TRI-PARTY AGREEMENT
PROVIDING FOR REGULATION OF SUBDIVISION AND APPROVAL OF BLANCO RIVER RANCH PHASE ONE RESIDENTIAL AREA

This Agreement (the "*Agreement*") is made and entered into by and among the **City of Kyle**, a home rule municipality (the "*City*"), **Hays County**, a political subdivision of the State of Texas (hereinafter "*County*"), and **BLANCO RIVER RANCH PROPERTIES LP,** a Texas limited partnership, or its permitted successors and assigns, as described below ("*Owner*"). City, County and Owner are sometimes referred to collectively as the "*Parties*", and individually, as a "*Party*".

RECITALS

WHEREAS, except for property in the corporate city limits of a city, counties are statutorily responsible for and have authority over platting and development review of certain subdivisions of real property, as well as the planning, construction, and maintenance of roads, stormwater management facilities, and other infrastructure in the unincorporated areas of counties; and

WHEREAS, in the parts of the unincorporated area that are within their extraterritorial jurisdiction ("*ETJ*"), municipalities have authority over platting and development review of subdivisions of real property, as well as infrastructure and other aspects of land development under various statutes; and

WHEREAS, since counties and municipalities have different statutory authorities, fiscal resources, and constituencies, their respective interests in and policies governing infrastructure and development can differ as well; and

WHEREAS, review and approval of subdivision plats is the basic tool that counties and municipalities use to ensure that infrastructure and development in the ETJ, which is an unincorporated area, is not planned or constructed in a manner that is adverse to their respective interests; and

WHEREAS, the City and County have entered into that certain Interlocal Cooperation Agreement for Subdivision Regulation within the Extraterritorial Jurisdiction of the City dated February 12, 2012, pursuant to Chapter 242 of the Texas Local Government Code (the "*1445 Agreement*"); and

WHEREAS, Owner intends to develop or sell for development the 858.7 acre tract of land described on the attached **Exhibit "A"** (the "*Property*") for residential purposes and related amenities and improvements; and

WHEREAS, it is contemplated that portions of the Property currently within the ETJ of the City (the "*ETJ Property*") and portions of the Property currently within the corporate limits of the City (the "*Annexed Property*") will fluctuate throughout the term of this Agreement (e.g. some of the current Annexed Property may be de-annexed by the City and thereafter covered by this Agreement and some of the current ETJ Property may be annexed by the City); and

WHEREAS, Owner plans to develop the Property in accordance with this Agreement and the De-Annexation and Development Agreement (the "*Development Agreement*") between Owner and the City approved March 21, 2017, as the same may be amended from time to time; and

WHEREAS the Parties desire to set forth specific development regulations that will apply to the development of the Property to the extent allowed by law and will, where specified, adjust or amend the manner in which the 1445 Agreement applies to the Property.

NOW, THEREFORE, the Parties agree as follows:

I. Definitions.

1. **"Owner"** means BLANCO RIVER RANCH PROPERTIES LP, and its successors and assigns as described in Article V, Section 8, below.

2. "**POA**" means a property owners association formed by Owner under the terms of restrictive covenant applicable to all or a portion of the Property that is obligated, under the terms of such restrictive covenant, to administer and maintain certain portions of and facilities within the Property.

II. Basic Regulatory Structure.

1. Except as amended or adjusted by this Agreement, subdivision regulation in the Property shall be in accordance with the 1445 Agreement as it exists today, a copy of which is attached hereto as **Exhibit "B"**. If the 1445 Agreement is amended, modified or terminated in the future, subdivision regulation in the Property will continue to be governed by the 1445 Agreement attached hereto as **Exhibit "B"** unless otherwise approved in writing by Owner.

2. Notwithstanding the foregoing, neither this Agreement nor the 1445 Agreement shall apply to any portion of the Annexed Property.

3. If the Development Agreement conflicts with City or County regulations or this Agreement, the Development Agreement shall control. The Parties agree, however, that the Development Agreement shall not control issues related to the structural design and construction of roadways on the Property, which are addressed below and in **Exhibit "D"** attached hereto.

III. Amendments/Adjustments to 1445 Agreement.

1. Notwithstanding any conflicting provisions contained in Article III, Paragraph D of the 1445 Agreement, the right-of-way shown on **Exhibit "C"** attached hereto is the only right-of-way that will be required to be dedicated by Owner for the Property, other than right-of-way for internal streets and roadways, with the understanding that the final location of the right-of-way for FM 150 within the Property will be determined by Texas Department of Transportation.

2. Nothwithstanding anything to the contrary contained in Article III, Paragraph D of the 1445 Agreement, the City's regulations, or the Hays County Development Regulations, the road design standards for all aspects of the roads on the Property, other than structural design, shall be those set forth in the Development Agreement. The standards for structural design of the roadways on the Property will be those set forth in **Exhibit "D"** of this Agreement.

3. Article III, Paragraph M of the 1445 Agreement is hereby deleted in its entirety with respect to the Property and replaced with the following:

> The County shall inspect public roadways and shall inspect stormwater drainage facilities located within the public right-of-way from the top of pipe up and the City shall inspect stormwater drainage facilities located within the public right-of-way from the top of pipe down. Such public roadways and stormwater drainage facilities located within the public right-of-way shall be approved and accepted if the facilities comply with applicable City and County regulations, as amended hereby (including the controlling standards contained in the Development Agreement). During construction or the two-year period for developer maintenance, the County or the City may issue a stop-work order if the standards established by this Agreement are not being met.
>
> The City will have inspection and approval authority over roadways and stormwater drainage facilities located outside of the public right-of-way and for water and wastewater lines and facilities within the Property. Such facilities shall be approved and accepted if the facilities comply with City regulations, as amended by the Development Agreement.

4. Article III, Paragraph N of the 1445 Agreement is hereby deleted in its entirety with respect to the Property and replaced with the following:

> Within the ETJ Property, the County shall be responsible for maintenance of the roads, curbs and bridges and their related appurtenances within public right-of-way upon completion of the facilities and acceptance by County-. The County agrees that it will maintain such roadways in accordance with a pavement index of greater than 70 and otherwise in accordance with the standards on **Exhibit "E"** attached hereto. The County shall not be responsible for the maintenance of stormwater drainage facilities or water and wastewater facilities within the ETJ Property.
>
> The maintenance of any roadways and curbs located outside of the public right-of-way within the Property shall be the responsibility of Owner or a POA. The City shall maintain all water and wastewater lines after acceptance by the City. Maintenance of storm water

facilities within the Property, including those in the ETJ Property, shall be the responsibility of the City pursuant to the Storm Drain and Flood Risk Mitigation Utility Fee (per City Ordinance) or any successor program. For the purposes of this section "storm water facilities" shall mean those facilities immediately associated with drainage on the roadways within the Property but shall not include those facilities required to otherwise accommodate development of the Property, such as detention ponds or drainage areas not associated with roadway drainage.

The City shall be responsible for maintenance of all publicly dedicated and accepted roads and curbs, including their related appurtenances, within the Annexed Property.

Prior to acceptance of new streets or other public improvements within the Property, either the City or County (whichever is responsible for maintaining the improvement in question) shall require Owner to submit a Certificate of Deposit, a Letter of Credit, or a warranty or cash bond payable to the County or the City (as applicable) as required by the applicable maintaining party's regulations, which shall be binding and in effect for two (2) years from the date of acceptance of the improvements. Owner shall be responsible for maintenance of the improvements prior to acceptance by the City or County, as appropriate.

5. The Parties agree to the following additional provisions, which are not included in the 1445 Agreement:

a. The City may perform work on its water or wastewater utilities and drainage facilities within the public right-of-way on the Property. Such work may include road cuts when and where alternative methods of construction and/or repair are not practicable. When the City desires to perform such work in areas of the right-of-way that have not been annexed by the City, the City shall apply for a utility permit from the County, which shall not be unreasonably denied, and the City shall be responsible for repair to the roadway and right-of-way in the same manner as any other utility provider.

b. The County shall not be responsible for maintenance of sidewalks or street lights on the ETJ Property. Sidewalks and street lights may be constructed in the right-of-way within the ETJ Property if Owner or a POA executes a license agreement with the County for the installation and ongoing maintenance of the sidewalks and street lights. All sidewalks shall comply with, and shall be inspected by the City (within the Annexed Property) or County (within the ETJ Property) for compliance with, the Americans with Disabilities Act, and applicable state and local laws. Sidewalks and street lights constructed in the right-of-way may be maintained by Owner or a POA pursuant to a license agreement with the County or, upon annexation

of the right-of-way, pursuant to a license agreement with the City. Any required license agreement entered into by Owner may be assigned to a POA and, upon such an assignment, Owner will be released from all obligations under the license agreement and the County or City, as applicable, will look solely to the POA for the performance of all obligations thereunder. Notwithstanding the foregoing, if, in the course of performing its respective maintenance obligations hereunder, either the City or the County damages a sidewalk, it shall be responsible for the repair of such damage.

c. The County agrees that it will maintain the roadways within the ETJ Property that are the subject of this Agreement to a standard that equals or exceeds a pavement index of seventy (70) until such time that the roadways are annexed by the City and brought into the City's maintenance system.

IV. Geographic Scope.

1. Owner may, in the future, elect to add additional land to the Property that is subject to this Agreement. If Owner owns or acquires additional land contiguous to any boundary of the Property that becomes subject to the Development Agreement, Owner shall provide written notice to the City and County. Such addition shall become effective thirty (30) days after delivery of such notice. The City shall also notify the County immediately of any changes of its full purpose corporate limits, limited purpose corporate limits, or ETJ, whether resulting from annexation, disannexation, legislation, judgment of a district court or other trial-level court, or any other means which affects the County.

V. Miscellaneous.

1. The recitals and findings set forth above are found to be true and correct for all purposes, and incorporated into the body of this Agreement.

2. General Administration. Administering this Agreement and the contact person for County shall be the Hays County Development Services Department Director or his or her representatives. Administering this Agreement and the contact person and representatives for City shall be the City Manager, or his or her designee.

3. Severability. If any clause, sentence, provision, paragraph, or article of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, or ineffective, that holding shall not impair, invalidate, or nullify the remainder of this Agreement, but the effect thereof shall be confined to the clause, sentence, provision, paragraph, or article so held to be invalid, illegal, or ineffective.

4. No Third Party Beneficiaries. Except as provided in Article V, Section 8, below, nothing in this Agreement, express or implied, is intended to confer upon any person, other than the Parties hereto and, with respect to Article III, Section 6.b., a

POA, any benefits, rights, or remedies beyond any such benefits, rights, or remedies that may be created by Chapter 242, Local Government Code.

5. Notice. All notices sent pursuant to this Agreement shall be in writing and must be sent by registered or certified mail, postage prepaid, return receipt requested to:

(a) With copy to:
Mr. Clint Garza (or his successors)
Hays County Development Services Department
P.O. Box 1006
San Marcos, Texas 78667

(b) With copy to:
City Manager
100 W Center St
Kyle, TX 78640

(c) With copy to:
Blanco River Ranch Properties LP
Attn: Gregg Reyes
1901 Hollister Road
Houston, TX 77080

Any Party shall have the right from time to time to change its respective address for purposes of notice, and each shall have the right to specify as its address any other address within the United States of America by a least five (5) days written notice to the other Parties.

6. Entire Agreement. This Agreement, with its Exhibits, and the 1445 Agreement, as amended hereby, constitute the entire agreement between Owner, County and City relating to the review and approval of subdivisions and any other related permits and approvals within the Property. City, County and Owner agree that-, if there is a specific conflict between this Agreement and the 1445 Agreement (attached as Exhibit "B"), this Agreement (as may be amended from time to time) shall prevail. Neither this Agreement nor the 1445 Agreement is intended to or will amend, supersede or diminish the effect of the Development Agreement and it is the intention of the Parties that, whenever possible, the provisions of this Agreement will be read in concert with and not in derogation of the terms of the Development Agreement.

7. Amendment. This Agreement may be amended only by a written agreement signed and executed by an authorized representative of City, County and Owner, or, following any permitted assignment of the Development Agreement, Owner's successors and assigns under the Development Agreement.

8. Assignment; Transferability. Subject to subparagraph (a) and (b) below, Owner may assign its rights and obligations under this Agreement to any successor owner of all or a portion of the Property to whom all or the applicable portion of Owner's rights and obligations under the Development Agreement are being assigned without the consent of the City or County. Owner shall provide the City and County thirty (30) days written notice of any such assignment. Upon such an assignment or partial assignment, Owner shall be fully released from and shall have no further liability with respect to the assigned rights and obligations.

(a) Any sale of a portion of Property shall not be deemed a sale or assignment of Owner's rights hereunder unless the conveyance or transfer instrument effecting such sale or assignment expressly states that it is a sale or transfer of Owner's rights under this Agreement.

(b) Except as provided in subparagraph (a) above, Owner and all future owners of all or any portion of the Property, including, without limitation, any affiliates of Owner to which all or any portion of the Property is conveyed or contributed, shall have the benefits of this Agreement, and the Property may be developed as set forth herein without notice or approval to the City or County; provided, however, that this Agreement may be amended as set forth herein. If Owner's rights and obligations hereunder are partially assigned to two or more owners, then, in the case of nonperformance by one owner, the City or County, as applicable, may pursue all remedies against that nonperforming owner, but will not impede development activities of any performing owner.

9. Agreement Binds Succession and Runs with the Property. This Agreement shall bind and inure to the benefit of the Parties, their successors and assigns. The terms of this Agreement shall constitute covenants running with the Property and shall be binding on all future developers and owners of the Property (exclusive of purchasers of fully developed lots within the Property), future County Commissioners Courts, and future City Councils.

Exhibits:

Exhibit A:	Property Description
Exhibit B:	1445 Agreement
Exhibit C:	Right of Way
Exhibit D:	County Roadway Standards (Structural)
Exhibit E:	County Roadway Maintenance Standards

[Signature Pages to Follow]

CITY OF KYLE:

CITY OF KYLE,
a Texas home rule municipality

By: _____

Printed Name: _____
Title: _____

Date: _____

STATE OF TEXAS §
§
COUNTY OF _____ §

BEFORE ME, the undersigned Notary Public in and for the State of Texas, on this day personally appeared _____, an Authorized Signatory of the City of Kyle, a Texas home rule municipality, on behalf of said city, in the capacity herein stated.

GIVE UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____, 20__.

_____
Notary Public in and for the State of Texas

HAYS COUNTY:

By: _____

Printed Name: _____
Title: County Judge

Date: _____

ATTEST:

_____
Liz Q. Gonzalez
Hays County Clerk

AGREED AS TO FORM:

By: _____

Printed Name: Clint Garza_____
Title: Hays County Director of Development,
And Community Services

Date: _____

STATE OF TEXAS §
§
COUNTY OF HAYS §

BEFORE ME, the undersigned Notary Public in and for the State of Texas, on this day personally appeared Clint Garza, Director of Development, Services Department, and an Authorized Signatory of Hays County, a policital subdivision of the State of Texas, on behalf of said county, in the capacity herein stated.

GIVE UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____, 2017.

_____
Notary Public in and for the State of Texas

AGREED AS TO FORM:

By: _____

Printed Name: Mark Kennedy_____
Title: Hays County General Counsel

Date: _____

STATE OF TEXAS §
§
COUNTY OF HAYS §

BEFORE ME, the undersigned Notary Public in and for the State of Texas, on this day personally appeared Mark Kennedy, General Counsel for Hays County, and an Authorized Signatory of Hays County, a policital subdivision of the State of Texas, on behalf of said county, in the capacity herein stated.

GIVE UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____, 2017.

_____
Notary Public in and for the State of Texas

OWNER:

BLANCO RIVER RANCH PROPERTIES LP,
a Texas limited partnership

By:
Name:
Title:

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on the ___ day of _____, 2017, by _____, _____ of Blanco River Ranch Properties LP, a Texas limited partnership, on behalf of said limited partnership.

Notary Public State of Texas

EXHIBIT "A"

Property Description

EXHIBIT "B"

1445 AGREEMENT

INTERLOCAL COOPERATION AGREEMENT BETWEEN HAYS COUNTY AND THE CITY OF KYLE FOR SUBDIVISION REGULATION WITHIN THE EXTRATERRITORIAL JURISDICTION OF THE CITY OF KYLE

THIS INTERLOCAL COOPERATION AGREEMENT (this "Agreement") is made and entered into by and between Hays County, Texas, a political subdivision of the State of Texas (hereinafter referred to as "COUNTY"), by and through its County Judge, Dr. Bert Cobb, and the City of Kyle, a municipal corporation of the State of Texas (hereinafter referred to as "CITY"), by and through its City Manager, Lanny S. Lambert. The City and the County are hereinafter collectively referred to as "the Parties" or "the Parties to this Agreement."

WHEREAS, the CITY has duly identified its corporate limits and the areas of its extraterritorial jurisdiction (hereinafter referred to as "ETJ" or the "CITY's ETJ") within the COUNTY; and

WHEREAS, the CITY has adopted and is enforcing subdivision regulations pursuant to TEX. LOCAL GOV'T CODE Subchapter A of Chapter 212 and other statutes applicable to municipalities; and

WHEREAS, the COUNTY has adopted and is enforcing subdivision regulations pursuant to TEX. LOCAL GOV'T CODE sections 232.001-232.005 and other statutes applicable to counties; and

WHEREAS, the COUNTY and the CITY, pursuant to TEX. LOCAL GOV'T CODE Section 242.001, both enforced their subdivision regulations in the CITY's ETJ and, in those situations where the CITY's regulation conflicted with the COUNTY's regulation, the more stringent provisions have prevailed; and

WHEREAS, the Texas Legislature revised TEX. LOCAL GOV'T CODE Chapter 242 to limit subdivision regulation within the ETJ to one entity; and

WHEREAS, to the extent that the CITY's execution of this Agreement and related agreements with other counties in other areas of the CITY's ETJ, or the CITY's adoption, administration or enforcement of ordinances, rules, regulations or plans in reasonable furtherance of this Agreement or the related agreements results in requirements or restrictions that are not identical throughout the CITY's entire ETJ, the Parties jointly acknowledge that the actions of the CITY are "reasonably taken to fulfill an obligation mandated by state law" within the meaning of TEX. GOV'T CODE Section 2007.003(b)(4), and are therefore not subject to TEX. GOV'T CODE Chapter 2007; and

WHEREAS, both the COUNTY and the CITY desire to enter into an Interlocal Cooperation Agreement, pursuant to TEX. GOV'T CODE Section 791.011(a), whereby the COUNTY and the CITY shall agree upon the terms of said written agreement.

NOW, THEREFORE, the COUNTY and the CITY mutually agree as follows:

I. TERM OF AGREEMENT AND CERTIFICATION

A. The COUNTY and the CITY mutually agree that the term of this Agreement shall be from the date it is formally and duly executed by both the COUNTY and the CITY until one year from the date approved by the last governing body of the CITY or COUNTY. This Agreement shall automatically renew annually on the anniversary date, unless earlier terminated by mutual agreement of the Parties.

B. Notwithstanding the foregoing, this Agreement may be terminated by either Party by giving thirty (30) days' written notice of intent to terminate this Agreement to the other Party. Any notice of intent to terminate must be

delivered by deposit in the United States mail, certified, return receipt requested, to the other Party at the addresses set out herein. Upon termination of this Agreement, neither Party shall have any obligations to the other Party under this Agreement, except with respect to payment for services already rendered under this Agreement, but not yet paid.

C. The COUNTY and the CITY mutually certify that this Agreement complies with the requirements of Texas Local Government Code, Chapter 242.

