic life;

(4) runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;

(5) discharges from a potable water source; diverted stream flow; rising ground water or spring;

(6) discharges from uncontaminated ground water infiltration;

(7) discharges from uncontaminated, pumped ground water;

(8) discharges from uncontaminated foundation and footing drains;

(10) discharges from air conditioning condensation;

(11) discharges from water pumped from an elevator sump or utility vault, so long as it is free of oil and visible sheen;

(12) discharges from individual residential exterior car washing with mild detergents only and when using no degreasers nor other chemicals;

(13) flows from a wetland, riparian habitat, or diverted stream flow;

(14) uncontaminated discharges associated with a de-chlorinated, residential swimming pool, spa, or ornamental fountain, excluding filter backwash wastewater and excluding saline water;

(15) uncontaminated discharges from the routine washing of pavement conducted without the use of detergents or other chemicals and where spills or leaks of oil, toxins, or other hazardous materials have not occurred (unless all spilled material has been removed), but does not include discharges of street sweeper wash water;

(16) discharges from fire fighting activities where foam or chemical agents are not used (and not including washing of trucks, runoff from training activities, and similar activities);

(17) discharges of uncontaminated fire test maintenance and fire sprinkler/suppression system water;

(18) discharges specified in writing by the County Executive as being necessary to protect public health and safety;

(19) discharges of uncontaminated water used for dust suppression;

(20) dye testing is an allowable discharge, but requires a verbal notification prior to the time of the test;

(21) discharges associated with dewatering of collected storm water in an above-ground storage tank secondary containment area, so long as the water is free of contaminants, oil, or visible sheen;

(22) discharges from dewatering of collected storm water in a construction pit, if free of silt, oil, or visible sheen;

(23) discharges of storm water from an authorized permanent water quality control;

(24) discharges of ballast water from a petroleum storage tank pit during installation; and

(25) discharges from a dumpster or similar receptacle, so long as it is water free of contaminants, oil, and visible sheen.

(d) The prohibition does not apply to any non-storm water discharge permitted under a TPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the federal Environmental Protection Agency and TCEQ, provided that the authorized person is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the Municipal Separate Storm Sewer.

(e) The construction, use, maintenance, or continued existence of an illicit connection to the Municipal Separate Storm Sewer is prohibited. This prohibition expressly includes, without limitation, an illicit connection made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. A person is considered to be in violation of this ordinance if the person connects a line conveying a pollutant to the Municipal Separate Storm Sewer, or allows such a connection to continue

104.004. Suspension of MS4 Access.

(a) Travis County may, without prior notice, require a person to immediately stop an illicit discharge into either the Municipal Separate Storm Sewer or water in the state when such suspension is necessary to prevent imminent and substantial danger to environmental quality, or to the health or welfare of any person. If a person fails to comply with the suspension order, Travis County may take such steps as deemed necessary to prevent or minimize damage to the Municipal Separate Storm Sewer or water in the State, or to minimize danger to persons.

(b) After providing notice, Travis County may suspend a person's access to discharge into the Municipal Separate Storm Sewer or water in the state in violation of this ordinance if such termination would abate or reduce pollution caused by an illicit discharge.

(c) Travis County will notify a responsible person of the proposed termination of access to the Municipal Separate Storm Sewer. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

(d) A person commits an offense if the person reinstates access to the Municipal Separate Storm Sewer, without the prior approval of the County Executive.

104.005. Industrial or Construction Activities Discharges. Any person authorized to discharge pollutants generated from an industrial or construction activity that is subject to a TPDES storm water discharge permit or similar authorization shall comply with all provisions of such permit. Proof of compliance may be required in a form acceptable to Travis County prior to allowing discharge into the Municipal Separate Storm Sewer.

104.006. Requirement to Prevent, Control, and Reduce Storm Water Pollutants by the Use of Best Management Practices.

(a) Travis County requires that Best Management Practices (BMPs) be identified and incorporated into any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the Municipal Separate Storm Sewer, or water of the State.

(b) The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other waste into the Municipal Separate Storm Sewer or water in the state through the use of structural and non-structural BMPs.

(c) Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required by the County Executive to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the Municipal Separate Storm Sewer or water in the state.

(d) Compliance with all terms and conditions of a valid TPDES permit authorizing the discharge of storm water associated with industrial activity, along with any additional, more stringent requirements required by a Travis County development permit, shall be deemed in compliance with the provisions of this section. These BMPs shall be part of a storm water pollution prevention plan (SWP3) as necessary for compliance with requirements of the TPDES permit.

104.007. Watercourse Protection. Any responsible person, owning or leasing property through which water in the State passes, shall keep and maintain that part of the watercourse

within the property free of waste that would cause a condition of pollution to exist. In addition, a responsible person shall maintain privately owned structures within or adjacent to a watercourse (including but not limited to a dam or weir), so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

104.008. Spill or Discharge of a Hazardous Substance.

(a) The person responsible shall prevent the spill or discharge of any hazardous substance into the water in the state and to cause the removal of such spills and discharges without undue delay.

(b) Whenever an accidental discharge or spill occurs at or from any activity or facility which causes or may cause pollution, the responsible person for the activity or facility shall notify the TCEQ and each state and federal agency, as required by law, as soon as possible and no later than 24 hours after the occurrence.

(c) When the person responsible becomes aware or discovers that an accidental discharge or spill described by subsection (b) may adversely affect a public or private source of drinking water, or may adversely affect a Travis County road, including a right-of-way, the individual shall also immediately notify Travis County as soon as possible and no later than 24 hours after the occurrence.

(d) Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in an illicit discharge or pollutants discharging into storm water, the Municipal Separate Storm Sewer, or water in the State, the responsible person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release.

104.009. Right of Entry.

(a) In accordance with Texas Water Code, Sec. 26.171, an Inspector shall be permitted to enter and inspect the premises of any person to determine whether or not:

(1) the quality of the water meets the state water quality standards adopted by the TCEQ;

(2) a person discharging effluent into the public water located in an area of which Travis County has jurisdiction has obtained permits for discharge of the effluent;

(3) a person who has a permit is making discharges in compliance with the requirements of the permit; and

(4) the information provided in an application for permit, plat, or other authorization can be verified by an on-site evaluation.

(b) In accordance with Texas Water Code, Sec. 26.173, an Inspector shall be permitted the right to enter public and private property within its territorial jurisdiction to make inspections and investigations of conditions relating to water quality. The Inspector, in exercising this power, is subject to the same provisions and restrictions as the TCEQ in accordance with Texas Water Code, Sec. 26.014.

(c) An Inspector shall be permitted to enter and inspect premises as often as may be necessary to determine compliance with this chapter. If a person has security measures in force which require proper identification and clearance before entry into its premises, the person shall make the necessary arrangements to allow access to an Inspector.

(e) Facility operators shall allow the Inspector ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of a TPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

(f) An Inspector shall follow all appropriate safety precautions and shall don personal protection equipment that may be applicable to an area of the premises being inspected.

(g) If the premises are occupied, the Inspector shall present credentials and request entry. If the premises are unoccupied, the Inspector shall attempt to contact a responsible person and request entry before entering.

(h) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected or sampled shall be promptly removed by the operator at the written or oral request of the Inspector and shall not be replaced.

(i) A delay of 30 minutes or more in allowing the Inspector access to a permitted facility is a violation of a storm water discharge permit and of this chapter. A person who is the owner or operator of a facility with a TPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the Inspector reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.

(j) If the Inspector has been refused access to any part of the premises from which storm water is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this subchapter, or that there is a need to inspect or sample as part of a routine inspection and sampling program designed to verify compliance with this subchapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the Inspector may seek issuance of a search warrant from any court of competent jurisdiction, in accordance with the enforcement policy adopted by the Commissioners Court on June 26, 2001.

104.010. Enforcement.

(a) Civil Remedies.

(1) In accordance with Texas Local Government Code, Sec. 573.003, whenever Travis County finds that a person has violated a prohibition or failed to meet a requirement of this chapter or subchapters H - K of chapter 82, that person is liable to the county for a civil penalty of not more than $1,000 for each violation. Each day a violation continues is considered a separate violation for purposes of assessing the civil penalty.

(2) Travis County may bring suit in a district court to:

(A) restrain a violation or threatened violation of a rule or requirement adopted by the county in this Code; or

(B) recover a civil penalty authorized by Subsection (a).

(3) Travis County may use means other than civil penalties and injunctions when necessary to enforce violations or requirements of the Code. Such means may include informal actions to deter non-compliance as described in enforcement policy adopted by the Commissioners' Court on July 26, 2001.

(b) Abatement of Violation and Remediation. Any person violating any of the provisions of this chapter or subchapters H - K of chapter 82 is liable for any costs of violation abatement or remediation of any property, land, water, or wildlife habitat negatively affected, damaged, or threatened as a result of any such violation. The cost of abatement or remediation is the responsibility of that person and not a cost borne by Travis County and any other affected entities.

(c) Injunctive Relief. It is unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter or subchapters H - K of chapter 82. If a person has violated or continues to violate the provisions, Travis County may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

(d) Criminal Prosecution. Any person who has violated or continues to violate the requirements of this chapter or subchapters H - K of chapter 82 shall be liable to criminal prosecution to the fullest extent as allowed under applicable law, and shall be subject to any criminal penalty or imprisonment authorized under such applicable criminal law. Travis County may recover all attorney fees, court costs, and other expenses associated with enforcement of the Code, including sampling and monitoring expenses.

(e) Remedies Not Exclusive. The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of Travis County to seek cumulative remedies.

EXHIBIT 3

Crosswalk for Proposed Repeals to Chapter 82 and Chapter 108

Affected Rule	Existing Requirement	Disposition of the Requirement
82.204(c)(25)(B)	Under this requirement, final plats can be approved only when the applicant submits information on environmental permits required by other jurisdictions.	These requirements have been supplemented with other environmental authorizations for which an applicant must show evidence of compliance. Together, these requirements are proposed in Section 82.916.
82.209(a)	This subsection specifies that the scope of the 2005-adopted water quality protection requirements is outside of all municipal ETJs.	Proposed Section 82.912 describes the scope of water quality protection requirements as being all unincorporated areas of Travis County, including all ETJs, except that the water quality requirements do not apply to subdivision proposals in the City of Austin ETJ processed through the Single Office of Review.
82.209(b)	This subsection identifies basic requirements to control pollutant discharges of construction site runoff and requirements for a pre-construction conference.	Proposed Sections 82.935 – 82.939 detail storm water quality measures for construction activities. Section 82.950 details requirements for a pre-construction conference.
82.209(c)	This subsection defines certain environmental features and establishes distance buffers between development and either an environmentally valuable feature or waterway.	The definitions are modified and proposed for addition to Section 82.002. The definition of bluff has been changed to characterize more formations as bluffs. The requirements for setbacks have been strengthened for eastern watersheds and waterways with adjacent bluffs, for rim rock, and these changes are proposed in Section 82.941.
82.209(d)	This subsection identifies restrictions on the use of cut and fill of land under development.	The requirements have been modified, clarified, and new requirements are proposed relating to the quality of fill material. These requirements are proposed for Section 82.943.
82.209(e) – (g)	These subsections describe the requirements for permanent, structural water quality controls.	The engineering standards for these controls are not proposed for change and are specified in Section 82.944.

Affected Rule	Existing Requirement	Disposition of the Requirement
82.209(h)	This subsection requires that permanent, structural water quality controls be maintained by the property owner.	The proposed requirement for a BMP Maintenance Permit requiring proper operation and maintenance for these structures and annual fees are proposed in 82.917 through 82.919.
82.209(i)	This subsection requires that a person submitting a preliminary plan shall provide information on how storm water will be managed to protect water quality once the construction phase commences.	These requirements are proposed for Section 82.939 and have been expanded with some additional detail.
82.209(j) and 82.211(j)	These subsections adopted 2009 City of Austin and 2007 LCRA technical criteria manuals as standards for review of development proposals to Travis County.	Use of the same criteria manuals are proposed in Section 82.933. The proposed rule references the latest City of Austin manual approved on the date the Commissioners' Court adopts 82.933.
82.209(k) and 82.211(k)	These subsections identify that water quality controls are subject to the same requirements as drainage structures and specify fiscal security requirements in the HLWO area.	These general statements are proposed to be replaced with more specific standards for storm water, including fiscal security (new 82.920 and amended 82.401), construction plans (82.935), and required inspections (82.951 – 82.952).
82.211(a)	This subsection identifies the purpose of rule amendments in 2010, which set out requirements for water quality protection in the HLWO area.	This specific purpose is no longer needed. The more broad purpose of proposed Chapter 104 is found in 104.001.
82.211(b)	This subsection defines best management practices (BMPs), commercial development, master plan, single family subdivision development, and single family residence.	In proposed amendments to 82.002, the definition of BMP has been modified to be consistent with the TCEQ and the LCRA definitions. The definitions of commercial development and master plan are also proposed for amendment in 82.002. The definitions of single family subdivision development and single family residence are supplanted with applicable Travis County terminology in 82.002.

Affected Rule	Existing Requirement	Disposition of the Requirement
82.211(d)	This subsection describes submittal requirements to Travis County and LCRA for applications subject to review by both entities.	The submittal requirements for applicants for environmental review are proposed in 82.914 and the environmental requirements for each application type are proposed in 82.931.
82.211(e)	This subsection adopted a standard for the LCRA HWLO area for pre-application meeting for certain large developments.	This requirement is proposed for the same class of large applicants, and has been expanded to apply to all parts of Travis County jurisdiction in proposed 82.915.
82.211(f)	This subsection establishes distance buffers between development and a waterway in the HLWO area.	In proposed 82.941, setbacks established for the HLWO area are proposed to be the same and to apply to all western watersheds of Travis County.
82.211(g) - (h)	These subsections principally cross-references other sections in Chapter 82.	Proposed 82.935 – 82.940 and 82.943 detail the requirements for storm water quality at construction sites and cut and fill, respectively
82.211(i)	This subsection describes the requirements for permanent, structural water quality controls in the HLWO area.	The engineering standards for these controls are not proposed for change and are specified in Section 82.944.
82.302(f)	This subsection identifies general standards to control construction-related impacts on water quality in the HLWO area.	Proposed 82.935 – 82.940 detail storm water quality measures for construction activities in all parts of Travis County jurisdiction.
82.302(g)	This subsection requires that development comply with USEPA general permits relating to construction and industrial activity.	The existing section is out-of-date and references a time before TCEQ assumed the NPDES program from USEPA in Texas. Proposed 82.935 – 82.940 detail storm water quality measures for construction activities. This section includes the specific requirements from the TCEQ-issued construction general permit. Proposed 82.916, 82.945, and new proposed Chapter 104 address discharges associated with industrial activity.
108.001 – 108.018	In 1995, this Chapter was adopted as the tree preservation policy that applies on County property and rights of way.	Proposed 82.973 would adopt very similar procedures and standards and would reference the use of the COA tree preservation guidelines adopted in the city's Environmental Criteria Manual.

