

# STANDARD UTILITY AGREEMENT

U-0012: Fort Bend County MUD No. 34  
County: Fort Bend  
Highway: FM 1093 Westpark Extension

This Agreement by and between the County of Fort Bend, Texas, ("**County**"), and Fort Bend County Municipal Utility District No. 34, ("**Utility**"), acting by and through its duly authorized representative, shall be effective on the date of approval and execution by and on behalf of the **County**.

**WHEREAS**, the **County** has deemed it necessary to make certain highway improvements as designated by the **County** and approved by the Federal Highway Administration within the limits of the highway as indicated above;

**WHEREAS**, the proposed highway improvements will necessitate the adjustment, removal, and/or relocation of certain facilities of **Utility** as indicated in the following statement of work: relocation of assets (12" Water Line) into a predesignated corridor according to the following schedule:

Bid Date:	February 15, 2016
FBCMUD No. 34 Board Approval:	February 23, 2016
Construction Start Date:	March 28, 2016
Construction Completion Date:	April 29, 2016

and more specifically shown in **Utility's** plans, specifications and estimated costs, which are attached hereto as Attachment "A" and Attachment "B".

**WHEREAS**, Subchapter E of Chapter 203 of the Texas Transportation Code regarding the relocation of utilities does not apply to this Project, but the County wishes to negotiate in good faith and enter into agreements with all affected utility companies for the participation in the costs of the adjustment, removal, and/or relocation of certain facilities as authorized under such subchapter.

**WHEREAS**, the **County**, upon receipt of evidence it deems sufficient, acknowledges **Utility's** interest in certain lands and/or facilities and determined it is appropriate to enter an agreement with **Utility** to govern the terms for participation in the costs of the adjustment, removal, and relocation of certain of its facilities located upon the lands as indicated in the statement of work above.


## NOW, THEREFORE, BE IT AGREED:

The **County** will pay to **Utility** fifty percent (50%) of the documented actual costs incurred for relocation of Utility in right of way by permit and one hundred percent (100%) of the documented actual costs incurred for relocation of the utility in the easement as specifically documented in *Exhibit "B" Reimbursement Breakout* for adjustment, removal, and/or relocation of **Utility's** facilities up to the amount said costs may be eligible for **County** participation.

All conduct under this agreement, including but not limited to the adjustment, removal and relocation of the facility, the development and reimbursement of costs, any environmental requirements, and retention of records will be in accordance with all applicable federal and state laws, rules and regulations, including, without limitation, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, 42 U.S.C. §§ 4601, et seq., the National Environmental Policy Act, 42 U.S.C. §§ 4231, et seq., the Buy America provisions of 23 U.S.C. § 313 and 23 CFR 635.410, the Utility Relocations, Adjustments, and Reimbursements provisions of 23 CFR 645, Subpart A, and with the Utility Accommodation provisions of 23 CFR 645, Subpart B. **Utility** shall supply, upon request by the **County**, proof of compliance with the aforementioned laws, rules and regulations prior to the commencement of construction.

The **Utility** agrees to develop relocation or adjustment costs by accumulating actual direct and related indirect costs in accordance with a work order accounting procedure prescribed by **County**, or may, with the **County's** approval, accumulate actual direct and related indirect costs in accordance with an established accounting procedure developed by **Utility**. Bills for work hereunder will be submitted to **County** not later than 90 days after completion of the work.

\_\_\_\_\_  
Date  
Fort Bend County

  
Initial  
\_\_\_\_\_  
Date  
1/26/16  
Fort Bend MUD No. 34

When requested, the **County** will make intermediate payments at not less than monthly intervals to **Utility** when properly billed and such payments will not exceed 90 percent (90%) of the eligible cost as shown in each such billing. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.

Upon execution of this agreement by both parties hereto, the **County** will, by written notice, authorize the **Utility** to perform such work diligently, and to conclude said adjustment, removal, or relocation by the stated completion date. The completion date shall be extended for delays caused by events outside **Utility's** control, including an event of Force Majeure, which shall include a strike, war or act of war (whether an actual declaration of war is made or not), insurrection, riot, act of public enemy, accident, fire, flood or other act of God, sabotage, or other events, interference by the **County** or any other party with **Utility's** ability to proceed with the relocation, or any other event in which **Utility** has exercised all due care in the prevention thereof so that the causes or other events are beyond the control and without the fault or negligence of **Utility**.

However, for any failure by **Utility** to conclude said adjustment, removal, or relocation by the stated completion date not caused by events outside **Utility's** control, the **County** may elect to: (1) reduce the reimbursement to **Utility** by one percent (1%) each day delayed; or (2) relocate the facility at the sole cost and expense of **Utility**.

The **County** will, upon satisfactory completion of the relocation or adjustment and upon receipt of final billing prepared in an approved form and manner, make payment in the amount of 90 percent (90%) of the eligible costs as shown in the final billing prior to audit and after such audit shall make an additional final payment totaling the reimbursement amount found eligible for **County** reimbursement.

Unless an item below is stricken and initialed by the **County and Utility**, this agreement in its entirety consists of the following:

1. Standard Utility Agreement;
2. Plans & Specifications (Attachment "A");
3. Utility Construction Cost Estimate (Attachment "B");
4. Utility's Schedule of Work and Estimated Date of Completion (Attachment "C").

All attachments are included herein as if fully set forth. In the event it is determined that a substantial change from the statement of work contained in this agreement is required, reimbursement therefore shall be limited to costs covered by a modification or amendment of this agreement or a written change or extra work order approved by the **County and Utility**.


This agreement is subject to cancellation by the **County** at any time up to the date that work under this agreement has been authorized and that such cancellation will not create any liability on the part of the **County**. However, the **County** will review and reimburse the **Utility** for eligible costs incurred by the **Utility** in preparation of this Agreement.

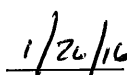
The **Utility** acknowledges to and for the benefit of the **County** and State of Texas that it understands the project under this Agreement is eligible for Federal-aid highway funds and as such, requires all of the iron, steel, and manufactured goods used in the project be produced in the United States ("Buy American Requirements") including iron, steel, and manufactured goods provided by the **Utility** pursuant to this Agreement.

The State Auditor may conduct an audit or investigation of any entity receiving funds from the **County** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the Legislative Audit Committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

The **Utility** by execution of this agreement does not waive any of the rights which **Utility** may have within the limits of the law.

\_\_\_\_\_  
Date  
Fort Bend County

  
Initial  
Fort Bend MUD No. 34


  
Date

It is expressly understood that the **Utility** conducts the adjustment, removal, or relocation at its own risk, and that Fort Bend County, Texas makes no warranties or representations regarding the existence or location of utilities currently within its right of way.