II. COUNTY RESPONSIBILITIES

A. The COUNTY assigns and delegates to the CITY the COUNTY's authority to approve subdivision plats within the ETJ of the CITY, pursuant to TEX. LOCAL GOV'T CODE Section 242.001(d), so that the CITY has exclusive jurisdiction to regulate subdivision plats in the CITY's ETJ.

B. The COUNTY Development Services Director shall, within 15 working days prior to anticipated final approval date, provide the City's Development Services staff with written recommendation for approval or disapproval of all plats for inclusion in the agenda backup prior to final plat approval.

III. CITY RESPONSIBILITIES

A. The CITY shall enforce its subdivision regulations, including review and approval processes and design and construction standards, within its ETJ.

B. The CITY shall enforce in the ETJ the following Hays County Subdivision and Development Regulations attached hereto and incorporated as Attachment "A" (Chapter 701.9, Chapter 701.16, Chapter 715.3, Chapter 721, Chapter 735.5.03 and Hays County Rules for On-site Sewage Facilities Section 10-A,D, and G). As the development regulations in Exhibit "A" are amended

from time to time, the County shall provide copies of such amended regulations to the City. These amended regulations shall be incorporated into and made a part of this Agreement for all purposes and shall supersede the conflicting provisions in the attached Exhibit "A."

C. If the CITY has existing ordinances establishing substantially similar standards for the subject areas of such COUNTY subdivision regulations, then the City may opt to apply the City ordinance in lieu of the corresponding COUNTY Subdivision Regulation. All City subdivision regulations not in conflict with Attachment "A" may be enforced. For any subdivision regulations in conflict with Attachment A, the more restrictive regulation will be enforced. If either Party wishes to propose revisions in the future to subdivision regulations that apply in the ETJ, the Party will notify the other Party of the proposed change. The Parties will cooperate in determining the need for the change and its effect on this Agreement, and will adopt any change agreed to by official action of their respective governing bodies.

D. For property located in the CITY's ETJ, the CITY agrees to require developers to dedicate public right-of-way pursuant to the Hays County Transportation Plan as currently revised or amended, subject to applicable constitutional and statutory limitations. For subdivisions in which it appears to the CITY that a requirement for dedication of right-of-way pursuant to such Transportation Plan may exceed an applicable constitutional or statutory limitation, the CITY will notify the COUNTY, and the parties will cooperate to determine the extent of right-of-way dedication to be required, or an

alternative method of securing the needed right-of-way. When enforcing subdivision regulations in the City's ETJ, the City shall facilitate the County's road maintenance program by requiring a road standard no less than the standards set out in Attachment "A."

E. The COUNTY expressly delegates to the CITY the authority to require the preparation of a subdivision plat for the division of any property into two or more lots as required in TEX. LOCAL GOV'T CODE section 232.001, including lots larger than five acres except for exempted subdivisions defined in Chapter 705.3.01 of the Hays County Development Regulations.

F. The CITY shall deliver six copies of all plat submittals to the COUNTY for review, within five working days from the date of receipt.

G. The COUNTY shall provide the CITY with written comments regarding subdivision plats within five working days from the date of receipt, and written comments regarding construction plans within ten days from the date of receipt.

H. The CITY shall include written recommendation from COUNTY Development Services Director in agenda backup for final plat approval.

I. The CITY shall require a signature block for the current COUNTY Development Services Department Director authorizing the filing of the plat under this agreement.

J. The CITY shall deliver two copies of all recorded plats for subdivisions within the CITY's ETJ to the COUNTY within five working days of the recording of the subdivision plat.

K. The CITY shall also provide to the COUNTY a digital file of each subdivision plat compliant with the currently adopted Hays County Digital Data Submission Standards.

L. The CITY shall confer and come to agreement with the Hays County 911 Addressing Division concerning street names prior to final plat approval.

M. The CITY shall allow COUNTY inspectors access to road construction sites of subdivisions within the ETJ and the CITY shall timely submit copies of all road design materials and road construction test results to the COUNTY during road construction. COUNTY inspectors shall have inspection and approval authority over the road construction, stormwater drainage construction, and water and wastewater facility construction within the right-of-way and easements. However, COUNY inspectors may, from time to time, collaborate with CITY inspectors and delegate to CITY inspectors specific inspections duties related to road construction, stormwater drainage construction, and/or water and wastewater facility construction within the right-of-way and easements, specifically properties contiguous to the City of Kyle city limits. The COUNTY may request that the CITY issue a stop-work notice if, in the COUNTY'S opinion, applicable construction standards are not being met.

N. Prior to acceptance of new streets or other public improvements in a subdivision, the CITY shall require of the applicant/developer a Certificate of Deposit, a Letter of Credit, or a warranty or cash bond as required by the Subdivision and Development Regulations of Hays County, payable to Hays

County, which shall be binding and in effect for two (2) years from the date of acceptance of the streets and improvements. The CITY shall require the applicant/developer to be responsible for maintenance of the streets and improvements as also required by the Hay County Subdivision and Development Regulations. The CITY shall also require the applicant/developer to post a utility bond or other improvements bond, payable to the CITY, if required by the subdivision regulations of the CITY.

O. The CITY shall collect and forward to the COUNTY all COUNTY subdivision fees as presently authorized or amended by the COUNTY, for services to be performed by the COUNTY. The CITY shall have the right to charge applicants/developers reasonable fees, sufficient to cover the full cost of services provided by the CITY under this Agreement and otherwise in the administration of regulations that apply to subdivisions in the CITY's ETJ. In addition to the City's fees and in consideration of the County's performance under this Agreement, the City shall collect a $320.00 per-lot fee for every subdivision subject to this Agreement. Subject to other taxes, fees, fines and penalties permitted by law, said $320.00 per-lot fee shall be forwarded to the County and shall constitute full and complete compensation for County services under this Agreement.

P. If a fee, Certificate of Deposit, Letter of Credit, warranty or bond is to be forwarded to Hays County in accordance with this Agreement, the City shall promptly forward the fee, Certificate of Deposit, Letter of Credit, warranty or bond to Ms. Roxie McInnis (or her successor), Hays County Development

Services Department, P.O. Box 1006, San Marcos, Texas 78667-1006. Physical address 2171 Yarrington Road.

Q. The CITY agrees to collaborate with the COUNTY regarding the interpretation of any rule or regulation delegated by the COUNTY under this agreement. Such collaboration may result in the grant of a variance on a case-by-case basis. However, the CITY shall not grant a variance to a COUNTY regulation without the consent of the COUNTY.

R. As an attachment to this Agreement, the CITY shall provide a current map and digital drawing file defining the legal boundaries of its corporate limits and areas of ETJ. The CITY shall notify the COUNTY of any changes to the CITY's ETJ within 10 days of the effective date of the change, and the area covered by this agreement shall be described by a metes and bounds description and accompanied by an updated digital drawing file. Notice shall be provided by letter according to Section IV. C, below. A change in the area covered by this Agreement shall not, however, affect any rights accrued under TEX. LOCAL GOV'T CODE Chapter 245 prior to the effective date of the change.

S. The CITY shall submit for review by the COUNTY facility planning reports supporting the proposed subdivision as required in 30 TAC Chapter 285.

T. The CITY shall review floodplain drainage analyses of FEMA regulated floodplains that are submitted in connection with proposed subdivision plats for compliance with Chapter 735 of the Hays County Development Regulations.

IV. GENERAL PROVISIONS

A. **General Administration:** Administering this Agreement and the contact person for the COUNTY shall be the Hays County Director of Development Services, or his/her representative. Administering this Agreement and the contact person and representative for the CITY shall be the CITY Manager, or his/her designee. The City hereby designates the Planning Director with authority over the City's subdivision planning staff as the designee for purposes of this Agreement.

B. **Alteration, Amendment or Modification:** This Agreement may not be altered, amended, or modified except in a subsequent writing signed by all Parties to this Agreement. No official, agent, employee, or representative of either the COUNTY or the CITY has the authority to alter, amend, or modify the terms of this Agreement, except in accordance with express authority as may be respectively granted by either the Hays County Commissioners Court or the CITY.

C. **Notice:** All notices sent pursuant to this Agreement shall be in writing and must be sent by registered or certified mail, postage prepaid, return receipt requested.

(a) Notices sent pursuant to this Agreement shall be sent to the Hays County Subdivision Coordinator's Office at the following address:

Ms. Roxie McInnis (or her successors)
Hays County Development Services,
P.O. Box 1006
San Marcos, Texas 78667-1006

(b) Notices sent pursuant to this Agreement may be delivered or sent to

the CITY at the following address:

Mr. Lanny S. Lambert. (or his successor)
City Manager
City of Kyle
PO BOX 40
Kyle , TX 78666

(c) To be effective, a copy of any notices sent to the COUNTY shall be sent to the Special Counsel's Office at the following address:

Mark Driscol Kennedy (or his successor)
A.D.A. – Chief – Civil Division
Hays County, Texas
712 South Stagecoach Trail, Suite 2057
San Marcos, TX 78666

(d) To be effective, a copy of any notice sent to the CITY shall be sent to the CITY Attorney at the following address:

Frank J. Garza
City Attorney
Davidson, Troilo, Ream & Garza, PC
7550 IH 10 West, Suite 800
San Antonio, Texas 78229

(e) When notices sent pursuant to this Agreement are mailed by registered or certified mail, delivery of notice shall be deemed effective three (3) working days after deposit in a U.S. mail box or at a U.S. post office.

D. Severability: If any provision of this Agreement is found to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect the remaining provisions of this Agreement.

E. Breach: The failure of either Party to comply with the terms and conditions of this Agreement shall constitute a breach of this Agreement. Either Party shall be entitled to any and all rights and remedies allowed under Texas law

for any breach of this Agreement by the other Party.

F. **Non-Waiver:** The waiver by either Party of a breach of this Agreement shall not constitute a continuing waiver of such breach or of a subsequent breach of the same or a different provision. Nothing in this Agreement is intended by either Party to constitute a waiver of any immunity from suit or liability to which it is entitled under applicable law.

G. **Entire Agreement; Third Parties:** This Agreement constitutes the entire agreement between the COUNTY and the CITY. No other agreement, statement, or promise relating to the subject matter of this Agreement and which is not contained in this Agreement or incorporated by reference in this Agreement shall be valid or binding. This Agreement is not intended to confer any rights on any third parties, and it shall not be construed as conferring any rights on any third parties.

H. **Terms used in Document:** As used in this document, the terms "Interlocal Cooperation Agreement", "Interlocal Agreement", "Agreement", and "Contract" are synonymous.

I. **Non-Defined Terms:** If not specifically defined in this Agreement, words and phrases used in this Agreement shall have their ordinary meaning as defined by common usage.

EXECUTED THIS _____ day of _____, 2012.

HAYS COUNTY

By: Bert Cobb

HONORABLE JUDGE BERT COBB, M.D.

HAYS COUNTY JUDGE

ATTEST:

LIZ Q. GONZALEZ, HAYS COUNTY CLERK

DATE: Aug 7, 2012

EXECUTED THIS _____ day of _____, 2012.

CITY OF KYLE

By: _____

LANNY S. LAMBERT ., CITY MANAGER

ATTEST:

AMELIA SANCHEZ, CITY CLERK

DATE: 2-13-13

City of Kyle, Texas
Approved as to Form

Julian Grant, City Attorney **Date** 2/13/13

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CHAPTER 701 - DEVELOPMENT REGULATIONS IN GENERAL

Sub-Chapter 9 - General Public Notice Requirements

§9.01. Communication with Precinct Commissioner

Where individual Chapters of these Regulations require communication or contact with the Precinct Commissioner, the Applicant or the Applicant's authorized agent is required to contact the Commissioner(s) in whose precinct(s) the proposed development is located prior to the submission of the Application. This contact or communication shall consist of either written communication or a personal visit by the Applicant or the Applicant's authorized agent. The Commissioner shall establish and make available to the public a copy of contact procedures for this purpose. Commissioners may delegate contact and communication responsibilities to one or more members of their staff. If the Commissioner requests a personal visit in response to receiving written communication, the Applicant or the Applicant's authorized agent shall arrange a personal visit with the Commissioner or the Commissioner's designee at a mutually agreeable time and place. The purpose of this personal visit shall be for the Applicant to inform the Commissioner about the project and for the Commissioner to present to the Applicant any constraints or concerns associated with the project. Documentation of contact or communication with the Commissioner, including the personal visit, if requested, shall be furnished to the County in conjunction with an Application.

§9.02. Notice Required

Where individual Chapters of these Regulations require notice, the Applicant is responsible for accomplishing such notice regarding the Application or any action thereon, including any costs associated with such notice. Where the requirements of state or federal law dictate that the County actually accomplish such notice associated with an Application or any action thereon, the Applicant shall be responsible for the payment of fees and charges established by the Commissioners Court to cover the cost of such notice.

§9.03. Documentation

Where individual Chapters of these Regulations require notice, the Applicant is responsible for furnishing documentation to the County confirming that such notice was accomplished. Specific documentation requirements shall be established by the Department for each type of notice required under these Regulations.

§9.04. Posted Notice

Where individual Chapters of these Regulations require posted notice, the Applicant shall be required to notify the public upon the determination by the Department that an Application for a Development Authorization is Administratively Complete. This notice shall be accomplished through posting signs at the Subject Property. Where Posted Notice is required, no exemptions from these requirements shall be allowed. The following requirements apply to Posted Notice, where required:

(A) Within two (2) working days of receipt of notice from the Department that an Application filed with the County has been determined to be Administratively Complete, the Applicant shall install public notice signs on the Subject Property. Signs shall remain in place on the Subject Property until a final decision is rendered on the Application by the

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Commissioners Court or until such time as the Application is withdrawn, if the application is withdrawn.

(B) Signs shall be placed within twenty (20) feet of all property boundaries fronting on a public roadway. Where the length of the boundary fronting on a public roadway exceeds one thousand feet, the signs shall be spaced no further than one-thousand feet apart. At least one sign shall be placed along each public roadway fronting the property. The Applicant shall ensure that the view of the signs is not obstructed by objects on the Subject Property and that the signs are placed where there is an unobstructed view of the signs from the public roadway. Signs are not required to be placed along property boundaries that do not front on a public roadway.

(C) The signs shall contain the specific text required by the individual Chapter that includes the posted notice requirement. The Department shall develop and make available to the public standard language to be used for each type of posted notice required under these Regulations.

(D) The signs shall be a minimum size of four feet by four feet, with the bottom of the sign placed at least two feet above ground level. The background of the sign shall be white. The heading on the sign shall be red letters at least three inches high, with the remaining text black letters at least 1-1/2 inches high. The sign shall also contain the reference number that is used by the Department to track the Application for which the posted notice is required. The Department shall develop and make available to the public specific signage criteria and shall make available examples of signs for each type of posted notice required under these Regulations.

(E) The signs shall be constructed of materials that are sufficiently durable to ensure the sign remains in place and legible during the entire period that posting is required.

(F) The Department may also, utilizing any procurement process authorized under State law, designate one or more approved vendors from whom Applicants may purchase signage to comply with these Regulations.

(G) Signs may also be supplied by Applicants. The Department is authorized to require review by the Department of any signs supplied by the Applicant. The Department may require that such signs supplied by the Applicant be replaced, at the Applicant's expense, if the Department determines that the signs supplied by the Applicant do not strictly conform to the requirements of these Regulations and published Department criteria.

(H) It shall be the responsibility of the Applicant to submit documentation to the Department that the signs have been properly installed and to periodically check sign locations to verify that signs remain in place and have not been vandalized or removed. The Applicant shall immediately notify the County of any missing or defective signs. It is unlawful for a person to alter any notification sign or to remove it while the case is pending; however, any removal or alteration that is beyond the control of the Applicant shall not constitute a failure to meet notification requirements. If signs are removed, damaged or become illegible, the Applicant shall replace the signs within three (3) working days.

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§9.05. Written Notice for Political Subdivisions and Contiguous Properties

Where individual Chapters of these Regulations require written notice, the Applicant shall be required to notify affected political subdivisions and the owners of Contiguous Properties through written notice. The following provisions apply to Written Notice, where required:

(A) The written notice must include a map clearly showing the boundaries and general location of the proposed development and major roadways in the vicinity.

(B) The written notice must include a general description of the nature of the proposed development, including identification of the Applicant and the Permittee and a general description of the nature of the activities for which approval is being requested.

(C) The written notice must also include any additional information required by the individual Chapter that includes the written notice requirement.

(D) The Applicant shall forward copies of any written notice to any other parties to the application, including the Permittee and/or the owners of the Subject Property.

§9.06. Identification of Affected Political Subdivisions

Where written notice is required to be submitted to an affected political subdivision, as part of its technical review of a completed application the Department shall identify all political subdivisions affected by the Application for which it has available records. The list of affected political subdivisions shall at a minimum include any political subdivision within whose boundaries the Subject Property is located. If the Subject Property is not located within the boundaries of an emergency services or management district, a school district, a water utility district, or a wastewater utility district, the nearest such district shall be included in the list of affected political subdivisions. The address for notice purposes for each affected political subdivision shall be the address furnished by the Department to the Applicant.

§9.07. Identification of Contiguous Property Owners

Where written notice is required to be submitted to owners of Contiguous Property, the applicant shall identify all owners of Contiguous Property that are not parties to the Application. The identified owners for the Contiguous Properties shall be those owners on file with the Hays Central Appraisal District (HCAD) within thirty (30) days prior to the date the Application is filed. The address of the identified owners for notice purposes shall be the address on file with the HCAD.

§9.08. Delivery of Written Notice

The following requirements apply to the delivery of Written Notice, where required:

(A) The person may deliver the written notice in person, by express courier or by depositing the notice with the United States Postal Service (USPS), postage paid. Personal delivery and delivery by express courier shall be confirmed by a written acknowledgement of receipt by the party to whom the written notice was delivered or their authorized agent. Mailed notice deposited with the USPS shall be sent certified with return receipt requested. Mailed notice may be confirmed by the receipt returned by the USPS. In instances where the person to receive Written Notice has requested that the person making the Written Notice submit such Written Notice via electronic media, the person making such Written Notice may deliver that notice via electronic media. All instances

of Written Notice delivered via electronic media must be confirmed in writing or by receipt of an affirmative reply from the recipient via electronic media. Nothing in this section shall be construed to require the issuance of Written Notice via electronic media.

(B) Where written notice is required to affected political subdivisions, within ten (10) working days of receipt of notice from the Department that the Application has been determined to be Administratively Complete and the Department's providing the Applicant with a list of affected political subdivisions, the Applicant shall provide written notice of the proposed development to each of the affected political subdivisions.

(C) Where written notice is required to owners of Contiguous Properties, within ten (10) working days of the filing of the application, the Applicant shall provide written notice of the Application to each of the owners of Contiguous Property that are not parties to the Application.

(D) Within ten days of providing such written notice under these Regulations, the Applicant shall provide copies of the notification and proof of notice delivery to the Department.

§9.09. Published Notice

Unless otherwise required under individual chapters, where published notice is required, it shall be accomplished in a newspaper of general circulation in the County at least two (2) times. For published notice of Applications, such notice shall be published within thirty (30) calendar days of filing the Application. For published notice of the consideration of action on any aspect of an Application, such notice shall be published during the period beginning on the 30th calendar day and ending on the 7th calendar day prior to such consideration. To document publication of the required notice, the person having such notice published shall submit an original, signed publisher's affidavit demonstrating actual publication.

§9.10. Review of Public Notice by the County

The County may review any and all procedures used by the Applicant or others to accomplish public notice under these Regulations. The County shall require additional public notice for any public notice deemed by the County as not in compliance with these Regulations. The County may suspend the processing of any application for which the County determines that public notice was not accomplished in substantial compliance with these Regulations. The Applicant or Permittee shall be responsible for the costs of such additional public notice required as a result of failing to publish notice in substantial compliance with these Regulations.

