



**PERMIT APPLICATION REVIEW FORM FOR
CABLE, CONDUIT, AND POLE LINE ACTIVITY
IN FORT BEND COUNTY**

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

- ☒ **Right of Way Permit**
☐ **Commercial Driveway Permit**

Permit No: 2017-15469

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

- ☒ a. Name of road, street, and/or drainage ditch affected.
☒ b. Vicinity map showing course of directions
☒ c. Plans and specifications

(2) BOND:

- ☐ County Attorney, approval when applicable.
- ☐ Perpetual bond currently posted. Bond No: _____ Amount: _____
- ☒ Performance bond submitted. Bond No: [REDACTED] Amount: \$29,892.81
- ☐ Cashier's Check Check No: _____ Amount: _____

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

We have reviewed this project and agree it meets minimum requirements.

Charles O. Ay

Permit Administrator

Date

PERFORMANCE BOND COVERING ALL CABLE, CONDUIT AND/OR POLE LINE
ACTIVITY IN, UNDER, ACROSS OR ALONG FORT BEND COUNTY ROAD,
COMMERCIAL DRIVEWAY AND MEDIAN OPENINGS OR MODIFICATIONS
(AUTHORIZED)

BOND NO [REDACTED]

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND §

THAT WE, Alcott, Inc. dba TCH whose (address, phone) is 4105 FM 2351, Friendswood, Texas, 77546, (281)993-2999, hereinafter called the Principal, and Developers Surety and Indemnity Company, a Corporation existing under and by virtue of the laws of the state of California and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at (name/address/phone) 17771 Cowan, Suite 100, Irvine, CA 92614, (949) 263-3300 whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Steve Rauch and whose address is 2591 Dallas Parkway, Suite 105, Frisco, Texas 75034, hereinafter called the Surety, and held and firmly bound unto, Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of Twenty-Nine Thousand, Eight Hundred Ninety-Two and 81/100 Dollars (\$ 29,892.81) current, lawful money of the United States of America, to be paid to said Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, to which payment well and truly to be made and done, we, the undersigned, bind ourselves and each of us, our heirs, executors, administrators, successors, assigns, and legal representatives, jointly and severally, by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the above bounden principal contemplates laying, constructing, maintaining and/or repairing one or more cables, conduits, and/or pole lines in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend, and the State of Texas, under the jurisdiction of the Commissioners' Court of Fort Bend County, Texas, pursuant to the Commissioners' Court order adopted on the 1st day of December, A.D. 1980, recorded in Volume 13, of the Commissioners' Court Minutes of Fort Bend County, Texas, regulating same, which Commissioners' Court order is hereby referred to and made a part hereof for all purposes as though fully set out herein;

AND WHEREAS, the principal desires to provide Fort Bend County with a performance bond covering all such cable, conduit and/or pole line activity, commercial driveway and median openings or modifications;

NOW, THEREFORE, if the above bounden principal shall faithfully perform all its cable, conduit and/or pole line activity (including, but not limited to the laying, construction, maintenance and/or repair of cables, conduits and/or pole lines) in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend and State of Texas, under the jurisdiction of the Commissioners Court of Fort Bend County, Texas, pursuant to and in accordance with minimum requirements and conditions of the above mentioned Commissioners' Court order set forth and specified to be by said principal done and performed, at the time and in the manner therein specified, and shall pay over and make good and reimburse Fort Bend County, all loss and damages which Fort Bend County may sustain by reason of any failure or default on the part of said principal, then this obligation shall be null and void, otherwise to remain in full force and effect.

This bond is payable at the County Courthouse in the County of Fort Bend and State of Texas.

It is understood that at any time Fort Bend County deems itself insecure under this bond, it may require further and/or additional bonds of the principal.

EXECUTED this 11th day of August, 2017.

Alcott, Inc. dba TCH
PRINCIPAL

BY 

Developers Surety and Indemnity Company
SURETY

BY 

Beverly A. Ireland, Attorney-in-Fact

**POWER OF ATTORNEY FOR
DEVELOPERS SURETY AND INDEMNITY COMPANY
INDEMNITY COMPANY OF CALIFORNIA**
PO Box 19725, IRVINE, CA 92623 (949) 263-3300

KNOW ALL BY THESE PRESENTS that except as expressly limited, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, do each hereby make, constitute and appoint:

Gloria M. Villa, David R. Groppell, Sharon Cavanaugh, Beverly A. Ireland, Sharen Groppell, Roxanne G. Brune, Francine Hay, Kurt A. Risk, jointly or severally

as their true and lawful Attorney(s)-in-Fact, to make, execute, deliver and acknowledge, for and on behalf of said corporations, as sureties, bonds, undertakings and contracts of suretyship giving and granting unto said Attorney(s)-in-Fact full power and authority to do and to perform every act necessary, requisite or proper to be done in connection therewith as each of said corporations could do, but reserving to each of said corporations full power of substitution and revocation, and all of the acts of said Attorney(s)-in-Fact, pursuant to these presents, are hereby ratified and confirmed.

This Power of Attorney is granted and is signed by facsimile under and by authority of the following resolutions adopted by the respective Boards of Directors of DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, effective as of January 1st, 2008.

RESOLVED, that a combination of any two of the Chairman of the Board, the President, Executive Vice-President, Senior Vice-President or any Vice President of the corporations be, and that each of them hereby is, authorized to execute this Power of Attorney, qualifying the attorney(s) named in the Power of Attorney to execute, on behalf of the corporations, bonds, undertakings and contracts of suretyship; and that the Secretary or any Assistant Secretary of either of the corporations be, and each of them hereby is, authorized to attest the execution of any such Power of Attorney;

RESOLVED, FURTHER, that the signatures of such officers may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures shall be valid and binding upon the corporations when so affixed and in the future with respect to any bond, undertaking or contract of suretyship to which it is attached.

IN WITNESS WHEREOF, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA have severally caused these presents to be signed by their respective officers and attested by their respective Secretary or Assistant Secretary this 6th day of February, 2017.

By: *Daniel Young*
Daniel Young, Senior Vice-President

By: *Mark Lansdon*
Mark Lansdon, Vice-President



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange

On February 6, 2017 before me, _____
Date

Lucille Raymond, Notary Public
Here Insert Name and Title of the Officer

personally appeared _____
Daniel Young and Mark Lansdon
Name(s) of Signer(s)

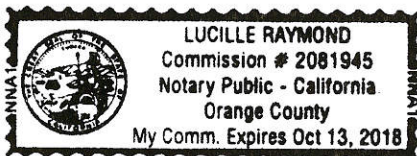
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Lucille Raymond
Lucille Raymond, Notary Public



Place Notary Seal Above

CERTIFICATE

The undersigned, as Secretary or Assistant Secretary of DEVELOPERS SURETY AND INDEMNITY COMPANY or INDEMNITY COMPANY OF CALIFORNIA, does hereby certify that the foregoing Power of Attorney remains in full force and has not been revoked and, furthermore, that the provisions of the resolutions of the respective Boards of Directors of said corporations set forth in the Power of Attorney are in force as of the date of this Certificate.

This Certificate is executed in the City of Irvine, California, this 11th day of August, 2017.

By: *Cassie J. Berrisford*
Cassie J. Berrisford, Assistant Secretary



IMPORTANT NOTICE

To obtain information or make a complaint:

You may call the Surety's toll free telephone number for information or to make a complaint at:

1-800-782-1546

You may also write to the Surety at:

P.O. Box 19725
Irvine, CA 92623-9725

You may contact the Texas Department of Insurance to obtain information on companies, coverage, rights or complaints at:

1-800-252-3439

You may write the Texas Department of Insurance at:

P.O. Box 149104
Austin, TX 78714-9104
Fax# 512-475-1771
web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us

PREMIUM OR CLAIM DISPUTES: Should you have a dispute concerning your premium or about a claim you should contact the Surety first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY: This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANCE

Para obtener informacion o para someter una queja:

Usted puede llamar al numero de telefono gratis de para informacion o para someter una queja al:

1-800-782-1546

Usted tambien puede escribir al Surety:

P.O. Box 19725
Irvine, CA 92623-9725

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104
Austin, TX 78714-9104
Fax# 512-475-1771
web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us

DISPUTAS SOBRE PRIMAS O RECLAMOS: Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el Surety primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

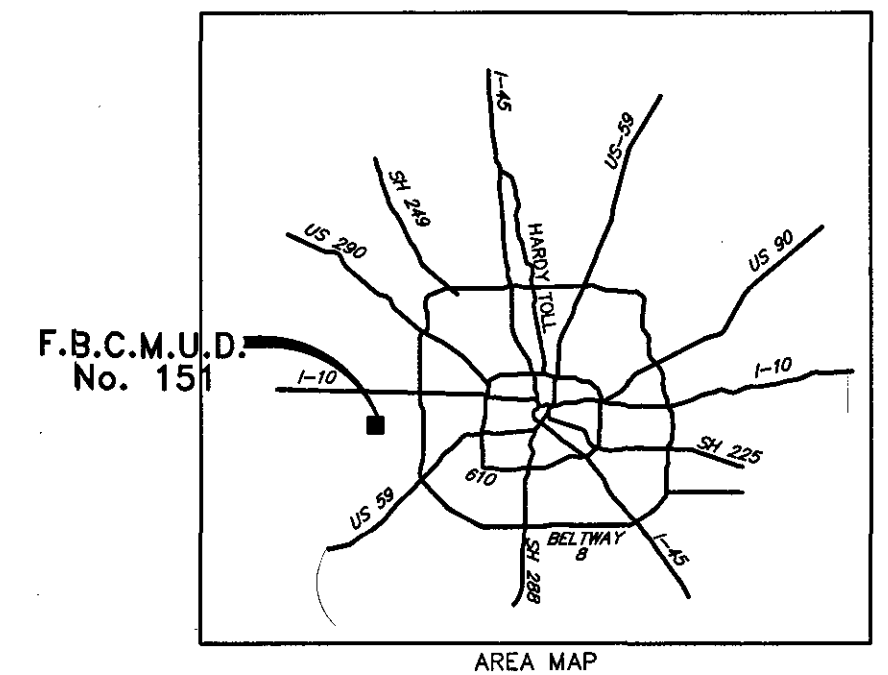
UNA ESTEAVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.



**Developers Surety and Indemnity Company
Indemnity Company of California
CorePointe Insurance Company**

17771 Cowan, Suite 100
Irvine, CA 92614
1-800-782-1546
www.AmTrustSurety.com

CONSTRUCTION
OF
WATERLINE EXTENSION
ALONG F.M. 1463
FOR
FORT BEND COUNTY
MUNICIPAL UTILITY DISTRICT No. 151
IN
FORT BEND COUNTY, TEXAS



NOTES:

These plans were prepared to meet or exceed the specifications and requirements of City of Houston and Fort Bend County as currently amended.

Approval by Fort Bend County will be deemed void if construction has not begun within one year of approval date.

Construction shall not begin before the plat of this section is filed in the Fort Bend County Map Records.

Construction will be monitored under the supervision of a licensed professional engineer of JONES & CARTER, INC.

Contractor shall notify the Fort Bend County Engineering Department at least 48 hours prior to commencement at construction@fortbendcountytx.gov.

I, Robert W. Dazey, a Professional Engineer licensed in the State of Texas do hereby certify that these plans were prepared under my supervision to meet or exceed the specifications and requirements of Fort Bend County, Texas.


ROBERT W. DAZEY, P.E.

