

AGENDA

CITY OF TAYLOR, TEXAS CITY COUNCIL MEETING CITY HALL, COUNCIL CHAMBERS, 400 PORTER STREET

MAY 12, 2016, 6:00 P.M.

CALL TO ORDER AND DECLARE A QUORUM

INVOCATION

PLEDGE OF ALLEGIANCE

PROCLAMATION/RECOGNITION

1. Proclamation: May is National Historical Preservation Month. (Mayor)
2. Proclamation: May 15-21, 2016 is National Police Week. (Mayor)
3. Proclamation: May is Motorcycle Safety Month. (Mayor)
4. Proclamation: May is Mental Health Awareness Month. (Mayor)

CITIZENS COMMUNICATION

(The City Council welcomes public comments on items not listed on the agenda. However, the Council cannot respond until the item is posted on a future meeting agenda. Registration forms are available at the sign in table.)

CONSENT AGENDA

(The Consent Agenda includes non-controversial and routine items that the Council may act on with one single vote. The Mayor or any Council member may pull any item from the Consent Agenda to discuss and act upon individually on the Regular Agenda.)

5. Approve minutes for April 28, 2016. (Susan Brock)

PUBLIC HEARING

6. Conduct Public Hearing and consider introducing Ordinance 2016-04 amending subdivision ordinance. (Ashley Lumpkin)

ORDINANCES

7. Consider introducing Ordinance 2016-10 to amend the Fee Ordinance to include the Transportation User Fee. (Rosemarie Dennis)

REGULAR AGENDA; REVIEW/DISCUSS AND CONSIDER ACTION

8. Receive final draft of housing development and marketing analysis. (Ashley Lumpkin)
9. Receive proposed plan for Municipal Drainage Utility projects. (Isaac Turner)
10. Consider proposed future agenda topics and items for discussion. (Mayor)

EXECUTIVE SESSION

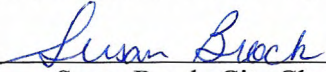
11. Executive Session I. The Taylor City Council will conduct a closed executive meeting pursuant to the provisions of the Open Meetings Law, Chapter 551, Texas Local Government Code, and the authority contained in Section 551.072 to discuss or deliberate regarding the purchase, exchange, lease, or value of real property.
 - Project Access

12. Consider action from Executive Session.

ADJOURN

The Council may vote and/or act upon each of the items listed in this Agenda. The Council reserves the right to retire into executive session concerning any items listed on this Agenda whenever it is considered necessary and legally justified under the Open Meetings Act including: Section 551.071 (Consult with attorney); Section 551.072 (Real Property); Section 551.073 (Gifts and Donations); Section 551.074 (Personnel Matters); Section 551.076 (Security Devices); and Section 551.087 (Economic Development). I certify that the notice of meeting was posted in the Taylor City Hall Lobby before 6:00 pm on May 9, 2016 and remained posted for at least 72 hours continuously before the scheduled time of said meeting. I further certify that the following news media was notified of this meeting: Taylor Press.

In compliance with the ADA the City Hall and Council Chambers is wheelchair accessible. Reasonable accommodations will be provided for persons attending city council meetings in need of special assistance. Please contact Susan Brock, City Clerk, at least 24 hours prior to the meeting for special assistance.

Posted By:  Date 5/9/16
Susan Brock, City Clerk



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 1
Agenda Title: Proclamation: May is National Historic Preservation Month
Council Action to be taken: Mayor will present Proclamation
Initiating Department: Main Street Program
Staff Contact: Deby Lannen, Main Street Manager

1. INTRODUCTION/PURPOSE

This item is added to bring attention to the role, relevance and importance of National Historic Preservation in the community.

2. DESCRIPTION/ JUSTIFICATION

Each year, Staff asks the Council, more specifically the Mayor to make this proclamation in order to demonstrate the City's support for the preservation of historical buildings. The national theme this year is **"This Place Matters,"** to focus on events that will engage citizens to speak up for the historic places that matter the most to them.

3. FINANCIAL/BUDGET

N/A

4. TIMELINE CONSIDERATIONS

This recognition is done annually during the month of May.

5. RECOMMENDATION

Staff recommends that the month of May be proclaimed as National Historic Preservation Month.

6. REFERENCE FILES

1a. [Proclamation](#)

Proclamation

NATIONAL HISTORIC PRESERVATION MONTH

Whereas, historic preservation is an important tool for managing growth, revitalizing neighborhoods, and fostering local pride; and

Whereas, historic preservation is important for all communities, both urban and rural, and is supported by the Taylor Main Street Program and the Taylor Conservation and Heritage Society; and

Whereas, it is important to celebrate the role of history in our lives and the contributions made by dedicated individuals in helping to preserve their heritage; and

Whereas, “*This Place Matters*” is the theme for National Historic Preservation Month , 2016, encourages people to celebrate the places that are meaningful to them and to their community.

Now, therefore, as Mayor of the City of Taylor I do hereby proclaim the month of May be recognized as

National Historic Preservation Month

Proclaimed this 12th day of May, 2016.

Jesse Ancira, Jr., Mayor



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 2
Agenda Title: National Police Week Proclamation
Council Action to be taken: Mayor Ancira to sign and issue the proclamation.
Initiating Department: Police Department
Staff Contact: Henry Fluck, Chief of Police

1. INTRODUCTION/PURPOSE

To recognize National Police Week 2016 and to honor the service and sacrifice of those law enforcement officers killed in the line of duty while protecting our communities and safeguarding our democracy.

2. DESCRIPTION/ JUSTIFICATION

There are approximately 900,000 law enforcement officers serving in communities across the United States, including the dedicated members of the Taylor Police Department. Approximately 60,000 assaults against law enforcement officers are reported each year, resulting in approximately 16,000 injuries.

3. FINANCIAL/BUDGET

There is no fiscal impact associated with this proclamation.

4. TIMELINE CONSIDERATIONS

May 15, 2016, is designated by the Congress and President of the United States as Peace Officers Memorial Day in honor of all fallen officers and their families and the week in which it falls in, May 15-21, 2016 as National Police Week.

5. RECOMMENDATION

Mayor Ancira to sign and issue the National Police Week Proclamation.

6. REFERENCE FILES

2a. [National Police Week Proclamation](#)

Proclamation

NATIONAL POLICE WEEK May 15-21, 2016

Whereas, the members of the Taylor Police Department play an essential role in safeguarding the rights and freedoms of all citizens of Taylor; and

Whereas, more than 20,000 law enforcement officers in the United States have made the ultimate sacrifice and been killed in the line of duty; and

Whereas, May 15 is designated as Peace Officers Memorial Day, in honor of all fallen officers and their families and U. S. flags should be flown at half staff;

Whereas, we seek to honor the service and sacrifice of those law enforcement officers killed or disabled in the line of duty while protecting our communities and citizens against violence.

Now, therefore, as Mayor of the City of Taylor I do hereby proclaim the week of May 15-21, 2016 be recognized as

National Police Week

Proclaimed this 12th day of May, 2016.

Jesse Ancira, Jr., Mayor



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 3
Agenda Title: Proclamation: May is Motorcycle Safety Awareness Month.

Council Action to be taken: Mayor presents Proclamation

Initiating Department: City Administration

Staff Contact: Shelly Holmes, Crossroads Motorcycle Club
512-581-8566 blessedd_2u@yahoo.com

1. INTRODUCTION/PURPOSE

National Highway and Traffic Safety Association has designated May as Motorcycle Safety Awareness month in 2016.

2. DESCRIPTION/ JUSTIFICATION

There are over 6.2 million motorcycles registered in the United States. Motorcycle fatalities represent approximately 11 percent of all highway fatalities each year, yet motorcycles represent approximately 3 percent of all registered vehicles in the United States. One of the main reasons motorcyclists are killed in crashes is because the motorcycle itself provides virtually no protection in a crash.

All motorists are reminded to safely "share the road" with motorcycles and to be extra alert to help keep motorcyclists safe. Motorcyclists are reminded to make themselves visible to other motorists.

3. FINANCIAL/BUDGET

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

6. REFERENCE FILES

3a. [Proclamation](#)

Proclamation

MOTORCYCLE SAFETY AWARENESS MONTH

Whereas, the motorcycle is a popular means of transportation for commuting and recreational use; and

Whereas, as a matter of safety these riders must be trained to safely operate their motorcycle to prevent injuries and deaths when sharing the streets and highways with other vehicles; and

Whereas, it is equally important that all drivers increase their awareness of motorcycles on the highways and know the rules of the road; and

Whereas, the annual observance of Motorcycle Safety Awareness Month raises public awareness for safe motorcycle riding.

Now, therefore, as Mayor of the City of Taylor, Texas, I hereby proclaim May as

Motorcycle Safety Awareness Month

Proclaimed this 12th day of May, 2016.

Jesse Ancira, Jr., Mayor



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 4
Agenda Title: Proclamation: May is Mental Health Awareness Month
Council Action to be taken: Mayor to present proclamation
Initiating Department: City Administration
Staff Contact: Susan Brock, City Clerk

1. INTRODUCTION/PURPOSE

Since 1949 Mental Health American and affiliates have led the observance of May as Mental Health Month by spreading the word that mental health is something everyone should care about.

2. DESCRIPTION/ JUSTIFICATION

The theme for 2016 is “Life with a Mental Illness” and calls on individuals to share what life with a mental illness feels like for them in words, pictures, and video on social media. Posting will share a point of view with individuals who may be struggling to explain the negative attitudes and misperceptions surrounding mental illnesses and show others that they are not alone.

3. FINANCIAL/BUDGET

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

6. REFERENCE FILES

4a. [Proclamation](#)

Proclamation

MENTAL HEALTH MONTH

WHEREAS, mental health is a vital part of our overall health and well-being; and

WHEREAS, all Americans experience times of difficulty and stress in their lives mental illnesses are real and prevalent in our nation; and

WHEREAS, prevention is an effective way to reduce the burden of mental illnesses and as a community we must increase awareness and understanding of mental health; and

WHEREAS, with early and effective treatment, many people with mental illnesses can recover and lead full, productive lives; and

WHEREAS, we, as a community, all have a responsibility to promote mental wellness and support prevention efforts.

NOW, THEREFORE, as Mayor of the City of Taylor, I, Jesse Ancira, Jr. do hereby proclaim May 2016 as

Mental Health Month

PROCLAIMED this 12th day of May, 2016.

Jesse Ancira, Jr., Mayor



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 5
Agenda Title: Approve minutes for April 28, 2016.
Council Action: Approve by consent or approve with corrections
Initiating Department: City Management/City Clerk
Staff Contact: Susan Brock, City Clerk

1. INTRODUCTION/PURPOSE

Pursuant to the Open Meetings Law, Chapter 551, Local Government Code and in accordance with the authority contained in Section 551.021 and the City Charter, the “Minutes” of each City Council must be recorded, compiled and approved by the City Council in subsequent meetings. The purpose of this item is to conform to these legal requirements.

2. DESCRIPTION/ JUSTIFICATION

N/A

3. FINANCIAL/BUDGET

N/A

4. RECOMMENDATION

Approve as submitted or amend with changes noted.

5. REFERENCE FILES

5a. [Minutes April 28, 2016](#)

The City Council of the City of Taylor met on April 28, 2016, at City Hall, 400 Porter St., Taylor, Texas. Mayor Jesse Ancira declared a quorum and called the meeting to order at 6:01 p.m. with the following present:

Mayor Pro Tem Chris Gonzales
Council Member Scott Green
Council Member Don Hill
Council Member Brandt Rydell

Isaac Turner, City Manager
Ted Hejl, City Attorney
Susan Brock, City Clerk

INVOCATION

Pastor Jeff Ripple, Christ Fellowship Church, led the group in prayer.

PLEDGE OF ALLEGIANCE

PROCLAMATIONS/RECOGNITION

1. PROCLAMATION: APRIL IS CHILD ABUSE PREVENTION AND AWARENESS MONTH.

Council Member Rydell presented a proclamation in recognition of April as the month for Child Abuse Prevention and Awareness. Ms. Monica Benoit-Beatty, Executive Director of the Williamson County Children's Advocacy Center accepted the proclamation and provided additional statistics on the center's activities.

2. PROCLAMATION: NATIONAL DAY OF PRAYER.

Council Member Hill presented a proclamation naming Thursday, May 5th as a Day of Prayer in the City of Taylor. Pastor Jeff Ripple, Jeanie Eckhardt, and others accepted the proclamation and invited the public to participate in one of the many events planned that day.

CITIZENS COMMUNICATION

Mayor Ancira asked those who had submitted requests if they want to speak now or when their respective agenda items come up for discussion. Mr. Mark Groba, 1331 CR 498, expressed his frustration in working with the city on his property at 800 7th Street. Mr. Jessie Ramos, Sr., 601 W. Walnut, asked for assistance in cleaning up his street, traffic concerns, lighting, and other improvements for safety reasons. All others who had signed up opted to speak later.

CONSENT AGENDA

3. CONCUR WITH PRELIMINARY FINANCIALS FOR MARCH 2016.

4. APPROVE MINUTES FOR APRIL 14, 2016.

Council Member Hill moved to approve the consent agenda as presented and Mayor Pro Tem Gonzales seconded the motion. VOTE: Five voted AYE. Motion passed.

PUBLIC HEARING

5. CONDUCT PUBLIC HEARING, DISCUSS AND CONSIDER A REQUEST TO REZONE PROPERTY LOCATED AT 2750 DAVIS FROM MF-2 (MULTI-FAMILY, High density) to B-1 (LOCAL BUSINESS).

Ms. Ashley Lumpkin, Director of Planning and Development Services, presented a request to

table this item for a second time since the property owner(s) were not present again. This item was tabled at the last council meeting due to the absence of the property owner(s). The item will be rescheduled for May 12 2016.

ORDINANCES

6. APPROVE ORDINANCE 2016-07 AMENDING FEE ORDINANCE REGARDING FEES FOR CITY SERVICES.

Ms. Rosemarie Dennis, Finance Director, presented this ordinance at the April 14th meeting and was asked to bring back a revised Transportation User Fee schedule to continue the discussion on business categories and individual businesses. She reminded them that the development fees were included to reflect changes in department fees to better reflect the actual cost of the service as well as a new service fee for MyPermit, which is an online service program.

Mr. Gary Gola, 1806 Cypress Cove, pointed out discrepancies on the rates for individual businesses. Staff agreed to meet with the consultant to get an accurate list of businesses and charges to present for further consideration. Mayor Pro Tem Gonzales moved to approve Ordinance 2016-07 as presented without the Transportation User Fee or schedule and to bring back the business list again on May 12 for final consideration. Council Member Green seconded the motion. VOTE: Five voted AYE. Motion passed.

ORDINANCE NO. 2016-07

AN ORDINANCE AMENDING ORDINANCE NO. 2015-14 ADOPTED ON SEPTEMBER 10, 2015 BY CHANGING CERTAIN RATES AND OTHER SERVICES PROVIDED BY THE CITY.

REGULAR AGENDA: REVIEW/DISCUSS AND CONSIDER ACTION

7. DISCUSS AND CONSIDER UPDATE ON TISD PROJECTS INCLUDING THE 7TH STREET SCHOOL FACILITY AND THE LEGACY SCHOOL FACILITY.

Mr. Turner presented a recap of activities at the Taylor Independent School District (TISD) related to the 7th Street facility and new construction planned at the Legacy School site. The TISD Board voted to end the agreement for redevelopment and to authorize the Superintendent to sell the buildings. Council Members expressed concern for securing a location for the non-profit groups and agreed to assist if possible.

Mr. Turner reported that Mr. Vaughn had set a date of May 12th when his Board needs a decision on whether or not the City will grant their request to close 5th street so they can begin the design phase of their plan to replace the portable buildings with a permanent structure. Mayor Ancira asked for a copy of any draft plans that might be available indicating where the structure would be placed.

Mr. Gola, Mr. Herbert Brinkmeyer, 705 Gravel Pit Road, and Ms. Annette Maruska, 308 Cherrywood Circle all spoke against closing 5th Street for this purpose. After much discussion, Mayor Pro Tem Gonzales moved not to abandon 5th Street and to work with the TISD to develop a timeline to relocate the portables. Council Member Hill seconded the motion. VOTE: Five voted AYE. Motion passed.

8. DISCUSS AND CONSIDER AMENDING CHAMBER OF COMMERCE AGREEMENT.

Mr. Bernal presented a review of changes made to the agreement approved by council last fall. These changes include a method to evaluate the impact of the Taylor Regional Park and Sports Complex on HOT funds through increased tourism. The amended agreement also includes performance requirements to improve the coordination of "Taylor Made Texas" logo and brand marketing materials with the Taylor Marketing Team. The budget appropriation of hotel funds will be subject to the performance of advertising, and marketing at increasing tourism on an annual basis on established criteria. Mayor Pro Tem Gonzales also made a request for the Chamber to consider adding Saturday hours to allow visitors on the weekend to access their resource materials.

Council Member Rydell moved to approve the amended agreement as presented and Council Member Green seconded the motion. VOTE: Five voted AYE. Motion passed.

9. RECEIVE UPDATE ON ANIMAL SHELTER.

Commander Joseph Branson presented an update on recent activities and grant funding received for the animal shelter. Council Member Green asked staff to consider adding an outdoor dog run at some point in the future. Council Member Hill moved to accept the report as presented and Council Member Green seconded the motion. VOTE: Five voted AYE. Motion passed.

10. DISCUSS AND CONSIDER REPORT REGARDING EMERGENCY REPAIRS FOR WASTEWATER EQUIPMENT.

Mr. Bernal presented a report of an emergency situation that occurred at the wastewater treatment plant when all three pumps experienced failure during a three week period in late March and the first week in April. The failures are a direct result of damage that occurred during the Memorial Day floods in 2015. Temporary pumps were rented and emergency procurement practices were used to issue a purchase order to replace the pumps as quickly as possible. The cost to rent the temporary pumps was \$6,597.25 and the new pumps including installation costs are \$76,547.95.

Council Member Green moved to accept the report and approve the action taken and Council Member Hill seconded the motion. VOTE: Five voted AYE. Motion passed.

11. CONSIDER APPOINTMENT TO PARKS AND RECREATION ADVISORY BOARD.

Mr. Mike DeVito, Superintendent, presented a request to appoint Larry Cmerek to fill a vacancy on the board created when Kenny Orts resigned earlier this year. There are no other applications on file.

Council Member Green moved to appoint Larry Cmerek to the Parks and Recreation Advisory City Board and Council Member Rydell seconded the motion. VOTE: Five voted AYE. Motion passed.

12. CONSIDER PROPOSED FUTURE AGENDA TOPICS AND ITEMS FOR DISCUSSION.

Mayor Ancira asked council members for any items in need of further discussion. Mayor Pro Tem Gonzales asked for further discussion on speeding and traffic issues; Mayor Ancira requested an update on code enforcement and a follow up report on the Community Clean Up event; Council Member Green requested a discussion on historic preservation and Council Member Rydell asked about developing standards for the historic district.

(Mayor Ancira and council members retired to closed session at 7:57 pm.)

13. EXECUTIVE SESSION I. The Taylor City Council will conduct a closed executive meeting pursuant to the provisions of the Open Meetings Law, Chapter 551, Texas Local Government Code, and the authority contained in Section 551.072 to discuss or deliberate regarding the purchase, exchange, lease, or value of real property.

- Project Access

14. EXECUTIVE SESSION II. The Taylor City Council will conduct a closed executive meeting under Section 551.071 of the Texas Government Code in order to meet with its City Attorney on a matter in which the duty of the Attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas authorize and allow such a closed meeting and which Rules conflict with the Texas Open Meetings Act.

- 7th Street Hospital building
- Municipal court services

15. EXECUTIVE SESSION III. The Taylor City Council will conduct a closed executive meeting pursuant to the provisions of the Open Meetings Law, Chapter 551, Texas Local Government Code, and the authority contained in Section 551.087 to discuss or deliberate regarding commercial and/or financial information on a business prospect that the City of Taylor, Texas, seeks to have locate, stay, or expand in or near the City of Taylor, Texas and with the City of Taylor, Texas, is conducting economic development negotiations and/or deliberate the offer of financial or other incentives to the business prospect.

- Project 1700

16. CONSIDER ACTION FROM EITHER EXECUTIVE SESSION.

Mayor Ancira resumed the open meeting at 9:08 p.m. and stated that there was no action taken during either Executive Session.

ADJOURN

With no further action Mayor Ancira declared the meeting adjourned at 9:08 p.m.

Jesse Ancira, Jr. Mayor

ATTEST:

Susan Brock, City Clerk



City Council Meeting May 12, 2016 Agenda Item Transmittal

Agenda Item #: 6
Agenda Title: Consider introducing Ordinance 2016-04 amending the Subdivision Ordinance.

Council Action to be taken: Introduce Ordinance 2016-04 as presented

Initiating Department: Development Services Department

Staff Contact: Ashley Lumpkin, Director of Development Services

1. INTRODUCTION/PURPOSE

This agenda item is to continue to discuss and consider the adoption of Ordinance 2016-04 to amend and restate the Subdivision Ordinance.

2. DESCRIPTION/ JUSTIFICATION

In response to discussion with various community stakeholders as well as the Planning and Zoning Commission, Staff is proposing modifications to clarify and amend when a plat is required in order to receive a building permit as well as remove redundancies or out-of-date requirements, as shown in the attached red-lined Subdivision Ordinance.

The proposed amendments are summarized as the following:

1. In the instances which the Building Official was tasked with authority regarding the subdivision process, that task is now assigned to the Development Services Director. Similarly, when the City Manager was tasked with an item but it made more sense to have the Ordinance state "Development Services Department" for where or to whom to submit development applications, that change was also made. For example, a Preliminary Plat submittal will be directed to the Development Services Department instead of the City Manager for processing.
2. Several zoning definitions that were only used within the definition section have been removed.
3. Three definitions were added to provide clarity to the ordinance:
 - a. City Manager - the chief administrative officer of the City of Taylor and his/her designated representative.

- b. Lot - a complete parcel of land shown on a final plat of record and having frontage upon a public street and shown on a final plat of record;
 - c. Parcel - a contiguous tract of land owned by or controlled by the same person or entity that is not included in a final plat of record.
- 4. The Engineering Manual was added to the end of the overall ordinance as Chapter 6. Nothing was amended or updated in the Ordinance, but for codifying via MuniCode, staff wanted to create on streamlined Subdivision Ordinance.
- 5. Sections 2.17 and 2.27 Building Permits and Fees have been updated to read:

Plans submitted for building permits shall not be approved and no permits shall be issued until the public improvements are accepted by the City, all appropriate fees are paid, and the plat is filed for record with the Williamson County Clerk's Office except as otherwise provided below:

- (1) A plat is not required for any modification to an existing structure if said modification is within the existing footprint of said structure.
- (2) A plat is not required for expansion to existing structures or site modifications, unless said expansion or site modification triggers a traffic impact analysis, requires the extension of public utilities or roadways, or encroaches upon the 100 year floodplain as set forth by this Code.
- (3) A plat is not required for approval of a sign permit.

The prohibition of building across a lot line has been removed (2.6.1. and 2.18.1). If a single owner owns two, legally platted lots, it should be permissible to allow that owner to treat the ownership tract as a single, legal lot. Removing this prohibition in both the residential and commercial sections of the Subdivision Ordinance will allow for a single owner to build across the common, platted lot line without the added expense of replatting or amending an existing plat of record, and proceed with their project to site and building planning. This does not remove the platting requirement for partial lots/lots that were subdivided after platting by metes and bounds resulting in a lot that does not meet the minimum ordinance requirements.

Staff presented these options to the Development Advisory Committee and other development review staff to gain feedback. Planning Commission Staff will be available to answer any questions that Council may have in regards to the proposed changes.

3. FINANCIAL/BUDGET

No impacts.

4. TIMELINE CONSIDERATIONS

None.

5. RECOMMENDATION

Staff recommends approving Subdivision Ordinance 2016-04. Staff is also forwarding the Planning and Zoning Commission recommendation to approve the amendments as presented.

6. REFERENCE FILES

6a. Ordinance 2016-04

6b. [Red-lined Subdivision Ordinance](#)

Taylor Subdivision Ordinance
Ordinance 2001-16, Adopted April 12, 2001
[Amended and Restated](#)
[Ordinance 2016-04, Adopted](#)

~~Ordinance Modifications~~

~~Ordinance 2003-33, Adopted September 23, 2003~~

~~Ordinance 2005-13, Adopted July 26, 2005~~

~~Ordinance 2006-34, Adopted December 14, 2006~~

~~Ordinance 2007-12, Adopted June 14, 2007~~

~~Ordinance 2008-1, Adopted January 22, 2008~~

~~Ordinance 2008-8, Adopted April 22, 2008~~

~~Ordinance 2011-12, Adopted April 14, 2011~~

Chapter 1 General Provisions

1.1 Title

This ordinance shall be officially known and cited as the "Subdivision Ordinance of the City of Taylor, Texas." It alternatively may be referred to throughout this document as the "Ordinance."

1.2 Authority

The Subdivision Ordinance is adopted pursuant to the powers granted to the City and subject to any limitations imposed by the Constitution and laws of the State of Texas. The City shall adopt and administer subdivisions and property development in accordance with Chapter 212 of the Local Government Code and all other State and Federal laws written or hereafter amended or passed authorizing the City to adopt rules governing plats and subdivisions of land within City jurisdiction and extraterritorial jurisdiction to promote the health, safety, morals, or general welfare of the City and safe, orderly, and healthful development of the City.

1.3 Purposes

The purposes of this Ordinance are: to ensure and promote a place in which all citizens may live, work, play, learn, and grow in a safe and productive living environment in a community built for family living; to conserve the value of property and encourage the most appropriate use of land throughout the City and to do so in accordance with the Comprehensive Plan. These purposes are met by:

1. providing the means of implementing the policies and provisions of the Comprehensive Plan;
2. guiding the growth of the City, concentrating more intense development in areas with high development capability and limiting development in areas of low capability; and
3. guiding through the establishment of performance standards, the type, distribution, and intensity of development.

1.4 Applicability

The provisions of this Ordinance, including the "City of Taylor Engineering Manual & Details" and all appendices, shall apply to the development of all land within the City of Taylor, Texas, unless specifically provided otherwise in this Ordinance. (~~Ord. 2011-12, 4/14/11~~)

1.5 Minimum Standards and Conflicting Provisions:

The provisions of this Ordinance, including the "City of Taylor Engineering Manual & Details" and all appendices are the minimum standards necessary to accomplish its stated purposes. It is not the intent of this Ordinance to interfere with, abrogate or annul any private easement, covenant, deed restriction or other agreement between private parties. When the provisions of this Ordinance impose a greater restriction than imposed by such private agreements, the provisions of this Ordinance shall control. When private agreements impose a greater restriction than imposed by this Ordinance, such private agreements shall control. (Ord. 2011-12, 4/14/11)

1.6 Rules of Construction

1.6.1 Meanings and Intent:

All provisions, terms, phrases and expressions contained in this Ordinance shall be construed in accordance with the "City of Taylor Engineering Manual & Details" and their stated purpose. (Ord. 2011-12, 4/14/11)

1.6.2 Text

In case of any difference of meaning or implication between the text of this Ordinance and any drawing or figure, the text shall control.

1.6.3 Computation of Time

The time within which an act is to be completed shall be computed by excluding the first day and including the last day; if the last day is a Saturday, Sunday or legal holiday, that day shall be excluded. In the computation of time for public hearing notice, both the first day (day of the advertisement) and the last day (day of the hearing) shall be excluded.

1.6.4 Delegation of Authority

Whenever a provision requires the City Manager or his/her designee to do some act or perform some duty, it is to be construed to authorize the head of the department or other officer to designate, delegate and authorize subordinates to perform the required act or duty unless the terms of the provision specify otherwise.

1.6.5 Non-Technical and Technical Words:

Words and phrases shall be construed according to this Ordinance, including the "City of Taylor Engineering Manual & Details" and all appendices to this Ordinance, and then according to the common and approved usage of the language, and technical words and phrases shall also be construed according to this Ordinance, including the "City of Taylor Engineering Manual & Details" and appendices to this Ordinance, after which technical words and phrases shall be construed according to the peculiar and appropriate meaning acquired by them in the law. (Ord. 2011-12, 4/14/11)

1.6.6 Public Officials, Bodies and Agencies

All public officials, bodies, and agencies to which references are made are those of the City of Taylor unless otherwise indicated.

1.6.7 Mandatory and Discretionary Terms

The words "shall" and "must" are always mandatory. The words "may" and "should" are permissive.

1.6.8 Conjunctions

Unless the context clearly indicates the contrary, conjunctions shall be interpreted as follows:

1. "And" indicates that all connected items, conditions, provisions or events shall apply; and

2. "Or" indicates that one or more of the connected items, conditions, provisions or events shall apply.

1.6.9 Tenses, Numbers and Gender

Words used in the past or present tense include the future as well as the past or present, unless the context clearly indicates the contrary. The singular shall include the plural and the plural shall include the singular, as the context and application of this Ordinance may reasonably suggest. Words of one gender shall apply to persons, natural or fictitious, regardless of gender, as the context and application of this Ordinance may reasonably suggest.

1.7 Transitional Provisions

The following transitional provisions shall apply to various matters pending or occurring prior to the effective date of this Ordinance.

1.7.1 Existing Permits or Private Agreements

This Ordinance is not intended to abrogate or annul any permits or agreements issued prior to the effective date of this Ordinance.

1.8 Written Interpretations

The following regulations shall govern the rendering of written interpretations of the provisions of this Ordinance.

1.8.1 Authority

The ~~Building Official~~[Development Services Director, or designee](#), shall have authority to make all written interpretations concerning the provisions of this Ordinance. A request for interpretation shall be submitted to the ~~Building Official~~[Development Services Department](#).

1.8.2 Rendering of Interpretation

Within ten (10) days after a request for interpretation has been submitted, the ~~Building Official~~[Development Services Director, or designee](#), shall: (1) review and evaluate the request in light of the text of this Ordinance, the official zoning map, the Comprehensive Plan and any other relevant information; (2) consult with other staff, as necessary; and (3) render an opinion.

1.8.3 Form

The interpretation shall be provided to the applicant in writing and be sent to the applicant by United States mail.

1.8.4 Official Record

The ~~Building Official~~Development Services Department shall maintain an official record of interpretations. The record of interpretations shall be available for public inspection during normal business hours.

1.8.5 Appeal

Appeals of written interpretations made by the ~~Building Official~~Development Services Director, or designee, shall be taken to the Planning and Zoning Commission. In considering such an appeal, the Board shall consider the interpretation and public testimony in light of the Comprehensive Plan, this Ordinance, and the official zoning map, whichever are applicable. The Board shall modify or reject the interpretation only if it is not supported by substantial competent evidence or if the interpretation is contrary to the Comprehensive Plan, this Ordinance, or the official zoning map.

1.9 Subdivision Fees

Refer to the City's "Fee Ordinance" or the ~~Community Development~~Development Services Department for all associated subdivision fees. The subdivision fees shall be paid upon the submittal of an application and the application shall not be considered complete until such fees have been paid.

1.10 Base Map

See Base Map, Figure 1-1 or the ~~Community Development~~Development Services Department for additional information.

1.11 Severability Clause

If any section, paragraph, subdivision, clause, phrase, or provision of this Ordinance shall be adjudged invalid or held unconstitutional, the same shall not affect the validity of this Ordinance as a whole or any part of provisions thereof, other than the part so decided to be invalid or unconstitutional.

1.12 Repealer Clause

All other ordinances, parts of ordinances or resolutions in conflict with this ordinance are hereby repealed to the extent of any such conflict.

~~1.13—Introduction~~

~~In accordance with Article VIII of the City Charter, this ordinance was introduced before the City Council on the 27th day of March, 2001.~~

~~PASSED, APPROVED and ADOPTED on the 24th day of April, 2001.~~

~~Randall J Pick, Chairman
Board of Commissioners~~

~~ATTEST:~~

~~Barbara S. Belz, City Clerk~~

Revised ~~April 14, 2011~~April 2016

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Chapter 2 Subdivision Improvements

ARTICLE I: GENERAL

2.1 Purpose

The purpose of this chapter is to control the subdivision of land in order to provide for orderly development and to secure adequate provisions for traffic, light, air, recreation, transportation, water, drainage, sewage and other facilities.

2.2 Applicability

This chapter shall apply to any land within the corporate limits and extraterritorial jurisdiction (ETJ) of the City of Taylor, unless specifically exempted by this article.

2.3 Authority

It shall be unlawful for any owner or agent of any owner of land to lay out, subdivide, plat or replat any land into lots, blocks and streets within the City or within the extraterritorial jurisdiction without the approval of the Planning and Zoning Commission. The City shall withhold all City improvements, including the maintenance of streets and furnishing of sewage and water service from all additions and subdivisions, the platting of which has not been approved by the Planning and Zoning Commission.

It shall also be unlawful for any such owner or agent to offer for sale or sell property therein or thereby, which has not been laid out, subdivided, platted or replatted with the approval of the Planning and Zoning Commission

No street number and no building permit shall be issued for the erection of any building in the City on any piece of property, other than an original or a resubdivided lot in a duly approved and recorded subdivision, without the written approval of a plat or subdivision by the Planning and Zoning Commission, ~~the approval of construction plans, the acceptance of the public improvements, and a duly approved and recorded subdivision or plat recorded with the Williamson County Clerks Office, except as otherwise provided for in Chapter 2, Article III, Commercial Design and Improvement Standards~~this ordinance.

2.4 Engineer Required

The subdivider shall retain the services of a professional engineer, licensed in the State of Texas, whose seal shall be placed on each sheet of the drawings, and who shall be responsible for the design and inspection of the drainage, roads and streets, and sewer and water facilities within the subdivision.

2.5 Monuments

Monuments, consisting of one-half (1/2) inch reinforced steel or larger, twenty-four (24) inches in length, shall be placed and countersunk at the corners of all lot lines.

At least two (2) benchmarks for each subdivision shall be permanently installed in an approved manner, with the location and the elevation as shown on the construction plans. Permanent benchmarks shall be brass disks set in an approved location with the elevation and benchmark numbers stamped in the disc.

ARTICLE II: RESIDENTIAL DESIGN AND IMPROVEMENT STANDARDS

2.6 Lots

The lot design of a neighborhood should provide for lots of adequate width and depth to provide open area and to eliminate overcrowding. Lots should be rectangular so far as practicable and should have the side lot lines at right angles to the streets on which the lot faces or radial to curved street lines.

1. All lots must front on a public street right-of-way.
2. All lots shown on the plat shall be for residential purposes unless otherwise noted.
3. Double frontage lots are prohibited, except when backing on an arterial street.
4. Unless approved by the Planning and Zoning Commission, no lots shall face on an arterial street.
5. All lots shown must conform to the minimum requirements of the zoning district in which it is located.
6. An individual sewer tap and water tap shall be installed for each lot.

~~2.6.1 No building permit shall be issued by the city for new construction or a renovation greater than fifty (50%) percent of replacement value, if that proposed construction will cross a lot line.~~

2.7 Blocks

Blocks are to be numbered consecutively within the overall plat and/or sections of an overall plat as recorded. All lots are to be numbered consecutively within each block. Lot numbering continues from block to block in a uniform manner that has been approved on an overall preliminary plat.

Maximum block length for residential: One thousand two hundred (1,200) feet and the minimum block length for residential is three hundred (300) feet, except upon approval by the City Planning and Zoning Commission.

Maximum block length along an arterial street: One thousand six hundred (1,600) feet and the minimum block length along an arterial street is four hundred (400) feet, except upon approval by the Planning and Zoning Commission.

2.7.1 Transition Setbacks

Transition building lines having a minimum angle of forty five (45) degrees are to be provided where an offset in building lines is greater than five (5) feet.

2.8 Streets

The street pattern of a neighborhood should provide adequate circulation within the subdivision and yet discourage excessive through traffic on local streets. The subdivider shall be responsible for the construction of all interior street improvements.

The subdivider shall be responsible for the construction of the adjacent half of all perimeter streets surrounding the subdivision that are not improved to city standards. Perimeter street subdivision requirements include any residential subdivision with greater than four (4) lots. In lieu of constructing perimeter streets, the City Manager may approve an escrow of one-half (1/2) of the cost. The cost must be approved by the City Engineer.

2.8.1 Street Arrangements

Unless otherwise approved by the Planning and Zoning Commission, provision shall be made for the extension of arterial streets. Collector streets shall be provided for the circulation of traffic through the subdivision and the connection thereof to the arterial streets. Adequate minor streets shall be provided to accommodate the subdivision. Off-center divisions should be avoided. All arterial and collector streets shall be continuous or in alignment with existing streets unless variations are deemed advisable by the City Engineer due to topography and requirements of traffic circulation.

2.8.2 Right-of-Way (ROW) Widths

All street and road rights-of-way within new subdivisions shall be subject to the minimum right-of-way and street widths as determined by the City Engineer [and the City of Taylor Engineering Manual & Details](#).

2.8.2.1 Work in Right of Way

Any work occurring within the City's Right of Way including, without limitation, installation or relocation of utilities such as electric, gas, cable, landscaping, or drainage shall require a permit prior to any work. (Ord. 2007-12, 6/14/07)

2.8.3 Street Jogs

Street jogs with centerline offsets of less than one hundred twenty-five (125) feet joining a minor street, less than one hundred fifty (150) feet joining a collector street, and less than two hundred (200) feet joining an arterial street shall be prohibited.

2.8.4 Intersection Angles

1. All streets are to intersect at a ninety (90) degree angle. Variations must be approved by the City Engineer.

2. Acute angle intersections approved by the City Engineer are to have twenty-five (25) foot radius at acute corners.
3. Street intersections with or extending to meet an existing street will be tied to the existing street on centerline with dimensions and bearings to show relationship.

2.8.5 Arterial Street Requirements

1. Arterial Street Curves. Curves in arterial streets are to have a centerline radius of two thousand (2,000) feet or more with exceptions to this standard granted only by the City Engineer. Reverse curves are to be separated by a minimum tangent of one hundred (100) feet.
2. Arterial street locations, alignments, widths, and cross-sections are to be determined by the Planning and Zoning Commission and designated on the Thoroughfare Plan.

2.8.6 Minor Street Curves

Curves in minor or residential streets are to have a centerline radius of three hundred (300) feet or more unless approved by the City Engineer.

2.8.7 Collector Street Curves

Secondary or collector streets are to have a centerline radius of eight hundred (800) feet or more with exceptions to this standard granted only by the City Engineer.

2.8.8 Cul-de-sacs

Cul-de-sacs shall not be longer than six hundred (600) feet and shall have a turnaround roadway (cul-de-sac) of eighty (80) feet and a street right-of-way of at least one hundred (100) feet at the closed end.

Temporary turnarounds shall be used at the end of a street that is more than four hundred (400) feet in length and will be extended in the future. Note for temporary turnaround: "Cross-hatched area is temporary easement for turnaround until street is extended (direction) in a recorded plat."

2.8.9 Street Buffers

A one-foot reserve shall be dedicated to the public in fee as a buffer separation between the side or end of streets in subdivision plats where such streets abut adjacent acreage tracts. When the adjacent property is subdivided in a recorded plat, the one-foot reserve shall become vested in the public for street right-of-way purposes (and the fee title thereto shall revert to and revest in the dedicator, his heirs, assigns, or successors).

2.8.10 Alleys

When alleys are provided, they shall have a minimum width of twenty (20) feet.

2.8.11 Street Names

Street names shall be continuations of existing street names adjacent to or on-line, if they are not duplications. Proposed new names shall be submitted to the [Building Official/Development Services Director, or designee](#), for approval prior to the submittal of final plat.

2.8.12 Street Signage

The subdivider is responsible for furnishing and erecting street signs with block numbers as required by the City.

2.8.13 Street Lighting

The Developer is responsible for furnishing and erecting street lighting as required by the City Manager, ~~or his designee~~. (Ord. 2007-12, 6/14/07)

2.9 Utility Easements

The subdivider may be responsible for dedicating utility easements to the City. Easements shall be worked out with private utility companies prior to plat submittal to the City.

2.10 Drainage

Adequate drainage shall be provided within the limits of the subdivision. The protection of adjoining property will be considered in the review of plans submitted. The subdivider shall be responsible for constructing all drainage improvements.

2.10.1 Design

Design of all drainage facilities, including but not limited to streets, inlets, storm sewers, outfalls, culverts, ditches and channels shall conform to normally accepted engineering standards as determined by the City Engineer. Under no circumstances will drainage be allowed to result in a negative effect upstream or downstream.

2.10.2 Maintenance Agreement Required for Drainage Facilities

If the City requires that the Developer (or landowner, PID, HOA, or other entity or person specifically approved by the City) shall be responsible for the maintenance of the Drainage Facilities, a Maintenance Agreement, as both are hereinafter defined, will be written and approved by the City that shall include terms and provisions deemed necessary by the City to provide maintenance of the Drainage Facilities. (Ord. 2007-12, 6/14/07)

2.10.3 Maintenance Agreement Noted on Final Plat

If a Developer requests, and the City approves, that a Public Improvement District (PID), Home Owners Association (HOA), or other entity be responsible for the maintenance of the Drainage Facilities, the Maintenance Agreement shall be included as part of the platting process and must be approved by the City prior to final plat approval. The plat shall include the information that a Maintenance Agreement is required for the Drainage Facility in the development and any term and provisions of the Maintenance Agreement the City deems necessary shall be noted on the final plat, which may include all terms of the Maintenance Agreement. (Ord. 2007-12, 6/14/07)

2.10.4 Maintenance Agreement if Preliminary Plat Not Required

The Maintenance Agreement must be negotiated during the Preliminary Platting process, or earlier in the planning process if required by the City, when a preliminary plat is not required. (Ord. 2007-12, 6/14/07)

2.10.5 City Maintenance of Drainage Facilities

If the City determines it will maintain the Drainage Facilities, it shall be noted on the final plat. The real and personal property included as the Drainage Facility shall be deeded and conveyed to the City as part of the platting process using instruments deemed reasonable and necessary to the City prior to final plat approval. The deed or other conveyance documents to the City must be free and clear of all liens, debts or other encumbrances, and the City may require evidence and title assurances of that requirement, including without limitation an owner's title insurance policy. (Ord. 2007-12, 6/14/07)

2.10.6 Role of the Homeowners Association/Public Improvement District

Ongoing role of the HOA/PID: The City Planner shall be the City liaison to a HOA and/or PID maintaining Drainage Facilities. Requirements concerning the HOA or PID operation to assure continued operation of Drainage Facilities shall be required by the City, including without limitation, financial reports filed with the City at least annually, a limitation against dissolution without City consent, and an assessment deemed adequate by the City to operate the Maintenance Facilities, allowing the City to collect dues directly and to assess liens against the subdivision for maintenance of the Drainage Facilities. (Ord. 2007-12, 6/14/07)

2.10.7 City Council Approval of Land Restrictions

All deed restrictions, covenants running with the land, and easements needed to operate the Drainage Facility must be approved by the City, filed of record, and contain provisions necessary to operate the Drainage Facilities and preventing amendment or dissolution without prior written consent from the City in the books and records of the entity. (Ord. 2007-12, 6/14/07)

2.11 Water and Sewer

The subdivider is responsible for extending utilities to the development site and shall make the necessary arrangements therefore with the applicable private utility companies and the City. The City may participate in the over-sizing of utilities if desired to serve further development.

2.11.1 Utilities Furnished or Supplied by City

Sewer. Sanitary sewers shall be installed to serve each lot. All sewer systems shall be extended across lots to the adjacent property lines.

Water. Water lines shall be installed to serve each subdivided or platted lots within the corporate limits of the City and within the extraterritorial jurisdiction. All water systems shall be extended across lots to the adjacent property lines.

All public improvements shall be the responsibility of the developer. Upon approval and acceptance of the water and sewer utilities by the City, the systems become the property of the City.

2.11.1.1 Private Utilities

Private Utilities – Within new subdivisions, all private utilities, except for distribution mains, shall be placed underground by the developer. There shall be no overhead power lines for street lights. Gas meters shall be placed underground in an appropriate box located in the parkway as approved by the City, or placed adjacent to the residential structure. If adjacent to the residential structure, the backside of the meter and pressure reducing valve shall be at least one foot from the finished edge of the residence, but not more than two feet. (Ord. 2008-8, 4/22/08)

2.11.2 Fire Flow Requirement

No building permit shall be issued by the City for construction, if that proposed construction does not meet the fire flow requirements. Minimum acceptable flow for fire protection is five hundred (500) gallons per minute (gpm) for a duration of not less than two (2) hours. This flow must be met with the water supply system remaining at or above a pressure of twenty (20) pounds per square inch (psi). All water mains must be a minimum of eight inches (8") diameter. Water mains shall be Polyvinyl Chloride Pipe (PVC) and shall be designed, manufactured, and tested in accordance with the applicable requirements of AWWA C-900 and AWWA M-23. Eight inch (8") through twelve inch (12") pipe shall be pressure class 150, DR18. Pressure class requirements for larger diameter pipes shall be subject to the approval of the City Engineer. These requirements apply to all new development, ~~including residential, commercial, and industrial building uses.~~ Any variation in these requirements is subject to the approval of the City Engineer.

2.12 Park and Playground Sites

In a residential subdivision of twenty (20) acres or more, the subdivider is required to dedicate five (5) percent of the total area of the subdivision that is not in the floodplain for park purposes or pay an escrow, with terms established by the city, in lieu of the parkland dedication. All dedication of land is subject to the approval of the City.

Park and playground sites shall be reserved as indicated on the Future Land Use Plan. Size shall be in accordance with the City's Comprehensive Plan for the park system.

2.13 School Sites

Location and size of school sites to be in accordance with the requirements of the school district and approved by the City of Taylor. All other conditions of this Ordinance shall also apply.

2.14 Sidewalks

The subdivider is responsible to note the location of sidewalks on the plat. The builder shall be responsible for constructing sidewalks in all residential districts. Sidewalks shall be installed on at least one side of the street, be a minimum of four (4) feet in width and be in compliance with the Americans with Disabilities Act (ADA). All sidewalks must be in compliance with specifications provided by the City Engineer.

2.15 Acceptance of Public Improvements

Prior to final acceptance for maintenance of the completed improvements by the City Council, the subdivider shall file with the City Engineer or City Manager the following:

1. A two (2) year, one-hundred percent (100%) percent maintenance bond of the contract price executed by a corporate surety licensed to do business in the State of Texas, conditioned that the improvements are free from defects in materials and workmanship.
2. Three (3) sets of reproducible "record drawings" for each project, which further contain or have attached certification from a professional engineer that all improvements comply with this Ordinance.
3. An affidavit from the subdivider stating that to the best of his information and belief, the contractor has complied with the regulations contained in this Ordinance.
4. Exemption: No maintenance or performance bond is required when the cost of the public improvements are expected to be less than five thousand (5,000) dollars. (ord. 2006-34)

2.16 Final Plat Acceptance

The acceptance of a final plat by the City does not in any manner obligate the City to finance or furnish any improvements of any kind within the approved subdivision.

2.16.1 Final Plat Expiration

From the date of Planning and Zoning Commission approval, a final plat will expire no later than six (6) months from the date of the Planning and Zoning Commission approval of the final plat of the approval if:

1. the plat has not been filed for record in the County Clerks office in Williamson County Texas; or
2. construction has not commenced and reasonable construction progress has been completed as determined by the City; or;
3. an appeal of the City determination of construction progress to the Planning and Zoning Commission has been rejected by the Planning and Zoning Commission; or
4. an extension to the filing or construction requirement has not been approved by the Commission. (Ord. 2007-12, 6/14/07)

2.17 Building Permits and Fees

Plans submitted for building permits shall not be approved and no permits shall be issued until the public improvements are accepted by the City, all appropriate fees are paid, and the plat is filed for record with the Williamson County Clerk's Office except as otherwise provided below:

- (1) A plat is not required for any modification to an existing structure if said modification is within the existing footprint of said structure.
- (2) A plat is not required for expansion to existing structures or site modifications, unless said expansion or site modification triggers a traffic impact analysis, requires the extension of public utilities or roadways, or encroaches upon the 100 year floodplain as set forth by this Code.
- (3) A plat is not required for approval of a sign permit.

ARTICLE III: COMMERCIAL DESIGN AND IMPROVEMENT STANDARDS

2.18 Lots

The lot design should provide for adequate width and depth to provide sufficient area for design components including but not limited to landscaping, parking and open area and to eliminate overcrowding, if applicable. Lots should be rectangular so far as practical and should have the side lot lines at right angles to the streets on which the lot faces or radial to curved street lines.

1. All lots must front on a public street right-of-way.
2. All lots shown must conform to the minimum requirements of the zoning district in which it is located.
3. An individual sewer tap and water tap shall be installed for each lot.

~~2.18.1—No building permit shall be issued by the city for new construction or a renovation greater than fifty (50%) percent of replacement value, if that proposed construction will cross a lot line.~~

2.19 Blocks

Blocks are to be numbered consecutively within the overall plat and/or sections of an overall plat as recorded. All lots are to be numbered consecutively within each block. Lot numbering continues from block to block in a uniform manner that has been approved on an overall preliminary plat.

2.20 Streets

The subdivider shall be responsible for the construction of the adjacent half of all perimeter streets surrounding the subdivision that are not improved to city standards. Perimeter street subdivision requirements include all commercial subdivisions. In lieu of constructing perimeter streets, the City Manager may approve an escrow of one-half (1/2) of the cost. The cost must be approved by the City Engineer.

2.20.1 Street Arrangements

Unless otherwise approved by the Planning and Zoning Commission, provision shall be made for the extension of arterial streets. Collector streets shall be provided for the circulation of traffic through the subdivision and the connection thereof to the arterial streets. All arterial and collector streets shall be continuous or in alignment with existing streets unless variations are deemed advisable by the City Engineer due to topography and requirements of traffic circulation.

2.20.2 Arterial Street Requirements

Arterial Street Curves. Curves in arterial streets are to have a centerline radius of two thousand (2,000) feet or more with exceptions to this standard granted only by the City Engineer. Reverse curves are to be separated by a minimum tangent of one hundred (100) feet.

Arterial street locations, alignments, widths, and cross-sections are designated on the Thoroughfare Plan.

2.20.3 Collector Street Curves

Secondary or collector streets are to have a centerline radius of eight hundred (800) feet or more with exceptions to this standard granted only by the City Engineer.

2.21 Utility Easements

The subdivider may be responsible for dedicating utility easements to the City. Easements shall be worked out with private utility companies prior to plat submittal to the City.

2.22 Drainage

Adequate drainage shall be provided within the limits of the subdivision. The protection of adjoining property will be considered in the review of plans submitted. The subdivider shall be responsible for constructing all drainage improvements.

2.22.1 Design

Design of all drainage facilities, including but not limited to streets, inlets, storm sewers, outfalls, culverts, ditches and channels shall conform to normally accepted engineering standards as determined by the City Engineer. Under no circumstances will drainage be allowed to result in a negative effect upstream or downstream.

2.23 Water and Sewer

The subdivider is responsible for extending utilities to the development site and shall make the necessary arrangements therefore with the applicable private utility companies and the City. The City may participate in the oversizing of utilities if desired to serve further development.

2.23.1 Utilities Furnished or Supplied by City

Sewer. Sanitary sewers shall be installed to serve each subdivided or platted lots within the corporate limits of the City and within the extraterritorial jurisdiction. All sewer systems shall be extended across lots to the adjacent property lines.

Water. Water lines shall be installed to serve each subdivided or platted lots within the corporate limits of the City and within the extraterritorial jurisdiction. All water systems shall be extended across lots to the adjacent property lines.

All public improvements shall be the responsibility of the developer. Upon approval and acceptance of the water and sewer utilities by the City, the systems become the property of the City.

~~2.23.1.1 Private~~ 2.23.1.1 Private Utilities

Private Utilities – Within new subdivisions, all private utilities, except for distribution mains, shall be placed underground by the developer. There shall be no overhead power lines for street lights. Gas meters shall be placed underground in an appropriate box located in the parkway as approved by the City, or placed adjacent to the residential structure. If adjacent to the residential structure, the backside of the meter and pressure reducing valve shall be at least one foot from the finished edge of the residence, but not more than two feet.

2.23.2 Fire Flow Requirement

No building permit shall be issued by the City for construction, if that proposed construction does not meet the fire flow requirements. Minimum acceptable flow for fire protection is five hundred (500) gallons per minute (gpm) for a duration of not less than two (2) hours. This flow must be met with the water supply system remaining at or above a pressure of twenty (20) pounds per square inch (psi). All water mains must be a minimum of eight inches (8") diameter. Water mains shall be Polyvinyl Chloride Pipe (PVC) and shall be designed, manufactured, and tested in accordance with the applicable requirements of AWWA C-900 and AWWA M-23. Eight inch (8") through twelve inch (12") pipe shall be pressure class 150, DR18. Pressure class requirements for larger diameter pipes shall be subject to the approval of the City Engineer. These requirements apply to all new development, ~~including residential, commercial, and industrial building uses.~~ Any variation in these requirements is subject to the approval of the City Engineer.

2.24 Sidewalks

The subdivider is responsible to note the location of sidewalks on the plat. Sidewalks shall be constructed and extended across their property along the perimeter of all property boundaries adjacent to public right-of-ways. Sidewalks shall be a minimum of four (4) feet

in width and be in compliance with the Americans with Disabilities Act (ADA). All sidewalks must be in compliance with specifications provided by the City Engineer.

2.25 Acceptance of Public Improvements

Prior to final acceptance for maintenance of the completed improvements by the City Council, the subdivider shall file with the City Engineer or City Manager the following:

1. A two (2) year, one-hundred (100%) percent maintenance bond of the contract price executed by a corporate surety licensed to do business in the State of Texas, conditioned that the improvements are free from defects in materials and workmanship.
2. Three (3) sets of reproducible "record drawings" for each project, which further contains or has attached certification from a professional engineer that all improvements comply with this Ordinance.
3. An affidavit from the subdivider stating that to the best of his information and belief, the contractor has complied with the regulations contained in this Ordinance.
4. Exemption: No maintenance or performance bond is required when the cost of the public improvements are expected to be less than five thousand (5,000) dollars. (ord. 2006-34)

2.26 Final Plat Acceptance, Filing, and Issuance of Building Permit

The acceptance of a final plat by the City does not in any manner obligate the City to finance or furnish any improvements of any kind within the approved subdivision.

The duly approved plat shall be recorded for record with the Williamson County Clerk's Office following the acceptance of the public improvements by the City, if applicable; and in the event there are no public improvements, prior to the issuance of the building permit.

2.27 Building Permits and Fees

Plans submitted for building permits shall include the necessary drainage related facilities.

Permits for the construction of new, renovated, expanded or reconstructed facilities that include public improvements, shall not be issued until the City has approved the construction plans and all of the applicable fees are paid.

Permits for the construction of new, renovated, expanded or reconstructed facilities that do not include public improvements, shall not be issued until the City has approved the construction plans, the payment of all applicable fees, and the duly approved plat is filed for record with the Williamson County Clerk's office except as otherwise provided below:

(1) A plat is not required for any modification to an existing structure if said modification is within the existing footprint of said structure.

(2) A plat is not required for expansion to existing structures or site modifications, unless said expansion or site modification triggers a traffic impact analysis, requires the extension of public utilities or roadways, or encroaches upon the 100 year floodplain as set forth by this Code.

(3) A plat is not required for approval of a sign permit.

2.28 Work in Right of Way

Any work occurring within the City's Right of Way including, without limitation, installation or relocation of utilities such as electric, gas, cable, landscaping, or drainage shall require a permit prior to any work. (Ord. 2007-12, 6/14/07)

Chapter 3

Review and Approval Procedures for Planning and Zoning Commission

3.1 Subdivision Concept Plan

Prior to completion of the preliminary plat, the developer or owner shall meet with the ~~City Manager or his designee~~ Development Services Director or designee to discuss the "concept" of the proposed project. At this conference, the ~~City Manager or~~ Development Services Director or his designee will provide information to the subdivider regarding utility, street, drainage and zoning constraints. In the event preliminary and final plats are not required, the concept plan shall be mandatory.

3.2 Subdivision Preliminary Plat

The developer or owner of the land to be subdivided shall submit a preliminary plat of the entire area under one ownership at the time the preliminary plat is submitted. Twelve (12) copies of a preliminary plat shall be submitted to the City for presentation to the Planning and Zoning Commission twenty-one (21) days prior to the meeting at which approval is sought. The plat shall be drawn to a scale of one inch equals one hundred feet (1"=100'), and shall show or be accompanied by the following information:

1. Name of subdivision (check for duplication).
2. Legal description of the land being subdivided attached to preliminary plat.
3. Total acreage and total number of lots and blocks.
4. Name of owner and address (unless given in letter of transmittal). If owner is a company or corporation, name of responsible individual such as a president or vice-president must be given.
5. Name of registered engineer or public surveyor.
6. Scale: One inch equals one hundred feet (1"=100') (consent of Planning and Zoning Commission needed for smaller scale and then only if lots are more than one-half (½) acre in area).
7. North arrow: North to be at top of sheet if possible.
8. Date: Each revision to bear new date.
9. Boundaries:
 - a. Ownership boundaries drawn in very heavy lines, with overall dimensions and bearings.

- b. Lines outside of boundaries of proposed subdivision to be dashed.
 - c. Provide a tie to an original corner of the original survey of which said land is a part.
- 10. Adjacent Property: Name and adjacent boundary location of subdivision, streets, easements, pipelines, watercourses, etc.
- 11. Topography Within the Subdivision: Water courses and ravines, showing high bank and width of existing or proposed easements, and contour lines at two (2) foot intervals and any other physical features pertinent to the subdivision.
- 12. Existing Features Inside Subdivision: Location and width of existing rights-of-ways, streets, alleys, easements and transportation features.
- 13. Proposed Features Inside Residential Subdivision:
 - a. Location, width, and name of streets.
 - b. Width and depth of all lots.
 - c. Location of building lines, alleys and easements.
- 14. Plans shall show the limits of the one hundred (100) year floodplains and floodways for all waterways.
- 15. Easements: A copy of the instrument establishing any private easement shall be submitted with the preliminary plat. Easement boundaries must be tied by dimensions to adjacent lot and tract corners. Where the private easement has no defined location or width, an effort shall be made to reach agreement on a defined easement. Where no agreement can be reached, then pipelines shall be accurately located and tied to lot lines, and building setback lines shall be shown at a distance of ten (10) feet from and parallel to the centerline of the pipeline.
- 16. Engineering Data Required:
 - a. Streets: Complete curve data shown on each side of street; length and bearings of all tangents; dimensions from all angle points and points of curve to an adjacent side lot line.
 - b. Lots: Complete dimensions and bearings for front, rear, and side lot lines.
 - c. Water Courses and Easements: Distances to be provided along the side lot lines from the front lot line to the point where the side line crosses the drainage easement line or the high bank of a stream; traverse line to be provided along the edge of all large water

courses in a convenient location, preferably along a utility easement if paralleling the drainage easement or stream.

17. Special Uses: Designate any sites for churches, sewage disposal plants, water plants, business, industry or other special land uses. If proposed use is unknown, designate as unrestricted. Show location of any proposed site for a school, park or public building.

3.2.1 Review of Preliminary Plat

Following review of the preliminary plat and negotiations with the subdivider on changes deemed advisable and the kind and extent of improvements to be made by him/her and upon advice from the City Attorney that the requirements as to legal form have been met and upon recommendation of the City Manager, the Planning and Zoning Commission shall, within thirty (30) days, act thereon as submitted, or modified, and if approved shall express its approval as "Conditional Approval," and state condition of such approval, if any, or if disapproved, shall express its disapproval and the reasons therefore.

The action of the Planning and Zoning Commission shall be noted on three (3) copies of the Preliminary Plat, and any conditions of either approval or disapproval shall be attached to and/or referred to each plat. One (1) copy shall be returned to the subdivider and one (1) copy shall be retained by the [City Manager Development Services Department](#).

Approval of the preliminary plat does not constitute acceptance of the subdivision, but is merely authority to proceed with the preparation of the final plat. No work shall be done on the subdivision before the final plat is approved. Approval of a preliminary plat expires at the end of one hundred eighty (180) days unless final plat has been submitted to the Planning and Zoning Commission. If any major changes are required by the Planning and Zoning Commission, ~~the City Manager may require submission of~~ a revised preliminary plat [may be required](#).

3.3 Final Plat

Twelve (12) white print copies of the final plat and one (1) mylar reproducible of the final plat shall be submitted to the Planning and Zoning Commission after the preliminary plat has been approved and all required changes and alterations made. No final plat will be considered unless a preliminary plat has first been submitted. Such plats shall be filed with the [City Manager Development Services Department](#) at least twenty-one (21) days prior to the meeting at which approval is requested. The final plat shall show or be accompanied by the following data:

1. Plats shall be drawn on eighteen by twenty-three (18 x 23) inch sheets to the scale of one inch equals one hundred feet (1"=100').
2. A title including name and subdivision, owner or owners, and registered professional land surveyor responsible for the plat and the scale and location of the subdivision with reference to an original corner of the original survey of which said land is a part, the date, north arrow, total acres and numbers of lots and blocks.

3. The certificate of the registered professional land surveyor who surveyed, mapped and monumented the land shall be placed on the face of the plat.
4. A certificate of ownership and dedication of all streets, easements, alleys, parks and playgrounds to public use forever, signed and acknowledged before a notary public by the owner and lienholder of the land.
5. An accurate on-the-ground boundary survey of the property with bearings and distances and showing the lines of all adjacent land, streets, easements, and alleys with their names and width. (Streets, alleys and lot lines in adjacent subdivision shall be shown dotted.) All necessary data to reproduce the plat on the ground must be shown on the plat.
6. Certificate of approval to be signed by the Chairman and Secretary of the Planning and Zoning Commission shall be placed on the face of the plat.
7. The plat shall show all existing features inside of the area being subdivided, such as existing water courses, railroads, width of streets, alleys and easements to be retained and other physical features deemed pertinent to the subdivision.
8. Streets, alleys and easements to be dedicated will be shown with the following engineering data: complete curve data shown on each side of the street; length and bearings of all tangents; dimensions from all angle points of curve to an adjacent side lot line.
9. Water Courses and Easements: Distances to be provided along the side lot lines from the front lot line or the high bank of a stream; traverse line to be provided along the edge of all large water courses in a convenient location, preferably along utility easement if paralleling the drainage easement or stream.
10. Drainage and Floodplains:
 - a. All subdivisions shall provide adequate drainage easements to cover one hundred (100) year floodplain areas, drainage channels, pipe systems and any other related drainage facilities. Limits of the one hundred (100) year floodplains and floodways shall be shown.
 - b. The final plat shall establish specific minimum floor slab elevations for construction of any structures on a lot within the one hundred (100) year floodplain to be a minimum of two (2) feet above the one hundred (100) year floodplain.
 - c. The final plat shall also contain certification by a licensed professional engineer that certifies that the information contained on the plat complies with all ordinances adopted by the City.
11. Lot and block lines and numbers of all proposed lots and blocks with complete dimensions for front, rear and side lot lines. Building setback lines shall be shown on all lots.

12. Twelve (12) sets of plans and specifications for water, sewer, paving and drainage prepared by a registered engineer must be approved by the City Engineer prior to the beginning of any construction of the subdivision.
13. Final Plat Expiration. From the date of Planning and Zoning Commission approval, a final plat will expire no later than six (6) months from the date of the Planning and Zoning Commission approval of the final plat of the approval if:
 1. the plat has not been filed for record in the County Clerks office in Williamson County Texas; or
 2. construction has not commenced and reasonable construction progress has been completed as determined by the City; or;
 3. an appeal of the City determination of construction progress to the Planning and Zoning Commission has been rejected by the Planning and Zoning Commission; or
 4. an extension to the filing or construction requirement has not been approved by the Commission. (Ord. 2007-12, 6/14/07)

3.3.1 Administrative Approval Plat (Ordinance 2008-1, 1/22/08)

Plats, replats or amended plats containing four(4) or fewer lots and requiring no extensions of municipal facilities may be administratively approved by the City Manager without consideration of the Planning and Zoning Commission if the plat, replat, or amended plat meets all applicable requirements of this Ordinance.

Amended plats as described by section 212.016 of the Local Government Code, as amended from time to time, with the exception of the authority to relocate a lot line to eliminate an inadvertent encroachment of a building or other improvement on a lot line or easement, may be administratively approved by the City Manager, without consideration of the Planning and Zoning Commission if the plat meets all applicable requirements of this Ordinance. (Ordinance 2005-1, July 26, 2005)

The City Manager shall not disapprove a plat, replat or amended plat submitted under this section and shall instead refer any plat, replat, or amended plat which the City Manager refuses to approve to the Planning and Zoning Commission for its consideration. Any such plat, replat or amended plat shall be acted on by the Planning and Zoning Commission.

The City Manager shall provide to the Planning and Zoning Commission periodic reports requiring administratively approved plats, replats or amended plats.

3.3.2 Requirements for Easements

Prior to approval of the final plat, the subdivider of any subdivision plat wherein public streets or easements are shown crossing private easements or fee strips shall, by letter to the Planning and Zoning Commission, assume responsibility for seeing that any adjustments and protection of existing pipelines, electrical transmission lines, or other facilities shall be planned and provided for to the satisfaction of the holder of the private easements or fee strips and the City Manager prior to the filing of the plat for record.

Prior to the filing of the final plat for record, the following requirements must be met:

1. The subdivider of any plat shall obtain from the holder of any private easement or fee strip within the plat crossed by proposed streets or other public easements an instrument granting to the public the use of the said public streets or easements over and across said private easements or fee strips for construction, operation, and maintenance of those public facilities normally using the type of public streets and easements indicated. This instrument shall be delivered to the Planning and Zoning Commission to be filed for record along with the plat.
2. The subdivider shall furnish the Planning and Zoning Commission with a letter from the holder of the private easements or fee strips in question stating that arrangements in pipelines, electric transmission lines, or other similar facilities have been made to the satisfaction of the holder of the easement.
3. The developer shall provide the Planning and Zoning Commission with a letter from the City Manager stating that arrangements for all matters pertaining to any necessary adjustments have been made to the satisfaction the City.
4. Easement for drainage adjacent to lots, tracts, or reserves shall be noted: "This easement shall be kept clear of fences, buildings, planting, and other obstructions to the operations and maintenance of the drainage facility."

3.4 Performance Bond

Prior to approval of the final plat, the subdivider shall file with the City Manager a performance bond executed by a corporate surety licensed to do business in the State of Texas, in an amount equal to the cost of the uncompleted and unaccepted improvements required by this Ordinance, as approved by the City Engineer, conditioned that the subdivider will complete such improvements within two (2) years from the date of final plat approval. Such bond shall conform to forms approved by the City.

3.5 Improvement Plans

Plans and specifications for all improvements must be approved by the City Engineer prior to the time the work on such improvements is commenced. Any improvement made shall be subject to the approval and acceptance of the City Engineer.

The engineer representing the subdivider must present to the [Development Services Department City Manager](#), reproducible complete "record drawings" for all paving, drainage structures, water lines, and sewer lines prior to final acceptance of public improvements.

3.6 Variances

The Planning and Zoning Commission may authorize a variance from these regulations when, in its opinion, undue hardship on the part of the subdivider will result from requiring strict compliance. In granting or imposing a variance, the Planning and Zoning Commission shall prescribe only conditions that it deems necessary to the public interest.

In making the findings herein required, the Planning and Zoning Commission shall take into account the nature of the proposed use of the land involved, existing uses of land in the vicinity, the number of persons who will reside or work in the proposed subdivision, and the probable effect of such variance upon traffic conditions and upon the public health, safety, and welfare in the vicinity. No variance shall be granted or imposed unless the Planning and Zoning Commission finds:

1. That there are special circumstances or conditions affecting the land involved such that the strict application of the provisions of this Ordinance would deprive the applicant of the reasonable use of his land or the City of orderly development; and
2. That granting of the variance is necessary for the preservation and enjoyment of a substantial property right of the applicant; and
3. That the granting or imposition of the variance will not be detrimental to the public health, safety and welfare; and
4. That the granting or imposition of the variance will not have the effect of preventing the orderly subdivision of other land in the area in accordance with the provisions of this Ordinance. Such findings of the Planning and Zoning Commission together with the specific facts upon which such findings are based, shall be incorporated into the official minutes of the Planning and Zoning Commission meeting at which such variance is granted or imposed. Variances may be granted or imposed only when in harmony with the general purpose and intent of this Ordinance so that the public health, safety, and welfare may be secured. Pecuniary hardship to the subdivider, standing alone, shall not be deemed to constitute undue hardship. All variances shall be granted or imposed on a case-by-case basis and no variance shall be construed to serve as a precedence for subsequent variances.

3.7 Review Procedure

Following a review of the final plat, and when to the satisfaction of the City Manager and City Attorney that all required conditions and requirements have been met, the Planning and Zoning Commission shall approve the said plat. Should the final plat, as submitted, fail to meet the conditions, and requirements of this Ordinance, then the Planning and Zoning Commission shall disapprove said plat and note its disapproval thereon, and attach thereto a statement of the reasons for disapproval.

Chapter 4 Enforcement

4.1 Enforcement Responsibility

This Ordinance shall be administered and enforced by the City Manager.

4.2 Compliance Required

No person may use, occupy or develop land, buildings or other structures, or authorize or permit the use, occupancy or development of land, buildings or other structures except in accordance with all provisions of this Ordinance.

4.3 Remedies and Enforcement Powers

4.3.1 Violations

Any person, firm or corporation violating this provision shall be deemed guilty of a misdemeanor and, upon conviction in the municipal court of the City of Taylor, Texas, shall be subject to a fine not to exceed the sum of five hundred dollars (\$500.00) for each offense, except however, where a different penalty has been established by state law for such offense the penalty shall be that fixed by state law, and for any offense which is a violation of any provision of law that governs fire safety, zoning, or public health and sanitation, including dumping of refuse, the penalty shall be a fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offense; and each and every day said violation is continued shall constitute a separate offense.

4.3.2 Stop Work

Whenever any construction work is being done contrary to the provisions of this Ordinance, the Enforcement Officer may order the work stopped by notice in writing served on the owner or contractor doing or causing such work to be done, and such person shall forthwith stop such work until authorized by the Enforcement Officer to proceed with the work.

4.3.3 Inspections

The Enforcement Officer shall have the right to enter upon any premises at any reasonable time for the purpose of making inspections of buildings or premises necessary to carry out his duties in the enforcement of this Ordinance.

4.4 Enforcement Procedures

4.4.1 Notice

The Enforcement Officer shall give written notice by certified mail to the owner of land on which a violation exists. The notice shall state the nature of the violation.

4.4.2 Notice of Criminal Penalty

In no case shall any person acting on behalf of the City seek a criminal penalty for violation of this Ordinance without giving thirty (30) days prior notice of the violation, specifying the action necessary to correct the violation and avoid criminal prosecution.

4.5 Other Enforcement Powers

In addition to the enforcement powers specified in this Ordinance, the City may exercise any and all enforcement powers granted to it by Texas law, as it may be amended from time to time.

4.5.1 Continuation

Nothing in this Ordinance shall prohibit the continuation of previous enforcement actions, undertaken pursuant to previous, valid resolutions, ordinances and laws.

Chapter 5 Definitions

5.1 Terms Defined

Words and terms used in this Subdivision Ordinance shall be given the meanings set forth in this Chapter. All words not defined shall be given their common, ordinary meanings, as the context may reasonably suggest. In case of a dispute over the meaning of a term not defined in this Ordinance, or over the application of a definition that is set forth, the [Building Official/Development Services Director](#) shall give a written interpretation in accordance with the procedures and standards of procedures in Section 1.8, "Written Interpretations."

Alley - A public right-of-way which affords a secondary means of access to abutting property.

Arterial Street - A principal traffic thoroughfare which more or less continues across the City which serves to connect remote parts of the City. It may also be a principal connecting street with the state and federal highways. Such arterial streets or thoroughfares are all such streets which will be indicated on the Thoroughfare Plan which will hereafter be adopted and placed on file with the Planning and Zoning Commission and City Engineer.

~~**Basement**—A story partially (at least fifty (50) percent), measured from floor to ceiling, below the average level of the ground surrounding the building. A basement is not counted when measuring the height of a building.~~

Block - A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, airport boundaries, or corporate boundary lines.

Block Face - A side of a block facing upon a street, within which lots face the abutting street.

Buildable Width - The width of the building site left to be built upon after the required side setbacks are provided.

~~**Building**—Any structure built for the support, shelter, or enclosure of persons, animals, chattels, or movable property of any kind.~~

~~**Building Height**—The vertical distance between the average finished grade at the base of the building and: (a) the highest point of the coping of a mansard or flat roof or (b) the mid-point between the eaves and ridge line of a gable, hip or gambrel roof. In the case of fences or walls, height shall be measured on the side with the least vertical exposure above finished grade to the top of the fence or wall.~~

Building Line - The rear line of a required front setback that is generally parallel to the street line forming the front line.

~~**Building Lot**—A single tract of land located within a single block that (at the time of filing for a building permit) is designed by its owner or developer under single ownership or control. It shall front upon a street or approved place. Therefore, a "building lot" may not~~

~~coincide with a lot of record. A "building lot" may be subsequently subdivided into two or more "building lots," subject to the provisions of this Ordinance.~~

~~Building Mixed—A building used partly for residential use and partly for community facility and/or commercial use. A mixed building is a commercial use.~~

~~Building, Principal—A building in which the principal use of the lot on which it is located is conducted. All residential uses, except bona fide servants' quarters, are principal uses.~~

~~Building, Residential—A building which is arranged, designed, used, or intended to be used for residential occupancy by one or more families or lodgers.~~

City - City of Taylor, Texas.

City Manager - the chief administrative officer of the City of Taylor and his/her designated representative.

City of Taylor Engineering Manual & Details – The engineering manual adopted February 9, 2010, by Ordinance 2009-37, and any engineer manual adopted by the City of ~~taylor~~Taylor, Texas, by ordinance after March 24, 2011, superseding or repealing Ordinance 2009-37. (Ord 2011-12, 4/14/11)

Collector Street - A street that continues through several residential districts and is intended as a connecting street between residential districts and arterial streets or thoroughfares or business districts. Such secondary or collector streets will also be indicated in the Thoroughfare Plan when adopted which will be placed on file with the City Engineer.

Commission - The Planning and Zoning Commission of the City of Taylor, Texas.

Construction Plans – shall mean the scaled and dimensioned drawings intended to identify exactly how a proposed project will be constructed. Construction plans include, but are not limited to, the following information: cover sheet, plat, site plan, landscape plan, sign plan, drainage plans and calculations, building plans, plans for both public and private utilities, construction details, etc.

Development, or to Develop - The construction of a new building or any structure on a building lot, the relocation of an existing building on another building lot, or the use of open land for a new use. To "develop" is to create a development.

Distribution Mains – Off-site utilities serving a subdivision and other areas that are not laterals or service lines.

Drainage Facilities: All facilities constructed within a subdivision related to storm water drainage, including but not limited to swales, lawn areas, fences, structures, drainage facilities, drainage pipes, pumps, and detention and retention ponds. (Ord. 2007-12, 6/14/07)

~~Dwelling Unit—One or more rooms, which are arranged, designed, used, or intended to be used for occupancy by a single family or a group of persons living together as a family or by a single person. Individual bathrooms and complete kitchen facilities permanently~~

~~installed are not necessarily provided. Each installation of kitchen facilities consisting of at least a stove or cooking device and a sink shall constitute a separate dwelling unit. Apartment units in apartment hotels are dwelling units.~~

Extraterritorial Jurisdiction - That area adjacent to the corporate limits of the City over which the City is authorized to control, among other things, subdivisions as prescribed or defined by law or by statutes.

~~Family—One or more persons related by blood, marriage, or adoption; or a group not to exceed four (4) persons not all related by blood or marriage, adoption or guardianship, occupying a dwelling unit.~~

~~Four-Family Residential—The use of a lot for four (4) dwelling units, other than mobile homes, within a single structure.~~

Home Owner's Association (HOA): an organization authorized by the Texas Property Code Section 202 that is established in part to provide for the maintenance of required drainage improvements. (Ord. 2007-12, 6/14/07)

Landscape - Trees, shrubs, ground cover, vines or grass installed in planting areas.

Lot - a parcel of land shown on a final plat of record and having frontage upon: (i) a street and shown on a final plat of record;

Lot Area or Lot Size - The amount of horizontal land area within lot lines. No building permit or development approval shall be issued for a lot that does not meet the minimum lot size requirements of this Ordinance.

Lot Area per Dwelling Unit - The lot area required for each dwelling unit located on a building lot.

Lot, Corner - A building lot situated at the intersection of two streets, the interior angle of such intersection not to exceed one hundred thirty-five (135) degrees.

Lot, Double Frontage - A building lot not a corner lot, both the front and rear lot lines which adjoin street lines. On a double frontage lot, both street lines shall be deemed front lot lines unless contrary to any restrictive covenant applicable to said property.

Lot, Interior - A building lot other than a corner lot.

Lot, Reverse Corner - A corner lot, the rear lot line of which abuts the side lot line of the lot to its rear.

Lot Line - A boundary of a ~~building~~ lot.

Lot Line, Front - The boundary of a building lot which is the line of an existing or dedicated street. Upon corner lots either street line may be selected as the front lot line provided a front and rear setback are provided adjacent and opposite, respectively to the front line, and provided further that same does not violate any restrictive covenant applicable to said property.

Lot Line, Rear - The boundary of a building lot which is most distant from and is, or is most nearly, parallel to the front lot line.

Lot Line, Side - Any boundary of a building lot which is not a front lot line or a rear lot line.

~~Lot of Record—An area of land designated as a lot on a plat of a subdivision recorded pursuant to statutes of the State of Texas with the County Clerk (County of Williamson) or an area of land held in single ownership described by metes and bounds upon a deed recorded or registered with the County Clerk.~~

Lot Width - The minimum distance measured in a straight line between the side lot lines of a building lot along a straight line, which shall be on the side of the building line opposite from the front line and one which must touch the building line at one point.

Maintenance Agreement - An agreement between the City of Taylor, Texas and a Developer that will insure that installed appurtenances will be maintained in accordance with best management practices. (Ord. 2007-12, 6/14/07)

~~Manufacturing, Limited—Light manufacturing processes unlikely to generate potentially harmful nuisance impacts such as noise, vibration, dust, odor, smoke, gas or fumes on adjacent property.~~

~~Manufacturing, General—An establishment engaged in the manufacture, predominantly from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment and packaging of such products, and incidental storage, sales and distribution of such products, but excluding basic industrial processing.~~

~~Manufactured Home Park (also Trailer Park or RV Park)—A parcel of land not less than five (5) acres nor greater than twenty-five (25) (for short or long term occupancy) by manufactured homes in designated spaces. Facility may include a residence for the owner/manager of the premises, utility hook-ups, accessory structures, playgrounds and open space areas, fenced yard areas for pets, and other similar amenities.~~

~~Manufactured Home Subdivision—A parcel of land which is designed, planned, improved and intended for the long term placement of individually owned HUD Code manufactured homes on platted lots which can be purchased outright by the owners. Facility may include a residence for the owner/manager of the premises, utility hook-ups, accessory structures, playgrounds and open space areas, fenced yard areas for pets, and other similar amenities.~~

~~Manufactured Housing—Any one of three types of prefabricated housing products which are typically manufactured/assembled at a location other than the end user's permanent site, and which are, regulated by the Texas Manufactured Housing Standards Act (Article 5221f and 5221f-1, V,A.C.S.). For the purpose of this Ordinance, there are three types of manufactured homes:~~

- ~~1. Mobile Home—A movable dwelling designed to be transported on its own chassis on the highway (either intact or in major sections) by a prime mover, which is constructed with a base section so as to be independently self-supporting, and which does not require a permanent foundation for year-round living. A mobile~~

home is also defined as any manufactured home that was constructed prior to June 15, 1976.

~~2. HUD Code Manufactured Home—A movable dwelling designed to be transported on the highway (either intact or in major sections) by a prime mover, which can be used as a residential dwelling either with or without a permanent foundation. A HUD Code manufactured home is also defined as a movable manufactured home that was constructed after June 15, 1976~~

~~3. Industrialized Home (also called Modular Prefabricated Structure or Modular Home)—A structure or building module as defined under the jurisdiction and control of the Texas Department of Labor and Standards, that is transportable in one or more sections on a temporary chassis or other conveyance device, and that is designed to be installed and used by a consumer as a fixed residence on a permanent foundation system. The term includes the plumbing, heating, air conditioning and electrical systems contained in the structure. The term does not include mobile homes or HUD Code manufactured homes as defined in the Texas Manufactured Housing Standards Act (Article 5221f, V.A.C.S.). Industrialized homes must meet all applicable local codes and zoning regulations that pertain to construction of traditional site constructed ("stick built") homes.~~

~~Motel or Hotel—A facility offering temporary lodging accommodations or guest rooms on a daily rate to the general public and providing additional services, such as restaurants, meeting rooms, housekeeping service and recreational facilities. A guestroom shall be defined as a room designed for the overnight lodging of hotel guests for an established rate or fee.~~

~~Municipal Facility or Use—Any area, land, building, structure and/or facility which is owned, used, leased or operated by the City of Taylor, Texas.~~

~~Multi-Family Residential—Any structure containing five (5) or more dwelling units.~~

~~Nonconforming Structure—Buildings and structures constructed prior to April 12, 2001 that do not comply with the setback, height, lot size or other dimensional or property development-related standards of the zoning district in which such buildings or structures are located.~~

~~Nonconforming Use—Uses that were established prior to April 12, 2001 that do not conform to the use regulations of the zoning district in which such uses are located.~~

Off-Site Improvements: Improvements made to a parcel of property in accordance with local policies that are not contained within the boundaries of the property. (Ord. 2007-12, 6/14/07)

~~Off-Street Parking Incidental to Main Use—Off-street parking spaces provided in accordance with the requirements of this Ordinance, located on the lot or tract occupied by the main use or within one hundred fifty feet (150') of such lot or tract, and located within the same zoning district as the main use or in an adjacent parking district.~~

On-Site Improvements: Improvements made to benefit a parcel or parcels of property in accordance with local policies that are within the boundaries of property being improved. (Ord. 2007-12, 6/14/07)

Open Space - That part of a building lot, including courts or setbacks, which is open and unobstructed from its lowest level to the sky, and is accessible to all residents upon a building lot, and is not part of the roof or that portion of the building containing dwelling units.

Parcel - a contiguous tract of land owned by or controlled by the same person or entity.

Park and Recreation, Public - An open recreation facility or park owned and operated by a public agency, such as the park department or school board and available to the general public.

~~Parking Lot, Space—A surface area, enclosed or unenclosed sufficient in size to store one automobile together with a surfaced driveway connecting the parking space with the street or alley and permitting ingress and egress of an automobile. A "parking space" shall not occupy any public land.~~

~~Parking Lot—An off-street (i.e., not on a public street or alley), ground level area, paved in accordance with City of Taylor parking lot standards for the short or long-term storage of motor vehicles.~~

~~Parking Lot or Structure, Commercial (Auto)—An area or structure devoted to the parking or storage of automobiles for a fee which may include, in the case of a parking structure only, a facility for servicing automobiles provided that such facility is an internal function for use only by automobiles occupying the structure and that such facility creates no special problems of ingress or egress.~~

Park or Playground (Private) - See "Private Recreation Facility".

Park or Playground (Public) - See "Public Recreation".

~~Permanent Foundation—A structure or structures in direct contact with the earth, continues in design and strength to anchor and supported a structure to said earth, designed to support a buildings dead and live loads, designed not to change in condition or place, constructed of a material that does not rot or deteriorate.~~

PID: Public Improvement District as authorized by section 372 of the Texas Local Government Code. (Ord. 2007-12, 6/14/07)

Plat - A map or chart of the subdivision. It shall include plan, plat or replat, both singular and plural.

Public Improvements – any water, wastewater, paving, and drainage facility that will be maintained by the City.

Public Infrastructure - any portion of a street, drainage, water, and wastewater improvement system, including but not limited to any and all appurtenances related to such system, whether on or off-site, which is intended to serve more than one parcel of property,

connects to existing public infrastructure, or intended to provide for the public health, safety, and welfare of the community. (Ord. 2007-12, 6/14/07)

Public Recreation - Publicly owned and operated parks, recreation areas, playgrounds, swimming pools and open spaces that are available for use by the general public without membership or affiliation. This land use shall include special event type uses such as rodeos, concerts, festivals and other special events.

Re-subdivision - The division of an existing subdivision, together with any change of lot size therein, or with relocation of any street lines.

Setback - The unobstructed, unoccupied open space between a structure and the property line of the lot on which the structure is located. Setbacks shall be unobstructed from the ground to the sky and measured as the horizontal distance between a property line and the furthestmost projection of the structure, except as provided otherwise in this Ordinance.

Setback, Front - A setback extending along the whole length of the front lot line between the side lot lines, and being the minimum horizontal distance between street line and the main building or any projections thereof other than steps, planter boxes, and unenclosed porches.

Setback, Rear - A setback extending across the rear of a lot between the side lot lines and being the minimum horizontal distance between the rear lot line and the rear of the principal building or any projections thereof other than steps, unenclosed balconies, or unenclosed porches.

Setback, Side - A setback extending along the side lot line from the front setback to the rear setback, being the minimum horizontal distance between any building or projections thereof except steps and the side lot line.

~~Single-Family Dwelling, Attached (Townhouse) - A dwelling which is joined to another dwelling at one or more sides by a party (i.e., shared) wall, which is designed for occupancy by one family, and which is located on a separate lot delineated by front side and rear lot lines.~~

~~Single-Family Dwelling, Detached - A dwelling designed and constructed as a freestanding structure for occupancy by one family, and located on a lot or separate building tract having no physical connection to a building located on any other lot or tract.~~

~~Storage Unit - (a) a structure, larger in size than six feet by eight feet (6 x 8), used for incidental storage or workspace at a residence, or (b) a series of enclosed units attached to permanent foundations that are leased or sold for the purpose of storing goods.~~

~~Story - That part of a building between the surface of a floor and the ceiling immediately above.~~

Street - A public right-of-way which affords a primary means of access to abutting property. A driveway or alley which serves only to give secondary vehicular access to a building lot or to an accessory parking or loading facility, or to allow vehicles to take or discharge passengers at the entrance to a building shall not be considered a street.

Street Width - Measurement from back-of-curb to back-of-curb.

Street Line - The right-of-way line of a street.

Subdivider - The person, firm, partnership, association, corporation or other legal entity subdividing a piece of land to be sold or otherwise handled for their own personal gain or use.

Subdivision - The division of a tract or parcel of land into two or more parts or lots for the purpose, whether immediate or future, of sale or building development or transfer of ownership, and shall include re-subdivision and shall further include both residential and business or commercial subdivision of land.