§9.11. Additional Public Notice by the County

Where these regulations require notice, the County may accomplish additional public notice of any Application or pending action on such Application using whatever means it may deem appropriate and as required by federal, state or local law. Any such costs for this additional public notice shall be the responsibility of the County. Additional public notice by the County may include, but is not limited to, posting notice on the Commissioners Court agenda, posting notice in conjunction with other posted notices at County facilities, posting on any electronic medium maintained or used by the County, or inclusion of such notice in any announcement or communication performed by the County. Except where required by law, such additional public notice by the County will be at the discretion of the Commissioners Court. The Department shall also distribute all written and published public notice required under these Regulations to those

persons on the Department maintained public distribution list in accordance with Subchapter 10 of this Chapter.

Sub-Chapter 16 - Coordination with "911" Addressing System

This subchapter shall govern the coordination required with the "911" Addressing System prior to issuance of a Development Authorization by the County.

§16.01. Communication with County "911" Coordinator

Prior to submitting an Application, the Applicant or the Applicant's authorized agent is required to contact the County "911" Coordinator to confirm the suitability of the naming and designation of proposed roadways and to establish procedures for identifying the "911" addresses for the subdivision. Applications for subdivisions must confirm the suitability of the name and designations in conjunction with the Preliminary Plan.

§16.02. Additional Coordination

The County "911" Coordinator may require the Applicant to coordinate "911" addressing information with the Hays County Sheriff, municipal police and fire departments, emergency services districts (ESDs) and any other emergency response agencies authorized to operate in the County whose response might be requested during an emergency.

§16.03. Approval Required

Prior to the issuance of a Development Authorization by the County, the Applicant shall submit evidence of approval by the County "911" Coordinator for the following:

(A) The proposed names or designations for new roadways, shared access easements or shared access driveways associated with any Application to the County for a Development Authorization. The County "911" Coordinator is hereby authorized to withhold approval of names or designations that the coordinator determines are very similar to existing names or designations or which may otherwise contribute to confusion in names or designations in a way that may hinder emergency response.

(1) When names or designations are allowed to change on a continuous street, street signs must be placed in a clear and unambiguous manner, so as not the hinder emergency response.

(B) If "911" addresses have not previously been established for the proposed development, in conjunction with the final Development Authorization, the County shall establish a "911" address for each lot or component of the development served by a Regulated Roadway, shared access easement or shared access driveway associated with that development. If the development plan includes multiple habitable structures located on the same lot (e.g. a multi-unit residential housing unit, a Manufactured Home Rental Community, a multi-unit commercial development, etc.), a "911" address shall be established for each habitable structure. The "911" addresses shall be established by the County "911" Coordinator.

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CHAPTER 715 - WATER AND WASTEWATER AVAILABILITY

Sub-Chapter 3 - Water Availability

§3.01. Applicability

The following developments are exempted from the requirements to certify water availability under these Regulations. The County encourages exempted developments to comply with these Regulations.

(A) Exempted subdivisions as defined under §701.3.01.

(B) Exempted Manufactured Home Rental Communities as defined under §745.2.01.

(C) The following categories of non-exempt subdivisions are not required to demonstrate water availability, subject to the inclusion of a plat note prohibiting further non-exempt subdivision or re-subdivision for a period of five (5) years following the filing of the Final Plat:

(1) All non-exempt subdivisions of five (5) lots or less in which all lots average at least two (2) acres.

(2) All subdivisions of ten (10) lots or less in which all lots are larger than ten (10) acres.

§3.02. Items Common to All Water Availability Demonstrations

The following items shall be addressed in all water availability demonstrations prepared under these regulations, regardless of the source(s) utilized:

(A) An estimate of the amount of water demand throughout all phases of development supported by engineering calculations based on the anticipated timetable for full build-out, including a statement describing the level of fire protection afforded to the proposed phase(s) of the development;

(B) A statement as to whether there are plans for alternative or backup water service; if so, an identification of the alternative or backup water source;

(C) A description of any anticipated new water facility improvements required to serve the development;

(D) A map showing the proposed location of all water facilities throughout all phases of development as well as the proposed water service area, including any TCEQ-approved service area boundaries of a water service provider operating under a Certificate of Convenience and Necessity (CCN) within the boundaries of the proposed subdivision;

(E) An estimated timetable for completion of all facilities; and,

(F) Based on the information available at the time the application is submitted, the anticipated owner(s) and operator(s) of all water facilities throughout all phases of development shall be identified and included in the application.

§3.03. Notification for All Developments Utilizing Local Groundwater

This Subchapter addresses the requirements that Subdivisions and Manufactured Home Rental Communities must meet to demonstrate water availability using Local Groundwater for the purposes of obtaining a Development Authorization from the County. These Regulations do not

include the details for requirements on the withdrawal and use of groundwater that may originate from the regulations other entities. The public is hereby notified that portions of Hays County are within the jurisdiction of other governmental entities, including Groundwater Conservation Districts and the Edwards Aquifer Authority, which regulate the withdrawal and use of groundwater under direct authority from the State of Texas, independent from the authority of Hays County. Within their statutory authority, these other governmental entities may impose requirements in addition to those contained in these Regulations. The Department shall cause to be included in any Development Authorizations issued under these Regulations a notice that valid limitations imposed by these other authorized entities are incorporated as a special provision into the terms of the County's Development Authorization and may be enforced as such by the County. The Department shall also develop and publish requirements for incorporating into the Record Documents notice of the requirements of these other governmental entities.

Where applicable federal, state or local statutes require Applicants to submit water availability certifications to other governmental entities, the Applicant shall document compliance with these requirements. Where the Department is made aware of applicable regulations of other entities, the Department shall process any Application as requesting a variance where that Application is determined to not be in compliance with such other regulations. It is the intention of these Regulations that all Applications be processed, to the extent authorized under State law, to not conflict with Groundwater Management Area planning efforts, established sustainable yields, desired future conditions, and managed available groundwater volumes.

§3.04. Procedures for Department Coordination with the Applicable Groundwater Conservation District

For all water availability demonstrations which rely in whole or in part on Local Groundwater, the Department shall ensure that a copy of the water availability demonstration is submitted to the applicable groundwater conservation district(s) [GCD] for review and comment. Where the Applicant is required to make such a submittal under §715.3.03, the Department shall forward to the GCD within ten (10) working days of receipt, a written request for review and comment on the portion of the availability demonstration relying on Local Groundwater. Where such submittal to the GCD is not otherwise required by the Applicant, the Department shall forward the information to the GCD within ten (10) working days of receipt, with a written request for review and comment on the portion of the availability demonstration relying on Local Groundwater. If the Department has not received written comments from the GCD within fifteen (15) working days, the GCD shall be considered as having waived the opportunity for review and comment on the availability demonstration. The Department shall consider all comments received from the GCD and may request such additional information from the Applicant as the Department deems appropriate in response to these comments. The Department shall include a summary of any comments timely received from the applicable GCD in any report made to the Commissioners Court on an Application. If the County has adopted a Memorandum of Understanding (MOU) with any GCD, the Department shall follow the procedures outlined in the MOU.

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§3.05. Water Availability Demonstrations Using Individual Private Water Wells Producing Local Groundwater

In addition to the requirements outlined in §715.3.02, Applicants requesting approval to utilize one or more individual private water wells using Local Groundwater to serve the proposed development shall construct at least two wells (one test well and one monitor well). Use of existing wells will be permitted if the wells fully meet these regulations. Well analyses shall be performed by a Texas licensed professional engineer or Texas licensed professional geoscientist, qualified to perform the hydrogeological testing, geophysical well logging and aquifer pump testing. The following information shall be provided to Commissioners Court for each well tested.

(A) Identify the hydrogeologic formation by well driller's log and approved geophysical logging methods. Provide a map and list of all known wells within 1,000 feet of the proposed subdivision boundaries (or a distance where measurable drawdown effects from the proposed subdivision well are expected). Each well is to be located by latitude and longitude.

(B) The Certification of Groundwater Availability For Platting Form as required by the TCEQ rules on Groundwater Availability Certification for Platting at 30 Tex. Admin. Code Section 230.3. The Department shall require an applicant to submit any engineering calculations, studies or other data supporting the statements contained in the Certification of Groundwater Availability For Platting Form.

Individuals marketing the development shall provide each purchaser or renter with a statement describing the extent to which water and wastewater service will be made available, and how and when such service will be made available.

§3.06. Additional Requirements for Subdivisions Served by Individual Water Wells Producing Local Groundwater in Priority Groundwater Management Areas

Applicants requesting approval to utilize individual private water wells producing Local Groundwater to serve proposed new development in a Priority Groundwater Management Area, as that term is defined by the Texas Commission on Environmental Quality, shall be subject to the following additional requirements:

(A) The person preparing the groundwater availability certification shall document that they obtained available information on historical water levels and known water wells from the applicable Groundwater Conservation District.

(B) The person preparing the groundwater availability certification shall perform a walking receptor survey around the perimeter of the Subject Property to identify the visual location of apparent undocumented water wells and to visually confirm the presence of documented water wells within five hundred (500) feet of the boundaries of the subject property.

(C) The person preparing the groundwater availability certification shall estimate the average annual recharge (per acre) in the vicinity of the Subject Property using a Groundwater Availability Model (GAM) reviewed and approved by the Texas Water Development Board.

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(D) The person preparing the groundwater availability certification shall utilize the estimated annual average recharge rates (developed under §715.3.06.C) to determine the total estimated annual recharge for the footprint area of the Subject Property. The estimated annual recharge for the Subject property shall be compared to the projected annual groundwater withdrawal, to assess whether the projected withdrawal exceeds the estimated recharge. For developments where the projected withdrawal exceeds estimated recharge, the Applicant shall take one or more of the following steps:

(3) Comply with the minimum lot size requirement of 6.00 acres, as presented in Table 705.05.01;

(4) Provide a supplemental demonstration of water availability based on an Other Water Supply System and prorate the minimum lot size requirement using 6.00 acres for the percentage provided by Local Groundwater and the otherwise applicable value from Table 705.05.01 for the Other Water Supply System; or,

(5) Subject to the requirements of §715.3.06(F), secure the future development rights for currently undeveloped property in a quantity sufficient to balance the groundwater withdrawal for the Subject Property with overall recharge from the Subject Property and other property, and provide Written Notice, as outlined in Chapter 701, to the owners of all proximate property for which a groundwater well is documented or discovered during the walking receptor survey and the owners of any other documented well within one-quarter mile of the Subject Property, that the projected groundwater use for the proposed development is being offset through the acquisition of additional property. The Department shall make available to the public standardized notice language for this purpose.

(E) For developments where the availability of groundwater is limited to less than the flow required to support fully developed conditions, the Applicant shall include in the Water and Wastewater Service Plan the procedures to be utilized to limit groundwater withdrawal to the certified available quantity.

(F) Property outside the Subject Property that is used for the purpose of balancing the groundwater withdrawal for the Subject Property shall comply with the following conditions:

(6) Eligible additional property must recharge to the same aquifer zone as the Subject Property and be within the same PGMA.

(7) All such additional property shall be subject to a conservation easement or equivalent legal mechanism structured to prohibit in perpetuity its future subdivision or development. The easement or instrument shall be granted to the public and shall be held by the County or other non-profit legal entity recognized by the County as custodian for the County. Such easement or instrument shall be in such form and under such conditions as are acceptable to the County.

(8) For properties located within the jurisdiction of public entities having zoning authority, the Applicant shall provide documentation that the zoning for the additional property is "agricultural", "open space" or other equivalent zoning that allows little to no development of the additional property.

(9) The additional property shall either be contiguous to the Subject Property or located within five (5) miles of the Subject Property.

(10) Additional property that is contiguous to the Subject Property may be considered as providing the same recharge as the Subject Property.

(11) Additional property that is not contiguous but is located within five (5) miles of the Subject Property shall be considered as providing seventy five percent (75%) of the recharge provided by the Subject Property.

(12) In instances where the Applicant proposes to secure the development rights from a property (the originating property) that is outside the jurisdiction of the County and within the jurisdiction of one or more local governmental entities, the Applicant must provide documentation of the written approval of the transfer from each such local governmental entity with jurisdiction over the originating property.

§3.07. Water Availability Demonstrations Utilizing a new TCEQ public water supply system:

In addition to the requirements outlined in §715.3.02, Applicants proposing to serve a development through a new public water supply system shall include the following information in the Water and Wastewater Service Plan:

(A) If water service is to be provided by a municipal utility district or other special purpose district that has not been created as of the filing of the Preliminary Plan, a detailed description of the proposed district boundaries, a timetable for creation of the district, and identification of the proposed organization of the district.

(B) Prior to the final approval of the development (e.g. the final plat or the Infrastructure Development Plan), the Applicant shall supply a letter to the Department from the water service provider certifying that they have the authority to provide water service; that there will be sufficient capacity to serve all phases of the proposed development; and that all required agreements have been executed.

(C) Within ten (10) working days of receiving this supply letter, the Department shall notify in writing all governmental entities which the Department has record of having jurisdiction over any aspect of water supply to the proposed development requesting their comments on the letter. In instances where the water service provider does not own or otherwise control the source(s) of supply, the Department may require that the Applicant obtain supporting documentation certifying the availability of adequate supply from the actual water supply source(s) in addition to the information required to be provided by the water service provider. The Department shall include in any Development Authorization a Special Provision recognizing the requirements of any other governmental entity with established jurisdiction over the proposed development. Any disputes between the Applicant, water service provider and other governmental jurisdictions shall be heard by the Commissioners Court.

(D) For developments within the jurisdiction of a Groundwater Conservation District that utilize groundwater in their demonstration, a formal groundwater availability analysis, in accordance with 30 TAC 230, shall be completed, along with a statement acknowledging that all applicable requirements of the GCD will be met.

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§3.08. Water Availability Demonstrations Utilizing an existing TCEQ-permitted public water supply:

If wholesale or retail water service is to be provided by an existing water utility or other existing water service provider, an applicant shall submit a written statement from the existing provider containing the following:

(A) A description of the authority of the existing provider to serve the proposed phase of development.

(B) A statement as to whether the existing provider has available capacity to serve the proposed phase of development, including a statement describing the level of fire protection afforded to the proposed phase(s) of the development.

(C) A description of the type of water service to be provided (wholesale or retail) and a timetable for the providing of such service to the proposed development.

(D) Identification of any anticipated water supply or service agreements that will need to be executed prior to the provision of service.

(E) Prior to the final approval of the development (e.g. the final plat or the Infrastructure Development Plan), the applicant shall supply a letter to the Department from the utility provider certifying that they have the authority to provide water service; that there will be sufficient capacity to serve all phases of the proposed development; and that all required agreements have been executed.

(F) Within ten (10) working days of receiving this supply letter, the Department shall notify in writing all governmental entities which the Department has record of having jurisdiction over any aspect of water supply to the proposed development requesting their comments on the letter. In instances where the water service provider does not own or otherwise control the source(s) of supply, the Department may require that the Applicant obtain supporting documentation certifying the availability of adequate supply from the actual water supply source(s) in addition to the information required to be provided by the water service provider. The Department shall include in any Development Authorization a Special Provision recognizing the requirements of any other governmental entity with established jurisdiction over the proposed development. Any disputes between the Applicant, water service provider and other governmental jurisdictions shall be heard by the Commissioners Court.

§3.09. Water Availability Demonstrations Utilizing Rainwater Harvesting

In addition to the requirements outlined in §715.3.02, Applicants proposing to serve a development through rainwater harvesting shall include the following information in the Water and Wastewater Service Plan:

(A) Estimates of the water availability from rainwater harvesting shall be based upon the "The Texas Manual on Rainwater Harvesting", published by the Texas Water Development Board, or other industry standard sources acceptable to the Department.

(B) Water demand estimates for demonstrations involving rainwater harvesting, including demonstrations utilizing multiple water sources, may not be lower than the largest value of the following:

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(13) The maximum water usage rates for "water conserving households" identified by the American Water Works Association, "Residential End Uses of Water";

(14) A total of forty five (45) gallons per person per day;

(15) A total of one hundred fifty (150) gallons per dwelling unit per day.

(C) The Water and Wastewater Service Plan shall include a standardized design for a rainwater harvesting system, prepared by a Texas licensed professional engineer, using design parameters applicable to the location of the Subject Property. This standardized design shall be based on a prototype representative of actual conditions anticipated to be present in the proposed development, including typical structure sizes and materials of construction. The standardized design shall include schematic plans, drawings and descriptions for the various component parts of the prototype system, and shall include any minimum requirements (e.g. minimum storage tank sizes) and appropriate adjustment factors to be used for each component to account for the range of differing sizes and configurations of structures anticipated to be present in the proposed development.

(D) The Water and Wastewater Service Plan shall include a standardized operations and maintenance plan for a rainwater harvesting system, prepared by a Texas licensed professional engineer. This operating and maintenance plan shall be based on the prototypical design and shall describe in detail the operating and maintenance requirements for each component of the prototypical rainwater harvesting system.

(E) The Water and Wastewater Service Plan shall clearly identify any water conservation measures and use limitations used in estimating the water demand and shall include the provisions to be utilized to ensure that the end users of the rainwater harvesting systems are aware of the need to follow these restrictions.

(F) Where rainwater harvesting constitutes the sole source of water supply for the development, the Applicant shall incorporate sufficient restrictions (including deed restrictions and plat notes) into the development documents to ensure that subsequent owners or users of the property do not install or utilize groundwater wells, until an updated water availability demonstration is approved documenting sufficient groundwater is available.

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CHAPTER 721 - ROADWAY STANDARDS

Sub-Chapter 1 - Applicability

§1.01. Applicability

This Chapter shall govern the following items related to Regulated Roadways within the County:

(A) The design and construction of all Regulated Roadways as defined in Chapter 701.

(B) The minimum roadway widths and building set back lines for Regulated Roadways.

§1.02. Legal Authority

Legal Authority for adopting and enforcing the regulations in this Chapter is granted to the County under TLGC in Chapters 231, 232 and 234, and under the Texas Transportation Code (TTC) Chapters 251, 286 and 545.

§1.03. Approval Required

Approval of the Commissioners Court is required prior acceptance by the County of Regulated Roadways. Separate approval is required under Chapter 751 for any use of existing County facilities, including roadway rights-of-way, which are not part of the Application for a Development Authorization.

Sub-Chapter 2 - Roadway Classifications

§2.01. Basis for Classification

Regulated Roadways shall be classified based on the criteria established in "A Policy on Geometric Design of Highways and Streets", latest edition, as developed by the American Association of State Highway and Transportation Officials (AASHTO). For the purposes of these Regulations, regulated roadways shall be designed to handle the average daily traffic (ADT) estimated to occur for a period of twenty (20) years following completion of construction of the roadway, with the pavement sections and widths required to accommodate the design ADT at the applicable speed limits adopted by the County. At a minimum, pavement sections and widths shall conform to the suggested minimum requirements established by AASHTO for the specified classification of roadway. Roadways shall also be classified under TTC Chapter 251. Roadway classification information is included in Table 721.02.

§2.02. Country Lane

A Country Lane shall be a one or two lane paved roadway, without improved shoulders, and considered a Special Purpose Road with a design capacity of up to 100 ADT in accordance with AASHTO design standards, and third-class roadways in accordance with TTC Chapter 251.

§2.03. Local Roadway

A Local Roadway shall be a two lane paved roadway, with improved shoulders or curb and gutter, and considered a Local Rural Road with a design capacity of between 101 and 1,000 ADT in accordance with AASHTO design standards, and third-class roadways in accordance with TTC Chapter 251.