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

**UTILITY**

Utility: Fort Bend County Municipal Utility District No. 34  
*Name of Utility*

By:   
*Authorized Signature*

BILLY E. HAEHNEL  
*Print or Type Name*

Title: President, Board of Directors

Date: 1/26/2016

**EXECUTION RECOMMENDED:**

**COUNTY**


By: \_\_\_\_\_  
*Authorized Signature*

\_\_\_\_\_  
*Print or Type Name*

Title: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Date  
Fort Bend County


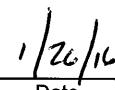
 1/26/16  
Initial Date  
Fort Bend MUD No. 34

# Exhibit A

## Fort Bend County Municipal Utility District No. 34 Plans & Specifications

(12 Pages that Follow)

\_\_\_\_\_  
Date  
Fort Bend County

  
Initial  
  
Date  
Fort Bend MUD No. 34









**BENCHMARKS:**  
 BENCH MARKS & BACK SIGHTS IN THE TOP OF A STAINLESS STEEL ROD  
 CONTROLLED BY THE SURVEYOR. THE SURVEYOR SHALL BE RESPONSIBLE FOR  
 CONTROLLING THE SURVEY. THE SURVEYOR SHALL BE RESPONSIBLE FOR  
 ADDRESS THROUGH A SURVEYOR'S OFFICE.  
 TEMPORARY BENCHMARKS SHALL BE SET ON THE TOP OF A 4x4 INCH  
 ELEVATION. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE  
 PROTECTION OF BENCHMARKS AND THE SURVEYOR SHALL BE RESPONSIBLE FOR  
 THE SURVEYOR'S OFFICE.  
 TEMPORARY BENCHMARKS SHALL BE SET ON THE TOP OF A 4x4 INCH  
 ELEVATION. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE  
 PROTECTION OF BENCHMARKS AND THE SURVEYOR SHALL BE RESPONSIBLE FOR  
 THE SURVEYOR'S OFFICE.

**PRIVATE UTILITY LEGEND**

- CI = CENTERPOINT ENERGY
- CTV = COMCAST
- T-DUCT = ATT LEGACY
- FOG = ATT
- FOG3 = LEVEL 3

1. ALL WATER LINES TO BE PROPOSED PVC CLASS 150, DR-15, AWWA C-900 UNLESS OTHERWISE INDICATED.
2. WHENEVER POSSIBLE, CENTER 12" JOINT C-900 PROPOSED WATER LINE AND 12" JOINT C-900 PROPOSED WATER LINE SHALL BE CENTERED ON PROPOSED CENTER LINE ON PROPOSED SANITARY SLOPE LEAD, 12" MIN. CLEARANCE.

- LEGEND:**
- INDICATES 12" JOINT C-900 (150 PSI MIN.) CENTERED ON CROSSING
  - INDICATES 12" MINIMUM CLEARANCE
  - INDICATES 24" MINIMUM CLEARANCE
  - SANITARY MANHOLE NUMBER
  - STORM MANHOLE NUMBER

NO.	DATE	DESCRIPTION

**BCE**  
 BROWN & CALDWELL ENGINEERS, P.C.  
 1917 FORT BEND COUNTY ROAD 100  
 FORT BEND COUNTY, TEXAS 77404  
 PHONE: 281.291.1000  
 FAX: 281.291.1001  
 WWW.BCEENGINEERS.COM  
 DATE: 05/05/2015

FORT BEND COUNTY M.U.D. 34

F.M. 1083

12" WATER LINE RELOCATION

PLAN AND PROFILE

BASILINE A  
 (STA 5+00 TO 10+00)

DATE: 05/05/2015  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 JOB NUMBER: 2015-001

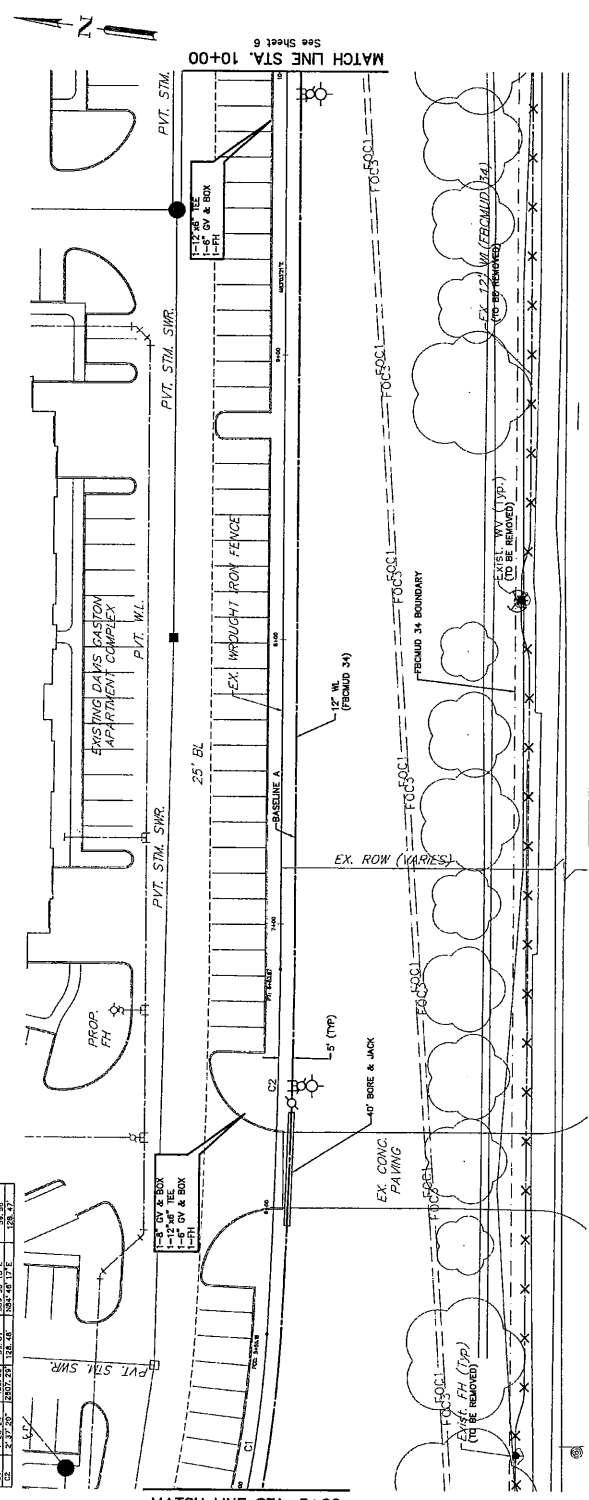
**CITY OF HOUSTON**  
 DEPARTMENT OF PUBLIC WORKS AND UTILITIES

FOR CITY OF HOUSTON USE ONLY

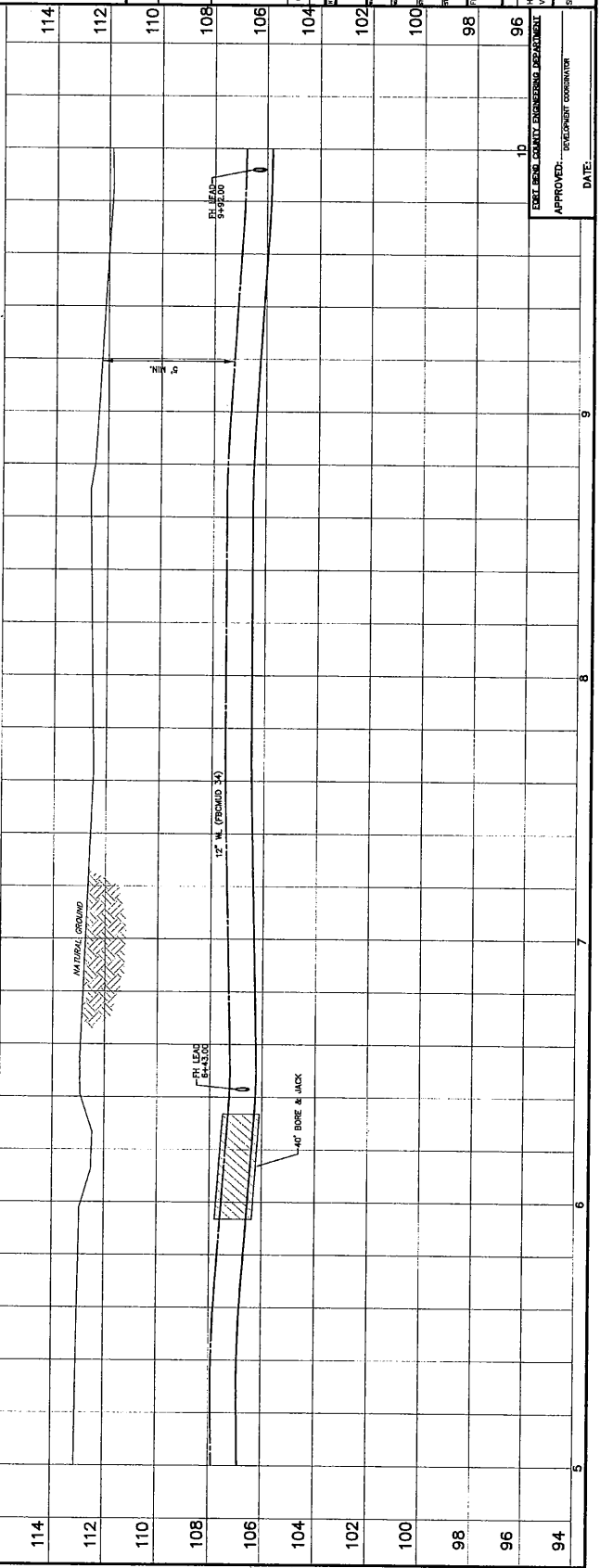
DRAWING SCALE: AS SHOWN  
 SHEET: 1 of 2  
 DATE: 11-27-14