~~Temporary Use—Structures such as construction sheds, seats, canopies, tents and fences used in construction work or for temporary purposes such as reviewing stands, all structures shall be completely removed upon the expiration of the time limit stated in the permit.~~

Use - The purpose or activity for which the land, or building thereon, is designed, arranged, or intended, or for which it is occupied or maintained, and shall include any manner of such activity with respect to the standards of this Ordinance.

~~Use, Principal—The main use of land or buildings as distinguished from a subordinate or accessory use.~~

Utility, Major - Public or quasi-public utility facilities less widely distributed than essential or limited utility facilities and of such a nature as to have an high degree of impact on adjoining properties. Typical uses include electrical generating plants, regional water and wastewater treatment plants, waste transfer stations, and sanitary landfills.

Utility, Minor - Public or quasi-public utility facilities of such a nature as to have an intermediate impact on adjoining properties. Typical uses include electrical and natural gas substations, communication equipment exchanges, construction/demolition landfills, reservoirs and water tanks, and radio, television and microwave transmission towers.

Utility, Private – Regulated enterprise, with or without a franchise, for providing needed service including but not limited to electric, natural gas, cable tv, and other communication systems, but not including cellular towers, that are not owned and operated by the city, county, state, federal government, or special utility district.

~~Visual Screen—A wall, not of living plant material, permanently affixed to the ground in which the area of all openings and cracks in each square foot of wall and entrance gates shall not exceed fourteen (14) square inches, and the wall is of sufficient height so that the objects being screened are not visible from any point on the lot line when viewed from any height between ground level and seven (7) feet above ground level. No wall shall exceed ten (10) feet in height.~~

Chapter 6 City of Taylor Engineering Manual

I. PURPOSE/INTRODUCTION

The purpose of this document is to establish the minimum standards and construction details for all public facility improvements.

II. PLAN REQUIREMENTS

All construction plans for proposed public water, wastewater, paving, drainage, and traffic improvements shall be designed, signed, sealed, and dated by a Licensed Professional Engineer licensed in the State of Texas and adhere to the requirements of this Section. All construction plans or drawings must be accompanied by a Geotechnical Engineering Report signed, sealed, and dated by a Licensed Professional Engineer. Plans and drawings shall be furnished in the following format and contain the elements listed herein:

1.
 - Cover Sheet
 - a.
Project title including City name
 - b.
Legal property description, if applicable
 - c.
Vicinity map
 - d.
Owner, engineer, and surveyor name, address and telephone number
 - e.
Project title in small print placed vertical along the right border
 - f.
Sheet index
 - g.
Signature block for City approval
2.
Copy of Current Plat - When applicable, a copy of the current plat bound with plans. The signed plat shall be bound with the as-built drawings.
3.
Drainage Area Map — This map should be accompanied with all drainage calculations. The Drainage Area Map must show all existing and proposed contours, existing and proposed storm sewers, and/or other drainage facilities.
- 4.

Site Plan - indicating the location and width of all proposed and existing paving and driveway approaches noting the back-of-curb radii.

5.

Utility Plan - indicating the location and size of all existing and proposed water and wastewater lines with adjacent existing or proposed top of curb grades. Also show the location of all existing and proposed fire hydrants adjacent to the site including the maximum coverage radius of each as outlined in later sections of this manual.

6.

Plan and Profile Sheets - for paving, wastewater, storm sewers, flumes, water lines twelve (12") inches in diameter and larger, and drainage channels. Stationing shall be generally left to right and with stationing beginning at the downstream end for all sewers, storm sewers, and channels. Stationing shall be included on the plan view as well as the profile for all roads, water, sewer, storm sewer and channel sheets. Elevations shall be calculated and provided in all profiles as indicated below.

a.

Straight grade - provide elevations at a maximum interval of 50 feet.

b.

Vertical curve - provide elevations at the beginning and ending points and at a maximum interval of 25 feet in between.

7.

Details - for improvements which are to be dedicated to the City maintenance. Refer to City of Taylor Engineering Manual Details where applicable.

8.

Maximum Sheet Size - Plan and profile sheets shall be a maximum of twenty-two (22") inches wide by thirty-four (34") inches long.

9.

Scale - Horizontal scale shall be one inch equals fifty feet (1" = 50') or larger, i.e. 1" = 40'. Vertical scale shall be one (1") inch equals five (5') feet or larger.

10.

Plotting Drainage Features - Appropriate hydraulic grade line or water surface profile shall be plotted with all drainage design. Capacity, design discharge, velocity, and velocity head shall be noted on each segment of drainage facility in the profile whenever one or more of these parameters changes.

11.

Erosion Control and Sedimentation Plan - an erosion control plan shall be submitted for all areas to be disturbed.

12.

City Review - Construction plans shall be reviewed by the City Engineer and, upon approval by the City, signed after all comments have been resolved. Construction must start within one (1) year following the City's approval. Plans for projects which

have not started construction within this time period must be submitted to the City for a new review.

13.

GIS Submittal Standards

Data MUST be to scale and geo-referenced to three points in electronic form to be submitted with required Record Drawings before signature and recordation to ensure that submission standards are met.

- State Plane Projected Coordinate System -
NAD 1983 StatePlan Texas Central FIPS 4203 Feet
- Projection - Lambert Conformal Conic
- False Easting - 2296583.33333333
- False Northing - 9842500.00000000
- Central Meridian - 100.33333333
- Standard Parallel 1 - 30.11666667
- Standard Parallel 2 - 31.88333333
- Latitude Of Origin - 29.66666667
- Linear Unit - Foot US
- Geographic Coordinate System - GCS North American 1983
- Datum - D North American 1983
- Prime Meridian - Greenwich
- Angular Unit - Degree

All Data must be provided in one layer, e. g. all lot lines should be in a single layer called "lotlines"; all utilities separate for each type e. g. water, wastewater, electric, etc.

All parcel information must be converted to DXF files.

One text style to be used for all.

Street Names should be in all capital letters.

No blocks or XREFS may be attached to a file to eliminate imbedded files. Detach COGO files and other survey files.

All submissions must be to scale.

No three dimensional objects

III. TESTING/INSPECTION

All construction, such as grading, paving, drainage structures, storm sewer, curb and gutter, water and wastewater, are subject to inspection during the construction period by the proper authorities of the City, and shall be constructed in accordance with the approved Construction Plans and this Manual.

A.

Periodic inspections will be performed by the City Inspector and/or City Engineer during construction of both proposed City maintained improvements and private maintained improvements. Inspections should be scheduled by the Contractor at the following intervals:

1.

Subgrade when:

a.

All tests for subgrade have been witnessed by City and passed.

b.

The subgrade conforms to the Construction Plans.

c.

All grading, including ditches and erosion control, is complete.

d.

All culverts, headwalls, and Safety End Treatments are installed; for cast-in-place concrete structures, inspection of placement of reinforcing bars shall be performed prior to pouring of concrete.

2.

Flexible Base when:

a.

All tests for flexible base have passed.

b.

The flexible base conforms to the Construction Plans.

3.

Other periodic inspections during testing; and

4.

Final inspection when:

a.

All tests have passed.

b.

All improvements are complete and record drawings are revised as per construction.

B.

Request for inspection must be received by the City via e-mail and must include the subdivision name, current date, inspection requested (subgrade, base etc.) and desired date and time of inspection.

Subgrade and flexible base inspections must be scheduled at least two (2) business days in advance of date requested for the inspection. For inspection during geotechnical testing, as least one (1) business day's notice is required in advance of date requested for the inspection. At least five (5) business days notice is required in advance of date requested for final inspections. Note that subgrade testing MUST be witnessed by the City.

The reinforcing steel in cast-in-place concrete structures must be inspected by City prior to pouring of concrete. Inspection should be scheduled at least two (2) business days in advance of date requested for the inspection. All cast in place structures should meet TxDOT Standards. Cast in-place concrete structures with uninspected reinforcing steel will be considered defective and must be removed and replaced at Contractor's expense.

C.

If testing or inspection does not occur for the subgrade and/or base while the surface is exposed, the contractor will be required to have an independent testing laboratory, acceptable to the City, perform testing at the Contractor's expense. Such testing may include core samples or additional density tests at 50-foot intervals measured longitudinally along the roadway. If the road surface is concrete, X-ray tests will be required for density tests. During the progress of the work, all materials, equipment and workmanship may be subjected to such inspections and tests as will assure conformance with the engineering requirements. All testing shall be done by an independent testing laboratory acceptable to the City and at the Contractor's expense. All final test reports submitted to the City and must be sealed by a Professional Engineer licensed in the state of Texas. The City shall approve the location of all testing. Testing locations shall be selected at varying distances from the centerline of the road. The Contractor is solely responsible for coordination with the testing laboratory, for scheduling of the tests, and for timely delivery of the results to the City. Additional testing may be required, at the contractor's expense, at the discretion of the City Engineer.

D.

Minimum Testing Requirements

1.

Subgrade

a.

Raw Subgrade (when lime or cement stabilized subgrade is not required for pavement design)

i.

Soil characteristics including liquid limit, plastic limit, plasticity index, and sieve analysis.

ii.

Density tests are required at a minimum of every 300 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

iii.

Standard Proctor tests are required for each existing soil type.

b.

Lime or Cement Stabilized Subgrade

i.

Soil characteristics including liquid limit, plastic limit, plasticity index, and sieve analysis.

ii.

Density tests are required at a minimum of every 300 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

iii.

Standard Proctor tests are required for each existing soil type.

iv.

Pulverization Gradation tests are required at a minimum of every 300 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

v.

Core or probe tests are required to show thickness of the subgrade every 500 feet (measured longitudinally along the roadway) with one test required in each cul-de-sac and eyebrow.

2.

Base

a.

Wet Ball Mill, Sieve Analysis, and P.I. tests shall be performed in accordance with TxDOT Standards.

b.

Density tests are required at a minimum of every 300 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

c.

Core or Probe tests are required to show thickness of the base every 500 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

3.

Hot Mix Asphaltic Concrete

a.

A mix design is required to be submitted for the HMAC.

b.

Density tests are required at a minimum of every 500 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

c.

Core tests are required to show thickness of the HMAC every 500 feet (measured longitudinally along the roadway) with three tests required in each cul-de-sac and eyebrow.

4.

Portland Cement Concrete

a.

A mix design is required to be submitted for the concrete.

b.

Concrete shall be tested for slump, air content, and compression strength in accordance with ACI 318.

5.

Storm Sewer

a.

The compaction of backfill shall meet or exceed the requirements of the applicable details.

b.

All storm sewer conduits shall be inspected prior to acceptance by the City. All conduits forty-two inch (42") or less shall be inspected using television inspection. Conduits larger than forty-two inch (42") may be inspected visually.

c.

A City representative shall be present during the television inspection.

d.

Televised Inspection Criteria

1)

All television equipment used shall have a minimum of two-hundred-twenty (220) lines of horizontal resolution. The picture shall be in color.

2)

All video information on DVD must have good picture quality.

3)

As a title heading on the tape and during the televising, the operator must:

i.

Note the project name and Contractor name.

ii.

Note the name of the company and the operator performing the video inspection.

iii.

Note line size and material, joint type and length.

iv.

Line segment to be televised including beginning and ending station numbers.

v.

Note page of plans used and year plans were stamped.

vi.

Note date and time of inspection.

vii.

A footage counter must be displayed on the DVD during the filming.

viii.

Show the above title block before and after each line segment.
Show the title block at one-hundred (100') foot intervals while filming the line segment.

ix.

All defects should be shown on film for a minimum of 10 seconds before proceeding with the televising.

4)

The Contractor shall supply a log sheet used in conjunction with the video tape for written documentation. All written information gathered must be legible and clearly understandable.

i.

Note the project name, Contractor name and contract number.

ii.

Note the name of the company and the operator performing the video inspection.

iii.

Note pipe size and material, joint type and length between joints.

iv.

Note the DVD footage counter, start to end.

v.

Note line segment to be televised, station numbers from and station numbers to length of line segment as indicated on plans.

vi.

Note page of plans used and year plans were stamped.

vii.

Note date and time of inspection.

viii.

Indicate by sketch the line segment to be televised in relation to surrounding street intersections and street addresses. Identify manhole station numbers. Show direction of flow with arrows and direction the camera is going. Indicate direction of north on the sketch.

ix.

Note the water depth at the beginning, every fifty (50') foot station, every change in grade, and at the end of the line segment.

x.

Identify the clock location, direction, size and type of laterals entering main. Indicate laterals as saddles, punched, or glued fittings.

xi.

Indicate final footage televised at end of the log sheet.

5)

One DVD per visual televised inspection project shall be furnished to the Project Inspector.

6)

Recording must be done on DVD discs.

7)

All DVD's and run sheets shall be submitted to the City. All tapes and log sheets shall become the property of the City.

6.

Water and Wastewater

All water and wastewater testing shall comply with the City of Austin specifications for testing.

IV. SPECIFICATIONS

All referenced specifications shall be implied to mean the latest version of specifications from each mentioned entity. The referenced specifications shall include all amendments thereto, and shall govern and constitute the technical specifications, except as amended by this Manual and is made a part thereof, but is not physically bound within this document.

A.

TXDOT SPECIFICATIONS

All applicable public improvements other than those specifically listed in this Manual shall be designed in accordance with the most current edition of *The Texas Department of Transportation's Highway Design Division Operations and Procedures Manual*.

B.

TEXAS ARCHITECTURAL BARRIERS ACT

All accessibility design and construction shall comply with the Texas Accessibility Standards in compliance with the Texas Architectural Barriers Act.

C.

TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

All traffic control devices shall conform to the latest edition of the Texas Manual of Uniform Traffic Control Devices.

D.

CITY OF AUSTIN

The following City of Austin, TX Standard Specifications are incorporated into this Manual: *SECTION 500 — Pipe and Appurtenances*

E.

CITY OF TAYLOR FIRE CODE SPECIFICATIONS

All designs, including fire hydrant spacing and location, fire lanes, and turning radii shall conform to the City of Taylor Fire Department requirements

V. DESIGN CRITERIA

TRAFFIC IMPACT STUDIES

There are two categories of Traffic Impact Studies:

- Level I — Trip Generation and Distribution Study

■ Level II — Traffic Impact Analysis (TIA)

Level I Studies are required for all projects that generate at least 50 vehicular trips within the peak a.m. or p.m. periods. A project that generates less than 50 peak-hour trips may still be subject to a Level I Study if there are specific capacity or safety issues that need to be addressed, in the opinion of the City Engineer.

Level II Studies (TIA) are required for all projects that generate at least 100 vehicular trips within the peak a.m. or p.m. periods. A project that generates less than 100 peak-hour trips may still be subject to a Level II Study if there are existing traffic problems, poor roadway alignment, capacity deficiencies, level of service issues, or expected adverse impacts from the proposed development in the opinion of the City Engineer.

RIGHT-OF-WAY WIDTHS

The right-of-way widths shall be designed for the intended use and anticipated traffic volume at optimum development of the area served. Additional right-of-way may be required at street intersections and to provide for left and right turn lanes at high-volume intersections. The following table shall be used as a guide in determining right-of-way widths.

<u>Local (1)</u>	<u>50</u>	<u>15</u>	<u>30</u>	<u>2</u>
<u>Collector</u>	<u>70</u>	<u>12</u>	<u>40</u>	<u>2</u>
<u>Minor Arterial</u>	<u>80</u>	<u>12</u>	<u>48</u>	<u>4 undivided</u>
<u>Major Arterial</u> <u>100'</u>	<u>100</u>	<u>12</u>	<u>74</u>	<u>4 divided</u>
<u>Major Arterial</u> <u>120'</u>	<u>120</u>	<u>12</u>	<u>88</u>	<u>6 divided</u>

Master Thoroughfare Plan **Right-of-Way and Pavement Standards**

<u>Street Classification</u>	<u>R.O.W. Width (feet)</u>	<u>Lane Width (feet)</u>	<u>Total Pavement Width (face to face feet)</u>	<u>Number of Lanes</u>
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(1)

A local street having a total length in excess of one thousand two hundred (1,200) feet or serving more than thirty (30) dwelling units may be required to provide a right-of-way width of not less than sixty (60) feet.

DESIGN SPEED AND MAXIMUM GRADE

All streets shall be designed to conform to the following parameters:

<u>Local</u>	<u>30</u>	<u>8</u>	<u>0.5</u>	<u>-</u>
<u>Collector</u>	<u>30</u>	<u>6</u>	<u>0.5</u>	<u>One lane or center 12'</u>
<u>Arterial</u>	<u>40</u>	<u>4</u>	<u>0.5</u>	<u>One lane in each direction</u>

Design Speeds and Maximum Grades

<u>Street Classification</u>	<u>Minimum Design Speed (MPH)</u>	<u>Maximum Percent Grade (%)</u>	<u>Minimum Percent Grade (%)</u>	<u>Area Free from Storm Water, Using a 100-year Frequency Storm</u>
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DRIVEWAY SPACING AND DESIGN STANDARDS

The criteria contained in the following table shall be the minimum and/or maximum standards to be applied in spacing and designing driveways on public streets. The City Engineer may modify these standards based on anticipated traffic flow and in accordance with sound traffic engineering practices.

<u>Driveway Throat Width</u>	<u>Local</u>	<u>11'</u>	<u>25'</u>	<u>25'</u>	<u>35'</u>
	<u>Minor Coll.</u>	<u>12'</u>	<u>25'</u>	<u>25'</u>	<u>35'</u>
	<u>Major Coll.</u>	<u>12'</u>	<u>25'</u>	<u>25'</u>	<u>35'</u>
	<u>Arterial</u>	<u>12'</u>	<u>25'</u>	<u>25'</u>	<u>35'</u>
<u>Driveway Curb Radius</u>	<u>Local</u>	<u>5'</u>	<u>10'</u>	<u>10'</u>	<u>20'</u>
	<u>Minor Coll.</u>	<u>5'</u>	<u>10'</u>	<u>10'</u>	<u>20'</u>
	<u>Major Coll.</u>	<u>10'</u>	<u>10'</u>	<u>10'</u>	<u>20'</u>
	<u>Arterial</u>	<u>15'</u>	<u>15'</u>	<u>20'</u>	<u>30'</u>
<u>Driveway Spacing (centerline)</u>	<u>Local</u>	<u>22'</u>	<u>22'</u>	<u>100'</u>	<u>100'</u>
	<u>Minor</u>	<u>32'</u>	<u>32'</u>	<u>100'</u>	<u>100'</u>

	Coll.				
	Major Coll.	80'	80'	150'	150'
	Arterial	100'	100'	250'	250'
Minimum Distance from Driveway to Intersection	Local	30'	30'	75'	75'
	Minor Coll.	50'	50'	100'	100'
	Major Coll.	100'	100'	150'	150'
	Arterial	100'	100'	180'	180'

[Driveway Spacing and Design Criteria](#)

Description	Street Classification	Residential Driveway		Commercial Driveway	
		Min.	Max.	Min.	Max.

-

[ALLEYS](#)

1.

[Alleys serving single family residential and duplex areas shall have a minimum right-of-way width of 20 feet.](#)

2.

Alley turnouts shall be paved to the property line and shall be 12 feet wide at that point.

3.

Alleys shall be paved in accordance with these Design criteria for a minimum width of 12 feet exclusive of any curbs which may be provided.

4.

A uniform transition in alley pavement widths shall be made in a distance of not less than 20 feet.

5.

Alleys shall intersect roads at right angles or radially to curved roads.

6.

The minimum distance between an alley/road intersection and a road/road intersection shall be the width of at least one (1) lot.

7.

Private alleys are prohibited.

8.

Maximum alley length between access points to a road shall be six hundred (600) feet.

9.

A length greater than six hundred (600) feet may be approved by the City Engineer in the form of a variance pending unusual conditions or limiting factors.

10.

In general, alley length shall not exceed one thousand three hundred twenty (1,320) feet between road access points.

11.

Dead-end alleys are prohibited.

12.

In cases where two alleys intersect or turn a sharp angle, lot corners shall be platted so that a triangular area of 25' x 25' or greater, is dedicated as part of the alley for the purpose of providing a minimum radius of 30 feet to the inside edge of the alley paving.

13.

Alley paving shall conform to the paving requirements for roads per this manual.

STREET IMPROVEMENTS

Streets shall be constructed or reconstructed using either hot-mixed asphaltic concrete pavement sections or reinforced Portland Cement Concrete pavement sections that meet or exceed the minimum specifications of this Manual. The developer requiring street construction shall provide a geotechnical report, sealed by a Licensed Professional Engineer, containing

recommendations for subgrade thickness and content. The minimum subgrade and pavement thickness shall be in accordance with the specifications contained in this Section.

HOT-MIXED ASPHALTIC CONCRETE PAVEMENT SECTIONS

1.

Local Streets

■ Density controlled subgrade

■ Fourteen (14") inches thick flexible base, Type A, Grade 2, (24") inches past the back of curb line.

■ Two (2.0") inches Type "C"

■ Lime Stabilized subgrade may be substituted for the above mentioned subgrade and a portion of the flexbase

2.

Collector Streets

■ Density controlled subgrade

■ Eighteen (18") inches thick flexible base, Type A, Grade 2, (24") inches past the back of curb line.

■ Two and one-half (2.5") inches Type "C"

■ Lime Stabilized subgrade may be substituted for the above mentioned subgrade and a portion of the flexbase

CONCRETE PAVEMENT SECTIONS

1.

Local Streets

■ Density controlled subgrade

■ Six (6.0") inches thick flexible base, Type A, Grade 2, (24") inches past the back of curb line

■ Six (6.0") inches of Class A concrete

■ #4 rebar on 18" O.C.E.W.

■ Lime Stabilized subgrade may be substituted for the above mentioned subgrade and a portion of the flexbase

12.

Collector Streets

■ Density controlled subgrade

■ Eight (8.0") inches thick flexible base, Type A, Grade 2, (24") inches past the back of curb line

- Seven (7.0") inches of Class A concrete
- #4 rebar on 18" O.C.E.W.
- Lime Stabilized subgrade may be substituted for the above mentioned subgrade and a portion of the flexbase

CURB AND GUTTER SPECIFICATIONS

All streets shall be provided with reinforced Portland Cement Concrete curbs and gutters in accordance with the following specifications.

1. Curbs and gutters bases shall not be less than twenty-four (24") inches wide and provide a minimum gutter width of eighteen (18") inches
2. Reinforcement shall be provided by three (3) No. 4 steel reinforcing bars by placing one (1) bar in the curb roll and two (2) bars in the curb and gutter base. Use manufactured chairs for concrete placement.
3. Concrete for curbs and gutters shall be Class "A" and consist of five (5) sacks (minimum) of Portland Cement for each cubic yard of concrete mix and have a seven (7) day flexural strength of five hundred pounds per square inch (500 PSI) and a twenty-eight (28) day compressive strength of three thousand pounds per square inch (3,000 PSI).
4. All driveway entrances constructed in existing curb and gutters shall be saw-cut at the curb return on both sides of the driveway and eighteen (18") inches into the street. After work is completed, the street sidewalk shall be repaired and it shall be the responsibility of the party installing the driveway. All driveways cut into existing curb and gutter areas shall utilize the horizontal curb cutting method, leaving the original gutter in place. Smooth dowels shall be installed into the back of the existing curb.
5. Control joint every 10', expansion joint every 50' or as approved.

STREET DRAINAGE

The following drainage conditions shall be observed:

1. All roads shall be a crowned or roof top section so as to provide proper drainage.
2. All plats shall depict the flow of drainage with arrows sufficient to show predicted path.

3.

An explanation and depiction shall be attached to show outflow and inflow availability on high flow areas. Adjoining property where inflow originates or outflow exists must be attached to insure compliance with drainage or excessive run-off factors.

4.

No plat shall be considered for approval unless accompanied by a complete set of construction drawings that show the drainage areas and flow calculations.

5.

The contractor/developer will assume all responsibility to disperse excess run-off so as not to exceed previous disbursements to the satisfaction of the city.

STREET CONSTRUCTION

No work whatsoever will be initiated without the issuance of an Authorization of Construction letter

1.

The street portion of the plat must be reviewed and approved by Fire Chief, Police Chief and City Engineer;

2.

An Authorization of Construction letter must be obtained from the City before any construction is initiated;

CONCRETE PIPE

All concrete pipe used for drainage purpose on City streets shall be reinforced.

SUBGRADE

1.

Subgrade shall extend ten (10') feet, if feasible, beyond the completed street when a future street is proposed to be built to assure proper conformity.

STREET SIGNS

LOCATION

Street signs shall be six (6") inches extruded, have white lettering on a green background, be engineer grade reflectorized, and include the block numbers along with the street name. Street signs shall be furnished and installed by the subdivider for all intersections within or abutting the subdivision. All signs shall be located in accordance with the *Texas Manual on Uniform Traffic Control Devices*.

SIGNS

All signs and mounts shall conform to the standards as set forth in the *Texas Manual on Uniform Traffic Control Devices*. All road identification signs are to have a green background with three (3) inch white reflective lettering.

INSTALLATION

The sign pole shall be buried to a minimum depth of two (2') feet and placed in a twelve (12") inch diameter concrete filled posthole. The pole shall be tall enough to accommodate all applicable signs. The bottom of the stop sign shall be located seven (7') feet above the finished grade of the surrounding ground.

APPROVAL

The developer shall submit a list of signs to be placed and a graphical representation of the signs for review by City Engineer prior to installation.

SIDEWALKS

SIDEWALK SPECIFICATIONS

1. Right of Way Permit Required - No person shall construct, reconstruct, alter, repair, remove or replace any sidewalk on any public property within the City Limits without first obtaining a permit from the building permit office.
2. Inspection Required - All work done in construction, reconstruction, alteration, repair, or removal or replacement of sidewalks shall be inspected by the city inspector to assure compliance with these regulations. When other public improvements are required, final acceptance of all other improvements shall not be made until sidewalks are approved.
3. Minimum Sidewalk Width - All sidewalks shall be a minimum of four (4') feet in width, except a sidewalk located within or abutting a collector street, or larger, as shown on the Thoroughfare Plan, shall not be less than five (5) feet in width. All sidewalks shall be constructed in the area between the curb or grade line of the public street and the abutting property line. The edge of the sidewalk shall generally be parallel with the curb line. The City Engineer may approve a plan to alter the location of a sidewalk to preserve a tree or for aesthetic purposes. One additional foot of width shall be added to a sidewalk that abuts a street curb.
4. Construction Materials - Sidewalks shall be constructed of Portland cement concrete (minimum thickness four (4") inches). Trail system sidewalks shall be a minimum thickness of five (5") inches. Concrete for sidewalks shall be Class "A" and consist of five (5) sacks (minimum) of Portland cement for each cubic yard of concrete mix and have a seven (7) day flexural strength of 500 pounds

per square inch (500 PSI) and twenty-eight (28) day compressive strength of 3,000 pounds per square inch (3,000 PSI). Reinforcement shall be in accordance with the construction detail contained herein

5.

Architectural Barriers Act - All sidewalk/street intersections shall be constructed so as to provide a ramp that complies with the Architectural Barriers Act. Barrier free ramps shall be provided for access to the street. Additional information on curb ramp location, design, visibility and texture may be found in the current edition of the Texas Accessibility Standards (TAS) prepared and administered by the Texas Department of Licensing and Regulation (TDLR).

STREET LIGHTING

GENERAL REQUIREMENTS

1.

Street lights shall be installed at all intersections, at the end of all cul-de-sac streets, and at additional locations in accordance with the following table:

<u>At intervals of not more than three hundred (300) feet</u>	<u>metal</u>	<u>100 watt high pressure sodium</u>	<u>30 feet</u>
<u>Street Lighting Requirements</u>			
<u>Required Spacing</u>	<u>Pole Type</u>	<u>Lamp Type</u>	<u>Height</u>

-

2.

The number of required street lights shall be equal to the total linear footage between street intersections divided by the required spacing. Fractions of street lights shall be rounded to the next whole number.

3.

Street lights shall be placed at approximately equal intervals between intersections and shall be subject to the approval of the City Engineer.

4.

Cobra head lamps shall be provided on standard street lighting fixtures, except that other lamp types may be permitted where custom lighting is approved by the City Engineer.

CUSTOM LIGHTING

1.

The subdivider may elect to provide custom lighting in lieu of the required standard street lighting, subject to the approval of the city engineer.

2.

If a subdivider elects to provide and install custom lighting, a homeowner's association (or some other such private entity) shall be created which will be perpetually liable for all costs associated with the maintenance of the lighting fixtures. The homeowner's association shall also be liable for the electrical energy costs of the custom lighting.

WATER SYSTEM IMPROVEMENTS

GENERAL

This section pertains to general design requirements for water distribution system construction in the City of Taylor. All water lines shall be sized and designed in accordance with the City of Taylor determined by the City Engineer. In the absence of specific standards, all water supply, distribution, pumping, and storage improvements shall be designed in accordance with the most current standards of the American Water Works Association criteria adopted by the Texas Administrative Code, Chapter 290.

LINE SIZES & LOCATIONS

1.

Standard water line sizes are, 8 inch, 10 inch, 12 inch, 16 inch, 20 inch, and 24 inch diameter. Other sizes may be approved by the City Engineer.

2.

All water lines shall be looped where possible. Dead end lines shall not exceed 600 feet, unless approved by the City Engineer.

3.

Water lines shall be located within the right of way, not under paving. Along State Highways, water lines are required on both sides of the roadway. New water lines crossing existing streets shall be placed by boring. A steel casing shall be required under major and minor collector roadways, arterial roadways and State Highway. Open cut excavation will not be allowed to cross existing streets, unless approved by the City Engineer.

4.

Automatic flushing valves are required for all dead-end mains of 50' or longer.

5.

Easements for water line construction shall meet the following requirements:

a.

The easement width shall be a minimum of 20 feet.

b.

In areas where multiple utilities or extended depth or larger utilities exist the easement may need to be wider as specified by the City.

c.

Larger easements may be required by the City Engineer to provide adequate space for maintenance.

6.

All piping with mechanical couplings, push-on, or similar joints subject to internal pressure shall be designed with blocking, anchors, and restraining harnesses to preclude separation of joints.

7.

Water lines exclusively for fire protection shall be dedicated to the public, unless the system is isolated from the public system by a detector check. All water lines shall be a minimum of eight (8") inches in diameter and looped when possible. Water lines shall not be located under paved surfaces where possible.

8.

Water service for multiple units on a single lot shall be served via one Master Meter. The developer is responsible for providing and metering service to individual units.

MATERIALS

All water lines and fittings shall be new materials and comply with the following:

1.

Water Lines — All water lines shall be Polyvinyl Chloride (PVC) material and be designed, manufactured, and tested in accordance with the applicable requirements of AWWA C-900 (eight (8") inch through twelve (12") inch water pipe) AWWA C-905 (sixteen (16") inches and larger water pipe), and AWWA M-23. Pipe larger than 16" shall be Ductile Iron.

2.

Other Pipe Material — All other materials must be submitted for approval by the City Engineer.

a.

All PVC water pipe shall be blue in color.

b.

Eight (8") inch through twelve (12") inch water pipe shall be pressure class 150, DR 18. Pressure class 200, DR 14 pipe may be required by the City Engineer in areas of high distribution system pressure, under roadways or other unusual circumstances.

3.

Fittings - Fittings shall be ductile iron in accordance with AWWA C110 or AWWA C153.

a.

Fittings: ANSI/AWWA C111/A21.11, except gaskets shall be neoprene or other synthetic rubber and factory installed.

b.

All waterline pipe and fittings shall be new materials and produced in the USA

INSTALLATION

All installations shall conform to the latest TCEQ, and AWWA Specifications, as amended by these standards.

1.

All pipe shall be installed with a minimum of forty-eight (48") inches of cover over top of pipe.

2.

The amount of open trench shall not exceed two hundred (200') feet from the end of the pipe laying operations, and no more than three hundred (300') feet of total open trench will be allowed. At the end of each work day, all trench excavation shall be backfilled and compacted to the end of the pipe laying operation.

3.

All connections to existing water mains shall be made under pressure unless dry connections will not cause any loss of service. Under special conditions connections that cause an interruption of service may be performed with approval of the City Engineer.

4.

Coated tracer wire and tape shall be installed in the embedment material twelve (12") inches above the pipe with the tracer wire terminating in in-line gate valve boxes accessible by City Staff.

5.

Density tests shall be taken at a minimum of every three hundred (300') feet for every lift or determined by inspection. A maximum thickness of lift is required for all trench backfill. A geotechnical report should be submitted for all trenches. The density reports shall be submitted to the City Inspector. The City has the right to require additional tests if they are deemed necessary.

6.

All density reports and bacteria test reports shall be completed, delivered to the City Engineer and Inspector, and approved before paving is allowed to begin. Bacteria test samples shall be taken by the City.

7.

PVC water pipe and appurtenances shall be installed as specified in AWWA M-23 and in accordance with the pipe manufacturer's recommendations.

8.

Fittings shall be installed in accordance with AWWA C-600.

a.

All mechanical joint bends, tees, and reducers which require blocking shall be additionally restrained with EBAA Megalug retainer gland or approved equal.

b.

All fittings must be polyethylene wrapped.

FIRE HYDRANTS

1.

Fire hydrants in commercial and industrial areas shall generally be at street intersections and so located that there will be a fire hydrant every three hundred (300') feet. Fire hydrants in a residential area shall be generally located on street intersections and not over five hundred (500') feet apart. City Fire Chief shall approve final fire hydrant locations.

2.

Materials

a.

Fire hydrants shall be manufactured in accordance with AWWA C-502, Dry-Barrel Fire Hydrants.

b.

Hydrants shall be manufactured such that all maintenance and adjustments can be performed without excavation and such that hydrants may be faced in any direction in relation to base. The hydrant shall be of a design that will permit extensions without disturbing the bottom section of the hydrant.

c.

A gate valve shall be installed with each fire hydrant.

3.

Manufacturers

Approved fire hydrants manufacturers are as follows:

a.

Clow — Medalion

b.

Mueller - Centurion

c.

Kennedy — K81D

d.

American Darling — B84B

4.

Locations

a.

Fire hydrants are to be located a minimum of three (3') feet and a maximum of six (6') feet behind the back of curb.

VALVES

1.

Resilient seated gate valves shall be used for six (6") inch and up to twenty-four (24") inch water lines. Butterfly valves may be allowed as an addition to gate valves for lines sixteen (16") inches and larger when approved by the City Engineer.

2.

Valves of approved design shall be installed at the intersections of all water mains so as to provide for proper maintenance and operation of the system and to provide a means of shutting off the supply to portions of the system for repairs. Three (3) valves shall be used on a four-way water line intersection and a minimum of two (2) valves shall be used on a three-way intersection.

3.

Materials

a.

Resilient Seated Gate Valves

1)

Resilient seated gate valves six (6") inches through sixteen (16") inches shall meet or exceed the latest revisions of AWWA C509 and shall meet or exceed the requirements of these standards.

2)

Resilient seated gate valves for buried service shall be furnished with a square two (2") inch operating nut. The valve box shall be Tyler Pipe 6850 series or approved equal. The valve box lid shall be painted safety blue. The paint shall be approved via submittal to the City.

3)

All valves must open left and close right.

b.

Butterfly Valves

Butterfly valves shall meet or exceed the latest revision of AWWA Standard C504 for Class 150B butterfly valves and shall meet or exceed the requirements of this specification. All valve components shall conform to Underwriters Laboratories classification in accordance with ANSI/NSF Standard 61.

4.

Installation

a.

Valves shall be furnished with extensions, such that the working nut is a maximum of thirty-six (36") inches below grade.

b.

Adjustable valve boxes shall be furnished and set on each valve in accordance with these standards. Valves that are deeper than forty-eight (48") inches, AWWA C900 PVC pipe shall be used for stacks, as long as the adjustable valve box is used at the top.

c.

After the final clean-up and alignment has been complete, the contractor shall cast in place a concrete block, around all valve box tops at the finish grade. See detail W-3.

d.

Valves located within a right-of-way shall be indicated on the face of the curb, or where curbs do not exist, on a conspicuous location adjacent to the valve location. Markings are to be the stamping of a four (4") inch high letter "V" with a three-eighths (3/8") inch stroke with the point of the "V" pointing towards the valve location.

e.

Valve markers shall be provided in rural areas.

5.

Manufacturers

a.

Approved manufacturers of six (6") inch through twelve (12") inch resilient seated gate valves are as follows:

1)

Mueller, Clow, American Darling and Kennedy

b.

Approved manufacturers of sixteen (16") inch and larger butterfly valves are as follows:

1)

Mueller, Clow, American Darling and Kennedy

AIR RELEASE AND FLUSHING VALVES

1.

Adequate air relief, and flushing valves shall be provided for flushing, disinfecting, daily operation requirements, and repairs when required by the City Engineer. Air release valves shall be required on twelve (12") inches and larger water lines. Water lines shall be designed so that each section of the water line can be flushed at its lowest and highest points.

2.

All dead end lines shall have a fire hydrant installed for flushing purposes. If installation of a fire hydrant is not possible, a flushing valve is required.

3.

A fire hydrant shall be required at high points on water lines smaller than twelve (12") inches for air relief and flushing.

4.

Materials - Air release valves and air/vacuum valves shall meet or exceed the latest revision of AWWA C512.

5.

Automatic Flushing Valves shall be installed on all dead-end mains of 2" or larger that extend 150 linear feet or longer. Approved Manufacturer: Hydro Guard Standard Unit

TAPPING SLEEVE

A tapping sleeve and valve shall be used when connecting a new water line to an existing line. A resilient seated gate valve shall be flanged to the tapping sleeve. The tapping sleeve shall be a Smith-Blair Spec. 664-665 stainless steel tapping sleeve, or approved equal.

WATER SERVICE

1.

The water meter box shall be placed a minimum of two (2') feet behind the back of curb unless sidewalks are adjacent to the curb, then they are to be set seven (7') feet behind the back of curb, and the water service shall be a minimum of twelve (12") inches deep, covered with a meter box in place at grade. If no curb is present, the water service shall be located at the property line, a minimum of twelve (12") inches deep, covered with a meter box in place at grade. Along roadways without a curb the water service line shall be constructed at a minimum of twelve (12") inches below the ditch flow line.

2.

Meter and service sizes will be determined by the developer prior to requesting service from the City. The minimum water service size between the water main and the meter shall be one (1") inch.

3.

Water services on undeveloped lots shall be located at the property line and shall be a minimum of one (1") inch in diameter.

4.

Materials

a.

Service Saddle

Service saddle shall be double strap bronze with brass body or nylon/epoxy coated stainless steel double bolt wide straps. Minimum size tap shall be 1 inch diameter.

Approved manufacturers:

1)

Smith Blair - Tapping Saddles up to 2" shall be epoxy coated with stainless steel straps

2)

Tapping Sleeve 4" and larger shall be epoxy coated steel or ductile iron

b.

Service Line

Service lines shall be 1" (single services) to 1.5" (double services) polyethylene SDR9.

c.

Corporation.

1)

Corporation stop shall be ball type with a diameter equal to the pipe size with compression outlet fitting, designed for a minimum working pressure of two hundred pounds per square inch (200 psi) and threaded counter clockwise.

2)

Approved manufacturers are Ford or Mueller.

d.

Angle Stop

1)

Angle stop shall be set with compression inlet fitting and locking wings.

2)

Approved manufacturers are Ford, Mueller or Smith Blair.

e.

Meter Boxes

1)

Single Meter boxes are to be DFW 1200 Series with AMR lid

2)

Double Meter boxes are to be DFW 1500 Series with AMR lid

3)

Traffic Rated Meter boxes shall be DFC "C" Series

5.

Installation

a.

General

1)

All water service shall be installed in accordance with these standards.

2)

Each individual service location shall be saw cut into the face of the curb with a four (4") inch high "W" painted blue by the Contractor. If no curb exist a similar mark should be placed in the pavement near the edge of the roadway.

FLUSHING VALVES

1.

Materials

a.

Corporation stop shall be two (2") inch ball type with compression outlet fitting, designed for a minimum working pressure of two hundred pounds per square inch (200").

b.

Two (2") inch curb stop shall be ball type with compression inlet fitting with tee head shut off.

c.

Pipe shall be two (2") inches diameter, polyethylene.

d.

All flushing valves shall be installed within a twenty-four (24") inch round metal meter box.

WATER LINE BORE

1.

Minimum steel casing thickness shall be a quarter (1/4") inch. Casings shall be required under collectors and thoroughfares, highway crossings, and railroad crossings. Casings shall also be required where deemed necessary by the City Engineer. The construction bore pit shall be located at a minimum distance of four (4') feet behind the back of curb or edge of pavement where no curb is present.

2.

The design engineer shall design the water line pipe casing for the following loading conditions and applicable combinations thereof:

a.

AASHTO HS20 loading as applicable

b.

Earth loading with the height of fill above the casing as shown on the plans

c.

Loads applied during jacking, including axial load from jacking

d.

All other applicable loading conditions, including loads applied during transportation and handling.

3.

Materials

a.

Steel Casing Pipe

Steel casing pipe shall be new (or used if approved by the City Engineer) and suitable for the purpose intended and shall have a minimum yield strength of 35,000 psi. Casing shall meet ASTM A-36, ASTM A-570, ASTM A-135, ASTM A-139, or approved equal. Pipe shall be coated with coal tar epoxy (15 mils min.) in accordance with AWWA C-210. Pipe joints shall be welded in accordance with AWWA C-206. After pipe is welded, coating shall be repaired.

b.

Casing Spacers

Use stainless steel casing spacers for any type of carrier pipe. Insulators shall be high density polyethylene. Insulators shall fit snug over the carrier pipe and position the carrier pipe approximately in the center of the casing pipe to provide adequate clearance between the carrier pipe bell and the casing pipe. Insulators shall be manufactured by "Recon" and be Racci Type or approved equal.

4.

Installation

a.

Excavation and Backfill of Access Pits

1)

Do not allow excavation over the limits of the bore or tunnel as specified. Shore the trench walls as necessary to protect workmen, the public, structures, roadways, and other improvements.

2)

Excavations within the right-of-way and not under surfacing shall be backfilled and consolidated by mechanical methods as specified in these standards for compaction of trenches under roadways. Surplus material shall be removed from the right-of-way and the excavation finished to original grades. Backfill pits immediately after the installation of the carrier pipe is completed. If carrier pipe is not installed immediately after casing

pipe installation, the City may require the access pits be temporarily backfilled until installation of carrier pipe.

3)

Where seeding or sodding is disturbed by excavation or backfilling operations, such areas shall be restored to the existing or better conditions.

WASTEWATER SYSTEM IMPROVEMENTS

GENERAL

This section pertains to general design requirements for waste water collection system construction in the City of Taylor. All sewer lines shall be sized and as determined by the City Engineer. In the absence of or in conflict with a specific standard contained in this Chapter, all collection, treatment, and disposal systems shall be designed in accordance with the most current criteria adopted by the Texas Administrative Code, Chapter 217, "Design Criteria for Domestic Wastewater Systems".

WASTEWATER MAIN SIZES AND DESIGN

1.

Standard wastewater main sizes are eight (8") inches, ten (10') inches, twelve (12") inches, fifteen (15") inches, and eighteen (18") inches in diameter. Other sizes may be approved by the City Engineer.

2.

Wastewater lines shall be constructed at a minimum depth of four (4') feet and be located within the R.O.W. or an approved utility easement. A wastewater line is required to be constructed on both sides of a State Highway.

3.

Easements for wastewater line construction shall meet the following requirements:

a.

The easement width shall be a minimum of twenty (20'). Greater easement width may be required for deep lines.

b.

If the wastewater line is less than twelve (12') feet deep, the outside diameter of the wastewater line shall be located a minimum distance of six (6') feet from the edge of the easement, and if other utilities are located in the same easement, the outside diameter of the wastewater line shall be located a minimum distance of three (3') feet from the outside diameter of the other utilities.

c.

If the wastewater line is greater than twelve (12') feet deep, the outside diameter of the wastewater line shall be located a minimum distance of nine (9') feet from the edge of the easement, and if other utilities are located in the

same easement, the outside diameter of the wastewater line shall be located a minimum distance of six (6') feet from the outside diameter of the other utilities.

d.

Proper separation of utilities must be maintained per TCEQ regulations.

4.

All wastewater mains shall be designed with consideration for serving the full drainage area subject to collection by the wastewater in question; the drainage area may be modified with the concurrence of the City Engineer because of the projected rate of development or the financial feasibility of the proposed extension.

5.

Wastewater mains should be designed with straight alignment whenever possible. When horizontal curvatures must be used, radial pipe must be used in accordance with the pipe manufacturer's recommendations. No joint deflection is allowed without the approval of the City Engineer and an appropriate TCEQ variance.

6.

All wastewater mains shall be designed with hydraulic slopes sufficient to give mean velocities, when flowing full or half full, of no less than two (2') feet per second.

WASTEWATER LINE MATERIALS

All wastewater lines and fittings shall be new materials and comply with the following:

1.

All wastewater pipes shall be Polyvinyl Chloride (PVC) pipe type SDR-26 for wastewater lines where wastewater lines exceed. For depths greater than twenty-four (24') feet material must approved by City Engineer.

2.

All PVC wastewater pipe shall be green in color. Developer to provide a manufacturers statement for pipe color other than green.

3.

PVC sewer pipe and fittings shall conform to the current ASTM Designation D 3034 for up to eighteen 18" inches and ASTM Designation F 679 for greater than fifteen (15") inches.

WASTEWATER LINE INSTALLATION

1.

General

a.

All installations shall conform to ASTM Designation D2321, and the as amended by these standards.

b.

Wastewater lines shall not be installed within nine (9') feet horizontally of any water main or fire hydrant. Where this is not possible, separation shall be in accordance with TCEQ standards.

c.

Construction shall begin at the downstream end of project and continue upstream with the bell facing upstream. No upstream piping shall be installed before downstream piping unless approved by the City Engineer.

2.

Excavation and Backfill

a.

The amount of open trench excavation shall not exceed two hundred (200') feet from the end of the pipe laying operations, and no more than three hundred (300') feet of total open trench will be allowed. At the end of each workday, all trench excavation shall be backfilled to the end of the pipe laying operation

b.

Density tests shall be taken every three hundred (300') feet for every lift. A maximum thickness of twelve (12") inches per loose lift is required for all trench backfill. A geotechnical report shall be submitted for all trenches. The density reports shall be submitted daily to the City Inspector. The City has the right to require additional tests if they are deemed necessary.

c.

A City inspector will be on site at all times when testing is being performed. The City Inspector shall be present during the placement of trench backfill lifts.

d.

All density reports shall be completed, delivered to the City's Engineer and Inspector, and approved before paving is allowed to begin.

MANHOLES

1.

Manholes shall be located at all intersections of wastewater lines and at intermediate spacing along the line. Generally the maximum spacing should not exceed five hundred (500') feet. Manholes should be located at all changes in grade and at the ends of all wastewater lines that will be extended.

2.

A manhole is required at the junction of wastewater lines with different inside pipe diameters.

3.

A drop of at least one tenth of a foot (0.1') is required through the manhole.

4.

A drop manhole is required when the flow line in is two (2') feet or greater than the flow line out.

5.

Minimum manhole inside diameter is four (4') feet.

6.

Drop-connection manholes shall have a minimum inside diameter of four (4') feet, with an exterior drop.

7.

Minimum pre-cast wall thickness is five (5") inches.

8.

All manholes shall be concrete.

9.

NOTE: If depth of cover is greater than 18 feet, Manhole size is subject to city Engineer approval.

a.

Cast-in-place — only when approved

1)

The manhole foundation shall be poured on undisturbed soil or approved subgrade and shall have a minimum thickness of eight (8") inches.

2)

The inlet and outlet pipes shall be poured into the foundation of the manhole. When straight through flow occurs, the pipe shall be laid continuously through the manhole.

3)

The invert shall be shaped and smoothed so that no projections will exist and the invert shall be self cleaning.

4)

When a cast-in-place manhole is used to connect to an existing wastewater line the manhole should be poured, tested and approved before the top of the existing line is cut out.

5)

Concrete work shall conform to all requirements of ACI 301, Standard Specification for Structural Concrete, published by the American Concrete Institute, except as modified herein.

6)

Detailing of concrete reinforcement and accessories shall be in accordance with ACI Publication 315.

7)

Portland cement shall be Type II, low-alkali and conform to ASTM Designation C-150.

8)

The manhole shall not be backfilled within twelve (12) hours after the concrete placement. Backfill shall be compacted and reports submitted to the City.

9)

The face of curb shall be stamped with a three (3") inch "MH" to mark the location of all manholes. The location of the stamp shall be a line that intersects the center of the manhole cover and the curb perpendicular to the centerline of the street. For manholes located in intersections, the curb shall be stamped at the closest location to the manhole. If no curb exist a similar mark should be placed in the pavement near the edge of the roadway.

c.

Precast Manhole

1)

Precast manholes shall be constructed in accordance to ASTM Designation C-478.

2)

Manhole base shall have a spread footing and be placed on a minimum of twelve (12) inches of crushed rock.

MANHOLE FRAME AND COVER

1.

Cover

a.

Materials

All manhole covers shall conform to the Standard Specifications for Domestic Grey Iron Castings, ASTM A-48, Class 30 B.

b.

Installation

1)

All manhole covers shall be thirty (32") inches in diameter.

2)

All manhole covers shall have two (2) integrally cast pick bars.

c.

Manufacturers (Traffic rated where necessary)

1)

East Jordan Iron Works

2)

Bass & Hayes

2.

Frames

a.

Materials

All manhole frames shall conform to the Standard Specifications for Grey Iron Castings, ASTM A-48, Class 30 B.

b.

Installation

All manhole frames shall provide a thirty (30") inch by one quarter (1/4") inch opening to assure proper fit of the manhole cover.

c.

Manufacturers

1)

East Jordan Iron Works

2)

Bass & Hayes

d.

Manholes located within the floodplain are to be sealed with an approved bolt-down cover and frame.

3.

Extension Ring

a.

Materials

All precast reinforced concrete extension rings shall conform to ASTM C-478.

b.

Installation

1)

The number of extension ring sections shall be kept to a minimum (i.e. use 1-12 inch extension ring instead of 2-6 inch extension rings).

2)

A one (1") inch by three and a half (3 1/2") inch bitumastic gasket shall be used to seal the extension ring at both joints.

6.

Manhole Inserts - Rain Pan

Shall be required on all Manholes.

a.

Materials

Rain pans shall be High Strength Stainless Steel to fit each manhole

b.

Manufacturers

Southwestern Packing and Seals.

WASTEWATER SERVICE

1.

No wastewater service line (lateral) shall be less than six (6") inches in nominal diameter.

2.

Wastewater laterals shall be a minimum of ten (10') feet downstream of the water service. Services will be identified in the field by a three (3") inch "S" cut into the curb, on the As-Built Plans and with a stake in the field for location purposes.

3.

Wastewater service laterals shall have a minimum of four (4') feet of cover at the property line.

4.

Materials

a.

All lateral wastewater service lines shall be gasketed PVC pipe type SDR-26.

b.

All PVC wastewater pipe used for lateral services shall meet ASTM 3034.

6.

Installation

All service laterals shall be installed in accordance with the wastewater embedment and backfill standards of the City of Taylor.

MAIN LINE CLEANOUTS

Cleanouts may be installed on lines that are permanent dead ends. The line may not exceed four hundred fifty (450') feet. Any line exceeding that length must end with a manhole.

WASTEWATER LINE BORING

SEE WATER LINE

1.

Installation

a.

Tolerances

1)

All bores shall be installed at a grade no less than the minimum indicated by TAC30, Chapter 317 for the desired pipe size.

2)

All bores shall maintain grade enough to ensure desired clearance distances between existing utilities and bore.

b.

Excavation and Backfill of Access Pits

SEE WATER SECTION

DRAINAGE AND STORM SEWER IMPROVEMENTS

GENERAL

This section pertains to general design requirements for drainage and storm sewer construction in the City of Taylor. All drainage facilities shall be sized and designed in accordance with the City Engineer.

RUNOFF CALCULATIONS

1.

The selection of which method to use for calculating runoff depends upon the size of the contributing drainage area at the most downstream point of the project. The "Rational Method" is acceptable for designing projects in which the drainage area is less than one-hundred (100) acres. A unit hydrograph method is required for projects with larger drainage areas.

2.

No matter which method is used to calculate runoff, a developer shall develop the property so that the rate of runoff created by the development as it leaves the property does not exceed the rate of runoff that is currently occurring in the existing conditions. A developer or builder of commercial property greater than one-half (1/2) acre must follow the above guidelines.

3.

Runoff computations shall be based upon fully developed watershed conditions in accordance with the land use projections in the latest comprehensive land use plan for the City of Taylor. The design engineer shall size drainage facilities by disregarding the detention effects of upstream property and calculating the runoff as if the off-site property was developed without any detention. If an approved regional detention/retention facility is in operation, the design engineer may size downstream drainage facilities based on consideration of the detention effects of the regional facility.

4.

Procedure for drainage areas less than one-hundred (100) acres.

a.

Computation of storm water runoff for drainage areas less than one-hundred (100) acres shall be by the Rational Method, which is based on the principle that the maximum rate of runoff from a given drainage area for an assumed rainfall intensity occurs when all parts of the area are contributing to the flow at the point of discharge.

The formula for calculation of runoff by the "Rational Method" is: $Q = CIA$

Where:

Q = the maximum rate of discharge, expressed in cubic feet per second.

C = Coefficient of Runoff.

<u>Park areas - No developed land</u>	<u>0.30</u>
<u>Developed Park sites</u>	<u>0.40</u>
<u>Single Family Residential</u>	<u>0.50</u>
<u>Duplex</u>	<u>0.60</u>
<u>Multiple Family</u>	<u>0.70</u>
<u>Schools</u>	<u>0.70</u>
<u>Churches</u>	<u>0.70</u>
<u>Neighborhood Commercial</u>	<u>0.70</u>
<u>Office Commercial</u>	<u>0.70</u>
<u>Commercial</u>	<u>0.85</u>

-

I = Intensity of Runoff in inches per hour

A = Drainage Area in acres.

b.

Time of concentration is the longest time, without interruption of flow by detention devices that a drop of water takes to flow from the farthest point of the drainage area to the point of concentration (i.e. the point of design). The time of concentration is composed of the inlet time and the flow time in a conduit or channel to the point of design.

The inlet time shall be 10 minutes for property zoned multiple family, churches, schools, local business, central business, commercial, or industrial.

An inlet time of 15 minutes shall be used for property zoned for parks, cemeteries, agricultural, and single family residential.

When designing inlets and laterals, the time of concentration is equal to the inlet time. The design engineer will compare the above specified inlet times to the actual calculated inlet time by computing the flow time overland and along the gutter to the first inlet. Manning's Equation shall be used to determine flow time to the inlet. The design engineer may use the actual calculated or specified inlet time. In no case shall a longer inlet time be used than 10 minutes for multiple family, commercial, churches, schools, industrial and business areas and 15 minutes for parks, cemeteries, agricultural, and single-family areas.

5.

Procedures for Drainage Areas greater than one-hundred (100) acres:

a.

For drainage areas in excess of one-hundred (100) acres where the use of the "Rational Method" does not provide reliable results, the use of a unit hydrograph method shall be made. The use of a unit hydrograph calculation will be based upon standard and accepted engineering principles subject to the approval of the City Engineer. Acceptable methods include the Soil Conservation Service (SCS) Technical Release Number 55 or the Corps of Engineers HEC-1 models for drainage areas one-hundred (100) acres or more.

b.

The unit hydrograph method shall be based upon fully developed watershed conditions assuming no effects from the small on-site detention facilities. The detention effects of large regional detention facilities can be taken into account in unit hydrograph methods.

c.

Circumstances that may require the use of a unit hydrograph method include sizing open channels, reclaiming floodplains, creating lakes, or building other types of drainage-related facilities on major drainage courses. Design engineers of these types of facilities should be aware that the requirement of designing for fully developed watershed conditions will mean that they may have to calculate these fully developed flows instead of using the flows calculated in certain Federal Emergency Management Agency's (FEMA) flood insurance studies or from studies performed for or approved by the City of Taylor.

DESIGN STORM FREQUENCIES

All developments submitted must provide data for the following design storm frequencies:

2-Year/10-year/25-Year/100-Year

<u>Closed Storm Sewer Systems</u>	<u>25-year with 100-year positive overflow in streets such that the depth of flow in the street does not exceed the right-of-way or drainage easement capacity.</u>
<u>Closed Storm Sewer Systems and Inlets at Street Low Point or Sag</u>	<u>100-year with positive overflow</u>
<u>Culverts and Bridges</u>	<u>100-year</u>
<u>Concrete-lined Channels</u>	<u>100-year</u>
<u>Earthen Channels</u>	<u>100-year</u>
<u>DRAINAGE FACILITY</u>	<u>DESIGN RECURRENCE INTERVAL</u>

-

The approved drainage system shall provide for positive overflow at all low points and these areas must be denoted on the plans as such. The term "positive overflow" means that when the inlets do not function properly or when the design capacity of the conduit is exceeded, the excess flow can be conveyed overland along a grassed or paved course. Normally, this would

mean along a street or alley, or shall require the dedications of special drainage easements on private property.

STREET AND ALLEY CAPACITY

1.

Streets

Streets and storm drains within new developments shall be designed so that storm water runoff resulting from a design storm of a one-hundred (100) year frequency is contained within the available right-of-way and/or drainage easement. The capacity of the street and right-of-way and/or easement and the storm sewer pipe working in combination must be designed for a capacity to safely contain a storm water from a design storm of one-hundred (100) year frequency.

2.

Alleys

The flows created by the one-hundred (100) year storm shall be contained within the capacity of all paved alleys.

INLET PLACEMENT AND CAPACITY

1.

The storm sewer system is to begin at the point where the storm water from a twenty-five (25) year frequency storm reaches curb depth, with the exception of collector streets on which storm sewer facilities must be designed to prevent one twelve (12') foot wide lane from ponding and on major streets on which storm sewer facilities must be designed to prevent one twelve (12') foot wide lane in each direction from ponding. At such point where the combined capacity of the street and storm drain system satisfies the twenty-five (25) year street capacity criteria (as previously described) but the one-hundred (100) year frequency storm runoff can not be contained within the right-of-way additional pick-up points (inlet capacity) shall be provided along with an increase in storm sewer capacity so that the one-hundred (100) year frequency storm runoff will be contained within the right-of-way.

2.

Inlets shall be placed upstream from an intersection whenever possible. At any intersection, only one street shall be crossed with surface drainage and this street shall be the lower classified street. When an alley intersects a street, inlets shall be placed in the alley whenever flow down that alley would cause the capacity of the intersecting street to be exceeded.

3.

The minimum inlet size shall be ten (10') feet. No more than twenty (20') feet of inlet shall be placed along one gutter at any given location. Minimum sizes of laterals shall be eighteen (18") inches.

4.

Manholes are required every three hundred (300') feet. Junction boxes are required at every change in flow line direction, change in pipe size. Manholes are to be a minimum 4' in diameter and shall be precast or cast in place if approved by City Engineer.

PIPE DESIGN STANDARDS

1.

Storm sewer conduit shall be sized to flow full. Manning's Equation shall be used to determine the conduit size.

2.

Minimum and Maximum Velocities in Pipes

a.

The minimum velocities in conduit shall be two and a half (2.5') feet per second.

b.

Maximum velocity in the pipe shall not exceed fifteen (15') feet per second.

c.

The maximum discharge velocities in the pipe shall also not exceed the permitted velocity of the receiving channel or conduit at the outfall to prevent erosive conditions. The maximum outfall velocity of a conduit in partial flow shall be computed for partial depth and shall not exceed the maximum permissible velocity of the receiving channel unless controlled by an appropriate energy dissipater (e.g. stilling basins, impact basins, rip-rap protection).

3.

In general, storm water shall be carried in concrete pipe conduit within the right-of-way but other types of conduit can be used to carry storm water in areas other than the right-of-way. However, prior permission to use other conduit materials must be obtained from the City Engineer.

4.

Hydraulic Gradient

a.

Conduits must be sized, and slopes must be set, such that runoff flows smoothly down the drainage system. To insure this smooth passage, the hydraulic gradient must be at the proper elevations. The hydraulic grade line shall be established and shown on the plans for all storm sewer design.

b.

The hydraulic grade line shall in no case be closer to the surface of the ground or street than one (1') foot. The HGL must not exceed the neck into the inlet.

c.

Hydraulic gradient calculations shall account for all head losses that may occur in the storm sewer line. Friction head loss shall be determined by direct application of Manning's Equation. Minor losses due to turbulence at structures shall be approved by City Engineer.

CULVERT DESIGN

1.
One (1') foot of freeboard is required between the one-hundred (100) year water surface elevation and the top of curb elevation. Exceptions must be approved in writing by the City Engineer.
2.
Culverts must be designed using standard engineering. Refer to the *Texas Department of Transportation (TxDOT) Hydraulic Design Manual*.
3.
Culvert hydraulic grade line calculations shall consider both inlet and outlet control.
4.
Culverts shall be skewed such that impacts due to the flood and normal flow angles of attack on the structure are minimized.
5.
The maximum velocity through a culvert shall be fifteen (15') feet per second.
6.
Stream stability shall be assessed when determining the number of barrels, height and width and culvert skew. Potential for scour shall be accounted for in the design.
7.
Hydraulic jumps shall not be allowed from face of culvert to fifty (50') feet from the culvert.

BRIDGES

1.
Two (2') feet of freeboard is required between the one-hundred (100) year water surface elevation and the low chord of the bridge. Exceptions to this requirement must be approved by the City Engineer in writing.
2.
The skew of the bridge piers and abutments shall be oriented as close to the normal or flood direction of flow resulting in an angle of attack as close to zero (0) degrees as possible.
3.
Computer modeling programs used for the hydraulic analysis of bridges shall be HEC-RAS or HEC2.
- 4.

Stream stability shall be assessed when designing the abutments and interior bents of the bridge. Scour shall be accounted for in the design.

5.

Flow shall not be supercritical in an area from one-hundred (100') feet upstream from a bridge to twenty-five (25') feet downstream from a bridge.

CHANNELS

1.

Open Channel Design Criteria: - either lined bottom or adjacent access easement

a.

All open channel design must follow the Corp of Engineers Guidelines.

b.

Channels may be left in their natural state provided that the channel velocities are six (6.0') feet per second or less and that one (1') foot of freeboard is available during the design storm event.

c.

If the natural channel is to be replaced by an improved channel, the flow from the one-hundred (100') year design flood must be contained within the improved channel while allowing for one (1') foot of freeboard.

d.

Improved channels shall be trapezoidal shaped and include a lined section if the design velocity is greater than six feet per second. Lining types such as concrete, rock walls and gabions may be used upon approval of the City Engineer. The maximum velocity allowed in concrete lined channels is fifteen (15') feet per second.

e.

Improved channels shall have minimum side slopes of:

- 4 feet horizontal to 1 foot vertical for earthen, grassed-lined side slopes.

- 2 feet horizontal to 1 foot vertical for concrete-lined side slopes.

f.

Where practicable, all unpaved channels should have sufficient grade to avoid ponding. A minimum slope of 0.50% is required for earthen channels and swales, except those used as part of a wetlands area. In areas where 0.50% cannot be obtained a pilot channel approved by the City may be used. All lined channels are to have a minimum slope of 0.50% and natural channels a minimum slope of 1.00%.

g.

The developer or owner shall use low maintenance vegetation for vegetative cover, as approved by the City Engineer prior to planting.

2.

Manning's Equation can be used to design channels and determine water surface elevations and velocities when backwater effects are negligible. Channels where backwater effects occur must be designed using models accepted by FEMA.

3.

All channel sections must consider and account for channel stabilization in their design. This requirement pertains to all sections whether they are left in their natural condition or are modified in any manner. The design of all drainage channels and swales shall assure adequate capacity and minimum maintenance to overcome the result of erosion, silting, sloughing of bends or similar occurrences.

4.

The design of the channel lining shall take into account the super-elevation of the water surface around curves and other changes in direction. In general a radius that is three (3) times the top width of the water surface during the design storm event is recommended for channel bends.

5.

A chain link fence six (6') feet in height, or other improvements as approved on a case by case basis by the City Engineer, shall be constructed on each side of the lined channel.

6.

Articulating Concrete Block flexible channel linings are required in lieu of reinforced concrete lining with the approval of the City Engineer.

7.

Easement width for open or lined channels shall be at least twenty feet (20') wider than the top of the channel, fifteen feet (15') of which shall be on one side to serve as an access for maintenance purposes.

ROAD SIDE SWALE DESIGN

Road side swales may be used along all roadways to convey drainage in accordance with the following criteria.

a.

Swales shall be designed to carry a one hundred (100) year storm and the back water effects of the most restrictive culvert to be placed in the swale.

b.

Swales shall at all times maintain a minimum thirty inch (30") depth.

c.

The entire swale should be contained within the ROW of the road. If the swale cannot be contained additional ROW may be required. A second option would be to provide a minimum sixteen foot (16') drainage easement and the following note on the plat:

Note: Drainage easements adjacent to roadways shall not be fenced and must be left so that access can be obtained for maintenance purposes.

d.

The side-slopes of all swales shall be 4:1 maximum.

e.

The minimum allowable bottom slope in any swales shall be 0.50%.

f.

Maximum allowable roughness coefficients and velocities for ditches are shown in (Table 3) and (Table 4) respectively.

g.

All plan and profile sheets for new roadways shall show the one hundred (100) year hydraulic grade line (HGL) in the profile for each swale (profiles shall be split — left and right swale, top and bottom), the existing grade at the center of each swale, the proposed pavement centerline, proposed swale flow-line, roadway centerline stationing, and elevation information at one hundred foot (100') station intervals.

<u>Monolithic Concrete Structure</u>	<u>0.013</u>
<u>Concrete Pipe</u>	<u>0.013</u>
<u>Corrugated Metal Pipe</u>	<u>0.024</u>
<u>Existing Earth Lined Channels</u>	<u>0.035 to 0.08</u>
<u>New Earth lined Channels</u>	<u>0.035</u>
<u>Rock Lined Channels</u>	<u>0.025 to 0.04</u>
<u>Concrete Lined Channels</u>	<u>0.015 to 0.025</u>

TABLE 3
ROUGHNESS COEFFICIENT "n" FOR USE IN MANNING EQ.

Materials of Construction

"n"

-

Maximum Velocity: The velocities shown in (Table 4) are maximum allowable in each situation. If a lower velocity cannot be achieved velocity attenuation devices must be constructed or installed. If rock rip-rap is to be used it must be six inch (6") diameter rock or greater.

<u>Culverts</u>	<u>15 fps</u>
<u>Inlet Laterals</u>	<u>15 fps</u>
<u>Storm Sewers</u>	<u>12 fps</u>
<u>Open Channels, ditches and swales</u>	<u>8 fps</u>
<u>Concrete Lined Channels</u>	<u>12 fps</u>

TABLE 4
MAXIMUM VELOCITY

Type of Conduit

Maximum Velocity

-

Driveway Culverts:

(1)

All driveways and driveway culverts are the responsibility of the individual lot owner or developer. It is the developer's responsibility to insure that all lot owners are aware of this requirement. Driveway culverts shall be made of corrugated metal pipe (CMP) or reinforced concrete pipe (RCP). They shall have a minimum bottom slope of 0.50% and be no less than twenty-four feet

(24') in length and no greater than fifty feet (50'). The minimum allowable driveway culvert size shall be fifteen inches (15") in diameter at the smallest diameter.

(2)

Concrete-Safety-Treatments (ends) are required for all new culverts in accordance with TxDOT standard details.

(3)

A minimum of six inches (6") of cover shall be placed above all new culverts below the lowest bank of the ditch.

(4)

Where multiple culverts occur in swales, the ditch bottom must be widened to have a bottom width that is six inches (6") greater on each side than the distance from the outside walls of the outer two culverts. Each culvert shall also be separated by six inches (6") of compacted fill material.

(5)

Driveway culverts shall be shown at the most restrictive section to be anticipated for each lot, in the roadway plan and profile. The Hydraulic Grade Line (HGL) shall reflect the effects of backwater in the profile. Proposed upstream and downstream elevations for proposed culverts shall be shown in the plan and profile as well.

(6)

All driveway culverts must be installed prior to issuance of building permits or construction activities on the individual lot.

Crossing Culverts:

(1)

Crossing culverts shall be placed to relieve drainage at all low-points and drainage crossings. They shall be constructed of Class-III or better, Reinforced Concrete Pipe (RCP).

(2)

The minimum bottom slope in all crossing culverts shall be 0.50%. The minimum allowable crossing culvert size shall be eighteen inches (18") in diameter.

(3)

Safety ends or headwalls shall be constructed at the ends of all Crossing Culverts to protect the embankment from erosion and culvert from displacement. The safety ends or headwalls shall be constructed in accordance with TxDOT standards as required by the physical conditions of the particular installation. Rock rip-rap or other suitable erosion control may be required at each location as supplemental protection.

(4)

All crossing culverts and related structures that are a part of the road construction shall be in place prior to final acceptance of the improvements for the subdivision.

DETENTION DESIGN

Runoff rates from site shall be limited to the rates that would be produced from pre-develop stream. Detention/retention facilities shall be designed for the one-hundred (100) year design flood according to the following criteria:

1.

The minimum amount of storage volume of the detention basin shall be that volume required to reduce runoff rate to the undeveloped rate. Dedicated detention/retention basins shall also include an additional one foot of freeboard and two feet of sediment storage. The volume of runoff storage for drainage areas greater than one-hundred (100) acres shall be computed using unit hydrograph procedures. Acceptable unit hydrograph procedures are provided in Section 14.8.B.5 of this document.

For drainage areas less than one-hundred (100) acres, the above methods are recommended; however, an approximate routing method based on the rational formula is allowable.

2.

All detention facilities designed shall consider the timing of the flood peak in the main channel into which the detention facility drains. Delaying the peak from a site in lower portions of a watershed may result in a higher peak on the main channel.

3.

A detention facility shall have enough gradient to ensure positive drainage to the outlet structures so as to avoid nuisance conditions such as standing water, odors, insects, and weeds. A minimum slope of 0.50% towards the outlet structure is required for all grass lined detention facilities.

4.

Detention areas in parking lots should take into consideration flooding of vehicles.

5.

Drainage easements shall be provided for all regional detention/retention facilities and for other detention/retention facilities where two or more owners are involved.

6.

Detention facilities shall be designed to empty in less than twenty-four (24) hours, unless it is also serving as an erosion control facility.

7.

The owner shall maintain detention/retention facilities unless the facilities. Detention facilities must be properly maintained to function as intended over a long period of time.

a.

Facilities should be mowed at least twice a year to control weeds and discourage woody growth.

b.

Debris, litter and accumulated sediment should be removed from detention facilities at least twice a year. Particular attention should be given to removal of debris, litter and sediment around outlet structures.

c.

Detention basins designed for sediment removal shall be maintained as specified in the maintenance plan and approved by the City with construction plan submittal.

FLUMES

1.

The use of flumes is discouraged. Flumes shall not be permitted when the purpose of a permanent flume is to carry runoff down the sides of earthen channels.

2.

A flume may be used to direct overflow runoff along property lines until the runoff can be intercepted by streets or conduits. A flume shall not carry more than ten (10) cubic feet per second during the one-hundred (100) year storm event with a slope of 1.00%.

3.

All flumes crossing sidewalks shall be covered or bridged such as to minimize danger to pedestrians.

4.

All edges are to be protected with rock rip-rap or other form of protection for erosion control and scour purposes.

LAKES

Approval to develop in any area subject to inundation by a lake must be obtained from the appropriate agency responsible for that particular lake before the city grants its approval. Agencies that should be contacted include, but are not limited to U.S. Army Corps of Engineers, TCEQ, the Brazos River Authority, and FEMA.

Regardless of approvals obtained from those agencies listed above, no filling, development or construction in any area subject to inundation by a lake shall occur without the approval of the City Engineer. The City Engineer may require any studies necessary to determine that filling, development or construction will not have a detrimental effect on adjacent, upstream or downstream properties and buildings. This subsection in no way diminishes other requirements of this section.

LOT TO LOT DRAINAGE

Grading and drainage of all residential lots shall be designed in a manner which will allow a maximum of one lot to drain across an adjacent lot and into a permanent structure, such as a concrete flume, lined channel, or proper inlet to an adequate drainage facility, or to a street right-of-way. If an approved drainage structure is not present, it will be required of the developer to construct the necessary facilities.

1.

Sheet flow techniques shall be used for lot to lot drainage where possible.

2.

Single lots shall accommodate their own drainage into an approved structure where topographic elevations allow this to occur.

DRAINAGE STUDIES AND ENGINEERING CERTIFICATION

PRELIMINARY DRAINAGE ANALYSIS GUIDELINES

The purpose of a Preliminary Drainage Analysis is to determine the need for drainage facilities and/or drainage easements either within the proposed development or offsite. A Preliminary Drainage Analysis is required for every subdivision plat or a development requesting a building permit on a parcel which does not have a previously approved Drainage Analysis, unless the city engineer has waived this requirement due to existing conditions. The Preliminary Drainage Analysis shall consist of the following information:

1.

A topographical map drawn at a scale of 1" = 200' which depicts the watershed that drains to and across the subdivision or development. The map must include the subdivision and an area extending a minimum of 200' in all directions from the proposed subdivision. Sheets shall be either 22" X 34" in size and may contain sheet to sheet match lines. The map must include contour lines at five (5') foot vertical intervals in terrain with a slope of two (2%) percent or more, or two (2') foot vertical intervals in terrain with a slope of less than two (2%) percent. Data from the City topo maps will be acceptable where available. Data from USGS Quad sheets may be acceptable only where City topo maps are not available. The datum for topography shall be that of the United States Coast and Geodetic Survey or the City of Taylor GIS datum.

The map shall indicate any offsite or adjoining areas outside the limits of the area being developed which are relevant to onsite drainage. Show all significant physical features such as proposed or existing drainage and utility easements, water bodies, streams, railroads, parks, and drainage ditches. Show location of existing utilities including gas and petroleum lines, electric, telephone and TV cable. Also, the location of any existing structures located within the area being proposed for development. The plan shall include the building footprint and parking areas when the Preliminary Drainage Analysis is prepared for a building permit.

2.

Calculation of the drainage areas, time of concentration, and storm water runoff rate for the 2, 25 and 100 year frequency storms.

3.

Identification of special flood hazard areas as defined by the Flood Hazard Area Regulations Ordinance and as located by the current Flood Insurance Rate Map.

4.

The Preliminary Analysis shall be sealed by a Licensed professional Engineer licensed by the State of Texas.

DRAINAGE STUDY GUIDELINES

A Drainage Study is required when it has been determined by the city engineer that the area being developed will require storm water drainage facilities or drainage easements either within the development or offsite. The following criteria shall be used for the developer's engineer to prepare a Drainage Study.

1.

The study shall analyze the effect of the subdivision or the development on existing downstream and upstream drainage facilities. The study shall be sufficient to verify compliance with the drainage design criteria contained in this chapter.

2.

The study shall include a topographical map as defined above in "Preliminary Drainage Analysis Guidelines."

3.

Delineation and calculation of drainage areas together with proposed flow arrows shall represent flow patterns from runoff after all proposed improvements have been installed. Surface water drainage patterns shall be shown for each and every lot in the proposed subdivision and for each lot adjacent to the proposed subdivision.

4.

In addition to those calculations required by the Preliminary Drainage Analysis, this study shall also include:

a.

Hydraulic calculations to each lateral, manhole, inlet and outlet structure on the pipe. Head losses shall be calculated as described elsewhere in this chapter.

b.

Inlet calculations utilizing the minimum time of concentration for the zoning type which is contributing the largest "CA" to the inlet.

5.

If any portion of the proposed subdivision or its offsite improvements (including pipes or ditches) fall within the limits of a Federal Emergency Management Agency (FEMA) floodplain, additional backwater calculations may be required. Additional calculations in the form of a Conditional Letter of Map Revision will be required if:

a.

Any portion of the proposed subdivision is determined to be located within a FEMA Zone "A" floodplain; or

b.

Any portion of the proposed subdivision is determined to be located within a FEMA Zone "AE" floodplain and the overall subdivision (including all phases) is 5 acres or larger; or

c.

Any portion of the proposed improvements from a subdivision include dredging or filling within a FEMA designated floodway.

Backwater calculations shall comply with normally accepted standards as required by FEMA for application for a Letter of Map Revision (LOMR). In addition, the calculations must begin with a previously defined Base Flood Elevation (BFE). The calculations shall continue upstream through the project until the proposed BFE is within .01 feet of the existing BFE or the limits of the existing Zone 'A' have been reached. A LOMR will be required prior to issuing building permits.

CERTIFICATION

All drainage studies and/or plans including those which are part of a standard construction plan submittal shall be sealed and signed by an engineer proficient in civil engineering and Licensed in the State of Texas. All drainage submittals shall include the following certifying statement by the "Engineer of Record".

DISCLAIMER OF LIABILITY

The degree of flood protection required by this policy is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This policy does not imply that land outside the areas of street rights-of-way, drainage or flood plain easements will be free from flooding or flood damages. This policy shall not create liability on the part of the City of Taylor, Texas or any official or employee thereof for any flood damages that result from reliance on this policy or any administrative decision lawfully made there under.

TRENCH SAFETY

In conformance with House Bills 662 and 665 as passed by the Seventieth Legislature Regular Session of the State of Texas, all construction projects within the City of Taylor or its extraterritorial jurisdiction as provided by the Municipal Annexation Act (Article 970a, Vernon's Texas Civil Statutes) shall contain provisions for trench safety. On construction projects in which trench excavation will exceed a depth of five (5) feet, the uniform set of general conditions must require that the bid documents and the contract include detailed plans and specifications for adequate safety systems that meet Occupational Safety and Health

Administration standards and that these plans and specifications include a pay item for these same safety systems.

<u>ENVIRONMENTAL</u>	
<u>Stabilized Construction Entrance</u>	<u>EN 001</u>
<u>Filter Dike Curb Inlet Protection</u>	<u>EN 002</u>
<u>Silt Fence Detail</u>	<u>EN 003</u>
<u>Rock Berm Detail</u>	<u>EN 004</u>
<u>PAVING</u>	
<u>Typical Street Layout and Utility Assignments</u>	<u>PV 001</u>
<u>Typical Street Section Detail with Standard Curb and Gutter</u>	<u>PV 002</u>
<u>Typical Street Section Detail with Ribbon</u>	<u>PV 003</u>
<u>Pavement Sections</u>	<u>PV 004</u>
<u>Driveway</u>	<u>PV 005</u>
<u>Sidewalk Details</u>	<u>PV 006</u>
<u>Standard Curb and Gutter Details</u>	<u>PV 007</u>

<u>Ribbon Curb Details</u>	<u>PV 008</u>
<u>Concrete Valley Gutter Detail</u>	<u>PV 009</u>
<u>Joint Details 1 of 2</u>	<u>PV 010</u>
<u>Joint Details 2 of 2</u>	<u>PV 011</u>
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<u>Reinforced Concrete Retaining Wall with Integral Sidewalk</u>	<u>PV 013</u>
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<u>Standard Street Sign Detail</u>	<u>PV 015</u>
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<u>Concrete Trench Cap Detail</u>	<u>UT 007</u>
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<u>Single 5/8" or 3/4" or 1" Water Meter Detail</u>	<u>UT 011</u>
<u>Single 1-1/2" or 2" Water Meter Details</u>	<u>UT 012</u>
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<u>3" or Larger Vented Air/Vacuum Valve Installation</u>	<u>UT 017</u>
<u>Standard Fire Hydrant</u>	<u>UT 018</u>

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GENERAL CONSTRUCTION NOTES

Revised July 2009

1.

[General Contractor shall call for all utility locates prior to any construction. Water & wastewater owned by the City of Taylor can be located by calling the Utility](#)

Department 512-352-3251. Allow three business days for utility locates by the City of Taylor.

2.

All construction shall be in accordance with the latest City of Taylor ENGINEERING MANUAL.

3.

The contractor shall give the City a minimum of 48 hours notice before beginning each phase of construction. The phases of construction are as follows:

4.

Prior to City acceptance of all improvements, all graded and disturbed areas are to be re-vegetated in accordance with the City of Austin Specification Item #604 unless another re-vegetation specification is specifically identified in the plans and/or bid form. When appropriate in the opinion of the Public Works Department, the City of Taylor may require native grasses to be used.

5.

The Contractor shall provide the City of Taylor copies of all test results prior to acceptance of this project.

6.

City, owner, engineer, contractor, representatives of all utility companies, and a representative from the testing lab shall attend pre-construction conference prior to start of construction. The contractor shall schedule the meeting with the City of Taylor Engineering Department 48 hours prior to this pre-construction meeting (512-352-3633).

7.

Excess soil shall be removed at the contractor's expense. Notify the City of Taylor for approval if the disposal site is inside the City's jurisdictional boundaries.

8.

Burning is prohibited. No blasting is allowed.

9.

Any changes or revisions to these plans must first be submitted to the City by the design engineer for review and written approval.

10.

The Contractor will reimburse the City for all cost incurred as a result of any damage to any City utility by the Contractor, regardless of these plans.

11.

Prior to City acceptance of this project, an engineer's concurrence letter and 22" x 34" record drawings (one Mylar copy, one blue-line or Xerox, and a digital copy on a CD ROM) shall be submitted to the Engineering Department. The Consulting Engineer and Contractor shall verify that all final revisions and changes have been made to the Mylar, blue-line, and digital copy prior to City submittal. Record

construction drawings shall be provided to the City in digital format as AutoCAD ".dwg" files, or ESRI ".shp" files on CD ROM. Line weights, line types and text size shall be such that if half-size prints (11" x 17") were produced, the plans would still be legible. All required digital files shall contain a minimum of two (2) control points referenced to the State Plane Grid Coordinate System — Texas Central Zone (4203), in US feet and shall include rotation information and scale factor required to reduce surface coordinates to grid coordinates in US feet. Half-size plans may also be required (see contract).

12.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF TAYLOR MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

13.

A traffic control plan, in accordance with the Texas Manual on Uniform Traffic Control Devices, shall be submitted to the City for review and approval prior to any partial or complete roadway closures.

14.

The contractor shall keep the site clean and maintained at all times, to the satisfaction of the City. This project will not be accepted until the site has been cleaned and re-vegetated to the satisfaction of the City.

15.

Signs are not permitted in Public Utility Easements or Drainage Easements.

16.

Inspect temporary erosion controls on a daily basis. Adjust the controls and/or remove any sediment buildup as necessary.

17.

Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment and debris. Contractor will not remove soil, sediment or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.

18.

The Contractor shall be responsible for all damage to private property, which occurred as a result of any portion of this project. Any damage to private property shall be repaired to equal or better condition. The Contractor shall coordinate all repairs to private property with the property owner. Contractor shall pay and/or settle with private property owner for all costs related to any damage. The City will not provide separate pay for repair of any damages, reimbursements or settlements.

19.

Contractor shall provide the services of the City's approved SCADA consultant and controls instrumentation consultant. (When applicable to SCADA) The cost of the

consultant and/or any equipment shall be subsidiary to the cost of the project (no separate pay) unless specifically identified on the bid form.

20.

Contractor shall be responsible for any and all utility relocations. Including but not limited to: ONCOR Electric, ATMOS Gas, AT&T Telephone, United States Post Office, Time Warner Cable Television, City of Taylor Water & Wastewater. Contractor shall call 800-DIG-TESS and maintain all confirmation numbers.

21.

If telephone service is required by this project, the contractor shall coordinate with phone company to provide/extend/re-locate the service. No separate pay will be provided and the City shall not be responsible for scheduling or coordinating with phone company.

22.

Electric and/or telephone poles that need to be re-located for this project will be at the expense of the contractor. The City of Taylor will not provide separate pay for pole re-location and the cost of the relocation is considered subsidiary to the project bid. The contractor is responsible for identifying poles that may conflict with these plans and making arrangements to resolve the conflict with the appropriate utility. If electric, telephone, or CATV service will be interrupted as a result of the re-location; the City shall approve the maximum allowable time the service will be interrupted.

23.

The contractor shall make applications to the electric company for electric service if new service is required. The City will assume the service upon acceptance of the project (if required). The contractor will pay for electric power until the meter is transferred to the City of Taylor. Impact fees and Application Fees required by the electric company will be the responsibility of the Contractor unless specifically identified in the contract.

24.

The contractor shall provide combination locks for all gates, hatches, vaults, and MCC boxes. Each lock shall be pre-approved and set to the City's requirements. (No separate pay)

25.

All work on these plans shall be performed. Pay for work shown on these plans, which are not identified in the contract, shall be considered incidental to the items specifically identified for payment.

26.

The contractor shall provide a competent and qualified superintendent to supervise all work. The superintendent shall be present during all construction activities.

27.

Any survey monuments damaged or moved as a result of this project shall be replaced to equal or better condition. A Texas Registered Land Surveyor shall

oversee the replacement and certify the replacement for its intended use. No separate pay will be provided.

28.

Adequate drainage conditions, in accordance with the City Engineering Manual, shall be maintained at all times.

29.

Any tree removed or damaged by this project, which is not specifically identified to be removed by the plans, will be replaced according to the requirements of the City of Taylor Code of Ordinances. No separate pay will be provided.

30.

The contractor shall uncover all utilities within the limits of construction and verify their location prior to any construction activities. The contractor shall notify the City and the Engineer, IN WRITING, of any conflicts prior to any other construction including but not limited to exact locations of conflicts with proposed or existing utilities. No additional pay unless specifically identified for payment in the contract documents. The contractor shall also make his own sub-surface investigation prior to bid.

31.

Only stainless steel casing spacers are allowed in encasement pipe(s).

32.

No separate pay will be given to de-water trenches or other excavated areas.

33.

Soil material imported for re-vegetation of disturbed areas shall be approved by the Public Works department prior to placement. A sample (submittal) is required.

34.

The contractor shall perform pumping stations and/or lift station start-up independently: prior to requesting witness or acceptance by the City. When a final start-up fails to be complete and acceptable and when City personnel are present at start-up, each additional start-up will be charged to the contractor, as liquidated damages, \$500.00 per additional meeting.

35.

Shutout of any customers of the City's utility due to tie-ins shall only be scheduled for nighttime work unless approved by the Engineering Department. The City's field representative shall coordinate and inspect all nighttime shutouts and tie-ins. The contractor shall request shutouts two weeks in advance. Shutouts will only be allowed in the following times and are subject to approval by the City: 10 PM - 6 AM; beginning on Tuesday, Wednesday or Thursday night(s). No extra time will be granted to the contract for unscheduled work in the time period allowed or due to requests outside the approved time periods.