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§2.04. Urbanized Local Roadway

An Urbanized Local Roadway shall be a two lane paved roadway, with improved shoulders or curb and gutter, and considered a Special Purpose Road with a design capacity of up to 1,000 ADT in accordance with AASHTO design standards and third-class roadways in accordance with TTC Chapter 251.

§2.05. Minor Collector

A Minor Collector shall be a two lane paved roadway, with improved shoulders or curb and gutter, and considered a Rural Collector with a design capacity of 1,001 to 2,500 ADT in accordance with AASHTO design standards, and may be either second-class or third-class roadways in accordance with TTC Chapter 251.

§2.06. Major Collector

A Major Collector shall be a two lane or larger paved roadway, with improved shoulders or curb and gutter, and considered a Rural Collector with a design capacity of 2,501 to 5,000 ADT in accordance with AASHTO design standards, and may be either first-class or second-class roadways in accordance with TTC Chapter 251.

§2.07. Minor Arterial

A Minor Arterial shall be a two lane or larger paved roadway, with improved shoulders or curb and gutter, and considered a Rural Arterial with a design capacity of 5,001 to 15,000 ADT in accordance with AASHTO design standards, and may be either second-class or third-class roadways in accordance with TTC Chapter 251.

§2.08. Major Arterial

A Major Arterial shall be a two lane or larger paved roadway, with improved shoulders or curb and gutter, and considered a Rural Arterial with a design capacity of greater than 15,000 ADT in accordance with AASHTO design standards, and may be either first-class or second-class roadways in accordance with TTC Chapter 251.

Sub-Chapter 3 - Public Roadways

§3.01. Dedication to Public

Any dedication of a roadway to the County for public use shall be accomplished using one of the methods allowed under Chapter 701, Subchapter 11. No dedication shall be effective until the record document is recorded. In no event shall any private lot extend into a dedicated public roadway.

§3.02. Publicly Maintained and Dedicated Roadways

Roadways dedicated to the public (Public Roadways) shall be required in all developments approved under these Regulations, except those satisfying the criteria for private roadways, as set forth below. All such Public Roadways shall be paved and shall be Regulated Roadways designed and constructed in accordance with the specifications set forth in Chapter 721, Subchapter 5. The boundary lines of all subdivision Lots fronting onto a publicly dedicated right-of-way shall be contiguous with the boundary of the right-of-way.

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§3.03. Construction of Public Roadways

Public Roadways shall be considered public infrastructure, subject to the requirements of Chapter 731. Unless interim authorization for construction is obtained under Chapter 731, construction of public roadways shall not commence until such time as a Development Authorization has been issued by the County on an Application filed under these Regulations.

§3.04. Connections to Public Roadways under the Jurisdiction of Other Entities

Certain Regulated Roadways and appurtenances governed by these Regulations may require connection to or construction on or within the right-of-way of public roadways under the jurisdiction of other public entities, including the Texas Department of Transportation (TXDOT), or any other authorized state or federal government entity. All construction and access to these roadways conducted in conjunction with a development authorized under these Regulations shall comply with the requirements of the entity having jurisdiction over the affected public roadway.

Sub-Chapter 4 - Private Roadways

§4.01. General Requirements for Private Roadways

All private roadways qualifying as Regulated Roadways (Regulated Private Roadways) shall be designed and constructed in accordance with the standards in Chapter 721, Subchapter 5 for Public Roadways. All Regulated Private Roadways shall have a surface suitable for all-weather access to all portions of the proposed development served by such Regulated Private Roadway.

§4.02. Criteria for Determining Private Roadway Status

Regulated Private Roadways shall be permitted only in conjunction with a development approved under these Regulations if they satisfy each of the following criteria:

(A) The person(s) responsible for the operation and maintenance of the Regulated Private Roadway has executed an agreement with the Commissioners Court acknowledging responsibility for such operation and maintenance;

(B) The executed agreement includes financial assurance, as required by the Commissioners Court; and,

(C) Lots within the development served by the Regulated Private Roadway shall have an average size greater than 5 acres; or.

The Commissioners Court has entered into an approved Development Agreement with the Owner or Permittee regarding the development of a master-planned community of no fewer than fifty (50) residential Lots.

§4.03. General Requirements for Maintenance of Private Roadways

Development Authorizations that include the use of Regulated Private Roadways shall be subject to a maintenance agreement with the County. The person(s) responsible for maintenance under the agreement may be the Owner of the Subject Property, the Permittee, or another person or entity acceptable to the County. The following provisions apply to Regulated Private Roadways:

(A) The following note shall be conspicuously displayed on the Record Documents filed in conjunction with the Development Authorization:

[Owner], by filing this Record Document, and all future owners of this property, by purchasing such property, acknowledge and agree that Hays County shall have no obligation whatsoever to repair or accept maintenance of the roadways shown on this approved development plan until and unless [Owner] and/or the property occupants or tenants have improved the roadways to the then current standards required by Hays County and the roadways have been accepted for maintenance by formal, written action of the County Commissioners Court and the roadways, with all required right-of-way and building setbacks, have been dedicated by the owners thereof, and accepted by the County, as public roadways. [Owner] and all future owners of property within the limits of the approved development plan shall look solely to the [Owner or Entity entering into Maintenance Agreement with the County] for future maintenance and repair of the roadways included in this development plan; and

(B) Any restrictive covenants establishing a responsibility for roadway operation and maintenance shall be placed on record concurrently with the recording of the Record Documents.

(C) Regulated Private Roadways shall be operated and maintained to allow unrestricted ingress/egress by the occupants of the property and service providers, including emergency services. The maintenance agreement with the County shall include enforcement provisions for Regulated Private Roadways that are not properly operated and maintained.

§4.04. Additional Requirements for Private Roadways to be Maintained by an Association

Concurrently with the filing of an Application for a Development Authorization that will include Regulated Private Roadways, the Applicant shall submit the following:

(A) Ready-for-execution copies of the articles of incorporation and bylaws of the homeowners or property owners association; and,

(B) The minimum annual assessments that will be imposed upon members of the association.

Sub-Chapter 5 - Standards for Regulated Roadways

§5.01. Applicability

Regulated Roadways are defined in Chapter 701, and include all roadways associated with an Application for a Development Authorization under these Regulations, including existing public roadways that are being connected or modified to accommodate the effects of a proposed development, new roadways dedicated to the public as part of a Development Authorization, new private roadways, shared access easements, and shared access driveways used for emergency services access as a part of a Development Authorization, and driveways, utilities, storm water management facilities or other facilities within the right-of-way of a Regulated Roadway.

§5.02. Design Requirements

All Regulated Roadways and related improvements shall be designed and installed so as to provide, to the maximum extent feasible, a logical system of utilities, drainage and roadways and

to permit continuity of improvements to adjacent properties. A Roadway Design Report, prepared by a Texas licensed professional engineer, certifying compliance with these Regulations and other applicable standards shall be prepared and submitted with the Application.

§5.03. Minimum Rights of Way and Building Setbacks

All Regulated Roadways shall comply with the established minimum right-of-way widths and building setback lines based on the roadway classification. Above-grade construction is prohibited within the established building setback lines. Building setback lines apply on each side of a Regulated Roadway. The established minimum right-of-way widths and building setback lines are presented in Table 721.02, below.

§5.04. Design and Construction Standards

(A) The classification and construction standards for all Regulated Roadways shall be determined according to the Average Daily Traffic anticipated for the roadways. The Roadway Design Report shall include estimates of the Average Daily Traffic (ADT) before and after the proposed development. The methodology for estimating ADT shall be based on recognized industry standards, including those utilized by the Texas Department of Transportation (TXDOT) and AASHTO. The post-development ADT shall be based on the maximum number of Lots that would be permitted in the approved development plan.

(B) The geometric requirements for Regulated Roadways shall be identified in the Roadway Design Report and shall be designed to accommodate the design ADT of the roadway. The minimum geometric standards for Regulated Roadways are summarized in Table 721.02.

(C) The design and construction of all Regulated Roadways shall conform to the Hays County Specifications for Paving and Drainage Improvements, as adopted by the Department, and shall include all necessary improvements, including necessary signage and traffic control devices. All signage and traffic control devices shall conform to the "Texas Manual of Uniform Traffic Control Devices," latest edition, as adopted by TXDOT. Speed bumps are not authorized as traffic control devices on Public Roadways. Pedestrian elements (e.g. sidewalks, crosswalks, access ramps, etc.) for projects in Public Roadways shall comply with the accessibility requirements of the Texas Department of Licensing and Regulation (TDLR), and if required, shall be submitted to TDLR for review and approval.

(D) Incentive for Lots Larger than Five Acres. As an incentive to developers to create lots larger than five acres and to reduce their associated development costs, Country Lane roadways may be constructed, without calculation of the Average Daily Traffic, if all Lots with frontage or access onto the roadway are (i) larger than five acres in size, (ii) restricted by a note on the Record Document limiting development to one single family dwelling unit per Lot and prohibiting TCEQ Regulated Development, and (iii) the application is approved by the Department.

(E) Incentives for Bicycle Paths and Lanes. If portions of a Local Roadway or Minor Collector are set aside and appropriately designated for the use of bicycles (or a separate bike path is constructed parallel to the roadway), then the amount of right-of-way dedicated to such bicycle use shall be credited against the width of required shoulders and

the Department may reduce the estimated Average Daily Traffic per Lot in determining the design criteria for the roadway served by the bicycle path/lane, in an amount determined appropriate by the Department.

(F) Clearance of Right-of-Way. Upon request by the Owner, the Department shall, to the extent it is safe and prudent to do so, permit preservation of trees of greater than ten inches (10") in diameter, measured one foot from the ground (or the replanting of trees by the Owner), within rights of way of roadways classified as Country Lanes, Local Roadways and Minor Collectors, with greater preservation of trees permitted along roadways with the lower design speed. The Owner shall be responsible for affixing reflectors or other safety devices to any trees preserved within the right-of-way.

§5.05. Access to Regulated Roadways

Except with respect to Lots served by Shared Access Driveways, each Lot shall have the minimum direct frontage onto a Regulated Roadway set forth below and Driveways shall be spaced no closer than the minimum space intervals set forth below, depending on the classification of road onto which the Lot has frontage and the driveway has access. All such driveways shall conform to the Hays County Driveway Specifications, as adopted by the Department.

(A) Incentive for Qualifying Lots. Qualifying Lots will be exempt from the minimum lot frontage and driveway spacing requirements specified above if approved by the Department and Commissioners Court with due regard to safety concerns. A Qualifying Lot is any Lot that (i) is restricted by plat note to development of a single family residence, (ii) has direct access onto a Regulated Roadway and (iii) satisfies the minimum Lot size requirements set forth in these Regulations either through actual lot size or lot size averaging.

(B) Flag Lots. Flag lots shall generally not be permitted, except if approved by the Commissioners Court as consistent with the intent and spirit of these Regulations. The Department shall advise the Commissioners Court if a proposed Lot constitutes a "flag lot" and the Commissioners Court shall, in reviewing all the circumstances, make the final determination.

§5.06. Commercial Driveways

Driveways serving commercial development shall be spaced at the minimum intervals of one hundred fifty feet (150'). Joint-use driveways may be utilized in situations that limit the number of driveway access permits that are issued by either the State of Texas or Hays County to a public roadway, or where safety concerns provide a satisfactory explanation for its use.

§5.07. Shared Access Driveways

Up to one (1) Lot without independent access to a Regulated Roadway may obtain access to a Regulated Roadway by means of a Shared Access Driveway if approved by the Commissioners Court. An additional two (2) Lots having independent access to a Regulated Roadway may also share the use of the Shared Access Driveway. Shared Access Driveways are intended as a means to provide flexibility in the development process, preserve the rural character of the land and avoid excessive infrastructure costs when such costs would provide little or no social benefit. Shared Access Driveways are not intended to serve as a substitute for interior roads. Excessive

use of Shared Access Driveways will not be permitted. Any application proposing shared access driveways shall also satisfy the following requirements:

(A) A plat note must be conspicuously displayed on the plat stating:

(16) All lots served by a Shared Access Driveway are restricted to one single family residence per lot and if any other Development of a Dwelling Unit occurs on any of the Lots obtaining access through the Shared Access Driveway, then such new Dwelling Unit must be constructed on a separately platted lot with direct frontage onto and physical access to a Regulated Roadway prior to construction of the Dwelling Unit. A duplex will not be considered a single family residence for purposes of this subparagraph.

(17) The owners of the Single Family Residences obtaining access through the Shared Access Driveway shall be solely responsible for all maintenance of the driveway, including maintaining any drainage structures associated with the driveway. The driveway must be maintained at all times in a condition that will permit unencumbered vehicular access by emergency vehicles.

(B) Each of the Lots sharing the use of the Shared Access Driveway shall hold equal, indivisible and unrestricted rights in the Shared Access Driveway, which rights shall be established by recorded easement and the easement shall run with the land of each of the benefited Lots. The easement instrument shall clearly state each Lot's pro rata responsibility with respect to future maintenance or repairs of the Shared Access Driveway.

(C) The Shared Access Driveway shall be no longer than one quarter mile in length and must have a minimum distance of (a) 200 feet from any other driveway entering onto the Regulated Roadway and (b) 500 feet from any other Shared Access Driveway.

(D) The Shared Access Driveway shall have a name or designation approved by the County "911" Coordinator and a separate "911" address shall be established as for each Lot which relies on a Shared Access Driveway for access.

(E) Up to three (3) Lots not having independent access to a Regulated Roadway may share a Shared Access Driveway with up to two (2) Lots having independent access to a Regulated Roadway if all other requirements of this are met and all Lots using or adjacent to the Shared Access Driveway are larger than five acres in size and restricted by Plat note limiting development to one single family residence per Lot and prohibiting TCEQ Regulated Development.

§5.08. Coordination with "911" Addressing System

If not previously established, all Applications for Development Authorization submitted to the County that include a new or altered Regulated Roadway, shared access easement, or a shared access driveway shall obtain approval for the names and/or designations for such roadways, easements or driveways from the County "911" Coordinator, in accordance with Chapter 701, Subchapter 16. The Applicant shall also establish a "911" address for all lots or components of the development served by a Regulated Roadway, shared access easement or shared access driveway associated with that development, in accordance with Chapter 701, Subchapter 16.

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§5.09. Speed Limits for Regulated Roadways

(A) If not previously established, all Applications for Development Authorization submitted to the County that include a new or altered Regulated Roadway, shared access easement, or a shared access driveway shall establish an appropriate maximum speed limit for such roadways, easements or driveways. Such established maximum speed limits shall not be greater than the maximum speed limits authorized under TTC Chapter 545.352 but shall not be less than the lower maximum speed limits authorized under TTC Chapter 545.355 for the specific type of roadway under consideration. For roadways with speed limits that are established at less than the maximum speed limits authorized under TTC Chapter 545.352, the Roadway Design Report shall include an explanation of the reasons for the reduced maximum speed limits.

(B) Speed limits shall not take effect until such time as the County approves and issues the Development Authorization under which those speed limits were established and signage indicating the established speed limit(s) is actually posted along the roadway.

§5.10. Construction Quality Assurance for Regulated Roadways.

The Permittee shall submit document all required inspections and tests at the completion of each phase of construction of the roadway. Construction Quality Assurance testing shall comply with the following:

(A) Tests on all components of the pavement system, including plasticity index, tests for compacted density, depth of base, distribution of asphalt, and other quality assurance tests required by the County's adopted roadway construction specifications.

(B) It is the responsibility of the Permittee to coordinate all inspections and laboratory tests with the Department and not to proceed with construction until proper inspections and tests have been obtained.

(C) Any laboratory tests and test holes shall be at the expense of the Permittee.

(D) In no event will any subsequent component be placed on the roadway until the underlying components have been approved in writing by the Department.

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Table 721.01 – Design Requirements Based on Roadway Classification

Functional Classification	Country Lane	Local Roadway	Urbanized Local Roadway	Minor Collector	Major Collector	Minor Arterial	Major Arterial
AASHTO Classification	Special Purpose	Local Rural	Special Purpose	Rural Collector	Rural Collector	Rural Arterial	Rural/Urban Arterial
Average Daily Traffic (ADT - one way trips*)	Not more than 100	101-1000	Not more than 1000	1001-2500	2501-5000	5001-15000	More than 15,000
Design Speed (mph)	25 mph	25 mph	25 mph	35 mph	45 mph	55mph	**
No. of Travel Lanes	2	2	2	2	2	4	**
Turn Lanes	No	No	No	No	**	**	**
Min. ROW Width (ft)	50	60	40	60	80	100	**
Building Setback (ft)	10	25	10	25	50	50	*50*
Width of Travelway (ft)	18	20	18	22	24	48	**
Width of Shoulders (ft)	2	4	2	5	6	8	**
Minimum Centerline Radius (ft)	200	300	200	375	675	975	**
Min. Tangent Length between Reverse or Compound Curves (ft)	50	100	50	150	300	500	**
Min. Radius for Edge of Pavement at Intersections (ft)	25	25	25	25	25	25	**
Intersection Street Angle Range	80-100	80-100	80-100	80-100	80-100	80-100	**

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(degrees)							
Max. Grade (%):	11	11	10	10	9	8	**
Min. Street Centerline offset at Adjacent Intersections (ft)	110	125	110	125	125	125	**
Min. Stopping Sight Distance (ft)	175	175	175	250	350	550	**
Min. Intersection Sight Distance (ft)	250	250	250	350	450	550	**
Ditch Foreslope Grade	4:01	4:01	4:01	5:01	5:01	6:01	**
Ditch Backslope Grade	3:01	3:01	3:01	4:01	4:01	4:01	**
Min. Cul-de-sac ROW/ Pavement Radius (ft)	70/45	70/45	70/45	70/45	N/A	N/A	N/A
Min. "T" End ROW/ Pavement Length (ft)	80/65	80/65	80/65	N/A	N/A	N/A	N/A
Min. "T" End ROW/ Pavement Width & Radius (ft)***	40/20	40/20	40/20	N/A	N/A	N/A	N/A
Min. Lot Frontage (ft)	30	50	30	100	150	150	150
Min. Drive Spacing (ft)	50	50	50	75	120	120	120

Notes:

* ADT shall be based on an average of 10 one-way trips per dwelling unit per day for residential lots. ADT calculations for commercial or other lots shall approved by the Department on a case-by-case basis.

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** Noted elements shall be approved by the County Engineer on a case-by-case basis.

*** "T" End Designs must conform to minimum AASHTO Standards

AASHTO – American Association of State Highway and Transportation Officials

Building Setback – Minimum building setback, in feet, applicable to each side of the roadway

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CHAPTER 735 - FLOOD DAMAGE PREVENTION

Sub-Chapter 5 - Provisions for Flood Hazard Reduction

§5.03. Standards for Subdivision Proposals

(A) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with this Chapter, and shall be approved by the County Floodplain Administrator prior to issuance of the Development Authorization by the County. Plat specifications and details for submission will be governed by Chapter 705 and other applicable provisions of these Regulations.

(B) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet the requirements this Chapter.

(C) Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is are greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to this Chapter.

(D) All subdivision plats shall have the Floodplain and Floodway clearly delineated on the plat and, where appropriate, shall have the lowest floor elevations for all lots located within Flood Hazard Areas.

(E) All subdivision Applications including the placement of manufactured home parks and subdivisions shall include provisions for adequate drainage as required under Chapter 725, to reduce exposure to flood hazards.

(F) All subdivision Applications including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(G) All subdivision Applications which include land which is encroached by areas of special flood hazard, must include the placement of a permanent benchmark indicating the elevation relative to mean sea level. The benchmark must be located within the platted property, and must be indicated on the subdivision plat.