APPROVED: [Signature]  
 DEVELOPMENT COORDINATOR

DATE: [Date]  
 SHEET 5 of 12



**BASILINE A**



STATION	ELEVATION (FEET)
114	
112	
110	
108	
106	
104	
102	
100	
98	
96	
94	

**REVISIONS**

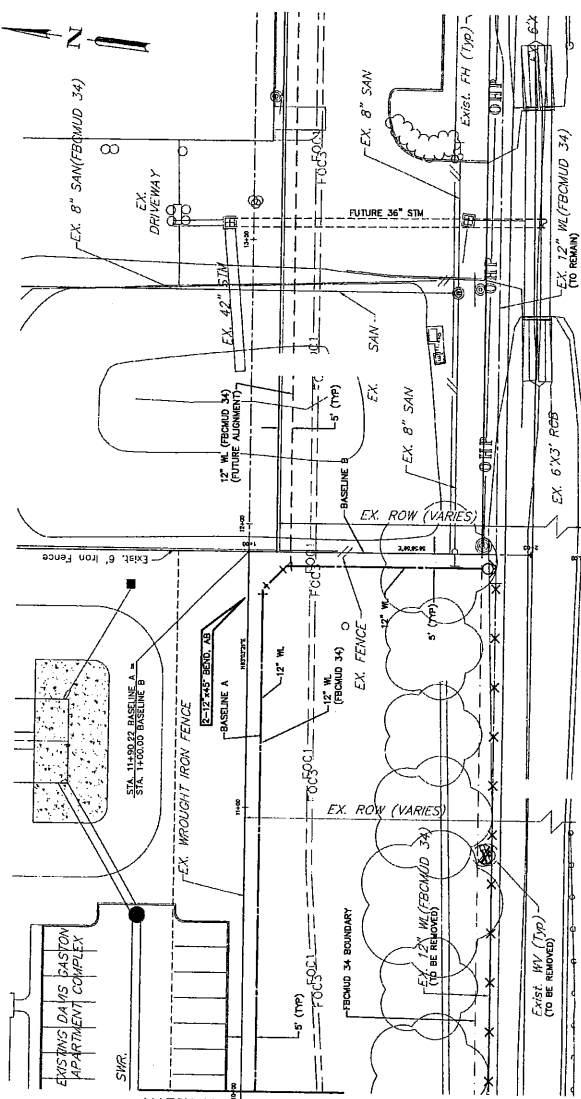
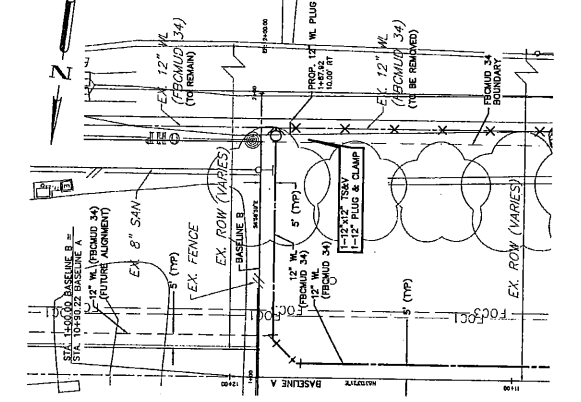
1. REVISION IN THE SIZE OF A WATER MAIN, 8" TO 12" IN SIZE, SHALL BE MADE IN THE CENTER OF A WATER MAIN. THE CENTER OF A WATER MAIN SHALL BE THE CENTER OF THE UTILITY. THE CENTER OF A WATER MAIN SHALL BE THE CENTER OF THE UTILITY. THE CENTER OF A WATER MAIN SHALL BE THE CENTER OF THE UTILITY. THE CENTER OF A WATER MAIN SHALL BE THE CENTER OF THE UTILITY.

**PRIVATE UTILITY LEGEND**

- GI = INTERPOINT ENERGY
- CITY = COMCAST
- T-DUCTY = AIT LEGACY
- FOCI = AIT
- FOCS = LEVEL 3

1. ALL WATER LINES TO BE PROPOSED PVC CLASS 150, DR-15, AWWA C-900 UNLESS OTHERWISE INDICATED.
2. WHENEVER POSSIBLE, CENTER 1'-20" JOINT, C-900 PROPOSED WATER LINE AND 1'-20" JOINT, C-900 PROPOSED WATER LINE PIPE ON PROPOSED SANITARY SEWER LINE, 12" MIN. CLEARANCE.