Street Notes:

1. No trenching of compacted base will be allowed. A penalty and/or fine may be imposed to the general contractor if trenching of compacted base occurs without City approval, regardless of who performed the trenching.
2. All sidewalks shall comply with the Americans With Disabilities Act. The City of Taylor has NOT reviewed these plans for compliance with the Americans With Disabilities Act, or any other accessibility legislation, and does not warranty or approve these plans for any accessibility standards.
3. Street barricades shall be installed on all dead end streets and as necessary during construction to maintain job safety.
4. Any damage caused to existing pavement, curbs, sidewalks, ramps, etc., shall be repaired by the contractor to the satisfaction of the City prior to acceptance of this project.
5. Density testing of compacted subgrade material, first course and second course compacted base, shall be made at 500 foot intervals. Any failed tests will be retested at the expense of the contractor.
6. The contractor shall coordinate with the City's field representative 48 hours prior to scheduled density testing. The City's field representative shall witness all testing.
7. The CONTRACTOR shall schedule all testing with an approved materials testing laboratory and notify the City's field representative of the time and location of all tests.
8. Traffic control signs and pavement markings in accordance with the Texas Manual on Uniform Traffic Control Devices to be installed as directed by the City of Taylor prior to City acceptance of this project.
9. Slope of natural ground adjacent to the right-of-way shall not exceed 4:1. If a 4:1 slope is not possible, a retaining wall or some other form of slope protection approved by the City shall be placed in a location acceptable to the City.
10. The City, engineer, contractor, and a representative from the testing lab shall attend a pre-paving conference prior to the start of paving. The contractor shall give the City's field representative 48 hours notice prior to this meeting.
- 11.

Failed tests shall be the financial responsibility of the contractor.

Wastewater Notes:

1.

The contractor, with City approval, shall raise manhole frames and covers and water valve boxes to finished pavement grade at the contractor's expense. All utility adjustments shall be completed prior to final paving construction.

2.

The location of any existing utility lines shown on these plans may not be accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor. The contractor shall locate all utilities prior to bidding the project.

3.

All iron pipe and fittings shall be wrapped with at least 8-mil polyethylene wrap, according to the COA Specification.

4.

All water mains, wastewater mains and service lines shall meet City of Taylor minimum cover specifications. All streets are to be cut to subgrade prior to installation of water mains.

5.

All wastewater lines shall be TV Video taped according to COA 510. The contractor shall supply two copies to the City's Field Representative.

6.

Gasketed PVC sewer main fittings shall be used to connect SDR-35 PVC to SDR-26 PVC pressure pipe or C-900.

7.

SDR-35 WW is not allowed.

8.

All sanitary sewers, excluding service lines, shall be mandrel tested per TCEQ criteria. A mandrel test will not be performed until backfill has been in place for a minimum of 30 days.

9.

All sanitary sewers, including service lines, shall be air tested per City of Austin Standard Specifications.

10.

Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe, unless specified otherwise by the City.

11.

City to be given 48 hours notice prior to all testing of water and wastewater lines. City inspection is required for all testing of water and wastewater lines.

12.
Water or wastewater line crossings shall be installed per TCEQ requirements.
13.
All manhole lids outside the pavement shall be bolted.
14.
Contractor to notify City of Taylor 48 hours prior to connecting to existing utilities.
Inspection of connections to existing utilities is required.
15.
All pipe bedding material shall conform to City of Austin Standard Specifications.
16.
Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
17.
Piping in and around lift station valve vaults will be painted and/or coated to the City's specifications.
18.
MCC's, junction boxes or any housing for electrical components shall be NEMA 4X stainless steel. Painted metal or any other type of box will not be accepted unless specifically identified in the plans.

Water Notes:

1.
The top of valve stems shall be at least 18", and no more than 36", below finished grade. Valve stem risers shall be welded on each end to the City's satisfaction.
2.
Fire hydrant leads to be ductile iron, Class 350, and installed per City of Taylor standard specifications and detail.
3.
The contractor shall provide cuts for all water lines and FH bury lines in accordance with the contract.
4.
Approved 5 1/4" fire hydrants: American Flow Control, B84B Mueller Company, Super Centurion 250, Clow Medallion Hydrant
5.
*All fire hydrants must meet City of Taylor thread specifications (National Thread)
6.
*Blue reflector markers shall be located on the centerline of the pavement across from all fire hydrants. Pavement markers at intersections shall be four-sided.
- 7.

All water lines, including service lines, shall be pressure and leak tested per City of Austin Standard Specifications and witnessed by the City of Taylor representative. All failed tests shall be the fiscal responsibility of the contractor, and the contractor may be required to re-test lines if the testing is not witnessed by the City. Contractor must notify the City of Taylor 48 hours prior to any testing.

8.

All water lines shall be sterilized and bacteriologically tested in accordance with City of Austin Standards. The contractor is responsible for sterilization and the City of Taylor is responsible for submitting bacteriological samples to the State unless otherwise approved by the Engineering department.

9.

All water valve risers not in pavement shall be set in concrete in accordance with the City's specifications and details. The standard detail is available on the City's web site.

10.

Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe unless otherwise approved by the Public Works department.

11.

Contractor to obtain a water meter from the City of Taylor for any water that may be required during construction. (512-352-3251)

12.

All water pipe and appurtenances larger than 12" shall have a maximum operating pressure greater than 250 psi unless specifically identified on the bid form.

13.

Manhole frames and covers and water valve boxes shall be raised to finished pavement grade at the contractor's expense with City inspection. All utility adjustments shall be completed prior to final paving construction.

14.

The location of any existing utility lines shown on these plans is the best available and may not be totally accurate. Any damage to existing utility lines, both known and unknown shall be repaired at the expense of the contractor. The Engineer and/or the City make no guarantee or warranty to the accuracy of these plans.

15.

All iron pipe and fittings shall be wrapped with at least 8-mil polyethylene wrap in accordance with the COA specification.

16.

All water mains, wastewater mains and service lines shall meet City of Austin Specifications minimum cover requirements. All streets are to be cut to subgrade prior to installation of water mains.

17.
City to be given 48 hours notice prior to all testing of water and wastewater lines.
City inspection is required for all testing of water and wastewater lines.
18.
All water valves over 24" in size shall have a by-pass line and valve installed. By-pass valves and lines are subsidiary to the cost of the valve unless specifically identified on the bid form.
19.
Contractor to notify City of Taylor 48 hours prior to connecting to existing utilities.
Inspection is required.
20.
All pipe bedding material shall conform to City of Taylor Standard Details.
21.
Tracer tape shall be installed on all water and wastewater mains in accordance with City of Austin Standards regardless of the type of pipe or depth of pipe installed.
22.
Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
23.
The City considers protection of its water system paramount to construction activities. City personnel will operate, or authorize the contractor to operate, all water valves that will pass through the City's potable water. The contractor may not operate any water valve, existing or proposed, that will allow water from the City's water system to flow to a proposed or existing water system without the express consent of the City. Notify the City two business days in advance of any request to operate a water valve. The general contractor may be fined \$500 or more, including additional theft of water fines, if a water valve is operated in an unauthorized manner, regardless of who operated the valve.

Storm Sewer Notes:

1.
The contractor with City inspection shall raise manhole frames and covers and water valve boxes to finished pavement grade. All utility adjustments shall be completed prior to final paving construction. The contractor will backfill around manholes and junction boxes with Class A concrete.
2.
All manhole lids shall be 32" or larger, unless expressly approved in writing by the Engineering Department. All lids outside the pavement will be bolted.
- 3.

The location of any existing utility lines shown on these plans is the best available and may not be totally accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor.

4.

Contractor to notify City of Taylor 48 hours prior to connecting to existing utilities.

5.

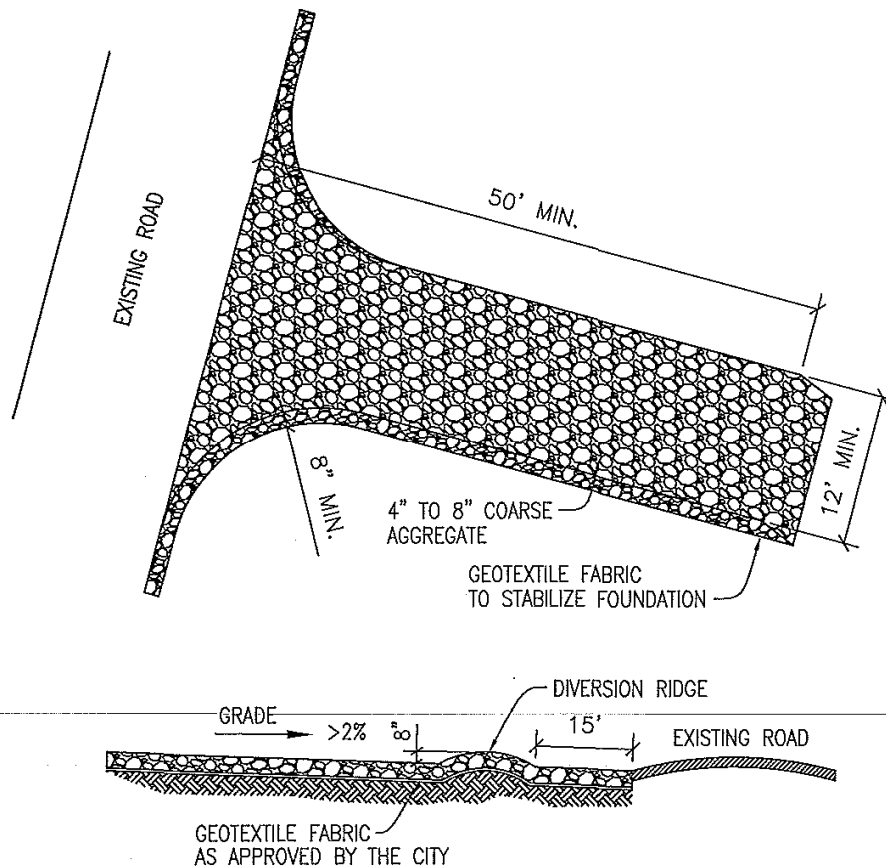
All pipe bedding material shall conform to City of Taylor Standard Details.

6.

Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.

7.

Contractor to install and maintain geo-textile fabric barrier (inlet protection) around storm sewer leads and inlets to prevent silt and other material from entering the storm sewer collection system.



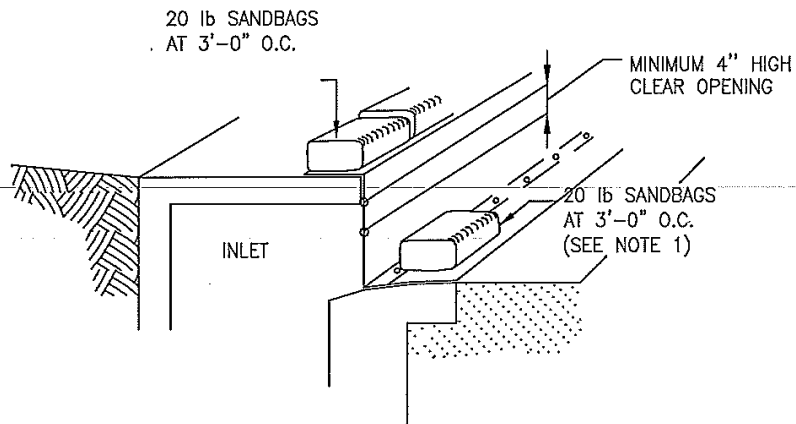
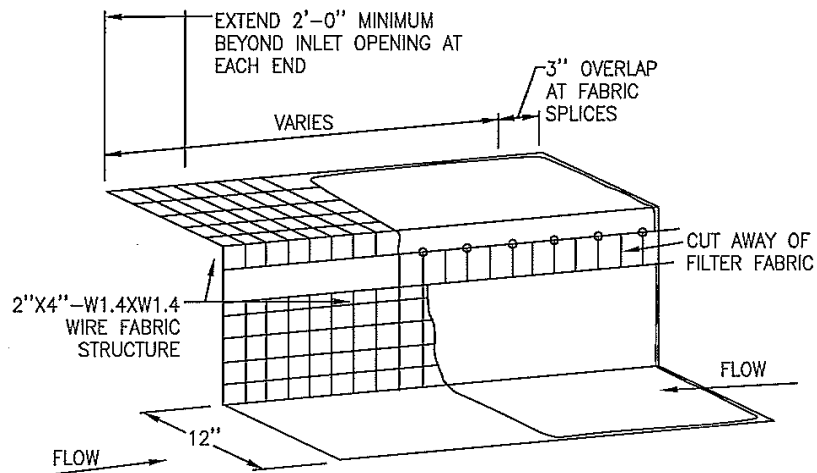
INSTALLATION:

- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION ENTRANCE ONTO A PUBLIC STREET WILL NOT BE ACCEPTED.
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:

- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

	APPROVED BY: CS	DATE: JULY 2009	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD
			STABILIZED CONSTRUCTION ENTRANCE	EN 001



NOTES:

1. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM WATER BEGINS TO OVERTOP THE CURB.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.



APPROVED BY:
CS

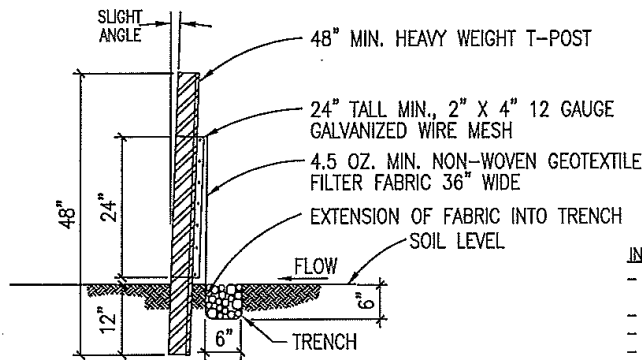
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

FILTER DIKE CURB INLET PROTECTION

STANDARD

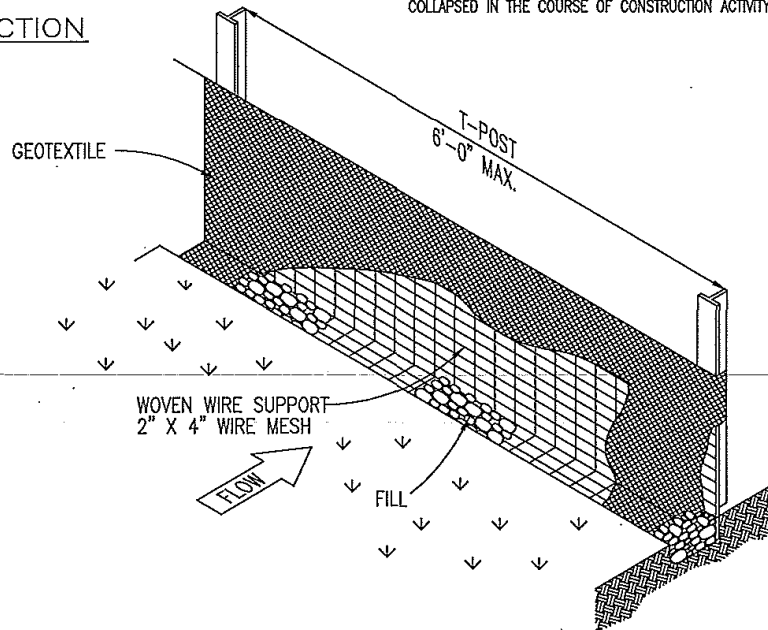
EN 002



CROSS SECTION

INSPECTION AND MAINTENANCE GUIDELINES:

- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.



INSTALLATION:

- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 11" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



APPROVED BY:
CS

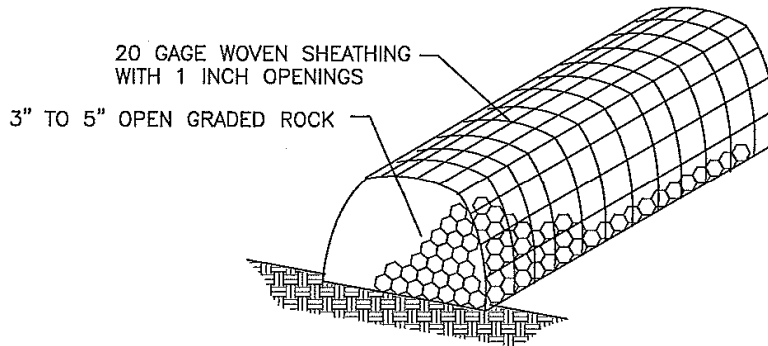
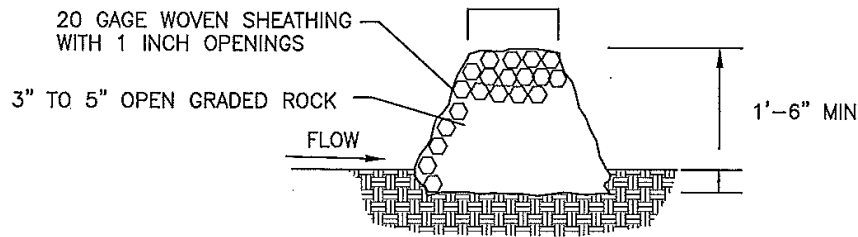
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD

EN 003

SILT FENCE DETAIL



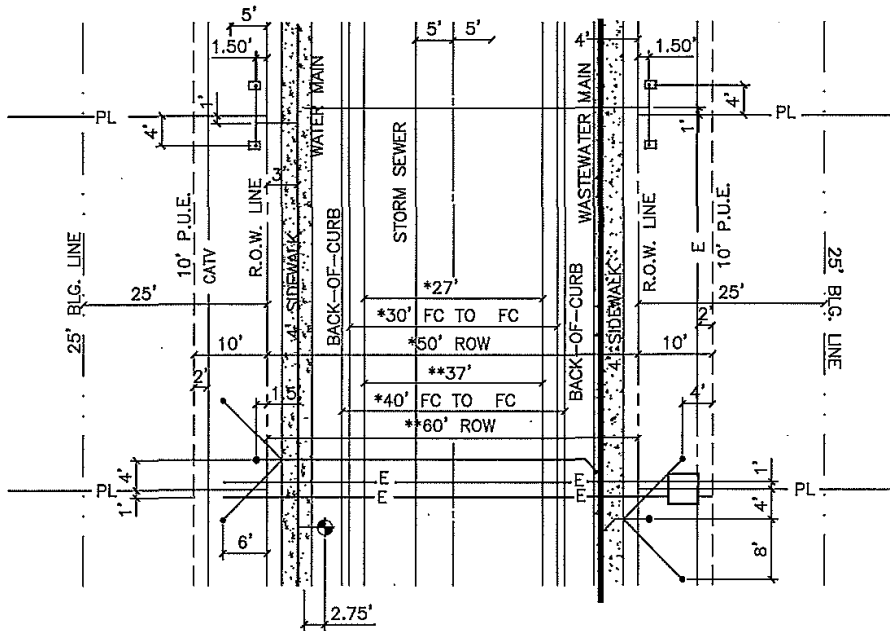
INSTALLATION:

- LAYOUT OF ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT IS REMOVED.

INSPECTIONS AND MAINTENANCE GUIDELINES:

- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATION IN STREAM BEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD EN 004
	CS	JULY 2009		



MINIMUM COVER BELOW FINISH-GRADE

ELECTRIC PRIMARY	36"
ELECTRIC SECONDARY	24"
WATER	48"
WASTEWATER	48"
STORM SEWER	36"
GAS	24"
TELECOMMUNICATIONS	24"



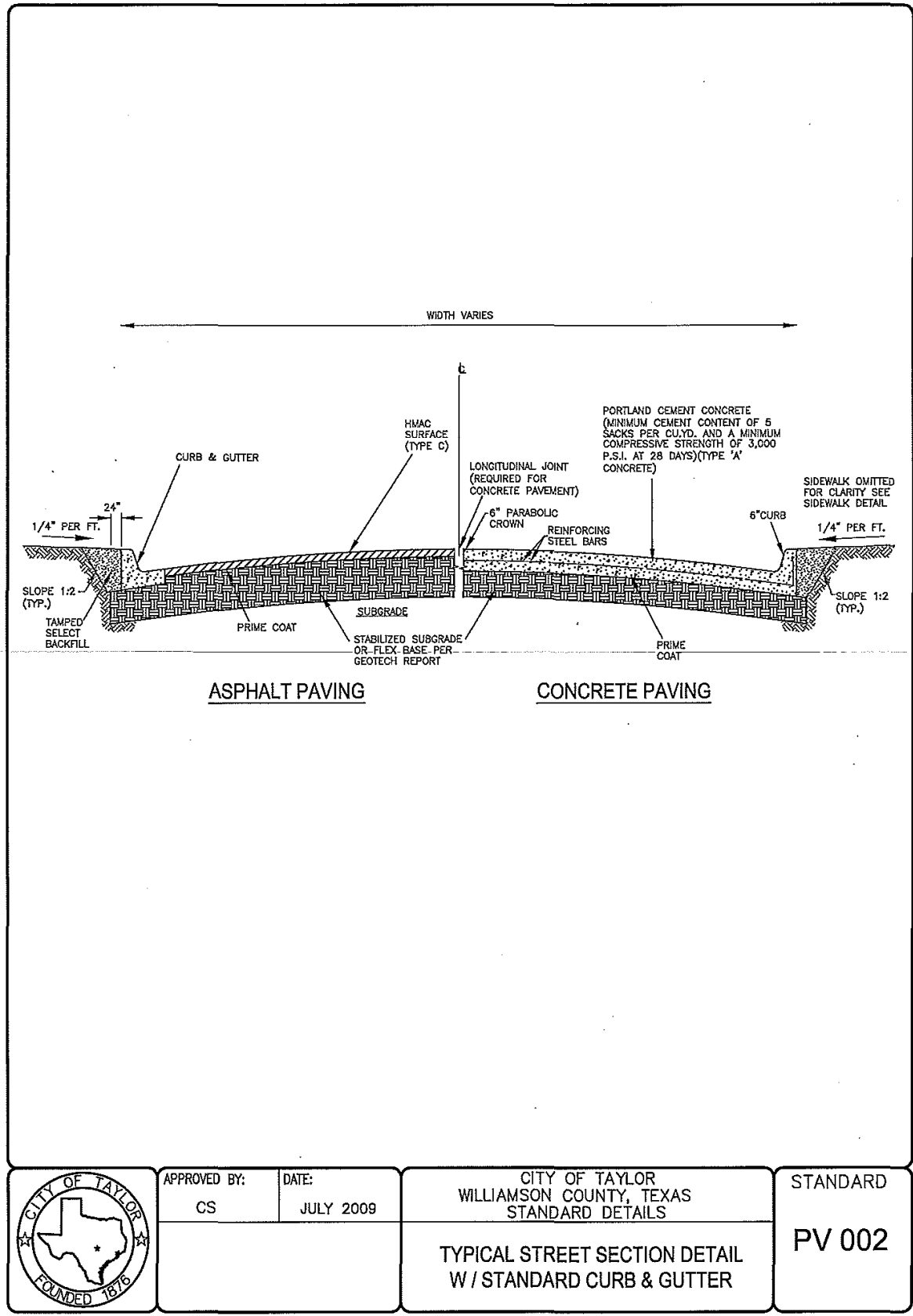
APPROVED BY: CS
DATE: JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

TYPICAL STREET LAYOUT
AND UTILITY ASSIGNMENTS

STANDARD

PV 001



APPROVED BY:
CS

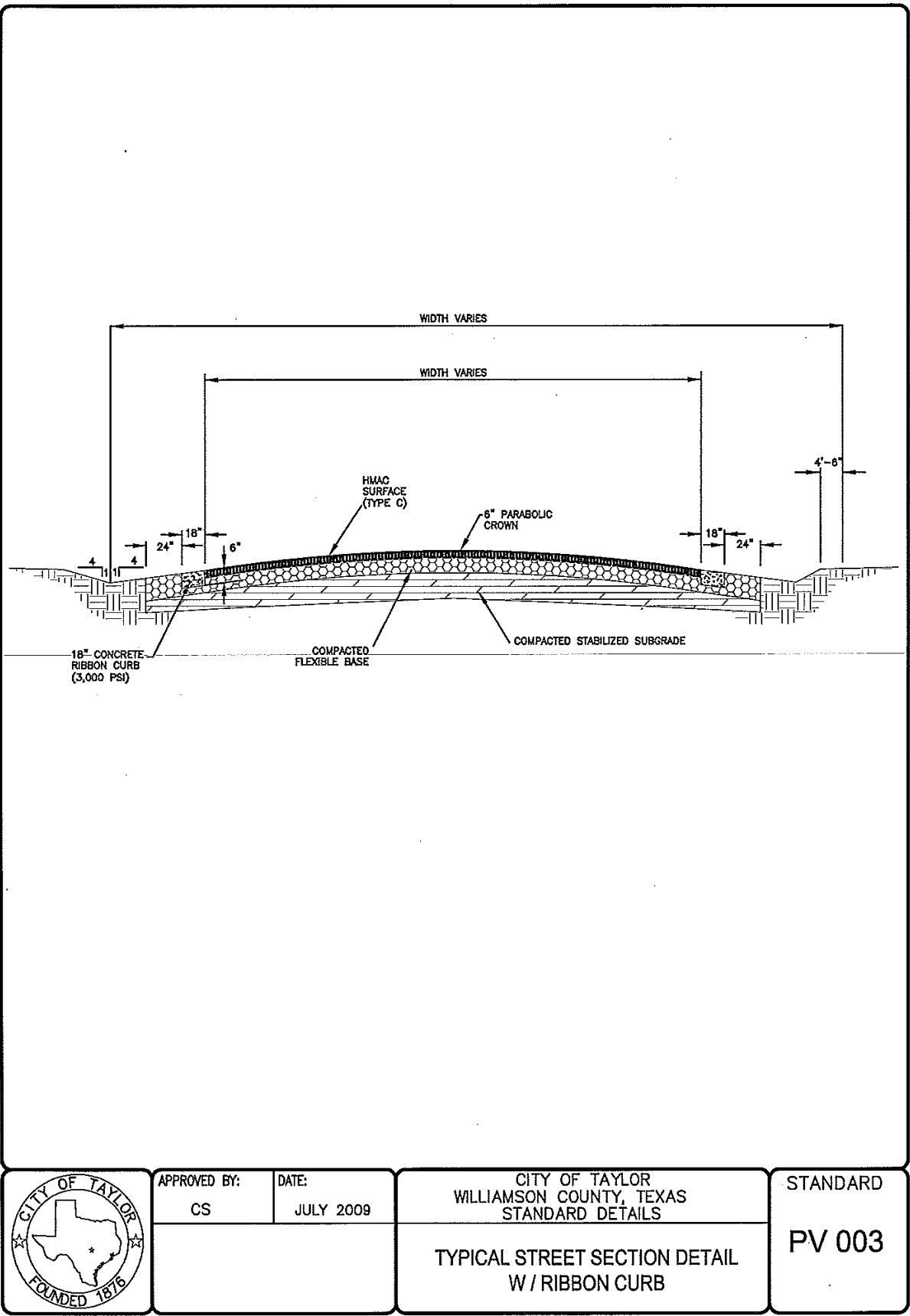
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD

PV 002

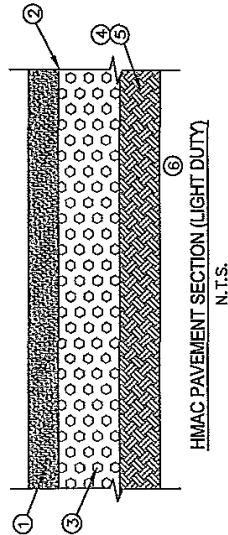
TYPICAL STREET SECTION DETAIL
W / STANDARD CURB & GUTTER



APPROVED BY:	DATE:
CS	JULY 2009

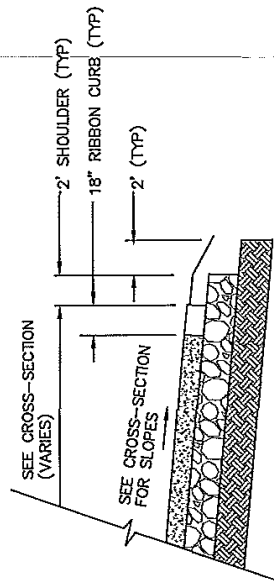
CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS
TYPICAL STREET SECTION DETAIL W / RIBBON CURB

STANDARD
PV 003



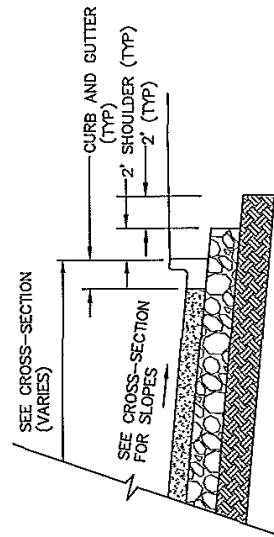
GENERAL NOTES:

1. HOT MIX ASPHALTIC CONCRETE CONFORMING TO TxDOT ITEM 340, TYPE "C"
2. MC-30 PRIME COAT MEETING THE REQUIREMENTS OF TxDOT ITEM 310 SHALL BE APPLIED AT A RATE 0.25 GALLON/SQUARE YARD. (RATE SHALL BE ADJUSTED IN THE FIELD TO PROVIDE UNIFORM COVERAGE WITHOUT RUNOFF. RATE TO BE APPROVED BY THE ENGINEER.)
3. CRUSHED AGGREGATE BASE CONFORMING TO TxDOT ITEM 247, TYPE A, GRADE 1. THE CRUSHED STONE BASE SHALL BE PLACED IN MAXIMUM 6 INCH LOOSE LIFTS AND COMPACTED TO A DENSITY EQUAL TO AT LEAST 100% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TEST METHOD TEX-113-E, AT $\pm 2\%$ OF OPTIMUM MOISTURE. THE BASE MATERIAL SHOULD EXTEND 24 INCHES BEHIND THE CURB.
4. THE EXPOSED SUBGRADE SHOULD BE PREPARED BY REMOVING ALL TREE ROOTS AND UNDESIRABLE MATERIAL SUCH AS SOFT CLAYS. THE UPPER 6 INCHES SHOULD BE COMPACTED TO A DENSITY EQUAL TO AT LEAST 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE BY STANDARD PROCTOR (ASTM D-698). SOIL MOISTURE SHOULD BE WITHIN $+3\%$ OR -1% OF OPTIMUM.
5. FILL SECTIONS SHALL BE FREE OF VEGETATION OR ORGANICS. MATERIAL SHALL CONSIST OF COHESIVE SOILS AND HAVE A MAXIMUM LIQUID LIMIT OF 40, PI BETWEEN 6 AND 20, AND A MAXIMUM PARTICLE SIZE OF 3 INCHES. FILLS SHOULD BE COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES AFTER COMPACTION AND BE COMPACTED IN ACCORDANCE WITH ITEM 3, ABOVE. FILL SHALL BE TxDOT ITEM 247, TYPE "A" - GRADE 2.
6. EXISTING UNDISTURBED SOIL.



TYPICAL STREET SECTION WITH RIBBON CURB

N.T.S.



TYPICAL STREET SECTION WITH STANDARD CURB AND GUTTER

N.T.S.



APPROVED BY:
CS

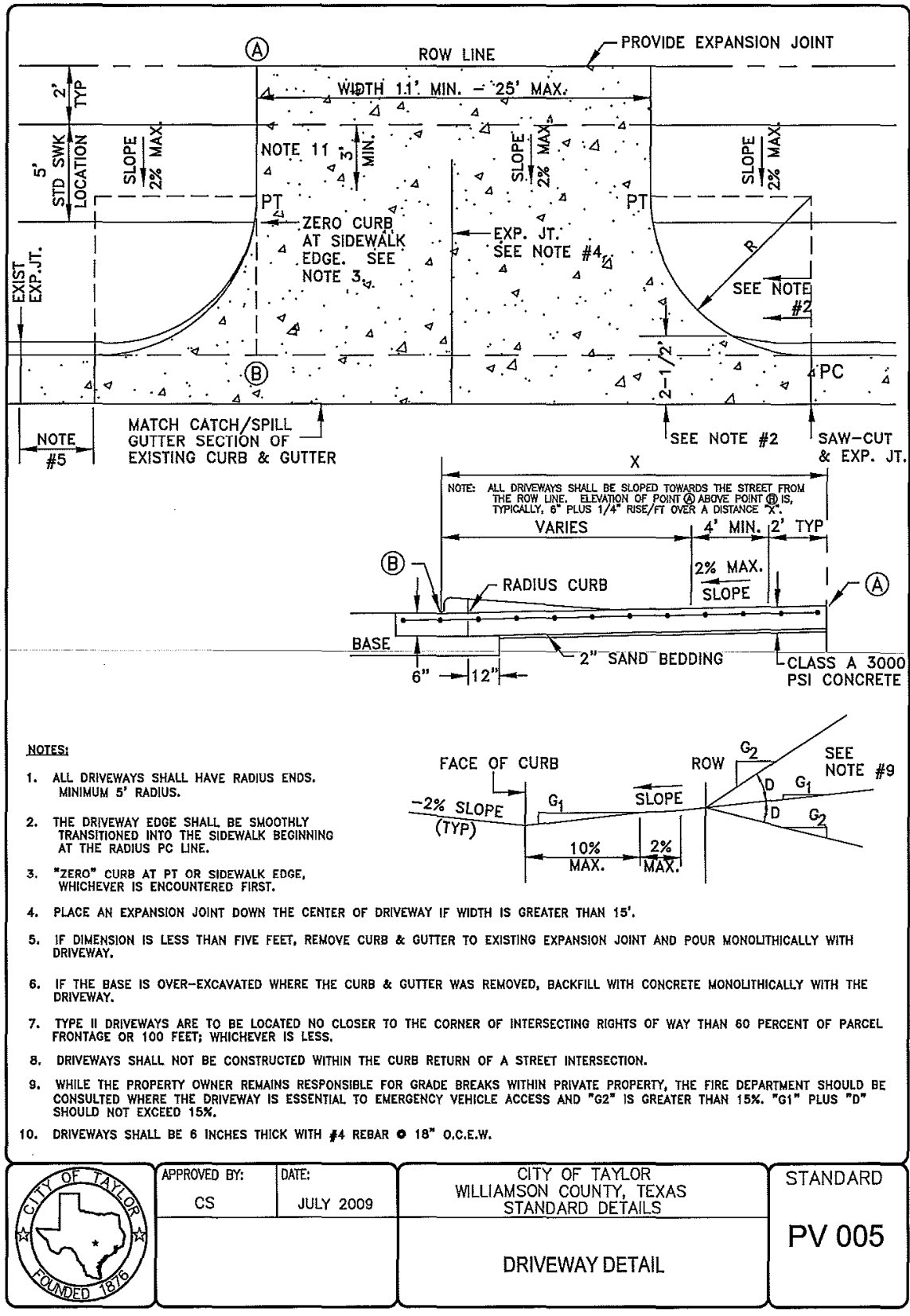
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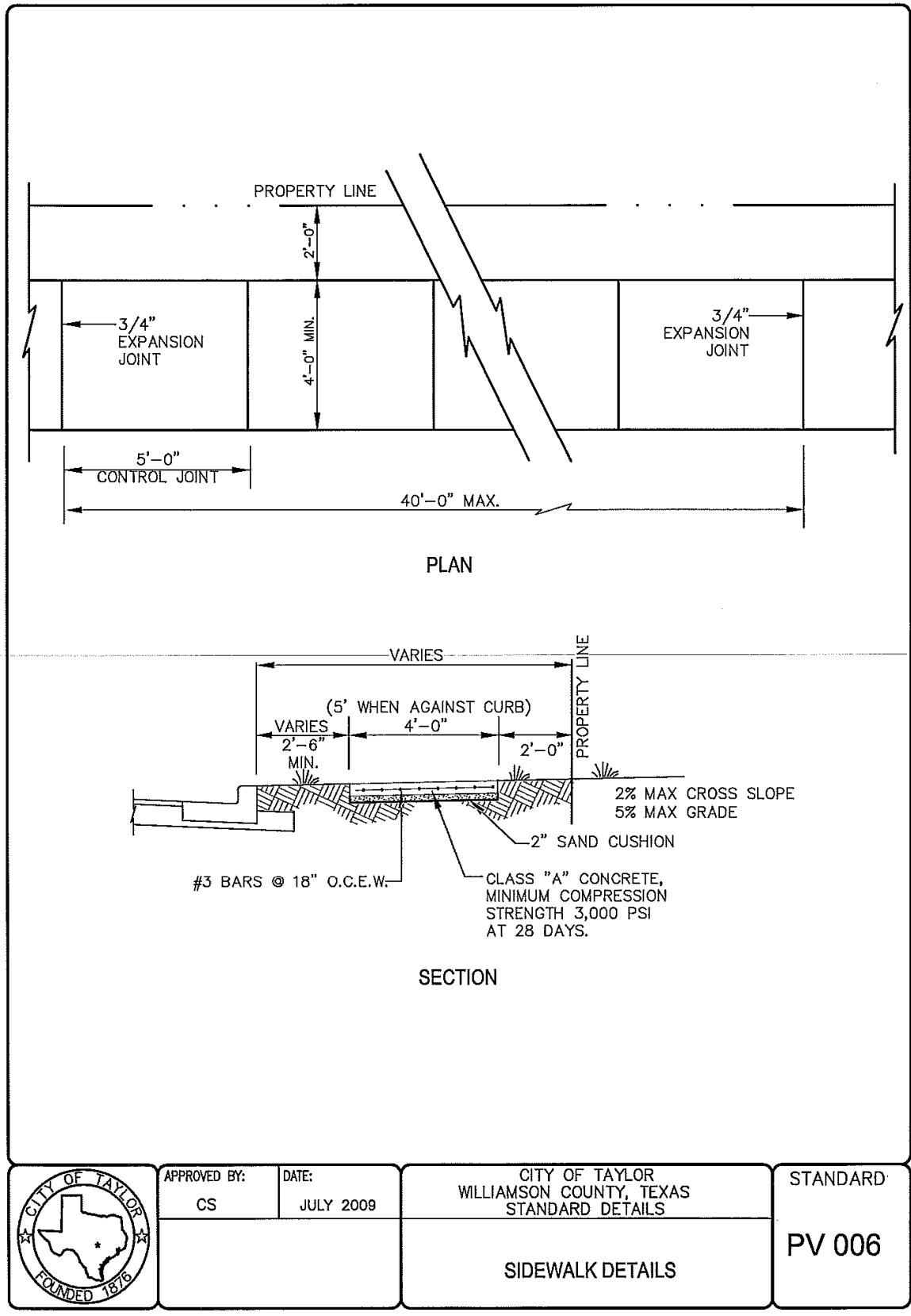
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

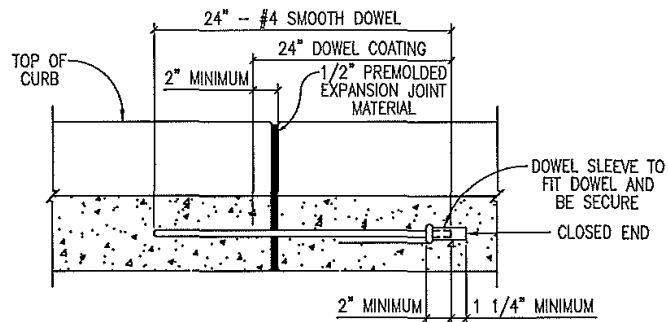
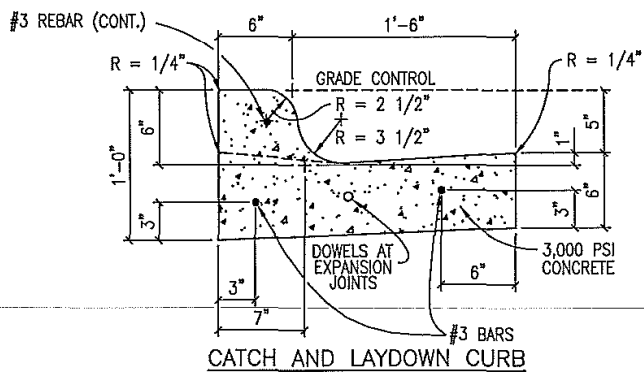
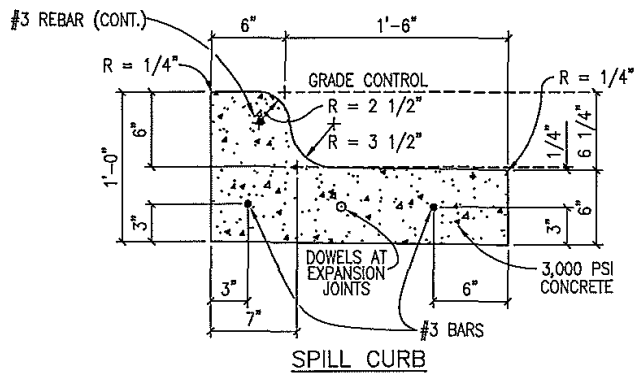
PAVEMENT SECTIONS

STANDARD

PV 004







NOTES:

1. EXPANSION JOINT INTERVALS NOT TO EXCEED 40'-0".
2. 4" MINIMUM FLEX BASE UNDER CURB AND GUTTER.



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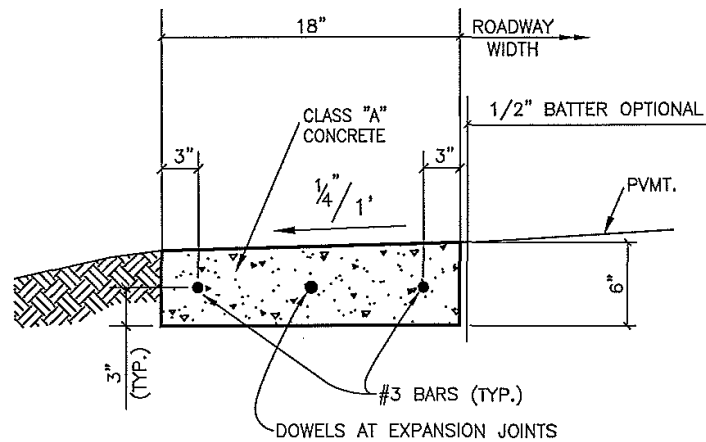
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CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD CURB AND GUTTER DETAIL

STANDARD

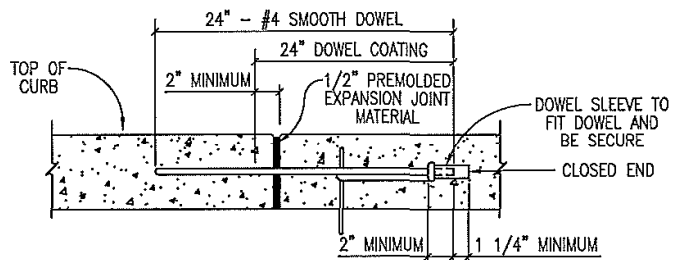
PV 007



NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.

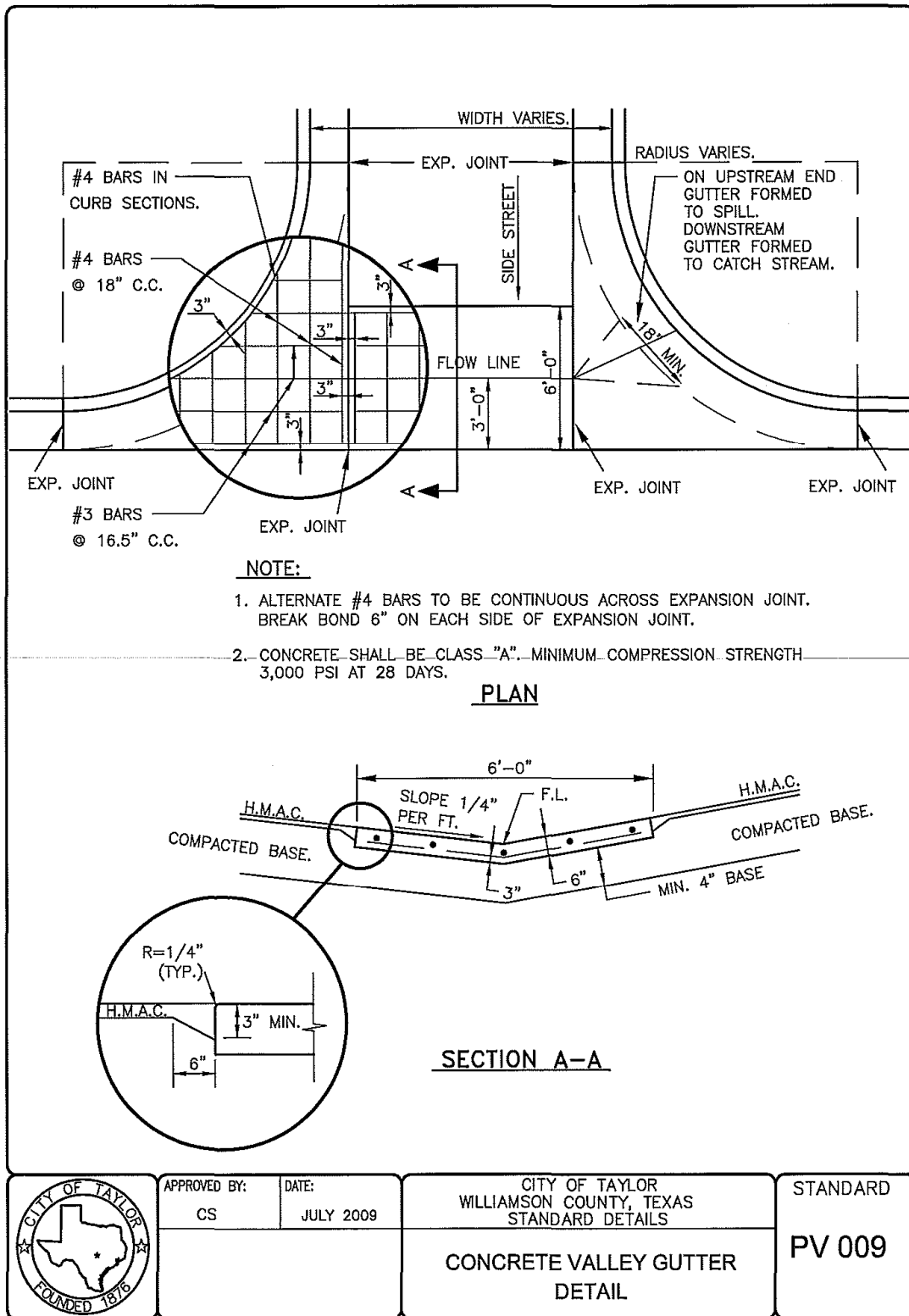
RIBBON CURB

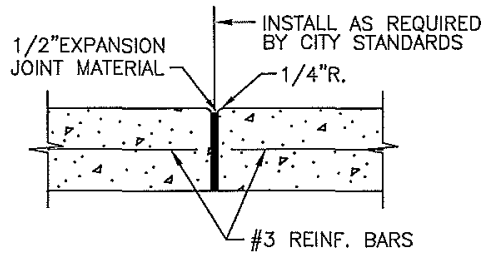


NOTE:
EXPANSION JOINT INTERVALS NOT TO EXCEED 40'-0".

CURB DOWEL DETAIL

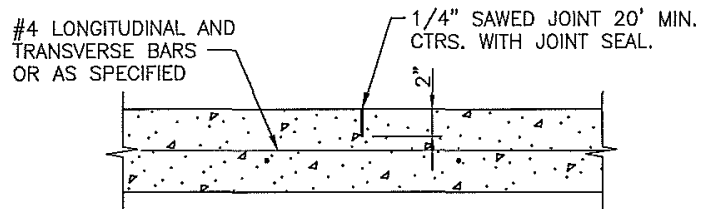
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	CS	JULY 2009		
			RIBBON CURB DETAILS	





CURB & GUTTER EXPANSION JOINT DETAIL

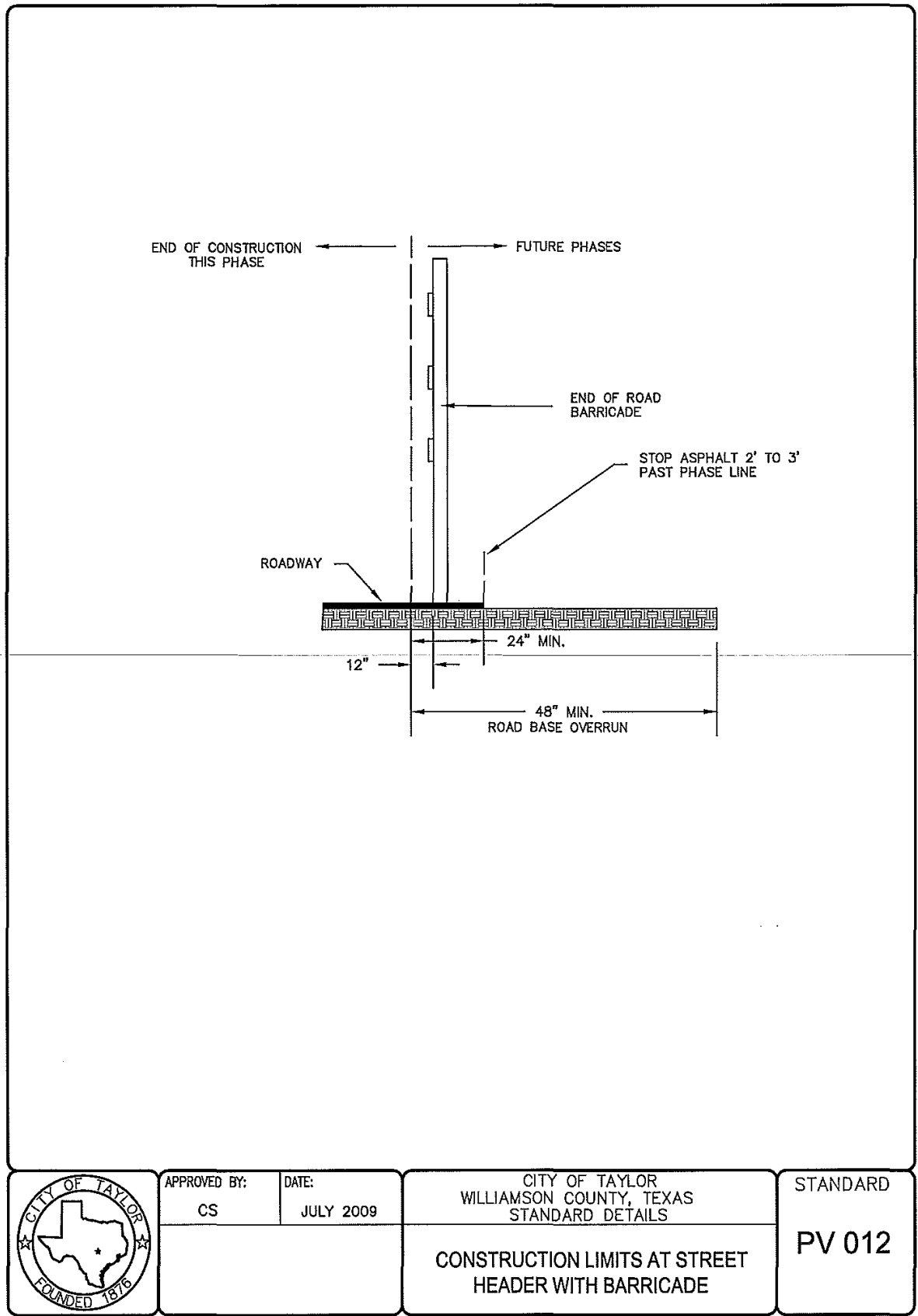
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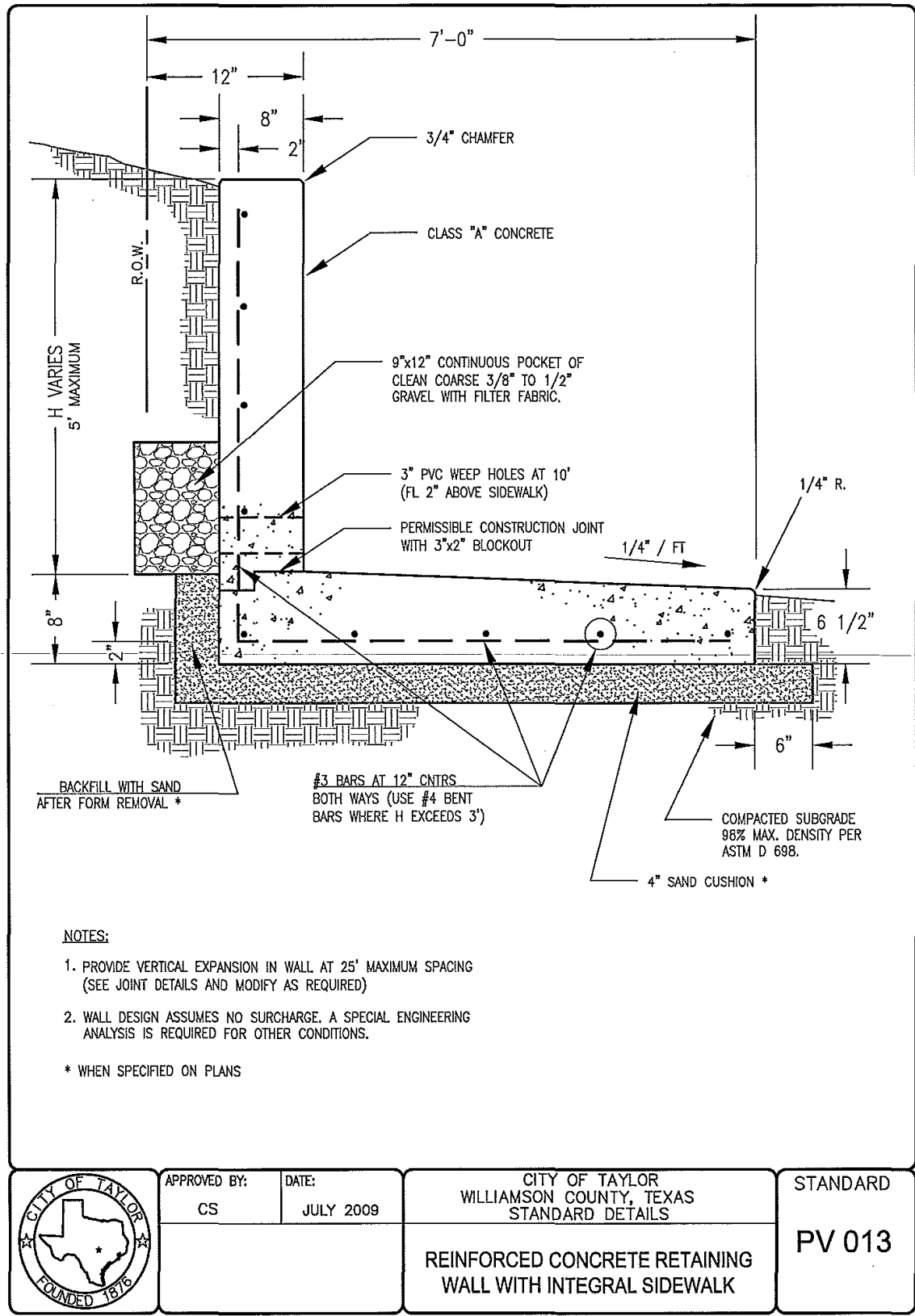


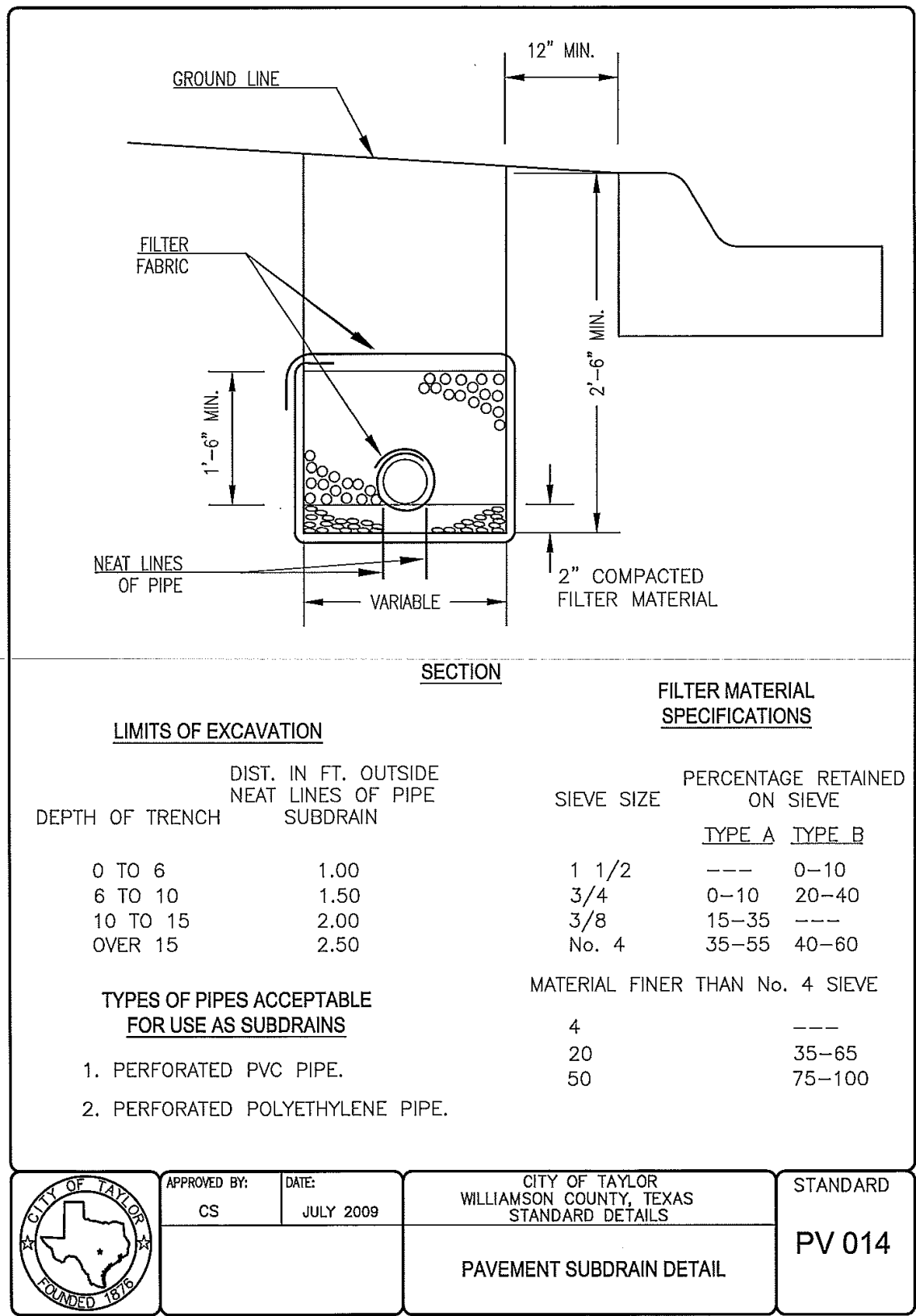
CONTRACTION JOINT DETAIL

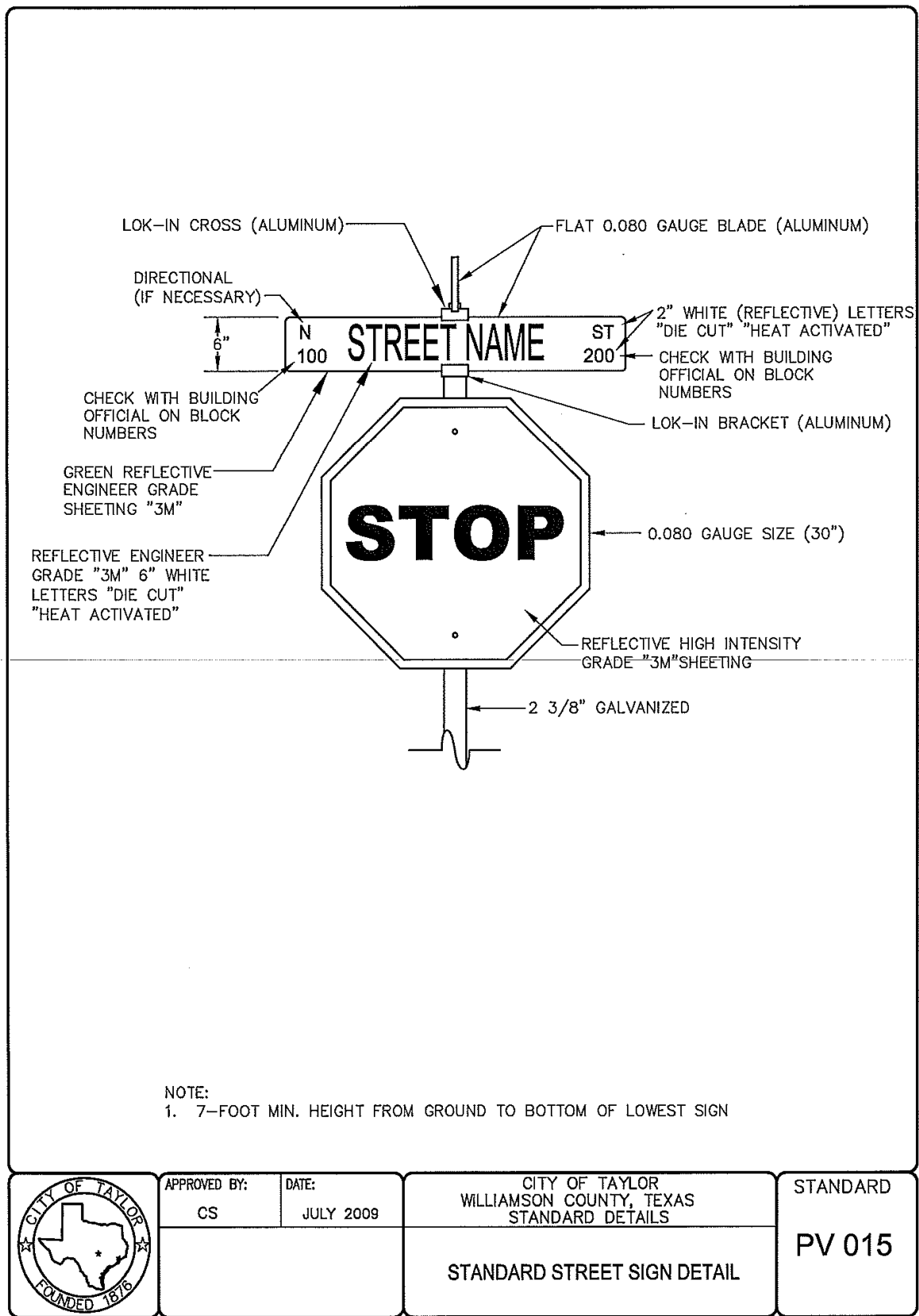
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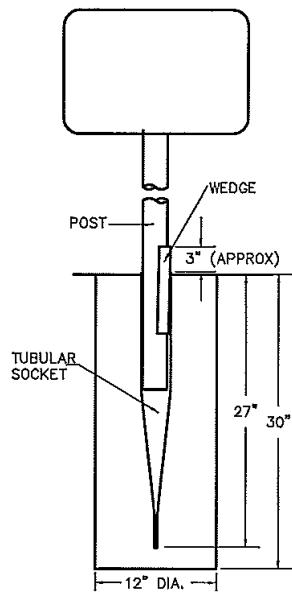
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	CS	JULY 2009		
			JOINT DETAILS (2 OF 2)	



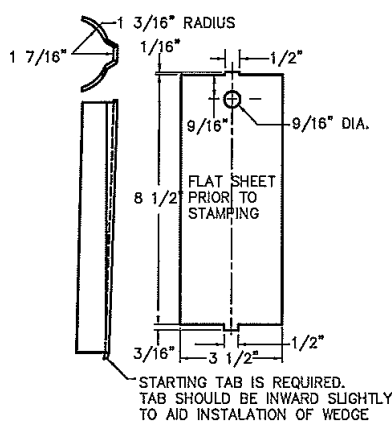






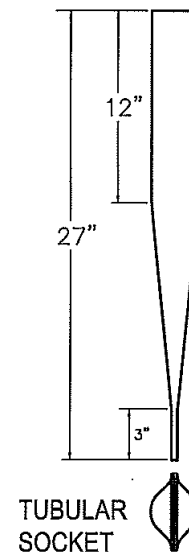


POST DETAIL



WEDGE DETAIL

WEDGE IS FABRICATED FROM 0.109\"/>



TUBULAR SOCKET DETAIL

POST – 13 BWM TUBING (2.375" OUTSIDE DIAMETER)

0.095" NOMINAL WALL THICKNESS
SEAMLESS OR ELECTRIC-RESISTANCE WELDED STEEL TUBING
STEEL SHALL BE HSLAS Gr 55 PER ASTM A1011 OR ASTM A1008
OTHER STEEL MAY BE USED IF THEY MEET THE FOLLOWING:
55,000 PSI MINIMUM YIELD STRENGTH
70,000 PSI MINIMUM TENSILE STRENGTH
18% MINIMUM ELONGATION IN 2"
WALL THICKNESS (UNCOATED) SHALL BE WITHIN THE RANGE OF 0.083" TO 0.099"
OUTSIDE DIAMETER (UNCOATED) SHALL BE WITHIN THE RANGE OF 2.369" TO 2.381"
GALVANIZATION PER ASTM A123 OR A653 G210. FOR PRECOATED STEEL TUBING (ASTM A653)
RECOAT TUBE OUTSIDE DIAMETER WELD SEAM BY METALLIZING WIRE PER ASTM B833

SOCKET

TUBULAR SOCKET PREFABRICATED FROM 12 BWM SEAMLESS OR ELECTRIC-RESISTANCE WELDED STEEL TUBING
2.875" OUTSIDE DIAMETER X 0.109" NORMAL WALL THICKNESS
STEEL SHALL BE HSLAS Gr 55 PER ASTM A1011 OR ASTM A1008
OTHER STEEL MAY BE USED IF THEY MEET THE FOLLOWING:
55,000 PSI MINIMUM YIELD STRENGTH
70,000 PSI MINIMUM TENSILE STRENGTH
20% MINIMUM ELONGATION IN 2"
WALL THICKNESS (UNCOATED) SHALL BE WITHIN THE RANGE OF 0.097" TO 0.113"
GALVANIZATION PER ASTM A123 AFTER FABRICATION, OR PER ASTM A653 G210. FOR PERCOATED STEEL TUBING (ASTM A653) RECOAT TUBE OUTSIDE DIAMETER WELD SEAM BY METALLIZING WITH ZINC WIRE PER ASTM B833.



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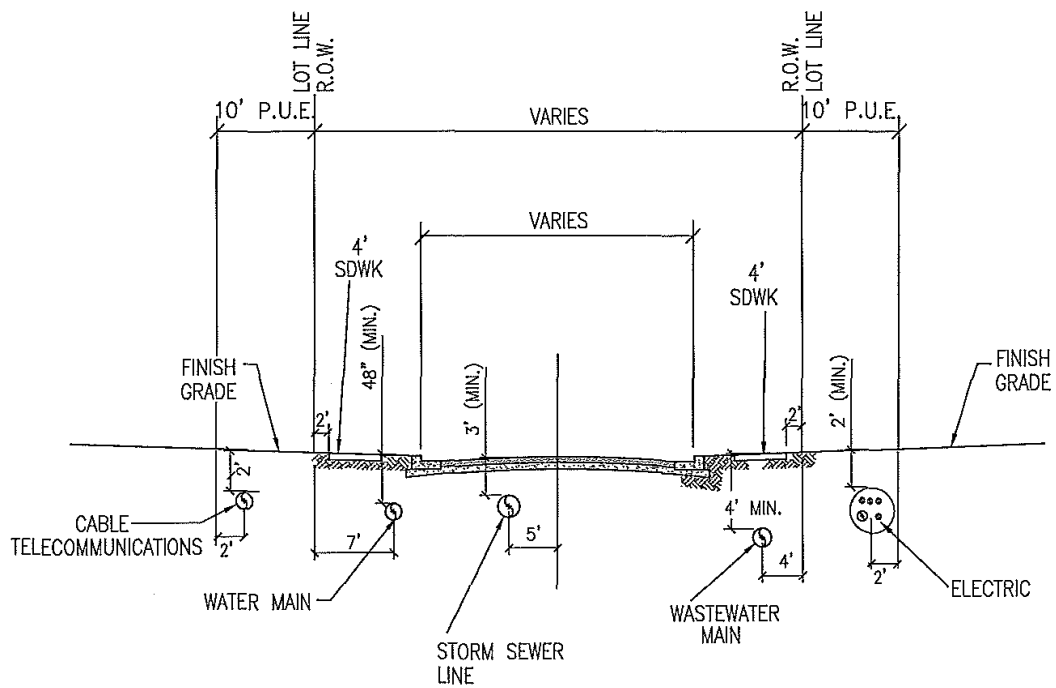
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CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

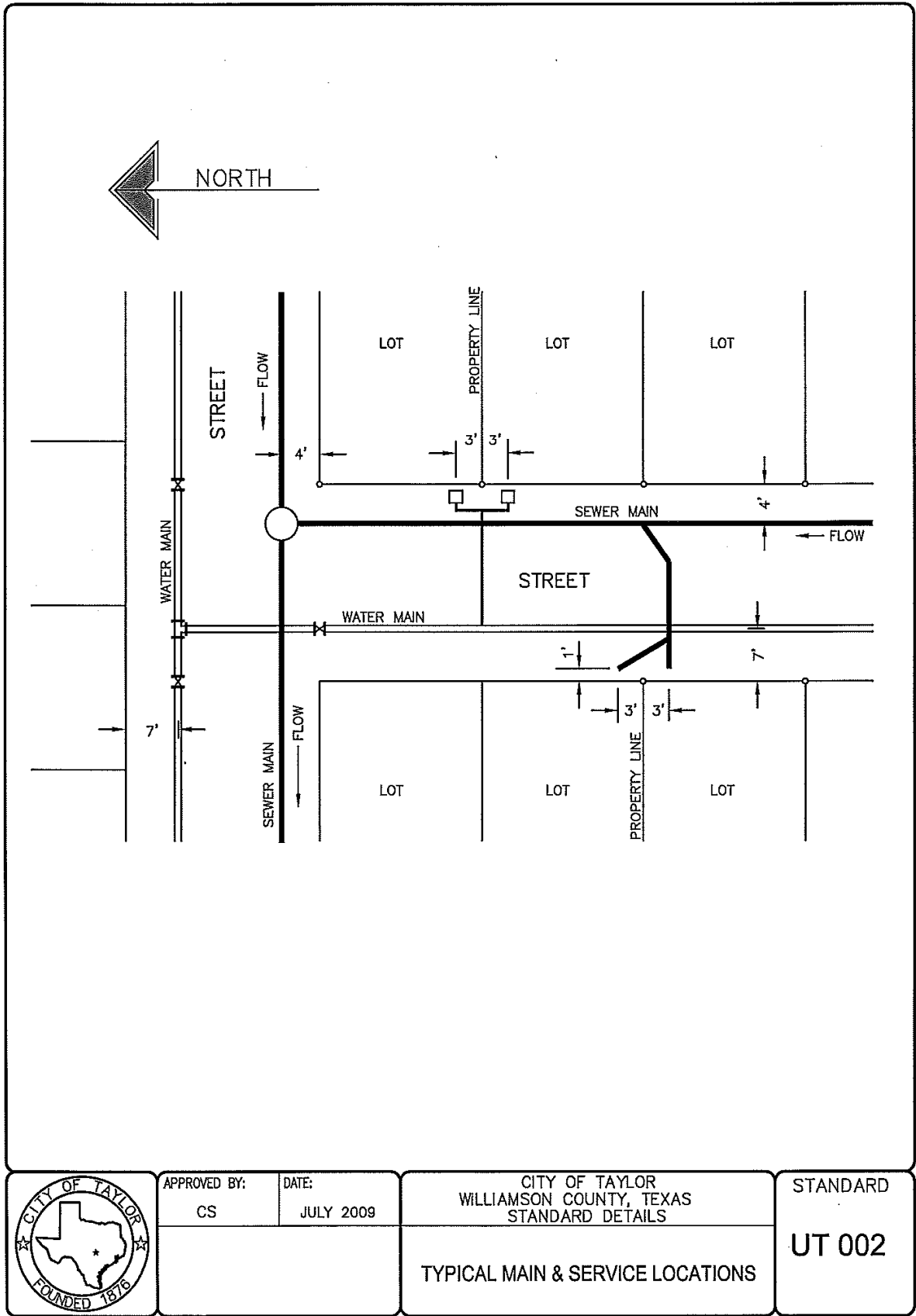
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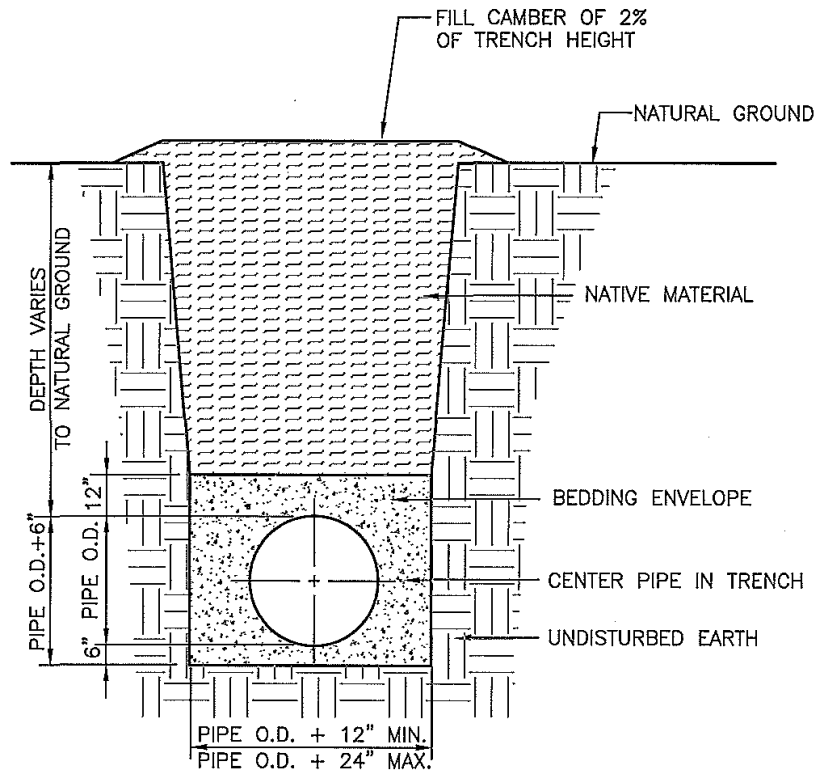
STANDARD

PV 016



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	CS	JULY 2009		UT 001
				TYPICAL UTILITY ASSIGNMENTS





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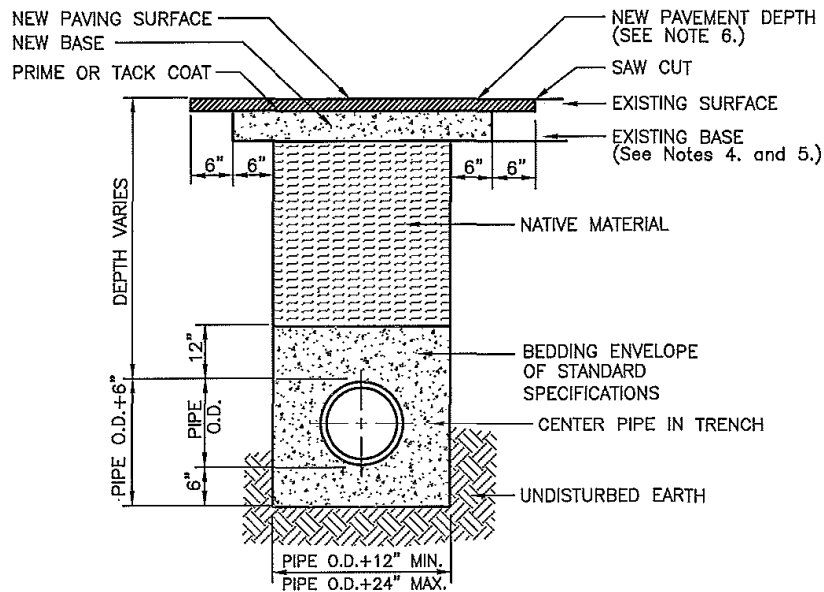
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

TYPICAL TRENCH
WITH UNFINISHED SURFACE

STANDARD

UT 003



NOTES:

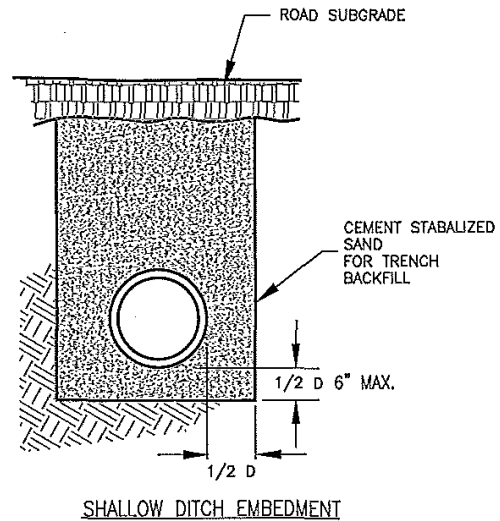
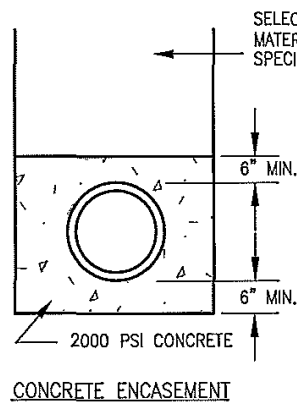
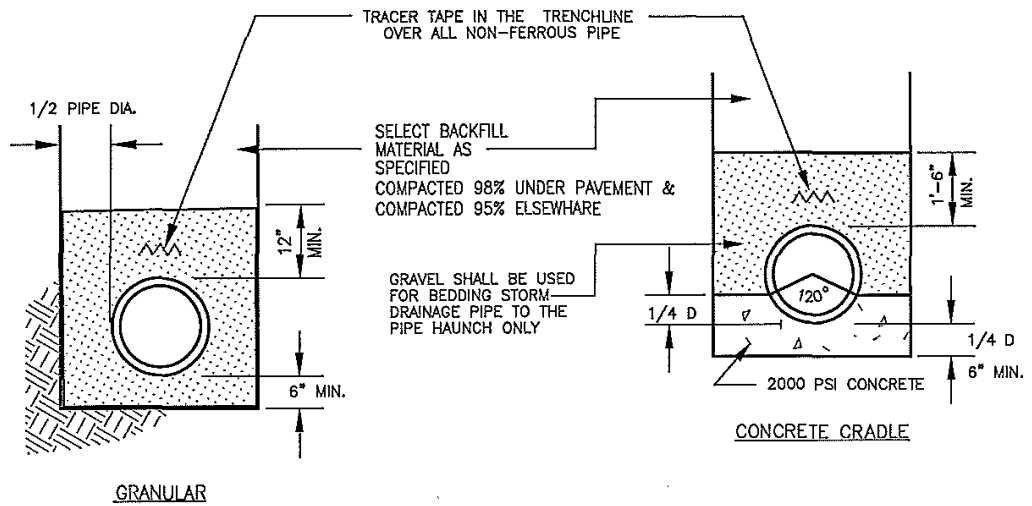
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 12" WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 6" WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 10 INCHES, WHICHEVER IS GREATER
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 8 INCHES OF BASE OR MATCH EXISTING, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 2 INCHES, WHICHEVER IS GREATER
7. ALL PRESSURE PIPE SHALL BE PROVIDED WITH THRUST BLOCKS WHERE CHANGES IN DIRECTION OCCUR, AT TEES, BENDS, CROSSES, CHANGES IN SLOPE, STOPS (DEAD ENDS) VALVES AND OR AS SHOWN, ON THE PLANS OR AS DIRECTED BY THE ENGINEER.



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CS	JULY 2009

CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS
TYPICAL TRENCH WITH PAVED SURFACE

STANDARD
UT 004



**** TYPICAL BEDDING SPECIFICATIONS:**

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED	WASHED GRAVEL % RETAINED
1/2"	0	0	0
3/8"	0-2	5-25	-
4m	40-85	80-100	-
10m	95-100	96-100	-
3/4"	-	-	100



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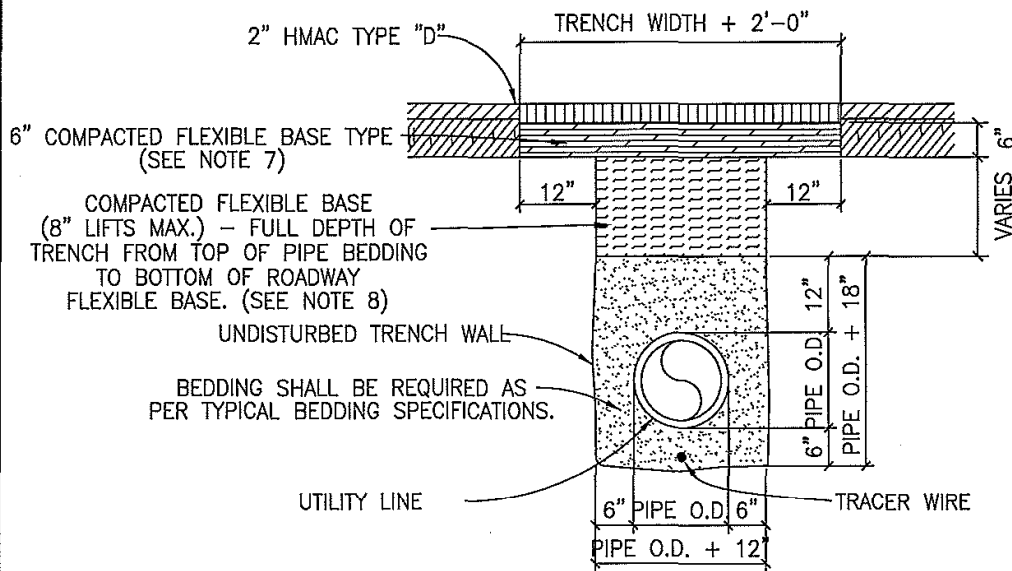
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JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD
EMBEDMENT AND ENCASEMENT

STANDARD

UT 005



NOTES:

1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
5. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY FIVE HUNDRED (500) FEET FOR EACH SIX (6) INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY.
6. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
7. FLEXIBLE BASE: (ROADWAY BASE)
TxDOT TYPE A - GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 100% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
8. FLEXIBLE BASE: (TRENCH BACKFILL)
TxDOT TYPE A - GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 98% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
9. CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER PRIOR TO USE.



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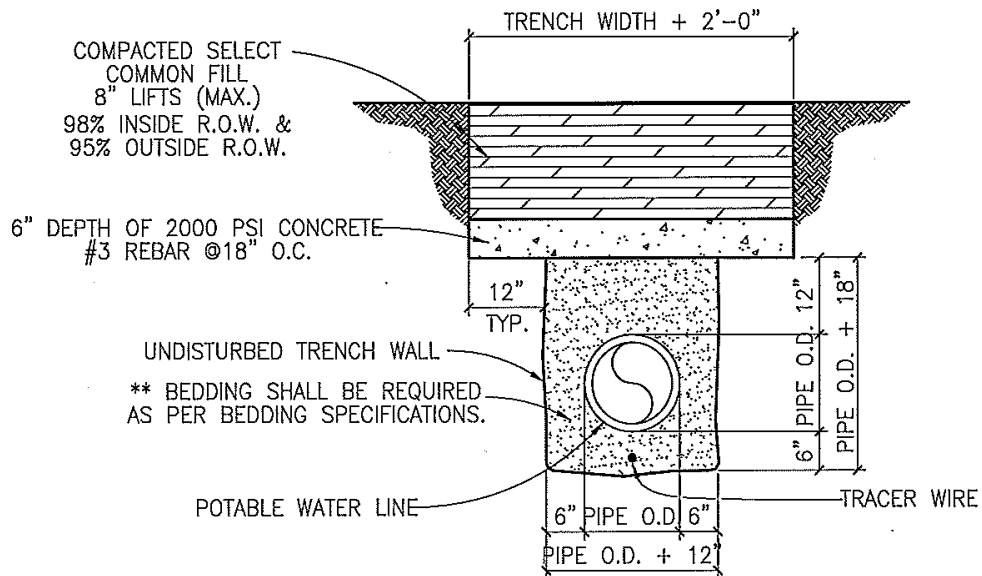
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

TRENCH DETAIL WITH PAVEMENT
REPLACEMENT UNDER
EXISTING ROADWAY

STANDARD

UT 006



* WHERE 48" MINIMUM COVER CAN NOT BE OBTAINED OR DUE TO POTENTIAL SURFACE LOADING THE CITY MAY REQUIRE A CAP TO BE INSTALLED.