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ORDER ADOPTING RULES OF HAYS COUNTY, TEXAS FOR ON-SITE SEWAGE FACILITIES

Section 10. AMENDMENTS.

The County of Hays, Texas, wishing to adopt more stringent Rules for its On-Site Sewage Facilities, understands that the more stringent local Rule shall take precedence over the corresponding Texas Commission on Environmental Quality requirements if local rules provide greater public health and safety protection. Listed below are the more stringent Rules adopted by Hays County, Texas.

A. Definitions.

The following terms shall have the corresponding meaning:

1. Dwelling Unit Equivalent – An estimated quantity of wastewater from a non-residential source that is equivalent to that generated from a three (3) bedroom residential dwelling unit, or 300 gallons per day, whichever is greater.

2. Qualified OSSF Inspector – An individual with a current license from the TCEQ as an Installer or a Maintenance Provider, as those terms are defined under 30 TAC Chapter 285 who also holds a current National Association of Wastewater Transporters (NAWT) or National Sanitation Foundation (NSF) certification as an on-site sewage facility inspector within one year of the effective date of these rules. Texas licensed professional engineers and Texas registered sanitarians may also inspect existing OSSFs, subject to the requirements of 30 TAC Chapter 285.

3. Department – Hays County Development Services Division

4. Groundwater Supply System – Any water supply system that obtains greater than one-third of its overall supply from Groundwater. This classification of water supply systems is further subdivided into Public Groundwater Supply Systems and Private Groundwater Supply Systems. Public Groundwater Supply Systems are any systems designated a Public Water System by the Texas Commission on Environmental Quality. Private Groundwater Supply Systems are any systems that do not qualify as a Public Groundwater Supply System, including, but not limited to, individual water supply wells.

5. Surface or Rainwater Collection System – A water supply system in which greater than two-thirds of the total water obtained is from a "surface" source, rainwater collection, or groundwater from an aquifer that is located entirely outside of Hays County. In the event any water supply system relies on Groundwater for greater than one-third, but not more than one-half, of its total water supply, the Commissioners Court may, on a case-by-case basis, approve an application to consider such water supply system to be a "Surface or Rainwater Collection System."

6. Private Well – Any water well other than a Public Well. This definition includes Non-Public Local Groundwater Supply Systems which are Local Groundwater Supply

Systems that do not qualify as a Public Local Groundwater Supply System, including, but not limited to individual water supply wells.

7. Public Well – A water well providing piped water for human consumption and defined as a "Community Water System" or a "Public Water System" under Chapter 290 of the Texas Administrative Code.

8. Rainwater Harvesting System – An individual potable water supply system approved by the Department and having rainwater as its source and designed to provide for any or all of the domestic water requirements, including irrigation.

D. Facility Planning

All of the terms and provisions of 30 TAC §285.4 are incorporated within the Rules of Hays County except as expressly amended below.

1. Land Planning, Site Evaluation and Minimum Lot Sizing. The following requirements shall apply to all lots on which an OSSF is to be utilized:

   (A) A platted or unplatted single family residential lot shall have a surface area of at least the acreage designated in Table 10-1 below.

   (B) Small Multi-Unit Residential Developments. Multi-unit residential developments with four or fewer individual dwelling units, including duplexes, may utilize lots smaller than the acreages set forth in Table 10-1, provided:

      (1) site specific evaluation materials, for a central system or individual systems, are prepared by a Texas licensed professional engineer or a Texas registered professional sanitarian and submitted to the Department for review and approval; and,

      (2) there is no more than one (1) dwelling unit for each TCEQ minimum lot acreage and no more than two (2) dwelling units for each minimum lot size as designated in Table 10-1 below.

   (C) Other Multi-unit Residential Developments and Non-Residential Developments. Platted or unplatted lots used for multi-unit residential developments with more than four dwelling units, including apartment complexes, groups of rental dwelling units and lots used for non-residential purposes (e.g. office, commercial, industrial or institutional uses) producing domestic wastewater:

      (1) shall have a minimum lot size of 1.0 acres and a total surface acreage of at least one (1) acre for each dwelling unit equivalent (DUE) per day; and,

      (2) the on-site sewage facilities for these developments shall be designed based on site specific evaluation materials.

   (D) OSSFs serving Manufactured Home Rental Communities and Recreational Vehicle Parks where spaces are rented or leased and are not subdivided for

individual sale may be designed in accordance with Subsection (1)(C) above of this Section D.

(E) Condominium Complexes. Condominium complexes utilizing on-site sewage facilities shall meet the following requirements:

(1) The Owner applying for the OSSF permit shall identify the person who will be legally responsible for compliance with all applicable OSSF requirements. The application for OSSF permit shall include a sworn (notarized) statement from such legally responsible person attesting that such person accepts full legal responsibility for compliance with all applicable OSSF requirements. In the event the designated legally responsible party fails or refuses to comply with any applicable OSSF requirements, the Department may institute appropriate enforcement action against that person, or against one or more of the following parties who the Department determines to be responsible for the noncompliance: (i) the owner or manager of the condominium complex; (ii) the owner of one or more individual condominium units; (iii) the legally constituted condominium owners association for that condominium; (iv) a maintenance company/provider contracted to provide maintenance for the noncompliant OSSF.

(2) All requirements set forth in this Section D apply to condominium complexes.

(3) Each individual condominium unit shall be equipped with a flow meter capable of measuring the wastewater flow from that unit or a flow meter capable of measuring the water usage for that unit.

(4) Maintenance of the OSSF for a condominium complex is subject to the applicable maintenance, testing and reporting requirements of TCEQ's Chapter 285 Rules and all maintenance shall be provided by a Maintenance Company/Provider registered with TCEQ under such rules.

(F) Where multiple sources of water apply to one lot, the larger of the two (2) minimum lot sizes shall govern.

(G) In instances where the actual design of the OSSF system proposed for use dictates a larger minimum lot size required, such larger minimum lot size shall apply.

2. Lot Size Averaging. Only platted development may take advantage of these averaging provisions. The minimum acreage requirements set forth in Table 10-1 below may be obtained by averaging the size of all Lots within a platted development so long as the only Lots with acreage exceeding the minimum set forth in such table that may be included in the averaging calculation shall be:

(A) Lots reserved by plat note for use as parkland or open space, or a private greenbelt in which all owners or residents of the subdivision hold an equal, unrestricted and indivisible right of access and use; or,

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(B) Lots larger than five acres restricted by a plat note prohibiting all development other than one Single Family Residence or other development excluded from the term "Regulated Activities" under the Edwards Aquifer Rules of the TCEQ (30 TAC Chapter 213), but without regard to the aquifer over which the development occurs.

3. Notwithstanding the averaging allowed above or anything else to the contrary in this Order, no on-site sewage facility shall be permitted on any Lot smaller than the minimum lot size permitted under Chapter 366 of the Texas Health and Safety Code and the TCEQ Regulations promulgated thereunder (30 TAC Chapter 285).

Table 10-1 – Minimum Lot Sizes (in Acres) for OSSFs

Location	Water Service	Advanced	Conventional	TCEQ Min.
EARZ [1]	Surface or Rainwater Collection System	1.50	2.00	1.00 [4]
EARZ	Public Groundwater Supply System[2,8]	2.50	4.50	1.00 [4]
EARZ	Private Well	3.00	5.00	1.00 [4,6]
EACZ [3]	Surface or Rainwater Collection System	1.00	1.50	0.50 [5]
EACZ	Public Groundwater Supply System	1.50	2.50	0.50 [5]
EACZ	Private Well	2.00 6.00[8]	3.00 6.00[8]	1.00 [6]
Any Other	Surface or Rainwater Collection System	0.50 1.00 [7]	1.00	0.50 [5] 1.00 [6]
Any Other	Public Groundwater Supply System	1.00	1.50	0.50 [5]
Any Other	Private Well	1.50 6.00[8]	2.00 6.00[8]	1.00 [6]

Notes:
1. Edwards Aquifer Recharge Zone as defined in 30 TAC §213
2. A Public System is a Public Water System as defined in 30 TAC §290
3. Edwards Aquifer Contributing Zone as defined in 30 TAC §213
4. TCEQ Minimum lot size as per 30 TAC §285.40(c)
5. TCEQ Minimum lot size as per 30 TAC §285.4(a)(1)(A)
6. TCEQ Minimum lot size as per 30 TAC §285.4(a)(1)(B)
7. Minimum lot size for use of surface application system as per 30 TAC §285.33(d)(2)
8. Applicable to new subdivisions and Manufactured Home Rental Communities served by individual private water wells located within the Priority Groundwater Management Area as defined by Texas Commission on Environmental Quality and required to demonstrate water availability as required by Hays County under the authority granted to the County under the Texas Water Code and the Texas Local Government Code.

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4. A lot may contain multiple habitable structures and qualify as a single family residential lot if it meets the following criteria:

   (A) In addition to the primary dwelling unit, the lot may be occupied by additional habitable structures or dwelling units (e.g. garage apartments, pool houses, guest cottages, etc.) with useable floor space less than fifty percent (50%) of the floor space of the primary dwelling unit;

   (B) The additional habitable structures are not offered for public use or rental; and,

   (C) All such additional habitable structures are precluded from sale or transfer separate from the primary dwelling unit.

5. Existing small lots or tracts that do not meet the minimum lot size requirements of this section and will serve one single family dwelling may be approved for an OSSF in accordance with the following requirements:

   (A) Any lot, regardless of the date of platting or subdivision, must be of adequate size to accommodate the proposed system, including an effluent dispersal area that complies with effluent loading requirements of 30 TAC §285.91, Table I, and the system must be designed and operated in accordance with the remaining requirements of 30 TAC §285.

   (B) For lots or tracts platted or subdivided before March 14, 1977, an OSSF may be permitted on a lot of any size.

   (C) For lots or tracts platted or subdivided on or after March 14, 1977, but before June 14, 1984, an OSSF may be permitted on a lot of at least twenty thousand (20,000) square feet in size;

   (D) For lots or tracts platted or subdivided on or after June 15, 1984, but before August 29, 1997;

      (1) If the lot has a soil depth of less than four (4) feet to bedrock or to groundwater or if the percolation rate exceeds forty five (45) minutes per one (1) inch, the minimum lot size shall be thirty thousand (30,000) square feet; or,

      (2) If the lot has both a soil depth of less than four (4) feet to bedrock or to groundwater and a percolation rate exceeding forty five (45) minutes per one (1) inch, the minimum lot size shall be forty thousand (40,000) square feet.

   (E) For lots or tracts platted or subdivided on or after June 15, 1984, but before August 29, 1997, an OSSF may be permitted on a lot with a minimum size in compliance with 30 TAC §285.4 or §285.40, as applicable, which meets the requirements of 30 TAC §285.31 and the Hays County Regulations that were in effect at the time.

ATTACHMENT "A"

(F) For lots or tracts platted or subdivided on or after August 29, 1997, and before the effective date of this Order, an OSSF may be permitted on a lot with a minimum size in compliance with Table 10-1 above, which meets the requirements of 30 TAC §285.31. An exception is the Edwards Aquifer Contributing Zone which only applies to the Barton Springs Segment of the Contributing Zone.

G. Innovative Development

Innovative development, such as "planned unit development" style developments, are encouraged and will be considered on a case by case basis, upon the submission of the following with a preliminary plan application for subdivision approval:

1. Site Evaluation Materials demonstrating that such an innovative development is appropriate in light of lot sizes, soil or other conditions;

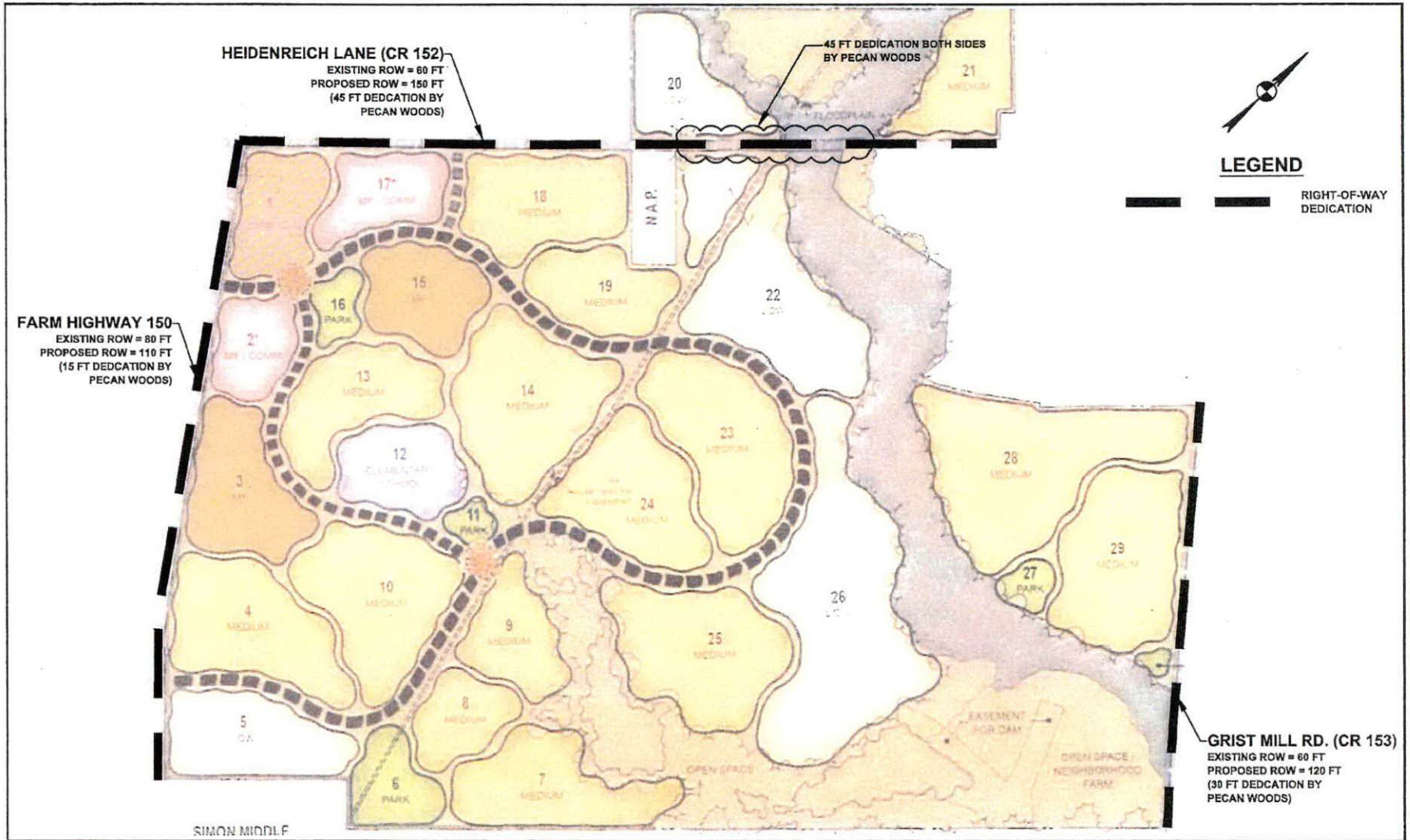
2. Site Specific Materials; and,

3. Site Plan to be recorded with Record Plat, which shall state the future development of the Property shall be in accordance with the Site Plan. The Site Plan shall designate the type of development permitted on each Lot, the location of buildings, paved areas, green belts and on-site sewage facilities (including drainage fields) on each Lot; and all other materials required under 285.30 of the Rules, as applicable. As provided in Section 285.6 of the Rules, cluster systems are not authorized.

The Commissioners Court may approve an application for innovative development permitting minimum lot acreage below those required in Table 10-1 upon a finding that the proposed development will provide equivalent protection of the public health and environment as development in accordance with these Regulations and that the lot acreage meet the TCEQ minimum.

EXHIBIT "C"

RIGHT OF WAY



Stantec
221 West Sixth Street, Suite 600
Austin, Texas 78701
Tel. (512) 328-0011 Fax (512) 328-0325
TBPE # F-6324 TBPLS #10194230

EXHIBIT "C"
RIGHT-OF-WAY DEDICATION

PECAN WOODS
KYLE, TEXAS

WALTON

DATE: 9/8/2016	SCALE: 1"=1000'	DRAWN BY: BCS	FILE: V:\2220\active\222010674\civil\cad\	PROJECT No. 222010674

V:\2220\active\222010674\civil\cad\CD Exhibits\2016-09-07 Tri Party\Exh C_ROW_dedication.dwg modified by bspencer on Sep 8, 16 2:21 PM

EXHIBIT "C"

RIGHT OF WAY

EXHIBIT "D"

COUNTY ROADWAY STANDARDS (STRUCTURAL)

SPECIFICATIONS
FOR
ROADWAY DESIGN, PAVING AND DRAINAGE IMPROVEMENTS
HAYS COUNTY, TEXAS

DESIGN STANDARDS: Unless specifically noted below, default standards shall be the most current City of Austin (COA) Standard Specifications. Design guidelines shall follow the "American Association of State Highway Transportation Officials", "U.S. Department of Transportation Highway Utility Guide", "Manual on Uniform Traffic Control Devices", or as directed by the Director of Transportation.

All pavement designs shall comply with section 3 of the latest COA Transportation Criteria Manual.

Functional Classifications and Required Minimum MFPS Input Values:

Hays County Classification ADT	Local 101-1,000	Minor Collector 1,001-2,500	Major Collector 2,501-5,000	Minor Arterial 5,001-15,000	Major Arterial >15,000
Corresponding COA Classification ADT	Residential Collector 1,000	Neighborhood Collector 2,000	Primary Collector 3,500	Minor Arterial 6,000	Major Arterial 18,000
Percentage Growth	3.5%	4%	4%	4%	4%
18-Kip Equivalency Factor	0.4	0.53	0.53	0.62	0.84
Initial Serviceability Index	4.20	4.20	4.20	4.20	4.20
Terminal Serviceability Index	1.50	1.50	2.00	2.50	2.50

Whenever a soil investigation indicates that more than two feet of expansive subgrade soil with a P.I. of 35 or greater exists beneath the expected base layer, **the design professional shall incorporate a combination of two of the measures described in COA Transportation Manual section 3.1.3 in the roadway design.**

Conflicts found on the plans and or specifications, shall be resolved through the Design Engineer of Record in consultation with and the approval of the Director of Transportation.

EROSION AND SEDIMENT CONTROL: All E&S controls shall be in place before any work begins. The Director of Transportation or his Representative has the Authority to **STOP WORK** at any time for failure to maintain sufficient erosion/sedimentation control.

START NOTICE: The contractor shall notify the Hays County Transportation Department a minimum of twenty-four (24) hours in advance of the work commencing on the project. The notice shall include the development permit number issued under the Regulations of Hays County, Texas. Failure to follow these requirements may result in the County not accepting the roadway and drainage facilities for maintenance upon completion.

SAFETY: The Director of Transportation has the Authority to **STOP WORK** at any time due to unsafe work practices.

Item: 1.00 EXCAVATION AND SUBGRADE PREPARATION

1.01 DESCRIPTION

The work to be performed under this specification will consist of excavation and grading necessary for the preparation of the road-bed subgrade and roadside drainage ditches, and shall include the removal and satisfactory disposal of all trees, shrubs, brush, roots, rocks and other debris within the right-of-way being cleared.

1.02 CONSTRUCTION METHODS

After the site of the work has been properly cleared, excavation and grading shall proceed in conformance with the plans and specifications, and as directed by the Director of Transportation or his Representative.
When required by the plans and specifications, selected materials from the excavation shall be utilized to improve the road-bed, in which case the work shall be performed in such manner and sequence that suitable materials may be selected, removed separately and deposited in the roadway within the limits and to the required elevations shown on the plans.
If unsuitable subgrade material is encountered, this material shall be excavated to a depth as required by the Director of Transportation or his Representative and replaced with approved material in compacted lifts no greater than 6" compacted in depth. Care shall be exercised so as not to disturb the natural ground below the compacted subgrade limits except for the construction of structures, or when so ordered by the Director of Transportation or his Representative.

