

Drainage District Engineer/Manager

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

Fort Bend County Engineering Department 301 Jackson Suite 401

Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

Applicant: G&A Boring Direccional Job Location Site: FM 1464, Houston, TX 77083	Oriveway Permit
	2018 Amount: \$50,000.00
Laying, Construction, Maintenance, and Repair of Buried Roads, Streets, Highways, and Drainage Ditches in Fort B Commissioners Court of Fort Bend County, Texas," as pas	ssed by the Commissioners Court of Fort Bend County, t Bend County, Texas, to the extent that such order is not
grounds for job shutdown. 2. Written notices are required: a. 48 hours in advance of construction	I ready for final inspection, submit notification to Permit online.org portal.
	d carried, it is ORDERED, ADJUDGED AND DECREED that said the Commissioners Court of Fort Bend County, Texas, and
Signature	Presented to Commissioners Court and approved.
By: Rich Staigle, PE, PTOE County Engineer	Date Recorded 4:30-18 Comm. Court No. 13c
N/A By:	Clerk of Commissioners Court By: Willes



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

Fort Bend County Engineering Department 301 Jackson Suite 401

301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500

Permits@fortbendcountytx.gov

X Rigi	ht of Way Permit		
Con	nmercial Driveway Peri	nit	
Permit No	o: 2018-19973		
The following "Notice of Proposed Cable, Concattachments have been reviewed and the notic of Fort Bend County, Texas.			
(1) COMPLETE APPLICATION FORM:			
X a. Name of road, street, and/o	r drainage ditch affected	I.	
X b. Vicinity map showing course	of directions		
X c. Plans and specifications			
(2) BOND:			
County Attorney, approval whe applicable.	r n		
X Perpetual bond currently posted.	Bond No:	Amount: \$50,000.00	
Performance bond submitted.	Bond No:	Amount:	
Cashier's Check	Check No:	Amount:	
(3) DRAINAGE DISTRICT APPROVAL (WHE	EN APPLICABLE):		
	_		
Drainage District Approval		Date	
We have reviewed this project and agree it i	neets minimum require	ements.	
Rid J Staigle, PE, PTOE		4/13/2018	
Permit Administrator		Date	

FORT BEND COUNTY **MUNICIPAL UTILITY DISTRICT NO. 30 FM 1464 - PHASE I 12" WATERLINE IMPROVEMENTS** FROM BISSONNET ST. TO BELLAIRE BLVD.

SHEET INDEX

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FORT BEND COUNTY M.U.D. No. 30 **BOARD OF DIRECTORS**

LINDA S. YORLANO

PRESIDENT

PAUL LIONEL YOUNT JR.

VICE PRESIDENT

CHRISTOPHER BELL

SECRETARY

MICHAEL SMITH

ASST. VICE PRESIDENT

PAULINE ROWE

ASST. SECRETARY

- NO SANITARY SEWER IMPROVEMENTS ARE INCLUDED IN THIS PROJECT.
 NO CHANGE IN THE EXISTING DRAINAGE PATTERN.

CITY OF HOUSTON NOTE:

CONTRACTOR SHALL NOTIFY THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENDINEERING, OCE ENGINEERING CONSTRUCTION DIVISION AT 832-395-4424 48 HOURS PRIOR TO STARTING WORK ON THIS PROJECT.

TXDOT APPROVAL

TXDOT PERMIT NO. HOU20150218154125 APPLIED FOR BY: GREG PHIPPS APPLIED FOR ON: 3-23-2015

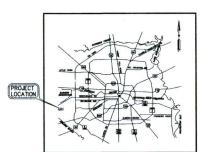
*PRIOR TO THE CONSTRUCTION OF THESE FACILITIES WITHIN OR BY THE DISTRICT THE DISTRICT OR ITS ENGINEER WILL GIVE WRITTEN NOTICE BY RECISTRED OR CERTIFIED MAIL TO THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING STATING

FRIM:
TLOOD INSURANCE RATE MAP: FORT BEND COUNTY, TEXAS
AND INCORPORATED AREAS
MAP \$44815700113 & \$4815700120J
EFF: 04/02/2014

TEXAS ONE-CALL NOTIFICATION SYSTEM CALL BEFORE YOU DIG 713-223-4567 (LOCAL HOUSTON NUMBER)

NOTE: CALL 1-800-DIG-TESS BEFORE THE COMMENCEMENT OF ANY EXCAVATION

CONTRACTOR THAT HOTE, THE CITYOF HOWERN, DEPARTMENT OF PUBLIC MORKS, AND ENGINEERING, OPPICE OF THE CITY SECTIONS WORK OUTFILE PRAJECT, TELEPHONE US. 832-341-9098



LOCATION MAP

DATE: July 2017 PLANS PREPARED BY:

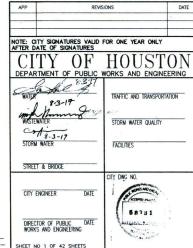
TXDOT APP. NO. HOUZO1312 130 75128 COSTANZA A&ASSOCIATES T.B.P.E. FIRM REGISTRATION No. F-652 4301 CENTER ST. DEER PARK, TX 77536 281-930-9338

VICINITY MAP

PREVIOUSLY APPROVED UNDER COH. FLME NO. 15-0426 C.OH. LOG NO. 1503 2 58 9 DEAWING NO. 54109

IMLS NO. 11036644 COH LOG NO. 11.1365





GENERAL CONSTRUCTION NOTES:

- CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION AND SHALL RESHAPE AND REGRADE ANY DITCHES THAT WERE DISTURBED DURING CONSTRUCTION SO AS NOT TO IMPEDE
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY THE CITY OF HOUSTON FOR CONSTRUCTION OF UTILITIES AND/OR CULVERTS WITHIN THE CITY R.O.W.
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY REGULATION OF FORT BEND COUNTY FOR FLOOD PLAIN MANAGEMENT.
- BACKFILL TO BE COMPACTED IN NO GREATER THAN EIGHT (8) INCH LIFTS TO THE DENSITY OF THE UNDISTURBED ADJACENT SOILS.
- ALL EXISTING UNDERGROUND UTILITIES ARE NOT CHARANTEED TO BE COMPLETE OR GETNITE, BUT WERE OBTAINED FROM THE BEST TO FREE OWNERS OF THE DESTRUCTION OF ALL EXISTING FACILITIES SHOWN ON DRAWNINGS CONTRACTOR SHALL COORDINATE ALL CONFLICTS WITH THE APPROPRIATE COVERNING ARENCY.
- CONTRACTOR SHALL COMPLY WITH "OSHA" REGULATIONS AND STATE OF TEXAS LAW CONCERNING TRENCHING AND SHORING.
- CONTRACTOR SHALL PROVIDE A TRENCH SAFETY SYSTEM TO MEET, AS A MINIMUM, THE REQUIREMENTS OF "OSHA" SAFETY AND HEALTH REGULATION, PART 1926, SUBPART 'P' AS PUBLISHED IN THE FEDERAL REGISTER, VOLUME 54, No. 209, DATED OCTOBER 31, 1989.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISED CITY OF HOUSTON SPECIFICATIONS AND STANDARDS.
- UTILITIES HAVE BEEN INDICATED ON THE CONTRACT DRAWINGS AND SHALL ACT AS A GUIDE TO THE CONTRACTOR VERIFFING THE ACTUAL LOCATION OF THESE UTILIES. THE CONTRACTOR WILL BE REQUIRED TO OBSERVE WATER AND GAS HETERS, MANHOLES, AND CLEAN GUIS ETC. NCESSARY OF DETECTIONS OF CHIEF RELATIONSHIP TO THE MANN AND LATERALS, AND TO DETECTION, DOE OTHER SUIFABLE MEANS TO VERTY THE ACTUAL OF THE CONTRACTOR OF THE PROPERTY OF THE CONTRACTOR OF THE PROPERTY OF LATERALS. IN CASE OF DAMAGE TO PRIVATE UTILITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE FOLLOWING:
 - HOUSTON FIRE DEPARTMENT (GAS. ALL PIPELINES.