**** TYPICAL BEDDING SPECIFICATIONS:**

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED	WASHED GRAVEL % RETAINED
1/2"	0	0	0
3/8"	0-2	5-25	-
4m	40-85	80-100	-
10m	95-100	96-100	-
3/4"	-	-	100



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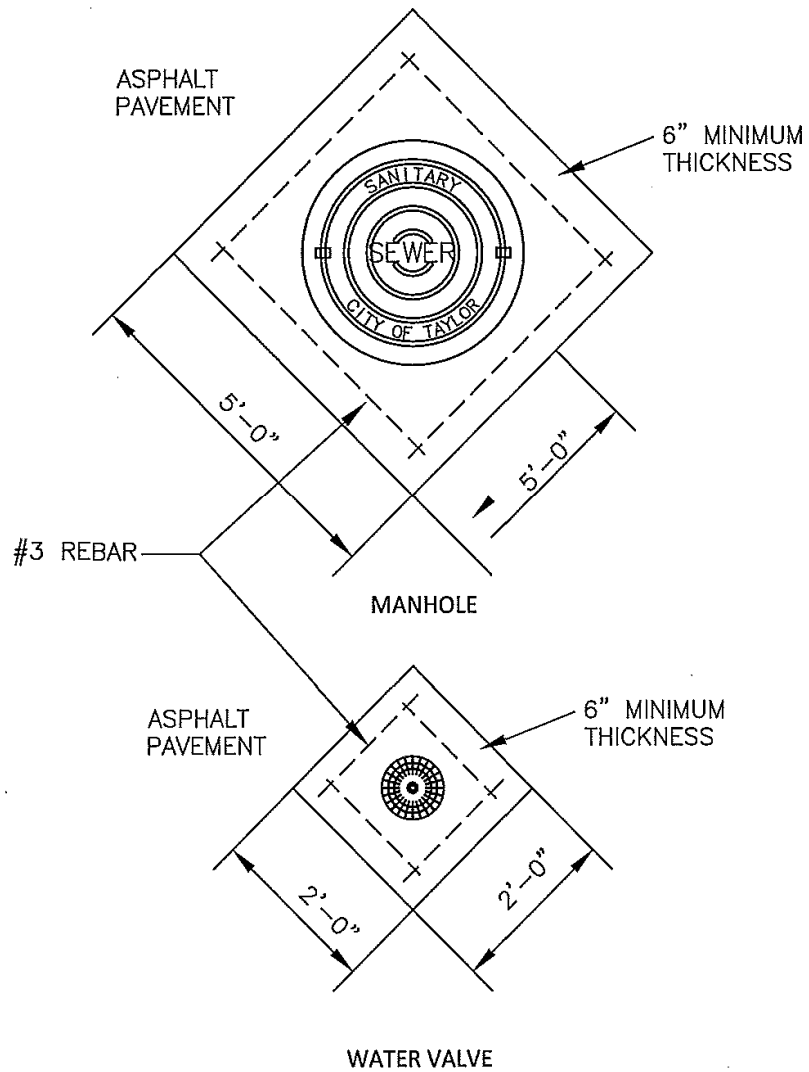
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

CONCRETE TRENCH CAP DETAIL

STANDARD

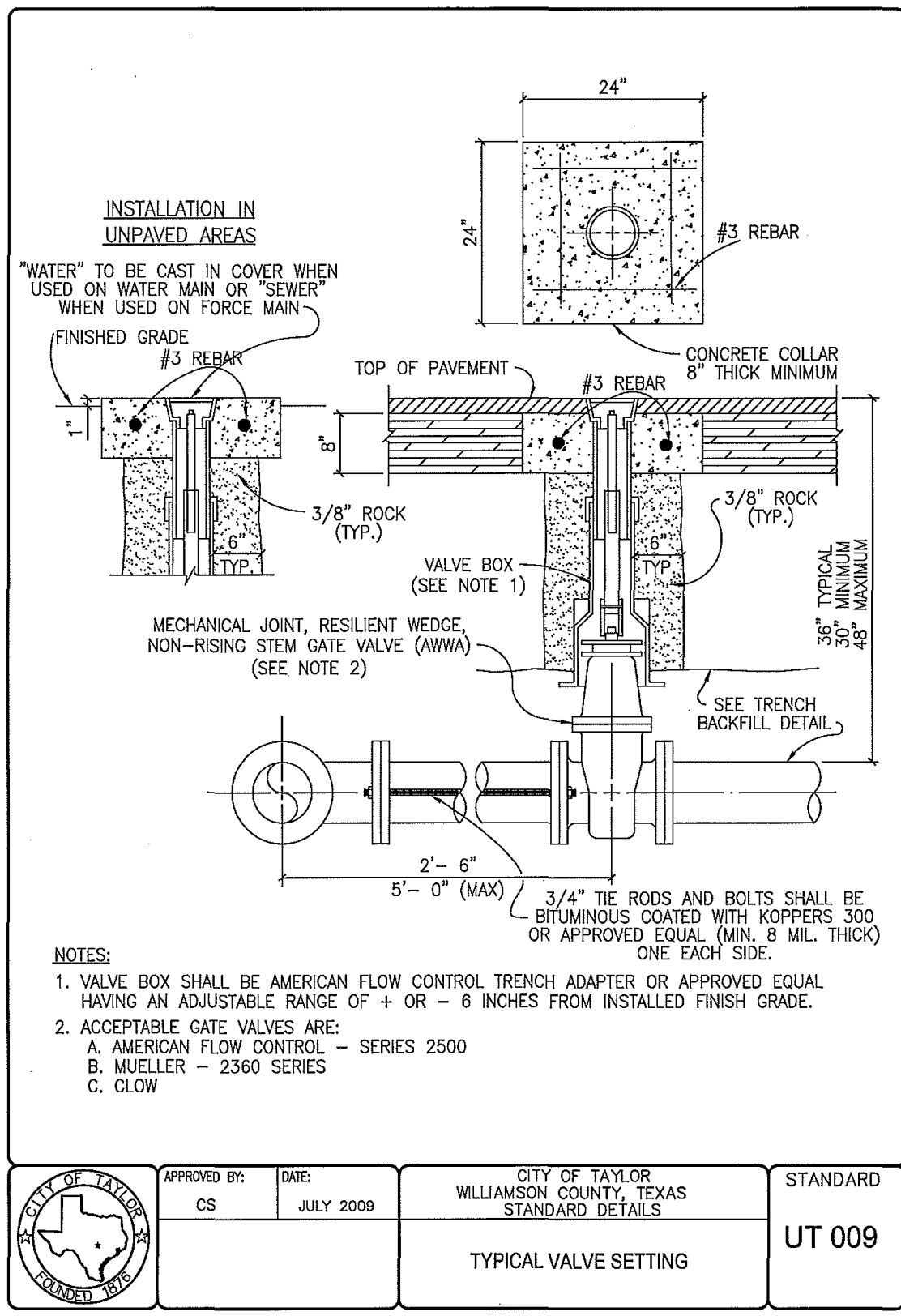
UT 007

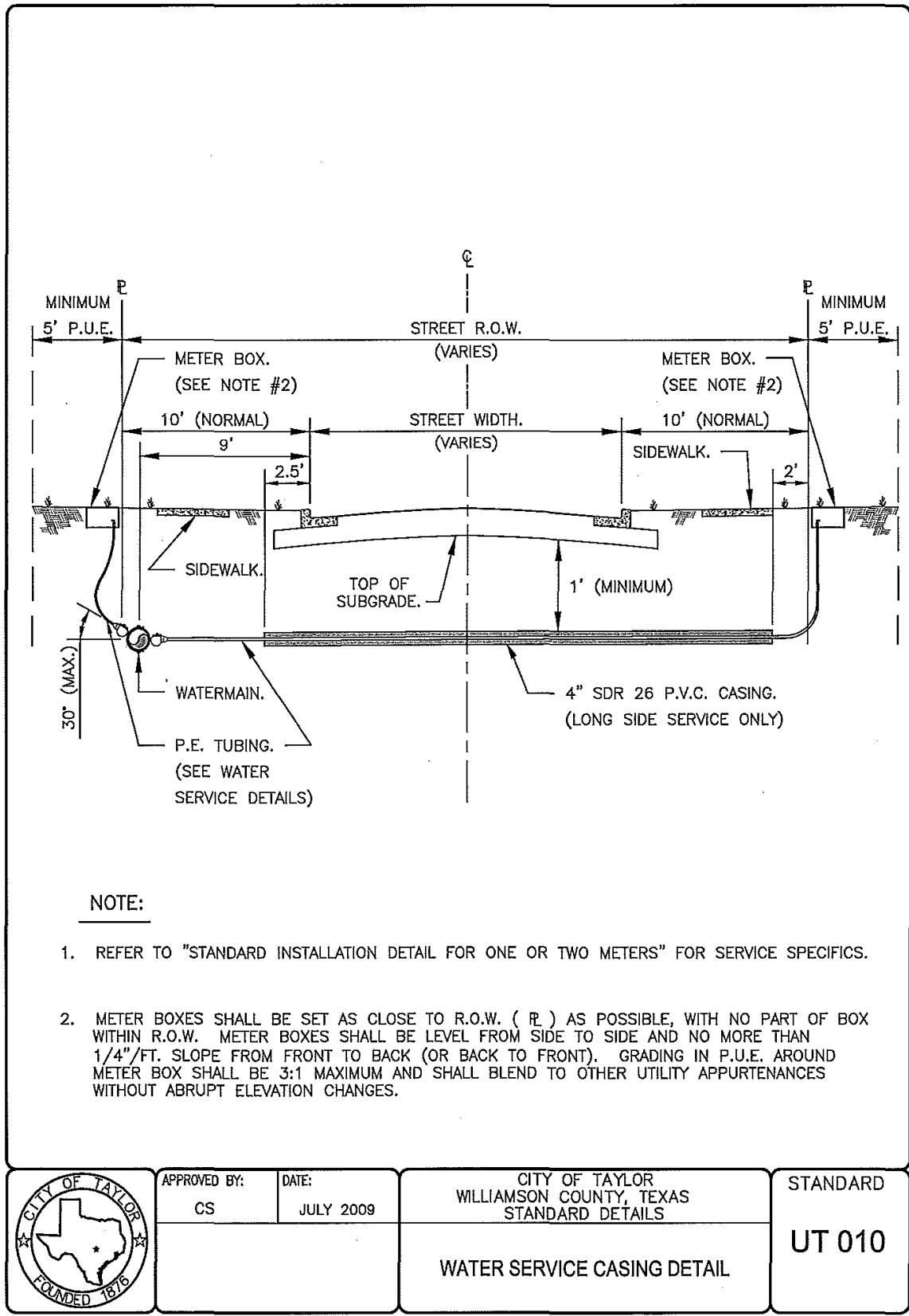


NOTES:

1. ALL ASPHALT PAVEMENT SHALL BE REMOVED ALONG NEAT SAW CUT LINES.
2. MANHOLE BOXOUT REQUIRED FOR ALL MANHOLES (STORM AND SANITARY) AND CLEANOUTS LOCATED IN THE STREET.
3. 1/2" RADIUS EDGE ON CONCRETE
4. #3 REBAR - 3000 PSI

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	CS	JULY 2009		
			MANHOLE AND WATER VALVE BOXOUT	





MATERIAL LIST

- A. SERVICE CLAMP REQUIRED.
 - B. 1" CORPORATION STOP --- SERVICE PIPE OUTLET.
 - C. 1" SERVICE PIPE.
 - D. LOCKING ANGLE METER STOP; SERVICE PIPE INLET X SWIVEL COUPLING NUT OUTLET:
-- FOR 5/8" AND 3/4" METERS: 1" x 3/4"
-- FOR 1" METERS: 1" x 1"
 - E. PLASTIC RECTANGULAR METER BOX. (SEE NOTE #5)
 - F. PIPE CASING WHERE APPLICABLE. (SEE SEPARATE DETAIL)
- NOTE: G THRU J TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT.
- G. WATER METER, CENTERED IN BOX. (SEE TABLE AT RIGHT)
 - H. WATER METER COUPLING; MALE I.P.T. X SWIVEL COUPLING NUT:
-- FOR 5/8" AND 3/4" METERS: 3/4" x 8 1/2" LONG.
-- FOR 1" METERS: 1" x 8 1/2" LONG.
 - I. BRONZE GATE VALVE; NON-RISING STEM (3/4" OR 1") FEMALE I.P.T. (PROPERTY OWNERS CUT-OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY STANDARDS).
 - J. 3/4" OR 1" PIPE MEETING CITY PLUMBING CODE REQUIREMENTS.

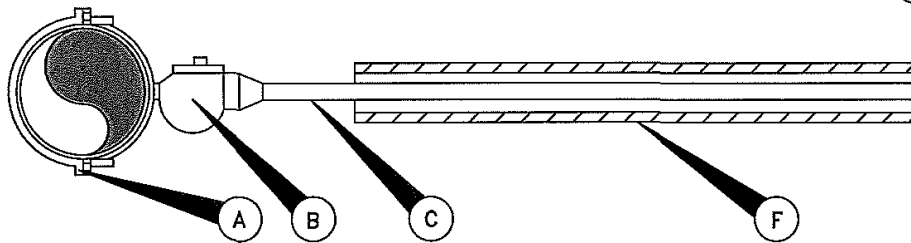
NOTES:

1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT MAY BE 150 PSI ANNEALED SEAMLESS TYPE "K" COPPER TUBING.
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
4. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
5. METER BOX TO BE MODEL DFW-3612 BY DFW ROTEC, INC. OR APPROVED EQUAL. PROVIDE BLACK-PAINTED METAL LID WITH METER READER.
6. AXIS OF METER ASSEMBLY (METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
7. SLOTS PROVIDED IN METER BOX TO ACCOMMODATE PIPING INTO AND OUT OF BOX SHALL NOT BE MODIFIED.

MAXIMUM SLOPE 1/4"/FT.
FRONT TO BACK OR BACK TO FRONT.

BOX TO BE LEVEL
SIDE TO SIDE.

METER SIZE	LENGTH
5/8"	7 3/4"
3/4"	9"
1"	11"



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APPROVED BY: CS	DATE: -
REVISION NO.:	FILE NAME:
REVISED BY:	DATE:

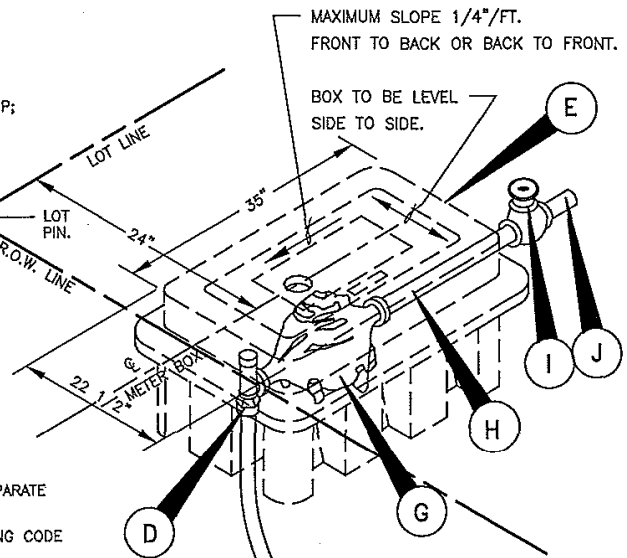
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

SINGLE 5/8", 3/4" OR 1"
WATER METER DETAIL

STANDARD
UT 011

MATERIAL LIST

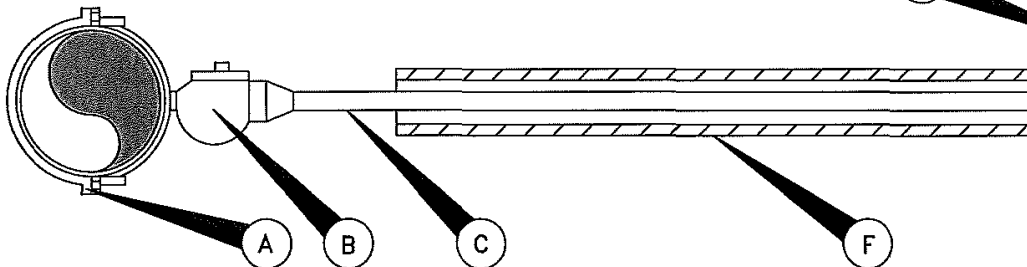
- A. SERVICE CLAMP REQUIRED.
 - B. 2" CORPORATION STOP --- SERVICE PIPE OUTLET.
 - C. 2" SERVICE PIPE.
 - D. BUSHING (IF NECESSARY) AND LOCKING ANGLE METER STOP;
SERVICE PIPE INLET X FLANGED COUPLING OUTLET:
- FOR 1 1/2" METERS: 1 1/2" X 1 1/2"
- FOR 2" METERS: 2" X 2"
 - E. PLASTIC RECTANGULAR METER BOX.
(SEE NOTE #5)
 - F. PIPE CASING WHERE APPLICABLE.
(SEE SEPARATE DETAIL)
- NOTE: G THRU J TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT.
- G. WATER METER, CENTERED IN BOX. (SEE TABLE AT RIGHT)
 - H. WATER METER COUPLING; MALE I.P.T. X FLANGED COUPLING NUT:
- LENGTH OF PIPE TO BE DETERMINED BY CONTRACTOR.
 - I. BRONZE GATE VALVE: NON-RISING STEM (1 1/2" OR 2")
FEMALE I.P.T.
(PROPERTY OWNERS CUT-OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY STANDARDS).
 - J. BUSHING (IF NECESSARY) AND PIPE MEETING CITY PLUMBING CODE REQUIREMENTS.



METER SIZE	LENGTH
1 1/2"	13"
2"	17"

NOTES:

1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT MAY BE 150 PSI ANNEALED SEAMLESS TYPE "K" COPPER TUBING OR 200 PSI BLACK COLORED POLYETHYLENE HAVING A DIMENSION RATIO OF 9 (DR9).
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
4. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
5. METER BOX TO BE MODEL DFW-6512 BY DFW ROTECH, INC. OR APPROVED EQUAL. PROVIDE BLACK-PAINTED METAL LID WITH METER READER.
6. AXIS OF METER ASSEMBLY (METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
7. SLOTS PROVIDED IN METER BOX TO ACCOMMODATE PIPING INTO AND OUT OF BOX SHALL NOT BE MODIFIED.



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CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD

SINGLE 1 1/2" OR 2"
WATER METER DETAIL

UT 012

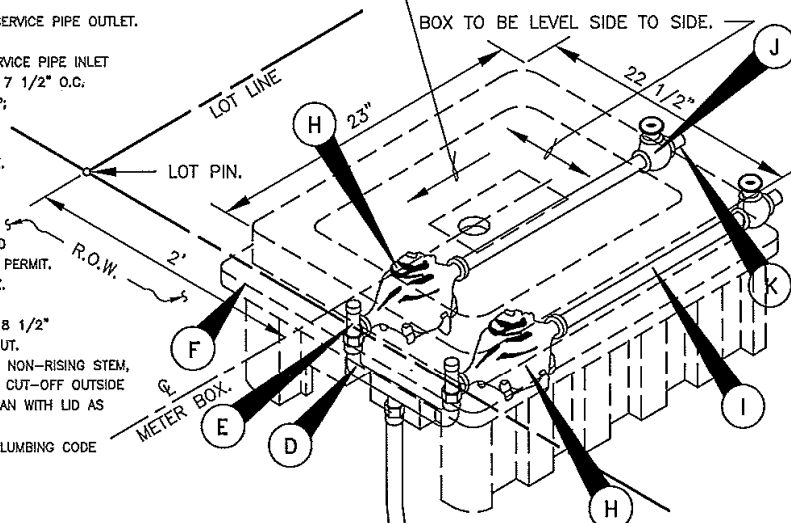
MATERIAL LIST

- A. SERVICE CLAMP REQUIRED.
- B. 1 1/2" CORPORATION STOP --- SERVICE PIPE OUTLET.
- C. 1 1/2" SERVICE PIPE.
- D. BRANCH CONNECTION: 1 1/2" SERVICE PIPE INLET AND 2 3/4" MALE I.P.T. OUTLETS 7 1/2" O.C.
- E. 3/4" LOCKING ANGLE METER STOP; FEMALE I.P.T. INLET AND SWIVEL COUPLING NUT OUTLET.
- F. PLASTIC RECTANGULAR METER BOX. (SEE NOTE #6)
- G. PIPE CASING WHERE APPLICABLE. (SEE SEPARATE DETAIL)
- NOTE: H THRU K TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT.
- H. WATER METERS, CENTERED IN BOX. (SEE TABLE AT RIGHT)
- I. WATER METER COUPLING: 3/4" X 8 1/2" MALE I.P.T. X SWIVEL COUPLING NUT.
- J. 3/4" OR 1" BRONZE GATE VALVE: NON-RISING STEM, FEMALE I.P.T. (PROPERTY OWNERS CUT-OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY STANDARDS)
- K. 3/4" OR 1" PIPE MEETING CITY PLUMBING CODE REQUIREMENTS.

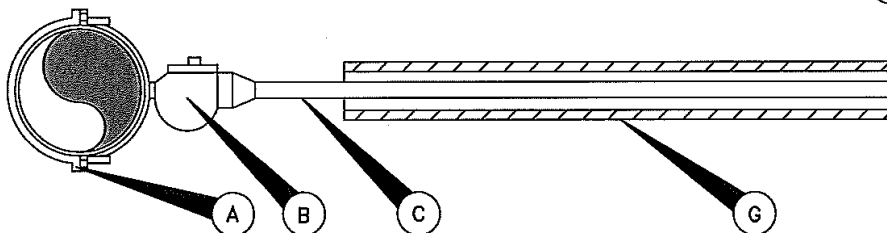
NOTES:

1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT MAY BE 150 PSI ANNEALED SEAMLESS TYPE "K" COPPER TUBING.
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
4. BRANCH CONNECTION AND BOTH ANGLE METER STOPS MUST BE INSTALLED PRIOR TO FIRST METER INSTALLATION EVEN THOUGH, THE SECOND PROPERTY MAY NOT BE READY FOR SERVICE.
5. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
6. METER BOX TO BE MODEL DFW-3812 BY DFW ROTEC, INC. OR APPROVED EQUAL. PROVIDE BLACK-PAINTED METAL LID WITH METER READER.
7. AXIS OF METER ASSEMBLY (METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
8. SLOTS PROVIDED IN METER BOX TO ACCOMMODATE PIPING INTO AND OUT OF BOX SHALL NOT BE MODIFIED.

MAXIMUM SLOPE 1/4"/FT.
FRONT TO BACK OR BACK TO FRONT.
BOX TO BE LEVEL SIDE TO SIDE.



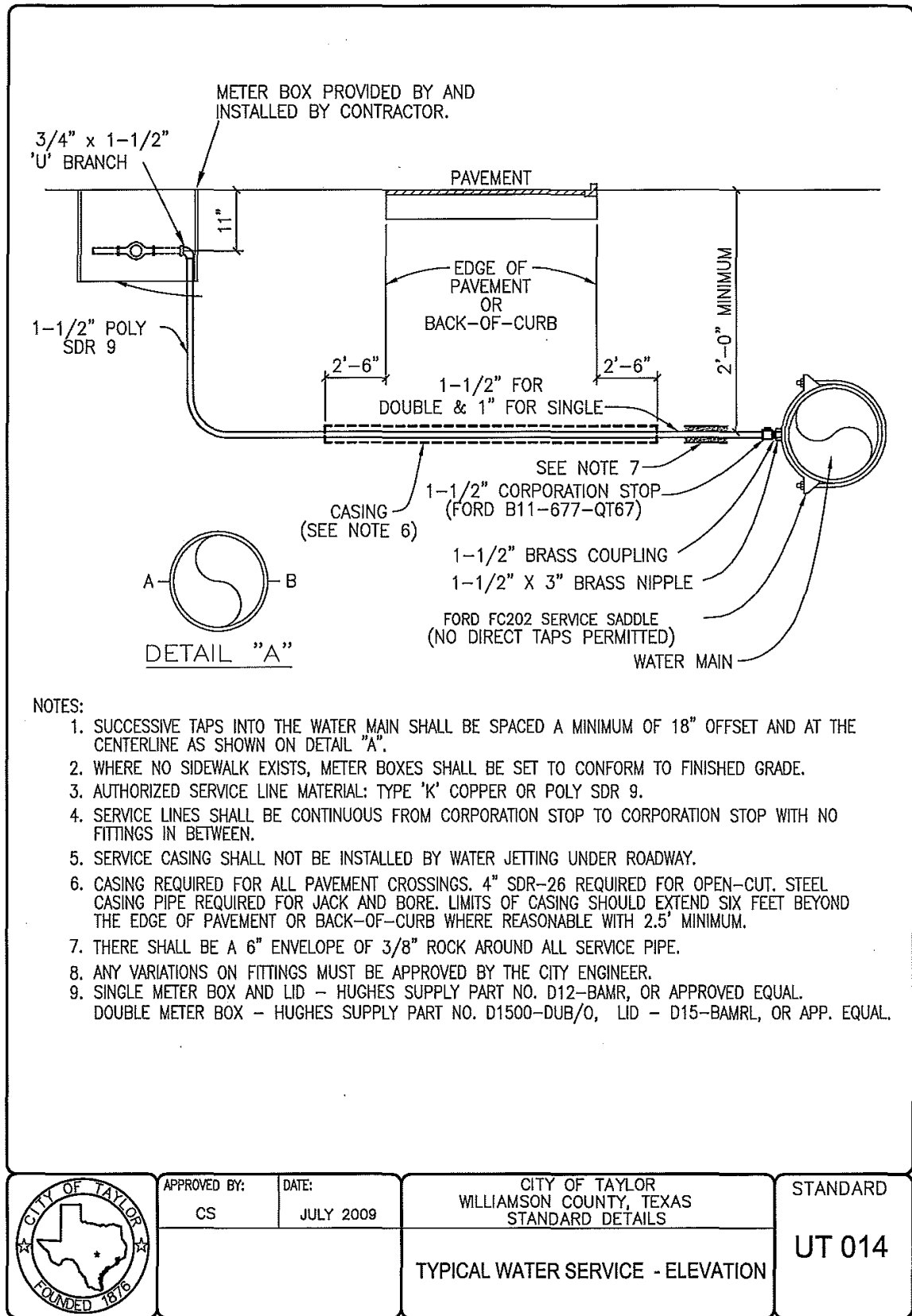
METER SIZE	LENGTH
5/8"	7 3/4"
3/4"	9"

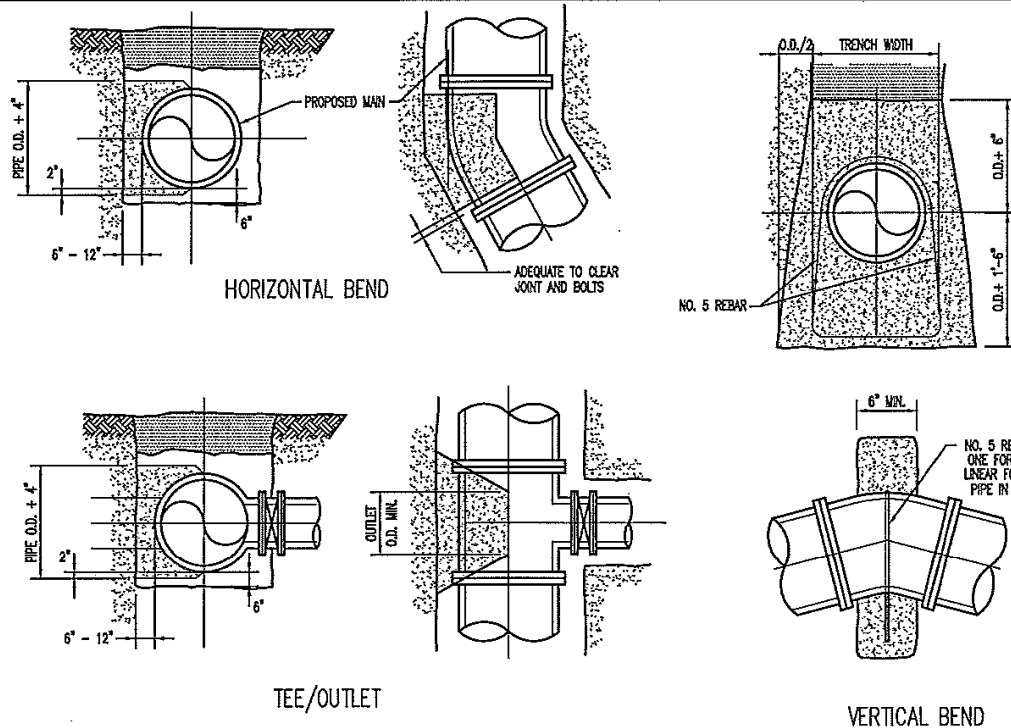


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CS	JULY 2009

CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS
DOUBLE 5/8" OR 3/4" WATER METERS DETAIL

STANDARD
UT 013





THRUST BLOCK DESIGN AS FOLLOWS:

A. PRESSURE OF 150 P.S.I. (ACTUAL IF HIGHER)
+ 50% SURGE ALLOWANCE

B. MAXIMUM SOIL BEARING:

SOIL TYPE	PRESSURE
LIMESTONE	4000 LBS./SQ. FT.
UNDISTURBED SOIL, CALICHE	2000 LBS./SQ. FT.
LOOSE OR SPONGY SOIL	1500 LBS./SQ. FT.

CONCRETE THRUST BLOCKING SCHEDULE **

		AREA REQUIRED (SQUARE FEET) BEARING AGAINST TRENCH WALL FOR PRESSURE PIPE						
PIPE SIZE (INCHES)	THRUST (POUNDS)	TEES AND PLUGS	BENDS					
			90°	45°	22-1/2°	11-1/4°	5°	1°
4	2.513	1.00	1.00	0.50	0.50	N/A	N/A	N/A
6	5.655	1.41	2.00	1.08	1.00	0.50	N/A	N/A
8	10.053	2.51	3.55	1.92	1.00	0.50	0.50	N/A
12	22.619	5.65	8.00	4.33	2.21	1.11	0.50	N/A
16	40.212	10.05	14.22	7.69	3.92	1.97	1.00	N/A
24	90.478	22.62	31.99	17.31	8.83	4.43	1.97	0.50
30	141.372	35.34	49.98	27.05	13.79	6.93	3.08	1.00
36	203.575	50.89	71.97	38.95	19.86	9.98	4.44	1.00
42	277.088	69.27	97.97	53.02	27.03	13.58	6.04	1.21
48	361.911	90.48	127.95	69.29	35.30	17.74	7.89	1.58
54	458.044	114.51	161.94	87.64	44.68	22.45	9.99	2.00

** BASED ON A 4,000 P.S.F. SOIL BEARING CAPACITY AND A 200 P.S.I. MAX. LINE PRESSURE INCREASE AND DECREASE BEARING AREA IN ACCORDANCE WITH THE BEARING STRENGTH OF SOIL AS DESCRIBED IN SCHEDULE.

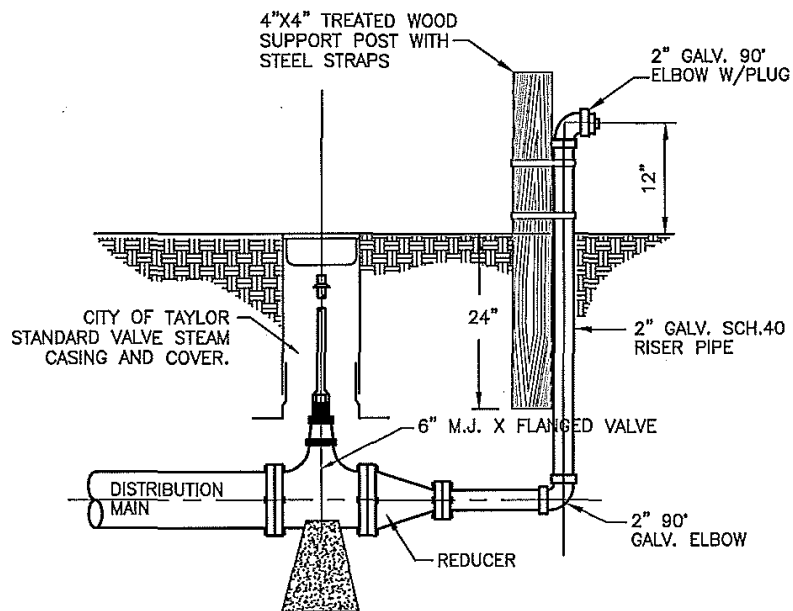


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DATE: JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

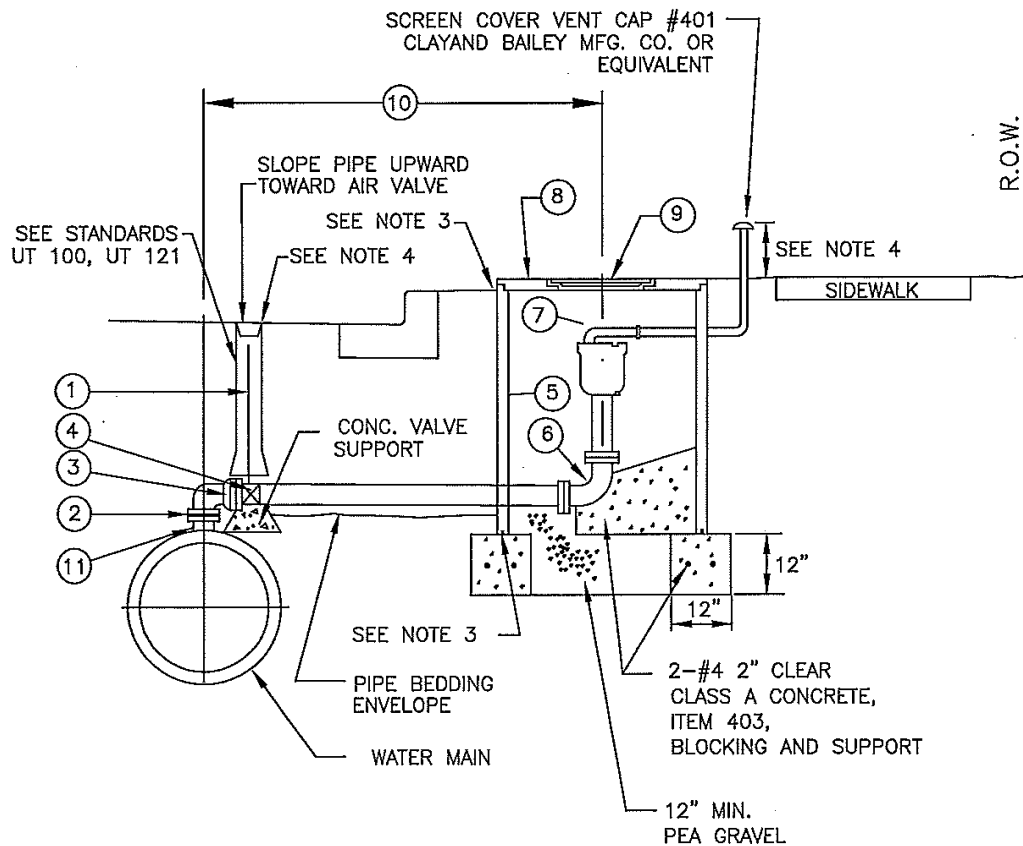
CONCRETE THRUST BLOCKING

STANDARD
UT 015



FLUSHING VALVE DETAIL
 (FOR PERMANENT DEAD END LINES,
 USE 2" BALL VALVE - FORD OR EQUAL)

	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD UT 016
	CS	JULY 2009		
				FLUSHING VALVE DETAIL



- | | |
|---|--|
| ① STEM EXTENSION | ⑦ COMBINATION AIR RELEASE VALVE
WITH GOOSNECK |
| ② INSULATED FLANGE CONNECTION | ⑧ REINFORCED PRECAST CONCRETE
LID (AASHTO H-20 LOADING) |
| ③ 90° BEND (FLG X FLG) | ⑨ RING AND 32" COVER |
| ④ GATE VALVE FLG X MJ | ⑩ PER PLAN DIMENSION OR AS
DETERMINED BY ENGINEER OR
DESIGNATED REPRESENTATIVE |
| ⑤ CLASS III R.C.P. MANHOLE
60" MIN. I.D. | ⑪ FLANGED OUTLET PER ANSI B16.1 |
| ⑥ 90° BEND (FLG. X FLG.) | |



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DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD

3" OR LARGER VENTED
AIR / VACUUM VALVE INSTALLATION

UT 017

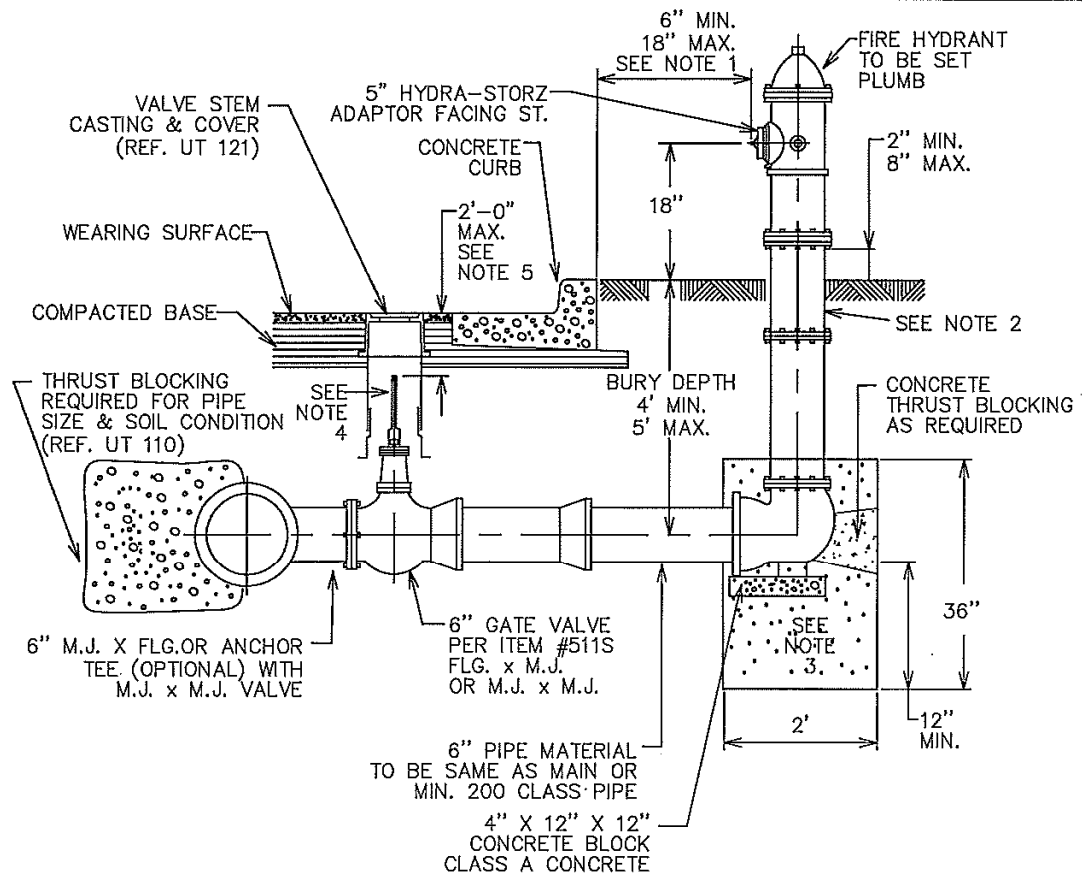
1 of 2

NOTES:

1. ON 10" AND LARGER TWO PIECE COMBINATION AIR VALVES, THE OUTLET PIPING OF THE SMALL VALVE SHALL BE VENTED WITHIN THE MANHOLE INTO THE SIDE OF THE LARGER VENT PIPE THAT GOES ABOVE GROUND.
2. AIR VENT PIPE 6" AND LARGER SHALL BE D.I. (CLASS 350 MIN.) PIPE FLANGE FITTINGS ORDERED SPECIAL WITH SHOP APPLIED KOPPER INERTOL RUST INHIBITIVE PRIMER 621, OR EQUAL, IN LIEU OF COAL TAR. EXTERIOR SURFACES OF ALL EXPOSED PIPE SHALL BE PAINTED WITH RUST-OLEUM ACRYLIC 5225 (SAFETY BLUE), OR EQUAL, PER COATING MANUFACTURER'S INSTRUCTIONS PRIOR TO INSTALLATION.
3. SEALANT SHALL BE 1½" FLEXIBLE BUTYL RESIN SEALANT CS-102 AS MANUFACTURED BY CONCRETE SEALANTS, INC. OR EQUAL.
4. INSTALLATION OF VALVE CASING RING SHALL BE PER CITY OF TAYLOR STANDARD NO. UT 100 AND OR UT 121.
5. AIR VENT PIPE INSTALLATION SHALL BE AS NEAR AS PRACTICAL TO THE RIGHT-OF-WAY LINE.
6. CONCRETE MANHOLE PENETRATIONS SHALL BE CORE BIT DRILLED. VOID SHALL BE FILLED BY PRESSING SEAL GASKET COPR. PSX RESILIENT CONNECTOR MEETING ASTM C923 OR APPROVED EQUAL.
7. CROSS SECTIONAL AREA OF OPENING TO BE EQUAL TO OR GREATER THAN CROSS SECTIONAL AREA OF AIR VENT PIPE.
8. AIR/VACUUM VALVE SHALL BE INSTALLED IN A MANNER WHICH WILL ALLOW REMOVAL OF ASSEMBLY WITHOUT REMOVAL OF PRECAST CONCRETE LID.

AIR VALVE	GATE VALVE	VENT PIPE (MIN.)	M.H. DIA. (MIN.)
3"	3"	3"	5'
4"	4"	4"	6'
6"	6"	6"	6'
8"	8"	8"	6'
10"	10"	10"	7'
12"	12"	12"	7'

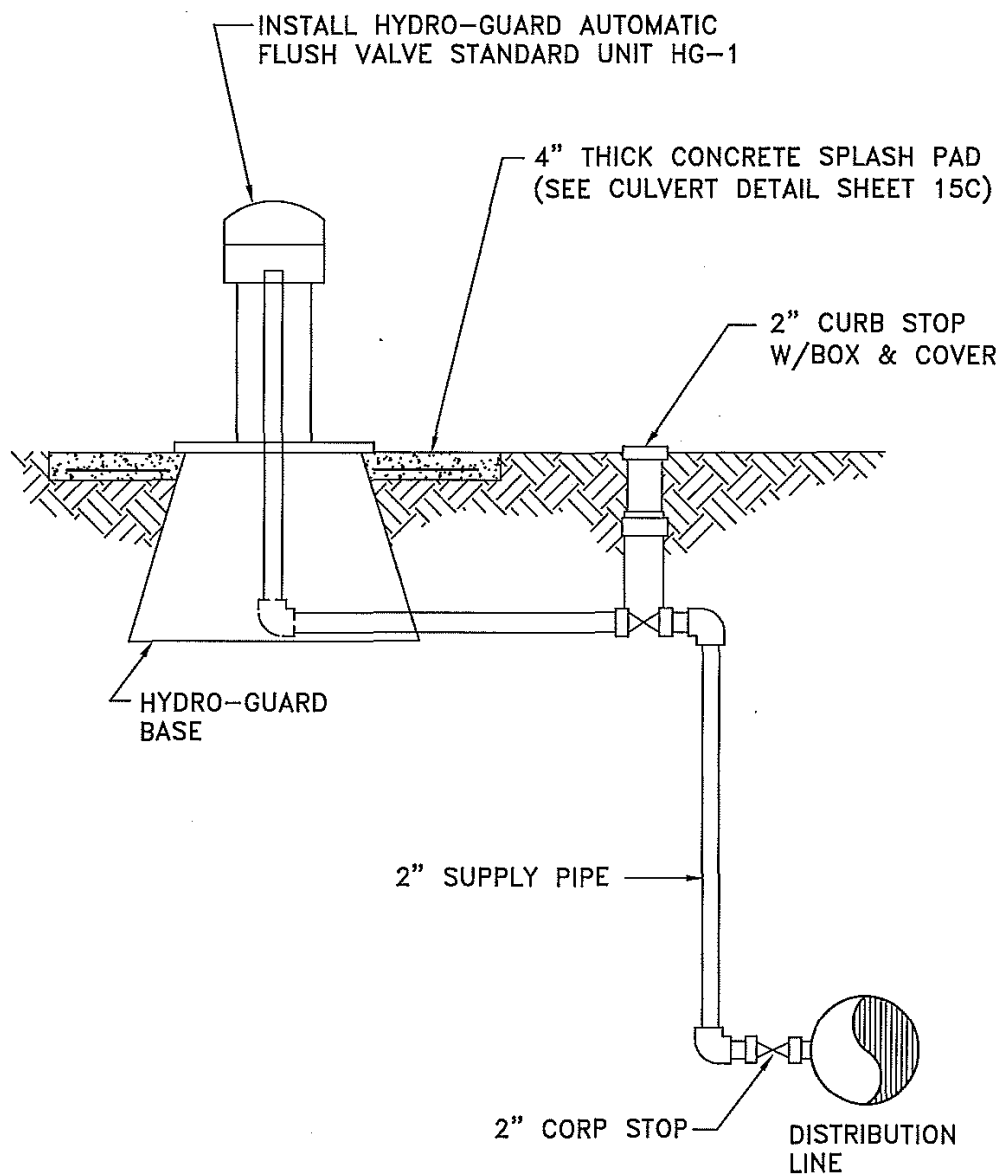
	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD UT 017 2 of 2
	CS	JULY 2009		



NOTES:

1. DIMENSIONS ARE APPLICABLE IN SPACE BETWEEN CURB AND SIDEWALK. WHERE WALK ABUTS CURB, AND IN PUBLIC OR COMMERCIAL AREAS, DIMENSION FROM BACK OF CURB SHALL BE 3' TO 6'. HYDRANTS ARE NOT TO BE PLACED IN SIDEWALK OR RAMP AREAS. SEE CITY OF TAYLOR STANDARD SPECIFICATIONS FOR LOCATION OF HYDRANT.
2. FOR BURY DEPTHS GREATER THAN 5', ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH SHALL BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT.
3. CRUSHED STONE OR GRAVEL SHALL BE PLACED AROUND THE BOTTOM OF THE HYDRANT FOR A RADIUS OF AT LEAST 12" AND EXTEND AT LEAST 12" ABOVE THE OUTLET. DO NOT BLOCK DRAIN HOLES.
4. WELD SOCKET 2½" X 2" DEEP TO 1" SCH. 40 ROUND STEM EXTENSION, FITTED ON OPERATING NUT, SCH. 80 FOR LENGTHS OVER 10'.
5. VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" & 24" FROM FINISHED GRADE.
6. HYDRANTS ARE TO BE PAINTED BY MANUFACTURER WITH "KEM-LUSTER" VERMILLION RED.
7. HYDRANTS ARE TO BE MUELLER "CENTURION" OR EQUIVALENT, CAPS AND CHAINS ARE NOT TO BE SUPPLIED WITH HYDRANTS.

	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD
	CS	JULY 2009	STANDARD FIRE HYDRANT	UT 018



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DATE:
JULY 2009

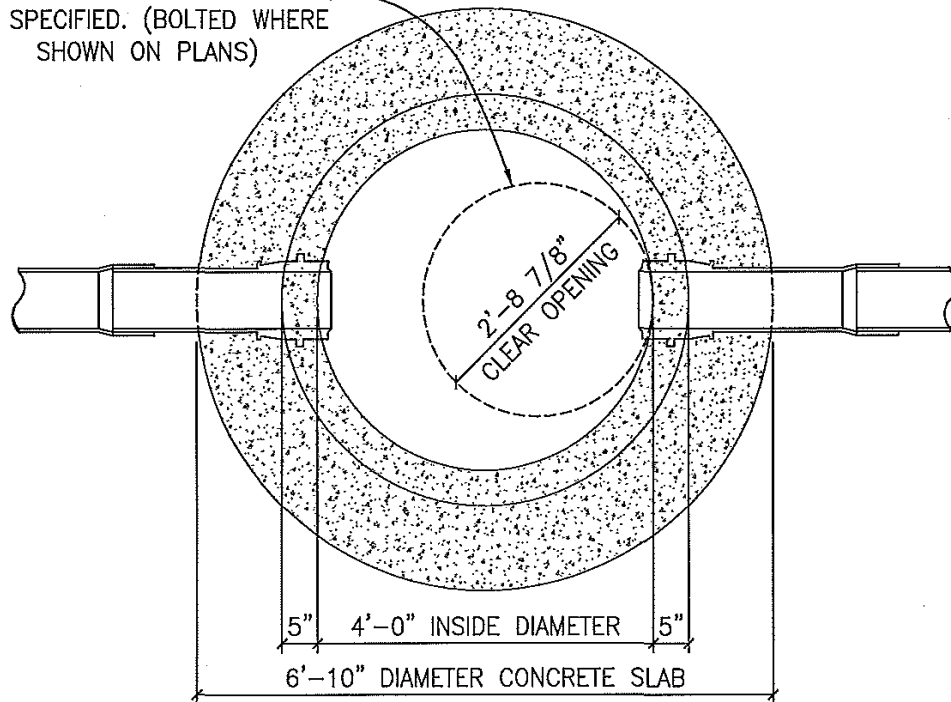
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD

AUTOMATIC FLUSHING VALVE

UT 019

STANDARD CASTING AND COVER,
AS SPECIFIED. (BOLTED WHERE
SHOWN ON PLANS)



MANHOLE PLAN

CITY OF TAYLOR NOTES:

MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

- A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER O-RING GASKET JOINTS CONFORMING TO ASTM C478, C433 AND C76.
- B. ALL MANHOLES SHALL HAVE WATER-TIGHT FRAME AND COVER, WITH A MINIMUM 36" CLEAR OPENING, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07) OR APPROVED EQUAL.
- C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
- D. ALL MANHOLES SHALL HAVE AN ECCENTRIC CONE.
- E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF TAYLOR, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY CALVERT CONCRETE OR APPROVED EQUAL M.F.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING, AND O-RING JOINT CONFORMING TO ASTM C443.
- F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
- G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
- H. TWO (2") INCH GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING, MINIMUM OF TWO (2), MAXIMUM OF FIVE (5) GRADE RINGS REQUIRED.



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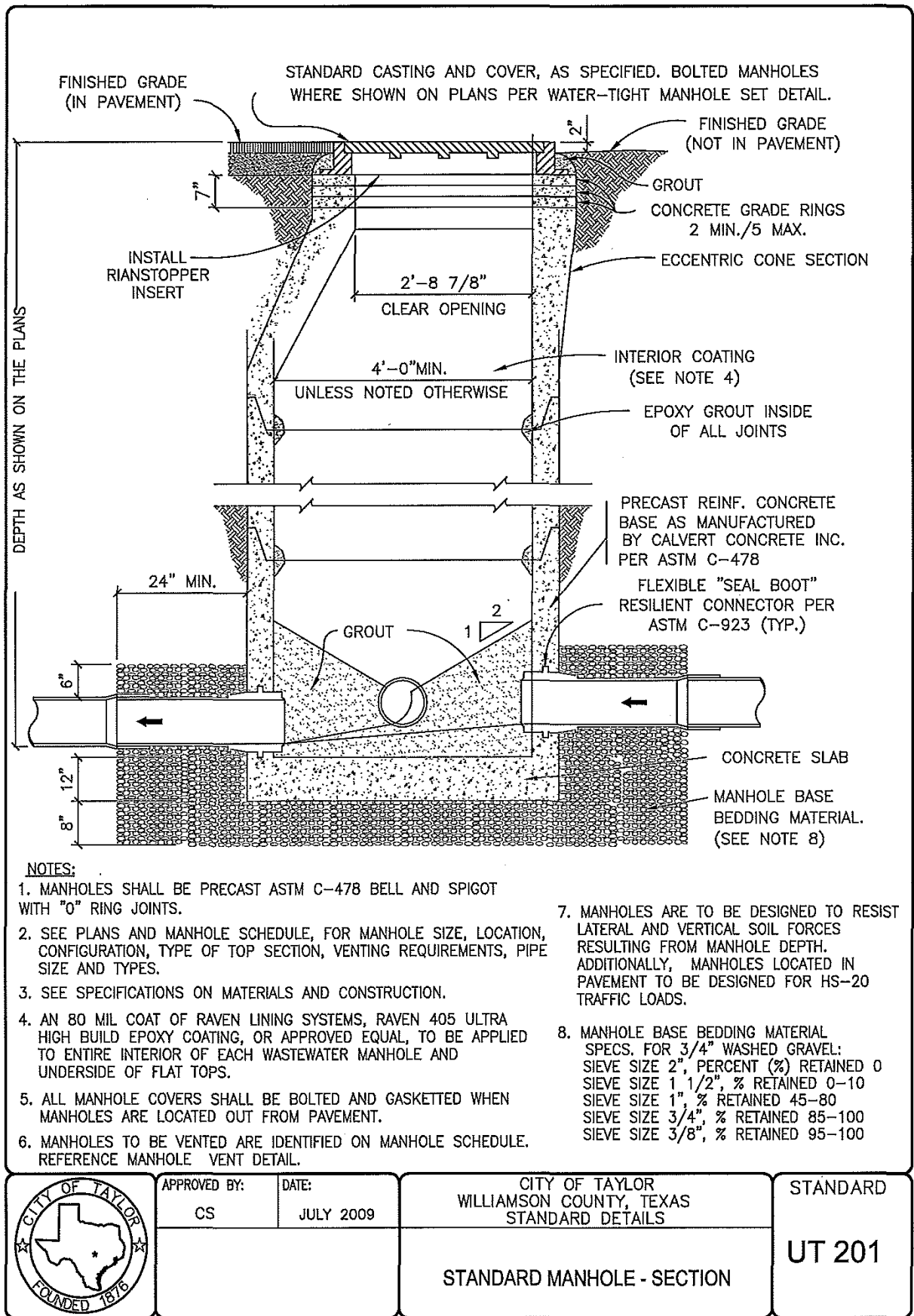
JULY 2009

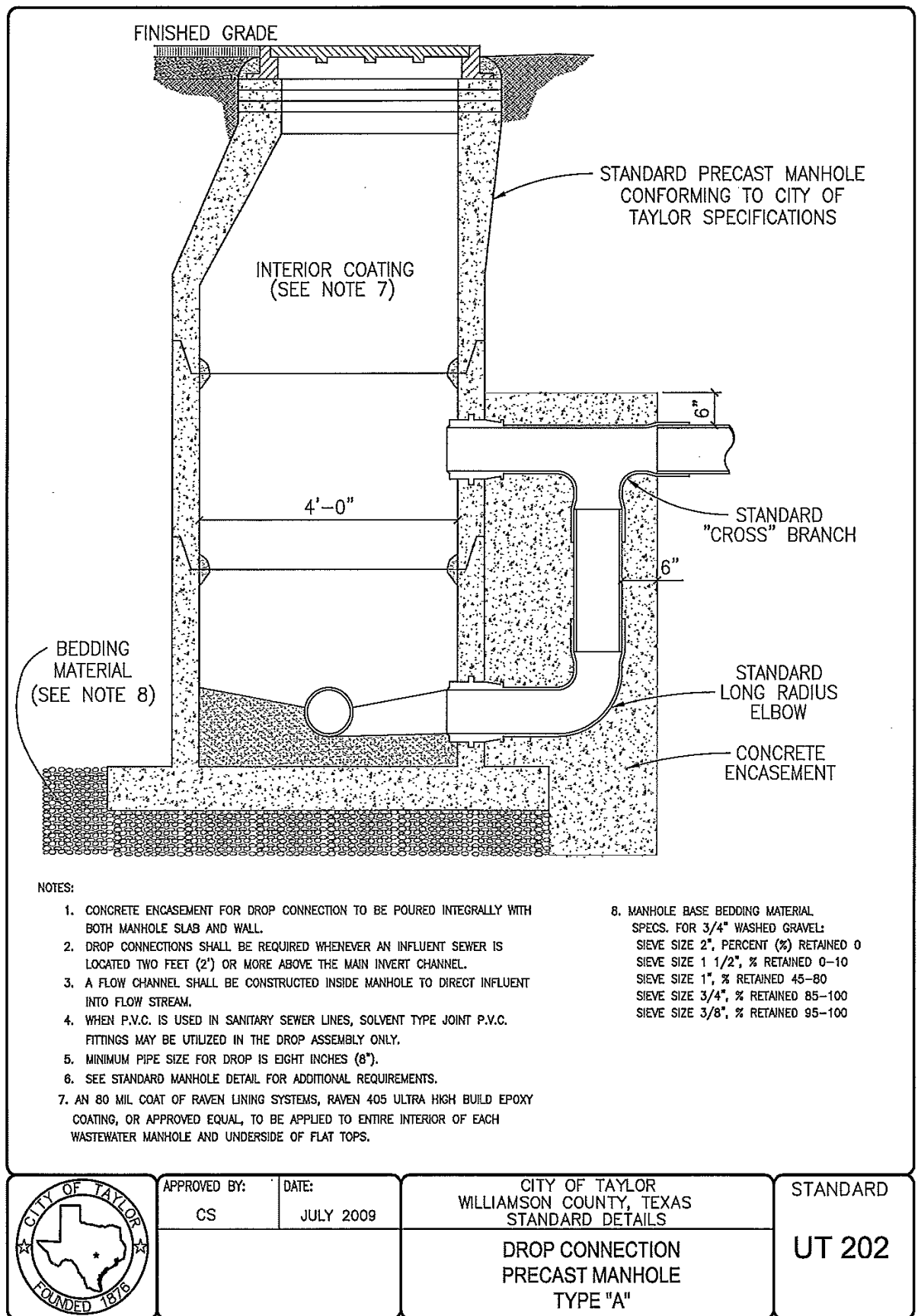
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

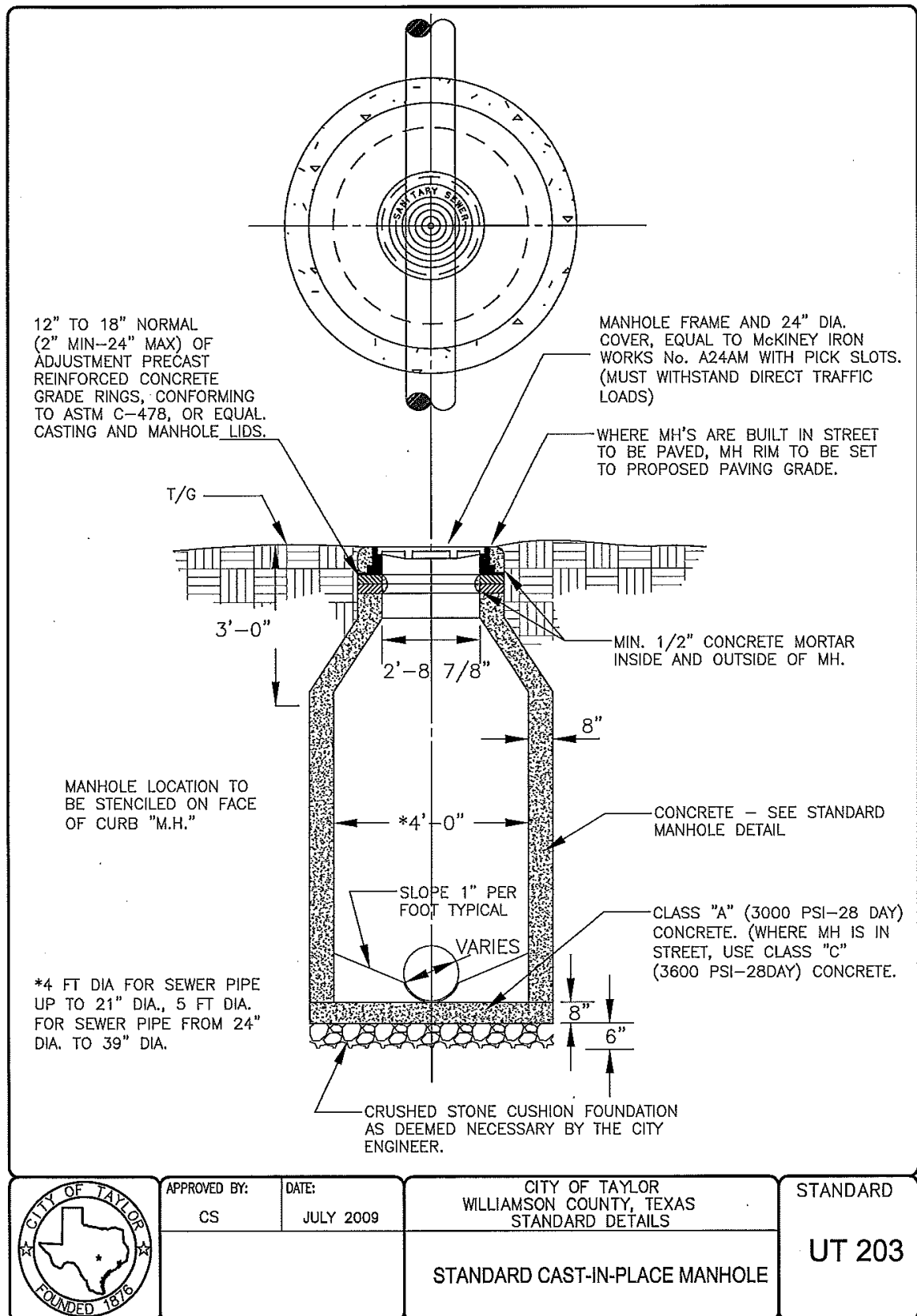
STANDARD MANHOLE - PLAN

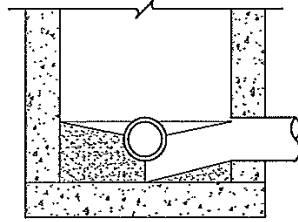
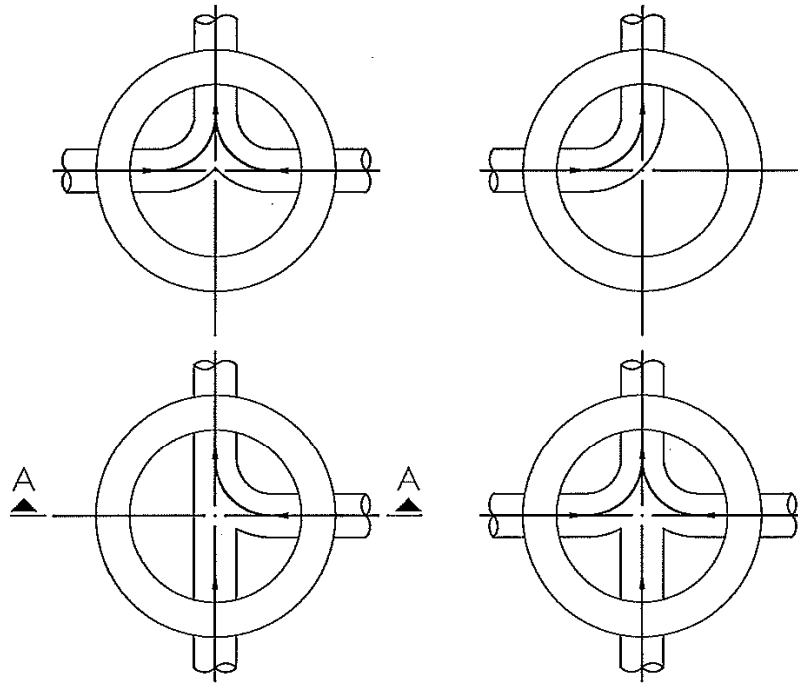
STANDARD

UT 200









SECTION "A-A"

NOTES:

1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOW.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.



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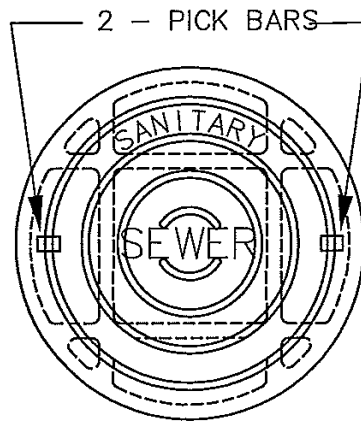
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

FLOW PATTERNS FOR
INVERT CHANNELS

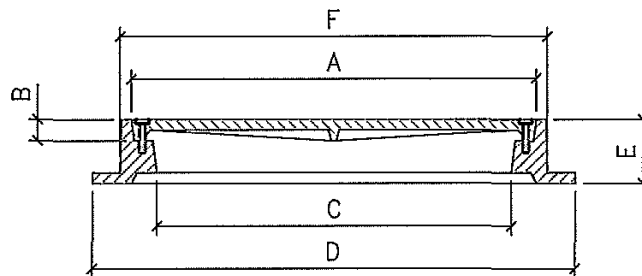
STANDARD

UT 204

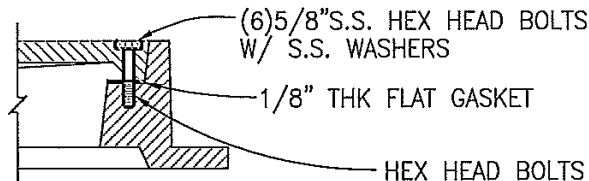


VULCAN #VM-42 OR
APPROVED EQUAL

NOTE:
LID SHALL HAVE TWO (2)
TYPE 4 PICK BAR



PLEASE SPECIFY TOP OR BOTTOM FLANGE WHEN ORDERING.
FOR TOP FLANGE ORDER No. V-1800-5 (East Jordan Iron Works, inc.)
FOR BOTTOM FLANGE ORDER No. V-1600-5 (East Jordan Iron Works, inc.)
THE WATER-TIGHT MANHOLE SETS (V-2600-5) FEATURE SIX STAINLESS STEEL
BOLTS IN COUNTERSUNK POCKETS AND A SEALING FLAT GASKET IN THE RING SET.
BOLTING PADS REDUCE THE STANDARD CLEAR OPENING BY TWO TO THREE INCHES.



WATER-TIGHT DETAIL

	DIMENSIONS						COVER		RING		SET
	A	B	C	D	E	F	CASTING	WEIGHT	CASTING	WEIGHT	WEIGHT
V-1600-5	38	2	36	46	6	40	41600523	365 LBS	41600510	320 LBS	685 LBS
V-1800-5	38	2	36	46	6	40	41600523	365 LBS	41600510	320 LBS	685 LBS
V-2600-5	38	2	36	46	6	40	42600523	365 LBS	41600511	320 LBS	685 LBS



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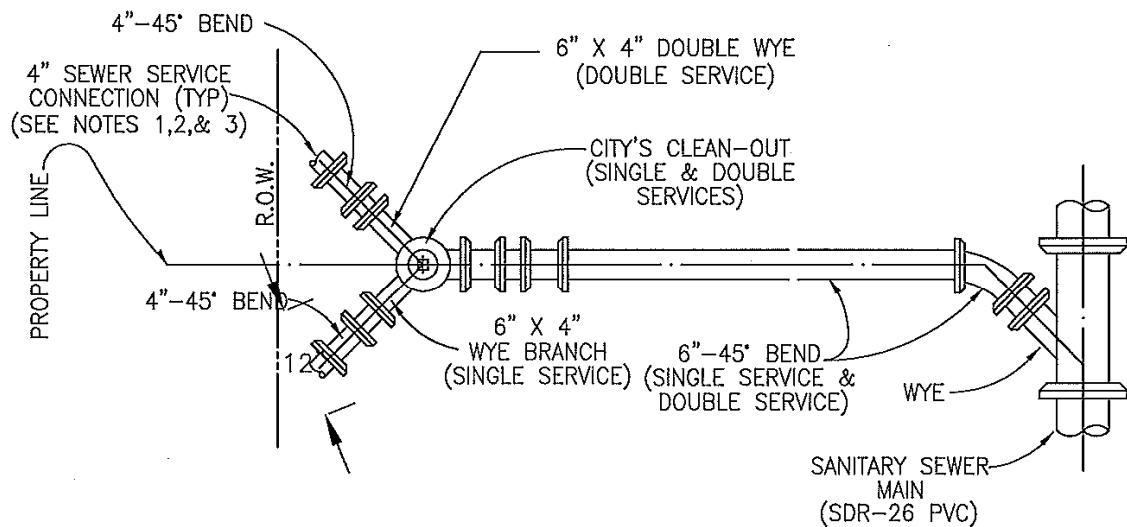
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD WASTEWATER MANHOLE
SET

STANDARD

UT 205



PLAN

NOTES:

1. FOR INSTALLATION WITHIN UTILITY EASEMENTS, SERVICE CONNECTION RISERS MAY BE LOCATED INSIDE THE PROPERTY LINE.
2. THE CLEAN-OUT SHALL BE EXTENDED 12" ABOVE FINISH GRADE.
3. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED CAP OR PLUG.
4. CONNECT YARD LINE TO SERVICE LINE WITH RIGID, SOLVENT-WELDED PVC TO PVC ADAPTER.
5. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT (1'-0") ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON PAVEMENT REPLACEMENT DETAIL.
6. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
7. ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY THE CITY ENGINEERING DEPARTMENT.
8. SERVICE LINE MATERIAL SHALL BE P.V.C., SDR-26.
9. SEWER SERVICE SLOPE TO BE 45' OFF CENTERLINE OF MAIN.



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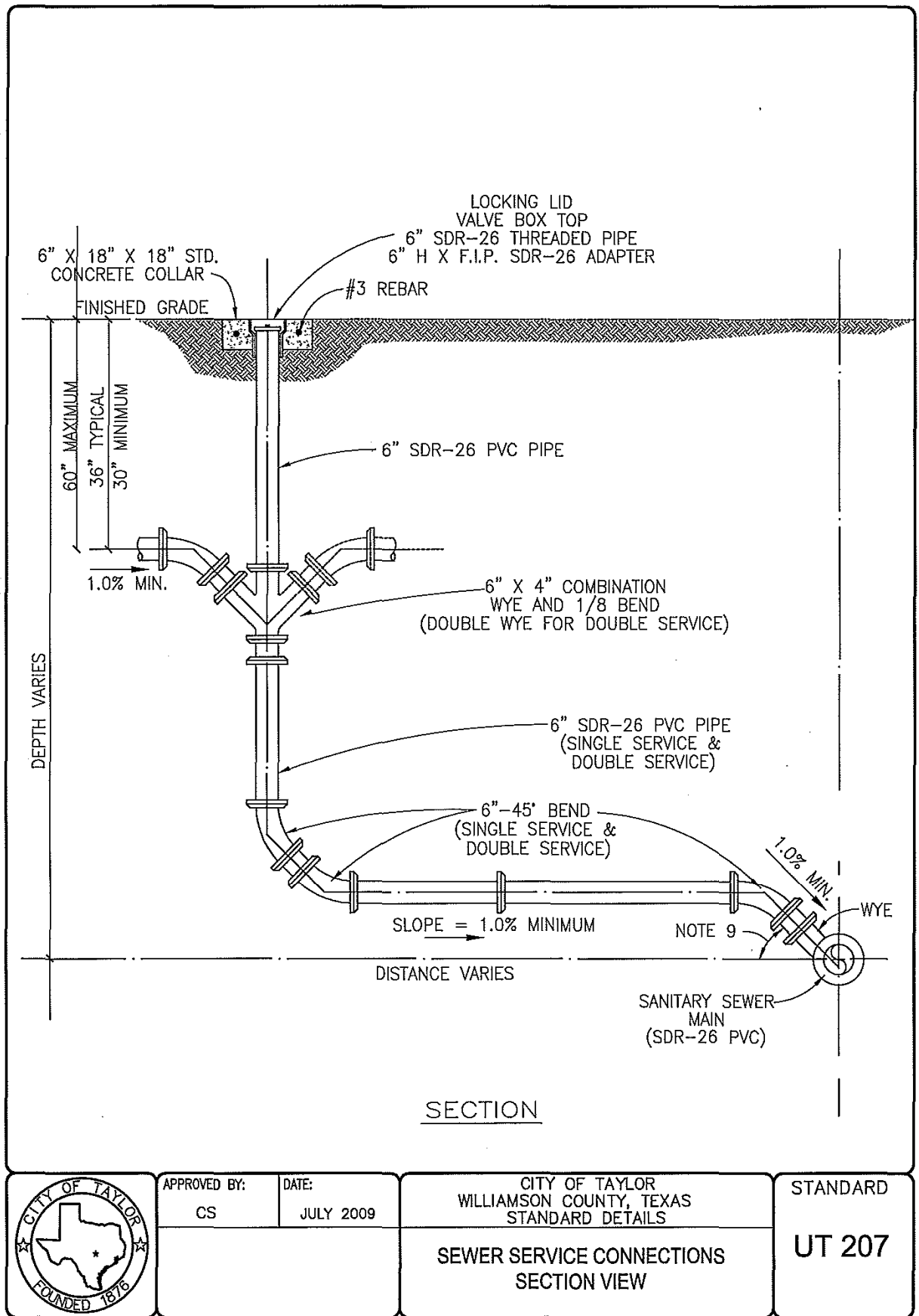
JULY 2009

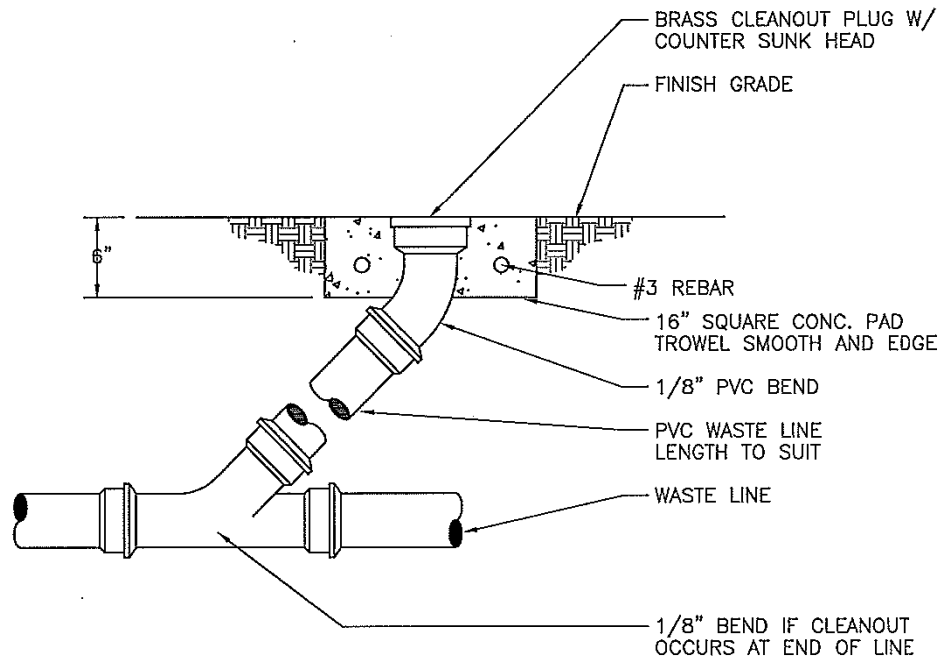
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

SEWER SERVICE CONNECTION
PLAN VIEW

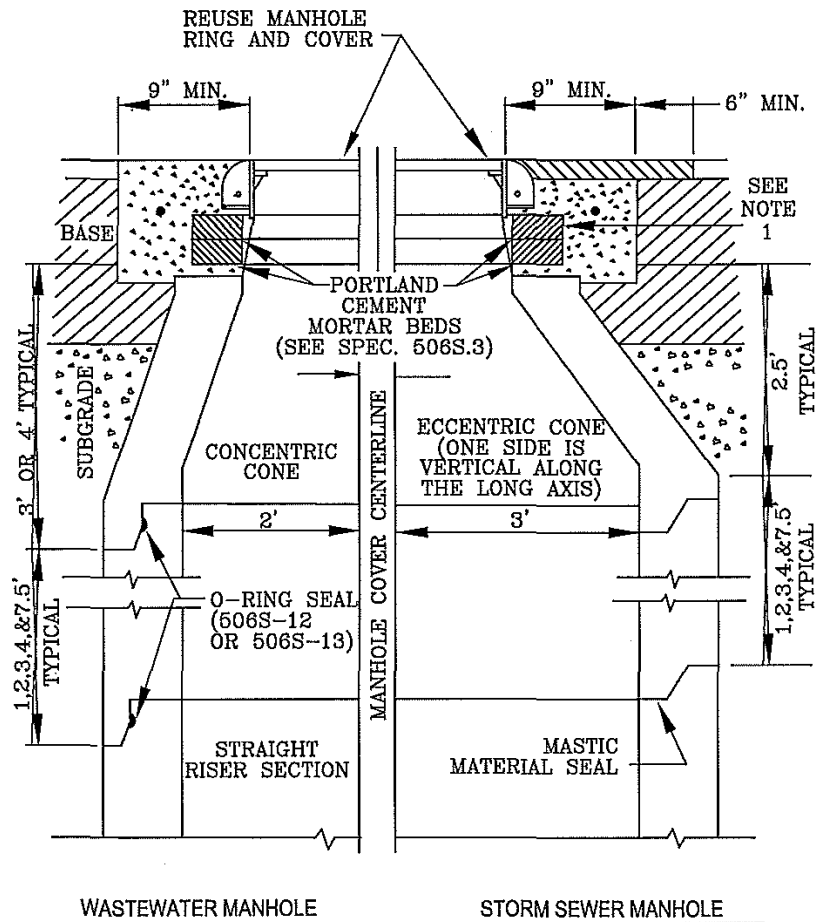
STANDARD

UT 206





	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD UT 208
	CS	JULY 2009		
			SANITARY SEWER CLEANOUT	



1. SEE "MINOR MANHOLE ADJUSTMENTS" STANDARD 506S-4 FOR CLARITY.
2. MANHOLE SECTIONS TEMPORARILY REMOVED FOR ROADWAY CONSTRUCTION MAY BE REUSED ONLY WITH THE WRITTEN APPROVAL OF THE INSPECTOR. O-RINGS SHALL NOT BE REUSED.
3. ANY COMBINATION OF REMOVING THE CONCRETE RINGS, AND / OR THE MANHOLE CONE, AND/OR THE STRAIGHT RISER SECTION OF THE MANHOLE SHALL BE ACCEPTABLE TO TEMPORARILY LOWER THE MANHOLE GRADE FOR ROADWAY RECONSTRUCTION.
4. WHILE THE MANHOLE IS TEMPORARILY LOWERED, A SHEET OF STEEL SUITABLE TO SUPPORT ALL IMPOSED LOADS SHALL BE USED TO COVER THE OPENING. FOR WASTEWATER MANHOLES, THE STEEL PLATE SHALL BE SET IN MORTAR TO PREVENT LEAKAGE.
5. SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% AND 100% DENSITIES, RESPECTIVELY, COMPACTION SHALL BE BY MECHANICAL TAMPING TO THE DENSITIES SPECIFIED.



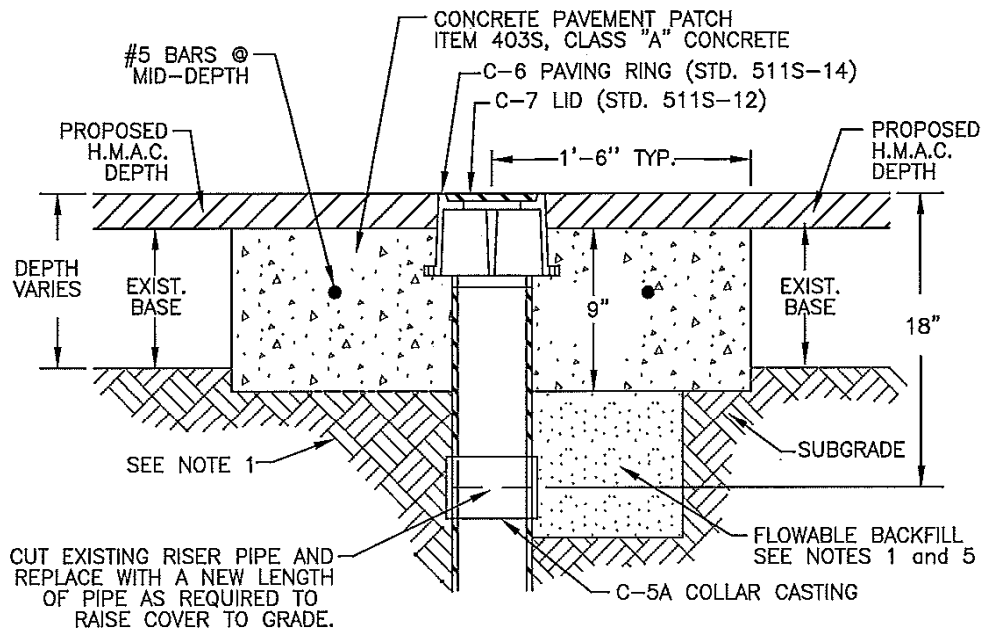
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JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

MAJOR MANHOLE ADJUSTMENT

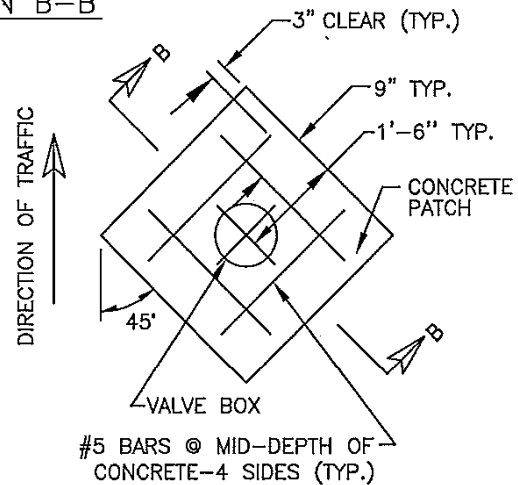
STANDARD
UT 209



SECTION B-B

NOTES:

1. SUBGRADE SHALL BE COMPACTED AS PER ITEM 201S, SUBGRADE PREPARATION.
2. VALVE CASTINGS SHALL BE ADJUSTED TO GRADE AFTER FINAL LIFT OF OVERLAY IS IN PLACE.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE BASE OF THE VALVE.
4. REMOVE EXISTING RISER PIPE DOWN 18" AND REPLACE TO THE NEW ELEVATION NEW PIPE AND A C-5A CASTING.
5. WHERE CAST IRON CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
6. REINFORCING STEEL SHALL MEET ITEM 406S, REINFORCING STEEL.



PLAN VIEW



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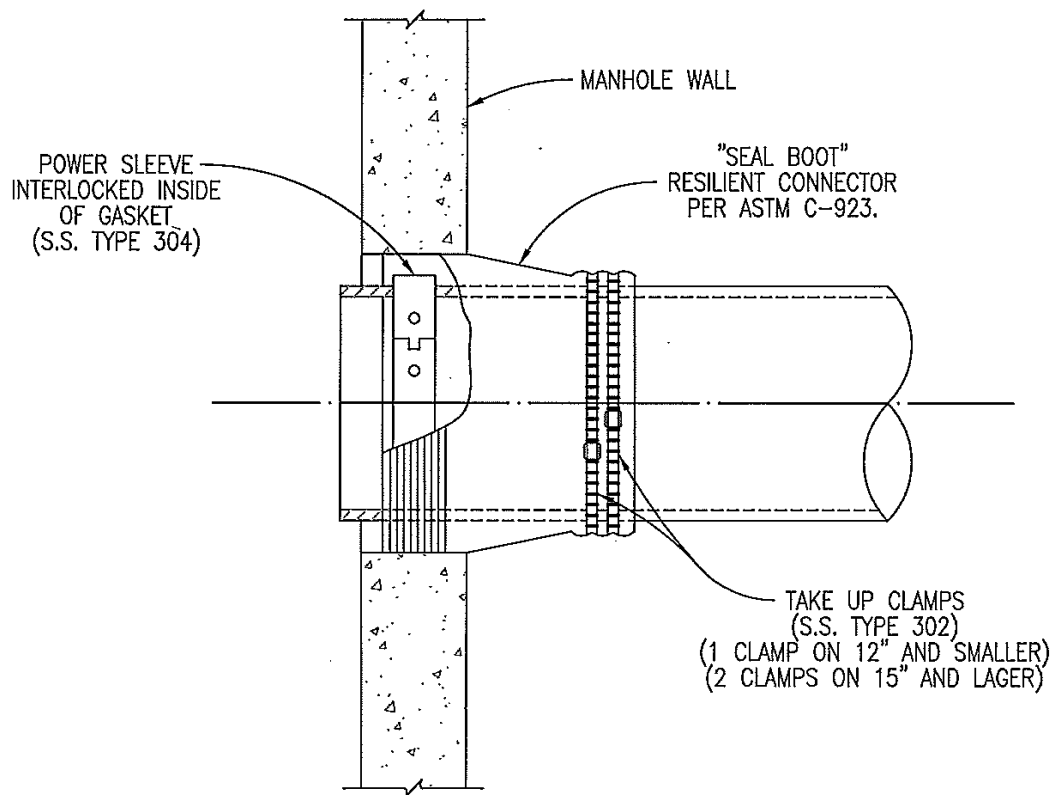
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

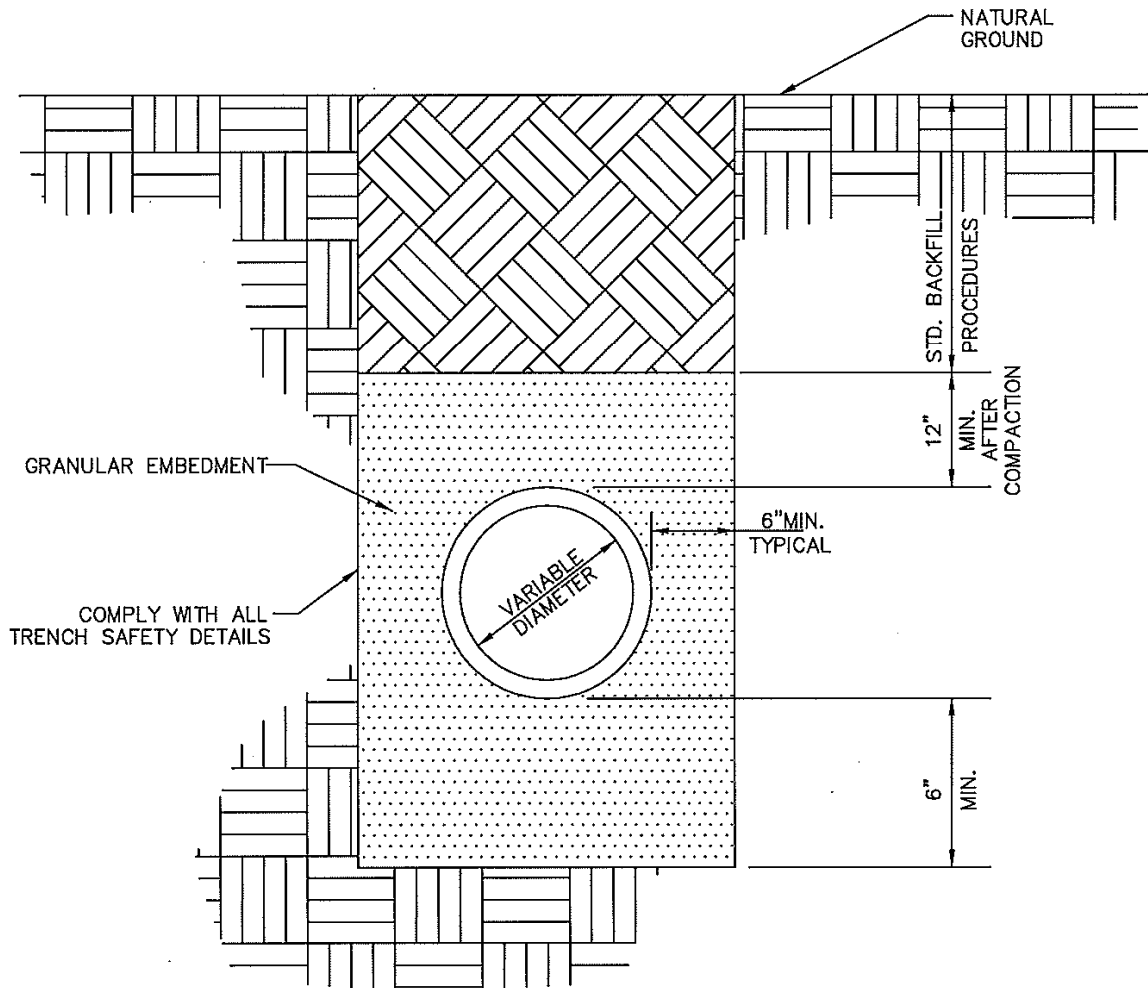
VALVE BOX ADJUSTMENT
DETAIL

STANDARD

UT 210



	APPROVED BY:	DATE:	CITY OF TAYLOR WILLIAMSON COUNTY, TEXAS STANDARD DETAILS	STANDARD UT 211
	CS	JULY 2009		
			FLEXIBLE "SEAL BOOT" CONNECTOR	



NOTE:

COST OF GRANULAR EMBEDMENT IS INCLUDED IN PRICE BID PER LINEAR FOOT OF SEWER PIPE.