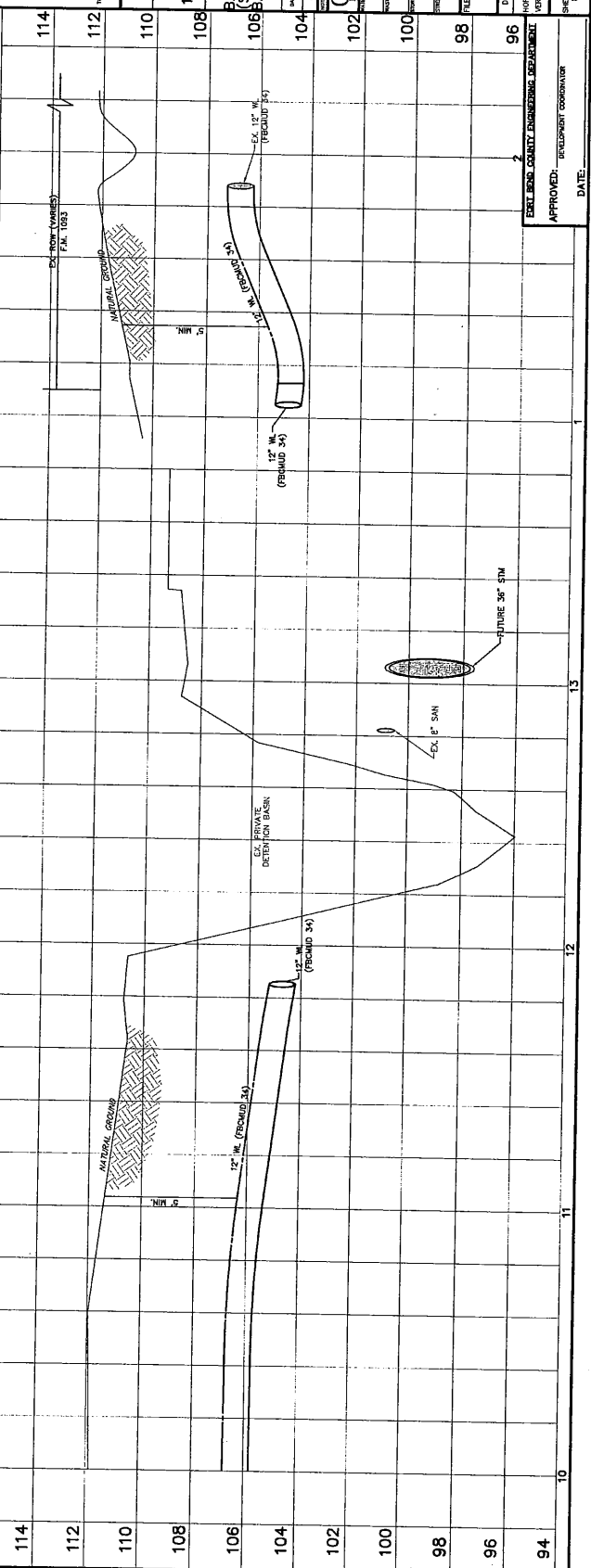
- LEGEND:**
- (1'-20" JT. OF C-900 PVC (150 PSI MIN.) CENTER ON CROSSING
  - (12" MINIMUM CLEARANCE
  - (18" MINIMUM CLEARANCE
  - (SANITARY MANHOLE NUMBER
  - (STORM MANHOLE NUMBER



MATCH LINE STA. 10+00  
See Sheet 9

**BASELINE B**

**BASELINE A**



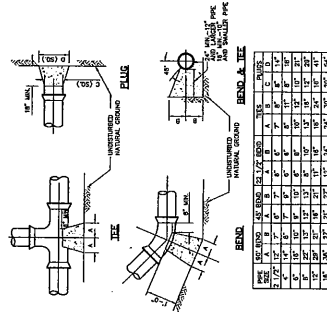
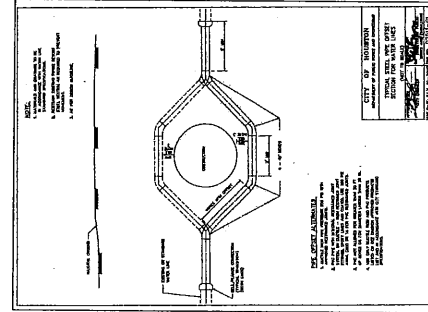
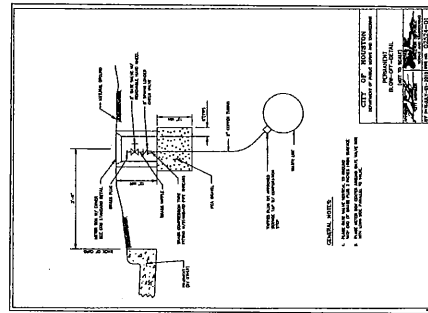
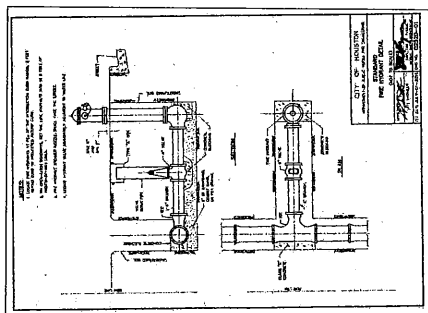
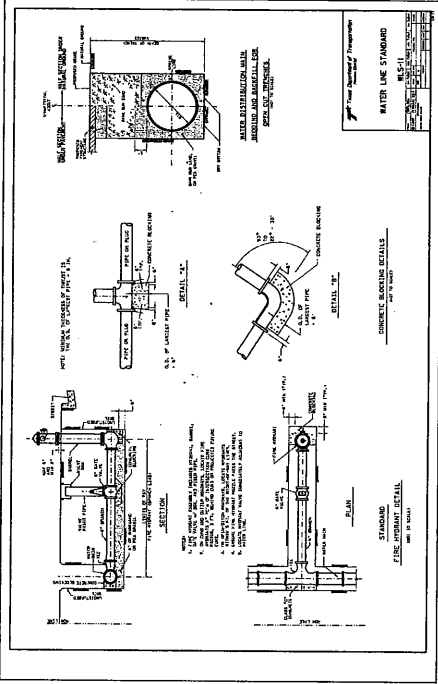
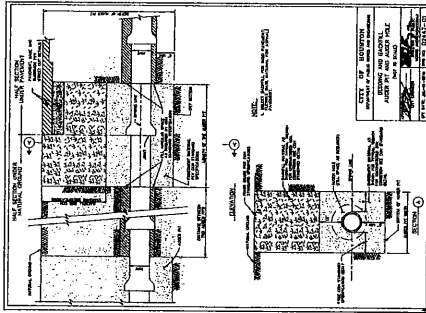
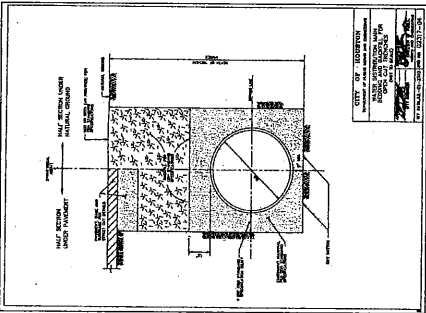
**BCE**