4-19-2017
Date

INDEX OF DRAWINGS

<u>SHEET No.</u>	<u>TITLE</u>
1	COVER SHEET & INDEX
2	GENERAL CONSTRUCTION LAYOUT - WATERLINE EXTENSION & SWPPP
3	CONSTRUCTION NOTES

PLAN & PROFILE

<u>STREET NAME</u>	<u>STATION</u>
4 F.M. 1463	1+00 TO 5+00
5 F.M. 1463	5+00 TO 9+00
6 F.M. 1463	9+00 TO 12+00

DETAILS

7	STORM WATER POLLUTION PREVENTION PLAN DETAILS
8	MISCELLANEOUS DETAILS

FORT BEND COUNTY ENGINEER

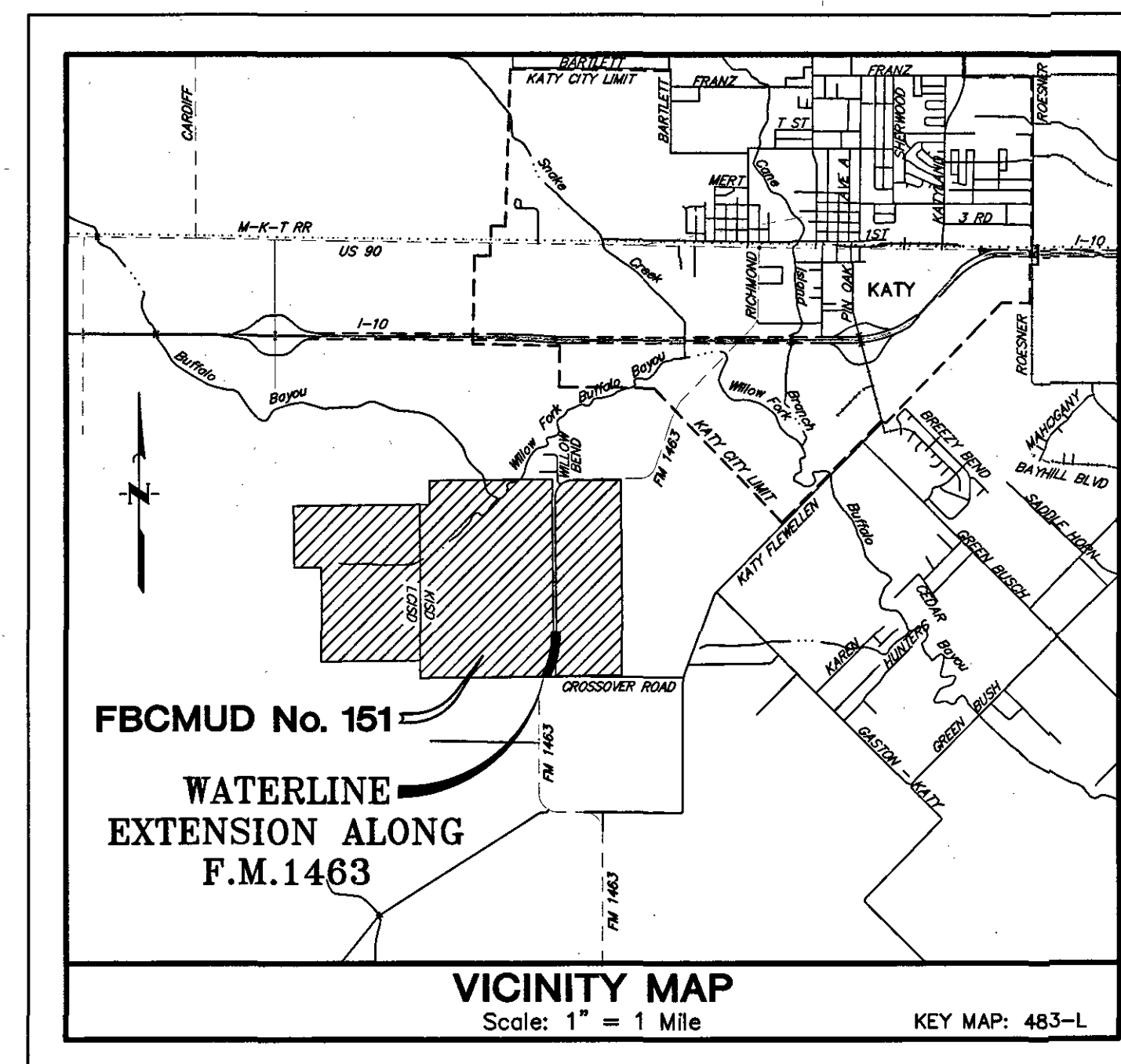
ENGINEER:  RICHARD W. STOLLERS, P.E.

DATE: 5/12/17

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN ONE (1) YEAR FROM DATE OF APPROVAL.

APPROVED:  DEVELOPMENT COORDINATOR

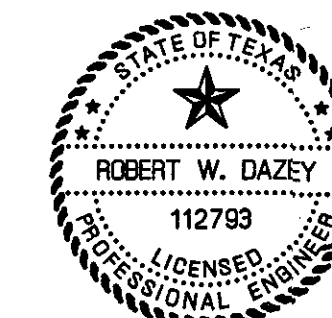
DATE: 5/11/17



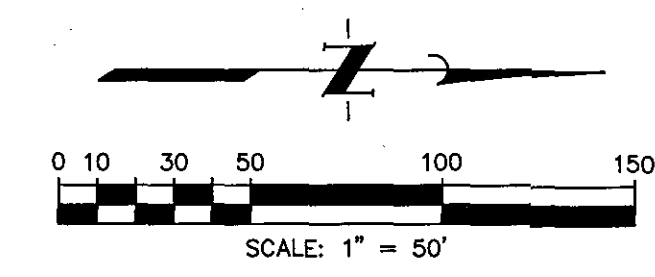
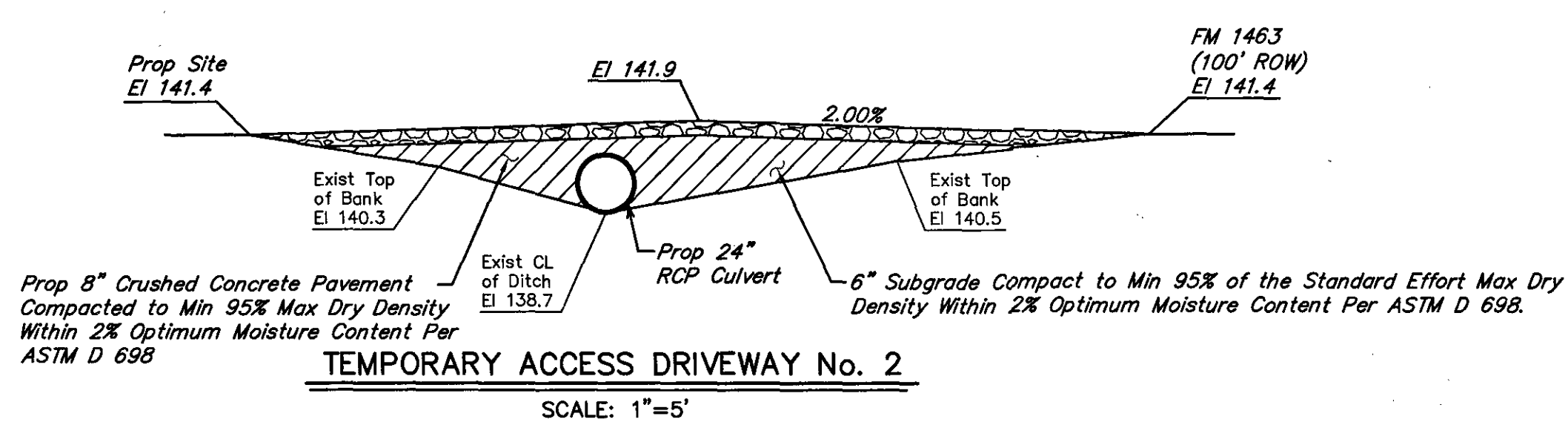
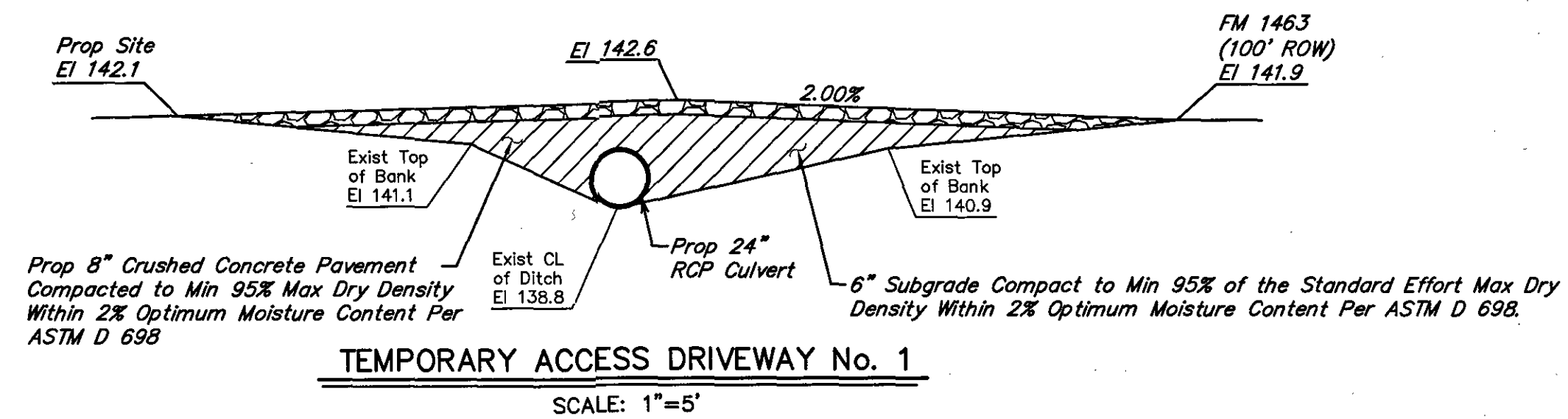
DIG-TESS NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
www.digtess.org/
Texas811 or 1-800-DIG-TESS
1-800-344-8377

APRIL 2017

 JONES | CARTER
Texas Board of Professional Engineers Registration No. F-439
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



SHEET
No: 1 OF 8



BENCH MARK (FEMA RM 7)
THE BASE BENCHMARK FOR FIRETHORNE SUBDIVISION IS FEMA RM 4. THIS BENCHMARK IS DESCRIBED ON FEMA PANEL NUMBER 48157C0015J. A DISK SET IN TOP OF SOUTHEAST END OF SOUTHWEST ABUTMENT OF PIN OAK ROAD BRIDGE OVER WILLOW FORK BUFFALO BAYOU.