EXHIBIT 4

Legislative Version of Rule Amendment Proposal
Chapters 82 and 64, Travis County Code

Reader's Guide

Text that is proposed for addition is shown in underline format, for example:
Underline format is proposed new text

Text shown in strike-through is proposed for deletion, for example:
~~Strike-through format is text proposed for deletion~~

Sections, subsections, paragraphs, etc. of the existing Code skipped or not shown in this document is not proposed fro revision

Section 82.002. Definitions. For the purposes of this chapter~~the Manual~~, the definition of various terms, phrases, words, and their derivations will have the meaning ascribed to them herein. When not consistent with the context, words used in the present tense include the future; words used in the singular number include the plural number; and words used in the plural number include the singular number. Any office referred to herein by title will mean the person employed or appointed for that position of his/her duly authorized deputy or representative. Definitions not expressly authorized herein are to be considered in accordance with customary usage. Additional definitions of words and phrases not defined in this section may be found in Section 64.031 of the Travis County Code. The definition of specific terms, phrases, ~~word~~words, and their derivations applicable to matter contained in this chapter ~~the Manual~~ are as follows:

The following definitions are proposed to be amended in this section, as follows:

"Best Management Practices" or "~~(~~BMPs~~)~~" mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the state or the Travis County MS4. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the Lake Travis watershed, BMP means those practices, including those described in LCRA's Technical Manual, that effectively manage storm water runoff quality and volume. ~~Practices specified to prevent and abate nonpoint source pollution resulting from stormwater runoff. These can include, but are not limited to, site design guidelines, temporary and permanent erosion controls, stormwater treatment ponds, and land management practices.~~

"Commercial Development" means all development other than open space, a ~~single-family~~ residence, or a residential~~single family~~ subdivision development.

"County Executive" or "Executive Manager" means the county executive ~~manager~~ of the Transportation and Natural Resources Department of Travis County, a successor department, or a person designated by the county executive ~~manager~~.

"Erosion and Sediment~~Sedimentation~~ Controls" mean temporary ~~Temporary~~ and permanent Best Management Practices (BMPs) specified for preventing and abating accelerated soil erosion and sedimentation ~~control~~ to the maximum extent practicable during construction and are removed after completion of re-vegetation~~revegetation~~. Permanent practices remain permanently in place to prevent soil erosion.

"Master Development Plan" or "Master Plan" means a conceptual plan of a multi-phased development showing the order of phased development, boundaries, adjacent property, environmental features (such as creeks, tributaries, slopes, recharge features, etc.), roads, designated land uses, sites for special use, and proposed location of water quality protection measures for the development. ~~A reasonably detailed map or schematic drawing containing the following:~~

~~(A)The boundaries of the entire development;~~

~~(B)The names of adjacent platted subdivisions or the names of the record owners of adjoining unplatted property;~~

~~(C)The location, width, and names of all existing or platted streets or public rights-of-way and all existing easements within and adjacent to the development;~~

~~(D)The layout and width of proposed arterials, thoroughfares and collector streets and the general configuration of proposed streets and alleys;~~

~~(E)The general arrangement and designations of land uses, and any sites for special use (that is, for parks, open space, detention, or public facilities);~~

~~(F)The approximate location of the 25-year flood plain and the 100-year flood plain, the location and width of existing drainage channels, creeks and water courses within the development;~~

~~(G)~~(A) ~~The location of proposed drainage courses and any necessary off-site extensions.~~

"Owner" means the ~~The~~ owner of real property subject to a proposed or existing subdivision, site, parcel of land, or development. Also: Subdivider, Applicant, Developer.

~~Stormwater~~ "Storm Water Pollution Prevention Plan" or "SWPPP" or "SWP3" means a document ~~the plan required by the construction general permit issued by the Texas Commission on Environmental Quality (TCEQ)~~ which describes the best management practices and activities to be implemented by a person to identify ~~and address potential~~ sources of pollutants or contamination at a site and the actions to eliminate or reduce pollutant discharges to water in the state, a conveyance, or a Municipal Separate Storm Sewer to the maximum ~~that are reasonably expected to affect the quality of discharges from a construction activity, and that describes the implementation of practices that will be used to minimize to the~~ extent practicable. The contents of the SWP3 shall include all practices and activities required by the relevant TCEQ permit as well as including additional requirements specified in the Travis County Code~~the discharge of pollutants in storm water during the construction activities required during land development~~.

"Western Watershed" means the ~~The~~ Lake Travis, Lake Austin or ~~Town~~ Lady Bird Lake watersheds.

The following definitions are proposed additions to this section:

"Aggregate" means any commonly recognized construction material originating by the disturbance of the surface, including dirt, soil, rock asphalt, clay, granite, gravel, gypsum, marble, sand, shale, stone, caliche, limestone, dolomite, rock, rip rap, dimension stone, minerals, and other similar substance.

"Agricultural Development" means activities associated with the production of livestock or use of the land for planting, growing, cultivating, and harvesting crops, or participating in a wildlife management plan. Agricultural development does not include the processing of plant or animal products after harvesting nor the production of timber and forest products..

"Applicant" means a person who submits an application to Travis County.

"Bluff" means a feature that is adjacent to a waterway that has a vertical change in elevation of more than 40 feet and an average gradient measured from the base of the bluff to its crest greater than a 1 : 1 slope (greater than one (1) foot vertical for each one (1) foot horizontal).

"BMP Maintenance Permit" means an operating permit issued by the County Executive to maintain the permanent water quality controls associated with an established development.

"Canyon Rimrock" means a rimrock that is adjacent to a waterway that has a rock substrate with a gradient that exceeds 60 percent for a vertical distance of at least four feet, and that is exposed for at least 50 feet horizontally along the rim of the canyon.

"Certified Erosion, Sediment, and Storm Water Inspector" or "CESSWI" means a person who holds a valid certification issued by EnviroCert International, Inc., and who possesses the qualifications and experience necessary for the inspection of ESC and SWP3s.

"Certified Inspector of Erosion and Sediment Control" or "CIESC" means a person who holds a valid certification issued by CIESC, Inc., and who possesses the qualifications and experience necessary for the inspection of ESC and SWP3s.

"Certified Professional in Erosion and Sediment Control" or "CPESC" means a person who holds a valid certificate issued by EnviroCert International, Inc, who possesses the qualifications and experience necessary for SWP3 and ESC plan development, approval, evaluation, and inspection.

"Clean Water Act" or "CWA" means the federal Water Pollution Control Act (33 U.S.C. §§1251 - 1387 (1977, as amended).

"Common Plan of Development" means a construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development (also known as a "common plan of development or sale") is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or

hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate "common plans," with only the interconnected parts of a project being considered part of a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located ¼ mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, if any interconnecting road, pipeline or utility project that is part of the same "common plan" is not included in the area to be disturbed

"Construction Activity" means clearing, grading, and excavating that results in land disturbance of equal to or greater than one acre. Construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal or greater than one acre. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

"Construction Support or Maintenance Area" means an area placed either on or in the proximity of a construction site or activity, used by the owner or operator of the construction site, for support activities associated with the development or construction, including areas for concrete or asphalt batch operations, material formulation or fabrication, construction or sales office, material storage, vehicle storage or maintenance, and similar activities.

"Contemporaneous Reclamation" means the sequential or progressive reclamation of the portions of a mining or quarrying site affected by mining or quarrying operations that is performed in advance of final site reclamation, but which may or may not be final reclamation, performed to minimize the area exposed to erosion, at any one time, by mining or quarrying activities.

"Conveyance" means curbs, gutters, man-made or natural channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport storm water runoff.

"Critical Environmental Feature" means a feature that is of critical importance to the protection of environmental resources, and includes a bluff, canyon rimrock, cave, point recharge feature, sinkhole, spring, and wetland.

"Discharge" or "To Discharge" means to either deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

"DRASTIC" means a classification system for comparing land units on the basis of their vulnerability to ground-water pollution, a detailed description of which is found in Appendix 1 of Title 30, Texas Administrative Code, Chapter 210.

"Fill" or "Fill Material" means material including, but not limited to rock, sand, soil, clay, concrete rubble with no exposed metal, and overburden or spoils from mining or other excavation activities. The term fill material does not include any material classified as a solid waste or any contaminated materials.

"Hazardous substance" means any substance that is designated as such by the administrator of the Environmental Protection Agency pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Sec. 9601 et seq.), is regulated pursuant to Section 311 of the federal Clean Water Act (33 U.S.C. Sec. 1321 et seq.), or is designated as such by the Texas Commission on Environmental Quality.

"Inspector" means a representative of the County Executive who is responsible for making investigations, responding to citizen complaints or concerns, and conducting inspections of development projects, property, and facilities, to determine the compliance status of an activity with this chapter, other requirements of the Travis County Code, and state environmental code.

"Industrial Activity" means any of ten (10) categories of industrial activities included in the definition of "storm water discharges associated with industrial activity" as defined in 40 CFR Section 122.26(b)(14)(i) – (ix) and (xi).

"Linear Construction" means a construction activity with longitudinally oriented land disturbance, that is typical of infrastructure projects and which may include an excavation for burial of conduit, such as the placement of a drinking water, storm sewer, sanitary sewer, electrical, or telecommunication utility line, a drainage improvement, roadway, and similar activities.

"Mine" means an excavation in the earth from which ores, coal, limestone, or other mineral substances are being or have been removed by excavation or other mining methods. A mine includes an area of land or surface actively or previously mined for the production of dimension stone, crushed or broken stone, construction sand and gravel, clay, or industrial sand.

"Municipal Separate Storm Sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(A) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States;

(B) designed or used for collecting or conveying storm water;

(C) which is not a combined sewer; and

(D) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

"Non-Storm Water Discharge" means any discharge to the Municipal Separate Storm Sewer that is not composed entirely of storm water.

"Notice of Change" or "NOC" means a written notification to the TCEQ from a discharger authorized under a general permit, providing changes to information that was previously provided to the agency in a notice of intent form.

"Notice of Termination" or "NOT" means a written submission to the executive director of the Texas Commission on Environmental Quality from a discharger authorized under a general permit requesting termination of coverage.

"Operator" means the person responsible for the overall operation of a site or facility.

"Outfall" means a point source at the point where pollutants discharge to surface water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream. In the context of this chapter, pollutants may discharge from a place of industrial activity, construction activity, other anthropogenic activities, or from a MS4. Sheet flow leaving a linear transportation system without channelization is not considered an outfall. A point source such as a curb cut, concrete traffic barrier with drainage slots that drain into an open culvert, roadside ditch, or not actually discharging into a water in the State is not considered an outfall.

"Permanent Water Quality Control" or "Water Quality Control" means a structure, system, or feature that provides water quality benefits by treating storm water run-off, including a water quality pond, water quality detention pond, commercial pond, or residential pond.

"Person" means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Point Recharge Feature" means a cave, sinkhole, fault, joint, or other natural feature that lies over an aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.

"Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the state. The term includes:

(A) tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone as defined by Texas Water Code, Section 26.502; or

(B) rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Texas Water Code, Section 26.502; and

(C) the term does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated rangeland, pastureland, and farmland that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

"Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

"Primary Operator" means the person or persons associated with a construction activity that meets either of the following two criteria:

(A) The person or persons have operational control over a site plan, construction plan, and specifications, including the ability to make modifications to those plans and specifications; or

(B) The person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan (SWP3) for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

"Quarry" means a site where aggregates are being or have been removed or extracted from the earth to form the pit or mine, including the entire excavation, stripped areas, haulage ramps, and the land under ownership, lease, or mineral rights immediately adjacent thereto upon which the plant processing the raw materials is located.

"Reclamation" means the process of removing structures and equipment and re-grading and re-vegetating as necessary to restore land affected by quarrying or mining to protect water quality in compliance with the purpose of this chapter.

"Registered Accessibility Specialist" means a person licensed by the Texas Department of Licensing and Regulation to inspect projects for compliance with the U.S. Americans with Disabilities Act (ADA) and Texas Accessibility Standards.

"Residential" means of or relating to structures and accessory uses of a single family, mobile home, or multi-family dwelling.

"Secondary Operator" means a person whose operational control is limited to the employment of other operators or to the ability to approve or disapprove changes to plans and specifications. A secondary operator is also defined as a primary operator and must comply with the permit requirements for primary operators if there are no other operators at the construction site.

"Sediment Basin" means a temporary pond where sedimentation of pollutants occurs which is used during site construction and then removed, or a permanent basin designed to be a permanent site structure but used for sedimentation during the construction phase of a site.

"Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

"Site Construction" means a construction activity and land disturbance at a site, as distinguished from linear construction.

"Small Construction Project" means any proposed construction activity that is not a part of a common plan of development and does not:

(A) exceed 10,000 square feet of land disturbance;

(B) result in depositing more than two feet of earth fill;

(C) include construction in a FEMA 100 year floodplain;

(D) include a significant alteration of existing drainage;

(E) include construction within:

(i) 150 feet of a critical environmental feature;

(ii) a platted waterway setback; or

(iii) an area near a waterway that requires a setback; and

(F) exceed 3,000 square feet, if the construction is linear construction for utility placement.

"Small Municipal Separate Storm Sewer System" or "Small MS4" means a municipal separate storm sewer system which was not previously authorized under a National Pollutant Discharge Elimination System ("NPDES") or Texas Pollutant Discharge Elimination System ("TPDES") individual permit as a medium or large municipal separate storm sewer system, as defined at 40 CFR Sec. 122.26(b)(4) and (b)(7).

"Solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations, and from community and institutional activities. The term:

(A) does not include:

(i) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued in accordance with Texas Water Code, Chapter 26 (an exclusion applicable only to the actual point source discharge that does not exclude industrial wastewater while it is being collected, stored, or processed before discharge, nor does it exclude sludge that is generated by industrial wastewater treatment);

(ii) uncontaminated soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements. The material serving as fill may also serve as a surface improvement such as a structure foundation, a road, soil erosion control, and flood protection.

(B) does include man-made materials exempted under (A)(ii) but where the land is sold, leased, or otherwise conveyed prior to the completion of construction of the surface improvements at a site where the man-made material is deposited.

"Storm Water" and "Storm Water Runoff" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

"SWP3 Inspection Report" or "Storm Water Pollution Prevention Plan (SWP3) Inspection Report" means a report required under the terms of the TCEQ Construction General Permit and by this chapter as a part of a SWP3, that is prepared by a qualified individual for the owner or operator of a construction site after routine and periodic inspection of disturbed areas of land that have not been finally stabilized, to determine whether all sediment and erosion control measures are operating correctly.

"SWP3 Site Notebook" or "Storm Water Pollution Prevention Plan (SWP3) Site Notebook" means the on-site notebook and log associated with implementing the approved SWP3 that is maintained up-to-date at the construction site by the owner or construction site operator. The SWP3 Site Notebook is an integral part of the SWP3 and must contain all required SWP3 information not included in the approved construction plans at the time of development permit approval and all SWP3 information that is generated during the construction of a development project.

