NOTICE OF REGULAR CITY COUNCIL MEETING
CITY OF TOMBALL, TEXAS

MONDAY, JUNE 2, 2014

6:00 P.M.

Notice is hereby given of a meeting of the Tomball City Council, to be held on Monday, June 2, 2014 at 6:00 P.M., City Hall, 401 Market Street, Tomball, Texas 77375, for the purpose of considering the following agenda items. All agenda items are subject to action. The reserves the right to meet in a closed session for consultation with attorney on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551, of the Texas Government Code.

1.0 Call to Order

2.0 Invocation

- Led by Brother James Roberson, Hufsmith Church of Christ

3.0 Pledges to U.S. and Texas Flags

4.0 Public Comments and Receipt of Petitions *[At this time, anyone will be allowed to speak on any matter other than personnel matters or matters under litigation, for length of time not to exceed three minutes. No Council/Board discussion or action may take place on a matter until such matter has been placed on an agenda and posted in accordance with law.]*

5.0 Reports and Announcements

- May 24, 2014 – ***Tomball City Pool - 2014 Swim Season* - Jerry Matheson Park Pool** opened May 24, 2014 and will close on September 1, 2014. May 24-June 6, 2014, the pool will be open only during weekends. The pool will be closed every Monday during swim season 2014, except Memorial Day and Labor Day. June 6-August 24, 2014 will be regular weekly days and hours. After August 24, 2014, the pool will open weekends only until September 1, 2014.
- June 9-July 28, 2014 - ***TOMBALL KID'S CLUB -*** *Every Monday and Thursday, 11:00 a.m.-1:00 p.m., at* **MLK Community Park**, 403 W. Chestnut
- June 14, 2014 - **2nd Saturday at the Depot -** 6:30 p.m.
- June 26, 2014 – **6th Annual Economic Outlook Luncheon – *"Celebrating 20 Years of Community Development"*** – sponsored by the **Tomball Economic Development Corporation** at **Lone Star College-Tomball** – 11:30 a.m.-1:30 p.m.
- July 4, 2014 – **July 4th Celebration and Street Party –5:00 p.m.-10:30 p.m.**
- August 30, 2014 –**Texas Music Festival –** 12:00 Noon-6:00 p.m.
- September 27, 2014 – **4th Annual Bugs, Brew & Barbeque Festival –** 12:00 Noon-6:00 p.m.
- October 25, 2014 – **3rd Annual Tomball *Bluegrass Festival*** – 12:00 Noon-6:00 p.m.
- ***Walk Tomball!*** – Every Saturday at 8:00 a.m. at the Depot
- Reports by City staff and members of council about items of community interest on which no action will be taken:
    - Mike Baxter– **3rd Annual Memorial Day Weekend Chili Challenge**

6.0 Approve the Minutes of the May 19, 2014 Regular City Council Meeting

7.0 Old Business:

7.1 Adopt on Second Reading, Ordinance No. 2014-12, an Ordinance of the City of Tomball, Texas, adopting the City's Land Use Assumptions and Capital Improvements Plan; Containing Other Provisions Relating to the Subject; and Providing for Severability.

8.0 New Business:

8.1 Consideration and Possible Action regarding Analysis for City-Operated Ambulance Service, as Requested by Emergency Services District #8 and NWEMS

8.2 Approve Request by The Woodlands Church Tomball Campus to block off the Depot Area for the 1st "My Day" Children's Program, to be held on Wednesday, June 18, 2014, and for In-Kind Services

8.3 Approve Resolution No. 2014-13, a Resolution of the City Council of the City of Tomball, Texas, Approving Request by Iglesia de Dios Taller del

Alfarero (Church of God Potter's House) for City Support/Co-Sponsorship to Conduct a Prayer March/Walk on FM 2920/Main Street on Saturday, July 26, 2014 from 9:00 a.m. to 12:00 p.m.

8.4 Appoint/Reappoint Members to the City of Tomball Board of Adjustments

8.5 Appoint/Reappoint Members to Serve on the Tomball Economic Development Corporation

8.6 Receive the Tomball Economic Development Corporation (TEDC) 2013-2014 Annual Report.

8.7 Approve the Tomball Economic Development Corporation (TEDC) 2014-2015 Strategic Work Plan.

8.8 Consideration and possible action to approve, as a Project of the Corporation, an agreement with Grimes Industrial, Inc. to make direct incentives to, or expenditures for, the promotion of new or expanded business development to wit: Grimes Industrial Inc., relocation and development of its Corporate Headquarters to be located at 959 East Main Street, Tomball, Texas. The estimated amount of expenditures for such project is $69,000.00

8.9 Approve the Replacement of a Fire Department SUV Command Vehicle

8.10 Adopt Resolution No. 2014-11, a Resolution of the City Council of the City of Tomball, Texas Setting a Public Hearing on July 21, 2014 at 6:00 P.M., to Discuss and Review the Adoption of Impact Fees.

8.11 Approve Resolution No. 2014-12, a Resolution of the City Council of the City of Tomball, Texas Adopting the Stormwater Management Program (SWMP) Necessary to Obtain a Texas Pollutant Discharge Elimination System Permit and Authorizing the City Manager to Execute the Notice of Intent

8.12 Approve **1603 HICKS SUBDIVISION**; Being a Subdivision of 2.6409 acres of land situated in the Joseph House Survey, Abstract Number 34 of Harris County, Texas, and being a Replat of Lot 3 of Amending Plat of 249 at Hufsmith Subdivision, a Subdivision according to the map or plat thereof recorded in Clerk's File Number 509116, of the Map Records of Harris County, Texas, and being the same land as described in deed recorded under Clerk's File Number Y068948, of Real Property Records of Harris County Texas.

8.13 Adopt, on First Reading, Ordinance No. 2014-14, an Ordinance of the City of Tomball Texas Renumbering Certain Provisions of the Charter of the City Following Amendments thereto Pursuant to the Authority Contained

Therein; Making Certain Findings; and Providing for Severability

8.14 Executive Session: The City Council will meet in Executive Session as Authorized by Title 5, Chapter 551, Government Code, the Texas Open Meetings Act, for the Following Purpose:

- Sec. 551.072 – Deliberations Regarding Real Property

9.0 Adjournment

C E R T I F I C A T I O N

I hereby certify that the above notice of meeting was posted on the bulletin board of City Hall, City of Tomball, Texas, a place readily accessible to the general public at all times, on the 29th day of May 2014 by 6:00 p.m., and remained posted for at least 72 continuous hours preceding the scheduled time of said meeting.

*Doris Speer*_____
Doris Speer
City Secretary, TRMC

This facility is wheelchair accessible and accessible parking spaces are available Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please feel free to contact the City Secretary's office at (281) 290-1002 or FAX (281) 351-6256 for further information.

AGENDAS MAY ALSO BE VIEWED ONLINE AT www.ci.tomball.tx.us.

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

- Led by Brother James Roberson, Hufsmith Church of Christ

Background:

Origination:

Recommendation:

Funding:

Party(ies) responsible for placing this item on agenda:
City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

- May 24, 2014 – ***Tomball City Pool - 2014 Swim Season*** **- Jerry Matheson Park Pool** opened May 24, 2014 and will close on September 1, 2014. May 24-June 6, 2014, the pool will be open only during weekends. The pool will be closed every Monday during swim season 2014, except Memorial Day and Labor Day. June 6-August 24, 2014 will be regular weekly days and hours. After August 24, 2014, the pool will open weekends only until September 1, 2014.
- June 9-July 28, 2014 - ***TOMBALL KID'S CLUB -*** *Every Monday and Thursday, 11:00 a.m.-1:00 p.m., at* **MLK Community Park**, 403 W. Chestnut
- June 14, 2014 - **2nd Saturday at the Depot -** 6:30 p.m.
- June 26, 2014 – **6th Annual Economic Outlook Luncheon – *"Celebrating 20 Years of Community Development"*** – sponsored by the **Tomball Economic Development Corporation** at **Lone Star College-Tomball** – 11:30 a.m.-1:30 p.m.
- July 4, 2014 – **July 4th Celebration and Street Party –5:00 p.m.-10:30 p.m.**
- August 30, 2014 –**Texas Music Festival –** 12:00 Noon-6:00 p.m.
- September 27, 2014 – **4th Annual Bugs, Brew & Barbeque Festival –** 12:00 Noon-6:00 p.m.
- October 25, 2014 – **3rd Annual Tomball *Bluegrass Festival*** – 12:00 Noon-6:00 p.m.
- ***Walk Tomball!*** – Every Saturday at 8:00 a.m. at the Depot
- Reports by City staff and members of council about items of community interest on which no action will be taken:
    - Mike Baxter– **3rd Annual Memorial Day Weekend Chili Challenge**

Background:

Origination:

Various

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Doris Speer, City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Tomball City Pool - 2014 Swim Season
Tomball Kid's Club
June 14, 2014 - 2nd Saturday at the Depot
Bugs Brew & Barbecue Festival - September 27, 2014
June 26, 2014 – 6th Annual Economic Outlook Luncheon

TOMBALL CITY POOL—2014 Swim Season

Jerry Matheson Park, 1240 Ulrich St. Tomball, Texas

SWIM LESSONS **Summer 2014**

YMCA Aquatics is about water safety, skill development and fun for everyone! Our programs are about more than just the techniques and skills; they are about building friendships, developing self-esteem and creating positive experiences that will last a lifetime.

TUESDAY THRU FRIDAY SESSIONS

Session 1: June 10-20
Session 2: June 24– July 4
Session 3: July 8-18
Session 4: July 22-August 1
Session 5: August 5-15

CLASS TIMES:

8:30 am: Preschool, Youth
9:15 am: Preschool, Youth
5:30 pm: Preschool, Youth
6:15 pm: Preschool, Youth

FEES:

$55 Facility Members / $80 Program Members

All swim classes are held at the Tomball City Pool, 1240 Ulrich Street

Pool Hours

MANAGED BY THE MAGNOLIA TOMBALL FAMILY YMCA

The pool will open May 24, 2014 and close on September 1, 2014. The pool will be closed every Monday during swim season 2014 except Memorial Day and Labor Day. May 24, 2014 the pool will be open only during weekends until June 6, 2014. June 6—August 24, 2014 will be regular weekly days and hours. After August 24, 2014 the pool will open weekends only until September 1, 2014.

DAILY FEES:
CHILDREN (AGE 12 & UNDER) $2
ADULTS (AGE 13 & UP) $4

SUMMER PASSES:
CHILDREN (AGE 12 & UNDER) $50
ADULTS (AGE 13 & UP) $100
FAMILY OF 4 OR MORE $200

City of Tomball residents receive 1/2 off the above prices
with a valid City of Tomball water bill. Season passes will be issued once residency is verified.

Questions may be directed to City of Tomball Public Works Department at 281-290-1400. Located at 501 James St., Tomball.

For registration information, please call the Y at 281-356-4077.

For aquatics program information, please email

MAGNOLIA/TOMBALL FAMILY YMCA
36725 FM 1774 Magnolia, TX 77355
281.356.4077

Tomball Kid's Club

Hosted by

Partnership with

Buffalo Wild Wings, Cisco Salsa Company & Salem Lutheran

June 9th- July 28th

Every Monday & Thursday

11am-1pm

MLK Community Park, Tomball
(403 S. Chestnut)

Date	Activity	Presenter
Monday, June 9th Thursday June 12th	HLSR Special Event Team Water fun Park	HEB Cisco's Salsa Company
Monday, June 16th Thursday, June 19th	Tomball Fire Department Lowes—building kits	HEB Buffalo Wild Wings
Monday, June 23rd Thursday, June 26th	NWEMS Water fun Park	HEB Cisco's Salsa Company
Monday, June 30th Thursday, July 3rd	Mi Pottery Salem Ministries Fun Day	HEB Buffalo Wild Wings
Monday, July 7th Thursday, July 10th	First Aid & Summer Kits Water fun Park	HEB Cisco's Salsa Company
Monday, July 14th Thursday, July 17th	Live Reptiles Tomball Police Dept.	HEB Buffalo Wild Wings
Monday, July 21st Thursday, July 24th	Tomball Soo Bahk Do Water fun Park	HEB Cisco's Salsa company
Monday, July 28th	End of Program Party	HEB, Buffalo Wild Wings & Cisco's Salsa Company

2ND SATURDAY AT THE DEPOT

JUNE 14TH AT 6:30

Baseball Fun with Tomball's "Texas Prospects Baseball Academy"

Get a special 2nd Saturday t-shirt while supplies last, compliments of TPBA!

- Games, crafts and lots more . . .
- Music by the Cypress Ramblers
- Concessions
- The baseball classic "The Sandlot" on the giant inflatable screen at dark

Free admission and parking. Bring your lawn chairs and picnic throws!

The Depot is at 201 S. Elm Street in downtown Tomball, Texas

TOMBALL, TEXAS

SEPTEMBER 27TH

2014

9A.M. - 6P.M.

BUGS, BREW AND BARBECUE

Classic VWs, Texas Craft Beer, Barbecue & Bands


JOIN THE
Tomball Economic Development Corporation
FOR THE
6TH ANNUAL ECONOMIC OUTLOOK LUNCHEON
Celebrating
20
YEARS
OF
Community Development
JUNE 26, 2014
11:30 A.M. – 1:30 P.M.
Lone Star College – Tomball
Beckendorf Conference Center
SAVE THE DATE
FEATURED SPEAKER:
Patrick Jankowski
CCR, Vice President Research
Greater Houston Partnership
LONE STAR COLLEGE
TOMBALL
TOMBALL
20 YEARS
ECONOMIC DEVELOPMENT CORPORATION
29201 Quinn Rd., Suite B • Tomball, Texas 7737
281.401.4086 • 888.401.7322 • tomballtxedc.or

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:
Approve the Minutes of the May 19, 2014 Regular City Council Meeting

Background:

Origination:
City Secretary

Recommendation:
N/A

Funding:

Party(ies) responsible for placing this item on agenda:
Doris Speer, City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:
Draft Minutes - May 19, 2014 Regular City Council Meeting

MINUTES OF REGULAR CITY COUNCIL MEETING
CITY OF TOMBALL, TEXAS

MONDAY, MAY 19, 2014
6:00 P.M.

1.0 Call to Order

The Council meeting was called to order at 6:00 p.m. by Mayor Fagan**.** Other members present were:

Councilman Hudgens
Councilman Stoll
Councilman Degges
Councilman Townsend
Councilman Dodson
Councilman-Elect Klein Quinn

Others present:

City Manager – George Shackelford
Assistant City Manager/Police Chief – Robert Hauck
City Secretary – Doris Speer
City Attorney – Loren B. Smith
Fire Chief – Randy Parr
Marketing Director – Mike Baxter
Finance Director – Glenn Windsor
Community Development Director – Craig Meyers
City Engineer – Lori Lakatos
City Planner – Rebeca Guerra
Community Events Coordinator – Rosalie Dillon
Alternate Presiding Judge-City Elections – Patsy Kinsey

2.0 The invocation was led by Senior Pastor Rick Brown, ChristBridge Fellowship.

3.0 The pledges to the U. S. and Texas Flags were led by Members of the Tomball High School Student Council.

4.0 Canvass of Election:

4.1 Canvass of Election
Escrutinio de la Elección
Kiểm Phiếu của Cuộc Bầu Cử
拉票選舉

4.2 Motion was made by Councilman Stoll, second by Councilman Dodson, to approve Resolution No. 2014-10, a Resolution and Order Canvassing the Returns and Declaring the Results of the Special Charter Amendment Election Held on May 10, 2014.

El Concejal Stoll hizo la moción, secundada por el Concejal Dodson, para adoptar la Resolución Nro. 2014-10, una Resolución y Orden de Escrutinio y Declaración de Resultados de la Elección Especial Celebrada el 10 de mayo de 2014.
Chuyển động đã được thực hiện bởi Ủy viên Hội đồng Stoll, thứ hai bởi Nghị Dodson, phê duyệt Nghị quyết số 2014-10, một Nghị quyết và tự vận động các Returns và Tuyên bố kết quả của Điều lệ sửa đổi bầu cử đặc biệt được tổ chức vào 10 tháng 5 năm 2014.
議案是由委員施托爾,第二,由委員Dodson號決議,批准2014-10,一項決議和命令的返回和宣布禁止拉票的結果,特別是修改《憲章》關於舉行選舉可能10,2014。

Motion carried unanimously.
Moción aceptada por unanimidad.
Kiến nghị được nhất trí thông qua.
動議無異議地通過。

4.3 The Oath of Office was administered by Mayor Fagan to F. S. “Field” Hudgens as the newly elected Councilman, Position 1 and to Lori Klein Quinn as the newly elected Councilman, Position 5.
El Juramento al Cargo fue administrado por la Alcaldesa Fagan a F. S. “Field” Hudgens como nuevo Concejal, Posición 1 y a Lori Klein Quinn como nuevo Concejal, Posición 5.
Tuyên Thệ Nhậm Chức đã được tiến hành bởi Thị Trưởng Fagan cho F. S. “Field” Hudgens là Nghị Viên mới được bầu chọn, Vị Trí 1 và cho Lori Klein Quinn Nghị Viên mới được bầu chọn, Vị Trí 5.
官員宣誓已由Mayor Fagan支配 F. S. “ Field” Hudgens 視為新當選的委員，席位1及 Lori Klein Quinn 視為新當選的委員，席位5。

4.4 Motion was made by Councilman Degges, second by Councilman Stoll, to Elect Councilman Hudgens as Mayor Pro-Tem, in Accordance with Section 6.08 of the City of Tomball Home Rule Charter.
El Concejal Degges hizo la moción, secundada por el Concejal Stoll, a elegir el Concejal Hudgens como Alcalde Pro-Tem, de conformidad con la sección 6,08 de la ciudad de Tomball Carta autonómica.
Chuyển động đã được thực hiện bởi Ủy viên Hội đồng Degges, thứ hai bởi Nghị Stoll, để đắc cử Ủy viên Hội đồng Hudgens như Thị trưởng Pro-Tem, phù hợp với mục 6.08 của thành phố Tomball Trang chủ Quy tắc Điều lệ.
運動是由議會議員Degges做，第二個由斯托爾市議員，選舉市議員妮莎哈金斯作為市長暫時按照市湯波地方自治憲章第6.08。

Motion carried unanimously.
Moción aceptada por unanimidad.
Kiến nghị được nhất trí thông qua.
動議無異議地通過。

Councilman Hudgens was elected Mayor Pro-Tem.
El Concejal Hudgens fue elegido Alcalde interino.
Nghị Viên Hudgens được chọn làm Thị Trưởng Tạm Thời.
委員 Hudgens 已當選為暫時市長。

5.0 The following public comment was received:

Harry Byrd 602 N. Hickory, 77375	-	Expressed his desire to serve on the Planning and Zoning Commission, if appointed.

6.0 Presentations:

Mayor Fagan honored Councilmember Preston Dodson for his service to the City of Tomball, August 2010 – May 2014.

Mayor Fagan presented Proclamations declaring the following:

- May 18-24, 2014 is ***"National Public Works Week"***
- May 25-30, 2014 is ***"Hurricane Preparedness Week"***

7.0 Reports and Announcements:

- May 24, 2014 – **3rd Annual Memorial Day Weekend Chili Challenge** – 10:00 a.m.-5:00 p.m.
- May 24, 2014 – ***Tomball City Pool - 2014 Swim Season* - Jerry Matheson Park Pool** will open May 24, 2014 and close on September 1, 2014. May 24-June 6, 2014, the pool will be open only during weekends. The pool will be closed every Monday during swim season 2014, except Memorial Day and Labor Day. June 6-August 24, 2014 will be regular weekly days and hours. After August 24, 2014, the pool will open weekends only until September 1, 2014.
- June 9-July 28, 2014 - ***TOMBALL KID'S CLUB -*** *Every Monday and Thursday, 11:00 a.m.-1:00 p.m., at* **MLK Community Park**, 403 W. Chestnut
- June 14, 2014 - **2nd Saturday at the Depot -** 6:30 p.m.
- June 26, 2014 – **6th Annual Economic Outlook Luncheon – *"Celebrating 20 Years of Community Development"*** – sponsored by the **Tomball Economic Development Corporation** at **Lone Star College-Tomball** – 11:30 a.m.-1:30 p.m.
- July 4, 2014 – **July 4th Celebration and Street Party –5:00 p.m.-10:30 p.m.**
- August 30, 2014 –**Texas Music Festival**
- September 27, 2014 – **4th Annual Bugs, Brew & Barbeque Festival**
- October 25, 2014 – **3rd Annual Tomball *Bluegrass Festival***
- ***Walk Tomball!*** – Every Saturday at 8:00 a.m. at the Depot ***(NOTE: New Time)***
- Reports by City staff and members of council about items of community interest on which no action will be taken:
    - Glenn Windsor – presented the **Quarterly Investment Report for Period Ending March 31, 2014.** The Public Funds Investment Act requires that a report of the City's investments be presented to Council on a quarterly basis. The investment report includes a listing of all investments together with information relating to diversification, cost vs. market values, yield information, and weighted average maturities. On March 31, 2014, the City had total cash equivalents and investments totaling $55,112,710. A copy of the report is attached for Council review.
    - Rebeca Guerra – presented an update regarding Donation Box Ordinance (Chapter 42) and Sign Ordinance (Chapter 60) Code Enforcement

8.0 Motion was made by Councilman Townsend, second by Councilman Stoll, to approve the Minutes of the May 5, 2014 Regular City Council Meeting.

Motion carried unanimously.

9.0 New Business:

9.1 Motion was made by Councilman Townsend, second by Councilman Stoll, to re-appoint H. G. "Hap" Harrington as Representative to the Southeast Texas Housing Finance Corporation Board of Directors.

Motion carried unanimously.

9.2 Motion was made by Councilman Hudgens, second by Councilman Stoll, to reappoint Darrell Roquemore and appoint Harry Byrd to serve on the City of Tomball Planning and Zoning Commission and the Capital Improvement Plan Advisory Committee.

Motion carried unanimously.

9.3 Motion was made by Councilman Hudgens, second by Councilman Stoll, to approve the Proposed Amendment to the Existing Agreement with Harris County regarding The City of Tomball's Participation with Harris County through Harris County's Community Development Block Grant Program.

Motion carried unanimously.

9.4 Motion was made by Councilman Townsend, second by Councilman Degges, to approve the Letter of Support on behalf of the Tomball Sister City Organization for Road Closure of South Cherry Street, a County Road, in Connection with the German Christmas Market, December 12-14, 2014 and the German Heritage Festival, March 27-29, 2015 and Authorize Mayor Fagan to Issue Letter of Support to Harris County Commissioners Court.

Motion carried unanimously.

9.5 Motion was made by Councilman Hudgens, second by Councilman Stoll, to approve the request from Dana Kelly to block off the Tomball Depot Area and close Market and South Walnut and Market and South Elm Streets for *"The 1st Annual Empty Glass Wine Festival"*, to be held on Sunday, October 5, 2014, from 12:00 p.m. to 5:00 p.m.

Motion carried unanimously.

9.6 Motion was made by Councilman Degges, second by Councilman Stoll, to approve the Professional Services Agreement for Engineering Services for the Design and Construction of the North Wastewater Treatment Plant Emergency Generator to Jones & Carter, Inc., for a Not to Exceed Cost of $34,000.00, and authorize the City Manager to Execute the Necessary Agreement

Motion carried unanimously.

9.7 Motion was made by Councilman Degges, second by Councilman Stoll, to approve Fixed Pricing for Natural Gas Acquisitions for the City's North Gate Natural Gas Purchases from EDF Trading for a Fixed Price of $4.80/MMBtu for June 2014 thru June 2015

Motion carried unanimously.

9.8 Council received the presentation regarding Draft Stormwater Management Program (SWMP)

- Mayor Fagan opened the Public Input Session at 7:09 p.m. to receive Public Input regarding the Stormwater Management Program

Receiving no public input, Mayor Fagan closed the Public Input Session at 7:09 p.m.

No action taken.

9.9 Mayor Fagan opened the Public Hearing at 7:34 p.m. to consider approval of Land Use Assumptions, Capital Improvements Plan, (CIP) for Water, Wastewater, Drainage, and Roadway Facilities, relating to possible adoption of Impact Fees; Consideration of Written Comments to be Provided to the City Council; in accordance with Chapter 395, Texas Local Government Code; Making Other Findings and Providing Details Related Thereto.

Receiving no public comments, Mayor Fagan closed the Public Hearing at 7:34 p.m.

Motion was made by Councilman Stoll, second by Councilman Townsend, to read Ordinance No. 2014-12 by caption only on First Reading.

Motion carried unanimously.

Motion was made by Councilman Townsend, second by Councilman Hudgens, to adopt, on First Reading, Ordinance No. 2014-12, an Ordinance of the City of Tomball, Texas, adopting the City's Land Use Assumptions and Capital Improvements Plan; Containing Other Provisions Relating to the Subject; and Providing for Severability. Vote was as follows:

Councilman Hudgens	Aye
Councilman Stoll	Aye
Councilman Degges	Aye
Councilman Townsend	Aye
Councilman Klein Quinn	Aye

Motion carried unanimously.

9.10 Motion was made by Councilman Townsend, second by Councilman Stoll, to approve the following Plat as recommended by the Planning and Zoning Commission:

- **DEWEYCASA FINAL PLAT**; Being a Subdivision of 0.7310 acre, located in the Joseph House Survey, A-34, Harris County, Texas and being Tract One and Tract Two of a 6.23 acre tract.

Motion carried unanimously.

9.11 Motion was made by Councilman Degges, second by Councilman Stoll, to approve the Pipeline Relocation/Reimbursement and Encroachment Agreement with Eagle Rock Desoto Pipeline, L.P. ("Eagle Rock"), in the Amount of $73,199.00, and authorize the City Manager to execute the Agreement with Eagle Rock Desoto Pipeline, L.P. ("Eagle Rock").

Motion carried unanimously.

9.12 Motion was made by Councilman Townsend, second by Councilman Hudgens, to set June 16, 2014 at 6:00 p.m. as the date and time for a Council Workshop to Discuss the Downtown Sidewalks and Possible Enhancements to the Four Corners Intersection.

Motion carried unanimously.

10.0 Motion was made by Councilman Townsend, second by Councilman Stoll, to adjourn.

Motion carried unanimously.

Meeting adjourned.

PASSED AND APPROVED this the 2nd day of June 2014.

Doris Speer, TRMC, CMC
City Secretary

Gretchen Fagan
Mayor

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Adopt on Second Reading, Ordinance No. 2014-12, an Ordinance of the City of Tomball, Texas, adopting the City's Land Use Assumptions and Capital Improvements Plan; Containing Other Provisions Relating to the Subject; and Providing for Severability.

Background:

On May 12, 2014, the Capital Improvements Plan Advisory Committee (CIPAC) reviewed the 2012-2022 City of Tomball Infrastructure Master Plan and Impact Fee Determination and PowerPoint presentation information prepared by CLR, Inc. and City staff. CIPAC voted unanimously to approve the Land Use Assumptions, Capital Improvements Plan, and Impact Fees. CIPAC recommends a 75% increase for water and sewer impact fees to be implemented by a 15% increase over the next five years

	CURRENT	PROPOSED
Water:	$1,329.12	$2,325.96
Sewer:	$1,653.23	$2,322.57

CIPAC voted unanimously to recommend the maximum allowable fee for drainage impact fees:

	CURRENT	PROPOSED
M125:	$574.40	$436.88
M121 West:	$4,985.14	$6,692.00
M121 East:	$6,828.71	$7,886.69
M118:	$6,023.90	$5,757.81
M124:	$0.00	$13,041.36

These recommendations are now being forwarded to City Council for approval consideration or to determine an impact fee not exceeding the maximum amount identified in the Infrastructure Master Plan and Impact Fee Determination 2012-2022. Local Government Code 395.015 requires that the impact fee may not exceed the maximum amount determined and Council may adopt a lesser amount.

On May 19, 2014, Council adopted Ordinance No. 2014-12 on first reading.

Origination:

Community Development Director

Recommendation:

Adopt, Ordinance No. 2014-12 on second reading.

Funding:

Party(ies) responsible for placing this item on agenda:
City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Ordinance No. 2014-12
Recommendation Letters 05.13.14
CIPAC Draft Meeting Minutes 05.12.14
Infrastructure Master Plan 2012-2022 Presentation
Infrastructure Master Plan 2012-2022

ORDINANCE NO. 2014-12

AN ORDINANCE OF THE CITY OF TOMBALL, TEXAS, ADOPTING THE CITY'S LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN; CONTAINING OTHER PROVISIONS RELATING TO THE SUBJECT; AND PROVIDING FOR SEVERABILITY.

* * * * *

WHEREAS, the City Council of the City of Tomball, Texas (the "City") has reviewed and evaluated its land use assumptions and capital improvements plan in the time and manner required by law; and

WHEREAS, the City Council has employed qualified professionals to prepare its land use assumptions and capital improvements plan for the City, and each was considered by the City's advisory committee, and such assumptions and plan were filed with the City, along with the advisory committee's comments; and

WHEREAS, the City Council has called, given notice of, and conducted a public hearing on such assumptions and plan in the time and manner required by law; and

WHEREAS, the City Council now desires to adopt such land use assumptions and capital improvement plan in accordance with said Chapter 395, Texas Local Government Code; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. **Findings**. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. **Land Use Assumptions and Capital Improvements Plan**. The land use assumptions and capital improvements plan included in the "Infrastructure Master Plan &

Capital Recovery Fee Determination 2012 to 2022," prepared by CLR, Inc., Gunda Corporation, and Rydan & Associates LLC same being attached hereto as Exhibit "A" and made a part hereof for all purposes, are hereby in all things approved and adopted.

Section 5. **Severability Clause**. In the event any clause phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Tomball, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 6. This Ordinance shall become effective fourteen days after the final reading and adoption of this Ordinance when the caption hereof is caused to be published once in the official newspaper of the City, by the City Secretary, as required by law. The City Secretary is directed to publish the caption of this Ordinance in the City's official newspaper within 14 days after the passage of the ordinance.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 19TH DAY OF MAY 2014.

COUNCILMAN HUDGENS	AYE
COUNCILMAN STOLL	AYE
COUNCILMAN DEGGES	AYE
COUNCILMAN TOWNSEND	AYE
COUNCILMAN KLEIN QUINN	AYE

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 2ND DAY OF JUNE 2014.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN DEGGES	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN KLEIN QUINN	_____

_____
Gretchen Fagan, Mayor

ATTEST:

_____
Doris Speer, City Secretary

CITY OF TOMBALL
CAPITAL IMPROVEMENTS PLAN ADVISORY COMMITTEE

DATE: May 13, 2014

TO: MAYOR AND CITY COUNCIL

FROM: LORI LAKATOS, PE, CFM

RE: CIPAC RECOMMENDED IMPACT FEE POLICY

The Capital Improvements Plan Advisory Committee (CIPAC) has concluded their review of the Infrastructure Master Plan and Impact Fee Determination 2012-2022, prepared by CLR, Inc., dated 04-10-14 and hereby presents their impact fee recommendation. The CIPAC, in accordance with Chapter 395.058 of the Texas Local Government Code has filed its written recommendation (attached). In review, the current water and sewer impact fee is $2,982.35 for a new, single-family residence or the equivalent of one living unit (LUE). The existing drainage impact fees per acre of development are listed as follows:

M125 -	$574.40
M121 West -	$4,985.14
M121 East -	$6,828.71
M118 -	$6,023.90

The result of the CIPAC process was a unanimous vote to recommend Council consideration of an updated impact fee. The attached materials show both the process and the complete methodology used in the process. The process followed Chapter 395 Texas Local Government Code on impact fees. City Council approved the same Planning & Zoning Committee "plus one" format for the CIPAC.

Exhibit A is a summary of impact fees for single-family residential and includes an "apples to apples" comparison of the 2009 fees and the final recommended 2012 fees. The yellow highlighted areas are the CIPAC recommendation, which represents a 75% increase over current impact fees. The recommended water and sewer impact fee is $4,648.53 for a new single-family residence or LUE. The recommended drainage impact fees per acre of development are listed as follows:

M125 -	$436.88
M121 West -	$6,692.00
M121 East -	$7,886.69
M118 -	$5,757.81
M124 -	$13,041.36

The recommended increases were unanimously approved by the CIPAC. For comparison, Exhibit B contains a chart showing a sample revision of other Cities and their current water and sewer impact fees.

Sincerely,

Lori Lakatos, P.E., CFM
City Engineer

cc: George Shackelford
Rob Hauck
Craig Meyers, P.E.

Attachments: CIPAC Letter Dated 05-13-14
Exhibit A
Exhibit B

CITY OF TOMBALL
CAPITAL IMPROVEMENTS PLAN ADVISORY COMMITTEE

DATE: May 13, 2014

TO: MAYOR AND CITY COUNCIL

FROM: CAPITAL IMPROVEMENTS PLAN ADVISORY COMMITTEE

RE: COMMITTEE RECOMMENDATION ON LAND USE ASSUMPTIONS AND INFRASTRUCTURE MASTER PLAN AND IMPACT FEE DETERMINATION 2012-2022

In accordance with Chapter 395.056 of the Texas Local Government Code, the Capital Improvements Plan Advisory Committee (CIPAC) created under Section 395.058 shall file its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fee before the fifth business day before the date of the public hearing on the amendments.

I hereby certify that this letter with the attached land use assumptions, capital improvements plans and impact fee (Exhibits A&B), and minutes of the CIPAC meeting held on May 12, 2014, in which the committee made its final recommendation to the City Council to approve the proposed amendments by a vote of 5-0, shall serve as the CIPAC's final written comments on the proposed amendments. The recommended impact fees represent a 75% increase, (15% each year for the next 5 years) over current impact fees for water and sewer, and the maximum allowable fee for drainage.

Sincerely,

Barbara Tague

Barbara Tague
CIPAC Chairman

Attachments:

Exhibit A
Exhibit B

Exhibit A (05/12/14)

Summary of Impact Fees for Single Family Residence

2009 Impact Fee Review			
Component	2009 Maximum Allowable Fee	2009 Adopted Fee (Effective 6/30/13)	% of Maximum Allowable Fee
Water (LUE)	$2,000.54	$1,329.12	66%
Sewer (LUE)	$4,523.54	$1,653.23	37%
Drainage (per acre)			
M118	$6,023.90	$6,023.90	100%
M121E	$6,828.71	$6,828.71	100%
M121W	$4,985.14	$4,985.14	100%
M124	$0.00	$0.00	
M125	$574.40	$574.40	100%

Proposed 2014 Impact Fee Review																	
Component	2014 Maximum Allowable Fee	% Increase 2009 to 2014	1% Increase Over 2009 Adopted Fee	2% Increase Over 2009 Adopted Fee	5% Increase Over 2009 Adopted Fee	10% Increase Over 2009 Adopted Fee	20% Increase Over 2009 Adopted Fee	25% Increase Over 2009 Adopted Fee	50% Increase Over 2009 Adopted Fee	75% Increase Over 2009 Adopted Fee	CIPAC 2014 Recommended Fees	% of Max. Allowable Fee
Water (LUE)	$3,319.37	150%	$1,342.41	$1,355.70	$1,395.58	$1,462.03	$1,594.94	$1,661.40	$1,993.68	$2,325.96	$2,325.96	70%
Sewer (LUE)	$2,322.57	40%	$1,669.76	$1,686.29	$1,735.89	$1,818.55	$1,983.88	$2,066.54	$2,322.57	$2,322.57	$2,322.57	100%
Total	$5,641.94		$3,012.17	$3,042.00	$3,131.47	$3,280.59	$3,578.82	$3,727.94	$4,316.25	$4,648.53	$4,648.53	82%
Drainage (Per Acre)												
M118	$5,757.81	-4%									$5,757.81	100%
M121E	$7,886.69	15%	$6,897.00	$6,965.28	$7,170.15	$7,511.58	$8,194.45	$6,231.43	$7,477.71	$7,886.69	$7,886.69	100%
M121W	$6,692.00	34%	$5,034.99	$5,084.84	$5,234.40	$5,483.65	$5,982.17	$0.00	$0.00	$0.00	$6,692.00	100%
M124	$13,041.36		$0.00	$0.00	$0.00	$0.00	$0.00	$718.00	$861.60	$1,005.20	$13,041.36	100%
M125	$436.88	-24%									$436.88	100%

Note:

2009 existing impact fees based on Infrastructure Master Plan and Capital Recovery Fee Determination 2007-2017, dated 10-22-08, prepared by Lockwood, Andrews & Newnam, Inc.

2014 proposed impact fees based on Infrastructure Master Plan and Impact Fee Determination 2012-2022, dated April 2014, by CLR, Inc.

Increase in the proposed maximum impact fees due to population growth projections and recent increase in historical construction cost.

Reference attached Exhibit B, single family fees comparison study for other Municipalities

Adoption of the maximum allowable fee may require reimbursement if infrastructure not completed/population projections not realized. The maximum impact fee is not recommended for the water and sewer impact fees but the maximum impact fees identified for drainage areas are recommended for adoption by Engineering.

Exhibit B (5/8/14)

Sample Review of Single-Family Residential Unit Water & Sewer Impact Fees			
City	**Water**	**Sewer**	**Total**
Baytown	$324.47	$1,918.99	$2,243.46
Conroe	$0.00	$0.00	$0.00
Friendswood	$2,088.00	$840.00	$2,928.00
Humble	$0.00	$1,675.00	$1,675.00
Jersey Village	$1,738.42	$2,339.00	$4,077.42
Katy*	$0.00	$0.00	$0.00
League City	$3,215.00	$2,419.00	$5,634.00
Magnolia	$1,500.00	$3,000.00	$4,500.00
Missouri City	$0.00	$0.00	All MUD districts
Pearland*	$1,972.78	$2,867.22	$4,840.00
Rosenberg	$3,215.86	$1,317.89	$4,533.75
Shenandoah	$0.00	$0.00	$0.00
Sugar Land	$0.00	$0.00	$0.00
Webster	$1,259.00	$1,399.00	$2,658.00
Tomball (Current)	**$1,329.12**	**$1,653.23**	**$2,982.35**
Tomball (Maximum proposed)	**$3,319.37**	**$2,322.57**	**$5,641.94**
Tomball (CIPAC Recommended)	**$2,325.96**	**$2,322.57**	**$4,648.53**
Note:			
**The average total is $2,545.36. If the highest total impact fee is eliminated the average is $2,287.97.*			
**Katy does assess impact fees on its City MUD's based on engineering calculations for each MUD.*			
**Pearland has a different impact fee for a large PD.*			

MINUTES OF
REGULAR CAPITAL IMPROVEMENTS PLAN MEETING
CITY OF TOMBALL, TEXAS

MONDAY, MAY 12, 2014

5:30 P.M.

1.0 Call to Order

The meeting was called to order by Chairman Tague at 5:34 p.m. Other members present were:

Commissioner Roquemore
Commissioner Beauvais
Commissioner Torres
Commissioner Chambers

Commissioner Anderson – arrived at 5:55 p.m.

draft

Others present:

Craig Meyers, Community Development Director
Lori Lakatos, City Engineer
Brandy Harbolt, Senior Administrative Assistant
Rebeca Guerra, City Planner
Loren Smith, City Attorney

2.0 No Public Comments were received.

3.0 Motion was made by Commissioner Beauvais, second by Commissioner Roquemore, to approve the Minutes of the Capital Improvements Plan Advisory Committee Meeting of December 9, 2013.

Motion carried unanimously.

Discussion/Action of the Following Items:

4.0 Presentation and Discussion of Land Use Assumptions and Capital Improvements Plan (CIP) for Water, Wastewater, Drainage, and Roadway Facilities, relating to possible adoption of Impact Fees*; Consideration of Written Comments to be Provided to the City Council*; in accordance with Chapter 395, Texas Local Government Code; Making Other Findings and Providing Details Related Thereto.

Lori Lakatos, City Engineer provided summary of Impact Fees for Single-Family Residences / Drainage and opened discussion for Commissioners.

5.0 Finalize comments to submit to City Council on May 19, 2014.

Commissioner Chambers made a motion to recommend a 75% increase of the water and sewer impact fees, and a maximum allowable fee for drainage; second by Commissioner Beauvais.

Commissioner Chambers amended his motion to include the 75% increase to be implemented by a adopting a 15% increase each year over the next 5 years; second by Commissioner Beauvais.

Motion carried unanimously.

6.0 Motion was made by Commissioner Torres to adjourn; second by Commissioner Beauvais.

Motion carried unanimously.

Meeting was adjourned at 6:25 p.m.

PASSED AND APPROVED this _____day of _____2014.

Brandy Pate Harbolt	Barbara Tague
CIPAC Commission Secretary	Chairman

CITY OF TOMBALL

INFRASTRUCTURE MASTER PLAN &
CAPITAL RECOVERY FEE DETERMINATION
2012 – 2022

May 19, 2014

1

Master Plan Topics of Discussion:

- Plan Objectives
- Population Projections
- Land Use Projections
- Water System
- Wastewater System
- Drainage System
- Traffic and Transportation
- Parks, Trails, & Sidewalks
- Natural Gas Distribution
- Maximum Impact Fee Determination

2

Plan Objectives:

- Estimate Growth within City Limits and ETJ from 2012-2022.
- Determine Infrastructure Needs to Accommodate Growth.
- Estimate the Cost and Impact Fees Related to Infrastructure Improvements to Serve Projected Growth.

3

Plan Objectives:

- Steps Used to Develop Master Plan
  - Estimate Land Use by Category for 2012 within City and ETJ.
  - Estimate the 2012 Population within the City and ETJ.
  - Estimate Future Land Use within the City and ETJ during the Study Period.
  - Estimate the Future Population and Service Needs as a Result of Land Use Changes.
  - Determine the Infrastructure Improvements Needed.
  - Estimate the Cost of the Infrastructure Improvements.
  - Determine the Capital Recovery Fees for Infrastructure Improvements.

4

Population Projections:

- 2010 Census within City Limits = 10,753
- Est. 2012 Population within City Limits = 11,121
- Est. 2012 Population for City and ETJ = 14,362
- Est. 2022 Population within City Limits = 13,156
- Est. 2022 Population within City and ETJ = 16,990

5

Land Use Projections:

2012 and 2022

- City Limit Area = 12 square miles
- City Limit and ETJ Area = 20.6 square miles
- Land Use Categories:
  - Residential
  - Commercial
  - Industrial
  - Other (Agricultural Land, Undeveloped, & Areas not Included in the Tax and Zoning Records)

6

Land Use Projections:

	2012	2022
Within City Limits	Area (Acres)	Area (Acres)
Residential, Developed	1,578.5	2,018.1
Commercial, Developed	1,200.8	1,427.6
Industrial, Developed	3.5	3.5
Other	4,887.6	4,221.2
Total City	7,670.4	7,670.4
Within ETJ		
Residential, Developed	1,643.2	1,691.8
Commercial, Developed	427.1	503.1
Industrial, Developed	8.8	8.8
Other	3,436.3	3,311.8
Total ETJ	5,515.4	5,515.4

7

Water System:

2012 Existing System

- Pine Street Water Plant
  - Well 1 = 548 gpm
  - Well 2 = 1,856 gpm
  - Well 3 = 741 gpm
  - Ground Storage = 400,000 gallons
  - Elevated Storage = 750,000 gallons
  - Booster Pump Capacity = 2,600 gpm
- Baker Street Water Plant
  - Well 4 = 784 gpm
  - Ground Storage = 200,000 gallons
  - Booster Pump Capacity = 1,100 gpm

8

Water System:

2012 Existing System

- FM 2920
  - Well 5 = 786 gpm
  - Well 6 = 578 gpm
  - Ground Storage = 500,000 gallons
  - Booster Pump Capacity = 3,000 gpm
- Ulrich Road
  - Elevated Storage = 500,000 gallons

9

Water System:

- Existing 2012 Water Demand = 823,204,000 gallons per year
- Projected 2022 Water Demand = 1,063,383,700 gallons per year
- Projected Increase = 240,179,700 gallons
- Additional Capacity Required to Meet TCEQ Requirements for the City and ETJ through 2022 (Without Baker Plant):
  - Wells = 216 gpm
  - Firm Booster Capacity = No additional capacity required
  - Total Storage = No additional capacity required
  - Elevated Storage = No additional capacity required
  - Ground Storage = No additional capacity required

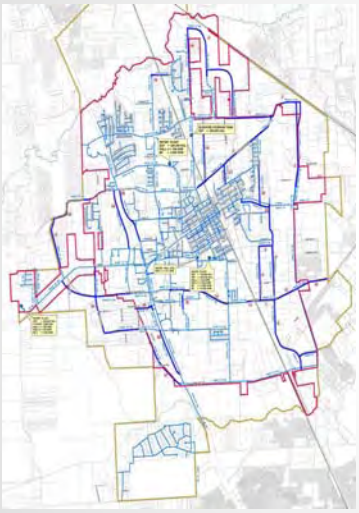
10

Water System:

- Existing Water Distribution System
  - 99 miles of transmission and distribution lines ranging from 1.5 inch to 16 inch diameter, with system pressure maintained by elevated storage and booster pumps.
- Proposed Water Lines, 2012 to 2022
  - 12 inch = 91,300 linear feet = 17.3 miles
  - 8 inch = 18,500 linear feet = 3.5 miles

11

Water System:



Estimated Cost to Improve Water System through 2022

- Additional Well Capacity = $1.42 M
- Additional Booster Pump Capacity = $66,600
- Additional Ground Storage Tanks = $1 M
- Additional Distribution Lines = $13.2 M
- Facilities = $347,500

- Total, Including Engineering, Surveying, & Contingency = $3.8 M

12

Wastewater System:

- North Wastewater Treatment Plant
  - Existing Capacity, 2012 = 1.5 mgd
  - Average Daily Flow in 2012 = 0.557 mgd
  - Projected Demand for 2022 = 0.66 mgd
  - Expansion Needed = None
- South Wastewater Treatment Plant
  - Existing Capacity, 2012 = 1.5 mgd
  - Average Daily Flow in 2012 = 0.950 mgd
  - Projected Demand for 2022 = 1.13 mgd
  - Expansion Needed = 0.5 mgd (Design Only)

13

Wastewater System:

- Existing Collection System, 2012
  - 80 miles of gravity sanitary sewer lines ranging from 6 inch to 36 inch diameter, and 4 inch to 12 inch pressure force mains in two networks.
  - 11 Lift Stations
- Proposed Gravity Sanitary Sewer Lines, 2012-2022
  - 18 inch = 24,700 linear feet
  - 15 inch = 7,800 linear feet
  - 12 inch = 14,900 linear feet
  - 10 inch = 9,000 linear feet
  - 8 inch = 18,900 linear feet
- Proposed Force Mains, 2012-2022
  - 6 inch = 7,800 linear feet
- Proposed Lift Stations = 3

14

Wastewater System:

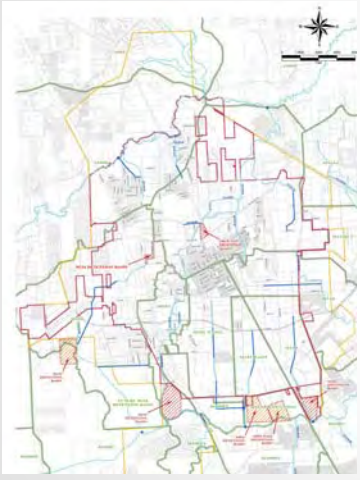


Estimated Cost to Improve Wastewater System through 2022

- North Wastewater Treatment Plant
  - No improvements proposed
- South Wastewater Treatment Plant
  - Expansion (0.5 MGD) Design Only
- Proposed Lift Stations = $1.35M
- Proposed Sanitary Sewer Lines = $12.15M
- Total, Including Engineering, Surveying, & Contingency = $13.5 M

15

Tomball's Existing Drainage System:



- City of Tomball is served by 7 outfall systems.
- Spring Creek, Willow Creek, Boggs Gully, M116, and M124 have floodplain studies.
- Total stream length of HCFCD channels within City Limits is 57,925 feet.
- Total stream length of HCFCD channels within ETJ is 103,814 feet.

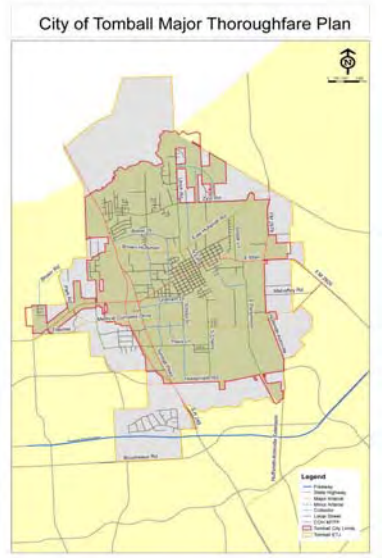
16

Outfall Drainage Channel Improvements:

- Improvements include extensions to existing channels, new channel / ditch alignments to serve as tributaries to existing channels and detention.
- Estimated total cost for all channel improvements is $46.95 million.
- Estimated total cost for all detention improvements is $42.17 million.
- Estimate total drainage program is $89.12 million.
- Estimated costs do not include allowances for private crossings, legal or fiscal costs, or ROW.

17

Traffic & Transportation:



- Four state roadways are within the city limits: SH 249, State Highway 249 Expressway, FM 2920, and FM 2978.
- There are eight minor and major arterials located throughout the city.
- The state roadways and arterials provided interconnectivity to the ETJ.
- The MTP will be updated as necessary.

18

Parks:

- **City Parks, 2012**
  - Juergens Park = 10 acres
  - Jerry Matheson Park = 9.8 acres
  - Martin Luther King, Jr. Park = 0.7 acres
  - Tomball Sports Association Little League Fields = 19 acres
  - Theis-Attaway Park = 4 acres
- **County Parks, 2012**
  - Roy Campbell Burroughs Park = 320 acres
  - Spring Creek Park = 114 acres
  - Samuel Matthews Park = 5 acres
- **Future Parks**
  - Tomball Outlots Triangle
  - Cortez Tract

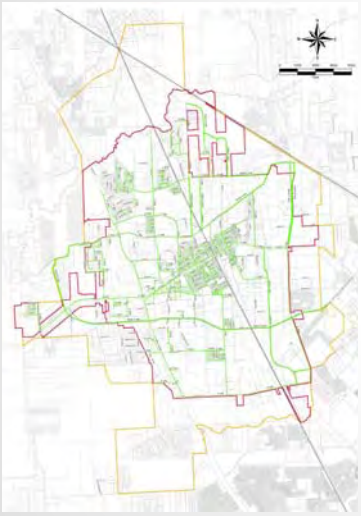
19

Parks:

- **Total Park Acreage, 2012**
  - 43.5 Acres
  - Estimated 2012 Population = 11,121
  - 3.91 acres per 1,000 residents
- **Total Park Acreage, 2022**
  - 59.2 additional acres
  - Estimated 2022 Population =13,156
  - 7.81 acres per 1,000 residents

20

Natural Gas Distribution:



- Historically the gas has not been included in the Infrastructure Master Plan.
- It's included to provide an overall layout and potential sizing of the distribution system for future development.

21

Maximum Impact Fee Determination:

- Water and Wastewater Impact Fees for the City of Tomball are based on Living Unit Equivalents (LUE) which correspond to the demand from one single family household served by a 3/4-inch meter.
- Total Connections in City, 2012 = 6,679 Living Unit Equivalents (LUE)
- Total Projected Connections in City and ETJ, 2022 = 7,874 LUE
- Total Projected Additional Connections = 1,195 LUE

22

Maximum Impact Fee Determination:

- Water Impact Fee per LUE = $3,319.37
- Wastewater Impact Fee per LUE = $2,322.57
- Total Water & Wastewater Impact Fee per LUE = $5,641.94
- Drainage Impact Fee per Acre
  - M118 = $5,757.81
  - M121E = $7,886.69
  - M121W = $6,692.00
  - M124 = $13,041.36
  - M125 = $436.88

23

Recommendation

- On May 12, 2014 the Capital Improvements Plan Advisory Committee made a recommendation to approve a 75% increase over current water and sewer impact fees, implementing the increase by 15% over the next five years. The total recommended water and sewer impact fee is $4,648.53 for a new single-family residence or LUE.
- The recommended Drainage Impact Fees per acre or development are listed as follows:

  M125 - $436.88

  M121 West - $6,692.00

  M121 East - $7,886.69

  M118 - $5,757.81

  M124 - $13,041.36

24

Questions

Prepared By

CLR, Inc.
Engineering * Surveying * GIS
19530 F.M. 362 Waller, Texas 77484

GUNDA CORPORATION
Engineers, Planners & Managers

RYDAN & ASSOCIATES LLC
ENGINEERING & FLOODPLAIN MANAGEMENT
HAZARD MITIGATION & GRANT ADMINISTRATION

25

CITY OF TOMBALL

INFRASTRUCTURE MASTER PLAN
&
CAPITAL RECOVERY FEE DETERMINATION
2012 TO 2022

Prepared By

CLR, Inc.

Engineering * Surveying * GIS

19530 F.M. 362 Waller, Texas 77484

GUNDA CORPORATION
Engineers, Planners & Managers

RYDAN & ASSOCIATES LLC

ENGINEERING & FLOODPLAIN MANAGEMENT
HAZARD MITIGATION & GRANT ADMINISTRATION

CLR, Inc.

*Engineering * Surveying * GIS*

TBPE Firm Registration No.: 275
19530 F.M. 362
Waller, Texas 77484
Office 713-462-0993

Report Editor

Water System
Wastewater System
Parks, Trails, & Sidewalks
Capital Recovery Fee Calculations

Kyle A. Bertrand, PE Date
TX PE No. 84575

GUNDA CORPORATION
Engineers, Planners & Managers

TBPE Firm Registration No.: F-3531
6161 Savoy, Suite 550
Houston, Texas 77036
Office 713-541-3530

Traffic & Transportation

Lokesh Vijayagopal, P.E., PTOE Date
TX PE No. 108937

RYDAN & ASSOCIATES LLC

ENGINEERING & FLOODPLAIN MANAGEMENT
HAZARD MITIGATION & GRANT ADMINISTRATION

TBPE Firm Registration No.: 12901
12514 Bent Pine Drive
Cypress, Texas 77429
Office 281-970-8085

Population Projections
Land Use Projections
Drainage System

John A. Laser, PE, CFM Date
TX PE No. 86970

CLR, Inc.

Engineering * Surveying * GIS

TBPE Firm Registration No.: 275
19530 F.M. 362
Waller, Texas 77484
Office 713-462-0993

Report Editor

Water System
Wastewater System
Parks, Trails, & Sidewalks
Capital Recovery Fee Calculations



Kyle A. Bertrand, PE — Date 4/10/14
TX PE No. 84575

GUNDA CORPORATION
Engineers, Planners & Managers

TBPE Firm Registration No.: F-3531
6161 Savoy, Suite 550
Houston, Texas 77036
Office 713-541-3530

Traffic & Transportation

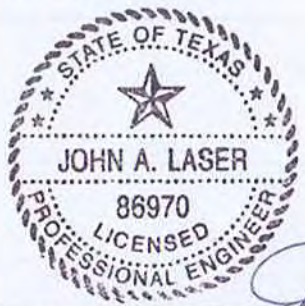


Lokesh Vijayagopal, P.E., PTOE — Date 4/8/2014
TX PE No. 108937

RYDAN & ASSOCIATES LLC
ENGINEERING & FLOODPLAIN MANAGEMENT
HAZARD MITIGATION & GRANT ADMINISTRATION

TBPE Firm Registration No.: 12901
12514 Bent Pine Drive
Cypress, Texas 77429
Office 281-970-8085

Population Projections
Land Use Projections
Drainage System



John A. Laser, PE, CFM — Date 4/10/14
TX PE No. 86970

INFRASTRUCTURE MASTER PLAN
&
CAPITAL RECOVERY FEE DETERMINATION
2012 TO 2022

Table of Contents

Section		Page
1.0	Executive Summary	1
2.0	Plan Objective	3
3.0	Population Projections	4
4.0	Land Use Projections	8
5.0	Potable Water System	14
6.0	Wastewater System	20
7.0	Drainage System	28
8.0	Traffic & Transportation	40
9.0	Parks, Trails, & Sidewalks	48
10.0	Natural Gas Distribution	52
11.0	Capital Improvement Plan & Maximum Capital Recovery Fee Determination	53

Appendix

A.	Texas Local Government Code Chapter 395	A - 1
B.	References	A - 16
C.	Unit Cost Data	A - 17
D.	Maximum Capital Recovery Fee Determination Spreadsheets	A - 21

1.0 Executive Summary

The City of Tomball Infrastructure Master Plan & Capital Recovery Fee Determination for 2012 to 2022 is an update to the Infrastructure Master Plan & Impact Fee Determination for 2007 to 2012 as required by Texas Local Government Code. The City of Tomball retained CLR, Inc. to update this capital improvements plan using generally accepted engineering and planning practices to meet State requirements, review and evaluate its current land use assumptions, and update its capital improvements plan.

Infrastructure improvements necessary to accommodate projected growth/development within the City of Tomball jurisdiction were identified based on population and land use projections. Improvements were identified for the City's Potable Water System, Wastewater System, Drainage System, Traffic & Transportation Network, Parks, Trails & Sidewalks, and its Natural Gas Distribution System.

The 2012 estimated population of the City of Tomball is 11,121, plus an additional 3,241 in the extra-territorial jurisdiction (ETJ), for a total estimated population of 14,362. The 2022 population forecast for the City of Tomball is 13,156, plus an additional 3,834 in the extra-territorial jurisdiction (ETJ), for a total estimated population of 16,990. Population from 2012 to 2022 is projected to increase 18.3%, at an annualized growth rate of 1.695%.

The City of Tomball is approximately 12 square miles (7,670 acres) in area with an additional 8.6 square miles (5,515 acres) included in Tomball's ETJ. Projected 2022 increases in developed acreage were calculated to be 440 acres (27.9% increase) in residential land, and 227 acres (18.9% increase) in commercial land.

City of Tomball 2012 Potable Water System currently is estimated at 6,654 connections, with Average Daily Demand (ADD) usage of 2.26 MGD. Water Production ADD is projected at 2.67 MGD with 7,950 connections for end of FY 2022, based on current 5-Year average water production of 335.9 gpd per Living Unit Equivalent (LUE). This report projects a 1,000 gpm production Water Plant, at a probable cost of $3.83M, and an increase in the water distribution network, amounting to probable cost of $12.31M, will be necessary to meet future demands.

City of Tomball 2012 Wastewater System currently is estimated at 6,654 connections, with Average Daily Flow (ADF) usage of 1.507 MGD. Wastewater Collection ADF is projected at 1.684 MGD for 7,950 connections for end of FY 2022, based on current 5-Year average wastewater collection of 211.9 gpd per LUE. This report projects four lift stations and an increase in the wastewater collection network, amounting to a probable cost of $14.45M, will be necessary to meet future demands. TCEQ criteria may require the design of a 0.35 MGD expansion to the south wastewater treatment plant, for probable cost of $0.53M in design costs, but projected flow capacity will not require construction to commence.

Projected increases in development acreage is within all watershed sub-basins, however for 10-year constructability, sub-basins selected for improvements are limited to M118, M121, M124, & M125. Estimated channel drainage system project costs for projected growth to 2022 amounts to $46.76 M. Estimated detention improvements costs for projected growth to 2022 amounts to $44.36 M.

An analysis of existing and projected roadway capacity was done for major roadways near the City of Tomball utilizing the Houston-Galveston Area Council (H-GAC) population growth factor to develop volume projections for 2017 & 2035. Based on volume projections, by 2017 FM 2920 (Main Street) from Telge Road to SH 249 (a two-lane roadway) will be operating at Level of Service (LOS) E, and by 2035 the roadway will be operating at LOS F. To bring the roadway to an acceptable LOS D, this segment should be widened to six lanes. Volume projections also predict that the volumes on Hufsmith-Kuykendahl Road (a two-lane roadway) from Stuebner-Airline Road to Kuykendahl Road, will be operating at LOS F by 2035. To bring the roadway to LOS C, this segment of the road should be widened to four lanes. LOS A being ideal traffic conditions with free flow of vehicles, and LOS F being grid-lock of traffic and unacceptable conditions.

For the 2022 population projection of 13,156, existing park space will proportion to approximately 8.81 acres per 1,000 residents. Approximately 15.7 acres of City of Tomball park development will be necessary to meet 10 acres per 1,000 residents by the end of 2022.

Historically, the City's natural gas distribution has not been included in this report. However, basic information has been included in this update to better centralize all infrastructure owned and operated by the City and provide reference for future planning.

This Capital Improvement Plan was developed in accordance with Texas Local Government Code §395, describing existing capital improvements and their total capacities, identifying necessary capital improvements or facility expansions and their costs, establishing a service unit for each category of capital improvements, projecting service units and demand necessitated by new development based on approved land use assumptions projected over a period of 10 years. From this Capital Improvement Plan a Maximum Capital Recovery Fee Determination was made for each service unit category.

The Maximum Impact Fees calculated are as follows:

Facility	Service Unit	Effective Date	Current Fee	Maximum Fee Calculated By This Report
Water Production	LUE	06/01/2012	$ 1,329.12	$ 3,319.37
Wastewater Collection	LUE	06/01/2012	$ 1,653.23	$ 2,322.57
Drainage System (by sub-basin)				
M118	Per Acre	06/01/2009	$ 6,023.90	$ 5,757.81
M121E	Per Acre	06/01/2009	$ 6,828.71	$ 7,886.69
M121W	Per Acre	06/01/2009	$ 4,985.14	$ 6,692.00
M124	Per Acre	N/A	$ -	$13,041.36
M125	Per Acre	06/01/2009	$ 574.40	$ 436.88

2.0 Plan Objective

The objective of this report is to identify infrastructure improvements necessary to accommodate projected growth/development within the City of Tomball jurisdiction. The focus of the studies conducted and recommendation provided are for a period of 10 years beginning 2012 and ending 2022. The studies and resulting recommendations utilize population and development projections, updated herein, City of Tomball Zoning Ordinance and Comprehensive Plan, and existing infrastructure records provided by the City of Tomball.

Probable costs associated with the improvements identified will be calculated and include costs of construction, land acquisition (when appropriate), engineering design, surveying, and other necessary consultant services. Of the improvements identified, the costs of those necessitated by new development and/or significant redevelopment will be utilized to calculate maximum capital recovery fees in accordance with Local Government Code, Title 12, Planning and Development, Chapter 395, Financing Capital Improvements Required by New Development in Municipalities, Counties and Certain Other Local Governments. The Capital Recovery Fees determined will establish maximum fees that can be adopted by the City if desired.

Population projects, land use, and drainage infrastructure data contained in this report are summaries from a Master Drainage Plan (MDP) prepared for the City of Tomball under separate contract. Only data required for the final recommendations and conclusions of this report have been included.

Basic steps used to identify necessary infrastructure improvements included:

- Estimation of current (2012) land use and distribution of population.
- Estimation of future (2022) land use and distribution of population.
- Review of Existing (2012) Infrastructure with respect to projected growth/development
- Determination of infrastructure improvements necessary to serve 2022 conditions.
- Calculation of Probable Costs associated with identified infrastructure improvements.
- Determination of maximum capital recovery fees.

3.0 Population Projections

History and Previous Projections

Several reports produced for the City of Tomball have included population projections for the City and the ETJ:

1. The 2002 Infrastructure Master Plan (IMP) by PBS&J;

2. The 2007 Infrastructure Master Plan by LAN; and,

3. The 2009 Tomball Comprehensive Plan.

All three of these documents utilized population projections developed by the Houston-Galveston Area Council (H-GAC) and the Texas Water Development Board (TWDB). The 2002 IMP refers to the 2000 Census population of 9,089 for the City of Tomball, but uses H-GAC and TWDB population projections that are based on the 1990 Census when the population was reported to be 6,370. Since this information is dated, population projections from the 2002 IMP will not be discussed further.

Both the 2007 IMP and the Comprehensive Plan include population projections developed by H-GAC using the 2000 Census population of 9,089 as a basis. Projections developed by the TWDB, also using the 2000 data, were included for reference in the 2007 IMP. The methodologies employed by these agencies to develop these projections will not be reviewed, but it should be noted that neither agency utilizes methods that incorporate variables particular to the City in estimating future growth. Populations for the county or region are estimated at a gross level and allocated to smaller jurisdictions on a percentage basis. The projections for the City appear in the following table. The figures for 1990 and 2000 are reported by the U.S. Census Bureau.

Year	H-GAC 2035	TWDB 2006
1990	6,370	6,370
2000	9,089	9,089
2010	12,238	12,059
2020	15,281	15,429
2030	19,541	18,150

The authors of the 2007 IMP developed estimates of the City and ETJ population employing land use density assumptions from the 2002 IMP and population density statistics from the 2000 Census to derive estimates for 2007 and 2017. The combined population estimates for these two data points was used in this report to produce comparable statistics for the years of interest noted in the following section.

2010 Census & Current Projection

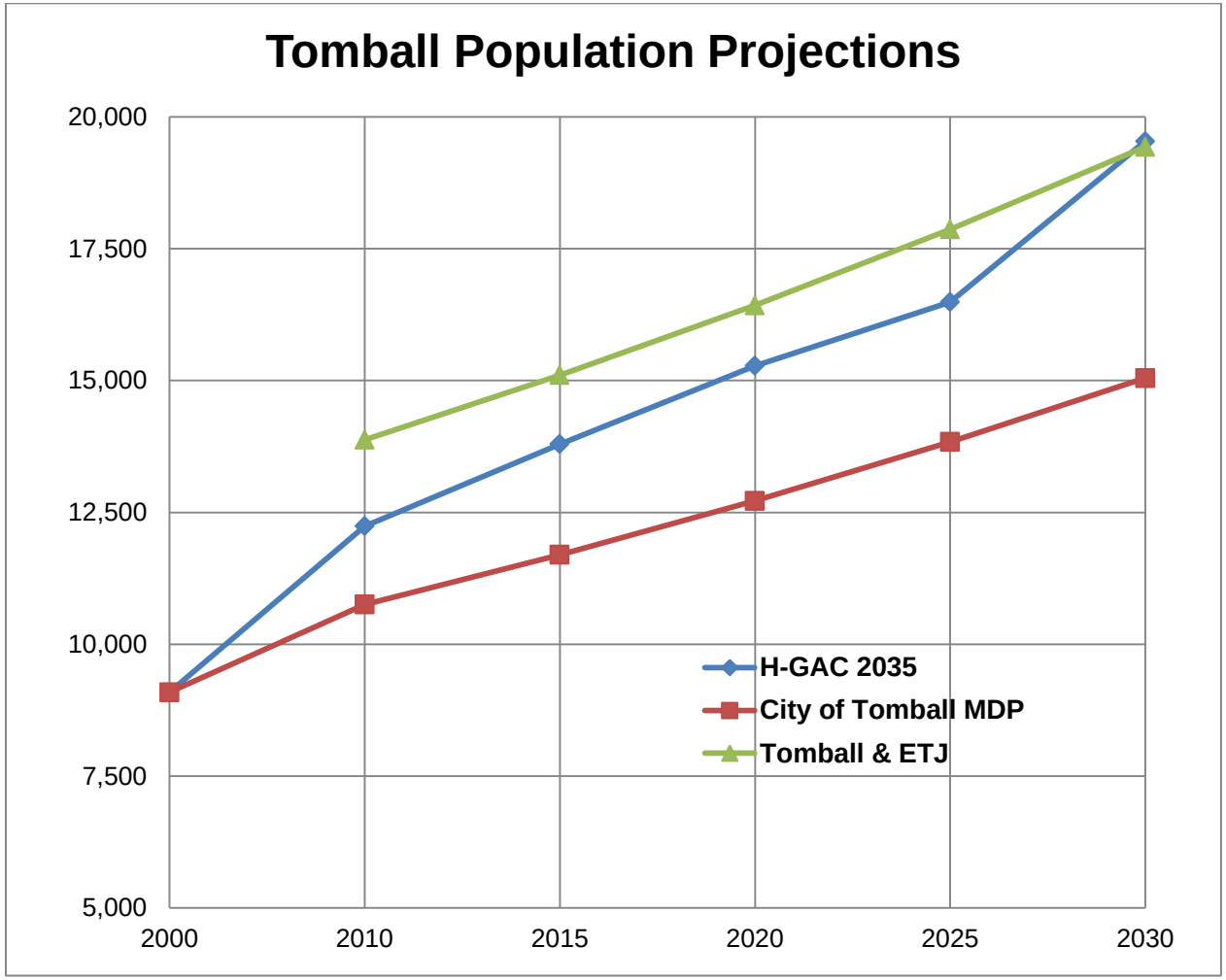
The U.S. Census Bureau has reported a 2010 population of 10,753 for the City of Tomball. This figure represents an absolute growth of 1,664 persons at a compounded annual growth rate of approximately 1.7% from the 2000 Census population of 9,089. The Census count represents a point-in-time estimate of the actual population which is unknown and may vary on a daily, weekly or monthly basis within the reporting year.

The following table presents the reported 2000 and 2010 US Census population for the City and projections developed for this IMP using the annualized growth rate of approximately 1.7% from 2000 to 2010. An estimate of the population for the Tomball extra-territorial jurisdiction (ETJ) based on 2010 Census Block data was provided by the Greater Houston Partnership in association with the Tomball Economic Development Corporation. The estimate of 3,241 for 2012 was discounted by the annualized growth rate of 1.7% to derive a 2010 population estimate of 3,134.

Year	Within City Limits	Tomball ETJ	Combined
2000	9,089	n/a	n/a
2010	10,753	3,134	13,887
2012	11,121	3,241	14,362
2015	11,696	3,409	15,105
2020	12,721	3,708	16,429
2022	13,156	3,834	16,990
2025	13,836	4,033	17,869
2030	15,049	4,386	19,435

To appreciate the differences in the projections for the 20-year time horizon (2010-2030), it should be noted that the annualized growth rate for the City of Tomball from 1990 to 2000 was 3.6% or approximately twice the growth rate for the latest 10-year period. The comparison of past and present population projections is not intended to imply that any particular forecasting methodology is superior to another since all forecasting of population is basically a best-guess formulated primarily on past history. A chart comparing population projections for the City of Tomball from the

H-GAC 2035 forecast with the projections developed for this IMP appears at the top of the next page. The combined projection for the City and ETJ developed for this report is also included in the graph.



Two major highway projects scheduled to begin construction in 2013 could likely impact population growth trends in the Tomball area. First, construction on both Segments F1 and F2 of the Grand Parkway is planned for the summer of 2013 with completion of both segments anticipated by the end of 2015. Segment F1 will connect State Highway 249 with U.S. Highway 290 while Segment F2 will extend from SH 249 to IH 45. The

planned intersection of the Grand Parkway with SH 249 is positioned near the current intersection of SH 249 with Boudreax Road. The second project involves upgrading SH 249 to a six-lane toll road from north of Spring-Cypress to FM 2920. Eventually, this project will include a second phase to extend the toll road, to be named the "Tomball Tollway", to FM 1774 in Montgomery County. Long-term, the Texas Department of Transportation plans to extend the project to SH 6 at Navasota.

On May 23, 2012, while text of this report was being drafted, the U.S. Census Bureau released estimates of 2012 population for states, cities and various other political subdivisions. The Bureau estimated a 2012 population of 10,964 for the City of Tomball. The Bureau's estimated growth in population from 2010 to 2012 is less than 60% of that projected for use in this report, resulting in an annualized growth rate of approximately 1%.

4.0 Land Use Projections

General

The City of Tomball is approximately 12 square miles (7,670 acres) in area with an additional 8.6 square miles (5,515 acres) included in Tomball's ETJ. Of the area within the ETJ, approximately 6.1 square miles (3,936 acres) is located in Harris County while 2.5 square miles (1,579 acres) lies within Montgomery County.

Land use within the City of Tomball and ETJ has been defined and described in several recent documents including the 2007 Infrastructure Master Plan, the 2009 Comprehensive Plan, and the Tomball Zoning Ordinance (2008-01). *See* ***Tomball Zoning & Tomball Comprehensive Land Use Plan Exhibits.*** The Zoning Ordinance and Comprehensive Plan provide the basis for guiding future land use, and the difference between these two documents should be clarified.

According to the City of Tomball Website:

> *"The purpose of a Comprehensive Plan is to anticipate growth and to guide that growth in a manner that provides Tomball with a balance of land uses that promote economic growth and improve quality of life."*
>
> *"The Comprehensive Plan is not a zoning ordinance and it does not affect existing zoning regulations. Instead, it provides the foundation for making changes or developing new regulations that implement identified goals, objectives, and actions."*
>
> *The Zoning Ordinance provides the legal framework for regulating development within the City. Again, with reference to the City's Website:*
>
> *"Zoning is a system of land use regulation that controls the development of land in the corporate City limits. It is a legal mechanism by which the City of Tomball is able to regulate land uses so as to protect the public health, safety, and/or general welfare. Land is mapped into different zones with the primary purpose of promoting compatible land uses and to separate incompatible uses*."

In addition, while the Comprehensive Plan provides guidance for development within the City limits and ETJ, the Zoning Ordinance only applies within the City. While the City has regulatory authority over certain development activities in the ETJ, those activities that do not fall within the purview of the City are subject to regulation by Harris and Montgomery counties, and by the requirements of utility districts, utility providers, and homeowner associations.

Existing Land Use

At any point in time, the existing land use in Tomball and the ETJ may be established by visual inspection and/or by inspection of the tax records maintained by Harris and Montgomery counties. Visual inspection of each parcel within Tomball and the ETJ was not feasible, even using aerial photographs, due to the large number of parcels within this area. Tax records of both the Harris County Appraisal District (HCAD) and the Montgomery County Appraisal District (MCAD) were used for production of this report. Not all areas are included in the tax records. In particular, public roads and right-of-way (ROW) are excluded, and other areas owned by public entities, such as drainage basins and channels, may be

excluded as well. However, with the exception of one large tract along the eastern portion of the ETJ in Montgomery County, almost all of the area within Tomball and the ETJ is included in the tax records exclusive of the ROW areas.

Both the HCAD and MCAD records identify land use on a parcel basis using the "Texas Property Tax Assistance Property Classification Guide". The Guide classifies properties by 21 broad categories. The HCAD and MCAD records used the following broad categories for classifying real property:

- Single Family Residential (A)
- Multi-Family Residential (B)
- Vacant Lots and Tracts (C)
- Agricultural and Timber (D)
- Farm and Ranch Improvements (E)
- Commercial and Industrial (F)
- Utilities (J)
- Residential Inventory (O)
- Exempt Property (X)

Most of these categories have sub-divisions which allow further insight into type of property use on a parcel basis. In addition to the Guide classification system, HCAD also identifies parcels by use of its own classifications. This information is accessible in the GIS database developed for this report in the event that further analysis is desired. Also see **Tomball Land Use by State Code Exhibit**.

To develop statistics for the existing 2012 land use, 4,493 properties from the City Tomball's Zoning records and from HCAD analyzed by state classification. An additional 2,028 parcels in the ETJ were examined. Agricultural land, undeveloped areas, and areas not included in the tax and zoning records are reflected in the "Other" category in this table. Land use is a dynamic process and the information represents a snapshot in time. In addition, the state tax classification may not accurately represent actual land use in all cases.

The following table displays 2012 existing land use for the City of Tomball and its ETJ.

2012 Land Use, Estimated

Within City Limits	Area (Acres)	Parcels Developed	Land Use Density (Acres/Parcel)	Population	Population Density (Persons/Acre)	Population Density (Persons/Parcel)
Residential, Developed	1,578.5	2,442	0.65	11,121	7.05	4.55
Commercial, Developed	1,200.8	547	2.20	n/a	n/a	n/a
Industrial, Developed	3.5	1	3.47	n/a	n/a	n/a
Other	4,887.6	21	n/a	n/a	n/a	n/a
Total City	7,670.4	3,011	n/a	11,121	1.45	n/a

Within ETJ	Area (Acres)	Parcels Developed	Land Use Density (Acres/Parcel)	Population	Population Density (Persons/Acre)	Population Density (Persons/Parcel)
Residential, Developed	1,643.2	1,070	1.54	3,241	1.97	3.03
Commercial, Developed	427.1	84	5.08	n/a	n/a	n/a
Industrial, Developed	8.8	1	8.75	n/a	n/a	n/a
Other	3,436.3	10	n/a	n/a	n/a	n/a
Total ETJ	5,515.4	1,165	n/a	3,241	0.59	n/a

Categories defined by State Classification

Total City & ETJ	13,186	14,362

Projected Land Use

Regardless of the existing usage, currently developed property was projected for future years under the same classification as the existing use. For undeveloped property, the Zoning description provided guidance for parcels within the City limits and the Comprehensive Plan served as guidance in the ETJ when determining future land use. The methodology employed for projecting residential development is complex and is included as an appendix to this report. The methodology used to project non-residential development is described in the following narrative. GIS software was employed to execute the analysis. Non-residential land use was forecast for 2022 and 2030, although data for intermittent years may be estimated without a great deal of additional effort using the GIS files.

Methodology for Non-residential Future Land Development

Properties currently used for residential purposes or projected for residential development were removed from consideration for non-residential development. Of 4,493 parcels in the City Zoning database, 2,844 were designated for residential use through 2030 leaving 1,649 properties for existing or potential non-residential development. Of the 1,649 non-residential properties, 568 had some type of structure listed in the tax records, leaving 1,081 properties determined to be undeveloped. Of the 2,028 properties in the ETJ, 1,450 were designated for residential use through 2030 leaving 578 properties for existing or potential non-residential development. Of those 578 properties, 95 were listed as having a structure on site, leaving 483 properties as undeveloped.

Step 1: The acreage associated with existing developed commercial and exempt properties was determined for the area within the City limits and the ETJ. This total area was increased by a factor of 1.7%, compounded annually, which is the same growth factor employed for projecting population growth. The resulting projected growth in non-residential development from 2012 to 2022 was determined to be 302.8 acres. The projected acreage increase in non-residential development was divided between the City (75%) and ETJ (25%).

Step 2: The 2012 undeveloped non-residential acreage was used as the basis for assigning growth for 2022. Within the City limits, the following zoning descriptions associated with the undeveloped parcels provided the categories for growth: General Retail, Commercial, Office, and Old Town/Mixed Use. Within the ETJ, the following Comprehensive Plan land use descriptions served as categories for growth: Commercial, Employment/Office, and Mixed Use. The relative percentage of undeveloped acreage in each category to the total undeveloped acreage was used to allocate the projected growth acreage to those categories. Allocations for the City and ETJ were conducted separately.

Step 3: The GIS database of non-residential properties was utilized to select undeveloped parcels that were associated with the categories listed in Step 2. Priority was given to selecting undeveloped properties along existing or expected major transportation categories: SH 249 and SH 249 Expressway, Hufsmith-Kohrville Road (FM 2978), East and West Main Street (FM 2920), Holderrieth Road, Hufsmith, Zion, and Cherry Street.

Step 4: The same process was employed for projecting land use by parcel for 2030. The effective percentage increase in developed non-residential land use from 2012 to 2030 was calculated to be 583 acres (35.4%) with or 303 acres (18.4%) projected as being developed by 2022 and an additional 280 acres being developed by 2030.

The following table displays the results of land use projections for the City of Tomball and its ETJ for 2022. 2022 Projected Land Use was apportioned to characteristic categories for residential, commercial, and industrial land use by acreage, and actual acreage and effective percentage increases were calculated. Increases were projected at 440 acres and 27.9% for developed residential land, and 227 acres and 18.9% for developed commercial land.

2022 Land Use, Projected

Within City Limits	Area (Acres)	Parcels Developed	Land Use Density (Acres/Parcel)	Population	Population Density (Persons/Acre)	Population Density (Persons/Parcel)
Residential, Developed	2,018.1	2,558	0.79	13,156	6.52	5.14
Commercial, Developed	1,427.63	648	2.20	n/a	n/a	n/a
Industrial, Developed	3.5	1	3.47	n/a	n/a	n/a
Other	4,221.2	20	n/a	n/a	n/a	n/a
Total City	7,670.4	3,227	n/a	13,156	1.72	n/a

Categories defined by State Classification/Zoning

Within ETJ	Area (Acres)	Parcels Developed	Land Use Density (Acres/Parcel)	Population	Population Density (Persons/Acre)	Population Density (Persons/Parcel)
Residential, Developed	1,691.8	1,267	1.34	3,834	2.27	3.03
Commercial, Developed	503.1	106	4.75	n/a	n/a	n/a
Industrial, Developed	8.8	1	8.75	n/a	n/a	n/a
Other	3,311.8	10	n/a	n/a	n/a	n/a
Total ETJ	5,515.4	1,384	n/a	3,834	0.70	n/a

Categories defined by State Classification/Comprehensive Plan

	13,186			16,990		

Comments on Methodologies

The methodologies employed to allocate projected population growth and land use to individual parcels within the City limits and ETJ creates a hypothetical version of the future. Although the selection of individual parcels follows certain rules, any number of undeveloped parcels could be eligible for selection, and a different scenario could easily result from selecting one parcel rather than another. In that sense, the process is somewhat arbitrary. Since the analyses were developed using GIS tools, and the output files are being provided to the City as products of this project, alternative scenarios may be developed with relative ease.

In addition, the HCAD and MCAD records that serve as the basis for categorizing and selecting properties are not without faults when used for the purposed described in the preceding narrative. The primary use of these records is taxation and not to serve as a database for land use analysis. However, these records were considered the best available data for the purpose of developing this IMP.

N

W E

S

0 1500 3000 4500 6000

Feet

Tomball
Land Use by State Code

Legend

- A: Single Family Residential
- B: Multifamily Residential
- C1: Vacant Lots and Land Tracts
- C2: Colonia Lots and Land Tracts
- C3: Res Vacant/Private Streets/Open Space/Retention
- D1: Native Pasture and Hay/Open Space
- D2: General Commercial Vacant
- E1: Rural Land, not qualified for Open Space, and Improvements
- F1: Commercial
- F2: Industrial and Manufacturing
- J3: Utilities-Electric
- J4: Utilities-Telephone
- J5: Utilities-Railroad
- O1: Residential Inventory
- TMBR: Timberland
- X: Exempy Property

AS OF: 03/12/2013

THE CITY OF TOMBALL, TEXAS FOUNDED 1907

CLR, Inc.

Engineers • Surveyors • GIS

19530 FM-362, Waller, Texas 77484 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_STATE_LANDUSE-2234.mxd 04/04/2014

N
W
E
S

0 1500 3000 4500 6000

Feet

Legend

- AG - Agricultural District
- SF-20E - Single Family 20 Estate District
- SF-9 - Single Famiily 9 District
- SF-6 - Single Famiily 6 District
- D - Duplex Residential District
- MF - Multi-Family Residential District
- O - Office District
- OT & MU - Old Town Mixed Use District
- GR - General Retail District
- C - Commercial District
- LI - Light Industrial District
- PD - Planned Development
- CUP - Conditional Use Permit
- MDR - Medium Density Residential
- RR - Rural Residential
- Employment
- Open Space

Tomball
Comprehensive Land Use Plan

AS OF: 01/08/2013

THE CITY OF TOMBALL, TEXAS
FOUNDED 1907

CLR, Inc.

Engineers • Surveyors • GIS

19530 FM-362, Waller, Texas 77484 Phone: (713) 462-0993

F:\Work\12-010-00_ TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_LANDUSE_CompPlan_2234_COTCOLORS.mxd ____ 04/04/2014

N

W E

S

0 1500 3000 4500 6000

Feet

Tomball Zoning

Zoning Legend

- AG - Agricultural District
- SF-20-E - Single Family 20 Estate District
- SF-9 - Single Family 9 District
- SF-6 - Single Family 6 District
- D - Duplex Residential District
- MF - Multi-Family Residential District
- MHP - Manufactured Home Park
- O - Office District
- OT & MU - Old Town Mixed Use District
- GR - General Retail District
- C - Commercial District
- LI - Light Industrial District
- PD - Planned Development
- CUP - Conditional Use Permit

AS OF: 07/17/2013

THE CITY OF TOMBALL, TEXAS FOUNDED 1907

CLR, Inc.

Engineers • Surveyors • GIS

19530 FM-362, Waller, Texas 77484 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_ZONING-2234.mxd _____ 04/04/2014

5.0 Potable Water System

The City of Tomball's water system consists of two primary components, water supply and water distribution. Currently, potable water is supplied by groundwater pumped from 2 aquifers by 6 wells at 4 production facilities operated by the City of Tomball. Facilities include 5 storage tanks and ancillary metering and disinfection (chlorine) equipment. Water well pump submergence was reported to be between 52 and 160 feet of depth.[1]

Water is distributed through approximately 99 miles of transmission and distribution lines ranging from 1.5-inch to 16-inch diameter, with system pressure maintained by elevated storage and booster pumps. Existing transmission and distribution line pipe materials consist of iron, steel, and PVC (polyvinylchloride) with the oldest lines originating in the late 1950's. The Water Distribution System Plant locations are shown in the **Tomball Master Plan Water Distribution System Exhibit**.

Existing Water System

The following table summarizes the existing water production and storage facilities:

Water Plant	Well Number (U.S.G.S. #)	Well Capacity (Estimated 2012) (gpm)	Aquifer	Ground Storage (gallons)	Elevated Storage (gallons)	Booster Pumps (No./gpm)
Pine Street	1 (Onsite) (LJ-60-60-10G)	548	Chicot	400,000	750,000	2 – 1,600 1 – 1,000
	2 (Onsite) (LJ-60-60-11G)	1,856	Evangeline	N/A	N/A	N/A
	3 (Offsite) School Street (LJ-60-60-111)	741	Chicot	N/A	N/A	N/A
Baker Street	4 (Onsite) (LJ-60-59-324) (See Note 1)	784	Evangeline	200,000 (See Note 2)	N/A	1 – 600 2 – 500
Ulrich Road	See Note 3	N/A	N/A	N/A	500,000	N/A
F.M. 2920	5 (Onsite) (LJ-60-60-T5)	786	Evangeline	500,000	N/A	3 – 1000
	6 (Onsite)	578	Chicot			
Totals		5,293		1,100,000	1,250,000	8,800

Notes:

1. The Baker Street well has continued to experience a high concentration of hydrogen sulfite gas and therefore it does not contribute to the City's supply.
2. The storage tank at the Baker Street plant is constructed as an elevated tank. However, the tank bowl is below the operating pressure plane and therefore operates as a ground storage tank.
3. Elevated tank functions as primary control for the pressure pumping operates for both the Pine and Baker plants.

Historical Water Use

City of Tomball historical data was used to develop existing and projected requirements. The City tracks meter count and monthly water consumption in five categories; single family residential, multifamily (combined), commercial, public municipal, and flushed/emergency. The following table quantifies annual water metered and pumped for the previous five fiscal years.

CITY OF TOMBALL
Annual Water Metered and Water Pumped
(in thousands of gallons)

FISCAL YEAR	RESIDENTIAL METERED	COMMERCIAL METERED	MULTI-FAMILY METERED	FLUSHED PUMPED & EMERGENCY	PUBLIC MUNICIPAL	TOTAL METERED & FLUSHED	TOTAL PUMPED	PERCENT METERED / PUMPED	# ACTIVE MTRS	AVERAGE EQUIV CONN'S	LUE GPD/CONN
2008 FY	271983	308332	64981	12000	8752	666048	774190	86.03%	3326	6472	327.7
2009 FY	290763	323787	65522	12024	8152	700248	790399	88.59%	3369	6515	332.4
2010 FY	240544	292952	75357	12000	6058	626911	709131	88.41%	3394	6540	297.1
2011 FY	364966	329679	97205	14000	8865	814715	922723	88.29%	3447	6593	383.5
2012 FY	279463	297707	82524	12000	6068	677762	823204	82.33%	3508	6654	339.0

For the purposes of this report, one Equivalent Single Family Connection (ESFC) equals one Living Unit Equivalent (LUE). For Fiscal Years 2008 to 2012 the average daily demand per ESFC required 335.9 gpd of water production. 5-Year average water production percentages for five categories follows: single family residential 41.4%, multifamily 11.0%, commercial 44.7%, public municipal 1.1%, and flushed/emergency 1.8%.

State Design Criteria

The Texas Commission on Environmental Quality (TCEQ) criteria specified in TAC, Title 30, part I, Chapter 290, Subchapter D, Rules and Regulations for Public Water Systems, 9/13/00, provides minimum acceptable design and construction practices to ensure public facilities are properly sized to produce and distribute safe potable water. This criterion includes:

- Connection – Defined as, a single residential unit or each commercial or industrial establishment to which drinking water is supplied from the system.
- Maximum Daily Demand – 2.4 times average daily demand
- Peak Hourly Demand – 1.25 times maximum daily demand (prorated to an hourly rate)
- Minimum Water System Capacity Requirements:

  Wells (2 or more) – total capacity of 0.6 gallons per minute (gpm) per connection

Booster Pumps (the lesser of)

Two or more pumps with total capacity of 2 gpm per connection, or

Minimum of 1,000 gpm with capacity to meet peak hourly demands with the largest pump out of service

Storage – Total capacity of 200 gallons per connection, including elevated storage of 100 gallons per connection.

Nominal Operating Pressure = 35 psi throughout system/20 psi minimum during firefighting event

Adequacy of Existing System

Existing City of Tomball water production facilities were evaluated based on TCEQ criteria as follows:

2012 Existing System vs. TCEQ Minimum Requirements

	Existing	Required	Meets
With Baker Plant	**Capacity**	**Capacity**	**Minimum**
Wells	5,293 gpm	3,992 gpm	Yes
Firm Booster Pump Capacity	8,800 gpm	4,656 gpm	Yes
Total Storage	2,350,000 gal	1,330,800 gal	Yes
Elevated Storage	1,250,000 gal	665,400 gal	Yes
Nominal Operating Pressure	55 psi	35 psi	Yes
Without Baker Plant			
Wells	4,509 gpm	3,992 gpm	Yes
Firm Booster Pump Capacity	7,200 gpm	4,656 gpm	Yes
Total Storage	2,150,000 gal	1,330,800 gal	Yes
Elevated Storage	1,250,000 gal	665,400 gal	Yes
Nominal Operating Pressure	55 psi	35 psi	Yes

Based on the available City of Tomball 2012 data for existing Water System conditions (6,654 conn at 2.26 MGD ADD), all components meet or exceed TCEQ minimum requirements both with and without operation of the Baker Street Plant facilities. The existing distribution system (lines 6" and larger) will be modeled to establish nominal operating pressure nodes.