ELEVATION 126.90 (1987 ADJUSTMENT)

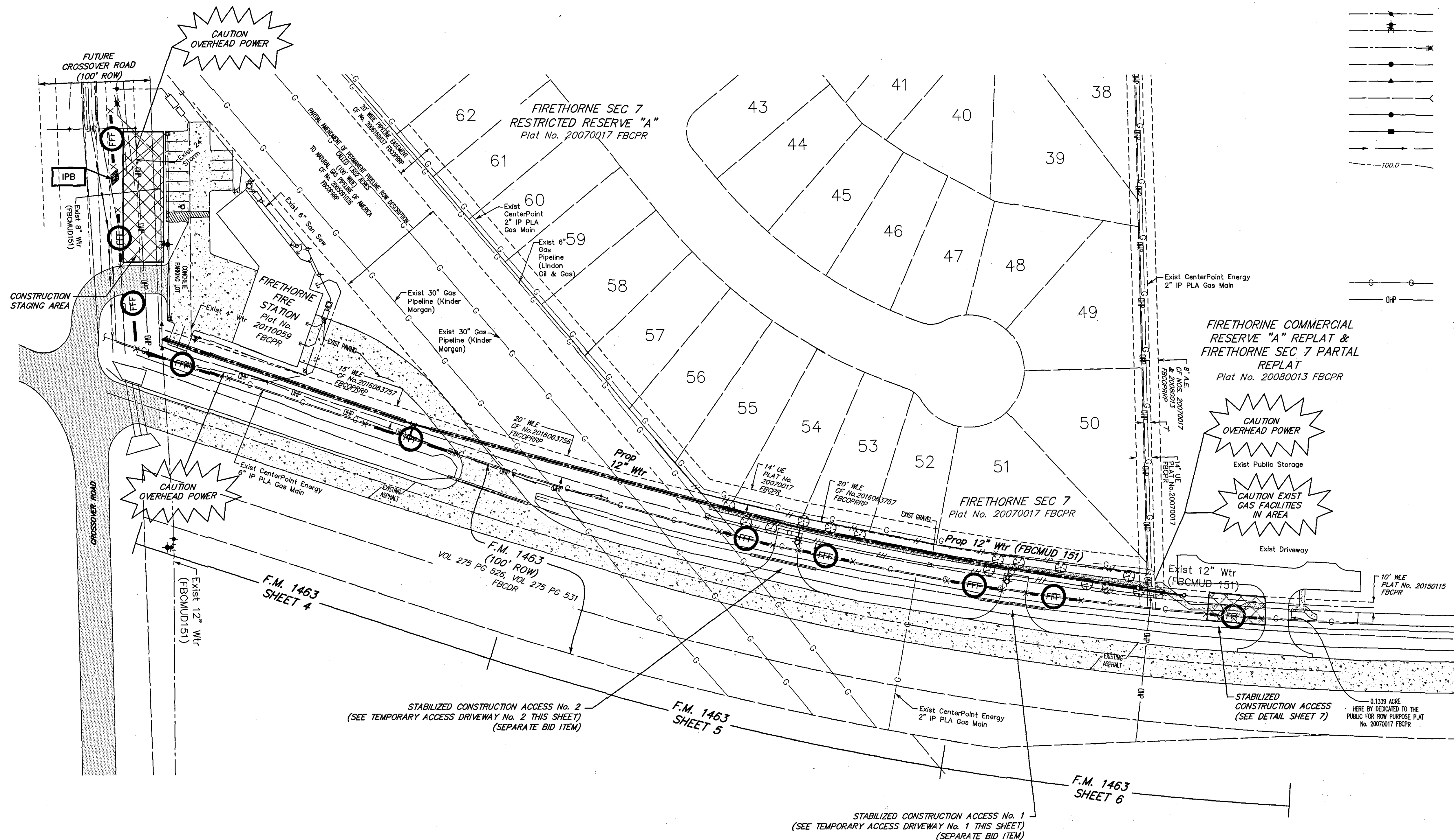
T.B.M.-1
OUT "X" LOCATED ON WHEELCHAIR RAMP AT THE NORTHWEST CORNER OF GREYSTONE CROSSING AND SOUTH FIRETHORNE ROAD.

ELEVATION 140.49 (NAVD 1987 ADJUSTMENT)

100 YR. FLOOD PLAIN
ACCORDING TO FEDERAL INSURANCE RATE MAP NO. 48157C0105L, EFFECTIVE APRIL 2, 2014, FOR FORT BEND COUNTY, TEXAS, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

LEGEND

EXISTING	PROPOSED	
		WATERLINE w/ GATE VALVE
		FLUSH VALVE w/ GATE VALVE
		PLUG & CLAMP w/ BLOW OFF
		SANITARY SEWER w/ MANHOLE
		SANITARY STACK
		SANITARY LEAD
		STORM SEWER w/ MANHOLE
		STORM SEWER w/ INLET
		SWALE CENTERLINE
		NATURAL GROUND CONTOUR
		UTILITY EASEMENT
		WATERLINE EASEMENT
		SANITARY SEWER EASEMENT
		STORM SEWER EASEMENT
		DRAINAGE EASEMENT
		AERIAL EASEMENT
		EXIST GAS LINE
		EXIST OVERHEAD POWER
		FILTER FABRIC FENCE
		INLET PROTECTION BARRIER



GENERAL CONSTRUCTION NOTES

- WASTEWATER COLLECTION SYSTEMS, WATER, PAVING, TRAFFIC SIGNALS AND DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CITY DOCUMENTS. THESE DOCUMENTS ARE "STANDARD CONSTRUCTION SPECIFICATIONS (MOST RECENT ISSUE DECEMBER 2014) AND "STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING" (MOST RECENT ISSUE DECEMBER 2014) WITH ALL SUBSEQUENT AMENDMENTS ADDED THERETO UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN MUST AGREE WITH THE MINIMUM STANDARDS ESTABLISHED IN THE LATEST ISSUE OF THE "INFRASTRUCTURE DESIGN MANUAL" (MOST RECENT ISSUE DECEMBER 2014). NOTE THAT PLAN SIGNATURES AND LETTERS OF CAPACITY AVAILABILITY FOR STORM, WASTEWATER AND WATER EXPIRE AFTER ONE YEAR AND THE LATEST EDITIONS OF DESIGN RULES, SPECIFICATIONS, STANDARD DETAILS AND MANUALS SHALL GOVERN AS OF THE DATES FOR RESIGNING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT HE/SHE HAS THE MOST RECENT EDITIONS. THESE DOCUMENTS MAY BE OBTAINED FROM THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS, 811 WALKER.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO PAVING, WATER LINES, WASTEWATER COLLECTION SYSTEMS, STORM SEWER AND TRAFFIC SIGNALS DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH CURRENT EDITIONS OF CITY OF HOUSTON STANDARD CONSTRUCTION SPECIFICATIONS, DESIGN DETAILS AND DESIGN MANUALS. REPAIRS SHALL BE AT NO COST TO THE CITY OF HOUSTON OR THE OWNER OF THE AFFECTED PROPERTY.
- ALIGNMENT, CENTERLINE CURVE DATA, AND STATIONING TO BE DETERMINED FROM APPROVED, RECORDED SUBDIVISION PLAT OR ROAD RIGHT-OF-WAY.
- PLACEMENT OF UTILITIES IN EASEMENTS SHALL BE GOVERNED BY THE "STANDARD 10-FOOT AND 14-FOOT EASEMENTS" AS ADOPTED BY THE UTILITY COORDINATING COMMITTEE FOR THE HOUSTON METROPOLITAN AREA.
- THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE GIVEN FOR REFERENCE ONLY. BEFORE COMMENCING THE WORK ON THIS CONTRACT, THE CONTRACTOR SHALL VERIFY BY FIELD INVESTIGATION THE ACTUAL LOCATIONS OF ALL UTILITY FACILITIES WITHIN AND ADJACENT TO THE LIMITS OF THE WORK THAT MAY BE AFFECTED BY THE WORK. CONFLICTS WHICH RESULT DUE TO NEGLIGENCE BY THE CONTRACTOR TO LOCATE HORIZONTALLY AND VERTICALLY EXISTING UTILITIES WHICH ARE SHOWN ON THE CONSTRUCTION DRAWINGS, OR WHICH THE CONTRACTOR HAS BEEN GIVEN NOTICE OR HAS KNOWLEDGE, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF REMEDIAL WORK, REMOVAL OF PORTIONS OF THE WORK OR EXTENSIVE DESIGN CHANGES OCCASIONED BY THE FAILURE OF THE CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UTILITIES AS DESCRIBED ABOVE SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR IS TO CONTACT DIG TESS AT TEXAS 811 OR 1(800)344-8377 FOR LOCATION OF EXISTING FACILITIES THAT MAY NOT BE SHOWN ON THE PLANS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY THE "REGULATIONS OF FORT BEND COUNTY, TEXAS, FOR FLOOD PLAIN MANAGEMENT" PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY FORT BEND COUNTY, TEXAS PRIOR TO STARTING CONSTRUCTION OF UTILITIES AND/OR CULVERTS WITHIN FORT BEND COUNTY ROAD RIGHTS-OF-WAY.
- CONTRACTOR SHALL COMPLY WITH O.S.H.A. REGULATIONS AND TEXAS STATE LAW CONCERNING TRENCH SAFETY SYSTEMS.
- CONTRACTOR TO FOLLOW CONSTRUCTION DETAILS IF DRAWINGS DEViate FROM CITY OF HOUSTON STANDARDS.
- THE CONTRACTOR SHALL RETURN ALL EXISTING FACILITIES TO EXISTING OR BETTER CONDITION UNLESS OTHERWISE NOTED AT NO ADDITIONAL COST TO THE OWNER.
- NOTE: "AUTHORIZATION NOTICE ISSUED BY FORT BEND COUNTY PUBLIC INFRASTRUCTURE ENGINEERING DEPARTMENT PERMIT OFFICE REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT TURN LANES WITHIN FORT BEND COUNTY RIGHT-OF-WAY." CONTACT FORT BEND COUNTY PERMIT OFFICE (281-633-7502).
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RED LINE RECORD DRAWINGS (INCLUDING MEASUREMENTS FROM TWO FIXED OBJECTS TO ENDS OF SANITARY SEWER SERVICES) AT THE COMPLETION OF THIS JOB, PRIOR TO FINAL PAYMENT.
- CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SITE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE OWNER WHETHER BY GRADING OR PUMPING.
- CONTRACTOR TO CALL JOSEPH REZA @ 713-777-5337 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

WATERLINE CONSTRUCTION NOTES

- ALL FOUR (4) INCH THROUGH TWELVE (12) INCH WATERLINES TO BE CLASS 235 (DR-18), PVC (AWWA C-900), OR DUCTILE IRON AS SPECIFIED. ASBESTOS CEMENT WATERLINE WILL NOT BE APPROVED FOR THIS PROJECT.
- TWELVE (12) INCH OR SMALLER WATERLINES SHALL HAVE A MINIMUM COVER OF FOUR (4) FEET BELOW TOP OF CURB. THE CONTRACTOR SHALL UNIFORMLY VARY THE ELEVATION OF THE WATERLINE FROM THE DEPTH SHOWN ON THE PLANS TO FACILITATE CONFLICT AVOIDANCE AND MAINTAIN MINIMUM CLEARANCES. MAXIMUM DEFLECTION OF JOINTS SHALL NOT EXCEED THE PIPE MANUFACTURER'S RECOMMENDATIONS.
- WATERLINE FITTINGS SHALL BE CAST OR DUCTILE IRON UNLESS OTHERWISE NOTED.
- WATERLINES SHALL BE CONSTRUCTED SO THAT ALL CROSSES AND TEES WILL NOT BE LOCATED UNDER PROPOSED OR FUTURE PAVING.
- VALVES SHALL BE LOCATED OPPOSITE PROPERTY CORNERS EXCEPT AS SHOWN ON THE PLANS.
- MAINTAIN 12-INCH MINIMUM CLEARANCE BETWEEN ALL WATERLINES, STORM SEWERS, AND CULVERTS UNLESS OTHERWISE NOTED.
- FOR SPECIAL WATERLINE / SANITARY SEWER CLEARANCES, SEE SANITARY SEWER CONSTRUCTION NOTES.
- WATERLINES SHALL BE BANK SAND-BEDDED AND BACKFILLED IN ACCORDANCE WITH THE LATEST EDITION OF CITY OF HOUSTON SPECIFICATIONS AND DETAILS.
- SANITARY PRECAUTIONS MUST BE TAKEN DURING WATERLINE CONSTRUCTION, AS CALLED FOR BY AWWA STANDARDS. PRECAUTIONS INCLUDE KEEPING PIPE CLEAN AND CAPPING, OR OTHERWISE EFFECTIVELY COVERING OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS, OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
- ALL NEWLY INSTALLED PIPES, COATINGS, AND RELATED PRODUCTS SHALL CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE / NATIONAL SANITATION FOUNDATION (ANSI / NSF) STANDARDS AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- DO NOT INCLUDE SERVICE CONNECTIONS IN THIS CONTRACT. HOWEVER, WHEN CONSTRUCTED, THEY WILL BE IN ACCORDANCE WITH THE LATEST EDITION OF CITY OF HOUSTON SPECIFICATIONS.
- ALL FLUSHING VALVES AND VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AFTER PAVING IS COMPLETE. FLUSHING VALVES SHALL BE TURNED TO FACE STREET.
- PROVIDE GATE VALVE EXTENSION STEM PER CITY OF HOUSTON AND/OR AS DIRECTED BY THE ENGINEER.