"TCEQ" means Texas Commission on Environmental Quality or any successor agency.

"Texas Pollutant Discharge Elimination System" or "TPDES" means the state program for issuing, amending, terminating, monitoring, and enforcing permits authorizing the discharge of pollutants to water in the State of Texas and imposing and enforcing pretreatment requirements under Clean Water Act §§ 307, 402, 318 and 405, the Texas Water Code and the Texas Administrative Code.

"Topsoil" means the surface layer of soil which is generally more fertile than the underlying soil layers, which is the natural medium for plant growth and which can provide the plant growth, soil stability, and other attributes necessary to meet the success standards approved in the reclamation plan.

"Topsoil Substitute Material" means soil or other unconsolidated material either used alone or mixed with other beneficial materials and which can provide the plant growth, soil stability, and other attributes necessary to meet the success standards approved in the reclamation plan.

"Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, or other waste, as the terms are defined in Texas Water Code, Section 26.001.

"Water" or "Water in the State" means groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

"Waterway" means water in the state other than groundwater, percolating or otherwise, springs, or wetlands.

"Waterway Setback" means the surface area of a setback or buffer area parallel to both sides of a waterway established as a protective easement permanently managed for the purpose of surface water quality protection in which development is prohibited or limited.

"Wetland" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do

support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetland boundaries are defined using the U.S. Army Corps of Engineer's protocol described in the 1987 Corps of Engineers Wetlands Delineation Manual.

82.103. Coordination with Other Jurisdictions.

(a) through (b) No change.

(c) Other Development.

In ~~additions~~ addition to compliance with the subdivision regulations of the County, a municipality, and/~~or~~ any other legislative created entities with subdivision authority, the development and use of real property in the County may be subject to regulation by other jurisdictions, such as the Lower Colorado River Authority, the Texas ~~Natural Resources Conservation~~ Commission on Environmental Quality, and the Barton Springs Edwards Aquifer Conservation District, as well as other County regulations~~, as provided in Section 82.101(c)~~.

82.106. Regulation of Land Excepted from the Platting Requirements.

(a) No change.

(b) The applicable portions of the County's current Rules and Private Sewage Facilities and Regulations for Flood Plain Management and Guidelines and Procedures for Development Permits; ~~and~~

(c) To the extent that engineering and traffic safety concerns are raised, the Travis County Driveway Permit Process; and

(d) The requirements of this chapter for permanent management of storm water, construction management of storm water, and setbacks for development from waterways and critical environmental features.

82.201 General Subdivision Procedures.

(a) General.

(1) The Commissioners Court will not approve a Final Plat for subdivision of land unless it complies with all applicable requirements ~~of these~~ and standards of this chapter.

(2) For subdivisions ~~with~~ within the ETJ of a municipality with which the County has entered into an agreement under 242.001(c) and (d), Local Government Code, County review, if any, shall be as provided in the agreement.

If any provision of the chapter cannot be reconciled with such and agreement in a manner consistent with Chapter 245, Local Government Code, the agreement shall control.

(a)(3) through (a)(4) No Changes.

(b) Applications.

(1) No Changes.

(2) The application for approval of a preliminary plan or Final Plat will be reviewed by TNR for completeness under the applicable requirements and procedures of ~~these Standards~~ this chapter.

(A) through (C) No Change.

(3) through (8) No Change.

(9) A Master Development Plan must be submitted for an applicant to meet "fair notice" requirements under Section 82.102(a). Otherwise, an applicant may voluntarily submit a master development plan as a non-binding planning tool, but it is not required and will not be approved by the County Executive ~~Manager~~ or the Commissioners Court. If submitted either voluntarily or to meet "fair notice" requirements, it shall consist of a written plan, supporting documentation, and a reasonably detailed map or schematic drawing, drawn to scale. The submittal must contain ~~containing~~ the following:

(A) No Change.

(B) The name~~names~~ of each adjacent platted subdivision~~subdivisions~~ ~~or~~and the name ~~names~~ of each~~the~~ record owner ~~owners~~ of adjoining unplatted property;

(C) through (D) No Change.

(E) The location, dimensions, ~~general arrangement~~ and designations of land uses, including all waterways, critical environmental features, and other land protected from development and proposed setbacks from waterways and critical environmental features;

(F) Any ~~any~~ sites proposed for special use, including ~~(e.g.~~, parks, open space, flood detention, permanent water quality controls, and ~~or~~ other public facilities~~)~~;

(GF) The ~~approximate~~ location of the 25-year flood plain and the 100-year flood ~~plan~~plain, the location and width of existing drainage channels, creeks, and water courses within the development;

(G)~~(H)~~A summary by a Texas-registered professional engineer or professional geoscientist:

(i) ~~-~~describing the proposed source of potable water and the wastewater service facilities for the subdivision; and

(ii) certifying the potable water source and wastewater service facilities will be of adequate capacity to serve all proposed lots of the subdivision; and

(I~~G~~) The proposed location of ~~proposed~~ drainage courses and any off-site extensions.

(c) Expiration and Extension.

(1) Preliminary Plan.

(A) No Change.

(B)

(i) No Change.

(ii) The expiration date of a preliminary plan may be extended administratively for a period of two years if neither the preliminary plan nor the regulations, including requirements of this chapter and Chapter 64, governing the original approval of the preliminary plan have significantly changed. No more than two such extensions shall be granted.

(iii) No Change.

82.204. Final Plat.

(a) Final Plat Approval. If the property proposed for a Final Plat is within the jurisdiction of any other governmental entity with platting authority, the Final Plat must be submitted concurrently to both jurisdictions. If the Final Plat application contains property currently within an existing recorded subdivision, see Section 82.201(d) for plat cancellation and revision procedures. A Final Plat must incorporate all the provisions of any Preliminary Plan for the property that has previously received approval from the Commissioners Court. A final plat proposal must comply with the water quality

protection requirements of Subchapters H – K. If changes are necessary, the approved Preliminary Plan must revised, unless the entire tract is being final platted.

(b) No Change.

(c) Final Plat Requirements Outside a Municipality's ETJ.

(1) through (24) No Change.

(25) Other Approvals.

(A) When a revision to a flood ~~plain~~ insurance rate map is initiated under Section 82.207, the owner must submit the evidence required by that section demonstrating~~of~~ the Federal Emergency Management Agency's receipt of the applicant's request for revision before approval of the final plat~~that request~~.

(B) Outside the ETJ, or for any single-family residential subdivision of a tract exceeding 20 acres and for all commercial subdivisions, the owner must provide evidence of compliance with the environmental requirements of other jurisdictions, in accordance with Section 82.916. ~~submit copies of any of the following permits that are required for the development of the tract, or if a permit is not required, documentation of that fact from the appropriate agency or, if documentation from the agency is unavailable, bona fide documentation of that fact from a qualified professional. In this subsection, areas in which Travis County has been granted exclusive jurisdiction pursuant to Chapter 242 of the Texas Local Government Code are considered outside the ETJ.~~

~~(i) If the development is subject to the LCRA Highland Lakes Watershed Ordinance or the TCEQ Edwards Aquifer rules at 30 Texas Administrative Code Chapter 213, or if the owner applies for an individual TPDES permit, any additional material that the owner submits to LCRA or TCEQ to obtain the permit, as well as the permit once it is issued.~~

~~(ii) Permits under Section 10 of the federal Rivers and Harbors Act and/or Section 404 of the federal Clean Water Act.~~

~~(iii) Permits under Section 10 of the federal Endangered Species Act.~~

~~(iv) The owner's proposed Stormwater Pollution Prevention Plan and Notice of Intent required to comply with Texas Pollutant Discharge Elimination System (TPDES) requirements under Section 26.040, Water Code, and Section 402 of the Clean Water Act. The final Plan and Notice must be submitted before approval of subdivision construction plans.~~

(C) through (E) No Change.

(d) Certifications and Acknowledgments.

(1) through (5) No Change.

(6) Plat Notes.

(A) through (D) No Change.

(E) The plat notes relating to water quality protection requirements, in accordance with Section 82.946 of this chapter.

(e) No Change.

82.206. Private Street Subdivision.

(a) General. A private street is privately owned and maintained, is not intended for use by the general public, and may have controlled or restricted access. Private streets normally serve residential properties on individual lots.

(1) through (2) No Change.

(3) Outside the ETJ of any municipality, private streets are subject to county regulations in order to ensure:

(A) through (D) No Change.

(E) Construction and post-construction operation of the private street does not cause or allow adverse impacts on water quality as a result of storm water runoff or other pollutant discharges.

(4) through (6) No Change.

(b) Creation of Private Streets in New Subdivisions.

(1) A homeowners or property owners association must be created to assume ownership and responsibility for the maintenance of the proposed private streets. Draft copies of the following documents are required to be submitted for review and approval during the preliminary review process, and approved copies must be recorded with the final plat:

(A) No Change.

(B) Association bylaws which outline membership, voting rights, and other items similar in nature; and

(C) Establishment of a contact person and mailing address for the association, along with a written procedure for continually updating and promptly communicating changes of contact person and mailing address, whenever it occurs.

(2) Prior to the issuance of a Basic Development Permit for the construction of the private street subdivision improvements, the developer must submit a copy of the association's ~~Homeowners' Association's~~ Certificate of Incorporation to the County Executive~~TNR~~.

(3) The following final plat notes are required:

(A) No Change.

(B) The undersigned owner does hereby subdivide ____ acres of land out of said _____ acres tract in accordance with this plat, to be known as "[subdivision's title]" subdivision, subject to the covenants and restrictions shown hereon, and hereby dedicates to the owners of the lots in the subdivision, public utilities serving the subdivision, emergency services providers with jurisdiction, and public service agencies, the use of all the private street and other easements shown hereon, subject to any easements and/or restrictions heretofore granted and not released. The maintenance and payment of real property taxes on such private streets are the responsibility of the owner(s) of the subdivision or any duly constituted homeowners association under that certain instrument of record at Volume ____ , Page ____ , of the Travis County Deed of Records or Doc# _____ of the Travis County Official Public Records. An express easement is hereby granted across said private streets and any common areas for the use of the surface for all governmental functions, vehicular and non-vehicular, including fire and police protection, solid and other waste material pickup, inspection or investigation of storm water management, and any other purpose any governmental authority deems necessary; and owner further agrees that all governmental entities, their agents or employees, shall not be responsible or liable for any damage occurring to the surface of the said private street and any common area as a result of any such use by governmental vehicles

(C) The private street shall be operated and maintained to prevent adverse impacts on water quality as a result of storm water runoff or other pollutant discharges. The xxx Association must manage the private street using appropriate structural and non-structural best management practices at all times to sufficiently prevent and address erosion and sedimentation. It is the continuing duty of the xxx Association to operate and maintain any permanent water quality control and other best management practices associated

with the private street, to reduce or eliminate the discharge of pollutants to the maximum extent practicable.

(4) through ((9) No Changes.

(10) In accordance with Section 104.009 of the Code, the homeowners or property owner's association shall allow entry of a Travis County inspector for purposes of inspection or investigation relating to water quality protection.

(c) Conversion of Existing Public Streets to Private Streets.

(1) A homeowners or property owner's association must be in existence or created and must have the power to assess fees in order to own, pay applicable taxes, operate and maintain a permanent water quality control structure, and maintain the proposed private streets. Draft copies of the documents referenced at Section 82.206(b)(1)(A) and (B) are required to be submitted for review and approval during the review process. ~~Approved copies of the documents shall be recorded by the county at the time of abandonment and discontinuance.~~ In addition, a copy of the homeowners association's Certificate of Incorporation must be provided to TNR prior to the time of abandonment and discontinuance. Approved copies of the Order of the Commissioners Court shall be recorded by the county at the time of abandonment and continuance.

(2) through (4) No Change.

(5) If security gates are proposed, a Basic Development Permit application must be submitted that include plans ~~must be prepared~~ showing the location of the security gates. A minimum storage space of 40 feet must be provided between the gates and the nearest intersecting street right-of-way. The design of the gates must be approved by the County ~~county~~, the emergency service provider, and, where applicable, any other governmental entity with jurisdiction.

(d) through (e) No Change.

82.207 Storm Water~~Stromwater~~, Drainage, and Floodplains.

(a) A preliminary plan, final plat, or development permit may not be approved unless it includes storm water drainage facilities, permanent water quality controls, and measures that:

(1) through (3) No Change.

(4) ensure surface grades will not~~no~~ permit water to gather in a pool that may become stagnant;

(5) control, both temporarily during construction and permanently thereafter, erosion and sedimentation so as to reduce to the maximum extent practicable or eliminate the discharge of pollutants into ~~minimize siltation of~~ water courses, in accordance with the requirements of Subchapters I and K;

(6) through (8) No Change.

(b) through (o) No Change.

~~**82.209 Storm Water Quality, Riparian Corridors, and Environment.**~~

~~(a) Geographic Scope~~
~~In addition to the other requirements of this chapter, this section applies outside the ETJ of any municipality to any single-family residential development of a tract exceeding 20 acres on the date of the order adopting this section and all Commercial Developments, except any development in the unincorporated areas of Travis County in the HLWO area, as governed by Section 82.211. . In this Section, areas in which Travis County has been granted exclusive jurisdiction pursuant to Chapter 242 of the Texas Local Government Code are considered outside the ETJ.~~

~~(b) Water Quality Measures for Construction Activities.~~

~~(1) Temporary and permanent best management practices shall be employed to prevent polluted stormwater runoff from all construction and development activities from entering surface waterways or groundwater during the construction process until final site stabilization is complete.~~

~~(2) If the owner or Construction Site Operator is issued a TCEQ Edwards Aquifer permit, or individual TPDES stormwater permit, and if the owner's or Construction Site Operator's SWP3 and Notice of Intent comply with the applicable TCEQ general permit requirements, no additional best management practices shall be required to comply with Paragraph (1), except as provided in Paragraph (3).~~

~~(3) Construction best management practices may be required in addition to those in the owner's or Construction Site Operator's SWP3 or TCEQ permit if:~~
~~more than five acres will be disturbed at any one time;~~

~~the development will take place on any slope greater than ten percent;~~

~~(C) the development includes a road crossing of a waterway, including an intermittent or perennial stream; or~~

~~(D) after construction or development activities commence, the measures in the SWP3 or TCEQ permit are determined by the Executive Manager to be inadequate to~~

ensure that pollution of surface and ground water is prevented to Maximum Extent Practicable.

4. Additional best management practices under Paragraph (3) include:

(A) a pre-construction site meeting;

(B) construction disturbance phasing or sequencing to limit soil erosion, including final stabilization accomplished with each phase;

(C) stabilization measures including re-vegetation, mulching, soil retention blanket, or similar best management practices;

(D) temporary structural or non-structural best management practices at additional locations or in additional quantities;

(E) accelerated maintenance; and

(F) other best management practices, if appropriate, specified in the LCRA Technical Manual.