Projected Improvements

To determine recommended water system improvements, CLR analyzed historical data, TCEQ criteria, and projected water demand through 2022. The recommended improvements include facilities in both the current City corporate boundary and in the ETJ necessary to serve the projected development.

Based on this report's earlier projection of City of Tomball annualized growth rate of approximately 1.7%, water demand was projected at the same rate to FY 2022 as shown in the following table. Water Production Average Daily Demand (ADD) is projected at 2,913,380 gpd for 7,874 connections for end of FY 2022.

CITY OF TOMBALL

Projected Water Production Requirements (Gallons)

	PROJECTED[1]			
FISCAL YEAR	**ANNUAL PUMPED**	**ADD PUMPED**	**AVG EQUIV CONN'S[2]**	**LUE GPD/CONN[3]**
2013	913,883,350	2,503,790	6767	370.0
2014	929,414,100	2,546,340	6882	370.0
2015	945,214,950	2,589,630	6999	370.0
2016	961,285,900	2,633,660	7118	370.0
2017	977,626,950	2,678,430	7239	370.0
2018	994,238,100	2,723,940	7362	370.0
2019	1,011,119,350	2,770,190	7487	370.0
2020	1,028,270,700	2,817,180	7614	370.0
2021	1,045,692,150	2,864,910	7743	370.0
2022	1,063,383,700	2,913,380	7874	370.0

[1] Projections based on 1.7% growth rate; see Population projection section 3.0.

[2] Average of Connections Projected for Given Fiscal Year.

[3] 335.9 GPD Historical 5-YR Average + 10% Factor of Safety = 370 GPD for planning.

The following table provides a summary of the projected water supply system demands, for end of FY 2022 loads, when evaluated against TCEQ minimum requirements (without operation of the Baker Street Plant facilities).

2022 Projected System vs. 2012 TCEQ Minimum Requirements

(Without Baker Plant)

	Existing Capacity	Required Capacity	Meets Minimum
Wells	4,509 gpm	4,725 gpm	No
Firm Booster Pump Capacity	7,200 gpm	5,511 gpm	Yes
Total Storage	2,150,000 gal	1,574,800 gal	Yes
Elevated Storage	1,250,000 gal	787,400 gal	Yes
Nominal Operating Pressure	55 psi	35 psi	Yes

Based on the projected water demands of the study period, the City of Tomball will be required by TCEQ criteria to increase its well production by 216 gpm. For practical water well construction to also serve water demands beyond 2022, CLR recommends Standard Water Plant sizing to include a 1,000 gpm Well, a 400,000 gal GST, 3 - 600 gpm total booster pumps, a maintenance building and emergency generator. With contingencies, engineering and surveying, the total Water Plant cost estimate amounts to $3.83M.

To meet projected needs, the City will require additional distribution lines to serve developing areas and for replacement of substandard lines, less than 8-inch, with minimum 8-inch diameter lines. The following table provides a summary of the projected water distribution system demands, for end of FY 2022 with loads distributed utilizing land use and density projections. The 20.8 mile total of additions represents a 21% increase in the water distribution network. Estimated future Water Distribution costs in 2013 dollars, amounts to $13.22M.

Water Line Unit Cost Data used to calculate the 10-year Water Distribution System CIP costs can be found in APPENDIX C. Costs do not include allowances for private crossings (RR or pipeline), legal or fiscal costs, or right of way/easement acquisition costs.

Future Water Distribution System Projects, 2012 to 2022

Project No.	Description	Priority (1)	Quantity	Units	Unit Cost	Total Cost
1	12-inch Water Line along Zion Road and E. Hufsmith Road from Neal Street east to F.M. 2978 E. ROW	1	6,700	LF	$ 127.00	$ 850,900.00
2	12-inch Water Line along FM 2978 from North of FM 2920 north to E. Hufsmith Road (East & West)	1	12,600	LF	$ 127.00	$ 1,600,200.00
3	12-inch Water Line along E. Hufsmith Road from Ulrich Road to Zion Road (includes Railroad Crossing)	1	8,300	LF	$ 127.00	$ 1,054,100.00
4	12-inch Water Line through new development between Ulrich Road and Zion Road	2	4,400	LF	$ 127.00	$ 558,800.00
5	12-inch Water Line along S. Persimmon Street from Agg Road to Holderrieth Road	2	5,700	LF	$ 127.00	$ 723,900.00
6	12-inch Water Line along S. Persimmon Street fromFM 2920 to Agg Road	2	4,500	LF	$ 127.00	$ 571,500.00
7	12-inch Water Line along Agg Road from S. Pitchford Road to S. Persimmon Street	2	1,200	LF	$ 127.00	$ 152,400.00
8	8-inch Water Line along S. Pitchford Road	2	3,600	LF	$ 88.00	$ 316,800.00
9	8-inch Water Line between S. Pitchford Road and S. Persimmon Street south of channel south of Lizzie Lane	2	1,200	LF	$ 88.00	$ 105,600.00
10	12-inch Water Line along Calvert Road and Alice Road from FM 2920 to High Meadows Rd	2	7,700	LF	$ 127.00	$ 977,900.00
11	12-Inch Water Line along Agg Road from Mulberry Street to S. Pitchford Road (includes Railroad Crossing)	2	1,900	LF	$ 127.00	$ 241,300.00
12	12-Inch Water Line along the Future Medical Complex Drive from S. Holderrieth to S. Cherry Street	2	3,900	LF	$ 127.00	$ 495,300.00
13	12-Inch Water Line along the Future Agg Rd from S. Persimmon Street to Hufsmith-Kohrville Road	2	2,100	LF	$ 127.00	$ 266,700.00
14	12-Inch Water Line along the Future Agg Rd east of Hufsmith-Kohrville Road to ETJ	3	2,600	LF	$ 127.00	$ 330,200.00
15	8-inch Water Line between Quinn Road and Julia Street of Hunterwood (includes Railroad Crossing)	3	1,500	LF	$ 88.00	$ 132,000.00
16	8-inch Water Line along Future Commercial Park Drive between Medical Complex Drive and Theis Lane	4	1,100	LF	$ 88.00	$ 96,800.00
17	12-Inch Water Line along Park Road from FM 2920 to Brown Road	4	3,900	LF	$ 127.00	$ 495,300.00
18	12-Inch Water Line along Ulrich Road north of Zion to replace existing 6-inch Water Line	4	4,500	LF	$ 127.00	$ 571,500.00
19	8-inch Water Line along Rudolph Road	4	3,700	LF	$ 88.00	$ 325,600.00
20	12-Inch Water Line along Brown Road from Park Road to Orchard Grove Drive	4	4,300	LF	$ 127.00	$ 546,100.00
21	8-Inch Water Line along Hospital Road between E. Hufsmith Road and E. Carrell Street	5	1,400	LF	$ 88.00	$ 123,200.00
22	8-Inch Water Line along Snook Lane from FM 2920 south ROW north to the Cedar Post Street backlot WL	5	2,800	LF	$ 88.00	$ 246,400.00
23	12-Inch Water Line along FM 2920 from N. Willow to S. Persimmon	5	2,400	LF	$ 127.00	$ 304,800.00
24	12-Inch Water Line along SH 249 Bypass west ROW from Brown Road south to Lowe's	5	4,100	LF	$ 127.00	$ 520,700.00
25	12-Inch Water Line along Business SH 249 east ROW from Brown Road south to Rudel Drive	5	4,000	LF	$ 127.00	$ 508,000.00
26	12-Inch Water Line along Hirschfield Road from SH 249 Bypass W. ROW east to Business SH 249	5	1,600	LF	$ 127.00	$ 203,200.00
27	12-Inch Water Line along SH 249 Bypass west ROW from Alice Road south to Holderrieth Road	5	4,900	LF	$ 127.00	$ 622,300.00
28	8-Inch Water Line along Business SH 249 west ROW from Theis Lane south to Holderrieth Road	5	3,200	LF	$ 88.00	$ 281,600.00
	Totals		**109,800**	**LF**		**$ 13,223,100.00**
	(1) Priority Rating of 1 is highest priority and 5 is lowest priority					

N
W
E
S

0 1500 3000 4500 6000

Feet

ELEVATED STORAGE TANK
EST = 500,000 GAL

WATER PLANT
GST = 200,000 GAL
WELL 4 = 784 GPM
BP = 3-500 GPM

WATER WELL SITE
WELL 3 = 741 GPM

WATER PLANT
EST = 750,000 GAL
GST = 400,000 GAL
WELL 1 = 548 GPM
WELL 2 = 1856 GPM
BP = 2-1600 GPM
BP = 1-1000 GPM

WATER PLANT
GST = 500,000 GAL
H-TANK= 5,000 GAL
WELL 5 = 786 GPM
WELL 6 = 578 GPM
BP-3 = 1000 GPM

Tomball ETJ

Tomball City Limits

Water

Existing

Proposed

Tomball Master Plan
Water Distribution System

CLR, Inc.
Engineers • Surveyors • GIS
19530 FM-362, Waller, Texas 77487 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_WATER-2234.mxd 04/04/2014

6.0 Wastewater System

The City of Tomball's wastewater system consists of two primary components, wastewater collection and wastewater treatment.

Currently, wastewater water is treated at 2 facilities, both operated by the City of Tomball. The north wastewater treatment plant is located at Neal Road south of Zion, and discharges into J231-00-00 then to Boggs Gully and eventually to Spring Creek. The south wastewater treatment plant is located at Holderrieth Road near S. Cherry and discharges into M121-00-00 then to Willow Creek.

Wastewater is collected through approximately 80 miles of sanitary sewer lines including 6-inch to 36-inch diameter gravity sanitary sewer, and 4-inch to 12-inch pressure force mains in two networks. The dividing line between the collections systems for the North and South Wastewater Plants generally follows SH249 Business South from Spring Creek, turns East remaining near Medical Complex Drive until it turns North on FM 2978 until Zion Road. Existing collection line pipe materials consist of clay, steel, and PVC (polyvinylchloride) with the oldest lines originating in the late 1950's.

Existing Wastewater System

Wastewater Treatment Plants

The north facility was completed in 1974 as a 0.75 MGD Sewage Treatment Plant (STP), and subsequently expanded in the late 80's to 1.5 MGD. This facility operates as a complete mix plant with four mixing basins and two clarifiers. The north service area presently serves approximately 4,270 acres and 2,459 connections.

The south facility was placed in service in 1999 as a 1.5 MGD STP. This facility operates as an extended aeration-oxidation facility, with one aeration channel, two clarifiers, and associated units. Facilities include ancillary metering and disinfection (chlorine) equipment. The south service area presently serves approximately 3,400 acres and 4,194 connections.

The following table summarizes the existing wastewater treatment facilities:

Wastewater Plant	Permit/Discharge Number	Plant Capacity (MGD)	Discharge	Lift Station (gpm)
Neal Road	TX 0022361/ 001-A	1.5	Spring Creek	4,500
Holderrieth Road	TX 0117595/ 001-A	1.5	Willow Creek	4,475

Lift Stations

Presently the City operates 11 sanitary sewer lift stations, not including the 2 located within the wastewater treatment plant sites. Private lift stations also exist within the City and serve areas that are not currently served by public gravity sewers. Public lift station general locations and capacities are shown below. The capacities shown are firm capacities with one pump out of service.

Existing Lift Station Capacities

LS #	Lift Station Name	Firm Capacity[1] (gpm)	LUE Equiv[2] Capacity
-	North WWTP	4500	7645
-	South WWTP	4475	7603
1	Northstar	250	425
2	Sherwood	380	646
3	Hunterwood	175	297
4	Hufsmith	350	595
5	Tomball Hills	225	382
6	Persimmon	108	183
7	Jergens Park	36	61
8	Mattheson Park	125	212
9	FM 2920 & Park Rd	340	578
10	Hicks	50-150	
11	School	200-300	
	(1) Lift station capacity with largest pump out-of-service		
	(2) Based on 211.9 gpd per LUE		

Collection System

The City's collection system is comprised of approximately 80 miles of gravity sewers and force mains ranging in size from 4-inch to 36-inch diameter. City of Tomball topography requires some isolated collection systems to pump by Lift Station before continuing as gravity lines.

The Wastewater Treatment Plants and sanitary sewer collection system are shown in the **Tomball Master Plan Sanitary Sewer System Exhibit**.

Historical Wastewater Flows

City of Tomball historical data was used to develop existing and projected requirements. As a Texas Pollutant Discharge Elimination System permit holder the City submits water quality discharge-monitoring reports (DMRs) to the TCEQ.

The following table quantifies DMR reported flows for the previous five years.

Historical Wastewater Treatment Plant Flows

	2008	2009	2010	2011	2012
North Wastewater Treatment Plant					
Annual Flow (MG)	231.0	216.1	195.3	177.4	203.3
Average Daily Flow (MGD)	**0.633**	**0.592**	**0.535**	**0.486**	**0.557**
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500
% of Total Plant Capacity Used	42.2%	39.5%	35.7%	32.4%	37.1%
South Wastewater Treatment Plant					
Annual Flow (MG)	305.1	290.5	276.7	292.4	346.8
Average Daily Flow (MGD)	**0.836**	**0.796**	**0.758**	**0.801**	**0.950**
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500
% of Total Plant Capacity Used	55.7%	53.1%	50.5%	53.4%	63.3%
Total Average Daily Flow (MGD)	**1.469**	**1.388**	**1.293**	**1.287**	**1.507**
LUE	6472	6515	6540	6593	6654
Average Daily Flow per LUE (gpd)	227.0	213.0	197.7	195.2	226.5
Total Water Demand					
Annual Water Demand (MG)	774.19	790.40	709.13	922.72	823.20
Average Daily Demand (MGD)	2.121	2.165	1.943	2.528	2.255
% of Wastewater Treated vs Water Pumped	69.3%	64.1%	66.6%	50.9%	66.8%

For the purposes of this report, one Equivalent Single Family Connection (ESFC) equals one Living Unit Equivalent (LUE). For Years 2008 to 2012 the average daily flow per ESFC was 211.9 gpd of wastewater treatment.

Wastewater flow was assumed to follow the 5-Year average water production percentages for five categories as follows: single family residential 41.4%, multifamily 11.0%, commercial 44.7%, public municipal 1.1%, and flushed/emergency 1.8%.

State Design Criteria

The TCEQ maintains minimum standards for public wastewater treatment and collections systems. The criteria are contained in Chapter 317 of the TCEQ regulations titled "Design Criteria for Sewerage Systems". The following minimum standards were utilized to determine adequacy of the existing system and to size necessary improvements.

- Estimation of wet weather flows as 400 percent of average day flow rates (collection system).
- The layout of collection lines are placed to provide flexibility toward future land use changes and economic considerations.
- Maximum sewer capacities were calculated for pipes flowing full at not less than 2 feet per second using standard grades on Manning's formula with an assumed "n" factor of 0.013.
- In order to avoid under-designs, which can occur without long range planning, trunk lines sizes were based upon consideration of the size of an area and an allowance for full development. The interim improvements for the study period consider future growth and provide a base system for the ultimate improvements.
    - Lift Station design to follow TCEQ Chapter 317 - Design Criteria for Sewerage Systems § 317.3. Lift Stations
    - STP design to follow TCEQ Chapter 317 - Design Criteria for Sewerage Systems § 317.4. Wastewater Treatment Facilities
- STP Design flow is defined as the wet weather maximum 30-day average flow. Peak flow is defined as the highest two hour flow expected to be encountered under any operational conditions, including times of high rainfall (generally the two-year, 24-hour storm is assumed - 4.85-inch for City of Tomball) and prolonged periods of wet weather. For new systems, the peak flow to average annual flow ratio is normally in the range between three and five to one, although other peaking factors may be warranted.
- Per TCEQ criteria an STP at 75% of flow capacity requires the design of a plant expansion, and an STP at 90% of flow capacity requires construction to commence on the expansion design.

Adequacy of Existing Wastewater System

Based on the available City of Tomball 2012 data for existing Wastewater System conditions (6,654 conn at 1.507 MGD ADF), both Wastewater Treatment Plants, all Lift Stations, and Sanitary Sewer Collection facilities meet or exceed TCEQ minimum requirements.

Projected Improvements

To determine recommended wastewater system improvements, CLR analyzed historical data, TCEQ criteria, and projected wastewater flow through 2022. The recommended improvements include facilities in both the current City corporate boundary and in the ETJ necessary to serve the projected development area.

Wastewater flow was projected to FY 2022, based on this report's earlier projection of the City of Tomball's annualized growth rate of approximately 1.7%, as shown in the following table. Wastewater Collection Average Daily Flow (ADF) is projected at 1.787 MGD for 7,874 connections for end of FY 2022. Wastewater flow projections based on historical flow per LUE is shown below.

Projected Wastewater Treatment Plant Flows

		Projected Averages										Increase
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2012-2022**
Total Average Daily Flow (MGD)	**1.507**	**1.536**	**1.562**	**1.589**	**1.616**	**1.643**	**1.671**	**1.700**	**1.728**	**1.758**	**1.787**	**0.280**
Case 1: Future LUEs reflect historical LUEs												
LUE	6654	6767	6882	6999	7118	7239	7362	7487	7614	7743	7874	1220
Average Daily Flow per LUE (gpd)	**226.5**	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	
North Wastewater Treatment Plant												
Annual Flow (MG)	203.3	207.2	210.8	214.3	218.0	221.7	225.5	229.3	233.2	237.1	241.1	37.8
Average Daily Flow (MGD)	**0.557**	**0.57**	**0.58**	**0.59**	**0.60**	**0.61**	**0.62**	**0.63**	**0.64**	**0.65**	**0.66**	0.10
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	_
% of Total Plant Capacity Used	37.1%	37.9%	38.5%	39.1%	39.8%	40.5%	41.2%	41.9%	42.6%	43.3%	44.0%	6.9%
South Wastewater Treatment Plant												
Annual Flow (MG)	346.8	353.5	359.5	365.6	371.8	378.1	384.6	391.1	397.7	404.5	411.3	64.6
Average Daily Flow (MGD)	**0.950**	**0.97**	**0.98**	**1.00**	**1.02**	**1.04**	**1.05**	**1.07**	**1.09**	**1.11**	**1.13**	0.18
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	_
% of Total Plant Capacity Used	63.3%	64.6%	65.7%	66.8%	67.9%	69.1%	70.2%	71.4%	72.6%	73.9%	75.1%	11.8%

However, the wastewater plants are normally designed for more flow per connection, as higher use is possible from future connections. Higher use is also possible from existing connections, without additional development (for example, higher occupancies in residences and hotels or changes in use of non-residential properties). The table that follows shows flow projections based on 300 gpd/LUE for existing and new development.

Projected Wastewater Treatment Plant Flows												
		Projected Averages										Increase
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2012-2022
Total Average Daily Flow (MGD)	**1.507**	**2.030**	**2.065**	**2.100**	**2.135**	**2.172**	**2.209**	**2.246**	**2.284**	**2.323**	**2.362**	**0.855**
Case 2: Future LUEs at 300 gpd												
LUE	6654	6767	6882	6999	7118	7239	7362	7487	7614	7743	7874	1220
Average Daily Flow per LUE (gpd)	**226.5**	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
North Wastewater Treatment Plant												
Annual Flow (MG)	203.3	273.9	278.5	283.3	288.1	293.0	298.0	303.0	308.2	313.4	318.7	115.4
Average Daily Flow (MGD)	**0.557**	**0.75**	**0.76**	**0.78**	**0.79**	**0.80**	**0.82**	**0.83**	**0.84**	**0.86**	**0.87**	0.32
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	_
% of Total Plant Capacity Used	37.1%	50.0%	50.9%	51.7%	52.6%	53.5%	54.4%	55.3%	56.3%	57.2%	58.2%	21.1%
South Wastewater Treatment Plant												
Annual Flow (MG)	346.8	467.2	475.1	483.2	491.4	499.7	508.2	516.9	525.6	534.5	543.6	196.8
Average Daily Flow (MGD)	**0.950**	**1.28**	**1.30**	**1.32**	**1.35**	**1.37**	**1.39**	**1.42**	**1.44**	**1.46**	**1.49**	0.54
Plant Capacity (MGD)	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	_
% of Total Plant Capacity Used	63.3%	85.3%	86.8%	88.3%	89.8%	91.3%	92.8%	94.4%	96.0%	97.6%	99.3%	36.0%

When both existing Wastewater Treatment Plants are evaluated against TCEQ minimum requirements for both 2022 Projected Wastewater System conditions (7,874 connections at 1.787 MGD and 2.362 MGD), facilities meet or exceed TCEQ minimum requirements.

The South Wastewater Treatment Plant is expected to exceed 75% of flow capacity (1.125 MGD) during the ten year period, requiring the design of a plant expansion in accordance with TCEQ regulations. The TCEQ requires that facilities begin engineering and financial plans once flows reach 75% of a facility and require construction to begin once flows reach 90%.

For this reason, included in the Master Infrastructure Plan is a 0.5 MGD expansion. With contingencies, engineering, and surveying, the total Wastewater Treatment Plant expansion cost estimate amounts to $4.20M. Since the expected new development from 2012 to 2022 is not expected to use this capacity, this cost is not included in the maximum impact fee calculation.

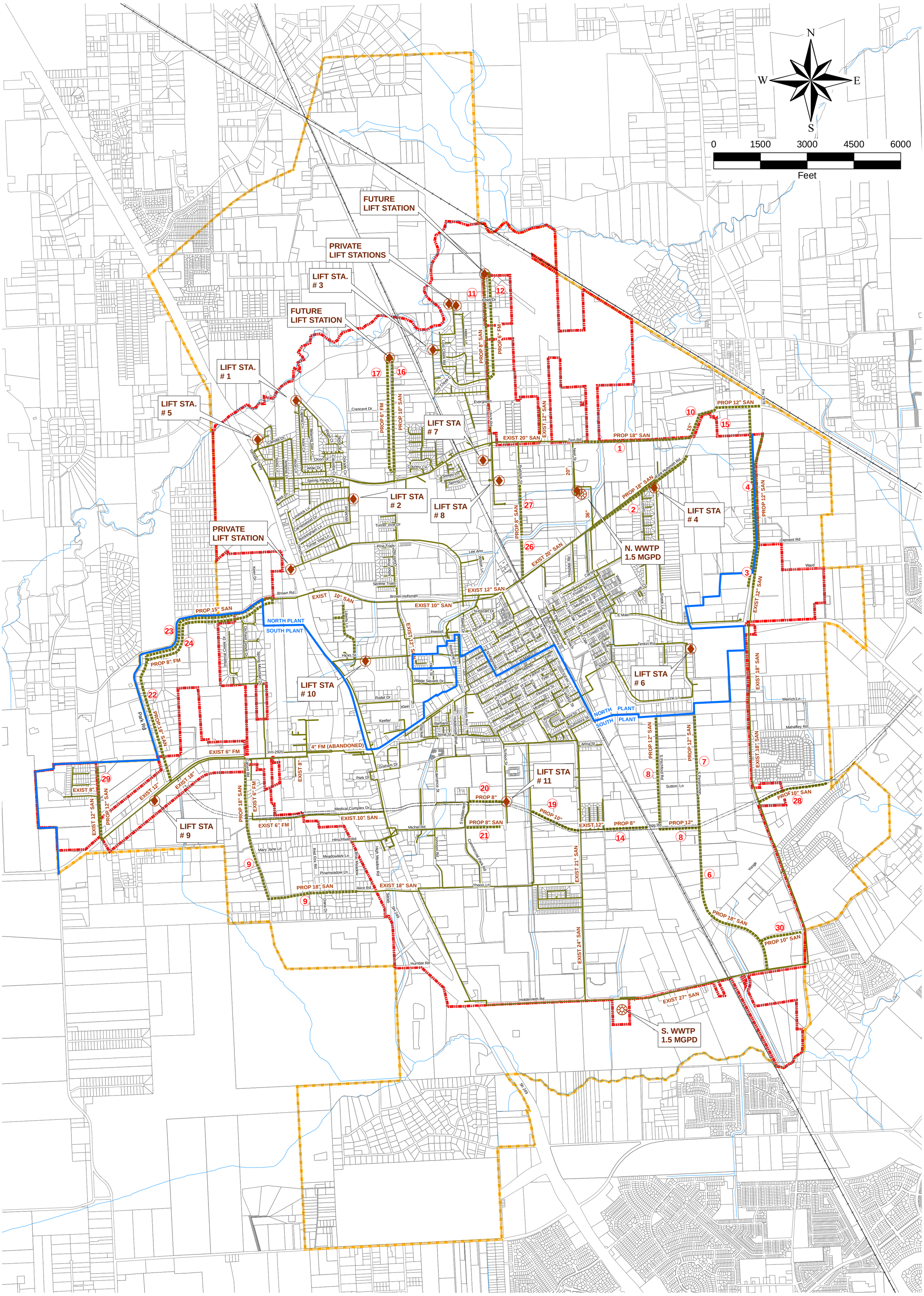
Projected development may also overload existing lift stations. Individual lift station demand vs capacity will have to be monitored to determine when pump or wet well upgrades are needed or required. Three new lift stations are included in the Capital Improvement Plan (CIP) cost estimate table for wastewater collection lines.

To meet projected needs, the City will require additional sanitary sewer collection lines to serve developing areas. The following table provides a summary of the projected wastewater collection system demands, for end of FY 2022 with estimated loads distributed utilizing land use and density projections. The 15.7 mile total of additions represents a 19.7% increase in the wastewater collection network. Estimated future wastewater collection system costs in 2013 dollars, amount to $13.5M.

Sanitary Sewer Unit Cost Data used to calculate the 10-year Wastewater Collection System CIP costs can be found in APPENDIX C. Costs do not include allowances for private crossings (RR or pipeline), legal or fiscal costs, or right of way acquisition costs.

Future Wastewater Collection System Projects, 2012 to 2022

Project No.	Description	Priority (1)	Quantity	Units	Unit Cost (2)	Total Cost
1	18-inch Gravity Sanitary Sewer along Zion Road from Neal Street to Cabotway Road	1	2,600	LF	$222.00	$577,200.00
2	18-inch Gravity Sanitary Sewer along E. Hufsmith Road from existing 36-inch line to Zion Road	2	3,900	LF	$222.00	$865,800.00
3	12-inch Gravity Sanitary Sewer along F.M. 2978 from north of F.M. 2920 to Dement Road	2	1,400	LF	$142.00	$198,800.00
4	12-inch Gravity Sanitary Sewer along F.M. 2978 north of Dement Road	2	3,600	LF	$142.00	$511,200.00
5	8-inch Gravity Sanitary Sewer along Liberty Lane from Hicks	2	2,000	LF	$92.00	$184,000.00
6	18-inch Gravity Sanitary Sewer along S. Persimmon Street from Agg Road to Holderrieth Road	3	5,600	LF	$222.00	$1,243,200.00
7	12-inch Gravity Sanitary Sewer along S. Persimmon Street north of Agg Road	3	3,600	LF	$142.00	$511,200.00
8	12-inch Gravity Sanitary Sewer along S. Pitchford Road and Agg Road to S. Persimmon Street	3	4,700	LF	$142.00	$667,400.00
9	18-inch Gravity Sanitary Sewer along Calvert Road and Alice Road from F.M. 2920 to SH 249	3	8,100	LF	$222.00	$1,798,200.00
10	15-inch Gravity Sanitary Sewer along Zion Road and E. Hufsmith Road from Cabotway Road to Stanolind Rd	3	2,600	LF	$182.00	$473,200.00
11	8-inch Gravity Sanitary Sewer along Ulrich Road	3	3,500	LF	$92.00	$322,000.00
12	6-inch Force Main along Ulrich Road	3	3,600	LF	$62.00	$223,200.00
13	Lift Station at the end of Ulrich Road (Design Flow = 375 gpm)	3	1	LS	$400,000.00	$400,000.00
14	8-inch Gravity Sanitary Sewer along Agg Road east of Mulberry Street	3	1,300	LF	$92.00	$119,600.00
15	12-inch Gravity Sanitary Sewer along E. Hufsmith Road from Stanolind Road across F.M. 2978	4	1,600	LF	$142.00	$227,200.00
16	10-inch Gravity Sanitary Sewer along Quinn Road	4	4,000	LF	$112.00	$448,000.00
17	6-inch Force Main along Quinn Road	4	4,200	LF	$62.00	$260,400.00
18	Lift Station at the end of Quinn Road (Design Flow = 430 gpm)	4	1	LS	$400,000.00	$400,000.00
19	10-inch Gravity Sanitary Sewer along the Future Medical Complex Drive west of Cherry Street	4	1,800	LF	$112.00	$201,600.00
20	8-inch Gravity Sanitary Sewer along the Future Medical Complex Drive west of School Street	4	1,100	LF	$92.00	$101,200.00
21	8-inch Gravity Sanitary Sewer along the Future Michel Road extension east of Commercial Park Drive	4	1,200	LF	$92.00	$110,400.00
22	18-inch Gravity Sanitary Sewer along Park Road from FM 2920 to Brown Road	4	4,500	LF	$222.00	$999,000.00
23	15-inch Gravity Sanitary Sewer along Brown Road from Park Road to Orchard Grove Drive	4	5,200	LF	$182.00	$946,400.00
24	8-inch Force Main along Brown Road from Orchard Drive to Park Road	4	5,200	LF	$72.00	$374,400.00
25	Lift Station at Brown Road and Orchard Grove Drive (Design Flow = 1,000 gpm)	4	1	LS	$550,000.00	$550,000.00
26	8-inch Gravity Sanitary Sewer along Rudolph Road north of E. Hufsmith Road	4	1,200	LF	$92.00	$110,400.00
27	8-inch Gravity Sanitary Sewer along Rudolph Road south of Zion Road	5	2,400	LF	$92.00	$220,800.00
28	10-inch Gravity Sanitary Sewer along the Future Med Complex east of Hufsmith-Kohrville Road	5	2,200	LF	$112.00	$246,400.00
29	8-inch Tomball Cemetery Rd north of FM 2920	6	1,000	LF	$92.00	$92,000.00
30	10-inch Gravity Sanitary Sewer along Spell Road from S Persimmon to FM 2978	6	1,000	LF	$112.00	$112,000.00
	(1) Priority Rating of 1 is highest priority and 5 is lowest priority		83,100		**Construction Total**	**$13,495,200.00**
	(2) Unit Price for Gravity Sanitary Sewer Includes Manholes					



Tomball Master Plan
Sanitary Sewer System

CLR, Inc.
Engineers • Surveyors • GIS
19530 FM-362, Waller, Texas 77487 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_SEWER-2234.mxd 04/04/2014

7.0 Drainage System

Introduction

The City of Tomball lies predominantly within the Spring Creek (J100-00-00) and Willow Creek (M100-00-00) watersheds in northwest Harris County. Rainfall runoff within the City and ETJ may travel overland, or be collected by drainage networks, and routed to natural or manmade (engineered) local drainage channels. The collector networks are typically roadside ditches, with culverts passing stormwater flows beneath paved areas, but also include curb and gutter applications draining to buried storm sewers.

Willow Creek serves a majority of the City of Tomball (4,333 acres) and its ETJ (3,873 acres), generally south of FM 2920 and west of SH 249, while Spring Creek drains the remaining area (3,337 acres and 1,642 acres respectively), with the exception of a small area in the far southern ETJ which drains to Cypress Creek. The Federal Emergency Management Agency (FEMA) Effective Flood Insurance Rate Map (FIRM) panels reflect significant 1% 100-year floodplains for both Willow Creek and Spring Creek. The City of Tomball has also mapped the Willow Creek floodplain beyond the FIRM map continuing north of FM2920 in the report titled "Willow Creek Tributary M124-00-00 Preliminary Engineering Report for Extension Improvements" (DRAFT), Lockwood, Andrews & Newnam, Inc., September, 2013. Both creeks are natural unimproved channels, and based on a review of the 2013-2014 Harris County Flood Control District (HCFCD) Capital Improvement Program, which covers planning through 2018, HCFCD has no current plans to improve either creek.

A large portion of the land area within the City and ETJ is either undeveloped or lightly developed. Future development in the City will be regulated to prevent structural flooding during extreme rainfall events up to and exceeding the 1% 100-year storm. Floodplain and drainage regulations in Harris and Montgomery counties also provide protection from structural flooding for new development in the City's ETJ.

Floodplain Regulation

Regulation of development activity within the City of Tomball and ETJ is shared with HCFCD, and Harris and Montgomery county engineering. HCFCD is authorized by the State of Texas to regulate activity that may impact the waters of rivers and streams and their tributaries within Harris County, this includes both Spring Creek and Willow Creek. Regardless of the permitting authority, the requirements of the jurisdiction must meet the minimum standards expressed in National Flood Insurance Program (NFIP) Title 44, Code of Federal Regulations (CFR), Section 60.3.

Development within the City of Tomball is governed by Chapter 38, "Flood Damage Prevention", of the City of Tomball Code of Ordinances which was last updated in October, 2010. Chapter 38 includes all of the minimum standards mandated by the NFIP (44 CFR § 60.3) plus a number of higher standards such as requiring that the first floor elevation of new or substantially-improved buildings be elevated to at least 1.5 feet above the base flood elevation (1% 100-year BFE). Harris County also requires 1.5 feet of freeboard above the 1% 100-year BFE for the first floor of new and substantially-improved buildings, and other provisions of the regulations exceed federal minimum standards as well. The Montgomery County floodplain court order requires one foot of freeboard for development within the regulatory floodplain.

In 2011 the City contracted for development of maps that would identify high-risk flood-prone areas within Tomball that were delineated within the regulatory floodplain on FEMA FIRM panels. 1% 100-year and 0.2% 500-year flood-prone area maps were developed for all areas within the City limits and most of the ETJ that are not included in the FEMA regulatory floodplain. In May, 2013, City Council adopted these maps by resolution (2013-19) extending Chapter 38 to apply to areas delineated on these maps within the City limits. Development within the ETJ is not affected by this resolution; however, if any portion of the ETJ in Harris County or Montgomery County is annexed by the City, then Chapter 38 would govern future development in those areas.

The FEMA floodplain data for Harris County used in this report is from the Flood Insurance Study (FIS) and DFIRM effective June 18, 2007. Floodplain data for Montgomery County is from the preliminary FIS and PDFIRM dated September 20, 2008, and is not effective as of this writing.

Drainage Regulation

In August, 2012, City Council adopted Ordinance No. 2011-17 which amended Chapter 38 to include Article IV, Drainage Design. Article IV states that the local drainage regulations will be expressed in the "City of Tomball Minimum Standards for Stormwater Drainage System Design" manual (Standards). Prior to amending Chapter 38 to include Article IV., the City informally utilized the drainage criteria issued by Harris County for guiding local development. The drainage policies of Harris County ("Regulations of Harris County, Texas, for the Approval and Acceptance of Infrastructure", amended May 1, 2011) still apply to development in the Tomball ETJ that lies within that county. The drainage policies of Montgomery County apply to the ETJ within that county.

The City of Tomball Standards provide protection from structural flooding for new development by mandating that the minimum first floor elevation of a proposed structure be the highest of:

- Eighteen inches (18") above the 1% probability recurrence interval (100-year) flood event; or,
- One foot (1') above the elevation of the center of the road or nearest sanitary or storm sewer manhole, whichever is higher; or,
- One foot (1') above the calculated ponding depth (as discussed in the Standards).

The Standards also provide protection for mobility in the design and construction of roadways that may be designated for emergency evacuation and emergency services. In general, the Standards specify the use of a 50% 2-year storm event for the design of storm sewers and roadside ditch collection systems while requiring that the water surface elevation during a 1% 100-year event not threaten structural flooding. The design of open channel stormwater conveyance is provided by the "HCFCD Policy Criteria and Procedure Manual" (current edition dated December 2010).

The Standards provide the requirements for on-site stormwater detention whenever new development may result in an increase in runoff from the site. Exceptions to these requirements are noted for specific instances including the availability of regional detention volume. Where regional detention volume is available, the City may assess an impact fee based on the acreage being developed in lieu of requiring on-site detention. In addition, a developer may be responsible for the cost of conveying the increased runoff to the conveying channel and/or funding improvements to the

conveying channel in order to accommodate the proposed increased flow volume. Currently, the availability and maximum amount of stormwater detention fee that may be assessed for new development is established by City Ordinance No. 2009-12.

Design Criteria

The City of Tomball Engineering and Planning Department established Minimum Standards for Stormwater Drainage Design effective September 6, 2011.

- *A 2-year rainfall design storm event is used for sizing storm sewers in newly developed areas. Existing storm drainage is evaluated using a 2-year design storm with proposed design based on resultant hydraulic gradient. Design of roadside ditches also utilizes a minimum 2-year rainfall.*
- *Design frequency for overland flow considers extreme storm events (1% 100-year storm) from the development to the primary outlet.*
- *Design and construction standards for open channel and outfalls into channels shall conform to those in the HCFCD Criteria Manual.*
- *Stormwater detention volume for redevelopment areas is calculated on the basis of the amount of area of the redeveloped impervious cover or the detention factor for the entire site, determined by the basin the project is located in.*
- *Stormwater detention volume serving the City, but within the ETJ in Harris County, fall under HCFCD Criteria.*

Watersheds

The City and its ETJ within Harris County are primarily drained by tributary channels to either Spring Creek or Willow Creek watersheds, with the exception of a small area of the southern ETJ which drains to Cypress Creek, see **Tomball Master Plan Drainage Systems Exhibit**. The area within the City and ETJ in Harris County to the north of FM 2920 and east of SH 249 primarily drains to Spring Creek through **J131-00-00** (Boggs Gulley) or J100E (served by J132-00-00 & J133-00-00). The remaining area primarily drains to Willow Creek to the south.

The five main tributaries providing drainage for the City to Willow Creek are:

- **M116-00-00** serves an area of the eastern City and ETJ and eventually makes outfall to Willow Creek in unincorporated Harris County east of the Tomball ETJ.
- **M118-00-00** is being developed to serve an area in southeastern Tomball that was previously drained by M116-00-00.
- **M121-00-00** is being extended and improved to serve a large area in the southern portion of the City.
- **M125-00-00** serves an area adjacent to SH 249 primarily in the southwestern part of the City.
- **M124-00-00** serves a large area in the western portion of the City and ETJ and extends well north of FM 2920.

The characteristics of each of the watershed sub-basins that drain through these channels will be discussed in detail later in this chapter.

The ETJ within Montgomery County drains to Spring Creek through several intermittent streams and through the Decker Branch to Mill Creek. Drainage in the Montgomery County ETJ is not explored in detail in this IMP except in reference to sub-basin J100E

Drainage Sub-Basins

In this document, the term "watershed" is reserved for the area drained by a main channel such as Spring Creek or Willow Creek, while the term "sub-basin" is used to refer to the tributary areas that aggregate to form the larger watershed. The term "catchment" may also be used interchangeably to refer to the same drainage area as "sub-basin".

This section of the Tomball IMP provides drainage and related information for seven primary sub-basins serving the Tomball ETJ in Montgomery County including:

Spring Creek Watershed: J131 and J100E

Willow Creek Watershed: M116, M118, M121, M125, and M124

Several other sub-basins provide drainage for areas of Tomball and the ETJ, but are not discussed in detail since their role is minor, and are described as follows:

M100F2 serves an area within the City limits that lies along both sides of the southern portion of SH 249 which drains by roadside ditches to Willow Creek and an area within the ETJ south of Holderrieth Road and east of SH 249 that is largely within the regulatory floodplain and drains to the creek through overland flow.

An area of the ETJ south of Holderrieth Road and west of SH249 is situated in the M100F1 and M100E sub-basins. M123-00-00 drains a portion of M100F1, but the 1999 Willow Creek study did not disclose any recommended improvements for this channel or for the sub-basin. None of the area within these two sub-basins includes territory within the City limits.

Areas of the ETJ east of the City are located within sub-basins M112A and M112B-C. The channel serving these two basins, M112-00-00 lies within unincorporated Harris County beyond the Tomball ETJ.

The far northern portion of the ETJ in Montgomery County is located in sub-basin J403E. This area is only sparsely developed and large portion is within the FEMA preliminary 1% 100-year floodplain of the Decker Branch to Mill Creek and Mill Creek.

M116

The IMP drainage area identified as M116 comprises an area of approximately 1575 acres located in the eastern portion of the City of Tomball (466 acres) and ETJ (559 acres). M116 is bounded generally by Main Street (FM 2920) along the north and east, a drainage divide with M100G along the south, and Hufsmith-Kohrville Road (FM 2978), and the Burlington Northern and Santa Fe Railroad tracks jumping to FM 2978 to the

west (see Exhibit). M116 is formed from a portion of TSARP catchment M116A_C by removal of the IMP drainage area identified as M118 and by minor modifications to the northeastern boundary.

The M116 drainage area is served by HCFCD channel M116-00-00 which outfalls to Willow Creek beyond the ETJ. M116-00-00 is primarily located in the county and ETJ, and HCFCD has not identified project funding for improvements within the current five-year CIP.

A visual inspection of the 2012 aerial photography reveals much of the M116 service area to be undeveloped.

New development resulting in stormwater runoff impacts will require on-site detention as impact fees are not available for this area.

M118

The IMP drainage area identified as M118 consists of an area of approximately 732 acres located in the southeastern portion of the City of Tomball (679 acres) and ETJ (53 acres). M118 is bound by the Burlington Northern and Santa Fe Railroad tracks along the western perimeter, the projection of Mahaffey Rd to the north, along Hufsmith-Kohrville Road on the east, and Willow Creek to the south (see Exhibit). M118 is formed from the southwestern portion of TSARP catchment M116A_C and a northwestern portion of TSARP catchment M100G.

M118-00-00 Channel and stormwater detention improvements are currently under development in the area south of Holderrieth Road and north of Willow Creek.

A visual inspection of the 2012 aerial photography reveals much of the M118 service area to be rural and undeveloped.

Payment of a drainage impact fee in lieu of on-site detention is available for new development in M118 at a maximum rate of $6,023.90 per acre.

M121

M121 encompasses an area of approximately 1,790 acres south of the City of Tomball (1,511 acres) and ETJ (279 acres). Its boundary extends from Main Street (FM 2920) south along the Burlington Northern and Santa Fe Railroad tracks to the east, then along Willow Creek and Holderrieth Road to the south, and eventually along a varied boundary intersecting Main near Vernon Avenue (see Exhibit). For management and analysis purposes, M121 was divided into three sub-basins: M121 East (538 acres), M121 West (993 acres), and M121 Detention (259 acres), with South Cherry Street providing a boundary between M121 East and West, and Holderrieth Street separating the detention area. M121 East and West lie mainly within the City limits while the detention area is primarily within the ETJ.

M121 is formed exclusively from TSARP catchment M100F2 with a portion of that original basin along SH 249 and Willow Creek remaining as M100F2. The M121 drainage area is served by HCFCD channel M121-00-00 which outfalls to Willow Creek.

A visual inspection of the 2012 aerial photography reveals much of the M121 East service area to be rural and undeveloped and there is little development within the boundaries of the detention area. The northern-most portion of M121 West service area includes the section of Old Town south of West Main, while the area to the south of Medical Complex Drive is largely rural and undeveloped.

M121 West detention volume is in place to serve this area, however basin and channel construction are expected to be completed by the end of CY 2015. *Payment of a drainage impact fee in lieu of on-site detention is available for new development in M121 West at a maximum rate of $4,985.14 per acre.*

M121 East channel and storm water detention improvements are under development in the area south of Holderrieth Road and north of Willow Creek, however final engineering design is on hold. *Payment of a drainage impact fee in lieu of on-site detention is available for new development in M121 East at a maximum rate of $6,828.71 per acre.*

M124

M124 comprises an area of approximately 2,930 acres extending from just south of the Lone Star College – Tomball campus on the north to an outfall to Willow Creek along the southwestern boundary of the City of Tomball (1,129 acres) and ETJ (924 acres). The basin includes drainage areas to the east and west of SH 249 and the SH 249 Expressway and is bounded primarily by J131 and M125 to the east and M100E, M100J and J100E along the west and north (see Exhibit).

M124 is formed primarily from TSARP catchments M124_A and M124B_C, and also includes areas previously included in M100J and J131. The drainage area is served by HCFCD channel M124-00-00 which outfalls to Willow Creek to the west of SH 249. The basin is the largest of the Tomball area basins draining to Willow Creek and includes a substantial area in the ETJ and unincorporated Harris County.

A visual inspection of the 2012 aerial photography reveals much of M124 to be undeveloped or lightly developed with dense commercial development in the vicinity of the SH 249/West Main Street interchange and the SH 249 Expressway and FM 2920 interchange.

New development resulting in stormwater runoff impacts will require on-site detention. Currently no impact fee has been adopted by the City of Tomball for this basin. However, this report includes a calculation for consideration.

M125

M125 is composed of an area of approximately 675 acres extending south from Hicks Street with meandering boundaries to Willow Creek along the southern boundary of the City of Tomball (496 acres) and ETJ (160 acres). This basin includes drainage areas to the east and west of SH 249 and the SH 249 Expressway and is bounded primarily by M121 West and M100F2 along the east and M124 along the west (see Exhibit).

M125 is formed from portions of TSARP catchments M100F1 and M100F2. The drainage area is served by HCFCD channel M125-00-00, a manmade channel, which outfalls to Willow Creek west of SH 249.

A visual inspection of the 2012 aerial photography reveals much of the M125 service area east of the Expressway to be developed while the area to the west is lightly developed or serving as stormwater detention.

Payment of a drainage impact fee for channel improvements is currently assessed for new development in M125 at a maximum rate of $574.40 per acre.

J131

J131 encompasses an area of approximately 3,156 acres including a major portion of Old Town north of Main Street in the City of Tomball (2297acres) and ETJ (472 acres). The basin is bound by the Spring Creek floodplain in the northeast, and roughly along Hufsmith-Kohrville Road (FM 2978) to the east, Main Street (FM 2920) to the south, and shares basin boundaries with M125 and M124 to the west, and along the drainage divide with J100E to the west (see Exhibit).

J131 is primarily formed from TSARP catchment J131 (with an area of the TSARP basin to the west of Quinn Road transferred to M124). The drainage area is served by HCFCD channel J131-00-00 (Boggs Gully) which outfalls to Spring Creek west of FM 2978. HCFCD tributaries that outfall to J131-00-00 include J131-01-00 in the eastern portion of the basin; J131-03-00, manmade channel serving an older developed portion of the City east of the BNSF RR tracks; and, J131-04-00 and J231-00-00, manmade channels that provide relief to smaller, more sparsely developed areas of the central and western basin.

A visual inspection of the 2012 aerial photography reveals that J131 encompasses most of Old Town, north of FM2920, and other densely developed commercial and residential areas near the downtown area, more sparsely developed commercial and residential areas apart from the downtown area, and large areas of undeveloped property, particularly in the far north and eastern regions of the basin.

Proposed improvements for J131-00-00 (Boggs Gully) have been completed. No other drainage channel improvement projects are being pursued at this time. New development resulting in stormwater runoff impacts will require on-site detention as impact fees are not available for this area.

The "Draft Tomball Downtown Specific Plan" (DSP), August, 2011, recommends storm sewer improvements and sub-regional detention for the downtown area of J131 in order to alleviate existing flooding concerns and reduce the potential for increased flooding related to expected redevelopment. According to the DSP, the area to be served by the proposed Project 4 ("North Storm Sewer Trunk Line") and Project 5 ("Detention Pond and Outfall Structure") extends from Main Street to roughly Epps Street to the north and from around Magnolia Street to the west to Elm Street to the east. A separate proposed storm sewer trunk line improvement project (Project 3) would provide drainage relief for an area west of Magnolia Street and connect to an existing storm sewer trunk line that discharges to Boggs Gully. The estimated cost for Projects 4 and 5, which must both be completed to provide relief, is estimated to be approximately $2.2 million; while the estimated cost for Project 3 is $0.3 million.

J100E

J100E is composed of approximately 6,572 acres along Spring Creek from the northern-most point in the City of Tomball to well west of the City limits (1,040 acres) and ETJ (1,170 acres). The basin includes a major portion of the ETJ in Montgomery County extending east from SH 249.

Within the City of Tomball, the basin shares boundaries with basins J131 and M124, and includes the Lone Star College – Tomball campus (see Exhibit). The IMP boundaries of this basin are consistent with the TSARP catchment boundaries.

A visual inspection of the 2012 aerial photography shows a good deal of residential development in the Tomball portion of the J100E basin with commercial development along SH 249. Heavily vegetated areas along both banks of Spring Creek remain undeveloped and are proximate to the 1% 100-year floodplain of the channel.

HCFCD is responsible for management of Spring Creek and increased drainage outfall volumes to the channel are not permitted by the District.

Proposed improvements for J132-00-00 & J133-00-00 have been completed. No other drainage channel improvement projects are being pursued at this time. New development resulting in stormwater runoff impacts will require on-site detention as impact fees are not available for this area.

Adequacy of Existing System

Drainage System

The majority of the existing storm sewer system meets the regulatory requirements of the City of Tomball. However, several properties located within the Old Town/mixed use area have recorded NFIP flood claims. Evaluation of flood risk in these areas should be assessed to determine the extent infrastructure meets current performance standards.

Channel System (Conveyance)

The adequacy of the existing storm water drainage channel system by sub-basin is as follows:

M116, M118, & M125

The M116, M118, & M125 drainage areas do not require channel conveyance improvements for existing development.

M121

The M121 drainage area will require channel conveyance improvements for existing development.

Downtown flooding south of FM 2920 is expected to be relieved when channel M121-01 connecting to the Hardin Street drainage ditch is completed. Localized flooding, particularly in older developed areas such downtown, may be related to inadequate drainage network infrastructure, poor maintenance of infrastructure, or structures being at risk of inundation during an extreme event due to a lack of elevation above adjacent natural ground. There are several structures located in the older developed area of M121 West that have flood claims filed under the NFIP. Uninsured structures may have also flooded, but the NFIP would have no record of such occurrences.

Since basin-wide drainage studies typically do not focus on the adequacy of localized collector networks, an evaluation of such networks is advised where there is a history of flooding.

M124

The M124 drainage area will require channel conveyance improvements for existing development.

This area, which is in the ETJ, includes several structures having experienced NFIP repetitive flood losses along with many structures deemed to be at risk of flooding by HCFCD. Most of these properties are beyond the limits of the 1% 100-year regulatory floodplain.

The western extents of M124 along and south of FM 2920 is also populated with large numbers of at-risk structures and several repetitive loss properties located within the City limits, ETJ, and unincorporated Harris County.

J131

The J131 drainage area will require channel conveyance improvements for existing development.

There are over 600 structures within J131 determined to be at risk of flooding by HCFCD. Of that number, almost 500 are located within the City limits of Tomball. Within the City, these properties tend to be clustered in three areas:

- A residential neighborhood located south of East Hufsmith Road and west of Snook Lane;
- A mixed use area east of the BNSF RR tracks, south of East Hufsmith Road, north of East Main Street and west of the J131-03-00 channel, and including a cluster of structures just to the east of North Willow Street; and,
- The Old Town/mixed use area bounded by Hufsmith Road on the north, the BNSF RR tracks to the east, West Main to the south, and the J131-00-00 drainage alignment to the west, with an additional cluster located between the alignment and Quinn Road.

In addition, there are several properties located within the Old Town/mixed use area that have recorded NFIP flood claims. Information from the Infrastructure GIS database, along with the expertise of Engineering Division staff, should be utilized to assess the flood risk in these areas to determine if the infrastructure meets current performance standards.

J100E

The J100E drainage area does not require channel conveyance improvements for existing development.

Detention System

The City of Tomball currently provides offsite detention capacity for sub-basins M118, M121 & M125 suitable for future land use development.

Projected Improvements

Projected increases in development acreage is within all watershed sub-basins, however for 10-year constructability, sub-basins selected for improvements are limited to M118, M121, M124, & J131. Projected drainage system improvements identified for end of FY 2022, with acreage distributed utilizing land use and density projections include:

M118

A preliminary engineering report (PER) for construction of M118-00-00 and the associated detention facility was issued in November, 2009. The detention basin south of Holderrieth Road is partially excavated, and the channel is partially completed south of Holderrieth Road. The Tomball Economic Development Corporation (TEDC) is expected to fund a portion of channel construction which is to be completed by the end of 2014. The expected completion date for remaining channel improvements is unknown. The improvements are being constructed to provide drainage for existing and future development in this area while eliminating the need for on-site stormwater detention.

M121

A PER was published in November 2009 that recommended channel improvements allowing for full development in the M121 basin. A major portion (volume) of M500 (M121 Detention - 258.38 acres) has been excavated by private parties under contract with HCFCD who owns and administers this facility. The proposed improvements are being constructed to alleviate localized flooding and to provide drainage infrastructure for new development in this area while eliminating the need for on-site stormwater detention.

M125

The FY 2012-2015 CIP status report, dated November 2011, states that an inter-local agreement was signed by the City and HCFCD in February 2008 for M125-00-00 channel improvements between Barbara Street and Willow Creek. The detention basin serves drainage from existing development. The City of Tomball will be responsible for funding expansion of the detention pond to provide storage volume for new development. On-site detention is required for new development. The proposed channel and detention improvements to serve existing development have been achieved and drainage regulations are adequate to assure that increased runoff from future development is managed appropriately.

M124

A feasibility study for extension improvements to M124-00-00 was prepared September 2013. According to the report, the preferred plan for improvements would include a channel designed to accommodate flows from the 1% 100-year event and detention storage to "mitigate increased conveyance from the proposed channel improvements and the loss of floodplain in the overbanks of the proposed channel." The cost of the project was estimated to be $48.2 million. Planning and execution of the project would require coordination with Harris County and HCFCD. The FY 2013-2017 CIP status report states that the proposed project has been divided into two phases: M124 North (from FM 2920 to SH 249) and M124 South (from FM 2920 southward). Also, a southern drainage area to be served by a future channel to M124-00-00, flowing east to west and just south of Hirschfield Farms should be considered in future planning for improvements to the M124-00-00 channel.

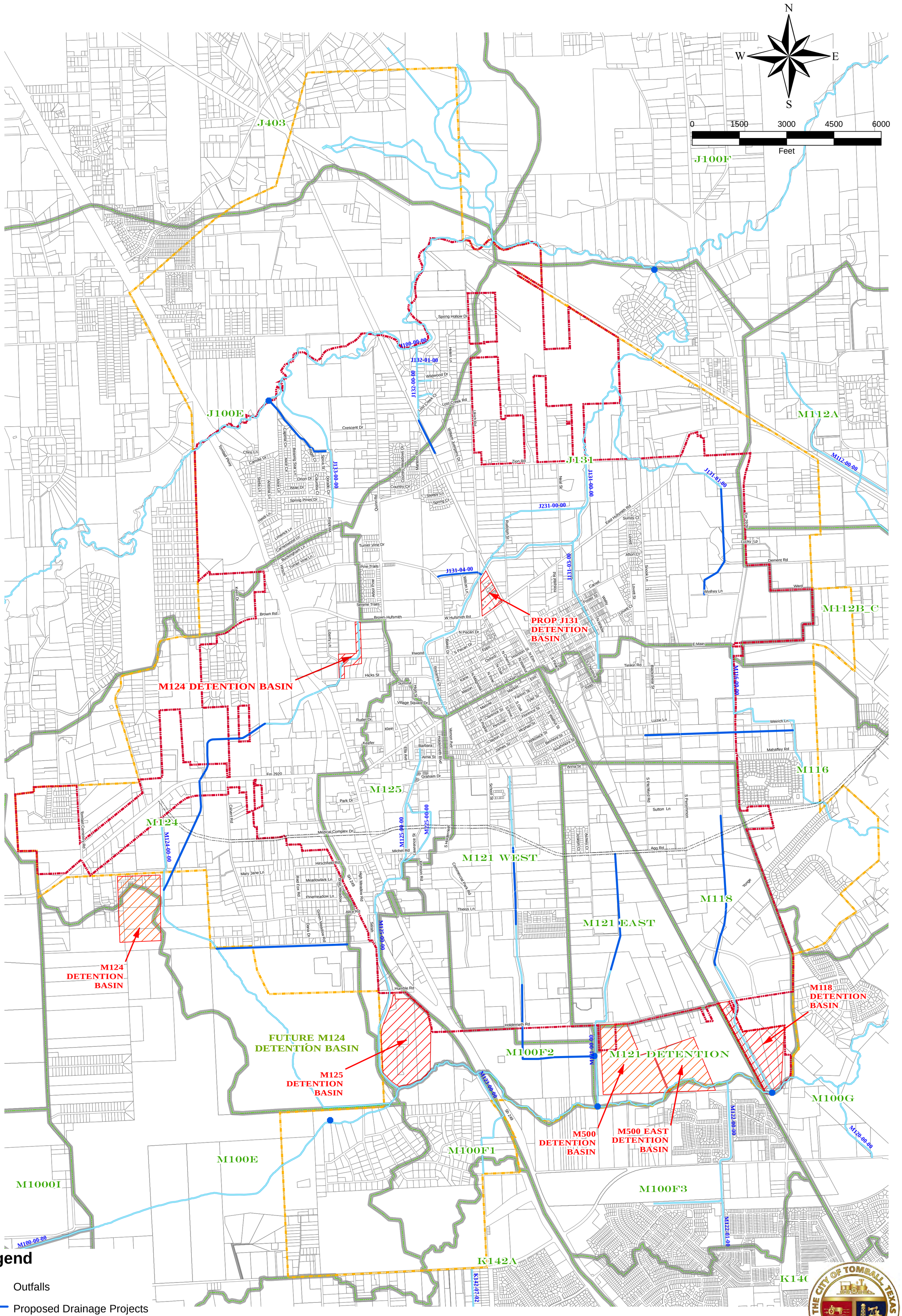
Summary

Estimated channel drainage system project costs for projected growth to 2022 amounts to $46.95M. Estimated detention improvements costs for projected growth to 2022 amounts to $42.17M. Drainage Unit Cost Data used to calculate the 10-year Drainage Channel & Detention System CIP costs can be found in APPENDIX C.

Future Drainage System Projects, 2012 to 2022

HCFCD Channel No.	Total Basin Area Served (Acres)	Construction Project	Estimated Length (Ft)	Estimated Volume (Acre-Ft)	Unit Cost	Estimated Channel Improvement Costs[1]	Estimated Detention Improvement Costs[1]
J131[2]	3,156	Detention & Conveyence	3,750		N/A[4]	$2,216,433	
J132[2]	250	Channel	1,250		$ 591.05	$738,811	
J133[2]	500	Channel	2,500		$ 591.05	$1,477,622	
M116[2]	1,575	Channel	4,750		$ 591.05	$2,807,482	
M116[2]	1,575	Detention		300	$ 27,616.87		$8,285,060
M118	732	N of EDC Project	4,100		$ 591.05	$2,423,300	
M118	732	EDC Project	2,300		$ 591.05	$1,359,412	
M118	732	S of Holderrieth + Detention	1,200	226	$ 591.05	$709,259	$1,790,741
M121 East	629	Channel	3,750		$ 591.05	$2,216,433	
M121 East	629	Detention		157	$ 27,616.87		$4,335,848
M121 West	1,161	Channel	2,450		$ 591.05	$1,448,070	
M121 West	1,161	Channel	4,750		$ 591.05	$2,807,482	
M121 West	1,161	Detention		215	$ 27,616.87		$5,937,626
M124[2]	2,930	Channel	4,000		$ 591.05	$2,364,196	
M124[2,3]	2,930	Channel	10,400			$26,377,589	
M124[2,3]	2,930	Detention		642			$21,818,344
		Totals	45,200	1,540		$46,946,090	$42,167,620

(1) Limited to Proposed Facilities estimates, including engineering & contingencies when no improvements exist.
(2) The current CIP does not include channel or detention construction within the next ten years.
(3) From 2013 LAN Estimate of Probable Costs; Includes Pipeline Adjustments and Land Acquisition
(4) Projects and costs identified in the Downtown Specific Plan


N
W
E
S
0
1500
3000
4500
6000
Feet
J403
J100F
J100E
M112A
J131
J131-00-00
J131-01-00
J231-00-00
J131-03-00
J131-04-00
M112-00-00
Fm 2978
Lucky Lp
Dement Rd
Ward
M112B_C
Winfrey Ln
PROP J131
DETENTION
BASIN
J100-00-00
J132-01-00
J132-00-00
Spring Hollow Dr
Wildwood Dr
Lost Creek Ct
Lost Creek Rd
Ulrich Rd
William Juergens Dr
Zion Rd
Helen Ln
Crescent Dr
Chris Ln
Camille Dr
Capella Cir
Alice Cir
Bearing Star Ln
Rudel Ct
Spica St
Orion Dr
Columba Ct
Dorado Cir
Altair Dr
Spring Pines Dr
Heidi Ln
Stella Ln
Antonia Ln
Alice Ln
Tomball Pkwy
J133-00-00
Country Meadows Dr
Country Cir
Marlene Rd
Quinn Rd
Sleepy Ln
Spring Ct
Limerick Ln
Carnegwood Ln
Buckingham Ln
Turner Vine Ln
Turner Vine Dr
Hirsch
Waldorf
Pine Trails
Arbor Pine
Serene Trails
Keefe Dr
Brown Rd
Brown-Hufsmith
W Hufsmith Rd
Wilson Ln
Liberty Ln
Inwood
Hicks St
M124 DETENTION BASIN
Summit
High St
Village Square Dr
Rudel Dr
Klein
Keefer
Barbara
Alma St
Ella Ave
Hoddemeth Blvd
Vernon Ave
Roxanne Dr
Graham Dr
Fm 2920
M125
Park Dr
Calvert Rd
Tomball Cemetery Rd
M124
M124-00-00
Medical Complex Dr
Michel Rd
Lawrence St
M125-00-00
M125-00-00
S Holderrieth
Hirschfield Rd
Mary Jane Ln
Red Fox Rd
Meadowlark Ln
Pinemeadow Ln
Green Meadow
SH 249
High Meadow Rd
Alice Rd
Green Meadow Rd
Dana Dr
Sarah
Humble Rd
M124
DETENTION
BASIN
FUTURE M124
DETENTION BASIN
M125
DETENTION
BASIN
Holderrieth Rd
Johnson Rd
Commercial Park Rd
Theiss Ln
M121 WEST
M121 EAST
M118
Yonge
M118
DETENTION
BASIN
M100F2
M121-00-00
M121 DETENTION
M500
DETENTION
BASIN
M500 EAST
DETENTION
BASIN
M122-00-00
M122-01-00
M120-00-00
M100G
M100F1
M100F3
M100E
M1000I
M100-00-00
K142A
K142-07-02
K140
Anna St
Schoolhouse St
S Pitchford Rd
Sutton Ln
S Persimmon
Joseph Ct
Ashley Ct
Agg Rd
M116
Mahaffey Rd
Lizzie Ln
Weirich Ln
M116-00-00
Timkin Rd
Blackshear St
E Main
S Crockett
Todd
Foster St
Mary
N Willow
Lovett Ct
Lovett St
Snook Ln
Carrell
Hospital Rd
Radolph St
Neal St
East Hufsmith Rd
Surrey Ct
Alton Ct
Lovett
Baker Dr
N Pecan Dr
S Pecan Dr
Epps
Oxford
N Cherry
Houston St
N Elm
N Walnut
St Peter
N Oak
N Pine
N Maple
Kahle
W Main
Elm
Mason
Market
Fannin St
Tyler St
Malone
S Oak
S Pine
Florence St
E Walnut St
Clarence St
S Poplar
Percival
Mcphail St
Clayton St
James St
Wilcrick St
Belmont St
Southmore St
Stelm
Roxanne Dr
Hoddemeth Blvd
Vernon Ave
Ella Ave
Barbara
Alma St
Graham Dr
Holderrieth Rd
Michel Rd
Lawrence St
Johnson Rd
Commercial Park Rd
Theiss Ln
Medical Complex Dr
Hirschfield Rd
Mary Jane Ln
Red Fox Rd
Meadowlark Ln
Pinemeadow Ln
Green Meadow
SH 249
High Meadow Rd
Alice Rd
Green Meadow Rd
Dana Dr
Sarah
Humble Rd
Park Dr
Calvert Rd
Tomball Cemetery Rd
Fm 2920
Graham Dr
Holderrieth Rd
Agg Rd
Yonge
Sutton Ln
S Persimmon
S Pitchford Rd
Joseph Ct
Ashley Ct
Anna St
Schoolhouse St
Legend
Outfalls
Proposed Drainage Projects
Existing Channel Centerlines
Tomball City Limits
Tomball ETJ
Tomball Catchment
Tomball Master Plan
Drainage Systems
CLR, Inc.
Engineers • Surveyors • GIS
19530 FM-362, Waller, Texas 77487 Phone: (713) 462-0993
THE CITY OF TOMBALL, TEXAS
FOUNDED 1907
F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_DRAINAGE-2234.mxd____04/04/2014

8.0 Traffic and Transportation

Introduction

The City of Tomball is located 28 miles northwest of downtown Houston in Harris County. The City and its ETJ are situated along three major highway corridors, SH 249, FM 2978, and FM 2920. SH 249 runs north and south on the western side of Tomball, connecting southward into Houston and northward into Montgomery County and eventually Navasota via other roadways. FM 2978 runs north-south from the FM 2920 (E. Main Street) and continues north toward Lake Conroe. FM 2920 (Waller-Tomball Road) travels east and west through the center of the City, extending westward to US 290 at Waller and eastward at IH 45 near Spring, Texas.

The roadway classifications for existing and proposed roadways in this report are based on the 2009 City of Tomball Major Thoroughfare Plan (MTP). The 2009 City of Tomball MTP was an update to the 2007 MTP, where a modified classification hierarchy system was established and clearly defined.

Regional arterials in or near Tomball's city limits and ETJ include Holderrieth Road, Brown Road, Hufsmith Road, and Hufsmith-Kohrville Road.

The roadway system is the City's primary form of transportation; however, the City, along with Houston-Galveston Area Council, has developed a bicycle and pedestrian trails network. Tomball is not in the METRO service area; although the surrounding portion of unincorporated Harris County is in the service area. The nearest bus service is approximately five miles to the south, where the #86 bus terminates at Hewlett Packard's office campus at State Highway 249 and Louetta Road.

Description of Major and Minor Existing Routes

The 2009 City of Tomball Major Thoroughfare Plan defines roadways through a hierarchy classification system of Collector, Minor Arterial, Major Arterial, and State Highway/Farm-to-Market Road. This classification system is based on right-of-way width, number of lanes, divided vs. undivided, pavement width, and median width.

Ulrich Road begins three miles north of Zion road as a two-lane minor arterial that runs north-south until Hufsmith Road, where it becomes Cherry Street.

Cherry Street begins at Hufsmith Road as Ulrich Road and continues south to Holderrieth Road, where it ends. Cherry is a two-lane minor arterial that runs north-south through the center of Tomball.

FM 2920 (Main Street) is a four-lane state highway/farm-to-market road. It begins west of Tomball near the City of Waller and becomes Main Street, which continues through downtown Tomball then east toward IH-45, where it terminates. This east-west roadway runs through the middle of the City of Tomball.

Holderrieth Road is a two-lane major arterial roadway that runs east-west on the southern edge of the City of Tomball. It begins at State Highway 249 and ends at Hufsmith-Kohrville Road.

Hufsmith Road is a southwest-northeast, undivided, two-lane major arterial roadway. It begins at Baker Drive and continues northeast to FM 2978, where Hufsmith Road ends and Hufsmith-Kueukendahl Road begins.

Brown Road is an east-west, undivided, two-lane major arterial roadway. The road begins at Lutheran Cemetery Road, which is west of Tomball, and currently ends at Baker Drive where it becomes Hufsmith Road to the east.

Hufsmith-Kohrville Road/FM 2978 is a north-south facility that spurs off of SH 249 in northern Harris County and forms the east city limit boundary of Tomball, then extends north into Montgomery County. North of Tomball city limits, FM 2978 becomes a five lane road at Stanolind Road/Bogs Road until E. Main Street, where it becomes a four lane road. Additionally, FM 2978 will be widened from 2 to 4 lanes from south of Dry Creek to Conroe-Hufsmith Rd. with construction expected to begin in 2013.

South Persimmon Street is a north-south two-lane minor arterial facility which begins at FM 2920 and continues south 1.5 miles where it terminates and becomes a gravel road.

State Highway 249, commonly referred to as Tomball Parkway, is a north-south state highway that traverses the City of Tomball. Its northernmost terminus is at the intersection of FM 1774 and FM 149 in Pinehurst. It extends approximately 27 miles south, crosses Beltway 8, and terminates in northern Houston at Interstate Highway 45. Its major intersections are FM 2920, Spring-Cypress Road, Louetta Road, and FM 1960.

Zion Road is a two-lane minor arterial that extends from SH 249 to Hufsmith Road. It is an east-west roadway that runs across the northern area of Tomball.

Description of Major Proposed Routes

Grand Parkway (State Highway 99) is a proposed 180+ mile scenic highway encircling the Greater Houston Region. At completion, it will traverse seven counties and provide easier access for suburban communities. Currently, 28.3 miles of the highway, Segment D from US 59 near Sugar Land to IH 10 near Katy (19.5 miles) and part of Segment I-2 from IH 10 to FM 1405 (8.8 miles), have been constructed as toll free roads. Segment D has been open to the public since 1994 and Segment I-2 since 2008. Segment F-1 is a proposed 12.0 mile, four-lane, controlled access toll road with intermittent frontage roads from US 290-Northwest Freeway to SH 249-Tomball Parkway with construction beginning in 2013. Segment F-2 is a proposed 12.1 mile, four-lane, controlled access toll road with intermittent frontage roads from SH 249-Tomball Parkway to IH 45-North Freeway, also beginning construction in 2013. Both segments have the potential to greatly affect Tomball, as this portion of the highway will travel east to west roughly in the vicinity of Boudreaux Road, just to the south of Tomball's ETJ. The opening of this facility, currently scheduled for 2015, will greatly affect traffic patterns in the region and serve as an additional east-west arterial.

State Highway 249 is an existing four lane roadway that runs along the western side of the City of Tomball. It is proposed to be developed into a six lane tollway from Brown Road to Harris County Line. The expansion is currently under construction and will be completed in 2015.

FM 2978/Hufsmith-Kohrville Road is an existing four-lane roadway that runs along the eastern side of the City of Tomball. This road is proposed to be widened to four lanes from South of Dry Creek to Conroe-Hufsmith Road and from FM 2920 to the future Grand Parkway (SH 99).

Medical Complex Drive is a four-lane boulevard that will serve potential commercial and industrial facilities, as well as the existing Tomball Regional Hospital. Medical Complex Drive currently extends eastward half a mile from SH 249 (Tomball Parkway). The City can benefit greatly from an additional east-west route. Currently, Main Street (FM 2920) serves as the primary route when traveling east or west through the City. This through traffic on the corridor mixes with traffic trying to access shopping and other Main Street attractions. The extension of Medical Complex Drive will allow the roadway to serve as an east-west arterial in the City of Tomball, shown in Exhibit 8-1. The proposed extension of Medical Complex Drive is a four lane roadway and extend southeast from FM 2920 at Triechel Road and connect with the existing segment of Medical Complex Drive. East of the existing roadway, it will continue southeast to join the existing Agg Road. Past Agg Road, Medical Complex Drive will continue northeast and run north of Tomball Country Club and south of the Willow Creek Estates subdivision. The road will then align with the existing Mahaffey Road and continue east to connect to FM 2920. East of the existing roadway, Medical Complex Drive is currently under design and is scheduled to be completed by April 2015, between Lawndale and South Cherry Street.

Other area roadways are in various stages of project development and can be found in Table 8-1. A map of Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP) projects can be seen in Exhibit 8-2.

Connections to Houston ETJ

Texas state law allocates ETJ based on a city's population. Tomball, with a 2010 Census population of 10,753, falls in the "5,000 to 24,999" category, and is thus entitled to a 1-mile ETJ. The ETJ will increase to 2 miles when the population reaches 25,000, and 3 ½ miles at 50,000. Tomball's actual ETJ is smaller than the allotted 1 mile in places, as it is surrounded on three sides by the ETJ of the City of Houston, who is entitled to a 5-mile ETJ, based on a population of 100,000 or more. Houston and Tomball have agreed to several ETJ exchanges to the east and west of Tomball.

Holderrieth Road, where it exits Tomball's ETJ and enters Houston's, is shown as a major thoroughfare (100 foot ROW) "to be acquired" in the City of Houston Major Thoroughfare and Freeway Plan. The connection would continue westward, parallel to FM 2920, until it merges with FM 2920 between Bauer and Backer Roads, approximately 10 miles west of Tomball. East of Tomball, Holderrieth is proposed to turn southward and connect to the existing Champions Forest Drive.

Hufsmith-Kuykendahl Road is shown as a major collector (minimum 70 foot ROW) with sufficient width from where it exits Tomball's eastern edge, to the road's current terminus at Kuykendahl Road.

Boudreaux Road, which is entirely in Houston's ETJ, is shown as a major thoroughfare. Other than the state facilities of FM 2920 and proposed Grand Parkway (SH 99), no other east-west roadways are shown in the vicinity of Tomball.

Triechel Road (extending eastward from FM 2920 near Telge Road) is shown as a major thoroughfare "to be widened". It ends at the Tomball city limits. This corridor was originally planned to connect to Tomball's Medical Complex Drive. It is located south of Medical Complex but north of Alice Road (the western extension of Theis Lane).

Hufsmith Road is a southwest-northeast, undivided, two-lane major arterial roadway that connects Tomball to the City of Houston's ETJ on the northeast side of the City. It extends out of the Tomball City limits into the City of Houston ETJ for only a quarter of a mile before the road becomes Hufsmith Kuykendahl Road.

Brown Road is an east-west, undivided, two-lane major arterial roadway which connects the City of Tomball to the City of Houston's ETJ on the west side of the City. Brown Road extends 1.5 miles outside of the Tomball City Limits and into the City of Houston ETJ before its ending point at Lutheran Cemetery Road.

Table 8-1 Other Future Roadway Projects – Tomball Vicinity

County	Sponsor	Street	From Limit	To Limit	Project Description	Fiscal Year	Project Status
Harris	Harris County	Cypress Rosehill Rd	Juergen Rd	Lake Cypress Hill Rd	4 Lane Asphalt Section W/ Bridge	2013	TIP
Montgomery	TxDOT Houston	FM 2978	S Of Dry Creek	Conroe Hufsmith Rd	Widen From 2 To 4 Lanes	2013	TIP
Harris	TxDOT Houston	SH 249	Willow Creek	1.5 mi. N Of Spring Cypress Rd	Construct 6 Lane Toll Road With Grade Separations	2015	TIP
Harris	TxDOT Houston	SH 249	Brown Rd	Willow Creek	Construct 6-Lane Toll Road With Bridges	2015	TIP
Harris	TxDOT Houston	SH 249	Montgomery C/L	Brown Rd	Reconstruct 6-Lane Toll Road With Grade Separations	2015	TIP
Montgomery	TxDOT Houston	SH 249	FM 1774/FM 149 In Pinehurst	Spring Creek/Harris C/L	Construct 6-Lane Toll Road With Grade Separations	2015	TIP
Harris	TxDOT Houston	SH 99	At SH 249		Construct 4 Direct Connectors (Toll)	2015	TIP
Multiple	TxDOT Houston	SH 99	US 290	US 59 N	Design And Construct 4-Lane Toll Road	2013	TIP
Montgomery	Montgomery County	Gosling Rd	Panther Creek Pines	Spring Creek	Widen 2 To 4 Lane; Construct 1/2 Bridge at Spring Creek	2023	RTP
Harris	Harris County	Gosling Rd	Montgomery C/L	FM 2920	Widen To 4-Lanes Undivided	2023	RTP
Harris	Harris County	Hufsmith-Kohrville Rd	FM 2920	SH 99	Widen To 4-Lane Undivided Asphalt	2023	RTP
Harris	Harris County	Louetta Rd	Steubner Airline Rd	T.C. Jester Blvd	Widen 5 Lane to 7-Lane	2023	RTP
Harris	Harris County	Louetta Rd	T. C. Jester	Kuykendahl Rd	Widen 5 Lane to 7-Lane	2023	RTP
Montgomery	Montgomery County	Nichols Sawmill Rd	S. of Butera Rd	FM 2920 In Harris Co	Construct New 2-Lane Road	2018	RTP
Harris	TxDOT Houston	SH 99	At SH 249		Construct 4 Direct Connectors (Toll)	2030	RTP
Montgomery	Montgomery County	Stagecoach Rd	Walnut Creek Rd	SH 249	Widen From 2 To 4-Lanes	2030	RTP
Harris	Harris County	Stuebner Airline Rd	Spring Cypress Rd	Louetta Rd	Widen To 6 Lane Concrete Blvd W/ S	2023	RTP

Existing and Proposed Capacity of Streets

An analysis of existing and projected roadway capacity was done for major roadways near the City of Tomball. The population growth factor which Houston-Galveston Area Council (H-GAC) used to develop the volume projections for 2017 & 2035 was much higher than that received from CLR, Inc. The volumes projections for 2017 & 2035 obtained from H-GAC were used to analyze existing roadway configuration capacity. Lane Levels of Service (LOS), found in Table 8-2, are based on the City of Houston's Major Thoroughfare and Freeway Plan 2012 Policy Statement. These Levels of Service were used to determine if existing capacity will be enough for future years. LOS A being ideal traffic conditions with free flow of vehicles, and LOS F being grid-lock of traffic and unacceptable conditions. Based on the results, by 2035 there are two segments of roadway that will be LOS F, and should therefore be widened, seen in Table 8-3.

Hufsmith-Kuykendahl Road from Stuebner-Airline Road to Kuykendahl Road exists as a two-lane roadway. By 2035, the volumes on this roadway indicate that this segment will be operating at LOS F. In order to bring the roadway LOS to LOS C, this segment of the road should be widened to four lanes.

FM 2920 (Main Street) from Telge Road to SH 249 exists as a four-lane roadway. Based on volume projections, by 2035 the roadway will be operating at LOS F. To bring the roadway LOS to an acceptable LOS D, this segment should be widened to six lanes. .

Table 8-2: Roadway Level of Service

Level of Service (LOS)	Vehicle Trips per Day
A	0-199
B	200-349
C	350-499
D	500-649
E	650-799
F	800 or more

Table 8-3: Roadway Capacity Level of Service								
Street		Segment	Classification	Existing Lanes	2035 Proposed Lanes	2017 Roadway LOS	2035 No-Build Roadway LOS	2035 Proposed Roadway LOS
1	Zion	SH 249 to Ulrich	Minor Arterial	2	2	A	B	B
2	Zion	Ulrich to Hufsmith	Minor Arterial	2	2	A	B	B
3	Hufsmith-Kuykendahl	FM 2978 to Stuebner-Airline	Major Arterial	2	2	B	D	D
4	Hufsmith-Kuykendahl	Stuebner-Airline to Kuykendahl	Major Arterial	2	4	D	F	C
5	FM 2978/ Hufsmith-Kohrville	Hufsmith-Kuykendahl to Main	State Highway	4	4	A	D	D
6	FM 2978/ Hufsmith-Kohrville	Holderrieth to SH 99	Major Arterial	2	4	A	C	C
7	Medical Complex Drive	FM 2920 to SH 249	Major Arterial	2	2	A	C	C
8	Medical Complex Drive	SH 249 to Hufsmith-Kohrville	Major Arterial	4	4	B	D	D
9	Medical Complex Drive	Hufsmith-Kohrville to FM 2920	Major Arterial	4	4	A	D	D
10	Ulrich	North of Hufsmith Rd	Minor Arterial	2	2	A	A	A
11	N. Cherry	Hufsmith to Main	Minor Arterial	2	2	A	B	B
12	S. Cherry	Main to Holderrieth	Minor Arterial	2	2	A	C	C
13	Holderrieth	Telge to SH 249	Major Arterial	2	2	A	C	C
14	Holderrieth	SH 249 to Hufsmith-Kohrville	Major Arterial	2	2	A	A	A
15	Main St (FM 2920)	Telge to SH 249	Major Arterial	4	6	E	F	D
16	Main St (FM 2920)	SH 249 to Hufsmith-Kohrville	State Highway	4	4	A	C	C
17	Main St (FM 2920)	Hufsmith-Kohrville to Stuebner-Airline	State Highway	4	4	A	A	A
18	Main St (FM 2920)	Stuebner-Airline to Hufsmith	State Highway	4	4	A	A	A
19	Hufsmith	N. Cherry to Hospital	Minor Arterial	2	2	B	C	C
20	Hufsmith	Hospital to Zion	Minor Arterial	2	2	B	C	C
21	Hufsmith	Zion to Hufsmith-Kohrville	Minor Arterial	2	2	C	D	D

Updates to the 2009 City of Tomball Major Thoroughfare Plan

Local Streets was added to the existing roadway classification hierarchy system. Local Streets is defined as an undivided, two-lane roadway with 50'-60' right-of-way serving primarily residential areas.

Medical Complex Drive will be extended along the existing Mahaffey Road. This extension will provide a complete east-west arterial that will connect to FM 2920 in the east.

Tomball Parkway was updated to be consistent with the H-GAC Transportation Improvement Project (TIP) to construct a six-lane toll road from Brown Road to Harris County Line.

Hufsmith-Kohrville Road will be extended as a four-lane roadway south of Holderrieth Road and will connect to Tomball Parkway south of Tomball.

Grand Parkway will be constructed south of Tomball as a four-lane toll road in the future, providing improved access to surrounding areas.

The Hike and Bike Trail, which connects parks, schools, and other land uses, as shown on the Tomball Parks and Recreation Exhibit.

The City of Tomball Major Thoroughfare Plan with updates can be seen in Exhibit 8-3.

N
W E
S

0 0.15 0.3 0.6 0.9 1.2
Miles

Existing
From SH 249 to S. Holderreith
Four Lane Roadway

Under Design/Construction 2014
S. Holderreith to S. Cherry
Four Lane Roadway

Proposed
West from FM 2920 to East at FM 2920
Four Lane Roadway

Legend

- Under Design/Construction
- Existing Medical Complex Drive
- Future Medical Complex Drive
- Tomball City Limits
- Tomball ETJ

Exhibit 8-1:
Tomball Infrastructure Master Plan
Medical Complex Drive

GUNDA CORPORATION
Engineers, Planners & Managers

SH 2987
From South of Dry Creek to Conroe-Hufsmith
Widen to four lanes

SH 249
From 1.5 miles north of Spring-Cypress
to Harris County Line
Construct six lane tollway

Hufsmith-Kohrville Road
From FM 2920 to SH 99
Widen to four lanes

SH 99
From US 290 to US 59 N
Construct four lane tollway

Hufsmith-Kohrville Extension
From SH 99 to SH 249
Construct four lane roadway

N
W E
S

0 0.175 0.35 0.7 1.05 1.4
Miles

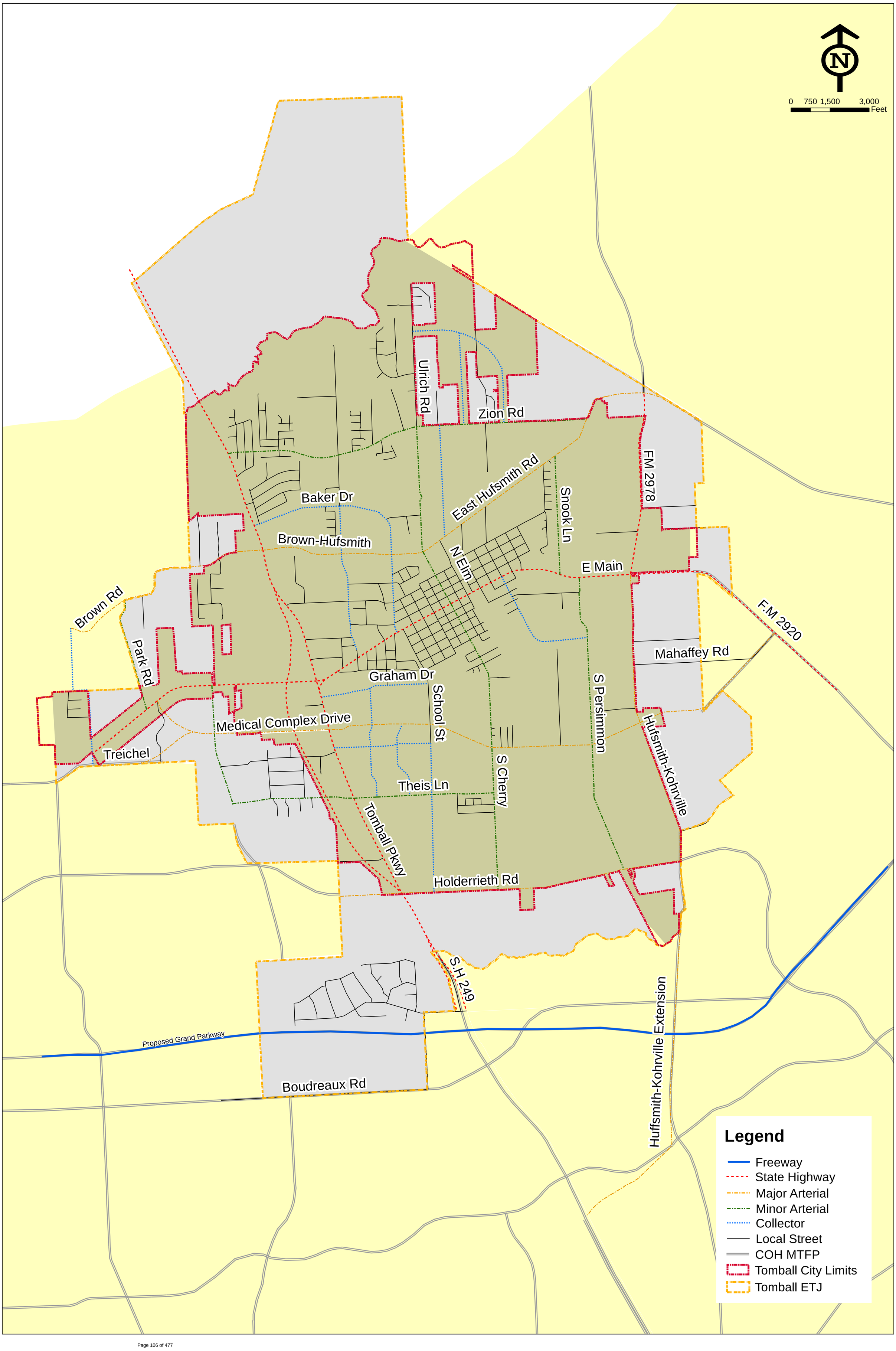
Legend

- Roadway Extension
- RTP
- TIP
- City Limits

Exhibit 8-2:
Tomball Infrastructure Master Plan
Transportation Improvement Program (TIP)
and Regional Transportation Plan (RTP) Future Projects

GUNDA CORPORATION
Engineers, Planners & Managers

City of Tomball Major Thoroughfare Plan



9.0 Parks, Trails, & Sidewalks

In 1995, the City developed its first park master plan, which included a list of existing parks and a plan for acquiring and developing new park land. Currently, the City owns approximately 43.5 acres of developed park land. There are also three Harris County park facilities either within the City or nearby that are available for Tomball residents. There are no regulations for park space, but the National Recreation and Park Association (NRPA) prior to 1997 did promote the goal of 10 acres of local park land per 1,000 residents, an attainable goal for the City of Tomball. The NRPA subsequently encouraged guidelines using need analysis to determine a recommended level of service for park elements.

Existing Parks

As seen in the **Parks and Recreation Exhibit**, there are six developed parks within the City's ETJ including one Harris County park. There are also two Harris County parks within 4 miles of the City. All of these parks are in good condition.

Parks within the City

Juergens Park is a 10 acre facility located at 1331 Ulrich Road. The park includes a large, lighted pavilion with covered picnic tables, a basketball court, sand volleyball court, barbeque and picnic facilities, restrooms, water fountains, 3 playgrounds, a lighted ½ mile asphalt walking trail, and a parking area. Overall, the park is in good condition, but vandalism has been a recurring problem.

Jerry Mattheson Park is a 9.8 acre facility located across from Juergens Park at 1240 Ulrich Road. The park includes four fenced & lighted tennis courts, a peewee baseball field, a large playground, a municipal swimming pool with a shower and restroom facilities, and a parking area. The park is in excellent condition.

Martin Luther King, Jr. Park is a 0.7 acre facility located at Timkin Road and South Chesnut Street. This park includes a restrooms, a covered and lighted basketball court, a playground, and two picnic tables with barbeque grills. The park is in excellent condition.

The Wayne Stovall Memorial Sports Complex is located on a 19 acre tract on the corner of West Hufsmith Road and North Cherry Street. The facility is owned by the City and leased to the Tomball Sports Association for operations and maintenance. The site includes eight baseball fields, two concession stands, a League office, a small playground, and large parking areas.

The Theis Attaway Nature Center is a 4 acre nature preserve located at 13509 Theis Lane between SH 249 and Commercial Park Drive. The park includes a nature pond with a pier, a grassy amphitheater, a bird/wildlife observation blind, 6-ft wide ¼ mile asphalt walking trail, benches, tables, restrooms, and a parking area.

Parks within the ETJ

Samuel Matthews Park is a 6 acre Harris County Precinct 4 facility located within the City's ETJ at 1728 Hufsmith Road near Stanolind Road. The park includes a covered and lighted basketball court, one open basketball court, one volleyball court, a playground, a lighted baseball field, picnic tables, restrooms, a 1/3 mile walking tail, a community building, restrooms, and parking area. The park is in very good condition.