FORT BEND COUNTY GENERAL NOTES

- FORT BEND COUNTY MUST BE INVITED TO THE PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOUR NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PAVING AT CONSTRUCTION OF FORT BEND COUNTY TEXAS GOV.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAYS.
- ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES, REGULATIONS AND REQUIREMENTS RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS" AS CURRENTLY AMENDED.
- ALL ROAD WIDTHS, CURB RADII AND CURB ALIGNMENT SHOWN INDICATES BACK OF CURB.
- A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
- ALL CONCRETE PAVEMENT SHALL BE 5 1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
- ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
- 4" X 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
- AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACED IN ACCORDANCE WITH TxDOT PED-12A STANDARD DETAIL SHEET, A.D.A. - HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAVING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REGULATIONS.
- CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
- ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMPS INSTALLED.
- GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION - BOTH DAY AND NIGHT.
- ALL R1-1 STOP SIGNS SHALL BE 30" X 30" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- STREET NAME SIGNAGE SHALL BE N A 9" HIGH SIGN FLAT BLADE W/ REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAME SIGNS SHALL BE MOUNTED ON STOP SIGN POST.
- A BLUE DOUBLE REFLECTORIZED BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS. THE BUTTON SHALL BE PLACED 12 INCHES OFF OF THE CENTERLINE OF THE STREET ON THE SAME SIDE OF THE HYDRANT.

PROTECTION REQUIREMENTS AT
WATER LINE - SANITARY SEWER CROSSINGS

	PROPOSED WATER LINE					PROPOSED SANITARY SEWER			
	OVER		UNDER			OVER		UNDER	
	EXISTING SS	PROP SS	EXISTING SS	PROP SS		EXISTING WL	PROP WL	EXISTING WL	PROP WL
Minimum 2 foot vertical clearance	✓ ¹	✓ ¹	✓	✓	NOT ALLOWED	✓	✓	✓	✓
Place 1 full section (min 18ft) of WL centered at SS crossing. Provide restrained joints on WL spaced at least 9 ft. horizontally from centerline of SS	✓	✓	✓	✓		✓	✓	✓	✓
Place 1 full section (min 18ft) of SS centered at WL crossing. Provide restrained joints on SS spaced at least 9 ft. horizontally from centerline of WL		✓						✓	✓
Replace 1 full section of existing SS with pressure-rated DP or pressure rated PVC pipe with adapters and restrained joints centered at WL crossing	✓ ^{2,3}		✓ ³						
Provide DP for small diameter WL (less than 24 inches). PVC pipe is only allowed if encased per TAC §200.44, and use restrained joints for both DP and PVC pipe				✓		✓			✓
Embed SS with CSS for the total length of 1 pipe segment plus 1 foot beyond the joints on each end	✓ ^{2,3}	✓ ⁴	✓ ³	✓ ⁴		✓ ⁴	✓ ⁴	✓ ⁴	✓ ⁴
Place 1 full section (min 18 ft) of min 150 psi SS centered at WL crossing. Provide restrained joints on SS. Spaced at least 9 ft horizontally from centerline of WL or encase in a joint of 150 psi pressure pipe (18 ft.) two nominal sizes larger with spacers at 5 ft. intervals.				✓			✓		

Note:

- Minimum clearance is 2 feet for non-pressure rated SS and 1 inches for pressure rated SS
 - Required if existing SS is disturbed and/or there is evidence of leakage
 - Not required for augered WL unless there is evidence of leakage; completely fill augered hole with bentonite/clay mixture
 - Not required for augered SS; completely fill augered hole with bentonite/clay mixture
- a. Both water lines and wastewater main or lateral must pass a pressure and leakage test as specified in AWWA C600
b. Sanitary Sewers (SS) is applicable to both gravity sanitary sewers and force mains

UTILITY NOTES

CAUTION: OVERHEAD POWER LINES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN TEN (10) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT CENTERPOINT SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6640 OR (713) 207-5769.

CAUTION: UNDERGROUND ELECTRICAL FACILITIES

LOCATION OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-8005, OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

CAUTION: UNDERGROUND GAS FACILITIES

LOCATION OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-8005, OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

-WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 945-8036 OR (713) 945-8037 (7:00 AM TO 4:30 PM) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.

-WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.

-WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.

-FOR EMERGENCIES REGARDING GAS LINES CALL (713) 656-3552 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

APPROVED: *Maya D. [Signature]*
DEVELOPMENT COORDINATOR

DATE: 5/11/17

NO.	DATE	REVISIONS

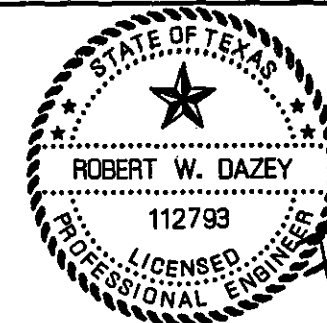
FORT BEND COUNTY MUD No. 151
FORT BEND COUNTY, TEXAS

WATERLINE EXTENSION ALONG F.M. 1463

CONSTRUCTION NOTES

JC JONES CARTER
Texas Board of Professional Engineers Registration No. F-439
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5357

SCALE: NTS DGN. BY: CJR
DATE: APRIL 2017 DWN. BY: ZGL
JOB NO. 05282-0111-00 DWG. NO. _____
SUBMITTED: _____ SURV. BY: _____
F.B. NO. _____



SHEET NO.
3
OF 8

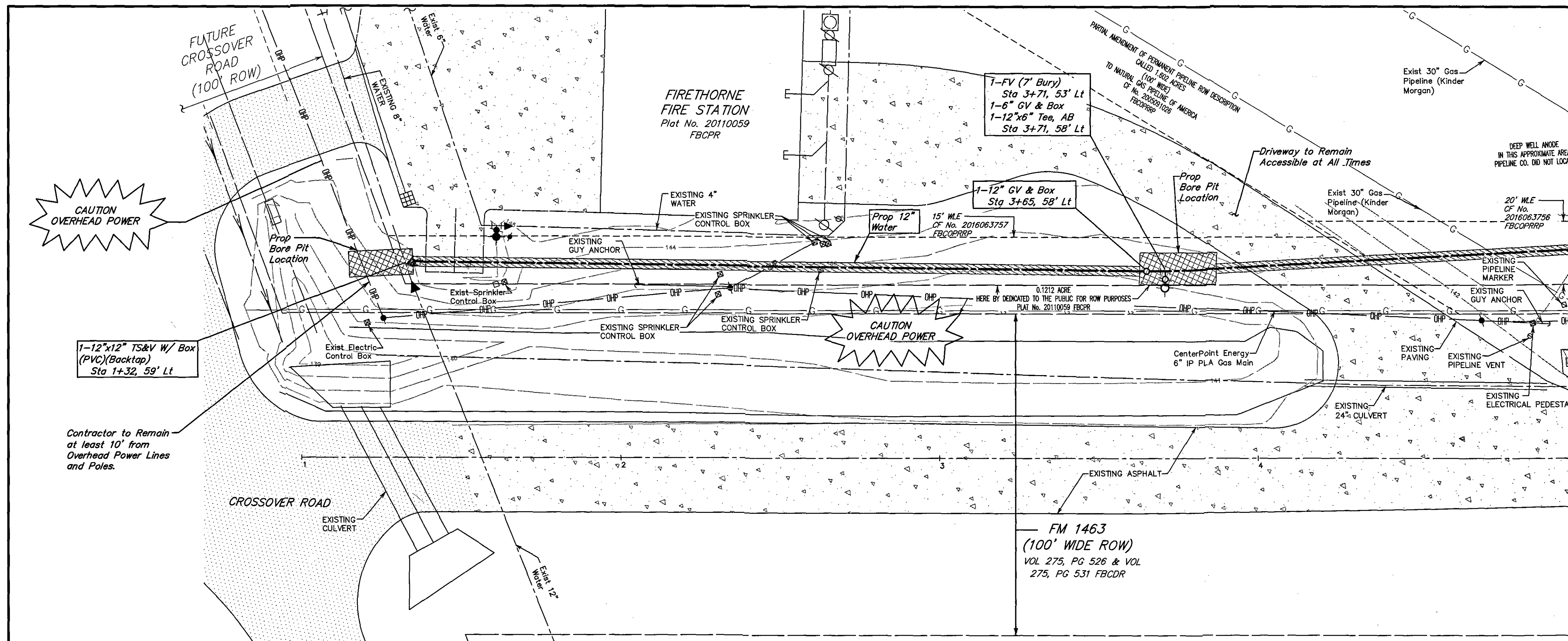
TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222

NOTICE:
For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground lines can be marked. This verification does not shift your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES

[Signature] Date: 5/24/17
CenterPoint Energy/Intrastate Gas Facilities Verification ONLY.
(This Signature verifies that you have shown O&P Natural Gas lines correctly - not to be used for conflict verification.) (See service lines are not shown.)
Signature Valid for six months.

[Signature] Date: 5/24/17
CenterPoint Energy/Underground Electrical Facilities Verification ONLY.
(This Signature verifies existing underground facilities - not to be used for conflict verification.)
Signature Valid for six months.

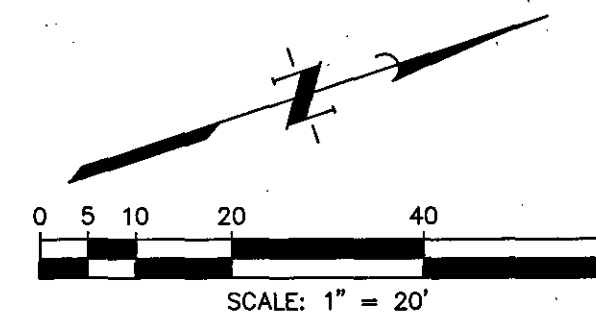


BENCH MARK (FEMA RM 7)
THE BASE BENCHMARK FOR FIRETHORNE SUBDIVISION IS FEMA RM 4. THIS BENCHMARK IS DESCRIBED ON FEMA PANEL NUMBER 481570015J. A DISK SET IN TOP OF SOUTHEAST END OF SOUTHWEST ABUTMENT OF PIN OAK ROAD BRIDGE OVER WILLOW FORK BUFFALO BAYOU.