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CS

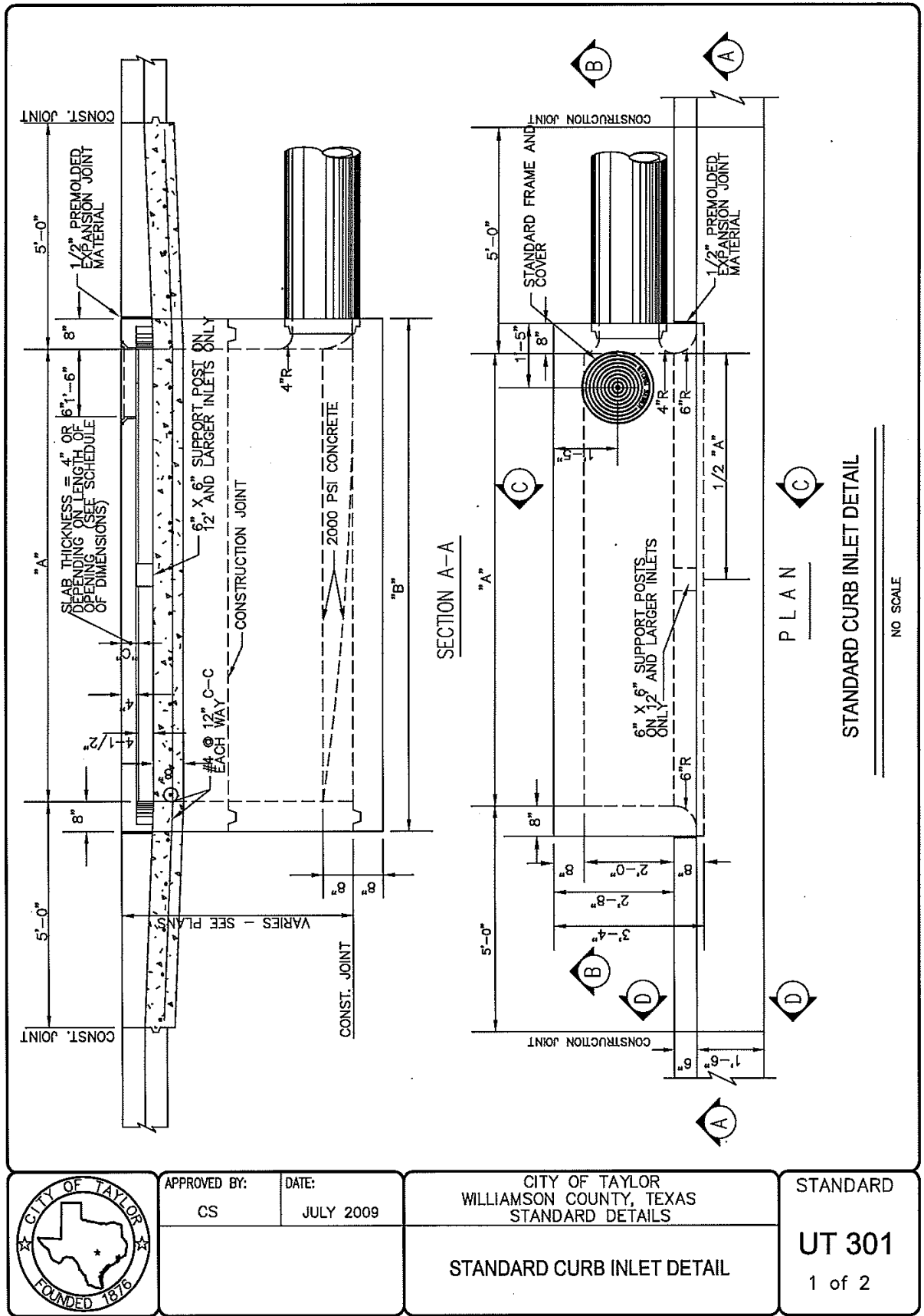
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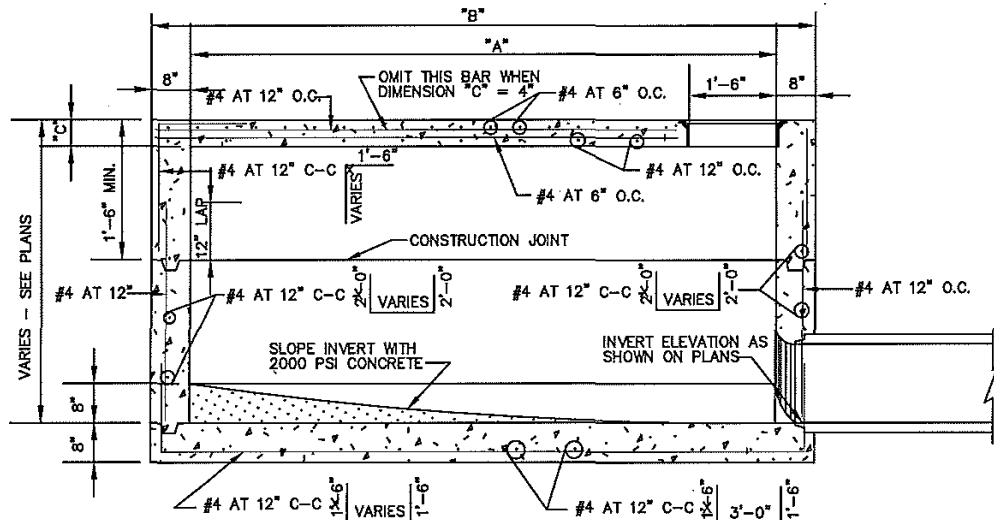
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STORM DRAIN PIPE EMBEDMENT
DETAIL

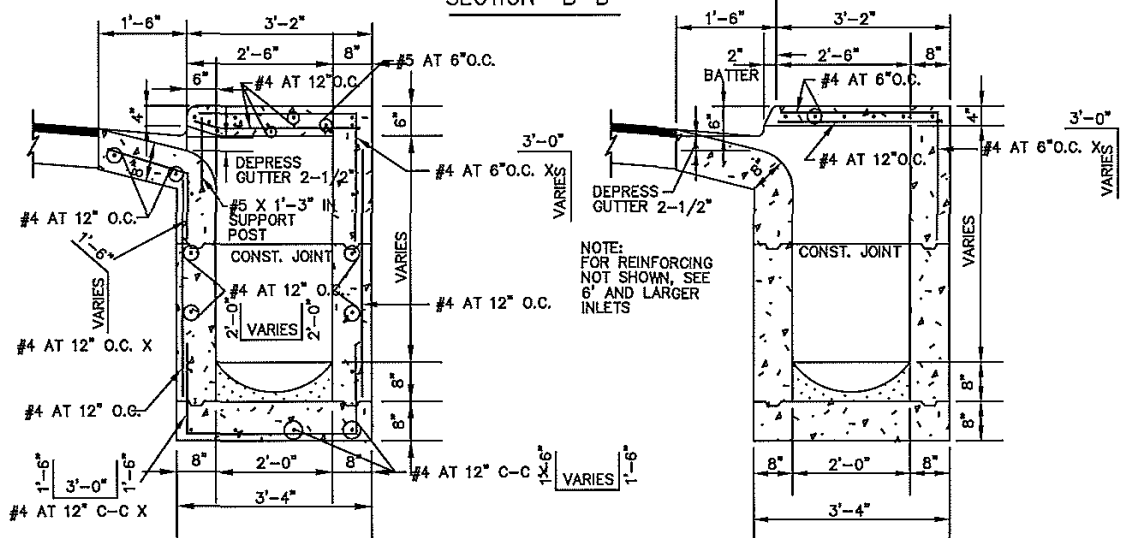
STANDARD

UT 300





SECTION B-B



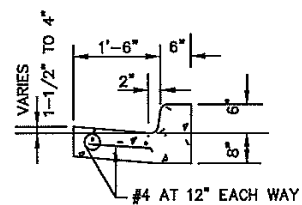
(6' AND LARGER INLETS)

SECTIONS C-C

(3'-5' INLETS)

NO SCALE

SCHEDULE OF DIMENSIONS		
OPENING "A"	OUTSIDE "B"	TOP SLAB "C"
3'-0"	4'-4"	4"
4'-0"	5'-4"	4"
5'-0"	6'-4"	4"
6'-0"	7'-4"	6"
8'-0"	9'-4"	6"
10'-0"	11'-4"	6"
12'-0"	13'-4"	6"
14'-0"	15'-4"	6"
AND LARGER	"A" + 16"	6"



SECTION D-D

NO SCALE



APPROVED BY:

CS

DATE:

JULY 2009

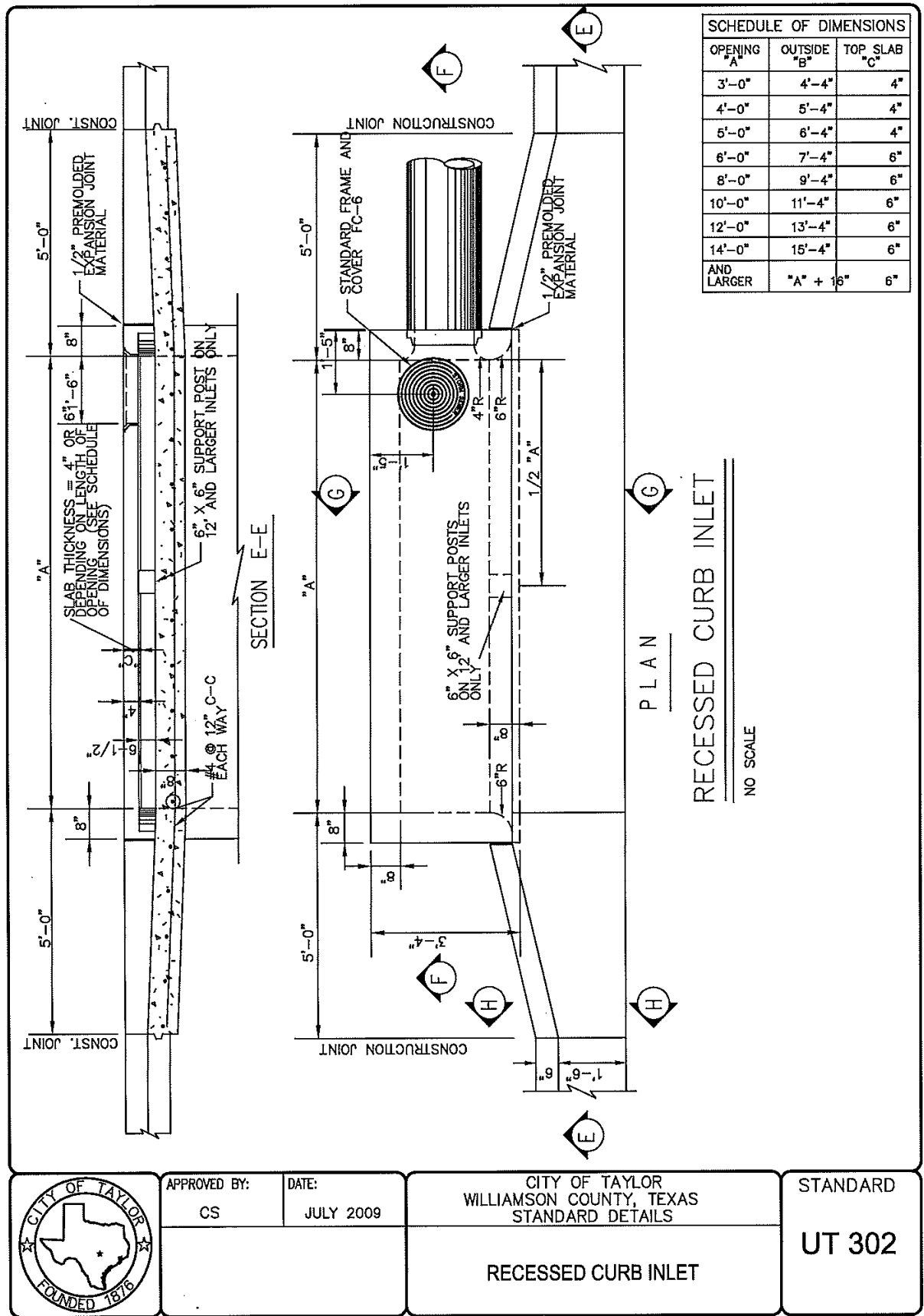
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD CURB INLET DETAIL

STANDARD

UT 301

2 of 2



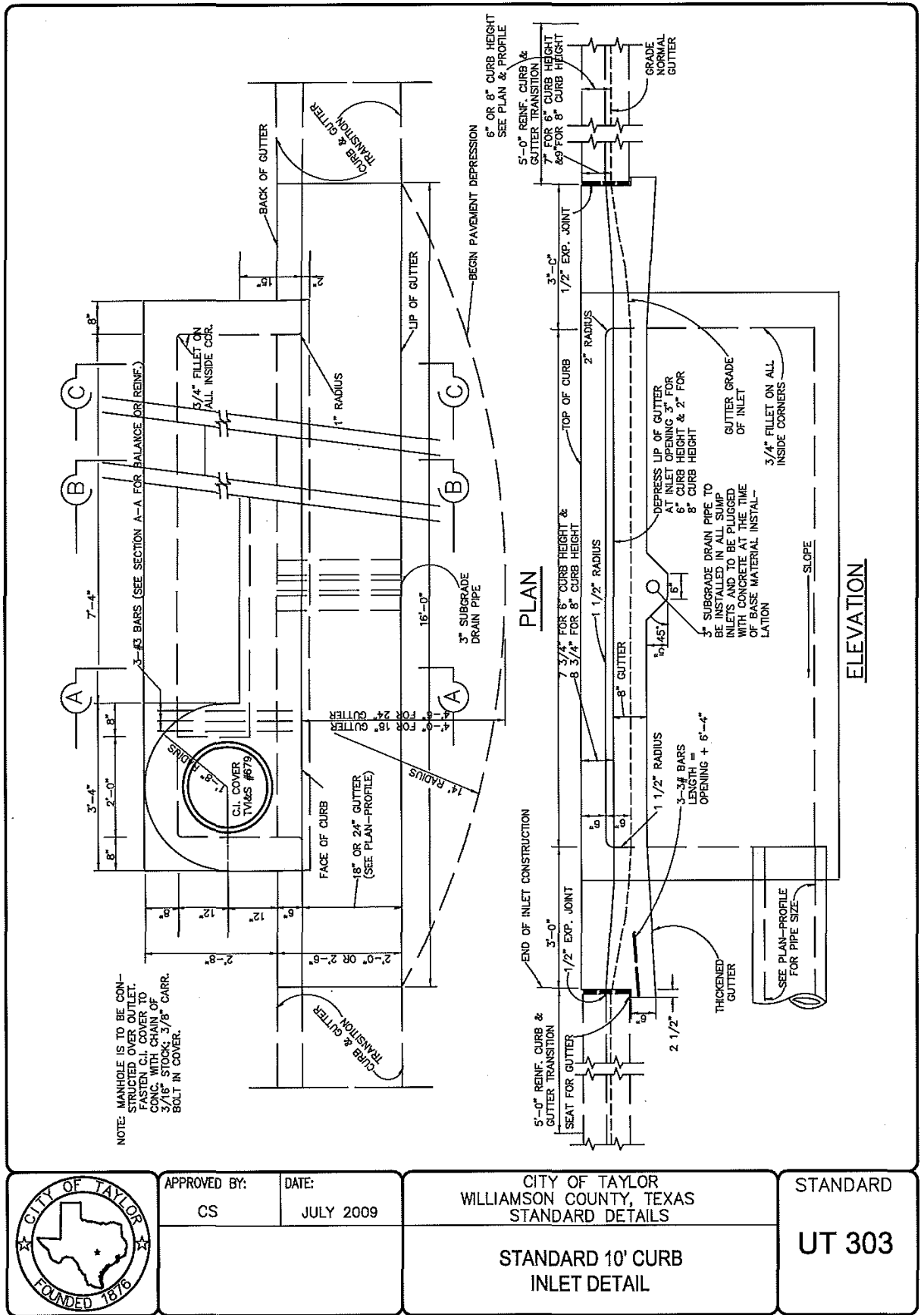
APPROVED BY:
CS

DATE:
JULY 2009

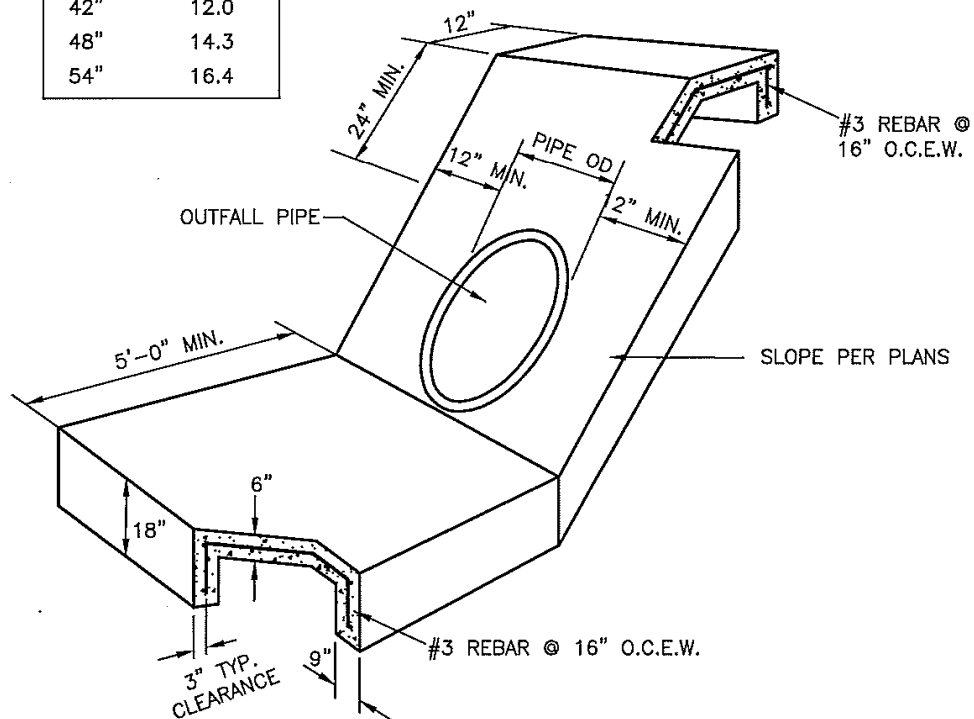
CITY OF TAYLOR
WILLAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD
UT 302

RECESSED CURB INLET



MINIMUM RIP-RAP QUANTITIES	
PIPE	SQ. YDS.
18"	6.2
24"	6.9
27"	7.8
30"	9.5
36"	10.4
42"	12.0
48"	14.3
54"	16.4



NOTES:

1. WHEN HEADWALLS AND WINGWALLS ARE REQUIRED, THEY SHALL CONFORM TO THE TEXAS HIGHWAY DEPARTMENT STANDARDS, OR AS DIRECTED BY THE CITY.
2. ENERGY DISSIPATERS SHALL BE INSTALLED IF PIPE VELOCITY EXCEEDS 5.0 F.P.S., OR AS DIRECTED BY THE CITY.



APPROVED BY:
CS

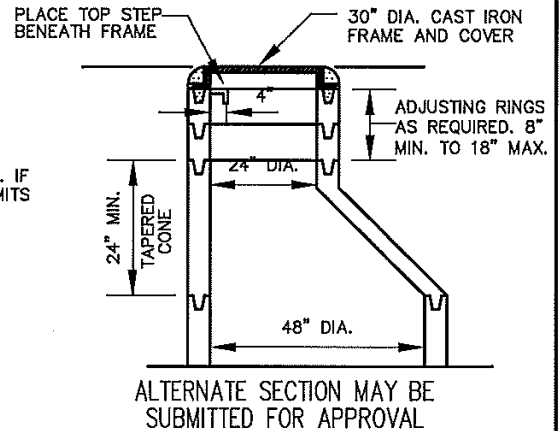
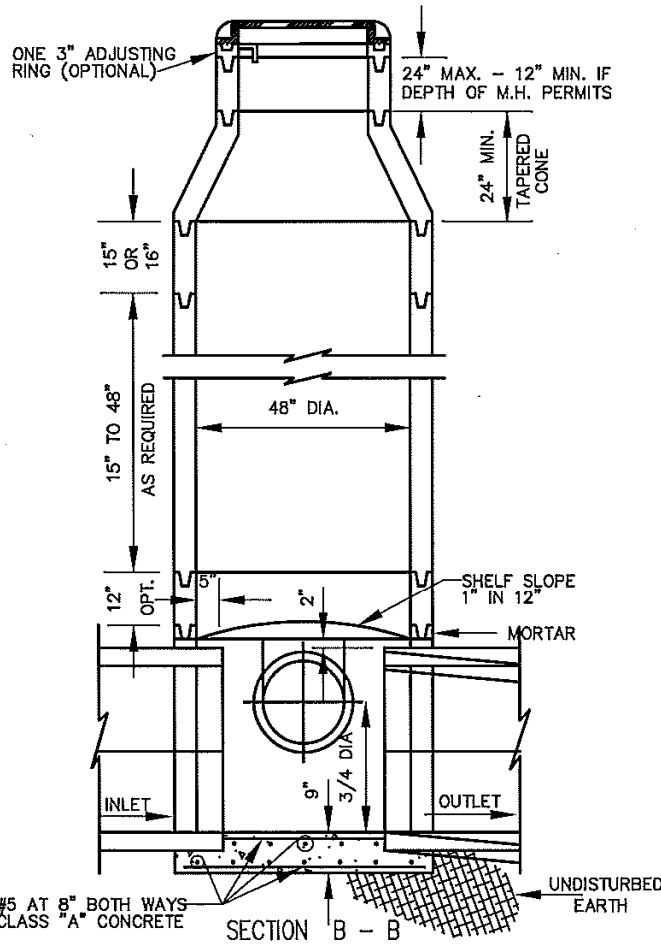
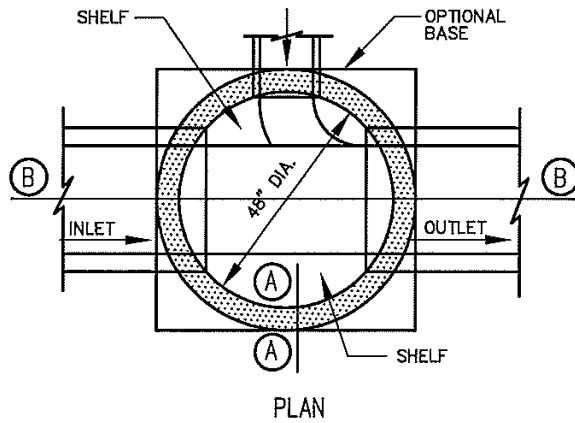
DATE:
JULY 2009

CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

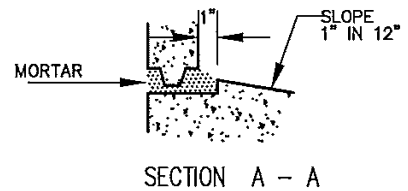
RIP-RAP AT PIPE OUTFALL

STANDARD

UT 304



NOTES: USE 24" FRAME AND COVER
MINIMUM SIZES:
4' DIA. - 18" TO 30"
5' DIA. - 36" TO 42"
6' DIA. - 48" TO 54"
7' DIA. - 60" TO 66"
SIZES TO BE USED ARE
DEPENDENT ON SEWER
ANGLES.

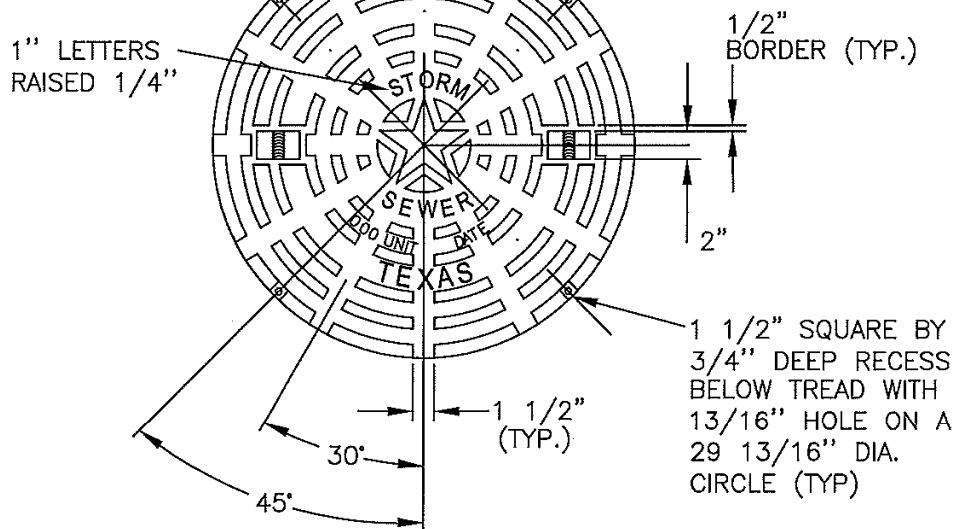


APPROVED BY: CS
DATE: JULY 2009

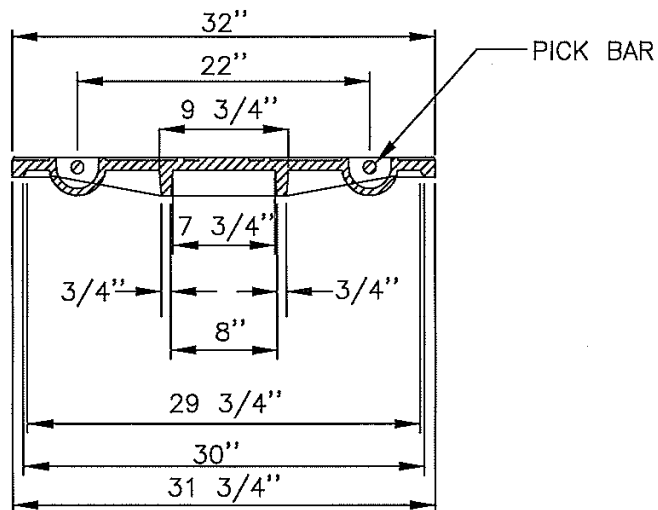
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STORM SEWER MANHOLE - PRECAST

STANDARD
UT 305



LID PLAN VIEW



LID SECTION VIEW



APPROVED BY:

CS

DATE:

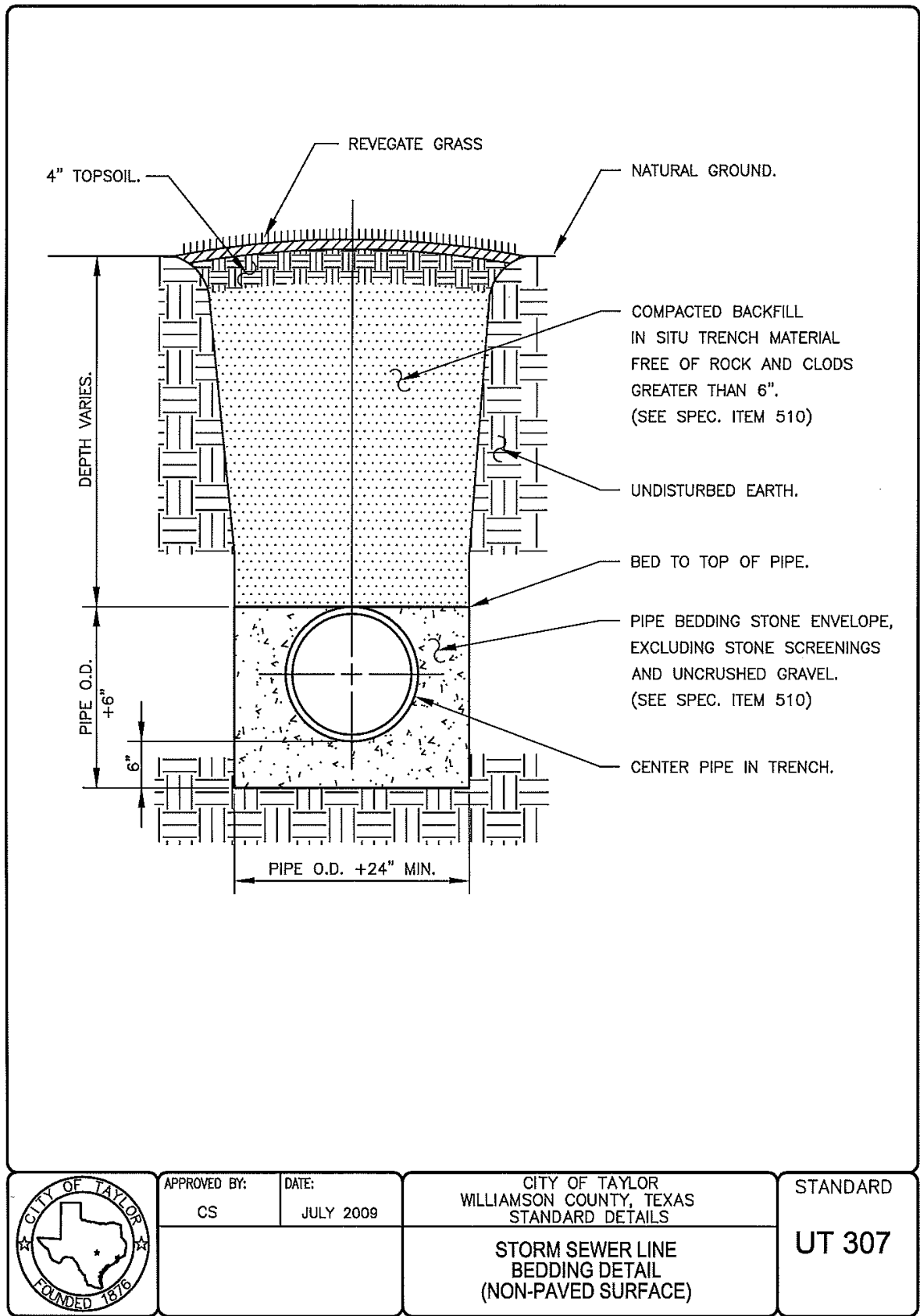
JULY 2009

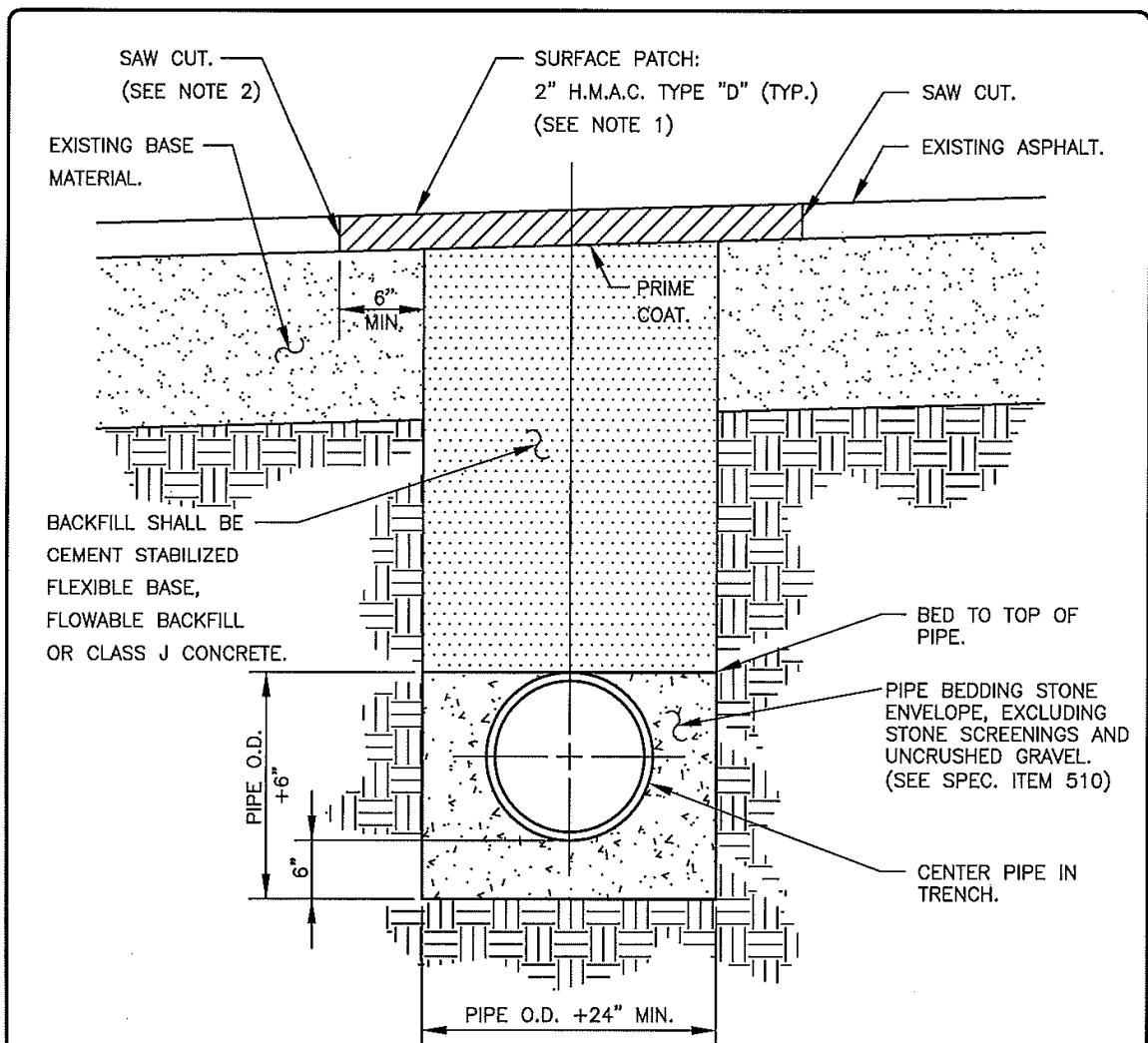
CITY OF TAYLOR
WILLIAMSON COUNTY, TEXAS
STANDARD DETAILS

STANDARD STORM SEWER
MANHOLE COVER (32")

STANDARD

UT 306





NOTES:

1. H.M.A.C. SHOWN IN THIS DETAIL IS SEPARATE FROM ANY ADDITIONAL THICKNESS CREATED BY ANY OVERLAY ITEM IN CONTRACT.
2. THE CONTRACTOR SHALL SAW CUT, REMOVE AND REPLACE EXISTING PAVEMENT A MINIMUM OF 6" BEYOND EITHER THE EDGE OF THE STORM SEWER TRENCH OR THE POINT WHERE EXISTING PAVEMENT IS DAMAGED DUE TO TRENCHING OPERATIONS, WHICHEVER IS GREATER.
3. INSTALLATION OF BACKFILL, SAW CUTTING AND REMOVAL OF EXISTING PAVEMENT AND SURFACE PATCH, SHALL NOT BE PAID FOR SEPARATELY. COSTS FOR THESE ITEMS SHALL BE INCLUDED IN UNIT PRICE BIDS FOR STORM SEWER PIPE.
4. THE CONTRACTOR SHALL PROVIDE STEEL PLATES TO SPAN THE TRENCH AS NECESSARY OR TO ALLOW BACKFILL TO CURE. SUCH PLATES SHALL BE SUITABLE FOR VEHICLE PASSAGE OVER THE TRENCH AND SHALL BE SATISFACTORILY ANCHORED IN PLACE. COSTS FOR THIS ITEM SHALL BE INCLUDED IN UNIT PRICE BIDS FOR STORM SEWER PIPE.



APPROVED BY:
CS

DATE:
JULY 2009

CITY OF TAYLOR
WILLAMSON COUNTY, TEXAS
STANDARD DETAILS

STORM SEWER LINE
BEDDING DETAIL
(PAVED SURFACE)

STANDARD

UT 308

(Ord. No. 2009-37, § 3, 2-9-2010)



City Council Meeting May 12, 2016 Agenda Item Transmittal

Agenda Item #: 7
Agenda Title: Consider introducing Ordinance 2016-10 amending Fee Ordinance regarding fees for City for services.

Council Action to be taken: Introduce Ordinance 2016-10 as presented

Initiating Department: Finance Department

Staff Contact: Rosemarie Dennis, Finance Director

1. INTRODUCTION/PURPOSE

This agenda item is to continue to discuss and consider introducing a new Ordinance 2016-10 to amend the current fee schedule for the FY2015-16 related to the Transportation User Fee only.

2. DESCRIPTION/ JUSTIFICATION

The information below summarizes the changes in the fee schedule for FY2015-16.

The changes are made to the current fee schedule which are shown in red in Exhibit "A". All other fees will remain unchanged.

Summary/description of changes:

- Transportation User Fee (effective date June 1, 2016)- Page 15 of the amended fee schedule- The Transportation User Fee Ordinance 2016-03 was approved and passed at the February 11, 2016 City Council meeting with the fee to go into effect on June 1, 2016. This ordinance is to include the fees reflecting the effective date.

Casey Sledge and Jennifer Black will be present to do a short presentation and address the concerns that came up at the last City Council meeting with regards to commercial accounts.

3. FINANCIAL/BUDGET

The projected revenue that will be generated from the transportation user fee is estimated to be more than \$700,000 annually. A separate fund has been established to account for the revenue collected through this fee.

4. TIMELINE CONSIDERATIONS

This fee is scheduled to go into effect on June 1, 2016 and the ordinance should be introduced at this meeting and final approval at the May 26th meeting.

5. RECOMMENDATION

Staff recommends introducing Fee Ordinance 2016-10 for City services.

6. REFERENCE FILES

7a. [Ordinance 2016-10](#)

7b. [Amended Fee Schedule](#)

ORDINANCE NO. 2016-10

AN ORDINANCE AMENDING ORDINANCE NO. 2016-07 ADOPTED ON APRIL 28, 2016 BY CHANGING CERTAIN RATES AND OTHER SERVICES PROVIDED BY THE CITY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TAYLOR:

SECTION 1.0 That the certain rates for utilities and other services provided by the city, for the support of the general government of the City of Taylor, Texas be amended in accordance with the changes shown in the attached Exhibit A fee schedule.

SECTION 2.0 That the amendment, as shown in words and figures in Exhibit A, is hereby approved in all aspects and adopted as an amendment to Ordinance No. 2016-07.

SECTION 3.0 All other provisions of Ordinance No. 2016-07 shall remain in full force and effect.

SECTION 4.0 In accordance with Article 8 of the City Charter, this ordinance was introduced before the City Council of the City of Taylor, Texas on the 12th day of May, 2016.

SECTION 5.0 This Ordinance shall be effective June 1, 2016.

PASSED, APPROVED, and ADOPTED on the _____ day of May 2016.

Jesse Ancira Jr., Mayor

ATTEST:

Susan Brock, City Clerk

City of Taylor - Fee Schedule for City Services 2015-16

AIRPORT

Hanger and Tie Down Rental		Monthly Fee
Hangar A	10 Units	\$ 200
Hangar B	6 Units	\$ 132
Hangar C	12 Units	\$ 278
Hangar D	12 Units	\$ 278
Hangar E	8 Units	\$ 278
	2 Units	\$ 337
	2 Units	\$ 375
Tie Downs	27	\$ 39
Over Night Tie Downs	8	\$ 6.00 per night if no fuel is purchased
Late Payment fee, if not paid by due date		10%
Long Term rental of hangar space in main hangar		as negotiated
Long Term rental of living quarters at airport		as negotiated
Fuel Sales		
AV Gas LL100		as determined by City Manager
Jet A		as determined by City Manager

ANIMAL CONTROL

Animal Adoption	\$ 80.00	
Annual animal registration		
If registration is done by veterinarian, the veterinarian retains \$1.50 of the fee and remits remainder to the City. All veterinarian costs incurred are passed on to the owner.		
Dog/Cat - Altered (Spayed or neutered) proof is required	\$ 5.00	Per tag
Dog/Cat - Unaltered (Not spayed or neutered)	\$ 15.00	Per tag
Boarding Fees (on or off-site)	\$ 15.00	Per day
Owner Surrender		
Animal-*Animal is heartworm negative, current on vaccinations, altered and deemed adoptable by Animal Control Supervisor	\$ 30.00	Per occurrence
Animal-*Animal is heartworm negative and deemed adoptable by Animal Control Supervisor, however needs vaccinations and/or alteration	\$ 80.00	Per occurrence
Litters (under 10 weeks of age)	\$ 60.00	
Pick-up:		
Deceased Animal	\$ 35.00	Per occurrence
Deceased Animal - After Hours	\$ 50.00	Per occurrence
Impound fee		
Live Animal	\$ 35.00	Per occurrence
Live Animal - After Hours	\$ 50.00	Per occurrence
Rabies quarantine:		
10 days boarding fee + impound fee + registration fee (if necessary)		
Rabies vaccination	\$ 25.00	Per year
Specialized Food	\$ 10.00	Minimum
Return Charges:		
Loose animals that are picked up	\$ 35.00	Per occurrence
Loose animals that are picked up(2nd occurrence per annum)	\$ 55.00	
Loose animals that are picked up(3rd occurrence per annum)	\$ 75.00	
Loose livestock that are picked up	\$ 65.00	Per occurrence

City of Taylor - Fee Schedule for City Services 2015-16

CEMETERY

Grave Digging Fees			
Normal Size	Weekdays 9am - 4pm	\$	600.00
Normal Size	Weekdays after 3:30 pm; Holidays/Weekends	\$	700.00
Infant or Ashes	Weekdays 9am - 4pm	\$	400.00
Infant or Ashes	Weekdays after 3:30 pm; Holidays/Weekends	\$	500.00
Oversize	Weekdays 9am - 4pm	\$	700.00
Oversize	Weekdays after 3:30 pm; Holidays/Weekends	\$	800.00
Disinterment	Weekdays 9am - 4pm	\$	850.00
Disinterment	Weekdays after 3:30 pm; Holidays/Weekends	\$	1,100.00
Sale of Cemetery Spaces			
Adult		\$	700.00 +\$25 deed filing fee for each sale
Infant/Child or Ashes		\$	350.00 +\$25 deed filing fee for each sale
Other Fees			
Location & marking of gravestone		\$	20.00
Transfer of lots/spaces by grantee		\$	30.00
Temporary grave markers		\$	20.00

FIRE DEPARTMENT

Following fees to be paid in advance by licensed party who holds permit:

Fire Department Permits/Fees

Site and subdivision plans	\$	100.00	
False Alarm (after 3rd Alarm)	\$	50.00	per occurrence
Special Events (includes plans review and inspection) See also Planning & Development fees	\$	100.00	
Controlled burn in city limits - Approved	\$	50.00	
Controlled burn in city limits - Unapproved	\$	300.00	fine
Fire reports	\$	3.00	

Inspections

CSI Inspection	\$	40.00	
Annual safety inspection - commercial buildings:	No charge		
Re-inspection fee - after second inspection	\$	50.00	
Fire final	\$	100.00	
Assisted living institutions	\$	50.00	
Day care centers (providing care for less than 10)	\$	50.00	
Day care centers (providing care for 11 or more)	\$	50.00	
Nursing homes	\$	100.00	
Hospital	\$	100.00	
Foster/adoption home	\$	25.00	

Test/Acceptance Test/ Plans Review

Fuel distribution tank and pipe installation (plans review and testing)	\$	150.00	
Hydrant flow test	\$	100.00	
Suppression System Plans Review	\$	300.00	per each system
Suppression System Test	\$	50.00	
Suppression System Test/Acceptance Per Floor Test <200(>200 \$.50 per device)	\$	100.00	
Suppression System Fire Pump Test/Acceptance test	\$	25.00	
Fire Alarm System Plan Review	\$	100.00	
Fire Alarm System /test/acceptance test	\$	75.00	
Carnival Inspection	\$	100.00	
Interior Seasonal Event	\$	100.00	
Kitchen vent hood suppression system plan review	\$	100.00	
Kitchen vent hood suppression system / Test/acceptance test	\$	50.00	
LP tank storage installation (plans review and testing)	\$	150.00	
Alternative fire suppression systems (spray booths, Dry/Wet Chem., etc.)	\$	50.00	
Alternative fire suppression systems (spray booths, Dry/Wet Chem., etc.) plans review	\$	100.00	

City of Taylor - Fee Schedule for City Services 2015-16

Fines for Negligent or Irresponsible Actions

- 1 A fine shall be charged for negligent, irresponsible, or otherwise unacceptable and malicious acts.
- 2 Charges may be filed in Municipal Court by the Taylor Fire Department, and a fine may be assessed.
- 3 Fines for such acts shall be assessed as follows:
 - Misadventure and/or Deliberate Risk taking (each incident) \$200 minimum plus Municipal Court Costs, if any.
 - Failure to respond to Lawful Warning or Order (each occurrence) \$200 minimum plus Municipal Court Costs, if any.
 - Injury to Fire Personnel due to deliberate act (each injury) - Any and all medical costs incurred by the employee, rehabilitation costs, lost of income, and any further compensation that may be necessary.
 - Damage to Fire Apparatus, equipment or property due to a deliberate act (each item)-The replacement cost of the individual item (see list)
 - Unauthorized Control Burn Fee - Any burning that violates the city ordinance or state law not allowing burning thirty minutes before dawn or thirty minutes after dusk
- 4 (each incident)-\$300 plus Municipal Court Costs, if any.

Note: The following list is not all-inclusive of equipment that may be damaged or contaminated during the course of a respond effort. Additional equipment that is not herein listed may be charged at actual replacement costs.

Following fees may be assessed against the insurance companies requesting Fire/EMS service at which the Taylor Fire Department responded. The same fees may be charged for specialized use or rental- such as but not limited to movie production or stand by services.

Apparatus

Aerial Apparatus	\$	600.00	per truck, per hour
Brush Truck	\$	325.00	per truck, per hour
Chief Vehicle	\$	150.00	per hour
Class A Pumper	\$	450.00	per truck, per hour
Command Unit	\$	150.00	per hour
Heavy Rescue Truck (staffed with 2 personnel)	\$	500.00	per truck, per hour
Medical Response Vehicle (staffed with 2 personnel)	\$	150.00	per truck, per hour
Rehab (staffed with 1 personnel)	\$	75.00	per hour
Tanker Apparatus	\$	350.00	per truck, per hour

Personnel

Fire Inspectors	\$	35.00	per hour
Fire Investigators	\$	75.00	per hour
Firefighter	\$	35.00	per hour
Haz-Mat Awareness	\$	25.00	per hour
Haz-Mat Operation	\$	35.00	per hour
Haz-Mat Tech	\$	40.00	per hour
Incident Commander	\$	75.00	per hour
Swift Water Team	\$	200.00	per hour

Haz-Mat

Absorbent	\$	17.00	per bag
Barricade Tape	\$	20.00	per roll
Broom	\$	20.00	each
Disposable Coveralls	\$	20.00	each
Disposable Goggles	\$	10.00	pair
Drum Liners	\$	8.00	each
Latex Gloves	\$	5.00	pair
Lite-Dri	\$	20.00	per 50lb bag
Plug and Patch Kit	\$	30.00	each
Poly Sheeting	\$	50.00	per roll
Shovel	\$	50.00	each
Top-Sol	\$	30.00	per bag

Protective Equipment Replacement

Bunker Coat	\$	800.00	each
Bunker Pants	\$	800.00	each
FF Boots	\$	275.00	pair
FF Gloves	\$	65.00	pair
Helmet	\$	275.00	each
Nomex Hood	\$	25.00	each

City of Taylor - Fee Schedule for City Services 2015-16

Firefighting Agents		
AFFF Foam	\$ 22.00	per gallon
Class A Foam	\$ 17.00	per gallon
Light Water	\$ 20.00	per gallon
Micro-Blaze	\$ 30.00	per gallon
Emergency Medical Service		
AED (use of FD Automatic External Defibrillator)	\$ 200.00	each use
AED Pads	\$ 25.00	each use
Biohazard	\$ 10.00	per incident
CPR	\$ 150.00	each patient
Dispatch Fee	\$ 80.00	per incident
Flat Rate	\$ 300.00	per incident
Spinal Immobilization	\$ 200.00	each patient
Firefighting Equipment Replacement		
A-Frame Combo Ladder	\$ 414.00	each
Attic Folding Ladder 10'	\$ 255.00	each
Attic Folding Ladder 8'	\$ 230.00	each
Deluge Monitor w/o pie & tips	\$ 2,080.00	each
Extension Ladder 24'	\$ 525.00	each
Extension Ladder 35'	\$ 925.00	each
Foam Aerator Tube	\$ 396.00	each
Fog Nozzle 1.0"	\$ 510.00	each
Fog Nozzle 1.5-1.75"	\$ 625.00	each
Fog Nozzle 2.5"	\$ 680.00	each
Fog Nozzle 2.5" Master	\$ 825.00	each
Fog Nozzle 2.5" Play pipe	\$ 1,095.00	each
Hose 1.0"	\$ 75.00	each 50'
Hose 1.0" booster	\$ 125.00	each 50'
Hose 1.75"	\$ 115.00	each 50'
Hose 2.5"	\$ 145.00	each 50'
Hose 3.0"	\$ 225.00	each 50'
Hose 5.0"	\$ 685.00	each 100'
Motorola Portable Radio 800 MHz	\$ 3,500.00	each
Motorola Portable Radio VHF	\$ 1,000.00	each
PASS Alarm	\$ 200.00	each
Roof Ladder 12'	\$ 275.00	each
Roof Ladder 14'	\$ 335.00	each
SCBA Air Mask	\$ 240.00	each
SCBA Air Mask complete	\$ 2,300.00	each
SCBA Spare Cylinders	\$ 570.00	each
Stacked Tips w/Shaper	\$ 566.00	each
Rescue Equipment Used		
Acetylene Cutting Kit	\$ 185.00	per hour
Air Bags	\$ 275.00	per hour
Air Impact Tools	\$ 85.00	per hour
Ajax Cutting Tool	\$ 35.00	per hour
Milwaukee Saws-All	\$ 65.00	per hour
Oxygen with Mask	\$ 90.00	per hour
Porta Power	\$ 85.00	per hour
Rescue Tools: Spreaders, Cutters, Rams	\$ 300.00	per hour
Fire Equipment Used		
ABC Extinguisher	\$ 45.00	each
Axe(s)	\$ 12.00	per hour
Barricade/Scene Tape	\$ 20.00	
Bolt Cutters (HD)	\$ 12.00	per hour
Cellular Phone w/long dist. Chg.	\$ 25.00	
Chain Saw	\$ 40.00	per hour
CO2 Extinguisher	\$ 45.00	each
Explosive Meter	\$ 180.00	
Gas Plug/Gasoline Plug Kit	\$ 45.00	
Generator	\$ 45.00	per hour

City of Taylor - Fee Schedule for City Services 2015-16

Hall Runner	\$	15.00	each
Halligan Tool	\$	12.00	per hour
Hand Lights	\$	15.00	each
K-Tool	\$	20.00	
PPV Fans	\$	50.00	per hour
Purple K Extinguisher	\$	75.00	each
Rescue (K-12) Saw	\$	40.00	per hour
Rolls of Plastic	\$	30.00	each
Salvage Covers	\$	25.00	each
Scene Lights	\$	32.00	per hour
Tank, Portable/Fold-a-Tank	\$	150.00	
Water Extinguisher	\$	15.00	each
Windshield Tool	\$	10.00	

The following Fire/EMS fees are assessed and may be recovered by a loss recovery contractor as provided in Ordinance 2010-15

Motor Vehicle Incidents

Level 1-	\$	435.00
Provides hazardous materials assessment and scene stabilization. This will be the most common "billing level". This occurs almost every time the fire department responds to an accident/incident.		
Level 2-	\$	495.00
Includes Level 1 services as well as clean up and material used (sorbents) for hazardous fluid clean up and disposal. Billed at this level if the fire department has to clean up any gasoline or other automotive fluids that are spilled as a result of the accident/incident.		
Level 3- Car Fire	\$	605.00
Provide scene safety, fire suppression, breathing air, rescue tools, hand tools, hose, tip use, foam, structure protection, and clean up gasoline or other automotive fluids that are spilled as a result of the accident/incident.		
Level 4-	\$	1,800.00
Includes Level 1& 2 services as well as extrication (heavy rescue tools, ropes, airbags, cribbing, etc.) Billed at this level if the fire department has to free/remove anyone from the vehicle(s) using any equipment. Will not bill at this level if the patient is simply unconscious and fire department is able to open the door to access the patient. The level is to be billed only if equipment is deployed.		
Level 5-	\$	2,200.00
Includes Level 1, 2 & 4 services as well as Air Care (multi-engine company response, mutual aid, helicopter). Billed at this level any time a helicopter is utilized to transport the patient(s).		
Level 6-		
Itemized Response: The city has the option to bill each incident as an independent event with custom mitigation rates, for each incident using, itemized rates deemed usual, customary and reasonable (UCR). These incidents will be billed, itemized per apparatus, per personnel, plus products and equipment used.		

Hazmat

Level 1-	\$	700.00
Basic Response: Claim will include engine response, first responder assignment, perimeter established, evacuations, set-up and command.		
Level 2-	\$	2,500.00
Intermediate Response: Claim will include engine response, first responder assignment, hazmat certified team and appropriate equipment, perimeter establishment, evacuations, set-up and command, Level A or B suit donning, breathing air and detection equipment. Set-up and removal of decon center.		
Level 3-	\$	5,900.00
Advanced Response: Claim will include engine response, first responder assignment, hazmat certified team and appropriate equipment, perimeter establishment, evacuations, first responder set-up and command, Level A or B suit donning, breathing air and detection equipment and robot deployment. Set-up and removal of decon center, detection equipment, recovery and identification of material. Disposal and environment clean up. Includes above in addition to any disposal rates of materials and contaminated equipment and material used at scene. Includes 3 hours of on scene time - each additional hour @ \$300.00/Hazmat team.		

City of Taylor - Fee Schedule for City Services 2015-16

Pipeline Incidents/Power Line Incidents

(Includes, but not limited to : Gas, Sewer, Septic to Sewer, and Water Pipelines)

Level 1- \$ 400.00

Basic Response: Claim will include engine response, first responder assignment, perimeter establishment, evacuations, first responder set-up and command. Includes inspection without damage or breakage.

Level 2- \$ 1,000.00

Intermediate Responses: Claim will include engine response, first responder assignment, and appropriate equipment, perimeter establishment, evacuations, set-up and command. May include Hazmat team, Level A or B suit donning, breathing air and detection equipment. Supervise and/or assist pipeline repair.

Level 3- **Itemized Claim Charges**

Advanced Response: Claim will include engine response, first responder assignment, and appropriate equipment, perimeter establishment, evacuations, first responder set-up and command. May include Hazmat team, Level A or B suit donning, breathing air and detection equipment. Supervise and/or assist pipeline repair to intermediate to major pipeline damage. May include set-up and removal or decon center, detection, recovery and identification of material. Disposal and environment clean up.

Fire Investigation

Fire Investigation Team- \$ 275.00 per hour

The claim begins when the Fire Investigator responds to the incident and is billed for logged time only.

Includes: Scene Safety, Investigation, Source Identification, K-9/Arson Dog Unit, Identification Equipment, Mobile Detection Unit, and Fire Report

Fires

OPTIONAL: A fire department has the option to bill each fire as an independent event with custom mitigation rates. Itemized per person, at various pay levels for itemized products used.

This will be the most common "billing level". This occurs almost every time the fire department responds to an incident.

Assignment- \$ 400.00 per hour, per engine
\$ 500.00 per hour, per truck

Includes: Scene Safety, Investigation, Fire/Hazard Control

Water Incidents

Level 1- \$400 + \$50/hr, per rescue person

Basic Response: Claim will include engine response, first responder assignment, perimeter establishment, evacuations, first responder set-up and command, scene safety and investigation (including possible patient contact, hazard control). This will be the most common "billing level". This occurs almost every time the fire department responds to a water incident.

Level 2- \$800 + \$50/hr, per rescue person

Intermediate Response: includes Level 1 services as well as clean up and material used (sorbents), minor hazardous clean up and disposal. The City will bill at this level if the fire department has to clean up small amounts of gasoline or other fluids that are spilled as a result of the incident.

\$2,000+\$50 per hour, per rescue person + \$100 per hour per Hazmat team member

Level 3-

Advanced Response: includes Level 1 and Level 2 services as well as D.A.R.T activation, donning breathing apparatus and detection equipment. Setup and removal of decon center, detection equipment, recovery and identification of material. Disposal and environment cleanup. Includes above in addition to any disposal rates of material and contaminated equipment and material used at scene.

Level 4-

Itemized Response: The City has the option to bill each incident as an independent event with custom mitigation rates, for each incident using, itemized rates deemed usual, customary, and reasonable (UCR). These incidents will be billed, itemized, per trained rescue person, plus rescue products used.

Back Country or Special Rescue

Minimum: \$400 for the first response vehicle + \$50/hr per rescue person. Additional rates of \$400/hr per response vehicle and \$50/hr per rescue person.

Itemized Response: each incident will be billed with custom mitigation rates deemed usual, customary, and reasonable (UCR). These incidents will be billed, itemized per apparatus per hour, per trained rescue person per hour, plus rescue products used.

City of Taylor - Fee Schedule for City Services 2015-16

Chief Response:	\$ 250.00 per hour
This includes the set-up of Command, and providing direction of the incident. This could include operations, safety, and administration of the incident.	

Miscellaneous:

Engine	\$ 400.00 per hour
Truck	\$ 500.00 per hour
Miscellaneous equipment	\$ 300.00 per hour

Mitigation Rate Notes

The mitigation rates above are average "billing levels", and are typical for the incident responses listed, however, when a claim is submitted, it will be itemized and based on the actual services provided. These average mitigation rates were determined by itemizing costs for typical run (from the time a fire apparatus leaves the station until it returns to the station) and are based on the actual costs, using amortize schedules for apparatus (including useful life, equipment, repairs, and maintenance) and labor rates (an average department's "actual personnel expense" and not just a firefighter's basic wage). The actual personnel expense includes costs such as wages, retirement, benefits, workers comp, insurance, etc.

LIBRARY SERVICES

Library Meeting Room

Should there be damages or cleaning needed, the deposit will NOT be refunded. In addition to the deposit, charges to defray clearing or repairs or loss of equipment will be charged to the responsible group.

Refundable Deposit	\$ 200.00	
Individuals/Non Profit	\$ 50.00	first two hours
Individuals/Non Profit - Additional Hours	\$ 25.00	each additional hour
Business/Commercial	\$ 100.00	first two hours
Business/Commercial - Additional Hours	\$ 50.00	each additional hour
Meeting Room Kitchen	\$ 25.00	per meeting

Library Fees

Library card - Non-resident Individual	\$ 10.00	per year
Library card - Non-resident Family	\$ 25.00	per year
Library card - Resident	no charge	
Library card - replacement (1st replacement)	\$ 1.00	
Library card - subsequent replacement cards	\$ 5.00	
Copies - Black & White	\$ 0.10	per impression
Overdue book	\$ 0.10	per day; \$5 maximum
Lost or damaged book	Cost to replace/repair	
Processing fee for lost or damaged book(s)	\$ 5.00	per book, non-refundable

MISCELLANEOUS FEES AND PERMITS

Taxicab

Vehicle permit fee	\$ 150.00	per vehicle
Taxicab driver's permit	\$ 25.00	per year
Horse drawn carriage permit	\$ 25.00	6 months

Street Closures

Special Events (non-parade, non-filming)	\$ 75.00	
Parade	\$ 75.00	

Film Production Fees

Activity:	Cost per Calendar Day
Film Application Fee	\$ 25.00
Total or disruptive use (regular operating hours) of a public building, park, right-of-way, or public area.	\$ 500.00
Partial, non-disruptive use of a public building, park, right-of-way, or public area.	\$ 250.00
Total closure or obstruction of public street or right-of-way, including parking lots and on-street parking.	\$ 50.00
Partial closure or obstruction of public street or right-of-way, including parking lots and on-street parking.	\$ 25.00
Use of City parking lots, parking areas, and City streets (for the purpose of parking film trailers, buses, catering trucks, and other large vehicles.	\$ 50.00

Filming	\$ 250.00	=+min of one police officer & vehicle at rates specified under police Dept. Fees
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City of Taylor - Fee Schedule for City Services 2015-16

PARKS AND RECREATION

Public Facility Rental

Murphy Park: Upper Pavilion Rental	\$	150.00	per day + \$100 refundable deposit
Lower Pavilion Rental	\$	130.00	per day + \$75 refundable deposit
Robinson Park: Pavilion	\$	25.00	per day
Bull Branch Park: Pavilion	\$	25.00	per day
Taylor Regional Park: Pavilion	\$	25.00	per day

Public Property

Long term rental of space on public property for commercial purposes

As Negotiated

Recreation Fees

Swimming Pool Admission: (Robinson Park & Murphy Park)

Children (3 and under)	Free
Children (4 to 12 years old)	\$ 2.00
Adults (13 to 59 years old)	\$ 3.00
Seniors (60 and over)	\$ 2.00
Family Passes - 30 admissions	\$ 45.00
Family Passes - 60 admissions	\$ 90.00

Pool Rental for Parties:

The YMCA will pay the City the regular admission price paid for each person attending parties.

Pool use for daycares and day camps:

The YMCA will pay the City the regular admission price paid for each daycare child or day campers attending the pool.

Pool use for YMCA members:

The YMCA will pay the City appropriate gate fee for each member of the YMCA attending the pool.

Swim Lessons:

The YMCA will pay the City \$5.00 for each swim lesson participant

General Use of Athletic Fields:

Taylor Regional Park & Sports Complex

Deposit	\$	100.00	
Hourly Use	\$	25.00	per hour, per field
Hourly Use with lights	\$	45.00	per hour, per field
Practice: per field, per month (2/week@2hrs each)	\$	200.00	
Gate fee	\$	10.00	per participating team

Robinson Park

Deposit (weekend rental)	\$	100.00	
Maintenance to field outside regular operating hours	\$	34.00	per/hr @ request of the renter
Rental Fee w/no lights	\$	25.00	per/day
Rental Fee with lights	\$	45.00	per/day

Recovery fee (ALL City fields) - All sports included

\$ 5.00 per person/per season

Athletic Fields (Taylor Regional Park & Sports Complex Only-Baseball/Softball only)

Deposit	\$	250.00	Include concession, if applicable
Field attendants (minimum of 2 attendants)	\$	17.00	per attendant, per hour
Lights	\$	50.00	per field
Rentals	\$	100.00	per field, per day
Field Re-drag/Re-chalk	\$	25.00	per field, per drag/chalk

Football and Soccer Fields

Field Rental	\$	150.00	per field, per day
Lights	\$	50.00	per field

Concession Stand (Taylor Regional Park & Sport Complex)

Concession Rentals Pay 10% of gross receipts

Deposit	\$	250.00	
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Beverage Use

(Cost per bottle calculated by dividing current case price by the number of bottles per case)

Vendors (Must obtain permission prior to event)

With Electricity	\$	35.00	per day
No electricity	\$	25.00	per day

City of Taylor - Fee Schedule for City Services 2015-16

PLANNING AND DEVELOPMENT SERVICES , ENGINEERING AND CONSTRUCTION

Building Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.
Weatherization Fees:

\$0.005/SF

New Single Family Residential and Residential Additions

BUILDING PERMIT FEE	\$0.25/square foot
ELECTRICAL PERMIT	\$0.25/square foot
PLUMBING PERMIT	\$0.25/square foot
MECHANICAL PERMIT	\$0.25/square foot
PLAN REVIEW FEE	\$0.15/square foot
TECHNOLOGY FEE	\$25.00

New Commercial and Commercial Additions

BUILDING PERMIT FEE	\$0.25/square foot
ELECTRICAL PERMIT	\$0.25/square foot
PLUMBING PERMIT	\$0.25/square foot
MECHANICAL PERMIT	\$0.25/square foot
PLAN REVIEW FEE	\$0.15/square foot
TECHNOLOGY FEE	\$50.00

New Commercial - SHELL ONLY

BUILDING PERMIT FEE	\$0.15/square foot
ELECTRICAL PERMIT	\$0.15/square foot
PLUMBING PERMIT	\$0.15/square foot
MECHANICAL PERMIT	\$0.15/square foot
PLAN REVIEW FEE	\$0.15/square foot
TECHNOLOGY FEE	\$25.00

Commercial/Tenant Finish Out

BUILDING PERMIT FEE	\$0.20/square foot
ELECTRICAL PERMIT	\$0.20/square foot
PLUMBING PERMIT	\$0.20/square foot
MECHANICAL PERMIT	\$0.20/square foot
PLAN REVIEW FEE	\$0.15/square foot
TECHNOLOGY FEE	\$15.00

Residential Remodel (Single Family, Duplexes, Triplexes)	\$50.00	Weatherization + 0.10/sf + inspections
Apartment Renovations	\$130.00	Per Unit
Commercial Remodeling	\$50.00	Weatherization + 0.10/sf + inspections
All above permits are also subject to a \$15 technology fee		
Porch or deck addition - Covered and uncovered	\$ 40.00	
Foundation leveling & repair permit	\$ 40.00	+\$0.10/SF
All above permits are also subject to a \$7 technology fee		

Inspection/Re-Inspection Fee	\$50	Per inspection
Inspections after normal hours (building inspections)	\$ 100.00	per hour
Work without a permit - First Offense	Double the permit fee	
Work without a permit - Second Offense	Triple the permit fee & filed on in Municipal Court	

Electrical Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

Residential Remodeling (Single Family, Duplexes, Triplexes)	\$ 40.00	Weatherization + 0.10/sf + inspections
Commercial Remodeling	\$ 40.00	Weatherization + 0.10/sf + inspections
All above permits are also subject to a \$7 technology fee		
"T" Pole	\$ 40.00	
Meter Loop	\$ 40.00	
Re-inspection fee (building inspections)	\$ 50.00	Per inspection
Inspections after normal hours (building inspections)	\$ 100.00	per hour
Work without a permit - First Offense	Double the permit fee	
Work without a permit - Second Offense	Triple the permit fee & filed on in Municipal Court	

City of Taylor - Fee Schedule for City Services 2015-16

Gas Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

	Flat Fee	
Residential Remodeling (Single Family, Duplexes, Triplexes)	\$ 40.00	Weatherization + 0.10/sf + inspections
Commercial Remodeling	\$ 40.00	Weatherization + 0.10/sf + inspections
Apartment Renovations	\$ 100.00	Per Unit
All above permits are also subject to a \$7 technology fee		
Yard Line Repair - Residential gas	\$ 40.00	
Gas meter release	\$ 40.00	
Re-inspection fee (building inspections)	\$ 50.00	Per inspection
Inspections after normal hours (building inspections)	\$ 100.00	per hour
Work without a permit - First Offense	Double the permit fee	
Work without a permit - Second Offense	Triple the permit fee & filed on in Municipal Court	

Mechanical Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

	Flat Fee	
Residential Remodeling (Single Family, Duplexes, Triplexes)	\$ 40.00	Weatherization + 0.10/sf + inspections
Commercial Remodeling	\$ 40.00	Weatherization + 0.10/sf + inspections
All above permits are also subject to a \$7 technology fee		
HVAC Change out	\$ 40.00	
HVAC Change out > 2,000 CFM	\$ 65.00	
HVAC Electric hook-up	\$ 40.00	
Re-inspection fee (building inspections)	\$ 50.00	Per inspection
Inspections after normal hours (building inspections)	\$ 100.00	per hour
Work without a permit - First Offense	Double the permit fee	
Work without a permit - Second Offense	Triple the permit fee & filed on in Municipal Court	

Plumbing Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

	Flat Fee	
Residential Remodeling (Single Family, Duplexes, Triplexes)	\$ 40.00	Weatherization + 0.10/sf + inspections
Apartment Renovations	\$ 100.00	Per Unit
Commercial Remodeling	\$ 40.00	Weatherization + 0.10/sf + inspections
All above permits are also subject to a \$7 technology fee		
Lawn sprinkler system	\$ 40.00	
Yard Line repair - Residential Water	\$ 40.00	
Yard Line repair - Residential Sewer	\$ 40.00	
Well permit (non-potable for irrigation)	\$ 40.00	Mostly to ensure there is not backflow into the potable water system
Re-inspection fee (building inspections)	\$ 50.00	Per inspection
Inspections after normal hours (building inspections)	\$ 100.00	per hour
Work without a permit - First Offense	Double the permit fee	
Work without a permit - Second Offense	Triple the permit fee & filed on in Municipal Court	

Miscellaneous Permits & Fees

	Flat Fee	
Accessory structure: less than or equal to 199SF	\$40.00	
Accessory structure: greater than or equal to 200SF	\$0.20/sf, minimum of \$40.00 + inspection fee	
Certificate of Occupancy Inspection (CSI) Commercial	\$ 80.00	
Inspection is performed if the structure's water account is switched from one business/tenant to another. Including zoning verification, among other items		
Certificate of Occupancy Inspection (CSI) Residential	\$ 80.00	
Inspection is performed if the residence was vacant for 6 months or more		
Demolition Permit	\$ 25.00	
Driveway/ ROW permit	\$ 40.00	No charge if associated with residential or commercial site plan approval; 2 public utility
Fence - Residential and Commercial	\$ 35.00	
Manufacture Home Park-additions or alterations to spaces	\$ 25.00	per space
Manufacture Home Park - Original permit application	\$ 400.00	
Manufacture Home Park License (annual fee)	\$ 250.00	=<10 spaces
Manufacture Home Park License (annual fee)	\$ 500.00	>10 spaces
Moving Permit - From out of town	\$ 130.00	+\$35 Escort Fee
Moving Permit - Local	\$ 65.00	+\$35 Escort Fee
Pool (Above ground)	\$ 50.00	+one-time electrical, plumbing, etc., inspection fees
Pool (In ground)	\$ 100.00	+one-time electrical, plumbing, etc., inspection fees
Right of way permit	\$ 40.00	
Tent - Revivals, etc.. Need site plan	\$ 35.00	

City of Taylor - Fee Schedule for City Services 2015-16

Sign Permits

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

Banner	\$	25.00	
Approved banner signs shall be displayed for a maximum of 90 days per calendar year. Non-profit, faith-based, governmental, and service clubs are exempt from paying the fee.			
New Sign or to reface a sign	\$	40.00	+ \$1.60/SF + \$7 technology fee
Temporary Use Directional Sign	\$	25.00	Per Calendar year per Real Estate Agency + \$5 for each additional sign.
Only allowed to be displayed from Noon to 5PM on Sundays. Can be displayed in the ROW as an off-site sign. See sign ordinance for additional requirements.			
Temporary Use Directional Sign Redemption Fee	\$	25.00	For the first sign + \$5 each additional sign. To retrieve sign if its picked up after the weekend.

Site Plan Review Fees - Planning Department

New Apartment & Apartment Addition	\$	200.00	+ \$20 technology fee
New Commercial & Commercial Additions	\$	200.00	+ \$20 technology fee
Commercial Shell	\$	200.00	+ \$20 technology fee

Site Plan Review Fees - Fire Department

New Apartment & Apartment Addition	\$	100.00	
New Commercial & Commercial Additions	\$	100.00	
Commercial Shell	\$	100.00	

Subdivision Fees

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates. Fees are non-refundable once the case has been processed.

Administratively Approved Plat	\$	350.00	+ \$25 per lot
Amended Plat	\$	350.00	
Development Concept Plan	\$	-	
Plat Filing Fee	Whatever the County Charges, will do this electronically.		
Plat Variance	\$	150.00	
Replats	\$	330.00	+ \$25 per lot
Subdivision Plat - Final	\$	300.00	+ \$30 per lot
Subdivision Plat-Preliminary	\$	550.00	+ \$35 per lot

All above applications are also subject to a \$20 technology fee

Zoning Fees

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates. Fees are non-refundable once the case has been processed.

Special Use Permit (SUP)	\$	250.00	
Rezoning Request		\$250	
Planned Developments	\$	500.00	
Zoning Variance	\$	150.00	
Zoning Notices		\$1/ mailed notice	

All above applications are also subject to a \$20 technology fee

Roadway Impact Fees

FOR PROPERTY PLATTED/SUBDIVIDED PRIOR TO FEBRUARY 13, 2014 AND AFTER APRIL 24, 2007

Applicable Fees in Enterprise & Empowerment Zones are charged 50% of the posted rates.

Residential Single Family (1 LUE Equivalency)	\$	480.32	
Residential Multi-Family (0.61 LUE Equivalency)	\$	293.00	
Retail/Commercial (1000/Sq Ft = 1.73 LUE Equivalency)	\$	830.95	
Industrial (1000/Sq Ft = 1.01 LUE Equivalency)	\$	485.12	
Prison (1000/Sq Ft = 2.40 LUE Equivalency)	\$	1,152.77	
Schools (0.09 LUE Equivalency/Student)	\$	43.23	

ROADWAY IMPACT FEES ORDINANCE 2014-03 ADOPTED FEBRUARY 13, 2014

FOR PROPERTY DEVELOPED AFTER FEBRUARY 13, 2014

EFFECTIVE FEE			
SERVICE AREA ONE (1)	\$	480	PER L.U.E.
SERVICE AREA TWO (2)	\$	318	PER L.U.E.

City of Taylor - Fee Schedule for City Services 2015-16

Sidewalks

Cash-in-Lieu Fee \$ 3.00 per Sq Ft

Right-of-way License

Original License \$ 350.00

Impact Fees (For projects platted between 1/10/02 and 4/24/06)

Applicable Fees in Enterprise and Empowerment Zones are charged at 50% of the posted rates.

All fees required in connection with the subdivision ordinance as set forth herein shall be payable at the time of the initial review, in the case of an initial review, or at the time each plat is filed.

Meter Type	Meter Size	Ratio to 5/8" Meter	Water Fee	Sewer Fee	Total Fee
Simple	5/8" x 3/4"	1.00	\$923	\$272	\$ 1,195
Simple	3/4"	1.50	\$1,384	\$409	\$ 1,793
Simple	1"	2.50	\$2,307	\$681	\$ 2,989
Simple	1-1/2"	5.00	\$4,615	\$1,362	\$ 5,977
Simple	2"	8.00	\$7,384	\$2,179	\$ 9,563
Compound	2"	8.00	\$7,384	\$2,179	\$ 9,563
Turbine	2"	10.00	\$9,230	\$2,724	\$ 11,954
Compound	3"	16.00	\$14,768	\$4,359	\$ 19,127
Turbine	3"	24.00	\$22,151	\$6,538	\$ 28,690
Compound	4"	25.00	\$23,074	\$6,811	\$ 29,885
Turbine	4"	42.00	\$38,765	\$11,442	\$ 50,207
Compound	6"	50.00	\$46,149	\$13,622	\$ 59,770
Turbine	6"	92.00	\$84,914	\$25,064	\$ 109,977
Compound	8"	80.00	\$73,838	\$21,795	\$ 95,633
Turbine	8"	160.00	\$147,676	\$43,589	\$ 191,265
Compound	10"	115.00	\$106,142	\$31,330	\$ 137,472
Turbine	10"	250.00	\$230,744	\$68,108	\$ 298,852
Compound	12"	330.00	\$304,582	\$89,903	\$ 394,484

Impact Fees (For projects platted after (4/24/06)

Applicable Fees in Enterprise and Empowerment Zones are charged at 50% of the posted rates.

All fees required in connection with the subdivision ordinance as set forth herein shall be payable at the time of the initial review, in the case of an initial review, or at the time each plat is filed.

Meter Type	Meter Size	Ratio to 5/8" Meter	Water Fee	Sewer Fee	Total Fee
Simple	5/8" x 3/4"	1.00	\$943	\$531	\$ 1,474
Simple	3/4"	1.50	\$1,415	\$796	\$ 2,211
Simple	1"	2.50	\$2,359	\$1,327	\$ 3,686
Simple	1-1/2"	5.00	\$4,717	\$2,654	\$ 7,371
Simple	2"	8.00	\$7,548	\$4,246	\$ 11,794
Compound	2"	8.00	\$7,548	\$4,246	\$ 11,794
Turbine	2"	10.00	\$9,435	\$5,308	\$ 14,743
Compound	3"	16.00	\$15,096	\$8,493	\$ 23,589
Turbine	3"	24.00	\$22,644	\$12,739	\$ 35,383
Compound	4"	25.00	\$23,587	\$13,270	\$ 36,857
Turbine	4"	42.00	\$39,627	\$22,294	\$ 61,921
Compound	6"	50.00	\$47,175	\$26,540	\$ 73,715
Turbine	6"	92.00	\$86,801	\$48,834	\$ 135,635
Compound	8"	80.00	\$75,479	\$42,464	\$ 117,943
Turbine	8"	160.00	\$150,958	\$84,928	\$ 235,886
Compound	10"	115.00	\$108,501	\$61,042	\$ 169,543
Turbine	10"	250.00	\$235,873	\$132,700	\$ 368,573
Compound	12"	330.00	\$311,352	\$175,164	\$ 486,516

Impact Fees (For projects platted after (1/26/12)

Meter Type	Meter Size	Ratio to 5/8" Meter	Water Fee	Sewer Fee	Total Fee
Simple	5/8" x 3/4"	1.00	\$1,770	\$1,230	\$ 3,000
Simple	3/4"	1.50	\$2,655	\$1,845	\$ 4,500
Simple	1"	2.50	\$4,425	\$3,075	\$ 7,500
Simple	1-1/2"	5.00	\$8,850	\$6,150	\$ 15,000

City of Taylor - Fee Schedule for City Services 2015-16

Simple	2"	8.00	\$14,160	\$9,840	\$	24,000
Compound	2"	8.00	\$14,160	\$9,840	\$	24,000
Turbine	2"	10.00	\$17,700	\$12,300	\$	30,000
Compound	3"	16.00	\$28,320	\$19,680	\$	48,000
Turbine	3"	24.00	\$42,480	\$29,520	\$	72,000
Compound	4"	25.00	\$44,250	\$30,750	\$	75,000
Turbine	4"	42.00	\$74,340	\$51,660	\$	126,000
Compound	6"	50.00	\$88,500	\$61,500	\$	150,000
Turbine	6"	92.00	\$162,840	\$113,160	\$	276,000
Compound	8"	80.00	\$141,600	\$98,400	\$	240,000
Turbine	8"	160.00	\$283,200	\$196,800	\$	480,000
Compound	10"	115.00	\$203,550	\$141,450	\$	345,000
Turbine	10"	250.00	\$442,500	\$307,500	\$	750,000
Compound	12"	330.00	\$584,100	\$405,900	\$	990,000

POLICE DEPARTMENT

Accident Report	\$	6.00	Per report
CD of Report	\$	5.00	Per CD
Alarm panel monitoring subscription	\$	24.00	Per month
Applicant Fingerprinting Cards	\$	2.50	Per card
Dispatching fee for other jurisdiction - By contract as negotiated by City Manager and approved by City Council			
Fingerprinting Service	\$	10.00	Per set
Parade Permit	\$	25.00	
Police Report	\$	0.25	Per page
Police unit (vehicle)	\$	25.00	Per hour
Security fee for off-duty police officer (3 hrs/officer minimum)	\$	42.00	Per hour

SOLID WASTE COLLECTION

Collected by City on monthly utility bill. Pick up once per week.

Residential

Fees calculated at **Base Fee/month + Franchise Fee (10%) + Sales Tax(8.25%)**

Container Size:

Single 96 gallon cart	\$	12.04	Base Fee/month
Single 65 gallon cart	\$	10.36	Base Fee/month
Each additional cart	\$	3.91	Base Fee/month

Customer requesting a one time additional waste/bulk item(s) collection (in additional to normal service) will be advised of a one-time additional charge prior to the scheduling of the additional pickup. Pricing determined by service provider.

Commercial

Fees calculated at **Base Fee/month + Franchise Fee (10%) + Sales Tax (8.25%)**

Container Size:

96 Gallon Cart (additional pick up is \$25):

One X Per week pick up	\$	18.91	Base Fee/month
Two X s Per week pick up	\$	27.08	Base Fee/month
Three X s Per week pick up	\$	33.00	Base Fee/month
Four X s Per week pick up	\$	41.27	Base Fee/month
Five X s Per week pick up	\$	51.15	Base Fee/month

2 Cubic Yards (additional pick up is \$25):

One X Per week pick up	\$	52.37	Base Fee/month
Two X s Per week pick up	\$	86.71	Base Fee/month
Three X s Per week pick up	\$	107.32	Base Fee/month

3 Cubic Yards (additional pick up is \$35):

One X Per week pick up	\$	68.54	Base Fee/month
Two X s Per week pick up	\$	119.23	Base Fee/month
Three X s Per week pick up	\$	169.79	Base Fee/month
Four X s Per week pick up	\$	199.77	Base Fee/month
Five X s Per week pick up	\$	247.66	Base Fee/month

City of Taylor - Fee Schedule for City Services 2015-16

4 Cubic Yards (additional pick up is \$45):			
One X Per week pick up	\$	86.71	Base Fee/month
Two X s Per week pick up	\$	151.72	Base Fee/month
Three X s Per week pick up	\$	219.51	Base Fee/month
Four X s Per week pick up	\$	264.16	Base Fee/month
Five X s Per week pick up	\$	343.08	Base Fee/month
6 Cubic Yards (additional pick up is \$55):			
One X Per week pick up	\$	108.38	Base Fee/month
Two X s Per week pick up	\$	178.90	Base Fee/month
Three X s Per week pick up	\$	265.54	Base Fee/month
Four X s Per week pick up	\$	298.84	Base Fee/month
Five X s Per week pick up	\$	364.88	Base Fee/month
8 Cubic Yards (additional pick up is \$65):			
One X Per week pick up	\$	131.88	Base Fee/month
Two X s Per week pick up	\$	218.56	Base Fee/month
Three X s Per week pick up	\$	307.07	Base Fee/month
Four X s Per week pick up	\$	378.08	Base Fee/month
Five X s Per week pick up	\$	477.12	Base Fee/month
10 Cubic Yards (additional pick up is \$75):			
One X Per week pick up	\$	160.76	Base Fee/month
Two X s Per week pick up	\$	252.90	Base Fee/month
Three X s Per week pick up	\$	350.43	Base Fee/month
Four X s Per week pick up	\$	453.38	Base Fee/month
Five X s Per week pick up	\$	597.90	Base Fee/month
<u>Roll Offs - include the following: (Delivery Charge + Daily Rental + Haul Cost)</u>			
Delivery Charge:			
Delivery Charge is calculated at Fee per delivery + Franchise Fee (10%) + Sales Tax (8.25%)			
20 yd Roll-Off	\$	126.25	Fee per delivery
30 yd Roll-Off	\$	126.25	Fee per delivery
40 yd Roll-Off	\$	126.25	Fee per delivery
Daily rental:			
Daily Rental is calculated at Rate/day + Franchise Fee (10%) + Sales Tax (8.25%)			
20 yd Roll-Off	\$	1.95	Rate/day
30 yd Roll-Off	\$	1.95	Rate/day
40 yd Roll-Off	\$	1.95	Rate/day
Haul cost:			
Haul Cost is calculated at Cost per haul + Franchise fee (10%) + Sales Tax (8.25%)			
20 yd Roll-Off	\$	388.46	Cost per haul
30 yd Roll-Off	\$	466.14	Cost per haul
40 yd Roll-Off	\$	543.83	Cost per haul
<u>One time collection of Bulky wastes on call for 2 cu yd, 3 cu yd, 4 cu yd, 6 cu yd, 8 cu yd or 10 Cubic yards</u>			
Delivery Charge	\$	72.58	Fee/delivery
Daily Rental	\$	4.35	Rate/day
Haul cost	\$	72.58	Cost per haul
Industrial Solid Waste Collection Services - collected by service provider			
<u>Spring and Fall cleanup</u>			
Per Standard pick-up truck load	\$	10.00	
Trailer (16' to 18')	\$	20.00	
<u>Assessments</u>			
Lot clean up	Actual cost + 10% admin fee		
Paving assessment	n/a		
<u>Lien Fees</u>			
Filing of Lien with Williamson County	Per current County rate		
Release of Lien with Williamson County	Per current County rate		

TRANSPORTATION USER FEE**TRIP FACTOR INDEX**

Category	Units	Trip Factor	SubCategories
Building Materials	1,000 SF	4.49	Building Materials and Lumber Store, Hardware/Paint Store, Nursery
Convenience Market	1,000 SF	34.57	Convenience Market (no gas pumps), Convenience Market with Gas Pumps, Gasoline/Service Station
Medical Office	1,000 SF	3.57	Medical-Dental Office Building, Clinic, Veterinary Hospital/Veterinary Clinic
Restaurant	1,000 SF	11.15	Restaurant, Drinking Place
			Fast Food Restaurant w/out Drive-Thru Window, Fast Food Restaurant with Drive-Thru Window, Donut Place w/out Drive-Thru Window, Donut Place with Drive-Thru Window
Fast Food	1,000 SF	26.15	Thru Window
Hospital/Nursing Home	1,000 SF	0.74	Hospital, Nursing Home
Indoor Recreation	1,000 SF	3.53	Bowling Alley, Movie Theater, Health Fitness Club
Lodging	Rooms	0.47	Hotel, Motel
			General Office Building, Single Tenant Office Building, United States Post Office, Research and Development Center, Business Park
Business Office	1,000 SF	1.29	
Bank	1,000 SF	12.13	Walk-In Bank, Drive-In Bank
Salon	1,000 SF	1.93	Hair Salon
General Retail	1,000 SF	3.71	Shopping Center, Apparel Store, Arts and Craft Store, DVD/Video Rental Store
			Quick Lubrication Vehicle Shop, Self Service Car Wash, Automated Car Wash, Automobile Parts Sales, Automobile Parts and Service Center
Auto Part/Service/Wash	1,000 SF	4.46	
Large School/Day Care	students	0.2	All schools w/greater than 50 students
Day Care	1,000 SF	12.46	Daycare Center (less than 50 students)
Supermarket/Pharmacy	1,000 SF	8.4	Supermarket, Pharmacy/Drugstore
Prison	1,000 SF	2.91	Prison
Superstore	1,000 SF	4.35	Free-Standing Discount Superstore
Outdoor Recreation	acres/campsites	0.3	Campground/RV Park, Golf Course, Arena
Car Sales	1,000 SF	2.62	New Car Sales
Warehousing	1,000 SF	0.32	Warehousing
Industrial	1,000 SF	0.73	General Light Industrial, General Heavy Industrial, Manufacturing, Utilities

TRANSPORTATION USER FEE SCHEDULE

MONTHLY BASE TRIP		MONTHLY	
	RATE		
Non-Residential Tiers			
Tier *I	0-8.99	\$	25.00
Tier II	9.00-13.65	\$	33.00
Tier III	13.66-27.30	\$	50.00
Tier IV	27.31-53.99	\$	67.00
Tier V	54.00-102.00	\$	84.00
Tier VI	102.01+	\$	133.00
Residential			
Single Family	flat rate	\$	8.00
Multi-Family	flat rate	\$	8.00

*All churches will be placed in Tier I

City of Taylor - Fee Schedule for City Services 2015-16

UTILITIES

Deposits for all single family, commercial, industrial, irrigation accounts per connection.