Additional Harris County Parks outside the ETJ

The Harris County Park System consists of four precincts including 22,500 acres of park facilities available for Tomball residents. Examples of these local park lands are Spring Creek Park and Roy Campbell Burroughs Park.

Spring Creek Park is a 114 acre facility located west of the City at 15012 Brown Road just outside the ETJ. The park includes RV/camper hookups, tent camping sites, a pavilion with picnic tables, a separate small barbeque pavilion, volleyball court, covered basketball court, two lighted tennis courts, baseball backstop, restroom facilities, camping/picnic areas, multiple playgrounds, and nature trails.

Roy Campbell Burroughs Park is a 320 acre facility located northeast of the City at 9738 Hufsmith Road about 3 miles from the ETJ. The park includes nine soccer fields, four baseball fields, two volleyball courts, 3 restroom facilities, over 8 miles of nature trails, dog park, a small fishing lake, picnic tables, multiple playground areas, and a large barbeque pavilion.

Existing Park Lands to be Developed

The City currently owns four additional sites totaling 64.9 acres which may be used for park land.

Martin Park is a 3 acre wooded site located on East Hufsmith Road at Peach Street. The site is located next to an assisted living facility that has an agreement with a regional non-profit group to develop a 1 acre park on the site in exchange for the use of the remainder of the property. The park development may include walking trails, benches, picnic tables, playground equipment, and native plantings and landscaping.

Tomball City Park is a 9.9 acre wooded site west of Rudolph Road. HCFCD Unit #J131-00-00 divides the tract into two sections, and the 5 acre Cortez Tract separates Tomball City Park from Jerry Mattheson Park. The City's 1995 park plan suggested the park include two large covered pavilions, picnic facilities, one softball field, restrooms, parking area, and walking trails with a wooden foot bridge crossing the drainage channel.

The City landfill is a 19 acre site between Neal Street and Rudolph Street that can be made available for possible park development. Harris County Flood District and the City jointly own a 75 acre site south of Holderrieth Road at Cherry Street for a storm water detention pond. When the construction of the pond is completed, the site will have approximately 35 acres available for possible park development.

Possibilities of development for both tracts include splash pads, skateboard, skating, or rollerblade facilities, baseball fields, soccer fields, walking trails, restrooms, picnic areas, playgrounds, and parking areas.

Proposed Parks

The Cortez Tract is a 5 acre site located on Ulrich Road between Jerry Mattheson Park and the future Tomball City Park. The acquisition of this tract will connect the two parks and complete the master park plan for Jerry Mattheson Park.

Tomball Outlots are small parcels between Ulrich Road, East Hufsmith Road, and the railroad without any road frontage. The City owns most of the parcels and is currently negotiating to acquire the rest of the parcels in order to designate the land for public use.

Pedestrian Sidewalks

The 1995 Park Plan proposed an interconnected system of pedestrian sidewalks that would connect existing parks as well as neighborhoods, schools, the community college, medical center, and other parts of the City. Existing pedestrian trails and sidewalks can also be seen in the **Parks and Recreation Exhibit**. The pedestrian trails are planned to be constructed in open areas and drainage easements where possible, and they will utilize approximately 1 mile of existing sidewalks along Baker Drive and Quinn Road. When complete, the project will consist of approximately 9.4 miles of trails throughout the City.

Bicycle Trails

Houston-Galveston Area Council (H-GAC), the Metropolitan Planning Organization (MPO) for Tomball, has developed a bicycle trails plan which identifies share use paths/trails for bicyclist to take that will connect residential, retail, and recreational areas of the City. The plan, which is incorporated in the **Parks and Recreation Exhibit**, is currently in the proposal stage. The sponsors for the bicycle trail plan are Harris County, TxDOT, and The Woodlands Development Corporation.

Summary

The City of Tomball currently maintains about 43.5 acres of park space available to residents within the City limits. This relates to approximately 3.91 acres per 1,000 residents based on the 2012 estimated population of 11,121 residents. Including the existing Harris County park system of approximately 22,500 acres of park space available to 4,092,459 residents within the county, approximately 5.50 acres per 1,000 residents, local public park land is at 9.41 acres per 1,000 residents.

For the 2022 population projection of 13,156, existing park space will proportion to approximately 3.31 acres per 1,000 residents, bringing local public park land to about 8.81 acres per 1,000 residents. Approximately 15.7 acres of City of Tomball park development will be necessary to meet 10 acres per 1,000 residents by the end of 2022. If the City of Tomball continues to acquire and develop the parks discussed previously, a goal of 10 acres of local park land per 1,000 residents is attainable.

N
W
E
S

0 1500 3000 4500 6000

Feet

HARRIS COUNTY PCT 4
BURROUGHS PARK

HARRIS COUNTY PCT 4
SAMUEL MATTHEWS PARK

JUERGENS PARK

JERRY MATTHESON PARK

FUTURE PARK

MARTIN PARK (FUTURE)

STOVALL
MEMORIAL
COMPLEX

HARRIS COUNTY PCT 4
SPRING CREEK PARK

THEISS ATTAWAY
NATURE CENTER

FUTURE
HARRIS COUNTY
FLOOD CONTROL
PARK

SPRING CREEK

Spring Hollow Dr
Helen Ln
Lost Creek Rd
Hillcrest Dr
Crescent Dr
William Juergens Dr
Richards Rd
County Aftercreek Dr
Zion Rd
Neal St
East Hufsmith Rd
Lovett
Afton Ct
Snook Ln
Fm 2920
Lucky Lp
Clement Rd
Ward
Winfrey Ln
R Williams
N Elm
Carter
Foster St
N Moore St
N Live Oak
N Peach
E Main
S Chestnut
Timkin Rd
Blackshear St
Todd
Lizzie Ln
Weirich Ln
Mahaffey Rd
S Pitchford Rd
S Persimmon
Sutton Ln
Agg Rd
Yonge
Holderrieth Rd
Tomball Pkwy
Capella Cir
Castor Cir
Alice Cir
Royal Ct
Sprica St
Dorado Cir
Chris Ln
Camille Dr
Stella Ln
Antonia Ln
Alice Ln
Orion Dr
Altair Dr
Spring Pines Dr
Heidi Ln
Limerick Ln
Carneswood Ln
Buckingham Ln
Wickford
Turner Vine Dr
Turner Vine Ln
Hirsch
Baker Dr
Pine Trails
Arbor Pointe
Serene Trails
Lee Ann
Sleepy Ln
Spring Cir
Keen Dr
Brown Rd
Brown-Hufsmith
Liberty Ln
Imperial Creek Dr
Orchard Grove Dr
Inwood
Hicks St
High St
Rosanne Dr
Epps
Oxford
Kane
Village Square Dr
W Main
Main
Rudel Dr
Klein
Keefer
Barbara
Ella Ave
Raymond Ave
Vernon Ave
Anna St
Graham Dr
Park Dr
Lawrence St
Medical Complex Dr
Michel Rd
S Holderrieth
Johnson Rd
Schnoor
Ashley Dr
Joseph Ct
Hufsmith Rd
Tomball Cemetery Rd
Fm 2920
Mueller Rd
Calvert Rd
Hirschfield Rd
Mary Jane Ln
Red Fox Rd
Meadowlark Ln
Briar Meadow
SH 249
Alice Rd
Sarah Rd
Dana Dr
Theiss Ln
Humble Rd

Legend

- Parks
- College or University; School
- Cultural Facility; Social/Fraternal Hall
- Hospitals
- Religious
- Detention Pond

- Trails
- Bikeways
- HCFCD Channels
- Tomball City Limits
- Tomball ETJ

Sidewalk
- Existing
- Proposed

Tomball
Parks and Recreation

THE CITY OF TOMBALL, TEXAS
FOUNDED 1907

CLR, Inc.
Engineers • Surveyors • GIS
19530 FM-362, Waller, Texas 77484 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_PARKS_TRAILS-2234.mxd ___ 04/04/2014

10.0 Natural Gas Distribution

The City of Tomball is the retail natural gas provider within the corporate boundaries of the City. Currently the City maintains and operates approximately 55.8 miles of distribution line ranging in size from 2 to 6 inch diameter. The system is currently supplied through two separate contracts with private wholesale providers.

Historically the City natural gas infrastructure system has not been included in this report. However, a decision was made to include basic information for the system in this report to help consolidate all City maintained and operated infrastructure systems. Typically the City will assess natural gas needs for an area and construct necessary improvements with and parallel to City water lines.

The City is currently in the process of evaluating the system to identify deficiencies such as under sized lines and/or in need of line looping. The **Tomball Master Plan Gas Distribution System** exhibit included in this report represents the existing lines in the system.

N
W
E
S
0 1500 3000 4500 6000
Feet

Legend

Tomball City Limits

Tomball ETJ

<all other values>

Gas

Existing

Proposed

Tomball Master Plan
Gas Distribution System

CLR, Inc.
Engineers • Surveyors • GIS
19530 FM-362, Waller, Texas 77487 Phone: (713) 462-0993

F:\Work\12-010-00_TomballMasterPlan\ACTIVE_DATA\TomballMasterPlan_GAS-2234.mxd____04/04/2014

11.0 Capital Improvement Plan & Maximum Capital Recovery Fee Determination

Capital Improvement Plan (CIP)

This section contains a discussion of the technical basis used in the calculation of Tomball's maximum impact fees as set forth in Local Government Code, Title 12, Planning and Development, Chapter 395, et seq, Financing Capital Improvements Required by New Development in Municipalities, Counties, and Certain Other Local Governments (Included in Appendix A for reference). Tomball Code, Part II, Chapter 82, Utilities, Article IV, Water and Wastewater Capital Recovery Fees, adopted by Ordinance No. 90-01 and amended by Ordinance 93-11, 96-20, 99-21, 2003-02, and 2009-12 implements Local Government Code §395.

In accordance with Chapter 395, a Capital Improvement Plan must be developed by qualified professional and contain the following:

1. A description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards.
2. An analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements.
3. A description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions.
4. A definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial.
5. The total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria.
6. The projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years.
7. A plan for awarding:
    A. A credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or
    B. In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

Chapter 395 stipulates updates to the CIP are to be completed within 5 years of the previous impact fee adoption. This document represents an update to the 2007 CIP, which impact fee was adopted May 18, 2009. The Impact Fee CIP process calculates the maximum allowable fees, also in conformance to Chapter 395.

Existing Capital Improvements

Existing capital improvements were identified earlier in this report. Costs to upgrade to regulatory standards are summarized below.

- Water - Existing Water Treatment Plants and Water Distribution facilities meet or exceed TCEQ minimum requirements; no upgrade costs associated with existing needs.
- Wastewater - Existing Wastewater Treatment Plants, Lift Stations, and Sanitary Sewer Collection facilities meet or exceed TCEQ minimum requirements; no upgrade costs associated with existing needs.
- Drainage – Several properties located within the Old Town/mixed use area have recorded NFIP flood claims. Evaluation of flood risk in these areas should be assessed to determine the extent infrastructure meets current performance standards. All existing City and ETJ drainage channel 1% 100-yr design flows are in bank per HCFCD requirements. Existing stormwater detention facilities exceed regulatory requirements of the City of Tomball and HCFCD. No costs within this CIP are associated to upgrading existing facilities.

Existing Capacity & Usage

An analysis of the total capacities, the levels of current usage, and commitments for usage of the capacities of the existing capital improvements have been identified in the Infrastructure Master Plan earlier sections. These values are summarized in the tables below:

Water Supply & Distribution

2012 Existing Water Production was compared to TCEQ Minimum Capacity Requirements as follows:

	Existing Capacity	**Required Capacity**	**Level of Usage**
Wells	5,293 gpm	3,992 gpm	75.4%
Firm Booster Pump Capacity	8,800 gpm	4,656 gpm	52.9%
Total Storage	2,350,000 gal	1,330,800 gal	56.6%
Elevated Storage	1,250,000 gal	665,400 gal	53.2%
Nominal Operating Pressure	55 psi	35 psi	Sufficient

Note: Pressure range is from 50 to 60 psi within the City of Tomball.

Analysis of City of Tomball 2012 data for existing Water System conditions yielded 6,654 connections at 2.26 MGD ADD.

Wastewater Collection & Treatment

2012 Existing Wastewater Collection was compared to actual capacity as follows:

North Wastewater Treatment Plant		South Wastewater Treatment Plant	
Annual Flow (MG)	203.3	Annual Flow (MG)	346.8
Average Daily Flow (MGD)	**0.557**	Average Daily Flow (MGD)	**0.950**
Plant Capacity (MGD)	1.500	Plant Capacity (MGD)	1.500
% of Total Plant Capacity Usage	37.1%	% of Total Plant Capacity Usage	63.3%

Analysis of City of Tomball 2012 data for existing Wastewater System conditions yielded 6,654 connections at 1.507 MGD ADF.

Drainage & Detention

Existing Land Use estimated for 2012, distributed by characteristic category, includes 1,578.5 acres in developed residential land, 1,200.8 acres in developed commercial land and 3.5 acres of Industrial land use. Existing City of Tomball storm sewer system capacities and levels of current usage are undetermined. Evaluation of flood risk areas is required for shortfall capacity requirements, and undeveloped or partially developed areas cannot be assessed to determine the extent that infrastructure does meet current performance standards.

Existing stormwater drainage channels 100yr design conveyance capacities are not sufficient for existing development.

Existing stormwater detention facilities are not sufficient and/or do not exist for existing development.

Land Use Assumptions

In accordance with State code Sec. 395.052. Periodic Update of Land Use Assumptions and Capital Improvements Plan Required

(a) A political subdivision imposing an impact fee shall update the land use assumptions and capital improvements plan at least every five years.

(b) The political subdivision shall review and evaluate its current land use assumptions and shall cause an update of the capital improvements plan to be prepared in accordance with Subchapter B.

Further, according to Sec. 395.042, to impose an impact fee, a political subdivision must adopt an order, ordinance, or resolution establishing a public hearing date to consider the land use assumptions and capital improvements plan for the designated service area.

"Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period.

Description of Service Area

The current corporate boundaries of the City of Tomball encompass approximately 12 square miles (7,670 acres) in area with an additional 8.6 square miles (5,515 acres) included in Tomball's ETJ. In accordance with State code, service area definitions for the infrastructure master plan have been divided into three categories as follows:

1. Potable water and wastewater facilities – service area is defined as the area within the current corporate boundaries and the extraterritorial jurisdiction (ETJ) of the City of Tomball.
2. Roadway facilities – service area is defined as the area within the current corporate boundaries of the City of Tomball not to exceed six miles.
3. Drainage facilities – for storm water, drainage, and flood control facilities the service area is defined as the area within the current corporate boundaries and the ETJ of the City of Tomball. Individual drainage service areas for seven basins with the current corporate boundaries and the extraterritorial jurisdiction have been defined earlier in this report and include Basins M116, M118, M121, M124, M125, J131, & J100E (which includes J132 & J133). These areas represent the areas actually served by their respective improvements.

10-year Service Area Land Use Projections

Land use and population projections were prepared earlier in this report as part of the Infrastructure Master Plan and are summarized below.

- Land Use changes projected for 2022, distributed by characteristic categories, include an increase in developed residential land use calculated to be 440 acres, in developed commercial land use of 227 acres.
- The Population Density within the current corporate boundaries of the City of Tomball is expected to increase from 1.45 capita per acre to 1.72 capita per acre for 2022. The Population Density within the current ETJ boundaries is expected to increase from 0.59 capita per acre to 0.70 capita per acre for 2022.
- Intensities of land use projections from 2012 to 2022 are an effective percentage increase in developed residential land use of 27.9% and in developed commercial land use of 18.9%.
- The 2012 estimated population of the City of Tomball is 11,121, plus an additional 3,241 in the extra-territorial jurisdiction (ETJ), for a total estimated population of 14,362. The 2022 population forecast for the City of Tomball is 13,156, plus an additional 3,834 in the extra-territorial jurisdiction (ETJ), for a total estimated population of 16,990. Population from 2012 to 2022 is projected to increase 18.3%, at an annualized growth rate of approximately 1.7%.

Capital Improvements Due to New Development

Capital improvements including facility expansions, necessitated and attributable to new development, were identified earlier in this report and are summarized below. The improvements identified conform to the approved land use assumptions described earlier in this report.

Water Supply & Distribution

Based on the projected water demands of the study period, the City of Tomball will be required by TCEQ criteria to increase its well production by 216 gpm. For practical water well construction to also serve water demands beyond 2022, CLR recommends Standard Water Plant sizing to include a 1,000 gpm Well, a 400,000 gal GST, 3 - 600 gpm total booster pumps, a maintenance building and emergency generator. With contingencies, engineering, and surveying, the total Water Plant cost estimate amounts to $3.83M.

Projected water distribution system improvements were identified earlier in this report for end of FY 2022 with loads distributed utilizing land use and density projections. The 20.8 mile total of additions represents a 21% increase in the water distribution network. Estimated future Water Distribution costs in 2013 dollars, amounts to $13.22M.

Wastewater Collection & Treatment

The City of Tomball is not expected to be required by new development to design a wastewater treatment plant expansion. However, TCEQ regulations are expected to cause the design, and possibly the construction, of an expansion at the South Wastewater Treatment Plant. With contingencies, engineering and surveying, the total Wastewater Treatment Plant expansion cost estimate amounts to $4.2M.

Projected development may overload existing lift stations. Individual lift station demand vs capacity will have to be monitored to determine time of needed pump or wet well upgrades. Three new lift stations are included in the CIP collection line estimate.

To meet projected needs, the City will require additional sanitary sewer collection lines to serve developing areas for end of FY 2022, with loads distributed utilizing land use and density projections. The 15.7 mile of additional lines represents a 19.7% increase in the wastewater collection network. Estimated future wastewater collection system costs in 2013 dollars, amounts to $13.5M.

Drainage & Detention

Using the 2022 assumptions of the Capital Improvement Plan, specifically projected land use and density projections, increased demand was projected within four (4) impact fee basins (out of seven total basins). Projected drainage system improvements were identified earlier in this report. Based on the 2022 projected demand, an increased length of 6.24 miles of drainage channel will be required for conveyance, amounting to an estimated cost of $39.71M. Based on the same projected demand, estimated detention improvements amount to $33.88M.

Total Costs of Capital Improvements and facility expansions necessitated and attributable to new development, are adjusted by calculated credits, then divided by projected service units, to calculate the impact fee per service unit.

Service Units and Conversion Table

State code requires establishment of a standard unit of measure for consumption, use, generation, or discharge attributable to an individual unit of development.

For utilities, the City of Tomball, Article IV, Sections 82-134 establishes living unit equivalents (LUE) as a basis for establishing equivalency for the various customer classifications relative to water and wastewater demands. Each single family home is served by a ¾-inch meter and this classification is considered one LUE. The following table shows LUE equivalences for various meter sizes and types. Conversion table applies equally to all land uses, with City ordinance provisions for exceptions based on professional engineering reports and/or staff recommendations.

LUE Equivalencies for Various Types and Sizes of Water Meters

Meter Type	Meter Size	Continuous Duty Maximum Rate (gpm)	Living Unit Equivalent (LUE)
Simple	3/4"	15	1.0
Simple	1"	25	2.5
Simple	1-1/2"	50	5.0
Compound	2"	80	8.0
Turbine	2"	100	10.0
Compound	3"	160	16.0
Turbine	3"	240	24.0
Compound	4"	250	25.0
Turbine	4"	420	42.0
Compound	6"	500	50.0
Turbine	6"	920	92.0
Compound	8"	800	80.0
Turbine	8"	1600	160.0
Compound	10"	1150	115.0
Turbine	10"	2500	250.0
Turbine	12"	3300	330.0

LUE is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12, and C702-10 recommended maximum rate for continuous duty flow of the meter, purchased at the sale of tap based on the Uniform Plumbing Code meter size and type.

LUE has also been used as the "service unit" for calculation of applicable potable water and wastewater fees presented in this report.

For Fiscal Years 2008 to 2012 the historical average daily demand per LUE required 335.9 gpd of water production. This report uses 370 gpd/LUE for annual variations in demand.

For Calendar Years 2008 to 2012 the historical maximum average annual daily flow per LUE was 227.0 gpd of wastewater treatment. This report recognizes that wastewater facilities are normally design at 300 gpd/LUE.

Calculation of impact fees associated with drainage improvements are based on actual acreage served by each basin as the "service unit".

Projected Service Units

Projected service unit increases for Water Production, Wastewater Collection, and Drainage & Detention were calculated earlier in this report. Water Production and Wastewater Collection are both projected for 7,874 connections by end of FY 2022, an increase of 1,195 in service units. Additional drainage areas projected for end of FY 2022 include 440 acres of residential land and 227 acres of commercial land, for a total 667 acres of projected development within the City Limits.

Projected Demands to Satisfy New Development

Projected service demands for Water Production, Wastewater Collection, and Drainage & Detention were calculated earlier in this report.

Water Production Average Daily Demand (ADD) is projected at 2,913,380 gpd for 7,874 connections for end of FY 2022.

Wastewater Collection Average Daily Flow (ADF) is projected at 2.362 MGD for 7,874 connections for end of FY 2022.

Future facilities will satisfy the drainage and detention storage requirements of the 2022 projected 667 acres of new development within the four basins.

Plan for Awarding Capital Improvement Plan Credits

As allowed by Chapter 395, City of Tomball Infrastructure Master Plan & Capital Recovery Fee Determination for 2012 to 2022 Credits will be calculated as a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan. Credit calculation is included under Maximum Capital Recovery Fee Determination.

Maximum Capital Recovery Fee Determination

The City of Tomball may enact or impose impact fees on land within the service area defined previously and by complying with other requirements defined in Texas Local Government Code Chapter 395. Items payable by fee for constructing capital improvements or facility expansions, established in the capital improvement plan only, include and are limited to:

1. Construction contract price
2. Surveying and engineering fees
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.

Other eligible costs provided by Chapter 395.012 include Cost of Indebtedness:

"Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan."

Applicable Capital Improvement Plan Costs

1. Capital Improvements Construction Costs for projected development was calculated per LUE for water and wastewater, and per acre for drainage. Existing costs include the City's currently outstanding bonds for Capital Improvement Plan (CIP) projects (See APPENDIX D).

Facility	Service Unit	CIP costs
Water Production	LUE	$ 4,394.20
Wastewater Collection	LUE	$ 3,074.64
Drainage System (by sub-basin)		
M118	Per Acre	$ 7,622.23
M121East	Per Acre	$ 10,440.45
M121West	Per Acre	$ 8,858.92
M124	Per Acre	$ 17,264.24
M125	Per Acre	$ 873.76

2. Surveying and engineering fees are included in the above estimates.
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees are not included in this report.
4. Total consultant fees actually paid for updating the capital improvements plan - $151,000. Fees were allocated equally to the three cost calculations (i.e., water, wastewater, and drainage) included above.

Cost of Indebtedness

Per Chapter 395.012 Impact fees of this CIP are to be used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the City of Tomball to finance the capital improvements or facility expansions identified in this capital improvements plan. No bond funds will be expended for facilities that are not identified in this capital improvements plan. Projected Cost of Implementing the CIP, including indebtedness, thus may be included in determining the amount of impact fees.

Interest charges and other finance costs were estimated and added to the Capital Improvement Plan Costs as shown in APPENDIX D.

Credits

Capital Improvement Plan Credits were calculated as follows:

A credit equal to 50 percent of the total projected cost of implementing the capital improvements plan was calculated and subtracted from the total costs.

See APPENDIX D Capital Improvement Plan Debt Service Credit and Maximum Impact Fees for calculation.

Maximum Impact Fees

The impact fee per service unit may not exceed the amount determined by subtracting the amount in Capital Improvement Plan Credits *Section 395.014(a)(7)* from the costs of the capital improvements described by Capital Improvements Due to New Development *Section 395.014(a)(3)* and dividing that amount by the total number of projected service units described by Projected Service Units *Section 395.014(a)(5).*

The maximum impact fee per service unit shall be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to projected new service units described by Section 395.014(a)(6) by the projected new service units described in that section.

The Maximum Impact Fees were calculated per LUE for water and wastewater, and per acre for drainage as follows (See APPENDIX D Capital Improvement Plan Debt Service Credit and Maximum Impact Fees for calculation):

Facility	Service Unit	Effective Date	Current Fee	Maximum Fee Per 2007 Report	Maximum Fee Calculated By This Report
Water Production	LUE	06/01/2012	$ 1,329.12	$ 2,000.54	$ 3,319.37
Wastewater Collection	LUE	06/01/2012	$ 1,653.23	$ 4,523.54	$ 2,322.57
Drainage System (by sub-basin)					
M118	Per Acre	06/01/2009	$ 6,023.00	$ 6,023.90	$ 5,757.81
M121E	Per Acre	06/01/2009	$ 6,828.71	$ 6,828.71	$ 7,886.69
M121W	Per Acre	06/01/2009	$ 4,985.14	$ 4,985.14	$ 6,692.00
M124	Per Acre	-	$ -	N/A	$13,041.36
M125	Per Acre	06/01/2009	$ 574.40	$ 574.40	$ 436.88

Maximum Impact Fee for Various Types and Sizes of Water Meters is also included in APPENDIX D.

Disposition of Previous Impact Fees

Fees previously collected under the City of Tomball impact fee program as of October 30, 2013 are listed in APPENDIX D.

APPENDIX A

TEXAS LOCAL GOVERNMENT CODE CHAPTER 395

The following requirements, extracted from the Texas Local Government Code Chapter 395, were utilized for preparation of this report.

TITLE 12. PLANNING AND DEVELOPMENT

SUBTITLE C. PLANNING AND DEVELOPMENT PROVISIONS APPLYING TO MORE THAN ONE TYPE OF LOCAL GOVERNMENT

CHAPTER 395. FINANCING CAPITAL IMPROVEMENTS REQUIRED BY NEW DEVELOPMENT IN MUNICIPALITIES, COUNTIES, AND CERTAIN OTHER LOCAL GOVERNMENTS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 395.001. DEFINITIONS. In this chapter:

(1) "Capital improvement" means any of the following facilities that have a life expectancy of three or more years and are owned and operated by or on behalf of a political subdivision:

(A) water supply, treatment, and distribution facilities; wastewater collection and treatment facilities; and storm water, drainage, and flood control facilities; whether or not they are located within the service area; and

(B) roadway facilities.

(2) "Capital improvements plan" means a plan required by this chapter that identifies capital improvements or facility expansions for which impact fees may be assessed.

(3) "Facility expansion" means the expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

(4) "Impact fee" means a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, and any other fee that functions as described by this definition. The term does not include:

(A) dedication of land for public parks or payment in lieu of the dedication to serve park needs;

(B) dedication of rights-of-way or easements or construction or dedication of on-site or off-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development;

(C) lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or constructing water or sewer mains or lines; or

(D) other pro rata fees for reimbursement of water or sewer mains or lines extended by the political subdivision.

However, an item included in the capital improvements plan may not be required to be constructed except in accordance with Section 395.019(2), and an owner may not be required to construct or dedicate facilities and to pay impact fees for those facilities.

(5) "Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period.

(6) "New development" means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of service units.

(7) "Political subdivision" means a municipality, a district or authority created under Article III, Section 52, or Article XVI, Section 59, of the Texas Constitution, or, for the purposes set forth by Section 395.079, certain counties described by that section.

(8) "Roadway facilities" means arterial or collector streets or roads that have been designated on an officially adopted roadway plan of the political subdivision, together with all necessary appurtenances. The term includes the political subdivision's share of costs for roadways and associated improvements designated on the federal or Texas highway system, including local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, sidewalks, drainage appurtenances, and rights-of-way.

(9) "Service area" means the area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, of the political subdivision to be served by the capital improvements or facilities expansions specified in the capital improvements plan, except roadway facilities and storm water, drainage, and flood control facilities. The service area, for the purposes of this chapter, may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, except for roadway facilities and storm water, drainage, and flood control facilities. For roadway facilities, the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six miles. For storm water, drainage, and flood control facilities, the service area may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, but shall not exceed the area actually served by the storm water, drainage, and flood control facilities designated in the capital improvements plan and shall not extend across watershed boundaries.

(10) "Service unit" means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1989, 71st Leg., ch. 566, Sec. 1(e), eff. Aug. 28, 1989; Acts 2001, 77th Leg., ch. 345, Sec. 1, eff. Sept. 1, 2001.

SUBCHAPTER B. AUTHORIZATION OF IMPACT FEE

Sec. 395.011. AUTHORIZATION OF FEE.

(a) Unless otherwise specifically authorized by state law or this chapter, a governmental entity or political subdivision may not enact or impose an impact fee.

(b) Political subdivisions may enact or impose impact fees on land within their corporate boundaries or extraterritorial jurisdictions only by complying with this chapter, except that impact fees may not be enacted or imposed in the extraterritorial jurisdiction for roadway facilities.

(c) A municipality may contract to provide capital improvements, except roadway facilities, to an area outside its corporate boundaries and extraterritorial jurisdiction and may charge an impact fee under the contract, but if an impact fee is charged in that area, the municipality must comply with this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.012. ITEMS PAYABLE BY FEE.

(a) An impact fee may be imposed only to pay the costs of constructing capital improvements or facility expansions, including and limited to the:

(1) construction contract price;

(2) surveying and engineering fees;

(3) land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and

(4) fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.

(b) Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.

(c) Notwithstanding any other provision of this chapter, the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay a staff engineer who prepares or updates a capital improvements plan under this chapter.

(d) A municipality may pledge an impact fee as security for the payment of debt service on a bond, note, or other obligation issued to finance a capital improvement or public facility expansion if:

(1) the improvement or expansion is identified in a capital improvements plan; and

(2) at the time of the pledge, the governing body of the municipality certifies in a written order, ordinance, or resolution that none of the impact fee will be used or expended for an improvement or expansion not identified in the plan.

(e) A certification under Subsection (d)(2) is sufficient evidence that an impact fee pledged will not be used or expended for an improvement or expansion that is not identified in the capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 90, Sec. 1, eff. May 16, 1995.

Sec. 395.013. ITEMS NOT PAYABLE BY FEE. Impact fees may not be adopted or used to pay for:

(1) construction, acquisition, or expansion of public facilities or assets other than capital improvements or facility expansions identified in the capital improvements plan;

(2) repair, operation, or maintenance of existing or new capital improvements or facility expansions;

(3) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(4) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(5) administrative and operating costs of the political subdivision, except the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay its administrative and operating costs;

(6) principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed by Section 395.012.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.014. CAPITAL IMPROVEMENTS PLAN.

(a) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:

(1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial;

(5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and

(7) a plan for awarding:

(A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or

(B) in the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

(b) The analysis required by Subsection (a)(3) may be prepared on a systemwide basis within the service area for each major category of capital improvement or facility expansion for the designated service area.

(c) The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.015. MAXIMUM FEE PER SERVICE UNIT.

(a) The impact fee per service unit may not exceed the amount determined by subtracting the amount in Section 395.014(a)(7) from the costs of the capital improvements described by Section 395.014(a)(3) and dividing that amount by the total number of projected service units described by Section 395.014(a)(5).

(b) If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee per service unit shall be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to projected new service units described by Section 395.014(a)(6) by the projected new service units described in that section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 3, eff. Sept. 1, 2001.

Sec. 395.016. TIME FOR ASSESSMENT AND COLLECTION OF FEE.

(a) This subsection applies only to impact fees adopted and land platted before June 20, 1987. For land that has been platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before June 20, 1987, or land on which new development occurs or is proposed without platting, the political subdivision may assess the impact fees at any time during the development approval and building process. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(b) This subsection applies only to impact fees adopted before June 20, 1987, and land platted after that date. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after June 20, 1987, the political subdivision may assess the impact fees before or at the time of recordation. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(c) This subsection applies only to impact fees adopted after June 20, 1987. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before the adoption of an impact fee, an impact fee may not be collected on any service unit for which a valid building permit is issued within one year after the date of adoption of the impact fee.

(d) This subsection applies only to land platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after adoption of an impact fee adopted after June 20, 1987. The political subdivision shall assess the impact fees before or at the time of recordation of a subdivision plat or other plat under Subchapter A, Chapter 212, or the subdivision or platting ordinance or procedures of any political subdivision in the official records of the county clerk of the county in which the tract is located. Except as provided by Section 395.019, if the political subdivision has water and wastewater capacity available:

(1) the political subdivision shall collect the fees at the time the political subdivision issues a building permit;

(2) for land platted outside the corporate boundaries of a municipality, the municipality shall collect the fees at the time an application for an individual meter connection to the municipality's water or wastewater system is filed; or

(3) a political subdivision that lacks authority to issue building permits in the area where the impact fee applies shall collect the fees at the time an application is filed for an individual meter connection to the political subdivision's water or wastewater system.

(e) For land on which new development occurs or is proposed to occur without platting, the political subdivision may assess the impact fees at any time during the development and building process and may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(f) An "assessment" means a determination of the amount of the impact fee in effect on the date or occurrence provided in this section and is the maximum amount that can be charged per service unit of such development. No specific act by the political subdivision is required.

(g) Notwithstanding Subsections (a)-(e) and Section 395.017, the political subdivision may reduce or waive an impact fee for any service unit that would qualify as affordable housing under 42 U.S.C. Section 12745, as amended, once the service unit is constructed. If affordable housing as defined by 42 U.S.C. Section 12745, as amended, is not

constructed, the political subdivision may reverse its decision to waive or reduce the impact fee, and the political subdivision may assess an impact fee at any time during the development approval or building process or after the building process if an impact fee was not already assessed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 980, Sec. 52, eff. Sept. 1, 1997; Acts 2001, 77th Leg., ch. 345, Sec. 4, eff. Sept. 1, 2001.

Sec. 395.017. ADDITIONAL FEE PROHIBITED; EXCEPTION. After assessment of the impact fees attributable to the new development or execution of an agreement for payment of impact fees, additional impact fees or increases in fees may not be assessed against the tract for any reason unless the number of service units to be developed on the tract increases. In the event of the increase in the number of service units, the impact fees to be imposed are limited to the amount attributable to the additional service units.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.018. AGREEMENT WITH OWNER REGARDING PAYMENT. A political subdivision is authorized to enter into an agreement with the owner of a tract of land for which the plat has been recorded providing for the time and method of payment of the impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.019. COLLECTION OF FEES IF SERVICES NOT AVAILABLE. Except for roadway facilities, impact fees may be assessed but may not be collected in areas where services are not currently available unless:

(1) the collection is made to pay for a capital improvement or facility expansion that has been identified in the capital improvements plan and the political subdivision commits to commence construction within two years, under duly awarded and executed contracts or commitments of staff time covering substantially all of the work required to provide service, and to have the service available within a reasonable period of time considering the type of capital improvement or facility expansion to be constructed, but in no event longer than five years;

(2) the political subdivision agrees that the owner of a new development may construct or finance the capital improvements or facility expansions and agrees that the costs incurred or funds advanced will be credited against the impact fees otherwise due from the new development or agrees to reimburse the owner for such costs from impact fees paid from other new developments that will use such capital improvements or facility expansions, which fees shall be collected and reimbursed to the owner at the time the other new development records its plat; or

(3) an owner voluntarily requests the political subdivision to reserve capacity to serve future development, and the political subdivision and owner enter into a valid written agreement.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.020. ENTITLEMENT TO SERVICES. Any new development for which an impact fee has been paid is entitled to the permanent use and benefit of the services for which the fee was exacted and is entitled to receive immediate service from any existing facilities with actual capacity to serve the new service units, subject to compliance with other valid regulations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.021. AUTHORITY OF POLITICAL SUBDIVISIONS TO SPEND FUNDS TO REDUCE FEES. Political subdivisions may spend funds from any lawful source to pay for all or a part of the capital improvements or facility expansions to reduce the amount of impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.022. AUTHORITY OF POLITICAL SUBDIVISION TO PAY FEES. (a) Political subdivisions and other governmental entities may pay impact fees imposed under this chapter.

(b) A school district is not required to pay impact fees imposed under this chapter unless the board of trustees of the district consents to the payment of the fees by entering a contract with the political subdivision that imposes the fees. The contract may contain terms the board of trustees considers advisable to provide for the payment of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 250, Sec. 1, eff. May 25, 2007.

Sec. 395.023. CREDITS AGAINST ROADWAY FACILITIES FEES. Any construction of, contributions to, or dedications of off-site roadway facilities agreed to or required by a political subdivision as a condition of development approval shall be credited against roadway facilities impact fees otherwise due from the development.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.024. ACCOUNTING FOR FEES AND INTEREST.

(a) The order, ordinance, or resolution levying an impact fee must provide that all funds collected through the adoption of an impact fee shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the fee was adopted.

(b) Interest earned on impact fees is considered funds of the account on which it is earned and is subject to all restrictions placed on use of impact fees under this chapter.

(c) Impact fee funds may be spent only for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as authorized by this chapter.

(d) The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.025. REFUNDS.

(a) On the request of an owner of the property on which an impact fee has been paid, the political subdivision shall refund the impact fee if existing facilities are available and service is denied or the political subdivision has, after collecting the fee when service was not available, failed to commence construction within two years or service is not available within a reasonable period considering the type of capital improvement or facility expansion to be constructed, but in no event later than five years from the date of payment under Section 395.019(1).

(b) Repealed by Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

(c) The political subdivision shall refund any impact fee or part of it that is not spent as authorized by this chapter within 10 years after the date of payment.

(d) Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002, Finance Code, or its successor statute.

(e) All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the impact fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.

(f) The owner of the property on which an impact fee has been paid or another political subdivision or governmental entity that paid the impact fee has standing to sue for a refund under this section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 1396, Sec. 37, eff. Sept. 1, 1997; Acts 1999, 76th Leg., ch. 62, Sec. 7.82, eff. Sept. 1, 1999; Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

SUBCHAPTER C. PROCEDURES FOR ADOPTION OF IMPACT FEE

Sec. 395.041. COMPLIANCE WITH PROCEDURES REQUIRED. Except as otherwise provided by this chapter, a political subdivision must comply with this subchapter to levy an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0411. CAPITAL IMPROVEMENTS PLAN. The political subdivision shall provide for a capital improvements plan to be developed by qualified professionals using generally accepted engineering and planning practices in accordance with Section 395.014.

Added by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.042. HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. To impose an impact fee, a political subdivision must adopt an order, ordinance, or resolution establishing a public hearing date to consider the land use assumptions and capital improvements plan for the designated service area.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.043. INFORMATION ABOUT LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN AVAILABLE TO PUBLIC. On or before the date of the first publication of the notice of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall make available to the public its land use assumptions, the time period of the projections, and a description of the capital improvement facilities that may be proposed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.044. NOTICE OF HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN.

(a) Before the 30th day before the date of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order, ordinance, or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN RELATING TO POSSIBLE ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the land use assumptions and capital improvements plan under which an impact fee may be imposed; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the land use assumptions and capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.045. APPROVAL OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) After the public hearing on the land use assumptions and capital improvements plan, the political subdivision shall determine whether to adopt or reject an ordinance, order, or resolution approving the land use assumptions and capital improvements plan.

(b) The political subdivision, within 30 days after the date of the public hearing, shall approve or disapprove the land use assumptions and capital improvements plan.

(c) An ordinance, order, or resolution approving the land use assumptions and capital improvements plan may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.0455. SYSTEMWIDE LAND USE ASSUMPTIONS.

(a) In lieu of adopting land use assumptions for each service area, a political subdivision may, except for storm water, drainage, flood control, and roadway facilities, adopt systemwide land use assumptions, which cover all of the area subject to the jurisdiction of the political subdivision for the purpose of imposing impact fees under this chapter.

(b) Prior to adopting systemwide land use assumptions, a political subdivision shall follow the public notice, hearing, and other requirements for adopting land use assumptions.

(c) After adoption of systemwide land use assumptions, a political subdivision is not required to adopt additional land use assumptions for a service area for water supply, treatment, and distribution facilities or wastewater collection and treatment facilities as a prerequisite to the adoption of a capital improvements plan or impact fee, provided the capital improvements plan and impact fee are consistent with the systemwide land use assumptions.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(b), eff. Aug. 28, 1989.

Sec. 395.047. HEARING ON IMPACT FEE. On adoption of the land use assumptions and capital improvements plan, the governing body shall adopt an order or resolution setting a public hearing to discuss the imposition of the impact fee. The public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution imposing an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.049. NOTICE OF HEARING ON IMPACT FEE.

(a) Before the 30th day before the date of the hearing on the imposition of an impact fee, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the adoption of an impact fee;

(4) the amount of the proposed impact fee per service unit; and

(5) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the plan and proposed fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.050. ADVISORY COMMITTEE COMMENTS ON IMPACT FEES. The advisory committee created under Section 395.058 shall file its written comments on the proposed impact fees before the fifth business day before the date of the public hearing on the imposition of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.051. APPROVAL OF IMPACT FEE REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the imposition of an impact fee, shall approve or disapprove the imposition of an impact fee.

(b) An ordinance, order, or resolution approving the imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.052. PERIODIC UPDATE OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) A political subdivision imposing an impact fee shall update the land use assumptions and capital improvements plan at least every five years. The initial five-year period begins on the day the capital improvements plan is adopted.

(b) The political subdivision shall review and evaluate its current land use assumptions and shall cause an update of the capital improvements plan to be prepared in accordance with Subchapter B.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 6, eff. Sept. 1, 2001.

Sec. 395.053. HEARING ON UPDATED LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. The governing body of the political subdivision shall, within 60 days after the date it receives the update of the land use assumptions and the capital improvements plan, adopt an order setting a public hearing to discuss and review the update and shall determine whether to amend the plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.054. HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE. A public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution amending land use assumptions, the capital improvements plan, or the impact fee. On or before the date of the first publication of the notice of the hearing on the amendments, the land use assumptions and the capital improvements plan, including the amount of any proposed amended impact fee per service unit, shall be made available to the public.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.055. NOTICE OF HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE.

(a) The notice and hearing procedures prescribed by Sections 395.044(a) and (b) apply to a hearing on the amendment of land use assumptions, a capital improvements plan, or an impact fee.

(b) The notice of a hearing under this section must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON AMENDMENT OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the amendment of land use assumptions and a capital improvements plan and the imposition of an impact fee; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the update.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 7, eff. Sept. 1, 2001.

Sec. 395.056. ADVISORY COMMITTEE COMMENTS ON AMENDMENTS. The advisory committee created under Section 395.058 shall file its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fee before the fifth business day before the date of the public hearing on the amendments.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.057. APPROVAL OF AMENDMENTS REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the amendments, shall approve or disapprove the amendments of the land use assumptions and the capital improvements plan and modification of an impact fee.

(b) An ordinance, order, or resolution approving the amendments to the land use assumptions, the capital improvements plan, and imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0575. DETERMINATION THAT NO UPDATE OF LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN OR IMPACT FEES IS NEEDED.

(a) If, at the time an update under Section 395.052 is required, the governing body determines that no change to the land use assumptions, capital improvements plan, or impact fee is needed, it may, as an alternative to the updating requirements of Sections 395.052-395.057, do the following:

(1) The governing body of the political subdivision shall, upon determining that an update is unnecessary and 60 days before publishing the final notice under this section, send notice of its determination not to update the land use assumptions, capital improvements plan, and impact fee by certified mail to any person who has, within two years preceding the date that the final notice of this matter is to be published, give written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of hearings related to impact fees. The notice must contain the information in Subsections (b)(2)-(5).

(2) The political subdivision shall publish notice of its determination once a week for three consecutive weeks in one or more newspapers with general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies. The notice of public hearing may not be in the part of the paper in which legal notices and classified ads appear and may not be smaller than one-quarter page of a standard-size or tabloid-size newspaper, and the headline on the notice must be in 18-point or larger type.

(b) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF DETERMINATION NOT TO UPDATE LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEES";

(2) a statement that the governing body of the political subdivision has determined that no change to the land use assumptions, capital improvements plan, or impact fee is necessary;

(3) an easily understandable description and a map of the service area in which the updating has been determined to be unnecessary;

(4) a statement that if, within a specified date, which date shall be at least 60 days after publication of the first notice, a person makes a written request to the designated official of the political subdivision requesting that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body must comply with the request by following the requirements of Sections 395.052-395.057; and

(5) a statement identifying the name and mailing address of the official of the political subdivision to whom a request for an update should be sent.

(c) The advisory committee shall file its written comments on the need for updating the land use assumptions, capital improvements plans, and impact fee before the fifth business day before the earliest notice of the government's decision that no update is necessary is mailed or published.

(d) If, by the date specified in Subsection (b)(4), a person requests in writing that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body shall cause an update of the land use assumptions and capital improvements plan to be prepared in accordance with Sections 395.052-395.057.

(e) An ordinance, order, or resolution determining the need for updating land use assumptions, a capital improvements plan, or an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(d), eff. Aug. 28, 1989.

Sec. 395.058. ADVISORY COMMITTEE.

(a) On or before the date on which the order, ordinance, or resolution is adopted under Section 395.042, the political subdivision shall appoint a capital improvements advisory committee.

(b) The advisory committee is composed of not less than five members who shall be appointed by a majority vote of the governing body of the political subdivision. Not less than 40 percent of the membership of the advisory committee must be representatives of the real estate, development, or building industries who are not employees or officials of a political subdivision or governmental entity. If the political subdivision has a planning and zoning commission, the commission may act as the advisory committee if the commission includes at least one representative of the real estate, development, or building industry who is not an employee or official of a political subdivision or governmental entity. If no such representative is a member of the planning and zoning commission, the commission may still act as the advisory committee if at least one such representative is appointed by the political subdivision as an ad hoc voting member of the planning and zoning commission when it acts as the advisory committee. If the impact fee is to be applied in the extraterritorial jurisdiction of the political subdivision, the membership must include a representative from that area.

(c) The advisory committee serves in an advisory capacity and is established to:

(1) advise and assist the political subdivision in adopting land use assumptions;

(2) review the capital improvements plan and file written comments;

(3) monitor and evaluate implementation of the capital improvements plan;

(4) file semiannual reports with respect to the progress of the capital improvements plan and report to the political subdivision any perceived inequities in implementing the plan or imposing the impact fee; and

(5) advise the political subdivision of the need to update or revise the land use assumptions, capital improvements plan, and impact fee.

(d) The political subdivision shall make available to the advisory committee any professional reports with respect to developing and implementing the capital improvements plan.

(e) The governing body of the political subdivision shall adopt procedural rules for the advisory committee to follow in carrying out its duties.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

SUBCHAPTER D. OTHER PROVISIONS

Sec. 395.071. DUTIES TO BE PERFORMED WITHIN TIME LIMITS. If the governing body of the political subdivision does not perform a duty imposed under this chapter within the prescribed period, a person who has paid an impact fee or an owner of land on which an impact fee has been paid has the right to present a written request to the governing body of the political subdivision stating the nature of the unperformed duty and requesting that it be performed within 60 days after the date of the request. If the governing body of the political subdivision finds that the duty is required under this chapter and is late in being performed, it shall cause the duty to commence within 60 days after the date of the request and continue until completion.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.072. RECORDS OF HEARINGS. A record must be made of any public hearing provided for by this chapter. The record shall be maintained and be made available for public inspection by the political subdivision for at least 10 years after the date of the hearing.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.073. CUMULATIVE EFFECT OF STATE AND LOCAL RESTRICTIONS. Any state or local restrictions that apply to the imposition of an impact fee in a political subdivision where an impact fee is proposed are cumulative with the restrictions in this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.074. PRIOR IMPACT FEES REPLACED BY FEES UNDER THIS CHAPTER. An impact fee that is in place on June 20, 1987, must be replaced by an impact fee made under this chapter on or before June 20, 1990. However, any political subdivision having an impact fee that has not been replaced under this chapter on or before June 20, 1988, is liable to any party who, after June 20, 1988, pays an impact fee that exceeds the maximum permitted under Subchapter B by more than 10 percent for an amount equal to two times the difference between the maximum impact fee allowed and the actual impact fee imposed, plus reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.075. NO EFFECT ON TAXES OR OTHER CHARGES. This chapter does not prohibit, affect, or regulate any tax, fee, charge, or assessment specifically authorized by state law.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.076. MORATORIUM ON DEVELOPMENT PROHIBITED. A moratorium may not be placed on new development for the purpose of awaiting the completion of all or any part of the process necessary to develop, adopt, or update land use assumptions, a capital improvements plan, or an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 441, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.077. APPEALS.

(a) A person who has exhausted all administrative remedies within the political subdivision and who is aggrieved by a final decision is entitled to trial de novo under this chapter.

(b) A suit to contest an impact fee must be filed within 90 days after the date of adoption of the ordinance, order, or resolution establishing the impact fee.

(c) Except for roadway facilities, a person who has paid an impact fee or an owner of property on which an impact fee has been paid is entitled to specific performance of the services by the political subdivision for which the fee was paid.

(d) This section does not require construction of a specific facility to provide the services.

(e) Any suit must be filed in the county in which the major part of the land area of the political subdivision is located. A successful litigant shall be entitled to recover reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.078. SUBSTANTIAL COMPLIANCE WITH NOTICE REQUIREMENTS. An impact fee may not be held invalid because the public notice requirements were not complied with if compliance was substantial and in good faith.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.079. IMPACT FEE FOR STORM WATER, DRAINAGE, AND FLOOD CONTROL IN POPULOUS COUNTY.

(a) Any county that has a population of 3.3 million or more or that borders a county with a population of 3.3 million or more, and any district or authority created under Article XVI, Section 59, of the Texas Constitution within any such county that is authorized to provide storm water, drainage, and flood control facilities, is authorized to impose impact fees to provide storm water, drainage, and flood control improvements necessary to accommodate new development.

(b) The imposition of impact fees authorized by Subsection (a) is exempt from the requirements of Sections 395.025, 395.052-395.057, and 395.074 unless the political subdivision proposes to increase the impact fee.

(c) Any political subdivision described by Subsection (a) is authorized to pledge or otherwise contractually obligate all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued or incurred by or on behalf of the political subdivision and to the payment of any other contractual obligations.

(d) An impact fee adopted by a political subdivision under Subsection (a) may not be reduced if:

(1) the political subdivision has pledged or otherwise contractually obligated all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision; and

(2) the political subdivision agrees in the pledge or contract not to reduce the impact fees during the term of the bonds, notes, or other contractual obligations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 669, Sec. 107, eff. Sept. 1, 2001.

Sec. 395.080. CHAPTER NOT APPLICABLE TO CERTAIN WATER-RELATED SPECIAL DISTRICTS.

(a) This chapter does not apply to impact fees, charges, fees, assessments, or contributions:

(1) paid by or charged to a district created under Article XVI, Section 59, of the Texas Constitution to another district created under that constitutional provision if both districts are required by law to obtain approval of their bonds by the Texas Natural Resource Conservation Commission; or

(2) charged by an entity if the impact fees, charges, fees, assessments, or contributions are approved by the Texas Natural Resource Conservation Commission.

(b) Any district created under Article XVI, Section 59, or Article III, Section 52, of the Texas Constitution may petition the Texas Natural Resource Conservation Commission for approval of any proposed impact fees, charges, fees, assessments, or contributions. The commission shall adopt rules for reviewing the petition and may charge the petitioner fees adequate to cover the cost of processing and considering the petition. The rules shall require notice substantially the same as that required by this chapter for the adoption of impact fees and shall afford opportunity for all affected parties to participate.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 76, Sec. 11.257, eff. Sept. 1, 1995.

Sec. 395.081. FEES FOR ADJOINING LANDOWNERS IN CERTAIN MUNICIPALITIES.

(a) This section applies only to a municipality with a population of 115,000 or less that constitutes more than three-fourths of the population of the county in which the majority of the area of the municipality is located.

(b) A municipality that has not adopted an impact fee under this chapter that is constructing a capital improvement, including sewer or waterline or drainage or roadway facilities, from the municipality to a development located within or outside the municipality's boundaries, in its discretion, may allow a landowner whose land adjoins the capital improvement or is within a specified distance from the capital improvement, as determined by the governing body of the municipality, to connect to the capital improvement if:

(1) the governing body of the municipality has adopted a finding under Subsection (c); and

(2) the landowner agrees to pay a proportional share of the cost of the capital improvement as determined by the governing body of the municipality and agreed to by the landowner.

(c) Before a municipality may allow a landowner to connect to a capital improvement under Subsection (b), the municipality shall adopt a finding that the municipality will benefit from allowing the landowner to connect to the capital improvement. The finding shall describe the benefit to be received by the municipality.

(d) A determination of the governing body of a municipality, or its officers or employees, under this section is a discretionary function of the municipality and the municipality and its officers or employees are not liable for a determination made under this section.

Added by Acts 1997, 75th Leg., ch. 1150, Sec. 1, eff. June 19, 1997.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1043, Sec. 5, eff. June 17, 2011.

Acts 2011, 82nd Leg., R.S., Ch. 1163, Sec. 100, eff. September 1, 2011.

APPENDIX B

References

"City of Tomball Infrastructure Master Plan and Capital Recovery Fee Determination 2002 to 2012", PBS&J, Houston, Texas, May 2002.

"City of Tomball Infrastructure Master Plan and Impact Fee Determination 2007 to 2017", LAN, Houston, Texas, October 2008.

"Tomball Comprehensive Plan - Vision 2030", adopted by Ordinance No. 2009-33, December 7, 2009.

"2035 Regional Growth Forecast", Houston-Galveston Area Council

2010 U.S. Census Report SF-1, City of Tomball, Texas, U.S. Census Bureau and the Texas State Data Center, 2011.

"Subcounty Total Resident Population Estimates (Vintage 2012): April 1, 2010 to July 1, 2012", U.S. Census Bureau, released via Internet on May 23, 2013.

"Local Grand Parkway construction upcoming…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 5, January 24 – February 20, 2013.

"Expansion of 249 moving plans for Aggie Expressway along", www.yourhoustonnews.com, by Lindsey Vaculin, posted December 19, 2012.

"Work to begin on Hwy. 249 tollway…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 9, May 16 – June 19, 2013.

APPENDIX C

Unit Cost Data

Water System Unit Cost Data

8-inch Water Line		Unit	Unit Price
8-inch Water Line		LF	$ 35.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 43.00
Augering & Roadway Repairs	20%	LF	$ 8.60
Easement Acquisition	15%	LF	$ 6.45
Pipeline Relocation	30%	LF	$ 12.90
Contingencies	15%	LF	$ 6.45
Engineering & Surveying	25%	LF	$ 10.75
Total 8-inch Water Line per LF			**$ 88.00**

12-Inch Water Line		Unit	Unit Price
12-inch Water Line		LF	$ 54.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 62.00
Augering & Roadway Repairs	20%	LF	$ 12.40
Easement Acquisition	15%	LF	$ 9.30
Pipeline Relocation	30%	LF	$ 18.60
Contingencies	15%	LF	$ 9.30
Engineering & Surveying	25%	LF	$ 15.50
Total 12-inch Water Line per LF			**$ 127.00**

(1) Assumes Fire Hydrants are spaced every 350 feet

Miscellaneous Items Used in Water Lines above			
Fire Hydrant Assembly		EA	$ 2,400.00

Water Well Plant Estimate				
	Qty		Unit Cost Est	Total Cost
Well	1000	gpm	$ 1,420.00	$1,420,000.00
GST	400000	gal	$ 2.50	$1,000,000.00
Boosters	1800	gpm	$ 37.00	$ 66,600.00
Maintenance Bldg	1	LS	$ 216,000.00	$ 216,000.00
HPT	10000	gal	$ 4.15	$ 41,500.00
Emer. Gen 275kW	300	kW	$ 300.00	$ 90,000.00
				$2,834,100.00
Contingencies	15%			$ 283,410.00
Engineering & Surveying	25%			$ 708,525.00
				$3,826,035.00

Sanitary Sewer Unit Cost Data

Item		Unit	Unit Price
8-inch Gravity Sanitary Sewer			
8-inch Gravity Sanitary Sewer (all depths)		LF	$ 40.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 46.00
Augering & Roadway Repairs	15%	LF	$ 6.90
Easement Acquisition	15%	LF	$ 6.90
Pipeline Relocation	30%	LF	$ 13.80
Contingencies	15%	LF	$ 6.90
Engineering & Surveying	25%	LF	$ 11.50
Indirect Cost Subtotal	100%		$ 46.00
8-inch Gravity Sanitary Sewer Total			**$ 92.00**
10-Inch Gravity Sanitary Sewer			
10-inch Gravity Sanitary Sewer (all depths)		LF	$ 50.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtoal			$ 56.00
Indirect Cost Subtotal (2)		LF	$ 56.00
10-Inch Gravity Sanitary Sewer Total			**$ 112.00**
12-Inch Gravity Sanitary Sewer			
12-inch Gravity Sanitary Sewer (all depths)		LF	$ 65.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 71.00
Indirect Cost Subtotal (2)		LF	$ 71.00
12-Inch Gravity Sanitary Sewer Total			**$ 142.00**
15-Inch Gravity Sanitary Sewer			
15-inch Gravity Sanitary Sewer (all depths)		LF	$ 85.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 91.00
Indirect Cost Subtotal (2)		LF	$ 91.00
15-Inch Gravity Sanitary Sewer Total			**$ 182.00**
18-Inch Gravity Sanitary Sewer			
18-inch Gravity Sanitary Sewer (all depths)		LF	$ 105.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 111.00
Indirect Cost Subtotal (2)		LF	$ 111.00
18-Inch Gravity Sanitary Sewer Total			**$ 222.00**

Sanitary Sewer Unit Cost Data (Cont.)

21-Inch Gravity Sanitary Sewer			
21-inch Gravity Sanitary Sewer (all depths)	LF	$	120.00
Sanitary Sewer Manhole(1)	LF	$	5.00
Trench Safety	LF	$	1.00
Subtotal		$	126.00
Indirect Cost Subtotal (2)	LF	$	126.00
21-Inch Gravity Sanitary Sewer Total		**$**	**252.00**
4-Inch Force Main			
4-Inch Force Main	LF	$	25.00
Trench Safety	LF	$	1.00
Subtotal		$	26.00
Indirect Cost Subtotal (2)	LF	$	26.00
4-Inch Force Main Total		**$**	**52.00**
6-Inch Force Main			
6-Inch Force Main	LF	$	30.00
Trench Safety	LF	$	1.00
Subtotal		$	31.00
Indirect Cost Subtotal (2)	LF	$	31.00
6-Inch Force Main Total		**$**	**62.00**
8-Inch Force Main			
8-Inch Force Main	LF	$	35.00
Trench Safety	LF	$	1.00
Subtotal		$	36.00
Indirect Cost Subtotal (2)	LF	$	36.00
8-Inch Force Main Total		**$**	**72.00**
Miscellaneous Items Used in Sanitary Sewer Lines Above			
Sanitary Sewer Manhole	EA	$	2,000.00
Lift Station (300-500 gpm)			
Lift Station (300-500 gpm) including contengencies	EA	$	320,000.00
Engineering & Testing	EA	$	80,000.00
Total		**$**	**400,000.00**
Lift Station (1,000-1,500 gpm)			
Lift Station (1,000-1,500 gpm) including contengencies	EA	$	440,000.00
Engineering & Testing	EA	$	110,000.00
Total		**$**	**550,000.00**
Lift Station (1,500-2,000 gpm)			
Lift Station (1,500-2,000 gpm) including contengencies	EA	$	820,000.00
Engineering & Testing	EA	$	205,000.00
Total		**$**	**1,025,000.00**
Wastewater Treatment Plant Capacity			
Wastewater Treatment Plant Capacity incl. contg.	gpd	$	6.00
Contingencies	gpd	$	0.90
Engineering & Testing	gpd	$	1.50
Total per gpd		**$**	**8.40**

(1) Manhole spaced every 400 feet.

(2) Indirect cost percentages are the same for all sizes of sanitary sewer lines and force mains. The percentages are shown in the cost data for an 8-inch sanitary sewer line.

Drainage Unit Cost Calculation

Item		Unit	Unit Price
Drainage Ditch			
Drainage Channel Excavation (10' bottom, 12' depth, 4:1 SS)*		LF	$ 257.78
Backslope Swale & Interceptor**		LF	$ 56.00
Sod (160' ROW)		LF	$ 53.33
Misc (Clearing, SWPPP, Etc)	15%	LF	$ 55.07
Subtotal			$ 422.18
Contingencies	15%	LF	$ 63.33
Engineering & Surveying	25%	LF	$ 105.54
Indirect Cost Subtotal	40%		$ 168.87
Drainage Ditch Total			**$ 591.05**

* Excavation Haul Off Assumed

** 250 ft spacing

Detention Unit Cost Calculation

Item		Unit	Unit Price
Detention Facility			
Detention Excavation (12' depth, 4:1 SS)*		Acre-Ft	$16,130.00
Backslope Swale & Interceptor**		Acre-Ft	$ 583.33
Sod		Acre-Ft	$ 440.00
Misc (Clearing, SWPPP, Etc)	15%	Acre-Ft	$ 2,573.00
Subtotal			$19,726.33
Contingencies	15%	Acre-Ft	$ 2,958.95
Engineering & Surveying	25%	Acre-Ft	$ 4,931.58
Indirect Cost Subtotal	40%		$ 7,890.53
Detention Facility Total			**$27,616.87**

* Excavation Haul Off Assumed

** 250 ft spacing

Unit Cost Data

Item		Unit	Unit Price
Mobilization			4%
SWPPP			2.5%
Excavation - Haul Off		CY	$ 10.00
Backslope Swale		Ea	$ 6,000.00
Backslope Interceptor		LF	$ 4.00
Sod		SY	$ 3.00
Sod		Acre	$ 4,840.00
Clearing & Grubbing		Acre	$ 5,000.00

Water System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 2007 CIP[1]						
Distribution Lines	$535,900	7,874	$68.06	1,195	$81,331	
Water Wells	$4,491,570	1,667	$2,694.94	979	$2,638,348	
Proposed Facilities with 2012 CIP						
Water Well	$1,420,000	1,667	$852.00	216	$184,032	
Ground Storage Tanks	$1,000,000	2,000	$500.00	216	$108,000	
Booster Pumps	$66,600	1,667	$39.96	216	$8,631	
Facility (Bldg, H-Tank & Generator)	$347,500	1,667	$208.50	216	$45,036	
WP Engineering, Surveying & Contingencies	$991,935	1,667	$595.16	216	$128,555	
Distribution Lines	$13,223,100	7,874	$1,679.34	1,195	$2,006,808	
Water (1/3 2012-2022 CIP Preparation Fees)					$50,333	
Total				**1,195**	**$5,251,075**	**$4,394.20**

(1) Existing facility costs are from Tomball staff.

Wastewater System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Bond Principal	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 1996 & 1999 CIP (1)							
South Wastewater Treatment Plant	$2,465,000		3,333	$739.50	753	$556,733	
Facilities constructed with 2002 CIP(1)							
Trunklines		$4,263,701	7,874	$541.49	1,195	$647,082	
Facilities constructed with 2007 CIP(1)							
Trunk Lines 2007 CIP		$888,503	7,874	$112.84	1,195	$134,844	
Proposed Facilities with 2012CIP							
Lift Stations 2012 CIP		$1,350,000	6,804	$198.41	1,195	$237,098	
Trunk Lines 2012 CIP		$13,495,200	7,874	$1,713.89	1,195	$2,048,103	
Water (1/3 2012-2022 CIP Preparation Fees)						$50,333	
Total					**1,195**	**$3,674,193**	**$3,074.64**

(1) Existing Facility costs from Tomball staff. Costs shown are outstanding bond amounts.
(2) Buildout to WWTP's maximum capacities.

Drainage System Capital Improvements Construction Costs per Acre, 2012 to 2022

HCFCD Channel No.	Construction Project	Estimated Improvement Costs	Collected Funds[1]	2012 Assessable Improvement Costs[2]	Total Basin Area Served (Acres)	Existing City of Tomball 2012 Development[3]	Estimated Floodway Acreage	Areas outside City and ETJ	Net Acreage to Bear Fee	1/3 2012-2022 CIP Fees per Usage Acre[5]	Capital Cost Basis per Acre	Total Cost Basis per Acre
J131[4]	Detention & Conveyence	$0	$0	$0	3,156	57	18	387	3,156		$0.00	
J132[4]	Channel	$0	$0	$0	250	57	4	0	250		$0.00	
										$ -		
J133[4]	Channel	$0	$0	$0	500	57	9	0	500		$0.00	
										$ -		
M116[4]	Channel	$0	$0	$0	1,575	57	0	550	1,575		$0.00	
M118	N of EDC Project	$2,423,300										
M118	EDC Project	$1,359,412										
M118	S of Holderrieth + Detention	$1,790,741										
		$5,573,454	$0	$5,573,454	732	57	51	0	732	$ 8.22	$7,614.01	$ 7,622.23
M121 East	Channel	$2,216,433										
M121 East	Detention	$4,335,848										
		$6,552,281	($9,591)	$6,561,872	629	170	27	0	629	$ 8.22	$10,432.23	$ 10,440.45
M121 West	Channel	$1,448,070										
M121 West	Channel	$2,807,482										
M121 West	Detention	$5,937,626										
		$10,193,178	($82,485)	$10,275,664	1,161	225	49	0	1,161	$ 8.22	$8,850.70	$ 8,858.92
M124[4]	Channel	$2,364,196		$2,364,196								
M124	Channel	$26,377,589		$26,377,589								
M124	Detention	$21,818,344		$21,818,344								
		$50,560,129	$0	$50,560,129	2,930	373	100	877	2,930	$ 8.22	$17,256.02	$ 17,264.24
M125	Detention	$543,805	($40,431)	$584,237	675	373	14	19	675	$ 8.22	$865.54	$ 873.76

(1) Existing Facility costs from Tomball staff based on outstanding bond amounts, plus Proposed Facilities estimates, including engineering & contingencies.

(2) Limited to Proposed Facility construction estimates, including engineering & contingencies when no improvements exist.

(3) Existing Areas previously assessed impact fees.

(4) The current CIP does not include channel or detention construction within the next ten years due to funding constraints.

(5) (1/3 2012-2022 CIP) Fee Dispensed by acreage for M118, M121, & M125.

Projected Cost of Implementing the CIP

Component	Capital Cost per LUE 2012 to 2022	Estimated Bond Soft Costs per LUE [1]	Estimated Total Bond Amount per LUE	Interest per LUE [2]	Total Debt Service per LUE
Water	$4,394.20	$351.54	$4,745.74	$1,893.00	$6,638.74
Wastewater	$3,074.64	$245.97	$3,320.61	$1,324.54	$4,645.15

Drainage Service Area	Capital Cost per Acre 2012 to 2022	Estimated Bond Soft Costs	Estimated Bond Amount per Acre [1]	Interest per Acre [2]	Total Debt Service per Acre
J131	$0.00	$0.00	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00	$0.00	$0.00
M118	$7,622.23	$609.78	$8,232.01	$3,283.61	$11,515.62
M121E	$10,440.45	$835.24	$11,275.69	$4,497.69	$15,773.37
M121W	$8,858.92	$708.71	$9,567.63	$3,816.37	$13,384.01
M124	$17,264.24	$1,381.14	$18,645.38	$7,437.34	$26,082.71
M125	$873.76	$0.00	$0.00	$0.00	$873.76

(1) Assumes a bond soft costs of 8.0%
(2) Assumes an interest rate of 3.5% and 40 semi-annual payments

Capital Improvement Plan Debt Service Credit and Maximum Impact Fees

Component	Total Debt Service per LUE	Debt Service Credit per LUE [1]	Maximum Impact Fee per LUE
Water	$6,638.74	$3,319.37	$3,319.37
Wastewater	$4,645.15	$2,322.57	$2,322.57

Drainage Service Area	Total Debt Service per Acre	Debt Service Credit per Acre [1]	Maximum Impact Fee per Acre
J131	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00
M118	$11,515.62	$5,757.81	$5,757.81
M121E	$15,773.37	$7,886.69	$7,886.69
M121W	$13,384.01	$6,692.00	$6,692.00
M124	$26,082.71	$13,041.36	$13,041.36
M125	$873.76	$436.88	$436.88

(1) Credit equal to 50% of the total projected cost of implementing the CIP.

Maximum Impact Fee for Various Types and Sizes of Water Meters

Meter Type	Meter Size	Living Unit Equivalent (LUE)	Water Impact Fee by Meter Size		Wastewater Impact Fee by Meter Size	Total Impact Fee by Meter Size
Simple	3/4"	1.0	$ 3,319.37	s	$ 2,322.57	$ 5,641.94
Simple	1"	2.5	$ 8,298.42		$ 5,806.43	$ 14,104.86
Simple	1-1/2"	5.0	$ 16,596.85		$ 11,612.87	$ 28,209.71
Compound	2"	8.0	$ 26,554.96		$ 18,580.58	$ 45,135.54
Turbine	2"	10.0	$ 33,193.70		$ 23,225.73	$ 56,419.43
Compound	3"	16.0	$ 53,109.92		$ 37,161.17	$ 90,271.09
Turbine	3"	24.0	$ 79,664.88		$ 55,741.75	$ 135,406.63
Compound	4"	25.0	$ 82,984.25		$ 58,064.33	$ 141,048.57
Turbine	4"	42.0	$ 139,413.53		$ 97,548.07	$ 236,961.60
Compound	6"	50.0	$ 165,968.49		$ 116,128.65	$ 282,097.14
Turbine	6"	92.0	$ 305,382.02		$ 213,676.72	$ 519,058.74
Compound	8"	80.0	$ 265,549.58		$ 185,805.84	$ 451,355.43
Turbine	8"	160.0	$ 531,099.17		$ 371,611.68	$ 902,710.85
Compound	10"	115.0	$ 381,727.53		$ 267,095.90	$ 648,823.42
Turbine	10"	250.0	$ 829,842.45		$ 580,643.25	$ 1,410,485.70
Turbine	12"	330.0	$ 1,095,392.04		$ 766,449.09	$ 1,861,841.13

LUE is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12, and C702-10 recommended maximum rate for continuous duty flow of the meter, purchased at the sale of tap based on the Uniform Plumbing Code meter size and type.

Disposition of Collected Impact Fees

Water Impact Fees Collected and Interest Earnings as of 12/31/12	$2,460,861			
Water System Improvements, completed from 1996 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" water main along Zion Road from Ulrich to Neal St.	$97,200			$97,200
2. 12" water main along SH 249 from Brown to Baker	$50,000			$50,000
3. 12" water main along S. Cherry from Agg to Theis	$210,600			$210,600
4. 12" water main along Theis from S. Cherry to SH 249	$194,499			$194,499
5. 2000 gpm water well	$600,000	$600,000		
Total	**$1,152,299**	**$600,000**	**$0**	**$552,299**
Water System Improvements, completed from 1999 CIP				
1. 12" water main along FM 2920 from Lowes to Calvert	$54,810			$54,810
2. 750,000 gallon elevated storage tank	$1,200,000		$1,200,000	
3. 6" parallel water main on Graham and Holderreith	$124,981			$124,981
Total	**$1,379,791**	**$0**	**$1,200,000**	**$179,791**
Total Water System Improvements from 1996 and 1999 CIP	**$2,532,090**	**$600,000**	**$1,200,000**	**$732,090**
Water System Improvements, completed from 2002 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" Water main on SH 249 from Theis to Holderreith	$172,800			$172,800
2. 12" Water main on Holderreith from School St ext. to SH 249	$86,400			$86,400
3. 12" Water main on Holderreith from School St ext. to Cherry	$103,680			$103,680
4. 12" Water main on Holderreith from S. Cherry to Huffsmith-Korhville	$311,040			$311,040
5. 12" Water main along S. Cherry from Theis to Holderreith	$164,160			$164,160
6. 12" Water main along Brown Rd to E. Hufsmith Extension	$216,000			$216,000
7. 8" Water main along Johnson Rd from Michel to shopping center	$37,260			$37,260
8. 12" Water main along Hufsmith-Kohrville from FM 2920 to Holderreith	$492,480			$492,480
9. Install 1200 gpm pump at Baker St. well	$270,000	$270,000		
10. 12" Water main along Alice Rd from SH 249 to SH 249 Bypass	$86,400			$86,400
11. 12" Water mian along FM 2920 from Persimmon to ETJ	$181,440			$181,440
12. 8" Water main on Willow St from Carrell to Texas	$34,155			$34,155
Total	**$2,155,815**	**$270,000**	**$0**	**$1,885,815**
Water System Improvements, completed from 2007 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 8-Inch Water Line along the Future Michel Road extension from Commercial Park Drive to	$796			$796

School Street				
2. 12-inch Water Line along Quinn Road from Baker Drive to Inwood Street	$195,978			$195,978
3. 12-inch Water Line along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$407,486			$407,486
4. 12-inch Water Line along Tomball Cemetery Road North of 2920 (Private Funding)	$0			
5. 12-inch Water Line along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$126,058			$126,058
6. Water Line Extension on Mechanic Street	$20,878			$20,878
7. Water Wells 5 and 6/Plant	$4,491,570	$4,491,570		
Total	**$5,242,766**	**$4,491,570**	**$0**	**$751,196**
Not 50% Funded by Impact fee as of 12/13/2012	$5,045,993	$4,491,570	$0	$554,422
Less Impact Fee Balance	-$18,522	0		-$18,522
Remaining to be paid by Impact fees	**$5,027,471**	**$4,491,570**		**$535,900**
Wastewater Impact Fees Collected and Interest Earnings as of 12/31/12	$2,600,215			
Balance as of 3/31/2008	$83,046			
Wastewater System Improvements, completed from 1996 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. 10" gravity sewer along SH 249 from McCoy's to FM 2920	$103,200			$103,200
2. 10" gravity sewer along Hooper from Bypass to SH 249	$50,000			$50,000
3. 10" gravity sewer along Hirschfield from SH 249 to Bypass	$40,000			$40,000
4. 1.5 MGD Wastewater Treatment Plant	$6,117,000		$6,117,000	
Total	**$6,310,200**	**$0**	**$6,117,000**	**$193,200**
Wastewater System Improvements, completed from 1999 CIP				
1. 10" gravity line along FM 2920: Kroger to City Limit	$14,144			$14,144
2. 12" gravity line along FM 2920: City Limit to Calvert	$151,948			$151,948
3. 10" gravity line along Hirschfield: SH 249 and bypass	$56,253			$56,253
4. Temporaty Lift Station at Calvert FM 2920	$80,000			$80,000
5. 6" force main along FM 2920 from temporary Lift Station to gravity sewer at Sh 249	$39,387			$39,387
6. 18" gravity trunk along Cherry from McPhail to Agg Road	$127,374			$127,374
7. 21" gravity trunk along Cherry from Agg to Theis	$120,745			$120,745
8. 24" gravity trunk along Cherry from Theis to Holderreith	$305,597			$305,597
9. 27" gravity trunk along Cherry from Holderreith to WWTP	$158,165			$158,165
10. 18" gravity line along Theis from LS to Cherry	$83,278			$83,278
11. Abandon Theis Lift Station	$360			$360
Total	**$1,137,251**	**$0**	**$0**	**$1,137,251**
Total Wastewater System Imp from 1996 and 1999 CIP	$7,447,451	$0	$6,117,000	$1,330,451

Wastewater System Improvements, completed from 2002 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. (8) 12" gravity line along W. Hufsmith from Quin Ext to SH 249	$164,160			$164,160
2. (10) 18" gravity line along FM 2920 from Calvert to Park St	$228,960			$228,960
3. (11) 6" force main from Temp Lift Station at Park/FM 2920 to Calvert	$73,440			$73,440
4. (12) 12" gravity line along FM 2920 from Park Rd to Tomball Cem. Rd	$145,935			$145,935
5. (14) Temp Lift Station at FM 2920 and Park Rd	$107,933			$107,933
6. (16) 10" gravity line on SH 249 from Hirschfield Rd to Alice Rd	$64,800			$64,800
7. (17) 21" gravity line on SH 249 from Alice Rd to Holderreith Rd	$528,255			$528,255
8. (18) 18" gravity line on Alice Rd from SH 249 Bypass to SH 249	$128,790			$128,790
9. (19) 30" gravity line on Holderreith Ext west of SH 249	$79,488			$79,488
10. (20) 30" gravity line on Holderreith from SH 249 and S. WWTP	$864,000			$864,000
11. (25) 8" gravity line along Johnson	$40,500			$40,500
12. (28) Abandon Cherry St Lift Station	$13,500			$13,500
13. (29) 27" gravity line on Holderreith from S. WWTP Trunk Line to BNRR	$577,800			$577,800
14. (30) 27" gravity line on Holderrieth from BNRR to Hufsmith-Kohrville Rd	$288,900			$288,900
15. (31) 24" gravity line on Hufsmith-Kohrville Rd from Holderreith to Sutton Ln	$790,560			$790,560
16. (32) 18" gravity line on Hufsnith-Kohrville Rd from Sutton Ln to FM 2920	$357,750			$357,750
Total	**$4,454,771**	**$0**	**$0**	**$4,454,771**
Not 50% Funded by Impact fee as of 12/13/2012	$4,290,611			$4,290,611
Less Impact Fee Balance	-$26,910			-$26,910
Remaining to be paid by Impact fees	**$4,263,701**			**$4,263,701**
Wastewater System Improvements, completed from 2007 CIP				
1. 10-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$329,227			$329,227
2. 12-inch Gravity Sanitary Sewer along Tomball Cementery Road (Private Funding)	$0			$0
3. 8-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$88,565			$88,565
4. 8" gravity line on Mechanic Street	$4,378			$4,378
5. Tomball Hills Lift Station	$466,333			$466,333
Total	**$888,503**	**$0**	**$0**	**$888,503**

APPENDIX A

TEXAS LOCAL GOVERNMENT CODE CHAPTER 395

The following requirements, extracted from the Texas Local Government Code Chapter 395, were utilized for preparation of this report.

TITLE 12. PLANNING AND DEVELOPMENT

SUBTITLE C. PLANNING AND DEVELOPMENT PROVISIONS APPLYING TO MORE THAN ONE TYPE OF LOCAL GOVERNMENT

CHAPTER 395. FINANCING CAPITAL IMPROVEMENTS REQUIRED BY NEW DEVELOPMENT IN MUNICIPALITIES, COUNTIES, AND CERTAIN OTHER LOCAL GOVERNMENTS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 395.001. DEFINITIONS. In this chapter:

(1) "Capital improvement" means any of the following facilities that have a life expectancy of three or more years and are owned and operated by or on behalf of a political subdivision:

(A) water supply, treatment, and distribution facilities; wastewater collection and treatment facilities; and storm water, drainage, and flood control facilities; whether or not they are located within the service area; and

(B) roadway facilities.

(2) "Capital improvements plan" means a plan required by this chapter that identifies capital improvements or facility expansions for which impact fees may be assessed.

(3) "Facility expansion" means the expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

(4) "Impact fee" means a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, and any other fee that functions as described by this definition. The term does not include:

(A) dedication of land for public parks or payment in lieu of the dedication to serve park needs;

(B) dedication of rights-of-way or easements or construction or dedication of on-site or off-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development;

(C) lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or constructing water or sewer mains or lines; or

(D) other pro rata fees for reimbursement of water or sewer mains or lines extended by the political subdivision.

However, an item included in the capital improvements plan may not be required to be constructed except in accordance with Section 395.019(2), and an owner may not be required to construct or dedicate facilities and to pay impact fees for those facilities.

(5) "Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period.

(6) "New development" means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of service units.

(7) "Political subdivision" means a municipality, a district or authority created under Article III, Section 52, or Article XVI, Section 59, of the Texas Constitution, or, for the purposes set forth by Section 395.079, certain counties described by that section.

(8) "Roadway facilities" means arterial or collector streets or roads that have been designated on an officially adopted roadway plan of the political subdivision, together with all necessary appurtenances. The term includes the political subdivision's share of costs for roadways and associated improvements designated on the federal or Texas highway system, including local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, sidewalks, drainage appurtenances, and rights-of-way.

(9) "Service area" means the area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, of the political subdivision to be served by the capital improvements or facilities expansions specified in the capital improvements plan, except roadway facilities and storm water, drainage, and flood control facilities. The service area, for the purposes of this chapter, may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, except for roadway facilities and storm water, drainage, and flood control facilities. For roadway facilities, the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six miles. For storm water, drainage, and flood control facilities, the service area may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, but shall not exceed the area actually served by the storm water, drainage, and flood control facilities designated in the capital improvements plan and shall not extend across watershed boundaries.

(10) "Service unit" means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1989, 71st Leg., ch. 566, Sec. 1(e), eff. Aug. 28, 1989; Acts 2001, 77th Leg., ch. 345, Sec. 1, eff. Sept. 1, 2001.

SUBCHAPTER B. AUTHORIZATION OF IMPACT FEE

Sec. 395.011. AUTHORIZATION OF FEE.

(a) Unless otherwise specifically authorized by state law or this chapter, a governmental entity or political subdivision may not enact or impose an impact fee.

(b) Political subdivisions may enact or impose impact fees on land within their corporate boundaries or extraterritorial jurisdictions only by complying with this chapter, except that impact fees may not be enacted or imposed in the extraterritorial jurisdiction for roadway facilities.

(c) A municipality may contract to provide capital improvements, except roadway facilities, to an area outside its corporate boundaries and extraterritorial jurisdiction and may charge an impact fee under the contract, but if an impact fee is charged in that area, the municipality must comply with this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.012. ITEMS PAYABLE BY FEE.

(a) An impact fee may be imposed only to pay the costs of constructing capital improvements or facility expansions, including and limited to the:

(1) construction contract price;

(2) surveying and engineering fees;

(3) land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and

(4) fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.

(b) Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.

(c) Notwithstanding any other provision of this chapter, the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay a staff engineer who prepares or updates a capital improvements plan under this chapter.

(d) A municipality may pledge an impact fee as security for the payment of debt service on a bond, note, or other obligation issued to finance a capital improvement or public facility expansion if:

(1) the improvement or expansion is identified in a capital improvements plan; and

(2) at the time of the pledge, the governing body of the municipality certifies in a written order, ordinance, or resolution that none of the impact fee will be used or expended for an improvement or expansion not identified in the plan.

(e) A certification under Subsection (d)(2) is sufficient evidence that an impact fee pledged will not be used or expended for an improvement or expansion that is not identified in the capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 90, Sec. 1, eff. May 16, 1995.

Sec. 395.013. ITEMS NOT PAYABLE BY FEE. Impact fees may not be adopted or used to pay for:

(1) construction, acquisition, or expansion of public facilities or assets other than capital improvements or facility expansions identified in the capital improvements plan;

(2) repair, operation, or maintenance of existing or new capital improvements or facility expansions;

(3) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(4) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(5) administrative and operating costs of the political subdivision, except the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay its administrative and operating costs;

(6) principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed by Section 395.012.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.014. CAPITAL IMPROVEMENTS PLAN.

(a) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:

(1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial;

(5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and

(7) a plan for awarding:

(A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or

(B) in the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

(b) The analysis required by Subsection (a)(3) may be prepared on a systemwide basis within the service area for each major category of capital improvement or facility expansion for the designated service area.

(c) The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.015. MAXIMUM FEE PER SERVICE UNIT.

(a) The impact fee per service unit may not exceed the amount determined by subtracting the amount in Section 395.014(a)(7) from the costs of the capital improvements described by Section 395.014(a)(3) and dividing that amount by the total number of projected service units described by Section 395.014(a)(5).

(b) If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee per service unit shall be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to projected new service units described by Section 395.014(a)(6) by the projected new service units described in that section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 3, eff. Sept. 1, 2001.

Sec. 395.016. TIME FOR ASSESSMENT AND COLLECTION OF FEE.

(a) This subsection applies only to impact fees adopted and land platted before June 20, 1987. For land that has been platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before June 20, 1987, or land on which new development occurs or is proposed without platting, the political subdivision may assess the impact fees at any time during the development approval and building process. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(b) This subsection applies only to impact fees adopted before June 20, 1987, and land platted after that date. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after June 20, 1987, the political subdivision may assess the impact fees before or at the time of recordation. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(c) This subsection applies only to impact fees adopted after June 20, 1987. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before the adoption of an impact fee, an impact fee may not be collected on any service unit for which a valid building permit is issued within one year after the date of adoption of the impact fee.

(d) This subsection applies only to land platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after adoption of an impact fee adopted after June 20, 1987. The political subdivision shall assess the impact fees before or at the time of recordation of a subdivision plat or other plat under Subchapter A, Chapter 212, or the subdivision or platting ordinance or procedures of any political subdivision in the official records of the county clerk of the county in which the tract is located. Except as provided by Section 395.019, if the political subdivision has water and wastewater capacity available:

(1) the political subdivision shall collect the fees at the time the political subdivision issues a building permit;

(2) for land platted outside the corporate boundaries of a municipality, the municipality shall collect the fees at the time an application for an individual meter connection to the municipality's water or wastewater system is filed; or

(3) a political subdivision that lacks authority to issue building permits in the area where the impact fee applies shall collect the fees at the time an application is filed for an individual meter connection to the political subdivision's water or wastewater system.

(e) For land on which new development occurs or is proposed to occur without platting, the political subdivision may assess the impact fees at any time during the development and building process and may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(f) An "assessment" means a determination of the amount of the impact fee in effect on the date or occurrence provided in this section and is the maximum amount that can be charged per service unit of such development. No specific act by the political subdivision is required.

(g) Notwithstanding Subsections (a)-(e) and Section 395.017, the political subdivision may reduce or waive an impact fee for any service unit that would qualify as affordable housing under 42 U.S.C. Section 12745, as amended, once the service unit is constructed. If affordable housing as defined by 42 U.S.C. Section 12745, as amended, is not

constructed, the political subdivision may reverse its decision to waive or reduce the impact fee, and the political subdivision may assess an impact fee at any time during the development approval or building process or after the building process if an impact fee was not already assessed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 980, Sec. 52, eff. Sept. 1, 1997; Acts 2001, 77th Leg., ch. 345, Sec. 4, eff. Sept. 1, 2001.

Sec. 395.017. ADDITIONAL FEE PROHIBITED; EXCEPTION. After assessment of the impact fees attributable to the new development or execution of an agreement for payment of impact fees, additional impact fees or increases in fees may not be assessed against the tract for any reason unless the number of service units to be developed on the tract increases. In the event of the increase in the number of service units, the impact fees to be imposed are limited to the amount attributable to the additional service units.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.018. AGREEMENT WITH OWNER REGARDING PAYMENT. A political subdivision is authorized to enter into an agreement with the owner of a tract of land for which the plat has been recorded providing for the time and method of payment of the impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.019. COLLECTION OF FEES IF SERVICES NOT AVAILABLE. Except for roadway facilities, impact fees may be assessed but may not be collected in areas where services are not currently available unless:

(1) the collection is made to pay for a capital improvement or facility expansion that has been identified in the capital improvements plan and the political subdivision commits to commence construction within two years, under duly awarded and executed contracts or commitments of staff time covering substantially all of the work required to provide service, and to have the service available within a reasonable period of time considering the type of capital improvement or facility expansion to be constructed, but in no event longer than five years;

(2) the political subdivision agrees that the owner of a new development may construct or finance the capital improvements or facility expansions and agrees that the costs incurred or funds advanced will be credited against the impact fees otherwise due from the new development or agrees to reimburse the owner for such costs from impact fees paid from other new developments that will use such capital improvements or facility expansions, which fees shall be collected and reimbursed to the owner at the time the other new development records its plat; or

(3) an owner voluntarily requests the political subdivision to reserve capacity to serve future development, and the political subdivision and owner enter into a valid written agreement.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.020. ENTITLEMENT TO SERVICES. Any new development for which an impact fee has been paid is entitled to the permanent use and benefit of the services for which the fee was exacted and is entitled to receive immediate service from any existing facilities with actual capacity to serve the new service units, subject to compliance with other valid regulations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.021. AUTHORITY OF POLITICAL SUBDIVISIONS TO SPEND FUNDS TO REDUCE FEES. Political subdivisions may spend funds from any lawful source to pay for all or a part of the capital improvements or facility expansions to reduce the amount of impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.022. AUTHORITY OF POLITICAL SUBDIVISION TO PAY FEES. (a) Political subdivisions and other governmental entities may pay impact fees imposed under this chapter.

(b) A school district is not required to pay impact fees imposed under this chapter unless the board of trustees of the district consents to the payment of the fees by entering a contract with the political subdivision that imposes the fees. The contract may contain terms the board of trustees considers advisable to provide for the payment of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 250, Sec. 1, eff. May 25, 2007.

Sec. 395.023. CREDITS AGAINST ROADWAY FACILITIES FEES. Any construction of, contributions to, or dedications of off-site roadway facilities agreed to or required by a political subdivision as a condition of development approval shall be credited against roadway facilities impact fees otherwise due from the development.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.024. ACCOUNTING FOR FEES AND INTEREST.

(a) The order, ordinance, or resolution levying an impact fee must provide that all funds collected through the adoption of an impact fee shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the fee was adopted.

(b) Interest earned on impact fees is considered funds of the account on which it is earned and is subject to all restrictions placed on use of impact fees under this chapter.

(c) Impact fee funds may be spent only for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as authorized by this chapter.

(d) The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.025. REFUNDS.

(a) On the request of an owner of the property on which an impact fee has been paid, the political subdivision shall refund the impact fee if existing facilities are available and service is denied or the political subdivision has, after collecting the fee when service was not available, failed to commence construction within two years or service is not available within a reasonable period considering the type of capital improvement or facility expansion to be constructed, but in no event later than five years from the date of payment under Section 395.019(1).

(b) Repealed by Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

(c) The political subdivision shall refund any impact fee or part of it that is not spent as authorized by this chapter within 10 years after the date of payment.

(d) Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002, Finance Code, or its successor statute.

(e) All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the impact fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.

(f) The owner of the property on which an impact fee has been paid or another political subdivision or governmental entity that paid the impact fee has standing to sue for a refund under this section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 1396, Sec. 37, eff. Sept. 1, 1997; Acts 1999, 76th Leg., ch. 62, Sec. 7.82, eff. Sept. 1, 1999; Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

SUBCHAPTER C. PROCEDURES FOR ADOPTION OF IMPACT FEE

Sec. 395.041. COMPLIANCE WITH PROCEDURES REQUIRED. Except as otherwise provided by this chapter, a political subdivision must comply with this subchapter to levy an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0411. CAPITAL IMPROVEMENTS PLAN. The political subdivision shall provide for a capital improvements plan to be developed by qualified professionals using generally accepted engineering and planning practices in accordance with Section 395.014.