ELEVATION 126.90 (1987 ADJUSTMENT)

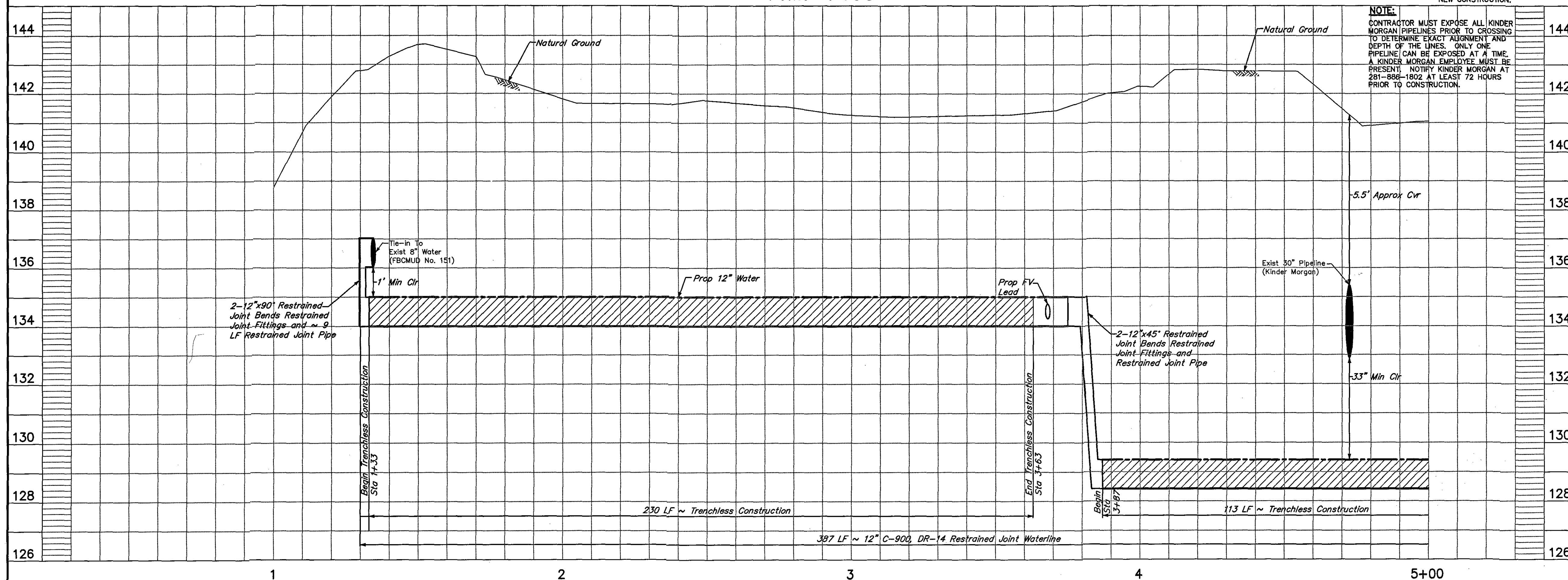
T.B.M.-1
CUT "X" LOCATED ON WHEELCHAIR RAMP AT THE NORTHWEST CORNER OF GREYSTONE CROSSING AND SOUTH FIRETHORNE ROAD.

ELEVATION 140.49 (NAVD 1987 ADJUSTMENT)



CAUTION:
EXIST UNDERGROUND GAS PIPELINES. CONTRACTOR TO USE CARE DURING CONSTRUCTION. MIN 33" SEPARATION FOR KINDER MORGAN. MIN 24" SEPARATION FOR LINDON OIL & GAS.

NOTE:
CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCEMENT OF NEW CONSTRUCTION.



NOTE:
CONTRACTOR MUST EXPOSE ALL KINDER MORGAN PIPELINES PRIOR TO CROSSING TO DETERMINE EXACT ALIGNMENT AND DEPTH OF THE LINES. ONLY ONE PIPELINE CAN BE EXPOSED AT A TIME. A KINDER MORGAN EMPLOYEE MUST BE PRESENT. NOTIFY KINDER MORGAN AT 281-888-1802 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.

APPROVED: *Max D. J.*
DEVELOPMENT COORDINATOR

DATE: 5/11/17

NO.	DATE	REVISIONS

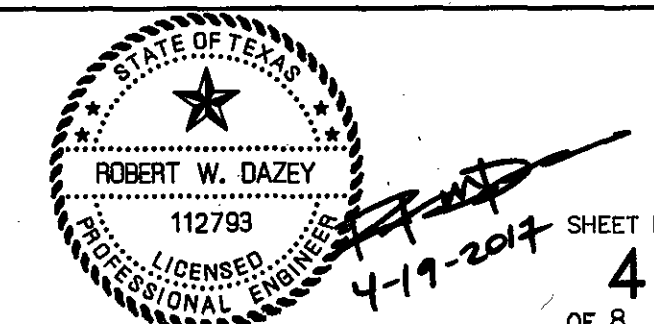
FORT BEND COUNTY MUD No. 151
FORT BEND COUNTY, TEXAS

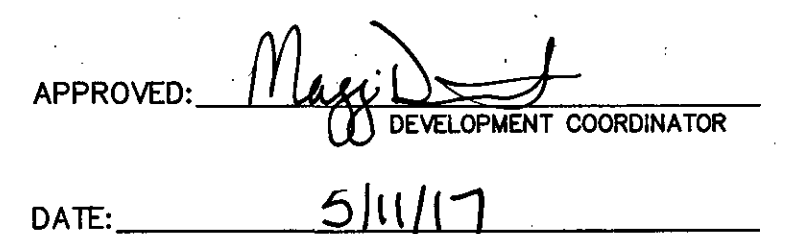
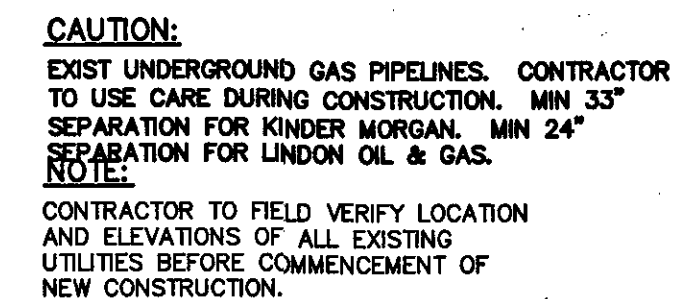
WATERLINE EXTENSION ALONG F.M. 1463

F.M. 1463
1+00 TO 5+00


J/C JONES CARTER
Texas Board of Professional Engineers Registration No. F-439
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

SCALE: 1"=20' H., 1"=2' V. DGN. BY: CJR
DATE: APRIL 2017 DWN. BY: ZGL
JOB NO. 05282-0111-00 DWG. NO. 112793
SUBMITTED: SURV. BY: F.B. NO.

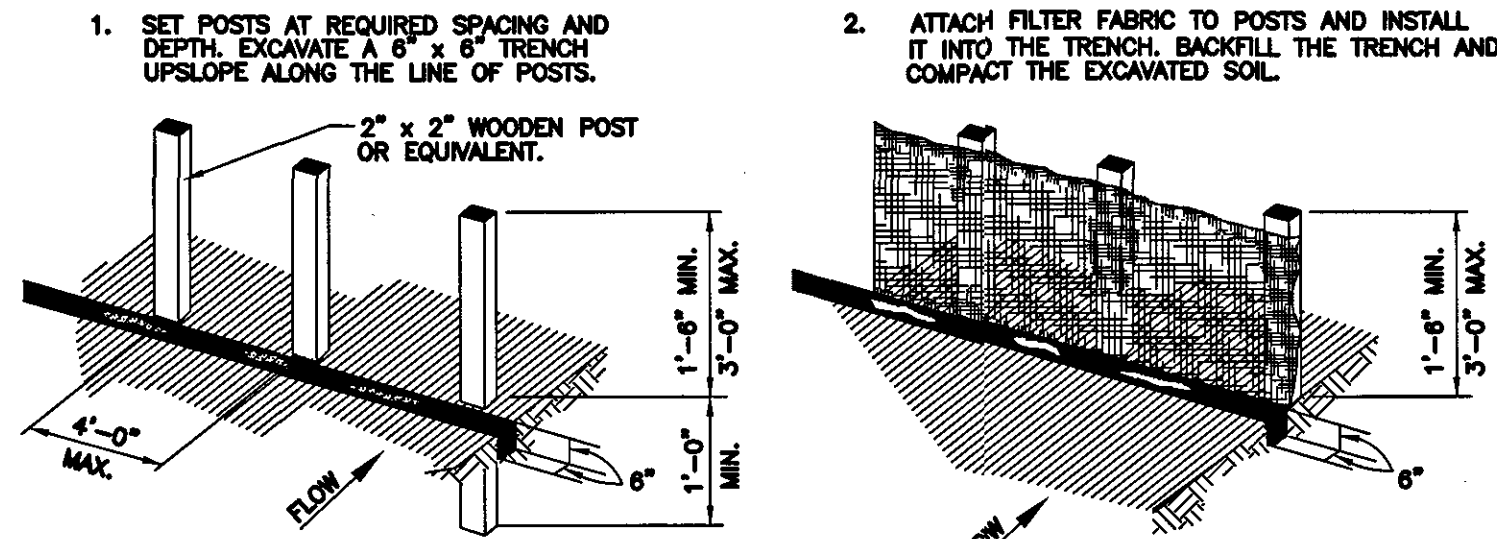




FORT BEND COUNTY MUD No. 151
 FORT BEND COUNTY, TEXAS
 WATERLINE EXTENSION ALONG F.M. 1463
 F.M. 1463
 9+00 TO 12+00



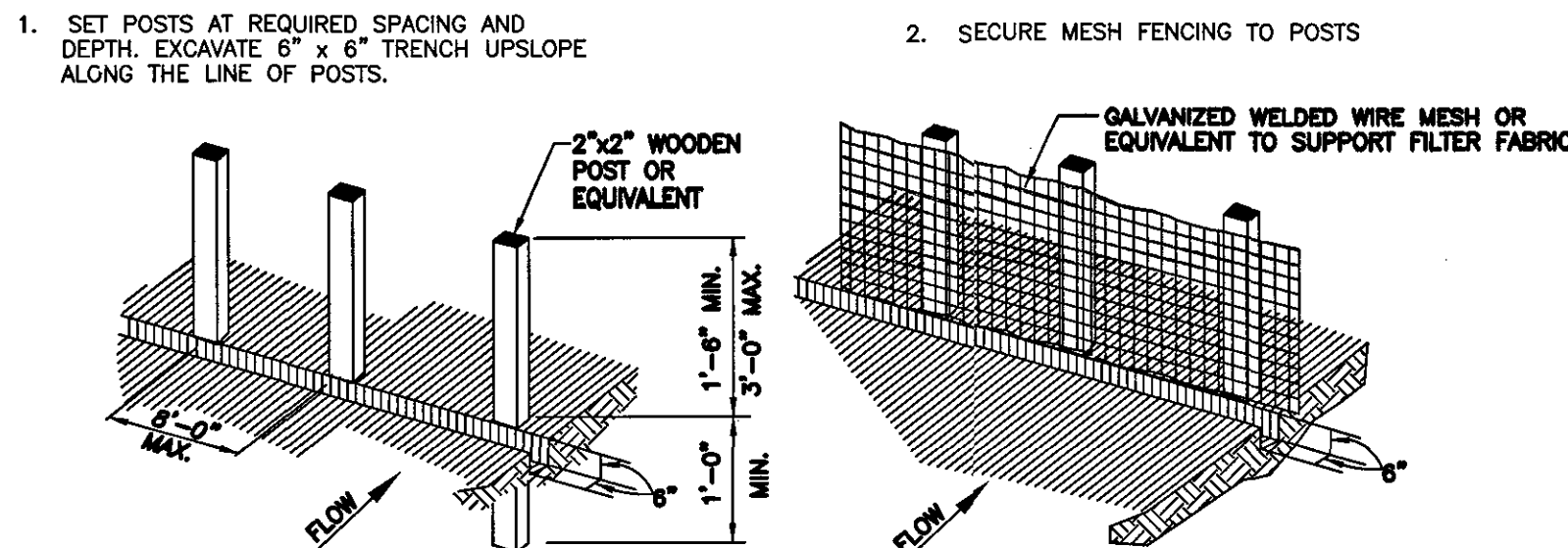
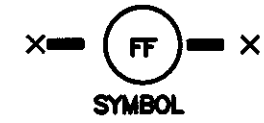
P:\PROJECTS\05282 FORT BEND COUNTY WATERLINE EXTENSION ALONG F.M. 1463\CH\CH\Draw\General\Waterline Extension Along F.M. 1463.dwg Apr 19, 2017 3:39pm de