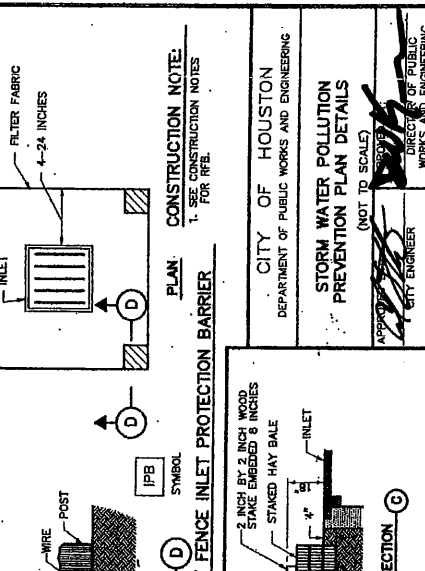
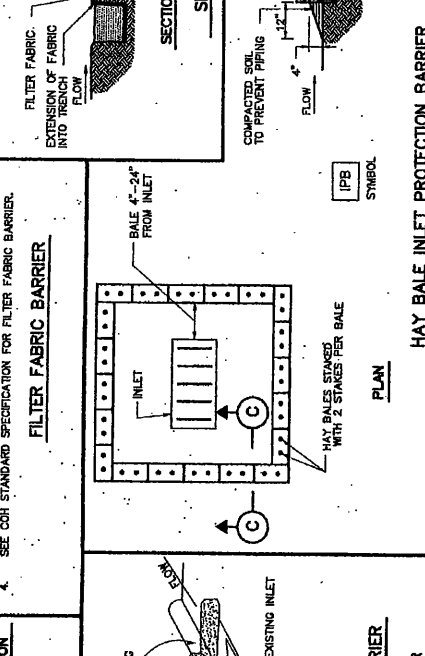
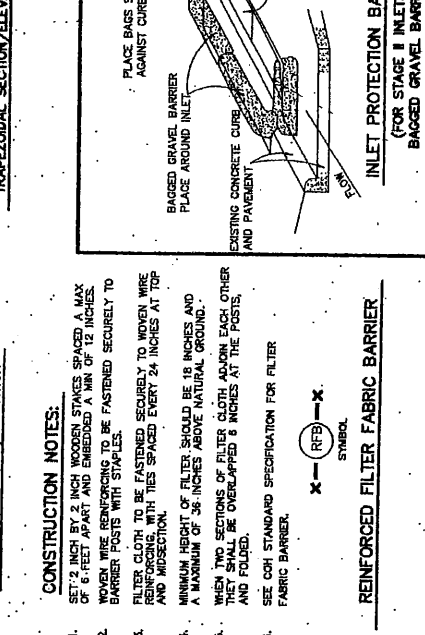
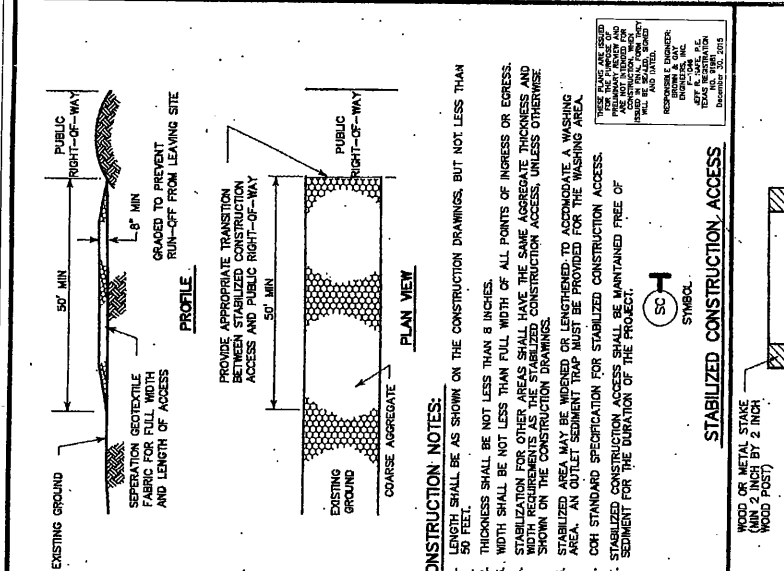
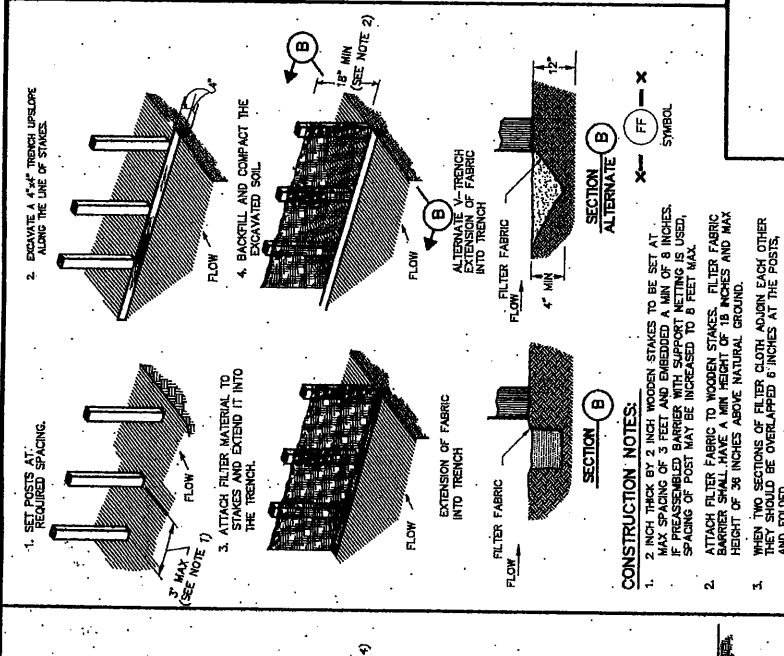
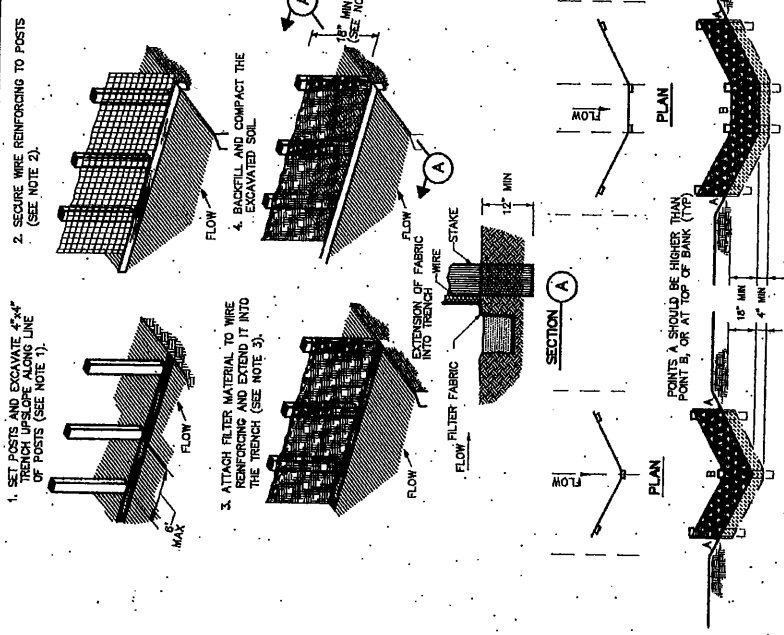
Richard G. Day Engineers, Inc.  
10777 Katy Road, Suite 100  
Houston, TX 77024  
Tel: 281.465.1111  
Fax: 281.465.1112  
www.rge.com

DATE: 08/08/2011  
JOB NUMBER: 2008-01  
SHEET NO.: 6 OF 12

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND BENCHMARKING

FOR CITY OF HOUSTON USE ONLY





THESE PLANS ARE DESIGNED BY THE CONSULTING ENGINEER AND CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES.

RESPONSIBLE DESIGNER:  
 CITY ENGINEER  
 CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

APPROVED:  
 CITY ENGINEER  
 CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DIRECTOR OF PUBLIC WORKS AND ENGINEERING  
 CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

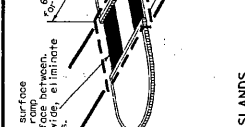
STORM WATER POLLUTION PREVENTION PLAN DETAILS  
 (NOT TO SCALE)

EFF DATE: JULY-01-2010 DWG NO: 01571-01

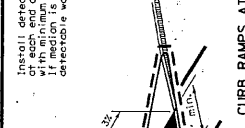
SHT. 8 OF 12



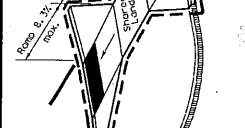
**TYPE 1**  
PERPENDICULAR CURB RAMP



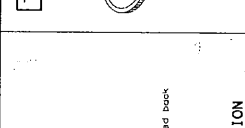
**TYPE 2**  
PARALLEL CURB RAMP  
(Use only where water will not pond in the landing.)