Added by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.042. HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. To impose an impact fee, a political subdivision must adopt an order, ordinance, or resolution establishing a public hearing date to consider the land use assumptions and capital improvements plan for the designated service area.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.043. INFORMATION ABOUT LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN AVAILABLE TO PUBLIC. On or before the date of the first publication of the notice of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall make available to the public its land use assumptions, the time period of the projections, and a description of the capital improvement facilities that may be proposed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.044. NOTICE OF HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN.

(a) Before the 30th day before the date of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order, ordinance, or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN RELATING TO POSSIBLE ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the land use assumptions and capital improvements plan under which an impact fee may be imposed; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the land use assumptions and capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.045. APPROVAL OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) After the public hearing on the land use assumptions and capital improvements plan, the political subdivision shall determine whether to adopt or reject an ordinance, order, or resolution approving the land use assumptions and capital improvements plan.

(b) The political subdivision, within 30 days after the date of the public hearing, shall approve or disapprove the land use assumptions and capital improvements plan.

(c) An ordinance, order, or resolution approving the land use assumptions and capital improvements plan may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.0455. SYSTEMWIDE LAND USE ASSUMPTIONS.

(a) In lieu of adopting land use assumptions for each service area, a political subdivision may, except for storm water, drainage, flood control, and roadway facilities, adopt systemwide land use assumptions, which cover all of the area subject to the jurisdiction of the political subdivision for the purpose of imposing impact fees under this chapter.

(b) Prior to adopting systemwide land use assumptions, a political subdivision shall follow the public notice, hearing, and other requirements for adopting land use assumptions.

(c) After adoption of systemwide land use assumptions, a political subdivision is not required to adopt additional land use assumptions for a service area for water supply, treatment, and distribution facilities or wastewater collection and treatment facilities as a prerequisite to the adoption of a capital improvements plan or impact fee, provided the capital improvements plan and impact fee are consistent with the systemwide land use assumptions.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(b), eff. Aug. 28, 1989.

Sec. 395.047. HEARING ON IMPACT FEE. On adoption of the land use assumptions and capital improvements plan, the governing body shall adopt an order or resolution setting a public hearing to discuss the imposition of the impact fee. The public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution imposing an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.049. NOTICE OF HEARING ON IMPACT FEE.

(a) Before the 30th day before the date of the hearing on the imposition of an impact fee, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the adoption of an impact fee;

(4) the amount of the proposed impact fee per service unit; and

(5) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the plan and proposed fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.050. ADVISORY COMMITTEE COMMENTS ON IMPACT FEES. The advisory committee created under Section 395.058 shall file its written comments on the proposed impact fees before the fifth business day before the date of the public hearing on the imposition of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.051. APPROVAL OF IMPACT FEE REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the imposition of an impact fee, shall approve or disapprove the imposition of an impact fee.

(b) An ordinance, order, or resolution approving the imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.052. PERIODIC UPDATE OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) A political subdivision imposing an impact fee shall update the land use assumptions and capital improvements plan at least every five years. The initial five-year period begins on the day the capital improvements plan is adopted.

(b) The political subdivision shall review and evaluate its current land use assumptions and shall cause an update of the capital improvements plan to be prepared in accordance with Subchapter B.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 6, eff. Sept. 1, 2001.

Sec. 395.053. HEARING ON UPDATED LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. The governing body of the political subdivision shall, within 60 days after the date it receives the update of the land use assumptions and the capital improvements plan, adopt an order setting a public hearing to discuss and review the update and shall determine whether to amend the plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.054. HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE. A public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution amending land use assumptions, the capital improvements plan, or the impact fee. On or before the date of the first publication of the notice of the hearing on the amendments, the land use assumptions and the capital improvements plan, including the amount of any proposed amended impact fee per service unit, shall be made available to the public.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.055. NOTICE OF HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE.

(a) The notice and hearing procedures prescribed by Sections 395.044(a) and (b) apply to a hearing on the amendment of land use assumptions, a capital improvements plan, or an impact fee.

(b) The notice of a hearing under this section must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON AMENDMENT OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the amendment of land use assumptions and a capital improvements plan and the imposition of an impact fee; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the update.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 7, eff. Sept. 1, 2001.

Sec. 395.056. ADVISORY COMMITTEE COMMENTS ON AMENDMENTS. The advisory committee created under Section 395.058 shall file its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fee before the fifth business day before the date of the public hearing on the amendments.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.057. APPROVAL OF AMENDMENTS REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the amendments, shall approve or disapprove the amendments of the land use assumptions and the capital improvements plan and modification of an impact fee.

(b) An ordinance, order, or resolution approving the amendments to the land use assumptions, the capital improvements plan, and imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0575. DETERMINATION THAT NO UPDATE OF LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN OR IMPACT FEES IS NEEDED.

(a) If, at the time an update under Section 395.052 is required, the governing body determines that no change to the land use assumptions, capital improvements plan, or impact fee is needed, it may, as an alternative to the updating requirements of Sections 395.052-395.057, do the following:

(1) The governing body of the political subdivision shall, upon determining that an update is unnecessary and 60 days before publishing the final notice under this section, send notice of its determination not to update the land use assumptions, capital improvements plan, and impact fee by certified mail to any person who has, within two years preceding the date that the final notice of this matter is to be published, give written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of hearings related to impact fees. The notice must contain the information in Subsections (b)(2)-(5).

(2) The political subdivision shall publish notice of its determination once a week for three consecutive weeks in one or more newspapers with general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies. The notice of public hearing may not be in the part of the paper in which legal notices and classified ads appear and may not be smaller than one-quarter page of a standard-size or tabloid-size newspaper, and the headline on the notice must be in 18-point or larger type.

(b) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF DETERMINATION NOT TO UPDATE LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEES";

(2) a statement that the governing body of the political subdivision has determined that no change to the land use assumptions, capital improvements plan, or impact fee is necessary;

(3) an easily understandable description and a map of the service area in which the updating has been determined to be unnecessary;

(4) a statement that if, within a specified date, which date shall be at least 60 days after publication of the first notice, a person makes a written request to the designated official of the political subdivision requesting that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body must comply with the request by following the requirements of Sections 395.052-395.057; and

(5) a statement identifying the name and mailing address of the official of the political subdivision to whom a request for an update should be sent.

(c) The advisory committee shall file its written comments on the need for updating the land use assumptions, capital improvements plans, and impact fee before the fifth business day before the earliest notice of the government's decision that no update is necessary is mailed or published.

(d) If, by the date specified in Subsection (b)(4), a person requests in writing that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body shall cause an update of the land use assumptions and capital improvements plan to be prepared in accordance with Sections 395.052-395.057.

(e) An ordinance, order, or resolution determining the need for updating land use assumptions, a capital improvements plan, or an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(d), eff. Aug. 28, 1989.

Sec. 395.058. ADVISORY COMMITTEE.

(a) On or before the date on which the order, ordinance, or resolution is adopted under Section 395.042, the political subdivision shall appoint a capital improvements advisory committee.

(b) The advisory committee is composed of not less than five members who shall be appointed by a majority vote of the governing body of the political subdivision. Not less than 40 percent of the membership of the advisory committee must be representatives of the real estate, development, or building industries who are not employees or officials of a political subdivision or governmental entity. If the political subdivision has a planning and zoning commission, the commission may act as the advisory committee if the commission includes at least one representative of the real estate, development, or building industry who is not an employee or official of a political subdivision or governmental entity. If no such representative is a member of the planning and zoning commission, the commission may still act as the advisory committee if at least one such representative is appointed by the political subdivision as an ad hoc voting member of the planning and zoning commission when it acts as the advisory committee. If the impact fee is to be applied in the extraterritorial jurisdiction of the political subdivision, the membership must include a representative from that area.

(c) The advisory committee serves in an advisory capacity and is established to:

(1) advise and assist the political subdivision in adopting land use assumptions;

(2) review the capital improvements plan and file written comments;

(3) monitor and evaluate implementation of the capital improvements plan;

(4) file semiannual reports with respect to the progress of the capital improvements plan and report to the political subdivision any perceived inequities in implementing the plan or imposing the impact fee; and

(5) advise the political subdivision of the need to update or revise the land use assumptions, capital improvements plan, and impact fee.

(d) The political subdivision shall make available to the advisory committee any professional reports with respect to developing and implementing the capital improvements plan.

(e) The governing body of the political subdivision shall adopt procedural rules for the advisory committee to follow in carrying out its duties.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

SUBCHAPTER D. OTHER PROVISIONS

Sec. 395.071. DUTIES TO BE PERFORMED WITHIN TIME LIMITS. If the governing body of the political subdivision does not perform a duty imposed under this chapter within the prescribed period, a person who has paid an impact fee or an owner of land on which an impact fee has been paid has the right to present a written request to the governing body of the political subdivision stating the nature of the unperformed duty and requesting that it be performed within 60 days after the date of the request. If the governing body of the political subdivision finds that the duty is required under this chapter and is late in being performed, it shall cause the duty to commence within 60 days after the date of the request and continue until completion.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.072. RECORDS OF HEARINGS. A record must be made of any public hearing provided for by this chapter. The record shall be maintained and be made available for public inspection by the political subdivision for at least 10 years after the date of the hearing.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.073. CUMULATIVE EFFECT OF STATE AND LOCAL RESTRICTIONS. Any state or local restrictions that apply to the imposition of an impact fee in a political subdivision where an impact fee is proposed are cumulative with the restrictions in this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.074. PRIOR IMPACT FEES REPLACED BY FEES UNDER THIS CHAPTER. An impact fee that is in place on June 20, 1987, must be replaced by an impact fee made under this chapter on or before June 20, 1990. However, any political subdivision having an impact fee that has not been replaced under this chapter on or before June 20, 1988, is liable to any party who, after June 20, 1988, pays an impact fee that exceeds the maximum permitted under Subchapter B by more than 10 percent for an amount equal to two times the difference between the maximum impact fee allowed and the actual impact fee imposed, plus reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.075. NO EFFECT ON TAXES OR OTHER CHARGES. This chapter does not prohibit, affect, or regulate any tax, fee, charge, or assessment specifically authorized by state law.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.076. MORATORIUM ON DEVELOPMENT PROHIBITED. A moratorium may not be placed on new development for the purpose of awaiting the completion of all or any part of the process necessary to develop, adopt, or update land use assumptions, a capital improvements plan, or an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 441, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.077. APPEALS.

(a) A person who has exhausted all administrative remedies within the political subdivision and who is aggrieved by a final decision is entitled to trial de novo under this chapter.

(b) A suit to contest an impact fee must be filed within 90 days after the date of adoption of the ordinance, order, or resolution establishing the impact fee.

(c) Except for roadway facilities, a person who has paid an impact fee or an owner of property on which an impact fee has been paid is entitled to specific performance of the services by the political subdivision for which the fee was paid.

(d) This section does not require construction of a specific facility to provide the services.

(e) Any suit must be filed in the county in which the major part of the land area of the political subdivision is located. A successful litigant shall be entitled to recover reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.078. SUBSTANTIAL COMPLIANCE WITH NOTICE REQUIREMENTS. An impact fee may not be held invalid because the public notice requirements were not complied with if compliance was substantial and in good faith.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.079. IMPACT FEE FOR STORM WATER, DRAINAGE, AND FLOOD CONTROL IN POPULOUS COUNTY.

(a) Any county that has a population of 3.3 million or more or that borders a county with a population of 3.3 million or more, and any district or authority created under Article XVI, Section 59, of the Texas Constitution within any such county that is authorized to provide storm water, drainage, and flood control facilities, is authorized to impose impact fees to provide storm water, drainage, and flood control improvements necessary to accommodate new development.

(b) The imposition of impact fees authorized by Subsection (a) is exempt from the requirements of Sections 395.025, 395.052-395.057, and 395.074 unless the political subdivision proposes to increase the impact fee.

(c) Any political subdivision described by Subsection (a) is authorized to pledge or otherwise contractually obligate all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued or incurred by or on behalf of the political subdivision and to the payment of any other contractual obligations.

(d) An impact fee adopted by a political subdivision under Subsection (a) may not be reduced if:

(1) the political subdivision has pledged or otherwise contractually obligated all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision; and

(2) the political subdivision agrees in the pledge or contract not to reduce the impact fees during the term of the bonds, notes, or other contractual obligations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 669, Sec. 107, eff. Sept. 1, 2001.

Sec. 395.080. CHAPTER NOT APPLICABLE TO CERTAIN WATER-RELATED SPECIAL DISTRICTS.

(a) This chapter does not apply to impact fees, charges, fees, assessments, or contributions:

(1) paid by or charged to a district created under Article XVI, Section 59, of the Texas Constitution to another district created under that constitutional provision if both districts are required by law to obtain approval of their bonds by the Texas Natural Resource Conservation Commission; or

(2) charged by an entity if the impact fees, charges, fees, assessments, or contributions are approved by the Texas Natural Resource Conservation Commission.

(b) Any district created under Article XVI, Section 59, or Article III, Section 52, of the Texas Constitution may petition the Texas Natural Resource Conservation Commission for approval of any proposed impact fees, charges, fees, assessments, or contributions. The commission shall adopt rules for reviewing the petition and may charge the petitioner fees adequate to cover the cost of processing and considering the petition. The rules shall require notice substantially the same as that required by this chapter for the adoption of impact fees and shall afford opportunity for all affected parties to participate.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 76, Sec. 11.257, eff. Sept. 1, 1995.

Sec. 395.081. FEES FOR ADJOINING LANDOWNERS IN CERTAIN MUNICIPALITIES.

(a) This section applies only to a municipality with a population of 115,000 or less that constitutes more than three-fourths of the population of the county in which the majority of the area of the municipality is located.

(b) A municipality that has not adopted an impact fee under this chapter that is constructing a capital improvement, including sewer or waterline or drainage or roadway facilities, from the municipality to a development located within or outside the municipality's boundaries, in its discretion, may allow a landowner whose land adjoins the capital improvement or is within a specified distance from the capital improvement, as determined by the governing body of the municipality, to connect to the capital improvement if:

(1) the governing body of the municipality has adopted a finding under Subsection (c); and

(2) the landowner agrees to pay a proportional share of the cost of the capital improvement as determined by the governing body of the municipality and agreed to by the landowner.

(c) Before a municipality may allow a landowner to connect to a capital improvement under Subsection (b), the municipality shall adopt a finding that the municipality will benefit from allowing the landowner to connect to the capital improvement. The finding shall describe the benefit to be received by the municipality.

(d) A determination of the governing body of a municipality, or its officers or employees, under this section is a discretionary function of the municipality and the municipality and its officers or employees are not liable for a determination made under this section.

Added by Acts 1997, 75th Leg., ch. 1150, Sec. 1, eff. June 19, 1997.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1043, Sec. 5, eff. June 17, 2011.

Acts 2011, 82nd Leg., R.S., Ch. 1163, Sec. 100, eff. September 1, 2011.

APPENDIX B

References

"City of Tomball Infrastructure Master Plan and Capital Recovery Fee Determination 2002 to 2012", PBS&J, Houston, Texas, May 2002.

"City of Tomball Infrastructure Master Plan and Impact Fee Determination 2007 to 2017", LAN, Houston, Texas, October 2008.

"Tomball Comprehensive Plan - Vision 2030", adopted by Ordinance No. 2009-33, December 7, 2009.

"2035 Regional Growth Forecast", Houston-Galveston Area Council

2010 U.S. Census Report SF-1, City of Tomball, Texas, U.S. Census Bureau and the Texas State Data Center, 2011.

"Subcounty Total Resident Population Estimates (Vintage 2012): April 1, 2010 to July 1, 2012", U.S. Census Bureau, released via Internet on May 23, 2013.

"Local Grand Parkway construction upcoming…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 5, January 24 – February 20, 2013.

"Expansion of 249 moving plans for Aggie Expressway along", www.yourhoustonnews.com, by Lindsey Vaculin, posted December 19, 2012.

"Work to begin on Hwy. 249 tollway…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 9, May 16 – June 19, 2013.

APPENDIX C

Unit Cost Data

Water System Unit Cost Data

8-inch Water Line		Unit	Unit Price
8-inch Water Line		LF	$ 35.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 43.00
Augering & Roadway Repairs	20%	LF	$ 8.60
Easement Acquisition	15%	LF	$ 6.45
Pipeline Relocation	30%	LF	$ 12.90
Contingencies	15%	LF	$ 6.45
Engineering & Surveying	25%	LF	$ 10.75
Total 8-inch Water Line per LF			**$ 88.00**

12-Inch Water Line		Unit	Unit Price
12-inch Water Line		LF	$ 54.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 62.00
Augering & Roadway Repairs	20%	LF	$ 12.40
Easement Acquisition	15%	LF	$ 9.30
Pipeline Relocation	30%	LF	$ 18.60
Contingencies	15%	LF	$ 9.30
Engineering & Surveying	25%	LF	$ 15.50
Total 12-inch Water Line per LF			**$ 127.00**

(1) Assumes Fire Hydrants are spaced every 350 feet

Miscellaneous Items Used in Water Lines above			
Fire Hydrant Assembly		EA	$ 2,400.00

Water Well Plant Estimate	Qty		Unit Cost Est	Total Cost
Well	1000	gpm	$ 1,420.00	$1,420,000.00
GST	400000	gal	$ 2.50	$1,000,000.00
Boosters	1800	gpm	$ 37.00	$ 66,600.00
Maintenance Bldg	1	LS	$ 216,000.00	$ 216,000.00
HPT	10000	gal	$ 4.15	$ 41,500.00
Emer. Gen 275kW	300	kW	$ 300.00	$ 90,000.00
				$2,834,100.00
Contingencies	15%			$ 283,410.00
Engineering & Surveying	25%			$ 708,525.00
				$3,826,035.00

Sanitary Sewer Unit Cost Data

Item		Unit	Unit Price
8-inch Gravity Sanitary Sewer			
8-inch Gravity Sanitary Sewer (all depths)		LF	$ 40.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 46.00
Augering & Roadway Repairs	15%	LF	$ 6.90
Easement Acquisition	15%	LF	$ 6.90
Pipeline Relocation	30%	LF	$ 13.80
Contingencies	15%	LF	$ 6.90
Engineering & Surveying	25%	LF	$ 11.50
Indirect Cost Subtotal	100%		$ 46.00
8-inch Gravity Sanitary Sewer Total			**$ 92.00**
10-Inch Gravity Sanitary Sewer			
10-inch Gravity Sanitary Sewer (all depths)		LF	$ 50.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtoal			$ 56.00
Indirect Cost Subtotal (2)		LF	$ 56.00
10-Inch Gravity Sanitary Sewer Total			**$ 112.00**
12-Inch Gravity Sanitary Sewer			
12-inch Gravity Sanitary Sewer (all depths)		LF	$ 65.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 71.00
Indirect Cost Subtotal (2)		LF	$ 71.00
12-Inch Gravity Sanitary Sewer Total			**$ 142.00**
15-Inch Gravity Sanitary Sewer			
15-inch Gravity Sanitary Sewer (all depths)		LF	$ 85.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 91.00
Indirect Cost Subtotal (2)		LF	$ 91.00
15-Inch Gravity Sanitary Sewer Total			**$ 182.00**
18-Inch Gravity Sanitary Sewer			
18-inch Gravity Sanitary Sewer (all depths)		LF	$ 105.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 111.00
Indirect Cost Subtotal (2)		LF	$ 111.00
18-Inch Gravity Sanitary Sewer Total			**$ 222.00**

Sanitary Sewer Unit Cost Data (Cont.)

21-Inch Gravity Sanitary Sewer			
21-inch Gravity Sanitary Sewer (all depths)	LF	$	120.00
Sanitary Sewer Manhole(1)	LF	$	5.00
Trench Safety	LF	$	1.00
Subtotal		$	126.00
Indirect Cost Subtotal (2)	LF	$	126.00
21-Inch Gravity Sanitary Sewer Total		**$**	**252.00**
4-Inch Force Main			
4-Inch Force Main	LF	$	25.00
Trench Safety	LF	$	1.00
Subtotal		$	26.00
Indirect Cost Subtotal (2)	LF	$	26.00
4-Inch Force Main Total		**$**	**52.00**
6-Inch Force Main			
6-Inch Force Main	LF	$	30.00
Trench Safety	LF	$	1.00
Subtotal		$	31.00
Indirect Cost Subtotal (2)	LF	$	31.00
6-Inch Force Main Total		**$**	**62.00**
8-Inch Force Main			
8-Inch Force Main	LF	$	35.00
Trench Safety	LF	$	1.00
Subtotal		$	36.00
Indirect Cost Subtotal (2)	LF	$	36.00
8-Inch Force Main Total		**$**	**72.00**
Miscellaneous Items Used in Sanitary Sewer Lines Above			
Sanitary Sewer Manhole	EA	$	2,000.00
Lift Station (300-500 gpm)			
Lift Station (300-500 gpm) including contengencies	EA	$	320,000.00
Engineering & Testing	EA	$	80,000.00
Total		**$**	**400,000.00**
Lift Station (1,000-1,500 gpm)			
Lift Station (1,000-1,500 gpm) including contengencies	EA	$	440,000.00
Engineering & Testing	EA	$	110,000.00
Total		**$**	**550,000.00**
Lift Station (1,500-2,000 gpm)			
Lift Station (1,500-2,000 gpm) including contengencies	EA	$	820,000.00
Engineering & Testing	EA	$	205,000.00
Total		**$**	**1,025,000.00**
Wastewater Treatment Plant Capacity			
Wastewater Treatment Plant Capacity incl. contg.	gpd	$	6.00
Contingencies	gpd	$	0.90
Engineering & Testing	gpd	$	1.50
Total per gpd		**$**	**8.40**

(1) Manhole spaced every 400 feet.

(2) Indirect cost percentages are the same for all sizes of sanitary sewer lines and force mains. The percentages are shown in the cost data for an 8-inch sanitary sewer line.

Drainage Unit Cost Calculation

Item		Unit	Unit Price
Drainage Ditch			
Drainage Channel Excavation (10' bottom, 12' depth, 4:1 SS)*		LF	$ 257.78
Backslope Swale & Interceptor**		LF	$ 56.00
Sod (160' ROW)		LF	$ 53.33
Misc (Clearing, SWPPP, Etc)	15%	LF	$ 55.07
Subtotal			$ 422.18
Contingencies	15%	LF	$ 63.33
Engineering & Surveying	25%	LF	$ 105.54
Indirect Cost Subtotal	40%		$ 168.87
Drainage Ditch Total			**$ 591.05**
* Excavation Haul Off Assumed			
** 250 ft spacing			

Detention Unit Cost Calculation

Item		Unit	Unit Price
Detention Facility			
Detention Excavation (12' depth, 4:1 SS)*		Acre-Ft	$16,130.00
Backslope Swale & Interceptor**		Acre-Ft	$ 583.33
Sod		Acre-Ft	$ 440.00
Misc (Clearing, SWPPP, Etc)	15%	Acre-Ft	$ 2,573.00
Subtotal			$19,726.33
Contingencies	15%	Acre-Ft	$ 2,958.95
Engineering & Surveying	25%	Acre-Ft	$ 4,931.58
Indirect Cost Subtotal	40%		$ 7,890.53
Detention Facility Total			**$27,616.87**
* Excavation Haul Off Assumed			
** 250 ft spacing			

Unit Cost Data

Item		Unit	Unit Price
Mobilization			4%
SWPPP			2.5%
Excavation - Haul Off		CY	$ 10.00
Backslope Swale		Ea	$ 6,000.00
Backslope Interceptor		LF	$ 4.00
Sod		SY	$ 3.00
Sod		Acre	$ 4,840.00
Clearing & Grubbing		Acre	$ 5,000.00

Water System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 2007 CIP[1]						
Distribution Lines	$535,900	7,874	$68.06	1,195	$81,331	
Water Wells	$4,491,570	1,667	$2,694.94	979	$2,638,348	
Proposed Facilities with 2012 CIP						
Water Well	$1,420,000	1,667	$852.00	216	$184,032	
Ground Storage Tanks	$1,000,000	2,000	$500.00	216	$108,000	
Booster Pumps	$66,600	1,667	$39.96	216	$8,631	
Facility (Bldg, H-Tank & Generator)	$347,500	1,667	$208.50	216	$45,036	
WP Engineering, Surveying & Contingencies	$991,935	1,667	$595.16	216	$128,555	
Distribution Lines	$13,223,100	7,874	$1,679.34	1,195	$2,006,808	
Water (1/3 2012-2022 CIP Preparation Fees)					$50,333	
Total				**1,195**	**$5,251,075**	**$4,394.20**

(1) Existing facility costs are from Tomball staff.

Wastewater System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Bond Principal	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 1996 & 1999 CIP (1)							
South Wastewater Treatment Plant	$2,465,000		3,333	$739.50	753	$556,733	
Facilities constructed with 2002 CIP(1)							
Trunklines		$4,263,701	7,874	$541.49	1,195	$647,082	
Facilities constructed with 2007 CIP(1)							
Trunk Lines 2007 CIP		$888,503	7,874	$112.84	1,195	$134,844	
Proposed Facilities with 2012CIP							
Lift Stations 2012 CIP		$1,350,000	6,804	$198.41	1,195	$237,098	
Trunk Lines 2012 CIP		$13,495,200	7,874	$1,713.89	1,195	$2,048,103	
Water (1/3 2012-2022 CIP Preparation Fees)						$50,333	
Total					**1,195**	**$3,674,193**	**$3,074.64**

(1) Existing Facility costs from Tomball staff. Costs shown are outstanding bond amounts.
(2) Buildout to WWTP's maximum capacities.

Drainage System Capital Improvements Construction Costs per Acre, 2012 to 2022

HCFCD Channel No.	Construction Project	Estimated Improvement Costs	Collected Funds[1]	2012 Assessable Improvement Costs[2]	Total Basin Area Served (Acres)	Existing City of Tomball 2012 Development[3]	Estimated Floodway Acreage	Areas outside City and ETJ	Net Acreage to Bear Fee	1/3 2012-2022 CIP Fees per Usage Acre[5]	Capital Cost Basis per Acre	Total Cost Basis per Acre
J131[4]	Detention & Conveyence	$0	$0	$0	3,156	57	18	387	3,156		$0.00	
J132[4]	Channel	$0	$0	$0	250	57	4	0	250		$0.00	
										$ -		
J133[4]	Channel	$0	$0	$0	500	57	9	0	500		$0.00	
										$ -		
M116[4]	Channel	$0	$0	$0	1,575	57	0	550	1,575		$0.00	
M118	N of EDC Project	$2,423,300										
M118	EDC Project	$1,359,412										
M118	S of Holderrieth + Detention	$1,790,741										
		$5,573,454	$0	$5,573,454	732	57	51	0	732	$ 8.22	$7,614.01	$ 7,622.23
M121 East	Channel	$2,216,433										
M121 East	Detention	$4,335,848										
		$6,552,281	($9,591)	$6,561,872	629	170	27	0	629	$ 8.22	$10,432.23	$ 10,440.45
M121 West	Channel	$1,448,070										
M121 West	Channel	$2,807,482										
M121 West	Detention	$5,937,626										
		$10,193,178	($82,485)	$10,275,664	1,161	225	49	0	1,161	$ 8.22	$8,850.70	$ 8,858.92
M124[4]	Channel	$2,364,196		$2,364,196								
M124	Channel	$26,377,589		$26,377,589								
M124	Detention	$21,818,344		$21,818,344								
		$50,560,129	$0	$50,560,129	2,930	373	100	877	2,930	$ 8.22	$17,256.02	$ 17,264.24
M125	Detention	$543,805	($40,431)	$584,237	675	373	14	19	675	$ 8.22	$865.54	$ 873.76

(1) Existing Facility costs from Tomball staff based on outstanding bond amounts, plus Proposed Facilities estimates, including engineering & contingencies.

(2) Limited to Proposed Facility construction estimates, including engineering & contingencies when no improvements exist.

(3) Existing Areas previously assessed impact fees.

(4) The current CIP does not include channel or detention construction within the next ten years due to funding constraints.

(5) (1/3 2012-2022 CIP) Fee Dispensed by acreage for M118, M121, & M125.

Projected Cost of Implementing the CIP

Component	Capital Cost per LUE 2012 to 2022	Estimated Bond Soft Costs per LUE [1]	Estimated Total Bond Amount per LUE	Interest per LUE [2]	Total Debt Service per LUE
Water	$4,394.20	$351.54	$4,745.74	$1,893.00	$6,638.74
Wastewater	$3,074.64	$245.97	$3,320.61	$1,324.54	$4,645.15

Drainage Service Area	Capital Cost per Acre 2012 to 2022	Estimated Bond Soft Costs	Estimated Bond Amount per Acre [1]	Interest per Acre [2]	Total Debt Service per Acre
J131	$0.00	$0.00	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00	$0.00	$0.00
M118	$7,622.23	$609.78	$8,232.01	$3,283.61	$11,515.62
M121E	$10,440.45	$835.24	$11,275.69	$4,497.69	$15,773.37
M121W	$8,858.92	$708.71	$9,567.63	$3,816.37	$13,384.01
M124	$17,264.24	$1,381.14	$18,645.38	$7,437.34	$26,082.71
M125	$873.76	$0.00	$0.00	$0.00	$873.76

(1) Assumes a bond soft costs of 8.0%
(2) Assumes an interest rate of 3.5% and 40 semi-annual payments

Capital Improvement Plan Debt Service Credit and Maximum Impact Fees

Component	Total Debt Service per LUE	Debt Service Credit per LUE [1]	Maximum Impact Fee per LUE
Water	$6,638.74	$3,319.37	$3,319.37
Wastewater	$4,645.15	$2,322.57	$2,322.57

Drainage Service Area	Total Debt Service per Acre	Debt Service Credit per Acre [1]	Maximum Impact Fee per Acre
J131	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00
M118	$11,515.62	$5,757.81	$5,757.81
M121E	$15,773.37	$7,886.69	$7,886.69
M121W	$13,384.01	$6,692.00	$6,692.00
M124	$26,082.71	$13,041.36	$13,041.36
M125	$873.76	$436.88	$436.88

(1) Credit equal to 50% of the total projected cost of implementing the CIP.

Maximum Impact Fee for Various Types and Sizes of Water Meters

Meter Type	Meter Size	Living Unit Equivalent (LUE)	Water Impact Fee by Meter Size		Wastewater Impact Fee by Meter Size	Total Impact Fee by Meter Size
Simple	3/4"	1.0	$ 3,319.37	s	$ 2,322.57	$ 5,641.94
Simple	1"	2.5	$ 8,298.42		$ 5,806.43	$ 14,104.86
Simple	1-1/2"	5.0	$ 16,596.85		$ 11,612.87	$ 28,209.71
Compound	2"	8.0	$ 26,554.96		$ 18,580.58	$ 45,135.54
Turbine	2"	10.0	$ 33,193.70		$ 23,225.73	$ 56,419.43
Compound	3"	16.0	$ 53,109.92		$ 37,161.17	$ 90,271.09
Turbine	3"	24.0	$ 79,664.88		$ 55,741.75	$ 135,406.63
Compound	4"	25.0	$ 82,984.25		$ 58,064.33	$ 141,048.57
Turbine	4"	42.0	$ 139,413.53		$ 97,548.07	$ 236,961.60
Compound	6"	50.0	$ 165,968.49		$ 116,128.65	$ 282,097.14
Turbine	6"	92.0	$ 305,382.02		$ 213,676.72	$ 519,058.74
Compound	8"	80.0	$ 265,549.58		$ 185,805.84	$ 451,355.43
Turbine	8"	160.0	$ 531,099.17		$ 371,611.68	$ 902,710.85
Compound	10"	115.0	$ 381,727.53		$ 267,095.90	$ 648,823.42
Turbine	10"	250.0	$ 829,842.45		$ 580,643.25	$ 1,410,485.70
Turbine	12"	330.0	$ 1,095,392.04		$ 766,449.09	$ 1,861,841.13

LUE is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12, and C702-10 recommended maximum rate for continuous duty flow of the meter, purchased at the sale of tap based on the Uniform Plumbing Code meter size and type.

Disposition of Collected Impact Fees

Water Impact Fees Collected and Interest Earnings as of 12/31/12	$2,460,861			
Water System Improvements, completed from 1996 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" water main along Zion Road from Ulrich to Neal St.	$97,200			$97,200
2. 12" water main along SH 249 from Brown to Baker	$50,000			$50,000
3. 12" water main along S. Cherry from Agg to Theis	$210,600			$210,600
4. 12" water main along Theis from S. Cherry to SH 249	$194,499			$194,499
5. 2000 gpm water well	$600,000	$600,000		
Total	**$1,152,299**	**$600,000**	**$0**	**$552,299**
Water System Improvements, completed from 1999 CIP				
1. 12" water main along FM 2920 from Lowes to Calvert	$54,810			$54,810
2. 750,000 gallon elevated storage tank	$1,200,000		$1,200,000	
3. 6" parallel water main on Graham and Holderreith	$124,981			$124,981
Total	**$1,379,791**	**$0**	**$1,200,000**	**$179,791**
Total Water System Improvements from 1996 and 1999 CIP	**$2,532,090**	**$600,000**	**$1,200,000**	**$732,090**
Water System Improvements, completed from 2002 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" Water main on SH 249 from Theis to Holderreith	$172,800			$172,800
2. 12" Water main on Holderreith from School St ext. to SH 249	$86,400			$86,400
3. 12" Water main on Holderreith from School St ext. to Cherry	$103,680			$103,680
4. 12" Water main on Holderreith from S. Cherry to Huffsmith-Korhville	$311,040			$311,040
5. 12" Water main along S. Cherry from Theis to Holderreith	$164,160			$164,160
6. 12" Water main along Brown Rd to E. Hufsmith Extension	$216,000			$216,000
7. 8" Water main along Johnson Rd from Michel to shopping center	$37,260			$37,260
8. 12" Water main along Hufsmith-Kohrville from FM 2920 to Holderreith	$492,480			$492,480
9. Install 1200 gpm pump at Baker St. well	$270,000	$270,000		
10. 12" Water main along Alice Rd from SH 249 to SH 249 Bypass	$86,400			$86,400
11. 12" Water mian along FM 2920 from Persimmon to ETJ	$181,440			$181,440
12. 8" Water main on Willow St from Carrell to Texas	$34,155			$34,155
Total	**$2,155,815**	**$270,000**	**$0**	**$1,885,815**
Water System Improvements, completed from 2007 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 8-Inch Water Line along the Future Michel Road extension from Commercial Park Drive to	$796			$796

School Street				
2. 12-inch Water Line along Quinn Road from Baker Drive to Inwood Street	$195,978			$195,978
3. 12-inch Water Line along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$407,486			$407,486
4. 12-inch Water Line along Tomball Cemetery Road North of 2920 (Private Funding)	$0			
5. 12-inch Water Line along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$126,058			$126,058
6. Water Line Extension on Mechanic Street	$20,878			$20,878
7. Water Wells 5 and 6/Plant	$4,491,570	$4,491,570		
Total	**$5,242,766**	**$4,491,570**	**$0**	**$751,196**
Not 50% Funded by Impact fee as of 12/13/2012	$5,045,993	$4,491,570	$0	$554,422
Less Impact Fee Balance	-$18,522	0		-$18,522
Remaining to be paid by Impact fees	**$5,027,471**	**$4,491,570**		**$535,900**
Wastewater Impact Fees Collected and Interest Earnings as of 12/31/12	$2,600,215			
Balance as of 3/31/2008	$83,046			
Wastewater System Improvements, completed from 1996 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. 10" gravity sewer along SH 249 from McCoy's to FM 2920	$103,200			$103,200
2. 10" gravity sewer along Hooper from Bypass to SH 249	$50,000			$50,000
3. 10" gravity sewer along Hirschfield from SH 249 to Bypass	$40,000			$40,000
4. 1.5 MGD Wastewater Treatment Plant	$6,117,000		$6,117,000	
Total	**$6,310,200**	**$0**	**$6,117,000**	**$193,200**
Wastewater System Improvements, completed from 1999 CIP				
1. 10" gravity line along FM 2920: Kroger to City Limit	$14,144			$14,144
2. 12" gravity line along FM 2920: City Limit to Calvert	$151,948			$151,948
3. 10" gravity line along Hirschfield: SH 249 and bypass	$56,253			$56,253
4. Temporaty Lift Station at Calvert FM 2920	$80,000			$80,000
5. 6" force main along FM 2920 from temporary Lift Station to gravity sewer at Sh 249	$39,387			$39,387
6. 18" gravity trunk along Cherry from McPhail to Agg Road	$127,374			$127,374
7. 21" gravity trunk along Cherry from Agg to Theis	$120,745			$120,745
8. 24" gravity trunk along Cherry from Theis to Holderreith	$305,597			$305,597
9. 27" gravity trunk along Cherry from Holderreith to WWTP	$158,165			$158,165
10. 18" gravity line along Theis from LS to Cherry	$83,278			$83,278
11. Abandon Theis Lift Station	$360			$360
Total	**$1,137,251**	**$0**	**$0**	**$1,137,251**
Total Wastewater System Imp from 1996 and 1999 CIP	$7,447,451	$0	$6,117,000	$1,330,451

Wastewater System Improvements, completed from 2002 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. (8) 12" gravity line along W. Hufsmith from Quin Ext to SH 249	$164,160			$164,160
2. (10) 18" gravity line along FM 2920 from Calvert to Park St	$228,960			$228,960
3. (11) 6" force main from Temp Lift Station at Park/FM 2920 to Calvert	$73,440			$73,440
4. (12) 12" gravity line along FM 2920 from Park Rd to Tomball Cem. Rd	$145,935			$145,935
5. (14) Temp Lift Station at FM 2920 and Park Rd	$107,933			$107,933
6. (16) 10" gravity line on SH 249 from Hirschfield Rd to Alice Rd	$64,800			$64,800
7. (17) 21" gravity line on SH 249 from Alice Rd to Holderreith Rd	$528,255			$528,255
8. (18) 18" gravity line on Alice Rd from SH 249 Bypass to SH 249	$128,790			$128,790
9. (19) 30" gravity line on Holderreith Ext west of SH 249	$79,488			$79,488
10. (20) 30" gravity line on Holderreith from SH 249 and S. WWTP	$864,000			$864,000
11. (25) 8" gravity line along Johnson	$40,500			$40,500
12. (28) Abandon Cherry St Lift Station	$13,500			$13,500
13. (29) 27" gravity line on Holderreith from S. WWTP Trunk Line to BNRR	$577,800			$577,800
14. (30) 27" gravity line on Holderrieth from BNRR to Hufsmith-Kohrville Rd	$288,900			$288,900
15. (31) 24" gravity line on Hufsmith-Kohrville Rd from Holderreith to Sutton Ln	$790,560			$790,560
16. (32) 18" gravity line on Hufsnith-Kohrville Rd from Sutton Ln to FM 2920	$357,750			$357,750
Total	**$4,454,771**	**$0**	**$0**	**$4,454,771**
Not 50% Funded by Impact fee as of 12/13/2012	$4,290,611			$4,290,611
Less Impact Fee Balance	-$26,910			-$26,910
Remaining to be paid by Impact fees	**$4,263,701**			**$4,263,701**
Wastewater System Improvements, completed from 2007 CIP				
1. 10-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$329,227			$329,227
2. 12-inch Gravity Sanitary Sewer along Tomball Cementery Road (Private Funding)	$0			$0
3. 8-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$88,565			$88,565
4. 8" gravity line on Mechanic Street	$4,378			$4,378
5. Tomball Hills Lift Station	$466,333			$466,333
Total	**$888,503**	**$0**	**$0**	**$888,503**

APPENDIX A

TEXAS LOCAL GOVERNMENT CODE CHAPTER 395

The following requirements, extracted from the Texas Local Government Code Chapter 395, were utilized for preparation of this report.

TITLE 12. PLANNING AND DEVELOPMENT

SUBTITLE C. PLANNING AND DEVELOPMENT PROVISIONS APPLYING TO MORE THAN ONE TYPE OF LOCAL GOVERNMENT

CHAPTER 395. FINANCING CAPITAL IMPROVEMENTS REQUIRED BY NEW DEVELOPMENT IN MUNICIPALITIES, COUNTIES, AND CERTAIN OTHER LOCAL GOVERNMENTS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 395.001. DEFINITIONS. In this chapter:

(1) "Capital improvement" means any of the following facilities that have a life expectancy of three or more years and are owned and operated by or on behalf of a political subdivision:

(A) water supply, treatment, and distribution facilities; wastewater collection and treatment facilities; and storm water, drainage, and flood control facilities; whether or not they are located within the service area; and

(B) roadway facilities.

(2) "Capital improvements plan" means a plan required by this chapter that identifies capital improvements or facility expansions for which impact fees may be assessed.

(3) "Facility expansion" means the expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

(4) "Impact fee" means a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, and any other fee that functions as described by this definition. The term does not include:

(A) dedication of land for public parks or payment in lieu of the dedication to serve park needs;

(B) dedication of rights-of-way or easements or construction or dedication of on-site or off-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development;

(C) lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or constructing water or sewer mains or lines; or

(D) other pro rata fees for reimbursement of water or sewer mains or lines extended by the political subdivision.

However, an item included in the capital improvements plan may not be required to be constructed except in accordance with Section 395.019(2), and an owner may not be required to construct or dedicate facilities and to pay impact fees for those facilities.

(5) "Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period.

(6) "New development" means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of service units.

(7) "Political subdivision" means a municipality, a district or authority created under Article III, Section 52, or Article XVI, Section 59, of the Texas Constitution, or, for the purposes set forth by Section 395.079, certain counties described by that section.

(8) "Roadway facilities" means arterial or collector streets or roads that have been designated on an officially adopted roadway plan of the political subdivision, together with all necessary appurtenances. The term includes the political subdivision's share of costs for roadways and associated improvements designated on the federal or Texas highway system, including local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, sidewalks, drainage appurtenances, and rights-of-way.

(9) "Service area" means the area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, of the political subdivision to be served by the capital improvements or facilities expansions specified in the capital improvements plan, except roadway facilities and storm water, drainage, and flood control facilities. The service area, for the purposes of this chapter, may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, except for roadway facilities and storm water, drainage, and flood control facilities. For roadway facilities, the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six miles. For storm water, drainage, and flood control facilities, the service area may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, but shall not exceed the area actually served by the storm water, drainage, and flood control facilities designated in the capital improvements plan and shall not extend across watershed boundaries.

(10) "Service unit" means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1989, 71st Leg., ch. 566, Sec. 1(e), eff. Aug. 28, 1989; Acts 2001, 77th Leg., ch. 345, Sec. 1, eff. Sept. 1, 2001.

SUBCHAPTER B. AUTHORIZATION OF IMPACT FEE

Sec. 395.011. AUTHORIZATION OF FEE.

(a) Unless otherwise specifically authorized by state law or this chapter, a governmental entity or political subdivision may not enact or impose an impact fee.

(b) Political subdivisions may enact or impose impact fees on land within their corporate boundaries or extraterritorial jurisdictions only by complying with this chapter, except that impact fees may not be enacted or imposed in the extraterritorial jurisdiction for roadway facilities.

(c) A municipality may contract to provide capital improvements, except roadway facilities, to an area outside its corporate boundaries and extraterritorial jurisdiction and may charge an impact fee under the contract, but if an impact fee is charged in that area, the municipality must comply with this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.012. ITEMS PAYABLE BY FEE.

(a) An impact fee may be imposed only to pay the costs of constructing capital improvements or facility expansions, including and limited to the:

(1) construction contract price;

(2) surveying and engineering fees;

(3) land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and

(4) fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.

(b) Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.

(c) Notwithstanding any other provision of this chapter, the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay a staff engineer who prepares or updates a capital improvements plan under this chapter.

(d) A municipality may pledge an impact fee as security for the payment of debt service on a bond, note, or other obligation issued to finance a capital improvement or public facility expansion if:

(1) the improvement or expansion is identified in a capital improvements plan; and

(2) at the time of the pledge, the governing body of the municipality certifies in a written order, ordinance, or resolution that none of the impact fee will be used or expended for an improvement or expansion not identified in the plan.

(e) A certification under Subsection (d)(2) is sufficient evidence that an impact fee pledged will not be used or expended for an improvement or expansion that is not identified in the capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 90, Sec. 1, eff. May 16, 1995.

Sec. 395.013. ITEMS NOT PAYABLE BY FEE. Impact fees may not be adopted or used to pay for:

(1) construction, acquisition, or expansion of public facilities or assets other than capital improvements or facility expansions identified in the capital improvements plan;

(2) repair, operation, or maintenance of existing or new capital improvements or facility expansions;

(3) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(4) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(5) administrative and operating costs of the political subdivision, except the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay its administrative and operating costs;

(6) principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed by Section 395.012.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.014. CAPITAL IMPROVEMENTS PLAN.

(a) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:

(1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial;

(5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and

(7) a plan for awarding:

(A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or

(B) in the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

(b) The analysis required by Subsection (a)(3) may be prepared on a systemwide basis within the service area for each major category of capital improvement or facility expansion for the designated service area.

(c) The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.015. MAXIMUM FEE PER SERVICE UNIT.

(a) The impact fee per service unit may not exceed the amount determined by subtracting the amount in Section 395.014(a)(7) from the costs of the capital improvements described by Section 395.014(a)(3) and dividing that amount by the total number of projected service units described by Section 395.014(a)(5).

(b) If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee per service unit shall be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to projected new service units described by Section 395.014(a)(6) by the projected new service units described in that section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 3, eff. Sept. 1, 2001.

Sec. 395.016. TIME FOR ASSESSMENT AND COLLECTION OF FEE.

(a) This subsection applies only to impact fees adopted and land platted before June 20, 1987. For land that has been platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before June 20, 1987, or land on which new development occurs or is proposed without platting, the political subdivision may assess the impact fees at any time during the development approval and building process. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(b) This subsection applies only to impact fees adopted before June 20, 1987, and land platted after that date. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after June 20, 1987, the political subdivision may assess the impact fees before or at the time of recordation. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(c) This subsection applies only to impact fees adopted after June 20, 1987. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before the adoption of an impact fee, an impact fee may not be collected on any service unit for which a valid building permit is issued within one year after the date of adoption of the impact fee.

(d) This subsection applies only to land platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after adoption of an impact fee adopted after June 20, 1987. The political subdivision shall assess the impact fees before or at the time of recordation of a subdivision plat or other plat under Subchapter A, Chapter 212, or the subdivision or platting ordinance or procedures of any political subdivision in the official records of the county clerk of the county in which the tract is located. Except as provided by Section 395.019, if the political subdivision has water and wastewater capacity available:

(1) the political subdivision shall collect the fees at the time the political subdivision issues a building permit;

(2) for land platted outside the corporate boundaries of a municipality, the municipality shall collect the fees at the time an application for an individual meter connection to the municipality's water or wastewater system is filed; or

(3) a political subdivision that lacks authority to issue building permits in the area where the impact fee applies shall collect the fees at the time an application is filed for an individual meter connection to the political subdivision's water or wastewater system.

(e) For land on which new development occurs or is proposed to occur without platting, the political subdivision may assess the impact fees at any time during the development and building process and may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(f) An "assessment" means a determination of the amount of the impact fee in effect on the date or occurrence provided in this section and is the maximum amount that can be charged per service unit of such development. No specific act by the political subdivision is required.

(g) Notwithstanding Subsections (a)-(e) and Section 395.017, the political subdivision may reduce or waive an impact fee for any service unit that would qualify as affordable housing under 42 U.S.C. Section 12745, as amended, once the service unit is constructed. If affordable housing as defined by 42 U.S.C. Section 12745, as amended, is not

constructed, the political subdivision may reverse its decision to waive or reduce the impact fee, and the political subdivision may assess an impact fee at any time during the development approval or building process or after the building process if an impact fee was not already assessed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 980, Sec. 52, eff. Sept. 1, 1997; Acts 2001, 77th Leg., ch. 345, Sec. 4, eff. Sept. 1, 2001.

Sec. 395.017. ADDITIONAL FEE PROHIBITED; EXCEPTION. After assessment of the impact fees attributable to the new development or execution of an agreement for payment of impact fees, additional impact fees or increases in fees may not be assessed against the tract for any reason unless the number of service units to be developed on the tract increases. In the event of the increase in the number of service units, the impact fees to be imposed are limited to the amount attributable to the additional service units.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.018. AGREEMENT WITH OWNER REGARDING PAYMENT. A political subdivision is authorized to enter into an agreement with the owner of a tract of land for which the plat has been recorded providing for the time and method of payment of the impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.019. COLLECTION OF FEES IF SERVICES NOT AVAILABLE. Except for roadway facilities, impact fees may be assessed but may not be collected in areas where services are not currently available unless:

(1) the collection is made to pay for a capital improvement or facility expansion that has been identified in the capital improvements plan and the political subdivision commits to commence construction within two years, under duly awarded and executed contracts or commitments of staff time covering substantially all of the work required to provide service, and to have the service available within a reasonable period of time considering the type of capital improvement or facility expansion to be constructed, but in no event longer than five years;

(2) the political subdivision agrees that the owner of a new development may construct or finance the capital improvements or facility expansions and agrees that the costs incurred or funds advanced will be credited against the impact fees otherwise due from the new development or agrees to reimburse the owner for such costs from impact fees paid from other new developments that will use such capital improvements or facility expansions, which fees shall be collected and reimbursed to the owner at the time the other new development records its plat; or

(3) an owner voluntarily requests the political subdivision to reserve capacity to serve future development, and the political subdivision and owner enter into a valid written agreement.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.020. ENTITLEMENT TO SERVICES. Any new development for which an impact fee has been paid is entitled to the permanent use and benefit of the services for which the fee was exacted and is entitled to receive immediate service from any existing facilities with actual capacity to serve the new service units, subject to compliance with other valid regulations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.021. AUTHORITY OF POLITICAL SUBDIVISIONS TO SPEND FUNDS TO REDUCE FEES. Political subdivisions may spend funds from any lawful source to pay for all or a part of the capital improvements or facility expansions to reduce the amount of impact fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.022. AUTHORITY OF POLITICAL SUBDIVISION TO PAY FEES. (a) Political subdivisions and other governmental entities may pay impact fees imposed under this chapter.

(b) A school district is not required to pay impact fees imposed under this chapter unless the board of trustees of the district consents to the payment of the fees by entering a contract with the political subdivision that imposes the fees. The contract may contain terms the board of trustees considers advisable to provide for the payment of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 250, Sec. 1, eff. May 25, 2007.

Sec. 395.023. CREDITS AGAINST ROADWAY FACILITIES FEES. Any construction of, contributions to, or dedications of off-site roadway facilities agreed to or required by a political subdivision as a condition of development approval shall be credited against roadway facilities impact fees otherwise due from the development.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.024. ACCOUNTING FOR FEES AND INTEREST.

(a) The order, ordinance, or resolution levying an impact fee must provide that all funds collected through the adoption of an impact fee shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the fee was adopted.

(b) Interest earned on impact fees is considered funds of the account on which it is earned and is subject to all restrictions placed on use of impact fees under this chapter.

(c) Impact fee funds may be spent only for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as authorized by this chapter.

(d) The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.025. REFUNDS.

(a) On the request of an owner of the property on which an impact fee has been paid, the political subdivision shall refund the impact fee if existing facilities are available and service is denied or the political subdivision has, after collecting the fee when service was not available, failed to commence construction within two years or service is not available within a reasonable period considering the type of capital improvement or facility expansion to be constructed, but in no event later than five years from the date of payment under Section 395.019(1).

(b) Repealed by Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

(c) The political subdivision shall refund any impact fee or part of it that is not spent as authorized by this chapter within 10 years after the date of payment.

(d) Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002, Finance Code, or its successor statute.

(e) All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the impact fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.

(f) The owner of the property on which an impact fee has been paid or another political subdivision or governmental entity that paid the impact fee has standing to sue for a refund under this section.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 1396, Sec. 37, eff. Sept. 1, 1997; Acts 1999, 76th Leg., ch. 62, Sec. 7.82, eff. Sept. 1, 1999; Acts 2001, 77th Leg., ch. 345, Sec. 9, eff. Sept. 1, 2001.

SUBCHAPTER C. PROCEDURES FOR ADOPTION OF IMPACT FEE

Sec. 395.041. COMPLIANCE WITH PROCEDURES REQUIRED. Except as otherwise provided by this chapter, a political subdivision must comply with this subchapter to levy an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0411. CAPITAL IMPROVEMENTS PLAN. The political subdivision shall provide for a capital improvements plan to be developed by qualified professionals using generally accepted engineering and planning practices in accordance with Section 395.014.

Added by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.042. HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. To impose an impact fee, a political subdivision must adopt an order, ordinance, or resolution establishing a public hearing date to consider the land use assumptions and capital improvements plan for the designated service area.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.043. INFORMATION ABOUT LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN AVAILABLE TO PUBLIC. On or before the date of the first publication of the notice of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall make available to the public its land use assumptions, the time period of the projections, and a description of the capital improvement facilities that may be proposed.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.044. NOTICE OF HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN.

(a) Before the 30th day before the date of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order, ordinance, or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN RELATING TO POSSIBLE ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the land use assumptions and capital improvements plan under which an impact fee may be imposed; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the land use assumptions and capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.045. APPROVAL OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) After the public hearing on the land use assumptions and capital improvements plan, the political subdivision shall determine whether to adopt or reject an ordinance, order, or resolution approving the land use assumptions and capital improvements plan.

(b) The political subdivision, within 30 days after the date of the public hearing, shall approve or disapprove the land use assumptions and capital improvements plan.

(c) An ordinance, order, or resolution approving the land use assumptions and capital improvements plan may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.0455. SYSTEMWIDE LAND USE ASSUMPTIONS.

(a) In lieu of adopting land use assumptions for each service area, a political subdivision may, except for storm water, drainage, flood control, and roadway facilities, adopt systemwide land use assumptions, which cover all of the area subject to the jurisdiction of the political subdivision for the purpose of imposing impact fees under this chapter.

(b) Prior to adopting systemwide land use assumptions, a political subdivision shall follow the public notice, hearing, and other requirements for adopting land use assumptions.

(c) After adoption of systemwide land use assumptions, a political subdivision is not required to adopt additional land use assumptions for a service area for water supply, treatment, and distribution facilities or wastewater collection and treatment facilities as a prerequisite to the adoption of a capital improvements plan or impact fee, provided the capital improvements plan and impact fee are consistent with the systemwide land use assumptions.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(b), eff. Aug. 28, 1989.

Sec. 395.047. HEARING ON IMPACT FEE. On adoption of the land use assumptions and capital improvements plan, the governing body shall adopt an order or resolution setting a public hearing to discuss the imposition of the impact fee. The public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution imposing an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.049. NOTICE OF HEARING ON IMPACT FEE.

(a) Before the 30th day before the date of the hearing on the imposition of an impact fee, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the adoption of an impact fee;

(4) the amount of the proposed impact fee per service unit; and

(5) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the plan and proposed fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.050. ADVISORY COMMITTEE COMMENTS ON IMPACT FEES. The advisory committee created under Section 395.058 shall file its written comments on the proposed impact fees before the fifth business day before the date of the public hearing on the imposition of the fees.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.051. APPROVAL OF IMPACT FEE REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the imposition of an impact fee, shall approve or disapprove the imposition of an impact fee.

(b) An ordinance, order, or resolution approving the imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 5, eff. Sept. 1, 2001.

Sec. 395.052. PERIODIC UPDATE OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN REQUIRED.

(a) A political subdivision imposing an impact fee shall update the land use assumptions and capital improvements plan at least every five years. The initial five-year period begins on the day the capital improvements plan is adopted.

(b) The political subdivision shall review and evaluate its current land use assumptions and shall cause an update of the capital improvements plan to be prepared in accordance with Subchapter B.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 6, eff. Sept. 1, 2001.

Sec. 395.053. HEARING ON UPDATED LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN. The governing body of the political subdivision shall, within 60 days after the date it receives the update of the land use assumptions and the capital improvements plan, adopt an order setting a public hearing to discuss and review the update and shall determine whether to amend the plan.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.054. HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE. A public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution amending land use assumptions, the capital improvements plan, or the impact fee. On or before the date of the first publication of the notice of the hearing on the amendments, the land use assumptions and the capital improvements plan, including the amount of any proposed amended impact fee per service unit, shall be made available to the public.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.055. NOTICE OF HEARING ON AMENDMENTS TO LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEE.

(a) The notice and hearing procedures prescribed by Sections 395.044(a) and (b) apply to a hearing on the amendment of land use assumptions, a capital improvements plan, or an impact fee.

(b) The notice of a hearing under this section must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON AMENDMENT OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the amendment of land use assumptions and a capital improvements plan and the imposition of an impact fee; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the update.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 345, Sec. 7, eff. Sept. 1, 2001.

Sec. 395.056. ADVISORY COMMITTEE COMMENTS ON AMENDMENTS. The advisory committee created under Section 395.058 shall file its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fee before the fifth business day before the date of the public hearing on the amendments.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.057. APPROVAL OF AMENDMENTS REQUIRED.

(a) The political subdivision, within 30 days after the date of the public hearing on the amendments, shall approve or disapprove the amendments of the land use assumptions and the capital improvements plan and modification of an impact fee.

(b) An ordinance, order, or resolution approving the amendments to the land use assumptions, the capital improvements plan, and imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.0575. DETERMINATION THAT NO UPDATE OF LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN OR IMPACT FEES IS NEEDED.

(a) If, at the time an update under Section 395.052 is required, the governing body determines that no change to the land use assumptions, capital improvements plan, or impact fee is needed, it may, as an alternative to the updating requirements of Sections 395.052-395.057, do the following:

(1) The governing body of the political subdivision shall, upon determining that an update is unnecessary and 60 days before publishing the final notice under this section, send notice of its determination not to update the land use assumptions, capital improvements plan, and impact fee by certified mail to any person who has, within two years preceding the date that the final notice of this matter is to be published, give written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of hearings related to impact fees. The notice must contain the information in Subsections (b)(2)-(5).

(2) The political subdivision shall publish notice of its determination once a week for three consecutive weeks in one or more newspapers with general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies. The notice of public hearing may not be in the part of the paper in which legal notices and classified ads appear and may not be smaller than one-quarter page of a standard-size or tabloid-size newspaper, and the headline on the notice must be in 18-point or larger type.

(b) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF DETERMINATION NOT TO UPDATE LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN, OR IMPACT FEES";

(2) a statement that the governing body of the political subdivision has determined that no change to the land use assumptions, capital improvements plan, or impact fee is necessary;

(3) an easily understandable description and a map of the service area in which the updating has been determined to be unnecessary;

(4) a statement that if, within a specified date, which date shall be at least 60 days after publication of the first notice, a person makes a written request to the designated official of the political subdivision requesting that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body must comply with the request by following the requirements of Sections 395.052-395.057; and

(5) a statement identifying the name and mailing address of the official of the political subdivision to whom a request for an update should be sent.

(c) The advisory committee shall file its written comments on the need for updating the land use assumptions, capital improvements plans, and impact fee before the fifth business day before the earliest notice of the government's decision that no update is necessary is mailed or published.

(d) If, by the date specified in Subsection (b)(4), a person requests in writing that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body shall cause an update of the land use assumptions and capital improvements plan to be prepared in accordance with Sections 395.052-395.057.

(e) An ordinance, order, or resolution determining the need for updating land use assumptions, a capital improvements plan, or an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 566, Sec. 1(d), eff. Aug. 28, 1989.

Sec. 395.058. ADVISORY COMMITTEE.

(a) On or before the date on which the order, ordinance, or resolution is adopted under Section 395.042, the political subdivision shall appoint a capital improvements advisory committee.

(b) The advisory committee is composed of not less than five members who shall be appointed by a majority vote of the governing body of the political subdivision. Not less than 40 percent of the membership of the advisory committee must be representatives of the real estate, development, or building industries who are not employees or officials of a political subdivision or governmental entity. If the political subdivision has a planning and zoning commission, the commission may act as the advisory committee if the commission includes at least one representative of the real estate, development, or building industry who is not an employee or official of a political subdivision or governmental entity. If no such representative is a member of the planning and zoning commission, the commission may still act as the advisory committee if at least one such representative is appointed by the political subdivision as an ad hoc voting member of the planning and zoning commission when it acts as the advisory committee. If the impact fee is to be applied in the extraterritorial jurisdiction of the political subdivision, the membership must include a representative from that area.

(c) The advisory committee serves in an advisory capacity and is established to:

(1) advise and assist the political subdivision in adopting land use assumptions;

(2) review the capital improvements plan and file written comments;

(3) monitor and evaluate implementation of the capital improvements plan;

(4) file semiannual reports with respect to the progress of the capital improvements plan and report to the political subdivision any perceived inequities in implementing the plan or imposing the impact fee; and

(5) advise the political subdivision of the need to update or revise the land use assumptions, capital improvements plan, and impact fee.

(d) The political subdivision shall make available to the advisory committee any professional reports with respect to developing and implementing the capital improvements plan.

(e) The governing body of the political subdivision shall adopt procedural rules for the advisory committee to follow in carrying out its duties.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

SUBCHAPTER D. OTHER PROVISIONS

Sec. 395.071. DUTIES TO BE PERFORMED WITHIN TIME LIMITS. If the governing body of the political subdivision does not perform a duty imposed under this chapter within the prescribed period, a person who has paid an impact fee or an owner of land on which an impact fee has been paid has the right to present a written request to the governing body of the political subdivision stating the nature of the unperformed duty and requesting that it be performed within 60 days after the date of the request. If the governing body of the political subdivision finds that the duty is required under this chapter and is late in being performed, it shall cause the duty to commence within 60 days after the date of the request and continue until completion.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.072. RECORDS OF HEARINGS. A record must be made of any public hearing provided for by this chapter. The record shall be maintained and be made available for public inspection by the political subdivision for at least 10 years after the date of the hearing.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.073. CUMULATIVE EFFECT OF STATE AND LOCAL RESTRICTIONS. Any state or local restrictions that apply to the imposition of an impact fee in a political subdivision where an impact fee is proposed are cumulative with the restrictions in this chapter.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.074. PRIOR IMPACT FEES REPLACED BY FEES UNDER THIS CHAPTER. An impact fee that is in place on June 20, 1987, must be replaced by an impact fee made under this chapter on or before June 20, 1990. However, any political subdivision having an impact fee that has not been replaced under this chapter on or before June 20, 1988, is liable to any party who, after June 20, 1988, pays an impact fee that exceeds the maximum permitted under Subchapter B by more than 10 percent for an amount equal to two times the difference between the maximum impact fee allowed and the actual impact fee imposed, plus reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.075. NO EFFECT ON TAXES OR OTHER CHARGES. This chapter does not prohibit, affect, or regulate any tax, fee, charge, or assessment specifically authorized by state law.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.076. MORATORIUM ON DEVELOPMENT PROHIBITED. A moratorium may not be placed on new development for the purpose of awaiting the completion of all or any part of the process necessary to develop, adopt, or update land use assumptions, a capital improvements plan, or an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 441, Sec. 2, eff. Sept. 1, 2001.

Sec. 395.077. APPEALS.

(a) A person who has exhausted all administrative remedies within the political subdivision and who is aggrieved by a final decision is entitled to trial de novo under this chapter.

(b) A suit to contest an impact fee must be filed within 90 days after the date of adoption of the ordinance, order, or resolution establishing the impact fee.

(c) Except for roadway facilities, a person who has paid an impact fee or an owner of property on which an impact fee has been paid is entitled to specific performance of the services by the political subdivision for which the fee was paid.

(d) This section does not require construction of a specific facility to provide the services.

(e) Any suit must be filed in the county in which the major part of the land area of the political subdivision is located. A successful litigant shall be entitled to recover reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.078. SUBSTANTIAL COMPLIANCE WITH NOTICE REQUIREMENTS. An impact fee may not be held invalid because the public notice requirements were not complied with if compliance was substantial and in good faith.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989.

Sec. 395.079. IMPACT FEE FOR STORM WATER, DRAINAGE, AND FLOOD CONTROL IN POPULOUS COUNTY.

(a) Any county that has a population of 3.3 million or more or that borders a county with a population of 3.3 million or more, and any district or authority created under Article XVI, Section 59, of the Texas Constitution within any such county that is authorized to provide storm water, drainage, and flood control facilities, is authorized to impose impact fees to provide storm water, drainage, and flood control improvements necessary to accommodate new development.

(b) The imposition of impact fees authorized by Subsection (a) is exempt from the requirements of Sections 395.025, 395.052-395.057, and 395.074 unless the political subdivision proposes to increase the impact fee.

(c) Any political subdivision described by Subsection (a) is authorized to pledge or otherwise contractually obligate all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued or incurred by or on behalf of the political subdivision and to the payment of any other contractual obligations.

(d) An impact fee adopted by a political subdivision under Subsection (a) may not be reduced if:

(1) the political subdivision has pledged or otherwise contractually obligated all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision; and

(2) the political subdivision agrees in the pledge or contract not to reduce the impact fees during the term of the bonds, notes, or other contractual obligations.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 2001, 77th Leg., ch. 669, Sec. 107, eff. Sept. 1, 2001.

Sec. 395.080. CHAPTER NOT APPLICABLE TO CERTAIN WATER-RELATED SPECIAL DISTRICTS.

(a) This chapter does not apply to impact fees, charges, fees, assessments, or contributions:

(1) paid by or charged to a district created under Article XVI, Section 59, of the Texas Constitution to another district created under that constitutional provision if both districts are required by law to obtain approval of their bonds by the Texas Natural Resource Conservation Commission; or

(2) charged by an entity if the impact fees, charges, fees, assessments, or contributions are approved by the Texas Natural Resource Conservation Commission.

(b) Any district created under Article XVI, Section 59, or Article III, Section 52, of the Texas Constitution may petition the Texas Natural Resource Conservation Commission for approval of any proposed impact fees, charges, fees, assessments, or contributions. The commission shall adopt rules for reviewing the petition and may charge the petitioner fees adequate to cover the cost of processing and considering the petition. The rules shall require notice substantially the same as that required by this chapter for the adoption of impact fees and shall afford opportunity for all affected parties to participate.

Added by Acts 1989, 71st Leg., ch. 1, Sec. 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 76, Sec. 11.257, eff. Sept. 1, 1995.

Sec. 395.081. FEES FOR ADJOINING LANDOWNERS IN CERTAIN MUNICIPALITIES.

(a) This section applies only to a municipality with a population of 115,000 or less that constitutes more than three-fourths of the population of the county in which the majority of the area of the municipality is located.

(b) A municipality that has not adopted an impact fee under this chapter that is constructing a capital improvement, including sewer or waterline or drainage or roadway facilities, from the municipality to a development located within or outside the municipality's boundaries, in its discretion, may allow a landowner whose land adjoins the capital improvement or is within a specified distance from the capital improvement, as determined by the governing body of the municipality, to connect to the capital improvement if:

(1) the governing body of the municipality has adopted a finding under Subsection (c); and

(2) the landowner agrees to pay a proportional share of the cost of the capital improvement as determined by the governing body of the municipality and agreed to by the landowner.

(c) Before a municipality may allow a landowner to connect to a capital improvement under Subsection (b), the municipality shall adopt a finding that the municipality will benefit from allowing the landowner to connect to the capital improvement. The finding shall describe the benefit to be received by the municipality.

(d) A determination of the governing body of a municipality, or its officers or employees, under this section is a discretionary function of the municipality and the municipality and its officers or employees are not liable for a determination made under this section.

Added by Acts 1997, 75th Leg., ch. 1150, Sec. 1, eff. June 19, 1997.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1043, Sec. 5, eff. June 17, 2011.

Acts 2011, 82nd Leg., R.S., Ch. 1163, Sec. 100, eff. September 1, 2011.

APPENDIX B

References

"City of Tomball Infrastructure Master Plan and Capital Recovery Fee Determination 2002 to 2012", PBS&J, Houston, Texas, May 2002.

"City of Tomball Infrastructure Master Plan and Impact Fee Determination 2007 to 2017", LAN, Houston, Texas, October 2008.

"Tomball Comprehensive Plan - Vision 2030", adopted by Ordinance No. 2009-33, December 7, 2009.

"2035 Regional Growth Forecast", Houston-Galveston Area Council

2010 U.S. Census Report SF-1, City of Tomball, Texas, U.S. Census Bureau and the Texas State Data Center, 2011.

"Subcounty Total Resident Population Estimates (Vintage 2012): April 1, 2010 to July 1, 2012", U.S. Census Bureau, released via Internet on May 23, 2013.

"Local Grand Parkway construction upcoming…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 5, January 24 – February 20, 2013.

"Expansion of 249 moving plans for Aggie Expressway along", www.yourhoustonnews.com, by Lindsey Vaculin, posted December 19, 2012.

"Work to begin on Hwy. 249 tollway…", Community Impact Newspaper, Northwest Houston Edition, Volume 4, Issue 9, May 16 – June 19, 2013.

APPENDIX C

Unit Cost Data

Water System Unit Cost Data

8-inch Water Line		Unit	Unit Price
8-inch Water Line		LF	$ 35.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 43.00
Augering & Roadway Repairs	20%	LF	$ 8.60
Easement Acquisition	15%	LF	$ 6.45
Pipeline Relocation	30%	LF	$ 12.90
Contingencies	15%	LF	$ 6.45
Engineering & Surveying	25%	LF	$ 10.75
Total 8-inch Water Line per LF			**$ 88.00**

12-Inch Water Line		Unit	Unit Price
12-inch Water Line		LF	$ 54.00
Fire Hydrant[1]		LF	$ 6.86
Trench Safety		LF	$ 1.00
Subtotal			$ 62.00
Augering & Roadway Repairs	20%	LF	$ 12.40
Easement Acquisition	15%	LF	$ 9.30
Pipeline Relocation	30%	LF	$ 18.60
Contingencies	15%	LF	$ 9.30
Engineering & Surveying	25%	LF	$ 15.50
Total 12-inch Water Line per LF			**$ 127.00**

(1) Assumes Fire Hydrants are spaced every 350 feet

Miscellaneous Items Used in Water Lines above			
Fire Hydrant Assembly		EA	$ 2,400.00

Water Well Plant Estimate	Qty		Unit Cost Est	Total Cost
Well	1000	gpm	$ 1,420.00	$1,420,000.00
GST	400000	gal	$ 2.50	$1,000,000.00
Boosters	1800	gpm	$ 37.00	$ 66,600.00
Maintenance Bldg	1	LS	$ 216,000.00	$ 216,000.00
HPT	10000	gal	$ 4.15	$ 41,500.00
Emer. Gen 275kW	300	kW	$ 300.00	$ 90,000.00
				$2,834,100.00
Contingencies	15%			$ 283,410.00
Engineering & Surveying	25%			$ 708,525.00
				$3,826,035.00

Sanitary Sewer Unit Cost Data

Item		Unit	Unit Price
8-inch Gravity Sanitary Sewer			
8-inch Gravity Sanitary Sewer (all depths)		LF	$ 40.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 46.00
Augering & Roadway Repairs	15%	LF	$ 6.90
Easement Acquisition	15%	LF	$ 6.90
Pipeline Relocation	30%	LF	$ 13.80
Contingencies	15%	LF	$ 6.90
Engineering & Surveying	25%	LF	$ 11.50
Indirect Cost Subtotal	100%		$ 46.00
8-inch Gravity Sanitary Sewer Total			**$ 92.00**
10-Inch Gravity Sanitary Sewer			
10-inch Gravity Sanitary Sewer (all depths)		LF	$ 50.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtoal			$ 56.00
Indirect Cost Subtotal (2)		LF	$ 56.00
10-Inch Gravity Sanitary Sewer Total			**$ 112.00**
12-Inch Gravity Sanitary Sewer			
12-inch Gravity Sanitary Sewer (all depths)		LF	$ 65.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 71.00
Indirect Cost Subtotal (2)		LF	$ 71.00
12-Inch Gravity Sanitary Sewer Total			**$ 142.00**
15-Inch Gravity Sanitary Sewer			
15-inch Gravity Sanitary Sewer (all depths)		LF	$ 85.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 91.00
Indirect Cost Subtotal (2)		LF	$ 91.00
15-Inch Gravity Sanitary Sewer Total			**$ 182.00**
18-Inch Gravity Sanitary Sewer			
18-inch Gravity Sanitary Sewer (all depths)		LF	$ 105.00
Sanitary Sewer Manhole(1)		LF	$ 5.00
Trench Safety		LF	$ 1.00
Subtotal			$ 111.00
Indirect Cost Subtotal (2)		LF	$ 111.00
18-Inch Gravity Sanitary Sewer Total			**$ 222.00**

Sanitary Sewer Unit Cost Data (Cont.)

21-Inch Gravity Sanitary Sewer			
21-inch Gravity Sanitary Sewer (all depths)	LF	$	120.00
Sanitary Sewer Manhole(1)	LF	$	5.00
Trench Safety	LF	$	1.00
Subtotal		$	126.00
Indirect Cost Subtotal (2)	LF	$	126.00
21-Inch Gravity Sanitary Sewer Total		**$**	**252.00**
4-Inch Force Main			
4-Inch Force Main	LF	$	25.00
Trench Safety	LF	$	1.00
Subtotal		$	26.00
Indirect Cost Subtotal (2)	LF	$	26.00
4-Inch Force Main Total		**$**	**52.00**
6-Inch Force Main			
6-Inch Force Main	LF	$	30.00
Trench Safety	LF	$	1.00
Subtotal		$	31.00
Indirect Cost Subtotal (2)	LF	$	31.00
6-Inch Force Main Total		**$**	**62.00**
8-Inch Force Main			
8-Inch Force Main	LF	$	35.00
Trench Safety	LF	$	1.00
Subtotal		$	36.00
Indirect Cost Subtotal (2)	LF	$	36.00
8-Inch Force Main Total		**$**	**72.00**
Miscellaneous Items Used in Sanitary Sewer Lines Above			
Sanitary Sewer Manhole	EA	$	2,000.00
Lift Station (300-500 gpm)			
Lift Station (300-500 gpm) including contengencies	EA	$	320,000.00
Engineering & Testing	EA	$	80,000.00
Total		**$**	**400,000.00**
Lift Station (1,000-1,500 gpm)			
Lift Station (1,000-1,500 gpm) including contengencies	EA	$	440,000.00
Engineering & Testing	EA	$	110,000.00
Total		**$**	**550,000.00**
Lift Station (1,500-2,000 gpm)			
Lift Station (1,500-2,000 gpm) including contengencies	EA	$	820,000.00
Engineering & Testing	EA	$	205,000.00
Total		**$**	**1,025,000.00**
Wastewater Treatment Plant Capacity			
Wastewater Treatment Plant Capacity incl. contg.	gpd	$	6.00
Contingencies	gpd	$	0.90
Engineering & Testing	gpd	$	1.50
Total per gpd		**$**	**8.40**

(1) Manhole spaced every 400 feet.

(2) Indirect cost percentages are the same for all sizes of sanitary sewer lines and force mains. The percentages are shown in the cost data for an 8-inch sanitary sewer line.

Drainage Unit Cost Calculation

Item		Unit	Unit Price
Drainage Ditch			
Drainage Channel Excavation (10' bottom, 12' depth, 4:1 SS)*		LF	$ 257.78
Backslope Swale & Interceptor**		LF	$ 56.00
Sod (160' ROW)		LF	$ 53.33
Misc (Clearing, SWPPP, Etc)	15%	LF	$ 55.07
Subtotal			$ 422.18
Contingencies	15%	LF	$ 63.33
Engineering & Surveying	25%	LF	$ 105.54
Indirect Cost Subtotal	40%		$ 168.87
Drainage Ditch Total			**$ 591.05**
* Excavation Haul Off Assumed			
** 250 ft spacing			

Detention Unit Cost Calculation

Item		Unit	Unit Price
Detention Facility			
Detention Excavation (12' depth, 4:1 SS)*		Acre-Ft	$16,130.00
Backslope Swale & Interceptor**		Acre-Ft	$ 583.33
Sod		Acre-Ft	$ 440.00
Misc (Clearing, SWPPP, Etc)	15%	Acre-Ft	$ 2,573.00
Subtotal			$19,726.33
Contingencies	15%	Acre-Ft	$ 2,958.95
Engineering & Surveying	25%	Acre-Ft	$ 4,931.58
Indirect Cost Subtotal	40%		$ 7,890.53
Detention Facility Total			**$27,616.87**
* Excavation Haul Off Assumed			
** 250 ft spacing			

Unit Cost Data

Item		Unit	Unit Price
Mobilization			4%
SWPPP			2.5%
Excavation - Haul Off		CY	$ 10.00
Backslope Swale		Ea	$ 6,000.00
Backslope Interceptor		LF	$ 4.00
Sod		SY	$ 3.00
Sod		Acre	$ 4,840.00
Clearing & Grubbing		Acre	$ 5,000.00

Water System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 2007 CIP[1]						
Distribution Lines	$535,900	7,874	$68.06	1,195	$81,331	
Water Wells	$4,491,570	1,667	$2,694.94	979	$2,638,348	
Proposed Facilities with 2012 CIP						
Water Well	$1,420,000	1,667	$852.00	216	$184,032	
Ground Storage Tanks	$1,000,000	2,000	$500.00	216	$108,000	
Booster Pumps	$66,600	1,667	$39.96	216	$8,631	
Facility (Bldg, H-Tank & Generator)	$347,500	1,667	$208.50	216	$45,036	
WP Engineering, Surveying & Contingencies	$991,935	1,667	$595.16	216	$128,555	
Distribution Lines	$13,223,100	7,874	$1,679.34	1,195	$2,006,808	
Water (1/3 2012-2022 CIP Preparation Fees)					$50,333	
Total				**1,195**	**$5,251,075**	**$4,394.20**

(1) Existing facility costs are from Tomball staff.

Wastewater System Capital Improvements Construction Costs per LUE, 2012 to 2022

Total Connections in City Only, 2012 =	**6,679**	**LUE**
Total Projected Connections in City & ETJ, 2022 =	**7,874**	**LUE**
Total Projected Additional Connections =	**1,195**	**LUE**

Component	Outstanding Bond Principal	Outstanding Capital Cost	LUE Capacity	Cost Basis per LUE	New LUE's Served from 2012 to 2022	Cost Distribution 2012 to 2022	Total Capital Cost per LUE 2012 to 2022
Facilities constructed with 1996 & 1999 CIP (1)							
South Wastewater Treatment Plant	$2,465,000		3,333	$739.50	753	$556,733	
Facilities constructed with 2002 CIP(1)							
Trunklines		$4,263,701	7,874	$541.49	1,195	$647,082	
Facilities constructed with 2007 CIP(1)							
Trunk Lines 2007 CIP		$888,503	7,874	$112.84	1,195	$134,844	
Proposed Facilities with 2012CIP							
Lift Stations 2012 CIP		$1,350,000	6,804	$198.41	1,195	$237,098	
Trunk Lines 2012 CIP		$13,495,200	7,874	$1,713.89	1,195	$2,048,103	
Water (1/3 2012-2022 CIP Preparation Fees)						$50,333	
Total					**1,195**	**$3,674,193**	**$3,074.64**

(1) Existing Facility costs from Tomball staff. Costs shown are outstanding bond amounts.
(2) Buildout to WWTP's maximum capacities.

Drainage System Capital Improvements Construction Costs per Acre, 2012 to 2022

HCFCD Channel No.	Construction Project	Estimated Improvement Costs	Collected Funds[1]	2012 Assessable Improvement Costs[2]	Total Basin Area Served (Acres)	Existing City of Tomball 2012 Development[3]	Estimated Floodway Acreage	Areas outside City and ETJ	Net Acreage to Bear Fee	1/3 2012-2022 CIP Fees per Usage Acre[5]	Capital Cost Basis per Acre	Total Cost Basis per Acre
J131[4]	Detention & Conveyence	$0	$0	$0	3,156	57	18	387	3,156		$0.00	
J132[4]	Channel	$0	$0	$0	250	57	4	0	250		$0.00	
										$ -		
J133[4]	Channel	$0	$0	$0	500	57	9	0	500		$0.00	
										$ -		
M116[4]	Channel	$0	$0	$0	1,575	57	0	550	1,575		$0.00	
M118	N of EDC Project	$2,423,300										
M118	EDC Project	$1,359,412										
M118	S of Holderrieth + Detention	$1,790,741										
		$5,573,454	$0	$5,573,454	732	57	51	0	732	$ 8.22	$7,614.01	$ 7,622.23
M121 East	Channel	$2,216,433										
M121 East	Detention	$4,335,848										
		$6,552,281	($9,591)	$6,561,872	629	170	27	0	629	$ 8.22	$10,432.23	$ 10,440.45
M121 West	Channel	$1,448,070										
M121 West	Channel	$2,807,482										
M121 West	Detention	$5,937,626										
		$10,193,178	($82,485)	$10,275,664	1,161	225	49	0	1,161	$ 8.22	$8,850.70	$ 8,858.92
M124[4]	Channel	$2,364,196		$2,364,196								
M124	Channel	$26,377,589		$26,377,589								
M124	Detention	$21,818,344		$21,818,344								
		$50,560,129	$0	$50,560,129	2,930	373	100	877	2,930	$ 8.22	$17,256.02	$ 17,264.24
M125	Detention	$543,805	($40,431)	$584,237	675	373	14	19	675	$ 8.22	$865.54	$ 873.76

(1) Existing Facility costs from Tomball staff based on outstanding bond amounts, plus Proposed Facilities estimates, including engineering & contingencies.

(2) Limited to Proposed Facility construction estimates, including engineering & contingencies when no improvements exist.

(3) Existing Areas previously assessed impact fees.

(4) The current CIP does not include channel or detention construction within the next ten years due to funding constraints.

(5) (1/3 2012-2022 CIP) Fee Dispensed by acreage for M118, M121, & M125.

Projected Cost of Implementing the CIP

Component	Capital Cost per LUE 2012 to 2022	Estimated Bond Soft Costs per LUE [1]	Estimated Total Bond Amount per LUE	Interest per LUE [2]	Total Debt Service per LUE
Water	$4,394.20	$351.54	$4,745.74	$1,893.00	$6,638.74
Wastewater	$3,074.64	$245.97	$3,320.61	$1,324.54	$4,645.15

Drainage Service Area	Capital Cost per Acre 2012 to 2022	Estimated Bond Soft Costs	Estimated Bond Amount per Acre [1]	Interest per Acre [2]	Total Debt Service per Acre
J131	$0.00	$0.00	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00	$0.00	$0.00
M118	$7,622.23	$609.78	$8,232.01	$3,283.61	$11,515.62
M121E	$10,440.45	$835.24	$11,275.69	$4,497.69	$15,773.37
M121W	$8,858.92	$708.71	$9,567.63	$3,816.37	$13,384.01
M124	$17,264.24	$1,381.14	$18,645.38	$7,437.34	$26,082.71
M125	$873.76	$0.00	$0.00	$0.00	$873.76

(1) Assumes a bond soft costs of 8.0%
(2) Assumes an interest rate of 3.5% and 40 semi-annual payments

Capital Improvement Plan Debt Service Credit and Maximum Impact Fees

Component	Total Debt Service per LUE	Debt Service Credit per LUE (1)	Maximum Impact Fee per LUE
Water	$6,638.74	$3,319.37	$3,319.37
Wastewater	$4,645.15	$2,322.57	$2,322.57

Drainage Service Area	Total Debt Service per Acre	Debt Service Credit per Acre (1)	Maximum Impact Fee per Acre
J131	$0.00	$0.00	$0.00
J132	$0.00	$0.00	$0.00
J133	$0.00	$0.00	$0.00
M116	$0.00	$0.00	$0.00
M118	$11,515.62	$5,757.81	$5,757.81
M121E	$15,773.37	$7,886.69	$7,886.69
M121W	$13,384.01	$6,692.00	$6,692.00
M124	$26,082.71	$13,041.36	$13,041.36
M125	$873.76	$436.88	$436.88

(1) Credit equal to 50% of the total projected cost of implementing the CIP.

Maximum Impact Fee for Various Types and Sizes of Water Meters

Meter Type	Meter Size	Living Unit Equivalent (LUE)	Water Impact Fee by Meter Size		Wastewater Impact Fee by Meter Size	Total Impact Fee by Meter Size
Simple	3/4"	1.0	$ 3,319.37	s	$ 2,322.57	$ 5,641.94
Simple	1"	2.5	$ 8,298.42		$ 5,806.43	$ 14,104.86
Simple	1-1/2"	5.0	$ 16,596.85		$ 11,612.87	$ 28,209.71
Compound	2"	8.0	$ 26,554.96		$ 18,580.58	$ 45,135.54
Turbine	2"	10.0	$ 33,193.70		$ 23,225.73	$ 56,419.43
Compound	3"	16.0	$ 53,109.92		$ 37,161.17	$ 90,271.09
Turbine	3"	24.0	$ 79,664.88		$ 55,741.75	$ 135,406.63
Compound	4"	25.0	$ 82,984.25		$ 58,064.33	$ 141,048.57
Turbine	4"	42.0	$ 139,413.53		$ 97,548.07	$ 236,961.60
Compound	6"	50.0	$ 165,968.49		$ 116,128.65	$ 282,097.14
Turbine	6"	92.0	$ 305,382.02		$ 213,676.72	$ 519,058.74
Compound	8"	80.0	$ 265,549.58		$ 185,805.84	$ 451,355.43
Turbine	8"	160.0	$ 531,099.17		$ 371,611.68	$ 902,710.85
Compound	10"	115.0	$ 381,727.53		$ 267,095.90	$ 648,823.42
Turbine	10"	250.0	$ 829,842.45		$ 580,643.25	$ 1,410,485.70
Turbine	12"	330.0	$ 1,095,392.04		$ 766,449.09	$ 1,861,841.13

LUE is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12, and C702-10 recommended maximum rate for continuous duty flow of the meter, purchased at the sale of tap based on the Uniform Plumbing Code meter size and type.