The finished grades, slopes and edges of the excavation shall be backfilled where necessary, using select materials thoroughly compacted and dressed off uniformly in a neat and workmanlike manner.

The Contractor shall at all times make ample provisions for completely and readily draining the subgrades and excavations.

1.03 EMBANKMENTS / FILLS

Embankments or fills shall be constructed at the locations and to the lines and grades shown on the plans. The underlying subgrade shall be scarified and benched as required in conformance with TxDOT item 132. Materials placed in fills shall be free from all organic matter, trash, frozen materials, and stone having a maximum dimension greater than six inches. Fills shall be formed of excavated materials placed in successive lifts of such widths and lengths as are suited to the moisture conditioning and compaction method utilized. Embankments shall be constructed in lifts not exceeding six inches in thickness after compaction.

The Contractor shall add moisture to, or shall dry by scarification each lift as may be necessary to meet the requirements of the moisture/density specification. The addition of moisture to or drying of each lift shall be accompanied with thorough mixing so as to bring all the material to a uniform moisture content.

Compaction shall be accomplished with tamping rollers, discs, and pneumatic rollers of approved design. Tamping rollers shall be used except for the final rolling of the completed fill which shall be accomplished by rubber-tired rollers. The rollers, unless otherwise directed, shall be operated at a speed between two and three miles per hour. All soft areas that develop during construction operations shall be scarified, aerated or moistened as required, and compacted to the full depth required to obtain the specified density of 95% for each layer.

Portions of embankments which are too near adjacent walls, pavements or other fixed objects to permit use of the above specified rolling equipment for compacting, and other portions which the roller cannot reach for any reason, shall be thoroughly compacted by tamping in two-inch lifts with mechanical tampers or other equipment as approved by the Director of Transportation or his Representative. The degree of compaction for such portions of the embankments shall be equivalent to that obtained by moisture conditioning and rolling as specified for other respective portions of the embankment. Damaged walls, pavements, or other fixed objects shall be replaced or repaired at the expense of the Contractor.

Approved material, excavated in preparation of the subgrade, may be utilized in the construction of adjacent shoulders and slopes or otherwise disposed of as directed by the Director of Transportation or his Representative. Any additional material required for the completion of the shoulders and slopes shall be secured from approved sources.

After compaction, in-place moisture density tests shall be required at intervals no less than 300 feet, at locations representative of the entire roadway. Intermediate points will be tested if required by the Director of Transportation or his Representative. The cost of these tests shall be borne by the Developer or Contractor.

All road subgrade, embankments, and trench backfill shall be compacted to a minimum density of ninety-five percent (95%) of the maximum dry density using TxDOT test method TEX-114-E (**All lifts, including ones that have passed density tests are subject to proof roll**). Subgrade materials on which vegetation will be established shall be compacted to a minimum of eighty five percent (85%).

Soil Description- P.I.	Required % Compaction	Moisture
Non-swelling- P.I. <20	95 to 105	-3% to +3%
Swelling- P.I. of 20 to 35	95 to 102	Optimum to +4%
Swelling- P.I. >35	95 to 100	Not less than optimum

1.04 EARTH CUTS

All cut areas shall be scarified to a minimum depth of 6" below grade, and all unsuitable, organic, and oversized (6"+) material removed. Scarification may be waived when a rock ledge is identified and its location noted by the Geotechnical Engineer. The Contractor shall add moisture to, or shall dry by aeration as may be necessary to meet the requirements of the moisture/density specification. Compaction shall be accomplished with tamping rollers, discs, and pneumatic rollers of approved design. Tamping rollers shall be used except for the final rolling which shall be accomplished by rubber-tired or flat wheel rollers.

1.05 MAINTENANCE OF THE FINISHED SUBGRADE

The finish subgrade shall be maintained to the proper grade, cross section, density, and moisture requirements by the Contractor until subbase or base material is placed thereon. All such maintenance, including re-compacting necessary as a result of precipitation or excessive drying out, shall be the responsibility of the Contractor. All construction traffic shall be uniformly distributed over the subgrade. The contractor shall check the subgrade for conformity to the lines and grades to within ½ inch by setting "blue tops" at intervals not exceeding 50 feet on the centerline, quarter points, curb lines and at other points indicated on the drawings or as directed by the Director of Transportation or his Representative. All subgrade and ditches shall have positive drainage prior to placement of flex base.

1.06 LIME STABLIZED SUBGRADE

Lime Stabilized Subgrade materials, equipment, and construction methods shall comply with most current COA specifications. Methods shall be approved by Geotechnical Report, the Director of Transportation, and confirmed by the Engineer of Record. **A maximum of 20 P.I. (Plasticity Index) will be accepted on lime treated subgrade.**

1.07 SUBGRADE TESTING

All subgrade shall be proof-rolled after the roadway has been cut to grade. The design Engineer, Accredited Laboratory, or their designated representative shall monitor proof-rolling operations and shall determine whether remediation of weak areas is required before subgrade treatment. If remediation is required, the Design Engineer or Accredited Laboratory shall provide recommendations for remediation. **A 25 ton pneumatic roller shall be used for proof-rolling. A County Representative must be present during proof rolling.**

Density tests shall be performed every 300 linear feet of subgrade. Closer spacing for density testing may be required to verify conformance with project specifications. A minimum of (2) in-place density tests per street are required. Director of Transportation or his Representative is required to witness all in-place densities.

In the event of ponding water on the subgrade after densities are made or other conditions beyond the contractors control, and if the Director of Transportation or his Representative deems that the subgrade conditions have been adversely affected, additional proof-rolling of the subgrade will be required.

1.08 INSPECTION

Prior to the installation of the base material, the compacted subgrade shall be inspected by the Director of Transportation or his Representative and proof rolled. A maximum of 1" of deflection will be allowed in non-stabilized plastic soils. The owner or his agent shall notify the Director of Transportation or his Representative forty-eight (48) hours prior to the time when the inspection is needed.

Item: 2.00 PIPE EMBEDMENT

2.01 MATERIALS

Bedding shall be angular material (manufactured sand, crushed stone or gravel) that is, washed material, hard and insoluble in water, free of mud, clay, silt, vegetation or other debris conforming to COA item 510. **The use of natural sand is not allowed in the ROW.**

2.02 EMBEDMENT

All pipe embedments shall have a min of 6-inches of embedment material below the bottom of the pipe. The initial layer of embedment placed to receive the pipe shall be brought up to a grade higher than that required for the bottom of pipe. The pipe shall be placed and brought to grade by tamping or by removal of the slight excess amount of embedment under the pipe:

Adjustments to grade shall be made by scraping away or filling with embedment material. **Wedging or blocking up the pipe will not be permitted.** Each pipe section of the pipe shall have a uniform bearing on the embedment of the length of pipe, except immediately at the joint. All lines shall have a minimum of 6-inches of granular embedment material on each side of the pipe and not less than 12-inches above the top of pipe. All other bedding materials must be approved by the Director of Transportation and conform to COA item 510. All bedding and trenches must be inspected prior to backfill by the Director of Transportation or his Representative. **All backfill in right-of-way must meet Hays County subgrade requirements. A minimum of 36" of cover from the top of pipe is required in the ROW.**

Item: 300 FLEXIBLE BASE

3.01 DESCRIPTION

This item shall consist of a foundation course for asphaltic concrete or other paving, and shall be composed of crushed limestone material constructed as herein specified in one or more courses in conformity with the typical sections shown on the plans and to the lines and grades established.

3.02 MATERIALS

The flexible base shall be constructed of crushed limestone material from an approved source. The material shall consist of durable stone particles mixed with an approved binding material, complying with the most current **COA Item 210 or TxDOT Item 247 Specifications.**

Sieve	Percent Retained
1 3/4"	0%
7/8"	10% to 35%
3/8"	30% to 50%
#4	45% to 65%
#40	70% to 85%

The material passing the #40 sieve shall be known as "soil binder" and the plasticity index shall not exceed 10.

The base material proposed to be used shall be tested by an approved soils testing laboratory and the results of the test shall be submitted to the Director of Transportation or his Representative prior to use of the material.

3.03 CONSTRUCTION METHODS

The base material shall be placed on the prepared subgrade in uniform courses with the compacted thickness to be no more than 7 inches or less than 3 inches. Material deposited on the subgrade shall be spread and shaped the same day unless otherwise directed by the Director of Transportation or his Representative. The course shall then be sprinkled as required and rolled as directed until a uniform compaction is secured. Through this entire operation, the shape of the base course shall be maintained by blading and the surface, upon completion, shall be smooth and in conformance with the typical sections shown on the plans and to the established lines and grades. All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the affected area, adding suitable material as required, compacting and reshaping. **Each course of base shall be compacted to a minimum density of 100 percent (100%), according to TXDOT Test Method Tex-113-E, with a moisture content of ±2% of optimum.**

3.04 THICKNESS CONTROL

The thickness of the compacted flexible base may vary a maximum of 1/2 inch than specified. Deviations not within this tolerance shall be corrected. The contractor shall check the surface of the lift for conformity of the lines and grades by setting " blue tops" at intervals not exceeding 50 feet on the centerline, at quarter points, at curb lines or at edge of pavement, and at other points that may be indicated on the drawings.

When the thickness of a particular lift of the flex base is in question, the contractor shall check the lift for conformity to the lines and grades by setting "blue tops" at intervals not to exceed 50 feet on the centerline, at quarter points, at curb lines or edge of pavement, and at other points that may be indicated on the drawings, or as directed by the Director of Transportation or his Representative

3.05 ROAD BASE REQUIREMENTS for PRIVATE ROADS

Roads that are intended to be privately maintained shall be designed and constructed in conformance with Hays County specifications. Testing and inspection standards in these specifications shall apply to private roads.

3.06 FLEXIBLE BASE TESTING

After final compaction, an in-place moisture density test shall be required at intervals no less than 1 per 300 LF, at locations representative of the entire road base. A minimum of two (2) in-place moisture density tests are required per street per lift. Director of Transportation or his Representative must be present at time of in-place density. Intermediate points will be tested if required by the Director of Transportation or his Representative. The cost of these tests shall be borne by the developer or contractor.

3.07 INSPECTION

Prior to the placement of the paving materials, the compacted base material shall be inspected for uniformity and loose segregated material. It may be proof rolled at the discretion of the Director of Transportation or his Representative. The Owner or his agent shall notify the Director of Transportation or his Representative forty-eight (48) hours prior to the time when the inspection is needed.

Item: 4.00 PRIME COAT

4.01 DESCRIPTION

This item shall govern the application of asphaltic material on the completed base course and/or other approved areas in accordance with the Drawings, these specifications or as directed by the Director of Transportation or designated representative.

4.02 MATERIALS

The asphalt material for Prime Coat shall meet the requirements of Cutback Asphalt, MC-30, Emulsion, SS-1, Emulsion CSS-1 or AE-P, Standard Specification Item No. 301S, "Asphalts, Oils and Emulsions".

4.03 CONSTRUCTION METHODS

When, in the opinion of the Director of Transportation or his designated representative, the base course or other surface is ready to receive the prime coat, the surface shall be prepared by sweeping or other approved methods as directed by the Director of Transportation or designated representative. The surface shall be lightly sprinkled with water just prior to application of the asphaltic material unless this requirement is waived by the Director of Transportation or designated representative. The Contractor shall submit a list of prime material(s) recommended for application on the work to the Director of Transportation or designated representative for approval. When emulsions are approved, a dispersal agent shall be added to the water before application.

The asphaltic material shall be applied on the clean surface by an approved type of self-propelled pressure distributor operated so as to distribute the prime coat at a rate ranging from 0.1 to 0.3 gallons per square yard (0.45 to 1.36 liters per square meter) of surface area. The material shall be evenly and smoothly distributed under pressure sufficient to assure proper distribution. During the application of prime coat, care shall be taken to prevent overspray of adjacent pavement, curb and gutters or structures. The Contractor shall be responsible for cleaning all areas contaminated by overspray.

Prime Coat may be applied when the surface temperature is 60°F or higher, and the air temperature is 50°F and rising. Measure the air temperature in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions, in the opinion of the Engineer or designated representative, are not suitable. **The application of prime coat shall be prohibited when the forecast for precipitation is equal to or greater than 50% within 24 hours of the time of proposed application.** The Contractor shall apply the asphaltic material at a temperature within 15°F of the specified temperature, but not exceed the maximum allowable in most current TxDOT item 300 specifications.

The Contractor shall provide all necessary equipment for determining the temperature of the asphaltic material, the rate at which it is applied, and for determining uniformity between two (2) distributor loads.

The distributor shall have been calibrated within three (3) years from the date it is first used on this project. The Director of Transportation or designated representative shall be furnished an accurate and satisfactory record of such calibration upon request. After beginning the work, if the yield on the asphaltic material applied appears in error, the distributor shall be calibrated in a manner satisfactory to the Director of Transportation or designated representative before proceeding with the work.

The Contractor shall be responsible for the maintenance of the surface until the work is accepted by the Engineer or designated representative. No traffic, hauling or placement of any subsequent courses shall be permitted over the freshly applied prime coat for a minimum of 24 hours or until the prime coat is accepted as dry and cured completely by the Director of Transportation or designated representative.

All storage tanks, piping, retorts, booster tanks and distributors used in storing or handling asphaltic materials shall be kept clean and in good operating condition at all times and they shall be operated in such manner that there will be no contamination of the asphaltic material with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the material storage facility at all times.

In the event of rain prior to the placement of HMAC, the primed base shall be inspected and approved before proceeding with the next course.

Item: 5.00 TWO COURSE SURFACE TREATMENT

5.01 DESCRIPTION

This item shall consist of a wearing surface composed of two applications of asphaltic material, each covered with aggregate constructed on the prepared base course as herein specified and in accordance with the details shown on the plans. All specifications in this item shall be in conformance with **COA Item 320S.**

A two course surface treatment may be applied when the surface temperature is 60°F or higher, and the air temperature is 50°F and rising. Measure the air temperature in the shade and away from artificial heat.

When latex modified asphalt cement is specified, the two course surface treatment shall be applied when the air and surface temperature is above 70°F. Air temperature shall be taken in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions, in the opinion of the Director of Transportation or his Representative, are not suitable.

5.02 MATERIALS

Asphaltic Materials:

The asphaltic materials used shall conform to COA Item No. 301S, "Asphalts, Oils and Emulsions" as follows: 1. Air Temperature 65 to 80°F, HFRS-2; 2. Air Temperature over 81°F, RS-2

Aggregate:

The aggregate materials shall conform to COA Item No. 302S, "Aggregate for Surface Treatments" as follows: 1. First Course Grade 3, 2. Second Course Grade 4

CLASS B:TYPE B Grade 3	
Sieve	**Percent (%) Retained**
3/4"	0%
5/8"	0-2%
1/2"	85-100%
3/8"	85-100%
1/4	95-100%
#10	99-100%
Application Rate - Min 1 CY covers 80 SY, (1:80), max 1 CY covers 100 SY, (1:100).	

CLASS B:TYPE B Grade 4	
Sieve	**Percent (%) Retained**
5/8"	0
1/2"	0-2
3/8"	20-35
#4	95-100
#10	99-100
Application Rate-Min. 1 CY covers 90 SY, (1:90); max 1 CY covers 110 SY, (1:110).	

5.03 CONSTRUCTION METHODS The area to be treated shall be cleaned of dirt, dust, or other deleterious matter by sweeping or other approved methods. Asphaltic material of the type and grade shown on the plans for the first course shall be applied on the clean surface by an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for determining the temperature of the asphaltic material in all of the heating equipment and in the distributor, for determining the rate at which it is applied, and for securing uniformity at the junction of two distributor loads. The distributor shall have been recently calibrated and the Director of Transportation or his Representative shall be furnished an accurate and satisfactory record of such calibration. After beginning work, should the yield of the asphalt material appear to be in error, the distributor shall be recalibrated in a manner satisfactory to the Road Director before proceeding.

Asphaltic material for each course may be applied for the full width of the surface treatment in one application, unless the width exceeds twenty-six feet (26'). No traffic or hauling will be permitted over the freshly applied asphaltic material until immediate covering is assured.

Aggregate, of the type and grade shown on the plans for the first course, shall be immediately and uniformly applied and spread by an approved self-propelled continuous feed aggregate spreader, unless otherwise shown on the plans or authorized by the Director of Transportation in writing. The aggregate shall be applied at the approximate rates indicated on the plans and as directed by the Director of Transportation or his Representative. The Contractor shall be responsible for the maintenance of the surface of the first course until the second course is applied.

The entire surface shall be broomed, bladed or raked as required by the Director of Transportation or his Representative and shall be thoroughly rolled with power rollers, self-propelled type, weighing not less than 6 tons not more than 12 tons. All wheels shall be flat.

In lieu of the rolling equipment specified, the Contractor may, upon written permission from the Director of Transportation, operate other compacting equipment that will produce equivalent relative compaction in the same period of time as the specified equipment. If the substituted compaction equipment fails to produce the desired compaction within the same period as would be expected of the specified equipment, as determined by the Director of Transportation or his Representative, its use shall be discontinued.

Rollers shall be maintained in good repair and operating condition and shall be approved by the Director of Transportation or his Representative.

The second course shall consist of asphaltic material and aggregate of the type and grade indicated on the plans for the second course. The asphaltic material and aggregate for this second course shall be applied and covered in the manner specified for the first application. The surface shall then be broomed, bladed or raked as required by the Director of Transportation or his Representative and thoroughly rolled as specified for the first course. Asphaltic materials and aggregates for both courses shall be applied at the approximate rates indicated on the plans and as directed by the Director of Transportation or his Representative.

The Contractor shall be responsible for the maintenance of the surface until the work is accepted by the Director of Transportation.

The Contractor shall be responsible for the proper preparation of all stockpile area before aggregates are placed thereon, including leveling and cleaning of debris necessary for the protection of the aggregate to prevent any contamination thereof.

All storage tanks, piping, retorts, booster tanks and distributors used in storing or handling asphaltic materials shall be kept clean and in good operating condition at all times and they shall be operated in such manner that there will be no contamination of the asphaltic material with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the material storage facility at all times.

Item: 6.00 HOT MIX ASPHALTIC CONCRETE PAVEMENT (HMACP)

6.01 DESCRIPTION

This item shall govern base, level up, and pavement surface courses composed of a compacted mixture of aggregate and asphaltic cement mixed hot in a mixing plant. The hot mix asphaltic concrete pavement (HMACP) shall be constructed on a previously completed and approved subgrade, subbase material, base material, concrete slab or existing pavement.

6.02 MATERIALS

The Contractor shall furnish materials to meet the requirements specified herein and shall be solely responsible for the quality and consistency of the product delivered to the Project.

Aggregate:

The aggregate shall be composed of coarse aggregate, a fine aggregate and, if required or allowed, mineral filler and reclaimed asphalt pavement (RAP). RAP use will be allowed in all base course mixtures except as specifically excluded herein, in the Contract Documents or on the Drawings, provided no more than 20% RAP is used.

RAP use will not be permitted in pavement surface courses.

Aggregates shall meet the quality requirements of **Table 6-1** and the COA item 340s.

Asphaltic Material:

Asphalt cement for the paving mixture shall conform to the requirements of COA Item 301S, "Asphalts, Oils and Emulsions", for AC-20 or PG64-22, Styrene (SBS) Modified Asphalt Cement, AC-SBS Blend AC-45P or PG76-22S, unless otherwise indicated in the Project Documents.