(c) Buffer Zones

(1) Buffer Zones for Environmentally Valuable Features.

(A) In this subsection, the following terms have the following meanings:

(i) "Bluff" means a bluff that is adjacent to a waterway that that has a vertical change in elevation of more than 40 feet and an average gradient greater than 400 percent (greater than four (4) feet vertical for each one (1) foot horizontal).

(ii) "Canyon Rimrock" means a rimrock that is adjacent to a waterway that has a rock substrate with a gradient that exceeds 60 percent for a vertical distance of at least four feet, and that is exposed for at least 50 feet horizontally along the rim of the canyon.

(iii) "Point Recharge Feature" means a cave, sinkhole, fault, joint, or other natural feature that lies over an aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.

(iv) "Environmentally Valuable Features" means features that are of critical importance to the protection of environmental resources, and include bluffs, canyon rimrocks, cave, point recharge features, sinkholes, springs, and wetlands.

(v) "Wetland" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal

~~circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.~~

~~(B) Drainage patterns for development must be designed to protect environmentally valuable features from the effects of runoff from developed areas, and to maintain the catchment areas of recharge features in a natural state. Special controls must be used where necessary to avoid the effects of erosion, or sedimentation, or high rate of flow.~~

~~(C) Buffer zones for environmentally valuable features shall be included within protective easements.~~

~~(D) A buffer zone is established around each environmentally valuable feature.~~

~~(i) For a cave, sinkhole, spring, and wetland, the width of the buffer zone is 150 feet from the edge of the environmentally valuable features.~~

~~(ii) For a point recharge feature, the buffer zone coincides with the topographically defined catchment basin, except that the width of the buffer zone from the edge of the environmentally valuable feature is not less than 150 feet and not more than 300 feet.~~

~~For a bluff or canyon rimrock feature, the buffer zone is 50 feet.~~

~~(E) Except as provided in Subparagraph (F) below, within an environmentally valuable feature buffer zone:~~

~~(i) the natural vegetation cover must be retained to the maximum extent practicable;~~

~~(ii) construction is prohibited; and~~

~~(iii) wastewater disposal or irrigation is prohibited.~~

~~(F) If located at least 50 feet from the edge of the environmentally valuable feature, the prohibition of Subparagraph (E) does not apply to a yard, hiking trail, or a recharge basin designed to discharge to a point recharge feature without polluting ground water.~~

~~(3) Buffer Zones for Waterways.~~

~~(A) Waterways are classified as follows:~~

~~(i) Within a western watershed;~~

~~(1) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more that 320 acres and not more than 640 acres;~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(ii) Within an eastern watershed:~~

~~(1) a minor waterway has a drainage area of at least 320 acres and not more that 640 acres;~~

~~(2) an intermediate waterway has a drainage area of more that 640 acres and not more than 1290 acres;~~

~~(3) a major waterway has a drainage area of more than 1280 acres.~~

~~(B) A buffer zone is established along each classified waterway. The boundaries of the buffer coincide with the boundaries of the fully developed 100-year flood plain for the waterway, except as follows. Buffer zones for waterways shall be included within protective easements.~~

~~(ii) For a minor waterway, the boundaries of the buffer zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway.~~

~~(iii) For an intermediate waterway, the boundaries of the buffer zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway.~~

~~(iv) For a major waterway, the boundaries of the buffer are located not less than 200 feet and not more than 400 feet from the centerline of the waterway.~~

~~(C) Notwithstanding Subparagraph (B), a waterway buffer zone does not extend beyond a rimrock or the crest of a bluff. A crest is a line along the top of a bluff beyond which the average slope has a gradient of not more than 50 percent for a distance of at least 40 feet.~~

~~(D) The shoreline boundary of the waterway buffer for Lake Travis coincides with the 681 foot mean sea level contour line. The width of the buffer, measured horizontally inland, is 100 feet, or, for a detached single-family residential use, 75 feet.~~

~~(E) Development within a waterway zone buffer is prohibited except as follows:~~

~~(i) A fence is permitted only if it does not obstruct flood flows,~~

~~(ii) A golf course or part of a golf course is permitted only if no fertilizers, pesticides, or herbicides are used within the buffer zone.~~

(iii) a park or similar open space use, other than a parking lot, is permitted only if a program of fertilizer, pesticide, and herbicide use is approved. Park development is limited to hiking, jogging, or walking trails and outdoor facilities, and excludes stable and corrals for animals.

(iv) Along Lake Travis, a boat dock, pier, wharf, or marina and necessary access and appurtenances, is permitted.

(v) A utility line may cross a waterway buffer zone.

(vi) Detention basins and floodplain alterations are permitted id the requirements of Section 82.207 and the other provisions of this chapter are met.

(vii) A minor waterway buffer zone may be crossed by a residential or commercial street or driveway if necessary to provide access to property that cannot otherwise be safely accessed.

(viii) An arterial street identified in the metropolitan transportation plan may cross a major waterway buffer zone.

(ix) An arterial or collector street may cross an intermediate waterway buffer zone only if it at least one mile from any other collector or arterial street crossing on the same waterway.

(x) An arterial or collector street may cross a minor waterway buffer zone, provided that a collector street crossing must be at least 2,000 feet from a collector or arterial street crossing on same waterway.

(xi) Street and utility crossings shall be aligned to be perpendicular to the waterway buffer zone.

(xii) The Executive Manager may grant exceptions to the requirements of clauses (ix) through (xi) where strict compliance is impracticable.

(xiii) All street and utility crossings shall be designed and constructed to minimize pollution of the waterway to the greatest extent practicable.

(d) Cut and Fill.

(1) Land Balancing.

(A) All cut and fill land balancing shall be limited to a maximum of 8 feet.

(B) Retaining walls shall not exceed one foot above the material being retained.

~~(C) Retaining wall over 5 feet in height shall be detailed in construction plans or plans submitted with the application for the site development permit.~~

~~(2) Detention and Water Quality Ponds.~~

~~There are no cut or fill limitations for the construction of water quality basins, stormwater detention ponds, streets, or driveways.~~

~~(3) Spoils Disposal.~~

~~(A) No fill shall be placed on any lot unless authorized in approved subdivision construction plans or a sit development permit.~~

~~(B) Temporary spoils shall be removed prior to acceptance of streets and drainage in a subdivision.~~

~~(C) Prior to removal of spoils from a site, the owner shall notify the Executive Manager of the destination of the spoils.~~

~~(e) Post-Construction Water Quality Controls~~

~~Permanent water quality controls meeting the requirements of Subsection (f) for western watersheds and Subsection (g) for eastern watersheds shall be employed to prevent polluted stormwater runoff from developed sites from entering surface waterways or ground water after construction is complete.~~

~~(f) Post-Construction Water Quality Controls for Western Watersheds~~

~~(1) For development in areas with slopes up to 10 percent, 70 percent of the additional pollutant load in the stormwater runoff for total suspended solids, total phosphorus, and oil and grease shall be removed. For such development with 500 feet of the 691 foot mean sea level contour line, 75 percent of the additional pollutant load in the stormwater runoff for total suspended solids, total phosphorus, and oil and grease shall be removed.~~

~~(2) For development on slopes greater than 10 percent but less than 20 percent, 80 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 75 percent of the additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed. For such development within 500 feet of the 691 foot mean sea level contour line, 90 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 85 percent of the additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed.~~

~~(3) For development on slopes greater than 20 percent, 90 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 85 percent of the~~

~~additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed.~~

~~(4) Streambank erosion shall be controlled by designing the drainage system so that the amount of erosion and siltation occurring in the receiving streams is not increased. The magnitude and frequency of the pre-development one year design storm shall remain the same.~~

~~(5) The requirements for Paragraph (1) through (4) may be satisfied for a single-family residential subdivision if the subdivision has:~~

~~(A) a minimum lot size of one acre; and~~

~~(B) a street and drainage network designed without curbs or gutters, or otherwise adequately designed, so that runoff is treated using overland flow methods to a vegetated buffer meeting slope and vegetative area cover requirements.~~

~~(g) Post-Construction Water Quality Controls for Eastern Watersheds~~

~~(1) Water quality controls are required for development with impervious cover exceeding 20% of net site area.~~

~~(2) The controls must provide at least the treatment level of a sedimentation/filtration system and must capture, isolate, and treat the water draining to the control from the contributing area.~~

~~(3) The required capture volume is the first one-half inch of runoff and an additional one-tenth on an inch of runoff for each 10% increase in impervious cover over 20% of gross site area.~~

~~(h) Maintenance~~

~~The owner or construction site operator shall be responsible for maintaining and shall maintain all permanent water quality controls in a proper manner and consistent with county and other applicable standards, including BMP maintenance permits or agreements required by LCRA or previously approved by LCRA. The owner or construction site operator shall remain responsible for maintenance until either the maintenance obligation is either assumed in writing by another entity having ownership or control of the property, including an owners' association, a district, or a municipality, or ownership of the property is transferred to another entity. A copy of the assumption or transfer of responsibility shall be filed with the Executive Manager within 30 days of the transfer.~~

~~(i) Site Assessment and Stormwater Management Plan~~

(1) An owner subject to the requirements of this section shall submit with an application for a preliminary plan a site assessment that identifies all environmentally valuable features, waterways and their classifications, buffer zones, contours, and all other information necessary to determine compliance with this section.

(2) An owner subject to the requirements of this section must submit with an application for a preliminary plan a stormwater management plan that demonstrates permanent water quality structural and non-structural BMPs will comply with this section and shows their locations. The stormwater management plan may be included as part of a drainage plant under 82.207 or as a part of the material submitted under Subsection (b). The stormwater management plan must summarize the SWP3 and temporary structural and non-structural BMPs to be used.

(j) Technical Criteria

For purposes of complying with this section, the following technical criteria manual shall apply, provided that any changes to the manuals subsequent to the effective date of this subsection shall not take effect until approved by the Commissioners Court.

Technical criteria for best management practices and water quality controls in eastern watersheds, environmentally valuable features, waterways, and buffer zones are those contained in the City of Austin Environmental Criteria Manual (effective December 15, 2009). The Executive Manager reserves the right to require alternate technical criteria, on a case-by-case basis, in consideration of site specific conditions. Impervious cover for purposes of Section 82.209(g) shall be calculated as it is calculated in the City of Austin's ETJ under Chapter 30, the Joint City of Austin – Travis County Code.

Technical criteria for best management practices and water quality controls in western watersheds are those in the LCRA HLWO Water Quality Management Technical Manual (effective July 1, 2007), provided that to the extent of any conflict, in watersheds contributing to the Edwards Aquifer the owner may use any equivalent or more stringent technical criteria in TCEQ's Complying with the Edwards Aquifer Rules: Technical Guidance and Best Management Practices (RG-348).

(k) Construction Plan, Engineering, Fiscal Security, and Inspections

Water quality controls are subject to same requirements as drainage structures under this chapter regarding construction plans, engineering standards, fiscal security, and inspections.

SECTION 82.211. Lake Travis Watershed Water Quality Protection.

(a) Purpose. The Commissioners Court adopts these requirements in recognition of the adoption by the LCRA of the HLWO (effective February 1, 2006). Adoption of

these requirements provides an applicant for a development permit with a consistent set of development standards. To improve consistency and provide for coordination of the processes used by Travis County and the LCRA in the area covered by the HLWO, Travis County and the LCRA will enter into an Interlocal Cooperation Agreements that included these requirements. Travis County and the LCRA will facilitate adoption of an Interlocal Cooperation Agreement including these requirements, that will improve the consistency and coordination of the processes used by Travis County and the LCRA in the area now within LCRA jurisdiction under the HLWO.

(b) Definitions. In this section, the following terms have the following meanings.

Best Management Practice or BMP means those practices, including but not limited to those described in LCRA's Technical Manual that effectively manage stormwater runoff quality and volume.

Commercial Development means all development other than open space, a single family residence, or a single family subdivision development.

Master Plan means a conceptual plan of a multi-phased development showing the order of phased development, environmental features (such as creeks, tributaries, slopes, etc.), roads, and proposed location of water quality protection measures for the development.

Single Family Subdivision Development means a development subdivision consisting of two or more Single Family Residences.

Single Family Residence means one- and two-family dwelling units designated for occupancy by one or more families as a residence.

(c) Geographic Scope and Applicability.

(1) In addition to other requirements of this chapter, this section applies within unincorporated areas of Travis County within the HLWO area, except as specified in paragraph (2).

(2) The requirements of this section are not applicable to a Single Family Subdivision Development within the extraterritorial jurisdiction of any municipality that has an executed agreement with Travis County that provides for a single office review and where a joint city/county code of subdivision regulations exists pursuant to Section 242.001(d)(4) of the Texas Local Government Code.

(3) In addition to the other requirements of this chapter, this section applies to the following proposals:

(A) A development application for a Single-Family Residence that proposes 10,000 square feet or greater of impervious cover or where one (1) acre or more of land would be disturbed;

(B) A Single-Family Subdivision Development or Commercial Development that proposes 10,000 square feet or greater of impervious cover or where one (1) acre or more of land would be disturbed; and

(C) A Re-development application that proposes a cumulative increase of impervious cover of 10,000 square feet or greater or where one (1) acre or more of land will be disturbed.

(4) A Travis County development permit issued pursuant to Chapter 64 of the Travis County Code is required for a Commercial Development or Single-Family Residence that will disturb less than one (1) acre of land. In addition to other requirements of this chapter, the application must describe how erosion and sedimentation will be controlled throughout the development process and how the site complies with the downstream buffer guidelines, in accordance with the LCRA Technical Manual.

(d) Development Application Procedures.

(1) In addition to other requirements of this chapter, an applicant for a development permit subject to this section is also subject to the requirements of paragraphs (2) – (4) of this subsection.

(2) Any development application, amendment application, and required supporting information shall be submitted to the Lower Colorado River Authority at the same time as it is provided to the Executive Manager.

(3) Whenever additional information is provided to the Executive Manager as a part of the administrative or technical review process for a development application, it also shall also be submitted at the same time to the Lower Colorado River Authority at the same time.

(4) Before making any changes to an approved master plan, an applicant must apply for an amendment to the development permit issued pursuant to Chapter 64 of the Travis County Code with respect to the approved master plan . An application for amendment shall be made and will be processed in accordance with the procedures of this subsection and any additional requirements of this chapter and Chapter 64. The application for amendment shall clearly identify the items being sought to be amended and the reasons therefore. No permit amendment is required for minor field adjustments of temporary erosion and sedimentation controls. A modification to an approved master plan shall be

required if there is a material change in land use or an increase in density or impervious cover. Modifications to an approved master plan shall be processed in accordance with the performance standards in effect on the date of the application for the area or phase covered by such modification.

(e) Pre-Development Planning.