Disposition of Collected Impact Fees

Water Impact Fees Collected and Interest Earnings as of 12/31/12	$2,460,861			
Water System Improvements, completed from 1996 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" water main along Zion Road from Ulrich to Neal St.	$97,200			$97,200
2. 12" water main along SH 249 from Brown to Baker	$50,000			$50,000
3. 12" water main along S. Cherry from Agg to Theis	$210,600			$210,600
4. 12" water main along Theis from S. Cherry to SH 249	$194,499			$194,499
5. 2000 gpm water well	$600,000	$600,000		
Total	**$1,152,299**	**$600,000**	**$0**	**$552,299**
Water System Improvements, completed from 1999 CIP				
1. 12" water main along FM 2920 from Lowes to Calvert	$54,810			$54,810
2. 750,000 gallon elevated storage tank	$1,200,000		$1,200,000	
3. 6" parallel water main on Graham and Holderreith	$124,981			$124,981
Total	**$1,379,791**	**$0**	**$1,200,000**	**$179,791**
Total Water System Improvements from 1996 and 1999 CIP	**$2,532,090**	**$600,000**	**$1,200,000**	**$732,090**
Water System Improvements, completed from 2002 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 12" Water main on SH 249 from Theis to Holderreith	$172,800			$172,800
2. 12" Water main on Holderreith from School St ext. to SH 249	$86,400			$86,400
3. 12" Water main on Holderreith from School St ext. to Cherry	$103,680			$103,680
4. 12" Water main on Holderreith from S. Cherry to Huffsmith-Korhville	$311,040			$311,040
5. 12" Water main along S. Cherry from Theis to Holderreith	$164,160			$164,160
6. 12" Water main along Brown Rd to E. Hufsmith Extension	$216,000			$216,000
7. 8" Water main along Johnson Rd from Michel to shopping center	$37,260			$37,260
8. 12" Water main along Hufsmith-Kohrville from FM 2920 to Holderreith	$492,480			$492,480
9. Install 1200 gpm pump at Baker St. well	$270,000	$270,000		
10. 12" Water main along Alice Rd from SH 249 to SH 249 Bypass	$86,400			$86,400
11. 12" Water mian along FM 2920 from Persimmon to ETJ	$181,440			$181,440
12. 8" Water main on Willow St from Carrell to Texas	$34,155			$34,155
Total	**$2,155,815**	**$270,000**	**$0**	**$1,885,815**
Water System Improvements, completed from 2007 CIP	**Amount**	**Wells**	**EST**	**Water lines**
1. 8-Inch Water Line along the Future Michel Road extension from Commercial Park Drive to	$796			$796

School Street				
2. 12-inch Water Line along Quinn Road from Baker Drive to Inwood Street	$195,978			$195,978
3. 12-inch Water Line along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$407,486			$407,486
4. 12-inch Water Line along Tomball Cemetery Road North of 2920 (Private Funding)	$0			
5. 12-inch Water Line along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$126,058			$126,058
6. Water Line Extension on Mechanic Street	$20,878			$20,878
7. Water Wells 5 and 6/Plant	$4,491,570	$4,491,570		
Total	**$5,242,766**	**$4,491,570**	**$0**	**$751,196**
Not 50% Funded by Impact fee as of 12/13/2012	$5,045,993	$4,491,570	$0	$554,422
Less Impact Fee Balance	-$18,522	0		-$18,522
Remaining to be paid by Impact fees	**$5,027,471**	**$4,491,570**		**$535,900**
Wastewater Impact Fees Collected and Interest Earnings as of 12/31/12	$2,600,215			
Balance as of 3/31/2008	$83,046			
Wastewater System Improvements, completed from 1996 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. 10" gravity sewer along SH 249 from McCoy's to FM 2920	$103,200			$103,200
2. 10" gravity sewer along Hooper from Bypass to SH 249	$50,000			$50,000
3. 10" gravity sewer along Hirschfield from SH 249 to Bypass	$40,000			$40,000
4. 1.5 MGD Wastewater Treatment Plant	$6,117,000		$6,117,000	
Total	**$6,310,200**	**$0**	**$6,117,000**	**$193,200**
Wastewater System Improvements, completed from 1999 CIP				
1. 10" gravity line along FM 2920: Kroger to City Limit	$14,144			$14,144
2. 12" gravity line along FM 2920: City Limit to Calvert	$151,948			$151,948
3. 10" gravity line along Hirschfield: SH 249 and bypass	$56,253			$56,253
4. Temporaty Lift Station at Calvert FM 2920	$80,000			$80,000
5. 6" force main along FM 2920 from temporary Lift Station to gravity sewer at Sh 249	$39,387			$39,387
6. 18" gravity trunk along Cherry from McPhail to Agg Road	$127,374			$127,374
7. 21" gravity trunk along Cherry from Agg to Theis	$120,745			$120,745
8. 24" gravity trunk along Cherry from Theis to Holderreith	$305,597			$305,597
9. 27" gravity trunk along Cherry from Holderreith to WWTP	$158,165			$158,165
10. 18" gravity line along Theis from LS to Cherry	$83,278			$83,278
11. Abandon Theis Lift Station	$360			$360
Total	**$1,137,251**	**$0**	**$0**	**$1,137,251**
Total Wastewater System Imp from 1996 and 1999 CIP	$7,447,451	$0	$6,117,000	$1,330,451

Wastewater System Improvements, completed from 2002 CIP	**Amount**	**N. WWTP**	**S. WWTP**	**Trunklines**
1. (8) 12" gravity line along W. Hufsmith from Quin Ext to SH 249	$164,160			$164,160
2. (10) 18" gravity line along FM 2920 from Calvert to Park St	$228,960			$228,960
3. (11) 6" force main from Temp Lift Station at Park/FM 2920 to Calvert	$73,440			$73,440
4. (12) 12" gravity line along FM 2920 from Park Rd to Tomball Cem. Rd	$145,935			$145,935
5. (14) Temp Lift Station at FM 2920 and Park Rd	$107,933			$107,933
6. (16) 10" gravity line on SH 249 from Hirschfield Rd to Alice Rd	$64,800			$64,800
7. (17) 21" gravity line on SH 249 from Alice Rd to Holderreith Rd	$528,255			$528,255
8. (18) 18" gravity line on Alice Rd from SH 249 Bypass to SH 249	$128,790			$128,790
9. (19) 30" gravity line on Holderreith Ext west of SH 249	$79,488			$79,488
10. (20) 30" gravity line on Holderreith from SH 249 and S. WWTP	$864,000			$864,000
11. (25) 8" gravity line along Johnson	$40,500			$40,500
12. (28) Abandon Cherry St Lift Station	$13,500			$13,500
13. (29) 27" gravity line on Holderreith from S. WWTP Trunk Line to BNRR	$577,800			$577,800
14. (30) 27" gravity line on Holderrieth from BNRR to Hufsmith-Kohrville Rd	$288,900			$288,900
15. (31) 24" gravity line on Hufsmith-Kohrville Rd from Holderreith to Sutton Ln	$790,560			$790,560
16. (32) 18" gravity line on Hufsnith-Kohrville Rd from Sutton Ln to FM 2920	$357,750			$357,750
Total	**$4,454,771**	**$0**	**$0**	**$4,454,771**
Not 50% Funded by Impact fee as of 12/13/2012	$4,290,611			$4,290,611
Less Impact Fee Balance	-$26,910			-$26,910
Remaining to be paid by Impact fees	**$4,263,701**			**$4,263,701**
Wastewater System Improvements, completed from 2007 CIP				
1. 10-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from SH 249 to Quinn Road	$329,227			$329,227
2. 12-inch Gravity Sanitary Sewer along Tomball Cementery Road (Private Funding)	$0			$0
3. 8-inch Gravity Sanitary Sewer along Future Brown-Hufsmith Road from Quinn Road to Baker Drive	$88,565			$88,565
4. 8" gravity line on Mechanic Street	$4,378			$4,378
5. Tomball Hills Lift Station	$466,333			$466,333
Total	**$888,503**	**$0**	**$0**	**$888,503**

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Consideration and Possible Action regarding Analysis for City-Operated Ambulance Service, as Requested by Emergency Services District #8 and NWEMS

Background:

Harris County Emergency Services District No. 8, with the endorsement of the Board of Directors of Northwest Rural Emergency Service, requests that the Tomball City Council authorize the City Manager or his designee(s) to perform an analysis regarding the creation of a City-operated emergency services department, either as a separate department or under the auspices of the City's fire department, to provide EMS services under a service agreement with ESD No. 8.

The service agreement would be similar to the agreement the City currently has with Harris County Emergency Services District No. 15 (ESD No. 15) for the delivery of fire services to that fire district.

Origination:

Harris County Emergency Services District No. 8 and Northwest Rural Emergency Service

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Doris Speer, City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Request from Harris County ESD 8 and NWEMS
List of Items to Review regarding EMS Contract

COVELER & KATZ, P.C.

Attorneys At Law
TWO MEMORIAL CITY PLAZA
820 GESSNER, SUITE 1710
HOUSTON, TEXAS 77024-8261
Telephone (713) 984-8222
Facsimile (713) 984-0670

April 7, 2014

The Honorable Gretchen Fagan, Mayor
Mr. George Shackelford, City Manager
City of Tomball
401 Market St.
Tomball, TX 77375

Re: Possible absorption of EMS as a city department

Dear Mayor Fagan and Mr. Shackelford:

Please find enclosed a letter in the above referenced matter from Lori Wallace, Board president of Harris County Emergency Services District No. 8. This copy is from a scanned copy of the original. I understand the originals will be sent by Ms. Wallace directly.

Thank you for your attention.

Very truly yours

COVELER & KATZ, P.C.

By:

Howard L. Katz
HLK/rs

Encl.

HARRIS COUNTY EMERGENCY SERVICES DISTRICT NO. 8

29530 Quinn Rd.
Tomball, Texas 77375

Lori Wallace, President
John P. Dillon, Vice President
Dana Rickett-Pugh, Treasurer
Sharla Gist, Secretary
C.J. Livanec, Jr., Assistant Secretary

COPY

April 4, 2014

The Honorable Gretchen Fagan, Mayor
Mr. George Shackelford, City Manager
City of Tomball
401 Market St.
Tomball, TX 77375

Re: Possible absorption of EMS as a city department

Dear Mayor Fagan and Mr. Shackelford:

At the meeting of Harris County Emergency Services District No. 8 ("District") held on March 6, 2014, the District Board received a request from Northwest Rural EMS, captioned by the following District agenda item:

"To review and take action on a request from Northwest Rural EMS ("NWEMS") to engage the City of Tomball to conduct a feasibility study regarding the creation of an EMS department."

As you know, pursuant to Chapter 775, Health & Safety Code, the District provides 911 EMS service to its jurisdiction, which area includes the City of Tomball. The District Board approved the agenda item to submit such a request to the City, subject to approval to do so by the board of NWEMS. We have received confirmation that the board of NWEMS did approve submission of the letter.

Accordingly, the District, for itself, and with the endorsement of the NWEMS board, would request that the Tomball City Council authorize the City Manager or such other municipal representative to conduct a feasibility study for the creation of an EMS department, standing alone or under the city fire department, to provide EMS services under a service agreement with the District. This would be similar to the contracting format between the City and Harris County Emergency Services District No. 15 regarding the delivery of fire service to that fire district.

The District Board would welcome the opportunity to discuss this matter with the City and its representatives.

Thank you for your attention.

HARRIS COUNTY EMERGENCY SERVICES DISTRICT NO. 8

29530 Quinn Rd.
Tomball, Texas 77375

Lori Wallace, President
John P. Dillon, Vice President
Dana Rickett-Pugh, Treasurer
Sharla Gist, Secretary
C.J. Livanec, Jr., Assistant Secretary

April 4, 2014

Very truly yours

Harris County Emergency Services District No. 8

By:

Lori Wallace, President

LIST OF ITEMS TO REVIEW FOR EMS CONTRACT
(As of 05.28.14)

CONTRACTS

1. Statutory document setting up ESD#8
    a. Legal limitations of use of ESD#8 funding
2. Any and all contracts for services rendered to provider.
3. Any and all contracts that provide revenue to provider including but not limited to Tomball Regional Hospital, nursing homes, etc.
4. Any and all contracts with Harris County ESD #8
5. Any and all contracts relating to purchases of supplies and materials for operation
6. Status of any and all civil, criminal, and personnel related lawsuits and/or threatened litigation.
7. Provide copies of current insurance policies including but not limited to general liability, medical liability, property, vehicle, errors & omissions, workers comp, D&O, etc.

PERSONNEL

1. Listing of all employees, qualifications, salaries, benefits, and written employment agreements
2. Copy of current Personnel Policy Handbook.
3. Copy of any Operating and/or Administrative Policy Handbook
4. Listing and cost of benefit package provided to employees

FIXED ASSETS

1. Listing of all fixed assets, including but not limited to: buildings and personal property, ambulances, vehicles, computers, supplies
2. Copy of titles to all vehicles

SUPPLIES/INVENTORY

1. Latest inventory of medical supplies

FINANCIAL

1. Last three (3) years audits along with Management Letters
2. Last three (3) budgets
    a. To include any and all financial obligiations
3. Last three (3) years of bank statements
    a. Checking
    b. Savings
    c. Letters of credit
4. Current year financial statements and monthly general ledger reports
5. Detailed accounts for the following:
    a. Payables
    b. Receivables
    c. loans
6. Copy of monthly bank reconciliations for last fiscal and current fiscal year
7. Estimated amounts to generated through recently passed taxing authority
8. Any and all information regarding annexation of adjacent properties

MISCELLANEOUS

1. Copy of agendas and minutes for 2012, 2013, and to date 2014

LEGAL ISSUES

1. Any state licenses to obtain
2. Medical director and protocols
3. http://www.hhsc.state.tx.us/rad/acute-care/amb-svcs/

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve Request by The Woodlands Church Tomball Campus to block off the Depot Area for the 1st "My Day" Children's Program, to be held on Wednesday, June 18, 2014, and for In-Kind Services

Background:

The Woodlands Church Tomball Campus wishes to hold their first "My Day" Children's Program on Wednesday, June 18, 2014, from 9:00 a.m. to 11:00 a.m.; the event is a free fun day for children as part of the Woodlands Church Tomball Campus' Community Outreach Ministry.

The Woodlands Church Tomball Campus has met with the City's special events team and has met the City's requirements. They are requesting in-kind services and to block off the Tomball Depot area during their event.

Origination:

The Woodlands Church Tomball Campus

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Rosalie Dillon, Community Events Coordinator

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

The Woodlands Church Tomball Request

Council Agenda Sheet

Topic: Consider request from The Woodlands Church Tomball Campus to block off the Depot area to hold their 1st "My Day" Children's Program on Wednesday June 18th from 9:00am to 11:00am – and their request for In-Kind Services.

Background: This is their first My Day event to be held in Tomball – a free fun day for children as part of their Community Outreach Ministry – they will have Insurance with City of Tomball named Additional Insured for the event date.

Organization: The Woodlands Church Tomball Campus

Recommendation:

Party(ies) responsible for placing this item on Agenda:
Rosalie Dillon, Community Events Coordinator

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve Resolution No. 2014-13, a Resolution of the City Council of the City of Tomball, Texas, Approving Request by Iglesia de Dios Taller del Alfarero (Church of God Potter's House) for City Support/Co-Sponsorship to Conduct a Prayer March/Walk on FM 2920/Main Street on Saturday, July 26, 2014 from 9:00 a.m. to 12:00 p.m.

Background:

Iglesia de Dios Taller Del Alfarero, requests Council support and permission to hold a prayer walk on the morning of Saturday, July 26, 2014. The walk would begin at 9 a.m. at the Tomball Intermediate School on Main Street, and proceed East towards the Depot Plaza, ending at the Gazebo.

If approved, the Tomball Police Department would utilize a rolling barricade to block the far right lane of FM 2920 heading East. The walk would turn into the Depot Plaza area from Elm Street.

Representatives of Iglesia Taller del Alfarero Church have met with the City's special events team and have met the City's requirements.

Iglesia de Dios Taller Del Alfarero is requesting permission from the City to block the street and the use of City personnel to do so, as well as waiving the fees for the use of the Gazebo.

Approval of Resolution No. 2014-13 will allow the Iglesia de Dios Taller Del Alfarero to request permission from TxDOT to block a portion of FM 2920 during the event.

Origination:

Iglesia de Dios Taller del Alfarero (Church of God Potter's House)

Recommendation:

Approval of Resolution No. 2014-13

Funding:

Party(ies) responsible for placing this item on agenda:

Rosalie Dillon, Community Events Coordinator

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Resolution No. 2014-13
Request from Iglesia Taller del Alfarero

RESOLUTION NO. 2014-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS, APPROVING REQUEST BY IGLESIA DE DIOS TALLER DEL ALFARERO (CHURCH OF GOD POTTER'S HOUSE) FOR CITY SUPPORT/CO-SPONSORSHIP TO CONDUCT A MARCH/WALK ON FM 2920/MAIN STREET ON SATURDAY, JULY 26, 2014 FROM 9:00 A.M. TO 12:00 P.M.

* * * * * * * * *

WHEREAS the Iglesia de Dios Taller del Alfarero (Church of God Potter's House) will undertake a March/Walk, to be held in the City of Tomball on Saturday, July 26, 2014 from 9:00 a.m. through 11:00 a.m.; and

WHEREAS the March/Walk will form at Tomball Intermediate School and proceed down Main Street (FM 2920) to the Tomball Depot; and

WHEREAS the purpose of the March/Walk is to pray for the City of Tomball, leaders, the business community, and area families; and

WHEREAS the Iglesia de Dios Taller del Alfarero (Church of God Potter's House) desires and requests the approval of the City of Tomball, including use of the Gazebo at the Tomball Depot, in this community effort;

NOW, THEREFORE, BE IT RESOLVED that the City of Tomball and its governing body approves the request by the Iglesia de Dios Taller del Alfarero (Church of God Potter's House) to undertake the Prayer March/Walk.

PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL HELD ON THE 2ND DAY OF JUNE, 2014.

_____
GRETCHEN FAGAN, Mayor

ATTEST:

_____
DORIS SPEER, City Secretary

Council Agenda Sheet

Topic: Consider request from the Iglesia Taller del Alfarero Church to have a Police rolling barricade for their Prayer walk on Saturday July 26th from 9:00am to 11:00am starting at Tomball Intermediate to the Depot via FM 2920 to S. Elm – and their request for In-Kind Services.

Background: As in years past, a Prayer Walk for the City of Tomball and all – they will have Insurance with City of Tomball named Additional Insured for the event date.

Organization: Iglesia Taller del Alfarero Church

Recommendation:

Party(ies) responsible for placing this item on Agenda:
Rosalie Dillon, Community Events Coordinator

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Appoint/Reappoint Members to the City of Tomball Board of Adjustments

Background:

The City Council is authorized, under Section 9 of the Zoning Ordinance, to appoint five (5) regular members and up to four (4) alternate members to serve as the Board of Adjustments (BOA). Members of the BOA must be resident citizens of the City of Tomball and serve staggered two-year terms.

The positions currently held by John Ford, John Lynch, Christine Roquemore and April Gray are up for appointment/reappointment. Mr. Lynch does not wish to be reappointed.

Mr. Ford was appointed in 2008; reappointment would be to a fourth term. Mrs. Gray and Mrs. Roquemore, Alternates on the BOA, were appointed in 2010 and 2012, respectively. Alternate Position 4 is vacant.

The following individual, not currently serving on another City-appointed Board, has expressed her interest in serving on the Board of Adjustments:

Michelle Beauvais (formerly serving on P&Z).

I would like to recommend the re-appointment of John Ford as a Regular member, the appointment of April Gray as a Regular member, the reappointment of Christine Roquemore as Alternate 1, and the appointment of Michelle Beauvais as Alternate 3; of course, Council may make additional nominations as desired.

Appointing April Gray to a Regular position and Michelle Beauvais as an Alternate will leave one vacant Alternate position; however, I do not recommend making an appointment to this vacancy, pending receipt of new applications for the Board of Adjustments.

Origination:

Mayor Fagan

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Doris Speer, City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER

☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

BOA Attendance 2012-2014
Michele Beauvais - Application

Board of Adjustments
2012-14 Member Attendance

April 12, 2012 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Rick Tomlinson – Present
John Lynch – Excused Absence
April Gray (Alternate) – Present

August 9, 2012 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Rick Tomlinson – Resigned effective 7/30/12
John Lynch – Excused Absence
Billy Hemby (Alternate) – Present
Jarmon Wolfe (Alternate) – Present

September 13, 2012 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Excused Absence
April Gray – (Alternate) – Present

October 11, 2012 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Excused Absence
April Gray – (Alternate) – Present
Christine Roquemore – (Alternate) – Present

December 13, 2012 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Present
Jarmon Wolfe – (Alternate) – Present

January 24, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Present
Jarmon Wolfe – (Alternate) – Present
Christine Roquemore (Alternate) – Present

March 14, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Excused Absence
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Excused Absence
Jarmon Wolfe – Present
Christine Roquemore – Present

June 13, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present (Arrived late, Board Member Wolfe sat in place)
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Present
Jarmon Wolfe (Alternate) – Present

July 11, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Present (Arrived late, Board Member Board Member Pilgrim sat in place)
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Absent
Christine Roquemore (Alternate) – Present
Rocky Pilgrim (Alternate) – Present
Jarmon Wolfe (Alternate) – Present (In audience, did not participate)

November 14, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Excused Absence
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Present
Jarmon Wolfe (Alternate) – Present

December 12, 2013 – 6:30 p.m.:

John Ford – Present
Tana Ross – Excused Absence
Brett Tynes – Present
Billy Hemby – Present
John Lynch – Excused Absence
Jarmon Wolfe (Alternate) – Present
Christine Roquemore (Alternate) – Present

January 9, 2014 – 6:30 p.m.:

John Ford – Present
Brett Tynes – Present
Billy Hemby – Excused Absence
John Lynch – Present
Jarmon Wolfe (Alternate) – Present
April Gray (Alternate) – Present
Christine Roquemore (Alternate) – Present (In audience, did not participate)

April 10, 2014 – 6:30 p.m.:

John Ford – Present
Brett Tynes – Present
Billy Hemby – Excused Absence
John Lynch – Excused Absence
Jarmon Wolfe – Present
April Gray (Alternate) – Present
Christine Roquemore (Alternate) – Present

CITY OF TOMBALL

APPLICATION FOR CITY BOARDS/COMMISSIONS/COMMITTEES

As an Applicant for a City Board, Commission, or Committee, your application will be available to the public. You will be contacted before any action is taken on your appointment to confirm your continued interest in serving. All appointments are made by the Tomball City Council. Incumbents whose terms expire are automatically considered for reappointment unless they indicate non-interest or have been appointed to two (2) consecutive terms. A member who is absent for more than 25% of called meetings in any twelve consecutive months or absent from more than two consecutive meetings, for other than medical reasons, will be automatically removed from service. Applicant must be a citizen of the United States and must reside within the city limits of Tomball unless otherwise stated in the position announcement. Applications will be kept on file for two years and will expire at the end of two years; for instance, an application dated in 2011 will expire in 2013.

Please Type of Print Clearly:

Date: 3/20/2011

Name: Michele Beauvais

Phone:

Address:

Phone: 281-831-3332 (Home)

City/State/Zip Tomball, TX. 77377

(Work)

Cell:

Email:

I have lived in Tomball 4.5 years. I am ✓ am not ___ a U.S. Citizen

Occupation: Co owner of American Communications Construction, Interior Designer

Professional and/or Community Activities: Habitat for Humanity, A.A.R.S T.A.I.D

Additional Pertinent Information/References: Dana & Trevor Pugh, Ann Marie & Kwin McWillis, Laurel & Mark Norris,

Applications for the following Council-appointed Boards, Commissions, and Committees will be kept on file in the City Secretary's office (281-290-1002) for one year.

If you are interested in serving on more than one board, please indicate your preference by numbering in order of preference (i.e., 1, 2, 3, etc.)

Decision-Making Boards and Commissions	Meeting Information
(✓) Planning & Zoning Commission	Second Monday each month, 6 p.m.
(✓) Board of Adjustments	To Be Announced; Evenings
Separate Legal Entities	Meeting Information
(✓) Tomball Economic Development Corporation	First Wednesday of January, April, July & October, 9 a.m. (special meetings may be called)
(✓) Tomball Hospital Board	Fourth Wednesday each month, 4 p.m.
Ad Hoc/Advisory Committees	
(✓) Downtown Tomball Advisory Committee	Meeting Information As called

****

I AM INTERESTED IN SERVING ON THE ABOVE-INDICATED BOARDS, COMMISSIONS, AND COMMITTEES.

Signature of Applicant

Please return this application to:

City Secretary
City of Tomball
401 Market Street
Tomball, TX 77375

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Appoint/Reappoint Members to Serve on the Tomball Economic Development Corporation

Background:

The Tomball Economic Development Corporation terms for Vincent O'Donnell, Bill Sumner, Jr., Richard Bruce, and Lori Klein Quinn expire May 31, 2014. Each member has indicated his/her desire to continue serving on the TEDC.

Kelly Violette, Executive Director-TEDC, recommends the reappointment of each member in order to maintain the continuity of the Board, especially as the TEDC continues developing the Business and Technology Park.

I would like to recommend the reappointment of Vincent O'Donnell, Bill Sumner, Jr., Richard Bruce, and Lori Klein Quinn. Nominations will also be accepted at the Council meeting.

Origination:

Mayor Fagan

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Doris Speer

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Receive the Tomball Economic Development Corporation (TEDC) 2013-2014 Annual Report.

Background:

The Bylaws of the Tomball Economic Development Corporation (TEDC) require that an annual status report outlining the activities of the Corporation in carrying out its Strategic Work Plan be submitted to City Council for review.

Origination:

Tomball Economic Development Corporation Board of Directors.

Recommendation:

As per the TEDC Bylaws, this annual report is for review by the City Council. No action is required.

Funding:

Party(ies) responsible for placing this item on agenda:

Kelly Violette, Executive Director, Tomball Economic Development Corporation

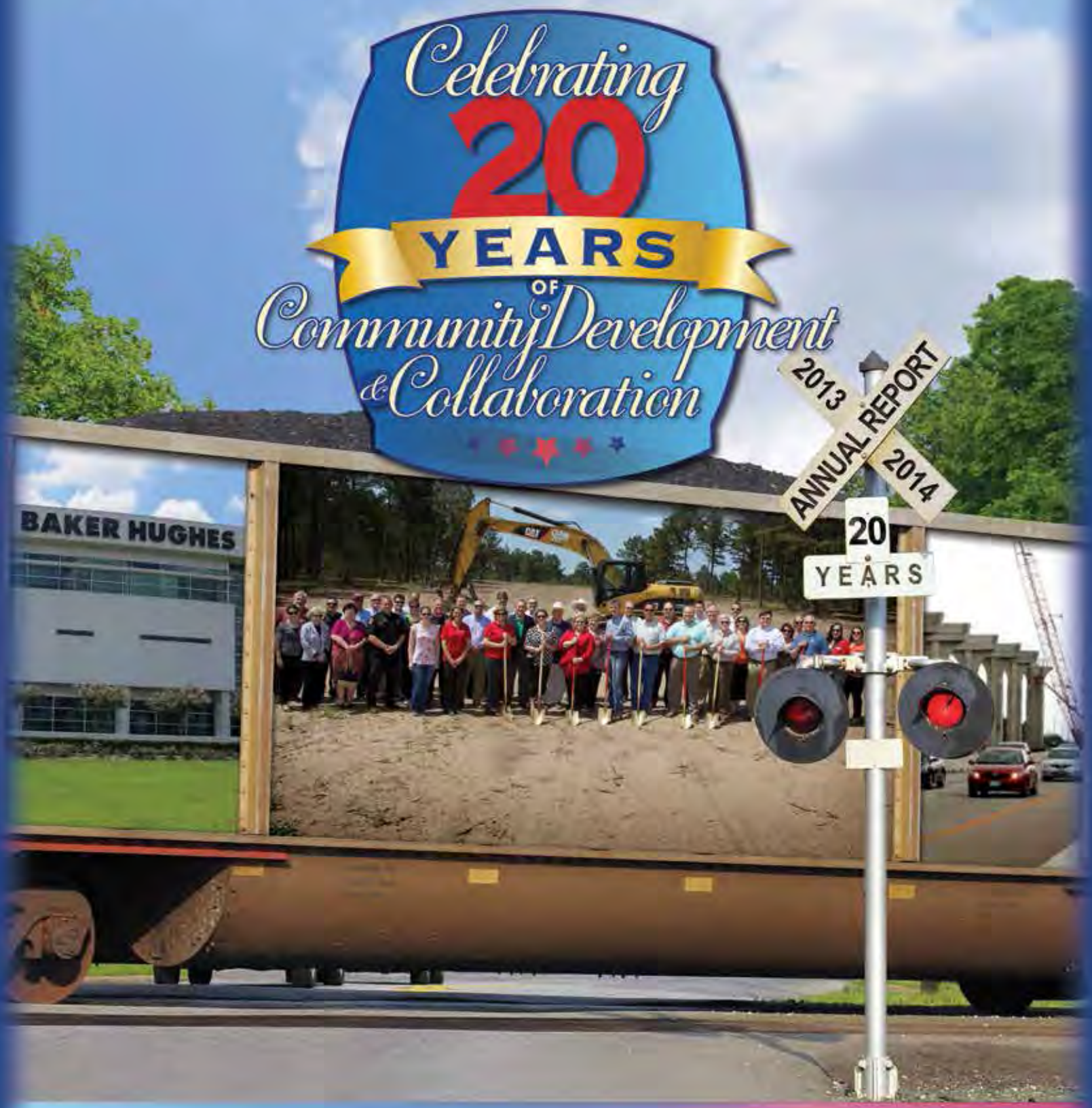
ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

2013-2014 Annual Report

TOMBALL ECONOMIC DEVELOPMENT CORPORATION



TOMBALL
20 YEARS
ECONOMIC DEVELOPMENT CORPORATION

BOARD of DIRECTORS

What is Economic Development?

"The process of creating wealth through the mobilization of human, financial, capital, physical and natural resources to generate marketable goods and services."
International Economic Development Council



From Left to right back row:
Chad Degges
Lori Klein-Quinn, *Treasurer*
Vince O'Donnell
Steven Vaughan, *Vice President*

From Left to right front row:
William E. Sumner, *Secretary*
Gretchen Fagan, *President*
Richard Bruce

The Tomball Economic Development Corporation (TEDC) is a non-profit Type B Corporation created pursuant to the Texas Development Corporation Act of 1979. The TEDC was formed in November 1994, after the citizens of Tomball voted to pass a one-half cent sales tax dedicated to economic development.

The TEDC works to promote, assist, and enhance economic and related development activities on behalf of the City of Tomball. It is governed by a seven member board of directors who are appointed by the Tomball City Council.

OPERATING REVENUES *(FY 2014 Adopted)*

Beginning Fund Balance	$9,399,286
Sales Tax	$2,725,000
Interest Income	$30,000
Total Available Resources	$12,154,286

EXPENDITURES

Administrative	$327,574
Indirect Economic Development Expenses	$983,050
City Debt Services	$1,204,816
Grants, Loans, & Other Expenditures	$1,935,000
Total Expenditures	$4,450,439

Ending Fund Balance $7,694,347

TOMBALL 20 YEARS ECONOMIC DEVELOPMENT CORPORATION

EXECUTIVE DIRECTOR'S MESSAGE



Kelly Violette, AICP
Executive Director

This year the Tomball Economic Development Corporation (TEDC) celebrates its 20th Anniversary! Since the beginning, the TEDC has focused on business retention and attraction efforts in order to develop the local economy and enhance Tomball's living and working environment.

As we look back at the past two decades it is incredible to see how far we have come. Since its inception, the TEDC has relocated nearly four dozen new companies, and assisted over 100 area businesses with expansion and improvement projects. These efforts have resulted in the creation of over 2,000 new jobs, the retention of 1,287 existing jobs, and over $200 million in private capital investment!

Additionally, the TEDC has invested over $13 million in infrastructure projects, including the expansion of Medical Complex Drive, as well as utility extensions along Holderrieth Road, Hufsmith-Kohrville Road, and Brown Road to serve new commercial developments.

This past year the TEDC celebrated several major accomplishments including the groundbreaking of the Tomball Business & Technology Park and the Texas Economic Development Council's Community and Economic Development Award for our efforts in bringing the Baker Hughes Western Hemisphere Education Center to Tomball. These two projects will bring hundreds of thousands of dollars in new capital investment to the city and provide meaningful job opportunities for our residents.



Tiffani Wooten
Coordinator

The Tomball Economic Development Corporation is proud of the accomplishments made during Fiscal Year 2013–2014 and remains committed to its goals of supporting businesses and economic growth to improve Tomball's' quality of life. The TEDC assisted with two expansion projects this year resulting in over $12 million in private capital investment, the retention of 131 jobs, the creation of 24 new jobs, and over 41,000 square feet of newly constructed space. Additionally, the TEDC was instrumental in attracting two new businesses to Tomball resulting in 34 new jobs and over $6.8 million in capital investment.

The improvements realized over the last two decades must be attributed in great part to those who have served the Corporation in one role or the other. I would like to take this opportunity to thank the past and present Board of Directors, City Council, community supporters, and staff for their contributions to the TEDC's success.

It is my great pleasure to serve you as the Executive Director of the Tomball Economic Development Corporation and I look forward to working with you to continue to develop Tomball as a great place to do business!

Sincerely,

Kelly Violette, AICP
Executive Director

TEDC Goals & Objectives

MISSION

The mission of the Tomball Economic Development Corporation (TEDC) is to promote economic growth in the City of Tomball through the attraction of new business and industry and the retention of existing businesses by providing the resources that enable development and advance the general well being of the community.

PROMOTE BUSINESS RETENTION AND EXPANSION

Tomball's businesses are the heartbeat of our local economy! That's why Business Retention and Expansion is the TEDC's first priority. Our goal is to retain Tomball companies and encourage business growth and expansion in order to increase employment and expand the tax base.



2013–2014 RESULTS:

- Two Expansion projects resulting in capital investment of over $12M, 131 retained jobs, 24 new jobs, and $107,617 in incentives
- Forty-three Business Improvement Grants awarded to 22 businesses resulting in $3,261,108.21 in capital investment
- Conducted 11 on-site visits with area businesses to discuss growth potential, resources, and needs
- Developed Community Profile and Retail Market Profile to promote expansion/development opportunities and incentives
- Met with 45 existing businesses to discuss possible expansion opportunities

ATTRACT NEW BUSINESS AND INDUSTRY

Attracting new businesses to Tomball benefits the community by bringing in new investment, creating jobs and providing a source of new money to the community through sales and services. The TEDC works to attract new businesses to Tomball by funding targeted infrastructure improvements, providing incentives for relocations, utilizing print and electronic media, developing new industrial sites, and maintaining relationships with sources of new business referrals.



2013–2014 RESULTS:

- Two new projects resulting in 34 new jobs and over $6.8 million in capital investment
- Continued progress on the development of the Tomball Business & Technology Park: completed engineering design, bid land clearing and drainage improvements, contracted with Colliers International for brokerage services, completed land clearing, coordinated with Railroad Commission and Energy Companies regarding pipeline relocation/removal, coordinated with Harris County Precinct 4 regarding off-site roadway improvements, held Groundbreaking Ceremony
- Submitted proposals for 8 industrial prospect leads from partner organizations including the Governor's Office of Economic Development and Tourism and the Greater Houston Partnership
- Hosted 3 site tours for international companies from China, Germany, and Belgium seeking to establish U.S. facilities
- Conducted over 100 prospect meetings to discuss relocation opportunities, incentives, and development procedures

COORDINATE ECONOMIC DEVELOPMENT EFFORTS IN TOMBALL, THE REGION, AND THE STATE

Successful economic development efforts are the result of many people working together to achieve a common goal. The TEDC works hand-in-hand with the City of Tomball, Greater Tomball Area Chamber of Commerce (GTACC), Lone Star College-Tomball, area realtors and developers, and regional partners to strengthen the local economy

2013–2014 RESULTS:

- Referred clients to Small Business Development Center and Service Corps of Retired Executives (SCORE) for start-up and mentoring assistance
- Provided presentations and development updates to area organizations, including the North Houston Association, Greater Tomball Area Chamber of Commerce, Magnolia Rotary, Society of Marketing Professional Services (SMPS), Leadership North Houston, and Lone Star College-Tomball
- Conference speaker and Trade Show participant at 2014 Public, Private, Partnership (P3) Conference
- Trade Show participation at 2013 International Council of Shopping Centers (ICSC) Deal Making Conference
- Participated in the City of Tomball Development Process Review Committee
- Hosted 5th Annual Economic Development Breakfast- Over 70 attendees
- Partnered with the City of Tomball on the implementation of the Livable Centers Downtown Plan—construction completed on downtown public restroom facilities at the Depot Plaza site



BUSINESS Retention & Expansion

The Tomball Economic Development Corporation is committed to the long-term economic growth and prosperity of the Tomball community. The Corporation's recruitment and retention efforts during FY 2013–2014 will result in the retention of 131 jobs, the creation of 24 new jobs, and more than $12 million in capital investment.

BREAUX PROPERTIES, LTD

Breaux Properties LTD owns and operates Breaux Machine Works out of an approximately 52,580 square foot facility located at 13842 Hirschfield Road, Tomball, TX 77377. The company has been in Tomball for over 38 years and provides CNC machining, conventional turning, milling, boring, drilling, and contract manufacturing services for customers in the energy industry.



In 2014, Breaux Properties LTD entered into a performance agreement with the Tomball Economic Development Corporation to expand its operations by constructing a new 35,750 square foot building on a 3.402 acre tract of land. The new facility is under construction at 28006 High Meadow Road, Tomball, TX 77377. The company currently has 115 employees and plans to add 10 additional employees as part of the expansion. The TEDC awarded the company $74,534.00 to assist with the expansion. The estimated capital investment for this project is $11,050,000.00.

INLINE SERVICES, INC.

Inline Services relocated to Tomball in 2003 after receiving a grant from the TEDC to assist with the relocation of 8 employees and the construction of a 7,250 square foot office/manufacturing facility located at 27731 Commercial Park Road. Inline Services is an industry leader in pipeline services and pigging products for commissioning and maintenance of oil and gas pipelines. Inline Services is expanding its operations by adding an additional 5,500 square foot warehouse/manufacturing facility on its existing site. The company currently has 16 employees and plans to add an additional 14 employees as part of the expansion. In 2014, the TEDC approved a performance agreement with Inline Services, awarding the company $33,083.00 to assist with the expansion. The estimated capital investment for this project is $1,100,000.00.



BUSINESS VISITATION PROGRAM

The Business Visitation Program was established in 2011 as part of the Corporation's Business Retention and Expansion Program. The program provides businesses with a point of contact for questions and issues and brings awareness of the resources available to them.

Over the year, TEDC staff along with partners from the Greater Tomball Area Chamber of Commerce, City of Tomball, and the Lone Star College System's Small Business Development Center met on-site with eleven existing businesses. As part of these on-site visits the team asked specific questions to understand the factors that affect the overall climate of each business and its industry. Those factors include: recent business achievements, business needs, local workforce factors, community strengths and weaknesses, community service and utility satisfaction, and legislative policy. The Business Visitation Program is not only a relationship building tool, it also assists staff in gathering data on each business for the TEDC database as well as identifying companies that may be at-risk or looking to expand operations.



New BUSINESS & INDUSTRY

GARTH LODGING CORPORATION

In 2013, the Tomball Economic Development Corporation entered into a performance agreement with Garth Lodging Corporation for assistance with infrastructure costs associated with the construction of a three-story Holiday Inn Express & Suites hotel. The 43,000 square foot facility includes 70 guest rooms, over 1,000 square feet of meeting space, and an outdoor pool. The project will bring 20 full time jobs and 5 part-time positions to the community. The TEDC awarded the company $56,000.00 to assist with infrastructure improvements including water and sewer extensions, drainage facilities, electrical service, and related site improvements that are necessary to develop this project. The estimated value of the project and improvements is $6,000,000.00. The hotel is currently under construction at 14055 Park Drive, Tomball.



QUICK TURN MACHINING INC.

Quick Turn Machining Incorporated is a CNC machine shop that services the oil and gas, petrochemical, control valve, automotive, and aerospace industries. The company has been in business for 18 years and is relocating from its current location in Spring, Texas to a 10,000 square foot facility at 428 South Persimmon Road in Tomball to accommodate the company's growth. Quick Turn Machining is relocating 7 jobs to the City and will create 2 new jobs within the first 2 years. The TEDC awarded the company $13,500.00 to assist with the relocation and necessary improvements to the building. The capital investment for this project is $825,000.00.

TOMBALL BUSINESS AND TECHNOLOGY PARK



The Tomball Economic Development Corporation, along with area officials, celebrated the groundbreaking of the Tomball Business and Technology Park on May 6, 2014.

The ceremony was the culmination of three years of planning and preparation on the project which, upon completion, will provide development ready sites for new and expanding businesses in the Tomball community. The property was acquired by the TEDC on December 19, 2011.

Since the project was announced in 2012, interest from site selectors and business owners has continued to grow. Although the site has been planned to accommodate variable lot sizes, the TEDC has seen interest from companies looking to purchase large tracts for corporate campus facilities due to its proximity to the Grand Parkway as well as other corporate facilities locating in the north Houston region.

The project master plan includes the construction of South Persimmon Road and Spell Road, as well as the extension of water, sewer and natural gas facilities. Development of the project includes the construction of the southern portion of the M118 Drainage Channel and improvements to the M118 Detention Pond located southerly of Holderrieth Road. The drainage improvements will provide regional detention for approximately 634 acres of development in the area.

The land clearing was completed in April 2014, and construction of the roadways, drainage channel and utilities are anticipated to begin by the fall of 2014.

2013-2014 HIGHLIGHTS:

- **The Tomball Economic Development Corporation entered into a partnership with Harris County Precinct 4 for intersection improvements at Hufsmith-Kohrville Road and Holderrieth Road. The TEDC will fund the design of the intersection, including a new traffic signal and left turn lanes, and Harris County Precinct 4 will fund the construction. Design plans for the improvements are complete and the county anticipates bidding the construction in June 2014.**
- **The Tomball Economic Development Corporation approved a listing agreement with Colliers International for marketing and land sales of the Tomball Business & Technology Park in December 2013. Colliers' Tom Condon, Jr., Senior Vice President, is leading the efforts. Colliers International is the third largest commercial real estate services company in the world with 12,500 professionals operating out of more than 500 offices in 61 countries.**

Economic Development EFFORTS

Over the past year, the TEDC has continued to build and reinforce partnerships with its economic development allies to help advance development opportunities within the community and strengthen the local economy.

In 2013, the TEDC was awarded the Texas Economic Development Council's Community Economic Development Award (CEDA) for its work on the Baker Hughes Western Hemisphere Education Center Project. The Community Economic Development Awards program recognizes exceptional contributions of TEDC member cities toward the economic vitality of their communities and the state of Texas through creativity, leadership, and partnership in the achievement of business retention, business recruitment and community improvement.

The award highlighted the coordination efforts between the TEDC, Baker Hughes, the City of Tomball, and the Greater Tomball Area Chamber of Commerce. Each entity worked diligently to facilitate the $55 million Western Hemisphere Education Center project, which will provide state-of-the art training for thousands of employees in the oil and gas industry. The facility, which is the only one of its kind in the United States, celebrated its Grand Opening on May 15, 2014.

Over the past year, the TEDC has worked with Harris County Precinct 4 to facilitate improvements to the Hufsmith-Kohrville Road corridor in order to ease congestion in the area and accommodate future traffic demand associated with the Baker Hughes project as well as the Tomball Business & Technology Park. As a result, Harris County Precinct 4 moved Segment 6 of the Hufsmith-Kohrville Road expansion project, which will widen the road from 500 south of Willow Creek Estates to F.M. 2920, up on its priority list. The segment is currently in the study phase and construction is anticipated to begin in the first quarter of 2015.





The Community Economic Development Award was presented to the TEDC at a special awards luncheon on October 17, 2013 at the Texas Economic Development Council's Annual Conference at the Hyatt Regency Riverwalk Hotel in San Antonio. There to accept the award was (from left to right): Tomball EDC board members Chad Degges and Lori Klein-Quinn; Mayor Gretchen Fagan; Tomball EDC Executive Director Kelly Violette; Jennifer Cutaia Schally, Government Relations, Baker Hughes Incorporated; George Bernhardt, Managing Counsel - Global Real Estate, Baker Hughes Incorporated; and TEDC Coordinator Tiffani Wooten.

Economic Development EFFORTS

The TEDC has been active in local, regional, and state events promoting economic development activities. Staff has attended conferences and provided presentations to numerous organizations including the North Houston Association, North Houston Regional Center for Economic Development, the Society of Marketing Professional Services (SMPS), and the Public Private Partnership Alliance.



The Public Private Partnership Alliance hosted the P3 Conference in Dallas, Texas in February 2014. The conference was attended by more than 750 public and private sector representatives from across the country. The TEDC sponsored a booth at the event in order to promote development projects in Tomball and connect with potential new development partners. TEDC Executive Director, Kelly Violette, made a presentation during the Deal Day Showcase Session to share Tomball's development goals, redevelopment visions and new projects.



The "North Houston Economy: Dynamic & Diverse" event was hosted by TEDC partners, the North Houston Association and the North Houston Regional Center for Economic Development, on April 23, 2014. The event featured keynote speaker, Bob Pertierra, Senior Vice President and Chief Economic Development Officer for the Greater Houston Partnership.

TEDC Executive Director, Kelly Violette, joined fellow speaker and panelist, Gil Staley, Chief Executive Officer, The Woodlands Area Economic Development Partnership, to discuss growth and targeted projects in the area at the January 2014 luncheon of the Houston division of Society of Marketing Professional Services (SMPS).



ECONOMIC DEVELOPMENT BREAKFAST

In June of each year, the TEDC hosts an Economic Outlook event for community leaders, real estate professionals, bankers, and developers to learn about and discuss the region's economic competitiveness and the issues that will impact growth and development The event has become one of the TEDC's most successful outreach initiatives as it continues to bring allies and stakeholders together to promote economic activity in Tomball. The speakers for the 2013 event included Gretchen Fagan, Mayor of Tomball, Commissioner R. Jack Cagle, Harris County Precinct 4, and Dr. Jim Gaines, Research Economist, Real Estate Center at Texas A&M. This has proven to be an ideal venue for staying informed on the Tomball community as well as providing a networking opportunity for attendees.



"Really liked the breakfast and meeting this morning; excellent speakers, good information, fun time; lots of guests--way to go! Keep up the good work."

Rick Gatewood, *Broker, Gatewood & Associates*

INTERNATIONAL COUNCIL OF SHOPPING CENTERS (ICSC)





As they say, everything is bigger in Texas! ICSC's Texas Conference & Deal Making is no exception. With over 220 exhibiting companies and 3,000+ of the industry's top leaders, this 3 day event is a great opportunity to attract new retailers, network with brokers, lenders, and property asset managers, and promote available properties.

The TEDC was one of the exhibitors at the Texas Conference and Deal Making show at the Dallas Convention Center on November 6-8, 2013. The presence of a Tomball booth at the show provided a wonderful opportunity for staff to connect with potential retailers and developers and provide an overview of the growth in the Tomball area. Two prospect visits and numerous leads were generated from attending the show.



Business Improvement GRANT PROGRAM

The purpose of this program is to promote the development and expansion of new and existing business enterprises within the City of Tomball, and enhance the economic welfare of the citizens of the City by securing and retaining business enterprises and maintaining a higher level of employment, economic activity and stability.

In FY2013-2014 for every dollar the TEDC invested it was matched 11:1



BUSINESS IMPROVEMENT GRANT PROGRAM

Fiscal 2013–2014	Project Cost	Project Scope	TEDC Grant
Baker Katz	$200,000.00	Property, Façade, & Signage Improvement	$22,500.00
B&D Custom Ink	$7,272.55	Signage	$1,000.00
America's Best Value Inn	$11,200.00	Property & Facade Improvement	$5,600.00
Chec-M Properties (One Moore)	$96,000.00	Property, Landscaping, & Signage Improvement	$21,000.00
Tomball Plaza LLC	$214,038.19	MEGA Grant-All Improvements	$50,000.00
Klein Wealth Management	$23,334.35	Property & Landscaping Improvement	$11,667.00
Pecos Grilling Company	$38,555.00	açade, Landscaping, & Signage Improvement	$18,098.00
Albers Properties	$8,000.00	Landscaping Improvements	$4,000.00
Keystone Townhomes	$60,534.00	Property, Façade, Landscaping, & Signage Improvement	$24,901.00
Gatewood and Associates	$6,150.00	Façade Improvement	$3,075.00
Breaux Properties	$355,561.30	Property & Landscaping Improvement	$20,000.00
Inline Services	$107,089.50	Property, Façade & Landscaping Improvement	$21,568.90
Hilltop Tool Rental	$6,696.02	Signage	$1,000.00
Davis Chiropractic Center	$13,144.97	Façade and Signage Improvement	$6,572.49
Dr. Hutson	$9,202.87	Façade Improvement	$4,601.44
Texas Star Gymnastics of Tomball	$17,425.50	Façade and Signage Improvement	$6,862.50
Grevis Properties	$17,044.20	Property, Façade, Landscaping & Signage Improvement	$8,522.60
Tomball Parkway Plaza	$728,486.76	Property, Façade, & Signage Improvement	$22,500.00
BK 249, LTD	$1,300,000.00	Property Improvement	$17,500.00
Pinnacle Collision Inc.	$3,000.00	Signage	$1,000.00
NW Heart Center	$19,046.00	Landscaping Improvement	$9,523.00
Rick Friedrichs DDS	$9,327.00	Signage	$2,500.00
	$3,261,108.21		**$283,991.93**



On behalf of myself and the entire JBL Asset Management organization, we would like to personally thank you for all your help and support with our Tomball Plaza project initiatives. Looking forward to continuing our relationship with you and the City of Tomball.

Marc Orio, *Director of Operations, JBL Asset Management*



This year the TEDC developed opportunities for "catalyst" projects that will promote significant reinvestment in underutilized commercial centers. A "mega grant" for up to $50,000 may be awarded for an improvement project that encompasses a multi-tenant retail, commercial, or service center. The Project must make a minimum private investment amount of $100,000 in order to be eligible for the Mega grant bringing the total project investment to at least $150,000.





TOMBALL 20 YEARS ECONOMIC DEVELOPMENT CORPORATION



Celebrating 20 YEARS OF Community Development & Collaboration













The success of an economic development organization is often measured by the number of jobs created/retained, the amount of private sector investment, workforce development initiatives, etc. All of these performance measures are intended to identify how effective the organization has been at enhancing the economic environment in which they function.

What is often the most important indication of success is also the most difficult to measure- the partnerships that are created between the organization, the business community, local and regional allies, the municipality, and the citizens. These partnerships play a critical role in a community's ability to retain and attract businesses that drive economic growth.

The success of the Tomball Economic Development Corporation can be measured in terms of the nearly four dozen new companies that have relocated to Tomball through our attraction efforts, the 100+ existing businesses that have been able to leverage their expansion dollars through our grants, the 2,000 new jobs that have been brought to the Tomball community, or the 1,287 jobs that have been retained due to the TEDC's efforts, but it is the partnerships and collaborative efforts of the organization that have truly made an impact in Tomball over the past 20 years.

With every new project that the TEDC undertakes it makes a commitment to increased prosperity and opportunity for our community. The pictures shown here represent a snapshot of the partnerships that have been formed over the past 20 years and the growth that has resulted from these efforts. The TEDC looks forward to celebrating these accomplishments and the businesses that have made Tomball their home at the 20th year celebration luncheon on June 26, 2014.

TOMBALL 20 YEARS
ECONOMIC DEVELOPMENT CORPORATION











TOMBALL
20 YEARS
ECONOMIC DEVELOPMENT CORPORATION

MARKETING Activities

2013 ANNUAL REPORT 2014
20 YEARS

The TEDC has continued to focus on online and print materials in local, regional and national publications, including the Greater Tomball Area Chamber of Commerce Guide, Houston Economic Development Guide, Area Development, Business Facilities, Trade & Industry, Expansion Solutions, and Global Corporate Expansion. Additionally, the TEDC advertised in Texas Wide Open for Business, which is distributed by the Texas Governor's Office of Economic Development & Tourism to all business inquiries and approximately 40,000 site selectors, brokers and incentive consultants.



2013–2014 HIGHLIGHTS:

- New Community Profile Fact Sheet & Retail Market Profile
- Two Page Feature Story in Expansion Solutions Magazine
- New Tomball Business & Technology Park Flyer
- Attended two Trade Shows with TEDC booth
- New Web Banners for national site selectors website
- Developed 20th Anniversary Video to be publicized at TEDC Luncheon on June 26, 2014
- New marketing materials for events: Tomball Business & Technology Park Groundbreaking, TEDC 20th Anniversary Luncheon, TEDC 20 Year Logo, etc.









These ads promote Tomball's area resources, demographics, and high quality of life to businesses seeking new locations.



ECONOMIC DEVELOPMENT WEBSITE (www.tomballtxedc.org)

The TEDC website is the Corporation's most powerful marketing tool. During FY13-14, TEDC staff continued to update the website with current information and to improve functionality to keep the TEDC competitive in the recruitment of new jobs and capital investment. Site selectors and other decision-makers have access to useful information such as demographics, available properties, research reports, site selection data, incentives, partner agencies and community/quality of life amenities.

2013–2014 HIGHLIGHTS:

- The Tomball Economic Development Corporation entered into a yearly contract with LoopLink which is hosted by LoopNet. The LoopLink Search Engine brings industry-leading property search, mapping and display technology to the website, allowing our developers and site selectors to increase lead generation and enhance customer communications
- Over the past year, the TEDC website was visited 17,427 times by 14,337 unique visitors, which is 70.47% higher than the previous year. Viewers visited 2.69 pages per visit, with 46,925 page views

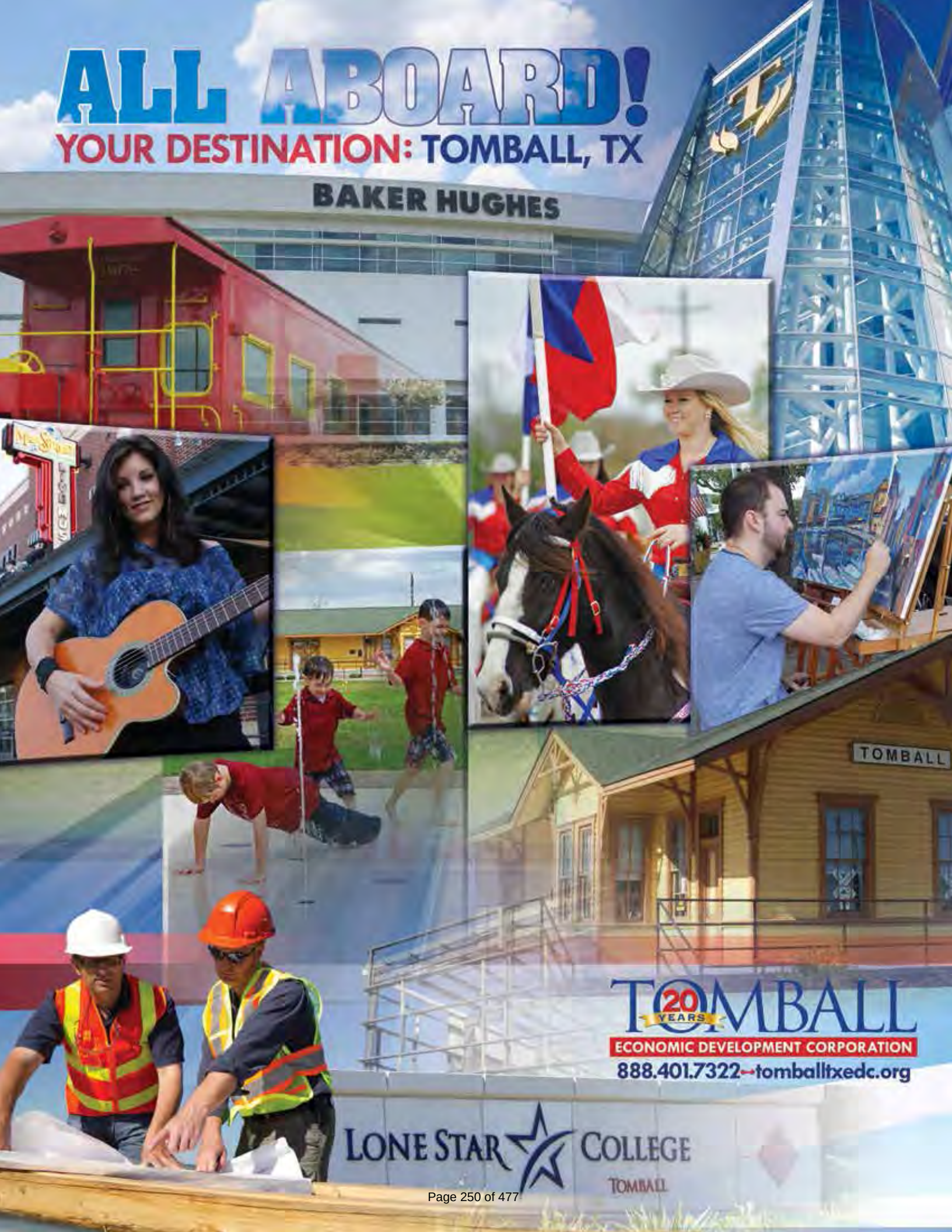











ALL ABOARD!
YOUR DESTINATION: TOMBALL, TX
BAKER HUGHES
TOMBALL
20 YEARS
TOMBALL
ECONOMIC DEVELOPMENT CORPORATION
888.401.7322 tomballtxedc.org
LONE STAR COLLEGE
TOMBALL

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve the Tomball Economic Development Corporation (TEDC) 2014-2015 Strategic Work Plan.

Background:

As stated in the TEDC Bylaws: "The Board of Directors shall direct the Corporation staff to research, develop, prepare and submit to the City Council for its approval an annual work plan which shall set goals and objectives of the Corporation, including but not limited to, short-term and long-term goals for the economic development of the City; goals and objectives for the utilization of funds to promote the expansion and development of a sound economic base for and within the City; and any other similar goals and objectives deemed appropriate by the Board and the City Council. The Board shall review and update the plan each year prior to the submission of the annual budget as a required by other provisions of these Bylaws."

Origination:

Tomball Economic Development Corporation Board of Directors

Recommendation:

Approval of the 2014-2015 Strategic Work Plan

Funding:

Party(ies) responsible for placing this item on agenda:

Kelly Violette, Executive Director, Tomball Economic Development Corporation

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

2014-2015 Strategic Work Plan

TOMBALL 20 YEARS
ECONOMIC DEVELOPMENT CORPORATION



Strategic Work Plan

2014–2015

TEDC Strategic Work Plan

2014-2015

MISSION STATEMENT

The mission of the Tomball Economic Development Corporation is to promote economic growth in the City of Tomball through the attraction of new business and industry and the retention of existing businesses by providing the resources that enable development and advance the general well being of the community.

VISION STATEMENT

Tomball will be a sound economic competitor, providing opportunities for commercial and industrial development that enable business owners and residents to benefit from Tomball's dynamic economy, strong labor force, and unmatched living and working environment.

ECONOMIC DEVELOPMENT GOALS

- *Promote Business Retention and Expansion.*
- *Attract New Business and Industry.*
- *Coordinate Economic Development Efforts in Tomball, the Region, and the State.*

TOMBALL 20 YEARS
ECONOMIC DEVELOPMENT CORPORATION

GOAL 1 PROMOTE BUSINESS RETENTION AND EXPANSION

ACTIVITIES

A. Maintain a structured business retention and expansion program:

1) Continue to develop and expand the Business Visitation Program to build relationships with existing businesses and industries and determine present and future needs.

2) Follow up and maintain ongoing contact with existing businesses and industries.

3) Facilitate coordination efforts with the City, County, and State to assist with expansion opportunities.

4) Develop resource material to distribute to area businesses.

B. Partner with post secondary institutions to identify and encourage workforce training opportunities.

C. Maintain and promote the Business Improvement Grant Program to improve the appearance of individual businesses and create an improved image for Tomball's business community:

1) Develop opportunities for "catalyst" projects that will promote significant reinvestment in underutilized commercial centers.

Expansion of Breaux Machine Works, L.P.

In February 2014, the Tomball Economic Development Corporation approved a $74,534 grant to assist with an $11 million expansion of Breaux Machine Works. The company employs 115 workers and has been in Tomball for more than 30 years. Expansion plans include the construction of a 35,750 square foot facility and the addition of 10 new employees.



The new facility is currently under construction at 28006 High Meadow Road, Tomball, TX 77377.

GOAL 2 ATTRACT NEW BUSINESS AND INDUSTRY

ACTIVITIES:

A. Work with public and private sectors in developing industrial land, business parks, and ready-to-use facilities to achieve Tomball's focused growth.

B. Work with the City of Tomball to remove potential barriers to new or expanded industrial/business development: oil & gas issues, infrastructure needs, permitting and land use ordinances, and mobility issues.

C. Encourage and assist, where possible, the development of additional tourist attractions in the historical downtown and depot area, as well as other appropriate locations in Tomball..

D. Maximize the economic benefits from Lone Star College and Tomball's Medical district:

1) Support infrastructure development within these areas.

2) Encourage the development of businesses that promote and support these assets.

E. Continue utilizing a marketing plan to promote a positive and pro-business image of Tomball.

1) Update website on regular and on-going basis

2) Advertise in business publication and journals of targeted industries/markets.

3) Develop professional collateral materials for targeted market campaigns.

The 120-acre Tomball Business and Technology Park will serve as a development ready location for new and expanding businesses in the Tomball community. The project involves a variety of infrastructure improvements, including the creation of new streets, intersection improvements, as well as necessary storm drainage, water, sewer and natural gas facilities. The drainage improvements will provide regional detention for approximately 634 acres of development in the area.

The land clearing was completed in April 2014, and construction of the roadways, drainage channel and utilities are anticipated to begin by the fall of 2014.



The Groundbreaking Ceremony was held on May 6, 2014.

GOAL 2 ATTRACT NEW BUSINESS AND INDUSTRY

ACTIVITIES

F. Maintain detailed property databases of available sites and buildings and utilize the City's GIS system to respond to prospect leads as well as provide information to the public.

G. Continue to stress the importance of David Wayne Hooks Memorial Airport as an asset to business/industry.

H. Encourage the continued development and redevelopment of commercial and retail centers.

I. Continue to develop and market business incentive programs.

J. Develop relationships and maintain contact with sources of new client referrals.

The Redevelopment of the Four Corners Shopping Center

The Four Corners Shopping Center, located at the southwest corner of S.H. 249 and FM 2920, has undergone a $10 million renovation including new façade, signage, parking, and landscaping improvements.

Baker Katz, LLC, the commercial real estate firm that purchased the Four Corners Shopping Center, worked with the Tomball Economic Development Corporation to identify a potential retail mix, redevelopment strategy, and economic development options for the project site.

The Tomball Economic Development Corporation and the City of Tomball entered into a Chapter 380 Economic Development Agreement with Baker Katz to reimburse the company for a portion of the renovation costs through future sales tax revenue increases at the site.



TOMBALL 20 YEARS ECONOMIC DEVELOPMENT CORPORATION

GOAL 3 COORDINATE ECONOMIC DEVELOPMENT EFFORTS IN TOMBALL, THE REGION, AND THE STATE

ACTIVITIES

A. Maintain and promote coordination/liaison with TEDC allies.

B. Develop feedback mechanisms to "shareholders."

C. Support efforts to develop local entrepreneurs and small businesses:

- **1)** Refer start-up businesses to Small Business Development Center (SBDC) at Lone Star College System.
- **2)** Follow-up and coordinate efforts with SBDC and Service Corps of Retired Executives (SCORE).

D. Monitor the local and regional business mix to identify gaps and/or opportunities.

E. Partner with utility and other service providers to ensure high quality, sustainable service provision.

F. Administer incentive and infrastructure funding policies.

G. Work with the City of Tomball on implementation of its tax abatement policy, Comprehensive Plan, Strategic Work Plan, and Livable Centers Downtown Plan.

5th Annual Economic Development Breakfast



The TEDC hosted its 5th Annual Economic Development Breakfast on June 27, 2013 to promote economic activity in Tomball, discuss economic trends in the region, and provide updates on major projects, including the Grand Parkway and SH 249 expansion.

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Consideration and possible action to approve, as a Project of the Corporation, an agreement with Grimes Industrial, Inc. to make direct incentives to, or expenditures for, the promotion of new or expanded business development to wit: Grimes Industrial Inc., relocation and development of its Corporate Headquarters to be located at 959 East Main Street, Tomball, Texas. The estimated amount of expenditures for such project is $69,000.00

Background:

All expenditures of the Tomball Economic Development Corporation (TEDC) sales tax revenue must first be approved as a "Project." At its regular meeting on May 20, 2014, the TEDC Board of Directors did take formal action to approve, as a Project of the TEDC, an agreement with Grimes Industrial, Inc., for the relocation and development of its Corporate Headquarters. The City Council of Tomball has final approval authority over all projects and agreements of the TEDC.

Origination:

Tomball Economic Development Corporation Board of Directors.

Recommendation:

Approve, as a Project of the Corporation, the Performance Agreement with Grimes Industrial, Inc.

Funding: Yes

Account Number: Project Grants

Party(ies) responsible for placing this item on agenda:

Kelly Violette, Executive Director, Tomball Economic Development Corporation.

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Cover Memo
Request Letter
Economic Impact Analysis
Draft Performance Agreement

TOMBALL
ECONOMIC DEVELOPMENT CORPORATION

TO: City Council Members
City of Tomball

FROM: Kelly Violette, Executive Director

MEETING DATE: June 2, 2014

SUBJECT: Grimes Industrial, Inc.

ITEM TYPE: Action

Grimes Industrial, Inc. manufactures structural steel and industrial sheet metal fabricated components for the oil and gas, energy, refining, and petro-chemical industries. Grimes Industrial Inc. has been in business since 2007 at its current location at 2828 Delafield St. Houston, TX 77023.

The company President, Mr. Jody Grimes, a Tomball area resident, desires to relocate the business to the City of Tomball. Mr. Grimes purchased a 4.611 acre tract of land located at 959 East Main Street, Tomball, Texas in 2011. Since that time, Mr. Grimes has been working with the TEDC staff and City of Tomball to address infrastructure issues necessary to support the construction of a new facility at the site. The primary issue has been the lack of a sanitary sewer line to service the site. Recently, Mr. Grimes acquired an easement along the adjacent property to the west in order to extend an 8" sanitary sewer line from Snook Lane to his property.

The proposed project includes the construction of an 8,000 square foot office/shop facility and an 8,000 square foot fabrication shop on approximately 2 acres of the 4.611 acre tract. Grimes Industrial, Inc. currently has twenty (20) full-time employees which will be relocated to the Tomball facility and plans to add an additional three (3) employees within the first year of operation. It is anticipated that the facility will have thirty-two (32) full-time employees by year five. The estimated capital investment for this project is $2,173,000.00.

This company is considered a primary employer based on its North American Industry Classification Code (NAICS) of 332312: Fabricated Structural Metal Manufacturing.

An economic impact analysis has been prepared to show the impact of this project on Tomball's economy. Per the analysis, the estimated five year net benefit to the city is $77,433.00. The proposed incentive is based upon $3,000 per each new job created in Tomball, not to exceed $69,000.00. The anticipated rate of return on the incentive over 5 years is 22.4%.

GRIMES
INDUSTRIAL, INC.
2828 DELAFIELD ST. - HOUSTON, TX 77023

May 5, 2014

For the attention of: Kelly Viollete

Dear Kelly,

I am writing to kindly request your consideration of funding assistance for our planned expansion and relocation from downtown Houston to Tomball.

My name is Jody Grimes, I am the founder, President, and sole owner of Grimes Industrial, Inc. I started the company 2007 as a manufacturer of structural steel and industrial sheet metal fabricated components for the oil and gas, energy, refining, and petro-chemical industries. We now have 7 years of steady growth and hope to gently accelerate our growth after we expand into our new facility.

The NAICS code for our manufacturing process is 332312.

We are intending to build a new facility located at 959 East Main St. Tomball, Texas 77375.
The lot is 4.611 acres. We intend to build our new 3,000 sq. ft. corporate offices, 5,000 sq. ft. machine shop, and 8,000 sq. ft. fabrciation shop for a total project site development of approx. 2 acres. We have also designed the fab shop to have a single slope roof for ease of future expansion. This will allow us to build expand an additional 8,000 sq. ft. for future growth of our fabrication facility.

The current appraisal value for the property is $223,000. We have a total project budget for building, land, and landscaping improvements cost of approx $1,650,000.00.

I have owned the land for three years. All utilitiy issues have now been addressed and resolved with the city. I have obtained the utility easement from Don Cannon with Motion Machinery next door to the west of my property so we can now move forwared with putting in the utilities from Snook over to our property. In conjunction with our building project, a infrastructure and city utility improvement is also a part of what I'm hoping the City of Tomball can assistance us in helping ease the commercial impact we're faced with. We are providing the City of Tomball a portion of the badly needed utitliy upsizing in order to be able to move our business to Tomball. I hope to close on this contract by the end of this month. Project completion and move in date (if approved) is set for December 2014.

We will have 20 employees moving from our existing location. With the extra office and shop square footage, we expect to staff up to 25-30 employees fairly quickly. Most of these will be sales/estimating staff and fabricators. The average wage will be approx. $40,000.

Please advise what assistance and tax abatement options are available and let me know if there's anything else you're needing from me at this time. My Operations Mgr. and I both live in Tomball and we can't wait to be closer to home.

My contact details are as follows:

Jody Grimes,
President of Grimes Industrial, Inc
2828 Delafield St.
Houston, TX. 77023
Tell: 713-921-0000
Fax: 713-921-0005
Cell: 832-458-4956
Email: jody@grimes-industrial.com
Website: www.grimes-industrial.com

Thank you in advance for your kind consideration of our expansion and relocation to Tomball.

Yours sincerley,

Jody Grimes

Economic Impact of Grimes Industrial, Inc. in Tomball, TX

Executive Summary

May 16, 2014

Prepared by:
Tomball Economic Development Corporation
29201 Quinn Road
Tomball, TX 77375

This summary was prepared by the Tomball Economic Development Corporation using Quick Impact by Impact DataSource. Please consult the full economic impact report for additional details and assumptions used in this analysis.

ECONOMIC IMPACT EXECUTIVE SUMMARY: GRIMES INDUSTRIAL, INC.

Project Description

Grimes Industrial, Inc. (GII) desires to construct a new 16,000 square foot fabrication and corporate office facility at 959 E. Main St. Tomball, TX 77375. GII is currently located in downtown Houston near the University of Houston. GII is currently renting it's facility and has outgrown the facilities with no possibility of expanding due to owners wishes. Funding is in place and GII is ready to build pending completion of Utility easement design / issues being resolved.

Economic Impact Over the First 10 Years

The project will have the following economic impact on the City of Tomball area over the first 10 years:

Economic Impact Over the First 10 Years			
	Direct	**Indirect & Induced**	**Total**
Total number of permanent direct and indirect jobs to be created	23	29	52
Salaries to be paid to direct and indirect workers	$11,045,619	$9,585,388	$20,631,006
Taxable sales and purchases expected in the city	$1,804,616	$838,721	$2,643,337
The value of new residential property to be built for direct and indirect workers who move to the city by Year 10	$0	$0	$0
The market value the firm's property on local tax rolls in Year 1	$2,198,000	$0	$2,198,000

Fiscal Impact Over the First 10 Years

Over the first 10 years, the City of Tomball and Tomball EDC can expect the following net benefits from the facility, its employees, and workers in spin-off jobs created in the community:

Costs and Benefits for the City Over the First 10 Years			
	Benefits	**Costs**	**Net Benefits**
Sales taxes allocated to the City	$39,650	$0	**$39,650**
Sales taxes allocated to Tomball EDC	$13,217	$0	**$13,217**
Property taxes	$76,700	$0	**$76,700**
Utility revenues	$134,725	$0	**$134,725**
Utility franchise fees	$12,504	$0	**$12,504**
Hotel occupancy taxes	$1,112	$0	**$1,112**
Other taxes and user fees	$14,016	$0	**$14,016**
Building permits and fees	$5,940	$0	**$5,940**
Costs of providing utilities	$0	$121,253	**($121,253)**
Costs of providing municipal services for new residents	$0	$25,885	**($25,885)**
Total	**$297,864**	**$147,138**	**$150,726**

Net Benefits To The City From The Direct and Indirect Sources

The city will receive benefits from direct and indirect economic impacts that result from the project. The benefits, associated costs and net benefits for the first 10 years are shown below, divided between direct and indirect impacts.

Net Benefits to the City from Direct and Indirect Sources			
	Benefits/Costs from:		
	Direct	***Indirect & Induced***	***Total***
Additional revenues:			
Sales taxes allocated to the City	$27,069	$12,581	**$39,650**
Sales taxes allocated to Tomball EDC	$9,023	$4,194	**$13,217**
Property taxes	$76,700	$0	**$76,700**
Utility revenues	$90,346	$44,379	**$134,725**
Utility franchise fees	$9,099	$3,406	**$12,504**
Hotel occupancy taxes	$1,112		**$1,112**
Other taxes and user fees	$3,504	$10,512	**$14,016**
Building permits and fees	$5,940		**$5,940**
Total additional revenues	***$222,793***	***$75,071***	***$297,864***
Additional costs:			
Costs of providing utilities	$81,312	$39,941	**$121,253**
Costs of providing municipal services for new residents	$6,471	$19,414	**$25,885**
Total additional costs	***$87,783***	***$59,355***	***$147,138***
Net Benefits	**$135,010**	**$15,716**	**$150,726**
Percent of total net benefits for city	*90%*	*10%*	

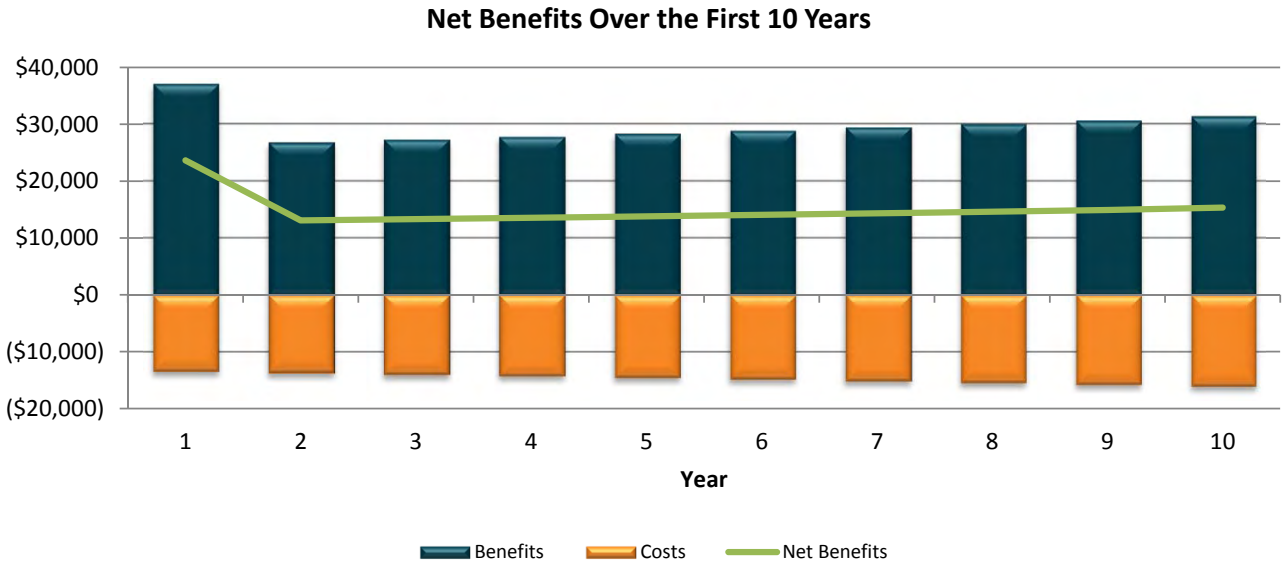
The net benefits to the city over the first 10 years are estimated to accrue as detailed below.

Net Benefits to the City by Year				
	Benefits	**Costs**	**Net Benefits**	**Cumulative Benefits**
Year 1	$37,095	$13,438	$23,658	$23,658
Year 2	$26,801	$13,706	$13,095	$36,753
Year 3	$27,301	$13,980	$13,320	$50,073
Year 4	$27,816	$14,260	$13,556	$63,629
Year 5	$28,349	$14,545	$13,804	$77,433
Year 6	$28,900	$14,836	$14,064	$91,497
Year 7	$29,470	$15,133	$14,337	$105,834
Year 8	$30,059	$15,436	$14,624	$120,458
Year 9	$30,669	$15,744	$14,925	$135,382
Year 10	$31,402	$16,059	$15,343	$150,726
Total	**$297,864**	**$147,138**	**$150,726**	
*Present Value of Net Benefits**			*$117,505*	

**The Present Value of Net Benefits is a way of expressing in today's dollars, dollars to be paid or received in the future. A dollar today and a dollar to be received or paid at differing times in the future are not comparable because of the time value of money. The time value of money is the interest rate or discount rate. This analysis uses a discount rate of 5% to make the dollars comparable.*

Fiscal Impact Over the First 10 Years

The graph below depicts the costs, benefits and net benefits to the city over the first 10 years.



Incentives

Tomball EDC may consider the following incentives for the project:

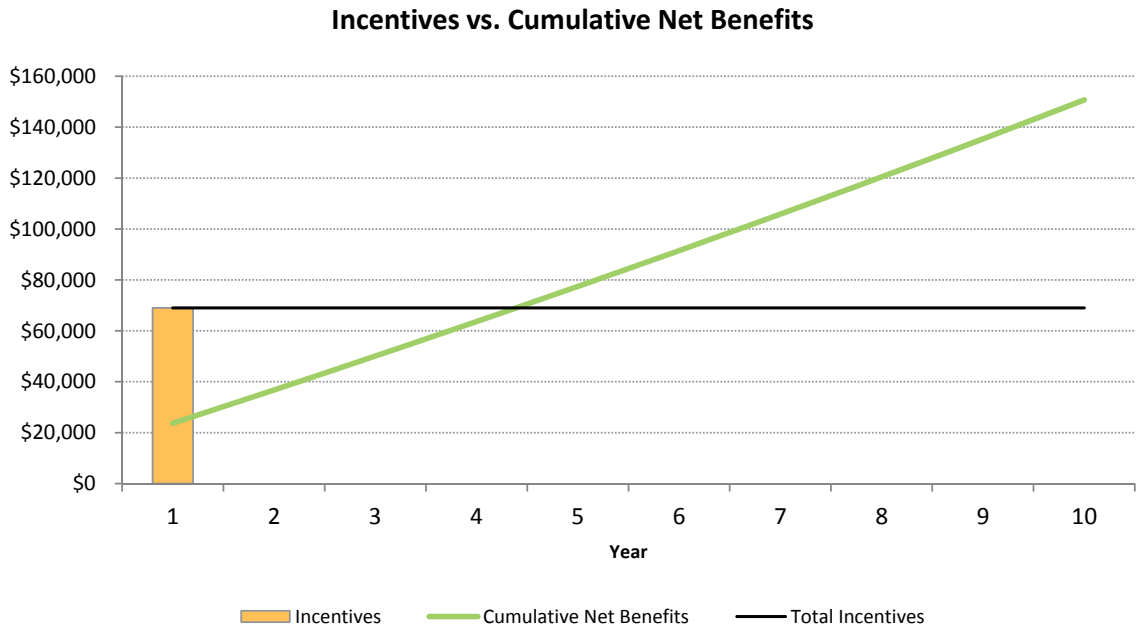
Incentives	
Year 1	$69,000
Year 2	$0
Year 3	$0
Year 4	$0
Year 5	$0
Year 6	$0
Year 7	$0
Year 8	$0
Year 9	$0
Year 10	$0

The table below shows an analysis of these incentives, including a calculation of incentives per job, rate of return and payback period.

Analysis of Incentives	
Total Incentives	$69,000
Incentives Per Job	$3,000
Rate of Return Over 5 Years	22.4%
Payback period (years)	4.4

** Rate of Return and Payback Period are calculated based on the sum of annual incentives rather than the PV of incentives.*

The graph below depicts the total incentives currently under consideration versus the cumulative net benefits to the city. The intersection indicates the length of time until the incentives are paid back.



AGREEMENT

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF HARRIS §

This Agreement (the "Agreement") is made and entered into by and between the **Tomball Economic Development Corporation**, an industrial development corporation created pursuant to Tex. Rev. Civ. Stat. Ann. Art. 5190.6, Section 4B, located in Harris County, Texas (the "TEDC"), and **Grimes Industrial, Inc.** (the "Company"), 2828 Delafield Street, Houston, Texas 77023.

W I T N E S S E T H :

WHEREAS, it is the established policy of the TEDC to adopt such reasonable measures from time-to-time as are permitted by law to endeavor to attract industry, create and retain primary jobs, expand the growth of the City of Tomball (the "City"), and thereby enhance the economic stability and growth of the City; and

WHEREAS, the Company proposes to develop a 4.611 acre tract of land within the City, located at 959 East Main Street, Tomball, Texas 77375 (the "Property"), and more particularly described in Exhibit "A," attached hereto and made a part hereof; and

WHEREAS, the Company, currently located at 2828 Delafield Street, Houston, Texas 77023, proposes to relocate its corporate headquarters to the Property, and as part of the process, plans to expend funds to construct an 8,000 square foot office/warehouse facility and an 8,000 square foot fabrication shop and make other capital improvements (the "Improvements"), generally described in Exhibit "B," attached hereto and made a part hereof, as are necessary; and

WHEREAS, the Company also proposes to move twenty (20) full-time employees to the Property and to create three (3) new jobs in Tomball within the first year of operation in conjunction with the relocation of its business operations to the Property; and

WHEREAS, the TEDC agrees to provide to the Company the sum of Sixty-Nine Thousand Dollars ($69,000.00) to assist in the construction of the Improvements, the relocation of the twenty (20) employees, and the creation of the three (3) new full-time jobs at the Property; and

WHEREAS, the Company has agreed, in exchange and as consideration for the funding, to satisfy and comply with certain terms and conditions; and

WHEREAS, this expenditure is found by the Board of Directors of the TEDC to be suitable for the relocation of the corporate headquarters to promote and develop new business enterprises on the Property;

NOW, THEREFORE, in consideration of the premises and the mutual benefits and obligations set forth herein, including the recitals set forth above, the TEDC and the Company agree as follows:

1.

Except as provided by paragraph 4, the Company covenants and agrees that it will operate and maintain the proposed business for a term of at least five (5) years and will maintain twenty-three (23) employees on the Property.

2.

The construction of the Improvements, the relocation of the twenty (20) employees, the hiring of the three (3) new employees, and the obtaining of all necessary occupancy permits from the City must occur within twenty-four (24) months from the Effective Date of this Agreement.

Extensions of these deadlines may be granted by the Board of Directors of the TEDC due to any extenuating circumstance or uncontrollable delay.

3.

The Company further covenants and agrees that it does not and will not knowingly employ an undocumented worker. An "undocumented worker" shall mean an individual who, at the time of employment, is not (a) lawfully admitted for permanent residence to the United States; or (b) authorized under the law to be employed in that manner in the United States.

4.

In consideration of the Company's representations, promises, and covenants, TEDC agrees to grant to the Company Sixty-Nine Thousand Dollars ($69,000.00) to fund a portion of the cost of the Improvements, the relocation of the twenty (20) employees, and the addition of the three (3) new employees to the Tomball operation. The TEDC agrees to distribute such funds to the Company within thirty (30) days of receipt of a letter from the Company requesting such payment, which letter shall also include: (a) a copy of the City's occupancy permit for the Improvements to the Property; (b) proof that the company has added the number of employees indicated above to the Tomball operation as evidenced by copies of Texas Workforce Commission form C-3 or Internal Revenue Service form 941; (c) a copy of a letter from the City acknowledging that all necessary plats, plans, and specifications have been received, reviewed, and approved; (d) an affidavit stating that all contractors and subcontractors providing work and/or materials in the construction of the Improvements have been paid and any and all liens and claims regarding such work have been released. In the event the number of jobs originally projected is not met or maintained, the amount of the funding provided to the Company by

TEDC will be reduced on a pro-rata basis to reflect the actual number of jobs at the time of the request for disbursement of funds.

5.

It is understood and agreed by the parties that, in the event of a default by the Company on any of its obligations under this Agreement, the Company shall reimburse the TEDC the full amount paid to the Company by the TEDC, with interest at the rate equal to the 90 day Treasury Bill plus ½% per annum, within 120 days after the TEDC notifies the Company of the default. It is further understood and agreed by the parties that if the Company is convicted of a violation under 8 U.S.C. Section 1324a(f), the Company will reimburse the TEDC the full amount paid to the Company, with interest at the rate equal to the 90 day Treasury Bill plus ½% per annum, within 120 days after the TEDC notifies the Company of the violation.

The Company shall also reimburse the TEDC for any and all reasonable attorney's fees and costs incurred by the TEDC as a result of any action required to obtain reimbursement of such funds. Such reimbursement shall be due and payable thirty (30) days after the Company receives written notice of default accompanied by copies of all applicable invoices.

It is understood and agreed by the parties that, in the event of a default by the TEDC on any of its obligations under this Agreement, the Company's sole and exclusive remedy shall be limited to either a) the termination of this Agreement or b) a suit for specific performance.

6.

Personal Liability of Public Officials: To the extent permitted by law, no director, officer, employee or agent of the TEDC, and no officer, employee or agent of the City of Tomball, shall be personally responsible for any liability arising under or growing out of this Agreement.

7.

This Agreement shall inure to the benefit of and be binding upon the TEDC and the Company, and upon the Company's successors and assigns, affiliates, and subsidiaries, and shall remain in force whether the Company sells, assigns, or in any other manner disposes of, either voluntarily or by operation of law, all or any part of the Property and the agreements herein contained shall be held to be covenants running with the Property for so long as this Agreement, or any extension thereof, remains in effect.

8.

Any notice provided or permitted to be given under this Agreement must be in writing and may be served by (i) depositing the same in the United States mail, addressed to the party to be notified, postage prepaid, registered or certified mail, return receipt requested; or (ii) by delivering the same in person to such party; or (iii) by overnight or messenger delivery service that retains regular records of delivery and receipt; or (iv) by facsimile; provided a copy of such notice is sent within one (1) day thereafter by another method provided above. The initial addresses of the parties for the purpose of notice under this Agreement shall be as follows:

If to City:	Tomball Economic Development Corporation 401 W. Market Street Tomball, Texas 77375 Attn: President, Board of Directors
If to Company:	Grimes Industrial, Inc. 2828 Delafield Street Houston, Texas 77023 Attn: Jody Grimes, Owner and President

9.

This Agreement shall be performable and enforceable in Harris County, Texas, and shall be construed in accordance with the laws of the State of Texas.

10.

Except as otherwise provided in this Agreement, this Agreement shall be subject to change, amendment or modification only in writing, and by the signatures and mutual consent of the parties hereto.

11.

The failure of any party to insist in any one or more instances on the performance of any of the terms, covenants or conditions of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, or condition, or right with respect to further performance.

12.

This Agreement shall bind and benefit the respective Parties and their legal successors and shall not be assignable, in whole or in part, by any party without first obtaining written consent of the other party.

13.

In the event any one or more words, phrases, clauses, sentences, paragraphs, sections, or other parts of this Agreement, or the application thereof to any person, firm, corporation, or circumstance, shall be held by any court of competent jurisdiction to be invalid or unconstitutional for any reason, then the application, invalidity or unconstitutionality of such words, phrases, clauses, sentences, paragraphs, sections, or other parts of this Agreement shall be deemed to be independent of and severable from the remainder of this Agreement, and the validity of the remaining parts of this Agreement shall not be affected thereby.

IN TESTIMONY OF WHICH, THIS AGREEMENT has been executed by the parties on this _____ day of _____ 2014 (the "Effective Date").

GRIMES INDUSTRIAL, INCORPORATED

By: _____

Name: Jody Grimes

Title: President and Owner

ATTEST:

By: _____

Name: _____

Title: _____

TOMBALL ECONOMIC DEVELOPMENT CORPORATION

By: _____

Name: Gretchen Fagan

Title: President, Board of Directors

ATTEST:

By: _____

Name: William E. Sumner Jr.

Title: Secretary, Board of Directors

ACKNOWLEDGMENT

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

This instrument was acknowledged before me on the _____ day of _____ 2014, by Jody Grimes, the President and Owner of Grimes Industrial Incorporated, for and on behalf of said company.

_____
Notary Public in and for the State of Texas

My Commission Expires: _____

(SEAL)

ACKNOWLEDGMENT

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

This instrument was acknowledged before me on the _____ day of _____ 2014, by Gretchen Fagan, President of the Board of Directors of the Tomball Economic Development Corporation, for and on behalf of said Corporation.

_____
Notary Public in and for the State of Texas

My Commission Expires: _____

(SEAL)

Exhibit A

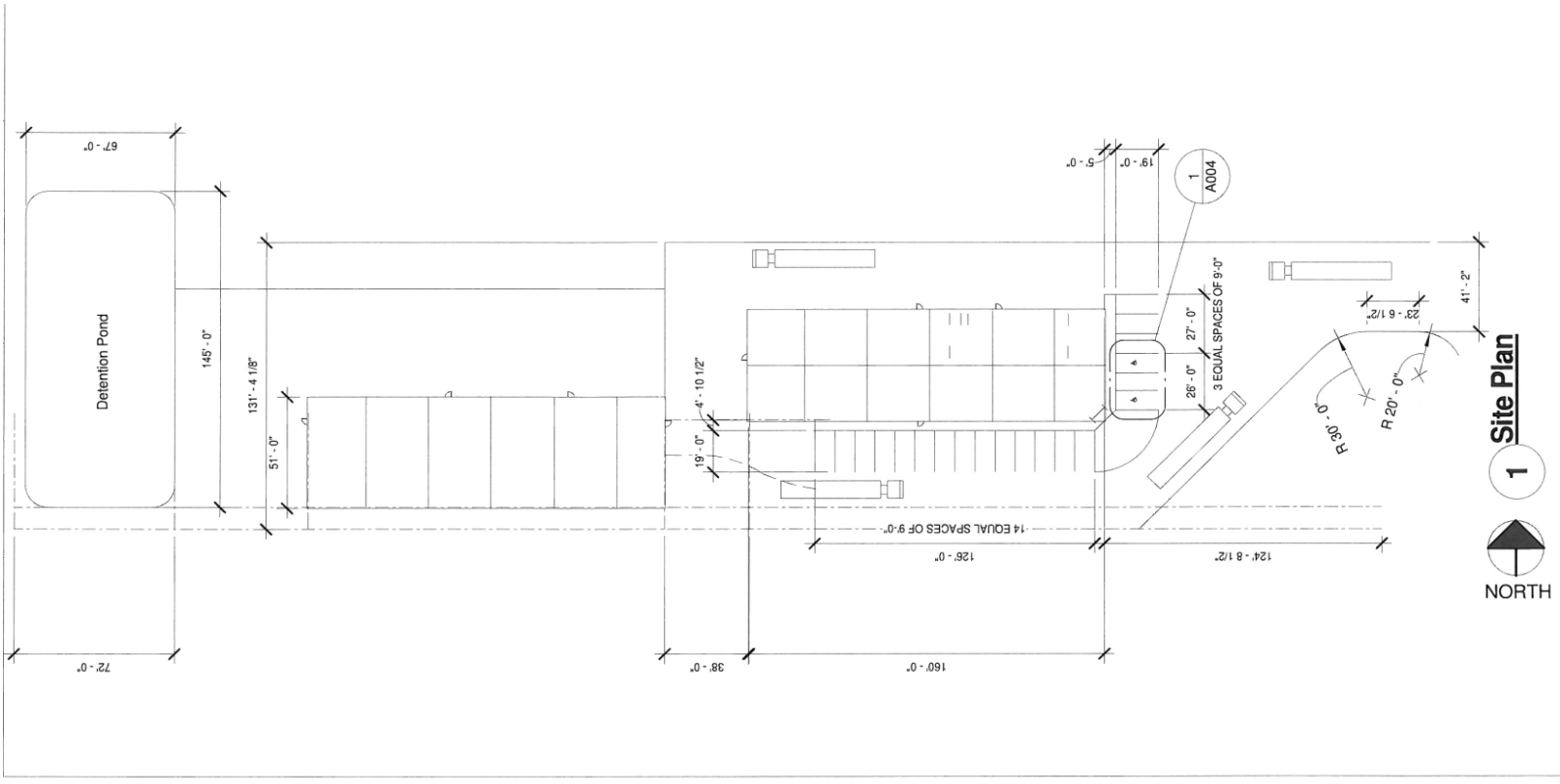
Legal Description of Property

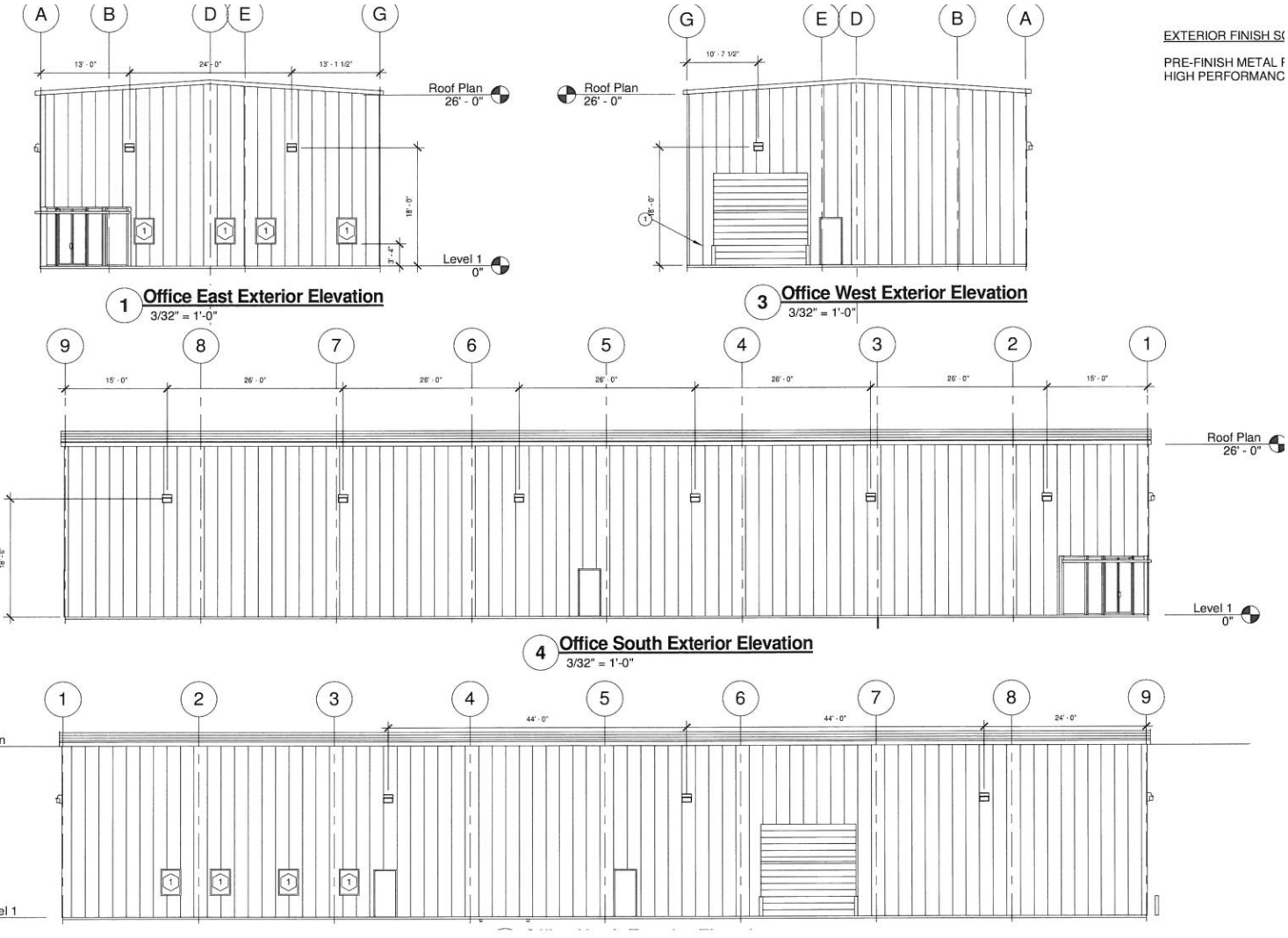
A TRACT OF LAND CONTAINING 4.611 ACRES (200,846 SQUARE FEET) (CALLED-4.71 ACRES) RECORDED IN HARRIS COUNTY CLERK'S FILE NUMBER (H.C.C.F. NO.) Z243499, SITUATED IN THE JESSE PRUITT SURVEY, ABSTRACT NO. 629, IN HARRIS COUNTY, TEXAS, BEING THAT CERTAIN CALLED 5 ACRE TRACT RECORDED IN VOLUME 2479, PAGE 423 OF THE HARRIS COUNTY DEED RECORD (H.C.D.R.); SAVE AND EXCEPT THOSE TRACTS RECORDED IN VOLUME 3637, PAGE 44 H.C.D.R. (CONVEYED TO THE COUNTY OF HARRIS) AND H.C.C.F. NOS. C743682, C845451 AND F018755. SAID 5 ACRE TRACT ALSO BEING DESIGNATED AS TRACT "E' OUT OF A CERTAIN CALLED 50 ACRE TRACT RECORDED IN VOLUME 1257, PAGE 233 H.C.D.R.