 - ELECTRICAL) AT 911.

 2. THE UTILITY COMPANIES

 3. CITY OF HOUSTON ENGINEERING AT 311
- 11. THE CONTRACTOR IS WHOLLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO ANY ADJOINING PROPERTIES. ANY AREA DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO AN EQUIA. OR BETTER CONDITION THAN THE EXISTING AT NO EXTRA COST TO THE CITY.
- 12. EXCAVATIONS LEFT BY THE REMOVAL OF EXISTING UTILITIES SHALL BE BACKFILLED IN MINIMUM EIGHT (8) INCH LIFTS TO 90% DENSITY OF UNDISTURBED ADJACENT SOILS.
- 13. ALL TRENCHES UNDER PAYEMENT (STREETS PARKING LOTS DRIVEWAYS ETC.) SHALL BE BACKFILLED IN THEIR ENTIRETY WITH 2 SACK CEMENT STABILIZED SAND TO THE BOTTOM OF THE SUBGRADE.
- CONTRACTOR SHALL PROVIDE 8" CEMENT STABILIZED BASE COMPACTED TO 95% STANDARD DENSITY UNDER 12" TO ALL INLETS, JUNCTION BOXES

STANDARD CITY OF HOUSTON NOTES (OUTSIDE OF THE CITY LIMITS)

- CONSTRUCT WASTEWATER COLLECTION SYSTEMS, WATER LINES AND STORM DRAINAGE IN ACCORDANCE WITH THE LATEST EDITION OF THE PUBLICATIONS STANDARD. CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREAMER PAWING, AND STRANDARD CONSTRUCTION DEFAULS FOR WASTEWATER PAWING, AND STRANDARD CONSTRUCTION DEFAULS FOR WASTEWATER. COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAYING PUBLISHED BY THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
- 2. UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIET THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION.
 - CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT 713-223-4567/800-245-4545 AND LONE STAR ONE CALL AT 800-669-8344 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER AND STORM DRAINGE LINES. DAMAGES SHALL BE REPARED WORKS AND LOBINGERSHOPS STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAYING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAYING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAYING REPERIENCE ABOVE, AI NO ADDITIONAL COST.
- CONTRACTOR SHALL NOTIFY THE OFFICE OF THE CITY ENGINEER, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING IN WRITING PRIOR TO COMMENTING CONSTRUCTION.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING PROTECTION OF WORKERS ENTERING EXCAVATIONS.

WATER DISTRIBUTION NOTES

- WATER MANY/METER CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF HOUSTON "SPECIFICATIONS FOR WATER MAN CONSTRUCTION AND MATERALS" MID "SPECIFICATIONS FOR WATER TAPS AND SERVICE LINES", 3/4 "THROUGH 2", WITH LATEST ADDERION AND ADDENDUM'S THERETO.
- 2. ALL UTLITES SHOWN ON THE DRAWINGS ARE SHOWN AT THE APPROXIMATE LOCATIONS BASED ON THE BEST AVAILABLE ROYAMATION, CONTRACTOR TO FEED VERMY LOCATION PERIOR TO CONSTRUCTION, ANY DAMAGE TO THE UTILITIES DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL CONSTRUCT THE PROPOSED WATER MAINS WITH THE SPECIFICATIONS RELATING TO EXCAVATION, TRENCHING AND BACKFILL FOR WATER MAINS.
- 4. P.V.C. WILL BE USED. IT WILL CONFORM TO ASTM C900 STANDARDS
- ALL WATER MAINS UNDER STREET PAVEMENT 4 INCHES THRU 12 INCHES IN DIAMETER, IF NOT OTHERWISE SHOWN, SHALL BE AWWA C-900 PVC PIPE.
- 6. NO A.C. PIPE WILL BE USED ON THE PROJECT.
- 7. WATER VALVES ON MAIN LINES TO BE LOCATED AS CLOSE AS POSSIBLE TO LOT LINE.
- ALL WATER MAINS WITHIN STREET R.O.W. HAVE MINIMUM 4' COVER BELOW TOP OF CURB. WATER MAINS WITHIN EASEMENTS HAVE MINIMUM 4' COVER BELOW NATURAL GROUND.
- FLUSHING VALVE ASSEMBLIES TO BE LOCATED 3' INSIDE OF RIGHT-OF-WAY. DEFLECT WATER LINES AS SHOWN ON PLANS. SEE DETAIL SHEET FOR TYPICAL ASSEMBLY.
- 10. ALL WATER METERS SIZED FROM 3/4" TO 2" MUST HAVE INDIVIDUAL SERVICE LEADS AND METER BOXES.
- 11. ALL WELDED STEEL SECTIONS TO EXTEND A MINIMUM OF 5 FEET PAST BENDS AND CROSSES.
- 12. NEW WATER LINES MUST BE DISINFECTED ACCORDING TO THE GUIDELINES ESTABLISHED IN THE "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS"
- 13. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING TO WITHSTAND TEST PRESSURE SPECIFICO IN SPECIFICATION FOR WATER MAIN CONSTRUCTION AND MATERIALS WITH LATEST ADDENDA AND AMERIMENTS THERETO.
- ALL GATE VALVES, TEES, CROSSES, AND OTHER FITTINGS SHALL BE PLACED BACK OF CURB, NOT UNDER PAYEMENT.
- 15. ALL PUBLIC WATER MAINS 4 INCHES THRU 12 INCHES IN DIAMETER, IF NOT OTHERWISE SHOWN, SHALL BE AWWA C-900 PVC PIPE (CL-150). ALL FITTINGS ARE TO BE MECHANICAL JOINT.
- 16. WATER VALVES ON MAIN LINES TO BE LOCATED AS CLOSE AS POSSIBLE TO LOT LINE.
- 17. FIRE HYDRANT ASSEMBLIES TO BE LOCATED 1' INSIDE STREET R.O.W., DEFLECT WATER LINES AS SHOWN ON PLANS. SEE DETAIL SHEET FOR TYPICAL ASSEMBLY, ALL FIRE HYDRANTS SHALL BE "MUELLER" A-24015 OR APPROVED EQUAL, THREADS NATIONAL STANDARD.
- 18. A MINIMUM OF 6 INCH CLEARANCE MUST BE MAINTAINED WHEN A WATER LINE CROSSES ANOTHER UTILITY. CURRENT TCEQ REGULATIONS SHALL BE ADHERED TO WHEN CROSSING SANITARY SEWER
- 19. ALL WELDED STEEL SECTIONS TO EXTEND A MINIMUM OF 5 FEET PAST BENDS AND CROSSES.
- 20. ALL GATE VALVES WILL BE INSPECTED FOR ALIGNMENT (PLUMB) AND OPERATION FULL OPEN TO FULL CLOSE POSITIONS.
- 21. CONTRACTOR SHALL PROVIDE NEW WATER SERVICE CONNECTIONS AT ALL LOCATIONS ALONG THE WATERLINE SERVICE ROLLTE
- 22. ALL WATER METERS AND SERVICE LINES SHALL BE LOCATED AT LOT LINES, SERVICE LINES SHALL BE 1" MINIMUM OR AS SHOWN ON PLANS.