Before submitting an application for a development permit for a Single Family Subdivision Development greater than 20 acres in area or a Commercial Development greater than three acres in area, an applicant shall contact the Executive Manager to arrange a pre-development/concept plan meeting with the Executive Manager or his designee. The meeting will focus on the proposed land plan, slopes, buffers, environmentally valuable features, and water quality management practices for construction activities and post-construction storm water management, and may include a site investigation. The objective of the meeting is to assess the desired development configuration and to offer constructive guidance regarding appropriate water quality management strategies for the site. Additional guidance on the meeting and procedures are found in the LCRA Technical Manual. After the meeting, the County will provide a letter to the applicant confirming that the meeting has been held.

(f) Buffer Zones.

(1) Buffer Zones for Environmentally Valuable Features. A development project subject to this section must comply with Section 82.209(c)(1).

(2) The buffer zones for bluffs and rimrocks shall not apply adjacent to the Pedernales River if:

(A) all lots fronting the Pedernales River have a minimum frontage of 200 feet and a minimum size of 1 acre and best management practices are employed to achieve a level of water quality and environmental protection equivalent to the 50 foot buffer zone; or

(B) the Executive Manager grants an exception allowing a buffer zone of no less than 25 feet based on a demonstration that a level of water quality and environmental protection equivalent to the 50 foot buffer zone will be achieved through enhancement of natural vegetative cover within the buffer, low impact site design, or other measures.

(3) Buffer Zones for Waterways. Buffer zones for waterways protect aquatic resources from the short and long term impacts of development activities. Buffer zones shall remain free of construction, development, or other alterations except for utility and roadway crossings. No stormwater treatment facilities, golf courses, on-site wastewater systems or wastewater irrigation shall be located in the buffer

~~zone. Stormwater discharge from the development shall be dispersed into a sheet flow pattern before reaching the buffer zone. Except as described in subparagraph (C), a development application shall comply with either option 1 or option 2, as described in subparagraphs (A) and (B).~~

~~(A) Option 1: Buffer Zones.~~

~~(i) Creeks or swales draining less than 40 acres but more than five acres, excluding roadside swales, shall have a minimum buffer width of 25 feet from the centerline of the creek or swale.~~

~~(ii) Creeks or swales draining less than 128 acres but more than 40 acres shall have a minimum buffer width of 75 feet from the centerline of the creek or swale.~~

~~(iii) Creeks draining less than 320 acres but more than 128 acres shall have a minimum buffer width of 100 feet from the centerline of the creek or swale.~~

~~(iv) Creeks draining less than 640 acres but more than 320 acres shall have a minimum buffer width of 200 feet from the centerline of the creek or swale.~~

~~(v) Creeks draining 640 acres or greater shall have a minimum buffer width of 300 feet from the centerline of the creek or swale.~~

~~(B) Option 2: Floodplain Buffer Zone.~~

~~(i) For creeks or rivers draining less than 40 square miles but more than five acres, excluding roadside swales, the buffer zone shall extend a minimum of 25 feet from the 100-year floodplain boundary paralleling each side of the creek or swale. The 100-year floodplain shall be based on the fully developed conditions as approved by LCRA.~~

~~(ii) For creeks or rivers draining more than 40 square miles, the buffer zone shall be considered equal to the 100-year floodplain as designated by Federal Emergency Management Agency or by an engineered floodplain study approved by LCRA.~~

~~(C) Exceptions to the Buffer Zone to Waterways.~~

~~(i) Limited utility and roadway crossing may be approved by the Executive Manager. The number of crossings through buffer zones shall be minimized according to the guidance located in the LCRA Technical Manual.~~

(ii) Along Lake Travis, necessary access and appurtenances to a boat dock, pier, wharf, or marina, may be approved by the Executive Manager. However, this exception is not allowable along the Lake Travis shoreline in the buffer zone of a swale, creek, or river.

(iii) A low impact park development may be approved by the Executive Manager. A low impact park should be limited to trails, picnic facilities, and similar construction that does not significantly alter the existing vegetation or drainage patterns.

(g) Cut and Fill. A development project subject to this section must comply with Section 82.209(d).

(h) Water Quality Measures for Construction Activities.

(1) A development project subject to this section must comply with Section 82.209(b)(1). If the owner's or Construction Site Operator's SWP3 and Notice of Intent comply with the applicable TCEQ general permit requirements and the SWP3 is prepared in accordance with the LCRA Technical Manual, no additional best management practices shall be required, except as provided in Paragraph (2).

(2) A development project subject to this section must also comply with Section 82.209(b)(3) and (4), when applicable due to the site conditions at the location of the proposed project.

(3) For each SWP3 and Notice of Intent prepared by the owner or Construction Site Operator, a copy shall be provided to the Executive Manager in either paper or portable document format (pdf). These shall be provided in draft form no later than two (2) business days prior to the pre-development/concept plan meeting identified in subsection (e) and provided in final form prior to final approval of the permit. The owner and Construction Site Operator shall be under the continuing obligation to promptly provide a copy of any Notice of Intent, Construction Site Notice, SWP3 revisions, or SWP3 construction inspection reports upon the request of Travis County.

(i) Post-Construction Water Quality Controls.

(1) Water Quality Volume. For the protection of water quality and drainage ways from channel erosion and stormwater runoff pollution, each development project subject to these performance standards shall provide water quality volume in approved BMPs found in the LCRA Technical Manual. The minimum required water

~~quality volume is based on the one-year, three-hour storm runoff volume as defined in the LCRA Technical Manual. In addition, development projects can use Low Impact Development methodologies as identified in the LCRA Technical Manual to reduce or avoid stormwater storage volume.~~

~~(2) Coverage of a development project or site under a Travis County development permit does not exempt the owner from the requirement to obtain a LCRA BMP Maintenance Permit, in accordance with Section 4, Subchapter A, Paragraph (d) of the LCRA HLWO effective March 1, 2007.~~

~~(3) Maintenance. A development project subject to this section must comply with Section 82.209(h).~~

~~(4) Alternate Standards. A Single Family Subdivision Development project subject to this section that meets the criteria in (A) or a Commercial Development project subject to this section that meets the criteria in (B) need not comply with paragraphs (1) – (2), except as specified in paragraph (5).~~

~~(A) Single Family Subdivision Development.~~

~~(i) The gross impervious cover is 15 percent or less and the Cluster Development sections have 20 percent or less gross impervious cover.~~

~~(ii) A street and drainage network is designed to include the use of open roadway sections, ribbon curb and maintenance of sheet flow.~~

~~(iii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods is used to gain compliance as defined in the LCRA Technical Manual.~~

~~(B) Commercial Development.~~

~~(i) Projects less than three acres in area can achieve compliance with this section through the use of vegetated filter strips and flow spreading methodologies as identified in the LCRA Technical Manual.~~

~~(ii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods can be used to gain compliance as defined in the LCRA Technical Manual. For a Single-Family Subdivision Development, the alternate standards of Section 5, Subchapter A, Paragraph (b)(2)(i) of the LCRA HLWO effective March 1, 2007, are adopted by reference.~~

~~(2) The Executive Manager may require that the water quality volume specified in paragraph (1) of this subsection be provided for a portion or portions of a development utilizing the alternate standards of paragraph (4), in consideration of factors including, but not limited to, minimum lot size of the subdivision, location and proximity of impervious cover sections of the development to the 691 foot mean sea level contour line, extent to which the development site is able to preserve or achieve sheet flow, and the intensity of slopes to be developed at a site.~~

~~(j) Technical Criteria. Technical criteria for best management practices and water quality controls are those in the LCRA HLWO Water Quality Management Technical Manual, effective July 1, 2007, and subsequent amendments.~~

~~(k) Construction Plan, Engineering, Fiscal Security, and Inspections.~~

~~(1) Water quality controls are subject to the same requirements as drainage structures under this chapter regarding construction plans, engineering standards, and inspections.~~

~~(2) Approval of a permit application for commercial and single-family subdivision development is contingent upon the execution of an irrevocable letter of credit acceptable to Travis County in the amount specified in the permit which provides for the construction of temporary erosion and sedimentation controls and site stabilization, in accordance with the permit and any other provision of this chapter. The amount of the irrevocable letter of credit shall not be less than 100 percent of the cost as estimated by the Texas-registered professional engineer who seals the permit application. The irrevocable letter of credit shall be released after the final inspection/concurrence letter from the engineer has been received and after approval of a BMP Maintenance Permit by LCRA.~~

82.301. General.

(a) No Change.

(b) General Engineering Design Process. A final Development Permit application may be submitted to TNR during normal office hours. The application must be accompanied by: (1) one set of the consulting engineer's construction drawings for streets, site development, drainage, storm water pollution prevention, permanent water quality control, water supply, wastewater, and roadway signing and striping plan; (2) one copy of the geotechnical report establishing pavement design standards based on City of Austin or AASHTO pavement thickness design for a full 20-year life; (3) temporary and permanent erosion and sedimentation control methods for all areas disturbed by the construction; and (4) an engineer's construction cost estimate signed and sealed by the same engineer who prepared the plans. In addition, an engineer's summary letter shall be submitted outlining the nature of the project and any requests for the use of Other Standards from the design standards with justification for such applications. A traffic impact analysis will be required for developments that generate traffic volumes in excess of 1,000 vehicles per day. A traffic impact analysis may be required for developments which generate less than 1,000 vpd depending on the type of access proposed, single versus multiple, or if the County believes that existing boundary streets which are affected by the subdivision access will require improvements to maintain an acceptable level of service at the intersections of the subdivision access roads.

(c) Engineer's Construction Plan Requirements. In addition to the construction plan requirements specified in this subsection, each application must include plan sheets prepared by a Texas-registered professional engineer that comply with the requirements of Section 82.935.

(1) through (13) No Change.

(d) No Change.

82.302. Street and Drainage Design.

(a) through (c) No Change.

(d) Exceptions or Additions to Design Guidelines. Exceptions or Additions to Approved Roadway Design Guidelines for inside and outside of the City of Austin ETJ.

(1) Street Grades. Shoulder section roadways may have minimum ~~certerline~~ centerline profile grades of 0.0%, if the bar ditches are provided with minimum flow line profile grades of 0.5% and the roadway has adequate cross-slope to drain storm water away from the pavement. Vertical curves less than one hundred feet long should be avoided. Alternative street grades are approvable using low hydrologic impact roadway projects, in accordance with section 82.971.

(2) through (10) No Change.

(e) No Change.

(f) Design for Erosion Control. Design standards for erosion and sediment control, sustainable roadways, native vegetation, and tree preservation for roadways and Rights-of-Way shall conform to Subchapter K of this chapter.

~~(1) Inside the ETJ of incorporated municipalities and within districts with special stormwater quality control requirements, development shall conform to the applicable standards of such municipalities or districts or the County's Standards, whichever are more stringent.~~

~~(2) In any case, minimum requirements for temporary and permanent erosion control design for right-of-way and drainage easement areas are as follows:~~

~~(A) The temporary control plan during construction shall be sufficient to prevent sedimentation of drainageways, drainage structures, and flood plain areas that could result in reduced flow capacity, excessive streambank erosion, erosion around structures, or damage of adjoining property.~~

~~(B) The permanent erosion control plan design shall be sufficient to:~~

~~(i) Permanently stabilize all disturbed areas with permanent vegetation, including slopes and embankments.~~

~~(ii) Prevent erosion from exit velocities at outlets of culverts, bridges, storm sewers, and channels through dissipaters, rip-rap, level spreaders, linings, gabions, etc.~~

~~(iii) Prevent gullying and scouring of roadside ditches and open channels from excessive tractive force (shear stress), through vegetation, linings, retention blankets, retards, drop structures, etc., both during and after the vegetation re-establishment period.~~

~~(iv) Protect the integrity of all structural improvements and prevent excessive continuing sedimentation from unstable right-of-way areas into drainage structures, channels, and bar ditches.~~

~~(g) National Pollutant Discharge Elimination System (NPDES) Compliance:~~

~~Stormwater discharges from all development projects must conform to the NPDES requirement of the Clean Water Act, which is administered through the U.S. Environmental Protection Agency (EPA). Based on construction scope and total acreage of disturbed soil area, requirements can include: compliance with NPDES General Permits for Industrial Activity, preparation and execution of a Storm Water Pollution Prevention Plan, construction and completion notifications, etc.~~

(g) Driveways.

(1) through (4) No Change.

(5) Driveways may be constructed with ~~portland~~ Portland cement concrete or hot mix asphalt concrete and they should be constructed for their full length and width between the edge of roadway and the right-of-way line. Dip-style driveways, as shown in Exhibits 82.302 B and C, as revised on [Insert effective date of rule], should be used when roadway bar ditches are 18" or less deep measured vertically from the edge of roadway to the invert of the bar ditch. Driveway culverts should be used when bar ditches are greater than 18" deep.

(6) Pipe culverts must be constructed according to details shown in Exhibits 82.302 (D) and (E), as revised on [Insert effective date of rule]. Driveway pipe culverts should be sized to convey the storm event which the roadway bar ditch conveys.

(7) A proposal for a driveway shall comply with the requirements of Section 82.931(g) of this chapter and shall provide appropriate construction controls that will reduce or eliminate erosion and sedimentation impacts of the project.

82.401 Construction Fiscal Security

(a) Requirement of Security

(1) Except as provided by subsection (g), approval of a construction plan for a commercial development or development of a subdivision is contingent upon the filing of ~~Requirement of Security. In order to assure that a Subdivision's streets and drainage structures are constructed in a timely manner and in accordance with the County's Standards, the Owner of the Subdivision shall file~~ construction security (the "Security"), payable to the County Judge, in the amount equal to, but not exceeding 100% of the cost of such construction, as approved by the County. Within the ETJ of the City of Austin, fiscal security as required by Travis County and the City of Austin by the Single Office of Review, in aggregate, shall be posted with the City of Austin.

(2) The requirement of security is necessary to ensure that:

(A) Streets and drainage structures for the subdivision are constructed in a timely manner and in accordance with the County's Standards; and

(B) Temporary erosion and sediment controls and permanent site stabilization for a commercial development or the development of a subdivision in accordance with the approved plan, permit, and standards required by Subchapters I and K.

(3) Construction Secured. The following plat note will be inserted on all plats to be approved by the County:

The Owner(s) of the Subdivision shall construct the Subdivision's street and drainage improvements (the "Improvements") to County Standards in order for the County to accept the public Improvements for maintenance or to release fiscal security posted to secure private Improvements. To secure this obligation, the Owner(s) must post fiscal security with the County in the amount of the estimated cost of the Improvements. The Owner(s)' obligation to construct the Improvements to County Standards and to post the fiscal security to secure such construction is a continuing obligation binding on the Owner(s) and their successors and assigns until the public Improvements have been accepted for maintenance by the County or the private Improvements have been constructed and are performing to County Standards.

(43) Computing Security Amount.