**TYPE 3**  
COMBINATION CURB RAMPS



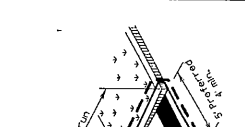
**TYPE 4**  
BLENDED TRANSITION



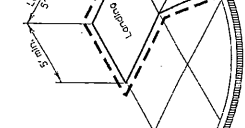
**TYPE 5**



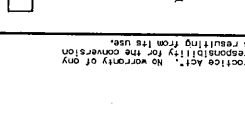
**TYPE 6**  
COMBINATION CURB RAMPS



**TYPE 7**



**TYPE 8**  
DIRECTIONAL RAMPS (Sidewalk set back from curb)



**TYPE 9**  
DIRECTIONAL RAMPS (Sidewalk adjacent to curb)



**TYPE 10**  
PARALLEL RAMPS (Sidewalk within 6' preferred, 5' min.)



**TYPE 11**  
OFFSET PARALLEL CURB RAMP



**TYPE 12**  
COMBINATION ISLAND RAMPS  
(Cross slope not to exceed 2% on any portion of ramp, landing or transition to street.)



**TYPE 13**  
CURVED RAMPS (Sidewalk within 6' preferred, 5' min.)



**TYPE 14**  
BLENDED TRANSITION



**TYPE 15**



**TYPE 16**



**TYPE 17**



**TYPE 18**



**TYPE 19**



**TYPE 20**



**TYPE 21**



**TYPE 22**



**TYPE 23**



**TYPE 24**



**TYPE 25**



**TYPE 26**



**TYPE 27**



**TYPE 28**



**TYPE 29**



**TYPE 30**



**TYPE 31**



**TYPE 32**



**TYPE 33**



**TYPE 34**



**TYPE 35**



**TYPE 36**



**TYPE 37**



**TYPE 38**



**TYPE 39**



**TYPE 40**



**TYPE 41**



**TYPE 42**



**TYPE 43**



**TYPE 44**



**TYPE 45**



**TYPE 46**



**TYPE 47**



**TYPE 48**



**TYPE 49**



**TYPE 50**



**TYPE 51**



**TYPE 52**



**TYPE 53**



**TYPE 54**



**TYPE 55**



**TYPE 56**



**TYPE 57**



**TYPE 58**



**TYPE 59**



**TYPE 60**



**TYPE 61**



**TYPE 62**



**TYPE 63**



**TYPE 64**



**TYPE 65**



**TYPE 66**



**TYPE 67**



**TYPE 68**



**TYPE 69**



**TYPE 70**



**TYPE 71**



**TYPE 72**



**TYPE 73**



**TYPE 74**



**TYPE 75**



**TYPE 76**



**TYPE 77**



**TYPE 78**



**TYPE 79**



**TYPE 80**



**TYPE 81**



**TYPE 82**



**TYPE 83**



**TYPE 84**



**TYPE 85**



**TYPE 86**



**TYPE 87**



**TYPE 88**



**TYPE 89**



**TYPE 90**



**TYPE 91**



**TYPE 92**



**TYPE 93**



**TYPE 94**



**TYPE 95**



**TYPE 96**



**TYPE 97**

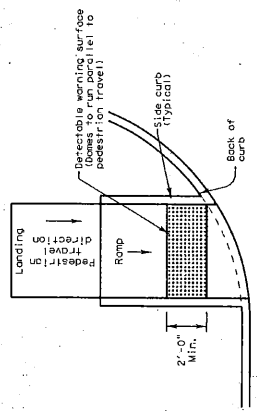


**General Notes**

1. Install a curb ramp or blended transition at each pedestrian street crossing.
2. All slopes shown are maximum allowable. Lesser slopes that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
3. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, curb side slope shall be desirable. Where a 5' sidewalk cannot be provided due to site conditions, a 5' x 5' passing area at intervals not to exceed 200' are required.
4. Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.
5. Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
6. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. The flared sides shall be a minimum of 10% maximum, measured parallel to the curb. The flared sides may be used only where the adjacent surface is planted, substantially obstructed, or otherwise protected.
8. Additional information on curb ramp location, design, light reflective value and reflective material may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC 68.102.
9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, passage over or through them. Medians should be designed to provide accessible passage over or through them.
10. Small channelization islands, which do not provide a minimum 5' x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
12. Handrails are not required on curb ramps. Provide curb ramps wherever an accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Curb ramps shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
17. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

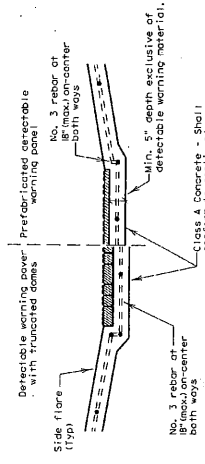
**Detectable Warning Material**

18. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 705 of the TAS. The surface must contrast approved cast-in-place dark brown or black aggregate, including the material adjacent to uncolored concrete, unless specified elsewhere in the plans.
19. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the TxDOT Approved Product List. Install products in accordance with manufacturer's specifications.
20. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
21. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
22. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb. Align the rows of domes to be perpendicular to the grade along the center radius.
23. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.



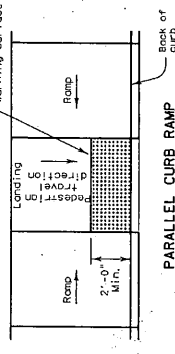
**DIRECTIONAL CURB RAMP**

Typical placement of detectable warning surface on sloping ramp run.



**PERPENDICULAR CURB RAMP**

Typical placement of detectable warning surface on sloping ramp run.



**PARALLEL CURB RAMP**

Typical placement of detectable warning surface on landing at street edge.

**DETECTABLE WARNINGS**

24. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
25. Lay full-size units, first followed by course units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.
26. Provide clear ground space at operable parts, including pedestrian push buttons.
27. Place traffic signal or illumination poles, ground boxes, control boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
28. Street grades and cross slopes shall be as shown elsewhere in the plans.
29. Changes in level greater than 1/4 inch are not permitted.
30. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway, where a continuous grade greater than 5% must be provided. Detectable warning materials may also be needed to protect pedestrians from potentially hazardous conditions. (Provide, handrails shall comply with TAS 505).
31. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
32. Driveways and turnouts shall be constructed and paid for in accordance with Item 510 in accordance with Item, "Sidewalks".
33. Sidewalk details are shown elsewhere in the plans.

**Sidewalks**

18. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 705 of the TAS. The surface must contrast approved cast-in-place dark brown or black aggregate, including the material adjacent to uncolored concrete, unless specified elsewhere in the plans.
19. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the TxDOT Approved Product List. Install products in accordance with manufacturer's specifications.
20. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
21. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
22. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb. Align the rows of domes to be perpendicular to the grade along the center radius.
23. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.

THIS PLAN AND SPECIFICATIONS ARE TO BE USED FOR THE PURPOSE OF THE PROVISION OF A SAFE AND ACCESSIBLE PUBLIC RIGHT OF WAY. THE USER OF THIS STANDARD IS RESPONSIBLE FOR OBTAINING THE LATEST EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC 68.102. THE USER OF THIS STANDARD IS GOVERNED BY THE "Texas Engineering Practice Act" and shall be held liable for any errors or omissions in the design or construction of any work prepared or supervised by the user of this standard.