Deposits waived on additional connections to those customers that have a current City of Taylor utility account with good payment history during the last five years. Good payment history is no disconnections for non-payment and no outstanding balances.

Meter Size	Avg. Gallons consumption/month**	Deposit Amount
5/8" x 3/4"	<10,000	\$ 100.00
3/4"	<10,000	\$ 120.00
1"	<10,000	\$ 130.00
1½"	<15,000	\$ 175.00
2"	<15,000	\$ 225.00
3"	<15,000	\$ 275.00
4"	<25,000	\$ 425.00
6"	<25,000	\$ 625.00
8"	<50,000	\$ 1,025.00
10"	<75,000	\$ 1,525.00
12"	<150,000	\$ 2,525.00

**If average monthly consumption is found to be in excess of minimum, customer may be assessed additional deposit as determined by the City Manager.

Deposits for all multi-family dwelling accounts per connection.

Deposits waived on additional connections to those customers that have a current City of Taylor utility account with good payment history during the last five years. Good payment history is no disconnections for non-payment and no outstanding balances.

Meter Size	Avg. Gallons consumption/month**	Deposit Amount calculated as follows:
5/8" x 3/4"	<10,000	\$100 +(((# units -1) x 0.7)x\$100)
3/4"	<10,000	\$120 +(((# units -1) x 0.7)x\$100)
1"	<10,000	\$130 +(((# units -1) x 0.7)x\$100)
1½"	<15,000	\$175 +(((# units -1) x 0.7)x\$100)
2"	<15,000	\$225 +(((# units -1) x 0.7)x\$100)
3"	<15,000	\$275 +(((# units -1) x 0.7)x\$100)
4"	<25,000	\$425 +(((# units -1) x 0.7)x\$100)

**If average monthly consumption is found to be in excess of minimum, customer may be assessed additional deposit as determined by the City Manager.

Tap Fees

Water Taps		
1"	\$ 1,048.00	per tap
1½"	\$ 1,480.00	per tap
2"	\$ 1,668.00	per tap
Sewer Taps		
2"	\$ 800.00	per tap
4"	\$ 929.00	per tap
6"	\$ 993.00	per tap

Backflow Prevention

Initial Permit	\$ 25.00
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Water Rates

Rates for all single family, commercial, industrial and irrigation accounts per connection.

Total monthly charges include the minimum base rate plus block rate structure for single family, commercial, and industrial. For irrigation the minimum base rate plus \$5.61 per 1,000 gallons.

Base Rate

Meter Size	Monthly Minimum Charge
5/8" x 3/4"	\$ 26.12
1"	\$ 43.63
1½"	\$ 65.31
2"	\$ 104.49
3"	\$ 208.98
4"	\$ 326.53
6"	\$ 653.85
Living Unit Equivalent (LUE)	\$ 10.67 for each LUE

City of Taylor - Fee Schedule for City Services 2015-16

Residential:

Block 1	per kgals. (0-2,000 gallons)	\$	2.65
Block 2	per kgals. (2001-5,000 gallons)	\$	2.92
Block 3	per kgals. (5,001-9,000 gallons)	\$	3.18
Block 4	per kgals. (above-9,000 gallons)	\$	3.71

Non-Residential:

Block 1	per kgals. (0-15,000 gallons)	\$	3.59
Block 2	per kgals. (15,001-45,000 gallons)	\$	3.95
Block 3	per kgals. (45,001-120,000 gallons)	\$	4.31
Block 4	per kgals. (above-120,000 gallons)	\$	4.66

Irrigation:

All usage	\$	5.61	per 1,000 gallons
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<u>Bulk Water Rate</u>	\$	5.00	per 1,000 gallons
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Sewer Rates

Rates for all Single Family Dwelling accounts per connection.

Total "charge" includes monthly minimum **plus \$5.08** per 1,000 gallons . Usages is based on three consecutive months average water billing during low use period (December, January and February).

Meter Size	Monthly Minimum Charge
5/8" x 3/4"	\$ 21.19
1"	\$ 21.19
1½"	\$ 21.19
2"	\$ 21.19
3"	\$ 21.19
4"	\$ 21.19
6"	\$ 21.19

Rates for all multi- family dwelling, commercial and industrial accounts per connection.

Total monthly charge includes monthly minimum **plus \$5.08** per 1,000 gallons.

Meter Size	Monthly Minimum Charge
5/8" x 3/4"	\$ 21.19
1"	\$ 21.19
1½"	\$ 21.19
2"	\$ 21.19
3"	\$ 21.19
4"	\$ 21.19
6"	\$ 21.19

Additional Utility Service Fees:

Administrative/Processing Fee	\$ 25.00
After Hours Connection Fee	\$ 50.00
Connect Fees	\$ 25.00
Fire Hydrant Meter-Base Fee (no consumption included)	\$ 100.00
Fire Hydrant Meter-Deposit	\$ 600.00
Late Fee (Applied to balance of account if not paid by due date indicated on bill)	10%
Lock Fee	\$ 25.00
Meter Fees	\$ 200.00
Meter Flow Test-In-House	\$ 40.00
Plugged/Pulled Meter Fee	\$ 75.00
Reconnect Fee	\$ 25.00
Reread Fees	\$ 20.00
Return Check & NSF Electronic Draft Fees	\$ 30.00
Return Trip Fee	\$ 20.00
Third Party Meter Flow Test-Commercial	\$ 175.00
Third Party Meter Flow Test-Residential	\$ 95.00
Transfer Fee	\$ 20.00
Unauthorized Usage Fee (customer turns water back on to avoid the after charge)	\$ 75.00

Municipal Drainage Utility System

Equivalent Residential Unit (ERU)	Monthly Rate
Residential (includes multi-family) = 1 ERU/Unit	\$ 2.00 Per ERU
Non-residential= \$2.00 per 2,500 sq ft of impervious area	\$ 2.00 minimum fee



City Council Meeting
May 12, 2016
Agenda Item Transmittal

Agenda Item #: 8
Agenda Title: Receive final draft of Housing Development and Marketing Analysis.

Council Action to be taken: Receive for information only

Initiating Department: Development Services Department

Staff Contact: Ashley Lumpkin, Director of Development Services

1. INTRODUCTION/PURPOSE

The City of Taylor executed a contract with Metrostudy to conduct an analysis of the city to determine future demand of residential development within Taylor. Emphasis will be placed on both move-up and executive level residential development. There is also a particular interest in master planned communities providing for a myriad of housing types locating within the city.

2. DESCRIPTION/ JUSTIFICATION

In an attempt to speed the development trend to Taylor, the City has reached out to numerous developers and home builders in the region to determine next steps to getting a large residential development in Taylor, as well as the demand for higher-end housing in Taylor. A common theme in the discussions was that a housing market study could help market the City better and provide the information developers need in order to develop large tracts of land. The city is particularly interested in a study that proactively answers the questions developers have when determining their next development and land acquisition.

Staff met with two separate firms to discuss the ideas of this direct approach of marketing Taylor to entice development more quickly. Metrostudy was chosen for the process as their proposal focused more on determining the future of Taylor with less emphasis on reiterating the current opportunities for change in Taylor.

The attached reports cover the existing community assets, land availability, market analysis of the great Austin area, and strategic recommendations.

3. FINANCIAL/BUDGET

None.

4. TIMELINE CONSIDERATIONS

None.

5. RECOMMENDATION

This report is for information only.

6. REFERENCE FILES

8a. Housing Market Study and New Housing Growth Community Marketing Assessment

8b. Taylor Texas Marketing Framework

FINAL DRAFT Housing Market Study and New Housing Growth Community Marketing Assessment



Prepared for the City of Taylor, Texas

May 5, 2016

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Introduction

Purpose and Methodology

Metrostudy was tasked by the City of Taylor with providing an assessment of residential development needs. Our goal is to assess the City's needs and provide recommendations for the fulfillment thereof. In so doing, Metrostudy seeks to provide actionable insight for key stakeholders, including the City, homebuilders, developers, and their associated financial partners.

Our estimates and recommendations are based upon expected single-family housing demand within a defined Target Market Area (TMA) surrounding the City. It is from TMA housing needs that the City of Taylor will draw much of its market support. Metrostudy also evaluated the overall Austin economy, particularly trends in household formation and employment growth, to determine the correlation between economic expansion and single-family housing demand. By analyzing these historical trends, Metrostudy established a forecast for housing starts in the Austin Market¹ and the TMA. A map of the TMA can be found on page 19 of this document.

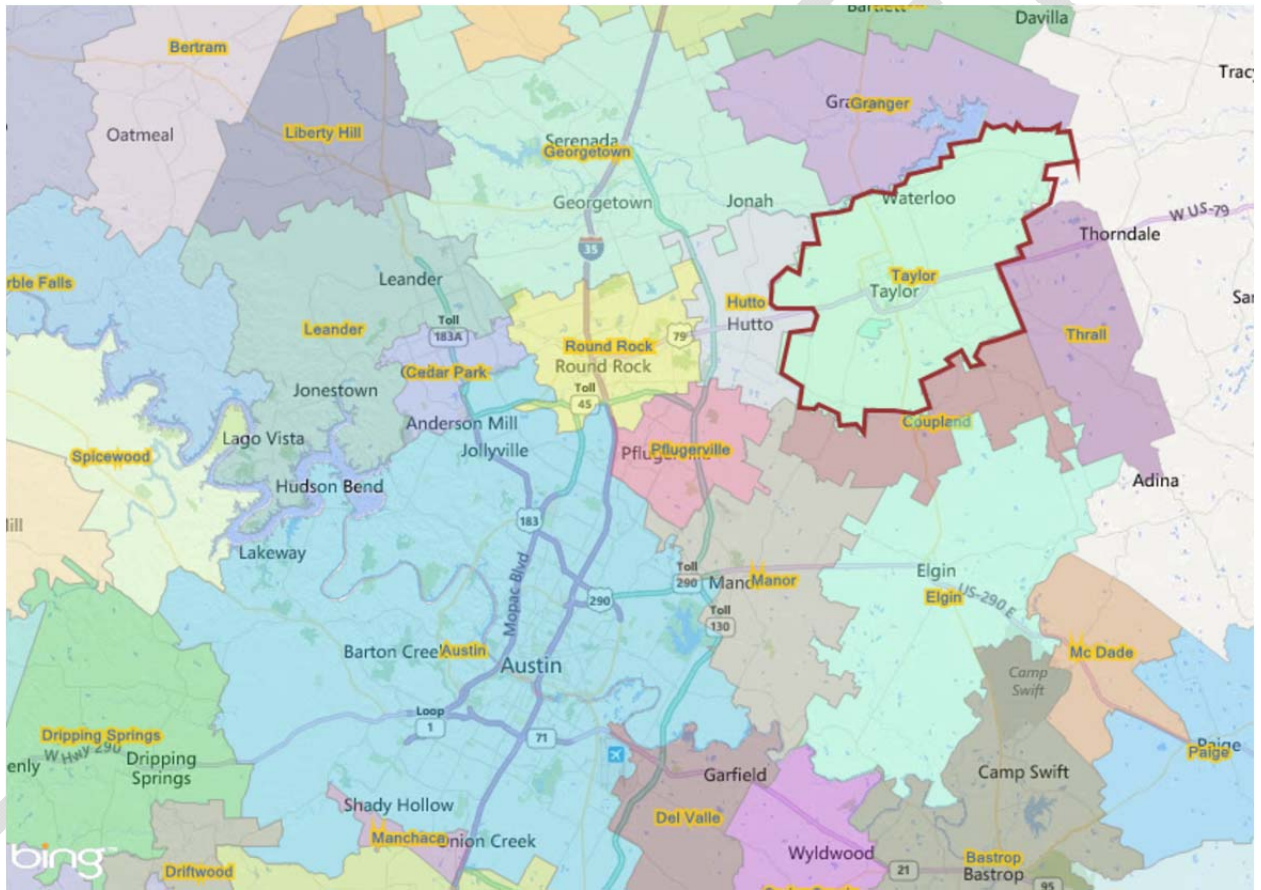
Aggregate single-family housing production was also analyzed to establish the manner in which Austin's housing supply expands and/or contracts in response to economic activity. Metrostudy monitors the supply of new homes on a quarterly basis to accurately determine the size of the Austin market, as well as the size and number of competing subdivisions.

Furthermore, a demographic analysis of the TMA was completed for two main reasons. First, to determine the percentage of the population that is capable of purchasing new homes. But more importantly, in order to break down the buyer profile of single-family housing purchasers in the general area. These are the types of households that will need to be targeted by the City's future developers and homebuilders.

¹ Metrostudy's Austin Market consists of Bastrop, Caldwell, Hays, Travis, and Williamson Counties.

City Location and Characteristics

The City of Taylor is nestled on the Northeast Austin frontier. Conveniently-located a short, 10 minute drive east of State Highway 130 along SH 79, Taylor provides residents the ambience of small town living with easy access to Austin's wide variety of urban entertainment and high-tech employment clusters. Dell, Hewlett-Packard, and Oracle, all located in the Round Rock corridor, are just a 15 minute drive from Taylor.



Community Challenges, Opportunities, and Assets

The following portion of our analysis will serve to notify the City of Taylor of its various strengths and weaknesses in terms of its assets and perceived discrepancies. Typically such assets focus around, but are not limited to, proximity to employment, schools,

location, recreational amenities, and a reasonable building / development entitlement process. Metrostudy's goal is to qualitatively present these opportunities and challenges in terms of how builders and developers will perceive the City when considering a new project within its jurisdiction. In addition, we provide solutions and positive messaging to overcome these objections. In order to determine the challenges, opportunities, and assets, Metrostudy performed the following steps:

- Field Research – Included spending time on the ground in the various neighborhoods of Taylor and other nearby communities assessing housing conditions, market dynamics, and development patterns.
- Professional Interviews – We spoke with several Austin-area builders and developers and Taylor-area realtors in order to gain a better understanding of each's perceptions about Taylor, its housing market, and the market potential for higher-end new housing development.
- Secondary Research – an in-depth analysis of housing market data was performed both within Taylor as well as within nearby communities and metro Austin overall.

Beginning with the good news, Metrostudy has identified multiple community assets and opportunities that are expected to support Taylor's market potential for higher-end new housing, including:

Asset #1: A Genuine "Community Feel"

Unlike some competing suburbs of Austin, Taylor presents a genuine "hometown" or "community" feel. Elements that contribute to this intangible but important asset include Taylor's well preserved historic neighborhoods, extensive park system, and redeveloping classic small town downtown. Hutto does not offer these elements on a scale equal to Taylor. The historic old town areas of Round Rock and Georgetown are on more of a comparable scale to Taylor. Although many other factors contributed greatly to the large scale development occurring in those two cities, it is important to

note that they are instructive that Taylor's current footprint could potentially support additional new development on a larger suburb scale.



Taylor's downtown area includes several notable restaurants and charming local shops. Mueller BBQ and the mixed use redevelopment of the McCrory Timmerman building (including a brew pub, coffee house, and high end loft rental apartments) are not the least of the elements that offer Taylor a genuine "community feel."

The sizable historic neighborhoods just north of downtown Taylor also contribute to this asset.



Metrostudy observed market interest in these older homes in vintage neighborhoods. Most that are currently listed on the market are under contract. Many had been extensively renovated and restored, and were selling for prices in excess of \$110 per front foot. While this represents a value to similar home pricing in vintage areas of central Austin, pricing is still at a premium for this area, indicating the strong demand for – and continuing attractiveness of – Taylor’s historic neighborhoods.

Opportunity: Favorable Land Economics

Metrostudy observed land pricing among tracts currently on the market for sale that would provide a steep discount versus many other suburban locations of Greater Austin. Potential residential development tracts observed for sale ranged in price from \$7,800 to \$21,000 per acre. This pricing structure allows for developers to purchase land at a sufficiently low land basis, thereby pricing in the risk of developing in Taylor (which does not exhibit a demonstrable history of real estate demand).

Asset: Community Amenities

Because it is an established community, Taylor offers new residents a slate of existing amenities that could make the community attractive to new residents and ultimately buyers of new homes within new more upscale developments. These include Taylor’s park and trail system. The more fully developed community amenities within Taylor

should be marketed as an attribute both to potential developer / builders and potential new residents.



Asset: Proximity to 130 Toll, Path of Growth

The opening of the 130 Toll Road has made commuting to and from suburban communities in the northeast, east, and southeast sides of Austin much more feasible than it had been prior. This transportation corridor has allowed for the path of growth to continue east from Round Rock to Hutto beyond 130. Taylor is the next location beyond Hutto in this path of growth expansion. Similar path of growth development has occurred in Georgetown to the north. Previously, Georgetown (not unlike Taylor) was a small historic town with the Sun City age restricted community adjacent. However, Austin's strong growth coupled with path of growth development has lead Georgetown to see strong development growth as Round Rock reaches buildout. A similar dynamic can reasonably be expected to occur in Taylor as Hutto reaches buildout. I-35 is a more primary route in the region than is 79, so the degree to which Taylor is in the path of growth is slightly lesser than the degree to which Georgetown was. However, as Georgetown achieves greater and greater level of development, it is not unreasonable to

contemplate development moving east of Georgetown / Round Rock along Chandler Road and Highway 29 East. This development would eventually reach Taylor. This scenario is not unreasonable to contemplate in the future because development would simply have to reach points too far north from Austin along I-35 such as Jarrell and further into Bell County once it extends beyond Georgetown. The distances from Austin employment centers would be too great; it is more reasonable to expect development to fill back in to the east as projected above. Developers interviewed in this Housing Study process indicated that the perception among homebuilders in Austin (and homebuyers) is that Taylor is geographically “far out.” However, the reality (as acknowledged by the same developer) is that 130 Toll is less than a ten minute drive from Downtown Taylor, and the introduction of 130 makes the commute from Taylor to key Austin area employment nodes comparable to that from multiple other suburbs in the area.

Challenge: Abundance of Land

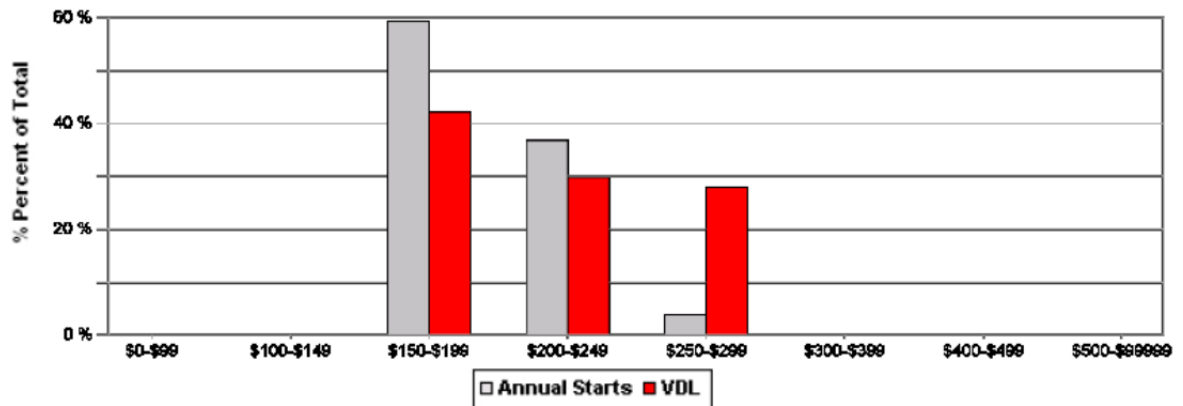
One challenge brought to our attention by our developer clients is the abundance of developable land within the TMA but outside of Taylor’s extraterritorial jurisdiction (ETJ). They fear that taking a long position in Taylor may expose them to undue risk of competition from potential tracts further west and closer to major transportation routes, such as SH-130 and I-35.

Challenge: Lack of Demonstrable Demand for Higher Priced Housing

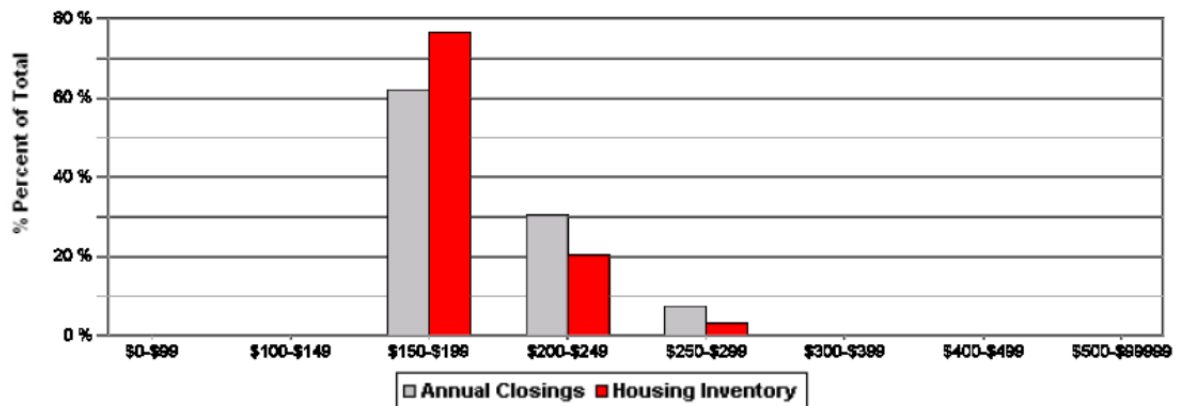
Taylor has many community assets and positives to offer. However, when contemplating where to develop new neighborhoods and build new homes, most builders, developers, and most importantly lenders, will want to see a demonstrable track record of new home sales in the targeted upper price ranges in order to move forward. Underwriting potential new upscale housing deals in Taylor may be more difficult than it would in areas that have a recent history of sales success of homes at or near the targeted price bands.

The tables below present Metrostudy's findings regarding the price band distribution of new homes recently sold in Taylor. Nearly all of these homes are within Summerfield.

Price Range Distribution of Annual Starts vs VDL



Price Range Distribution of Annual Closings vs Housing Inventory



In order to support new more upscale housing being developed in Taylor, it would require a more thorough underwriting and analysis than some developers, builders, and their lenders would wish to perform. This underwriting would ideally require:

- An analysis of the custom homes built on acreage in the surrounding area
- An analysis of the custom homes built at Hills at Mustang Creek

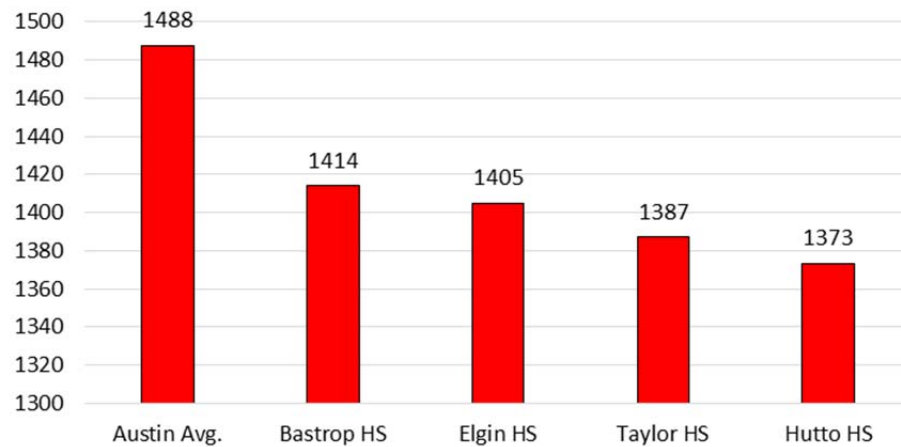
- Connections to be drawn between market potential in Taylor for such housing and market potential for same in surrounding communities including Hutto and Thrall.

Challenge: Public Education System

In order to assess school quality, Metrostudy evaluates district and campus performance on the Scholastic Aptitude Test (SAT) relative to nearby schools. SAT scores are expected to discount all positive and negative attributes that contribute to the quality of education at a particular school or district, including instructional expenditures, teacher experience, standards of accountability, and peer effects.

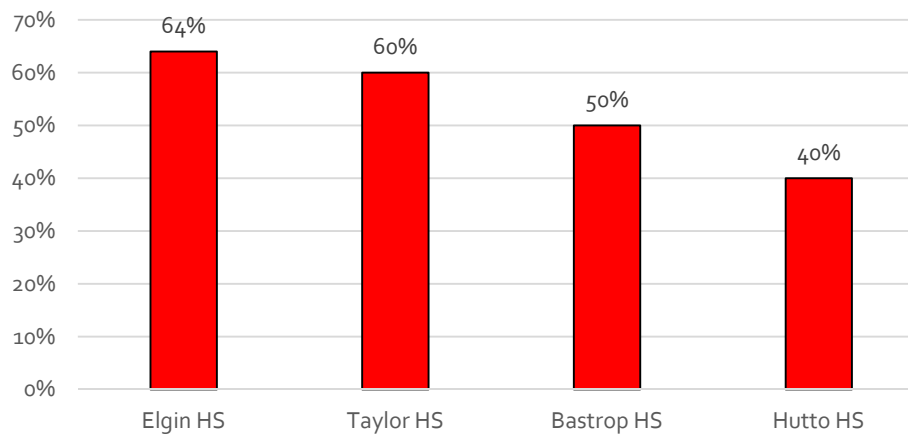
Taylor High School underperforms on the SAT compared to the Austin metro area in general, and also versus many comparable small town schools in particular, such as Bastrop High School and Elgin High School. The perception of Taylor having subpar public schools may hamper the City's competitiveness vis-à-vis other suburbs. This negative perception was confirmed by several local real estate agents. However, it is at least better than Hutto, which leads us to believe that its quality will suffice to support a similar level of new single-family residential attraction. Additionally, Taylor ISD does have a strong number of successes to celebrate. These are outlined in the Strategic Recommendations portion of this report as items which should be proactively promoted.

Average SAT Score



Source: Texas Education Agency, Metrostudy

Percentage of Students Classified as Economically Disadvantaged



Land Availability

Available land in a market-suitable, environmentally feasible, and structurally-supportable location is one of the most crucial key components needed to facilitate new residential development in Taylor. Fortunately, Taylor has the land and infrastructure to offer in the event that residential development interest materializes. Developable land in

Taylor is also priced very competitively as compared to developable tracts in other eastern Austin suburban areas, which generally trade currently for \$25,000 to \$40,000 per acre. Tracts available in Taylor, identified by Metrostudy, are on the market for between \$9,000 and \$22,000. This price structure sets up a potentially compelling value for land developers.

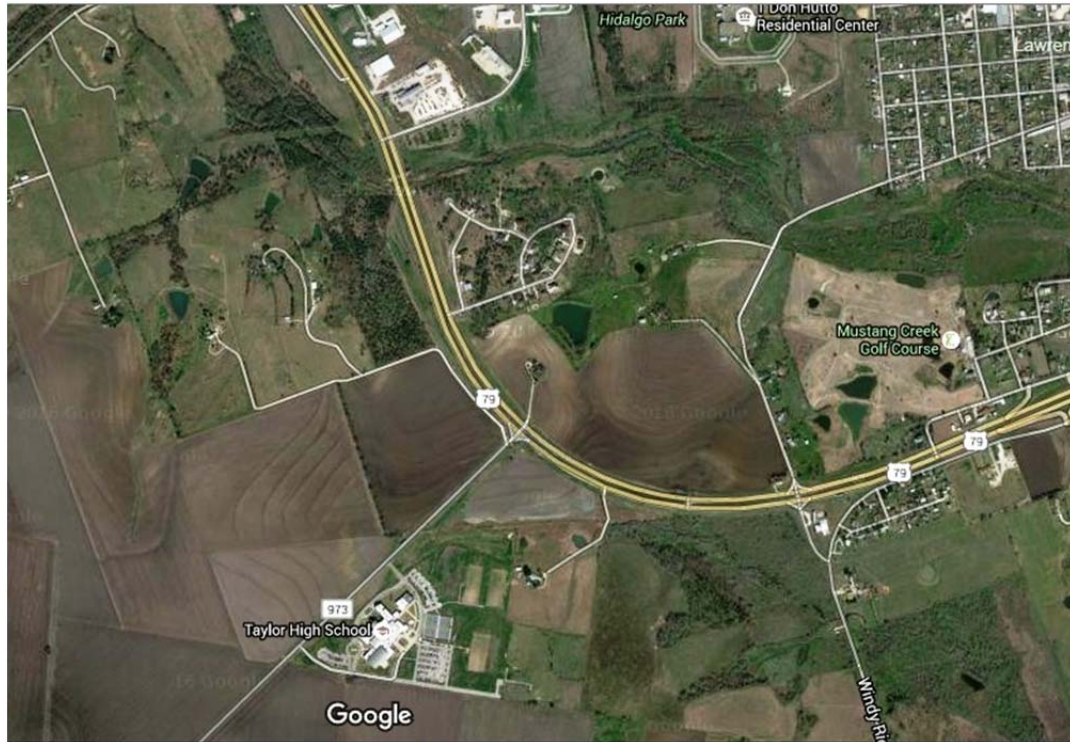
Metrostudy has identified several corridors and areas of Taylor as optimal for potential new residential development at the targeted price points and housing product types. These locations will be discussed below in terms of both available land within each as well as the characteristics Metrostudy identified making these corridors optimal.

SOUTHWEST TAYLOR

The first area identified as being suitable for additional residential development is Southwest Taylor. Specifically, three locations have been identified within Southwest Taylor:

1. Along 79 in the immediate vicinity of the existing upscale Hills of Mustang Creek neighborhood.
2. Along 973 across from or adjacent to the new Taylor High School campus.
3. Along Windy Ridge Road and Buttercup Road, east and south of the new Taylor High School campus.

This area is attractive for new residential development for several reasons. Most importantly, it enjoys close proximity to the attractive new high school campus and SH-79. Thus, it provides easy access to employment routes and also the town's retail.

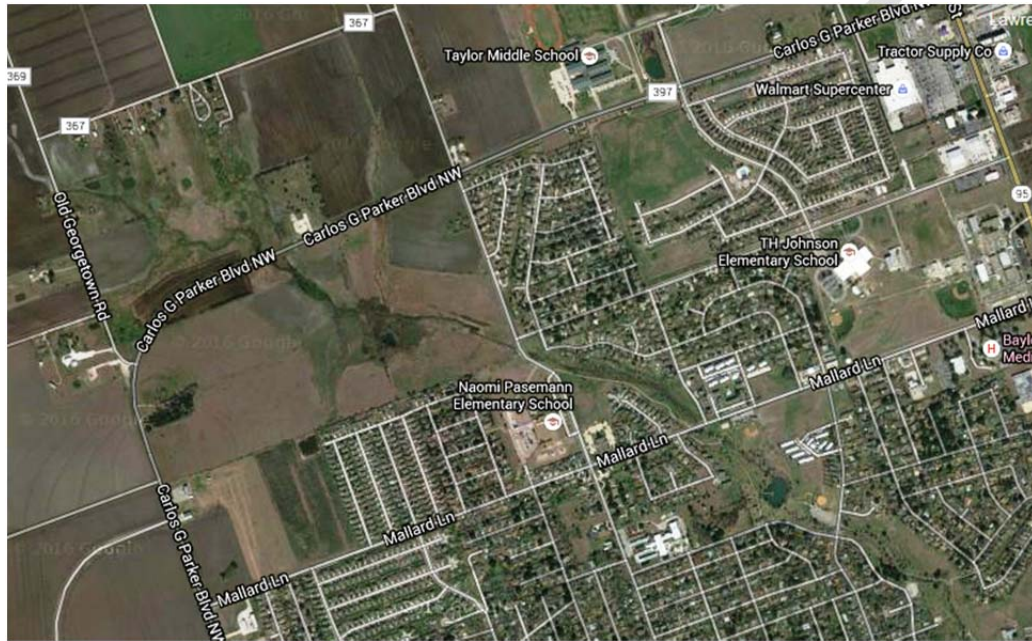


- There is currently a 39.74 acre tract at the hard northwest corner of Carlos G Parker and 973 on the market for \$894,308 or \$22,500 per acre.
- In addition, there are four tracts that total 137.31 acres south of the high school on the market for \$1,853,671 or \$13,499 per acre.
- There are seven subdivided 5 acre “gentleman’s ranch” tracts for sale for \$89,900 each along Windy Ridge Road near the intersection with Buttercup Road.
- There are currently five finished vacant developed lots for sale between \$25,000 and \$41,000 in the Hills of Mustang Creek neighborhood.

NORTH / NORTHWEST TAYLOR

This area provides the best opportunity identified by Metrostudy to tie new development into the existing fabric of Taylor. Developable land exists in this area along the northwest corner of Carlos G. Parker near the intersections with Mallard Lane and with North Drive.

This location is potentially desirable for new single family development because it is adjacent to existing community infrastructure including the park / trail system and facilities including Pasemann Elementary, Taylor Middle School, and the Taylor Regional Park and Sports Complex.



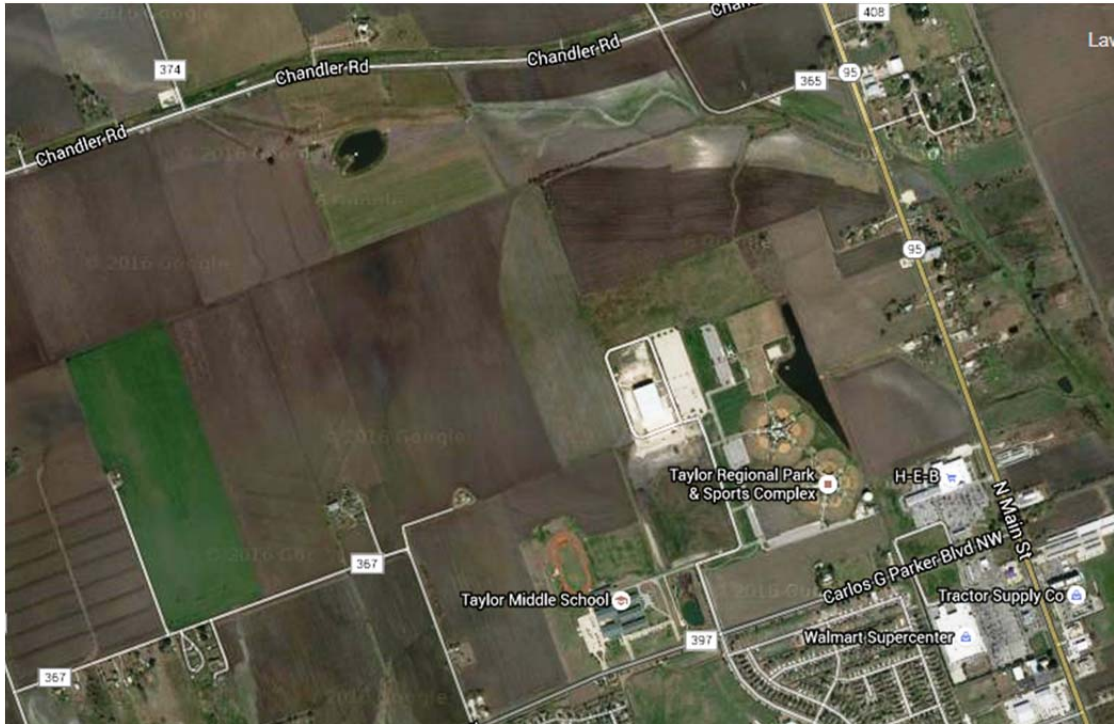
The primary challenge to seeing residential development in this area is twofold. First, much of the land along Carlos G. Parker is zoned for more intensive land uses than single family residential, including light industrial and others. Accordingly, the land is valued at a price too high for residential development. There is currently a 4.73 acre tract inside of Carlos G. Parker north of Mallard listed for \$773,000, and a 3.06 acre tract just to the northwest listed at \$350,000. Tracts could be available along North Drive, or immediately above Oaklawn Drive, that do not have commercial zoning and do not have Carlos G. Parker frontage. These tracts could then potentially be priced and zoned appropriately for residential development. The form this development would take would be smaller, “infill” types of neighborhood development as opposed to larger master planned communities that require more acreage.

CHANDLER ROAD CORRIDOR

As a secondary location, the Chandler Road Corridor has been identified as a potential development node. This is due to two factors:

- Chandler Road being a primary commuting “back door” from Taylor into Hutto, Round Rock, and 130 Toll.
- A potential “corridor effect” extending east from existing master planned communities along Chandler (or University Blvd at that point) including Vizcaya and Teravista.

The downside to developing a new community along Chandler Road in Taylor is lack of connectivity to the existing neighborhoods and amenities of Taylor. One potential scenario that could overcome that factor would be if a sufficiently large tract or tracts were to be acquired south of Chandler Road and north of Taylor Middle School and the Regional Park and Sports Complex. A development within this specific location could be tied into the existing north Taylor area by an extension of North Drive. It could also be further tied into the existing Taylor amenities if direct access were provided from the neighborhood into the Regional Park and Sports Complex.



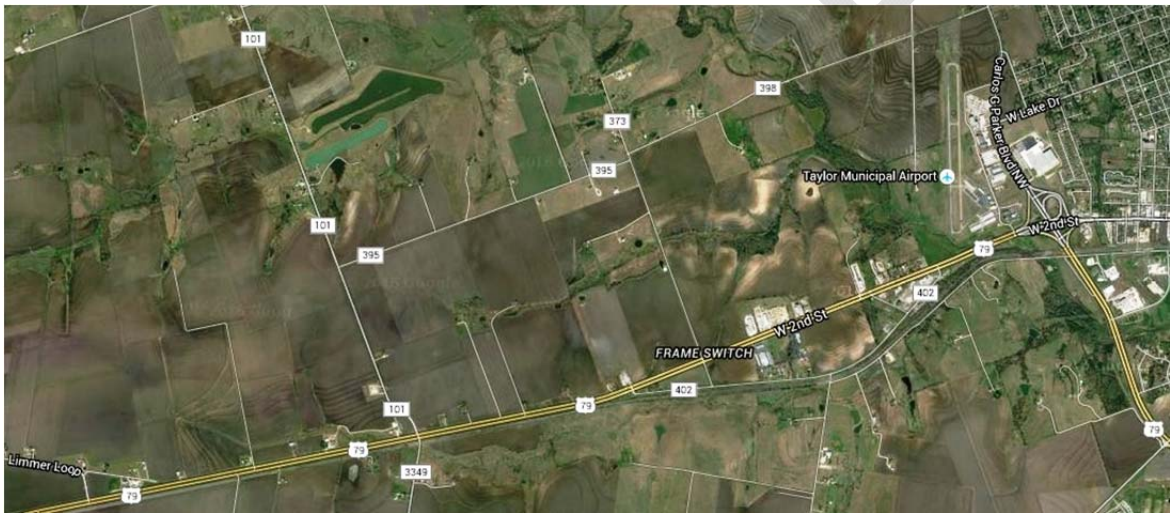
Examples of tracts currently on the market in this area include:

- A 210 acre site along N. CR 366 north of Chandler Road with San Gabriel River frontage for sale at \$2,500,000, or \$11,904 per acre that could be suitable for an upscale development.
- An 83 acre prairie tract for sale listed at \$650,000 along the north line of Chandler Road east of 374.

79 WEST NEAR CR 737

A fourth potential location suitable for new residential development is along 79 West, near CR 373. Metrostudy identified this location because it is the area within the City of Taylor that is most within the direct path of growth extending from Hutto. A medium sized to large residential development in this area could serve as an instigator to draw further development into Taylor from Hutto. The intersection with CR 373 is only a few minutes' drive east of Limmer Loop along 79, and Limmer Loop is the beginning of current new suburban development in Hutto.

This area appears to have sufficient vacant land to support development of a sizable, multiple lot size program single family development. Such a development could support the opening of an on-site Taylor ISD elementary school. An on-site school would not only serve as an attractive amenity for potential homebuyers, but could also serve to help overcome the current objection over Taylor schools perceived to be present in the new home market place. A new, in-neighborhood school, will often overcome objections otherwise expressed about the schools within an area.



Examples of tracts currently on the market in this area include:

- A 48 acre working farm on the north line of 79 priced at \$800,000 or \$16,645 per acre
- An 84 acre tract north of CR 398 priced at \$831,600 or \$9,900 per acre.

Ideally, a development in this area would have frontage along 79 sufficient to allow for a statement making entry area with high quality hardscape and softscape elements. Such an entrance will allow for the community to establish and directly present its identity to potential homebuyers.

I. Executive Summary

Economic Overview

- Austin's economy created approximately 200,000 net new jobs during the current market cycle. As a result, unemployment (3.1 percent) remains below Texas (4.4 percent) and the national average (4.9 percent).
- Despite some headwinds in manufacturing and continued mild growth in the state economy related to the high trade-weighted dollar value and prolonged commodity price slump, most of Austin's large service-based industries have continued to grow unabated. Buoyed by the continued strength and non-cyclical nature of its high-tech employment cluster, the city's professional services sector added 57,300 jobs since the depths of the recession. As a result, employment in non-basic sectors that are sensitive to consumer spending, such as leisure and hospitality, trade, transportation, and utilities, is also growing strong.
- Inflation-adjusted retail sales and wages data show considerable robustness in the economy late last year, surpassing growth in the state and nation.

Housing Market Overview

- Employment gains since the recession have caused housing demand to grow at a faster rate than housing supply. This excess demand is leading to a general shortage that is expected to become increasingly apparent as the housing cycle matures.
- Home prices are currently —and expected to continue— slightly exceeding the income-supported home price. Extreme overvaluation, while not currently the case, may in fact happen if the Austin region's political constraints to affordable housing development are not eased and construction costs continue their upward trend.

- Austin's resale home market adequately portrays the area's robust demand for livable square footage. The total dollar volume of MLS transactions reached \$10.5 billion in 2015, which is more than twice the post-recession low and 52 percent higher than the previous peak reached in 2006. A combination of rising prices and unit sales were responsible for the large increase. Annual closings reached 32,115 by the end of 2015, up 62 percent from the 19,872 units sold during the same period five years ago. Similarly, the median home price increased 37 percent, going from \$189,650 in 2010 to \$260,429 at the end of last year.
- The annual pace of new single-family housing starts reached 11,540 in 4Q15, which is almost twice the bottom reached 5 years ago after the Financial Crisis. However, on a year-over-year basis, growth in starts remained roughly unchanged versus 2014.
- New home inventory has been trending upward lately. A total of 7,310 homes were either under construction or sitting finished, vacant and ready to be sold. The current 8 months of supply remained relatively unchanged compared to a year ago, but this level is significantly high compared to historical norms, explaining why housing absorption failed to keep pace with lot deliveries over the past couple years.
- After several years of lot demand outstripping supply and declining inventories, lot deliveries began to outpace absorption (housing starts) during 2014. The trend continued through 2015, with developers bringing 3,945 more lots online than builders actually absorbed. As a result, vacant developed lot inventory and months of supply increased over the past couple years.
- VDL months of supply increased from 17.1 months in 3Q14 to 20.2 months during 4Q15. However, Metrostudy still considers current lot inventory to be within the long-term equilibrium range for this region. In other words, no oversupply exists in the lot market. Developers should increase the supply of

metro area lots, as builders are expected to remain ready and willing to buy them.

Target Market Area Analysis

- Population and household estimates indicate that the TMA is experiencing considerable growth. As of 2015, there were an estimated 281,143 people in 95,333 households. The TMA is expected to experience a population increase of approximately 32,533 and household increase of 10,998 by 2020, representing gains of nearly 12 percent.
- The TMA currently has an average household size of 2.91 persons, slightly larger than the 2.57 average size for the Austin area. Households consisting of 2 or fewer persons account for approximately 48 percent of the households within the TMA, while households containing 3-5 persons account for approximately 45 percent. Unsurprisingly, the TMA distribution of households in the 3-5 person range is about 10 percent higher than the Austin area, reflecting its attractiveness as a destination for families with children.
- On average, households within the TMA have higher household incomes than the overall Austin metro area. The TMA's estimated average household income for 2015 was \$80,107 with an estimated median household income of \$67,815. For comparison, the average household income in Austin was \$83,551 with a median household income of \$61,610.
- Annual starts on single-family homes within the TMA increased substantially since 4Q10, climbing from 1,295 to 2,904 annual starts by the end of 4Q15. As a result, the TMA's relative share of starts activity Austin area increased from 21.5% to 25.2%. We expect the TMA capture rate to stay on the same relatively stable path over the next five years due to higher barriers to entry in other submarkets.

- Lot absorption has outpaced lot delivery in 16 of the previous 24 quarters, most recently in 4Q15. Overall, there has been a net decrease of 601 lots from inventory since the beginning of 2010. As a result, months of vacant developed lot supply is roughly 25 percent below equilibrium. Under present conditions, we expect new entrants (communities) to experience above average absorption, especially if the product is sufficiently differentiated or priced competitively on per square foot basis.
- The TMA currently has 15 months of vacant developed lot supply versus the current market cycle average of 20. This is principally due to the increasing demand from end consumers and homebuilders for new livable square footage in the wider Austin area. We believe current conditions justify a more aggressive land acquisition strategy for local developers.
- Most TMA starts are in the \$200s. According to our most recent release (4Q15), these accounted for 63 percent of the TMA total, versus only 43 percent of Austin area starts. New homes priced above \$400,000 make up a tiny fraction (3%) of the market, so any future offerings in this category will have to be significantly cheaper on a per square foot basis and differentiated to an adequate extent that would entice high income or net worth households.
- The overall average months of supply of VDL across home price bands in the TMA is 15 months, well below the 20 to 24 month equilibrium range identified by Metrostudy. However, MOS is lowest for homes priced under \$300,000: the average MOS among those price bands is only 13. As a result, homes priced under \$300,000 are expected to achieve above average absorption.

II. Austin Market Analysis

Summary

The Austin economy is in the midst of rapid expansion and urban sprawl. Despite some headwinds in manufacturing and continued mild growth in the state economy related to the high trade-weighted dollar value and prolonged commodity price slump, most of Austin's large service-based industries have continued to grow unabated. Buoyed by the continued strength and non-cyclical nature of its high-tech employment cluster, the city's professional services sector added 57,300 jobs since the depths of the recession. This tightening of Austin's labor market continues to lead real wages higher. As a result, employment in non-basic sectors that are sensitive to consumer spending, such as leisure and hospitality, trade, transportation, and utilities, is also growing strong. Inflation-adjusted retail sales and wages data show considerable robustness in the economy late last year, surpassing growth in the state and nation.

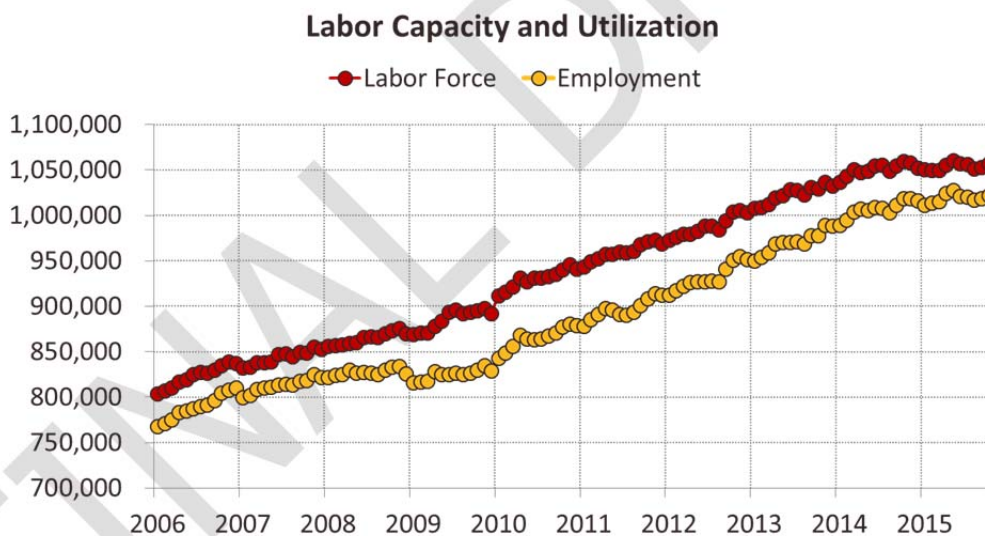
Several significant trends stand out for the Austin housing market. The resale home market provides an adequate portrayal of the area's robust demand for livable square footage. Due to a combination of rising prices and sales, the total dollar volume of MLS transactions reached \$10.5 billion in 2015 – more than twice the post-recession low and 52 percent higher than the previous peak reached in 2006. The annual pace of new single-family housing starts reached 11,540 in 4Q15, which is almost twice the bottom reached 5 years ago after the Financial Crisis. As a result – and after several years of lot demand outstripping supply– lot deliveries began to outpace absorption (housing starts) as early as 2014. The trend continued through 2015, with developers bringing 3,945 more lots online than builders actually absorbed. Overall, however, months of vacant developed lot supply is still within the long-term range that Metrostudy considers to be equilibrium for this market. And Austin still has a supply shortage at multiple price points and lot sizes. While the premium product market, characterized by prices in excess of \$400K on lots over 70' wide, is currently oversupplied, everything cheaper and smaller is chronically undersupplied. Absorption is therefore expected to be strongest for mid-

range and low-end (affordable housing) product types geared toward lower-to-middle and slightly upper-middle income families.

Economic Overview

LABOR CAPACITY AND UTILIZATION

Austin's economy continues to register impressive growth, even after several years of expansion. Since the loss of around 21,000 jobs during the Great Recession, Austin has managed to create an average of about 61,000 net new jobs per year. A total of nearly 214,000 jobs have been added since the depths of the recession. As a result, unemployment (3.1 percent) remains well below Texas (4.4 percent) and the national average (4.9 percent). In fact, unemployment in Austin is amongst the lowest of the 50 largest metropolitan areas in the entire United States.



EMPLOYMENT BY SECTOR

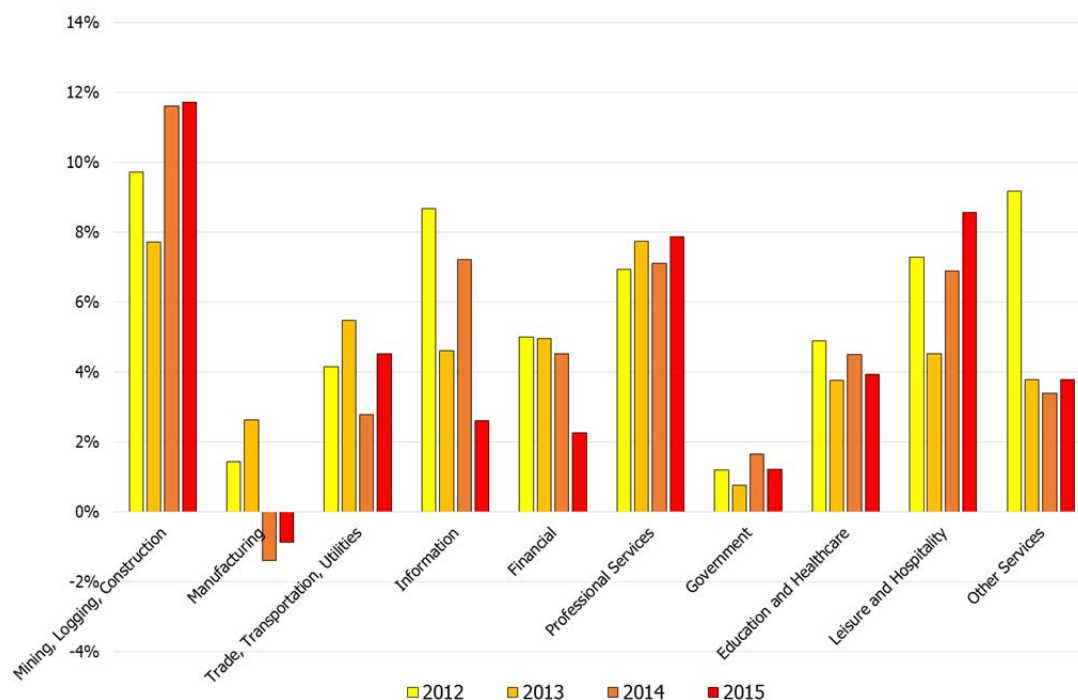
Despite some headwinds in manufacturing and continued mild growth in the state economy related to a high trade-weighted dollar value and the prolonged commodity price slump, most of Austin's large service sectors have continued to expand at a healthy pace. Buoyed by the continued strength and non-cyclical nature of its high-tech

employment cluster, the city's professional services sector added 57,300 jobs since the depths of the recession. This tightening of Austin's labor market continues to lead real wages higher. As a result, employment in non-basic sectors sensitive to consumer spending, such as leisure and hospitality, trade, transportation, and utilities, is also growing strong.

Employment Growth by Sector							
Sector	2010	2011	2012	2013	2014	2015	Total
Mining, Logging, Construction	600	(700)	3,900	3,400	5,500	6,200	18,900
Manufacturing	1,500	2,100	800	1,500	(800)	(500)	4,600
Trade, Transportation, Utilities	6,500	6,300	6,100	8,400	4,500	7,500	39,300
Information	600	1,400	1,900	1,100	1,800	700	7,500
Financial	(400)	2,300	2,300	2,400	2,300	1,200	10,100
Professional Services	7,000	8,700	8,700	10,400	10,300	12,200	57,300
Government	800	(3,900)	2,000	1,300	2,800	2,100	5,100
Education and Healthcare	4,400	6,200	4,700	3,800	4,700	4,300	28,100
Leisure and Hospitality	4,000	3,700	6,600	4,400	7,000	9,300	35,000
Other Services	(200)	800	3,100	1,400	1,300	1,500	7,900
Total	24,800	26,900	40,100	38,100	39,400	44,500	213,800

Source: Bureau of Labor Statistics

Annual Non-Farm Employment Growth by Sector



Demographic Trends

TOTAL POPULATION

The following table summarizes Austin MSA population and household data from the 2010 Census, with 5-year estimates and projections for 2015 and 2020, respectively. After growing approximately 12 percent over the previous five years, population growth is expected to slow to roughly 9 percent through 2020 as the MSA establishes a larger base. Current population sits at nearly 2 million people residing in 773 thousand households. Nielsen Claritas forecasts the area to grow by an annual average 35,855 people and 14,030 households between 2015 and 2020. This growth will necessitate an expansion of the Greater Austin Area housing stock.

Austin Market		Population and Household Growth		
	2010 Census	2015 Estimate	2020 Projection	
Population	1,716,289	1,927,989	2,107,262	
Total Numerical Change	-	211,700	179,273	
Total Percent Change	-	12.3%	9.3%	
Annual Number Change	-	52,925	35,855	
Annual Percent Change	-	3.0%	1.8%	
Households	650,459	733,239	803,391	
Total Numerical Change	-	82,780	70,152	
Total Percent Change	-	12.7%	9.6%	
Annual Number Change	-	20,695	14,030	
Annual Percent Change	-	3.0%	1.8%	
Average Household Size	2.6	2.6	2.6	

Source: Claritas/U.S. Census Bureau

AGE DISTRIBUTION

During the next five years, Austin's population is anticipated to grow across all age groups, including those aged 25-34, which makes it unique compared to other markets. Mimicking national demographic trends, the segment of the population over age 55 are anticipated to account for a much larger share of the regional population than previous cycles. Consequently, the demand for differentiated smaller products is expected to increase.

Both the number and percentage of population in the 45-64 age range, which is considered to be highest in earnings potential, are expected to increase in the region during the next five years. The 65-74 age group is expected to increase its share of the population by 2 percent, which is more than any other segment. These demographic shifts in age and income reinforce the need for developers and homebuilders to make timely alterations in neighborhood and/or floor plan designs to meet the needs of more elderly consumers.

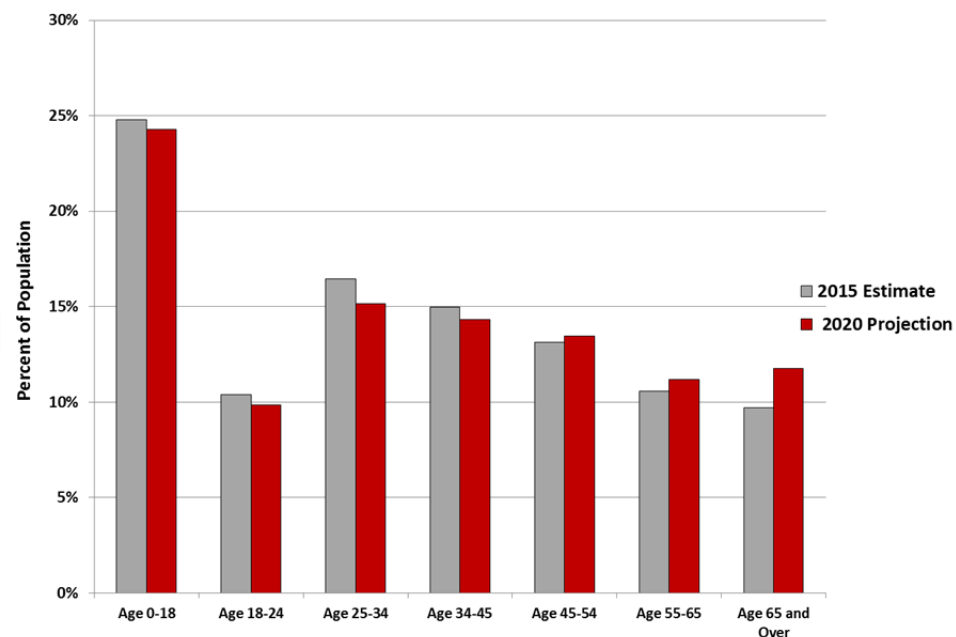
Austin's Population by Age

**Population Distribution By Age
Austin Market**

Age Range	2015 Estimate		2020 Projection	
	Number	Percent	Number	Percent
Age 0-18	477,807	25%	511,595	24%
Age 18-24	200,155	10%	207,709	10%
Age 25-34	317,233	16%	318,989	15%
Age 34-45	288,551	15%	302,042	14%
Age 45-54	253,188	13%	283,829	13%
Age 55-65	203,875	11%	235,546	11%
Age 65 and Over	187,180	10%	247,552	12%
Total	1,927,989	100%	2,107,262	100%
Median Age	34.0		35.5	

Source: Claritas/U.S. Census Bureau

Austin Market Population by Age

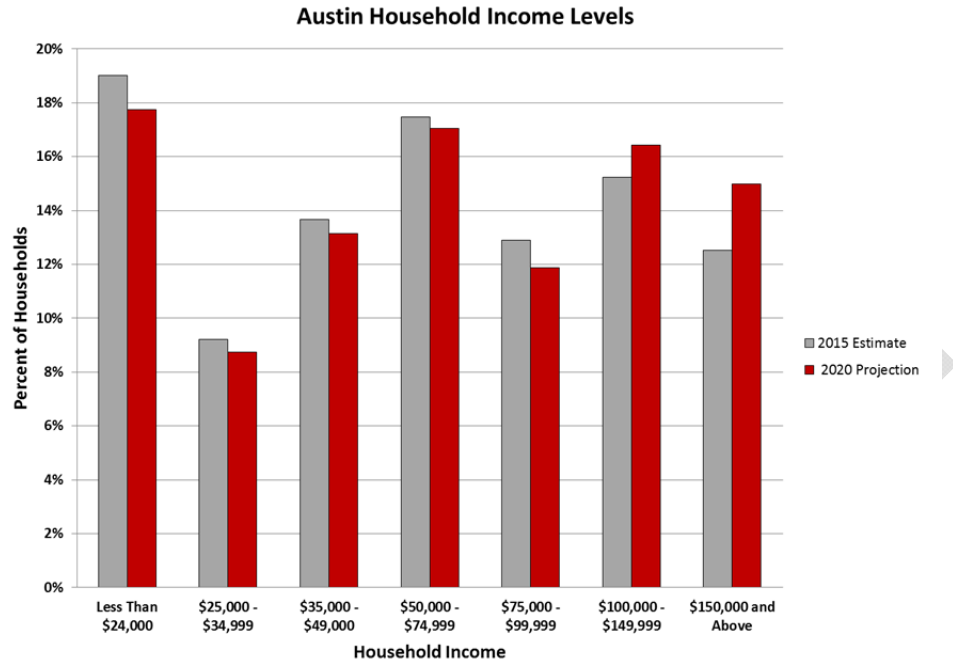


INCOME DISTRIBUTION

Austin's median household income has grown substantially in recent years. According to Nielsen Claritas estimates, the MSA's median income grew more than 10 percent over just the past couple years; in comparison, the national median income remained roughly stagnant. As Austin continues to grow, households with incomes of at least \$100,000 are anticipated to show the strongest growth. Consequently, further housing price appreciation is to be expected. However, as shown in the following chart, most area households will continue earning less than \$24,000 per year, leaving a broad swath of the market unattainable

Austin's Population by Household Income

Household Income Distribution Austin Market				
Income Range	2015 Estimate		2020 Projection	
	Number	Percent	Number	Percent
Less Than \$24,000	139,427	19%	141,244	18%
\$25,000 - \$34,999	67,538	9%	69,483	9%
\$35,000 - \$49,000	100,144	14%	104,526	13%
\$50,000 - \$74,999	128,140	17%	135,585	17%
\$75,000 - \$99,999	94,552	13%	94,552	12%
\$100,000 - \$149,999	111,707	15%	130,733	16%
\$150,000 and Above	91,731	13%	119,275	15%
Total	733,239	100%	795,398	100%
Median Income	\$61,610		\$65,939	
Average Income	\$83,551		\$90,080	
Source: Claritas/U.S. Census Bureau				

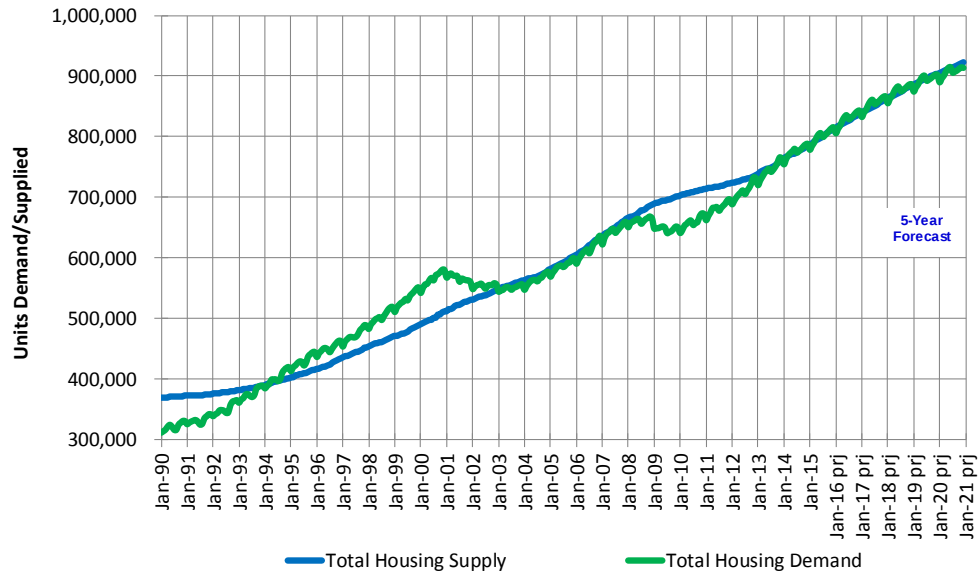


Residential Real Estate Market

AGGREGATE SUPPLY & DEMAND

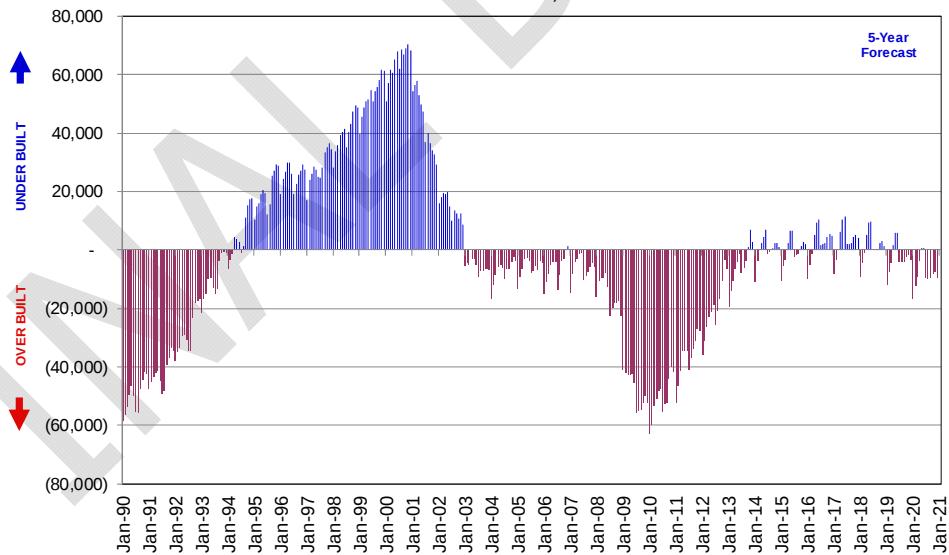
Patterns of housing over supply and under supply are based upon a comparison between a given year's ratio of jobs and housing relative to the long-term trend. During recessionary years, employment losses produced a condition whereby the existing housing stock was too large in comparison to the employment base, contributing to price degradation. Employment gains since the recession, on the other hand, have caused housing demand to grow at a faster rate than housing supply. This excess demand is leading to a general shortage that is expected to become increasingly apparent as the cycle matures.

HOUSING DEMAND AND SUPPLY PATTERNS Austin-Round Rock, TX



Source: Bureau of Labor Statistics; Census Bureau; National Assoc. of Realtors; Real Estate Economics

HOUSING (OVER)/UNDER SUPPLY PATTERNS Austin-Round Rock, TX

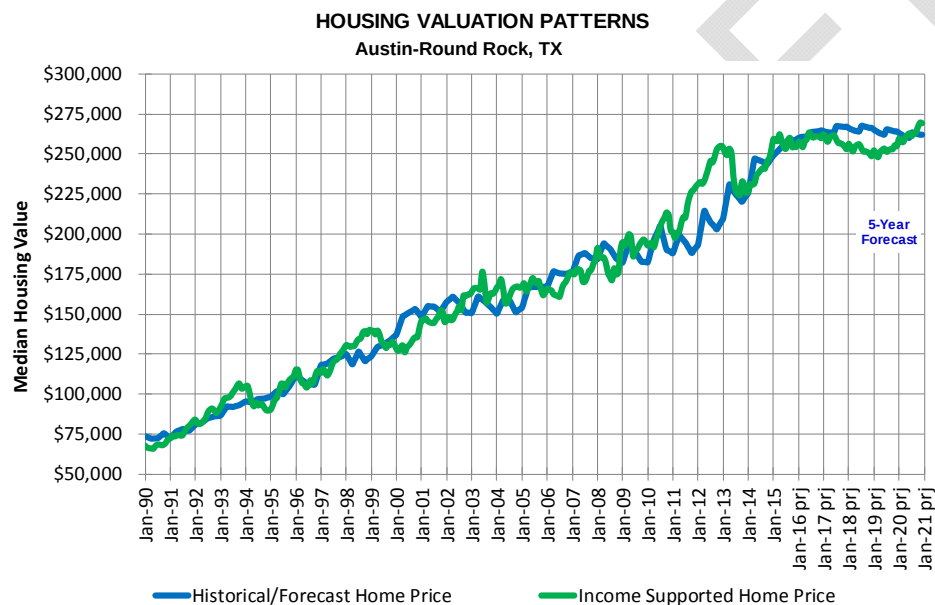


* Over/Under supply measures based on current jobs-to-housing relationship relative to long-term relationship between jobs and housing.

Source: Bureau of Labor Statistics; Census Bureau; National Assoc. of Realtors; Real Estate Economics

PRICING AND AFFORDABILITY

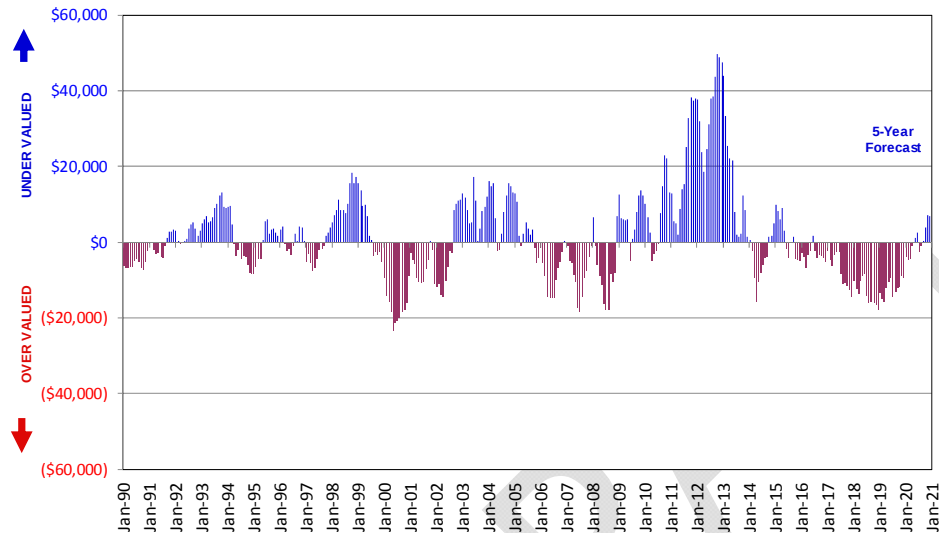
Austin area housing prices are currently –and expected to continue–exceeding the income-supported home price. Our ‘Supportable Median Home Price’ (shown by the green curve in our graph below) is derived from equilibrium housing costs based upon the 40-year trend line between housing values and household incomes. ‘Historical/Forecast Median Home Price’ (shown by the blue curve) is compared with supportable median prices to measure the degree of over/under valuation.



Source: Bureau of Labor Statistics; Census Bureau; National Assoc. of Realtors; Real Estate Economics

Though some under valuation was evident in the mid- to late 1990s, over valuation became increasingly apparent during the 2003-2006 unsubstantiated run-up in prices. The resultant economic and housing crisis caused artificially high housing prices to plummet, creating under valuation during recessionary years that was almost as significant as over valuation during the peak of the previous cycle. Currently, housing prices are not yet inflated to a significantly overvalued status, but extreme overvaluation is likely to appear soon if the Austin region’s political constraints to affordable housing development are not eased and construction costs continue their upward trend.

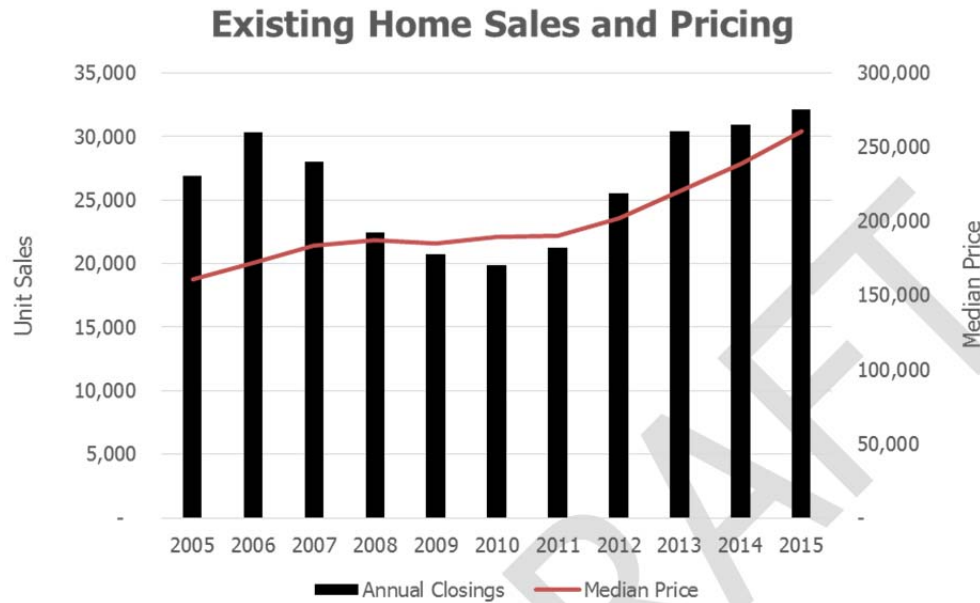
HOUSING (OVER)/UNDER VALUATION PATTERNS
Austin-Round Rock, TX



* Over/Under valuation based on value of housing (inclusive of mortgage rates) relative to long-term relationship between housing value & household incomes.
Source: Bureau of Labor Statistics; Census Bureau; National Assoc. of Realtors; Real Estate Economics

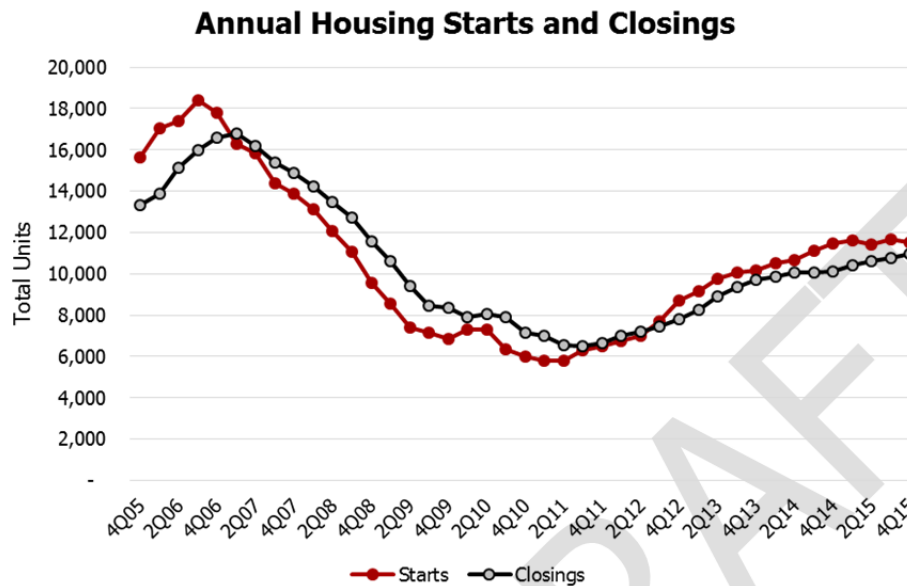
EXISTING HOME MARKET TRENDS

Austin's resale home market adequately portrays the area's robust demand for livable square footage. The total dollar volume of MLS transactions reached \$10.5 billion in 2015, which is more than twice the post-recession low and 52 percent higher than the previous peak reached in 2006. A combination of rising prices and unit sales were responsible for the large increase. Annual closings reached 32,115 by the end of 2015, up 62 percent from the 19,872 units sold during the same period five years ago. Similarly, the median home price increased 37 percent, going from \$189,650 in 2010 to \$260,429 at the end of last year. Months of supply dropped from 5.6 to a record low of 2.1 over the same period.



NEW HOUSING STARTS & FORECAST

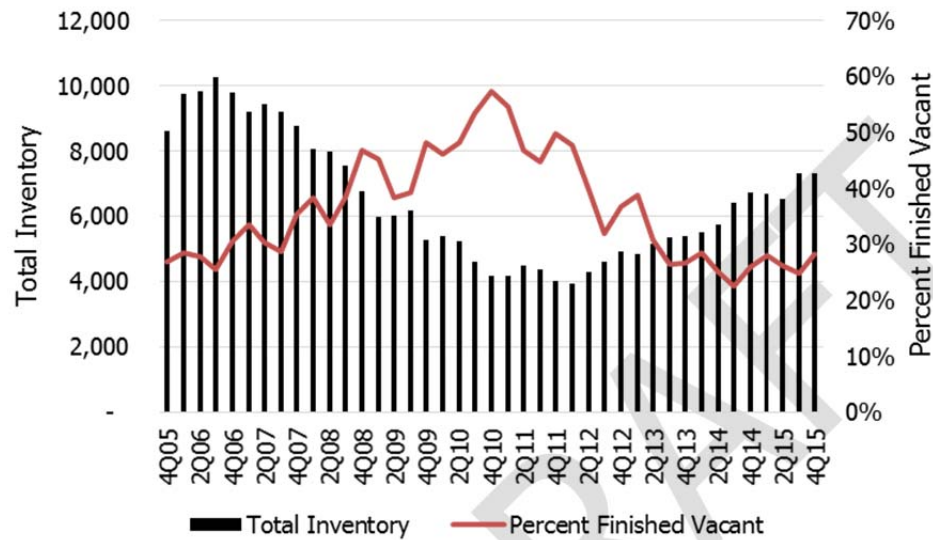
The annual pace of new single-family housing starts reached 11,540 in 4Q15, which is almost twice the bottom reached 5 years ago after the Financial Crisis. However, on a year-over-year basis, growth in starts remained roughly unchanged versus 2014. During this time, homebuilder sentiment remained generally positive, although we have heard some only complaints regarding stiff competition over trades and rising land/lot prices due to new market entrants. Overall, however, most builders are expecting a good 2016. They are working hard to position deals appropriately, and we expect some heavy-hitters will attempt to push back harder on pricing throughout the year.



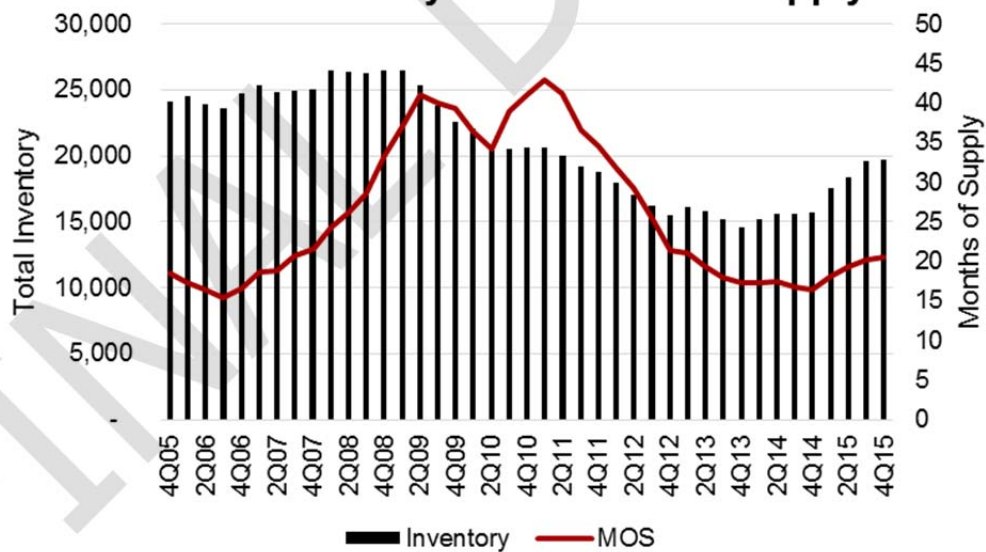
NEW HOUSING AND VACANT DEVELOPED LOT INVENTORY TRENDS

New housing and vacant developed lot inventory have both been trending upward lately. According to our most recent figures, a total of 7,310 homes were either under construction or sitting finished, vacant and ready to be sold. The current 8 months of supply remained relatively unchanged compared to a year ago, but this level is significantly high compared to historical norms – thus explaining why housing absorption failed to keep pace with lot deliveries over the past couple years. It seems that builders may have reached short-term capacity limits. Meanwhile, VDL inventory, currently at 19,705, grew by 3,992 units versus a year ago. As a result, VDL months of supply increased from 17.1 months in 3Q14 to 20.2 months during 4Q15. Metrostudy considers current lot inventory to be within the long-term equilibrium range for this region.

New Housing Inventory



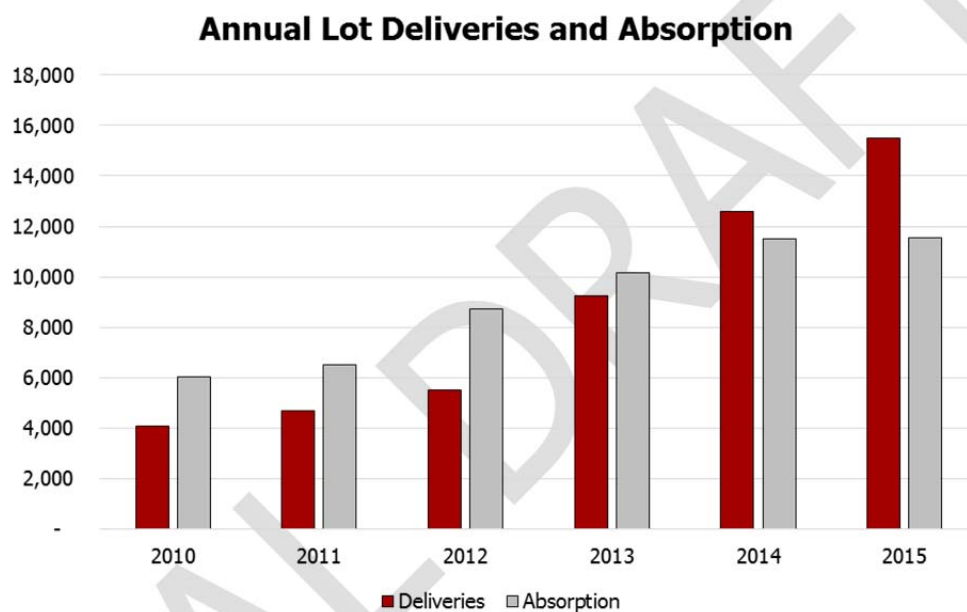
VDL Inventory and Months of Supply



VACANT DEVELOPED LOT ABSORPTION AND INVENTORY

After several years of lot demand outstripping supply and declining inventories, lot deliveries began to outpace absorption (housing starts) during 2014. The trend

continued through 2015, with developers bringing 3,945 more lots online than builders actually absorbed. As a result, vacant developed lot inventory and months of supply increased over the past couple years. However, readers should not interpret this to imply fundamental weakness in the housing market. Overall, months of vacant developed lot supply is still within the long-term range that Metrostudy considers to be equilibrium for this market.



III. Target Market Area Analysis

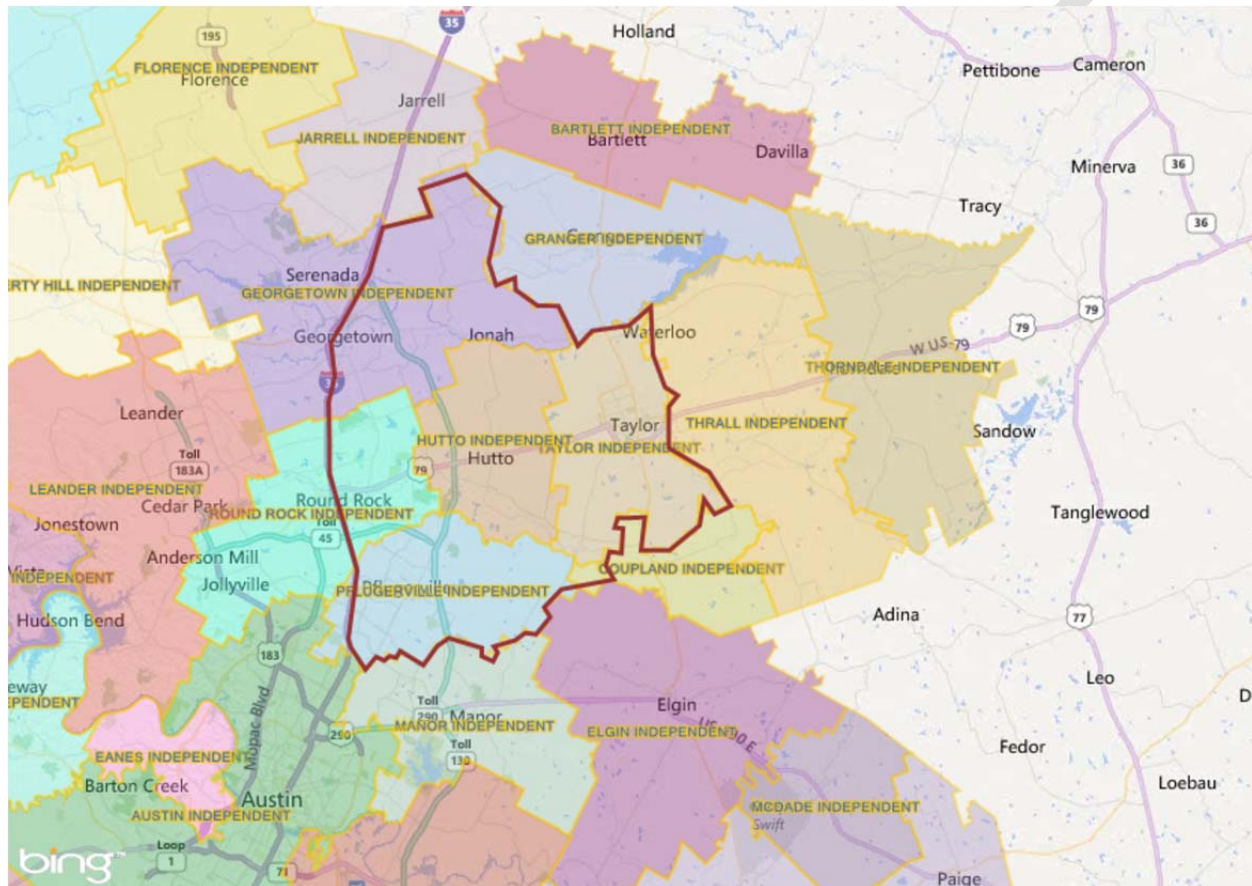
Introduction

The following section describes the socioeconomic and residential real estate market trends in the City's trade area. An evaluation of housing sales, starts activity, lot inventory levels, and future development plans will provide a foundation for understanding the area's supply and demand, product preference, competition, and potential opportunities.

FINAL DRAFT

Definition and Justification

The map below shows the boundaries for the Target Market Area (TMA), as well as the City of Taylor's position within the TMA.



The TMA boundaries were established using several market-related considerations. Primarily, these borders are represented by:

- **North:** The northernmost boundaries of Georgetown Independent School District.
- **South:** The southernmost boundaries of Pflugerville Independent School District.
- **East:** The easternmost boundaries of the City of Taylor's extraterritorial jurisdiction.

- **West:** I-35.

Many of the communities within the TMA boundaries are expected to compete for the same buyer traffic. They will share the same infrastructure advantages and disadvantages, such as retail and commercial locations, traffic patterns, drive time to and from employment centers, and recreational facility availability. Consequently, new-home trends in the TMA communities are expected to be indicative of future demand for particular housing products in the City of Taylor.