Tack Coat shall conform to COA 307S, "Tack Coat".

Additives:

Additives to facilitate mixing and/or improve the quality of the asphaltic mixture or tack coat may be used with the authorization of the Engineer or designated representative. The Contractor may choose to use either lime or a liquid anti-stripping agent to reduce moisture susceptibility of the aggregate.

6.03 Paving Mixtures

An asphalt mixture design is developed by a laboratory process, which includes the determination of the quality and quantity of the asphalt cement and the individual aggregates, and the testing of the combined mixture (Laboratory Design). The Laboratory Design is subsequently revised to produce an appropriate job mix formula. The job mix formula (JMF) lists the quantity of each component to be used in the mix after the laboratory design has been adjusted by running it through a particular plant (i.e. the mix design is Plant Corrected). **The JMF will be the standard to which the Acceptance Plan will be applied.** The JMF of one drum or batching unit shall not be used for another unit. The Contractor shall submit to the Engineer on forms provided by the Engineer or designated representative, an asphalt mixture design reviewed, signed and sealed by a Registered Professional Engineer licensed in the State of Texas or certified by a TxDOT Level II Certified Asphalt Technician. Mix designs older than one year will not be accepted without a review of current test data of the proposed materials and current mix design to ensure that the materials meet specification requirements. The JMF (Plant Corrected) shall be submitted to the Engineer or designated representative for review, for each individual Project, a minimum of three (3) working days before the mixture is to be placed. Under no circumstances will a mixture be placed before its use is reviewed and approved by the Engineer or designated representative. Performance of the mix design shall remain the responsibility of the Contractor.

Mixture Design: The mix shall be an approved TxDOT design and comply with Construction Bulletin C-14 and Test Method Tex-204-F and the requirements herein. The master grading limits of the appropriate type and the JMF will be plotted on a graduated chart with sieve sizes raised to the 0.45 power and will be submitted to the Engineer or designated representative with the asphalt mixture design. The Bulk Specific Gravity of aggregates in RAP will be determined on extracted aggregates.

Types: The blend of coarse aggregate, fine aggregate, and mineral filler, if allowed, that is established by TxDOT Test Method Tex-200-F, Dry Sieve Analysis, shall conform to the master gradation shown in **Table 6-1** for the type of specified mixture. The voids in the mineral aggregate (VMA) will be determined as a mixture design requirement only, in accordance with TxDOT Test Method Tex-207-F, and shall not be less than the value indicated in **Table 6-1**.

TABLE 6-1: Master Grading - Percent Passing by Weight (Mass) or Volume

Sieve Size US (SI)	Type C Coarse Surface	Type D Fine Surface
7/8" (22 mm)	100	
5/8" (15.5 mm)	95-100	
1/2" (12.5 mm)		100
3/8" (9.5 mm)	70-85	85-100
No. 4 (4.75 mm)	43-63	50-70
No. 10 (2.00 mm)	30-40	32-42
No. 40 (425 µm)	10-25	11-26
No. 80 (187.5 µm)	3-13	4-14
No. 200 (75 µm)	1-6	1-6
VMA % minimum	13	14
Rec. Min. Lift	2" (50 mm)	1-1/2" (37.5 mm)

Tolerances: Fluctuations in the aggregate gradation and asphalt content of the Job Mix Formula (JMF) shall not vary by more than the following criteria but the aggregate gradation shall be limited to the range of the master gradation as established by TEX-210-F.

SIEVES	Percent By Weight (Mass)
2" (50 mm) Sieve through No. 10 (2.00 mm) Sieve	5.0
No. 40 (425 µm) through No. 200 (75 µm) Sieve	3.0
Asphalt Content	0.5

Stability and Density: The mixture shall be designed at or near optimum density, as indicated on the Drawings, to conform to the following percent of Maximum theoretical Density as measured by TxDOT Test Method TEX-227-F and Stability conforming to TxDOT Test Method TEX-208-F. The laboratory mixture shall be molded in accordance with TxDOT Test Method TEX-206-F and the Bulk Specific Gravity determined in accordance with TxDOT Test Method TEX-207-F.

Surface Courses	Optimum Laboratory Density	Laboratory Density		Stability
		Min	Max	
Lanes/Local Streets	96%	94.5%	97.5%	35 min
Collectors/Arterials	96%	94.5%	97.5%	40-60 min

6.04 Equipment

The trucks that deliver the hot mix asphalt concrete material to the project shall be of sufficient number to insure a continuous paving operation. All equipment used for the production, placement and compaction of the mixture shall be maintained in good repair and operating conditions to the satisfaction of the Engineer or designated representative and comply with the COA item 340S.5. All equipment shall be made available for inspection. If the Engineer or designated representative expresses concern about the condition of any equipment, it shall not be used until it is repaired to the satisfaction of the Engineer or designated representative.

6.05 Mixture Temperature

The Contractor shall select a target temperature for discharge of the HMA mixture from the mixer between 250°F and 350°F that is suitable to weather and Project conditions. The target temperature shall be reported to the Engineer or designated representative daily. The HMA mixture temperature shall not vary by more than 25°F from the target temperature for discharge from the mixer. **HMA mixtures that are discharged from the mixer at a temperature exceeding 350°F or a temperature more than 50°F below the target temperature shall not be accepted and shall not be placed on the Project.**

6.06 CONSTRUCTION METHODS

General: The Contractor shall be responsible for the production, transportation, placement and compaction of the specified HMA paving mixture to the requirements of this specification. The Contractor shall also be responsible for providing a safe environment for inspection personnel to inspect the equipment and to acquire samples.

Surfaces to be paved shall be finished, primed, cured, broomed and tacked, as appropriate, to the satisfaction of the Engineer or designated representative. If the surface on which the first course of the paving mixture is to be placed is a flexible base course, and a cut-back asphalt is to be used as a prime coat, the flexible base shall have been primed and cured a minimum of 24 hours before the paving mixture may be placed. The 24-hour restriction will not apply to a flexible base that has been primed with material other than a cutback. **However, the surface on which the tack coat and/or paving mixture are to be placed shall be in a dry condition.**

Equipment shall be inspected prior to use and, if found to be defective or in an operating condition that could potentially affect the quality of the finished pavement, as determined by the Engineer or designated representative, its use shall not be allowed. Leakage of fuels, oils, grease, hydraulic or brake fluids or other contaminants onto the prepared surface or newly-laid HMA layer will not be allowed and may require replacement of the affected pavement area.

Any material delivered to the Project that by visual inspection can reasonably be expected not to meet specification requirements (i.e. segregated or burned material, deficient or excess asphalt, low mixing temperature, visible contaminants, etc.), as determined by the Engineer or designated representative, shall not be used or left in place.

Place mixture when the roadway surface temperature is at or above 60°F unless otherwise approved. Measure the roadway surface temperature with a hand-held thermal camera or infrared thermometer. The Engineer may allow mixture placement to begin before the roadway surface reaches the required temperature if conditions are such that the roadway surface will reach the required temperature within 2 hr. of beginning placement operations. Place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable as determined by the Engineer. The **Engineer may restrict the Contractor from paving if the ambient temperature is likely to drop below 32°F within 12 hr. of paving.**

Unless indicated otherwise on the Drawings, dumping of the HMA material in a windrow and then placing the HMA mixture in the finishing machine with windrow pick-up equipment will be permitted provided the temperature of the HMA mixture does not drop more than 50°F below the target temperature before being placed by the finishing machine. **Under no circumstances will the HMA material be permitted to be dumped on or near the job site and then reloaded for hauling to the site of placement.** Exceptions may be allowed if approved by the Engineer or designated representative.

Construction joints of successive courses of HMA material shall be offset at least 6 inches. Longitudinal joints in the layer shall be placed to coincide with lane lines as directed by the Engineer or designated representative. Transverse joints shall be offset a minimum of 5 feet.

The completed surface, when tested with a ten (10) foot straight-edge laid parallel to the centerline of the roadway, shall have a maximum ordinate measured from the face of the straight-edge not to exceed one-eighth (1/8) inch at any point. Approved templates shall be furnished by the Contractor for checking subgrade and finished sections. The templates shall be of such strength and rigidity that if the support is transferred to the center there will not be a deflection of more than one-eighth inch (1/8").

6.07 COMPACTION

The pavement layers/lifts shall be compacted thoroughly and uniformly to obtain the compaction and cross section meeting the requirements indicated on the Drawings and this specification item.

Regardless of the method used for compaction, all rolling to achieve specified density shall cease before the temperature of the HMA mixture drops below 175°F.

Rolling with a pneumatic tire roller shall be used to seal the surface. Rolling with a tandem or other steel-wheel roller shall be provided if required to iron out any roller marks. Surface sealing and removal of roller marks may be accomplished at HMA temperatures below 175°F.

6.08 TESTING

The Developer, at his expense, shall employ a commercial testing laboratory approved by the Director of Transportation or his Representative to conduct the required material testing.

The HMA mixture shall be tested daily at the Project site for conformance to specification requirements. The Director of Transportation or designated representative shall utilize a random selection method to determine sample locations based on the Contractor's anticipated production. Each day's anticipated production shall be divided into three (3) essentially equal single-pass, sub-area lots. Each day's sample locations shall be equally distributed over the three (3) sub-areas. If, due to the weather or plant malfunctions, the Contractor's daily-anticipated production is not attained, the random locations will not be recalculated. Also, no more than one location of the three (3) sub-areas shall be located in an irregular shaped area such as a cul-de-sac.

Unless directed otherwise by the Director of Transportation or designated representative, a minimum of three bag samples and three correlating 4-inch cores will be obtained from each day's production.

Bag samples shall be taken during lay-down operations. The primary sampling point for the bag samples shall be from the windrow if a windrow elevator is used. If a windrow elevator is not used, the sample shall be taken from the middle of the paving machine hopper. This sampling location will require a stoppage in the paving operation in order for the Inspector to safely secure a sample from the hopper.

One core shall be taken for every 2,000 single-pass square yards with a minimum of three (3) cores for all projects. One core shall be taken at the same station and pass sampled for each of the bag samples. Core sites shall be patched with an approved polymer modified cold mix, if HMAC is not available.

For total areas of less than 500 square yards (420 square meters), a total of only two bag samples and two correlating cores will be obtained. If the Contractor desires additional testing, it shall be at its own entire expense.

The Director of Transportation or designated representative may alter, increase or waive the testing schedule to ensure material and workmanship compliance with specification requirements. Acceptability of the completed pavement shall be based on the average of test results for the Project.

Gradation, asphalt content and stability value of the HMA mixture shall be reported for each of the bag samples. The stability value reported for each of the bag samples shall be the average of three (3) tests per bag.

Pavement thickness and density shall be determined from 4-inch field cores. For each day's placement, density of cores for which no corresponding bag samples were taken shall be determined by using the average Maximum Theoretical Density of the day's three (3) bag samples or as may otherwise be determined by the Director of Transportation or designated representative.

An HMAC thickness of 1.5" shall be the minimum at any and all locations, rather than an average.

When, in the opinion of the Director of Transportation or designated representative, test results appear unrepresentative, additional testing may be authorized. The retesting will be at the expense of the Owner and the results of the retesting shall be averaged with the results of the original testing. If the results of retesting indicate that the original test results were erroneous, the original test results will be discarded.

6.09 ASPHALT CONTENT ACCEPTANCE SCHEDULE

% Deviation from the JMF	All Roadways
≤ +/- 0.3	Acceptance
+/- 0.31 to +/- 0.50	+2 year Warranty
> +/- 0.50	1" Overlay

6.10 DENSITY ACCEPTANCE SCHEDULE

Average Percent Density	All Roadways
> 96	1" Overlay
91 to 96	Acceptance
< 91	1" Overlay

6.11 THICKNESS ACCEPTANCE SCHEDULE

Variance Percent of Thickness	2" thickness or Greater
0 – 10	Acceptance
10.1 - 16	+2 year Warranty
>16	1" Overlay

***Note - a 1" Overlay shall be required if HMAC is deficient in more than one category.**

Item: 7.00 REINFORCING STEEL

7.01 Description

This item shall consist of the furnishing and placing of reinforcing steel, deformed and smooth, of the size and quantity indicated and in accordance with COA item 406S.

7.02 Chairs and Supports

Chairs and Supports shall be steel, precast mortar or concrete blocks cast in molds meeting the approval of the Engineer/Architect of sufficient strength to position the reinforcement as indicated when supporting the dead load of the reinforcement, the weight of the workers placing concrete and the weight of the concrete bearing on the steel. Chairs shall be plastic coated when indicated.

Chair Types and Applicable Uses	
Structural or Architectural Elements (columns, beams, walls, slabs) exposed to weather, not subjected to sand blasting, water blasting or grinding.	Galvanized steel or steel chairs with plastic coated feet.
Structural or Architectural Elements exposed to weather and subject to sand blasting, water blasting or grinding.	Stainless steel chairs.
Structural or Architectural Elements not exposed to weather or corrosive conditions.	Uncoated steel chairs

7.03 Splices

Splicing of bars, except when indicated on the drawings or specified herein, will not be permitted without written approval of the Engineer or designated representative. No substitution of bars will be allowed without the approval of the Engineer or designated representative. Any splicing of substituted bars shall conform to the requirements in the Table below. Splices not indicated on the drawings will be permitted in slabs not more than 15 inches in thickness, columns, walls and parapets. Splices will not be permitted in bars 30 feet or less in plan length unless otherwise approved. For bars exceeding 30 feet in plan length, the distance center to center of splices shall not be less than 30 feet minus 1 splice length, with no more than 1 individual bar length less than 10 feet. Splices not indicated on the drawings, but permitted hereby, shall conform to the **Table 7-1** below. The specified concrete cover shall be maintained at such splices and the bars placed in contact and securely tied together.

Table 7-1: Minimum Lap Length Requirements

Bar Number	Uncoated	Coated
3	1 foot 4 inches	2 foot 0 inches
4	1 foot 9 inches	2 foot 8 inches
5	2 foot 2 inches	3 feet 3 inches
6	2 foot 7 inches	3 feet 11 inches
7	3 feet 5 inches	5 feet 2 inches
8	4 feet 6 inches	6 feet 9 inches
9	5 feet 8 inches	8 feet 6 inches
10	7 feet 3 inches	10 feet 11 inches
11	8 feet 11 inches	13 feet 5 inches

Spiral steel shall be lapped a minimum of 1 turn. Bar No. 14 and No. 18 may not be lapped. Welded wire fabric shall be spliced using a lap length that includes an overlap of at least 2 cross wires plus 2 inches on each sheet or roll. Splices using bars that develop equivalent strength and are lapped in accordance with the table above are permitted. Welding of reinforcing bars may be used only where indicated on the drawings or as permitted herein. All welding operations, processes, equipment, materials, quality of work and inspection shall conform to the requirements indicated on the drawings. All splices shall be of such dimension and character as to develop the full strength of the bar being spliced. End preparation for butt-welding reinforcing bars shall be done in the field, except Bar No. 6 and larger shall be done in the shop. Delivered bars shall be of sufficient length to permit this practice.

For box culvert extensions with less than 1 foot of fill, the existing longitudinal bars shall have a lap with the new bars as shown in the table above. For box culvert extensions with more than 1 foot of fill, a minimum lap of 12 inches will be required. Unless otherwise indicated on the drawings, dowel bars transferring tensile stresses shall have a minimum embedment equal to the minimum lap requirements shown in the table above. Shear transfer dowels shall have a minimum embedment of 12 inches.

7.04 Placement

All reinforcing steel shall be tied at all intersections, except that where spacing is less than 1 foot in each direction, alternate intersections only need be tied. For reinforcing steel cages for other structural members, the steel shall be tied at enough intersections to provide a rigid cage of steel. Mats of wire fabric shall overlap each other 1 full space as a minimum to maintain a uniform strength and shall be tied at the ends and edges.

Where prefabricated deformed wire mats are specified or if the Contractor requests, welded wire fabric may be substituted for a comparable area of steel reinforcing bar plan, subject to the approval of the Engineer/Architect.

A suitable tie wire shall be provided in each block, to be used for anchoring to the steel. Except in unusual cases and when specifically authorized by the Engineer, the size of the surface to be placed adjacent to the forms shall not exceed 2 1/2 inches square or the equivalent thereof in cases where circular or rectangular areas are provided. Blocks shall be cast accurately to the thickness required and the surface to be placed adjacent to the forms shall be a true plane, free of surface imperfections.

Reinforcement shall be supported and tied in such a manner that a sufficiently rigid cage of steel is provided. If the cage is not adequately supported to resist settlement or floating upward of the steel, overturning of truss bars or movement in any direction during concrete placement, permission to continue concrete placement will be withheld until corrective measures are taken. Sufficient measurements shall be made during concrete placement to insure compliance with the above.

No concrete shall be deposited until the Engineer/Architect has reviewed the placement of the reinforcing steel and all mortar, mud, dirt, etc., shall be cleaned from the reinforcement, forms, workers' boots and tools.

Reinforcement shall be placed as near as possible in the position indicated. Unless otherwise indicated, dimensions shown for reinforcement are to the centers of the bars. In the plane of the steel parallel to the nearest surface of concrete, bars shall not vary from plan placement by more than 1/12 of the spacing between bars. In the plane of the steel perpendicular to the nearest surface of concrete, bars shall not vary from plan placement by more than 1/4 inch. Cover of concrete to the nearest surface of steel shall be as follows:

Table 7-2: Minimum Cover

Type, Location, or Exposure level	Min Cover
(a) Concrete cast against and permanently exposed to earth	3"
(b) Concrete exposed to earth or weather:	
Bar No. 6 through 18 bars	2"
Bar No. 5, W31 or D31 wire and smaller	1.5"
(c) Concrete not exposed to weather or in contact with ground:	
Slabs, walls, joists:	
Bar No. 14 and 18	1.5"
Bar No. 11 and smaller	1"
Beams, columns:	
Primary reinforcement, ties, stirrups, spirals	1.5"
Shells, folded plate members:	
Bar No. 6 and larger	1"
Bar No. 5, W31 or D31 wire, and smaller	1"

Item: 8.00 CONCRETE for STRUCTURES

8.01 Description

This item shall govern quality, storage, handling, proportioning and mixing of materials for Portland cement concrete construction of bridges, culverts, slabs, prestressed concrete and incidental appurtenances.

8.02 Materials

Concrete shall be composed of Portland cement or Portland cement and fly ash, water, aggregates (fine and coarse), and admixtures proportioned and mixed as hereinafter provided to achieve specified results.

A. **Cementitious Materials:** Portland cement shall conform to ASTM C 150 and COA item 403S, Type I (General Purpose), Type II (General Purpose with Moderate Sulfate Resistance) and Type III (High Early Strength). Type I shall be used when none is specified or indicated on the drawings. Type I and Type III cements shall not be used when Type II cement is specified or indicated on the drawings. Type III cement may be used in lieu of a Type I cement, when the anticipated air temperature for the succeeding 12 hours will not exceed 60°F. All cement shall be of the same type and from the same source for a monolithic placement.

B. **Mixing Water:** Water for use in concrete and for curing shall be potable water free of oils, acids, organic matter or other deleterious substances and shall not contain more than 1,000 parts per million of chlorides as Cl or sulfates as SO_4.

C. **Mortar and Grout:** Unless otherwise specified, indicated on the drawings or approved by the Engineer or designated representative mortar and grout shall consist of 1 part cement, 2 parts finely graded sand and enough water to make the mixture plastic. When required to prevent color difference, white cement shall be added to produce color required. When required by the Engineer or designated representative, an approved latex adhesive may be added to the mortar.