CAUTION: UNDERGROUND GAS FACILITIES

LOCATIONS OF CENTERPOINT ENERGY MAIN LINE (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE LLC., WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE MESS ARE LUSALY NOT SHOWN ON SHOULD HAVE SHOWN IN INCREASE THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS LIST AND THE CONTRACTOR SHALL CONTRACT THE UTILITY COORDINATING COMMITTEE AT (715) 223—4367 OR 1-800-689—8344 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LURS LOCATED.

-WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 967-8037 (7:00 am TO 4:30 pm) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.

-WHEN CONTERPONT FACULTIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACULTIES TO PREVENT EXCESSIVE STRESS ON THE PIPHIG. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACULTIES.

WARNING: OVERHEAD ELECTRICAL LINES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OUTRINED LINES HAS NOT BEEN SHOWN ON HERES DRAWNERS AS THEY ARE CLEARLY MSIBLE, BUT YOU SHOULD LOCATE THEM PROFIT TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH AND SAFETY CODE, FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY OF HIGH VOLTAGE LINES, SPECIFICALLY.

- ANY ACTIVITY WHERE PERSON 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 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 CAPRES BOTH CRIMINAL AND CYLL LOBBLITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT (713) 207-6248 OR (713) 207-2222.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

- THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCFQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D.
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN OPEN MISTAL ACCEPTIVE BY AND
- 3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS.
- NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
- WATER TRANSMISSION AND DISTRIBUTION LINES MUST BE INSTALLED IN ACCORDANCE WITH THE WANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE.
- The hydrostatic leakage rate shall not exceed the amount allowed or recommended by awar formula for PVC PIPE: L= (N)(D)(/P)/7,400. The formula for ductile or cast iron PIPE is L= (S)(D)/P)/133,200
- THE USE OF PIPES AND PIPE FITTINGS THAT CONTAIN MORE THAN 8.0% LEAD OR SOLDERS AND FLUX THAT CONTAINS MORE THAN 0.2% LEAD IS PROHIBITED IN THE FOLLOWING CIRCUMSTANCES FOR INSTALLATION OR REPAIR OF ANY PUBLIC WATER SUPPLY AND FOR INSTALLATION OR REPAIR OF ANY PUBLISHING IN A RESIDENTIAL OR MORESIDENTIAL. PROVIDING WATER FOR HUMAN CONDUMPTION AND CONNECTED TO A PUBLIC DIFFINING MATER SUPPLY STSTEM.
- THE CONTROCTOR SHALL INSTALL APPROPRIATE ARE RELEASE DIVICES IN THE DISTRIBUTION SYSTEM AT ALL POINTS WHERE TOPOGRAPHY OF OTHER FACTORS MAY CREATE ARE LOOKS IN THE LINES. ALL VENT OPENINGS TO THE ATMOSPHERE SHALL BE COVERED WITH 18-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE COUNTAINSTANT OF SYSTEM SHALL BE OSSONED TO AFFORD SPECIAL. CIRCULATION OF WATER WITH A MINIMUM OF DEAD ENDS. ALL DEAD—END MAINS SHALL BE PROVIDED WITH ACCEPTABLE FLUSH VALVES AND DISCHARGE PIPING. ALL DEAD—END LINES LESS THAN TWO INCHES IN DIAMETER WILL NOT REQUIRE FLUSH VALVES IF THEY END AT A CUSTOMER SERVICE. WHERE DEAD ENDS ARE NECESSARY AS A STAGE IN THE GROWTH OF THE SYSTEM, THEY SHALL BE LOCATED AND ARRANGED TO ULTIMATELY CONNECT THE ENDS TO PROVIDE CIRCULATION.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN THE CONTROLLOW SPALL MINITUM TA MINITUM SEPARATION UNITARILE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES AND SEPTIC TANN CRAINFELDS. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION, SEPARATION DISTANCES, INSTALLATION METHODS. AND MATERIALS UTILIZED MUST MEET \$290.44(E) OF THE CURRENT
- THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR
- 11. THE CONTRACTOR SHALL DISINFECT THE NEW WATER MAINS IN ACCORDANCE WITH AWAY STANDARD COST AND THEN FLUSH AND SAMPLE THE LINES BEFORE BEINE PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICRO BIOLOGICAL ANALYSIS TO CHECK THE FFECTIMENESS OF THE DISSINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MININUM OF ONE SAMPLE FOR ACH 1,000 FEET OF COMMITTED WATER LINE WILL BE REQUIRED OR AT THE NEXT AMAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER.

HOUSTON PIPELINE CONTACT: CORY PARTON 281-850-1417 (FIELD) CONTACT: KAVIN DODD 832-668-1137 (PLANS)

CONTACT: RICHARD HINES 585-615-5184 (FIELD)

MONUMENT PIPELINE CONTACT: JOSH BOWSLER 832-451-4268 (FIELD)

KINDER MORGAN PIPELINE CONTACT: MIKE LUNA 713-539-9646 (FIELD)

PIPELINE INFORMATION

NETCO PIPELINE

WINDSTREAM FACILITIES

- T. THE LOCATIONS OF WINESTEAM FACULTIES ARE SHOWN IN AN APPROXIMATE WY CHAY. THE CONTRACTIONS ELECTION IN AN APPROXIMATE WY CONTRACTION OF THE CONTRACTION OF THE CONTRACTION OF THE CONTRACTION OF THE CONTRACT OF THE CONTRA
- 2. THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
- 3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF "WINDSTREAM FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORNING, THE CONTRACTOR SHALL EXPOSE THE WINDSTREAM FACILITIES
- 4. WHEN WINDSTREAM FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.