(A) An estimate of the costs of the road, drainage, and sidewalk construction shall be signed and sealed by a Texas Registered Professional Engineer and delivered to TNR for its approval. The estimate will be based on construction plans, which are acceptable to TNR, and current costs for such work, which have been developed by the County from City, County, and State bid results and from information provided by local suppliers. Preliminary construction plans may be submitted to TNR, if they are sufficiently detailed to establish a reliable basis for the preparation of the construction cost estimate. Quantities will be as shown on the Subdivision's construction plans or developed from the plans, if required. Estimates will be on forms developed by the County. Costs of large or unusual structures, such as bridges, will be based on current costs for similar structures in the area. However, in no case shall the amount of Security be less than the amount it would cost the County to complete the work if it becomes necessary.

(B) The amount of the security shall not be less than 100 percent of the cost estimated by the Texas-registered professional engineer who seals the approved plan. The estimate provided must determine the cost for Travis County to complete all temporary erosion and sediment controls, and permanent stabilization work at the site.

(54) Form of Security. The forms of acceptable Security, including a Bond, Letter of Credit, and Cash Security Agreement are included in the Appendix. The Commissioners Court must approve substantive modifications to the form of security. Any form of Security selected will include an escalation clause that may require an increase in the amount of Security over time. Fiscal security for the construction of sidewalks shall be posted as provided in Section 82.202(g)(3). If

~~posed~~ posted separately from fiscal security ~~of~~for other subdivision infrastructure, sidewalk fiscal security shall be in a form ~~which~~that tracks the forms of security set forth in the Appendix ~~with the exception~~ except that the ~~terms~~term "Sidewalks" will be substituted for the term "Improvements" in the forms and, for sidewalks for which the homebuilder or other person undertaking site development is responsible, the reference to acceptance by the Commissioners Court at the end of the one-year construction performance period ~~is~~will be deleted from the forms.

(~~6~~5) Substitution of Security. In the case of impending call down of the Security, the~~The~~ County Judge may accept an offer of substitute security in the then current amount of Security under an approved form without the necessity of Commissioners Court action. In cases where the Security is not about to expire, the County Executive may accept an offer of substitute security. The amount of Security shall be increased to account for any estimated increase in cost due to a change in the construction cost index for the items considered in the original computation of Security.

(~~6~~7) When Security Required. ~~Security must be filed with the County prior to~~

(A) Security must be filed with the County prior to

(i) approval of a subdivision plat for recording; or

(ii) the commencement of the construction and site disturbance of any kind~~of the Improvements~~, if no Security is in place at that time.

(B) For construction projects required to provide fiscal security for erosion and sediment controls under this chapter, it shall be provided prior to the final approval of the development permit.

(C) If the Security for a recorded Subdivision expires before construction of the Improvements has been completed, it shall be reposted by the party responsible for the construction of such Improvements before construction begins or continues.

(~~8~~7) Period of Security. The Security instruments shall have a principal period of three years or more. Bonds with no expiration date are acceptable. Letters of Credit may include the following statement:

It is a condition of this letter of credit that it shall be automatically extended without amendment, for additional one-year periods from the present or any future expiration date, unless the bank notifies Travis County in writing by registered mail or overnight courier, at least 60 days prior to the then

current expiration date, that the bank elect not to extend this letter of credit for an additional one-year period.

(98) Construction Performance Period for Public Improvements. The Owner is responsible for the construction of the public Improvements during the Construction Performance Period, which begins upon the acceptance of the construction of the public Improvements by the County and ends a minimum of one year later, when, if the Improvements are performing to County Standards, the County releases the ~~Construction Performance Period Security~~construction performance period security. If the public Improvements are not then performing to County Standards, the County will notify the owner in writing of the repairs which must be performed in order to bring the Improvements back to acceptable County Standards.

(10) Construction Performance Period for Temporary Erosion and Sediment Controls and Permanent Stabilization.

(A) The security for temporary erosion and sediment controls and permanent stabilization will be released after the final inspection/concurrence letter from the applicant's engineer has been received, as specified in Section 82.953 and after approval of a BMP Maintenance Permit in accordance with Section 82.917, unless the County Executive has waived the requirement for the BMP Maintenance Permit.

(B) The security for temporary erosion and sediment controls and permanent stabilization for a commercial development or residential subdivision development in the Highland Lakes Watershed Ordinance area will, be released after the final inspection/concurrence letter from the engineer has been received by the County Executive and after approval of a BMP Maintenance Permit by Travis County or LCRA.

(11) The requirements of this section apply to a commercial development of a mine or quarry, to ensure construction of temporary erosion and sediment controls, permanent site stabilization, including complete implementation of a mine or quarry reclamation plan as specified in Section 82.945. Additional security requirements for a mine or quarry are specified in Section 82.945.

(b) Collection of Security.

(1) Condition and Period of Construction Security. The Construction Security will be conditioned that the Owner ~~of the Subdivision~~ shall promptly begin construction of the Improvements, including construction of temporary erosion and sediment controls, after approval of the plat and shall diligently prosecute and complete such construction in accordance with the County Standards and specifications. The Construction Security will remain in full force and in effect until all of the ~~Subdivision~~ Improvements and permanent site stabilization have

been completed to the satisfaction of the County and public Improvements have been accepted and are performing to County Standards at the end of the Construction Performance Period.

(2) Collection on Security. In the event any or all of the Improvements, including temporary erosion and sediment controls and permanent site stabilization fail to meet the County Standards and the Owner fails or refuses to correct the defects or damage called to his attention in writing by the County, the County may collect the Security to complete the Improvements. The County Judge is authorized to execute notices of intent to collect on posted Security without the necessity of Commissioners Court action, but the Court must authorize the collection of the Security.

(3) Conditions to Draw on Security. The County may draw upon any Security posted ~~under~~ in accordance with this ~~Agreement~~Chapter upon the occurrence of one or more of the following events:

(A) The failure of the Owner or Operator~~Subdivider~~ to construct or complete the Improvements to the applicable County Standards;

(B) The Owner or Operator's~~Subdivider's~~ failure to renew or replace the Security at least forty-five (45) days prior to its expiration;

(C) The acquisition of the Property or a portion of the Property by the issuer of the Security or other creditor through foreclosure or an assignment or conveyance in lieu of foreclosure;

(D) The arrangement by the Commissioners Court for the completion of one or more of the Improvements, including completion of temporary erosion and sediment controls, or permanent site stabilization; or

(E) The determination by the Commissioners Court that the completion of one or more of the public Improvements, including completion of temporary erosion and sediment controls, or permanent site stabilization is in the public Interest.

(4) Collection Is Not Acceptance. The collection on Security and the prosecution of construction to complete the Improvements, including to complete temporary erosion and sediment controls, or permanent site stabilization, to the extent possible with the resulting funds is not acceptance of the Improvements for maintenance. The County is not a Subdivision developer and, if it undertakes the performance of such construction through a third party contractor, the County is acting as a third party trustee on behalf of the public.

(5) Repeat Recovery. The recovery on Security will not be limited or exhausted by one or more recoveries less than the total amount of Security.

(c) Reductions of Security

(1) Partial Reduction of Construction Security for Public Improvements. Where estimated costs for construction exceed $50,000, partial reductions of construction Security may be allowed, but cannot exceed ninety percent (90%) of the Security posted for public Improvements or 100% of the Security posted for private Improvements. Partial reductions will be signed by the County Executive ~~Manager~~, when provided with:

(A) through (C) No Change.

(2) A partial reduction of construction security for temporary erosion and sediment controls or permanent site stabilization is not allowable, unless a section or phase of a subdivision that has been completed in its entirety, as specified in paragraph (4) of this subsection.

(3) Full Release. The County Executive ~~Manager~~ will notify the Commissioners Court of the satisfactory construction of the public and private Improvements. The Commissioners Court may then authorize accepting public Improvements for maintenance. Upon acceptance of the public Improvements and the satisfactory completion of the Construction Performance Period, the County Executive ~~Manager~~ will fully release the Security for public Improvements, except for sidewalks not yet constructed. Upon approval of the private Improvements, the County Executive ~~Manager~~ will fully release the Security for the private Improvements.

(4~~3~~) Partial Acceptance. Sections or Phases of subdivisions must be completed in their entirety, excluding sidewalks. No allowances will be made for accepting partially completed sections or phases without the approval of a variance from the Commissioners' Court.

(5~~4~~) Sidewalk Fiscal. Fiscal for sidewalks shall be released as the sidewalks are constructed and a favorable inspection by a Registered Accessibility Specialist is provided to TNR or substitute fiscal is provided on one or more lots by the then owner of the lot.

(6~~5~~) Sidewalk Fiscal. Fiscal for sidewalks for which the homebuilder or other person undertaking site development is responsible shall be released as the sidewalks are determined to be constructed in compliance with all requirements of this chapter.

(d) If the plat is to be approved and filed, the Owner must post Security in the amount of ten percent (10%) of the cost of the completed Improvements and 100% of the cost of the incomplete Improvements to secure the performance of the construction

of the Improvements for a minimum of one year from the date of the approval of the plat and acceptance of the dedication by the County.

(e) Alternative Fiscal. Notwithstanding Sections (a)-(ed) above, the Owner of the land to be subdivided may request the Commissioners Court in writing in the form included in the Appendix for its approval to have the County hold a plat in abeyance until all of the Improvements have been completed to the satisfaction of the County. The Owner shall file Security with the submitted Final Plat to secure restoration of disturbed areas should construction not be completed. The amount of Security to be posted for restoration for developments located within a municipality's ETJ shall be based upon the requirements of the applicable municipality or the County's Standards, whichever are more stringent. However, in no case shall the amount posted be less than the amount required for the County to perform or to contract for the performance of the work, if necessary. The Owner may also be required to post Security for boundary street Improvements, if the Improvements are not to be completed during the construction of the subdivision streets and drainage system. Upon satisfactory completion of the Improvements, the submitted plat shall be forwarded to the Commissioners Court for approval.

(f) If an operator succeeds another at a site, the County Executive may release the first operator after the successor operator files an application for the change, obtains a permit, posts the required security, and assumes, in writing, all outstanding stabilization or reclamation liability and requirements at the site transferred to the successor operator. All areas disturbed by the first operator that have not been transferred to the successor operator shall remain the liability of the first operator.

(g) Multiple Jurisdictions. If more than one regulatory authority has jurisdiction over a development, an owner is not required to comply with this section if the owner provides sufficient evidence and information to the County Executive that the necessary fiscal security has been posted with another regulatory authority with jurisdiction.

82.402. Road Assessments.

Chapter 253 of the Texas Transportation Code authorizes the County to improve a road in a subdivision or an access road to a subdivision, and then assess all or part of the costs of the improvement pro rata against the record owners of the subdivision. There are the following prerequisites for such road assessments:

(1) The Commissioners Court must determine that the improvement is necessary for the public health, safety, or welfare of the residents of the County, including a determination that an unacceptable condition of adverse impact to surface water quality exists.

(2) through (6) No Change.

(7) If the proposition fails, the commissioners court may not order the improvement and assessment. The commissioners court may not again propose the improvement and assessment before the fourth anniversary of the date the county clerk declares the results of the vote to the commissioners court.

82.601. Inspection: General Obligations and Responsibilities.

(a) through (b) No Change.

(c) Performance Period. If during the one-year Performance Period, beginning on the date the public Improvements are accepted by the County and ending one (1) year thereafter, the public Improvements including permanent site stabilization are damaged, exhibit failures, re-vegetation is not fully complete, or have required excessive maintenance due to damage or defects in materials or workmanship, including utility backfills or design inadequacies or, if, with respect to permanent site stabilization, re-vegetation is not fully complete, the Owner shall take corrective actions, which are acceptable to the County. Prior to release of the Performance Bond, the public Improvements and site stabilization shall be in a condition substantially equal to that at the beginning of the Performance Period.

(d) through (h) No Change.

(i) Corrective Action for~~General~~ Environmental Protection.

(1) Temporary erosion and sediment controls~~control~~ shall be constructed and maintained and permanent site stabilization shall be completed in an acceptable manner in accordance with the approved construction plan and SWP3, as required by Sections 82.933 – 82.940 of this chapter~~as outlined in the City of Austin's Environmental Criteria Manual~~.

(2) If the erosion and sediment controls or permanent site stabilization is~~are~~ found to be inadequate, the owner or authorized representative of the owner ~~contractor~~ shall be notified to take corrective measures. If the contractor or primary operator fails to correct the deficiencies, the County may require the contractor to stop construction until the deficiencies are corrected in accordance with the approved plans.

82.602. Inspection: Protection of Persons and Property.

(a) and (b) No Change.

(c) Protection of Adjoining Property. The Owner shall be responsible for and shall require ~~his/her contractors~~ each contractor or primary operator to take proper means to protect the adjacent or adjoining property, ~~or~~ any private properties, and residents on those properties from any~~. The scope of this requirement includes the prevention of~~ in

~~any way encountered, which might be injured~~ injury, damage, or serious effects related in any reasonable way to~~seriously affected by~~ any process of construction to be undertaken by the owner or authorized representative of the owner. ~~in the work from any damage or injury by reason of said process of construction and the~~ The Owner shall be liable for any and all claims for such damage on account of the failure to fully protect all adjoining, adjacent, and private property and all residents on those properties.

(d) No Change.

(e) Location and Protection of Utilities.

(1) The Owner and his/her contractors are solely responsible for the location and protection of any and all public utility lines and utility customer service lines in the work area. The contractor shall exercise due care to locate and to mark, uncover, or otherwise protect all utility lines in the work area. Upon request, the utility owners will provide such information they have as to the location and grade of water, wastewater, gas, storm sewer, and telephone and electric lines and other utilities in the work area; but such information shall not relieve the Owner or his/her contractor's obligation thereunder, which shall be primary and nondelegatable. Any utility lines damaged by the contractor's operations shall be immediately repaired by the contractor on approval of the utility or the Owner shall cause such damage to be repaired at his/her expense.

(2) Prior to the release of construction fiscal security as described in Section 82.401, the owner shall provide the County Executive with accurate record drawings, in accordance with the standards described in Section 82.604(h).

(f) No Change.

82.603. Inspection (Responsibility of Owner and County).

(a) through (c) No Change.

(d) No Change.

(1) through (5) No Change.

(6) County Inspectors (TNR);

(e) Inspector Notifications. It is anticipated that through the Preconstruction Conference and the cooperation of the Owner, Contractor, Superintendent, Primary Operator, and Inspector, only a forty-eight (48) hour advance notice of intent to begin the work will be required. However, other circumstances may require additional advance notification. The Inspector shall be given the opportunity to ~~choice of inspecting and testing~~inspect and test before, during, ~~or~~and after the operation of various stages of construction.