D. **Admixtures:** All chemical admixtures including water reducing, plasticizers and air entrainment shall conform to TxDOT DMS-4640, "Chemical Admixtures for Concrete". Calcium chloride-based admixtures shall not be approved. Admixtures shall be included in the prequalified concrete admixtures list maintained by TxDOT's Construction Division. High-range water-reducing admixtures (TxDOT Type F or G) and accelerating admixtures (TxDOT Type C or E) shall not be used in bridge deck concrete.

E. **Air Entrainment** Unless indicated otherwise on the drawings, all concrete classes with the exception of Class B shall be air entrained in accordance with **Table 8-2**. If the air content is more than 1.5 percentage points below or 3 percentage points above the required air, the load of concrete will be rejected. If the air content is more than 1.5 but less than 3 percentage points above the required air, the concrete may be accepted based on strength test results.

8.03 Mix Design

The Contractor shall furnish a mix design acceptable to the Director of Transportation or designated representative for the class of concrete specified. The mix shall be designed by a qualified commercial laboratory and signed/sealed by a registered Professional Engineer, licensed in the state of Texas to conform with requirements contained herein, to ACI 211.1 or TXDOT Bulletin C-11 (and supplements thereto). The Contractor shall perform, at his own expense, the work required to substantiate the design, including testing of strength specimens. Complete concrete design data shall be submitted to the Director of Transportation or designated representative for approval. The mix design will be valid for a period of one (1) year provided that there are no changes to the component materials.

At the end of one (1) year, a previously approved mix may be resubmitted for approval if it can be shown that no substantial change in the component materials has occurred. The resubmittal analysis must be reviewed, signed and sealed by a registered Professional Engineer, licensed in the state of Texas.

This resubmittal shall include a reanalysis of specific gravity, absorption, fineness modulus, sand equivalent, soundness, wear, and unit weights of the aggregates. Provided that the fineness modulus did not deviate by more than 0.20 or that the re-proportioned total mixing water, aggregate and cement (or cement plus fly ash) are within 1, 2, and 3 percent, respectively, of pre-approved quantities, a one-year extension on the approval of the mix may be granted by the Engineer or designated representative. Updated cement, fly ash, and admixture certifications shall accompany the resubmittal.

8.04 Consistency and Quality of Concrete

Concrete shall be workable, cohesive, possess satisfactory finishing qualities and of stiffest consistency that can be placed and vibrated into a homogeneous mass within slump requirements specified in **Table 8-3.** No concrete will be permitted with a slump in excess of the maximums shown unless water-reducing admixtures have been previously approved. Slump values shall be conducted in accordance with TXDOT Test Method TEX-415-A.

Consistency and quality of concrete should allow efficient placement and completion of finishing operations before initial set. Re-tempering (i.e. addition of water and reworking concrete after initial set) shall not be allowed. When field conditions are such that additional moisture is needed for final concrete surface finishing operation, the required water shall be applied to surface by fog spray only and shall be held to a minimum. Excessive bleeding shall be avoided and in no case will it be permissible to expedite finishing and drying by the application of cement powder to the surface.

During progress of the work, the Director of Transportation or designated representative shall require the Developer to cast test cylinders and/or beams as a check on compressive and/or flexural strength of concrete actually placed. The Director of Transportation or designated representative may require the developer also to perform slump tests, entrained air tests and temperature checks to ensure compliance with specifications. The cost shall be bared by the developer or contractor.

Unless otherwise specified or indicated on the drawings, concrete mix temperature shall not exceed 90°F except in mixes with high range water reducers where a maximum mix temperature of 100°F will be allowed. Cooling an otherwise acceptable mix by addition of water or ice during agitation will not be allowed.

Ice may be used during hot weather concrete placement to lower the concrete temperature; however, the Contractor shall furnish a mix design acceptable to the Engineer or designated representative for class of concrete specified. **The addition of ice shall not exceed 50% of the total mix water weight.**

Test cylinders may be required for small placements such as wing walls and head walls. The Engineer may vary the number of tests to a minimum of 1 for each 25 cubic yards placed over a several day period.

Slump tests will be performed in accordance with TxDOT Test Method Tex-415-A. Entrained air tests will be performed in accordance with TxDOT Test Method Tex-416-A.

Test specimens shall be cured using the same methods and under the same conditions as the concrete represented. Design strength beams and cylinders shall be cured conforming to TXDOT Bulletin C-11 (and supplements thereto).

When control of concrete quality is by 28-day compressive tests, job control testing will be by 7-day compressive strength tests. The minimum strength requirement for seven (7) day test will be 70 percent of the specified minimum 28-day compressive strength. If the required 7-day strength is not secured with the quantity of cement specified in **Table 8-1**, changes in the mix design shall be made and resubmitted for approval. For an occasional failure of the seven-day compressive test, the concrete may be tested at 28 days for final evaluation.

Table 8-1: Classes of Concrete

Class	Cement Sacks/CY	Minimum Strength (psi) 7 days	Minimum Strength (psi) 28 days	Maximum W/C Ratio	Course Agg Grade 2,3,4	Entrained Air
A	5.0	2100	3000	0.6	1,2,3,4,8	Yes
B	4.0	1400	2000	0.6	2,3,4,5,6,7	No
C5	6.0	2520	3600	0.45	1,2,3,4,5,6	Yes
D	4.5	1750	2500	0.6	2,3,4,5,6,7	No
H5	6.0	As Indicated	As Indicated	0.45	3,4,5,6	Yes
I	5.5	2450	3500	0.45	2,3,4,5	Yes
J	2.0	560	800	N/A	2,3,4,5	No
S5	6.0	2800	4000	0.45	2,3,4,5	Yes

Notes: 1.Maximum water-cement or water-cementitious ratio by weight.

2. Unless otherwise allowed, Grade 1 coarse aggregate shall only be used in massive foundations with 4-in minimum clear spacing between reinforcing steel bars.

3. Grade 1 coarse aggregate grading shall not be used in drilled shafts.

4. Unless otherwise allowed, Grade 8 coarse aggregate shall be used in extruded curbs.

5. Structural concrete classes.

6. When Type II cement is used in Class C, S or A concrete, the 7-day compressive strength requirement will be 2310 psi for Class C, 2570 psi for Class S and 1925 psi for Class A minimum.

Table 8-2: Air Entrainment*

Nominal Maximum Aggregate Size In (mm)	% Air Entrainment Moderate Exposure	% Air Entrainment Severe Exposure
3/8 (9.5) Grades 7&8	6	7.5
1/2 (12.5) Grade 6	5.5	7
3/4 (19) Grade 5	5	6
1 (25) Grade 4	4.5	6
1-1/2(37.5) Grade 3	4.5	5.5
2 (50) Grade 2	4	5

* For specified concrete strengths above 5,000 psi a reduction of 1 percentage point is allowed.

Table 8-3: Slump Requirements

Type of Construction	Slump in inches Maximum	Slump in inches Minimum
Cased Drilled Shafts	4	3
Reinforced Foundation Caissons and Footings	3	1
Reinforced Footings and Substructure Walls	3	1
Uncased Drilled Shafts	6	5
Thin-walled Sections; 9 inches (225 mm) or less	5	4
Bridge Decks	4	2
Pavements, Fixed-form	3	1
Pavements, Slip-form	1-1/2	½
Sidewalks, Driveways and Slabs on Ground	4	2
Curb & Gutter, Hand-vibrated	3	1
Curb & Gutter, Hand-tamped or spaded	4	2
Curb & Gutter, Slip-form/extrusion machine	2	½
Heavy Mass Construction	2	1
High Strength Concrete	4	3
Riprap and Other Miscellaneous Concrete	6	1

8.05 Mixing and Mixing Equipment

A. Ready-mixed Concrete

Use of ready-mixed concrete will be permitted provided the batching plant and mixer trucks meet quality requirements specified herein. When ready-mixed concrete is used, additional mortar (1 sack cement, 3 parts sand and sufficient water) shall be added to each batch to coat the mixer drum. Ready-mixed concrete, batching plant and mixer truck operation shall include the following:

1. A ticket system will be used that includes a copy for the Inspector. Ticket will have machine stamped time/date of concrete batch, a mix design designation, weight of cement, fly ash, sand and aggregates; exact nomenclature and written quantities of admixtures and water. Any item missing or incomplete on ticket may be cause for rejection of concrete.

2. Sufficient trucks will be available to support continuous placements. The Contractor will satisfy the Director of Transportation or designated representative that adequate standby trucks are available to support monolithic concrete placement requirements.

3. A portion of mixing water required by the mix design to produce the specified slump may be withheld and added at the job site, but only with permission of the Director of Transportation or designated representative and under the Inspector's observation. When water is added under these conditions, the concrete batch will be thoroughly mixed before any slump or strength samples are taken. Additional cement shall not be added at the job site to otherwise unacceptable mixes.

4. A metal plate(s) shall be attached in a prominent place on each truck mixer plainly showing the various uses for which it was designed. The data shall include the drum's speed of rotation for mixing and for agitating and the capacity for complete mixing and/or agitating only. A copy of the manufacturer's design, showing dimensions of blades, shall be available for inspection at the plant at all times. Accumulations of hardened concrete shall be removed to the satisfaction of the Director of Transportation or designated representative.

5. The loading of the transit mixers shall not exceed capacity as shown on the manufacturer's plate attached to the mixer or 63 percent of the drum volume, whichever is the lesser volume. The loading of transit mixers to the extent of causing spill-out en route to delivery will not be acceptable. Consistent spillage will be cause for disqualification of a supplier.

6. Excess concrete remaining in the drum after delivery and wash water after delivery shall not be dumped on the project site unless approval of the dump location is first secured from the Director of Transportation or designated representative.

B. Hand-mixed Concrete

Hand mixing of concrete may be permitted for small placements or in case of an emergency and then only on authorization of the Director of Transportation or designated representative. Hand-mixed batches shall not exceed a 4 cubic foot (3 cubic meters) batch in volume. Material volume ratios shall not be leaner than 1 part cement, 2 parts large aggregate, 1 part fine aggregate and enough water to produce a consistent mix with a **slump not to exceed 4 inches**. Admixtures shall not be used unless specifically approved by the Director of Transportation or designated representative.

Item: 9.00 DRAINAGE FACILITIES

9.01 DESCRIPTION This item shall govern the furnishing of all drainage culvert pipe, concrete headwalls, and reflector post as shown on the Plans and herein specified, and installing the same as designated on the Plans or by the Director of Transportation or his Representative in conformity with the lines and grades given.

9.02 MATERIALS The culvert pipe shall be of size, length, and gauge as shown on the plans. Corrugated galvanized metal pipe shall be as specified by item 460 of the most current TxDOT Standard Specifications. Reinforced concrete pipe shall be as specified by Item 464 of the same. All pipe shall be new and unused and shall not have been damaged by handling or shipping.

Reflector posts shall conform to the COA detail 824-2 or an approved alternative, equipped with 3 inch amber reflectors. The length of the post shall be adequate to place the reflector assembly 48 inches above the centerline elevation of the street and anchor the post approximately 48 inches into the ground.

Concrete headwalls and/or rip-rap shall be constructed of Class A concrete conforming with COA Item 403S reinforced with deformed bars or wire mesh conforming with Item 406S of same. All headwalls and/or rip-rap shall be of the dimensions and in the locations shown on the plans.

9.03 CONSTRUCTION METHODS Culvert pipe shall be installed to the lines and grades shown on the Plan or as specified by the Director of Transportation or his Representative. The pipe shall be bedded along its complete length and up to the shoulders. The backfill around the pipe shall be compacted. The installation of all culvert pipes shall be in general conformance with the appropriate sections of the most current TxDOT Standard Specifications. All culvert pipes located at street intersections shall be provided with reflector posts. The reflector post shall be equipped with one reflector facing in each direction of traffic flow. Reflector posts shall be provided on the ends of the concrete headwalls or rip-rap as shown on the Plans. The concrete headwalls or rip-rap shall be of the dimensions and at the locations shown on the plans. The headwalls shall be formed on their exposed surfaces, which shall be grouted and broom finished upon removal of the forms. **Guardrail is required were slopes do not meet requirements of Table 7.3.**

Item: 10.00 CHANNEL EXCAVATION

10.01 DESCRIPTION Channel Excavation shall consist of required excavation for all channels, the removal and proper utilization or disposal of all excavated materials, and constructing, shaping and finishing of all earthwork involved in conformity with the required lines, grades and typical cross sections and in accordance with the specifications and requirements herein outlined.

10.02 CLASSIFICATION All Channel Excavation will be Unclassified. Unclassified Channel Excavation shall include all materials encountered regardless of their nature or the manner in which they are removed.

10.03 CONSTRUCTION METHODS All suitable materials removed from the excavation shall be used, insofar as practicable, in the formation of embankments as required, or shall be otherwise utilized or satisfactorily disposed of as indicated on plans, or as directed, and completed work shall conform to the established alignment, grades and cross sections. During construction, the channel shall be kept drained, insofar as practicable, and the work shall be prosecuted in a neat and workmanlike manner.

Unsuitable channel excavation or excavation in excess of that needed for construction, shall be known as "Waste" and shall become the property of the Contractor to be disposed of by him.

Channel Excavation shall include the removal and replacement of all fence lines crossing the channels and the installation of gates and water gaps as shown on the plans.

All channels and that area adjacent to them which has been disturbed by construction equipment shall be graded smooth and seeded. Seeding shall conform to item 164 of the most current TxDOT Standard Specifications or applicable standards for the appropriate jurisdiction.

Item: 11.00 CLEAR ZONES

11.01 General

The purpose of this section is to provide design criteria for establishing a roadway clear zone. Minimum clear zone widths may be found in **Table 11-1.**

11.02 Clear Zones

The term "clear zone" is used to describe the generally flat and unobstructed area that is provided beyond the travel lanes. The clear zone may include shoulders.

For urban streets, arterials, collectors and local streets, where curbs are used, available area for clear zones may be limited. A minimum offset distance of 18 inches should be provided between the face of curb and obstructions such as utility poles, lighting poles and fire hydrants (Local Urban Streets, Horizontal Clearance to Obstructions, Chapter 5 of AASHTO's, "A Policy On Geometric Design of Highways and Streets, 2001"). Greater offsets should be provided when possible to permit curbside parking.

Because most curbs do not have a capability to redirect vehicles, the minimum clear zone distance should be increased as directed by the Director of Transportation or designated representative commensurate with increases in traffic volumes and vehicle speeds.

TABLE 11-1: MINIMUM CLEAR ZONE WIDTH

Classification	Design Speed	ADT	Minimum Clear Zone Width* **
Arterial/Collector	≥50mph	0-750	10ft
Arterial/Collector	≥50mph	750-1500	16ft
Arterial/Collector	≥50mph	>1500	30ft
Collector	≤45mph	All	10ft
Local/Country Lane Uncurbed	All	All	10ft
Local/Country Lane Curbed	All	All	4ft from FOC

* Without barrier or other safety treatment of appurtenances.

**Measured from edge of travel lane for all cut sections and for all fill sections where side slopes are 1V:4H or flatter. Where fill slopes are steeper than 1V:4H it is desirable to provide a 10 ft. area free of obstacles beyond the toe of slope.

11.03 Landscaping in the Right of Way

The following requirements will apply to all landscaping within the right-of-way along roadsides, median and intersection.

A. Intersections

No landscaping of any type shall obstruct vision. These requirements will apply to any material from a height of two (2) feet to a clearance height of eight (8) feet above the top of curb, including, but not limited to full grown trees, full-grown shrubs, fences, structures, any signs except traffic control signs, etc.

B. Traffic Control Devices

No landscaping of any type shall obstruct vision. These requirements will apply to any material from a height of seven (7) feet to a clearance height of fourteen (14) feet above the top of curb, including, but not limited to full grown trees, full-grown shrubs, fences, structures, any signs except traffic control signs, etc. within twenty-five (25) feet of any existing or proposed traffic signal, regulatory or warning signs, or other traffic control devices.

C. School Crossings

No landscaping of any type shall obstruct vision. These requirements will apply to any material with a height of two (2) feet or greater within one hundred fifty (150) feet of a school crossing to assure pedestrian safety by not restricting the sight visibility of motorists.

D. Railroad Crossings

No landscaping of any type shall obstruct vision. These requirements will apply to any material with a height of two (2) feet or greater within two hundred fifty (250) feet of a railroad crossing to assure adequate sight visibility.

E. General Note

Any landscaping that is not in compliance with the requirements stated in these criteria or has been planted without an approved License Agreement from the County shall be removed by the sponsoring organization or individual at their cost. The required License Agreement may be obtained from the Hays County Road and Bridge Department.

Item: 12.00 MISCELLANEOUS

12.01 SIGNAGE

Street name signs, traffic control signs, speed limit signs, etc., shall all conform to the requirements of the most current TxDOT Standard Specifications and the "Uniform Manual of Traffic Control Devices".

Sign posts shall conform to the COA detail 824-2 or an approved alternative.

Stop bars shall be installed at all stop sign location. They shall be retro-reflective white thermoplastic material a minimum of 24" wide. They shall be placed adjacent to the stop sign and shall extend from the edge of pavement to the midpoint of the roadway.

For all developments proposing new street construction, the developer's engineer shall provide - as part of the construction plans - a narrative statement in recordable format, to be recorded with the final plat, listing the type and location of all proposed signs for directing and controlling traffic.

12.02 COMPLETION CERTIFICATE

Upon completion, but prior to acceptance of the work by Hays County Transportation Department, the accredited materials engineering laboratory shall submit to Hays County Transportation Department a written statement of substantial compliance which has been sealed by a professional engineer licensed in the state of Texas. The written statement of substantial compliance must acknowledge that all construction materials and operations used in the project were tested and inspected by accredited laboratory and that they comply with all the specifications applicable to the project.

At the time a final inspection and release of performance security is requested; the design engineer shall provide a complete set of "as-built" Record drawings in PDF format (300 dpi) on a virus free disk and shall certify that all road and drainage construction has been completed in substantial accordance with previously approved plans and specifications, except as noted. **No performance security will be released without these exhibits.**

EXHIBIT "E"

COUNTY ROADWAY MAINTENANCE STANDARDS

OFFICE OF THE COUNTY ENGINEER
Jerry Borcherding, P.E.
P. O. Box 906 San Marcos, Texas 78667
(512) 393-7385 Fax (512) 393-7393

August 17, 2016

Mr. Moore:

The process for acceptance of roads into the County maintenance system follows an established process as follows:

1. Roads are to be designed and constructed in accordance with Hays County standards.

2. A Hays County Transportation Department inspector will inspect all stages of road and drainage* construction.

3. At the end of a project or phase of a project a punch-list will be presented to the contractor.

4. After punch-list items are corrected the project or phase of the project will be brought before Commissioners Court for approval of construction. Included in this Court action will be acceptance of a 2-yer maintenance bond presented by the responsible entity. This bond will be "called" in the event the contractor, developer, MUD, or other responsible entity fails to maintain the roads during the 2-year maintenance period.

5. As the end of the 2-year maintenance period approaches, an additional punch-list will be developed by a Transportation Department inspector.

6. After punch-list items are corrected, the project or phase of the project will be brought before Commissioners Court for acceptance into the County maintenance system.

7. The County will continue to maintain the accepted roads and drainage improvements* until such time a City annexes the subdivision (project or phase of the project).

County maintenance efforts are performed on an as-needed basis and could include:

- **Crack sealing**
- **Pot hole patching**
- **Curb repairs**
- **Total reconstruction if warranted**
- **Overlays if warranted**
- **Chip-seal if warranted**
- **ROW maintenance (ditch maintenance, grass cutting)**

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- **Tree trimming**

At the time of annexation the condition of the roads can be discussed between the City and County with appropriate actions taken based on prearranged agreements.