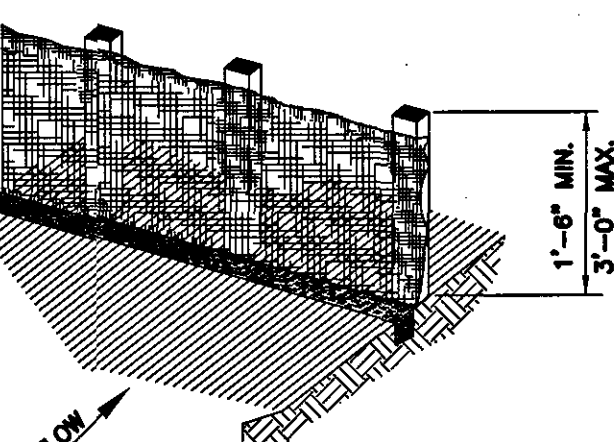
GENERAL NOTES:

1. SET POSTS AT 4-FOOT MAXIMUM SPACING. IF FACTORY PREASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
2. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT THE POST, FOLD TOGETHER, AND ATTACH TO THE POSTS.
3. REMOVE SEDIMENT DEPOSITS WHEN SILT DEPTH REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE.

FILTER FABRIC FENCE



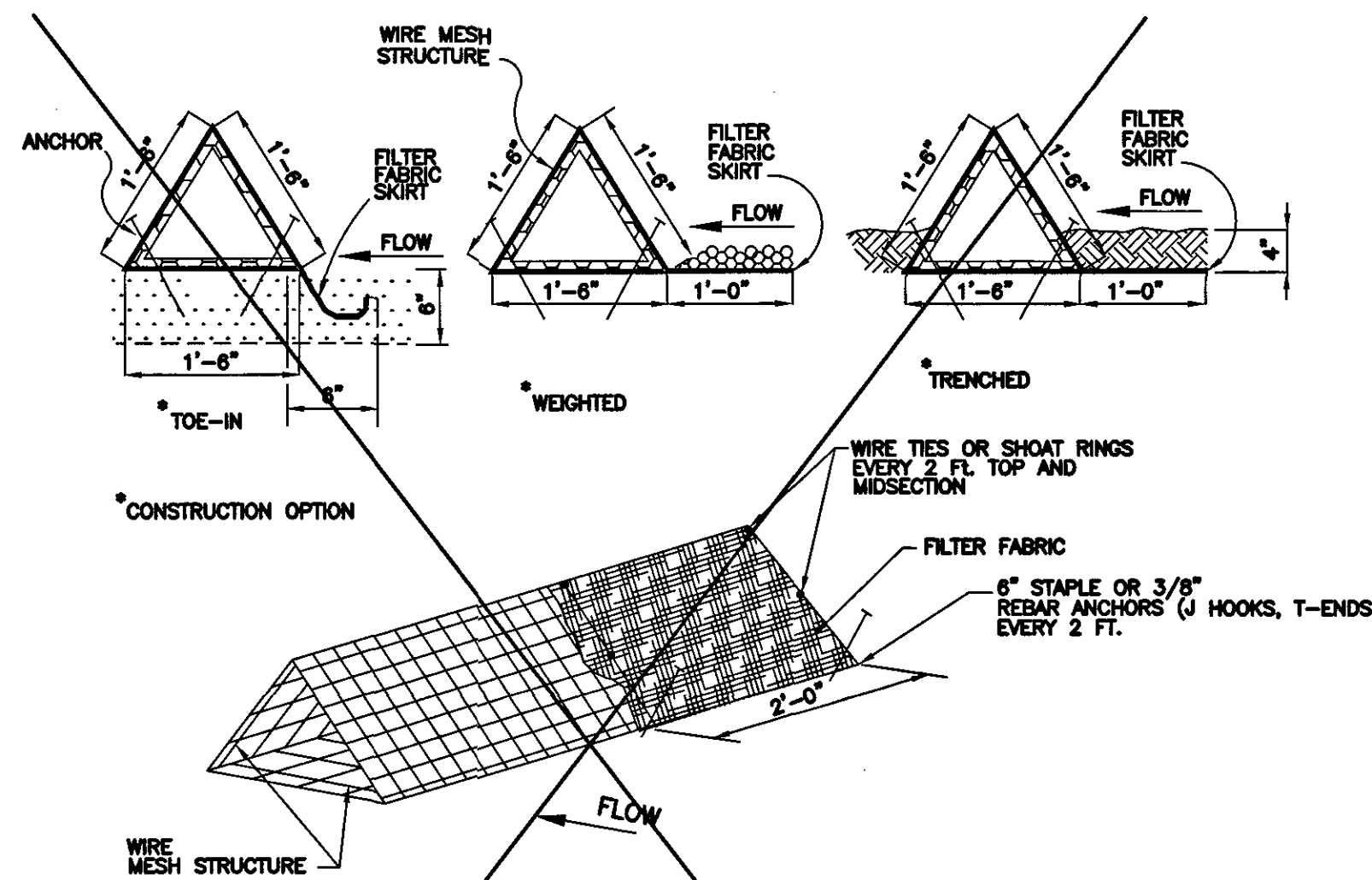
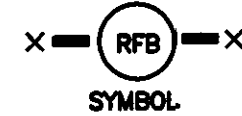
3. ATTACH FILTER MATERIAL TO WIRE FENCE AND EXTEND IT INTO THE TRENCH. BACKFILL AND COMPACT THE EXCAVATED SOIL.



GENERAL NOTES:

1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

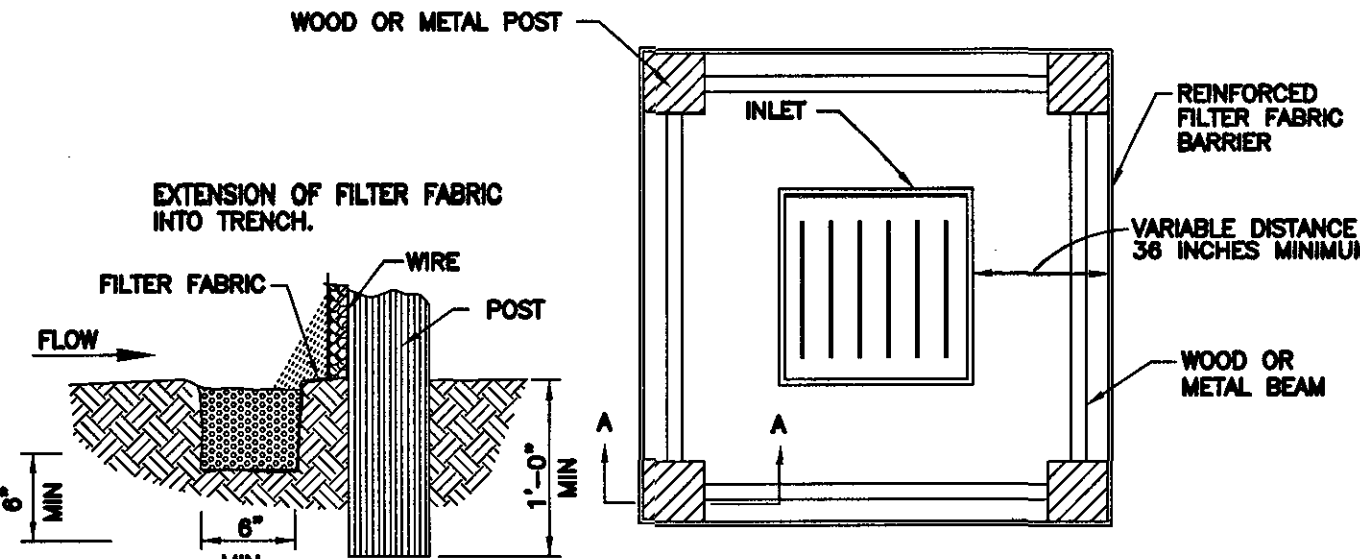
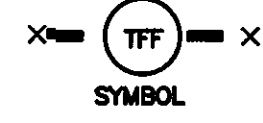
REINFORCED FILTER FABRIC BARRIER



GENERAL NOTES:

1. PLACE BARRIER IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BARRIER.
2. USING ONE CONTINUOUS SECTION OF FILTER FABRIC, WRAP FABRIC AROUND WIRE MESH AND EXTEND FABRIC TO FORM SKIRT ON THE UPSTREAM SIDE.
3. WEIGHT SKIRT WITH A CONTINUOUS LAYER OF 3-INCH TO 5-INCH OPEN GRADED ROCK, OR TIE-IN SKIRT WITH SIX INCHES WITH MECHANICALLY COMPACTED MATERIAL.
4. SECURELY ANCHOR BARRIER AND SKIRT IN PLACE USING 6-INCH WIRE STAPLES ON 2-FOOT CENTERS ON BOTH EDGES, OR STAKE USING 18-INCH BY 3/8 INCH REBAR (T-ENDS, J-HOOKS).
5. FILTER FABRIC SHALL BE LAPPED OVER ENDS 6 INCHES TO COVER SEGMENT JOINTS. FASTEN JOINTS WITH GALVANIZED SHOOT RINGS OR EQUIVALENT.
6. THE BARRIER STRUCTURE SHALL BE WELDED WIRE MESH, 18 INCHES ON EACH SIDE.