SHEET 2 OF 4

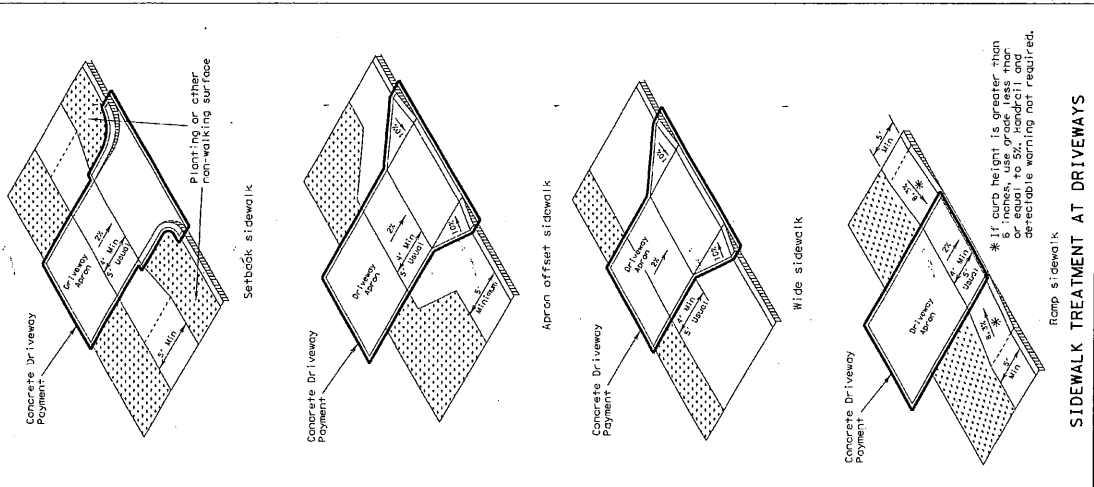
Texas Department of Transportation  
Design Standard

**PEDESTRIAN FACILITIES  
CURB RAMPS**

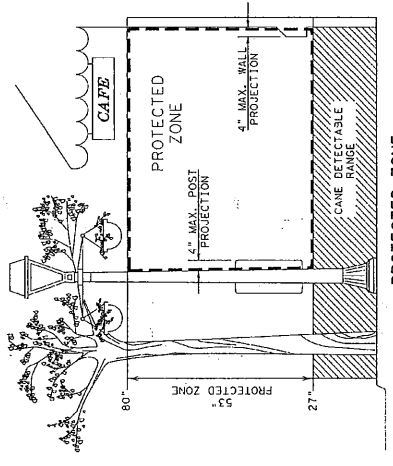
PED-12A

DATE	BY	CHECKED	DATE
03/20/2012	03/20/2012	03/20/2012	03/20/2012
REV	DATE	BY	DATE
1	JUNE 13, 2012	03/20/2012	03/20/2012
2			
3			

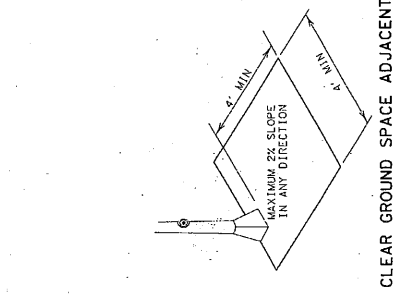
DISCLAIMER: Use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



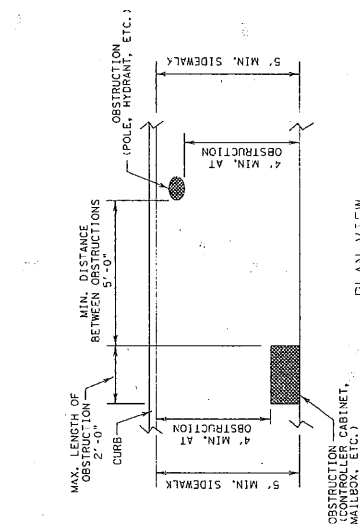
**SIDEWALK TREATMENT AT DRIVEWAYS**



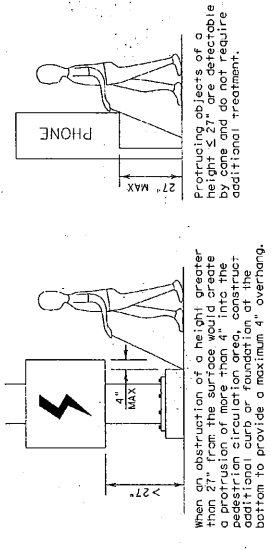
**PROTECTED ZONE**  
In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27" and 80" above the surface.



**CLEAR GROUND SPACE ADJACENT TO PEDESTRIAN PUSH BUTTON**



**PLAN VIEW**  
**PLACEMENT OF STREET FIXTURES**  
ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4" CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.



**DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"**

SHEET 3 OF 4

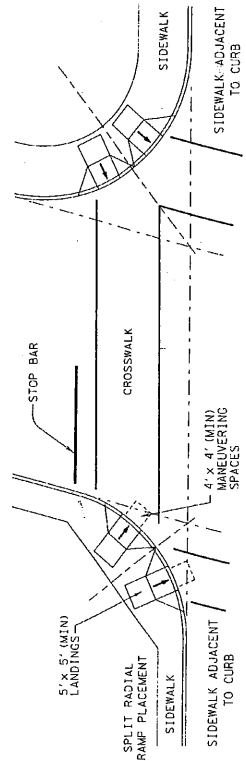
Texas Department of Transportation  
**PEDESTRIAN FACILITIES**  
**CURB RAMPS**  
**PED-12A**

FILE NO.	POSTED BY	DATE	BY	DATE	BY	DATE	BY
12001	March 2012	10/13/12	JAK	10/13/12	JAK	10/13/12	JAK
1012	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12
1012	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12	10/13/12
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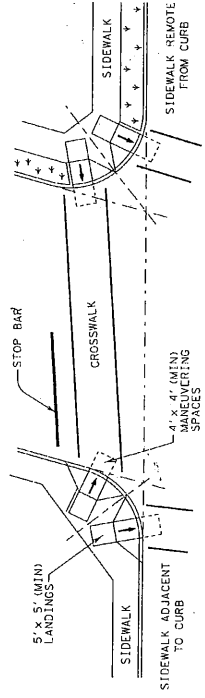
DATE: 11/13  
 FILE: 11/13

THESE PLANS ARE USED FOR THE DESIGN AND CONSTRUCTION OF PEDESTRIAN FACILITIES. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION AND DATA PROVIDED TO THE ENGINEER. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE FACILITIES SHOWN ON THESE PLANS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

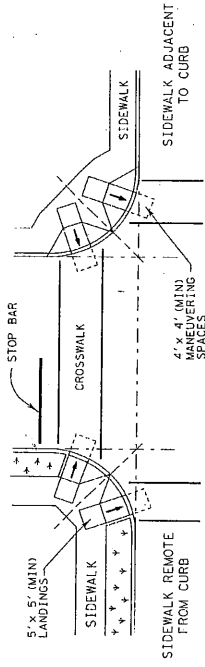
DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TCEQ for any damages or for incorrect results of damages resulting from its use. DATE: FILE:



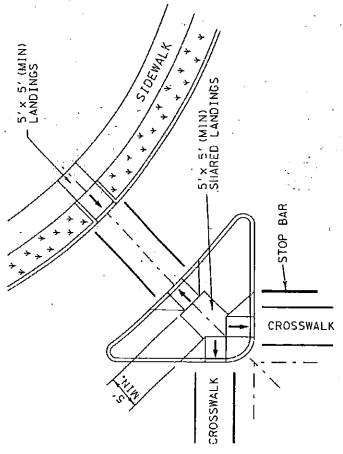
SKewed INTERSECTION WITH "LARGE" RADIUS



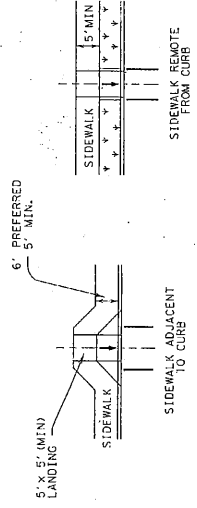
SKewed INTERSECTION WITH "SMALL" RADIUS



NORMAL INTERSECTION WITH "SMALL" RADIUS



AT INTERSECTION W/FREE RIGHT TURN & ISLAND



MID-BLOCK PLACEMENT PERPENDICULAR RAMPS

SHEET 4 OF 4

Texas Department of Transportation  
 Division  
 Shindler

PEDESTRIAN FACILITIES  
 CURB RAMPS

PED-12A

FILE	06/12/12.dgn	REV	12/02	DATE	12/02	BY	12/02
PROJECT	00000000	CONTRACT	00000000	SECTION	00000000	SHEET NO.	00000000
DATE	06/13/12	BY	12/02	DATE	12/02	BY	12/02