(1) When a major item, such as excavating, placing of storm sewer pipe, processing of base, placing of curb and gutter, placing structures, laying asphaltic concrete, placing bedding material over storm water underdrains in a water quality control structure, or constructing drains, is under way, the Inspector will follow up at intervals. If the work is stopped for any reason (e.g., rain, strike, lack of materials, equipment breakdown, etc.) for seven (7) calendar days or more, the Inspector shall be notified twenty-four (24) hours in advance of work startup. Usual construction sequence is shown in Exhibit 82.301 E in the Appendix and is generally as follows:

(A) Placement of storm water erosion and sediment controls.
(B) Excavation.
(CB) Subgrade preparation.
(DC) Installation of underground pipe, conduit, and structures.
(ED) Processing first left of base.
(FE) Placing curb and gutter.
(GF) Processing final left of base.
(HG) Laying asphaltic concrete.

(2) through (6) No Change.

(f) through (m) No Change.

82.604 Inspection: Approval of Construction: and Performance Period Guarantee.

(a) No Change.

(b) Within four (4) working days after the Owner or the Owner's consulting engineer or contractor has given the Inspector written notice that the work has been substantially completed, the Inspector will review the work and a report will be prepared for the Owner with copies for the Owner' s consulting engineer and the contractor. This report will include: (1) any remaining items discovered which do not comply with the Construction Documents; (2) requirements of the County previously required and not completed; and (3) any other items required for the issuance of the Approval of Construction Letter. The Inspector's report shall not excuse the Owner from requiring his/her contractors to perform all the work required by the Construction Documents regardless of the time of discovery.

(c) A construction approval meeting will be convened on the site of the work and at a time agreed to by the InspectorsTNR and the Owner. The Owner will also invite contractors as appropriate and the Owner's consulting engineer. An Approval of Construction Letter will be issued by the County. The Letter will be issued at the onsite meeting if all items listed below in this section are in order. If there are exceptions, an

approval letter will not be issued and a letter of exception will be issued for the~~with reasons of~~ exceptions. An Approval Letter will then be issued when the exceptions are cleared. The Approval of Construction Letter will not be issued until~~contingent upon~~ the following documents ~~being supplied~~ are submitted to the County:

(1) through (5) No Change.

After the Approval of Construction Letter has been issued, the public streets and drainage will be accepted by the Commissioners Court and the construction will be monitored by the County for the one year maintenance period. If damages, failures, or defects appear, or if unsatisfactory stabilization or unsatisfactory re-vegetation occurs, the Owner will be notified to make corrections.

(d) through (f) No Changes.

(g) In addition to the requirements of this section, at the time of substantial completion, the owner or the owner's consulting engineer must also comply with the requirements of Section 82.951(b)(10) relating to final inspection of the site stabilization in accordance with the SWP3.

(h) Standards for Geo-Referencing of Structures.

(1) The owner's consulting engineer shall provide the County Executive with reproducible plans or "record drawings" of the permanent drainage system constructed for a project, as part of the final inspection and completion approval process. These record drawings shall be in general conformance with paragraph (c)(3) of this section, along with the additional requirements of paragraphs (2) – (5) of this subsection to provide information for the Travis County MS4 Map.

(2) The record drawings shall be of the "as-built" condition observed at the final inspection of the project.

(3) The record drawing sheets shall include the plan cover sheet, the drainage layout sheet, the drainage plan and profile sheets, and the detention and permanent water quality control plans and detail sheets, as applicable to the individual project.

(4) The record drawing sheets shall include, as a minimum:

(A) the location of each drainage structure, including: culverts, bridges, inlets, manholes, open channels, outfalls, storm sewer pipe outlets, headwalls, and ponds; and

(B) the location of the storm sewer piping extending underground between the inlet, outlet, and manhole structures.

(5) The record drawings shall consist of one printed copy and one digitally reproducible copy, with digital data in a format approved by the County Executive, for ease of incorporation or conversion into a Geographic Information Systems (GIS) format.

82.901. Permits.

(a) The County requires permits for the construction of all driveways accessing public roads, utility installation and servicing within public rights-of-way, and Basic Development Permit for all construction outside incorporated areas for residential and commercial development and soils disposal sites. The Basic Development Permit shall incorporate the construction and water quality protection Standards ~~outlined in~~ required by this chapter~~document~~ as well as the requirements of ~~*Travis County Regulations for Flood Plain Management*~~ Chapter 64 of the Travis County Code (Regulations for Floodplain Management and Guidelines and Procedures for Development Permits). All incomplete permit applications will expire one year after the submittal date. A 180-day extension may be granted by the Executive Manager upon request before the one-year time limit has passed. Applicants attempting to complete an expired permit application must apply for a new permit. A renewal of a permit may be allowed by the County Executive ~~Manager~~, if it is determined that no significant changes have been made to the construction plans and specifications.

(1) Driveway Permit Submittal Requirements.

(A) No Change.

(B) To scale drawing~~Drawing~~ describing the type, layout, and location of driveway, including documentation either acknowledging use of approved standard details and in accordance with the requirements of 82.931(g) of this chapter for driveways, or alternative details reviewed during the permitting process.

(C) No Change.

(2) Utility Installation Permit.

(A) through (B) No Change.

(C) All work shall be in compliance with the construction and water quality protection Standards ~~outlined in~~ required by this chapter~~document~~ as well as the requirements of Chapter 64 of the Travis County Code (Regulations for Floodplain Management and Guidelines and Procedures for Development Permits), as applicable to the project~~Travis County Regulations for Flood Plain Management~~.

(D) through (I) No Change.

Chapter 64. Regulations for Floodplain Management and Guidelines and Procedures for Development Permits

SUBCHAPTER A.

64.001. Findings and General Authority.

(a) No Change.

(b)

(1) through (2) No Change.

(3) Pursuant to the authority granted to it by the Texas Legislature in Texas Local Government Code, Chapter 573, the Travis County Commissioners Court is authorized to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)).

64.045. Dedication of Easements and Rights-of-Way.

(a) through (d) No Change.

(e) Upon completion of construction of the development in accordance with the permit, the owner shall provide reproducible plans or record drawings to the County Executive that meet the requirements of Section 82.604(h) of the Code, relating to geo-referencing of structures completed.

64.062 Development Permit Application.

(a)

(1) through (20) No Change.

(21) The information required by Section 82.931 of the Code for environmental review, as specified for the permit application type.

(b) through (g) No Change.

64.066. Approval or Denial of Development Permit.

(a) through (j) No Change.

(k) The failure of the application to include any of the applicable information required by Section 82.931 of the Code.

64.071. Revocation of Permits.

(a) and (b) No Change.

(c) Grounds for suspension or revocation of a permit include, but are not limited to:

(1) Refusal~~refusal~~ to make corrections as may be required by the Floodplain Administrator;~~,~~

(2) Refusal to make corrections as may be required for compliance with the requirements of Chapter 82, Subchapters H - K of the Code (relating to Water Quality Protection Standards);

(3) Allowing~~allowing~~ work to be covered so an inspection cannot be made;~~,~~ or

(4) Denial ~~denial~~ of access for inspections to the Floodplain Administrator or other agents of the County Executive~~his agent~~.

64.183. Utilities and Individual Septic Tank Systems.

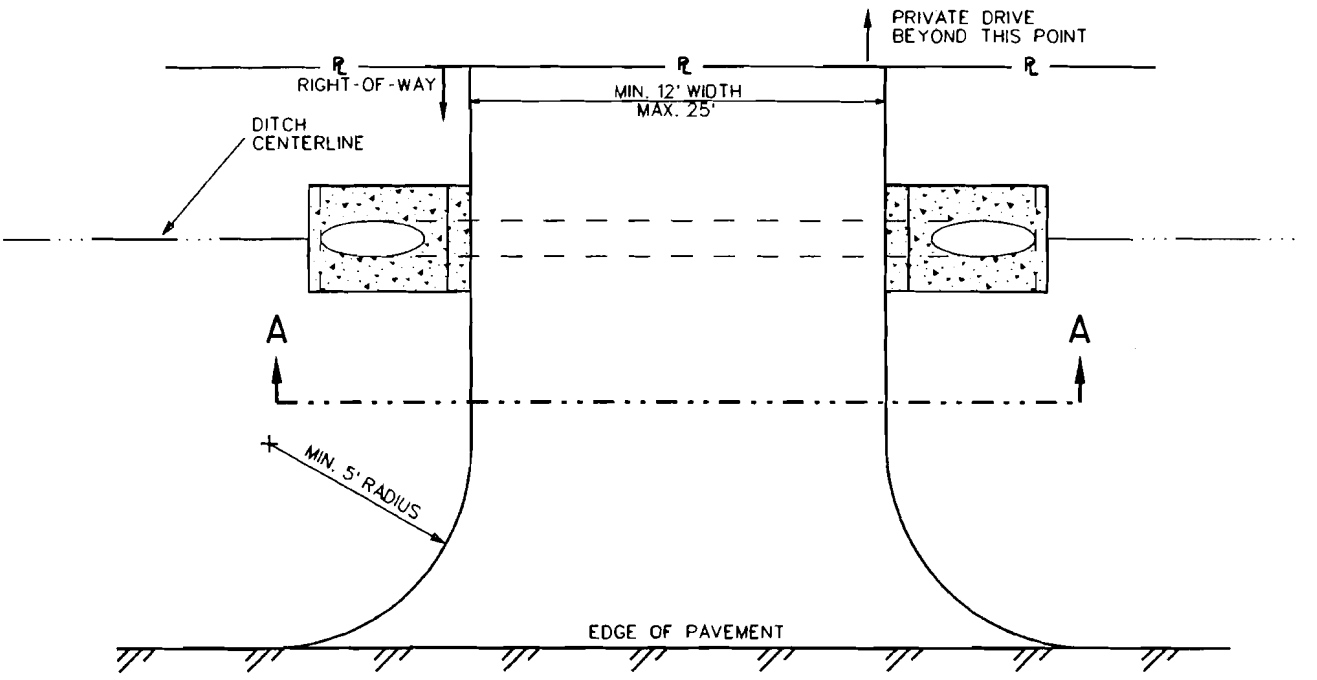
(a) Except as provided in Subsection ~~(b)~~(c), a basic development permit or special flood hazard area development permit must be obtained prior to the installation, repair, or removal of all utilities, including as water and wastewater lines, on-site waste disposal systems, gas lines, telephone and electric lines and related facilities.

(b) In addition to the requirements of this Chapter, an application submitted for the basic development permit shall include all of the applicable information required by Section 82.931 of the Code.

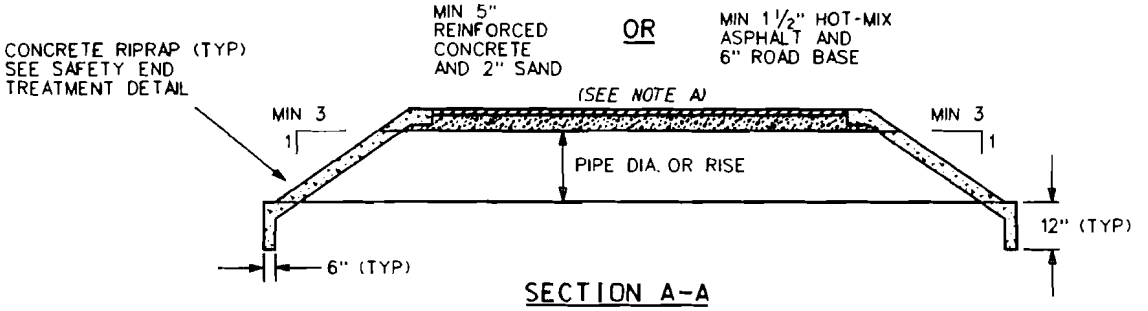
(c) A permit does not have to be obtained prior to performing emergency repairs to a utility, but written notice must be provided to the Floodplain Administrator on the next County business day as to the location of the repair, the nature of the repair, the name of the person conducting the repairs, the name and address of the property owner, and the name and address of the person who requested the repairs. For the purpose of this subsection, an emergency repair is a repair that is necessary to mitigate or prevent an immediate threat to the health and safety of the public.

(d~~c~~) No sewage treatment plant, septic tank system, or other on-site sewage disposal system shall be operated when there are floodwaters over any portion of the on-site sewage disposal system.

EXHIBIT 5

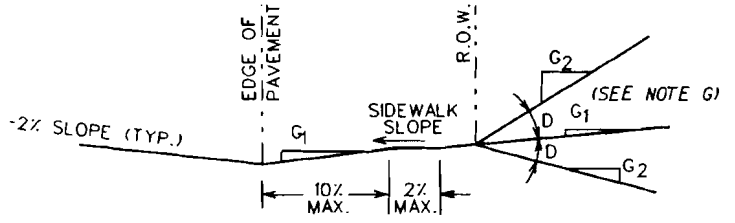


PLAN VIEW



SECTION A-A

DRAWINGS
NOT TO SCALE



ALLOWABLE GRADES

NOTES:

A) MATERIAL DEPTHS SHOWN ABOVE ARE MININUMS. TOTAL COVER OVER PIPE IS RECOMMENDED TO BE 12" OR MORE.

B) PIPE MAY BE CORRUGATED METAL OR CONCRETE ONLY. PIPE MAY BE ROUND OR ARCH SHAPE.

C) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE #3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH

D) INSTALL CULVERT PIPE TO MATCH FLOWLINE OF DITCH.

E) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.

F) SPECIAL CONDITIONS MAY APPLY TO ARCH PIPES LARGER THAN DES 3 AND ROUND PIPES LARGER THAN 30".

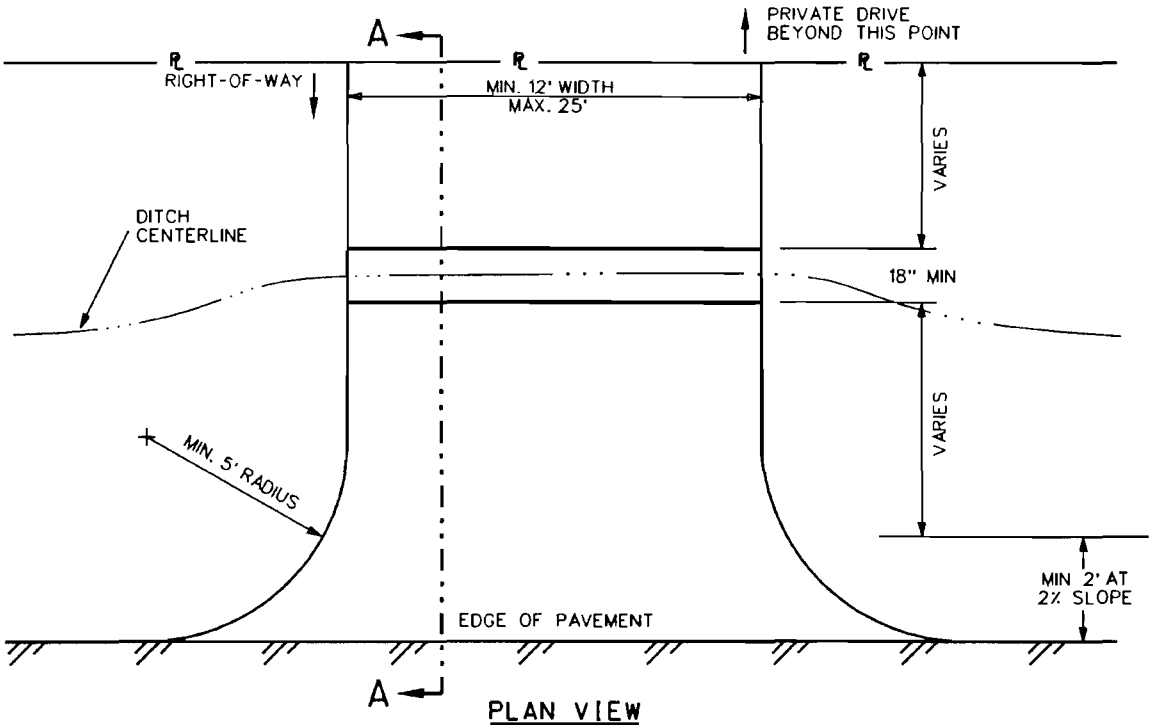
G) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.