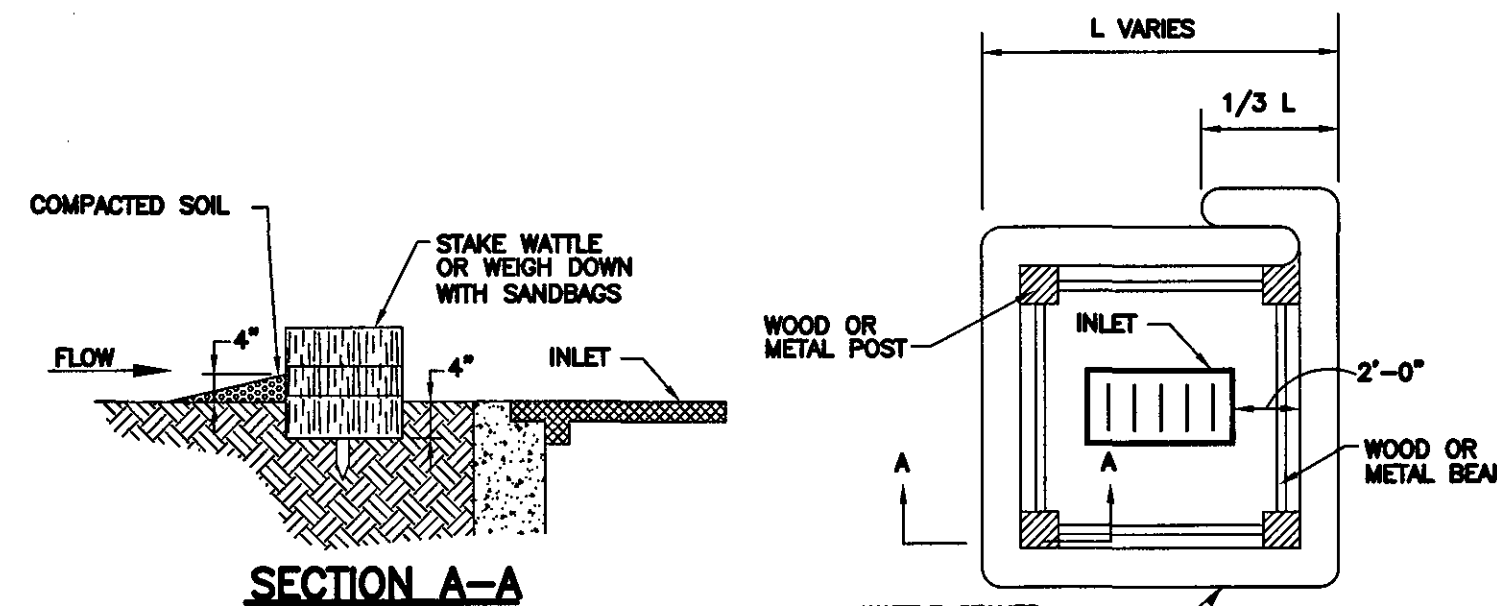
TRIANGULAR FILTER FABRIC FENCE



SECTION A-A

PLAN

SEE REINFORCED FILTER FABRIC BARRIER DETAIL FOR REINFORCED FILTER FABRIC BARRIER REQUIREMENTS

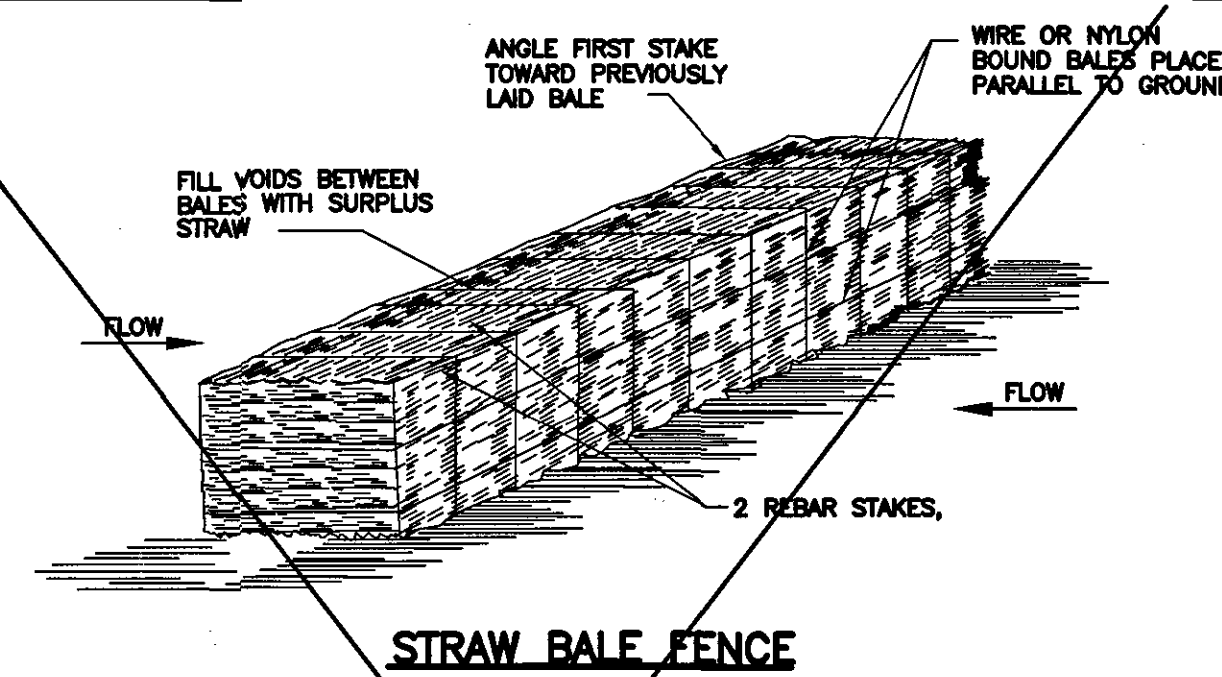


SECTION A-A

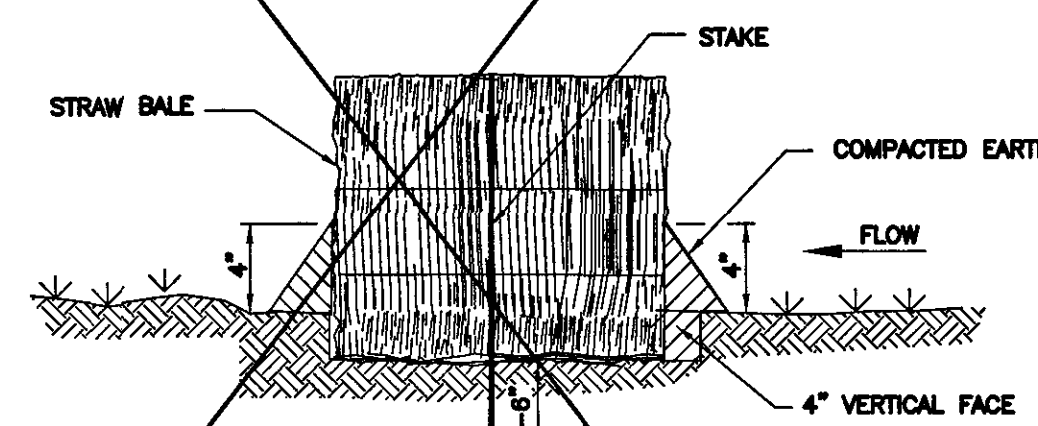
PLAN

NOTE: TYPICALLY STRAW BALES ARE NOT RECOMMENDED FOR INLET PROTECTION BARRIERS.

INLET PROTECTION BARRIERS FOR STAGE I INLETS



STRAW BALE FENCE

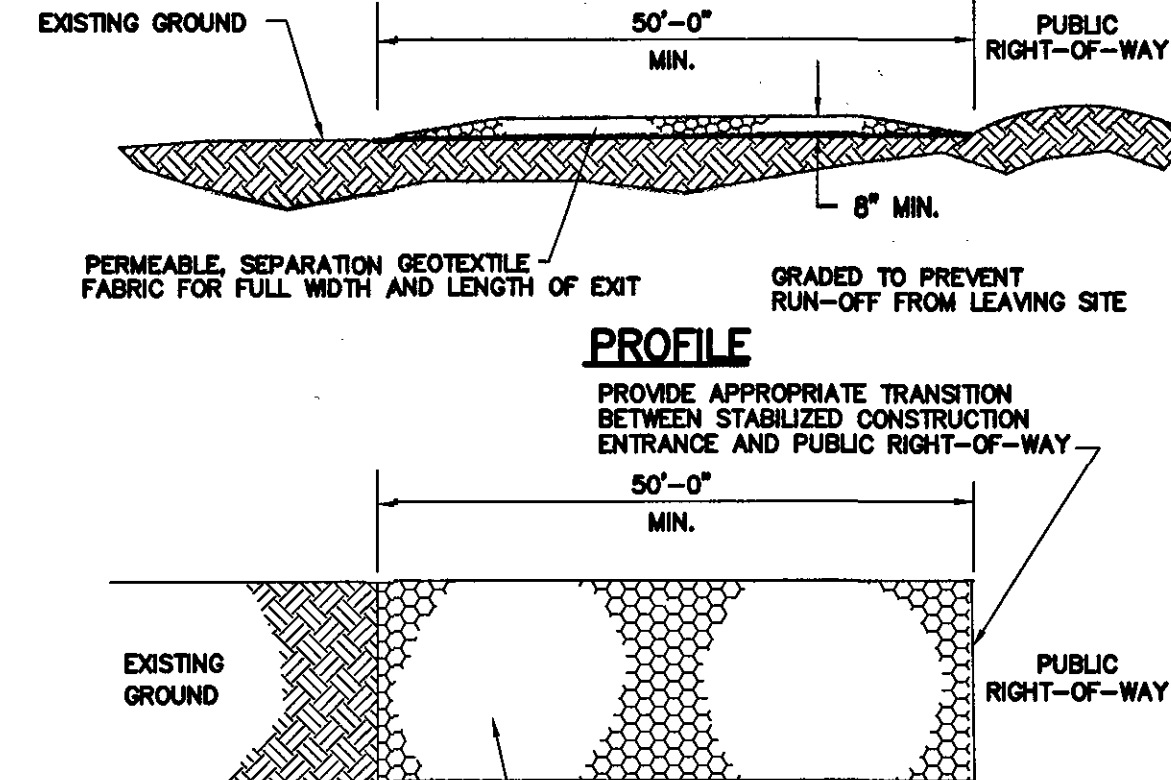
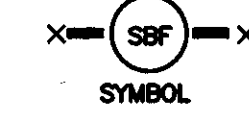


SECTION

GENERAL NOTES:

1. LIMIT USE TO ONSITE SNALES FOR PURPOSES OF LOW FLOW VELOCITY DISSIPATION FOR EROSION CONTROL. USE STRAW BALE FENCES TO TREAT OVERLAND FLOW ONLY. DO NOT USE STRAW BALES TO TREAT FLOW IN CHANNELS.
2. PLACE BALES IN A ROW WITH ENDS TIGHTLY ABUTTING ADJACENT BALES. FILL THE VOIDS BETWEEN BALES WITH SURPLUS STRAW. PLACE BALES WITH GRADING PARALLEL TO GROUND SURFACE.
3. IMBED EACH BALE AT LEAST 4 INCHES IN THE SOIL.
4. SECURELY ANCHOR BALES IN PLACE BY REBAR STAKES. DRIVE STAKES THROUGH THE BALES AND AT LEAST 18 INCHES INTO THE GROUND. ANGLE THE STAKE IN EACH BALE TOWARD THE PREVIOUS BALE TO FORCE THE BALES TOGETHER.
5. BIND BALES WITH WIRE OR NYLON ROPE TIED ACROSS THE STRAW BALES.
6. REPLACE WITH NEW STRAW BALE FENCE EVERY TWO MONTHS.
7. WATTLES STAKED INTO THE GROUND ARE A PREFERRED SUBSTITUTE FOR STRAW BALE FENCES.