Population and Household Trends

Metrostudy uses demographic data and projections from Claritas to help in characterizing geographic areas and in establishing trends. The underlying goal is to understand the buyer profile and determine the appropriate value proposition.

Population and household estimates indicate that the TMA is experiencing considerable growth. As of 2015, there were an estimated 281,143 people in 95,333 households. The TMA is expected to experience a population increase of approximately 32,533 and household increase of 10,998 by 2020, representing gains of nearly 12 percent.²

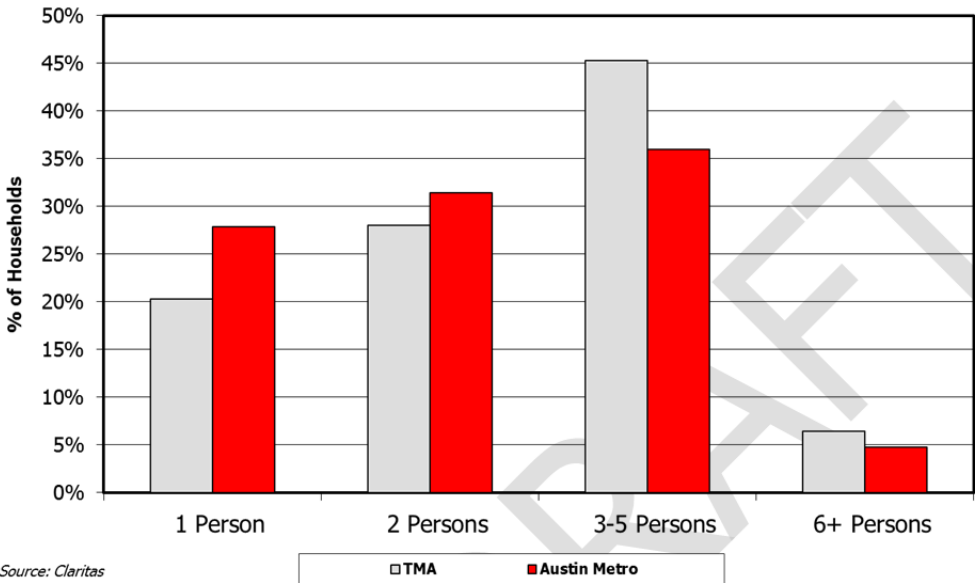
² Population and household growth estimates are always conservative. It is reasonable to assume the TMA will necessitate household growth of approximately 14 percent with a minimum of 11.5 percent and a maximum of 16.8 percent over five-year period spanning 2015-2020.

Northeast TMA		Population and Household Growth		
	2010 Census	2015 Estimate	2020 Projection	
Population	240,317	281,143	313,676	
Total Numerical Change	-	40,826	32,533	
Total Percent Change	-	17.0%	11.6%	
Annual Number Change	-	2,916	6,507	
Annual Percent Change	-	1.1%	2.2%	
Households	81,614	95,333	106,331	
Total Numerical Change	-	13,719	10,998	
Total Percent Change	-	16.8%	11.5%	
Annual Number Change	-	980	2,200	
Annual Percent Change	-	1.1%	2.2%	
Average Household Size	2.9	2.9	2.9	

Source: Claritas

The TMA currently has an average household size of 2.91 persons, slightly larger than the 2.57 average size for the Austin area. Households consisting of 2 or fewer persons account for approximately 48 percent of the households within the TMA, while households containing 3-5 persons account for approximately 45 percent. Unsurprisingly, the TMA distribution of households in the 3-5 person range is about 10 percent higher than the Austin area, reflecting its attractiveness as a destination for families with children.

**Target Market Area vs. Austin
Percent Distribution of 2015 Households by Size**



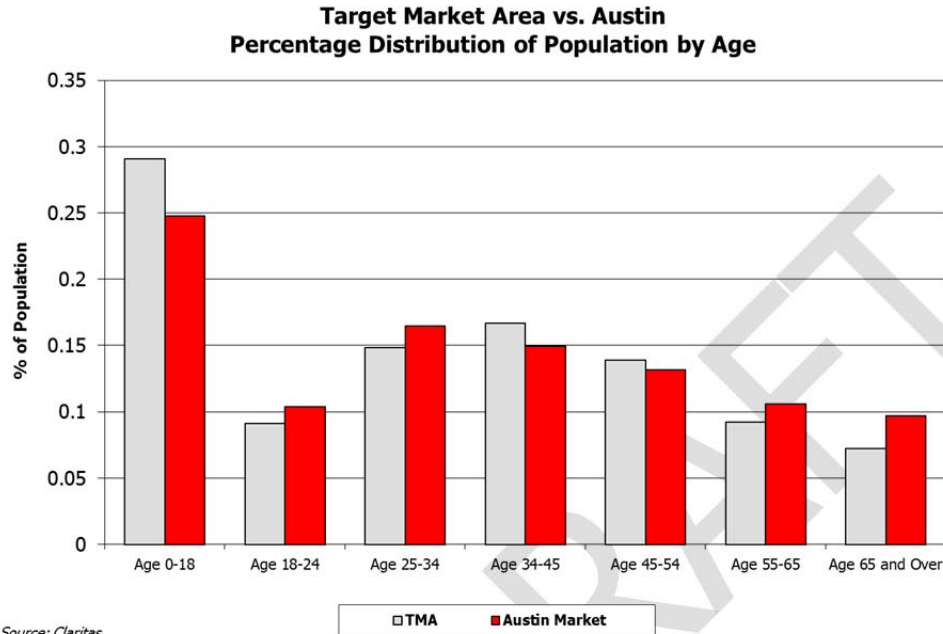
**Northeast Austin TMA
Household Size Profile
2015 Estimate**

Household Size	2015	% Distribution
1 Person	19,346	20%
2 Persons	26,706	28%
3-5 Persons	43,160	45%
6+ Persons	6,120	6%
TOTAL	95,332	100%

TMA Average HH Size: 2.91
Austin Metro Avg. HH Size: 2.57

Source: Claritas

As is typical with suburban areas of Austin with high quality public schools, the age distribution skews slightly younger, with 28% of residents under the age of 18. Another TMA contrast with the Austin market is the higher distribution of prime working age (34-54 year old) adults. This is the ideal buyer profile for the types of housing envisioned in the City of Taylor.



On average, households within the TMA have higher household incomes than the overall Austin metro area. The TMA's estimated average household income for 2015 was \$80,107 with an estimated median household income of \$67,815. For comparison, the average household income in Austin was \$83,551 with a median household income of \$61,610.

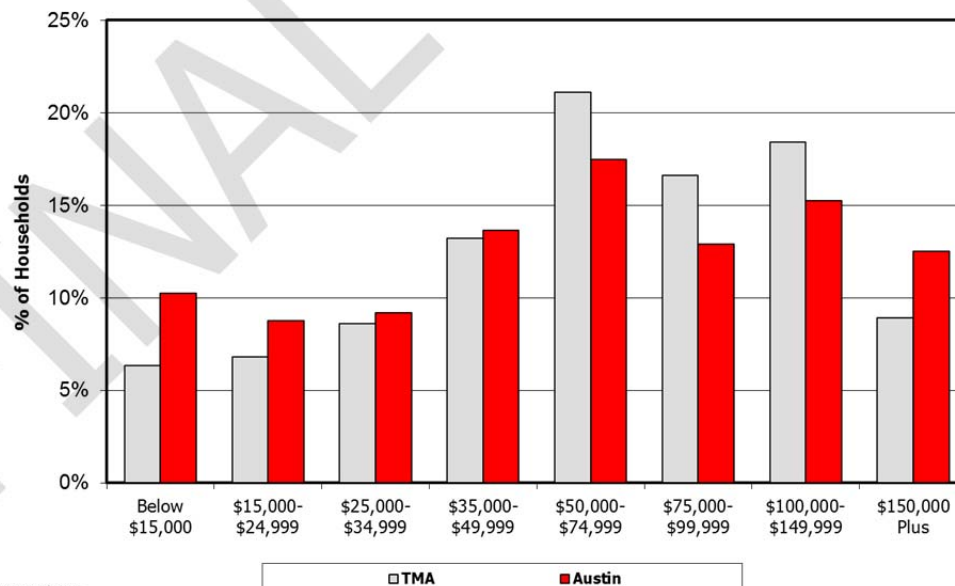
**Target Market Area
Income Profile of Households
2015 Estimate**

Household Income	2015	% Distrib.
Below \$15,000	6,041	6%
\$15,000-\$24,999	6,495	7%
\$25,000-\$34,999	8,194	9%
\$35,000-\$49,999	12,599	13%
\$50,000-\$74,999	20,119	21%
\$75,000-\$99,999	15,824	17%
\$100,000-\$149,999	17,570	18%
\$150,000 Plus	8,491	9%
TOTAL	95,333	100%

TMA Median HH Income:	\$67,815
TMA Average HH Income:	\$80,107
Austin Metro Med. HH Income:	\$61,610
Austin Metro Avg. HH Income:	\$83,551

Source: Claritas

**Target Market Area vs. Austin
Percent Distribution of 2015 Household Incomes**



Residential Analysis

This section describes recent quarterly trends in single-family housing starts and vacant developed lots in regards to price, volume, lot sizes, and subdivisions.

HOUSING STARTS

The table and chart on the following page display the annual rate of new single-family home starts on a quarterly basis from 4Q10 through 4Q15 for both the overall Austin market and the TMA, with the percent share of the metropolitan Austin market captured by the TMA also displayed.

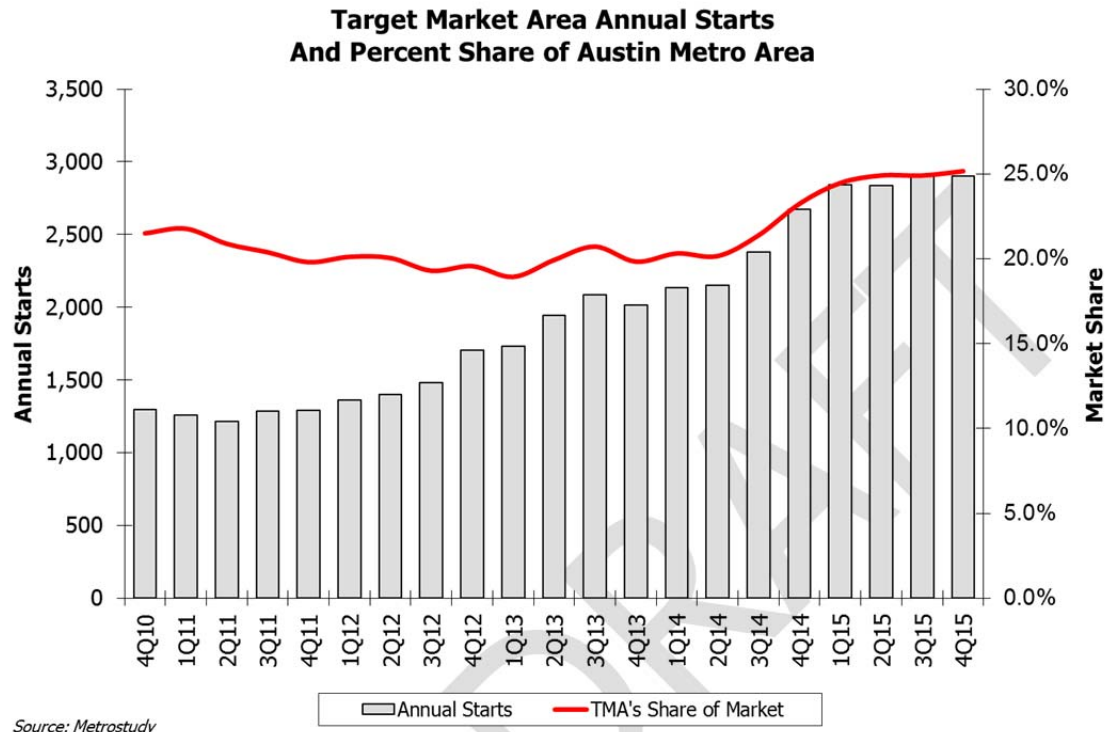
Annual starts on single-family homes within the TMA increased substantially since 4Q10, climbing from 1,295 to 2,904 annual starts by the end of 4Q15. As a result, the TMA's relative share of starts activity Austin area increased from 21.5% to 25.2%. We expect the TMA capture rate to stay on the same relatively stable path over the next five years due to higher barriers to entry in other submarkets.

The following table and chart illustrate the historical and forecast rate of single-family housing starts in the Austin survey region and the TMA, as well as the historical and forecast market share.

**Target Market Area Starts
and Market Share of Total Austin Starts
4Q12 to 4Q15 and Projected**

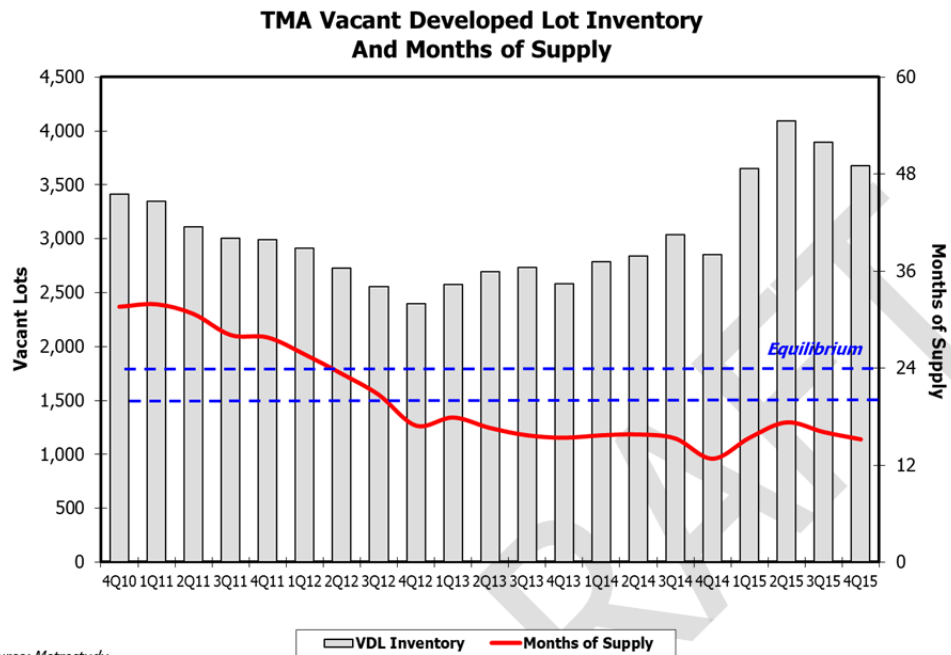
Qtr/Yr	Ann. Starts Austin	Ann. Starts TMA	TMA Share of Austin
4Q10	6,022	1,295	21.5%
1Q11	5,777	1,258	21.8%
2Q11	5,818	1,215	20.9%
3Q11	6,293	1,283	20.4%
4Q11	6,518	1,291	19.8%
1Q12	6,760	1,360	20.1%
2Q12	6,988	1,401	20.0%
3Q12	7,685	1,483	19.3%
4Q12	8,723	1,707	19.6%
1Q13	9,136	1,730	18.9%
2Q13	9,763	1,946	19.9%
3Q13	10,077	2,088	20.7%
4Q13	10,169	2,017	19.8%
1Q14	10,508	2,135	20.3%
2Q14	10,657	2,149	20.2%
3Q14	11,137	2,382	21.4%
4Q14	11,488	2,671	23.3%
1Q15	11,605	2,840	24.5%
2Q15	11,396	2,839	24.9%
3Q15	11,674	2,908	24.9%
4Q15	11,540	2,904	25.2%
<i>Projected</i>			
2016	11,500 to 12,500	2,933 to 3,188	25.5%
2017	12,500 to 13,000	3,163 to 3,289	25.3%
2018	13,000 to 13,500	3,263 to 3,389	25.1%
2019	13,500 to 14,000	3,375 to 3,500	25.0%
2020	13,500 to 14,000	3,362 to 3,486	24.9%
Avg. 16'-20'	12,800 to 13,400	3,119 to 3,288	25.2%

Source: Metrostudy



VACANT DEVELOPED LOTS

The following chart shows recent quarterly lot inventory trends in Austin and the TMA. Austin's total VDL inventory had been in rapid decline since the beginning of the current market cycle (in 2010), as increasing consumer demand worked to clear the backlog resulting from the housing boom. Although total inventory has crept back up since 2014, months of supply is still well within the range Metrostudy considers to be equilibrium for this region. In the TMA, however, developers were unable to accelerate lot production to match the robust rebound of home starts rates. As a result, months of available lot supply is roughly 25 percent below equilibrium. Under present conditions, we expect new entrants (communities) to experience above average absorption, especially if the product is sufficiently differentiated or priced competitively on per square foot basis.



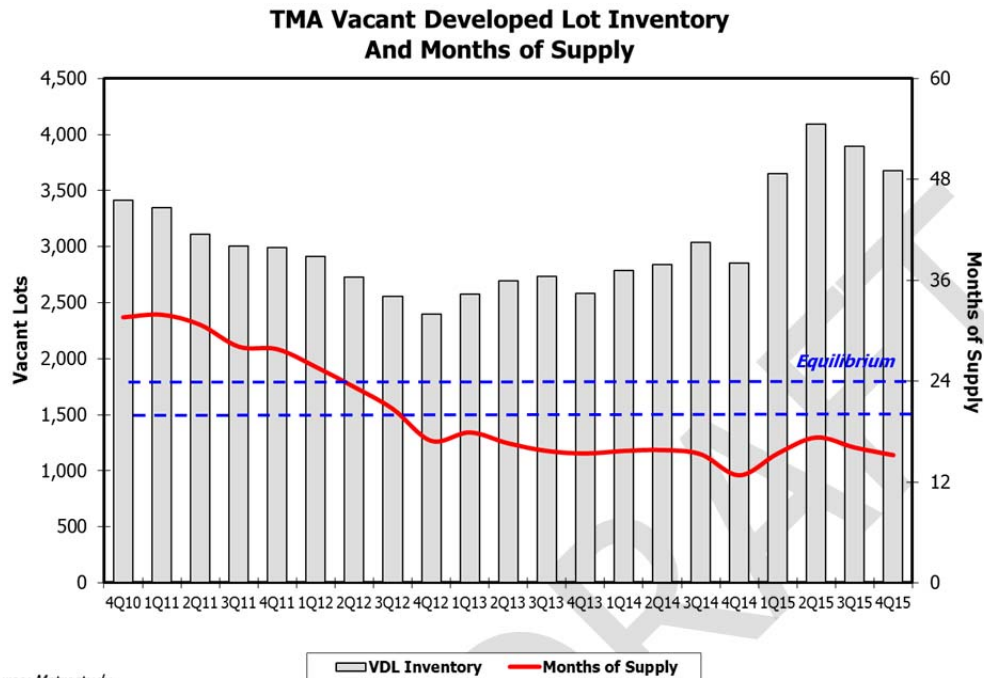
Source: Metrostudy

**Austin and Target Market Area
Vacant Developed Lot Inventory and Months of Supply
4Q10 to 4Q15**

Qtr / Yr	Austin VDL	Months of Supply	TMA VDL	Months of Supply
4Q10	20,615	41	3,412	32
1Q11	20,651	43	3,347	32
2Q11	19,974	41	3,108	31
3Q11	19,237	37	3,004	28
4Q11	18,766	35	2,992	28
1Q12	17,993	32	2,910	26
2Q12	17,042	29	2,725	23
3Q12	16,239	25	2,558	21
4Q12	15,538	21	2,397	17
1Q13	16,090	21	2,578	18
2Q13	15,804	19	2,692	17
3Q13	15,151	18	2,731	16
4Q13	14,626	17	2,585	15
1Q14	15,176	17	2,788	16
2Q14	15,561	18	2,838	16
3Q14	15,585	17	3,038	15
4Q14	15,713	16	2,851	13
1Q15	17,566	18	3,651	15
2Q15	18,361	19	4,092	17
3Q15	19,623	20	3,897	16
4Q15	19,705	21	3,676	15

Source: Metrostudy

The TMA currently has 15 months of vacant developed lot supply versus the current market cycle average of 20. This is principally due to the increasing demand from end consumers and homebuilders for new livable square footage in the wider Austin area. Current conditions justify a more aggressive acquisition strategy for local developers.



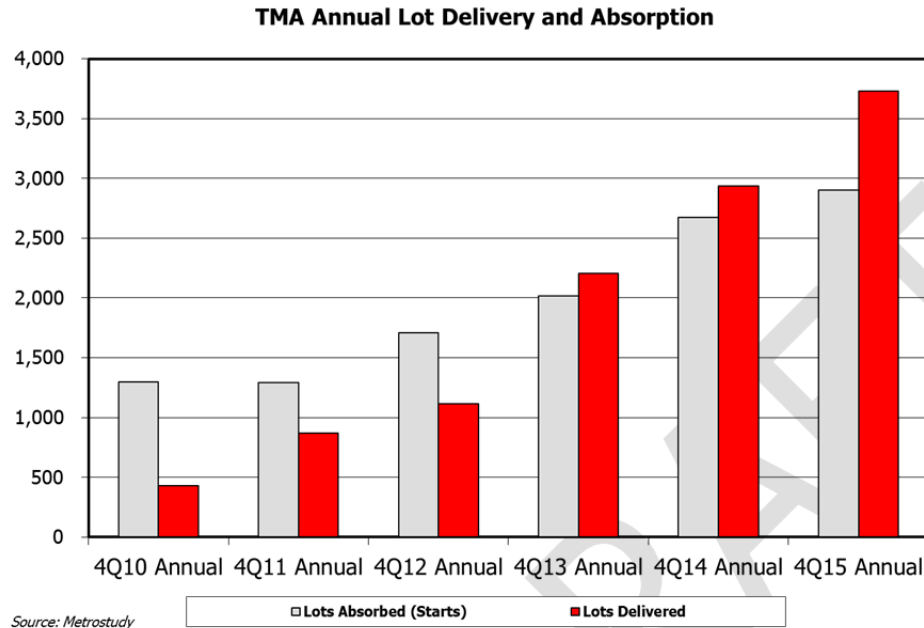
LOT DELIVERY AND ABSORPTION

Lot absorption has outpaced lot delivery in 16 of the previous 24 quarters, most recently in 4Q15. Overall, there has been a net decrease of 601 lots from inventory since the beginning of 2010. Over the previous four quarters, however, lot deliveries exceeded absorption by 825 units. This was due to a combination of two factors. Mainly, strong production in communities like Siena in Hutto, Paloma Lake in Round Rock, and Avalon in Pflugerville. Yet it was also due in part to the severe inclement weather experienced in Austin, and throughout the state of Texas, during the first half of 2015. It was a very wet year. This situation corrected in 3Q15 as lot absorptions outpaced lot deliveries and area weather stabilized. The following table shows historical lot deliveries and absorption rates during the current market cycle:

**Target Market Area
Quarterly Lot Delivery and Lot Absorption
1Q10 to 4Q15**

Yr/Qtr	Lots Absorbed	Lots Delivered	Net Increase or (Decrease)
1Q10	328	255	(73)
2Q10	427	74	(353)
3Q10	284	22	(262)
4Q10	256	79	(177)
1Q11	291	226	(65)
2Q11	384	145	(239)
3Q11	352	248	(104)
4Q11	264	252	(12)
1Q12	360	278	(82)
2Q12	425	240	(185)
3Q12	434	267	(167)
4Q12	488	327	(161)
1Q13	383	564	181
2Q13	641	755	114
3Q13	576	615	39
4Q13	417	271	(146)
1Q14	501	704	203
2Q14	655	705	50
3Q14	809	1,009	200
4Q14	706	519	(187)
1Q15	670	1,470	800
2Q15	654	1,095	441
3Q15	878	683	(195)
4Q15	702	481	(221)
Total	11,885	11,284	(601)

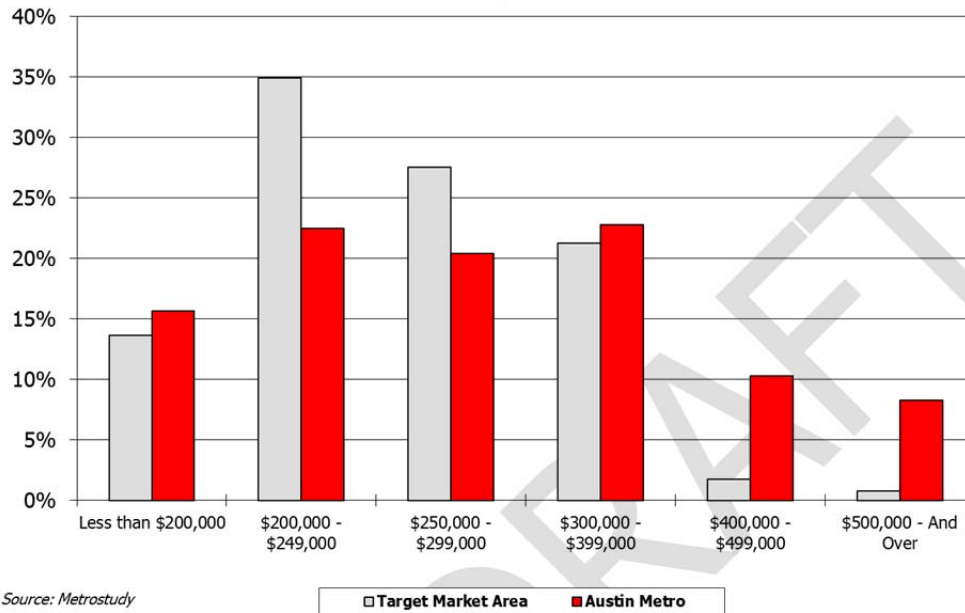
Source: Metrostudy



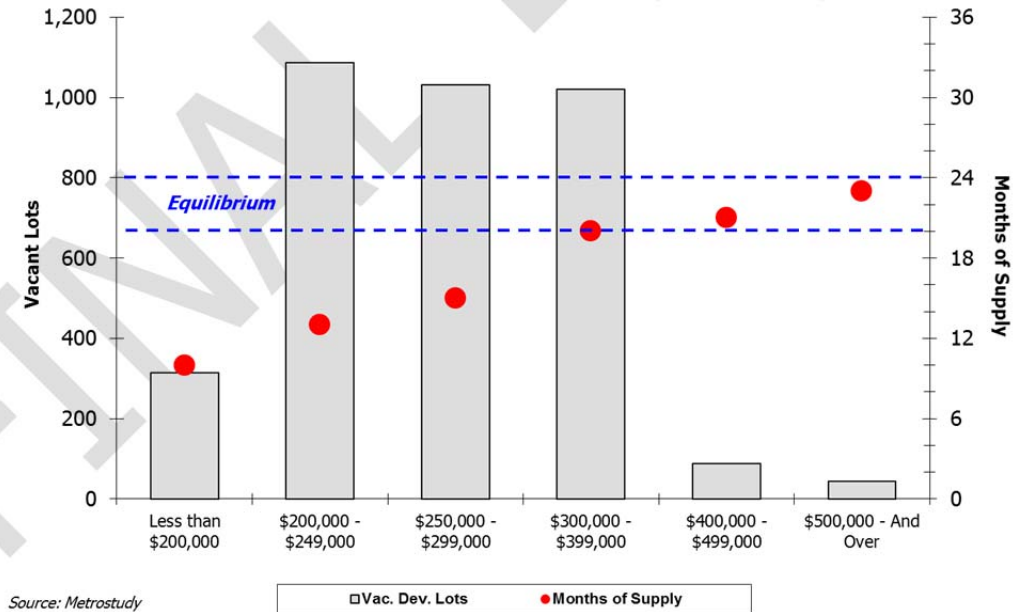
PRICE RANGE DISTRIBUTION OF NEW HOME STARTS AND VDL

Most TMA starts are in the \$200s. According to our most recent release (4Q15), these accounted for 63 percent of the TMA total, versus only 43 percent of Austin area starts. New homes priced above \$400,000 make up a tiny fraction (3%) of the market, so any future offerings in this category will have to be significantly cheaper on a per square foot basis and differentiated to an adequate extent that would entice high income or net worth households. The overall average months of supply of VDL across home price bands in the TMA is 15 months, well below the 20 to 24 month equilibrium range identified by Metrostudy. However, MOS is lowest for homes priced under \$300,000: the average MOS among those price bands is only 13. As a result, homes priced under \$300,000 are expected to achieve above average absorption.

**Percent Distribution of Annual Starts by Price Range
Austin and Target Market Area**

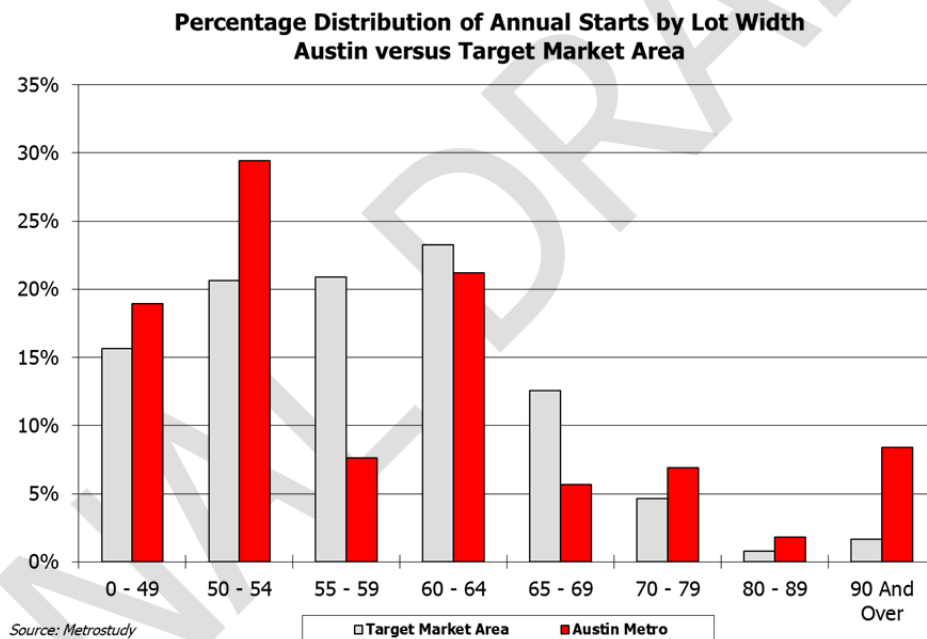


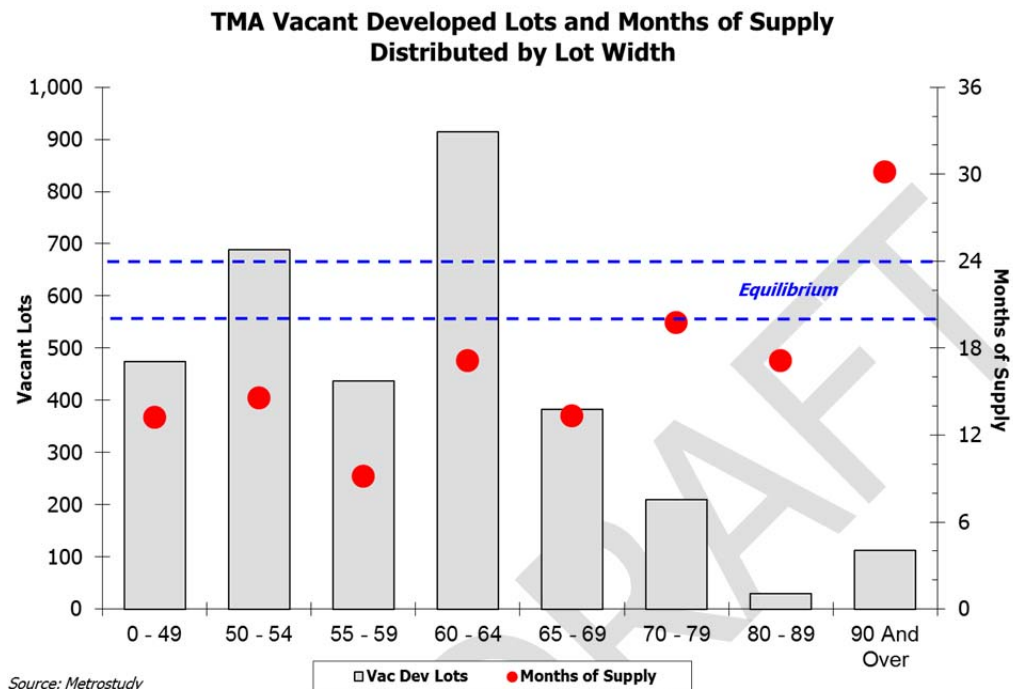
**TMA Vacant Developed Lot Inventory
And Months of Supply by Price Range for Housing**



TMA DEMAND BY LOT SIZE

The 60'-64' lot width range is the sweet spot of this market area. Unsurprisingly, given the price range distribution, the vast majority (92%) of housing starts are 64' and below, with the below 49', 50'-54', 55'-59', and prized 60'-64' lot ranges accounting for 16%, 21%, 21%, and 23%, respectively. For the most part, all lot size programs are below equilibrium, with the exception of 90' and above. The appearance of oversupply in extra-large lot programs, however, is overstated due to the area's lack of a real market for this product type.





TMA SUBDIVISIONS RANKED BY ANNUAL NEW HOME STARTS

The following table shows the top 10 subdivisions in the TMA ranked by the total number of new homes started during 4Q15. The top 10 subdivisions started at least 80 homes each during the previous four quarters, and accounted for 1,620 starts (56%) of the total annual starts in the TMA. The top-10 subdivisions also have only a 16.4-month supply of vacant developed lots, which is below the level Metrostudy considers equilibrium for this region. An increase in supply –either by incumbents or new entrants—is warranted under current conditions, and will continue to be for the foreseeable future.

Target Market Area Subdivisions Ranked by 4Q15 Annual Starts							
Rank	Subdivision Name <i>Builders</i>	Price Range <i>(in Thousands of Dollars)</i>	Lot Size	4Q15 Ann Starts	4Q15 Ann Closings	Vac Dev Lots	Months of Supply
1	Siena	\$190 - \$571	53'-63'	316	257	533	20.2
2	Teravista	\$231 - \$467	50'-60'	206	204	352	20.5
3	Paloma Lake	\$219 - \$427	53'-70'	203	218	205	12.1
4	Avalon	\$193 - \$419	50'-65'	201	157	243	14.5
5	Falcon Pointe	\$249 - \$336	55'	184	168	63	4.1
6	Highland Park	\$188 - \$260	20'-70'	139	128	37	3.2
7	Blackhawk/Lakeside	\$232 - \$423	70'-80'	109	43	186	20.5
8	Pinnacle	\$176 - \$216	47'-52'	98	71	34	4.2
9	Commons at Rowe Lane	\$235 - \$399	55'-65'	84	70	123	17.6
10	Glenwood	\$169 - \$217	50'-60'	80	88	139	20.9
Top 10 Total				1,620	1,404	1,915	16.4
Balance of TMA				1,284	1,292	1,761	16.4
TMA Total				2,904	2,696	3,676	15.2
Top 10 Subdivisions Share of TMA				56%	52%	52%	

Source: Metrostudy

PLANNED HOUSING PROJECTS

A total of 25,505 undeveloped lots have received either preliminary or final approval in the TMA. We include this information so that developers can get an idea of what is planned to come online over the next several years in the general market area. It is worth noting, however, that just because a plat is approved does not mean that the lots are under development. Many of these plats are only pre-approved and will enter the market only if Austin MSA single-family housing demand continues to grow unabated. Furthermore, delivery timing of lots will depend on the type of lot, the supply and demand for the lot type, and whether the lots are for brand new communities or “add-ons” to existing communities.

Target Market Area Future Lot Inventory				
Subdivision	Sec.	Lot Size	Developer	# of Lots
Addison (Georgetown)	Concept	N/A	Michael Moore	3,000
Avalon	Ph 11B	55x120	Blake Magee	1,888
Avalon	Ph 12	50x120	Blake Magee	1,640
Avalon	Ph 13	NA	Blake Magee	1,440
Avalon	Ph 14	60x120	Blake Magee	922
Avalon	Ph 16	NA	Blake Magee	915
Avalon	Ph 17	NA	Blake Magee	896
Avalon	Ph 5C	NA	Blake Magee	841
Avalon	Ph 6C	NA	Blake Magee	678
Ballantyne	Prel Plan	NA	Finley Company (Tim Finley)	637
Beaver Creek	Prel Plan	NA	Sealy Heatherwilde L.P.	550
Blackhawk/Lakeside II	Ph 2-1B Undefined	70x125	N/A	544
Blackhawk/Lakeside III	Future	NA	Robert Tieman	448
Blackhawk/Park III	Ph III Sec 2 Undefined	NA	N/A	445
Blackhawk/Park IV	Ph IV-6B	75x120	N/A	426
Blackhawk/Park VII	Ph VII-2 Undefined	NA	N/A	336
Cactus	FUTURE	N/A	Tejas Viego Land Company	330
Cantarra	FUTURE Sec III	N/A	Intermandeco	258
Cantarra	FUTURE Sec IV	NA	Intermandeco	224
Cantarra	FUTURE Sec V	N/A	Intermandeco	213
Cantarra	Sec IIA	50x120	Intermandeco	205
Cantarra	Sec IIIA (p) - DR	NA	Intermandeco	188
Cantarra II	FUTURE	N/A	N/A	182
Carmel	Prel Plan	NA	N/A	176
Carmel Creek	FUTURE	N/A	Pulte Homes	173
Carol Meadows	Sec 2	N/A	Bob Chambers	169
Chisholm Park Duplexes	Section 2	NA	LOM Services	161
Total Future Lots				25,505
Source: Metrostudy				

IV. Strategic Recommendations

The following section highlights Metrostudy's recommendations for the City of Taylor, based on our comprehensive review of the Austin Market and TMA analysis. The overarching goal of these recommendations is to promote the success of introducing new home development in Taylor focused on higher price points and more upscale housing. Among the strategic recommendations identified are potential market niches. Some of these recommendations are large scale, capital intensive, time intensive public policy initiatives. Some of them are simple events and marketing messages that can be implemented cost and time effectively. Each has been identified by Metrostudy as an action with a potential resulting outcome of facilitating or promoting the development of new more upscale homes in Taylor.

Create a Public Improvement District

During the course of reaching out to developers, we were advised that a Public Improvement District (PID) might be sufficient to serve as a competitive advantage for the City. In mentioning this, our developer client stated that a PID would significantly reduce the cost burden associated with building a level of amenity sufficient to attract homebuyers. As a result, project risk would be lower and expected returns would be higher.

Chapter 372 of the Texas Local Government Code (TLGC) provides the process for establishing a PID. According to the TLGC, PIDs may be formed to develop, rehabilitate or expand affordable housing; create water, wastewater, health and sanitation, or drainage improvements; street and sidewalk improvements; mass transit improvements; parking improvements; library improvements; park, recreation and cultural improvements; landscaping and other aesthetic improvements; art installation; creation of pedestrian malls or similar improvements; supplemental safety services for the improvement of the district, including public safety and security services; or

supplemental business-related services for the improvement of the district, including advertising and business recruitment and development.

By defining the boundaries for PID implementation, only the tax payers within the district are responsible for paying for the improvements that specifically benefit them. This is preferable to a direct subsidy from the local government or issuance of bonds that would compel taxpayers in other parts of the City to shoulder part of the financial burden for improvements that offer them no direct benefit.

Promote Taylor ISD Successes

The general perception of Taylor ISD is that it is more challenged than neighboring school districts, with a greater percentage of children from lower socioeconomic backgrounds. However, the District also has its success stories. Taylor ISD (with the assistance of the City) should seek venues and opportunities to promote its successes to those generally in the real estate industry. These successes can include expansions and improvements to campuses, athletic wins, academic highlights, and special programs offered in the schools. Messaging Taylor ISD successes to the local realtor community could be done very efficiently through ABOR member marketing and events. Such messaging (via email, special events presenting TISD to the realtor community, articles in the local Association magazine, etc.) can work to change the perception of Taylor ISD first among area realtors and secondly among homebuyers in the region. Homebuilders and developers stay acutely aware of homebuyer perceptions, so any momentum achieved in altering perceptions will likely feed directly up to the builders and developers and will influence their actions regarding Taylor.

Taylor ISD offers many successes upon which to build a new narrative, redirecting perception away from current inaccurate perceptions based on previous conditions within the District that have been greatly improved and rectified over the last seven to eight years. These successes include:

- Taylor High School has changed from being ranked “Academically Unacceptable” eight plus years ago to now being rated highly and achieving the highest graduation rate of any high school in Williamson County.
- Legacy Early College High School, and it’s strong academic performance and unique (one of 13 in Texas) program in which every student receives an Associate’s Degree at no charge. 98% of LECHS graduates go on to attend four year universities.
- The new large scale stadium, field house, softball / baseball facilities, and ag facility in process for development by TISD.
- The HS-TSTC Tech Connect Co-Op between Taylor ISD and Texas State Technical College offering eight technical vocational certificate programs at no cost to the students.
- Taylor High School and Legacy High School are “One to One” campuses, meaning every student receives a Mac Book Air.
- A student / teacher ratio that is 3 below the state average, at 19:1
- Extracurricular programs that are highly competitive with high student participation levels.
- Naomi Pasemann Elementary School is a Premiere Level “Leader in Me” School
- Taylor has been the State Champions in Academic Decathlon three times in the last eight years.

Market and Leverage Taylor’s “Hometown Feel”

Taylor is fortunate to offer a true hometown feel including the City’s vintage neighborhoods and historic downtown. This is an advantage that Taylor can leverage to attract homebuyer / new resident interest in the community, which can ultimately lead to builder / developer interest in developing communities and housing in Taylor.

The overall umbrella of marketing the “Hometown Feel” can take three forms:

- Policies and incentives that encourage continued investment and improvement in assets like Taylor's historic downtown that foster this "Hometown Feel"
- Organized promotion of Taylor's current "Hometown Feel" assets and events
- New and different community events that emphasize these "Hometown Feel" assets and raise awareness of them to potential residents from throughout the Austin area.

Implement Policies for the Protection and Investment in "Hometown Feel"

Assets

Metrostudy identifies two key sets of assets that contribute to the "Hometown Feel" of Taylor: (1) Its historic neighborhoods and (2) the vintage downtown area. Taylor's historic neighborhoods should be protected, improved, and promoted by the creation of a neighborhood specific Historic District with unique street signage, wayfinding, and plaques noting the importance of each historic home within. The policy aspect of implementing a historic district centers on regulating remodel and rebuild / tear down activity in the neighborhood and specific to the historic homes themselves. When setting such policies, balance must be achieved between protecting the homes and neighborhood and realistically meeting the needs of actual neighborhood residents. This action could foster new more upscale housing development in Taylor because it makes the existing town assets more attractive and places greater emphasis on these assets, making Taylor overall a more desirable (or perceived to be more desirable) place to live.





The policies and initiatives that could bolster Taylor's historic downtown area are likely to be more investment intensive. Taylor is already focusing resources towards this successfully via the Taylor Main Street Programs, including the Downtown Rental / Purchase Program. Such programs have contributed to Downtown successes like the McCrory Timmerman building redevelopment. Continued program successes in this area will only further bolster Taylor's historic downtown area which will contribute to strengthening the "Hometown Feel" asset possessed by Taylor. This asset is a powerful advantage that many competing suburban areas do not offer. The strength and appeal of Downtown Taylor can lead to setting the stage for the community to be perceived as a desirable place to live and a desirable, suitable place for additional upscale single family housing development.

Organized Promotion of Existing "Hometown Feel" Assets

This family of action steps is generally low cost in nature, and works to raise awareness of Taylor among both Austin area building / development professionals and potential new residents from throughout the Austin region. One immediate opportunity is expanded marketing and promotion of the Blackland Prairie Days event throughout the greater Austin area. This fun event can be leveraged as a springboard for residents from other surrounding, more crowded suburban areas throughout the Austin region to have a reason to come to Taylor, and become familiar with Taylor. Direct marketing in area "Community Impact News" type newspapers serving Round Rock, Georgetown, Pflugerville, Leander, Cedar Park, and others could be effective to this end. Also,

promoting the event informally through family oriented Facebook feeds favored by families in these suburbs could be a low cost high impact effort. Finally, promoting the event in publications like Austin Family magazine / website could reach families in these other competing suburbs effectively. The goal of this effort is to leverage an event that is already happening to raise overall Austin-wide market awareness of Taylor. More interaction with and awareness of Taylor plants the seed of Taylor as a place to live, and gets Taylor on the radar of a greater pool of potential future homebuyers and residents. Austin's population has grown significantly in recent years, with many of these new residents from out of state. These residents will not have a reason to know about Taylor if they are not presented with a compelling reason to visit the town.

New and Different Events to Promote Taylor's "Hometown Feel" Assets

In addition to leveraging this existing event, Metrostudy has identified several additional targeted events:

Host a ULI Austin District Council Event at McCrory Timmerman: Urban Land Institute, or ULI, is a broad based think tank and professional organization for those involved in the real estate development industry and allied professions. The Austin District Council holds monthly meetings for both their overall membership as well as targeted meetings for their Young Leaders (under 35) group. These meetings typically contain both a professional networking and educational component, and often are held at a local new development or redevelopment of note. The McCrory Timmerman building is a perfect example and a perfect venue for such a meeting. The net outcome of hosting ULI would be awareness of a) activity and investment in Taylor, and b) Taylor overall as a destination among a group that includes the developers, consultants, and bankers that facilitate development in greater Austin.

Host a Homebuilders Association of Greater Austin event at McCrory Timmerman – both Williamson County Chapter and Overall Membership: The overall goal of this effort would be similar to that of hosting the ULI event. A low cost but potentially high impact

opportunity to drive awareness of activity within and the desirability of Taylor among local professionals charged with developing and building new housing in the overall Austin market.

Hold a Historic Home Tour “Sip and Stroll” type of event: A walking (or bus) tour of Taylor’s historic neighborhoods and homes could also work to build awareness of Taylor among both providers of upscale new housing as well as potential residents. Such an event could be oriented towards awareness growth among builders / developers if it were held in conjunction with ULI, ABoR, or Homebuilders Association of Greater Austin. A similar event could be oriented towards potential new residents if it were marketed in much the same way Metrostudy recommended marketing Blackland Prairie Days to residents of nearby and region-wide suburbs. Unlike holding events at McCrory Timmerman, this recommendation brings along with it the added logistical and possible political challenge of recruiting historic homeowners to participate in the event. One opportunity to create awareness of Taylor by leveraging its historic neighborhoods and homes while not requiring residents to make the inside of their homes available would be a holiday event mimicking “Lights in the Heights” in the Houston Heights area of Houston. This historic neighborhood in Houston holds an extensive holiday light festival every year where streets are closed off, residents sit on their porch and visit with event attendees, and decorate their homes extensively for the holiday. Typically a holiday concert is also held in a neighborhood park, giving the event a central congregating location.



One Austin area land developer interviewed during this process indicated that many residents in the greater Austin area do not have much of a mental image of Taylor, because they generally travel around Taylor on the south 79 Bypass instead of traveling straight along West 2nd Street / East 4th Street which connect through Downtown Taylor and function as “Business 79.” An overarching goal of these events should be to create a reason for residents in the broader region (both professionals in the housing industry and the general population) to come into ‘town’ on West 2nd Street and come away with a mental picture of Taylor that is focused on these “Hometown Feel” Assets.

Leverage the Hills of Mustang Creek

Taylor does already have one upscale, luxury home development of the general nature targeted within this study: Hills of Mustang Creek. This community is located within one of the identified target development areas by this study, and in general offers a desirable location near the new Taylor High School campus and near Hwy 79 for ease of access to Hutto, Round Rock, and 130 Toll. This custom home community features lots sized 120' x 220' with a total of 57 homesites. 19 lots have homes built or under construction, resulting in 38 vacant developed lots. According to Williamson County Appraisal District, these 38 vacant lots are owned by 17 different owners (including some owned by the original developer). These lots are currently valued at a lower price / value than lots of a similar quality in communities of a similar quality elsewhere in suburban Austin. A local real estate broker could work with lot owners on assembling a package of vacant lots, somewhere between 20 and all 38, and then market these lots to a larger high end focused homebuilder. Such a builder could establish a model home sales center in the community, market the community in a proactive professional manner, and reactivate the asset. Hills of Mustang Creek represents the greatest “low hanging fruit” opportunity to introduce more upscale new homes to be built in Taylor. This is because:

- The community has 38 ready to build on, vacant lots, that support the type of more upscale executive housing Taylor is lacking.
- Austin is currently a lot constrained and land constrained market, so high quality homebuilders are actively looking for lots and land to buy to fulfill current strong homebuyer demand.
- Hills of Mustang Creek is a high quality development located within one of the key potential new home growth corridors of Taylor as identified by Metrostudy.

These 38 lots represent a relatively low risk opportunity for builders of upscale housing to establish a building presence and program in Taylor. Should they be successful in doing so, this will be highly productive in drawing the attention of other builders and developers of upscale housing neighborhoods towards Taylor.

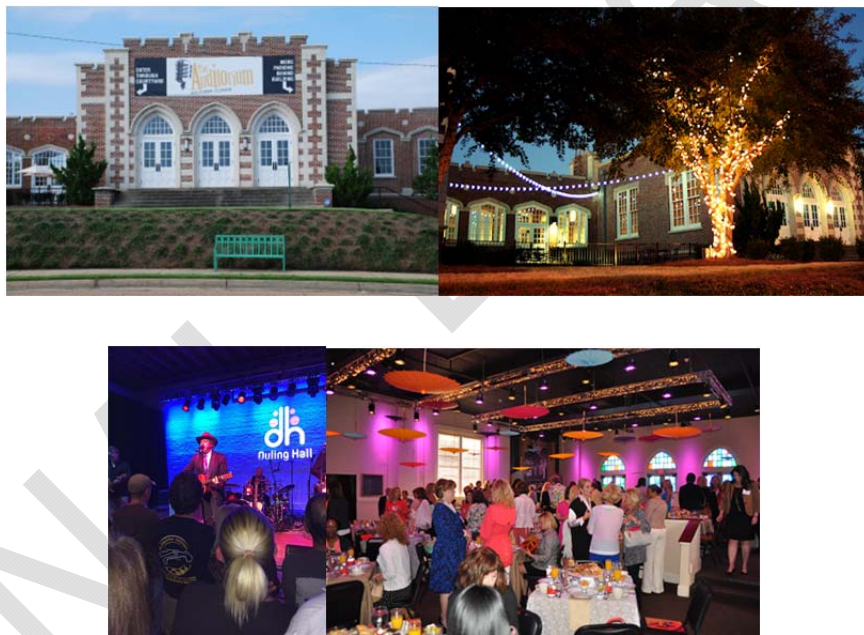
Leverage Former Taylor MS/HS Site for a Unique Community Amenity

Metrostudy understands that Taylor ISD is in the process of accepting bids to purchase the 6.4 acre site in Central / North Taylor that houses the former Taylor High School and Taylor Middle School campuses. This is a unique re-development opportunity within one of Taylor's historic neighborhoods. The opportunity exists to re-purpose these two historic campus buildings into a unique community amenity asset that could be another "Hometown Feel" Asset making Taylor a more desirable place to live and therefore more desirable place for builders and developers to offer higher price point new homes. The scale and configuration of the historic school buildings lend themselves to a variety of adaptive re-use scenarios. One similar re-development that Metrostudy feels is instructive of what could be achieved in Taylor is Duling Hall in Jackson, Mississippi. Duling Hall is a venue in a repurposed historic junior high school building in the vintage Fondren neighborhood. Like the Taylor MS / HS site, Duling is surrounded by a neighborhood of historic homes and churches. Duling Hall fronts on a slightly busier, more commercial street than does the Taylor MS / HS site. However, the two locations are otherwise comparable.

As a private business enterprise that was aided by grant finding from the City of Jackson, Duling Hall has been converted into a multi-use venue including:

- A small concert venue showcasing local and regional musicians
- A locally owned, farm to table concept restaurant
- A special event venue

This site has become a redevelopment focal point in the Fondren neighborhood. Photos of the redevelopment site and it's various uses are presented on the top of the following page.



Develop an Agrihood

One challenge presented to Metrostudy by our developer clients interviewed as part of this Taylor effort was this: there is plenty of land left in Hutto and other suburbs closer in to Austin along the path of growth. Why would homebuyers choose to leapfrog past these areas to Taylor? The answer to that question is that they must be incentivized to do so by being offered a sufficiently unique value proposition to make them choose

Taylor over a closer in competing suburb. One development trend that is gaining a foothold on a national level is the “Agrihood.” These neighborhoods marry the conventional product offerings and layout of a master planned community with community agricultural and food growing as the key theme and amenity offering. Such communities are highly activated, and align well with the desire by both millennials and empty nesters to live in an active, connected community. Highly successful agrihoods have been launched in Dallas / Fort Worth and Houston by professional seasoned master planned community developers. Interestingly, as progressive as the Austin region is relative to its Texas large metro peers, Metrostudy knows of no meaningful agrihood developments that are either active or planned for development in the Austin region. Taylor could be a strong potential location for the first such community in Austin as the theme of an agrihood ties well with Taylor’s agricultural past and present. Will an agrihood support Taylor’s goal of attracting more upscale housing? The pricing and product of housing offered in Harvest Green in suburban Houston and Harvest in suburban Dallas are instructive towards this answer.

Near Houston, base home pricing in Harvest Green in Richmond ranges from a low of \$250,000 for homes on 50’ wide lots by DR Horton to \$560,000 for the largest home offered by Trendmaker Homes on a 75’ wide lot.

Near Dallas, base home pricing at Harvest in Argyle ranges from a low of \$330,000 for the smallest patio home to \$569,000 for the largest home offered by David Weekley Homes on an 80’ wide lot.

An agrihood in Taylor could initially be expected to achieve pricing at a value to the pricing represented in more established, closer in Harvest Green and Harvest. However, even at a relative value pricing, the net outcome would be homes offered at the \$250K to \$350K price range and the \$400K plus price range targeted for growth in Taylor.

Large Lot, Competitively-Priced Value Proposition

Another challenge to producing new upscale housing in Taylor that was brought up by developer clients interviewed was the scarcity of housing priced above \$400,000 in Hutto, which is closer to 130 Toll, has newer retail, and more highly perceived schools. Why would there be a market for such higher priced homes in Taylor which is further out and arguably lacks some of these other positive attributes? One way to potentially create this market is to give the homebuyer an incentive to buying an executive luxury home in Taylor versus closer in suburbs such as Round Rock. An incentive identified by Metrostudy is to offer the homebuyer a high end new custom or production home on an acreage estate lot at a price competitive with what they would pay for a similar home on a 70' to 90' subdivision lot in Round Rock or Pflugerville.

Metrostudy believes that an acreage estate lot community (defined as offering lots $\frac{3}{4}$ acre to 1.5 acres in size) that was professionally developed with lots sold to a builder or builders who operated a professional model home sales center and marketed the community proactively could achieve sales success at price points above \$400,000 in Taylor. Austin overall is a land constrained market, while Taylor is not land constrained. A way to leverage this dynamic is to offer large spacious lots at a relative value. Taylor is closer in to Austin than many locations where such acreage subdivisions are developed, providing it an advantage it may not similarly enjoy relative to conventional master planned communities. Land is sufficiently low priced in Taylor to facilitate such a development. Some of the most active large lot communities in Greater Austin are located in relative close proximity to Taylor:

- Grand Mesa at Crystal Falls: 42 annual closings priced from \$450K to \$1.0M
- Green Haven Ranch: 18 annual closings priced from \$300K to \$524K
- Reagans Overlook: 44 annual closings priced from \$492K to \$662K
- Shady Oaks Estates: 27 annual closings priced from \$399K to \$507K
- Woodland Park: 17 annual closings priced from \$376K to \$496K

Shady Oaks Estates, in nearby Hutto, is probably the most instructive example of pricing power that could be achieved in Taylor.

V. Q&A Development

The purpose of this recommendation is to preemptively present questions the City may reasonably anticipate being asked by potential land developers and homebuilders who are contemplating building homes or developing subdivisions in the City of Taylor. Some of these are direct questions with concrete answers, while others are broader concepts of concern and importance to builders and developers when evaluating new places in which to work. Many to most of these questions will be answered as part of Metrostudy's larger engagement with the City.

Next Steps:

City officials and other key related stakeholders should contemplate the answers to these questions and ultimately have answers ready in preparation for potential engagement with builders and land developers to recruit them to expand into the City of Taylor.

Market-Oriented Questions

1. What is the market demand for new homes in Taylor?
2. What are the key employers in and around Taylor?
3. What public schools serve Taylor, and how are they ranked by TEA?
4. Who do you anticipate will want to purchase a new home in Taylor?
 - (a) Current local residents who wish to upgrade their current home?
 - (b) Current local residents who wish to downsize from their current home?

- (c) Commuters into Austin?
 - (d) Commuters to Round Rock?
 - (e) Retirees / soon to be retirees from elsewhere in the Austin region?
 - (f) Others?
5. What is the current population of the City of Taylor?
 - A. Where do current residents of Taylor work?
 - B. What marketing window can my company use to drive traffic to our subdivision or homes?
 6. What other new home subdivisions (if any) are currently operating or planned within the City of Taylor?
 7. What attributes distinguish Taylor from other parts of the TMA where large scale suburban development is beginning? I.e. why should I expect a homebuyer to buy a new home in Taylor instead of 5-10 minutes away in Hutto or 15 to 25 minutes away in Round Rock and Pflugerville?
 8. What is the tax rate in Taylor, and how does this compare to other places in Williamson County?
 9. What community amenities or attributes are special about Taylor that I can reference to market the homes / neighborhood I plan on developing?

Process-Oriented Questions

1. What is the building permit process for home construction in Taylor?
2. What is the building inspection process for home construction in Taylor?
3. What is the platting /entitlement process for land development in Taylor?
4. What is the development review process for land developments in Taylor?
5. Does the City of Taylor have water and sewer capacity sufficient to serve a new residential subdivision?
6. Will the City of Taylor allow the formation of a PID to provide utilities or as a vehicle to reimburse the developer for infrastructure and amenities installed in a new subdivision?

7. Who is the electric, gas, phone, and cable infrastructure provider that serves Taylor and Williamson County?
8. Does Taylor have zoning or other land use controls in place?
9. What roads in or near Taylor are slated for expansion or construction, and what impact will that have on surrounding land tracts for development?
10. Are any areas of developable land in Taylor within the FEMA floodplain?
11. Are there any finished lots currently available to build homes immediately in Taylor?
12. Are there any subdivisions currently being engineered or planned for near term future development in Taylor?
13. Which civil engineering firms have land development experience in Taylor?
14. Does Taylor have a municipal building code?
15. Does Taylor have municipal subdivision regulations?

VI. Resale Market Impact

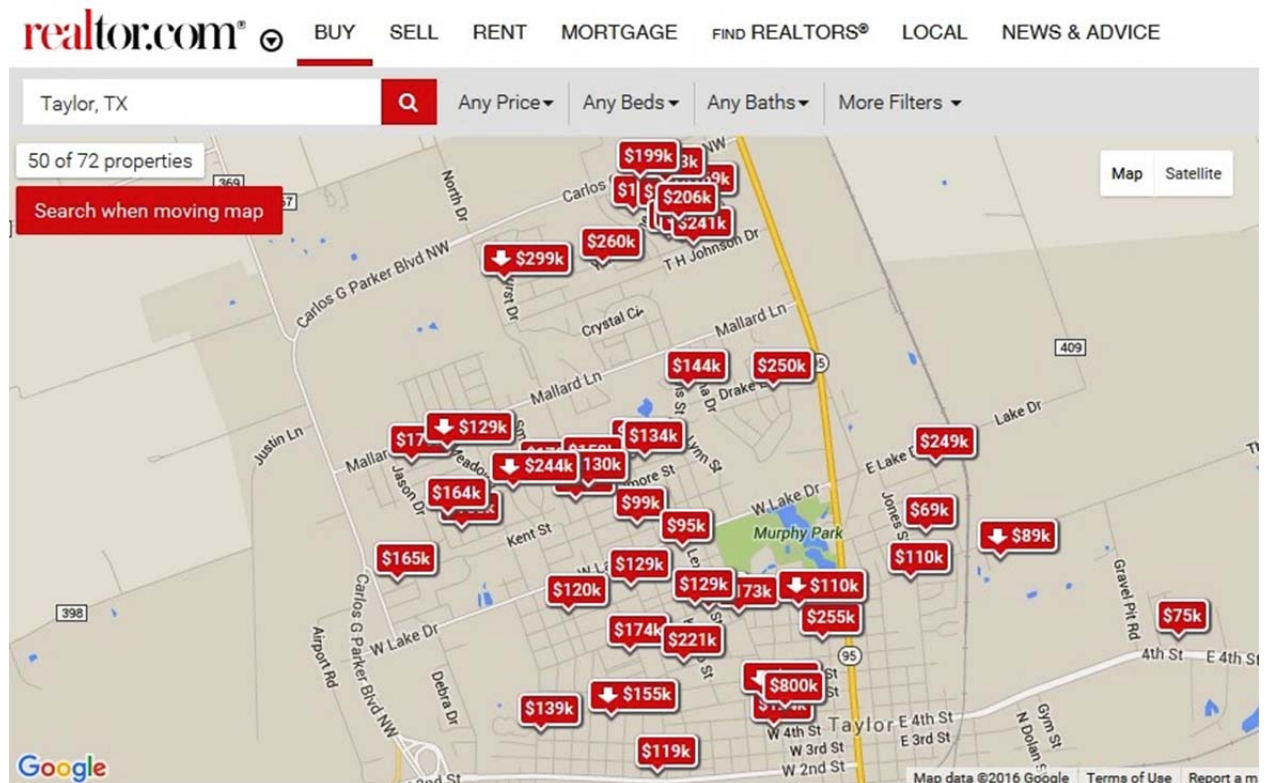
In addition to Metrostudy was tasked with assessing the impact on the existing resale home market in Taylor under the assumption that meaningful new single-family residential development will occur? In order to provide guidance around this impact, Metrostudy has:

- Assessed current resale home market conditions
- Noted potential differences between current and future development
- Presented potential resale market impact points
- Drawn conclusions from the above exercises

CURRENT CONDITIONS

The resale home market in Taylor is characterized by scarce inventory. Realtor.com, the National Association of Realtors public facing listing site, currently lists 72 homes on

the market in Taylor; however, of these 72, 27 are new homes primarily listed by KB Home in Summerfield.



Many of the remaining 45 (72 total minus 27 new homes) true resales are older properties in north and near-north Taylor.

Notably, of the 72 total listings, 33 are currently pending sale. Another 18 of the 72 are “place holder” listings by KB Home showing one of the plans they offer in Summerfield, but not tied to an actual home or specific lot on which to build a home. It is not uncommon for builders to leverage the MLS to advertise in this manner. Netting the 33 homes pending sale *plus* the 18 KB Home placeholders from the total of 72 listings results in true new and resale home inventory listed for sale of just 21 homes in Taylor. This represents less than three months inventory, corresponding directly with the current tight 2.0 months of inventory reported greater Austin-wide.

The fact that 33 homes (across all price and age characteristics) are currently pending sale indicates market interest in purchasing homes and living in Taylor. Some of this interest may stem from Taylor's relative affordability. The median listing price is \$176,000 or \$100 per foot. This represents a value versus the overall greater Austin market. The March 2016 median home price in greater Austin is \$278,000. Currently, virtually all home listings in Taylor are priced below \$300,000.

NEW DEVELOPMENT / EXISTING HOME CHARACTERISTICS

New single family development in Taylor is likely to be sufficiently different from most current housing offered in Taylor, and thus is not expected to result in a negative impact upon values and sales of existing homes. The most typical impact on existing homes and neighborhoods is a flight from these homes by current owners to the new homes and neighborhoods once they are offered. This flight can result in a decline of values of existing homes as their level of inventory builds as buyers flock to new homes. However, Metrostudy does not anticipate this dynamic occurring in Taylor for two key reasons.

First, many of the existing housing stock in Taylor is located within established, stable neighborhoods. Without significant decline characteristics, the level of incentive is not as strong for current homeowners to relocate to new neighborhoods as it would be if the existing neighborhoods were in a decline state. Metrostudy has not observed or been notified of flight from existing nearby neighborhoods to Summerfield as that neighborhood has been open for sales. Some of this is due to the entry level nature of a portion of Summerfield. However, Metrostudy still sees this as a positive indicator. Summerfield is located adjacent to several of Taylor's existing, established neighborhoods so it would have had an optimal opportunity to draw buyers from these neighborhoods as residents would not have to change schools, community resources, etc. to move to Summerfield. Yet Summerfield has not appeared to have a negative impact on existing home values nor has it appeared to have an impact on existing home inventory levels as they are and continue to be tight.

A reasonable portion of the existing housing stock in Taylor is historic or vintage in nature. A different sort of buyer seeks an older home in a vintage neighborhood over a new home in a new neighborhood. Very little, if any, cross-shopping between these two types of housing options occurs. Of the 33 listings currently pending sale, 21 of them are older / vintage homes indicating a level of interest in this type of housing in Taylor.

POTENTIAL RESALE MARKET IMPACT POINTS

Potential Resale Market Impact Points

Metrostudy is of the general opinion that additional new single family residential development in Taylor would have minimal impact on existing neighborhoods and housing in Taylor. The relatively small impacts that could potentially occur are limited to the following:

- Price declines and inventory creep in Summerfield. Buyers who sought “nicer” new homes in Taylor have until recently been offered essentially one option: the larger homes /lot size programs in Summerfield offered by KB Home. Should a new development offering a different variety of home floor plans and features be introduced in Taylor, some current residents may choose to relocate to this neighborhood. Further, some potential Summerfield larger lot new home buyers could choose to purchase homes in the new subdivision which would result in slower absorption in Summerfield.
- Slight price declines and inventory creep in certain other new neighborhoods in northern Taylor. Many of the neighborhoods north of Mallard Lane feature homes that are at least somewhat comparable to new homes. Therefore, residents of this area may be more likely than residents of other areas of Taylor to cross-shop with new homes and wish to “upgrade” to a new home should a high quality new home development be introduced in Taylor. Because of this, it is possible that an increased number of homes in these neighborhoods north of Mallard Lane could come to market and therefore result in increased inventory and suppressed pricing. This is considered by Metrostudy to be a minimal risk

because a) Summerfield has not posed this problem so far, and b) new housing a short drive west in Hutto has not appeared to present this impact on these Taylor neighborhoods either.

CONCLUSION

New high quality single-family home development is not expected to have a negative impact on values or home inventory in Taylor's existing neighborhoods. It is likely that the opposite will occur. A professionally-developed and marketed new community development in Taylor could generate increased overall interest in living in Taylor. Should this occur, the result is more likely to be increased values of existing homes in Taylor.

VII. Assumptions & Limiting Conditions

The following contingencies and limiting conditions are noted as fundamental assumptions that may affect the validity of the analysis and conclusions reached in this report:

- All information contained in this report, while based upon information obtained from the client and other sources deemed to be reliable, is in no way warranted by Metrostudy.
- The Austin MSA, State of Texas, and the nation as a whole will not suffer any major economic shock during the time period of the forecast contained in this report.
- Population will continue to increase at or above the rate forecast.
- The sources of statistical data and demographic estimates used in this analysis are sufficiently accurate to be useful for planning purposes.
- The development will be designed, promoted, and managed in a professional manner.

- The recommendations set forth in this report will be acted upon within a reasonable period of time to preclude major changes in the conditions evaluated.

Radical changes in factors affecting the major assumptions noted above could alter the conclusions reached in this analysis or necessitate the re-evaluation of portions of this report.

FINAL DRAFT



Taylor, Texas Marketing Framework

Target Audience: Single Family Builders / Developers

10707 Corporate Drive, Suite 200
Stafford, Texas 77477

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April 2016



Introduction

Introduction

The purpose of this supplemental document is for Metrostudy to provide the City of Taylor a separate marketing message document synthesizing the findings from the broader Housing Study effort in such a way to be useful in marketing Taylor builder and developer community to attract them to produce new move up housing in Taylor.

This Marketing Framework Includes:

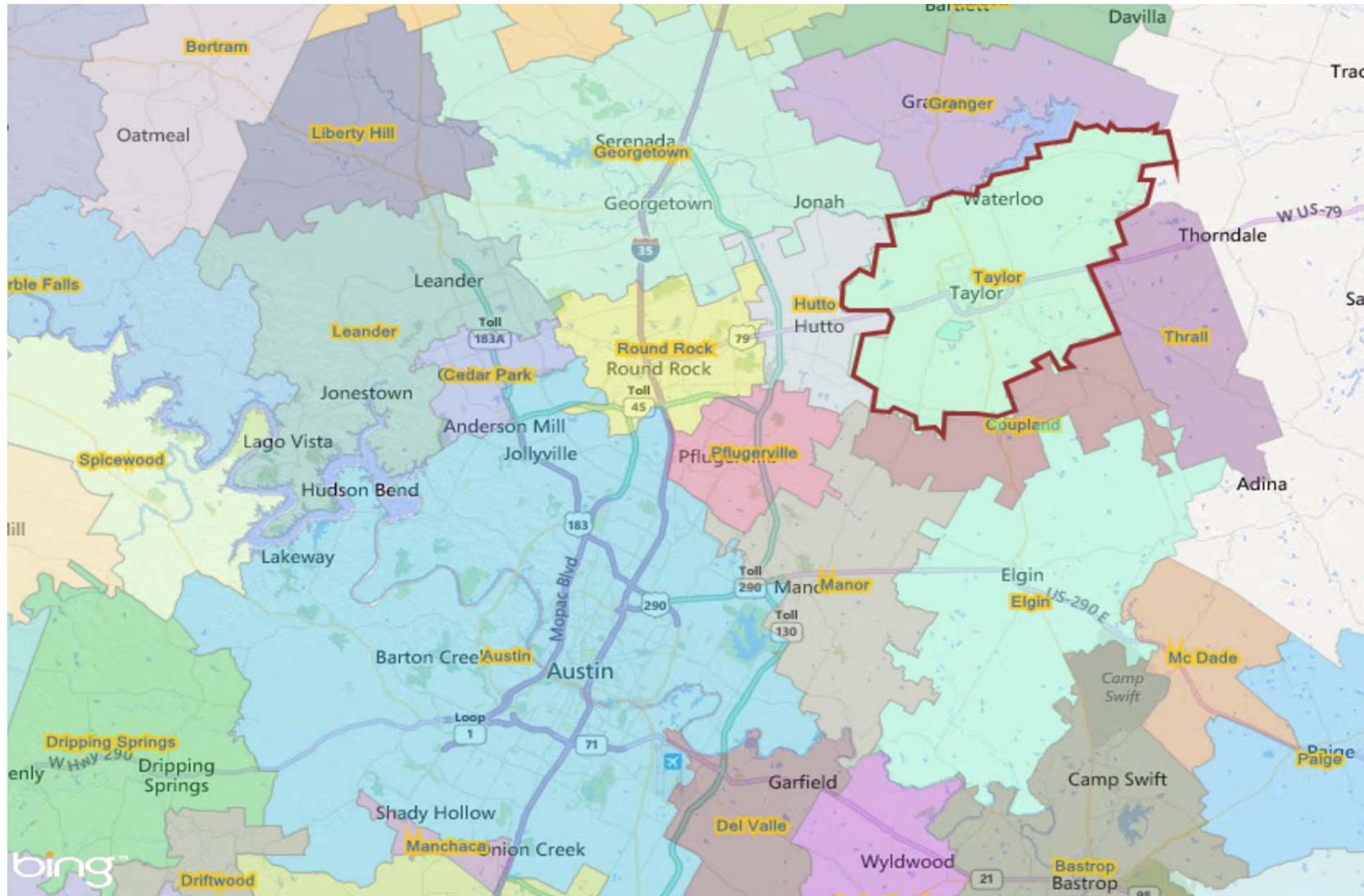
- City Location and Characteristics
- Community Assets
- Taylor and Surrounding Area (TMA) Consumer Segmentation
- The Case for Taylor
- The Value Proposition – In General and As it Relates to Taylor



City Location and Characteristics

City Location

The City of Taylor is nestled on the Northeast Austin frontier. Conveniently-located a short, 10 minute drive east of State Highway 130 along SH 79, Taylor provides residents the ambience of small town living with easy access to Austin's wide variety of urban entertainment and high-tech employment clusters. Dell, Hewlett-Packard, and Oracle, all located in the Round Rock corridor, are just a 15 minute drive from Taylor.





Community Assets

Asset #1 – A Genuine “Community Feel”

Unlike some competing suburbs of Austin, Taylor presents a genuine “hometown” or “community” feel. Elements that contribute to this intangible but important asset include Taylor's well preserved historic neighborhoods, extensive park system, and redeveloping classic small town downtown. Hutto does not offer these elements on a scale equal to Taylor. The historic old town areas of Round Rock and Georgetown are on more of a comparable scale to Taylor. Although many other factors contributed greatly to the large scale development occurring in those two cities, it is important to note that they are instructive that Taylor's current footprint could potentially support additional new development on a larger suburb scale.



Asset #2 – Community Amenities

Because it is an established community, Taylor offers new residents a slate of existing amenities that could make the community attractive to new residents and ultimately buyers of new homes within new more upscale developments. These include Taylor's park and trail system. The more fully developed community amenities within Taylor should be marketed as an attribute both to potential developer / builders and potential new residents.



Asset #3 – Proximity to 130 Toll, Path of Growth

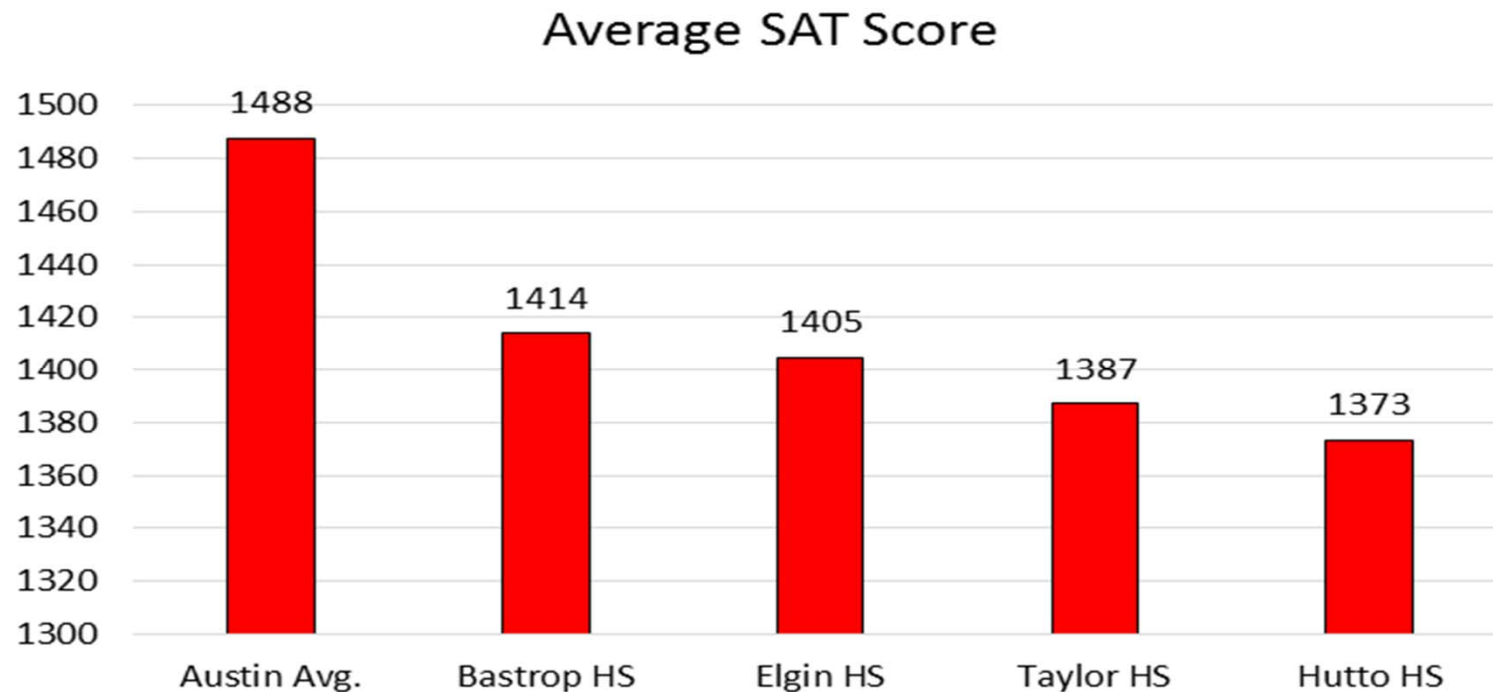
The opening of the 130 Toll Road has made commuting to and from suburban communities in the northeast, east, and southeast sides of Austin much more feasible than it had been prior. This transportation corridor has allowed for the path of growth to continue east from Round Rock to Hutto beyond 130. Taylor is the next location beyond Hutto in this path of growth expansion. Similar path of growth development has occurred in Georgetown to the north. Previously, Georgetown (not unlike Taylor) was a small historic town with the Sun City age restricted community adjacent. However, Austin's strong growth coupled with path of growth development has lead Georgetown to see strong development growth as Round Rock reaches buildout. A similar dynamic can reasonably be expected to occur in Taylor as Hutto reaches buildout. I-35 is a more primary route in the region than is 79, so the degree to which Taylor is in the path of growth is slightly lesser than the degree to which Georgetown was. However, as Georgetown achieves greater and greater level of development, it is not unreasonable to contemplate development moving east of Georgetown / Round Rock along Chandler Road and Highway 29 East. This development would eventually reach Taylor. This scenario is not unreasonable to contemplate in the future because development would simply have to reach points too far north from Austin along I-35 such as Jarrell and further into Bell County once it extends beyond Georgetown. The distances from Austin employment centers would be too great; it is more reasonable to expect development to fill back in to the east as projected above.

Asset #4 – Favorable Land Economics

Metrostudy observed land pricing among tracts currently on the market for sale that would provide a steep discount versus many other suburban locations of Greater Austin. Potential residential development tracts observed for sale ranged in price from \$7,800 to \$21,000 per acre. This pricing structure allows for developers to purchase land at a sufficiently low land basis, thereby pricing in the risk of developing in Taylor (which does not exhibit a demonstrable history of real estate demand).

Asset #5 – Better Performing Schools than Hutto....by some definitions

One market objection to Taylor that Metrostudy observed is related to the performance and demography of Taylor ISD versus competing suburbs. Builders, developers, and homebuyers should take note that several metrics favor Taylor ISD over Hutto ISD. One is the average SAT score as reflected in the table below.



Source: Texas Education Agency, Metrostudy

Asset #5 – Better Performing Schools than Hutto....by some definitions

In addition:

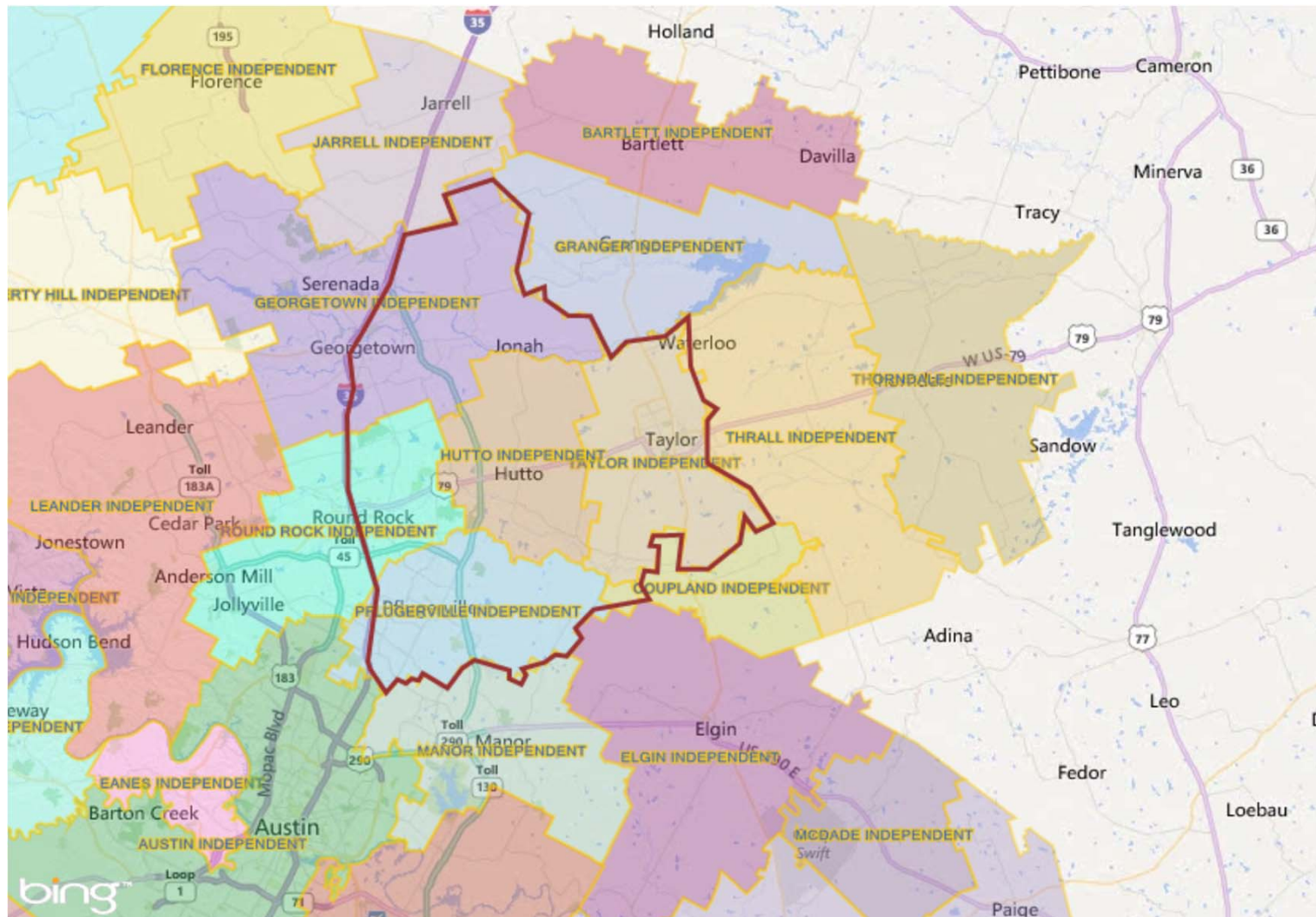
- 6.4% of Taylor ISD students are in Gifted and Talented programs while just 4.5% of Hutto ISD students are.
- Taylor has a Teacher / Student Ratio of 13.20 S/T, versus Hutto's 15.40 S/T ratio.



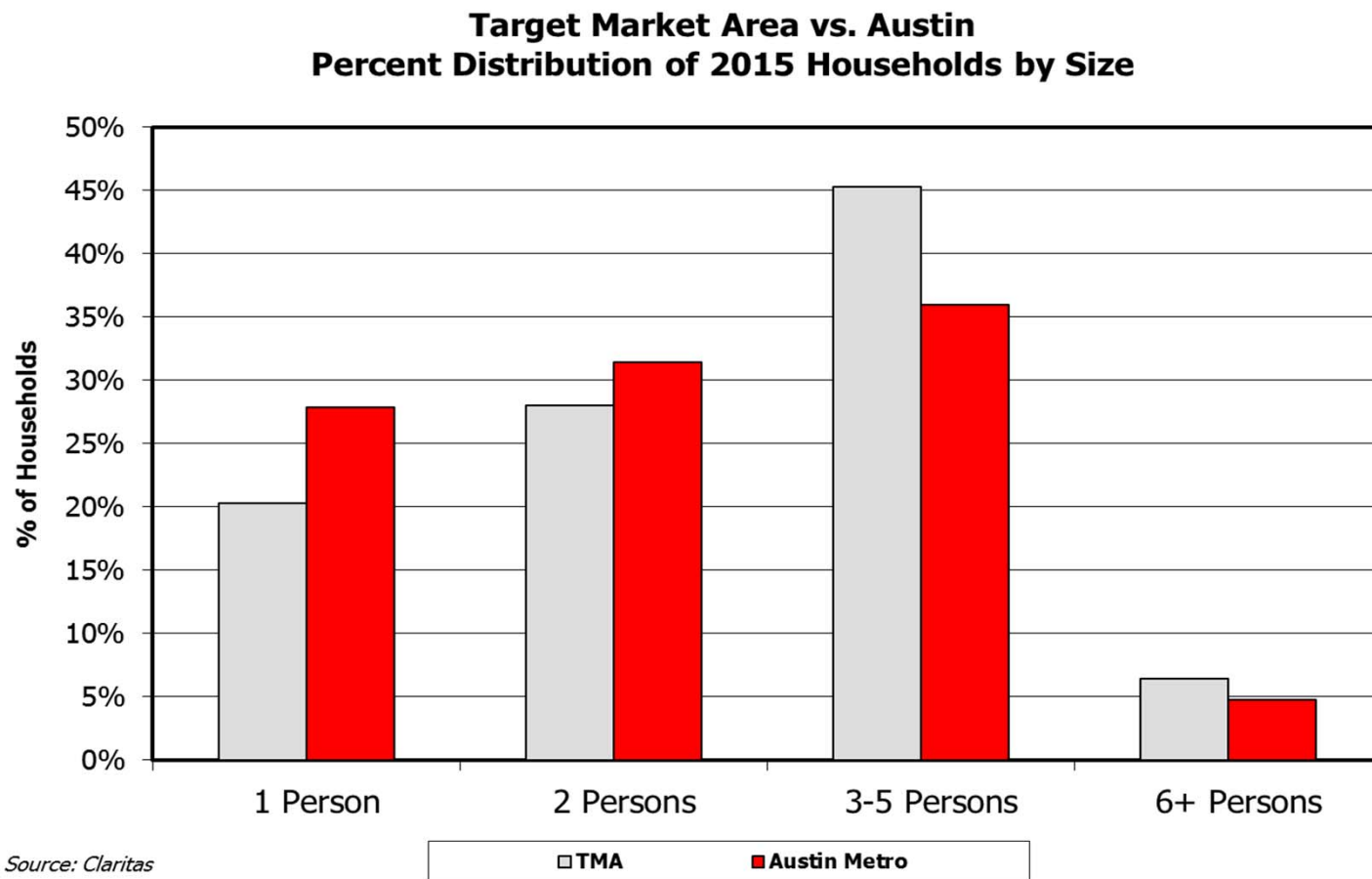
Taylor and Surrounding TMA Area Consumer Segmentation

TMA Boundaries

Communities within the target market area (TMA) boundaries are expected to compete for the same buyer traffic. They will share the same infrastructure advantages and disadvantages, such as retail and commercial locations, traffic patterns, drive time to and from employment centers, and recreational facility availability. Consequently, new-home trends and demographics in the TMA is expected to be indicative of potential demand for particular housing products in the City of Taylor.