- TXDOT SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION USING THE UIR SYSTEM. CONTACT TXDOT ONCE THE CONSTRUCTION IS COMPLETE.

 CONTROCTOR SHALL CONTACT ISRAEL CUELLAR AT (281)238—7955 Example William Cork. TO OBTAIN AN APPROVED TRAFTIC CONTROL PLAN, NO DIRT NUISANCE TO ROADWAY.
- ALL SURPLUS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY AND THE EXCAVATION FINISHED FLUSH WITH
- SURROUNDING NATURAL GROUND.

 SO BORE BITS TO BE LEFT UNPROTECTED.

 CONTACT ISRAEL CUELLAR WHEN JOB STARTS AND IS COMPLETED.

FORT BEND COUNTY GENERAL NOTES:

- CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 24 HOURS PRIOR TO ANY PAWNG OPERATIONS AT CONSTRUCTION@FORTBENDCOUNTYX,GOY.
- 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
- ALL ROAD WIDTHS, CURB RADII AND CURB ALIGNMENT SHOWN INDICATES BACK OF CURB.
- A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
- 6. ALL CONCRETE PAYEMENT SHALL BE 5-1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVEYSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
- ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
- 8. 4"X12" REINFORCED CONCRETE CURB SHALL BE PLACED IN <u>FRONT</u> OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
- AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACE IN ACCORDANCE WITH TXDOT PED-12A STANDARD DETAIL SHEET, ADA. HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAYING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REQUILATIONS.
- 10. CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
- 11. ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMPS INSTALLED.
- 12. GUIDELINES ARE SET FORTH IN THE TEXAS MANUAL ON GOIZELINES AND SET FORTH IN THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENILLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION —BOTH DAY WARNING DEVICES, ETC., DURING CONSTRUCTION —BOTH DAY AND NIGHT.
- 13. ALL R1-1 STOP SIGNS SHALL BE 30"X30" WITH DIAMOND GRADE SHEETING. STREET NAME SIGNS SHALL BE UPPER AND LOWER CASE LETTERS WITH DIAMOND GRADE SHEETING.
- 14. 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 AS THE HYDRANT.

BENCHMARK INFORMATION: CONTROL POINT #75

CONTROL POINT \$75

§ IRON ROD WITH A NORTH FORT BEND WATER
AUTHORITY ALUMINUM CAP SET 49.2' EAST OF OBRIEN
ROAD IN A PIPELINE EASEMENT APPROX. 2,400' SOUTH
OF BEECHNUT STREET.
ELEV. 94.15' NAVD-88, 2002 ADJ.
CONTROL POINT \$78

CANTING. POINT #76 §* IRON ROD WITH A NORTH FORT BEND WATER AUTHORITY ALUMINUM CAP SET APPROX. 200° SOUTH OF BEECHNUT STREET & 17.9° EAST OF OBRIEN ROAD. ELEV. 92.92 NAVD—88, 2002 ADJ. CONTROL POINT #77

CONINCI. POINT 877.

§ "IRON ROD WITH A NORTH FORT BEND WATER AUTHORITY ALUMINUM CAP SET APPROX. 1,100' NORTH FOR BECCHING THE EAST SIGE OF FM 1464 JUST SOUTH OF ITH 1464 PLAZA STRIP MALL. ELEV. 92.22 NAVD—88, 2002 AD. CONTROL POINT #80

CONINCOL POINT #80

§ IRON ROD WITH A NORTH FORT BEND WATER AUTHORITY ALUMINUM CAP SET IN THE MEDIAN EAST OF THE INTERSECTION OF BELLIARE BOULEVARD AND F.M.1484 10.8 FEET EAST OF THE END OF THE MEDIAN. ELEV. 93.47 NAVID—88, 2002 ADJ.

SITE IS LOCATED IN ZONE 'X' PER MAP PANEL NUMBERS: 481157C0110J & 0120J.

REVISIONS DESCRIPTION DATE INITIALS DATE: 9/7/17



FORT BEND COUNTY M.U.D. NO. 30 FM 1464 - PHASE I 12" WATERLINE IMPROVEMENTS

GENERAL NOTES

NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES DEPARTMENT OF PUBLIC WORKS AND
MATERIAL TOP PUBLIC WORKS AND
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FILE NO: F003-1009

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE N.T.S.

SHEET No: 2 OF 42 STREET SONS AND CO. 5 e 7 3 1 Indiana .



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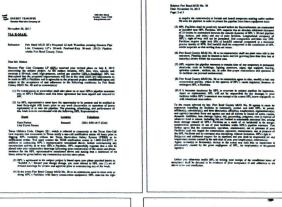
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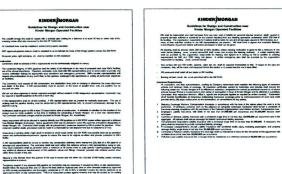
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Should you have any questions, places find fine to context on at (713) 989-1835 or others, must well-decamp procedures.



REVISIONS

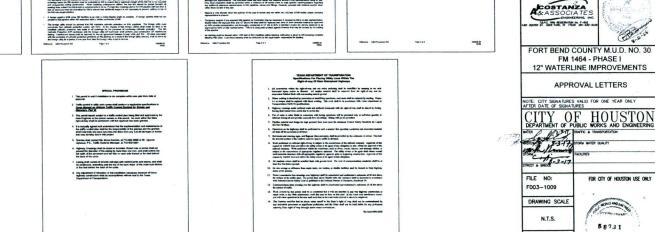
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SHEET No: 3 OF 42