Exhibit B

Description of Improvements

Construction of an 8,000 square foot office/warehouse facility and an 8,000 square foot fabrication shop along with related parking and drive aisles and detention facility to be located at 959 East Main Street, Tomball, Texas 77375.




A
B
D
E
G
13' - 0"
24' - 0"
13' - 1 1/2"
Roof Plan
26' - 0"
18' - 0"
3' - 4"
Level 1
0"
1 Office East Exterior Elevation
3/32" = 1'-0"
G
E
D
B
A
10' - 7 1/2"
Roof Plan
26' - 0"
18' - 0"
3 Office West Exterior Elevation
3/32" = 1'-0"
EXTERIOR FINISH SC
PRE-FINISH METAL F
HIGH PERFORMANC
9
8
7
6
5
4
3
2
1
15' - 0"
26' - 0"
26' - 0"
26' - 0"
26' - 0"
26' - 0"
15' - 0"
Roof Plan
26' - 0"
18' - 0"
Level 1
0"
4 Office South Exterior Elevation
3/32" = 1'-0"
1
2
3
4
5
6
7
8
9
44' - 0"
44' - 0"
24' - 0"
Plan
)"
evel 1
)"

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve the Replacement of a Fire Department SUV Command Vehicle

Background:

The Tomball Fire Department acquired two police department Chevy Tahoes approximately three years ago in an effort to extend the useful life of the vehicles and to fill a need for additional Command and Fire Inspector vehicles. The 2008 Tahoe that was being used by Jon Fontenot, Assistant Chief - Operations, injested something two weeks ago that caused the engine to lose all compression. The truck was taken to Parkway Chevrolet and they provided an estimate of approximately $4,200 to repair the vehicle. This vehicle was scheduled for replacement in October of 2014 through the Vehicle Replacement Fund.

The Department is seeking permission to replace the vehicle immediately rather than wait until October. Funding is available in the Vehicle Replacement Fund to make the approximately $48,000 purchase, emergency equipment and the storage systems in the rear of the truck.

Origination:

Fire Department

Recommendation:

Staff recommends approval

Funding:

Party(ies) responsible for placing this item on agenda:

Randy Parr

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Adopt Resolution No. 2014-11, a Resolution of the City Council of the City of Tomball, Texas Setting a Public Hearing on July 21, 2014 at 6:00 P.M., to Discuss and Review the Adoption of Impact Fees.

Background:

The Texas Local Government Code (LGC) requires the City have a Notice of Public Hearing on Adoption of Impact Fees published in the newspaper before the 30th day before the date of the set hearing. The LGC also requires that an order or resolution must be adopted, establishing a public hearing date to discuss the imposition of the impact fee.

Origination:

Engineering

Recommendation:

Engineering recommends approval of this resolution.

Funding:

Party(ies) responsible for placing this item on agenda:

Engineering Division

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Resolution 2014-11 - Set Public Hearing on Impact Fees

RESOLUTION NO. 2014-11

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS SETTING A PUBLIC HEARING ON JULY 21, 2014 AT 6:00 P.M., TO DISCUSS AND REVIEW THE ADOPTION OF IMPACT FEES.

* * * * *

WHEREAS, Section 395.047 of the Texas Local Government Code, directs and states that a governing body of the political subdivision shall adopt an order or resolution setting a public hearing to discuss and review the proposed ordinance imposing impact fees; and,

WHEREAS, pursuant to Section 395.047 of the Texas Local Government Code it is in the best interest of the City to hold said public hearing to discuss and review the proposed ordinance imposing impact fees.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

SECTION 1: That the City Council of the City of Tomball, Texas, hereby sets and approves the Public Hearing to be held on July 21, 2014, at 6:00 p.m. at the City of Tomball City Hall, 401 Market Street, Tomball, Texas to discuss and review the adoption of impact fees. Any member of the public has the right to appear at the hearing and present evidence for or against the proposed fees.

SECTION 2: That this Resolution shall be in full force and effect from and after its passage and adoption.

PASSED AND ADOPTED this 2nd day of June, 2014.

_____
Gretchen Fagan, Mayor
City of Tomball, Texas

ATTEST:

_____
Doris Speer
City Secretary

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve Resolution No. 2014-12, a Resolution of the City Council of the City of Tomball, Texas Adopting the Stormwater Management Program (SWMP) Necessary to Obtain a Texas Pollutant Discharge Elimination System Permit and Authorizing the City Manager to Execute the Notice of Intent

Background:

On March 3, 2014, City Council approved the Professional Services Agreement with RG Miller Engineers to prepare the City of Tomball Stormwater Program for compliance with Small Municipal Separate Storm Sewer System (MS4) Permit TXR040000. On May 19, 2014, City Council was presented the Draft Stormwater Management Program and public input was also sought by posting the Draft Stormwater Management Program on the City's website and posting a notice in the newspaper. In order to be compliant with the State of Texas mandated permit, the City must submit its Stormwater Management Program and Notice of Intent (NOI) to the Texas Commission on Environmental Quality (TCEQ) no later than June 11, 2014.

Origination:

Community Development Department

Recommendation:

Approval

Funding:

Party(ies) responsible for placing this item on agenda:

Community Development Department

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Resolution No. 2014-12
City of Tomball SWMP
Tomball Notice of Intent

RESOLUTION NO. 2014-12

A RESOLUTION OF THE CITY OF TOMBALL, TEXAS ADOPTING THE STORMWATER MANAGEMENT PROGRAM NECESSARY TO OBTAIN A TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT; AND MAKING OTHER FINDINGS RELATED THERETO.

* * * * *

WHEREAS, pollutants in urban stormwater runoff can adversely impact creeks and bayous; and

WHEREAS, the Texas Water Code and implementing regulations by the Texas Commission on Environmental Quality ("TCEQ") require the City to obtain a Texas Pollutant Discharge Elimination System ("TPDES") permit to discharge stormwater pollutants into waters of the state; and

WHEREAS, TPDES Permit No. TXR040000, issued December 13, 2013 by the TCEQ requires the City to develop and implement a Stormwater Management Program ("SWMP") to reduce pollutants discharged into waters of the state to the maximum extent practicable; and

WHEREAS, the City has prepared the required SWMP; and

WHEREAS, the City has solicited and considered public comments on its proposed SWMP; and

WHEREAS, Permit No. TXR040000 requires the City to submit the SWMP, a SWMP checklist, a fee of $100 and a properly executed Notice of Intent ("NOI") to the TCEQ by June 11, 2014; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The facts and matters set forth in the preamble are hereby found to be true and correct.

Section 2. The Stormwater Management Program, a true and correct copy of which is attached to this Resolution as if set forth herein at length, is hereby adopted and approved by the City.

Section 3. The City supports implementation of the compliance obligations set forth in the SWMP.

Section 4. The City Manager or his designee is hereby authorized to execute the NOI and submit the required documents to the TCEQ.

Section 5. The City Manager or his designee is hereby authorized to respond to subsequent instructions from the TCEQ regarding publication of the TCEQ's *Executive Director's Preliminary Decision* to issue authorization under TXR040000 and to take other necessary actions to finalize permit coverage.

Section 6. That this Resolution shall be in full force and effect from and after its passage and adoption.

PASSED AND ADOPTED this 2nd day of June, 2014.

_____
Gretchen Fagan, Mayor
City of Tomball, Texas

ATTEST:

_____
Doris Speer
City Secretary

CITY OF TOMBALL
STORM WATER MANAGEMENT PROGRAM
FOR COMPLIANCE WITH TXR040000

Prepared for:

City of Tomball
401 Market St.
Tomball, TX 77375

Prepared by:

r.g. miller engineers

16340 Park Ten Place, Suite 350
Houston, Texas

June 2014

Contents

Page

Acronyms and Abbreviations vi

1.0 INTRODUCTION 1-1

1.1 REGULATORY BACKGROUND 1-1

1.2 MS4 LEVELS 1-2

1.3 THE PURPOSE OF THIS DOCUMENT 1-3

1.4 ENTITIES ASSISTING WITH THE DEVELOPMENT OF THIS DOCUMENT 1-3

1.5 ORGANIZATION OF THIS DOCUMENT 1-4

2.0 CITY BACKGROUND 2-1

2.1 SETTING AND CHARACTER 2-1

2.2 IMPAIRED RECEIVING WATERBODIES WITH AND WITHOUT TOTAL MAXIMUM DAILY LOADS 2-4

2.3 FORM OF GOVERNMENT 2-5

2.4 LEGAL AUTHORITY 2-5

2.4.1 Permit Text 2-5
2.4.2 Texas Constitution and Local Government Code 2-7
2.4.3 Additional Pending Authorities 2-8

2.5 RATIONALE STATEMENT FOR SWMP 2-8

3.0 PUBLIC EDUCATION, OUTREACH, AND INVOLVEMENT 3-1

3.1 PERMIT TEXT 3-1

3.1.1 Public Education and Outreach 3-1
3.1.2 Public Involvement 3-2

3.2 DISCUSSION OF EXISTING BMPS 3-3

3.2.1 Spring Cleanup Week 3-3
3.2.2 Consolidated Recycling Day 3-3
3.2.3 Legal Public Notice 3-3
3.2.4 “Report a Concern” Online Form 3-4

3.3 SELECTED NEW BMP'S 3-4

3.3.1 Utility Bill Flyers 3-4
3.3.2 Complaint Hotline 3-4
3.3.3 Storm Drain Placarding 3-5
3.3.4 Public Involvement in SWMP Development 3-5
3.3.5 Add Stormwater Content to Lobby Slide Show 3-5
3.3.6 Add Stormwater Content to City Website 3-6
3.3.7 Stormwater Quality Give-A-Ways 3-6
3.3.8 Add Stormwater Content to Tomball City Newsletter 3-6
3.3.9 Identify Target Audiences for Public Education and Outreach Program 3-7

3.3.10 Identify Goals and Objectives for Public Education and Outreach Program 3-7

4.0 ILLICIT DISCHARGE DETECTION ELIMINATION 4-1

4.1 PERMIT REQUIREMENTS 4-1

4.1.1 Program Development 4-1
4.1.2 Allowable Non-Stormwater Discharges 4-2
4.1.3 Requirements for All Permittees 4-2
4.1.4 Additional Requirements for Level 3 and 4 Small MS4s 4-4
4.1.5 Additional Requirements for Level 4 Small MS4s 4-4

4.2 DISCUSSION OF EXISTING BMPS 4-4

4.2.1 Consolidated Recycling Day 4-4
4.2.2 Litter Abatement 4-5
4.2.3 Nuisance Abatement 4-5

4.3 SELECTED NEW BMP'S 4-5

4.3.1 Storm Sewer Map 4-5
4.3.2 Complaint Hotline 4-6
4.3.3 “Report a Concern” Online Form 4-6
4.3.4 Storm Drain Placarding 4-6
4.3.5 Promote Harris County Household Hazardous Waste Collection Facility 4-6
4.3.6 Mitigate Illegal Dumping 4-7
4.3.7 Detect Illicit Discharge Locations 4-7
4.3.8 Illicit Discharge Program Procedures 4-8
4.3.9 Illicit Discharge Investigation, Elimination, and Enforcement 4-8
4.3.10 Tomball City Newsletter Storm Water Articles 4-8
4.3.11 Employee Training 4-8
4.3.12 Illicit Discharge Ordinance 4-9

4.4 LIST OF ALLOWABLE NON-STORMWATER DISCHARGES 4-9

5.0 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL 5-1

5.1 PERMIT REQUIREMENTS 5-1

5.1.1 Requirements and Control Measures 5-1
5.1.2 Requirements for all Permittees 5-2
5.1.3 Additional Requirements for Level 3 and 4 Small MS4 5-5

5.2 DISCUSSION OF EXISTING BMPS 5-5

5.2.1 Erosion and Sediment Control Ordinance 5-5
5.2.2 Construction Site Design Requirements 5-6
5.2.3 Construction Site Plan Review and Approval Procedures 5-6

5.3 SELECTED NEW BMP'S 5-7

5.3.1 “Report a Concern” Online Form 5-7
5.3.2 Complaint Hotline 5-7
5.3.3 Construction Site Inspections and Enforcement 5-8
5.3.4 Employee Training 5-8

6.0 POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT 6-1

6.1.1 Post-Construction Stormwater Management Program 6-1
6.1.2 Requirements for all Permittees 6-2
6.1.3 Additional Requirements for Level 4 Small MS4s....6-2

6.2 DISCUSSION OF EXISTING BMPS....6-2

6.2.1 Detention Pond Maintenance Requirements....6-2

6.3 SELECTED NEW BMP'S....6-3

6.3.1 Permanent Stormwater Quality Ordinance....6-3
6.3.2 Design Criteria....6-4
6.3.3 Plan Review and Approval Procedures for Permanent Stormwater Quality BMPs....6-4
6.3.4 Inspections and Long-Term O&M of Permanent Stormwater Quality BMPs for City-Owned Facilities....6-4
6.3.5 Inspections and Long-Term O&M of Permanent Stormwater Quality BMP for Third Party Owner/Operators....6-5

7.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS....7-1

7.1 PERMIT REQUIREMENTS....7-1

7.1.1 Program Development....7-1
7.1.2 Requirements for All Permittees....7-1
7.1.3 Additional Requirements for Level 3 and 4 Small MS4s....7-4
7.1.4 Additional Requirements for Level 4 Small MS4s....7-5

7.2 DISCUSSION OF EXISTING BMPS....7-5

7.2.1 Pesticide and Herbicide Management....7-5
7.2.2 Disposal of Waste Material....7-5
7.2.3 Street Sweeping....7-5

7.3 SELECTED NEW BMP'S....7-5

7.3.1 Spill Response Kits....7-6
7.3.2 O&M Employee Training....7-6
7.3.3 Good Housekeeping SOP Manual....7-6
7.3.4 Operation and Maintenance at City Facilities....7-7
7.3.5 Maintenance Contractor Requirements and Oversight....7-7
7.3.6 Assessment of City Facilities and Operations....7-7
7.3.7 Identify Pollutants of Concern at City Facilities....7-8
7.3.8 Develop Pollution Prevention Measures for City Facilities....7-8
7.3.9 Inspect City Facilities....7-8
7.3.10 Maintain Structural Controls at City-Owned Facilities....7-8
7.3.11 City-Owned Facilities and Control Inventory....7-9

8.0 PLAN OF COMPLIANCE FOR DISCHARGES TO IMPAIRED WATERS....8-1

8.1 DISCHARGES TO WATERS WITHOUT TMDLS....8-1

8.1.1 PERMIT REQUIRMENTS....8-1
8.1.2 PLAN OF COMPLIANCE FOR DISCHARGES TO IMPAIRED WATERS WITHOUT A TMDL....8-2

8.1.2.1 Determine Whether Small MS4 May be a Source of Pollutants of Concern by December 2014....8-2

8.1.2.2 Update SWMP by December 2015 to Include Focused BMPs 8-2
8.1.2.3 Submit Notice of Change by December 2016 to Formally Amend SWMP 8-2
8.1.2.4 Bacteria Impairments 8-2
8.2 DISCHARGES TO WATERS WITH APPROVED TMDLS 8-3
8.2.1 PERMIT REQUIRMENTS 8-3
8.2.2 WATERS WITH APPROVED TMDLS THAT RECEIVE DISCHARGES FROM THE CITY OF TOMBALL MS4 8-7
8.2.3 FOCUSED BMPS TO ADDRESS DISCHARGES TO WATERS WITH APPROVED BACTERIA TMDLs 8-7
8.2.3.1 Focused Bacteria BMP: Address Sanitary Sewer System and Lift Station Conditions 8-7
8.2.3.2 Focused Bacteria BMP: Improve Sanitary Sewer System Leaks and Overflow Reporting 8-8
8.2.3.3 Focused Bacteria BMP: Improve Collection System Protections and Public Education 8-8
8.2.3.4 Focused Bacteria BMP: Address Onsite Sewage Facilities (Septic Systems) 8-8
8.2.3.5 Focused Bacteria BMP: Illicit Discharges and Dumping 8-9
8.2.3.6 Focused Bacteria BMP: Identify and Address Significant Animal Sources 8-9
8.2.3.7 Focused Bacteria BMP: Residential Education About Bacteria Loadings 8-10
8.2.3.8 Focused Bacteria BMP: Pet Waste Management Regulation 8-10
8.2.3.9 Focused Bacteria BMP: Grease and Grit Trap Regulation 8-10
8.2.3.10 Sanitary Sewer Overflow Mitigation Program 8-10
8.2.3.11 *Legal Authority:* See Section 2.4 of this document for a summary of the City of Tomball's legal authority. 8-11
9.0 RECORD-KEEPING AND REPORTING 9-1
9.1 RECORD KEEPING (PART IV, SECTION A) 9-1
9.2 REPORTING (PART IV, SECTION B) 9-1
9.2.1 General Reporting Requirements (Section B.1) 9-1
9.2.2 ANNUAL REPORT (Section B.2) 9-2
10.0 REFERENCES 10-1

Figures

Figure 2-1 Vicinity Map 2-2

Tables

Table 2-1 List of Waters Meeting Standards....2-6
Table 2-2 List of Impaired Waters without an EPA Approved TMDL....2-6
Table 2-3 List of Impaired Waters with an EPA Approved TMDL....2-6
Table 3-1 BMPs for Public Education, Outreach, and Involvement....3-8
Table 4-1 BMPs for Illicit Discharge Detection and Elimination....4-10
Table 5-1 BMPs for Construction Site Runoff Control....5-9
Table 6-1 BMPs for Post-Construction Runoff Control....6-6
Table 7-1 BMPs for Pollution Prevention/Good Housekeeping....7-10
Table 8-1 Focused BMPs to Address Discharges to Waters with Approved Bacteria TMDLs....8-2
Table 8-2 Watersheds with Approved TMDLs Receiving Discharges from the Tomball MS4....8-7

Appendices

Appendix A General Permit for Small Municipal Separate Storm Sewer Systems to Discharge Under the Texas Pollutant Discharge Elimination System, Permit No. TXR040000, December 13, 2013

Appendix B City of Tomball Ordinances

Acronyms and Abbreviations

BMP	Best Management Practices
CFR	U.S. Code of Federal Regulations
CWA	Clean Water Act
EPA	Environmental Protection Agency
GIS	Geographic Information System
GPS	Global Positioning System
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
SWMP	Storm Water Management Plan
TCEQ	Texas Commission on Environmental Quality
TAC	Texas Administrative Code
TDA	Texas Department of Agriculture
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System

1.0 INTRODUCTION

1.1 REGULATORY BACKGROUND

In 1972, Congress amended the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act ["CWA"]) to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by an National Pollutant Discharge Elimination System ("NPDES") permit. The NPDES program is designed to track point sources and requires the implementation of controls necessary to minimize the discharge of pollutants.

In 1987, Congress amended the CWA to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. The first phase of the program, commonly referred to as "Phase I," was promulgated by the U.S. Environmental Protection Agency ("EPA") on November 16, 1990 (*Federal Register*, Volume 55, Page 47,990 [55 FR 47990]). Phase I requires NPDES permits for storm water discharge from a large number of priority sources, including municipal separate storm sewer systems ("MS4's") generally serving populations of 100,000 or more and several categories of industrial activity, including construction sites that disturb five or more acres of land.

EPA promulgated the second phase of the storm water regulatory program, commonly referred to as "Phase II," on December 8, 1999 (64 FR 68722). Phase II regulations address storm water discharges from certain MS4's serving populations of less than 100,000 people (called "small MS4's"). In summary, the regulations, which may be found in Title 40, Part 122, of the Code of Federal Regulations ("CFR") (40 CFR 122), require that all small MS4 operators located in *Urbanized Areas* (as defined by the latest U.S. census) must "develop, implement and enforce a Storm Water Management Program ("SWMP") designed to reduce the discharge of pollutants from [the] MS4 to the maximum extent practicable, to protect water quality…"

EPA has delegated authority to issue MS4 storm water discharge permits to the State of Texas. Under the authority of the Texas Water Code and the CWA, the Texas Commission on Environmental Quality ("TCEQ") is the regulatory body responsible for issuing permits regulating discharges from small MS4 systems to waters of the state. On August 13, 2007 the TCEQ issued the first round general permit for small MS4s, Permit No. TXR040000, which expired on August 12, 2012.

On December 13, 2013 the TCEQ issued their new second round general permit for small MS4s. A copy of the new permit is provided in Appendix A. In summary, the second round permit requires that the City of Tomball (hereinafter, the "City") comply with a number of administrative and legal requirements and

to update, implement, and enforce a storm water management program (SWMP) designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable to protect water quality.

1.2 MS4 LEVELS

The December 13, 2013 permit imposes compliance obligations on small MS4s based on the population within the 2010 urbanized area and served by the small MS4. A four level system is defined in Part II.B.5 of the permit, which states:

- **Level I:** Operators of traditional small MS4s that serve a population of less than 10,000 within an urbanized area;
- **Level 2:** Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an urbanized area. This category also includes all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the urbanized area, unless the nontraditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served;
- **Level 3:** Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,00 within an urbanized area;
- **Level 4:** Operators of traditional small MS4s that serve a population of 100,000 or more within an urbanized area.

The City is considered a Level 2 small MS4 under the permit. A Level 2 SWMP must address five areas, called Minimum Control Measures ("MCM"), as follows:

- Public Education, Outreach, and Involvement;
- Illicit Discharge Detection and Elimination;
- Construction Storm Water Runoff Control;
- Post-Construction Storm Water Management in New Development and Redevelopment; and,
- Pollution Prevention/Good Housekeeping for Municipal Operations.

For each MCM the SWMP must:

- Define measurable goals that include the development of ordinances or other regulatory mechanisms, allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;
- Define a schedule including the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action;
- Include a summary of written procedures describing how the permittee will implement the SWMP; and,
- Include a description of a program or a plan of compliance to address discharges to impaired water bodies and Total Maximum Daily Load (TMDL) requirements.

1.3 THE PURPOSE OF THIS DOCUMENT

This document serves as the City's SWMP. It includes all selected BMP's for each of the minimum control measures, measurable goals for each BMP, the evaluation method, an implementation schedule, and a rationale statement. This document provides a clear road map for implementing stormwater quality management activities to improve runoff quality and to maintain permit compliance.

1.4 ENTITIES ASSISTING WITH THE DEVELOPMENT OF THIS DOCUMENT

The City of Tomball was assisted by R.G. Miller Engineers, a private consulting firm, in the development of this SWMP.

1.5 ORGANIZATION OF THIS DOCUMENT

This document is organized into various sections as follows:

Section 1 – Introduction: This section provides background information on the stormwater regulatory program, defines the purpose of this document, and describes document organization.

Section 2 – City Background: This section provides general information about the City, including setting and character, receiving water body conditions, form of government, legal authority, and a rationale statement for the SWMP.

Section 3 – Public Education, Outreach, and Involvement: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Public Education, Outreach, and Involvement MCM.

Section 4 – Illicit Discharge Detection and Elimination: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Illicit Discharge Detection and Elimination MCM.

Section 5 – Construction Site Stormwater Runoff Control: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Construction Site Stormwater Runoff Control MCM.

Section 6 – Post Construction Stormwater Management in New Development and Redevelopment: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Post Construction Stormwater Management in New Development and Redevelopment MCM.

Section 7 – Pollution Prevention/Good Housekeeping for Municipal Operations: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Pollution Prevention/Good Housekeeping for Municipal Operations MCM.

Section 8 – Plan of Compliance for Discharges to Impaired Waters: This section describes the permit requirements, current BMPs, selected new BMPs, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Plan of Compliance for Discharges to Impaired Waters program.

Section 9 – Record-Keeping and Reporting: This section describes the annual reporting requirements of the permit.

Section 10 – References: This section provides references used in writing this document.

2.0 CITY BACKGROUND

2.1 SETTING AND CHARACTER

The City of Tomball is the northernmost city in Harris County, located 30 miles north of downtown Houston. It is at a higher elevation than most of Harris County and encompasses 11.93 square miles. The 2010 US Census determined the City's population to be 10,753. See Figure 2-1 for a vicinity map.

The downtown area is generally flat and sits at an elevation of about 175 feet (ft) above mean sea level (amsl). To the north the terrain slopes up and down to elevations ranging from 170 ft amsl to 230 ft amsl and reaching a low point along Spring Creek of 150 ft amsl. To the south the terrain slopes up and down to elevations ranging from 140 to 175; reaching Willow Creek to the south, at about 130 ft amsl. The northern portion of the City drains through three major channel systems, Boggs Gully (J131), J132, and J133, to Spring Creek. The southern portion of the City drains through four channels, M116, M121, M118, M124, and M125 to Willow Creek. There are seven predominant soil series within the Tomball city limits:

- **Atasco Series** consists of deep, acid, gently sloping, loamy soils on forested uplands. These soils formed in clayey sediments, mainly along natural drainageways. These soils are moderately well drained. Surface runoff is medium. Permeability is very slow, and the available water capacity is high. During wet periods these soils are saturated in the lower part of the profile for 2 to 4 months. The erosion hazard is moderate. Areas of these soils are used mainly for timber production and for woodland grazing and pasture.

- **Gessner series** consists of deep, slightly acid to moderately alkaline, nearly level, loamy soils. These soils are in low depressions of the coastal prairie. They are loamy throughout, and they formed in thick beds of unconsolidated loamy sediment. These soils are poorly drained. Surface runoff is very slow to ponded. The soils are saturated with water during winter and spring and for short periods following summer rains. Water stands on the surface in the depressions for long periods. Internal drainage is slow. Permeability is moderate, and the available water capacity is high. These soils are mainly in native pasture. Some are used for rice, and some are in urban development.

- **Hockley series** consists of deep, acid, nearly level to gently sloping, loamy soils on forested uplands. These soils have loamy upper layers and sandy clay loam lower layers that contain

plinthite. They formed in thick beds of unconsolidated loamy sediments. The soils are moderately well drained. Surface runoff is medium to slow. Internal drainage is moderately slow in the layers containing plinthite and medium above the plinthite. Permeability is moderately slow, and the available water capacity is medium. These soils are used mainly for woodland grazing, timber production, and improved pasture.

- **Kenney series** consists of deep, acid, nearly level to gently sloping, sandy soils on forested uplands. These soils have a thick sandy layer underlain by a reddish loamy layer. They formed in thick beds of unconsolidated sediment of loamy sand, sandy loam, and sandy clay loam. Kenney soils are well drained. Surface runoff is very slow. Internal drainage is rapid. Permeability is moderately rapid, and the available water capacity is low. These soils are used mainly for woodland grazing. A few areas are used for timber, improved pasture, and cultivated crops.

- **Nahatche series** consists of nearly level, loamy, stratified soils on bottom lands. These soils are on flood plains along the major streams and their tributaries. They formed in loamy alluvial sediments. These soils are subject to flooding one or more times each year for a few days to about a month. The water table is within 20 inches of the surface, mainly during the winter or early in spring. The soils are somewhat poorly drained. Surface runoff is slow, and permeability is moderate. The available water capacity is medium. These soils are used mainly for woodland grazing and wildlife habitat. A few areas are used for timber production and improved pasture.

- **Segno series** consists of deep, acid, nearly level to gently sloping, loamy soils on forested uplands. These soils have a loamy upper layer over a more clayey layer that contains plinthite. They formed in thick beds of unconsolidated loamy sediments. These soils are moderately well drained. Surface runoff is slow to medium. Internal drainage in the layers having plinthite is moderately slow. Permeability is moderately slow, and the available water capacity is medium. These soils are used mainly for woodland grazing, timber production, and improved pasture.

- **Wockley series** consists of deep, acid, nearly level, loamy soils on prairies. Pine and hardwoods have encroached in some areas. These soils have loamy upper layers and more clayey lower layers that have gray mottles and that are more than 5 percent plinthite. These soils formed in thick, loamy, unconsolidated sediments of marine origin. These soils are somewhat poorly drained. Surface runoff is slow. Permeability is moderately slow, and the available water capacity is medium. These soils are used mainly for rice and improved pasture. Some are in urban use.

(USDA, 1976)

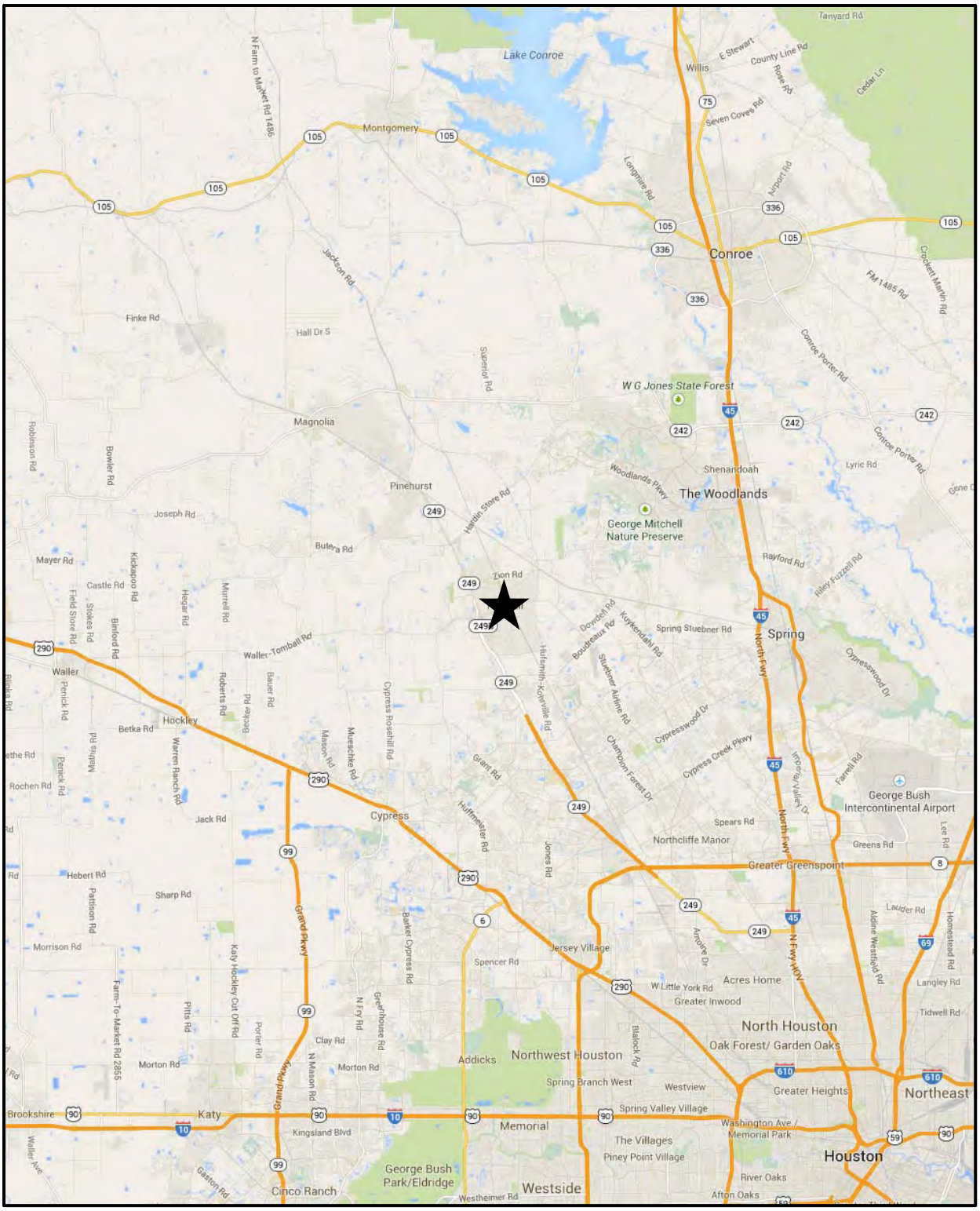


Figure 2-1 Vicinity Map

2.2 IMPAIRED RECEIVING WATERBODIES WITH AND WITHOUT TOTAL MAXIMUM DAILY LOADS

Section 303(d) of the CWA directs states to identify and prioritize waters which do not meet water quality standards – called "impaired" – and for which a total maximum daily load ("TMDL") must be developed. A TMDL is the total amount of a pollutant that can be discharged to a water body without causing the water body to be impaired. The State of Texas and its Clean Rivers Program partners routinely monitor receiving water quality and assess receiving water conditions. This information is used to determine which waters do not meet water quality standards. Receiving waters can be categorized into three groups, as follows:

- **Waters Meeting Standards:** These are waters that are meeting surface water quality standards and that do not appear on the Section 303(d) list. The MS4 operator is only required to implement TXR040000 provisions *other than* Part II.D.4 in these watersheds. See Table 2.1 for a list of waters meeting standards that receive discharges directly from the City of Tomball MS4.

- **Impaired Waters without an EPA Approved TMDL:** These are waters that are not meeting surface water quality standards, do appear on the Section 303(d) list, but do not yet have an EPA approved TMDL. The MS4 operator is required to implement TXR040000 provisions including Part II.D.4.b. but not including Part II.D.4.a. See Table 2-2 for a list of impaired waters without an EPA approved TMDL that receive discharges directly from the City of Tomball MS4. This table is blank due to the fact that the City of Tomball does not discharge to any impaired waters without an EPA Approved TMDL.

- **Watersheds with an EPA Approved TMDL:** These are waters that are not meeting surface water quality standards, do appear on the Section 303(d) list, and do have an EPA approved TMDL. The MS4 operator is required to implement TXR040000 provisions including Part II.D.4.a. but not including Part II.D.4.b. See Table 2-3 for a list of watersheds with an EPA approved TMDL that receive discharges from the City of Tomball MS4, directly or indirectly through another MS4.

Table 2-1 List of Waters Meeting Standards Receive Storm Water Discharges Directly from the City of Tomball MS4 (TCEQ, 2013b)		
Name	**Segment ID**	**303(d) Impairment Parameter**
Boggs Gully	Unclassified	None

Table 2-2 List of Impaired Waters without an EPA Approved TMDL that Receive Stormwater Discharges Directly from the City of Tomball MS4 (TCEQ, 2013b)		
Name	**Segment ID**	**303(d) Impairment Parameter**
N/A	N/A	N/A

Table 2-3 List of Watersheds with an EPA Approved TMDL that Receive Stormwater Discharges from the City of Tomball MS4 Directly or Indirectly Through Another MS4 (TCEQ, 2014)		
Name	**Segment ID**	**303(d) Impairment Parameter**
Spring Creek	1008	Bacteria
Willow Creek	1008H	Bacteria

2.3 FORM OF GOVERNMENT

The City of Tomball is a Home Rule Charter city that operates under the "Council-Manager" form of government. The City Council is comprised of the Mayor and a five-member Council. Pursuant to its provisions and subject only to the limitations imposed by the State Constitution, the Statutes of this State and by this Charter, all powers of the City are vested in an elective Council which enacts local legislation, adopts budgets, determines policies, and appoints the City Manager, who in turn, shall be held responsible to the Council for the execution of the laws and the administration of the government of the City. All powers of the City shall be exercised in the manner prescribed by the City Charter, or if the manner be not prescribed, then in such manner as may be prescribed by ordinance, the State Constitution, or the Statutes of this State

2.4 LEGAL AUTHORITY

2.4.1 Permit Text

The following text is quoted directly from the Small MS4 General Permit, TPDES Permit No. TX040000, dated December 13, 2013. Internal references to other sections of the permit have been maintained. For additional information, please consult Appendix A which contains a copy of the entire permit.

(a) Traditional small MS4s, such as cities

(1) Within two years from the permit effective date, the permittee shall review and revise, if needed, its relevant ordinance(s) or other regulatory mechanism(s), or shall adopt a new ordinance(s) or other regulatory mechanism(s) that provide the permittee with adequate legal authority to control pollutant discharges into and from its small MS4 in order to meet the requirements of this general permit.

(2) To be considered adequate, this legal authority must, at a minimum, address the following:

a. Authority to prohibit illicit discharges and illicit connections;

b. Authority to respond to and contain other releases – Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the small MS4;

c. Authority to require compliance with conditions in the permittee's ordinances, permits, contracts, or orders;

d. Authority to require installation, implementation, and maintenance of control measures;

e. Authority to receive and collect information, such as stormwater plans, inspection reports, and other information deemed necessary to assess compliance with this permit, from operators of construction sites, new or redeveloped land, and industrial and commercial facilities;

f. Authority, as needed, to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the small MS4;

g. Authority to respond to non-compliance with BMPs required by the small MS4 consistent with their ordinances or other regulatory mechanism(s);

h. Authority to assess penalties, including monetary, civil, or criminal penalties; and

i. Ability to enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

2.4.2 Texas Constitution and Local Government Code

The City is a Home Rule Charter municipality created under authority granted by Article 11, Section 5 of the Texas Constitution. Authority is granted to the City by the Texas Legislature under Local Government Code, Title 2, Organization of Municipal Government, Subtitle D, General Powers of Municipalities, Chapter 51, General Powers of Municipalities, Subchapters A and B, General Provisions and Provisions Applicable to Type A General-Law Municipality as follows:

The governing body of a municipality may adopt, publish, amend, or repeal an ordinance, rule, or police regulation that:

1. *Is for the good government, peace, or order of the municipality or for the trade and commerce of the municipality; and*

2. *Is necessary or proper for carrying out a power granted by law to the municipality or to an office or department of the municipality.*

In addition they may:

1. *Adopt an ordinance, act, law, or regulation, not inconsistent with state law, that is necessary for the government, interest, welfare, or good order of the municipality as a body politic.*

2. *Sue and be sued, implead and be impleaded, and answer and be answered in any matter in any court or other place.*

3. *Contract with other persons.*

4. *Take, hold, purchase, lease, grant, or convey property located in or outside the municipality, and the governing body of the municipality may manage and control the property belonging to the municipality.*

The following City of Tomball Ordinances define the enforcement authority, prohibitions, right of entry, and enforcement procedures necessary to implement the City's Illicit Discharge Detection Elimination Program, the Construction Site Program, and the Post-Construction Program:

- **Grease and Grit Traps** -- PART II - CODE OF ORDINANCES >> Chapter 82 - UTILITIES >> ARTICLE III. - INDUSTRIAL WASTES >> Sec. 82-108.

- **Erosion and Sediment Control** -- PART II - CODE OF ORDINANCES >> Chapter 38 – Flood Damage Prevention >> ARTICLE IV. – Erosion and Sediment Control

- **Nuisances** -- PART II - CODE OF ORDINANCES >> Chapter 30 - ENVIRONMENT >> ARTICLE IV. - NUISANCES

- **Littering** -- PART II - CODE OF ORDINANCES >> Chapter 62 - SOLID WASTE >> ARTICLE I. - IN GENERAL >>Sec. 62-2 – Littering prohibited generally.

A copy of these regulations is included in Appendix B.

2.4.3 Additional Pending Authorities

As of this writing, the City does not yet have full legal authority in place to enforce certain provisions of their SWMP. During implementation of the SWMP the City will utilize the authority granted by the State Constitution and the City Charter to develop and adopt additional City Ordinances to provide full legal authority to implement and enforce the City's Illicit Discharge, Detection, and Elimination Program; the Construction Site Stormwater Runoff Control Program; and the Post-Construction Stormwater Management Program. Additional information about the planned City Ordinances are described in Sections 4.3, 5.3, and 6.3 respectively.

2.5 RATIONALE STATEMENT FOR SWMP

During the development of this SWMP, the City considered BMP's that would: protect water quality, comply with TPDES Permit No. TXR040000, and ensure program costs that would not create undue hardship on City residents and businesses. Established stormwater programs for other MS4 operators were reviewed and evaluated. A variety of BMP's for each minimum control measure were considered and compared. BMP's were ultimately selected based on an evaluation of overall effectiveness, affordability, and suitability to the City of Tomball community. All selected BMPs are consistent with approved TMDLs and Implementation Plans of the City's MS4's watershed.

The SWMP has been developed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The City has sought to meet the MEP standard by utilizing existing and new programs or BMP's to fulfill the requirements of this general permit. The program will allow continual adjustment and refinement through City implementation experience and feedback from all sectors of the residential and business community.

3.0 PUBLIC EDUCATION, OUTREACH, AND INVOLVEMENT

This section presents the permit requirement for the Public Education, Outreach, and Involvement Program. The section describes the existing and new BMPs necessary to implement this program. It describes the measureable goals for each BMP and the due date in months and years (or frequency) for each implementation action. Table 3-1, found at the end of this section, summarizes each BMP, implementation activities, measurable goal, and due dates or frequency of actions. Information about the State law and City ordinances that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in Section 3.2 and 3.3.

3.1 PERMIT TEXT

The following text is quoted directly from the Small MS4 General Permit, TPDES Permit No. TXR040000, dated December 13, 2013. Internal references to other sections of the permit have been maintained. For additional information, please consult Appendix A which contains a copy of the entire permit.

3.1.1 Public Education and Outreach

(1) All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. The program must, at a minimum:

a. Define the goals and objectives of the program based on high priority community-wide issues (for example, reduction of nitrogen in discharges from the small MS4, promoting previous techniques used in the small MS4, or improving the quality of discharges to the Edwards Aquifer);

b. Identify the target audience(s);

c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;

d. Determine cost effective and practical methods and procedures for distribution of materials.

(2) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.

(3) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

(4) MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

3.1.2 Public Involvement

All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. At a minimum, all permittees shall:

(1) If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;

(2) If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;

(3) Ensure the public can easily find information about the SWMP.

3.2 DISCUSSION OF EXISTING BMPS

3.2.1 Spring Cleanup Week

Description and Summary of Implementation Procedures: The City will continue to conduct an annual clean-up event every spring. The event is advertised in the local newspaper and through the City's newsletter. The event advertisements are targeted to City residents, including public service employees. During the event residents drop off bulk waste items such as old furniture, mattresses, appliances (properly drained and tagged), carpeting, and small amounts of lumber and building materials. In addition to the bulk waste drop off, the public works department also provides curbside brush and limb chipping services. The City will maintain an event log identifying the type, volume, and method of disposal for all collected wastes.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.2.2 Consolidated Recycling Day

Description and Summary of Implementation Procedures: The City will continue to hold the Tomball Consolidated Recycling Day every spring. The City provides a drive-through and drop-off service for electronic waste, old prescription medicine, car tires, car batteries, used motor oil and antifreeze, as well as recyclable paper, plastic, and glass. The City will maintain an event log identifying the type, volume, and method of disposal for all collected wastes.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.2.3 Legal Public Notice

Description and Summary of Implementation Procedures: Public notice required under Texas law will continue to be provided when implementing SWMP provisions. This may include public hearings, public notices in the local newspaper, public notices on the City's website, or other legally required and acceptable means of providing public notice for City actions.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.2.4 "Report a Concern" Online Form

Description and Summary of Implementation Procedures: The City will continue to maintain an internet-based public "Report a Concern" mechanism. The online form will be advertised, and the public will be encouraged to use the form to report observed violations of stormwater regulations for illicit discharges, construction runoff controls, or any related issue to the City via the Citizen Request Form. Public requests will be delivered to appropriate City personnel for follow-up action. The City will maintain a log of reports submitted and will document follow-up action.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3 SELECTED NEW BMP'S

3.3.1 Utility Bill Flyers

Description and Summary of Implementation Procedures: The City will develop storm water related flyers to insert into customer utility bills at least twice annually. The flyers will educate residents, visitors, businesses, commercial and industrial facilities. Flyer topics will include: discussions of storm water related water quality impacts; identification of actions citizens can take to reduce storm water related impacts; announcements of community clean up events; information for citizens regarding illicit discharges and how to report them; and other storm water related topics. The flyers will also be made available at the Public Works building and City Hall. These BMP's raise public awareness to the need to reduce the discharge of pollutants. Targeted City groups include residents, city employees, visitors, businesses, and commercial and industrial facilities.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.2 Complaint Hotline

Description and Summary of Implementation Procedures: The City will establish and operate a phone line for residents to call in questions and complaints. The phone line will field calls regarding environmental concerns, dumping activities, construction runoff, illicit discharges, and hazard and nuisance conditions. City personnel will investigate valid complaints. The Complaint Hotline will be advertised to city residents and businesses through the City newsletter, utility bill flyers, on the City website, at public events, and on stormwater educational materials and media.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.3 Storm Drain Placarding

Description and Summary of Implementation Procedures: Storm drain plaques will be placed on selected storm water inlets in the City. Plaques provide an educational message informing viewers that the storm water system drains directly to streams and that no waste placement or dumping should occur. Placarding educates a broader group of people to include residents, visitors, public service employees, businesses, commercial and industrial facilities and construction site personnel. Placards will be located at areas that see a high volume of the target audience, but will be limited to storm drains where curb and gutter facilities exist. In areas where there are roadside ditches, no placarding will be done. A city employee will do a visual inspection of the plaques at least once per year, replace plaques as necessary. The City will place plaques at any new publicly viewable storm water inlets.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.4 Public Involvement in SWMP Development

Description and Summary of Implementation Procedures: The City will notify the public regarding their opportunity for participation in SWMP development by posting proposed stormwater BMP's and SWMP program elements on the City website, at City Hall, and at the Public Works building. The City will provide a mechanism for the public to provide comments upon proposed elements and suggest additional recommendations. The City will evaluate public comments and incorporate suggestions into the SWMP as appropriate.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.5 Add Stormwater Content to Lobby Slide Show

Description and Summary of Implementation Procedures: The City will incorporate stormwater information into the slide shows displayed on prominent television screens that are placed in the lobbies of City Hall and the Public Works building. Slide topics will cover actions that citizens can take to improve the quality of stormwater runoff such as: identifying and reporting illicit discharges; picking up pet waste; yard maintenance; water conservation tips; eliminating fats, oils, and greases from sewer pipes; and will publicize City clean-up and recycling events.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.6 Add Stormwater Content to City Website

Description and Summary of Implementation Procedures: The City maintains an informational website that includes content on current programs and activities. The City will update the website to include stormwater program information. Information to be posted may include: digital copies of educational brochures; downloadable copies of stormwater forms (e.g., construction site pollution prevention plan form); public comments and City responses; City clean-up information and schedules; contact information for plan review and inspection programs; customer service phone intake number; and "Report a Concern" online form.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.7 Stormwater Quality Give-A-Ways

Description and Summary of Implementation Procedures: The City will design and print various give-a-ways to hand out at various festivals and speaking engagements throughout the year. Give-a-way topics or themes will cover actions that citizens can take to improve the quality of stormwater runoff such as: identifying and reporting illicit discharges; picking up pet waste; yard maintenance; water conservation tips; and eliminating fats, oils, and greases from sewer pipes. Tomball Firefighters conduct fire safety talks at schools as well as hosting an open house and children's birthday parties at the fire station. The give-a-way will be a take-home item for the children and will include important stormwater related messages as well as customer hotline information and the city web address. Give-a-ways will also distributed at various festivals throughout the year and at the school and public libraries.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.8 Add Stormwater Content to Tomball City Newsletter

Description and Summary of Implementation Procedures: The City has an email distribution list and a digital format newsletter which can be sent to residents and businesses promoting special events and happenings around the City. The City will write and publish stormwater related articles in the city newsletter at least twice annually. The stormwater articles will educate residents, public employees, HOAs, and businesses. Article topics will include: discussions of stormwater related water quality impacts; identification of actions citizens can take to reduce stormwater related impacts; informational articles for

citizens regarding illicit discharges and how to report them; and other stormwater related topics. These BMPs will raise public awareness of the need to reduce the discharge of pollutants. Targeted groups will include residents, public employees, HOAs, businesses, and commercial and industrial facilities.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.9 Identify Target Audiences for Public Education and Outreach Program

Description and Summary of Implementation Procedures: The City will identify the target audiences for the public education and outreach program, considering high-priority, community-wide issues, likely sources of pollution, and the entities that generate the pollutants.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

3.3.10 Identify Goals and Objectives for Public Education and Outreach Program

Description and Summary of Implementation Procedures: The City will identify goals and objectives for the public education and outreach program, considering high-priority, community-wide issues, likely sources of pollution, and the entities that generate the pollutants.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 3-1.

Table 3-1
BMP's for Public Education and Outreach

BMP	Activity	Measurable Goals	Completed By (Month and Year or Frequency of Action
EXISTING BMPS			
Spring Cleanup Week	Advertise each event in the local newspaper, the City of Tomball Newsletter, and the City website and Facebook.	Record the date of advertisement. Maintain copy of the announcements.	Two Times Per Year
	Conduct events each year.	Conduct one event each year and prepare a summary of the events. Estimate the number of households participating. Assess whether appropriate staff time was devoted to the preparation and execution of the event. Record recommendations to improve future events.	One Time Per Year
	Dispose of collected materials.	Record the type, volume and method of disposal for wastes received.	One Time Per Year
Consolidated Recycling Day	Advertise each event in the local newspaper, the City of Tomball Newsletter, City Website, Facebook, and local newspaper.	Record the date of advertisement. Maintain copy of the advertising announcements.	One Time Per Year
	Conduct event each year.	Conduct one each year and prepare a summary of the event. Estimate the number of households participating. Assess whether appropriate staff time was devoted to the preparation and execution of the event. Record recommendations to improve future events.	One Time Per Year
	Recycle or properly dispose of collected materials.	Record the type, volume and method of disposal for wastes received.	One Time Per Year
Legal Public Notice	Provide required public notice regarding specific city actions requiring notice (adoption of an ordinance, etc.).	Document publication on website and posting at city hall or other suitable method(s).	As Needed
"Report a Concern" Online Form	Maintain online form on city website.	Document reported concerns and City follow-up actions.	Ongoing
	Publicize online form and how it can be used to report stormwater pollution concerns.	Maintain log of advertising methods used to publicize hotline.	Ongoing
NEW BMPs			
Utility Bill Flyers	Design stormwater quality flyers to put into customer utility bills.	Complete	December 2016
	Print flyers and distribute in utility bills.	Record dates the flyers were sent and maintain copies of flyers.	Two Times Per Year

Table 3-1 BMP's for Public Education and Outreach			
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year or Frequency of Action**
Complaint Hotline	Set up line.	Complete	May 2015
	Operate line.	Track number of complaints received.	Ongoing
	Evaluate public comments and incorporate suggestions into stormwater management plan.	Complete activity.	May 2016
Storm Drain Placarding (Curb Markers)	Identify and inventory inlets for storm drain placarding. Obtain bids for plaques or curb markers.	Inventory completed. Bids obtained.	May 2015
	Purchase plaques.	Complete activity.	December 2016
	Using City staff, install plaques.	Plaques 100% installed.	June 2016
Public Involvement in SWMP Development	Notify the public regarding their opportunity for participation in stormwater program development by posting proposed stormwater BMP's and SWMP program elements on City website and at the municipal building. Provide mechanism for public to provide comments upon proposed elements and suggest additional recommendations.	Record date materials posted on website and at the municipal building. Maintain copy of posted materials and received comments.	May 2014
	Evaluate public comments and incorporate suggestions into stormwater management plan.	Complete activity.	May 2014
Lobby Slide Show	Design slides and place in rotation in City Hall and Public Works lobby television slide-shows.	Complete activity. Maintain hard-copy of posted slides.	May 2016
	Update slides to include timely information about upcoming stormwater related events and information.	Maintain log of updates and hard-copies of posted slides.	Ongoing
Educational Content on City Website and Facebook page	Create and add stormwater content to City of Tomball website and Facebook.	Complete	May 2015
	Post updated information.	Post updates. Track visitors to website with web counter, and “likes” for Facebook page.	Two Times Per Year
Stormwater Quality Give- A-Ways	Design and print give-a-ways.	Complete activity.	May 2015
	Distribute at City facilities with routine public access, libraries, and distribute at open-houses and community events.	Print or purchase up to 500 items annually. Record number of give-a-ways distributed.	One Time Per Year

Table 3-1 BMP's for Public Education and Outreach			
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year or Frequency of Action**
Tomball City Newsletter Stormwater Articles	Write and publish storm water articles within the Tomball City Newsletter.	Maintain a copy of each storm water article. Record the number of newsletters distributed.	Two Times Per Year
Identify Target Audiences for Public Education and Outreach Program	Considering high-priority, community-wide issues, likely sources, and entities that generate the pollutants.	Complete activity and document in memorandum to file.	December 2015
Identify Goals and Objectives of Public Education and Outreach Program	Considering high-priority, community-wide issues, likely sources define public education goals and objectives.	Complete activity and document in memorandum to file.	December 2015

4.0 ILLICIT DISCHARGE DETECTION ELIMINATION

This section presents the permit requirement for the Illicit Discharge Detection and Elimination Program. The section describes the existing and new BMPs necessary to implement this program. It describes the measureable goals for each BMP and the due date in months and years (or frequency) for each implementation action. Table 4-1, found at the end of this section, summarizes each BMP, implementation activities, measurable goal, and due dates or frequency of actions. Information about State law and City ordinances that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in Section 4.2 and 4.3.

4.1 PERMIT REQUIREMENTS

The following text is quoted directly from the Small MS4 General Permit, TPDES Permit No. TXR040000, dated December 13, 2013. Internal references to other sections of the permit have been maintained. For additional information, please consult Appendix A which contains a copy of the entire permit.

4.1.1 Program Development

(1) All permittees shall develop, implement and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1(c).

The Illicit Discharge Detection and Elimination (IDDE) program must include the following:

a. An up-to-date MS4 map (see Part III.B.2.(c)(1));

b. Methods for informing and training MS4 field staff (See Part III.B.2.(c)(2));

c. Procedures for tracing the source of an illicit discharge (see Part III. B.2.(c)(5));

d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));

e. *For Level 2, 3 and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;*

f. *For Level 4 small MS4s, procedures for identifying priority areas within the small MS4 likely to have illicit discharges, and a list of all such areas identified in the small MS4 (See Part III.B.2.(g)(1));*

Not applicable to City which is a Level 2 MS4.

g. *For Level 4 small MS4s, field screening to detect illicit discharges (See Part III.B.2.(g)(2)).*

Not applicable to City which is a Level 2 MS4.

(2) For non-traditional small MS4s, if illicit connections or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ regional office of the possible illicit connection.

(3) If another MS4 operator notifies the permittee of an illegal connection or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part III.B.2.(c)(3).

(4) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

4.1.2 Allowable Non-Stormwater Discharges

Non-stormwater flows listed in Part II.C do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the flow as a significant source of pollutants to the small MS4.

4.1.3 Requirements for All Permittees

All permittees shall include the requirements described below in Parts III.B.2(c)(1)-(6)

(1) MS4 mapping

All permittees shall maintain an up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:

a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S;

b. The location and name of all surface waters receiving discharges from the small MS4 outfalls;

c. Priority areas identified under Part III.B.2.(e)(1) if applicable.

(2) Education and Training

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.

(3) Public Reporting of Illicit Discharges and Spills

To the extent feasible, all permittees shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example by including a phone number for complaints and spill reporting.

(4) All permittees shall develop and maintain on site procedures for responding to illicit discharges and spills.

(5) Source Investigation and Elimination

a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable.

(i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.

(ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.

(iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

b. Identification and Investigation of the Source of the Illicit Discharge –All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge extends outside the permittee's boundary, all permittees shall notify the adjacent permitted MS4 operator or TCEQ's Field Operation Support Division according to Part III.A.3.b.

c. Corrective Action to Eliminate Illicit Discharge

(i) If and when the source of the illicit discharge has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

(6) Inspections – The permittee shall conduct inspections, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.

4.1.4 Additional Requirements for Level 3 and 4 Small MS4s

Not applicable to City which is a Level 2 MS4.

4.1.5 Additional Requirements for Level 4 Small MS4s

Not applicable to City which is a Level 2 MS4.

4.2 DISCUSSION OF EXISTING BMPS

4.2.1 Consolidated Recycling Day

Description and Summary of Implementation Procedures: See Section 3.2.2 for a discussion of the City's Consolidated Recycling Day.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.2.2 Litter Abatement

Description and Summary of Implementation Procedures: The City will continue to identify and abate litter and trash on public rights of way. The City will inspect sites identified from the complaint hotline and the online complaint form. The City will maintain a log of abatement activities.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.2.3 Nuisance Abatement

Description and Summary of Implementation Procedures: The City will continue to identify and abate nuisance conditions on private property. The City will inspect sites identified from the complaint hotline and the online complaint form. The City will maintain a log of abatement activities and inspections.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3 SELECTED NEW BMP'S

4.3.1 Storm Sewer Map

Description and Summary of Implementation Procedures: The City is in the process of creating a storm sewer map that contains the elements required under this permit, including the location of major outfalls and the names and locations of waters of the United States that receive discharges from those outfalls. The City will use various resources to complete the map, including: construction plans, as-built drawings, and drainage maps. The map will be updated annually to reflect any changes or additions to the storm sewer system. The map will be located on site and made available for TCEQ review upon request.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.2 Complaint Hotline

Description and Summary of Implementation Procedures: See Section 3.3.2 for a discussion of the complaint hotline.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.3 "Report a Concern" Online Form

Description and Summary of Implementation Procedures: See Section 3.3.3 for a discussion of the complaint hotline.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.4 Storm Drain Placarding

Description and Summary of Implementation Procedures: See Section 3.3.4 for a discussion of the storm drain placarding BMP.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.5 Promote Harris County Household Hazardous Waste Collection Facility

Description and Summary of Implementation Procedures: The City will promote the use of the Harris County HHW facility and mobile collection trailer. Residents of Harris County who reside outside of the incorporated City of Houston limits may use the facility to properly dispose of household hazardous waste. Items accepted at the HHW facility include, but are not limited to household cleaners, yard/automobile products, pool chemicals, paint and paint related products, batteries, tires, items containing mercury (e.g. mercury thermometers, Compact Fluorescent Lights (CFLs), and fluorescent tubes), aerosols, and small and BBQ size propane cylinders. The City will utilize the City newsletter utility bill flyers, and outreach events to promote the facility at least 4 times per year. The

City will partner with Harris County to document the amount of waste coming from the City of Tomball residents.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.6 Mitigate Illegal Dumping

Description and Summary of Implementation Procedures: The City will create a program to identify and mitigate illegal dumping sites on public rights of way. The City will inspect sites identified from the complaint hotline and the online complaint form. The City will train field employees to identify and report illegal dumping sites during the course of their regular work duties. In addition, the City will consider using technological assistance such as motion sensitive cameras in high-risk areas that are frequently used for illegal dumping. Clean-up and enforcement action will be taken as needed. The City will maintain logs of all clean-up activities and enforcement actions taken.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.7 Detect Illicit Discharge Locations

Description and Summary of Implementation Procedures: The City will establish a program to utilize existing city employees to detect illicit discharge locations during normal work activities and while driving. This includes employees from Parks and Recreation, Streets, and Utility Divisions. The City will also investigate illicit discharges from calls or website reports. The appropriate City staff will be notified of the report and will investigate the source of the discharge.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.8 Illicit Discharge Program Procedures

Description and Summary of Implementation Procedures: The City will develop program procedures that will describe how illicit discharges will be detected, investigated, and eliminated. The procedures will also describe how the City will enforce its Illicit Discharge Ordinance.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.9 Illicit Discharge Investigation, Elimination, and Enforcement

Description and Summary of Implementation Procedures: The City will establish a program to address illicit discharges. Upon identification of an illicit discharge the City will investigate the source of the discharge using City operating procedures. Once the source of the discharge has been identified the City will inform the owner or operator of the source facility that the discharge activities must cease. The City will conduct a follow up inspection and if the source facility fails to mitigate the discharge the City will implement its enforcement procedures.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.10 Tomball City Newsletter Storm Water Articles

Description and Summary of Implementation Procedures: See Section 3.3.9 for a discussion of the newsletter BMP.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.11 Employee Training

Description and Summary of Implementation Procedures: The City will train field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. The training program will include: the stormwater quality

management program; procedures for tracing the source of an illicit discharge and removing the source of the illicit discharge; how to detect illicit discharges; the illicit discharge program regulations and operating procedures; the construction runoff control program; and the good housekeeping program. The City will maintain training program materials and attendance lists on site and will make them available for review by the TCEQ.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.3.12 Illicit Discharge Ordinance

Description and Summary of Implementation Procedures: The City will draft and adopt a City Ordinance prohibiting illicit discharges to the City MS4 and illicit connections to the storm sewer system. The ordinance will define illicit discharge, illicit connections, and other relevant terms. The ordinance will establish administrative authority, define enforcement procedures and penalties, grant the City the authority to respond to and contain other releases, control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the small MS4. The ordinance will grant the City the authority to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the small MS4; to assess penalties, including monetary, civil, or criminal penalties; and the ability to enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

4.4 LIST OF ALLOWABLE NON-STORMWATER DISCHARGES

The City has considered and determined the following occasional incidental non-storm water discharges to be insignificant contributors of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources that do not violate Texas Surface Water Quality Standards, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards,

and street wash water excluding street sweeper waste water. In accordance with Part II.B of the permit, no controls and conditions have been currently established for these discharges. Controls and conditions set up by the City will be documented in the annual reports submitted to the TCEQ.

Table 4-1 BMP's for Illicit Discharge Detection and Elimination			
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year or Frequency of Action**
EXISTING BMPs			
Consolidated Recycling Day	See Table 3-1		
Litter Abatement	Perform litter abatement activities in public rights of way.	Maintain log of abatement activities.	Ongoing
Nuisance Abatement	Abate found nuisance conditions on private property. Inspect known dumping areas monthly.	Maintain log of nuisance abatement activities including dates and locations.	Ongoing
NEW BMPs			
Storm Sewer Map	Update and maintain to reflect changes to system.	Update map and maintain log to document date of revisions.	Once per Year
Complaint Hotline	See Table 3-1		
"Report a Concern" Online Form	See Table 3-1		
Storm Drain Placarding	See Table 3-1		
Promote Harris County HHW Collection Facility	Publish information about the Harris County HHW Collection Facility on the City website and in the Tomball Newsletter.	Record dates of advertisements. Maintain copy of articles or advertisements.	Twice per year
	Produce and handout flyers at the Consolidated Recycling Day to citizens that are dropping off recyclables.	Record number of flyers distributed. Maintain copy of flyer.	Once per year
Mitigate Illegal Dumping	Develop procedures to describe how illegal dumping sites will be identified, investigated and eliminated. The procedures will also describe how the City will enforce the Illegal Dumping ordinance.	Maintain a log of illegal dumping mitigation activities including dates and locations of follow-up actions.	Start December 2015 and then ongoing.
Detect Illicit Discharge Locations	Conduct ad-hoc detections during normal work activity and while driving within the MS4 areas in the City.	Maintain a log of detected illicit discharges and follow-up actions.	Annually
	Inspect areas or discharges reported by the public.	Maintain a log of detected illicit discharges and follow-up actions.	Annually

Table 4-1 BMP's for Illicit Discharge Detection and Elimination			
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year or Frequency of Action**
Illicit Discharge Program Procedures	Develop program procedures to describe how illicit discharges will be detected, investigated, and eliminated. The procedures will also describe how the City will enforce its Illicit Discharge Ordinance.	Complete and document activity.	December 2015
Illicit Discharge Investigation, Elimination, and Enforcement	Investigate source of identified discharge.	Complete and document activity.	Within two weeks of finding discharge.
	Notify source facility or neighboring MS4 about discharge and the requirement to mitigate the discharge.	Complete and document activity.	Within two weeks of finding discharge.
	Initiate enforcement procedures against source facility if they fail to mitigate discharge.	Complete and document activity.	Within four weeks of notifying source facility.
Tomball City Newsletter	See Table 3-1		
Employee Training	Train employees on illicit discharge program.	Complete and document activity. Maintain log of attendees.	Annually
Illicit Discharge Ordinance	Develop ordinance.	Complete activity.	December 2016
	Adopt ordinance.	Complete activity.	December 2017

5.0 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

This section presents the permit requirement for the Construction Site Storm Water Runoff Control Program. The section describes the existing and new BMPs necessary to implement this program. It describes the measureable goals for each BMP and the due date in months and years (or frequency) for each implementation action. Table 5-1, found at the end of this section, summarizes each BMP, implementation activities, measurable goal, and due dates or frequency of actions. Information about State law and City ordinances that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in Section 5.2 and 5.3.

5.1 PERMIT REQUIREMENTS

The following text is quoted directly from the Small MS4 General Permit, TPDES Permit No. TXR040000, dated December 13, 2013. Internal references to other sections of the permit have been maintained. For additional information, please consult Appendix A which contains a copy of the entire permit.

5.1.1 Requirements and Control Measures

All permittees shall develop, implement and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term.

If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).

5.1.2 Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7).

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.

(2) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.

a. Erosion and Sediment Controls - Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.

b. Soil Stabilization - Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid, and drought stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.

c. BMPs - Design, install, implement, and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPs must be designed, installed, implemented and maintained to:

(i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters;

(ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

(iii) Minimize the discharge of pollutants from spills and leaks.

d. As an alternative to (a) through (c) above, all permittees shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.

(3) Prohibited Discharges

The following discharges are prohibited:

a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;

b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;

c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

d. Soaps or solvents used in vehicle and equipment washing;

e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

(4) Construction Plan Review Procedures

To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

a. The site plan review procedures must incorporate consideration of potential water quality impacts.

b. The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III. B.3.(a) or in the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000.

(5) Construction Site Inspections and Enforcement

To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspections of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

a. Inspections must occur at a frequency determined by the permittee, based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving waterbodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.

b. Inspections must occur during the active construction phase.

(i) All permittees shall develop, implement, and revise as necessary, written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on site or in the SWMP and be made available to TCEQ.

(ii) Inspections of construction sites must, at a minimum:

1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage.

2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements.

3. Assess compliance with the permittee's ordinances and other regulations.

4. Provide a written or electronic inspection report.

c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ.

For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the TCEQ's Field Operations Support Division according to Part III.A.3(b).

(6) Information submitted by the Public

All permittees shall develop, implement and maintain procedures for receipt and consideration of information submitted by the public.

(7) MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by .the permittee or by outside trainers.

5.1.3 Additional Requirements for Level 3 and 4 Small MS4

Not applicable to City which is a Level 2 MS4.

5.2 DISCUSSION OF EXISTING BMPS

5.2.1 Erosion and Sediment Control Ordinance

Description and Summary of Implementation Procedures: The City will continue to enforce the Erosion and Sediment Control Ordinance. The City added Article IV, Erosion and Sediment Control to the City Code of Ordinances in October 2009. The purpose of the Article is to reduce erosion during the construction process by implementing and enforcing erosion and sediment control guidelines. The Article states that "No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of 5,000 or more square feet without the approval of an Erosion and Sediment Control Plan by the City Engineer." No site development permit is required, however, for the following activities: any emergency activity that is immediately necessary for the protection of life, property or natural resources; existing nursery and agricultural operations conducted as a permitted main or accessory use; or any activities on a lot less than one acre in area and used for single family or two family residential purposes only. The Erosion and Sediment Control Plan is a set

of plans prepared by or under the direction of a licensed professional engineer indicating the specific measures and sequencing to be used controlling sediment and erosion on a development site before, during and after construction. The Article contains inspection provisions as well as enforcement procedures and actions for failing to comply, including stop-work orders, revocation of permit, and fines. The City will review and update existing ordinances requiring erosion, sediment, and on-site waste controls to ensure compliance with TPDES Permit No. TXR040000. A copy of the full ordinance is included in the References section at the end of this document.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

5.2.2 Construction Site Design Requirements

Description and Summary of Implementation Procedures: The City will continue to enforce Construction Site Design Requirements. The City requires that grading, erosion control practices, sediment control practices, and waterway crossings meet the design criteria set forth in the most recent version of the *Storm Water Management Handbook for Construction Activities, City of Houston, Harris County, and HCFCD*. The City will review the most recent version of the Handbook to ensure that it is consistent with the updated TPDES Permit No. TXR040000. In addition, the City provides The *Tomball Development Guide* and standard specification documents on the City website for erosion and sediment control structures. The City will review these documents and ensure that they are consistent with TPDES Permit No. TXR040000.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

5.2.3 Construction Site Plan Review and Approval Procedures

Description and Summary of Implementation Procedures: The City will continue to require plan review and approval procedures for construction projects that incorporates considerations of potential water quality impacts, and is consistent with TPDES Permit No. TXR040000. The City requires contractors or developers to submit an *Erosion and Sediment Control* Plan for any land-disturbing activity that would require the uncovering of 5,000 or more square feet, except if the activity occurs on a lot less than one acre in size that is used for single family or two family residential

housing. The *Erosion and Sediment Control Plan* is a set of plans prepared by or under the direction of a licensed professional engineer indicating the specific measures and sequencing to be used controlling sediment and erosion on a development site before, during and after construction. These measures include, but are not limited to: a natural resources map; a sequence of construction of the development site; all erosion and sediment control measures; seeding mixtures and rates; and provisions for maintenance of control facilities. The City will continue to review plans for compliance with required water quality protection measures. The City will continue to require corrective action for observed violations and to pursue enforcement when necessary. All follow-up and enforcement actions will be tracked and made available for review to the TCEQ.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

5.3 SELECTED NEW BMP'S

The new BMPs discussed below are required to implement this program.

5.3.1 "Report a Concern" Online Form

Description and Summary of Implementation Procedures: See Section 3.3.3 for a discussion of the complaint hotline.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 4-1.

5.3.2 Complaint Hotline

Description and Summary of Implementation Procedures: See Section 3.3.2 for a discussion of the complaint hotline.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

5.3.3 Construction Site Inspections and Enforcement

Description and Summary of Implementation Procedures: The City will develop and implement site inspection procedures, checklists, and enforcement policies to govern a construction stormwater inspection and enforcement program. These procedures will be maintained onsite or in the SWMP and made available to the TCEQ upon request. The City will require corrective action for observed violations and pursue enforcement when necessary. All follow-up and enforcement actions will be logged and made available for review to the TCEQ.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

5.3.4 Employee Training

Description and Summary of Implementation Procedures: See section 4.3.12 for a discussion of the Employee Training Program.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 5-1.

Table 5-1 BMP's for Construction Site Runoff Control			
BMP	**Activity**	**Measurable Goals**	**Completed by (Month and Year) or Frequency of Action**
EXISTING BMPS			
Erosion and Sediment Control Ordinance	Review all existing ordinances related to erosion and sediment and on-site waste controls. If necessary, draft revised ordinances to fulfill requirements of SWMP including enforcement provisions.	Complete activity.	December 2016
	Adopt revised ordinances.	Complete activity.	December 2017
	Provide public notice for adopted ordinances.	Complete activity.	December 2018
Construction Site Design Requirements	Evaluate existing criteria manual relating to construction site runoff and waste disposal controls.	Prepare brief memorandum documenting necessary criteria document additions or changes.	December 2016
	Revise and/or adopt existing criteria manual for use by the City.	Complete activity.	December 2017
Construction Site Plan Review and Approval Procedures	Continue to review plans for compliance with required water quality protection measures	Inspect 100% of sites subject to permitting program. Maintain log of plans reviewed and status. Record number of plans reviewed.	Ongoing
NEW BMPS			
"Report a Concern" Online Form	See Table 3-1		
Complaint Hotline	See Table 3-1		
Construction Site Inspections and Enforcement	Develop inspection procedures and checklist.	Complete activity	December 2016
	Develop enforcement policy.	Complete activity	December 2017
	Implement Program. Conduct site inspections and enforcement activities.	Inspect 100% of sites subject to permitting program. Maintain log of sites inspected, dates, and findings. Record number of sites inspected.	December 2018 and Ongoing
Employee Training	See Table 4-1		

6.0 POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

This section presents the permit requirement for the Post-Construction Storm Water Management in New Development and Redevelopment Program. The section describes the existing and new BMPs necessary to implement this program. It describes the measureable goals for each BMP and the due date in months and years (or frequency) for each implementation action. Table 6-1, found at the end of this section, summarizes each BMP, implementation activities, measurable goal, and due dates or frequency of actions. Information about the State law and City ordinances that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in Section 6.2 and 6.3.

6.1.1 Post-Construction Stormwater Management Program

(1) All permittees shall develop, implement and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.

(2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program element fully implemented by the end of the permit term.

6.1.2 Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.4.(b)(1)-(3)

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by TCEQ.

(2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.

(3) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:

a. Maintenance performed by the permittee. See Part III.B.5

b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

6.1.3 Additional Requirements for Level 4 Small MS4s

Not applicable to City which is a Level 2 MS4.

6.2 DISCUSSION OF EXISTING BMPS

6.2.1 Detention Pond Maintenance Requirements

Description and Summary of Implementation Procedures: The City will continue to require builders to submit as-built drawings from the Engineer of Record to certify the detention pond system design and volume provided is in accordance to the approved building plans. The City's Pond Maintenance Requirements require the owner or operator to perform routine inspections, special inspections after major hurricane or tornado events, monthly and annual maintenance, surface maintenance as well as

surface water management system maintenance. The City requires the owner or operator to visually inspect ponds for sediment buildup and if buildup occurs, the sediment will be cleaned from the pipes. The City also requires the detention ponds be visually inspected by the owner or operator for the presence of litter and requires that any litter be removed on a continual basis. The pond O&M requirements are attached to all plan sets where ponds are required. These requirements are part of the minimum design standards for construction that is reference in the *Minimum Standards for Stormwater Drainage Design Ordinance*.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

6.3 SELECTED NEW BMP'S

The new BMPs discussed below are required to implement this program.

6.3.1 Permanent Stormwater Quality Ordinance

Description and Summary of Implementation Procedures: The City will develop an ordinance that will require permanent stormwater quality BMPs to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale, and will include long-term operation and maintenance ("O&M") provisions. The City will establish, implement, and enforce a requirement that owners or operators of new development and significant redevelopment sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality for the life of the development. The City ordinance will include a requirement to consider space limitations, health and safety concerns, and cost effectiveness to determine the feasibility of construction of permanent structures for a particular site or type of site. It will also require an annual permitting process to ensure ongoing operations and maintenance.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

6.3.2 Design Criteria

Description and Summary of Implementation Procedures: The City will evaluate existing design criteria information to determine what additional design information is needed to implement permanent stormwater quality controls in new development or significant redevelopment. The City will develop and adopt a new or amended design criteria addressing permanent stormwater quality controls in new development or significant redevelopment.

Legal Authority: See Section 2.4 of this document for a summary of the City of Universal City's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

6.3.3 Plan Review and Approval Procedures for Permanent Stormwater Quality BMPs

Description and Summary of Implementation Procedures: The City will develop a *Stormwater Quality Permit* application process and permanent post-construction BMP plan review procedures applicable to new development or significant redevelopment. The plan review process will evaluate the permanent structural and non-structural BMPs proposed for the third party development to remove pollutants from stormwater runoff from the site for the life of the property. All parties seeking to develop more than 1 acre of property will be required to obtain a *Stormwater Quality Permit* from the City. The *Stormwater Quality Permit* will only be issued if the City approves the plans which illustrate the permanent structural and non-structural BMPs proposed for the third party development to remove pollutants from stormwater runoff from the site along with an *Inspection, Operations, and Maintenance Plan* which illustrates how stormwater quality BMPs will be inspected and maintained.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

6.3.4 Inspections and Long-Term O&M of Permanent Stormwater Quality BMPs for City-Owned Facilities

Description and Summary of Implementation Procedures: The City will develop a standard operating procedure describing inspection and long term operations and maintenance of City-owned stormwater quality facilities. The standard operating procedure will require the City to develop and maintain an inventory of City-owned stormwater quality facilities, to define and implement an

inspection process for City-owned facilities, and to define operations and maintenance activities for each City-owned facility.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

6.3.5 Inspections and Long-Term O&M of Permanent Stormwater Quality BMP for Third Party Owner/Operators

Description and Summary of Implementation Procedures: The City will create an periodic renewal process for the *Stormwater Quality Permit* (described in Section 6.3.3) which will require all completed new development sites (or significant redevelopment sites) with permanent BMPs to submit a permit renewal to the City and a certificate sealed by a professional engineer stating that the BMPs have been maintained in accord with the original *Inspection, Operations, and Maintenance Plan.* The City will maintain a log of inspections and will document enforcement actions taken.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 6-1.

Table 6-1 BMPs for Post-Construction Runoff Control			
BMP	**Activity**	**Measurable Goals**	**Completed by (Month and Year) or Frequency of Action**
EXISTING BMPs			
Detention Pond Maintenance	Continue to require builders to submit as-built drawings from the Engineer of Record to certify the pond system design and volume provided is in accordance to the approved building plans.	Review detention pond drawings from 100% from construction permit applications.	Ongoing
	Continue to require routine owner or operator inspections, including visual inspections for sediment and litter. Continue to require monthly and annual maintenance, surface maintenance as well as surface water management system maintenance by owner or operator.	Document enforcement actions taken.	Ongoing
NEW BMPs			
Permanent Stormwater Quality Ordinance	Create and adopt City Ordinance that requires permanent stormwater quality BMPs in new development and significant redevelopment performed by third parties as well as an annual permitting process to ensure ongoing operations and maintenance.	Complete activity.	December 2017
Design Criteria	Evaluate existing criteria manuals and materials relating to new development.	Complete activity.	December 2016
	Revise and/or adopt existing criteria manuals and materials for use by the City.	Complete activity.	December 2017
Plan Review and Approval Procedures for Permanent Stormwater Quality BMPs	Develop site plan review procedure and checklist.	Complete activity.	June 2017
	Review all third party site plans submitted for City review and approval for compliance with the City permanent stormwater quality order.	Review site plans as they are received.	January 2018.
Inspections and Long-Term O&M of Permanent Stormwater Quality BMPs for City-owned facilities	Develop standard operating procedure and inventory of City-owned permanent water quality BMPs.	Complete activity.	June 2017
	Train city employees.	Complete activity. Maintain log of attendees	December 2017
	Implement inspection program.	Document inspection findings.	Initiate by June 2018. Conduct annual inspections in future years.

Table 6-1 BMPs for Post-Construction Runoff Control			
BMP	**Activity**	**Measurable Goals**	**Completed by (Month and Year) or Frequency of Action**
Inspections and Long-Term O&M of Permanent Stormwater Quality BMP for Third Party Owner/Operators	Create annual renewal process for permanent BMPs.	Complete activity.	June 2017
	Train city employees.	Complete activity. Maintain log of attendees.	December 2017
	Implement annual renewal process for permanent BMPs. Enforce regulations as appropriate.	Review 100% of submitted renewal applications. Maintain log of renewal applications reviewed and status. Document enforcement actions taken.	Initiate by June 2018. Review applications on an ongoing basis. Enforce on an ongoing basis.

7.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

This section presents the permit requirement for the Pollution Prevention and Good Housekeeping for Municipal Operations Program. The section describes the existing and new BMPs necessary to implement this program. It describes the measureable goals for each BMP and the due date in months and years (or frequency) for each implementation action. Table 7-1, found at the end of this section, summarizes each BMP, implementation activities, measurable goal, and due dates or frequency of actions. Information about the State law and City ordinance that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in Section 7.2 and 7.3.

7.1 PERMIT REQUIREMENTS

The following text is quoted directly from the Small MS4 General Permit, TPDES Permit No. TXR040000, dated December 13, 2013. Internal references to other sections of the permit have been maintained. For additional information, please consult Appendix A which contains a copy of the entire permit.

7.1.1 Program Development

(1) All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1.(c))

7.1.2 Requirements for All Permittees

All permitees shall include the requirements described below in Parts III.B.5.(1)-(6) in the program:

(1) Permittee-Owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. If feasible, the inventory may include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:

a. Composting facilities;

b. Equipment storage and maintenance facilities;

c. Fuel storage facilities;

d. Hazardous waste disposal facilities;

e. Hazardous waste handling and transfer facilities;

f. Incinerators;

g. Landfills;

h. Materials storage yards;

i. Pesticide storage facilities;

j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;

k. Parking lots;

l. Golf courses;

m. Swimming pools;

n. Public works yards;

o. Recycling facilities;

p. Salt storage facilities;

q. Solid waste handling and transfer facilities;

r. Street repair and maintenance sites;

s. Vehicle storage and maintenance yards; and

t. Structural stormwater controls.

(2) Training and Education

All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.

(3) Disposal of Waste Material

Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

(4) Contractor Requirements and Oversight

a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in Parts III B.5.(2)-(6).

b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspection by TCEQ.

(5) Municipal Operation and Maintenance Activities

a. Assessment of permittee-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:

(i) Road and parking lot maintenance may include such areas as pothole repair, pavement marking, sealing, and re-paving;

(ii) Bridge maintenance may include such areas as re-chipping, grinding, and saw cutting;

(iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and

(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).

c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:

(i) Replacing materials and chemicals with more environmentally benign materials or methods;

(ii) Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface waters; and

(iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

d. Inspection of pollution prevention measures - All pollution prevention measures implemented at permittee-owned facilities must be visually inspected at a frequency determined by the permittee to ensure they are working properly. A log of inspections must be maintained and made available for review by the TCEQ upon request.

(6) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the permittee and consistent with maintaining the effectiveness of the BMP.

7.1.3 Additional Requirements for Level 3 and 4 Small MS4s

Not applicable to City, which is a Level 2 MS4.

7.1.4 Additional Requirements for Level 4 Small MS4s

Not applicable to City, which is a Level 2 MS4.

7.2 DISCUSSION OF EXISTING BMPS

7.2.1 Pesticide and Herbicide Management

Description and Summary of Implementation Procedures: The City will continue to ensure that staff responsible for handling pesticides and herbicides maintain appropriate licensing, as required by the Texas Department of Agriculture ("TDA").

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.2.2 Disposal of Waste Material

Description and Summary of Implementation Procedures: The City will continue to dispose of waste materials removed from the small MS4 in accordance with 30 TAC Chapters 330 or 335, as applicable. For each disposal activity the City will document the type of waste, the amount of waste, and date, the transporter used, and the destination of the waste.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.2.3 Street Sweeping

Description and Summary of Implementation Procedures: The City will continue to sweep each street within the MS4 area. Major thoroughfares, owned by the City are swept at least six times annually and all other City roads at least four times annually.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3 SELECTED NEW BMP'S

The following BMP's will be implemented:

7.3.1 Spill Response Kits

Description and Summary of Implementation Procedures: The City will maintain spill response kits at facilities with activities that have the potential of contributing pollutants to storm water. Facilities include municipal parking lots and vehicle and equipment maintenance and storage yards. The City will conduct annual audits of these facilities to ensure that: spill response kits are present, facility staff is aware of the kits, and facility staff are trained in the appropriate usage of the kits.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table7-1.

7.3.2 O&M Employee Training

Description and Summary of Implementation Procedures: The City will continue training program for City employees working in operations and maintenance jobs. The training will be augmented to include information about sources of pollutants to storm water runoff and work methods employees can take to minimize contributions to storm water pollution. Training will also include use of spill response equipment and employee safety. The City will maintain records of training events and attendees logs.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.3 Good Housekeeping SOP Manual

Description and Summary of Implementation Procedures: The City will develop a *Good Housekeeping Standard Operating Procedure (SOP) Manual* for employees that perform activities with the potential to impact water quality. The manual will provide checklists and procedures for common municipal activities that may impact storm water quality. Municipal activities related to: equipment storage and maintenance facilities; recreational pools; fuel storage facilities; materials storage yards; pesticide storage facilities; buildings, including, police stations, fire stations, and office buildings; parking lots; swimming pools; public works yards; street repair and maintenance sites; vehicle storage and maintenance yards; and structural stormwater controls will be addressed in the manual. The manual will include a list of all municipal facilities that may impact runoff quality. The manual will also include procedures relating to operation and maintenance activities, and will be used during the O&M employee training. The City will perform an annual audit to ensure that all relevant city activities are described within the manual, and staff is familiar with the manual.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.4 Operation and Maintenance at City Facilities

Description and Summary of Implementation Procedures: The City will develop a program to inspect and maintain City facilities (such as the City Service Centers) to reduce potential impacts from storm water runoff. Maintenance program activities will likely include picking up litter, removing oil, placing and storing materials in appropriately designated areas, etc. Operation and maintenance activities and schedules for City owned post-construction BMP's will be included in the *Good Housekeeping SOP Manual*.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.5 Maintenance Contractor Requirements and Oversight

Description and Summary of Implementation Procedures: Contractors hired by the City to perform maintenance activities on City owned facilities will be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures implemented by the City. The City will provide adequate oversight of contractor activities to ensure that contractors are using appropriate control measures and standard operating procedures. Oversight procedures will be developed.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.6 Assessment of City Facilities and Operations

Description and Summary of Implementation Procedures: The City will evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater. The following activities will be evaluated: road and parking lot maintenance such as pothole repair, pavement marking, sealing, and re-paving; bridge maintenance including areas for re-chipping, grinding, and saw cutting; cold weather operations, including application of deicing and anti-icing compounds; and right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation. Evaluation results will be documented in a written report.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.7 Identify Pollutants of Concern at City Facilities

Description and Summary of Implementation Procedures: The City will identify pollutants of concern that could be discharged from City owned facilities or operations and maintenance activities. Evaluation results will be documented in a written report.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.8 Develop Pollution Prevention Measures for City Facilities

Description and Summary of Implementation Procedures: The City will develop and implement a written pollution prevention plan for each City-owned facility that has a high potential to discharge pollutants into stormwater, except those covered by TCEQ Permit No. TXR050000. Each pollution prevention plan will include measures that will reduce the discharge of pollutants in stormwater from City-owned facilities.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.9 Inspect City Facilities

Description and Summary of Implementation Procedures: City will visually inspect pollution prevention measures implemented at City-owned facilities at a frequency that will be defined in the facility specific pollution prevention plan. The City will maintain a log of inspections.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.10 Maintain Structural Controls at City-Owned Facilities

Description and Summary of Implementation Procedures: The City will maintain any structural controls installed at City owned facilities at an appropriate frequency. Frequency will be defined in facility specific pollution prevention plans. Maintenance activities and requirements will defined in facility specific pollution prevention plans.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

7.3.11 City-Owned Facilities and Control Inventory

Description and Summary of Implementation Procedures: The City will develop and maintain an inventory of facilities and stormwater controls that the City owns and operates within the regulated area of the MS4. The inventory will include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory will be available for review by TCEQ and will consider the following facilities: equipment storage and maintenance facilities; fuel storage facilities; materials storage yards; pesticide storage facilities; buildings, including police stations, fire stations, and office buildings; parking lots; swimming pools; public works yards; street repair and maintenance sites; vehicle storage and maintenance yards; wastewater treatment plans; water treatment plans; and structural stormwater controls.