FILE: Q:\Project\Environmental\Driveway_Stds\culvert_style_2011.dgn
DATE: 09-Mar-11

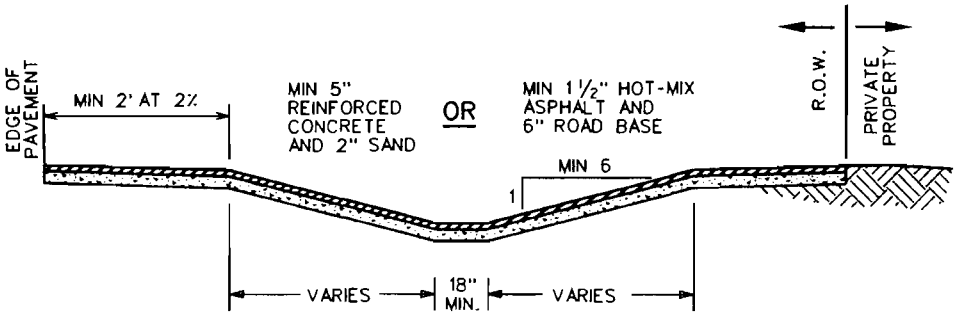
TRAVIS COUNTY, TEXAS

TRANSPORTATION and NATURAL RESOURCES DEPARTMENT

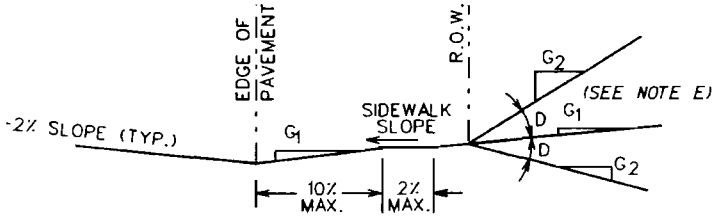
RESIDENTIAL DRIVEWAY WITH CULVERT PIPE



PLAN VIEW



SECTION A-A



ALLOWABLE GRADES

DRAWINGS
NOT TO SCALE

NOTES:

A) DIP CENTERLINE TO BE ALIGNED WITH DITCH CENTERLINE.

B) TOP OF DIP SECTION TO MATCH DITCH FLOWLINE ELEVATION.

C) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE #3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH

D) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.

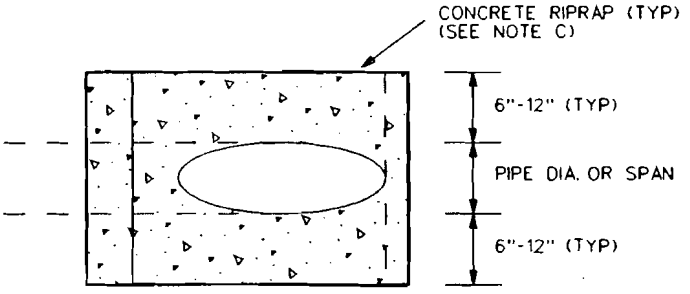
E) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.

FILE: Q:\Project\Environmental\Driveway_Stds\dip_style_2011.dgn
DATE: 09-Mar-11

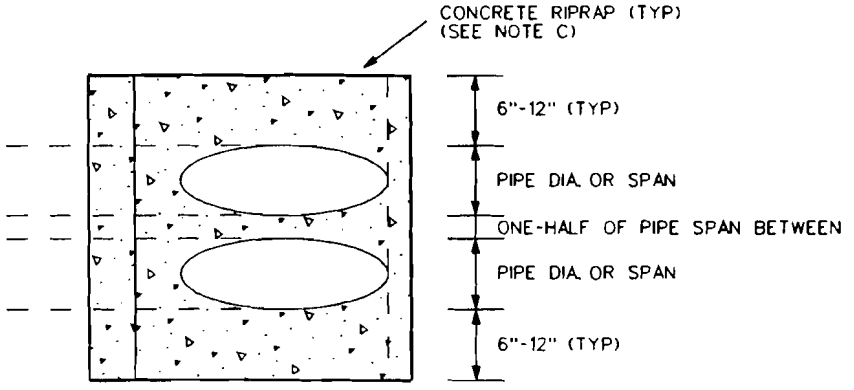
TRAVIS COUNTY, TEXAS

TRANSPORTATION and NATURAL RESOURCES DEPARTMENT

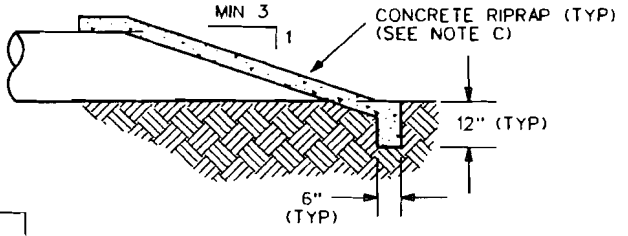
RESIDENTIAL DRIVEWAY DIP-STYLE



PLAN VIEW -- SINGLE PIPE



PLAN VIEW -- MULTIPLE PIPES



SECTION

DRAWINGS
NOT TO SCALE

NOTES:

A) PIPE SIZE AND NUMBER TO BE DESIGNATED BY PERMITTING DEPARTMENT.

B) PIPE MAY BE CORRUGATED METAL OR CONCRETE ONLY. PIPE MAY BE ROUND OR ARCH SHAPE.

C) CONCRETE RIPRAP SHALL BE A NOMINAL 4" THICK REINFORCED WITH MIN 6X6XW1.5XW1.5 WELDED WIRE MESH

D) SPECIAL CONDITIONS MAY APPLY TO ARCH PIPES LARGER THAN DES 3 AND ROUND PIPES LARGER THAN 30".

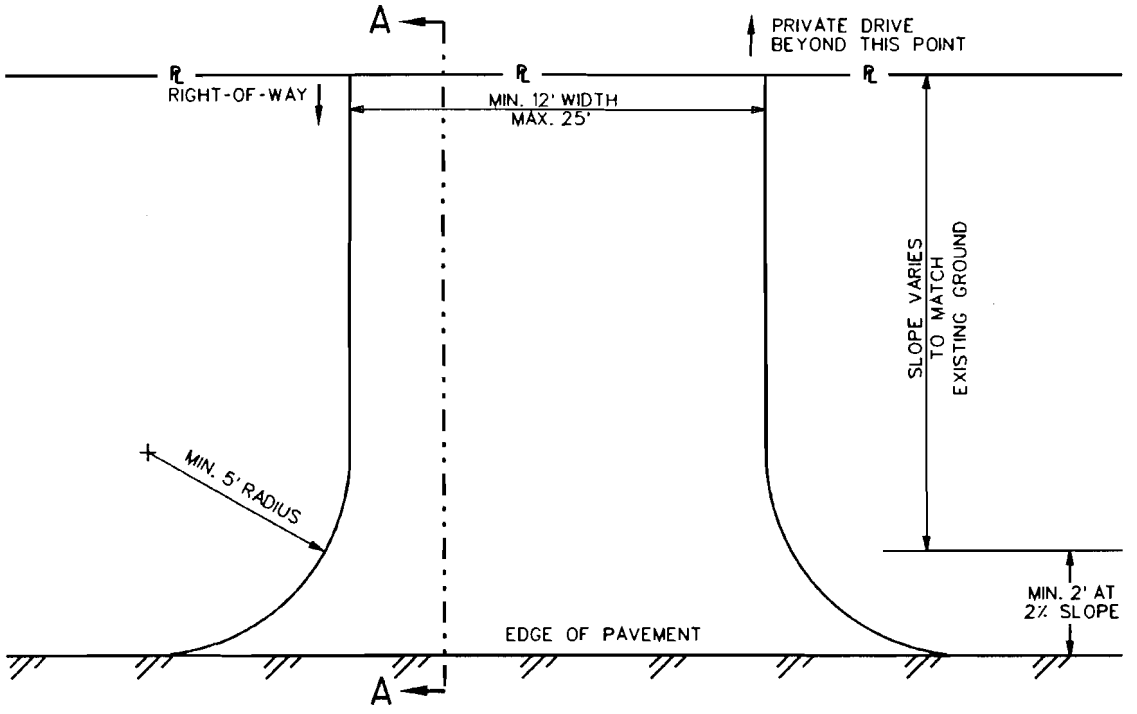
E) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS

FILE: Q:\Project\Environmental\Driveway_Stds\safety_end_2011.dgn
DATE: 09-Mar-11

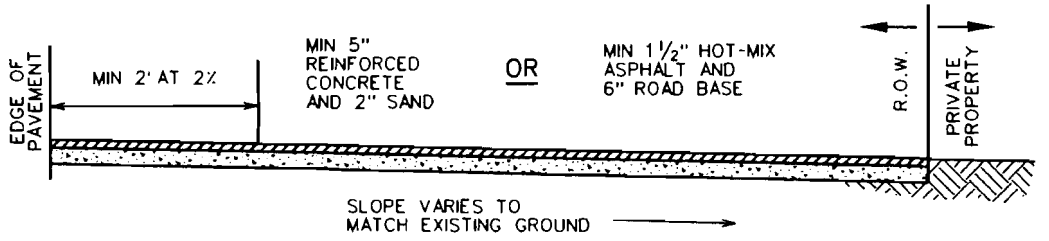
TRAVIS COUNTY, TEXAS

TRANSPORTATION and NATURAL RESOURCES DEPARTMENT

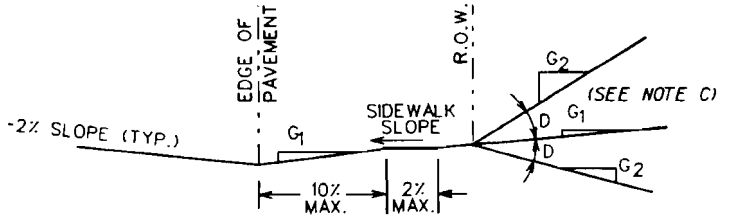
SAFETY END TREATMENT FOR RESIDENTIAL DRIVEWAY CULVERT



PLAN VIEW



SECTION A-A



ALLOWABLE GRADES

DRAWINGS
NOT TO SCALE

FILE: Q:\Project\Environmental\Driveway_Stds\straight_tie_in_2011.dgn
DATE: 09-Mar-11

NOTES:

A) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE #3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH

B) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.

C) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.

TRAVIS COUNTY, TEXAS

TRANSPORTATION and NATURAL RESOURCES DEPARTMENT

RESIDENTIAL DRIVEWAY STRAIGHT TIE-IN

TRANSPORTATION AND NATURAL RESOURCES DEPARTMENT

JOSEPH P. GIESELMAN, EXECUTIVE MANAGER

411 W. 13th St.
Eleventh Floor
P.O. Box 1748
Austin, Texas 78767
(512) 854-9383
FAX (512) 854-4626

April 9, 2010

MEMORANDUM TO: Brunilda Cruz, TNR Financial Services

FROM: Steve Manilla, TNR Public Works Division

Subject: Explanation of Pecan Street Change Order to Repair Curb and Pavement Settlement

The roadway improvements for our Pecan Street CIP project were completed and accepted by TNR in August 2009. The construction contract is in its one year warranty period. In February 2010 TNR was informed by the project's design engineer, Halff Associates, that they observed very noticeable settlement of the outside lane of a 475' section of new roadway. TNR contacted the construction contractor RGM to alert them to a possible warranty issue. RGM examined the settlement at the site and concluded that it was significant enough to barricade the area, which they did. However, RGM refuted that this was a warranty issue and stated that this was a design issue.

A similar incident, albeit at a much smaller scale, occurred while the project was under construction. At that time TNR believed the problem could be attributed to either a construction workmanship issue or a design error or omission. TNR invited Halff to investigate the problem and they concluded that it was not a design issue. Rather than delay the project RGM made repairs at no cost to us but did so in the spirit of cooperation, not as an admission of fault.

TNR believes the current problem is attributable to a combination of construction workmanship and design but it is more likely a design issue. The severe drought last year followed by recent wet weather conditions may also have played a part. We are not sure how much is attributable to each but RGM agreed to make the repair at a reduced rate for this type of work. Attached is a breakdown of their costs. TNR staff believes that if we had to hire another contractor to do the work we would have to pay at least 50% more than what RGM is charging. We recommend approval of the Change Order in the amount of $49,705.13. Although TNR approved Halff's design for the project we are discussing with them our concern that this problem is partially attributable to a design issue. These discussions may lead to an agreement that will allow us to recover our costs and establish a protocol for responding to future problems if they arise.

Attachment

CC: Steve Sun, P.E., CIP Division Manager
Roger Schuck, P.E., Project Manager

RGM CONSTRUCTORS, L.P.

15603 NORTH IH 35
PFLUGERVILLE, TEXAS 78660
512-990-8313.....512-990-3785

PROPOSAL

9-Mar-10

To: TRAVIS COUNTY

Attention: ROGER SHUCK

Scope: **REPAIR ASPHALT OPTION 1**

		Quantity		Unit		Total
1	Remove curb	475	LF	$ 3.00	$	1,425.00
2	Asphalt removal	667	SY	$ 5.00	$	3,335.00
3	Excavation and Haul off 3ft	633	CY	$ 6.00	$	3,798.00
4	Subgrade Prep	667	SY	$ 2.00	$	1,334.00
5	Curb & Gutter w/ 3' Extra footing behind curb	475	LF	$ 10.00	$	4,750.00
6	2' Base 475 x 18 x 2'	633	CY	$ 21.00	$	13,293.00
7	Asphalt Paving 6"	667	SY	$ 30.39	$	20,270.13
8	Cement Stabilize Base	12	TNS	$125.00	$	1,500.00
	TRAVIS COUNTY TOTAL AMOUNT DUE				$	49,705.13