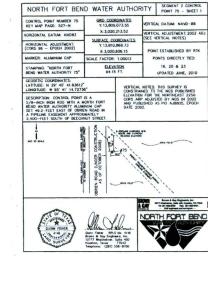
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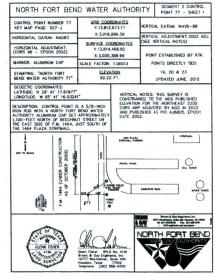
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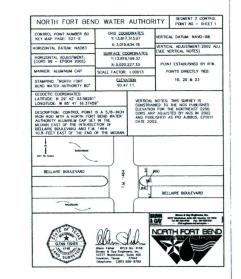
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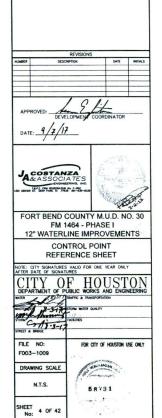
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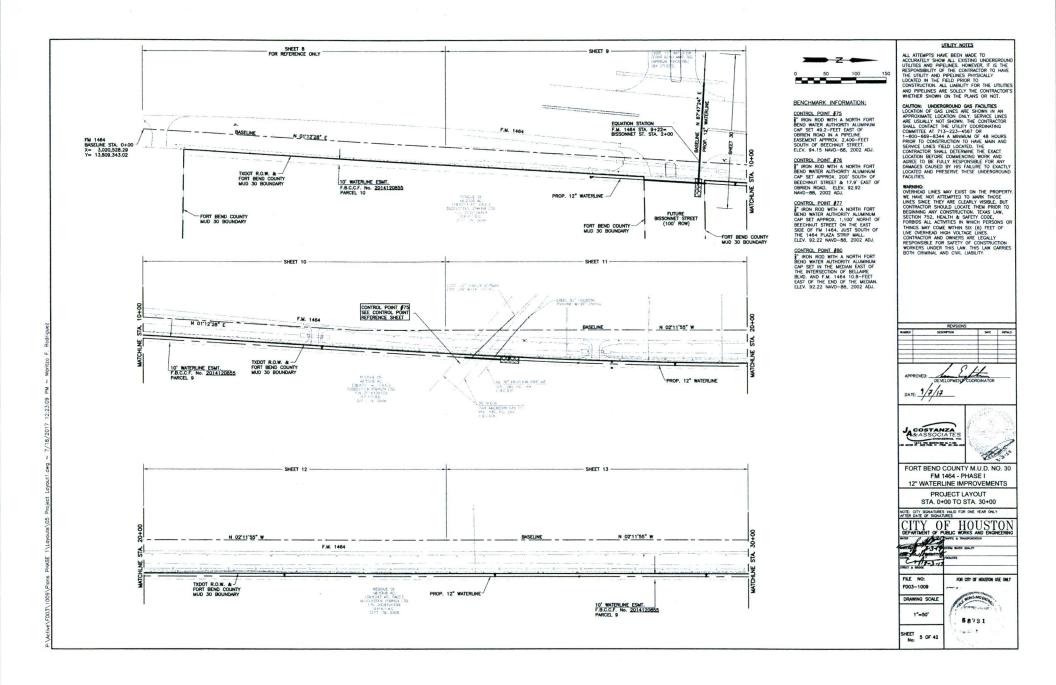


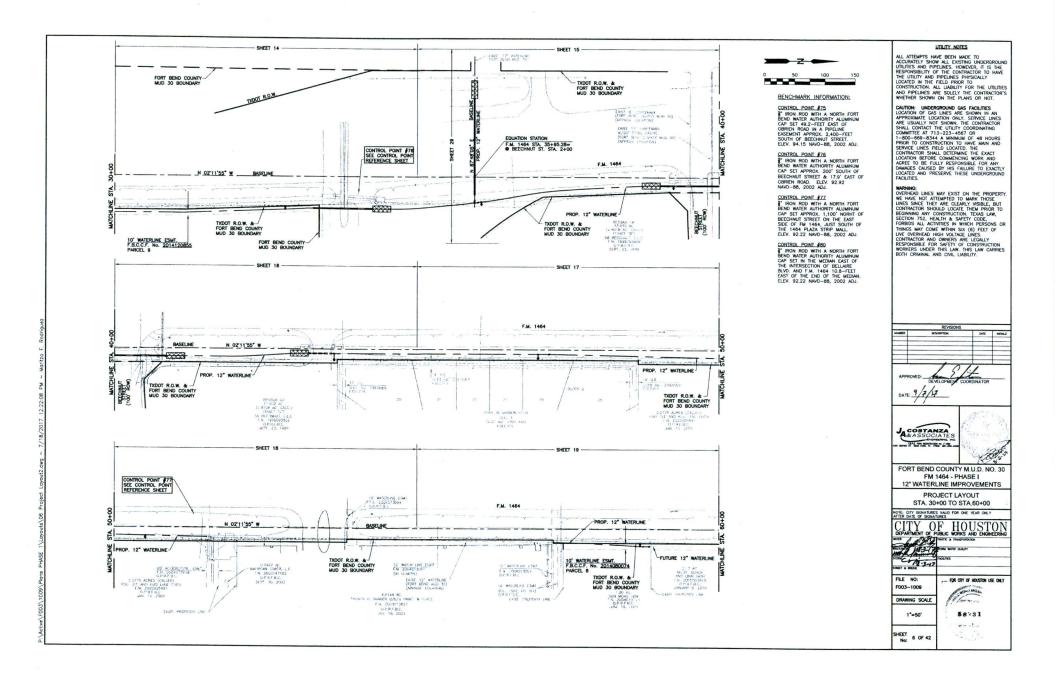


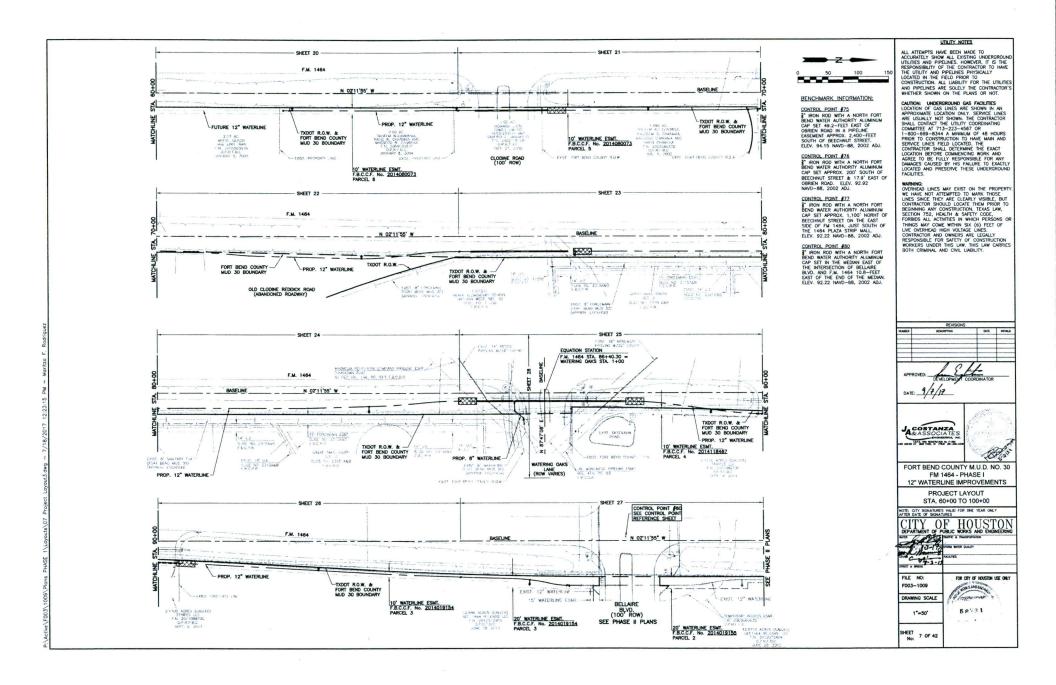
NORTH FORT BEN	D WATER	AUTHOR	RITY	SEGMENT 2 CONTROL POINT 76 - SHEET 1	
CONTROL POINT NUMBER 76 KEY MAP PAGE: 527-N	GRID COORDINATES Y: 13,810,949.54		VERTICAL DATUM: NAVD-88		
HORIZONTAL DATUM: NAD83	X: 3,020,113.19			VERTICAL ADJUSTMENT: 2002 ADJ (SEE VERTICAL NOTES)	
HORIZONTAL ADJUSTMENT: (CORS 96 - EPOCH 2002)	SURFACE COORDINATES Y: 13,812,744.97 X: 3,020,505.80		POINT ESTABLISHED BY RTK POINTS DIRECTLY TIED: 19, 20 & 23 UPDATED JUNE, 2010		
MARKER: ALUMINUM CAP	SCALE FACTOR: 1.00013				
STAMPING: "NORTH FORT BEND WATER AUTHORITY 76"	ELEVATION 92.92 FT.				
GEODETIC COORDINATES: LATITUDE: N 29' 41' 00.52954 LONGITUDE: W 95' 41' 15.2620	6-	CONSTRA	INED TO	THIS SURVEY IS THE NGS PUBLISHED	
DESCRIPTION: CONTROL POINT 5/8-INCH IRON ROD WITH A M BEND WATER AUTHORITY ALUM SET APPROXIMATELY 200-FEE' BEECHINUT STREET 17.9-FEET OBRIEN ROAD.	NORTH FORT INUM CAP T SOUTH OF	CORS AR	N FOR THE NORTHEAST 2250 P ADJUSTED BY NGS IN 2002 USHED AS PID AJ8805, EPOCH 02.		
BEECHNUT STR	ROAD (UNDER CONSTRU AS OF OCTOBER 2008)	POWER POLE	510	from 8 for fugitors, In	
OF CHAPACITY OF THE CONTROL OF THE C	Genn Flaher RPL Brown & Goy Engin 10777 Westhalmar,	Full-	NOR	0777 Westbaltner, Brits 400, Houseau, TS 77042 Tel: 391-666-6700 Fac: 381-608-6751 — Old anghears and exregions —	