THIS STANDARD IS THE PROPERTY OF THE TEXAS DEPARTMENT OF TRANSPORTATION. IT IS LOANED TO YOUR AGENCY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF THE TEXAS DEPARTMENT OF TRANSPORTATION, ANY REPRODUCTION OR TRANSMISSION OF THIS STANDARD IS PROHIBITED. DATE: 06/13/12

TYPICAL CROSSING LAYOUTS

# Exhibit B

## Fort Bend County Municipal Utility District No. 34

### Construction Cost Estimate

(3 Pages that Follow)

\_\_\_\_\_  
Date  
Fort Bend County

BEH      1/26/16  
Initial      Date  
Fort Bend MUD No. 34

**EXHIBIT B**

**Fort Bend County Municipal Utility District No. 34**

**F.M. 1093 12 Inch Water Line Relocation  
Phase 1**

**Preliminary Construction Cost Estimate  
February 2, 2016**

<u>ITEM</u>	<u>QUANTITY &amp; UNIT</u>	<u>UNIT COST</u>	<u>ITEM TOTAL</u>
<b><u>UNIT A: WATER DISTRIBUTION SYSTEM</u></b>			
1. C900-DR18 (class 150) P.V.C. Waterline (all depths) (including bends, wyes, crosses, plugs and clamps, reducers and tees):			
a. 12" Pipe	1,000 LF	\$ 80.00	\$ 80,000.00
b. 16" Pipe	10 LF	\$ 100.00	\$ 1,000.00
2. Gate Valve and Box:			
a. 12" Pipe	2 EA	\$ 3,250.00	\$ 6,500.00
3. Fire Hydrants (including leads, tee (mechanical joint) & 6" GV; all depths):	5 EA	\$ 3,675.00	\$ 18,375.00
4. Trenchless Waterline Installation (Includes 12" Water Pipe, Excavation, Backfill and Compaction of Bore and Receiving Pits)	100 LF	\$ 125.00	\$ 12,500.00
5. Miscellaneous Items:			
a. 2" Blow Off Valve with Box	1 EA	\$ 1,000.00	\$ 1,000.00
b. 16" Wet Connect (including cutting of existing waterline and connection of proposed water line)	2 EA	\$ 1,500.00	\$ 3,000.00
6. Trench Safety System	1,010 LF	\$ 1.00	\$ 1,010.00
7. Existing Water Line Removal, Including all Related Water Line Appurtenances, Off-Site Disposal and Backfilling of Trench			
a. 12" Pipe	1,270 LF	\$ 15.00	\$ 19,050.00
b. 16" Pipe	155 LF	\$ 20.00	\$ 3,100.00
8. Off-site Disposal of Excess Utility Excavation (includes disposal of said material at a location which the Contractor has a legal right and permission to dispose of said material)	1 LS	\$ 5,000.00	\$ 5,000.00
<b>TOTAL, UNIT A</b>			<b>\$ 150,535.00</b>

**Fort Bend County Municipal Utility District No. 34**

**F.M. 1093 12 Inch Water Line Relocation  
Phase 1**

**Preliminary Construction Cost Estimate  
February 2, 2016**

ITEM	QUANTITY & UNIT	UNIT COST	ITEM TOTAL
<b><u>UNIT B: STORM WATER POLLUTION CONTROL</u></b>			
1. Enforcement and Maintenance of TPDES Requirements for Duration of Contract	1 LS	\$ 2,500.00	\$ 2,500.00
2. Stabilized Construction Access (Spec. Item 4711)	1 EA	\$ 2,500.00	\$ 2,500.00
3. Reinforced Filter Fabric Fence (Spec. Item 4311)	1,500 LF	\$ 2.00	\$ 3,000.00
4. Solid sodding of Disturbed Area within Gaston Road Right-of-Way (final quantity to be determined by engineer as per field conditions)	250 SY	\$ 7.50	\$ 1,875.00
5. Hydro-mulch Seeding of disturbed areas (final quantity to be determined by engineer as per field conditions) (Spec. Item 4241)	1.0 AC	\$ 2,500.00	\$ 2,500.00
<b>TOTAL, UNIT B</b>			<b>\$ 12,375.00</b>
<b><u>UNIT C: TRENCH SAFETY PLAN</u></b>			
1. Design and submittal of Trench Safety plan for underground utilities; prepared and sealed by an engineer licensed by the State of Texas in accordance with the contract documents.	1 LS	\$ 2,000.00	\$ 2,000.00
<b>TOTAL, UNIT C</b>			<b>\$ 2,000.00</b>
<b><u>UNIT D: EXTRA PAY ITEMS</u></b>			
The following are to be used only when directed by the Engineer and approved by the Owner. Methods will be approved by the Engineer and will be paid for at the prescribed unit prices. Utilization of these items will depend on site conditions at the time of construction.			
1. Orange Protective Safety Fence (\$1.00 per LF minimum)	200 LF	\$ 2.00	\$ 400.00
2. Extra Clearing	1 AC	\$ 2,500.00	\$ 2,500.00
3. Containers to Haul and Dispose Off-Site Miscellaneous Debris and Trash (Containers shall have a minimum of 40 CY)	1 EA	\$ 1,000.00	\$ 1,000.00
<b>TOTAL, UNIT D</b>			<b>\$ 3,900.00</b>

**Fort Bend County Municipal Utility District No. 34**

**F.M. 1093 12 Inch Water Line Relocation  
Phase 1**

**Preliminary Construction Cost Estimate**

February 2, 2016

ITEM	QUANTITY & UNIT	UNIT COST	ITEM TOTAL
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**SUMMARY - F.M. 1093 12 INCH WATER LINE RELOCATION PHASE 1**

UNIT A: WATER DISTRIBUTION SYSTEM			\$ 150,535.00
UNIT B: STORM WATER POLLUTION CONTROL			\$ 12,375.00
UNIT C: TRENCH SAFETY PLAN			\$ 2,000.00
UNIT D: EXTRA PAY ITEMS			\$ 3,900.00
<b>TOTAL</b>			<b>\$ 168,810.00</b>

**ALTERNATE BID ITEMS**

1. On-site Disposal of Excess Utility Excavation (includes disposal of said material at a location which the Contractor has a legal right and permission to dispose of said material)	1 LS	\$	\$
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## Exhibit C


# Fort Bend County Municipal Utility District No. 34

## Schedules of Work and Estimated Date of Completion

(As Shown Below)

<b>Bid Date:</b>	<b>February 15, 2016</b>
<b>FBCMUD No. 34 Board Approval:</b>	<b>February 23, 2016</b>
<b>Construction Start Date:</b>	<b>March 28, 2016</b>
<b>Construction Completion Date:</b>	<b>April 29, 2016</b>

\_\_\_\_\_  
Date  
Fort Bend County

  
Initial  
\_\_\_\_\_  
Date  
1/26/16  
Fort Bend MUD No. 34