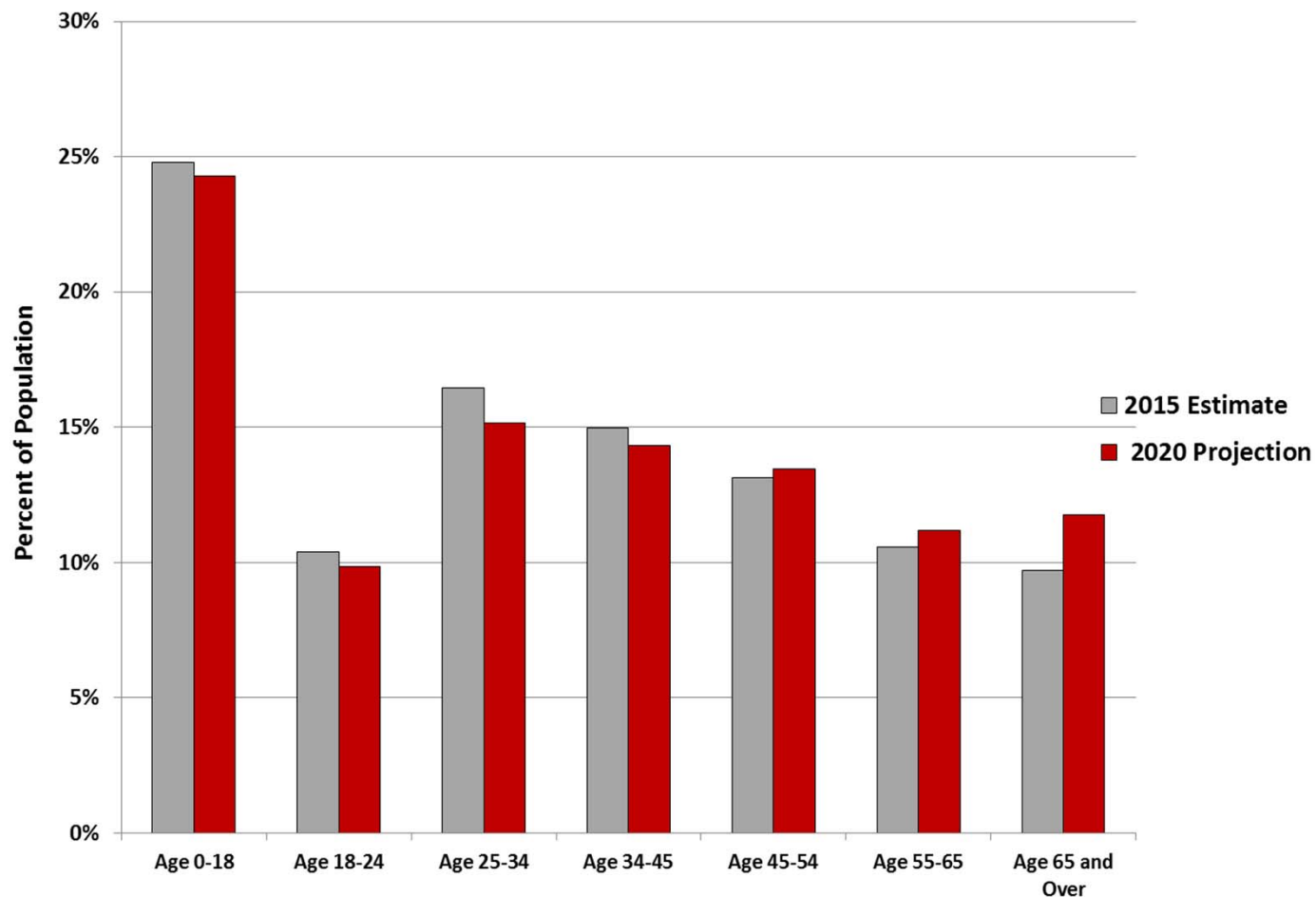


This area is one found highly favorable by families. This is evidenced by the larger share of 3-5 person and 6+ person households in this area versus Austin overall.



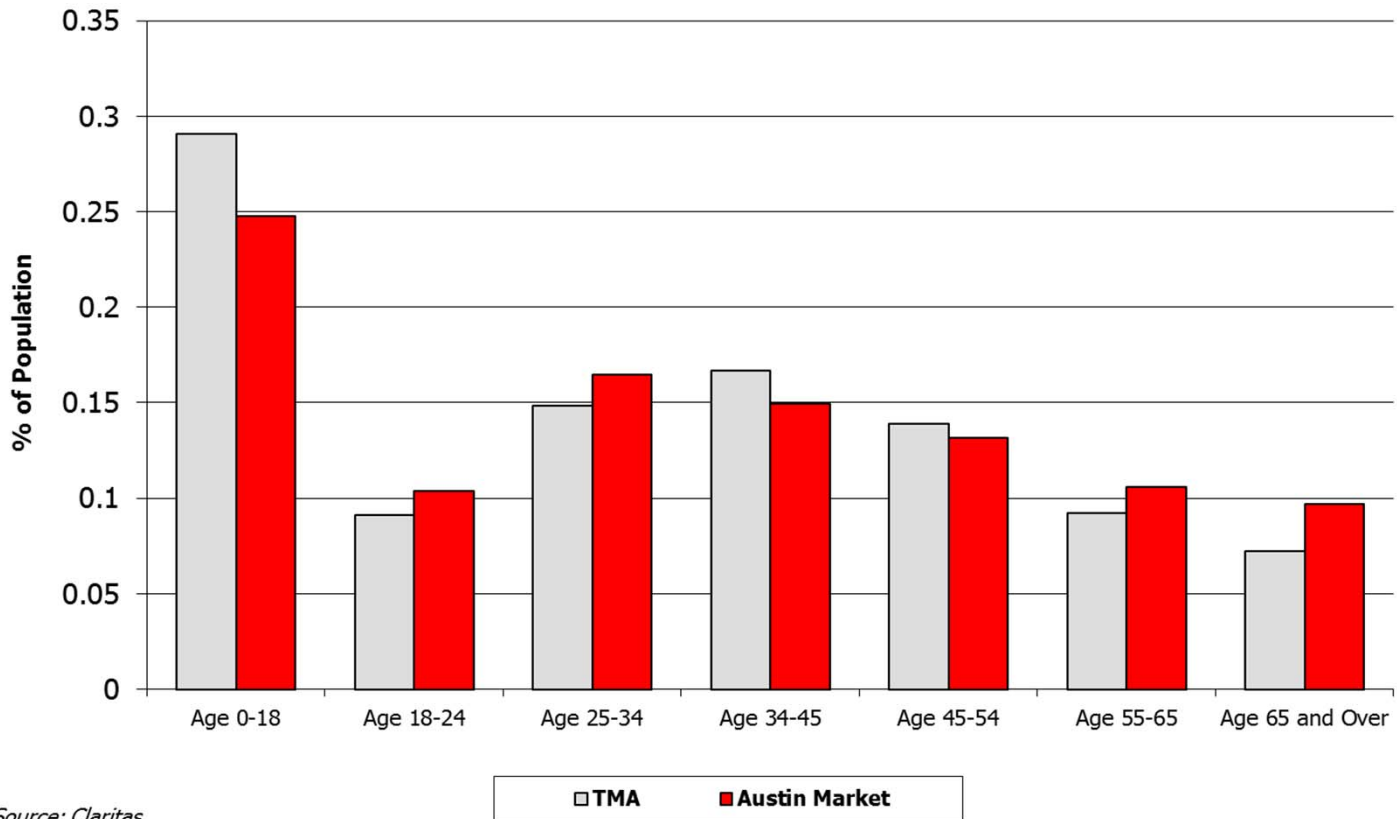
Homebuilders and developers must keep in mind the shifting age distribution of the Greater Austin Area when positioning housing products in new communities. Maximizing return on investment will require targeting growing segments of the income and age distributions. Those in the older age cohorts are anticipated to make up a larger share of the overall population. Taylor's laid back lifestyle, hometown feel amenities, and close proximity to healthcare and employment align well with the needs of these age groups.

Austin Market Population by Age

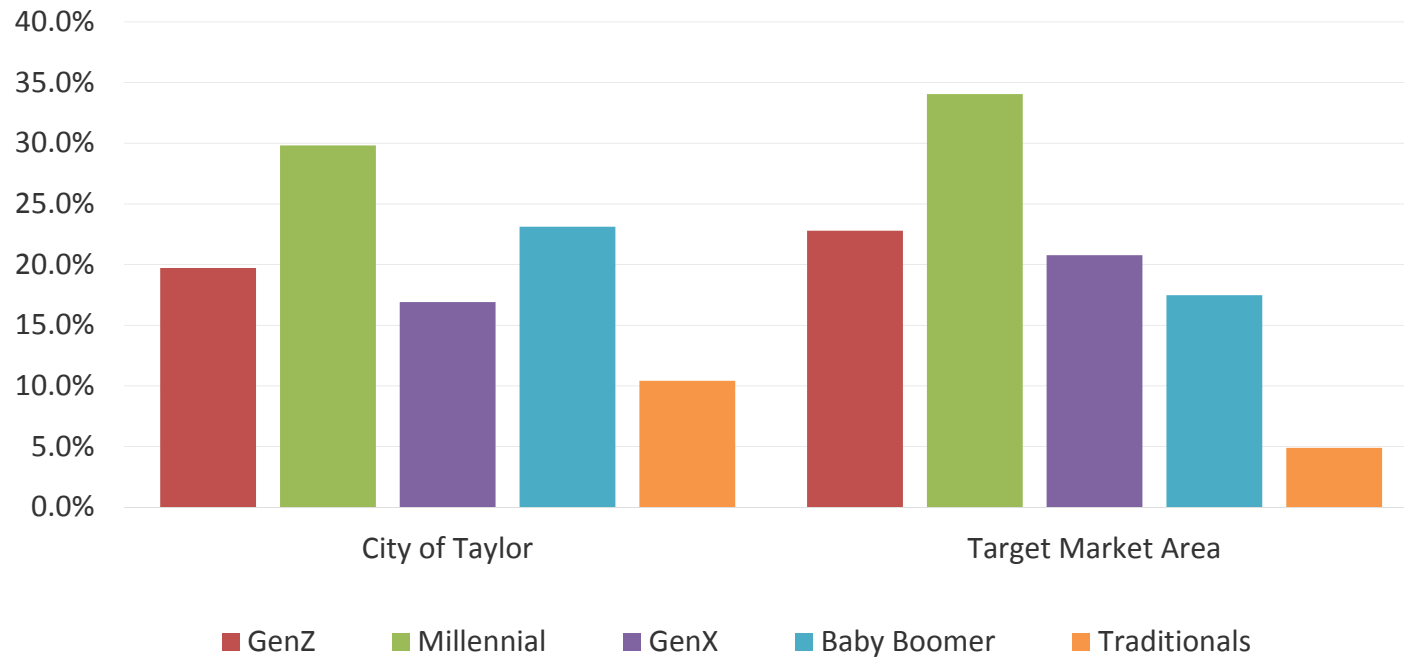


The TMA contains more children, and more middle aged residents than Austin overall. As those middle aged age groups get older, their needs and wants are likely to shift as they enter the “move down” and “empty nest” housing stages of life. Taylor, and new development within Taylor, can be well positioned to capitalize on the housing needs of these age groups.

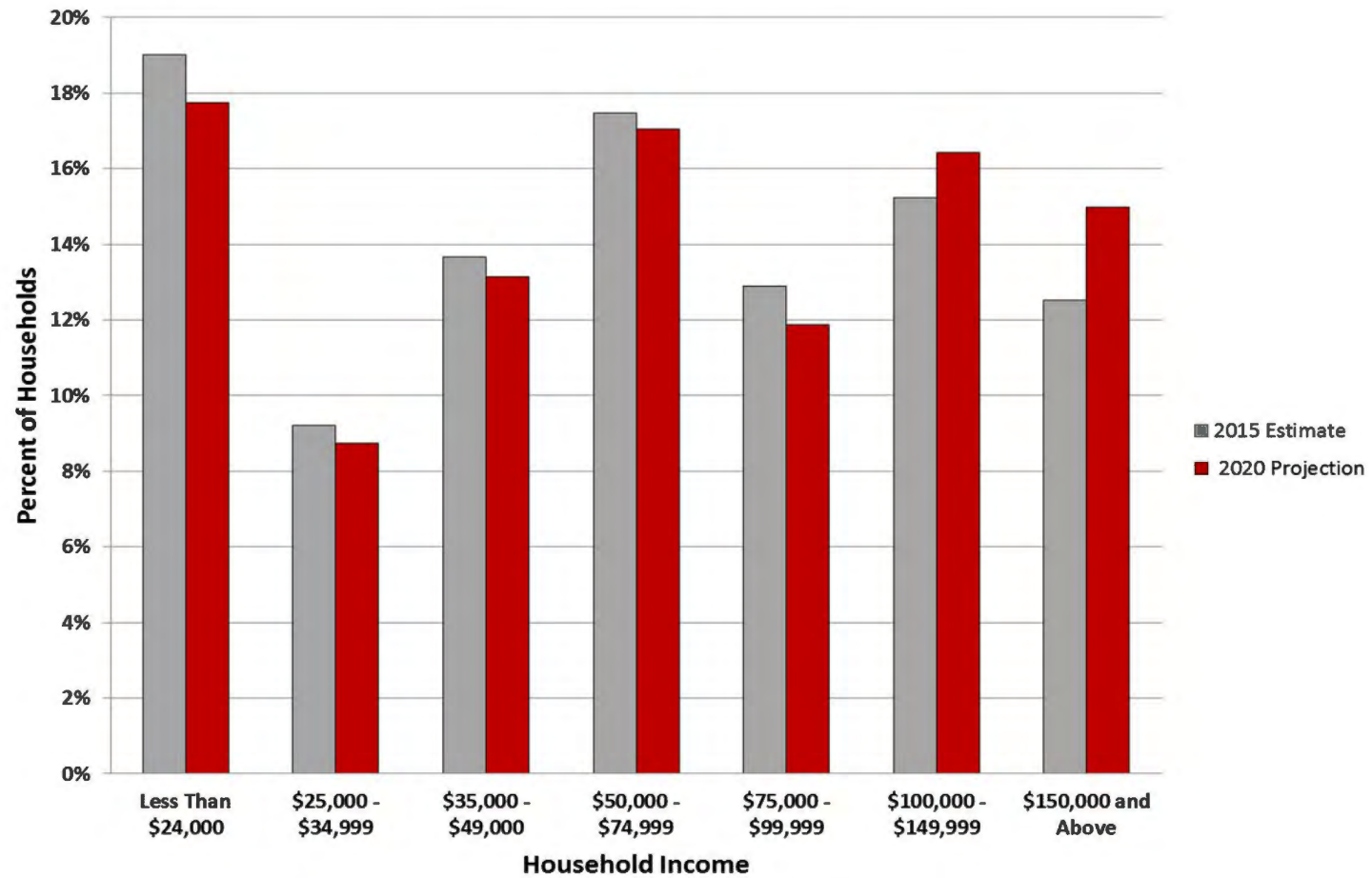
**Target Market Area vs. Austin
Percentage Distribution of Population by Age**



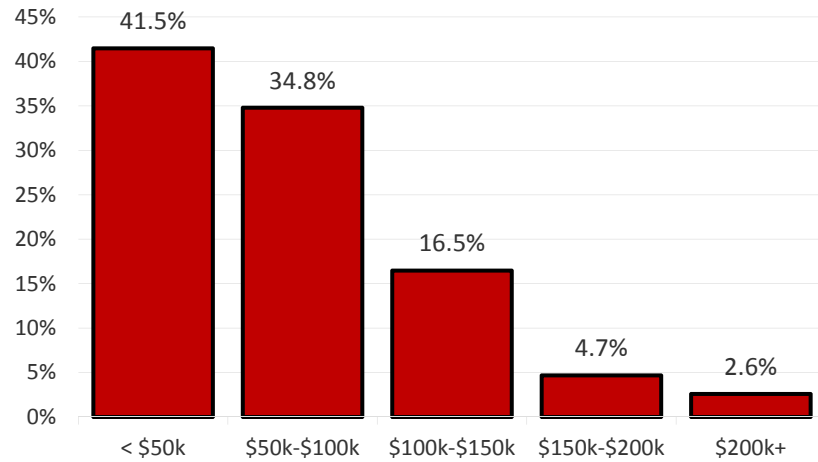
POPULATION BY GENERATION



Austin Household Income Levels



CITY OF TAYLOR INCOME DISTRIBUTION



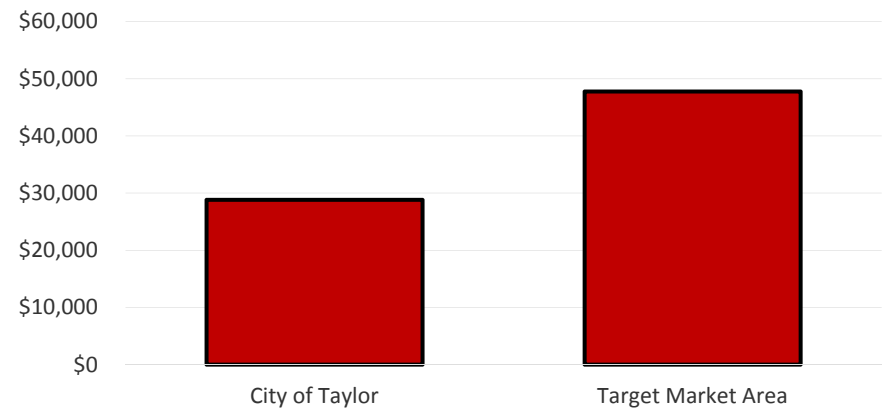
TMA INCOME DISTRIBUTION



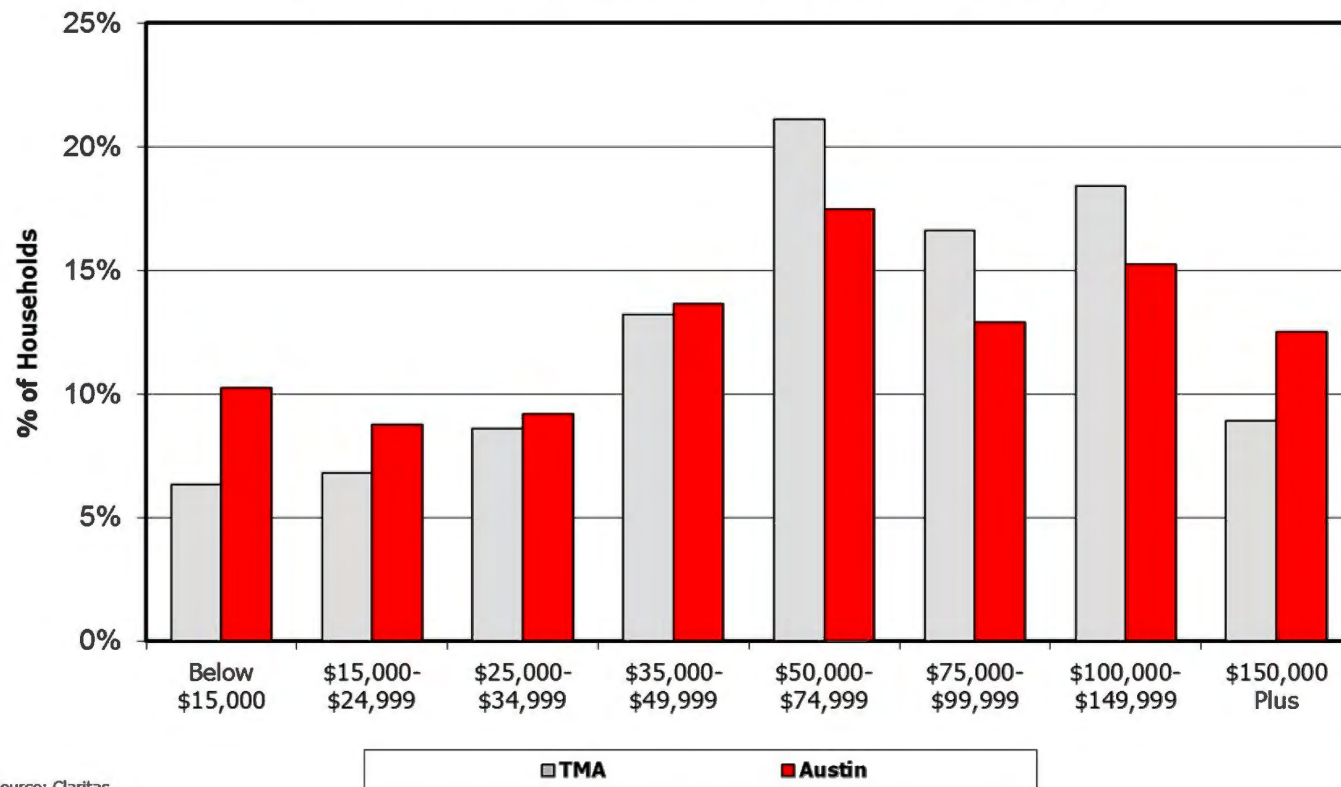
MEDIAN HOUSEHOLD INCOME



RETAIL SALES PER CAPITA



**Target Market Area vs. Austin
Percent Distribution of 2015 Household Incomes**





The Case for Taylor

The Case for Taylor

“People don’t know what they want until you show it to them.” –Steve Jobs

- Austin area developers need to think beyond competing in overcrowded submarkets. Within Austin’s most competitive markets, such as our defined Northeast Austin TMA, communities are always trying to outperform rivals to grab bigger slices of existing demand.
- A builder/developer in the City of Taylor would have the opportunity to create uncontested market space. Competition is irrelevant in this situation, and the goal is to invent and capture new demand, offering customers a leap in value at a lower cost. This concept applies to move up and executive housing.
- Conventional wisdom holds that new developments can either create greater value for homebuyers at a higher cost or create a “value play” at a lower cost. Our recommended strategy is based on the simultaneous pursuit of differentiation (via large lots, low density) attainable at a lower cost per sq. ft. due to the relative discount in land prices in Taylor vis-à-vis other portions of the TMA. In other words, It is an “and-and,” not an “either-or” strategy.

Reduce-Eliminate-Raise-Create

Reduce

What costs can be reduced by developing in Taylor?

- Land

Raise

What can and should be raised above industry standard?

- Age-targeted housing?
- Specialty Amenitization?

Eliminate

What costs can be eliminated by developing in Taylor?

- Scale back and eliminate some traditional community amenities due to Taylor's vibrant town center
- Special District creation costs

Create

What has never been offered, but should/could be done, in a new development in Taylor?

- Acreage Estate Lot Living?
- A Vibrant "Agrihood"?
- A Production Operation at Hills of Mustang Creek?



Value Proposition

Value Proposition

- ***To Homebuyers:*** Prospective developers and homebuilders, in conjunction with the City of Taylor, should provide a clear, simple statement of the benefits, both tangible and intangible, that the community will provide.
- ***To Homebuilders / Developers:*** Taylor provides the opportunity to bring to market a unique community development, likely at a land cost basis that prices in the risk for doing so, within the current Northeast Austin path of growth, with the support of and existing high quality community infrastructure within the City of Taylor.
- The value proposition must be made by leveraging the community's assets to take advantage of its opportunities and avoid its challenges, which are laid forth in Metrostudy's Housing Market Study and New Housing Growth Community Marketing Assessment for the City of Taylor.



City Council Meeting
May 12, 2016
Agenda Item Transmittal

Agenda Item #: 9

Agenda Title: Receive proposed plan for Municipal Drainage Utility projects.

Council Action to be taken: Discuss and consider approving recommended projects.

Initiating Department: City Administration

Staff Contact: Isaac Turner, City Manager

1. INTRODUCTION/PURPOSE

Halff and Associates will provide an update on the Municipal Utility Drainage System (MDUS) projects.

2. DESCRIPTION/ JUSTIFICATION

Halff and Associates manages the MDUS program and performed a drainage assessments of events thru the October 2015 flooding.

The MDUS list of drainage projects has been updated to include additional drainage improvement projects that were identified.

New incidents of flooding from the recent April 2016 rains are being assessed and are not included as projects in the attached report.

3. FINANCIAL/BUDGET

Portion of funding for the recommended projects will come from the MDUS fund balance, Transportation User fee, Utility Fund and 2012 bond proceeds. The specific amounts will be detailed in the upcoming FY 2016 -2017 Budget process, however the estimated are listed below.

- MDUS fund
- TUF
- Utility Fund
- 2012 Bond Proceeds

4. TIMELINE CONSIDERATIONS

Small MDUS projects

2016 Q3-Q4 Design

2017 Q1 acquire easements and coordinate utility adjustments

2017 Q2 construct small projects

Edmonds/Mills

2017 Q1-Q2 Design

2017 Q3-Q4 Coordinate utility adjustments

2017 Q4 Bid construction

2018 Construction

5. RECOMMENDATION

Staff is requesting for Council to approve proceeding with the recommended projects.

6. REFERENCE FILES

9a. MDUS CIP Presentation



City of Taylor MDUS CIP Projects Update





Overview of Scope

Part 1 - Edmond Mills – Preliminary Assessment

STATUS: COMPLETE

Part 2 – Donna Drainage – Review Previous Study. Develop Construction Documents

STATUS: Analysis complete. Alternatives Developed. Design on Hold

Part 3 – Miscellaneous Site - Preliminary Assessments of 5 various smaller site/projects

STATUS: COMPLETE

Part 4 – Additional Sites - Preliminary Assessments of 5 additional smaller site/projects

STATUS: COMPLETE

Part 5 – Additional Sites – Preliminary Assessment of 10 additional smaller site/projects

STATUS: COMPLETE



Taylor MDUS 5-year CIP table

Projects in Halff's current scope of work.

MDUS 5-year CIP

Edmond / Mills - Phase 1

Paula / Medical Pkwy

McLain Street

800 Kirk Street

2nd / Main

Laurel / Sams St

Donna Channel - Preliminary Design

1608 Castlewood Drive

210 Lake Drive < Complete

MDUS 5-year CIP

900 West 3rd Street

407 Drake Lane

Booth / Oak

Airport at Mustang Cr

Debus St

4th @ Victoria

Kimbrow @ 6th

Kimbrow @ 7th

Rio Grande @ Mustang Cr

LEVEL 1 PROJECTS TOTAL

Oaklawn @ Bull Br Trib

LEVEL 2 PROJECTS TOTAL



Taylor MDUS CIP – Projects added after May 31, 2015

Projects in Halff's current scope of work.

2000 Davis Street

Brookwood Circle

2709 Kelly Lane

1409 TH Johnson Dr

1308 TH Johnson Dr

3310 Crystal Circle

Reece Residence (2nd Street)

Tammi Lane

Taylor Dental Association



Other Projects (Not on CIP List)

Projects in Halff's current scope of work.

Davis St Sidewalk
2200 Lee St
1806 Lynn



Summary of Projects

	Site	Project Costs
Part 1	Edmond and Mills Street	Option 1: \$2,520,000
		Option 2: \$2,970,000
Part 2	Donna Channel	Option 1: \$1,320,000
		Option 2: \$1,760,000
Part 3 & 4	Paula Lane/Medical Parkway	\$33,000
	McLain Street	\$154,000
	800 Kirk Street	Option 1: \$38,500
		Option 2: \$77,000
		Option 3: \$187,000
	Laurel/Sams Street	\$170,000
	407 Drake Lane	\$66,000
	Booth/Oak	\$55,000
	Debus Drive	Option 1: \$121,000
		Option 2: \$1,100,000
	Kimbrow @ 7th	\$38,500
	Oaklawn @ Bull Br Trib (Greenlawn)	\$66,000
	W. Lake Drive	Completed by City



Summary of Projects

	Site	Project Costs
Part 5	2000 Davis Street	\$21,000
	Brookwood Circle (706, 708, 710)	See Donna Channel
	2709 Kelly Drive	\$11,000
	1409 TH Johnson at Pinehurst	\$92,400
	1308 TH Johnson culvert	\$121,000
	3310 Crystal Circle	\$31,000
	Reece Residence on 2nd Street	Option 1: \$130,000
		Option 2: \$66,000
		Contingency 1: \$30,000
	Tammi Lane near 1617	\$70,500
	Taylor Dental Association (Cabaniss) on 920 Main St/SH95	\$50,600
	Davis Street Sidewalk at Bull Branch	\$21,000
	Grand Total: Varies	\$5,500,000- \$6,700,000



Funding

**Projects Grand Total:
\$5,500,000 - \$6,700,000**

**Current Available MDUS Fund:
\$872,000**



Prioritization of Projects

Priority	Project	Number of Affected Properties	Approx Cost Per Residence Affected	Probable Total Cost	Level of Severity
1	Edmond and Mills Street	43	Phase 1: \$22,260	Phase 1: \$957,000	3
2	Donna Channel*	15	Option 1: \$88,000 Option 2: \$117,333	Option 1: \$1,320,000 Option 2: \$1,760,000	3
3	2709 Kelly Drive	1	\$11,000	\$11,000	3
4	Paula Lane/Medical Parkway*	2	\$16,500	\$33,000	3
5	800 Kirk Street	2	\$19,250	\$38,500	3
6	Laurel/Sams Street	10	\$17,000	\$170,000	3
7	Booth/Oak (Walnut)*	2	\$27,500	\$55,000	3
8	Reece residence on 2nd Street*	3	Option 1: \$53,333 Option 2: \$32,000	Option 1: \$160,000 Option 2: \$96,000	3
9	Oaklawn @ Bull Br Trib (Greenlawn)*	2	\$33,000	\$66,000	3

* Easement acquisition required, cost undetermined



Prioritization of Projects

Priority	Project	Number of Affected Properties	Approx Cost Per Residence Affected	Probable Total Cost	Level of Severity
10	Brookwood Circle (706, 708, 710)	3	Option 1: Donna Option 2: \$63,000	Option 1: Donna Channel Option 2: \$189,000	3
11	Turkey Creek	3	Option 1: City Crew Option 2: \$83,392	Option 1: City Crew Option 2: \$250,175	3
12	1609/1611 Castlewood Ct.*	2	TBD	TBD	3
13	1806 N Lynn Street	1	TBD	TBD	3
14	1308 TH Johnson culvert	6	\$20,200	\$121,000	2
15	2000 Davis Street	1	\$21,000	\$21,000	2
16	3310 Crystal Circle	1	\$31,000	\$31,000	2
17	Kimbro @ 7th	1	\$38,500	\$38,500	2
18	Taylor Dental Association (Cabaniss) on 920 Main St/SH95	1	\$50,600	\$50,600	2
19	407 Drake Lane	1	\$66,000	\$66,000	2

* Easement acquisition required, cost undetermined



Prioritization of Projects

Priority	Project	Number of Affected Properties	Approx Cost Per Residence Affected	Probable Total Cost	Level of Severity
20	Debus Drive*	2	\$60,500	\$121,000	1
21	Tammi Lane near 1617	2	\$35,250	\$70,500	1
22	1409 TH Johnson at Pinehurst	1	\$92,400	\$92,400	1
23	Mclain Street	1	\$154,000	\$154,000	1
24	2200 Lee Street	1	na	Work by City	1
25	Davis Street Sidewalk at Bull Branch	0	n/a	\$21,000	1

* Easement acquisition required, cost undetermined



Project Packages

Phase 1 Edmond Mills & 6 Smaller Projects (Defer Donna)				MDUS + TUF + Utility Funds		
Priority	Project	Number of Affected Properties	Probable Total Cost	Drainage Costs	Roadway Costs	Running Total MDUS Funds
1	Edmond and Mills Street	43	Phase 1: \$957,000	\$660,000	\$297,000	\$660,000
2	Donna Channel	15	\$1,760,000			
3	2709 Kelly Drive	1	\$11,000	\$11,000		\$671,000
4	Paula Lane/Medical Parkway	2	\$33,000	\$33,000		\$704,000
5	800 Kirk Street	2	\$38,500		\$38,500	(Street Funds)
6	Laurel/Sams Street	10	\$170,000		\$170,000	(Street Funds)
7	Booth/Oak (Walnut)	2	\$55,000	\$55,000		\$759,000
8	Reece residence on 2nd Street	3	\$96,000	\$85,000	\$11,000	\$844,000
9	Oaklawn @ Bull Br Trib (Greenlawn)	2	\$66,000	\$66,000		\$910,000



Recommendation

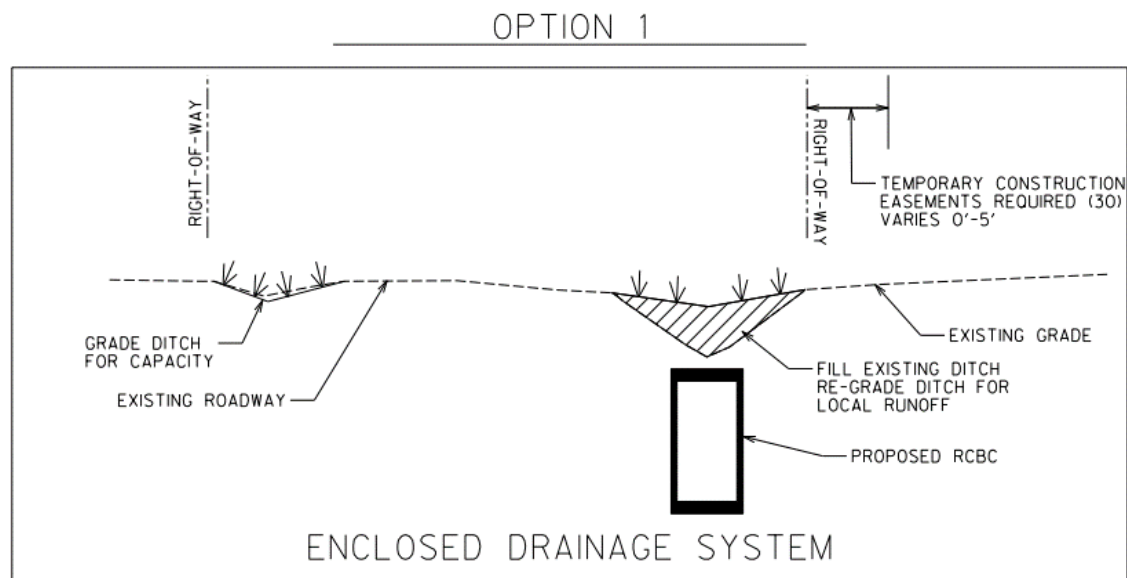


Proceed with:

- **First six small projects**
- **Edmonds Phase 1**
- **Use combination of MDUS, utility, and TUF funds**



Edmond/Mills



Project Costs

Option 1: Enclosed Drainage (storm sewer)

\$1,760,000 Drainage

\$ 770,000 Roadway, Utilities

\$2,530,000 Total*

*Easement costs not included





Edmond/Mills

Project Costs

Option 2: Open Drainage (channel)

\$2,200,000 Drainage

\$ 770,000 Roadway, Utilities

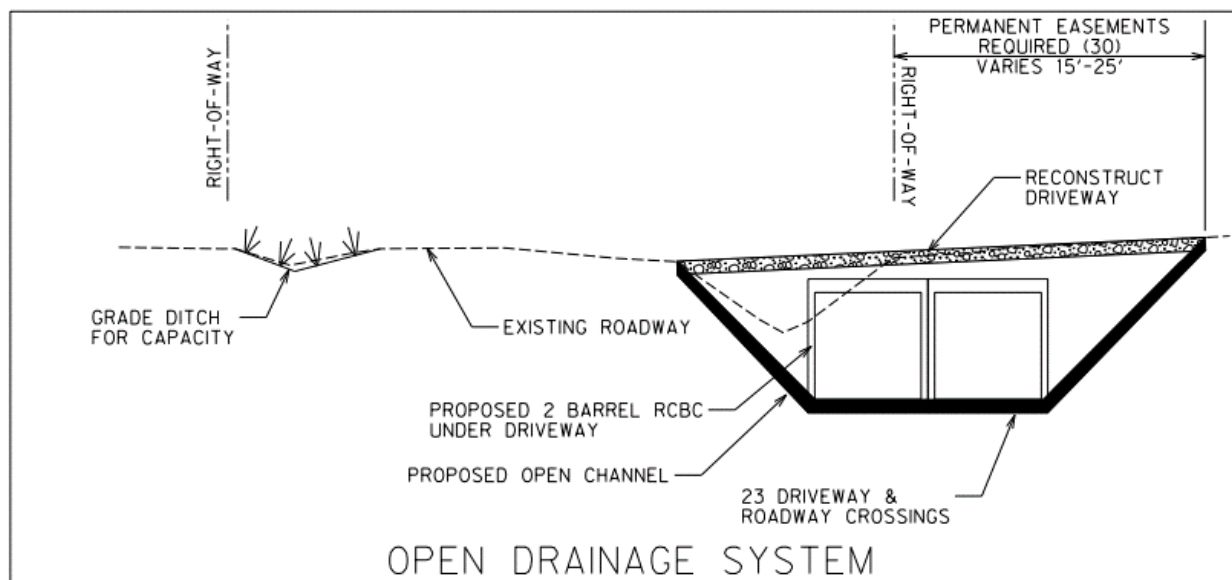
\$2,970,000 Total*

Next Steps:

- **Choose Option/Phasing**
- **Funding (drainage, roadway, utilities)**
- **CDs**

*Easement costs not included

OPTION 2





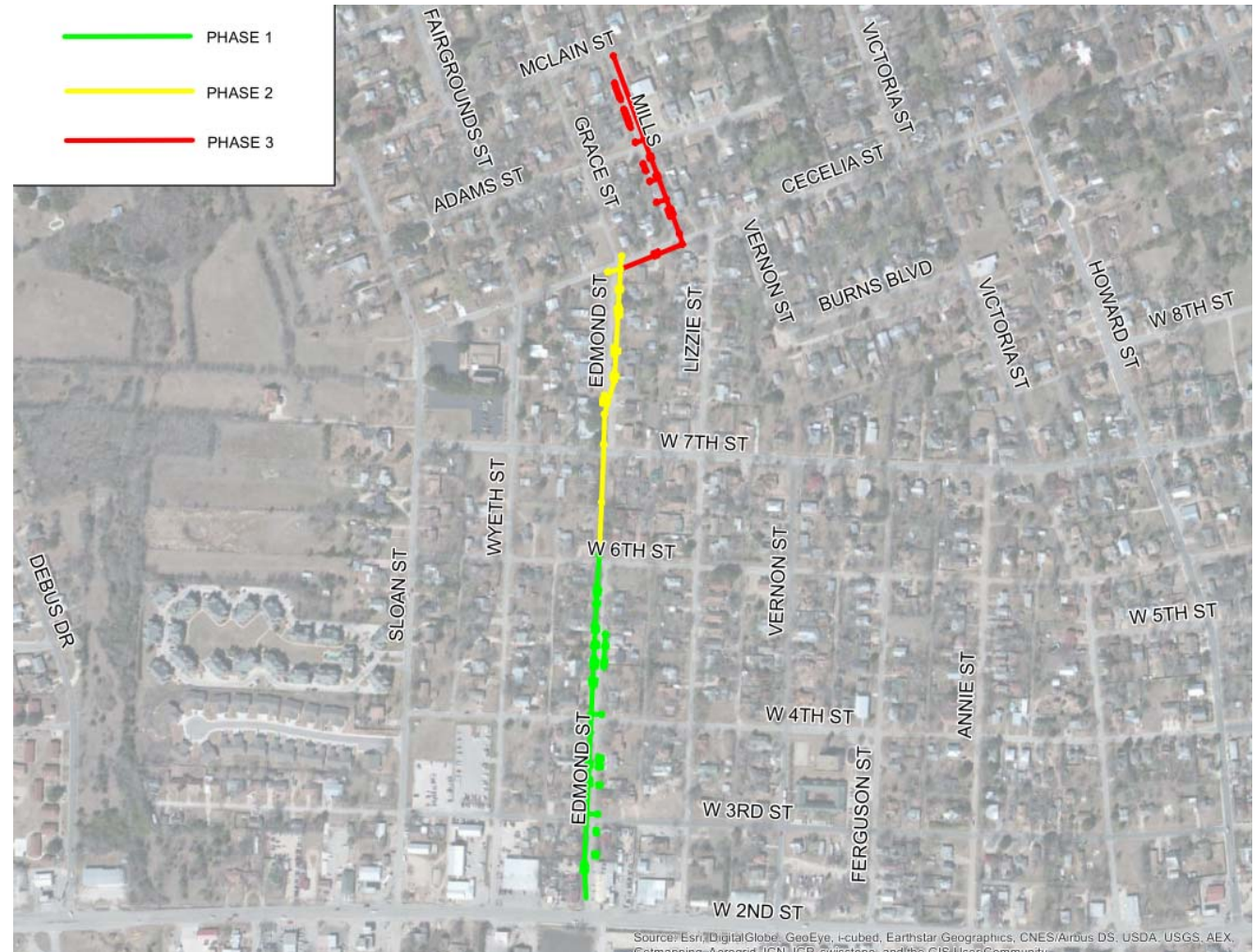
Edmond/Mills: Potential Phasing

Project Costs (Option 1)

Phase 1: \$957,000

Phase 2: \$814,000

Phase 3: \$759,000





Donna Channel

Option 1

Project Costs

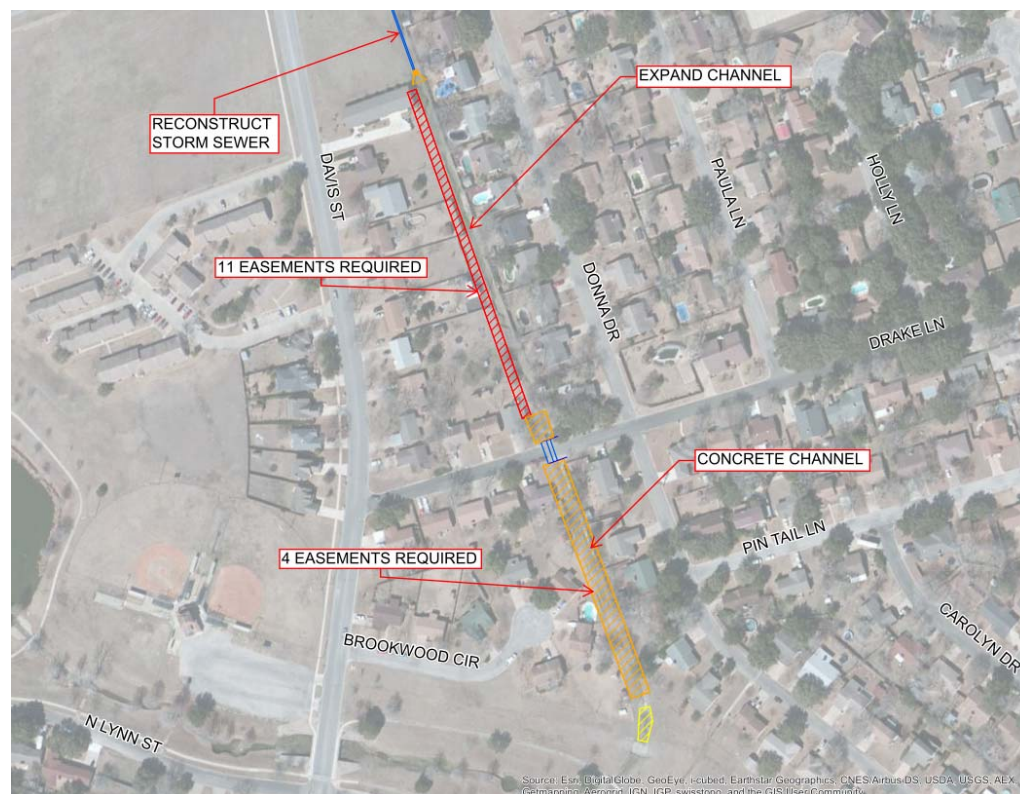
Option 1 - Channel reconstruction, storm sewer

\$1,320,000

*Could require USACE permit for wetlands
(15 Easements required, cost TBD)

Next Steps:

- Choose Option
- Easement Acquisition
- ISD Coordination
- Funding/CDs



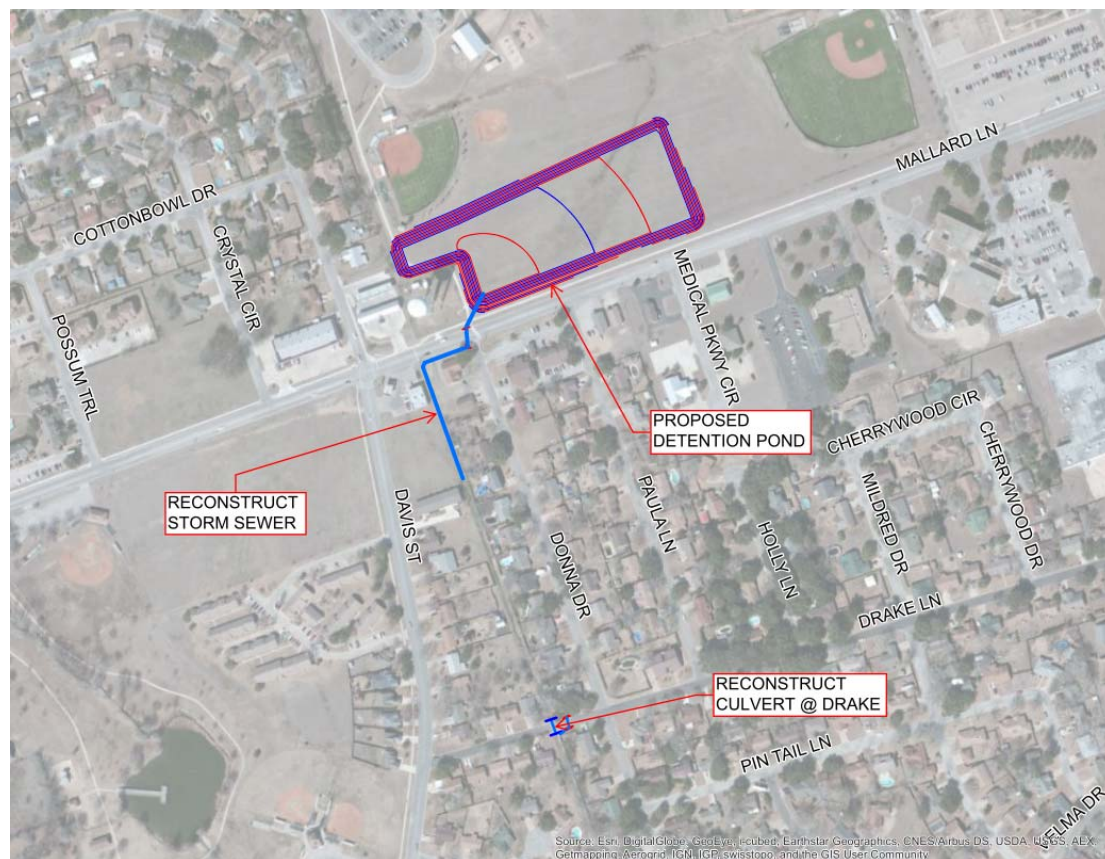


Donna Channel

Option 2

Project Costs

Option 2 - Detention pond, storm sewer
\$1,760,000 (ISD easement required, cost
TBD)





McLain Street

Project Costs
\$154,000

Next Steps:

- **Funding/CDs**





Paula Lane/Medical Parkway

Project Costs: \$33,000

Next Steps:

- Easement acquisition
- Funding/CDs





Miscellaneous Projects: 800 Kirk Street





Miscellaneous Projects: Laurel/Sams Street

Project Costs
\$170,000

Next Steps:

- **Funding/CDs**





Additional Misc Projects: Kimbro @ 7th

Project Costs
\$38,500

Next Steps:

- **Funding/CDs**





Additional Misc Projects: 407 Drake Lane

Project Costs
\$66,000

Next Steps:

- **Funding/CDs**





Additional Misc Projects: Oaklawn @ Bull Branch Trib (Greenlawn)

Project Costs

\$66,000

(ISD easement required, cost TBD)

Next Steps:

- Easement acquisition
- ISD Coordination
- Funding/CDs





Debus Drive

Option 1

Project Costs

Option 1-(Interim repairs to address complaints) \$121,000

Option 2-(Full reconstruction from Lake Dr to Thomas St, storm sewer) \$1,100,000

Next Steps:

- Choose Option
- Funding/CDs





Additional Misc Projects: Booth/Oak

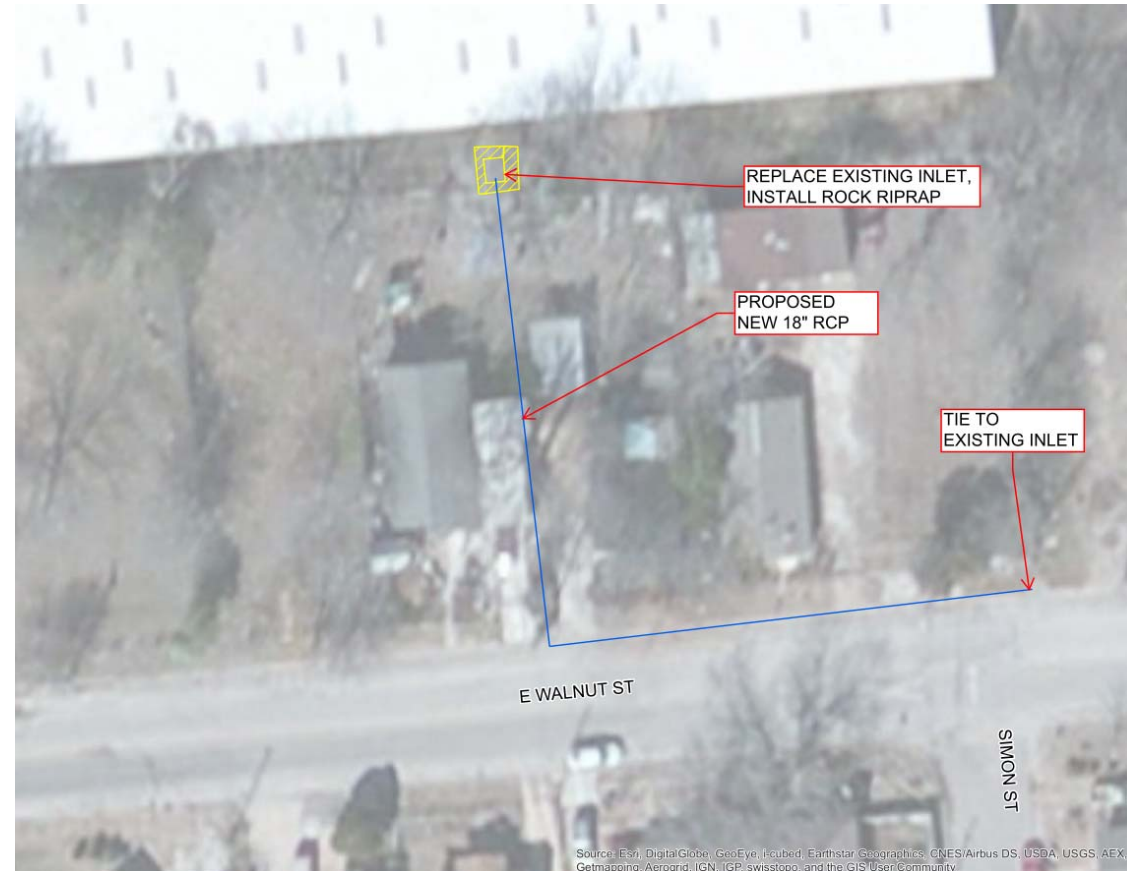
Project Costs

\$55,000

(Easement required, cost TBD)

Next Steps:

- **Easement acquisition**
- **Funding/CDs**





Turkey Creek Option 2

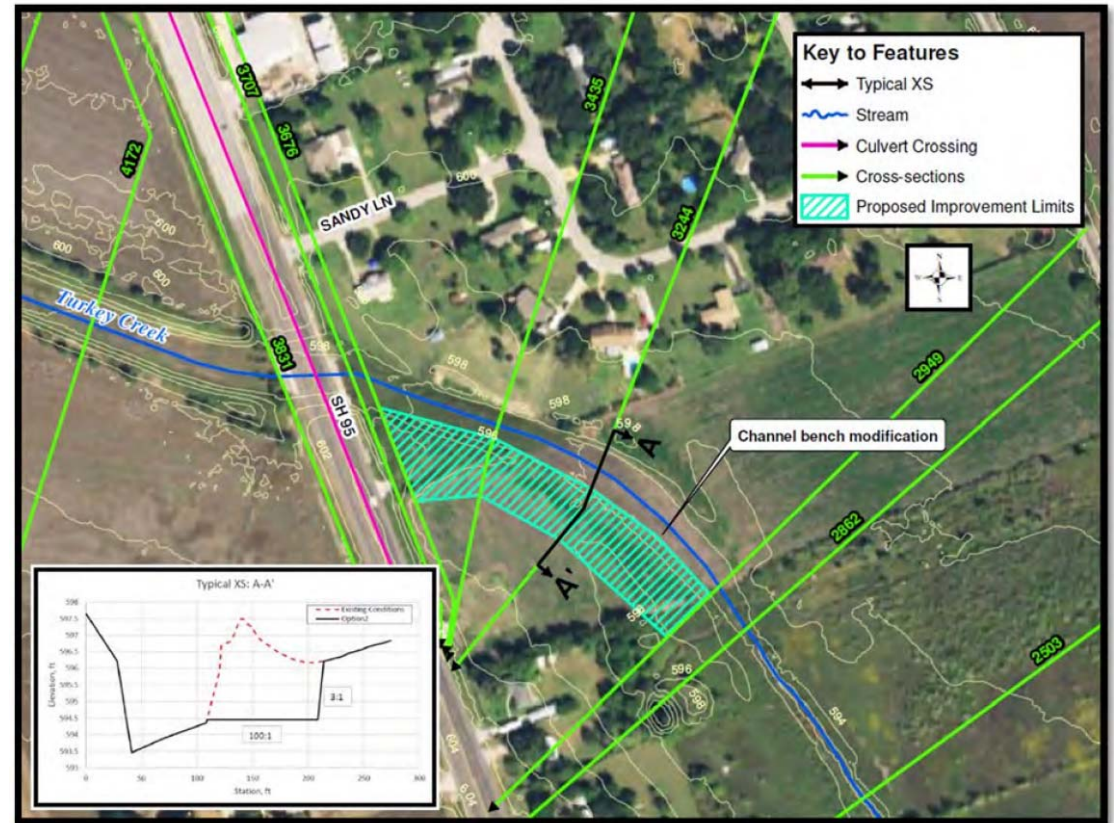
Project Costs

Option 1- Debris Clearing by City Forces (Temporary Right of Entry Required)

Option 2- Channel Widening (Temp Easement ;Cost TBD) \$250,175

Next Steps:

- TXDOT Coordination
- Easement Acquisition
- Funding/CDs





Additional Misc Projects: 2000 Davis Street

Project Costs

\$21,000

(Temp Easement Req'd -Cost TBD)

Next Steps:

- **Easement Acquisition**
- **Funding/CDs**





Brookwood Circle

Project Costs

Option 1: Donna Channel Project

Option 2: \$189,000 (Drake Culvert & Channel Maintenance)



Next Steps:

Choose Option
Easement Acquisition
ISD Coordination
Funding/CDs





2709 Kelly Drive

Project Costs

\$11,000

(Easement Required-Cost TBD)

Next Steps:

- **Easement Acquisition**
- **Funding/CDs**



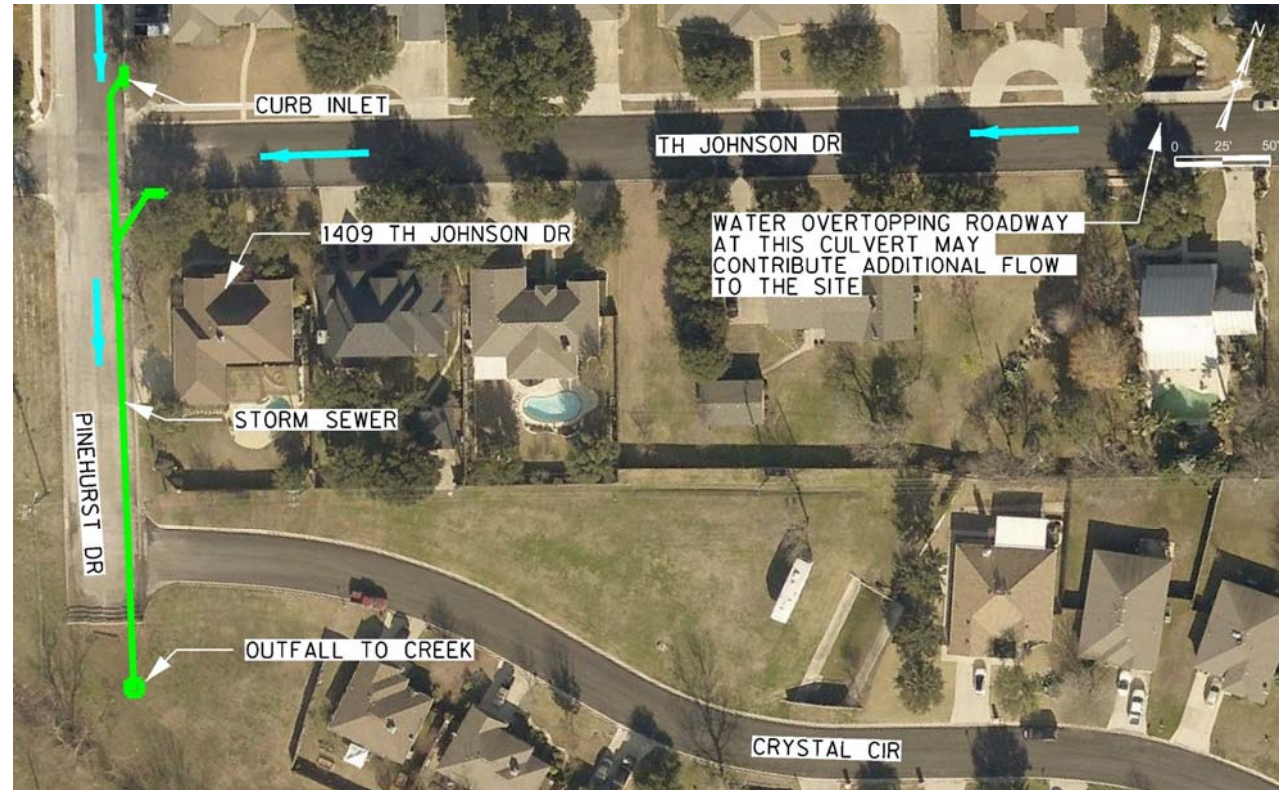


Additional Misc Projects: TH Johnson @ Pinehurst

Project Costs
\$92,400

Next Steps:

- Funding/CDs





Additional Misc Projects: 1308 TH Johnson Culvert





Additional Misc Projects: 1308 TH Johnson Culvert

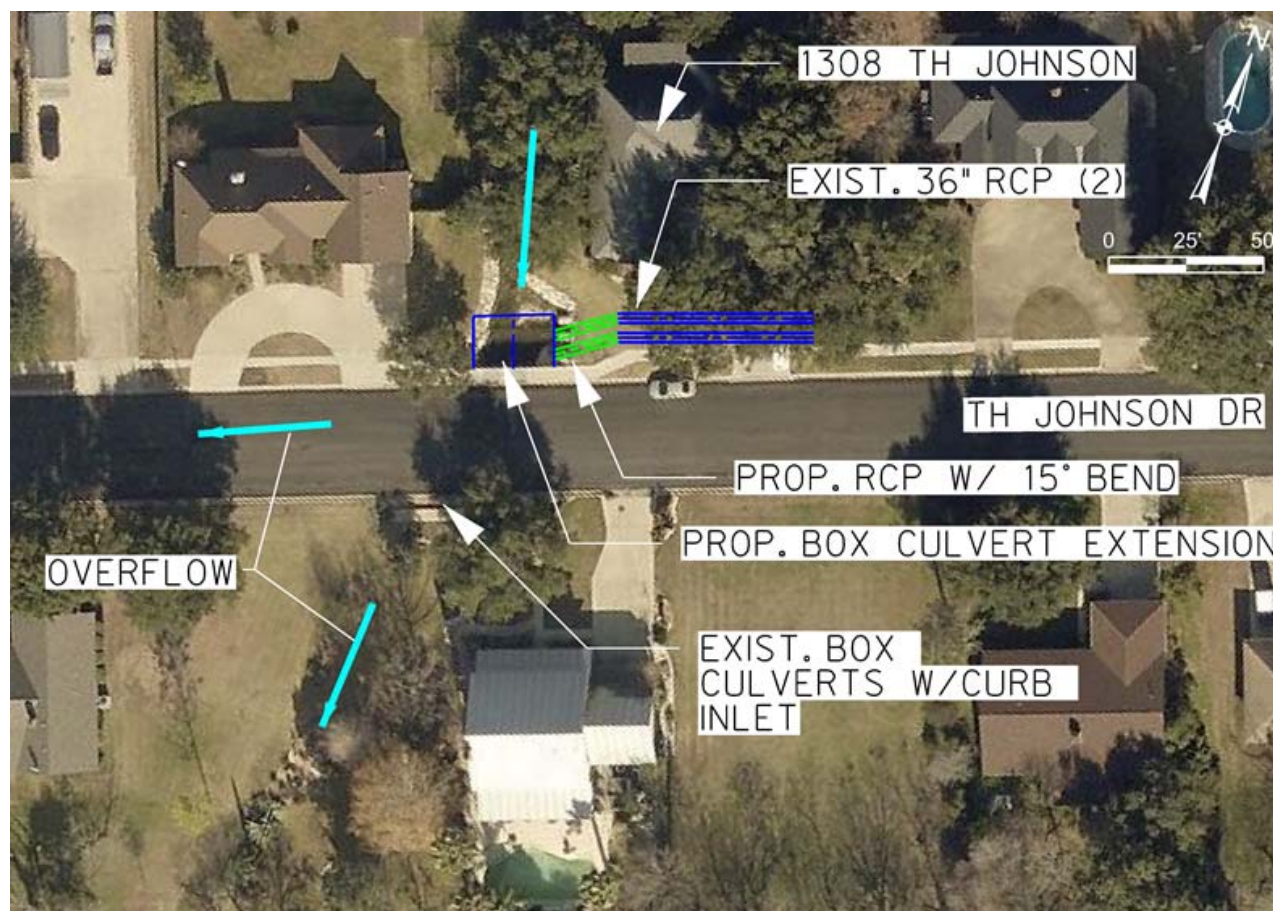
Project Costs

\$121,000

(Easement Required)

Next Steps:

- **Easement Acquisition**
- **Funding/CDs**





Additional Misc Projects: 3310 Crystal Circle





Additional Misc Projects: 3310 Crystal Circle

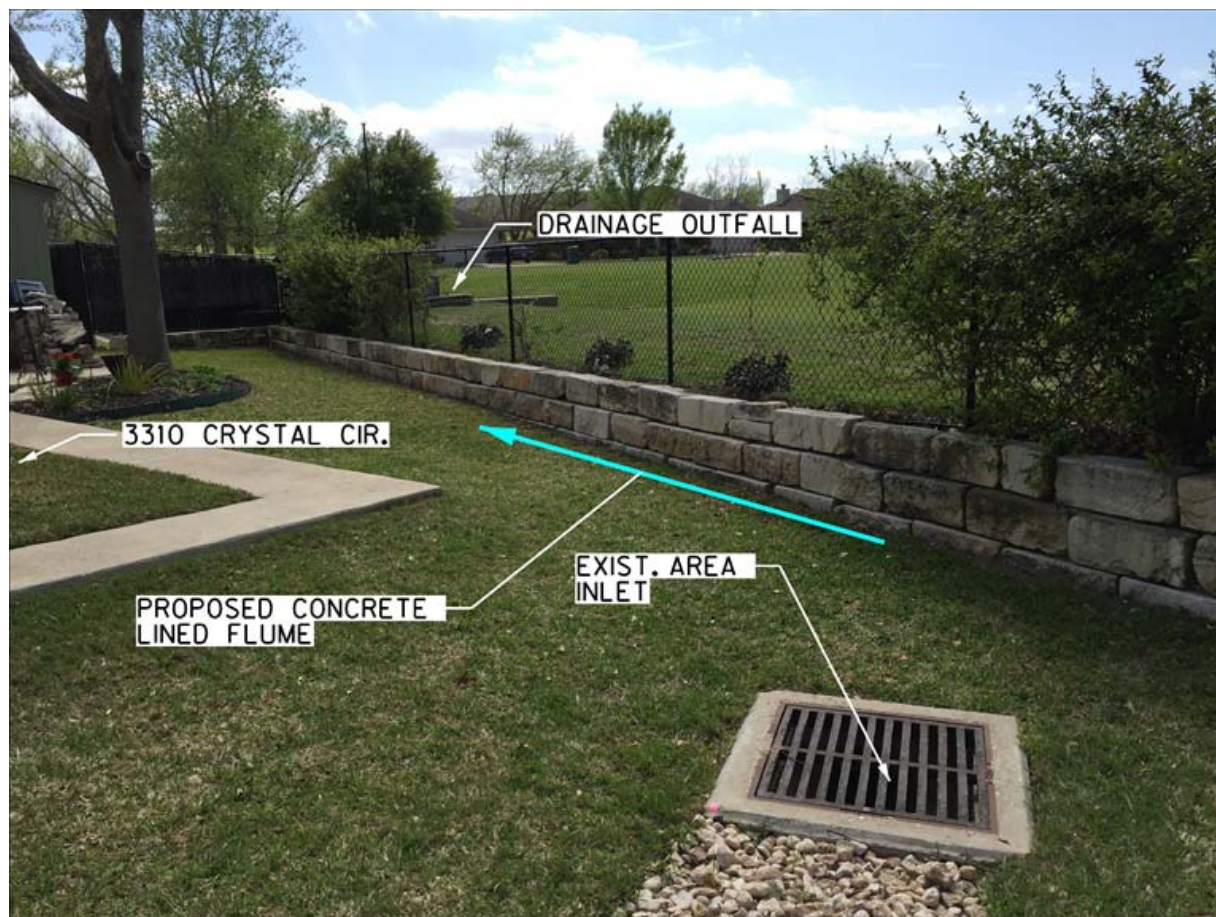
Project Costs

\$31,000

(Temporary Construction Easement
Required)

Next Steps:

- Easement Acquisition
- Funding/CDs





Additional Misc Projects: Reece Residence on 2nd Street



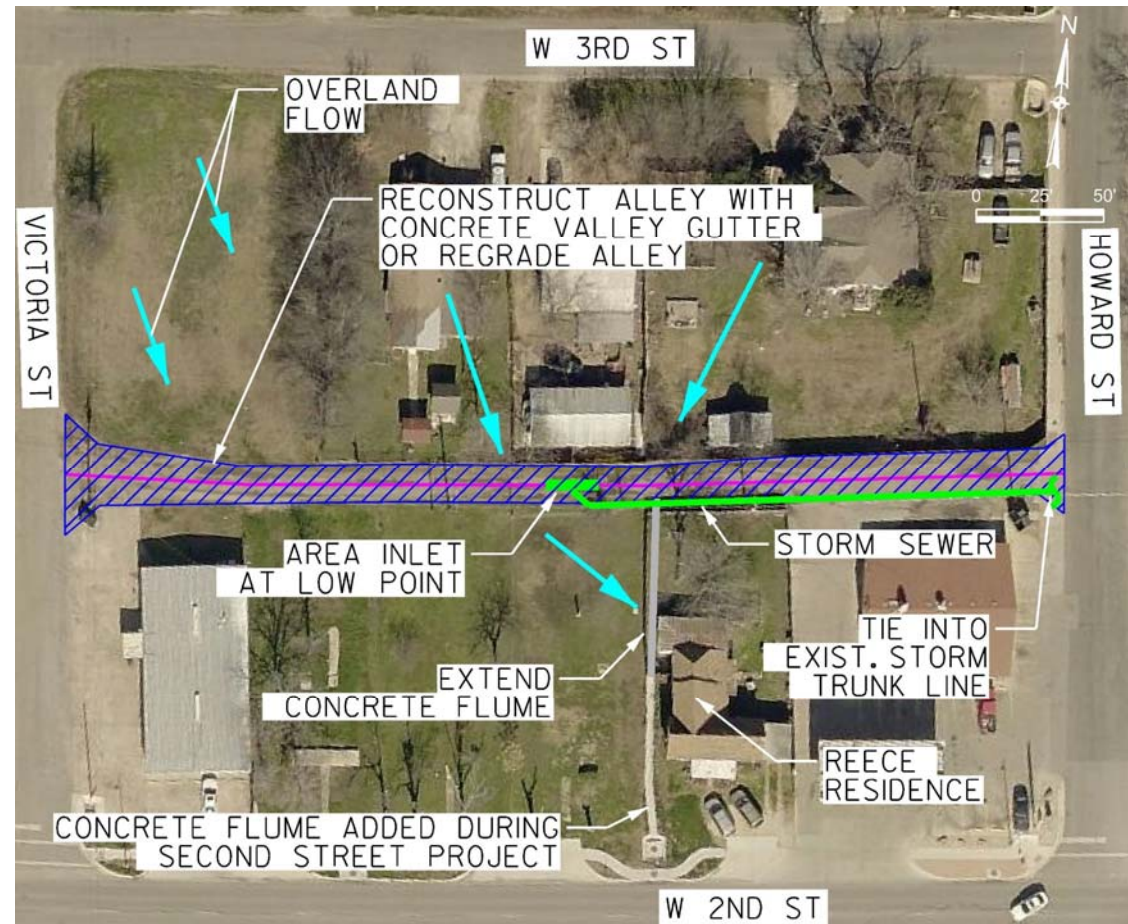
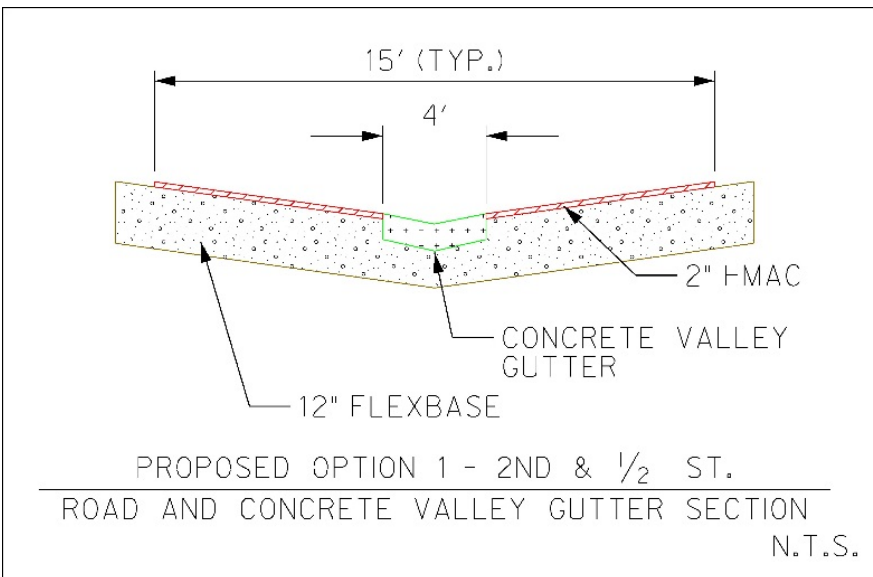


Additional Misc Projects: Reece Residence on 2nd Street

Project Costs

Option 1: \$130,000

Howard St Contingency: \$30,000
(Easement Required-Cost TBD)



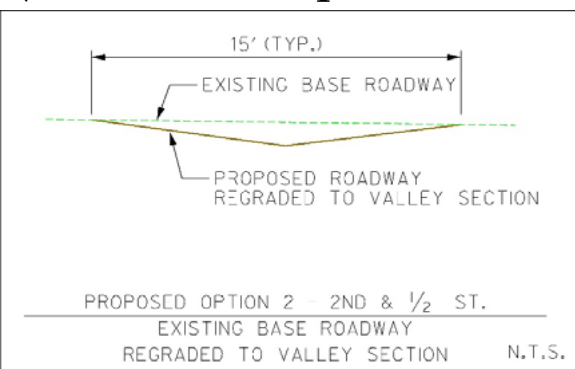


Additional Misc Projects: Reece Residence on 2nd Street

Project Costs

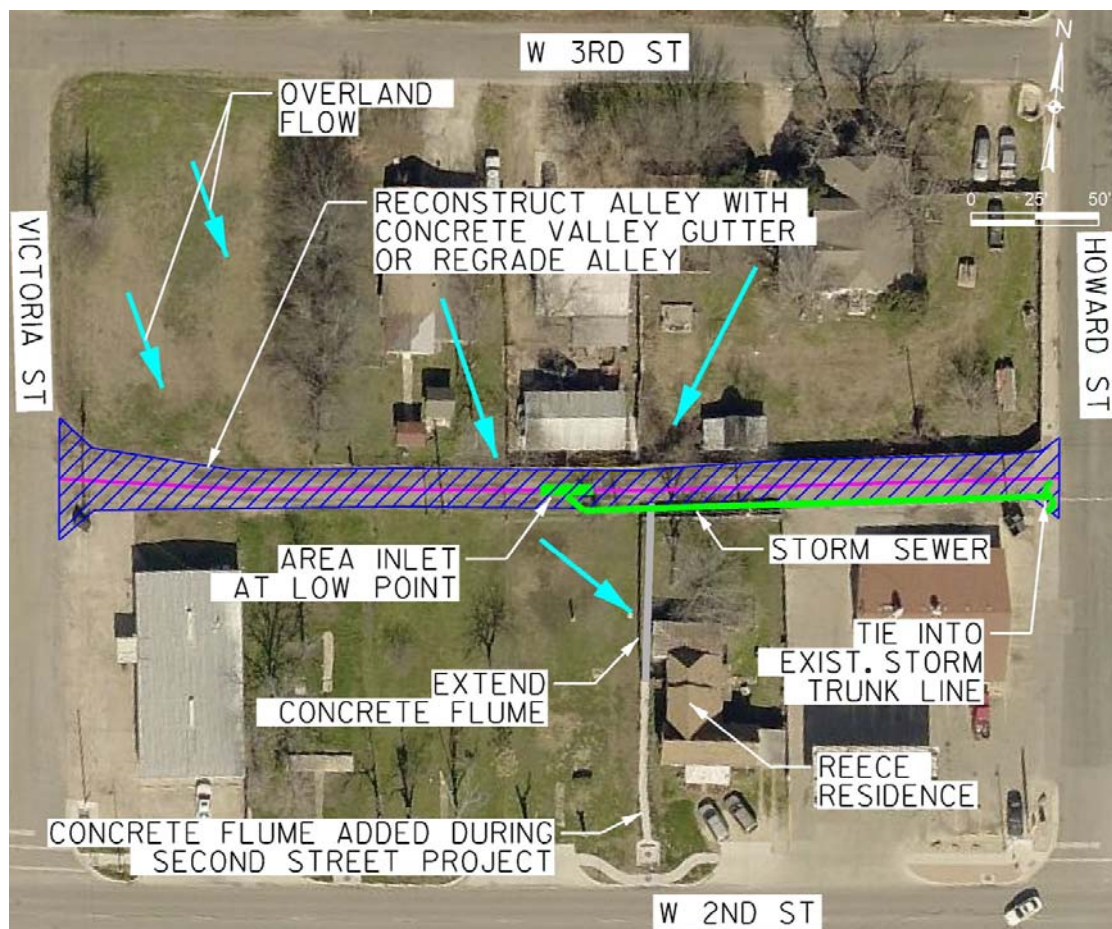
Option 2: \$66,000

Howard St Contingency: \$30,000
(Easement Required-Cost TBD)



Next Steps:

- Choose Option
- Easement Acquisition
- Funding/CDs





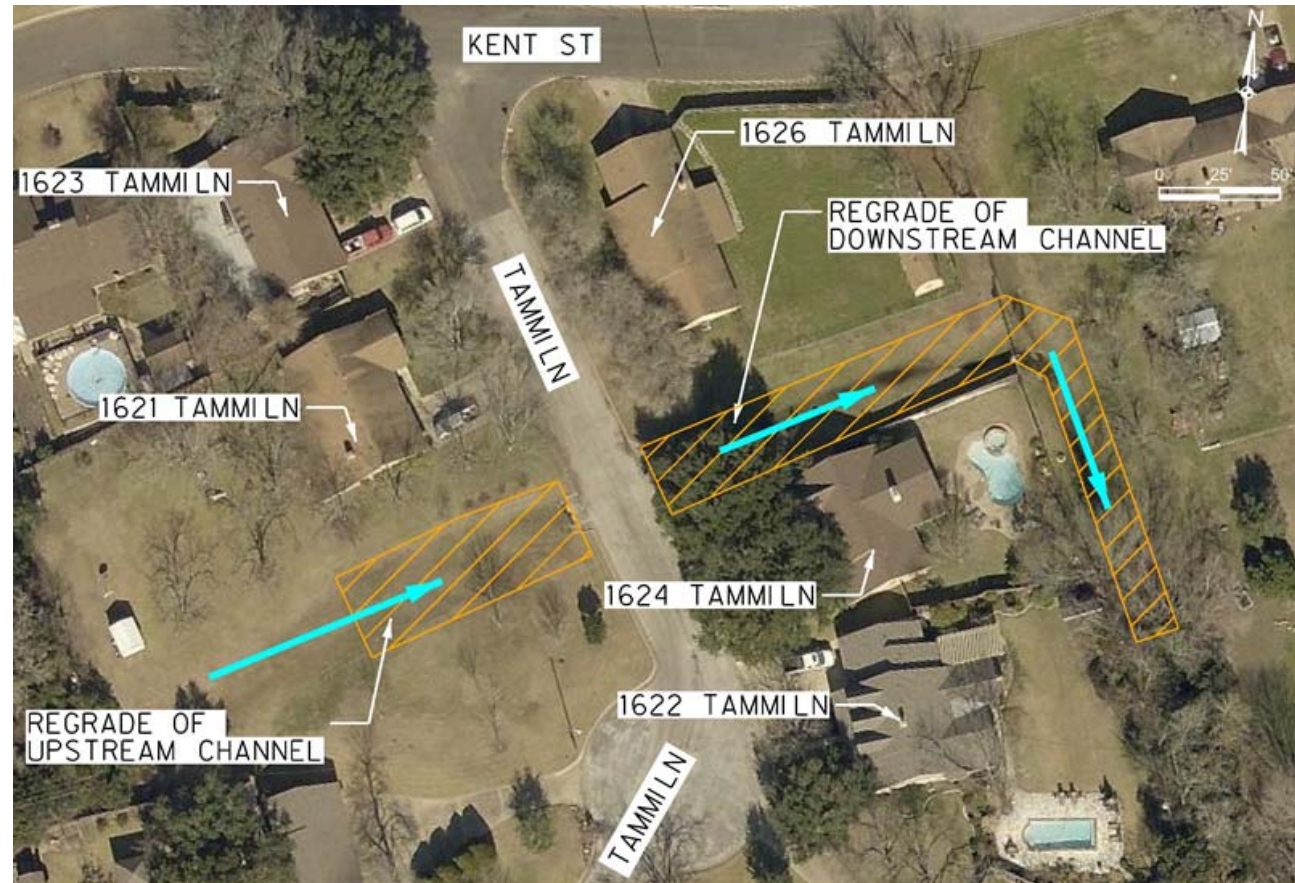
Project Costs: \$70,500
(Temporary Easement Required-Cost TBD)

Next Steps:

- **Easement Acquisition**
- **Funding/CDs**



Tammi Lane



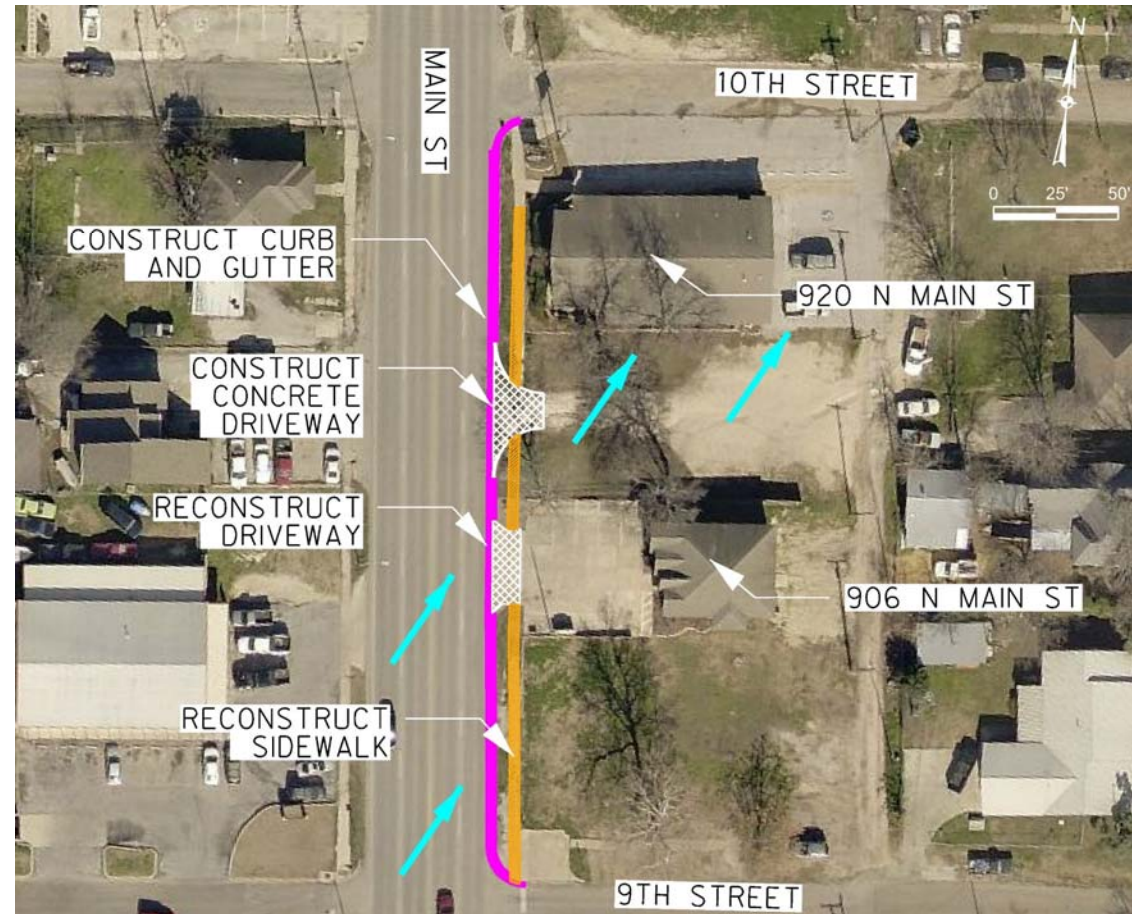


Taylor Dental Association

Project Costs
\$50,600

Next Steps:

- **Coordination w/TxDOT**
- **Funding/CDs**





Davis Street @ Bull Branch Sidewalk

Project Costs

\$21,000

Next Steps:

- **Funding/CDs**





2200 Lee Street

Project Costs

Debris Clearing by City Forces
(Temporary Right of Entry Required)

Next Steps:

- **Public Works evaluate equipment needed and if accessible.**
- **Coordinate ROE & clean debris.**





City Council Meeting
May 12, 2016
Agenda Item Transmittal

Agenda Item #: 10

Agenda Title: Consider proposed future agenda topics and any items for future discussion.

Council Action to be taken: Discuss possible future agenda items.

Initiating Department: City Council

Staff Contact: Mayor

1. INTRODUCTION/PURPOSE

Under this item, staff will be receiving input regarding future agenda items from you. This agenda item will be added as a routine matter on each of your upcoming agendas and will not be an action item unless specific items are listed for consideration. Staff will also be bringing potential agenda items before you at this time.

2. DESCRIPTION/ JUSTIFICATION

3. FINANCIAL/BUDGET

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

6. REFERENCE FILES

10a. [Continuous list of items](#)

Topics still to be addressed:

Gonzales:

- a city facilities assessment
- report from Police Department every 6 months
- Cemetery streets
- Speeding and traffic issues (July)

Ancira:

- request joint meetings or workshop with the TEDC- TEDC mtg is scheduled for June 3 @ 8 am.
- Update on Williamson County Expo Center (May 12)
- Code enforcement update; Community Clean Up follow up (May 12)

Green:

- Re-evaluate Animal control tech positions (during budget discussions)
- Historical preservation

Rydell:

- Developing historic preservation ordinances
- More diversity for board volunteers

Hill:

- Ordinance review



***City Council Meeting
May 12, 2016
Agenda Item Transmittal***

Agenda Item #: 11
Agenda Title: Executive Session. (Acquisition of real property)
Council Action to be taken: Adjourn into Closed session.
Initiating Department: City Administration
Staff Contact: Mayor

1. INTRODUCTION/PURPOSE

2. DESCRIPTION/ JUSTIFICATION

The Taylor City Council will conduct a closed meeting under Section 551.072 of the Texas Government Code which allows such a closed meeting and which Rules conflict with the Texas Open Meetings Act.

3. FINANCIAL/BUDGET

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

6. REFERENCE FILES

11a. [Executive Session form](#)

**TAYLOR CITY COUNCIL
CERTIFIED AGENDA - EXECUTIVE SESSION**

1. OPEN MEETING ANNOUNCEMENT

The City of Taylor City Council convened in Open Session, declared a quorum on May 12, 2016 and has posted an Official Agenda indicating the possible need for an Executive Session. The Council will now adjourn into Executive Session pursuant to the Texas Open Meetings Act, Government Code Section:

- | | | |
|-------------------------------------|---------|--|
| ☐ | 551.071 | To consult with its attorney regarding a matter in which the duty of the attorney to the City conflicts with the Open Meetings Act. |
| ☒ | 551.072 | To conduct deliberations regarding the purchase, exchange, lease, or value of real property. |
| ☐ | 551.074 | Regarding personnel matters |
| ☐ | 551.087 | Regarding economic development negotiations and considering financial or other incentives to a business prospect that the City seeks to have locate in or near the City of Taylor. |

Any action resulting from the Executive Session will be taken in Open Session immediately following the Executive Session.

2. BACK TO OPEN SESSION

The time is now _____ and we will reconvene into Open Session. No action or vote was taken on any matter discussed in Executive Session.

CERTIFICATION

As Mayor of the City of Taylor, I do hereby certify that this Agenda of an Executive Session of the City Council is a true and correct record of the proceedings.

WITNESS my hand this the 12th day of May 2016.

Mayor