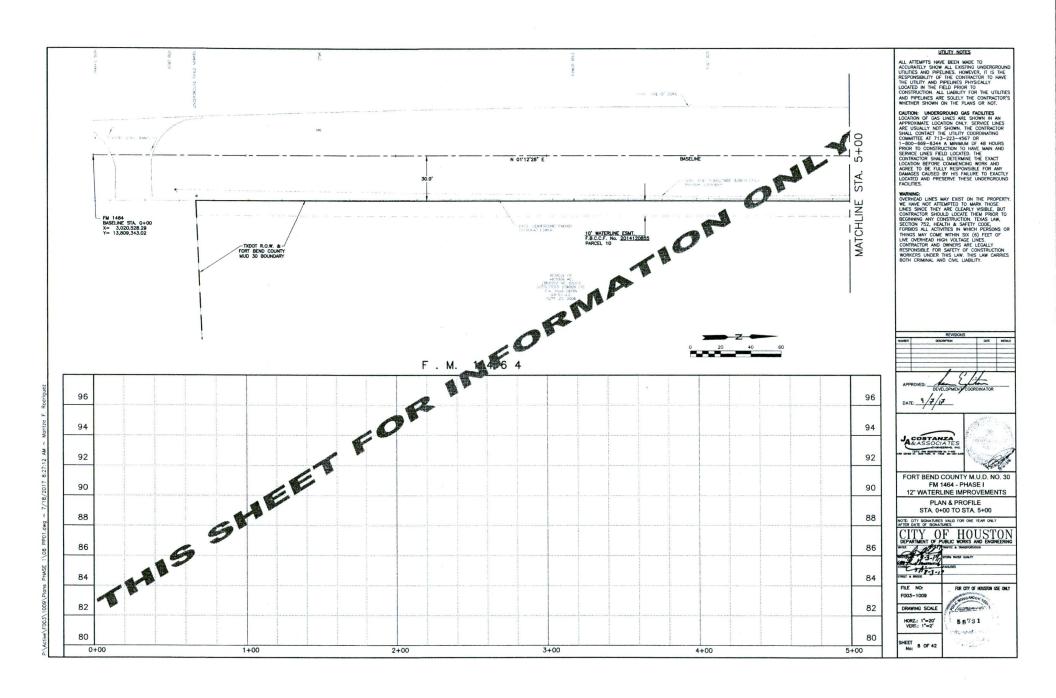


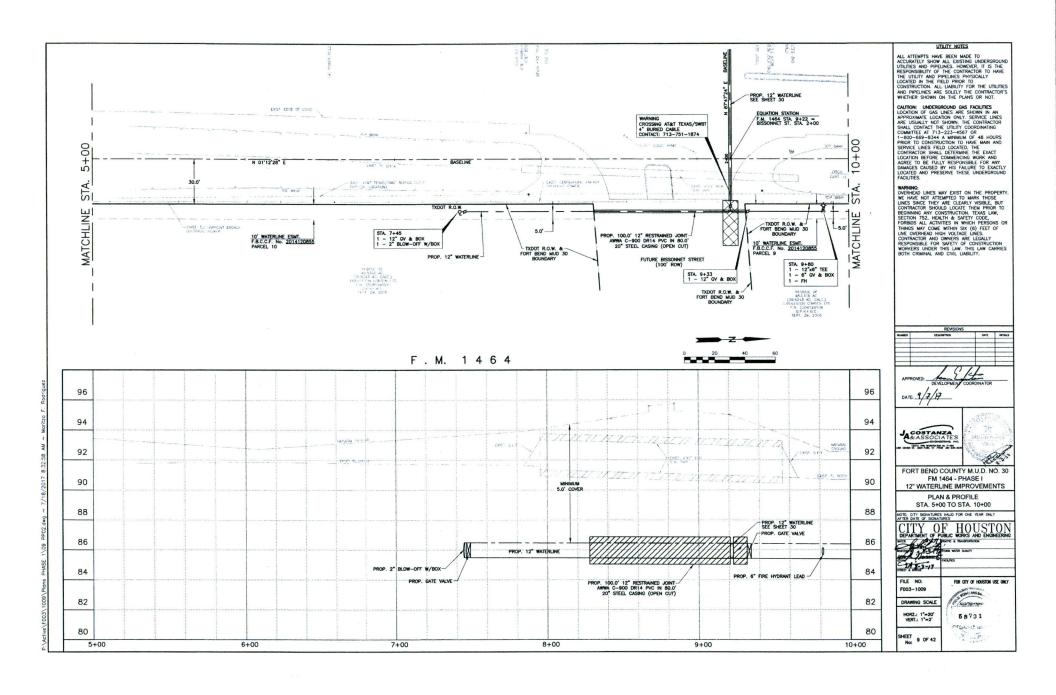


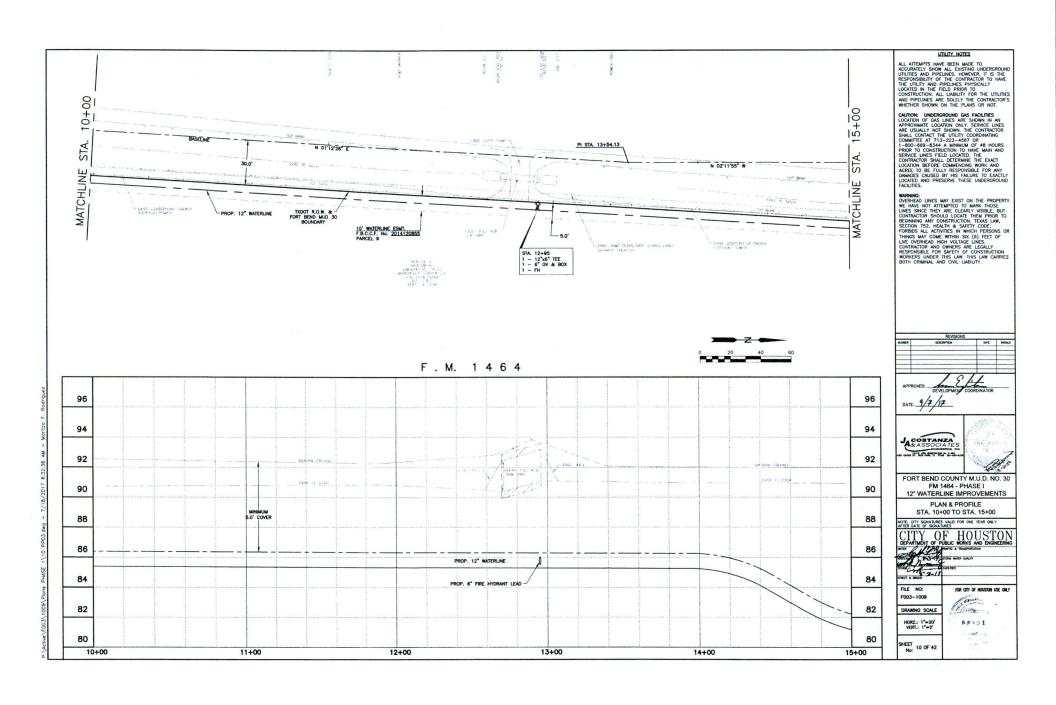