STRAW BALE FENCE



PROFILE

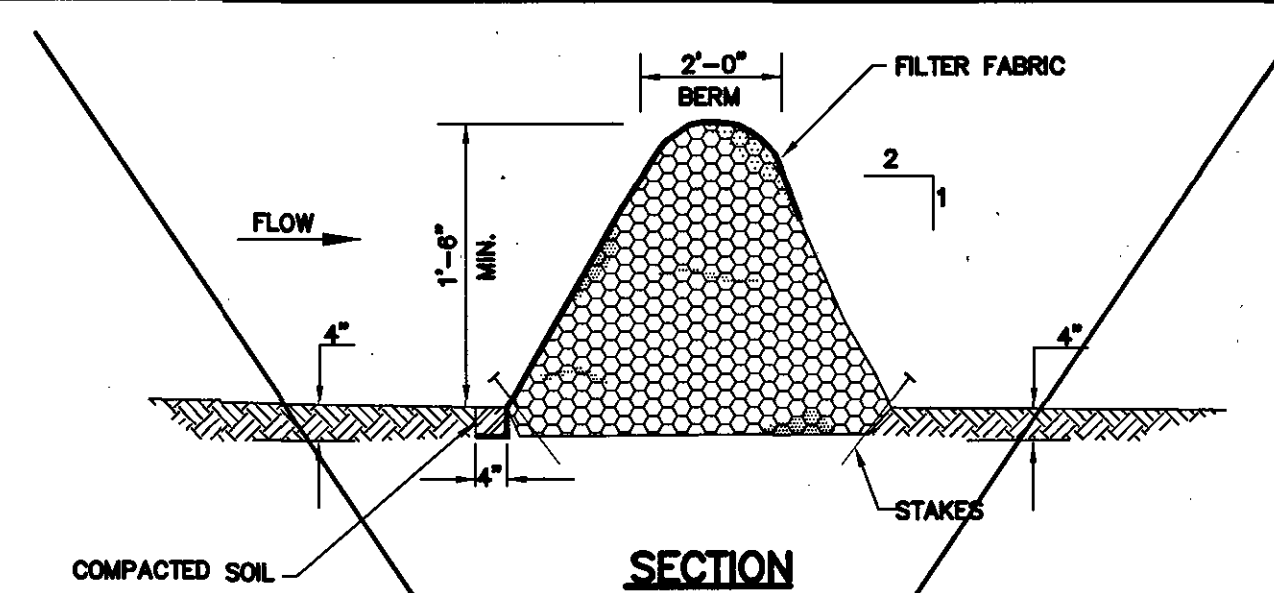
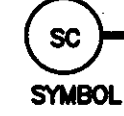
PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY

PLAN VIEW

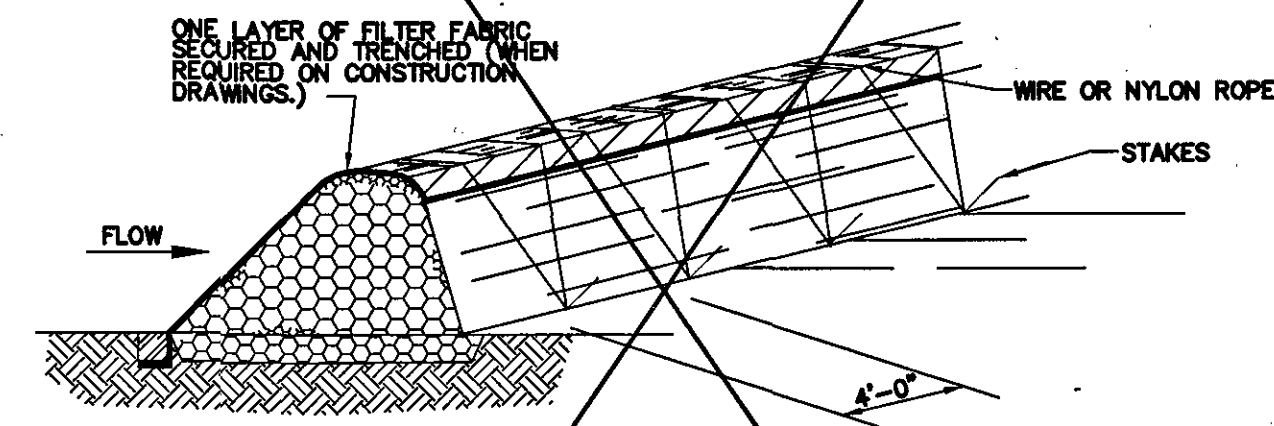
GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.
7. ALTERNATIVE METHODS OF CONSTRUCTION INCLUDE:
 - CEMENT STABILIZED SOIL: COMPACTED CEMENT STABILIZED SOIL, LIMESTONE AGGREGATE, OR OTHER FILL MATERIAL IN AN APPLICATION OF THICKNESS OF 8 INCHES.
 - WOOD MATS: OAK OR OTHER HARDWOOD TIMBERS PLACED EDGE TO EDGE AND ACROSS SUPPORT WOODEN BEAMS WHICH ARE PLACED ON TOP OF EXISTING SOIL IN AN APPLICATION THICKNESS OF 6 INCHES.
 - STEEL MATS: PERFORATED MATS PLACED ACROSS PERPENDICULAR SUPPORT MEMBERS.

STABILIZED CONSTRUCTION ACCESS



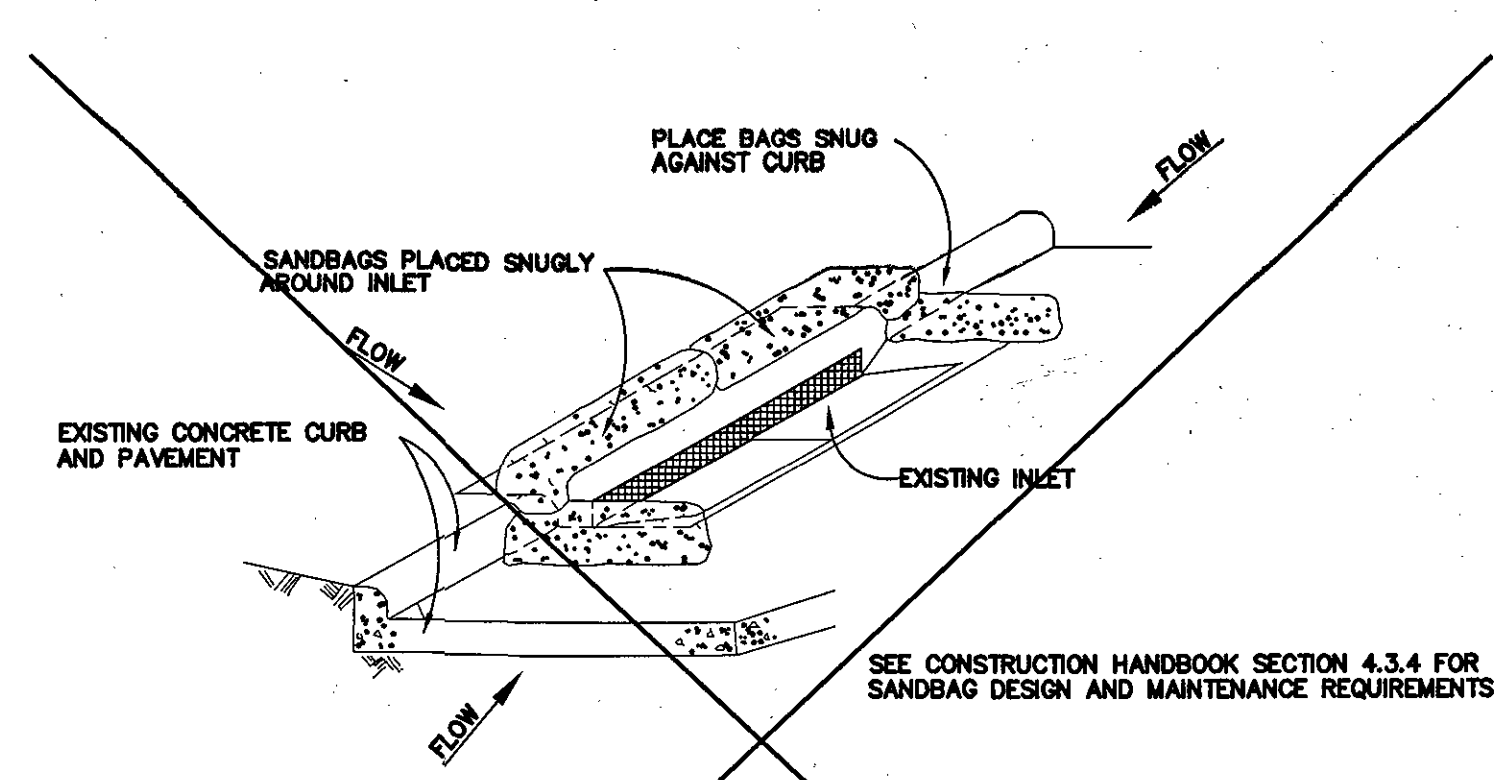
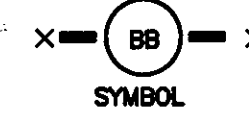
SECTION



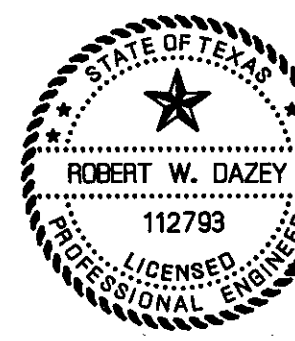
GENERAL NOTES:

1. LIMIT USE TO ONSITE SNALES FOR PURPOSES OF LOW FLOW VELOCITY DISSIPATION FOR EROSION CONTROL. USE BRUSH BERMS TO TREAT OVERLAND FLOW ONLY. DO NOT USE BRUSH BERMS TO TREAT FLOW IN CHANNELS.
2. PLACE WOODY BRUSH AND BRANCHES HAVING A DIAMETER OF LESS THAN 2 INCHES WITH A 6-INCH OVERLAP. AVOID INCORPORATION OF ANNUAL WEEDS AND SOIL INTO BRUSH BERM.
3. MINIMUM HEIGHT OF THE BRUSH BERM IS 18 INCHES, MEASURED FROM THE TOP OF THE EXISTING GROUND AT THE UPSLOPE TOE TO THE TOP OF THE BERM.
4. HAND PLACE BRUSH BERMS ALONG CONTOUR LINES. MACHINE PLACEMENT OF BRUSH BERMS IS NOT PERMITTED.
5. IMBED BRUSH BERM AT LEAST 4 INCHES INTO THE SOIL.
6. ANCHOR BRUSH BERMS USING WIRE OR NYLON ROPE ACROSS THE BERM WITH A MINIMUM TENSION OF 50 POUNDS.
7. SECURELY TIE THE ROPE TO 18-INCH REBAR STAKES DRIVEN INTO THE GROUND ON 4-FOOT CENTERS ON BOTH SIDES OF THE BERM.
8. PERFORM MAINTENANCE AS NEEDED.

BRUSH BERM



INLET PROTECTION BARRIERS FOR STAGE II INLETS

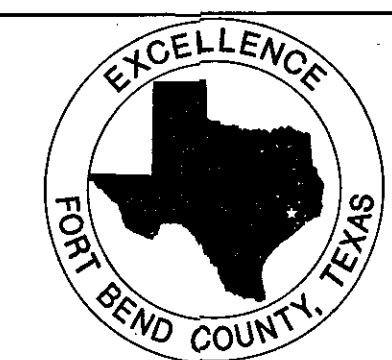


WATERLINE EXTENSION ALONG F.M. 1463

NO.	REVISIONS	DATE	NAME
1	CHANGED TITLE BLOCK	7/21/98	R.L.S.
2	ADDED CONTINENTAL CROSSWALK	8/3/98	ALP

DRAWN BY:	R.L.S.	SHEET DESCRIPTION:	STORM WATER POLLUTION PREVENTION PLAN DETAILS	JOB NO.	05282-0111-00
CHKD BY:		FILE NAME:	PMDT.L	FILE NO.:	
SCALE:	N.T.S.	APPROVED BY:		SHT NO.:	7 / 8
DATE:	6/27/01				

FORT BEND COUNTY
ENGINEERING DEPARTMENT



Mass 5/11/17