Legal Authority: See Section 2.4 of this document for a summary of City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, and Due Dates or Frequency of Actions: See Table 7-1.

Table 7-1 BMP's for Pollution Prevention/Good Housekeeping			
BMP	**Activity**	**Measurable Goals**	**Completed by (Month and Year) or Frequency of Action**
EXISTING BMPs			
Pesticide/Herbicide Management	Maintain pesticide and herbicide certifications for all city applicators.	Track employee certifications for all pesticide/herbicide staff.	Annually
Disposal of Waste Material	Dispose of waste materials in accordance with 30 TAC Chapters 330 or 335 as applicable.	For each disposal activity document the type of waste, the amount of the waste, the date, the transporter, and the destination.	Within one week of each disposal activity.
Street Sweeping	Sweep major thoroughfares.	Maintain log indicating date and location of areas swept.	Six Times per Year
	Sweep roads other than major thoroughfares.	Maintain log indicating date and location of areas swept.	Four Times per Year.
NEW BMPs			
Spill Response Kits	Maintain spill response kits at all City facilities with activities that may contribute pollutants to storm water. Audit facilities to verify.	Document deployment of kits at all inventoried facilities each year.	Annually
O&M Employee Training	Conduct employee training.	Maintain log of training events and attendees.	One Time Per Year
Good Housekeeping SOP Manual	Develop manual.	Complete activity.	December 2016
	Train staff. Incorporate into O&M employee training.	Complete activity.	March 2017
	Implement all good housekeeping SOPs.	Complete activity.	June 2017
	Perform annual audit to ensure that all relevant city activities are described within the manual.	Maintain log of audit date and results.	Annually
O&M at City Facilities	Inspect and maintain City facilities to reduce potential impacts from storm water runoff. (Pick-up litter, remove oil, etc.)	Record dates of inspection and identify maintenance activities performed.	Frequency of each activity outlined in detail in Good Housekeeping Rules Manual

Table 7-1 BMP's for Pollution Prevention/Good Housekeeping			
BMP	**Activity**	**Measurable Goals**	**Completed by (Month and Year) or Frequency of Action**
Maintenance Contractor Requirements and Oversight	Develop new standard contract language.	Complete development of new standard contract language that includes appropriate reference to standard operating procedures (SOPs) and stormwater plans.	December 2016.
	Contractually require service providers to comply with all control measures and operational procedures.	Include standard contract language and SOPs in all new contracts.	Utilize new language in all contracts awarded after December 2016.
	Provide adequate oversight of contractor activities.	Document oversight date, activity, and person.	Within one week of each activity performed by a contractor.
Assessment of City Facilities and Operations	Evaluate operations and maintenance activities at City owned facilities and conducted in the County.	Document results in written report.	December 2016
Identify Pollutants of Concern at City Facilities	Identify pollutants of concern at City facilities.	Document results in written report.	December 2016
Develop Pollution Prevention Measures for City Facilities	Develop written pollution prevention plan for each City owned facility.	Complete Pollution Prevention Plan.	December 2017
Inspect City Facilities	Develop written inspection procedure and check list.	Complete activity.	December 2017
	Implement inspections.	Document inspections.	At frequency defined in Facility Pollution Prevention Plans.
Maintain Structural Controls and City Owned Facilities	Conduct required maintenance activities of structural controls.	Document activity.	At frequency defined in Facility Pollution Prevention Plans.
City-Owned Facilities and Control Inventory	Develop inventory of City-owned facilities and stormwater controls within MS4 area.	Complete activity	December 2017
	Update inventory of facilities and controls.	Maintain record of updates and additions to facilities and control inventory.	One Time Per Year

8.0 PLAN OF COMPLIANCE FOR DISCHARGES TO IMPAIRED WATERS

This section provides the City's plan of compliance with the requirements relating to discharges to impaired waters and to waters with approved TMDLs. This section presents the permit requirements followed by the City's plan of compliance.

8.1 DISCHARGES TO WATERS WITHOUT TMDLS

8.1.1 PERMIT REQUIRMENTS

[From Small MS4 General Permit, TPDES Permit No. TXR040000, issued December 13, 2013]

The permittee shall … determine whether the permitted discharge is directly to one or more water quality impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities:

(1) Discharging a Pollutant of Concern

a. Within the first year following the permit effective date, the permittee shall determine whether the small MS4 may be a source of the pollutant(s) of concern by referring to the CWA §303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern.

b. If the permittee determines that the small MS4 may discharge the pollutant(s) of concern to an impaired water body without an approved TMDL, the permittee shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.

c. In addition, no later than three years following the permit effective date, the permittee shall submit an NOC to amend the SWMP to include any additional BMPs to address the pollutant(s) of concern.

(2) Impairment of Bacteria

Where the impairment is for bacteria, the permittee shall identify potential significant sources and develop and implement focused BMPs for those sources. The permittee may implement the BMPs listed in Part II.D.4(a)(5) or proposed alternative BMPs as appropriate.

(3) The annual report must include information on compliance with this section, including results of any sampling conducted by the permittee.

8.1.2 PLAN OF COMPLIANCE FOR DISCHARGES TO IMPAIRED WATERS WITHOUT A TMDL

During the preparation of this SWMP the City determined that its permitted MS4 discharges do not flow directly to any impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. Segment 1008_2, Spring Creek from Field Store Road to SH249, is listed as having depressed dissolved oxygen. It is adjacent to the City's MS4, but does not receive waters directly from the City's MS4. The water body receives discharges directly from MS4 operated by Lone Star College and TxDOT, therefore, Table 8-1 is blank.

Table 8-1 - Pollutants of Concern Discharged from City MS4 to Impaired Waters

Segment No.	Name	Description	Impairment
N/A	N/A	N/A	N/A

8.1.2.1 Determine Whether Small MS4 May be a Source of Pollutants of Concern by December 2014

BMP is not applicable to City as it does not discharge directly to any impaired water bodies.

8.1.2.2 Update SWMP by December 2015 to Include Focused BMPs

BMP is not applicable to City as it does not discharge directly to any impaired water bodies.

8.1.2.3 Submit Notice of Change by December 2016 to Formally Amend SWMP

BMP is not applicable to City as it does not discharge directly to any impaired water bodies.

8.1.2.4 Bacteria Impairments

BMP is not applicable to City as it does not discharge directly to any impaired water bodies.

8.2 DISCHARGES TO WATERS WITH APPROVED TMDLS

8.2.1 PERMIT REQUIRMENTS

[From Small MS4 General Permit, TPDES Permit No. TXR040000, issued December 13, 2013]

If the small MS4 discharges to …a… water body with an approved TMDL, where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section. The SWMP and required annual reports must include information on implementing any targeted controls required to reduce the pollutant(s) of concern as described below:

(1) Targeted Controls

The SWMP must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused effort or implementing additional Best Management Practices (BMPs) to reduce the pollutant(s) of concern in the impaired waters.

(2) Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term.

(3) Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant(s) of concern. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the maximum extent practicable (MEP). The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of instream water quality standards. The benchmark must be determined based on one of the following options:

a. If the MS4 is subject to a TMDL that identifies a Waste Load Allocation(s) (WLA) for permitted MS4 stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are

jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part II.D.4(a)(6).

b. *Alternatively, if multiple small MS4s are discharging into the same … water body with an approved TMDL, with an aggregate WLA for all permitted stormwater MS4s, then the MS4s may combine or share efforts to determine an alternative sub-benchmark for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark would cumulatively support the aggregate WLA. Where an aggregate benchmark has been broken into sub-benchmarks for individual MS4s, each permittee is only responsible for progress in meeting its sub-benchmark.*

(4) Annual Report

The annual report must include an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

(5) Impairment for Bacteria

If the pollutant of concern is bacteria, the permittee shall include focused BMPs addressing the below areas, as applicable, in the SWMP and implement as appropriate. If a TMDL Implementation Plan (I-Plan) is available, the permittee may refer to the I-Plan for appropriate BMPs. The SWMP and annual report must include the selected BMPs. Permitees may not exclude BMPs associated with the minimum control measures required under 40 CFR §122.34 from their list of proposed BMPs. Proposed BMPs will be reviewed by the executive director during the NOI and SWMP review and approval process.

The BMPs shall, as appropriate, address the following:

a. *Sanitary Sewer Systems*

(i) *Make improvements to sanitary sewers to reduce overflows;*

(ii) *Address lift station inadequacies;*

(iii) *Improve reporting of overflows; and*

(iv) *Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.*

b. On-site Sewage Facilities (for entities with appropriate jurisdiction)

(i) Identify and address failing systems; and

(ii) Address inadequate maintenance of On-Site Sewage Facilities (OSSFs).

c. Illicit Discharges and Dumping

Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, and grit traps.

d. Animal Sources

Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.

e. Residential Education

Increase focus to educate residents on:

(i) Bacteria discharging from a residential site either during runoff events or directly;

(ii) Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;

(iii) Decorative ponds; and

(iv) Pet waste.

(6) Monitoring or Assessment of Progress

The permittee shall monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

a. The permittee may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality as follows:

(i) Evaluating Program Implementation Measures

The permittee may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the

appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals. The permittee may assess progress by using program implementation indicators such as: (1) number of sources identified or eliminated; (2) decrease in number of illegal dumping; (3) increase in illegal dumping reporting; (4) number of educational opportunities conducted; (5) reductions in sanitary sewer flows (SSOs); or, (6) increase in illegal discharge detection through dry screening, etc.; or

(ii) Assessing Improvements in Water Quality

The permittee may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional instream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, and/or other local efforts as appropriate.

b. Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

(7) Observing no Progress Towards the Benchmark

If, by the end of the third year from the effective date of the permit, the permittee observes no progress toward the benchmark either from program implementation or water quality assessments as described in Part II.D.4(a)(6), the permittee shall identify alternative focused BMPs that address new or increased efforts towards the benchmark or, as appropriate, shall develop a new approach to identify the most significant sources of the pollutant(s) of concern and shall develop alternative focused BMPs for those (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent annual reports.

Where the permittee originally used a benchmark based on an aggregated WLA, the permittee may combine or share efforts with other MS4s discharging to the same watershed to determine an alternative sub-benchmark for the pollutant(s) of concern for their respective MS4s, as described in Part II.D.4(a)(3)(b) above. Permittees must document, in their SWMP for the next permit term, the proposed schedule for the development and subsequent adoption of alternative sub benchmark for the pollutant(s) of concern for their respective MS4s and associated assessment of progress in meeting those individual benchmarks.

8.2.2 WATERS WITH APPROVED TMDLS THAT RECEIVE DISCHARGES FROM THE CITY OF TOMBALL MS4

During the preparation of this SMWP, the City reviewed the TCEQ's summary of water bodies that have an EPA approved TMDL. Two formally approved TMDL affect watersheds that receive stormwater discharges from the City of Tomball MS4. These are listed below in Table 8-2 (TCEQ, 2014).

Table 8-2 – Watersheds with Approved TMDLs Receiving Discharges from the Tomball MS4

Segment No.	Name	Pollutant
1008	Spring Creek	Bacteria
1008H	Willow Creek	Bacteria

8.2.3 FOCUSED BMPS TO ADDRESS DISCHARGES TO WATERS WITH APPROVED BACTERIA TMDLs

To address discharges to waters with approved bacteria TMDLs the following subsection of this SWMP includes a description of focused BMPs to be implemented along with the measureable goals for each focused BMP, the due date in months and years (or frequency) for each implementation action, and the benchmark for progress tracking. Table 8-3 summarizes each focused BMP, implementation activities, measurable goal, due dates or frequency of actions, and the benchmark. Information about the State law and City regulations that provide the legal authority necessary to implement and enforce this program and all others is provided in combined format in Section 2.4. A summary of written procedures describing how the permittee will implement this program is included in each of the BMPs described in this section.

8.2.3.1 Focused Bacteria BMP: Address Sanitary Sewer System and Lift Station Conditions

Description and Summary of Implementation Procedures: The City will develop a map of the sanitary sewer system and lift stations based on the age of the infrastructure components. The City will review sanitary sewer overflow reports and add this information to the map. The City will develop a system evaluation process that will identify and prioritize system improvements or replacements needed to reduce or eliminate sanitary sewer overflows (SSOs). The City will conduct the evaluation, identify needed improvement projects (such as lift station and line repairs) and schedule the necessary work to reduce or eliminate SSOs.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.2 Focused Bacteria BMP: Improve Sanitary Sewer System Leaks and Overflow Reporting

Description and Summary of Implementation Procedures: The City will train employees to identify and report sanitary sewer leaks or overflows. Educate residents to identify and report sanitary sewer leaks or overflows. Employees and residents will be encouraged to report location, time, and estimated volume of leakage or overflow observed or signs of leakage or overflow conditions, including odor, staining, or vegetation conditions. The City will publicize the reporting mechanism and document all reports.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.3 Focused Bacteria BMP: Improve Collection System Protections and Public Education

Description and Summary of Implementation Procedures: The City will review and update its sewer use rules regarding the introduction of fats, oils, greases, rags, and disposable wipes into the system. The City will develop and implement a public education program that will explain the adverse environmental impacts and customer cost increases resulting from the inappropriate disposal of objects, fats, oils, greases, rags, and disposable wipes into the sanitary sewer system and inform the public about appropriate disposal methods for these items.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.4 Focused Bacteria BMP: Address Onsite Sewage Facilities (Septic Systems)

Description and Summary of Implementation Procedures: The City will identify failing systems by creating a map of impaired watersheds, known septic systems, known sanitary sewer systems, and developed tracts of land. The City will conduct a desktop evaluation of the mapping data and identify areas of development not served by sanitary sewer systems. The City will conduct drive-by inspections of developed areas not served by sanitary sewer systems to investigate conditions and to identify failing systems. Once identified, the City will encourage owner / operators to address failing systems. The City will take enforcement action as appropriate to compel owners / operators to address failing systems. The

City will address inadequate maintenance of septic systems. See Section 4.3.8 for related program for onsite sewage facilities.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.5 Focused Bacteria BMP: Illicit Discharges and Dumping

Description and Summary of Implementation Procedures: The City will conduct illicit discharge detection efforts in the impaired watershed. City staff will walk drainage ways and creeks within watersheds with approved TMDLs to visually inspect stormwater outfalls to identify illicit discharges and dumping sites along riparian areas. Identified illicit discharges will be investigated and eliminated as described in Section 4.3.10. Found dumping sites will be mitigated using the City's *Mitigate Illegal Dumping Sites* program as described in Section 4.3.8.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.6 Focused Bacteria BMP: Identify and Address Significant Animal Sources

Description and Summary of Implementation Procedures: The City will identify significant animal sources of bacteria such as zoos, horse stables, concentrated animal feeding operations, or similar large facilities with significant animal populations that are located in the impaired watershed with an approved bacteria TMDL. The City will create an inventory and map of significant animal source facilities. The City will evaluate the types of facilities and the City's existing legal authority and, if necessary, modify existing regulations to address the identified animal sources. The City will work with facility owners and operators to voluntarily mitigate bacteria loading to impaired waters with approved TMDLs. If facilities fail to address loading, then the City will take enforcement action to compel load reductions.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.7 Focused Bacteria BMP: Residential Education About Bacteria Loadings

Description and Summary of Implementation Procedures: The City will include educational goals in its overall public education program that focus on the education of residents to avoid discharging oils and grease down the sink, avoid feeding water birds, and cleaning up pet waste. See also Section 3.3.12 for Identify Goals and Objectives of Public Education and Outreach Program.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.8 Focused Bacteria BMP: Pet Waste Management Regulation

Description and Summary of Implementation Procedures: The City will develop and adopt a pet waste management regulation that will require residents to clean up pet waste.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.9 Focused Bacteria BMP: Grease and Grit Trap Regulation

Description and Summary of Implementation Procedures: The City adopted an ordinance that requires the City's Public Works department to maintain a list of grease and grit trap generators. *Tomball, Texas, Code of Ordinances, PART II – Code of Ordinances, Chapter 82 – Utilities, Article III. – Industrial Wastes, Sec. 82-108 – Grease and Grit Traps* requires grease and grit trap generators to deliver a copy of the disposal manifest to the Public Works Department in order that the City can monitor the cleaning and maintenance of the grease or grit trap and take enforcement action if necessary. The City will document any enforcement action taken.

Legal Authority: See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

8.2.3.10 Sanitary Sewer Overflow Mitigation Program

Description and Summary of Implementation Procedures: The City initiated the Infrastructure Replacement Program in the early 90's. One focus of this program is to address sanitary sewer overflows

(SSO). By implementing an Inflow and Infiltration program the City intends to reduce the number of SSO's and the associated suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. In addition, the City will address lift stations and manholes. The City will identify, map, and prioritize sewer line problem areas, lift station repairs, and manholes that need replacement. All upgrades will be performed on a yearly basis within budgetary allowances.

8.2.3.11 *Legal Authority:* See Section 2.4 of this document for a summary of the City of Tomball's legal authority.

BMP, Implementation Activities, Measurable Goal, Due Dates or Frequency of Actions, and Benchmark: See Table 8-3.

Table 8-3 – Focused BMPs Addressing Bacteria TMDLs				
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year) or Frequency of Action**	**Benchmark**
Address Sanitary Sewer System and Lift Station Conditions	Develop map of system by age with overflow locations noted.	Complete map.	June 2017	Complete activity on time.
	Develop system evaluation process.	Complete evaluation process.	December 2017	Complete activity on time.
	Conduct system evaluation and identify needed improvements.	Complete evaluation.	June 2018	Complete activity on time.
Improve Sanitary Sewer System Leaks and Overflow Reporting	Train employees to identify and report overflows or leaks.	Complete development of training materials and conduct first training session.	June 2017 and then Annually	Complete activity on time.
	Educate residents to identify and report overflows or leaks.	Complete development of educational materials and begin distribution.	June 2017 and then Annually	Complete activity on time.
	Publicize reporting mechanisms and document all reports.	Include reporting methods in training and public education.	June 2017 and then Annually	Complete activity on time.
Improve Collection System Protections and Public Education	Review and update sewer use ordinance related to the discharge of fats, oils, grease, rags, and disposable wipes.	Adopt revised ordinance.	June 2017	Complete activity on time.
	Develop public education program to inform the public about the adverse impacts from discharging fats, oils, grease, rags, and disposable wipes.	Finish development of program.	June 2017	Complete activity on time.
	Distribute educational materials.	Complete activity.	Annually	Complete activity on time.

Table 8-3 – Focused BMPs Addressing Bacteria TMDLs				
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year) or Frequency of Action**	**Benchmark**
Address Onsite Sewage Facilities	Prepare map of septic systems, sanitary sewer systems, tracts of land, developed land (land use), and identify priority areas.	Complete map.	June 2016	Complete map on time.
	Conduct study of map and conduct drive by inspections of priority areas.	Identify priority areas in impaired watersheds with development and no sanitary sewer system for inspection. Inspect priority areas. Summarize inspection findings.	Identify priority areas by December 2016. Inspect 33% of priority areas by June 2017, December 2017, and December 2018, respectively.	Complete identification of priority areas on time. Complete inspections on time.
	Encourage owners and operators to address failing systems. Enforce on owners and operators that fail to mitigate failing systems.	Encourage system repairs. Enforce on owners as necessary. Summarize encouragement activities and enforcement activities.	Document communications to owners as they occur. Document enforcement actions as they occur.	Communicate or enforce on identified failing septic systems within three months of identification.
Illicit Discharges and Dumping	Visually inspect creeks and drainage ways that are part of the Tomball MS4 in watersheds with approved TMDLs.	Document inspection findings.	Complete by December 2016.	Complete and document findings on time.
	Investigate found discharges.	Document actions taken regarding found discharges.	Complete by December 2017.	Complete and document findings on time.
	Take enforcement actions as needed.	Document enforcement actions.	Complete by December 2018.	Complete and document findings on time.
	Clean up dumping sites.	Document findings and clean up actions.	Complete by December 2018.	Complete and document findings on time.

Table 8-3 – Focused BMPs Addressing Bacteria TMDLs				
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year) or Frequency of Action**	**Benchmark**
Identify and Address Significant Animal Sources	Identify and map significant animal source facilities in impaired watershed with approved bacteria TMDLs.	Complete map and inventory.	December 2016	Complete activity on time.
	Evaluate animal source facilities and existing legal authority.	Document findings.	June 2017	Complete activity on time.
	Adopt new regulations (if required).	Adopt regulations (if needed).	December 2017	Complete activity on time.
	Seek voluntary actions to reduce bacteria loads. Document actions and results.	Complete and document activities.	June 2018	Complete activity on time.
	Take enforcement action to compel load reductions.	Complete and document activities.	December 2018	Complete activity on time.
Residential Education About Bacteria Loadings	Include information about reducing bacteria loads from residential activities including pet waste management in public education program goals and objectives.	See Section 3.3.1	See Section 3.3.1	Complete activity on time.
Pet Waste Management Regulation	Develop and adopt a pet waste management regulation	Complete activity.	June 2017	Complete activity on time.
	Adopt regulation.	Complete activity.	December 2017	Complete activity on time.

Table 8-3 – Focused BMPs Addressing Bacteria TMDLs				
BMP	**Activity**	**Measurable Goals**	**Completed By (Month and Year) or Frequency of Action**	**Benchmark**
Grease and Grit Trap Ordinance	Continue to update list of grease and grit trap waste generators.	Maintain list of all grease and grit trap waste generators.	Ongoing	Complete activity.
	Continue to review grease and grit trap disposal manifests for compliance with City Ordinance.	Collect and review 100% of manifests for grease and grit trap generators. Perform inspections and take enforcement action as necessary.	Ongoing	Complete activity.
Sanitary Sewer Overflow Mitigation Program	Update sanitary sewer replacement map.	Update map and maintain log to document date of revisions.	Once per Year	Complete activity.
	Develop a list to prioritize lines that need to be replaced or repaired. Develop a budget for projects.	Maintain log of repair or replacement priorities and approve yearly budget for Infrastructure Replacement projects.	Once per Year	Complete activity.
	Complete scheduled and budgeted repairs or replacement projects.	Complete activity.	Ongoing	Complete activity.

9.0 RECORD-KEEPING AND REPORTING

The City shall conduct record-keeping and adhere to reporting requirements mandated by the TCEQ General Permit as defined below:

9.1 RECORD KEEPING (PART IV, SECTION A)

1. *The permittee shall retain all records, a copy of this TPDES general permit, and records of all data used to complete the application (NOI) for this general permit and satisfy the public participation requirements, for a period of at least three (3) years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the executive director at any time.*

2. *The permittee shall submit the records to the executive director only when specifically asked to do so. The SWMP required by this general permit (including a copy of the general permit) must be retained at a location accessible to the TCEQ.*

3. *The permittee shall make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten (10) working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.*

4. *The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.*

9.2 REPORTING (PART IV, SECTION B)

9.2.1 General Reporting Requirements (Section B.1)

(a) Noncompliance Notification.

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. Report of such information must be provided orally or by electronic facsimile transmission (FAX) to the TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the appropriate TCEQ regional office and to the TCEQ Enforcement

Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

(1) A description of the noncompliance and its cause;

(2) The potential danger to human health or safety, or the environment;

(3) The period of noncompliance, including exact dates and times;

(4) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(5) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

(b) Other Information

When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report, the permittee shall promptly submit the facts or information to the executive director.

9.2.2 ANNUAL REPORT (Section B.2)

The MS4 operator shall submit a concise annual report to the executive director within 90 days of the end of each reporting year. For the purpose of this section, the reporting year may include either the permit year, the permittee's fiscal year or the calendar year, as elected by the small MS4 and notified to the TCEQ in the application submittal. The annual report must address the previous reporting year.

The first reporting year for annual reporting purposes shall begin on the permit effective date, and shall last for a period of one (1) year (the end of the "permit year"). Alternatively, if the permittee elects to report based on its fiscal year, the first reporting year will last until the end of the fiscal year following the end of the first permit year. If the permittee elects to report based on the calendar year, then the first reporting year will last until December 31, 2014.

The MS4 has selected the "calendar year" as the reporting year. The annual report is therefore due on March 31 each year starting on March 31, 2015.

Subsequent calendar years will begin at the beginning of the first reporting year (which will vary based on the previous paragraph) and last for one (1) year. The MS4 operator shall also make a copy of the annual report readily available for review by TCEQ personnel upon request. The report must include:

(a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

(b) A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

(c) If applicable, a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4s BMPs used to address the pollutant of concern;

(d) A summary of the stormwater activities the MS4 operator plans to undertake during the next reporting year;

(e) Proposed changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;

(f) Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementations plans;

(g) Notice that the MS4 operator is relying on another government entity to satisfy some of its permit obligations (if applicable);

(h) The number of construction activities where the small MS4 is the operator and authorized under the 7th optional MCM, including the total number of acres disturbed; and

(i) The number of construction activities that occurred within the jurisdictional area of the small MS4 (as noticed to the permittee by the construction operator), and that were not authorized under the 7th MCM.

An annual report must be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the permittee has either not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI and SWMP, then the annual report may include that information.

If permittees share a common SWMP, they shall contribute to and submit a single system-wide report. Each permittee shall sign and certify the annual report in accordance with 30 TAC § 305.128 (relating to Signatories to Reports).

The annual report must be submitted with the appropriate TCEQ reporting forms if available, or as otherwise approved by TCEQ.

The annual report must be submitted to the following address:

Texas Commission on Environmental Quality
Stormwater & Pretreatment Team (MC – 148)
P.O. Box 13087
Austin, Texas 78711-3087

A copy of the annual report must also be submitted to the TCEQ Regional Office that serves the area of the regulated small MS4.

If available, electronic submission of annual reports is encouraged. The Federal Waste Reduction Act and the Government Paperwork Elimination Act encourages governmental agencies to use electronic submission. See the TCEQ website at, www.tceq.texas.gov for additional information and instructions.

10.0 REFERENCES

Mike Dennis and Lessie Upchurch, 2010. "TOMBALL, TX," *Handbook of Texas Online (Website).* Texas State Historical Association, Denton, TX. 2010. http://www.tshaonline.org/handbook/online/articles/hgt06 Accessed March 31, 2014.

TCEQ, 2013a. *General Permit for Small Municipal Separate Storm Sewer Systems to Discharge Under the Texas Pollutant Discharge Elimination System Permit No. TXR040000*. TCEQ, Austin, TX, December 13.

TCEQ, 2013b. *2012 Texas Integrated Report – Texas 303(d) List (Category 5).* TCEQ, Austin, TX, May 9.

Texas Commission on Environmental Quality (TCEQ), 2014. *Segments with Total Maximum Daily Loads (Website).* TCEQ, Austin, TX, http://www.tceq.texas.gov/waterquality/tmdl/nav/tmdlsegments Accessed March 4, 2014.

Tomball, 2014. *City of Tomball Code of Ordinances.* Municipal Code Corporation, Tallahassee, FL, http://library.municode.com/HTML/11633/level1/CODE.html Accessed April 2, 2014.

Tomball Economic Development Corporation (TEDC), 2010. *Tomball, Texas Major* Employers., Tomball, TX, October 5, 2010. http://www.tomballtxedc.org/community-profile/major-employers Accessed April 2, 2014

United States Department of Agriculture (USDA), 1976. *Soil Survey*. Harris County, Texas. 1976.

Appendix A

General Permit for Small Municipal Separate Storm Sewer Systems to Discharge Under the Texas Pollutant Discharge Elimination System, Permit No. TXR040000, December 13, 2013

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR040000, issued August 13, 2007

Small Municipal Separate Storm Sewer Systems

located in the state of Texas

may discharge directly to surface water in the state

only according to requirements and conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years after the permit effective date.

EFFECTIVE DATE: DEC 13 2013

ISSUED DATE: DEC 13 2013

Bryan W. Shaw

For the Commission

TCEQ GENERAL PERMIT NUMBER TXR040000
RELATING TO DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Table of Contents

Part I. Definitions 5
Part II. Permit Applicability and Coverage 11
Section A. Small MS4s Eligible for Authorization under this General Permit 11
1. Small MS4s Located in an Urbanized Area 11
2. Designated Small MS4s 11
3. Operators of Previously Permitted Small MS4s 11
4. Regulated Portion of Small MS4 12
5. Categories of Regulated Small MS4s 12
Section B. Available Waivers from Coverage 12
1. Waiver Option 1: 13
2. Waiver Option 2: 13
Section C. Allowable Non-Stormwater Discharges 14
Section D. Limitations on Permit Coverage 15
1. Discharges Authorized by Another TPDES Permit 15
2. Discharges of Stormwater Mixed with Non-Stormwater 15
3. Compliance with Water Quality Standards 15
4. Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements .. 15
5. Discharges to the Edwards Aquifer Recharge Zone 19
6. Discharges to Specific Watersheds and Water Quality Areas 20
7. Protection of Streams and Watersheds by Home Rule Municipalities 20
8. Indian Country Lands 20
9. Endangered Species Act 20
10. Other 21
Section E. Obtaining Authorization 21
1. Application for Coverage 21
2. Late Submission of the NOI and SWMP 22
3. Stormwater Management Program (SWMP) 22
4. Contents of the NOI 23
5. Notice of Change (NOC) 24
6. Change in Operational Control of a Small MS4 24

7. Notice of Termination (NOT) 24
8. Signatory Requirement for NOI, NOT, NOC, and Waiver Forms 24
9. Fees 24
10. Permit Expiration 25
11. Suspension of Permit Coverage 25
12. Public Notice Process for NOI submittal 25
Section F. Permitting Options 27
1. Authorization Under the General Permit 27
2. Alternative Coverage under an Individual TPDES Permit 27
Part III. Stormwater Management Program (SWMP) 28
Section A. Developing a Stormwater Management Program (SWMP) 28
1. SWMP Development and Schedule 28
2. Content of the SWMP 28
3. Legal Authority 29
4. Resources 30
5. Effluent Limitations 30
6. Enforcement Measures 30
Section B. Minimum Control Measures 30
1. Public Education, Outreach, and Involvement 31
2. Illicit Discharge Detection and Elimination (IDDE) 32
3. Construction Site Stormwater Runoff Control 35
4. Post-Construction Stormwater Management in New Development and Redevelopment 38
5. Pollution Prevention and Good Housekeeping for Municipal Operations 40
6. Industrial Stormwater Sources 45
7. Authorization for Construction Activities where the Small MS4 is the Site Operator 46
Section C. General Requirements 47
Part IV. Recordkeeping and Reporting 47
Section A. Recordkeeping 47
Section B. Reporting 47
1. General Reporting Requirements 47
2. Annual Report 48
Part V. Standard Permit Conditions 49

Part VI. Authorization for Municipal Construction Activities – Applicable only if the 7th Optional MCM is selected 51
Section A. Eligible Construction Sites 51
Section B. Discharges Eligible for Authorization 51
1. Stormwater Associated with Construction Activity 51
2. Discharges of Stormwater Associated with Construction Support Activities 51
3. Non-Stormwater Discharges 52
4. Other Permitted Discharges 52
Section C. Limitations on Permit Coverage 53
Section D. Stormwater Pollution Prevention Plan (SWP3) Requirements 53
Section E. Stormwater Runoff from Concrete Batch Plants 53
1. Benchmark Sampling Requirements 53
2. BMPs and SWP3 Requirements 55
3. Prohibition of Wastewater Discharges 57
4. Concrete Truck Wash Out Requirements 58
Section F. Effective Date of Coverage 58
Section G. Deadlines for SWP3 Preparation and Compliance 58
Section H. Plan Review and Making Plans Available 59
Section I. Keeping Plans Current 59
Section J. Contents of SWP3 59
1. Site Description 59
2. Structural and non-structural controls 60
3. Stabilization Practices 60
4. Structural Control Practices 61
5. Permanent Stormwater Controls 62
6. Other Controls 62
7. Effluent Limits 62
8. Approved State and Local Plans 62
9. Maintenance 62
10. Inspections of Controls 63
11. Pollution Prevention Measures 64
Section K. Additional Retention of Records 64

Part I. Definitions

Arid Areas - Areas with an average annual rainfall of less than ten (10) inches.

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Catch basins - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

Classified Segment - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

Clean Water Act (CWA) - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

Common Plan of Development or Sale - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

Construction Activity - Soil disturbance, including clearing, grading, and excavating; and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

> **Small Construction Activity** is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.
>
> **Large Construction Activity** is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land.

Construction Site Operator - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

(a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or

(b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution

prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure - Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

Conveyance - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

Discharge – When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

Edwards Aquifer - As defined in 30 TAC §213.3 (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the TCEQ or the TCEQ website.

Final Stabilization - A construction site where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

(1) The homebuilder completing final stabilization as specified in condition (a) above; or

(2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

(c) For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

General Permit - A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

Groundwater Infiltration - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

High Priority Facilities - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

Hyperchlorinated Water – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

Illicit Connection - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge - Any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting activities.

Impaired Water - A surface water body that is identified on the latest approved CWA §303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

Indian Country - Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Indicator Pollutant - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

Industrial Activity - Any of the ten (10) categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

MS4 Operator - For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;

(b) That is designed or used for collecting or conveying stormwater;

(c) That is not a combined sewer; and

(d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

Non-traditional Small MS4 - A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

Notice of Change (NOC) - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

Notice of Intent (NOI) - A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

Outfall - A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-or-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

Permittee - The MS4 operator authorized under this general permit.

Point Source - (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant(s) of Concern – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

Redevelopment - Alterations of a property that changed the "footprint" of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

Semiarid Areas - Areas with an average annual rainfall of at least ten (10) inches, but less than 20 inches.

Small Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;

(b) Designed or used for collecting or conveying stormwater;

(c) Which is not a combined sewer;

(d) Which is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2; and

(e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

Stormwater and Stormwater Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff from an area where there is either a large construction or a small construction activity.

Stormwater Management Program (SWMP) - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Total Maximum Daily Load (TMDL) - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Traditional Small MS4 - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

Urbanized Area (UA) - An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial census.

Waters of the United States - (According to 40 CFR § 122.2) Waters of the United States or waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.

Part II. Permit Applicability and Coverage

This general permit provides authorization for stormwater and certain non-stormwater discharges from small municipal separate storm sewer systems (MS4) to surface water in the state. The general permit contains requirements applicable to all small MS4s that are eligible for coverage under this general permit.

Section A. Small MS4s Eligible for Authorization under this General Permit

Discharges from a small MS4 must be authorized if any of the following criteria are met and may be authorized under this general permit if coverage is not otherwise prohibited.

1. Small MS4s Located in an Urbanized Area

Operators of small MS4s that are fully or partially located within an urbanized area (UA), as determined by the 2000 or 2010 Decennial Census by the U.S. Bureau of Census, must obtain authorization for the discharge of stormwater runoff and are eligible for coverage under this general permit unless otherwise prohibited.

2. Designated Small MS4s

A small MS4 that is outside an urbanized area that is *designated* by TCEQ based on evaluation criteria as required by 40 CFR § 122.32(a)(2) or 40 CFR § 122.26(a)(1)(v) and adopted by reference in Title 30, TAC § 281.25, is eligible for coverage under this general permit. Following designation, operators of small MS4s must obtain authorization under this general permit or apply for coverage under an individual TPDES stormwater permit within 180 days of notification of their designation.

3. Operators of Previously Permitted Small MS4s

Operators of small MS4s that were covered under the previous TPDES general permit for small MS4s (TXR040000, Issued and Effective on August 13, 2007) must reapply for permit coverage, or must obtain a waiver if applicable (see Part II.B, related to Obtaining a Waiver.)

4. Regulated Portion of Small MS4

The portion of the small MS4 that is required to meet the conditions of this general permit are those portions that are located within the UA as defined and used by the U.S. Census Bureau in the 2000 or 2010 census, as well as any portion of the small MS4 that is designated by TCEQ.

For the purpose of this permit, the regulated portion of a small MS4 for a transportation entity is the land owned by the permittee within the UA which functions as, or is integral to a transportation system with drainage conveyance. Non-contiguous property that does not drain into the transportation drainage system is not subject to this general permit.

5. Categories of Regulated Small MS4s

This permit defines MS4 operators by the following categories, or levels, based on the population served within the 2010 UA. The level of a small MS4 may change during the permit term based on the MS4 operator acquiring or giving up regulated area, such as by annexing land or if land is annexed away. However, the level of a small MS4 will not change during the permit term based on population fluctuation.

(a) Level 1: Operators of traditional small MS4s that serve a population of less than 10,000 within a UA;

(b) Level 2: Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within a UA. This category also includes all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the UA, unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served;

(c) Level 3: Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within a UA;

(d) Level 4: Operators of traditional small MS4s that serve a population of 100,000 or more within a UA.

For the purpose of this section "serve a population" means the residential population within the regulated portion of the small MS4 based on the 2010 census, except for non-traditional small MS4s listed in (b) above.

Section B. Available Waivers from Coverage

The TCEQ may waive permitting requirements for small regulated MS4 operators if the criteria are met for Waiver Option 1 or 2 below. To obtain Waiver Option 1, the MS4 operator must submit the request on a waiver form provided by the executive director. To obtain Waiver Option 2, the MS4 operator must contact the executive director and coordinate the activities required to meet the waiver conditions. A provisional waiver from permitting requirements begins 30 days after an administratively complete waiver form is postmarked for delivery to the TCEQ. Following review of the waiver form, the executive director may:(1) Determine that the waiver form is technically complete and approve the waiver by providing a notification and a waiver number; (2) Determine that the waiver form is incomplete and deny the waiver until a completed waiver form is submitted; or (3) Deny the waiver and require that permit coverage be obtained.

If the conditions of a waiver are not met by the MS4 operator, then the MS4 operator must submit an application for coverage under this general permit or a separate TPDES permit application.

At any time the TCEQ may require a previously waived MS4 operator to comply with this general permit or another TPDES permit if circumstances change so that the conditions of the waiver are no longer met. Changed circumstances can also allow a regulated MS4 operator to request a waiver at any time.

At any time the TCEQ can request to review any waivers granted to MS4 operators to determine whether any of the information required for granting the waiver has changed. At a minimum TCEQ will review all waivers when MS4 operators submit their renewal waiver applications.

For the purpose of obtaining a waiver, the population served refers to the residential population for traditional small MS4s and for certain non-traditional small MS4s with a residential population (such as counties and municipal utility districts). For other non-traditional small MS4s, the population served refers to the number of people using the small MS4 on an average operational day.

1. Waiver Option 1:

The small MS4 serves a population of less than 1,000 within a UA and meets the following criteria:

(a) The small MS4 is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES / TPDES stormwater program (40 CFR § 122.32(d)); and

(b) If the small MS4 discharges any pollutant(s) that have been identified as a cause of impairment of any water body to which the small MS4 discharges, stormwater controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern.

2. Waiver Option 2:

The small MS4 serves a population under 10,000 within a UA and meets the following criteria:

(a) The TCEQ has evaluated all waters of the U.S., including small streams, tributaries, lakes, and ponds, that receive a discharge from the small MS4;

(b) For all such waters, the TCEQ has determined that stormwater controls are not needed based on wasteload allocations that are part of an approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern; and

(c) The TCEQ has determined that future discharges from the small MS4 do not have the potential to exceed Texas surface water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(d) For the purpose of this paragraph (2.), the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total

suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the small MS4.

Section C. Allowable Non-Stormwater Discharges

The following non-stormwater sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the permittee or the TCEQ to be significant contributors of pollutants to the small MS4, or they are otherwise prohibited by the MS4 operator:

1. Water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;
13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper waste water;
15. Discharges or flows from emergency fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

Section D. Limitations on Permit Coverage

1. Discharges Authorized by Another TPDES Permit

Discharges authorized by an individual or other general TPDES permit may be authorized under this TPDES general permit only if the following conditions are met:

(a) The discharges meet the applicability and eligibility requirements for coverage under this general permit;

(b) A previous application or permit for the discharges has not been denied, terminated, or revoked by the executive director as a result of enforcement or water quality related concerns. The executive director may provide a waiver to this provision based on new circumstances at the regulated small MS4; and

(c) The executive director has not determined that continued coverage under an individual permit is required based on consideration of an approved total maximum daily loading (TMDL) model and implementation plan, anti-backsliding policy, history of substantive non-compliance or other 30 TAC Chapter 205 considerations and requirements, or other site-specific considerations.

2. Discharges of Stormwater Mixed with Non-Stormwater

Stormwater discharges that combine with sources of non-stormwater are not eligible for coverage by this general permit, unless either the non-stormwater source is described in Part II.C of this general permit or the non-stormwater source is authorized under a separate TPDES permit.

3. Compliance with Water Quality Standards

Discharges to surface water in the state that would cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit except as described in Part II.D.4 below. The executive director may require an application for an individual permit or alternative general permit to authorize discharges to surface water in the state if the executive director determines that an activity will cause has the reasonable potential to cause, or contribute to, a violation of water quality standards or is found to cause, have the reasonable potential to cause, or contribute to the impairment of a designated use of surface water in the state. The executive director may also require an application for an individual permit based on factors described in Part II.F.2.

4. Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements

Discharges of the pollutant(s) of concern to impaired water bodies for which there is a TCEQ and EPA approved total maximum daily load (TMDL) are not eligible for this general permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA §303(d) list, as not meeting Texas Surface Water Quality Standards.

The permittee shall control the discharges of pollutant(s) of concern to impaired waters and waters with approved TMDLs as provided in sections (a) and (b) below, and shall assess the progress in controlling those pollutants.

(a) Discharges to Water Quality Impaired Water Bodies with an Approved TMDL

If the small MS4 discharges to an impaired water body with an approved TMDL, where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section.

The SWMP and required annual reports must include information on implementing any targeted controls required to reduce the pollutant(s) of concern as described below:

(1) Targeted Controls

The SWMP must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused effort or implementing additional Best Management Practices (BMPs) to reduce the pollutant(s) of concern in the impaired waters.

(2) Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term.

(3) Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant(s) of concern. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the maximum extent practicable (MEP). The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of instream water quality standards.

The benchmark must be determined based on one of the following options:

a. If the MS4 is subject to a TMDL that identifies a Waste Load Allocation(s) (WLA) for permitted MS4 stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part II.D.4(a)(6).

b. Alternatively, if multiple small MS4s are discharging into the same impaired water body with an approved TMDL, with an aggregate WLA for all permitted stormwater MS4s, then the MS4s may combine or share efforts to determine an alternative sub-benchmark for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark would cumulatively support the aggregate WLA. Where an aggregate benchmark has been broken into sub-benchmarks for individual MS4s, each permittee is only responsible for progress in meeting its sub-benchmark.

(4) Annual Report

The annual report must include an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

(5) Impairment for Bacteria

If the pollutant of concern is bacteria, the permittee shall include focused BMPs addressing the below areas, as applicable, in the SWMP and implement as appropriate. If a TMDL Implementation Plan (I-Plan) is available, the permittee may refer to the I-Plan for appropriate BMPs. The SWMP and annual report must include the selected BMPs. Permitees may not exclude BMPs associated with the minimum control measures required under 40 CFR §122.34 from their list of proposed BMPs. Proposed BMPs will be reviewed by the executive director during the NOI and SWMP review and approval process.

The BMPs shall, as appropriate, address the following:

a. Sanitary Sewer Systems

(i) Make improvements to sanitary sewers to reduce overflows;

(ii) Address lift station inadequacies;

(iii) Improve reporting of overflows; and

(iv) Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.

b. On-site Sewage Facilities (for entities with appropriate jurisdiction)

(i) Identify and address failing systems; and

(ii) Address inadequate maintenance of On-Site Sewage Facilities (OSSFs).

c. Illicit Discharges and Dumping

Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, and grit traps.

d. Animal Sources

Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.

e. Residential Education

Increase focus to educate residents on:

(i) Bacteria discharging from a residential site either during runoff events or directly;

(ii) Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;

(iii) Decorative ponds; and

(iv) Pet waste.

(6) Monitoring or Assessment of Progress

The permittee shall monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

a. The permittee may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality as follows:

(i) Evaluating Program Implementation Measures

The permittee may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals.

The permittee may assess progress by using program implementation indicators such as: (1) number of sources identified or eliminated; (2) decrease in number of illegal dumping; (3) increase in illegal dumping reporting; (4) number of educational opportunities conducted; (5) reductions in sanitary sewer flows (SSOs); or, (6) increase in illegal discharge detection through dry screening, etc.; or

(ii) Assessing Improvements in Water Quality

The permittee may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional instream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, and/or other local efforts as appropriate.

b. Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

(7) Observing no Progress Towards the Benchmark

If, by the end of the third year from the effective date of the permit, the permittee observes no progress toward the benchmark either from program implementation or water quality assessments as described in Part II.D.4(a)(6), the permittee shall identify alternative focused BMPs that address new or increased efforts towards the benchmark or, as appropriate, shall develop a new approach to identify the most significant sources of the pollutant(s) of concern and shall develop alternative focused BMPs for those (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent annual reports.

Where the permittee originally used a benchmark based on an aggregated WLA, the permittee may combine or share efforts with other MS4s discharging to the same watershed to determine an alternative sub-benchmark for the pollutant(s) of concern for their respective MS4s, as described in Part II.D.4(a)(3)(b) above. Permittees must document, in their SWMP for the next permit term, the proposed schedule for the development and subsequent adoption of alternative sub benchmark for the pollutant(s) of concern for their respective MS4s and associated assessment of progress in meeting those individual benchmarks.

(b) Discharges Directly to Water Quality Impaired Water Bodies without an Approved TMDL

The permittee shall also determine whether the permitted discharge is directly to one or more water quality impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities:

(1) Discharging a Pollutant of Concern

a. Within the first year following the permit effective date, the permittee shall determine whether the small MS4 may be a source of the pollutant(s) of concern by referring to the CWA §303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern.

b. If the permittee determines that the small MS4 may discharge the pollutant(s) of concern to an impaired water body without an approved TMDL, the permittee shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.

c. In addition, no later than three years following the permit effective date, the permittee shall submit an NOC to amend the SWMP to include any additional BMPs to address the pollutant(s) of concern.

(2) Impairment of Bacteria

Where the impairment is for bacteria, the permittee shall identify potential significant sources and develop and implement focused BMPs for those sources. The permittee may implement the BMPs listed in Part II.D.4(a)(5) or proposed alternative BMPs as appropriate.

(3) The annual report must include information on compliance with this section, including results of any sampling conducted by the permittee.

5. Discharges to the Edwards Aquifer Recharge Zone

Discharges of stormwater from regulated small MS4s, and other non-stormwater discharges, are not authorized by this general permit where those discharges are prohibited by 30 TAC Chapter 213 (Edwards Aquifer Rule). New discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

For existing discharges, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the effluent limitation requirements found in Part VI.D. of this general permit.

The permittee's agency-approved WPAPs that are required by the Edwards Aquifer Rule must be referenced in the SWMP. Additional agency-approved WPAPs received after the SWMP submittal must be recorded in the annual report for each respective permit year. For discharges originating from the small MS4 permitted area, and located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants must also submit a copy of the MS4 NOI to the appropriate TCEQ regional office with each WPAP application submitted to TCEQ on or after August 13, 2012.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact:

TCEQ, Water Program Manager
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact:

TCEQ, Water Program Manager
Austin Regional Office
12100 Park 35 Circle, Bldg. A, Rm 179
Austin, Texas 78753
(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges of stormwater from regulated small MS4s and other non-stormwater discharges are not authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Home Rule Municipalities

This general permit does not limit the authority of a home-rule municipality provided by § 401.002 of the Texas Local Government Code.

8. Indian Country Lands

Stormwater runoff from small MS4s that occur on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from the U.S. EPA.

9. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this permit. Federal requirements related to endangered species apply to all TPDES permitted discharges, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee shall contact TCEQ for additional information prior to submittal of the NOI and SWMP. If adverse impact is determined after submittal of the NOI and SWMP or after permit issuance, the permittee shall contact TCEQ immediately to determine corrective action and potential modification to the MS4's permit.

10. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7.

This permit does not transfer liability for the act of discharging without, or in violation of, a NPDES or a TPDES permit from the operator of the discharge to the permittee(s).

Section E. Obtaining Authorization

1. Application for Coverage

When submitting a notice of intent (NOI) and SWMP, for coverage under this general permit, as described in Parts II.E.3., II.E.4, and Part III, the applicant must follow the public notice and availability requirements found in Part II.E.12 of this general permit.

Applicants seeking authorization to discharge under this general permit must submit a completed NOI on a form approved by the executive director, and a SWMP as described in Part III. The NOI and SWMP must be submitted to the TCEQ Water Quality Division, at the address specified on the form. Following review of the NOI and SWMP, the executive director may determine that: 1) The submission is complete and confirm coverage by providing a notification and an authorization number, 2) The NOI or SWMP are incomplete and deny coverage and require that a new complete NOI and SWMP be submitted, 3) Approve the NOI and SWMP with revisions and provide a written description of the required revisions along with any compliance schedule(s), or 4) Deny coverage and provide a deadline by which the MS4 operator must submit an application for an individual permit. Discharge authorization begins when the applicant is notified by TCEQ that the NOI and SWMP have been administratively and technically reviewed and the applicant has followed the public participation provisions in Part II.E.12. Denial of coverage under this general permit is subject to the requirements of 30 TAC § 205.4(c). Application deadlines are as follows:

(a) Small MS4s Located in a 2010 Urbanized Area (UA) (Newly regulated Small MS4s)

Operators of small MS4s described in Part II.A.1 that were not previously regulated under the TPDES General Permit TXR040000, shall submit an NOI and SWMP within 180 days following the effective date of this general permit.

(b) Small MS4s Located in a 2000 UA (Previously Regulated Small MS4s)

Operators of small MS4s described in Part II.A.1 that were required to obtain authorization under the previous TPDES General Permit TXR040000 based on the 2000 UA maps shall submit an NOI and revised SWMP within 180 days following the effective date of this general permit.

(c) Designated Small MS4s

Following designation, operators of small MS4s described in Part II.A.2 shall submit an NOI and SWMP, or apply for coverage under an individual TPDES stormwater permit, within 180 days of being notified in writing by the TCEQ of the need to obtain permit coverage.

(d) Individual Permit Alternative

If an operator of a small MS4 described in Part II.A.1. of this general permit elects to apply for an individual permit, the application must be submitted within 90 days following the effective date of this general permit.

2. Late Submission of the NOI and SWMP

Operators are not prohibited from submitting an NOI and SWMP after the deadlines provided. If a late NOI and SWMP are submitted, then this general permit provides authorization only for discharges that occur after permit coverage is obtained. The TCEQ reserves the right to take appropriate enforcement actions for any unpermitted discharges.

3. Stormwater Management Program (SWMP)

A SWMP must be developed and submitted with the NOI for eligible discharges that will reach waters of the U.S., including discharges from the regulated small MS4 to other MS4s or to privately-owned separate storm sewer systems that subsequently drain to waters of the U.S., according to the requirements of Part III of this general permit. The SWMP must include, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action throughout the permit term.

New elements in the program must be completely implemented within five years of the effective date of this general permit, or within five years of being designated for those small MS4s which are designated following permit issuance. Previously regulated MS4s shall assess existing program elements set forth in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

Changes may be made to the SWMP during the permit term. The TCEQ may notify the permittee of the need to modify the SWMP to be consistent with the general permit, in which case the permittee will have 90 days to finalize such changes to the SWMP.

Changes that are made to the SWMP before the NOI is approved by the TCEQ must be submitted in a letter providing supplemental information to the NOI. Changes to the SWMP that are made after TCEQ approval of the NOI and SWMP may be made following submittal of a notice of change (NOC) and receipt of written approval of the NOC from the TCEQ, except as follows:

(a) The following changes may be implemented without submitting an NOC form. The changes may be made immediately following revision of the SWMP, and must be included in the annual report:

(1) Adding components, controls, or requirements to the SWMP; or replacing a BMP with an equivalent BMP. An equivalent BMP is one that is intended to address the same concern as the original BMP and is substantially similar in nature to the original BMP;

(2) Nonsubstantive changes, including:

a. A change in personnel, or a reorganization of departments responsible for implementing the SWMP;

b. Minor clarifications to the existing BMPs;

c. Correction of typographical errors;

d. Other similar administrative or nonsubstantive comments.

(3) Adding or subtracting area(s) during the permit term, such as by annexing land or if land is de-annexed.

(b) The permittee may replace a less effective or infeasible BMP specifically identified in the SWMP with an alternative BMP, (for example, replacing a structural BMP with a non-structural BMP). Such a change may be implemented within 60 days following submittal of an NOC form, unless the NOC is denied in writing by TCEQ. Such requests must include the following:

(1) An explanation of why the BMP was eliminated;

(2) An explanation of the effectiveness of the replacement BMP; and

(3) An explanation of how the replacement BMP is expected to achieve the goals of the previous BMP.

(c) All other changes must be submitted on an NOC form and may only be implemented following written approval by TCEQ (See Part II.E.5).

4. Contents of the NOI

The NOI must contain the following minimum information:

(a) MS4 Operator Information

(1) The name, mailing address, electronic mail (email) address, telephone number, and facsimile (fax) number of the MS4 operator; and

(2) The legal status of the MS4 operator (for example, federal government, state government, county government, city government, or other government).

(b) Site Information

(1) The name, physical location description, and latitude and longitude of the approximate center of the regulated portion of the small MS4;

(2) County or counties where the small MS4 is located;

(3) An indication if all or a portion of the small MS4 is located on Indian Country Lands;

(4) The name, mailing address, telephone number, email (if available) and fax number of the designated person(s) responsible for implementing or coordinating implementation of the SWMP;

(5) A signature and certification on the NOI, according to 30 TAC § 305.44, that a SWMP has been developed according to the provisions of this permit;

(6) A statement that the applicant will comply with the Public Participation requirements described in Part II.E.12.;

(7) The name of each classified segment that receives discharges, directly or indirectly, from the small MS4. If one or more of the discharge(s) is not directly to a classified segment, then the name of the first classified segment that those discharges reach must be identified;

(8) The name of any MS4 receiving the discharge prior to discharge into waters of the U.S.;

(9) The name of all surface water(s) receiving discharges from the small MS4 that are on the latest EPA-approved CWA § 303(d) list of impaired waters;

(10) An indication of whether the small MS4 discharges within the Recharge Zone, the Contributing Zone or the Contributing Zone within the Transition Zone of the Edwards Aquifer; and

(11) Any other information deemed necessary by the executive director.

5. Notice of Change (NOC)

If the MS4 operator becomes aware that it failed to submit any relevant facts, or submitted incorrect information in the NOI, the correct information must be provided to the executive director in a NOC within 30 days after discovery. If any information provided in the NOI changes, an NOC must be submitted within 30 days from the time the permittee becomes aware of the change.

Any revisions that are made to the SWMP must be made in accordance with Part II.E.3. above. Changes that are made to the SWMP following NOI approval must be made using an NOC form, in accordance with Part II.E.3. above.

6. Change in Operational Control of a Small MS4

If the operational control of the regulated small MS4 changes, the previous operator must submit a Notice of Termination (NOT) and the new operator must submit an NOI and SWMP. The NOT and NOI must be submitted concurrently not more than ten (10) calendar days after the change occurs.

7. Notice of Termination (NOT)

A permittee may terminate coverage under this general permit by providing a Notice of Termination (NOT) on a form approved by the executive director. Authorization to discharge terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ, or immediately following confirmation of receipt of the electronic NOT form by the TCEQ. A NOT must be submitted within 30 days after the MS4 operator obtains coverage under an individual permit.

8. Signatory Requirement for NOI, NOT, NOC, and Waiver Forms

NOI, NOT, NOC, and Waiver forms must be signed and certified consistent with 30 TAC § 305.44(a) and (b) (relating to Signatories to Applications).

9. Fees

An application fee of $100.00 must be submitted with each NOI. A fee is not required for submission of a waiver form, a NOT, or an NOC.

A permittee authorized under this general permit must pay an annual Water Quality fee of $100.00 under TWC § 26.0291 and 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

10. Permit Expiration

(a) This general permit is effective for five (5) years from the permit effective date. Authorizations for discharge under the provisions of this general permit will continue until the expiration date of the general permit. This general permit may be amended, revoked, or canceled by the commission or renewed by the TCEQ for an additional term not to exceed five (5) years.

(b) If the executive director proposes to reissue this general permit before the expiration date, the general permit will remain in effect until the date on which the commission takes final action on the proposal to reissue this general permit. For existing permittees, general permit coverage will remain in effect after the expiration date of the existing general permit, in accordance with 30 TAC, Chapter 205. No new NOIs will be accepted and no new authorizations will be processed under the general permit after the expiration date.

(c) Following issuance of a renewed or amended general permit, all permittees, including those covered under the expired general permit, may be required to submit an NOI according to the requirements of the new general permit or to obtain a TPDES individual permit for those discharges. The renewed permit will include a deadline to apply for coverage, and authorization for existing permittees will be automatically extended until the deadline to apply for coverage, or until an application is submitted for renewal, whichever occurs first.

(d) If the TCEQ does not propose to reissue this general permit within 90 days before the expiration date, permittees must apply for authorization under a TPDES individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date of this general permit, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit.

11. Suspension of Permit Coverage

The executive director may suspend an authorization under this general permit for the reasons specified in 30 TAC § 205.4(d) by providing the discharger with written notice of the decision to suspend that authority, and the written notice will include a brief statement of the basis for the decision. If the decision requires an application for an individual permit or an alternative general permit, the written notice will also include a statement establishing the deadline for submitting an application. The written notice will state that the authorization under this general permit is either suspended on the effective date of the commission's action on the permit application, unless the commission expressly provides otherwise, or immediately, if required by the executive director.

12. Public Notice Process for NOI submittal

An applicant under this general permit shall adhere to the following procedures:

(a) The applicant shall submit an NOI and SWMP to the executive director. The SWMP must include information about:

(1) BMPs the applicant will implement for each of the six MCMs, as appropriate;

(2) The measurable goals for each of the BMPs, including, as appropriate the months and years in which the applicant will take the required actions, including interim milestones and the frequency of the action; and

(3) The person or persons responsible for implementing or coordinating the applicants SWMP.

(b) After the applicant receives written instructions from the TCEQ's Office of Chief Clerk, the applicant must publish notice of the executive director's preliminary decision on the NOI and SWMP.

(c) The notice will include the following information, at a minimum:

(1) The legal name of the MS4 operator;

(2) Indication of whether the NOI is for a new authorization or is a renewal of an existing authorization;

(3) The address of the applicant;

(4) A brief summary of the information included in the NOI, such as the general location of the small MS4 and a description of the classified receiving waters that receive the discharges from the small MS4;

(5) The location and mailing address where the public may provide comments to the TCEQ;

(6) The public location where copies of the NOI and SWMP, as well as the executive director's general permit and fact sheet, may be reviewed; and

(7) If required by the executive director, the date, time, and location of the public meeting.

(d) This notice must be published at least once in a newspaper of general circulation in the municipality or county where the small MS4 is located. If the small MS4 is located in multiple municipalities or counties, the notice must be published at least once in a newspaper of general circulation in the municipality or county containing the largest resident population for the regulated portion of the small MS4. This notice must provide opportunity for the public to submit comments on the NOI and SWMP. In addition, the notice must allow the public to request a public meeting. A public meeting will be held if the TCEQ determines that there is significant public interest.

(e) The public comment period begins on the first date the notice is published and lasts for at least 30 days. If a public meeting is held, the comment period will end at the closing of the public meeting (see paragraph (f) below). The public may submit written comments to the TCEQ Office of Chief Clerk during the comment period detailing how the NOI or SWMP for the small MS4 fails to meet the technical requirements or conditions of this general permit.

(f) If significant public interest exists, the executive director will direct the applicant to publish a notice of the public meeting and to hold the public meeting. The applicant shall publish notice of a public meeting at least 30 days before the meeting and hold the public meeting in a county where the small MS4 is located. TCEQ staff will facilitate the meeting.

(g) If a public meeting is held, the applicant shall describe the contents of the NOI and SWMP. The applicant shall also provide maps and other data on the small MS4. The applicant shall provide a sign in sheet for attendees to register their names and addresses and furnish the sheet to the executive director. A public meeting held under this general permit is not an evidentiary proceeding.

(h) The applicant shall file with the Chief Clerk a copy and an affidavit of the publication of notice(s) within 60 days of receiving the written instructions from the Chief Clerk.

(i) The executive director, after considering public comment, will either approve, approve with conditions, or deny the NOI based on whether the NOI and SWMP meet the requirements of this general permit.

(j) Persons whose names and addresses appear legibly on the sign-in sheet from the public meeting and persons who submitted written comments to the TCEQ will be notified by the TCEQ's Office of Chief Clerk of the executive director's decision regarding the authorization.

Section F. Permitting Options

1. Authorization Under the General Permit

An operator of a small MS4 is required to obtain authorization either under this general permit, or under an individual TPDES permit if it is located in a UA or designated by the TCEQ. Multiple small MS4s with separate operators must individually submit an NOI to obtain coverage under this general permit, regardless of whether the systems are physically interconnected, located in the same UA, or are located in the same watershed. Each regulated small MS4 will be issued a distinct permit number. These MS4 operators may combine or share efforts in meeting any or all of the SWMP requirements stated in Part III of this general permit. MS4 operators that share SWMP development and implementation responsibilities must meet the following conditions:

(a) Participants

The SWMP must clearly list the name and permit number for each MS4 operator that chooses to contributes to development or implementation of the SWMP, and provide written confirmation that the contributing MS4 operator has agreed to contribute. If a contributing small MS4 has submitted a NOI and SWMP to TCEQ, but has not yet received written notification of approval, along with the accompanying permit authorization number, a copy of the submitted NOI form must be made readily available or be included in the SWMP.

(b) Responsibilities

Each permittee is entirely responsible for meeting SWMP requirements within the boundaries of its small MS4. Where a separate MS4 operator is contributing to implementation of the SWMP, the SWMP must clearly define each minimum control measure and the component(s) each entity agrees to implement, within which MS4 area(s) each entity agrees to implement and clearly identify the contributing MS4 operator.

2. Alternative Coverage under an Individual TPDES Permit

An MS4 operator eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). The executive director may require a MS4 operator, authorized by this general permit, to apply for an individual TPDES permit because of: the conditions of an approved TMDL or TMDL implementation plan; a history of substantive non-compliance; or other 30 TAC Chapter 205 considerations and requirements; or other site-specific considerations. The executive director shall deny or suspend a facility's authorization for disposal under this general permit based on a rating of "unsatisfactory performer" according to commission rules in 30 TAC §60.3, *Use of Compliance History*. An applicant who owns or operates a facility classified as an "unsatisfactory performer" is

entitled to a hearing before the commission prior to having its coverage denied or suspended, in accordance with Tex. Water Code § 26.040(h).

Part III. Stormwater Management Program (SWMP)

To the extent allowable under state and local law, a SWMP must be developed, implemented and enforced according to the requirements of Part III of this general permit, for stormwater discharges that reach waters of the U.S., regardless of whether the discharge is conveyed through a separately operated storm sewer system. The SWMP must be developed, implemented and enforced to reduce the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA and the TWC.

A permittee that implements best management practices consistent with the provisions of their permit and SWMP constitutes compliance with the standard of reducing pollutants to the MEP and will be deemed in compliance with Part III of this permit. This permit does not extend any compliance deadlines set forth in the previous permit effective August 13, 2007.

Section A. Developing a Stormwater Management Program (SWMP)

1. SWMP Development and Schedule

(a) Existing regulated small MS4s

Permittees who were regulated under the previous TPDES general permit TXR040000, shall update and submit to the TCEQ an updated SWMP under this general permit along with the NOI for coverage. The NOI and SWMP are due within 180 days of the general permit effective date. The permittee shall continue to operate under the conditions of the previous permit and existing SWMP until the revised SWMP is approved.

(b) New regulated small MS4s

Operators of regulated small MS4s that were not required to obtain permit coverage under the previous TPDES general permit TXR040000, have 180 days from the effective date of the general permit to develop and submit their NOI and SWMP.

(c) Implementation of the SWMP

Existing small MS4 operators shall ensure full implementation of any new elements in the revised SWMP as soon as practicable, but no later than five years from the permit effective date. Previously regulated MS4 operators shall continue to implement existing elements in the approved SWMPs until the revised SWMPs has been approved.

Designated small MS4s must achieve full implementation of the SWMP as soon as practicable, but no later than five years from designation. Newly regulated small MS4s, based on the 2010 Decennial Census, must achieve full implementation of the SWMP as soon as practicable, but no later than five years from the permit effective date.

2. Content of the SWMP

At a minimum, the permittee shall include the following information in its SWMP:

(a) A description of Minimum Control Measures (MCM) with measureable goals, including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action for each MCM described in Part III, Section B.

(b) A measurable goal that includes the development of ordinances or other regulatory mechanisms, allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;

(c) A summary of written procedures describing how the permittee will implement the provisions in Parts III and IV of this general permit.

(d) A description of a program or a plan of compliance with the requirements in Part II.D.4. (relating to Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements)

3. Legal Authority

(a) Traditional small MS4s, such as cities

(1) Within two years from the permit effective date, the permittee shall review and revise, if needed, its relevant ordinance(s) or other regulatory mechanism(s), or shall adopt a new ordinance(s) or other regulatory mechanism(s) that provide the permittee with adequate legal authority to control pollutant discharges into and from its small MS4 in order to meet the requirements of this general permit.

(2) To be considered adequate, this legal authority must, at a minimum, address the following:

a. Authority to prohibit illicit discharges and illicit connections;

b. Authority to respond to and contain other releases – Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the small MS4;

c. Authority to require compliance with conditions in the permittee's ordinances, permits, contracts, or orders;

d. Authority to require installation, implementation, and maintenance of control measures;

e. Authority to receive and collect information, such as stormwater plans, inspection reports, and other information deemed necessary to assess compliance with this permit, from operators of construction sites, new or redeveloped land, and industrial and commercial facilities;

f. Authority, as needed, to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the small MS4;

g. Authority to respond to non-compliance with BMPs required by the small MS4 consistent with their ordinances or other regulatory mechanism(s);

h. Authority to assess penalties, including monetary, civil, or criminal penalties; and

i. Ability to enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

(b) Non-traditional small MS4s, such as counties, drainage districts, transportation entities, municipal utility districts, military bases, prisons and universities

(1) Where the permittee lacks the authority to develop ordinances or to implement enforcement actions, the permittee shall exert enforcement authority as required by this general permit for its facilities, employees, contractors, and any other entity over which it has operational control within the portion of the UA under the jurisdiction of the permittee. For discharges from third party actions, the permittee shall perform inspections and exert enforcement authority to the MEP.

(2) If the permittee does not have inspection or enforcement authority and is unable to meet the goals of this general permit through its own powers, then, unless otherwise stated in this general permit, the permittee shall perform the following actions in order to meet the goals of the permit:

a. Enter into interlocal agreements with municipalities where the small MS4 is located. These interlocal agreements must state the extent to which the municipality will be responsible for inspections and enforcement authority in order to meet the conditions of this general permit; or,

b. If it is not feasible for the permittee to enter into interlocal agreements, the permittee shall notify an adjacent MS4 operator with enforcement authority or TCEQs Field Operations Support Division as needed to report discharges or incidents that it cannot itself enforce against. In determining feasibility for entering into interlocal agreements, the permittee shall consider all factors, including, without limitations, financial considerations and the willingness of the municipalities in which the small MS4 is located.

4. Resources

It is the permittee's responsibility to ensure that it has adequate resources and funding to implement the requirements of this permit.

5. Effluent Limitations

The controls and BMPs included in the SWMP constitute effluent limitations for the purposes of compliance with state rules. This includes the requirements of 30 TAC Chapter 319, Subchapter B, which lists the maximum allowable concentrations of hazardous metals for discharge to water in the state.

6. Enforcement Measures

Permittees with enforcement authority (i.e. traditional small MS4s) shall develop a standard operating procedure (SOP) to respond to violations to the extent allowable under state and local law. When the permittee does not have enforcement authority over the violator, and the violations continue after violator has been notified by the permittee, the permittee shall notify either the adjacent MS4 operator with enforcement authority or TCEQ's Field Operations Support Division.

Section B. Minimum Control Measures

Operators of small MS4s seeking coverage under this general permit shall develop and implement a SWMP that includes the following six minimum control measures (MCMs), as applicable.

All program elements must be implemented according to the schedule mentioned in Part III.A. All six MCMs apply to all MS4s regardless of their level as described in Part II.A.5. Specific program elements under each MCM shall be implemented by all MS4 operators, unless it is specifically stated that particular program elements only are applicable for certain levels of small MS4s.

Permittees shall provide justification within the SWMP for any requirements that were not implemented because they were not feasible as described in each MCM.

1. Public Education, Outreach, and Involvement

(a) Public Education and Outreach

(1) All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. The program must, at a minimum:

a. Define the goals and objectives of the program based on high priority community-wide issues (for example, reduction of nitrogen in discharges from the small MS4, promoting previous techniques used in the small MS4, or improving the quality of discharges to the Edwards Aquifer);

b. Identify the target audience(s);

c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;

d. Determine cost effective and practical methods and procedures for distribution of materials.

(2) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.

(3) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2.. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

(4) MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

(b) Public Involvement

All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related

to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. At a minimum, all permittees shall:

(1) If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;

(2) If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;

(3) Ensure the public can easily find information about the SWMP.

2. Illicit Discharge Detection and Elimination (IDDE)

(a) Program Development

(1) All permittees shall develop, implement and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1(c).

The Illicit Discharge Detection and Elimination (IDDE) program must include the following:

a. An up-to-date MS4 map (see Part III.B.2.(c)(1));

b. Methods for informing and training MS4 field staff (See Part III.B.2.(c)(2));

c. Procedures for tracing the source of an illicit discharge (see Part III. B.2.(c)(5));

d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));

e. For Level 2, 3 and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;

f. For Level 4 small MS4s, procedures for identifying priority areas within the small MS4 likely to have illicit discharges, and a list of all such areas identified in the small MS4 (See Part III.B.2.(g)(1));

g. For Level 4 small MS4s, field screening to detect illicit discharges (See Part III.B.2.(g)(2)).

(2) For non-traditional small MS4s, if illicit connections or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ regional office of the possible illicit connection.

(3) If another MS4 operator notifies the permittee of an illegal connection or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part III.B.2.(c)(3).

(4) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2.. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

(b) Allowable Non-Stormwater Discharges

Non-stormwater flows listed in Part II.C do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the flow as a significant source of pollutants to the small MS4.

(c) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.2(c)(1)-(6)

(1) MS4 mapping

All permittees shall maintain an up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:

a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S;

b. The location and name of all surface waters receiving discharges from the small MS4 outfalls;

c. Priority areas identified under Part III.B.2.(e)(1) if applicable.

(2) Education and Training

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.

(3) Public Reporting of Illicit Discharges and Spills

To the extent feasible, all permittees shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example by including a phone number for complaints and spill reporting.

(4) All permittees shall develop and maintain on site procedures for responding to illicit discharges and spills.

(5) Source Investigation and Elimination

a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable.

(i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.

(ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.

(iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

b. Identification and Investigation of the Source of the Illicit Discharge –All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge extends outside the permittee's boundary, all permittees shall notify the adjacent permitted MS4 operator or TCEQ's Field Operation Support Division according to Part III.A.3.b.

c. Corrective Action to Eliminate Illicit Discharge

(i) If and when the source of the illicit discharge has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

(6) Inspections –The permittee shall conduct inspections, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.

(d) Additional Requirements for Level 3 and 4 small MS4s

In addition to the requirements described in Parts III.B.2(c)(1)-(6) above, permittees who operate level 3 and 4 small MS4s shall meet the following requirements:

(1) Source Investigation and Elimination

Permittees who operate level 3 and 4 small MS4 shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part III.B.2.(e)(2), to verify that the discharge has been eliminated. The permittee shall document its follow-up investigation. The permittee may seek recovery and remediation costs from responsible parties consistent with Part III.A.3., and require compensation related costs. Resulting enforcement actions must follow the procedures for enforcement action in Part III.A.3. If the suspected source of the illicit discharge is authorized under an NPDES/TPDES permit or the discharge is listed as an authorized non-stormwater discharge, as described in Part III.C, no further action is required.

(e) Additional Requirements for Level 4 small MS4s

In addition to the requirements described in Parts III.B.2(c)-(d) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Identification of Priority Areas

Permittees who operate level 4 small MS4s shall identify priority areas and shall document the basis for the selection of each priority area and shall create a list of all priority areas identified. This priority area list must be available for review by the TCEQ.

(2) Dry Weather Field Screening

By the end of the permit term, permittees who operate level 4 small MS4s shall develop and implement a written dry weather field screening program to assist in detecting and eliminating illicit discharges to the small MS4. Dry weather field screening must consist of (1) field observations; and (2) as needed, field screening.

If dry weather field screening is necessary, at a minimum, the permittee shall:

a. Conduct dry weather field screening in priority areas as identified by the permittee in Part III.B.2(e)(1). By the end of the permit term, all of those priority areas, although not necessarily all individual outfalls must be screened.

b. Field observation requirements – The permittee shall develop written procedures for observing flows from outfalls when there has been at least 72 hours of dry weather. The written procedures should include the basis used to determine which outfalls would be observed. The permittee shall record visual observations such as odor, color, clarity, floatables, deposits or stains.

c. Field screening requirements – The permittee shall develop written procedures to determine which dry weather flows will be screened, based on results of field observations or complaint from the public or the permittee's trained field staff. At a minimum, when visual observations indicate a potential problem such as discolored flows, foam, surface sheen, and other similar indicators of contamination, the permittee shall conduct a field screening analysis for selected indicator pollutants as determined by the permittee. Screening methodology may be modified based on experience gained during the actual field screening activities. The permittee shall document the method used.

3. Construction Site Stormwater Runoff Control

(a) Requirements and Control Measures

(1) All permittees shall develop, implement and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the the progam fully implemented by the end of this permit term.

If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).

(b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7)

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.

(2) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.

a. Erosion and Sediment Controls - Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.

b. Soil Stabilization - Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.

c. BMPs – Design, install, implement, and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPs must be designed, installed, implemented and maintained to:

(i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters;

(ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

(iii) Minimize the discharge of pollutants from spills and leaks.

d. As an alternative to (a) through (c) above, all permittees shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.

(3) Prohibited Discharges - The following discharges are prohibited:

a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;

b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;

c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

d. Soaps or solvents used in vehicle and equipment washing;

e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

(4) Construction Plan Review Procedures

To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures, that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

a. The site plan review procedures must incorporate consideration of potential water quality impacts.

b. The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III.B.3.(a) or in the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000.

(5) Construction Site Inspections and Enforcement

To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspections of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

a. Inspections must occur at a frequency determined by the permittee, based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.

b. Inspections must occur during the active construction phase.

(i) All permittees shall develop, implement, and revise as necessary, written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on site or in the SWMP and be made available to TCEQ.

(ii) Inspections of construction sites must, at a minimum:

1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage.
2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements.
3. Assess compliance with the permittee's ordinances and other regulations.
4. Provide a written or electronic inspection report.

c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ.

For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the TCEQ's Field Operations Support Division according to Part III.A.3(b).

(6) Information submitted by the Public

All permittees shall develop, implement and maintain procedures for receipt and consideration of information submitted by the public.

(7) MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.

(c) Additional Requirements for Level 3 and 4 small MS4s

In addition to the requirements described in Parts III.B.3(b)(1)-(7) above, permittees who operate level 3 and 4 small MS4s shall meet the following requirements:

(1) Construction Site Inventory

Permittees who operate level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Notification to the small MS4 should be made by submittal of a copy of an NOI or a small construction site notice. The permittee shall make this inventory available to the TCEQ upon request.

4. Post-Construction Stormwater Management in New Development and Redevelopment

(a) Post-Construction Stormwater Management Program

(1) All permittees shall develop, implement and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre

that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.

(2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement, that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program element fully implemented by the end of the permit term.

(b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.4.(b)(1)-(3)

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2.. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by TCEQ.

(2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.

(3) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:

a. Maintenance performed by the permittee. See Part III.B.5

b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

(c) Additional Requirements for Level 4 small MS4s

In addition to the requirements described in Parts III.B.5(b)(1)-(3) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Inspections - Permittees who operate level 4 small MS4s shall develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance plan. For small MS4s with limited enforcement authority, this requirement applies to the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area.

a. Inspection Reports - The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.

5. Pollution Prevention and Good Housekeeping for Municipal Operations

(a) Program development

(1) All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1.(c))

(b) Requirements for all Permittees

All permitees shall include the requirements described below in Parts III.B.5.(1)-(6) in the program:

(1) Permittee-owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. If feasible, the inventory may include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:

a. Composting facilities;

b. Equipment storage and maintenance facilities;

c. Fuel storage facilities;

d. Hazardous waste disposal facilities;

e. Hazardous waste handling and transfer facilities;

f. Incinerators;

g. Landfills;

h. Materials storage yards;

i. Pesticide storage facilities;

j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;

k. Parking lots;

l. Golf courses;

m. Swimming pools;

n. Public works yards;

o. Recycling facilities;

p. Salt storage facilities;

q. Solid waste handling and transfer facilities;

r. Street repair and maintenance sites;

s. Vehicle storage and maintenance yards; and

t. Structural stormwater controls.

(2) Training and Education

All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.

(3) Disposal of Waste Material - Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

(4) Contractor Requirements and Oversight

a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in Parts III B.5.(2)-(6).

b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspection by TCEQ.

(5) Municipal Operation and Maintenance Activities

a. Assessment of permittee-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:

(i) Road and parking lot maintenance may include such areas as pothole repair, pavement marking, sealing, and re-paving;

(ii) Bridge maintenance may include such areas as re-chipping, grinding, and saw cutting;

(iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and

(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).

c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:

(i) Replacing materials and chemicals with more environmentally benign materials or methods;

(ii) Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface waters; and

(iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

d. Inspection of pollution prevention measures - All pollution prevention measures implemented at permittee-owned facilities must be visually inspected at a frequency determined by the permittee to ensure they are working properly. A log of inspections must be maintained and made available for review by the TCEQ upon request.

(6) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the permittee and consistent with maintaining the effectiveness of the BMP.

(c) Additional Requirements for Level 3 and 4 small MS4s:

In addition to the requirements described in Parts.B.5.(b)(1)-(6) above, permittees who operate level 3 or 4 small MS4s shall meet the following requirements:

(1) Storm Sewer System Operation and Maintenance

a. Permittees who operate level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures.

b. Permittees who operate level 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).

(2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

Permittees who operate level 3 or 4 small MS4s shall implement an O&M program that includes, if feasible and practicable, a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which must include an implementation schedule and a waste disposal procedure. The basis for the

decision must be included in the SWMP. If a street sweeping and cleaning program is implemented, the permittee shall evaluate the following permittee-owned and operated areas for the program: streets, road segments, and public parking lots including, but not limited to, high traffic zones, commercial and industrial districts, sport and event venues, and plazas, as well as areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.

a. Implementation schedules – If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets, roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee's O&M program.

b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.

c. Sweeper Waste Material Disposal – If utilizing street sweepers, the permittee shall develop a procedure to dewater and dispose of street sweeper waste material and shall ensure that water and material will not reenter the small MS4.

(3) Mapping of Facilities

Permittees who operate level 3 or 4 small MS4s shall, on a map of the area regulated under this general permit, identify where the permittee-owned and operated facilities and stormwater controls are located.

(4) Facility Assessment

Permittees who operate level 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:

a. Assessment of Facilities' Pollutant Discharge Potential - The permittee shall review the facilities identified in Part III.B.5.(b) once per permit term for their potential to discharge pollutants into stormwater.

b. Identification of *high priority* facilities - Based on the Part III.B.5.(c)(4)a. assessment, the permittee shall identify as *high priority* those facilities that have a high potential to generate stormwater pollutants and shall document this in a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.

c. Documentation of Assessment Results - The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.

(5) Development of Facility Specific SOPs

Permittees who operate level 3 or 4 small MS4s shall develop facility specific stormwater management SOPs. The permittee may utilize existing plans or documents that may contain the following required information:

a. For each high priority facility identified in Part III.B.5.(c)(4)b., the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility.

b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept on site when possible and must be updated as necessary.

(6) Stormwater Controls for High Priority Facilities

Permittees who operate level 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part III.B.5.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

a. General good housekeeping – Material with a potential to contribute to stormwater pollution should be sheltered from exposure to stormwater when feasible.

b. De-icing and anti-icing material storage - The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.

c. Fueling operations and vehicle maintenance - The permittee shall develop SOPs (or equivalent existing plans or documents) which address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.

d. Equipment and vehicle washing - The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharged under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.

(7) Inspections

Permittees who operate level 3 or 4 small Ms4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

(d) Additional Requirements for Level 4 small MS4s:

In addition to all the requirements described in Parts III.B.5(b) and III.B.5.(c) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Pesticide, Herbicide, and Fertilizer Application and Management

a. Landscape maintenance - The permittee shall evaluate the materials used and activities performed on public spaces owned and operated by the permittee such as parks, schools, golf courses, easements, public rights of way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these areas may include mowing, fertilization, pesticide application, and irrigation. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides, and organic debris.

b. The permittee shall implement the following practices to minimize landscaping-related pollutant generation with regard to public spaces owned and operated by the permittee:

(i) Educational activities, permits, certifications, and other measures for the permittee's applicators and distributors.

(ii) Pest management measures that encourage non-chemical solutions where feasible. Examples may include:

(a) Use of native plants or xeriscaping;

(b) Keeping clippings and leaves out the small MS4 and the street by encouraging mulching, composting, or landfilling;

(c) Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions;

(d) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety.

c. The permittee shall develop schedules for chemical application in public spaces owned and operated by the permittee that minimize the discharge of pollutants from the application due to irrigation and expected precipitation.

d. The permittee shall ensure collection and proper disposal of the permittee's unused pesticides, herbicides, and fertilizers.

6. Industrial Stormwater Sources

(a) Permittees operating a level 4 small MS4 shall include the requirements described below in Part III. B.6.(1) – this requirement is only applicable to level 4 MS4s

(1) Permittees who operate level 4 small MS4s shall identify and control pollutants in stormwater discharges to the small MS4 from permittee's landfills; other treatment, storage, or disposal facilities for municipal waste (for example, transfer stations and incinerators); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the small MS4. The program must include priorities and procedures for inspections and for implementing control measures for such discharges.

7. Authorization for Construction Activities where the Small MS4 is the Site Operator

The development of this MCM for construction activities, where the small MS4 is the site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000 for each construction activity. Permittees that choose to develop this measure will be authorized to discharge stormwater and certain non-stormwater from construction activities where the MS4 operator meets the definition of a construction site operator in Part I of this general permit. When developing this measure, permittees are required to meet all requirements of, and be consistent with, applicable effluent limitation guidelines for the Construction and Development industry (40 CFR Part 450), TPDES CGP TXR150000, and Part III.B.3 of this permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the small MS4 located within a UA or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their small MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES CGP, TXR150000, or under an individual TPDES permit.

This MCM is only available for projects where the small MS4 is a construction site operator or owner, and the MCM does not provide any authorization for other construction site operators at a municipal project.

Controls required under this MCM must be implemented prior to discharge from a municipal construction site into surface water in the state.

(a) The MCM must include:

(1) A description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;

(2) A description of the area that this MCM will address and where the permittee's construction activities are covered (for example within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);

(3) Either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for stormwater discharges;

(4) A general description of how a SWP3 will be developed for each construction site, according to Part VI of this general permit, "Authorization for Municipal Construction Activities"; and

(5) Records of municipal construction activities authorized under this optimal MCM, in accordance with Part VI of this general permit.

Section C. General Requirements

Permittees shall provide information in the SWMP documenting the development and implementation of the program. At a minimum, the documentation must include:

1. A list of any public or private entities assisting with the development or implementation of the SWMP;
2. If applicable, a list of all MS4 operators contributing to the development and implementation of the SWMP, including a clear description of the contribution;
3. A list of all BMPs and measurable goals for each of the MCMs;
4. A schedule for the implementation of all SWMP requirements. The schedule must include, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action throughout the permit term.
5. A description of how each measurable goal will be evaluated; and
6. A rationale statement that addresses the overall program, including how the BMPs and measurable goals were selected.

Part IV. Recordkeeping and Reporting

Section A. Recordkeeping

1. The permittee shall retain all records, a copy of this TPDES general permit, and records of all data used to complete the application (NOI) for this general permit and satisfy the public participation requirements, for a period of at least three (3) years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the executive director at any time.
2. The permittee shall submit the records to the executive director only when specifically asked to do so. The SWMP required by this general permit (including a copy of the general permit) must be retained at a location accessible to the TCEQ.
3. The permittee shall make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten (10) working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.
4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

Section B. Reporting

1. General Reporting Requirements

(a) Noncompliance Notification

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. Report of such information must be provided orally or by electronic facsimile

transmission (FAX) to the TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the appropriate TCEQ regional office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

(1) A description of the noncompliance and its cause;

(2) The potential danger to human health or safety, or the environment;

(3) The period of noncompliance, including exact dates and times;

(4) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(5) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

(b) Other Information

When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report, the permittee shall promptly submit the facts or information to the executive director.

2. Annual Report

The MS4 operator shall submit a concise annual report to the executive director within 90 days of the end of each reporting year. For the purpose of this section, the reporting year may include either the permit year, the permittee's fiscal year or the calendar year, as elected by the small MS4 and notified to the TCEQ in the application submittal. The annual report must address the previous reporting year.

The first reporting year for annual reporting purposes shall begin on the permit effective date, and shall last for a period of one (1) year (the end of the "permit year"). Alternatively, if the permittee elects to report based on its fiscal year, the first reporting year will last until the end of the fiscal year following the end of the first permit year. If the permittee elects to report based on the calendar year, then the first reporting year will last until December 31, 2014.

Subsequent calendar years will begin at the beginning of the first reporting year (which will vary based on the previous paragraph) and last for one (1) year. The MS4 operator shall also make a copy of the annual report readily available for review by TCEQ personnel upon request. The report must include:

(a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

(b) A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

(c) If applicable, a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4s BMPs used to address the pollutant of concern;

(d) A summary of the stormwater activities the MS4 operator plans to undertake during the next reporting year;

(e) Proposed changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;

(f) Description and schedule for implementation of additional BMP's that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementations plans;

(g) Notice that the MS4 operator is relying on another government entity to satisfy some of its permit obligations (if applicable);

(h) The number of construction activities where the small MS4 is the operator and authorized under the 7th optional MCM, including the total number of acres disturbed; and

(i) The number of construction activities that occurred within the jurisdictional area of the small MS4 (as noticed to the permittee by the construction operator), and that were not authorized under the 7th MCM.

An annual report must be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the permittee has either not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI and SWMP, then the annual report may include that information.

If permittees share a common SWMP, they shall contribute to and submit a single system-wide report. Each permittee shall sign and certify the annual report in accordance with 30 TAC § 305.128 (relating to Signatories to Reports).

The annual report must be submitted with the appropriate TCEQ reporting forms if available, or as otherwise approved by TCEQ.

The annual report must be submitted to the following address:

Texas Commission on Environmental Quality
Stormwater & Pretreatment Team; MC - 148
P.O. Box 13087
Austin, Texas 78711-3087

A copy of the annual report must also be submitted to the TCEQ Regional Office that serves the area of the regulated small MS4.

If available, electronic submission of annual reports is encouraged. The Federal Waste Reduction Act and the Government Paperwork Elimination Act encourages governmental agencies to use electronic submission. See the TCEQ website at, www.tceq.texas.gov for additional information and instructions.

Part V. Standard Permit Conditions

A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the general permit and statutes under which it was issued, and is grounds for enforcement action, for terminating coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit.

B. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

C. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

D. Authorization under this general permit may be suspended or revoked for cause. Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee shall furnish to the executive director, upon request and within a reasonable timeframe, any information necessary for the executive director to determine whether cause exists for modifying, revoking, suspending, reissuing or terminating authorization under this general permit. Additionally, the permittee shall provide to the executive director, upon request, copies of all records that the permittee shall maintain as a condition of this general permit.

E. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of this permit and with the condition of the permittee's SWMP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed only when the operation is necessary to achieve compliance with the conditions of this permit.

F. Inspection and entry shall be allowed under the TWC Chapters 26-28, Health and Safety Code §§ 361.032-361.033 and 361.037, and 40 CFR §122.41(i). The statement in TWC § 26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

G. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under the TWC, Chapters 26, 27, and 28, and the Texas Health and Safety Code, Chapter 361 for violations including but not limited to the following:

1. Negligently or knowingly violating CWA, §§ 301, 302, 303, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA, § 402; and

2. Knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.

H. All reports and other information requested by or submitted to the executive director must be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

I. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.

J. The permittee shall implement its SWMP on any new areas under its jurisdiction that are located in a UA or that are designated by the TCEQ. Implementation of the SWMP in these areas is required the greater of three (3) years from acquiring the new area, or five (5) years from the date of initial permit coverage.

Part VI. Authorization for Municipal Construction Activities – Applicable only if the 7th Optional MCM is selected

The MS4 operator may obtain authorization under TPDES CGP, TXR150000 to discharge stormwater runoff from each construction activity performed by the MS4 operator that results in a land disturbance of one (1) acre or more of land or less than one (1) acre of land, if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Alternatively, the MS4 operator may develop the SWMP to include the optional seventh (7^{th}) stormwater MCM listed in Part III.B.7 of this general permit if the eligibility requirements in Part VI.A. below are met. If an MS4 operator decides to utilize this MCM, then the MS4 operator must include this MCM in its SWMP submitted with the NOI or submit an NOC notifying the executive director of the addition of this MCM to its SWMP. The MS4 operator must identify the geographic area or boundary where the construction activities will be conducted under the provisions of this general permit. If the permittee meets the terms and requirements of this general permit, then discharges from these construction activities may be authorized under this general permit as long as they occur within the regulated geographic area of the small MS4. An MS4 operator may utilize this MCM over additional portions of their small MS4 if those areas are also in compliance with all MCMs listed in this general permit. Even if an MS4 operator has developed this optional seventh stormwater MCM, the MS4 operator may apply under TPDES CGP TXR150000 for authorization for particular municipal construction activities including those activities that occur during periods of low potential for erosion (for which no SWP3 must be developed).