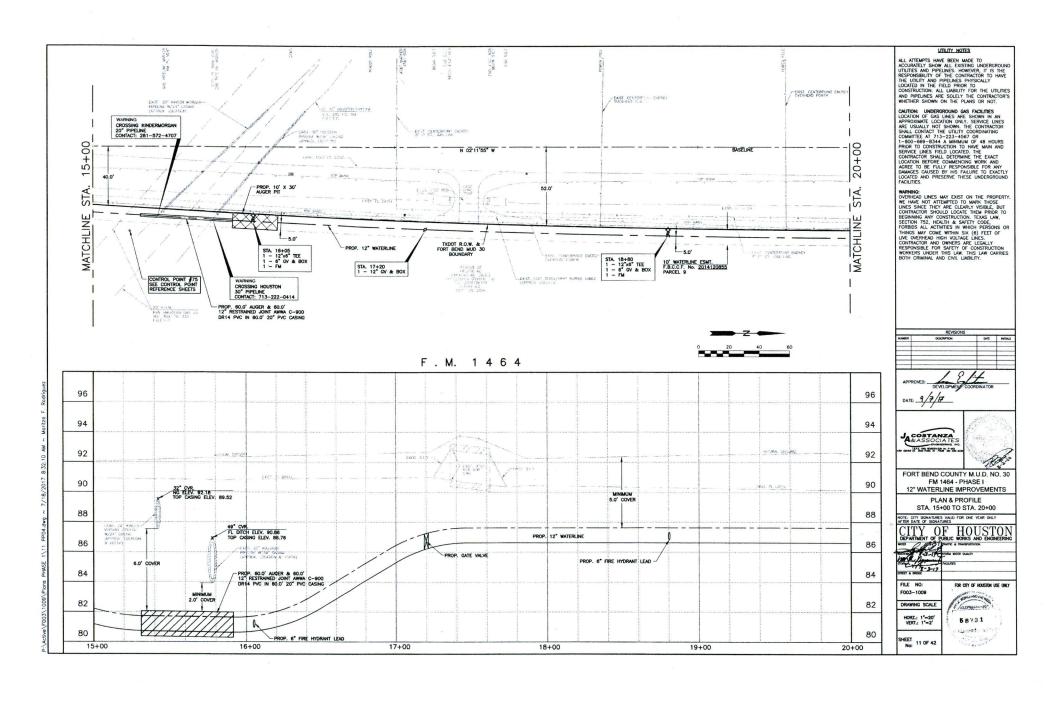


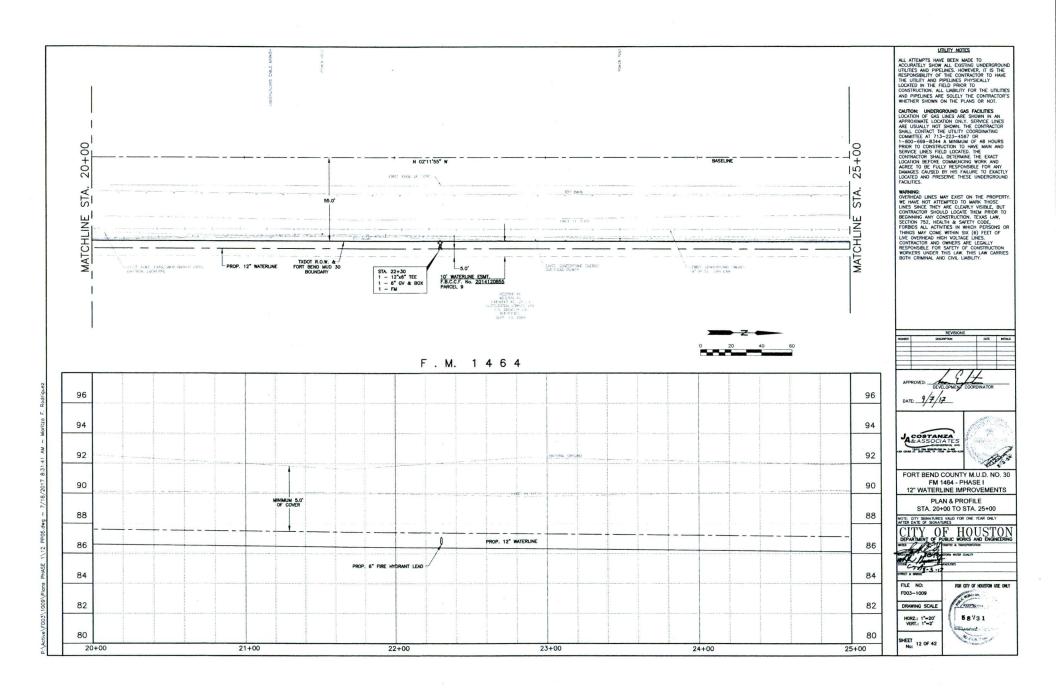