Section A. Eligible Construction Sites

Discharges from construction activities within the regulated area where the MS4 operator meets the definition of construction site operator are eligible for authorization under this general permit. Discharges from construction activities outside of the regulated area, where the MS4 operator meets the definition of construction site operator, are only eligible for authorization under this general permit in those areas where the MS4 operator meets the requirements of Parts III.B.1. through III.B.6 of this general permit, related to MCMs.

Section B. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

Discharges of stormwater runoff from small and large construction activities may be authorized under this general permit.

2. Discharges of Stormwater Associated with Construction Support Activities

Discharges of stormwater runoff from construction support activities, including concrete batch plants, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas may be authorized under this general permit provided:

(a) The activity is located within a one-mile distance from the boundary of the permitted construction site and directly supports the construction activity;

(b) A SWP3 is developed according to the provisions of this general permit and includes appropriate controls and measures to control sediment and erosion and discharge of pollutants in stormwater runoff from the supporting construction activity site;

(c) The construction support activity either does not operate beyond the completion date of the construction activity or obtains separate TPDES authorization for discharges as required; and

(d) Discharge of stormwater from concrete production facilities must meet the requirements in Section E below

3. Non-Stormwater Discharges

The following non-stormwater discharges from construction sites authorized under this general permit are also eligible for authorization under this MCM:

(a) Discharges from emergency fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);

(b) Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) Water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) Uncontaminated water used to control dust;

(e) Potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);

(f) Uncontaminated air conditioning condensate; and

(g) Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

4. Other Permitted Discharges

Any discharge authorized under a separate TPDES or TCEQ permit may be combined with discharges from construction sites operated by the small MS4, provided the discharge complies with the associated permit.

Section C. Limitations on Permit Coverage

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under Part VI of the general permit.

Section D. Stormwater Pollution Prevention Plan (SWP3) Requirements

Operators of municipal construction activities that qualify for coverage under this general permit and that discharge stormwater associated with construction activities into surface water in the state must:

1. Develop a SWP3 according to the provisions of this general permit that covers the entire site and begin implementation of that plan prior to commencing construction activities;
2. Post a signed copy of a TCEQ approved site notice in a location at the construction site where it is readily available for viewing prior to commencing construction activities and maintain the notice in that location until completion of the construction activity and final stabilization of the site;
3. Ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this general permit and the SWP3;
4. Ensure all contractors are aware of the SWP3 requirements, are aware that municipal personnel are responsible for the day-to-day operations of the SWP3, and who to contact concerning SWP3 requirements; and
5. Ensure that the SWP3 identifies the municipal personnel responsible for implementation of control measures described in the plan.

Section E. Stormwater Runoff from Concrete Batch Plants

Discharges of stormwater runoff from concrete batch plants at regulated construction sites may be authorized under the provisions of this general permit provided that the following requirements are met for concrete batch plant(s) authorized under this permit. If discharges of stormwater runoff from concrete batch plants are not covered under this general permit, then discharges must be authorized under an alternative general permit or an individual permit. This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

1. Benchmark Sampling Requirements

(a) Operators of concrete batch plants authorized under this section must sample the stormwater runoff from the concrete batch plants according to the requirements of this section of the general permit, and must conduct evaluations of the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 1. Benchmark Monitoring

Benchmark Parameters	Benchmark Value	Sampling Frequency	Sample Type
Oil and Grease	15 mg/L	1/quarter (*1)(*2)	Grab (*3)

Benchmark Parameters	Benchmark Value	Sampling Frequency	Sample Type
Total Suspended Solids	100 mg/L	1/quarter (*1)(*2)	Grab (*3)
pH	6.0-9.0 S.U.	1/quarter (*1)(*2)	Grab (*3)
Total Iron	1.3 mg/L	1/quarter (*1)(*2)	Grab (*3)

(*1) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*2) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

January through March
April through June
July through September
October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the NOI.

(*3) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

(b) The permittee shall compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

The operator's investigation must identify the following:

(1) Any additional potential sources of pollution, such as spills that might have occurred;

(2) Necessary revisions to good housekeeping measures that are part of the SWP3;

(3) Additional BMPs, including a schedule to install or implement the BMPs; and

(4) Other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater run-on to the permitted facility, by laboratory analyses of samples of stormwater run-off from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

2. BMPs and SWP3 Requirements

Minimum Stormwater Pollution Prevention Plan (SWP3) Requirements - The following are required in addition to other SWP3 requirements listed in this section:

(a) Description of Potential Pollutant Sources - The SWP3 must provide a description of potential sources (activities and materials) that may reasonably be expected to affect the quality of stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe practices that that will be used to reduce the pollutants in these discharges to assure compliance with this general permit, including the protection of water quality, and must ensure the implementation of these practices. The following must be developed, at a minimum, in support of developing this description:

(1) Drainage – The site map must include the following information:

a. The location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

b. A depiction of the drainage area and the direction of flow to the outfall(s);

c. Structural controls used within the drainage area(s);

d. The locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes listed in the TPDES Construction General Permit TXR150000; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

e. The locations of the following: any bag house or other dust control device(s); recycle or sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(2) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and that have a potential to affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(3) Spills and Leaks - A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and that drain to

stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated.

(4) Sampling Data - A summary of existing stormwater discharge sampling data must be maintained, if available.

(b) Measures and Controls - The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part VI.E.2.(a) of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(1) Good Housekeeping - Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

a. Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater.

Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

b. Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(2) Spill Prevention and Response Procedures - Areas where potential spills that can contribute pollutants to stormwater runoff, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(3) Inspections - Qualified facility personnel (for example, a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. The inspection frequency must be specified in the SWP3 based upon a consideration of the level of concrete production at the facility, but must be a minimum of once per month while the facility is in operation. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection or containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(4) Employee Training - An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a

minimum, must consist of one training prior to the initiation of operation of the concrete batch plant.

(5) Record Keeping and Internal Reporting Procedures - A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(6) Management of Runoff - The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

(c) Comprehensive Compliance Evaluation – At least once per year, one (1) or more qualified personnel (for example, a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following:

(1) Visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection or containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(2) Based on the results of the evaluation, the following must be revised as appropriate within two (2) weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part VI.E.2(a), "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part VI.E.2.(b) "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(3) The permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any incidence(s), and the report must be signed according to 30 TAC Section 305.128, relating to Signatories to Reports.

(4) The Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part VI.E.2.(b)(3) of this general permit.

3. Prohibition of Wastewater Discharges

Wastewater discharges associated with concrete production including wastewater disposal by land application are not authorized under this general permit. These wastewater

discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized manner. Discharges of concrete truck washout at construction sites may be authorized if conducted in accordance with the requirements of Part VI of this general permit.

4. Concrete Truck Wash Out Requirements

This general permit authorizes the wash out of concrete trucks at construction sites regulated under this section of the general permit, provided the following requirements are met. Authorization is limited to the land disposal of wash out water from concrete trucks. Any other direct discharge of concrete production waste water must be authorized under a separate TCEQ general permit or individual permit.

(a) Direct discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.

(b) Concrete truck wash out water shall be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.

(c) Wash out of concrete trucks during rainfall events shall be minimized. The direct discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck washout as the result of rain.

(d) The discharge of wash out water shall not cause or contribute to groundwater contamination.

(e) If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated map.

Section F. Effective Date of Coverage

Construction activities may not commence under this section until the MS4 NOI and SWMP are approved in writing by the TCEQ. Following approval of the NOI and SWMP, operators of construction activities eligible for coverage under this general permit are authorized to discharge stormwater associated with construction activity immediately upon posting the signed construction site notice required under this section.

Section G. Deadlines for SWP3 Preparation and Compliance

The SWP3 must:

1. Be completed and initially implemented prior to commencing construction activities that result in soil disturbance;

2. Be updated as necessary to reflect the changing conditions of new contractors, new areas of responsibility, and changes in best management practices; and

3. Provide for compliance with the terms and conditions of this general permit.

Section H. Plan Review and Making Plans Available

The SWP3 must be retained on-site at the construction site or made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; and to local government officials.

Section I. Keeping Plans Current

The permittee shall amend the SWP3 whenever either of the following occurs:

1. There is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3; or
2. Results of inspections or investigations by site operators, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section J. Contents of SWP3

The SWP3 must include, at a minimum, the information described in this section.

1. Site Description

A site description, or project description, which must include:

(a) A description of the nature of the construction activity, potential pollutants and sources;

(b) A description of the intended schedule or sequence of major activities that will disturb soils for major portions of the site;

(c) The number of acres of the entire construction site property and the total number of acres of the site where construction activities will occur, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas;

(d) Data describing the soil type or the quality of any discharge from the site;

(e) A map showing the general location of the site (e.g. a portion of a city or county map);

(f) A detailed site map indicating the following:

(1) Drainage patterns and approximate slopes anticipated after major grading activities;

(2) Areas where soil disturbance will occur;

(3) Locations of all major structural controls either planned or in place;

(4) Locations where temporary or permanent stabilization practices are expected to be used;

(5) Locations of construction support activities, including off-site activities that are authorized under the permittee's NOI, including material, waste, borrow, fill, or equipment storage areas;

(6) Surface waters (including wetlands) either at, adjacent, or in close proximity to the site;

(7) Locations where stormwater discharges from the site directly to a surface water body or a MS4; and

(8) Vehicle wash areas.

(g) The location and description of asphalt plants and concrete plants (if any) providing support to the construction site and that are also authorized under this general permit;

(h) The name of receiving waters at or near the site that will be disturbed or that will receive discharges from disturbed areas of the project; and

(i) A copy of Part VI of this TPDES general permit.

2. Structural and non-structural controls

The SWP3 must describe the structural and the non-structural controls (best management practices) that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation and the party responsible for implementation. At a minimum, the description must include the following components:

(a) Erosion and Sediment Controls

(1) Erosion and sediment controls must be designed to retain sediment on-site to the maximum extent practicable with consideration for local topography and rainfall.

(2) Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications. If periodic inspections or other information indicates a control has been used incorrectly, or that the control is performing inadequately, the operator must replace or modify the control.

(3) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50 per cent.

(4) If sediment escapes the site, accumulations must be removed at a frequency to minimize further negative effects and, whenever feasible, prior to the next rain event.

(5) Controls must be developed to limit offsite transport of litter, construction debris, and construction materials by stormwater runoff.

3. Stabilization Practices

The SWP3 must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible.

(a) Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation and other similar measures.

(b) The following records must be maintained and either attached to or referenced in the SWP3 and made readily available upon request to the parties in Part VI.H. of this general permit:

(1) The dates when major grading activities occur;

(2) The dates when construction activities temporarily or permanently cease on a portion of the site; and

(3) The dates when stabilization measures are initiated.

(c) Stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily or permanently ceased, and will not resume for a period exceeding 14 calendar days, except as provided in (1) and (2) below.

(1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(2) Where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable. These conditions exist in arid areas, semiarid areas, and areas experiencing drought conditions.

4. Structural Control Practices

The SWP3 must include a description of any structural control practices used to divert flows away from exposed soils, to limit the contact of runoff with disturbed areas, or to lessen the off-site transport of eroded soils.

(a) Sites with a drainage area of ten (10) or more acres:

(1) A sediment basin is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin may be temporary or permanent, but must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from off-site areas and flow from on-site areas that are either undisturbed or have already undergone final stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations must be included in the SWP3.

(2) Where rainfall data is not available or a calculation cannot be performed the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until the site reaches final stabilization.

(3) If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until the site reaches final stabilization. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation pattern, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

(4) Perimeter Controls – At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(b) Controls for sites with drainage areas less than ten acres:

(1) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten (10) acres. At a minimum, silt

fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(2) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

5. Permanent Stormwater Controls

A description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed must be included in the SWP3. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site.

6. Other Controls

(a) Off-site vehicle tracking of sediments and the generation of dust must be minimized.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to reduce pollutants from these materials.

(c) The SWP3 must include a description of pollutant sources from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

7. Effluent Limits

The federal Effluent Limitations Guidelines at 40 CFR Part 450.21(a) apply to all regulated construction activities under this 7th optional MCM, where the small MS4 is the operator.

8. Approved State and Local Plans

(a) The permittee shall ensure the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

(b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for whom the permittee receives written notice.

9. Maintenance

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If through inspections the permittee determines that BMPs are not operating effectively, maintenance must be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated

storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

10. Inspections of Controls

(a) Personnel provided by the permittee must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site. Sediment and erosion control measures identified in the SWP3 must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

Where sites have been finally or temporarily stabilized or where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), inspections must be conducted at least once every month. In arid or semi-arid, or drought stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater

As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection. The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(b) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part VI.J.10(a) above. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part VI.J.10.(a) above. The conditions of the controls along each inspected 0.25 mile portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 mile portion to either the end of the next 0.25 mile inspected portion, or to the end of the project, whichever occurs first.

As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be

developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection. The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

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

(d) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

(e) A report summarizing the scope of the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: The locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

(f) The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

11. Pollution Prevention Measures

The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge.

Section K. Additional Retention of Records

The permittee shall retain the following records for a minimum period of three (3) years from the date that final stabilization has been achieved on all portions of the site. Records include:

1. A copy of the SWP3; and
2. All reports and actions required by this section, including copies of the construction site notices.

Appendix B

City of Tomball Ordinances

*Cross reference—Health and sanitation, ch. 42.

ARTICLE VI. - WATER AND SEWER LINES*

Sec. 82-231. - When construction permitted.
Sec. 82-232. - When payback is applicable; basis.
Sec. 82-233. - Approval by the city.
Sec. 82-234. - Preparation of map.
Sec. 82-235. - Conformity to city standards.
Sec. 82-236. - Violations.
Sec. 82-237. - Extension of city-owned utilities; requiring connections to city water, sewer and gas lines for service of new construction.
Secs. 82-238—82-250. - Reserved.

Sec. 82-231.- When construction permitted.

All persons, including subdividers, property owners and developers, hereinafter referred to as "subdividers", who own or control property which is so situated with reference to any sewer or water line in the city as, in the opinion of the city council or such officer as may be designated for the purpose, to make it practical to connect with any sewer or water line, may, at their cost and expense, lay and construct water and sewer lines in and along the streets and ways of the city to connect with such water and sewer lines in accordance with the master plan of the city and such conditions as may be prescribed by the ordinances or the city council.

(Code 1978, § 5-61)

Sec. 82-232.- When payback is applicable; basis.

The payback provisions of this article shall only apply to extensions of main trunk lines to the property line of the subdivider. Any lines constructed within the subdivision or property of the subdivider, or those which are feeder lines, shall not be taken into consideration when determining the amount of payback under this article. It is hereby declared that all sewers and water lines laid under the provisions of this article shall be in all respects owned, managed, controlled and regulated by the city, and connections made therewith shall be governed and regulated in the same manner as connections with any sewers and water lines, except that the right is hereby reserved to subdividers constructing same, to receive, for private service connections, a payback for the subdividers cost of constructing the water and/or sewer line. Such payback amount is to be based upon a pro rata share of the initial cost of the construction as it relates to the number of square feet in the tract being serviced by the private service connection. The amount of reimbursement to the subdividers constructing the water and/or sewer lines shall be established by the city council after a hearing, establishing the cost of the construction and the area to be serviced.

(Code 1978, § 5-62)

Sec. 82-233.- Approval by the city.

(a)
Before beginning any construction of the improvements authorized in this article, complete plans and specifications for such improvements shall have first been completely approved by the director of public works and the city engineer as meeting the city's standards.
(b)
The director of public works, or his duly authorized representative, shall from time to time inspect the construction of all utility facilities during the course of construction to see that the same shall comply with the city's standards governing the same. In this regard, free access shall be accorded the director of public works and his duly authorized representative by the subdivider, his agents and employees. Inspection by the director of public works or a failure of the director of public works to inspect construction shall not in any way impair or diminish the obligation of the subdivider to install improvements in accordance with the plans and specifications therefor as approved by the city engineer and director of public works in accordance with the city's standards.

(Code 1978, § 5-63)

Sec. 82-234.- Preparation of map.

Upon the construction of the water or sewer line by the subdivider, who has a right of payback for the construction of such water or sewer line, the city shall prepare a map indicating the area within which any use of the water or sewer lines would require a payback to the subdivider who constructed the water or sewer line. This map designating the area in which a payback would result shall be placed on public record at the city hall and all developers applying for permits shall be made aware of the existence of the map and the cost of developing and using the water and sewer lines.

(Code 1978, § 5-64)

Sec. 82-235.- Conformity to city standards.

The water and/or sewer lines constructed under this article shall conform to the recommendations of the city engineer and director of public works, in the design, size and layout of the water distribution system. The water design shall be acceptable, without penalty, to the Texas Fire Insurance Commission and shall be approved by the city engineer and the director of public works. All materials and installations for water and sewer lines shall be in accordance with the Texas Department of Health Standards and the American Water Works Association standards and with the city's standards for same and shall be approved by the city engineer and the director of public works.

(Code 1978, § 5-65)

Sec. 82-236.- Violations.

Any subdivider who lays or constructs any sewer and/or water line or makes any connection with any sewer and/or water line for which a payback would be due under this article without having first complied with the provisions of this article or who shall refuse to permit the city to make connection with any of the proposed sewer and/or water lines, or interfere therewith, or who shall violate any of the provisions of this article shall be guilty of an offense. Cumulative of any other remedy available to it, the city may proceed by injunction or other appropriate remedy to correct any violation of this article.

(Code 1978, § 5-66)

Sec. 82-237.

- Extension of city-owned utilities; requiring connections to city water, sewer and gas lines for service of new construction.

(a)
Utility extensions by the city. It is the policy of the city to extend any or all municipally-owned utilities to unserved residences or businesses when budgeted and appropriated city funds for such extension are available, in accordance with the criteria below:
(1)
Requests for extensions will be addressed in the order in which they are received. The availability of funds for that specific program will be the first requirement considered.
(2)
Annual estimated revenue to the city over five years must equal or exceed the estimated cost of installation to be paid by the city, less applicable capital recovery fees. Revenue is estimated by the finance director, based on current average annual billings for the category of use. Construction cost is estimated by the public works director using current unit pricing for materials, equipment use and labor.
(3)
Full payments of the required contribution to the city have all been received for the specific program.
(4)
The city will extend water utility service if adequate service can be provided (i) in compliance with Texas Water Commission regulations and guidelines, and (ii) as necessary to supply fire protection services, including the sizing of lines as determined appropriate by the city to meet anticipated future service needs. Sewer service will be extended consistent with available capacity, including the sizing of lines as determined appropriate by the city to meet anticipated future service needs. Gas service will be extended in a similar manner.
(5)
This policy does not impose any obligation on the city to extend city utilities when such extensions are the responsibility of the owner, builder or developer.
(b)
Nondiscriminatory administration of policy. It is the policy and goal of the city to provide utilities, in accordance with the guidelines of this article, to all citizens on an equal, nondiscriminatory basis. The city is committed to the furtherance of this policy and goal.
(c)
Water, sewer and gas connections required for new construction. All new construction, residential or commercial, shall be connected to and use the city owned water, sewer and gas utilities if such utility service lines are located within 100 feet of any property lines of the subject lot, tract or parcel of land at the time of construction. New construction does not include remodeling or add-ons to existing residential or commercial improvements.
(d)
Penalties. Any person, corporation or entity who or which violates the provisions of this section shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed $2,000.00 per offense. Each day in which any violation shall occur, or each occurrence of any violation, shall constitute a separate offense.

(Ord. No. 93-08, §§ 3—6, 7-12-93)

Secs. 82-238—82-250.- Reserved.

ARTICLE III. - DESIGN STANDARDS

Sec. 70-31. - [Standards and specifications.]
Sec. 70-32. - Comprehensive plan.
Sec. 70-33. - General requirements.
Sec. 70-34. - Public streets; general arrangement and layout.
Sec. 70-35. - Streets; specific standards.
Sec. 70-36. - Street paving.
Sec. 70-37. - Street names.
Sec. 70-38. - One-foot reserves.
Sec. 70-39. - Partial or half streets.
Sec. 70-40. - Easements.
Sec. 70-41. - Federal flood insurance program.
Sec. 70-42. - Building setback requirements.
Sec. 70-43. - Reserve tracts.
Sec. 70-44. - Lots, general provisions.
Sec. 70-45. - Minimum lot sizes.
Sec. 70-46. - Utilities.
Sec. 70-47. - Drainage.
Sec. 70-48. - Sanitary sewer.
Sec. 70-49. - Water.
Sec. 70-50. - Monuments and markers.
Secs. 70-51—70-60. - Reserved.

Sec. 70-31.- [Standards and specifications.]

No preliminary or final plat shall be approved by the commission, and no permit shall be issued for the construction of any improvement intended for public use or for the use of purchasers or owners of lots fronting or adjacent to such improvement, and no improvement intended for public use shall be accepted by the city, unless any such improvements shall comply with the following standards and specifications.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-32.- Comprehensive plan.

All improvements required by this chapter shall conform to the city's comprehensive plan, this chapter, or any other federal, state, or local law or regulation applicable thereto, and all construction shall be in accordance with the "City of Tomball Minimum Construction Standards for Community Improvements."

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-33.- General requirements.

(a)
Approval of plans required. Before beginning any construction of the improvements required by this chapter on proposed roadways, public utilities or drainage facilities, or structures pertaining to any subdivision coming under the provisions of this chapter and either within the city limits or its ETJ, complete plans and specifications for such improvements shall have first been approved, in their entirety, by the director of public works as meeting the appropriate standards as delineated in section 70-32 above. In addition, within 30 days following completion of all improvements as required by the city of the owner or subdivider of the subdivision, the owner or subdivider shall provide to the director of public works, one set of as-built drawings of all underground utilities and street improvements that have been constructed.
(b)
Changes to construction plans. No change in the plans and specifications for a public improvement required hereunder shall be made without the prior written approval of the director of public works.
(c)
Inspection. The director of public works shall from time to time inspect the construction of all required improvements in the subdivision during the course of construction to see that the same comply with the city's standards governing same. In this regard, free access to the subdivision shall be accorded the director of public works by the subdivider, his agents and employees. Inspection by the director of public works, or a failure of the director of public works to inspect construction as required herein, shall not in any way impair or diminish the obligation of the subdivider to install improvements in the subdivision in accordance with plans and specifications therefore as approved by the director of public works, in accordance with the city's standards.
(d)
City standards. The construction standards referred to in this chapter may be revised from time to time by the city council without requiring an amendment to this chapter, such standards being subject to change by motion duly adopted by the city council. Any such changes or revisions shall be immediately noted upon such standards.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-34.- Public streets; general arrangement and layout.

The public street system pattern proposed within any subdivision shall comply with design standards of this section and shall:

(1)
Provide for adequate vehicular access to all properties within the subdivision plat boundaries;
(2)
Provide adequate street connections to adjacent properties to ensure adequate traffic circulation within the general area;
(3)
Provide a local street system serving properties to be developed for residential purposes which discourages through traffic while maintaining sufficient access and traffic movement for convenient circulation within the subdivision and access by fire, police and other emergency services personnel; and
(4)
Provide for a sufficient number of continuous streets to accommodate the traffic demands generated by new development.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-35.- Streets; specific standards.

(a)
Location and alignment. The location and alignment of public streets proposed to be dedicated and established within a subdivision plat shall be designed in conformance with the standards listed in section 70-33 herein.
(b)
Right-of-way width, widening. The width of the right-of-way to be dedicated for any street shall be as set forth below.
(1)
Local streets. The width of the right-of-way for local streets shall be not less than 80 feet. Provided however, a right-of-way width of not less than 60 feet may be approved if there is also dedicated a ten-foot-wide drainage and utility easement immediately adjacent to each side of such local street, which in combination would total 80 feet in width, and an open ditch drainage system is provided for such street. In those instances where a proposed subdivision is located adjacent to an existing public street with a right-of-way width less than 60 feet, sufficient additional right-of-way shall be dedicated within the subdivision to accommodate the development of the street to a total right-of-way width of not less than 60 feet. Notwithstanding the foregoing, the commission may, on written application, in its discretion authorize a street right-of-way width of not less than 50 feet for a local street where such street cannot reasonably be made to continue or extend onto an existing, approved, proposed, or possible future street, is so located that logically it could not be extended to connect with an existing, approved, or proposed street, there is not a likelihood that it would inhibit the ability of the city to provide emergency

services from fire, police, medical, or other rescue personnel, the street provides access to single family residential properties only, and the total length of such street does not exceed 700 feet.
(2)
Collector streets. The width of the right-of-way for collector streets shall be not less than 80 feet.
(3)
Arterial streets. The width of the right-of-way for arterial streets shall be not less than 100 feet.
(c)
[Abutments.] All lots shown on the plat shall abut a public street, or abut a private street that shall meet all requirements herein for public streets. All lots shown on the plat shall have indicated thereon the front of the lot for subsequent construction of a building.
(d)
Curves and intersections.
(1)
Local, collector, and arterial streets. The design and construction of all local, collector, and arterial streets shall meet the guidelines set forth in the "Policy on Geometric Design of Highways and Streets," Fourth Edition, 2001, as published by the American Association of State Highway and Transportation Officials ("AASHTO"), the city's current comprehensive plan, and any other applicable design and construction standards adopted by the city. Such considerations as adopted by the city shall include, but not be limited to street function, street capacity, service levels, traffic safety, pedestrian safety, and utility facilities and their location, which may effect the minimum requirements. Proposed streets shall meet this criteria and be approved by the director of public works prior to final design.
(2)
Right angle. The angle of street intersections shall not vary more than ten degrees from the perpendicular. Where acute angle intersections are approved a radius of at least 25 feet in the right-of-way line at the acute corner shall be provided.
(e)
Cul-de-sac right-of-way radii. The radii of the right-of-way at the end of local streets terminated with a circular cul-de-sac turnaround shall be not less than 50 feet. The city shall cause to be erected at the entrance of any such street a sign reading "dead-end street," but such sign shall be at the expense of the developer.
(f)
Dead-end streets. Dead-end streets shall not be approved except in those instances where the street is terminated by a temporary circular cul-de-sac turnaround or where the street is designated to be extended into adjacent property. Such dead-end streets must also comply with section 70-38, which contains the requirements for the dedication of a one-foot reserve.
(g)
Signs and traffic control devices. The developer shall be responsible for the installation of all required street signs and traffic control devices, as determined by the director of public works or designee. All such signs and traffic control devices shall be in accordance with the Texas Manual on Uniform Traffic Control Devices, 1980 Edition, as published by the Texas Department of Transportation.
(h)
Street lighting. The developer shall be responsible for the installation of street lighting in accordance with the "City of Tomball Minimum Construction Standards for Community Improvements."
(i)
Sidewalks. The developer shall be responsible for the installation of sidewalks in all residential and commercial subdivisions, except in residential subdivisions along streets with open ditch drainage. Sidewalks shall be constructed in accordance with 'City of Tomball Minimum Construction Standards for Community Improvements.' Sidewalks, when applicable, shall be considered as part of the required street system, whether public or private.

(Ord. No. 2001-19, § 2, 1-7-02; Ord. No. 2006-14, § 1, 10-23-06)

Sec. 70-36.- Street paving.

All public or private streets as provided herein shall be constructed in accordance with the "City of Tomball Minimum Standards for Community Improvements." Provided however, no public or private street shall be constructed having a pavement width of less than 28 feet.

(Ord. No. 2001-19, § 2, 1-7-02; Ord. No. 2005-05, § 1, 7-18-05)

Sec. 70-37.- Street names.

All streets dedicated by plat shall be named, and so identified on such plat, in conformance with the following:

(1)
New streets. New street names shall not duplicate existing street names located within the city, other than extensions of existing streets;

(2)
Extensions of existing streets. Existing street names shall be used in those instances where a new street is a direct extension of an existing street or a logical extension (when the streets in question are not and cannot be physically continuous) thereof except in those instances where the existing street name is a duplicate street name;
(3)
Suffixes. Street name suffixes such as court, circle and loop should be designated on streets that are cul-de-sacs or in a configuration of a loop street;
(4)
Prefixes. Street name prefixes such as north, south, east and west may be used to clarify the general location of the street; however, such prefixes shall be consistent with the existing and established street naming and address numbering system of the general area in which the street is located; and
(5)
Alphabetical and numerical streets prohibited. Alphabetical and numerical street names shall not be designated, except in those instances where such street is a direct extension of an existing street with such a name and is not a duplicate street name.
(6)
Street name change. No street name once designated may be changed except by city ordinance.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-38.- One-foot reserves.

In those instances where a street is established by a plat submitted to the commission and such street forms a stub street onto adjacent unplatted acreage, or where such street lies along and parallel with the subdivision boundary and is adjacent to unplatted acreage, a one-foot wide reserve shall be established within the street right-of-way at its "dead-end" terminus, or along the right-of-way adjacent to such unplatted acreage, to form a buffer strip, dedicated to the public, between the street right-of-way and the adjacent unplatted acreage, to prevent access to such street from the adjacent unsubdivided acreage, unless and until the commission has reviewed the development proposals for such adjacent acreage, and a plat of the adjacent property is duly recorded. The conditions associated with the establishment of a one-foot reserve on a plat are contained in the following notation that shall be placed upon the face of any plat where a one-foot reserve is to be established:

> "One-foot reserve dedicated to the City in fee as a buffer separation between the side or end of streets where such streets abut adjacent acreage tracts, the condition of such dedication being that when the adjacent property is subdivided pursuant to a recorded plat, the one-foot reserve shall thereupon become vested in the public for street right-of-way purposes."

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-39.- Partial or half streets.

Partial or half streets may be dedicated in those instances where the commission determines that it is necessary for the proper development of the land and in the public interest to locate a public street right-of-way centered on a property line. The commission shall not approve a partial or half street dedication within a subdivision dedicating less than a 50-foot right-of-way width for a designated arterial street, or less than a 40-foot right-of-way width for a designated collector street, or less than a 30-foot right-of-way width for any other type public street. Appropriate notations and the one foot reserve dedication in fee as provided in section 70-38 shall be placed upon the plat restricting access from any partial or half streets so dedicated to adjacent acreage tracts until the adjacent property is subdivided pursuant to a recorded plat and the additional adjacent right-of-way is acquired providing the full right-of-way as specified in this chapter.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-40.- Easements.

(a)
Utility easements. Utility easements, both above and below grade, are those easements established by plat or separate instrument which are dedicated to the city for public use and designed to accommodate facilities necessary to provide various types of utility services to the individual properties within the plat boundaries. Utility easements may be used for, but not be limited to, facilities necessary to provide water, electrical power, natural gas, telephone, telegraph, cable television, and sanitary sewer services.
(1)
Location. Utility easements shall be provided along the front of all lots except when the commission determines that such location is not feasible for the orderly development of the subdivision, or where the right-of-way is not wide enough to allow for the proper placement and maintenance of all utilities. Utility easements located along the outer boundaries of a subdivision shall contain the full width required for such easement except in those instances where the adjacent property is within a portion of a previously approved and platted subdivision and under the same ownership as the property being platted or where additional easement width is dedicated by separate instrument by the owner of said adjacent tract. In such cases, one-half of the required easement width shall be dedicated within the platted boundary with the other one-half provided outside the platted boundary by separate instrument or through notation on the plat certifying the ownership and dedication of said easement.
(2)
Widths. All utility easements established within any subdivision plat shall not be less than ten feet in width, but may be required to be greater where determined by the director of public works.
(3)
Limitations. All utility easements shall be limited to surface and below grade easements. Aerial easements over utility easements shall be limited to that necessary for transformers, amplifiers, and other similar devices that cannot be placed below grade, it being the express purpose and intent hereof to require all utilities, to the extent reasonably possible, to be placed below ground level.
(b)
Drainage easements. All drainage easements shall be located and properly dedicated to the city to accommodate the drainage requirements necessary for the proper development of the property within the subdivision boundaries and within its natural watershed and in conformance with the city's comprehensive plan, its regulations governing storm drainage and/or flood control, and the requirements of other governmental agencies having jurisdiction over storm drainage or flood control within the area in which the subdivision is located. A suitable note on the plat shall restrict all properties within the subdivision to ensure that drainage easements within the plat boundaries shall be kept clear of fences, buildings, obstructive vegetation, and other obstructions to the operation and maintenance of the drainage facilities therein.

Storm water detention easements. Each storm water detention easement shall be located and designed in accordance with applicable standards of governmental agencies having jurisdiction over surface water drainage or flood control within the area in which the proposed subdivision or development is located. Each subdivision plat that dedicates a storm water detention easement shall contain a restriction on the plat that (1) prohibits the construction of fences or buildings, whether temporary or permanent, or installation or maintenance of plantings or other obstructions to the operation and maintenance of the facility, within the storm water detention easement or upon properties adjacent thereto, and (2) prohibits drainage from abutting properties directly into the storm water detention easement except by means of a drainage structure approved by the director of public works or the authorized public drainage or flood control official.

(c)
Private easements, fee strips.
(1)
Existing easements, fee strips. All easements or fee strips created prior to the subdivision of any tract of land shall be shown on the subdivision plat of said land with appropriate notations indicating the name of the holder of such easement or fee strip, the purpose of the easement and generally the facilities contained therein, the dimensions of the easement or fee strip tied to all adjacent lot lines, street rights-of-way and plat boundary lines, and the recording reference of the instruments creating and establishing said easement or fee strip. In those instances where easements have not been defined by accurate survey dimensions such as "over and across" type easements, the subdivider shall request the holder of such easement to accurately define the limits and location of such easement through the property within the plat boundaries. If the holder of such undefined easement does not define the easement involved and will not certify his refusal to define such easement to the commission, the subdivision plat shall provide accurate information as to the center line location of all existing pipelines or other utility facilities placed in conformance with the easement holder's rights, and building setback lines shall be established not less than 15 feet from and parallel to both sides of the centerline of all underground pipelines or pole lines involved.
(2)
Establishment of special use utility or drainage easements. A special use utility or drainage easement may be established by subdivision plat when such easement is for the purpose of accommodating a utility or drainage facility owned, operated, and maintained by a unit of government and is restricted to either water mains, sanitary sewers, storm sewers, or other drainage

purposes and where it has been determined by the commission that these facilities cannot or should not be accommodated within a general purpose public utility or drainage easement or public street right-of-way. Easements proposed to be established for any privately-owned utility company or private organization providing utility services and restricted for their exclusive use shall not be created by a subdivision plat; however, such private utility facilities may be accommodated and placed within the general purpose utility easements and public streets established within the plat boundary. Nothing herein, however, may prevent such private companies or the subdivider from granting and establishing special or exclusive use easements by separate instrument if such arrangements are deemed necessary to properly serve the properties within the plat boundaries.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-41.- Federal flood insurance program.

No subdivision of land shall be approved unless same complies in all respects with the city's flood damage prevention regulations, as found in chapter 38 of this Code. Each final plat shall have depicted thereon applicable boundaries of all flood zones as provided in the latest edition of the Federal Insurance Rate Maps.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-42.- Building setback requirements.

No plat of any subdivision shall be approved unless building setback lines are established therein in accordance with the city's applicable regulations, as found in chapter 14 of this Code.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-43.- Reserve tracts.

Reserve tracts are those individual parcels of land created within a platted subdivision which are not divided into residential or commercial lots, but are established to accommodate some specific purpose such as a private recreational facility, school or church site, or site for utility facilities or other activities or land uses for which division into lots is not appropriate. Since the use of reserve tracts may not be completely determined by the subdivider or developer at the time plats are prepared and submitted to the city, these reserve tracts are often established as "unrestricted reserves" that allows maximum flexibility in the determination of the ultimate use planned for such properties.

(1)
Street access. Reserves established on any subdivision plat shall have frontage on and be immediately adjacent to at least one street, with such frontage being not less than 60 feet in width.
(2)
Identification and designation. All reserves shall be labeled and identified on the plat, and a description of the use intended for such reserve, if known, shall be noted. If the use of the reserve is not restricted for any specific use, the reserve shall be identified and noted as being "unrestricted." All reserves are to be identified and designated by alphabetical letters, not numbers, along with an indication as to the total acreage of such reserves that shall be shown within each reserve boundary.
(3)
Special purpose reserves. Notwithstanding any other provision contained herein or in chapter 14 of this Code, special purpose reserves may be created which do not otherwise comply with minimum lot size requirements. "Special purpose reserves" shall mean tracts restricted to a use beneficial to the public or to the owners of lots within a subdivision, including but not limited to, tracts housing facilities for utilities, common area amenities such as parks, playgrounds and greenbelts, pipeline regulator stations, and community signs, The commission shall be authorized to waive requirements contained in this chapter which are, because of the nature of the restricted reserve's use, deemed by the commission as inapplicable or inappropriate. For example, the commission would be authorized to waive the requirement that sanitary sewer service be available to a special purpose reserve that is restricted to the housing of a subdivision identification sign. Any special purpose reserve shall be identified on the plat as such, and shall contain an appropriate notation of the restrictions applicable thereto.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-44.- Lots, general provisions.

The purpose of this section is to provide general overall guidelines for the establishment of individual lots within a subdivision.

(1)
General lot design, arrangement, layout. The general lot design within any subdivision shall be based upon the concept that such lots are created and established as undivided tracts of land and that purchasers of such lots can be assured that these tracts of land meet the applicable regulations, including those found in chapter 14 of this Code, which are based upon the following basic criteria:
a.
That the lot is of sufficient size and shape to accommodate easements for all public and private utility services and facilities to adequately serve any residential dwelling unit constructed thereon.
b.
That the lot is of sufficient size and shape and is so located that direct vehicular access is provided from a public street or through an approved private street and that the required number of off-street parking spaces can be provided on the lot without encroachment within any adjacent public or private street right-of-way.
(2)
Lot shapes. Lots shall be designed, so far as possible, with side lot lines being at right angles or radial to any adjacent street right-of-way line. Where all lots are either perpendicular and at right angles or radial to adjacent street rights-of-way, a suitable notation shall be placed upon the plat in lieu of lot line bearings.
(3)
Key or flag shaped lots. For the purposes hereof, a key or flag shaped lot shall mean a lot having gross disparities in width between side lot lines, sometimes resembling a flag on a flag pole, a key, or some other lot shape of comparable irregularity. Key or flag shaped lots shall not be prohibited if otherwise in compliance with the minimum lot size requirements of this and other applicable regulations of the city and, provided that no portion of any such lot is less than 50 feet in width.
(4)
Street access limitations. Rear and side vehicular driveway access from lots to adjacent streets designated as major thoroughfares or any other public street which carries a traffic volume where additional vehicular driveways would create a traffic hazard or impede the flow of traffic, shall not be approved and such access restriction shall be noted directly upon the plat and adjacent to the lots in question.
(5)
Lot and block identification. All blocks established in a subdivision shall be designated on the plat, and shall be numbered consecutively throughout the entire subdivision. Lots established within blocks shall also be numbered consecutively within the block. Lot numbering shall be cumulative throughout the subdivision if the numbering system continues from block to block in a uniform manner.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-45.- Minimum lot sizes.

General provisions. Lot sizes shall comply with minimum requirements set forth in the applicable ordinances of the city, including chapter 14 of this Code.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-46.- Utilities.

Adequate provision for all utilities shall be provided to the entire subdivision. All distribution and service lines of electrical, telephone, television, and other wire-carrier type utilities shall be underground. Transformers, amplifiers, or similar devices associated with the underground lines shall be located upon the ground or below ground level. Where the underground placement of such facilities is not a standard practice of the utility involved, the subdivider or developer shall make arrangements with the applicable utility for payment of all costs associated with the non-standard installation. All utility installations shall comply with the "City of Tomball Minimum Construction Standards for Community Improvements."

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-47.- Drainage.

Drainage facilities shall be designed and constructed in accordance with all federal, state, and local rules and regulations, including the "City of Tomball Minimum Construction Standards for Community Improvements."

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-48.- Sanitary sewer.

Sanitary sewer facilities shall be designed and constructed in accordance with all federal, state, and local rules and regulations, including the "City of Tomball Minimum Construction Standards for Community Improvements." Each lot within a proposed subdivision shall be connected to the sanitary sewer system of the city if any point within such subdivision is located within 1,000 feet of the city's collection system therefor. No septic tank system shall be permitted within any newly platted subdivision when connection to the city's sanitary sewer system is required hereunder.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-49.- Water.

Facilities for the provision of potable water to all areas of the proposed subdivision shall be designed and constructed in accordance with the "City of Tomball Minimum Construction Standards for Community Improvements." Each lot within a proposed subdivision shall be connected to the potable water distribution system of the city if any point within such subdivision is located within 1,000 feet of the city's distribution system therefor. No water well shall be permitted within any newly platted subdivision if potable water is available from the city's system as provided herein.

(Ord. No. 2001-19, § 2, 1-7-02)

Sec. 70-50.- Monuments and markers.

(a)
Concrete monuments, six inches in diameter and 24 inches long, shall be placed on all boundary corners, block corners, curve points, and angle points. A copper pin one-quarter inch in diameter embedded three inches in the monument shall be placed at the exact intersection point on the monument. The monuments shall be set at such an elevation that they will not be disturbed during construction, and the top of the monument shall not be less than 12 inches below the finish ground level.
(b)
Lot markers shall be five-eighths inch or greater reinforcing bar, 24 inches long, or approved equal, and shall be placed at all lot corners flush with the ground, or below ground if necessary in order to avoid being disturbed.
(c)
Where no benchmark is established or can be found within 300 feet of the boundary of the subdivision, such benchmark shall be established to the latest edition of the U.S. Coast and Geodetic Survey datum. The benchmark shall be established upon a permanent structure, or may be set as a monument and shall be readily accessible and identifiable on the ground.

(Ord. No. 2001-19, § 2, 1-7-02)

Secs. 70-51—70-60.- Reserved.

Chapter 44 - LANDSCAPING, PARK AND OPEN SPACE STANDARDS

ARTICLE I. - LANDSCAPING STANDARDS
ARTICLE II. - BUFFERING AND SCREENING

Tomball, Texas, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 44 - LANDSCAPING, PARK AND OPEN SPACE STANDARDS >> ARTICLE I. - LANDSCAPING STANDARDS >>

ARTICLE I. - LANDSCAPING STANDARDS

Sec. 44-1. - New development.
Sec. 44-2. - Definitions.
Sec. 44-3. - Landscaping required.
Sec. 44-4. - Credits; minimum requirements.
Sec. 44-5. - Prohibited activities.
Sec. 44-6. - Trees within public rights-of-way.
Secs. 44-7—44-9. - Reserved.

Sec. 44-1.- New development.

A developer shall provide and maintain landscaped areas within all new developments according to the standards contained in this article. The standards contained herein are minimum standards.

(Ord. No. 2003-01, § 2, 3-17-03)

Sec. 44-2.- Definitions.

Buffer shall mean a specified land area, together with the planting and landscaping required on any building site, which may also contain a barrier, such as a berm or a fence, where such additional screening is necessary to achieve the desired level of buffering between various activities, and shall meet the minimum requirements to provide a year-round visual obstruction.

Building site shall mean the tract, parcel or lot of land area which is being developed and which is designated on the building permit application, together with all contiguous tracts or parcels of land held under common ownership and any existing buildings and appurtenant parking.

Diameter shall mean the minimum diameter of a tree as measured six inches about the root collar for trees up to and including four inches in diameter and 12 inches above the root collar for trees having a larger diameter.

Drip line shall mean the periphery of an area underneath a tree, which would be encompassed by the perpendicular line dropped from the outermost edges of the crown of the tree.

Groundcover plants. No minimum size is required but the planting is to be done so as to develop full coverage within 18 months.

Landscape development shall mean trees, shrubs, groundcover plants, vines, or grass installed in planting areas, having a minimum of ten square feet of actual plantable area and a minimum inside dimension on any side of 18 inches.

Private property shall mean any industrial, commercial, business, multi-family, or townhouse site development.

Public property shall mean any land owned by the city, including street rights-of-way and yards around public buildings.

Root collar shall mean an encircling structure of band-like markings or a marked color change (from the tree bark) located at the highest part of the root system joining into the trunk of the tree at or slightly below the surrounding soil line.

Screening shall mean any method of visually shielding or obscuring one land use from another by the planting of evergreen trees or shrubs, or both, or the erection of a screening fence designed to minimize the transmission or propagation of noise, light, vibration, or dust from traffic or other activity on one property to adjoining public or private properties. Screening shall meet minimum requirements to provide a year-round visual obstruction.

Shrub shall mean any self-supporting, woody, deciduous or evergreen species, which is generally multi-stemmed and sold by height or spread and measured in inches or feet, as normally will grow in the county.

Tree shall mean any self-supporting wood plant, evergreen or deciduous, which at the time of planting has a caliper equal to or greater than two inches as measured six inches about the root collar, which is not less than six feet in height as measured from the root collar, and shall be of a species that normally grows to an overall height of a minimum of 15 feet in the county.

(Ord. No. 2003-01, § 2, 3-17-03)

Sec. 44-3.- Landscaping required.

(a)
This section shall set forth the minimum standards and shall apply to all property developed, except single- or two-family residential buildings. No building permit shall be issued unless the minimum area, prescribed in table A below, of the building site not covered by a building or structure is devoted to landscape development.

Table A	
Total Area of Site	*Required Landscape Development*
Up to 20,000 sq. ft.	5% of area not covered by building or structure
20,000 to 200,000 sq. ft.	7-1/2% of area not covered by building or structure
Above 200,000 sq. ft.	10% of area not covered by building or structure
The required number of trees on a building site not covered by a building or structure shall be:	
Area Not Covered By Building or Structure	*No. of Trees Required*
Less than 3,000 sq. ft.	0
3,000—7,000 sq. ft.	1
7,001—10,000 sq. ft.	2
10,001—20,000 sq. ft.	3
20,001—30,000 sq. ft.	4
30,001—40,000 sq. ft.	6

40,001 sq. ft. or greater	3 per 20,000 sq. ft.*
* Round to the next highest whole tree.	

(b)
Landscape development located within the rear setback area of a building site and not adjacent to a public street shall not be considered when determining the minimum requirements of this section.
(c)
Trees planted to meet these requirements must have a minimum caliper of two inches at six inches above the root collar.
(d)
If a building or development, constructed or substantially constructed prior to the date of adoption of this chapter, is altered or enlarged, such building or development shall not be subject to the provisions.
(e)
Landscaping plan. A landscaping plan shall be submitted at the time of application for any preliminary plat or building permit application, and such landscaping plan required under this section shall contain the following information:
(1)
The location and type of all existing trees on the building site, which are six inches or more in diameter, and delineation of which trees or natural features are to be retained;
(2)
A description/plan of how existing healthy trees to be retained on the site will be protected from damage during construction;
(3)
The location, height, and material of all proposed screening and fencing on the site;
(4)
The location and dimension of proposed landscape development; and
(5)
A description of trees, shrubs, and groundcover plants shown on the plan, including names, location, quantities, size (diameter and/or container), height, spread, and spacing.
(f)
Alternate landscaping design. The planning commission may consider and approve an alternative plan, which is not in strict compliance with the requirements of this chapter. Such alternative plan must meet the objectives and purposes of this chapter, as determined by the planning commission, may not reduce the standards set forth herein, and clearly be superior to a plan that would otherwise be in strict compliance. In making this determination, the planning commission may consider the topography, shape, size, or other natural features of the building site; the suitability of any alternative screening or buffering proposal; and other similar factors.
(g)
Replacement of dead landscaping plants. If any required landscaping tree, shrub, or groundcover plant should die, the owner shall replace these plants by the end of the next planting season.
(h)
Replacement of existing landscape development. Any major or significant modification to a landscape development constructed or installed in association with this chapter must be in accordance with this chapter and must be approved by the city's building official.

(Ord. No. 2003-01, § 2, 3-17-03)

Sec. 44-4.- Credits; minimum requirements.

(a)
Tree preservation credit. Landscaping plans that preserve existing trees shall be given credit toward the total number of trees required as shown below:

Diameter of existing tree	Credit against tree requirement
1"—3"	1.0 tree
3½"—9"	2.0 trees
9½"—15"	3.0 trees
15½" or greater	6.0 trees

(b)
If a credited tree dies for any reason, it must be replaced with the credit number of trees within 120 days.

(Ord. No. 2003-01, § 2, 3-17-03)

Sec. 44-5.- Prohibited activities.

The following activities shall be prohibited within the limits of the drip line of any existing tree to be retained under the provisions of a landscape plan required by this chapter:

(1)
Material storage. No materials intended for use in construction or waste materials accumulated due to excavation or demolition;
(2)
Equipment cleaning/liquid disposal. No equipment shall be cleaned or other liquids deposited, including paint, oil, solvents, asphalt, concrete, mortar, or other materials;
(3)
Tree attachments. No signs, wires, or other attachments, other than those of a protective nature, which have been approved in the tree disposition plan; and
(4)
Vehicular traffic. No vehicle, construction equipment or parking is allowed.

(Ord. No. 2003-01, § 2, 3-17-03)

Editor's note—*Ord. No. 2003-01, § 2, adopted March 17, 2003, enacted provisions intended for use as subsections (a)—(d). To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as subsections (1)—(4).*

Sec. 44-6.- Trees within public rights-of-way.

A person commits an offense if he removes or destroys a tree within a street right-of-way, or upon any public property, without first obtaining written authorization therefor from the city manager.

(Ord. No. 2003-01, § 2, 3-17-03)

Secs. 44-7—44-9.- Reserved.

ARTICLE II. - BUFFERING AND SCREENING

Sec. 44-10. - Purpose.
Sec. 44-11. - Buffering and screening.

Sec. 44-10.- Purpose.

Requirements are set forth in this article for the provision of buffers between different types of land uses. The buffer is designed to eliminate or minimize potential nuisances and to reduce potentially adverse impacts of noise, odor, or incompatible uses. Such nuisances may include, but shall not be limited to, dirt, litter, noise, lights, signs, unsightly buildings or parking areas.

(Ord. No. 2003-01, § 2, 3-17-03)

Sec. 44-11.- Buffering and screening.

When a commercial or industrial use is established on a building site located adjacent to any residential area, a ten-foot side landscaped open-space buffer shall be installed and maintained by the owner, developer, or operator of the commercial or industrial property between it and the

adjacent residential area. In addition, a six-foot high opaque fence or wall shall be erected and maintained along the property line to provide visual screening. The fence or wall shall be of wood, masonry, wrought iron, or aluminum, and may be a diagonal, horizontal, or vertical stockade-type privacy fence, although the framing of such fence may be of metal. The provisions of this section shall not apply where the residential area is separated by a public street, drainage ditch, or canal with a minimum easement of 30 feet. Conversely, when a single-family use is established on a building site adjacent to any commercial, industrial, or multiple-family area, a six-foot high opaque fence or wall shall be erected and maintained along the property line.

With written approval of the planning commission, and otherwise full compliance with landscaping standards, a required buffer may include a stormwater detention area. In no event, however, shall the following uses be allowed in buffers: playfields, stables, swimming pools, tennis courts, or similar active recreation uses.

(Ord. No. 2003-01, § 2, 3-17-03)

ORDINANCE NO. 2009-30

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS, BY ADDING A NEW ARTICLE IV TO CHAPTER 38; IMPLEMENTING AND ENFORCING EROSION AND SEDIMENT CONTROL MANAGEMENT GUIDELINES; PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED $2000 FOR EACH DAY OF VIOLATION HEREOF; AND PROVIDING FOR SEVERABILITY; AND MAKING OTHER PROVISIONS AND FINDINGS RELATED THERETO.

* * * *

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The Code of Ordinances of the City of Tomball, Texas, is hereby amended by adding a new Article, IV, Erosion and Sediment Control, to provide as follows:

"ARTICLE IV. EROSION AND SEDIMENT CONTROL

Sec. 38-50. Purpose.

The purpose of this Article is to reduce erosion during the construction process by implementing and enforcing erosion and sediment control management guidelines. The provisions of this Article are cumulative and in addition to other regulations or rules of the City that may be applicable to the development of property.

Sec. 38-51. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Clearing means any activity which removes the vegetative surface cover.

Drainage Way means any channel that conveys stormwater runoff throughout the site.

Erosion Control means measures that prevent erosion.

Erosion and Sediment Control Plan means a set of plans prepared by or under the direction of a licensed professional engineer indicating the specific measures and

Created by Neevia Document Converter trial version http://www.neevia.com

sequencing to be used controlling sediment and erosion on a development site including, before, during and after construction.

Grading means excavation or fill of material, including the resulting conditions thereof.

Perimeter means the area of a lot or tract of land that is 30 feet wide and parallel to and adjacent to the property lines of the lot or tract of land.

Perimeter Control means a barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

Phasing means clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

Sediment Control means measures that prevent eroded sediment from leaving the site.

Site means a parcel of land, or a contiguous combination thereof, where grading work is performed as a single unified operation.

Site Development Permit means a permit issued by the municipality for which the construction or alteration of ground improvements and structures for the control of erosion, runoff and grading.

Stabilization means the use of practices that prevent exposed soil from eroding.

Start of Construction means the first land-disturbing activity associated with a development, including land preparation such as clearing, grading and filling; installation of streets and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

Watercourse means any natural or artificial body of surface water, including, but not limited to bayous, channels, creeks, lakes, ponds, rivers, sloughs and streams defined by a bed and banks.

Waterway means a channel that directs stormwater runoff to a watercourse, or to the public storm drain.

Sec. 38-52. Permit Required.

(a) No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of 5,000 or more square feet without the approval of an Erosion and Sediment Control Plan by the City Engineer.

Created by Neevia Document Converter trial version http://www.neevia.com

(b) No site development permit is required however for the following activities:

(1) Any emergency activity that is immediately necessary for the protection of life, property or natural resources.
(2) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
(3) Any activities on a lot less than one acre in area and used for single family or two family residential purposes only.

(c) Each application shall bear the name(s), address(es) and contact number(s) of the owners and developers of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm, and shall be accompanied by a filing fee.

(d) Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan.

(e) The applicant shall file with City a faithful performance bond or bonds, letter of credit, or other improvement security in an amount deemed sufficient by the City Engineer to cover all costs of improvements, landscaping, and maintenance of improvements for such period as specified by the City, and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

Sec. 38-53. Review and Approval

(a) The City Engineer will review each application for a site development permit to determine its conformance with the provisions of this Article. Within 30 days after receiving an application, the City Engineer shall, in writing:

(1) Approve the permit application;
(2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
(3) Disapprove the permit application, indicating the deficiencies and the procedure for submitting a revised application and/or submission.

(b) Failure of the City Engineer to act on original or revised applications within 30 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the City Engineer. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the City Engineer.

Created by Neevia Document Converter trial version http://www.neevia.com

(c) Any permit issued under this Article shall expire six months following its issuance; provided, however, that the City Engineer may extend a permit to complete work substantially completed under that permit.

Sec. 38-54. Erosion and Sediment Control Plan

(a) The Erosion and Sediment Control Plan shall include:

(1) A natural resources map identifying soils, forest cover, and resources protected under other chapters of this code.
(2) The map shall be at a scale no smaller than 1"=100'.
(3) The map of the perimeter of the trees to remain, including a tree survey showing the location, diameter, and name of all trees with 8 inch caliper or more measured three feet from the ground.
(4) A sequence of construction of the development site, including stripping and clearing, rough grading, construction of utilities, infrastructure, and buildings, and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, and the sequence of clearing, installation of temporary erosion and sediment measures, and establishment of permanent vegetation.
(5) All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and permanently, after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
(6) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
(7) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
(8) Identification of the representative for site activities.

(b) Modifications to the plan shall include

(1) Major amendments of the Erosion and Sediment Control Plan shall be submitted to the City Engineer and shall be processed and approved, or disapproved, in the same manner as the original plans.
(2) Field modifications of a minor nature may be authorized by the City Engineer by written authorization to the permittee.

Created by Neevia Document Converter trial version http://www.neevia.com

Sec. 38-55. Design Requirements

(a) Grading, erosion control practices, sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the Storm Water Management Handbook for Construction Activities, City of Houston, Harris County, and HCFCD, 2006 Edition and shall be adequate to prevent transportation of sediment from the site to the satisfaction of the City Engineer.

(b) Clearing and Grading

(1) Clearing and grading of natural resources, such as forests and wetlands, floodplain, shall not be permitted, except when in compliance all other chapters of this Code. These standards are cumulative of other Federal, State, and local jurisdictional requirements.

(2) Clearing techniques that retain natural vegetation and retain natural drainage patterns, as described in the Storm Water Management Handbook for Construction Activities, City of Houston, Harris County, and HCFCD, 2006 Edition, shall be used to the satisfaction of City Engineer.

(3) Phasing shall be required on all sites disturbing greater than *thirty* acres, with the size of each phase to be established at plan review and as approved by City Engineer.

(4) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.

(5) Cut and fill slopes shall be *no greater than 2:1*, except as approved by City Engineer to meet other community or environmental objectives.

(c) Erosion Control

(1) Soil must be stabilized within *five days* of clearing or inactivity in construction.

(2) If vegetative erosion control methods, such as seeding, have not become established within *two weeks*, the City Engineer may require that the site be reseeded, or that a non-vegetative option be employed.

(3) On steep slopes or in drainage ways, special techniques that meet the design criteria outlined in the Storm Water Management Handbook for Construction Activities, City of Houston, Harris County, and HCFCD, 2006 Edition, shall be used to ensure stabilization.

(4) Soil stockpiles must be stabilized or covered at the end of each work day.

Created by Neevia Document Converter trial version http://www.neevia.com

(5) At the close of the construction season, the entire site must be stabilized, using a heavy mulch layer, or another method that does not require germination to control erosion.
(6) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
(7) Techniques that divert upland runoff past disturbed slopes shall be employed.

(d) Sediment Controls

(1) Sediment controls shall be provided in the form of settling basins or sediment traps or tanks, and perimeter controls.
(2) Where possible, settling basins shall be designed in a manner that allows adaptation to provide long term stormwater management.
(3) Adjacent properties shall be protected by the use of a vegetated buffer strip, in combination with perimeter controls.

(e) Waterways and Watercourses

(1) When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided.
(2) When in-channel work is conducted, the channel shall be stabilized before, during and after work.
(3) All on-site stormwater conveyance channels shall be designed according to the criteria outlined in the Storm Water Management Handbook for Construction Activities, City of Houston, Harris County, and HCFCD, 2006 Edition.
(4) Stabilization adequate to prevent erosion shall be provided at the outlets of all pipes and paved channels.

(f) Construction Site Access

(1) A temporary access road shall be provided at all sites.
(2) Other measures may be required at the discretion of City Engineer in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains.

Sec. 38-56. Inspection

(a) City Engineer or designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading, stripping, excavating, and

Created by Neevia Document Converter trial version http://www.neevia.com

filling work bearing the stamp of approval of the City Engineer shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify City Engineer at least two (2) working days before the following:

(1) Start of Construction;
(2) Erosion and Sediment Control Measures are in place and stabilized;
(3) Site Clearing has been completed;
(4) Rough Grading has been completed;
(5) Final Grading has been completed;
(6) Close of the Construction Season; and
(7) Final Landscaping.

(b) The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures. All inspections shall be documented in written form and submitted to City Engineer at the time interval specified in the approved permit.

(c) The City Engineer or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under Section b.

Sec. 38-57. Enforcement

(a) Stop-Work Order; Revocation of Permit.

(1) The City Engineer may issue a stop-work order for any clearing or tree removal activity being conducted without a permit required by this Article.
(2) In the event that any person holding a site development permit pursuant to this ordinance violates the terms of the permit, or implements site development in such a manner as to materially adversely affect the health, welfare, or safety or persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the City Engineer may suspend or revoke the site development permit.

(b) Violation and Penalties

(1) No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be

Created by Neevia Document Converter trial version http://www.neevia.com

done, contrary to or in violation of any terms of this ordinance.

(2) A person commits an offense if the person intentionally or knowingly clears land or removes trees, or causes the clearing of land or removal of trees, without a permit for such clearing of land or removal of trees required by this Article.

(3) A person commits an offense if the person intentionally or knowingly clears land or removes trees, or cause the clearing of land or removal of trees, in violation of the terms of a permit issued under this Article.

(4) Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor."

Section 2. All ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extent of such inconsistency or conflict, hereby repealed.

Section 3. Any person who shall intentionally, knowingly, recklessly, or with criminal negligence, violate any provision of this Ordinance, shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed $2000. Each day of violation shall constitute a separate offense.

Section 4. It is the intent of the City that this Ordinance shall comply in all respects with the applicable provisions of the United States Constitution, the Texas Constitution, and the Charter of the City of Tomball. In the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 5. This Ordinance shall take effect immediately from and after its passage and the publication of the caption hereof, as provided by law and the City's Home Rule Charter.

Created by Neevia Document Converter trial version http://www.neevia.com

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 5TH DAY OF OCTOBER 2009.

COUNCILMAN QUINN	AYE
COUNCILMAN STOLL	AYE
COUNCILMAN WEBB	ABSENT
COUNCILMAN TOWNSEND	AYE
COUNCILMAN DRIVER	AYE

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 19TH DAY OF OCTOBER 2009.

COUNCILMAN WEBB	AYE
COUNCILMAN QUINN	AYE
COUNCILMAN STOLL	AYE
COUNCILMAN TOWNSEND	AYE
COUNCILMAN DRIVER	AYE

Gretchen Fagan
Gretchen Fagan, Mayor

ATTEST:

Doris Speer
Doris Speer, City Secretary

Created by Neevia Document Converter trial version http://www.neevia.com

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

RESET FORM

Notice of Intent (NOI) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the TPDES Phase II MS4 General Permit (TXR040000)

IMPORTANT:

- Use the INSTRUCTIONS to fill out each question in this form.
- Use the CHECKLIST to make certain you filled out all required information. Incomplete applications WILL delay approval or result in automatic denial.
- Once processed your authorization can be viewed at: http://www2.tceq.texas.gov/wq_dpa/index.cfm

APPLICATION FEE:

- You must pay the **$100** Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
  - Go to https://www3.tceq.texas.gov/epay/index.cfm
  - Select Fee Type: GENERAL PERMIT MS4 PHASE II STORM WATER DISCHARGE NOI APPLICATION
- **Provide your payment information below, for verification of payment:**

  Mailed ☐ Check/Money Order No.: _____
  Name Printed on Check: _____
  EPAY ☐ Voucher No.: _____
  Is the Payment Voucher copy attached? ☐ Yes

One (1) copy of the NOI and Stormwater Management Program (SWMP) with the completed SWMP Cover Sheet MUST be submitted with the original NOI and SWMP.

Is the copy attached? ☑ Yes

RENEWAL: Is this NOI a Renewal of an existing Phase II MS4 General Permit Authorization?
(Note: An authorization cannot be renewed after June 11, 2014.)

☐ Yes The existing authorization number is: TXR04_____
(If an authorization number is not provided, a new number will be assigned.)

☑ No

1) OPERATOR (Applicant)

a. If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at:
http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch
CN 600667190

b. What is the Legal Name of the entity (applicant) applying for this permit?
City of Tomball
(The exact legal name must be provided.)

c. What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC 305.44(a).
Prefix (Mr. Ms. Miss): Mr.
First/Last Name: George Shackelford Suffix:
Title: City Manager Credential:

d. What is the contact information for the Operator Contact (Responsible Authority)? The mailing address must be recognized by the US Postal Service. You may verify the address at:
https://tools.usps.com/go/ZipLookupAction!input.action
Phone Number: (281) 290-1466 Ext: Fax Number:
E-mail: LLakatos@tomballtx.gov
Mailing Address: 501 James St.
Internal Routing (Mail Code, Etc.):
City: Tomball State: TX ZIP Code: 77375
If outside USA: Territory: Country Code: Postal Code:

e. Indicate the type of Customer (The instructions will help determine your customer type):
☐ Federal Government ☐ State Government ☐ County Government
☑ City Government ☐ Other Government

f. Number of Employees:
☐ 0-20; ☐ 21-100; ☑ 101-250; ☐ 251-500; or ☐ 501 or higher

2) BILLING ADDRESS

The Operator is responsible for paying the annual fee. The annual fee will be assessed to authorizations active on September 1 of each year. TCEQ will send a bill to the address provided in this section. The Operator is responsible for terminating the permit when it is no longer needed.

Is the billing address the same as the Operator Address?
☑ Yes, go to Section 3).

☐ No, complete section below

Phone Number: Ext: Fax Number:
E-mail:
Mailing Address:
Internal Routing (Mail Code, Etc.):
City: State: ZIP Code:
Mailing Information if outside USA:
Territory: Country Code: Postal Code:

3) REGULATED ENTITY (RE) INFORMATION

If the site of your business is part of a larger business site or if other businesses were located at this site before yours, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch.

If the site is found, provide the assigned Regulated Entity Reference Number and provide the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

a. TCEQ issued RE Reference Number (RN): RN 101386506

b. Name that is used to identify the small MS4 (Example: City of XXX MS4)
City of Tomball MS4

c. Provide a brief description of the regulated MS4 boundaries: (Example: Area within the City of XXXX limits that is located within the xxx (e.g. Dallas) urbanized area):
Area within the City of Tomball City limits that is located within the Houston urbanized area

d. County where the largest residential population exists within the regulated MS4 boundaries:
Harris

Is the MS4 located within additional counties?
☐ Yes – If Yes, what county (or counties)?

☑ No

e. Latitude: 30.098905 Longitude: -95.618899

4) GENERAL CHARACTERISTICS

a. Is the project/site located on Indian Country Lands?
☐ Yes – If Yes, you must obtain authorization through EPA, Region 6.

☑ No

b. What is applicant's Standard Industrial Classification (SIC) code?
SIC Code: 9111

c. What is the category or level of the MS4 based on the population served?
☐ **Level 1:** Operators of traditional small MS4s that serve a population of less than 10,000 within an urbanized area (UA).

☑ **Level 2:** Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an UA.

This category also includes all non-traditional small MS4s such as counties, drainage districts, transpiration entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the UA, unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served.

☐ **Level 3:** Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within an UA.

☐ **Level 4:** Operators of traditional small MS4s that serve a population of 100,000 or more within an UA.

d. Has TCEQ "designated" the small MS4 as needing coverage under this general permit?

☐ Yes

☑ No - If No and no portion of the small MS4 is located within an UA as determined by the 2000 or 2010 Decennial Census by the U.S Bureau of Census requiring a NOI be submitted, the operator is not eligible for coverage under this general permit through the NOI.

e. What is your annual reporting year?

☐ Calendar year

☑ MS4 general permit year

☐ Fiscal year – If Fiscal year, what is the last day of the fiscal year?_____

f. Stormwater Management Program (SWMP)

1. I certify that the SWMP submitted with this Notice of Intent has been developed according to the provisions of this general permit TXR040000.

   ☑ Yes

   ☐ No – If No, the application is considered incomplete and may be returned.

2. I certify that the SWMP Cover Sheet is completed and attached to the front of the SWMP.

   ☑ Yes

   ☐ No – If No, the application is considered incomplete and may be returned.

3. Who is the person responsible for implementing or coordinating implementation of the SWMP? (Note: All contact information requested below is required.)

   First/Last Name: Lori Lakatos
   Title: City Engineer Company: City of Tomball
   Phone Number: (281) 292-1466 Ext: Fax Number:
   E-mail: LLakatos@tomballtx.gov
   Mailing Address: 501 James St.
   Internal Routing (Mail Code, Etc.):
   City: Tomball State: TX ZIP Code: 77375

g. 7th Minimum Control Measure (MCM) for Municipal Construction Activities

1. Is the MCM for authorization to discharge stormwater from municipal construction activities included with the attached SWMP?

   ☐ Yes – If Yes, what are the boundaries within which those activities will occur? (Note: If the boundaries are located outside of the urbanized area, then the entire SWMP must also incorporate the additional areas.)

   _____

   ☑ No

2. Is the discharge or potential discharge from regulated construction activities within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer?
   - ☐ Yes – If Yes, please note that a copy of the agency approved Water Pollution Abatement Plan (WPAP) required by the Edward Aquifer Rule (30 TAC Chapter 213) must be either included or referenced in the construction stormwater pollution prevention plan(s).
   - ☑ No

h. Discharge Information

1. What is the name of the water body (ies) receiving stormwater from the MS4?
   Boggs Gully, Mill Creek, Spring Creek, Willow Creek

2. What is the classified segment(s) that receives discharges, directly or indirectly, from the small MS4?
   1008A, 1008, 1008H

3. Are any of the surface water body (ies) receiving discharges from the small MS4 on the latest EPA-approved Clean Water Act (CWA) §303(d) list of impaired waters?
   - ☐ Yes – If Yes:
     What is the name of the impaired water body (ies) receiving the discharge from the small MS4?

     What are the pollutants of concern?
   - ☑ No

4. Is the discharge into any other MS4 prior to discharge into surface water in the state?
   - ☑ Yes – If Yes, what is the name of the MS4 Operator?
     Harris County
   - ☐ No

i. Edwards Aquifer

Is the discharge or potential discharge from the MS4 within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer?

- ☐ Yes - If Yes, complete certification below by checking “Yes”.
- ☑ No

I certify that a copy of the TCEQ approved WPAP required by the Edwards Aquifer Rule (30 TAC Chapter 213) is either included or referenced in the SWMP.

- ☐ Yes

j. Public Participation Process

The Office of Chief Clerk will send the operator or person responsible for publishing, the notice of the executive director’s preliminary determination of the NOI and SWMP, in a newspaper of general circulation in the county where the small MS4 is located. If multiple

counties, notice must be published at least once in the newspaper of general circulation in the county containing the largest resident population.

The applicant must file with the Chief Clerk a copy of an affidavit of the publication within 60 days of receiving the written instructions from the Office of Chief Clerk.

1. I will comply with the Public Participation requirements described in Part II.E.12 of the general permit.
   ☑ Yes
   ☐ No – If No, coverage under this general permit is not obtainable.

2. Who is the person responsible for publishing notice of the executive director's preliminary determination on the NOI and SWMP? (Note: All contact information requested below is required.)
   First/Last Name: Lori Lakatos
   Title: City Engineer Company: City of Tomball
   Phone Number: (281) 290-1466 Ext: Fax Number:
   E-mail: LLakatos@tomballtx.gov
   Mailing Address: 501 James St.
   Internal Routing (Mail Code, Etc.):
   City: Tomball State: TX ZIP Code: 77375

3. What is the name and location of the public location where copies of the NOI and SWMP, as well as the executive director's general permit and fact sheet, may be reviewed?
   Name of Public Place: City of Tomball City Hall
   Address of Public Place: 401 Market St., Tomball, TX
   County of Public Place: Harris

5) CERTIFICATION

Check Yes to the certifications below. Failure to indicate Yes to ***ALL*** items may result in denial of coverage under the general permit.

a. I certify that I have obtained a copy and understand the terms and conditions of the Phase II (Small) MS4 General Permit TXR040000. ☑ Yes

b. I certify that the small MS4 qualifies for coverage under the general permit TXR040000. ☑ Yes

c. I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. ☑ Yes

d. I understand that authorization active on September 1st of each year will be accessed an Annual Water Quality Fee. ☑ Yes

Operator Certification:

I, George Shackelford (*Typed or printed name*) City Manager (*Title*)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under **30 Texas Administrative Code §305.44** to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature: _____ Date: _____

(Use blue ink)

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Approve **1603 HICKS SUBDIVISION**; Being a Subdivision of 2.6409 acres of land situated in the Joseph House Survey, Abstract Number 34 of Harris County, Texas, and being a Replat of Lot 3 of Amending Plat of 249 at Hufsmith Subdivision, a Subdivision according to the map or plat thereof recorded in Clerk's File Number 509116, of the Map Records of Harris County, Texas, and being the same land as described in deed recorded under Clerk's File Number Y068948, of Real Property Records of Harris County Texas.

Background:

The Planning and Zoning Commission voted unanimously to approve **1603 HICKS SUBDIVISION** Replat with contingencies on April 14, 2014. Corrections have been addressed and the Replat is being presented to City Council for approval consideration.

Origination:

Community Development Department

Recommendation:

Approval

Funding:

Party(ies) responsible for placing this item on agenda:

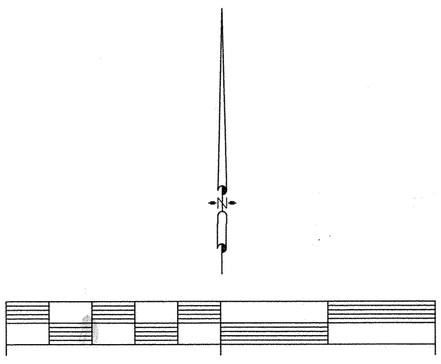
Brandy Harbolt, Engineering and Planning

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

1603 Hicks Subdivision Plat



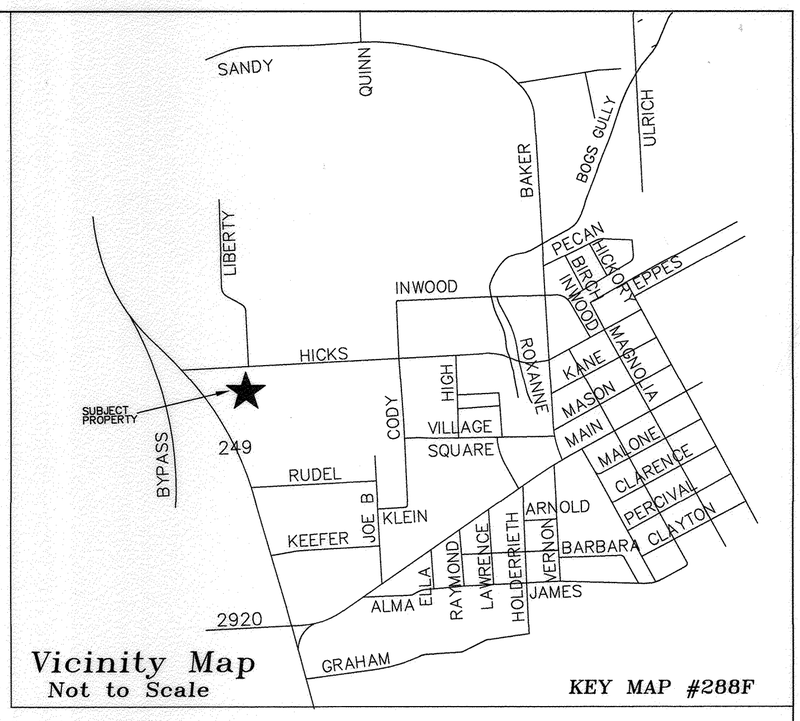
Scale: 1" = 40'

I, Steven L. Crews, am authorized under the laws of the State Texas to practice the profession of surveying and hereby certify that the above subdivision is true and correct; was prepared from an actual survey of the property made under my supervision on the ground; that all boundary corners, angle points, points of curvature, and other points of reference not found have been marked with iron rods having an outside diameter of not less than three-quarter inch (3/4") and a length of not less than three feet (3'); and that the plat boundary corners have been tied to the nearest survey corner.

Steven L. Crews
Texas Registration Number 4141

STATE OF TEXAS REGISTERED STEVEN L. CREWS 4141 PROFESSIONAL LAND SURVEYOR

LINE	BEARING	DISTANCE
L1	N 81°12'57" E	18.70'
L2	S 04°58'58" E	30.00'
L3	N 87°23'40" E	30.00'
L4	N 04°58'58" W	30.00'
L5	N 87°50'35" E	115.76'



Vicinity Map
Not to Scale

KEY MAP #288F

Notes:
Public Easements:
Public Easements denoted on this plat are hereby dedicated to the public forever. Any public utility, including the City of Tomball, shall have the right at all times, of ingress and egress to and from and upon said easement for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity of any time of procuring the permission of the property owner. Any public utility, including the City of Tomball, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements that in any way endanger or interfere with the construction, maintenance or efficiency of it's respective systems on any of the easements shown on this plat. Neither the City of Tomball nor any other public utility shall be responsible for any damages to property within an easement arising out of the removal or relocation of any obstruction in the public easement.

Flood Information:
According to FEMA Firm Panel No. 48201C0230-L (Effective Date June 18, 2007), this property is in Zone "X" and is not in the 0.2% Annual Chance Flood Plain.
Note #1:
All oil/gas pipelines or pipeline easements with ownership through the subdivision have been shown.
Note #2:
All oil/gas wells with ownership (plugged, abandoned, and/or active) through the subdivision have been shown.
Note #3:
No building or structure shall be constructed across any pipelines, building lines, and/or easements. Building setback lines will be required adjacent to oil/gas pipelines. The setbacks at a minimum should be 15 feet off centerline of low pressure gas lines, and 30 feet off centerline of high pressure gas lines.
Note #4:
This plat does not attempt to amend or remove any valid covenants or restrictions.
Note #5:
The building lines shown on this plat shall be in addition to, and shall not limit or replace, any building lines required by the City of Tomball Code of Ordinances at the time of the development of the property.
Note #6:
The Basis of Bearings for this plat is North line of the Amending Plat of 249 at Hufsmith Subdivision, recorded under Film Code Number 509116, M.R.H.C.T.
Note #7:
Electrical distribution easement recorded in Volume 6566, Page 154, D.R.H.C.T. does not affect subject property.
Note #8:
Subject to blanket electrical distribution easement recorded in Volume 951, Page 534, D.R.H.C.T.

D.R.H.C.T. = DEED RECORDS OF HARRIS COUNTY TEXAS
M.R.H.C.T. = MAP RECORDS OF HARRIS COUNTY TEXAS
R.P.R.H.C.T. = REAL PROPERTY RECORDS OF HARRIS COUNTY TEXAS
FC NO. = FILM CODE NUMBER
CF NO. = CLERK'S FILE NUMBER
C.O.T.U.E. = UTILITY EASEMENT DEDICATED TO THE CITY OF TOMBALL
R.O.W. = RIGHT OF WAY

BLOCK 1
WAUKESHA PEARCE TOMBALL
FC NO. 641146
M.R.H.C.T.

LOT 1

LIBERTY LANE
60' R.O.W.

BLOCK 1
TOMBALL ESTATES
FC NO. 366113
M.R.H.C.T.

LOT 1 | LOT 2 | LOT 3

HICKS STREET
60' R.O.W.
VOL. 92, PAGES 119-122 D.R.H.C.T.

30' x 30' LIFT STATION TO THE CITY OF TOMBALL
CF NOS. U226513, U350633, & U780742, R.P.R.H.C.T.

Found Iron Rod w/ Survey Cap for Reference S 35°56'29"W 0.65'

N 87°23'40"E 150.07'
N 87°23'40"E 105.17'
Found 1 1/4" Iron Pipe
10' C.O.T.U.E.
25' Building Line
L2
L3
L4
Set Iron Rod w/ Survey Cap

LOT 2

AMENDING PLAT OF
249 AT HUFSMITH
SUBDIVISION
FC NO. 509116
M.R.H.C.T.

RESTRICTED RESERVE "B"

N 26°14'23"E 200.69'
10' Private Sewer Easement

LOT 4
0.6559 Acre
28,571.22 Sq. Feet

206.07'
S 01°16'30"E
238.00'
322.01'
S 02°55'47"W

RESTRICTED RESERVE "A"
FIRST BAPTIST CHURCH
OF TOMBALL
FC NO. 615002
M.R.H.C.T.

LOT 3
1.9850 Acres
86,469.10 Sq. Feet

L1
Found T-Post at Corner
Found Iron Rod w/ Survey Cap
174.65'
N 09°02'57"W
20' Relocated Sierra Pipeline Easement
L5
Set Iron Rod w/Survey Cap
20' Relocated Sierra Pipeline Easement
84.01'
Set Iron Rod w/Survey Cap
Found Fence Post at Corner
20' Relocated Sierra Pipeline Easement
S 82°21'34"W 351.35'

LOT 1

Found Iron Rod w/ Survey Cap for Reference S 13°30'14"W 0.78'

RESTRICTED RESERVE "A"
FIRST BAPTIST CHURCH
OF TOMBALL
FC NO. 615002
M.R.H.C.T.

THE STATE OF TEXAS
COUNTY OF HARRIS

We, Maple Residential, Ltd., acting by and through JEFF STALLONES, its general partner, being officer of Maple Residential, Ltd., owners hereinafter referred to as owners of the 2.6409 acre tract described in the above and foregoing plat of 1603 HICKS SUBDIVISION, do hereby make and establish said subdivision of said property according to all liens, dedications, restrictions and notations on said plat and hereby dedicate to the use of the public forever, all streets, alleys, parks, watercourses, drains, easements and public places shown thereon for the purposes and considerations therein expressed; and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title to the land so dedicated.

FURTHER, owners have dedicated and by these presents does dedicate to the use of the public for public utility purposes forever an unobstructed aerial easement five feet (5') in width from a plane twenty feet (20') above the ground level upward, located adjacent to all public utility easements shown hereon.

FURTHER, owners do hereby dedicate to the public a strip of land fifteen feet (15') wide on each side of the center line of any and all bayous, creeks, gullies, ravines, draws, sloughs, or other natural drainage courses located and depicted upon in said plat, as easements for drainage purposes, giving the City of Tomball, Harris County, or any other governmental agency, the right to enter upon said easement at any and all times for the purpose of construction and maintenance of drainage facilities and structures.

FURTHER, owners do hereby covenant and agree that all of the property within the boundaries of this plat and adjacent to any drainage easement, ditch, gully, creek or natural drainage way shall hereby be restricted to keep such drainage ways and easements clear of fences, buildings, planting, and other obstructions to the operation and maintenance of the drainage facility and that such abutting property shall not be permitted to drain directly into this easement, except by means of an approved drainage structure.

IN TESTIMONY WHEREOF, Maple Residential, Ltd., has caused these presents to be signed by Jeff Stallones, its manager, thereunto authorized, this _____ day of _____, 2014.

Maple Residential, Ltd.

By:_____
Jeff Stallones, its General Partner

THE STATE OF TEXAS
COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared Jeff Stallones, General Partner of Maple Residential, Ltd., known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 23rd day of May, 2014.

Roxann W. Harris
Notary Public in and for the State of Texas
My Commission Expires: 12-23-17

ROXANN W HARRIS MY COMMISSION EXPIRES December 23, 2017

We, CommunityBank of Texas, N.A., owner and holder of a lien against the property described in the plat known as 1603 HICKS SUBDIVISION, said lien being evidenced by instrument recorded in Clerk's File Number 20120188567 of the Real Property Records of Harris County, Texas, do hereby in all things subordinate our interest in said property to the pruposes and effects of said plat and the dedication and restrions shown herein to said plat and we hereby confirm tha we are the present owner of said lein and have not assigned the same nor any part thereof.

By:_____
TW Custer

THE STATE OF TEXAS
COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared TW Custer, EVP/Market Chairman, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 23rd day of May, 2014.

Roxann W. Harris
Notary Public in and for the State of Texas
My Commission Expires: 12-23-17

ROXANN W HARRIS MY COMMISSION EXPIRES December 23, 2017

This is to certify that the Planning and Zoning Commission of the City of Tomball, Texas, has approved this plat and subdivision of 1603 HICKS SUBDIVISION in conformance with the laws of the State of Texas and the ordinances of the City of Tomball as shown hereon and authorized the recording of this plat this _____ day of _____, 2014.

By:_____
Barbara Tague
Chairman

By:_____
Darrell Roquemore
Vice Chairman

We, the City Manager and the City Engineer for the City of Tomball, do hereby certify that this plat complies with the City of Tomball ordinance.

George Shackelford, City Manager

Lori Lakatos, P.E.,
City Engineer

This is to certify that the City accepts the Planning & Zoning Commission's authorized approval and acceptance of all dedicated public easements in conformance with the laws of the State of Texas the ordinance of the City of Tomball as shown hereon and authorized the recording of this plat this _____ day of _____, 2014.

By:_____
Gretchen Fagan, Mayor

Doris Speer, City Secretary

Harris County Clerk Certificate of Filing:

I, Stan Stanart, County Clerk of Harris County, Texas, do hereby certify that the within instrument with its certificate of authentication was filed for registration in my office on _____, 2014, at _____ o'clock __M., and duly recorded on _____, 2014, at _____ o'clock __M., and at Film Code No._____ of the Map Records of Harris County for said County.

Witness my hand and seal of office, at Houston, the day and date last above written.

Stan Stanart
County Clerk
of Harris County, Texas

By: _____
Deputy

Owner:
MAPLE RESIDENTIAL, LTD.
46 Palmer Crest
Spring, Texas 77381
Phone: 713-899-4710

Surveyor:
C & C SURVEYING, INC.
7424 FM 1488, Suite A
Magnolia, Texas 77354
Office: 281-356-5172
FAX: 281-356-1935

FINAL PLAT

1603 HICKS SUBDIVISION

Being a subdivision of 2.6409 acres of land situated in the Joseph House Survey, Abstract Number 34, of Harris County, Texas, and being a replat of Lot 3 of AMENDING PLAT OF 249 AT HUFSMITH SUBDIVISION, a subdivision according to the map or plat thereof recorded in Clerk's File Number 509116, of the Map Records of Harris County, Texas, and being the same land as described in deed recorded under Clerk's File Number Y068948, of the Real Property Records of Harris County Texas.

2 LOTS, 1 BLOCK

APRIL 2014
Sheet 1 of 1

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Adopt, on First Reading, Ordinance No. 2014-14, an Ordinance of the City of Tomball Texas Renumbering Certain Provisions of the Charter of the City Following Amendments thereto Pursuant to the Authority Contained Therein; Making Certain Findings; and Providing for Severability

Background:

Proposed Charter Amendment No. 5, which was approved by the voters on May 10, 2014, states:

"SECTION 1.10 - RENUMBERING OF CHARTER

Subsequent to the Charter amendment election of May 10, 2014, the Council shall by ordinance authorize the general editing of this Charter to renumber and rearrange as necessary all articles, sections, and subsections therein, or amendments thereto."

Ordinance No. 2014-14 provides for the renumbering and rearranging of sections in Article 1, Article VI, Article VII, and Article VIII affected by results of the May 10, 2014 election.

Upon passage of Ordinance No. 2014-14, the Charter will be prepared for printing and recording with the required agencies and posting on the City's website. Copies of the Charter will be available, free of charge, for the citizens of Tomball at City Hall.

Origination:

Doris Speer, City Secretary

Recommendation:

Adopt Ordinance No. 2014-14 on First Reading.

Funding:

Party(ies) responsible for placing this item on agenda:

Doris Speer, City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	

ATTACHMENTS:

Ordinance No. 2014-14

ORDINANCE NO. 2014-14

AN ORDINANCE OF THE CITY OF TOMBALL TEXAS RENUMBERING CERTAIN PROVISIONS OF THE CHARTER OF THE CITY FOLLOWING AMENDMENTS THERETO PURSUANT TO THE AUTHORITY CONTAINED THEREIN; MAKING CERTAIN FINDINGS; AND PROVIDING FOR SEVERABILITY.

* * * * *

WHEREAS, at an election held on the 10th day of May, 2014, amendments to the Charter of the City of Tomball were approved by the citizens voting in such election; and

WHEREAS, one of the amendments to the Charter approved by the voters was section 1.10, Renumbering of Charter, of Article I, Introductory Provisions, which required the City Council to adopt an ordinance for the renumbering or rearranging the articles, sections and subsections of the Charter as a result of the approved amendments; and

WHEREAS, the City Council, desires to renumber and rearrange the articles, sections, and subsections of the Charter as a result of the approved amendments as set forth below; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The facts and matters contained in the preamble are hereby found to be true and correct.

Section 2. Article I, Introductory Provisions, of the Charter of the City of Tomball is hereby amended by renumbering Section 1.08, Gender of Wording, to become Section 1.05, Gender of Wording, and new Section 1.10, Renumbering of Charter, to become Section 1.06, Renumbering of Charter.

Section 3. Section 6.02, Number, Selection, and Term, of Article VI, The Tomball City Council, is hereby amended to renumber Subsection E to become Subsection D.

Section 4. Subsection C, Duties of City Manager, of Section 7.01, City Manager, of Article VII, Administrative Services, is hereby amended to renumber subsection (7) to become subsection (6).

Section 5. Article VII, Administrative Services, is further amended by renumbering Section 7.07, City Fire Department, to become Section 7.06, City Fire Department, Section 7.08, City Attorney, to become Section 7.07, City Attorney, Section 7.09, Municipal Court, to become Section 7.08, Municipal Court, Section 7.10, Health Department to become Section 7.09, Health Department, Section 7.11, Department of Public Works, to become Section 7.10, Department of Public Works, and Section 7.12, City Building Official and Inspectors, to become Section 7.11, Department of Community Development.

Section 6. Subsection C, of Section 8.21, Tax Liens, of Article VII, Municipal Finance, is hereby renumbered to become Subsection B.

Section 7. In the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 10. This Ordinance shall become effective fourteen days after the final reading and adoption of this Ordinance when the caption hereof is caused to be published once in the official newspaper of the City, by the City Secretary, as required by law. The City Secretary is directed to publish the caption of this Ordinance in the City's official newspaper within 14 days after the passage of the ordinance.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE _____ DAY OF _____ 2014.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN DEGGES	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN KLEIN QUINN	_____

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE _____ DAY OF _____ 2014.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN DEGGES	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN KLEIN QUINN	_____

_____
Gretchen Fagan, Mayor

ATTEST:

_____
Doris Speer, City Secretary

Regular City Council
Agenda Item
Data Sheet

Meeting Date: June 2, 2014

Topic:

Executive Session: The City Council will meet in Executive Session as Authorized by Title 5, Chapter 551, Government Code, the Texas Open Meetings Act, for the Following Purpose:

- Sec. 551.072 – Deliberations Regarding Real Property

Background:

Origination:

George Shackelford, City Manager

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

City Secretary

ACTION TAKEN

APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1ST ☐ 2ND	