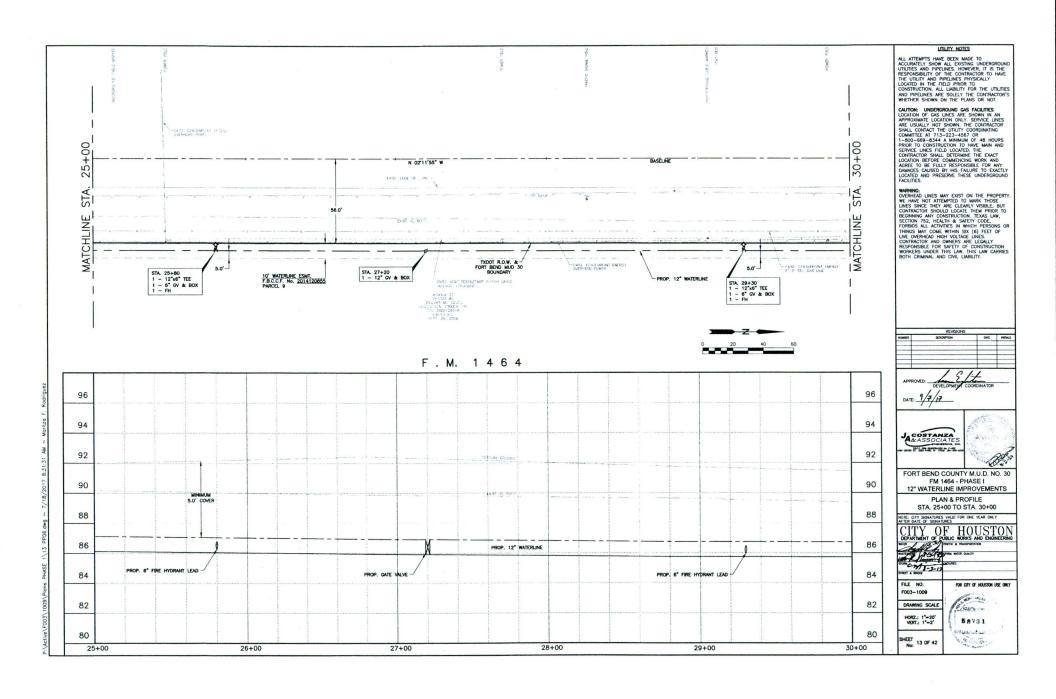


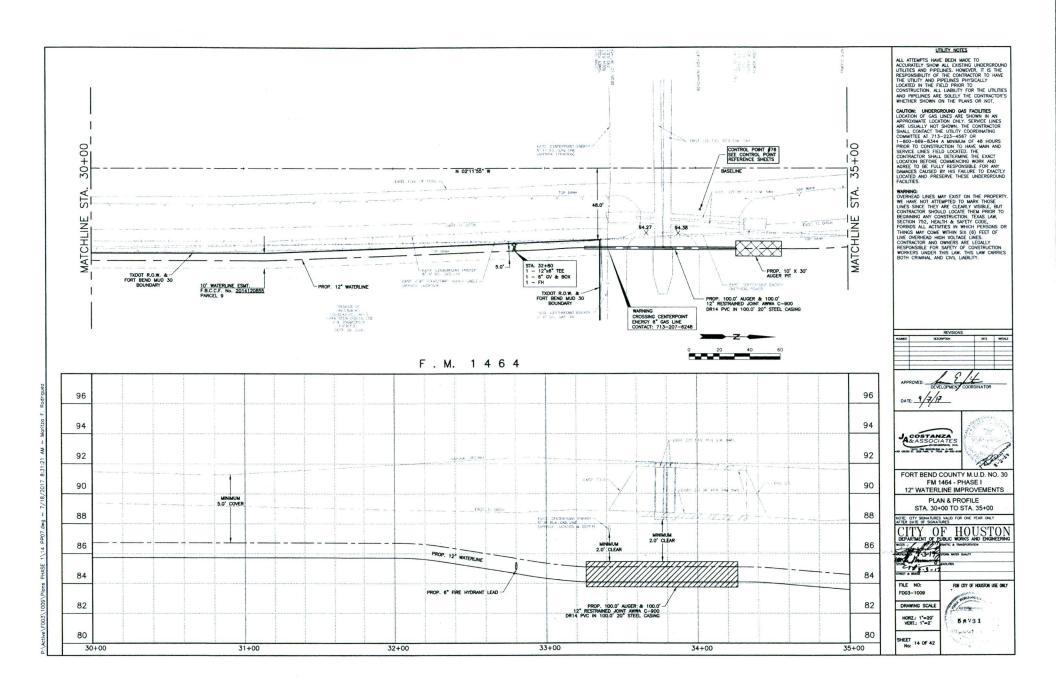


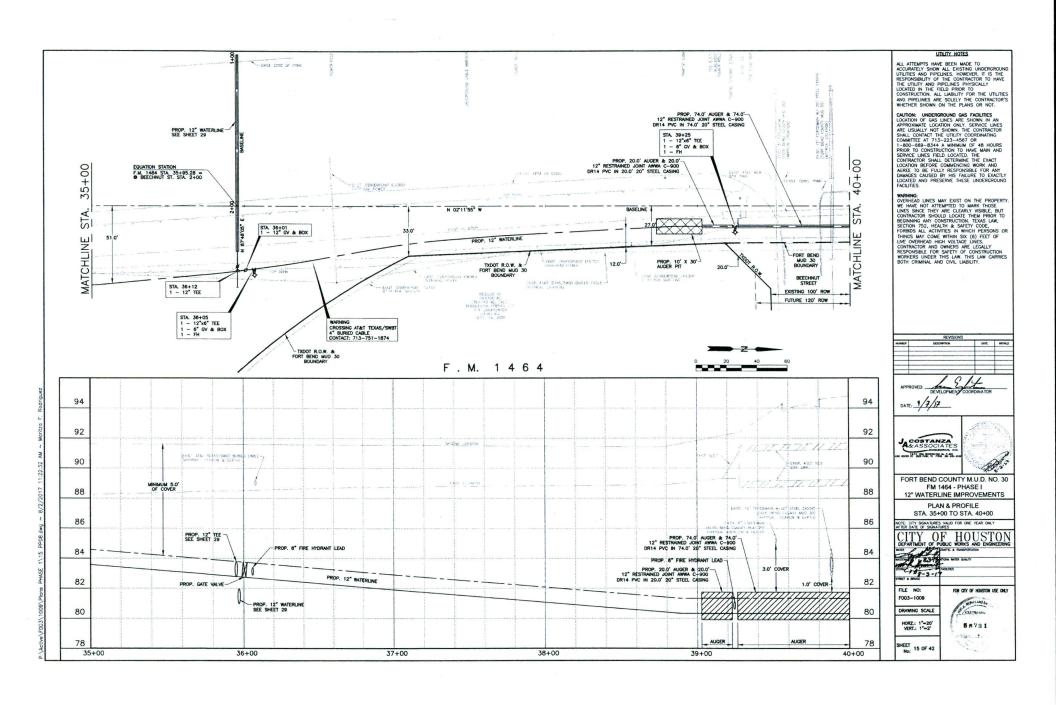


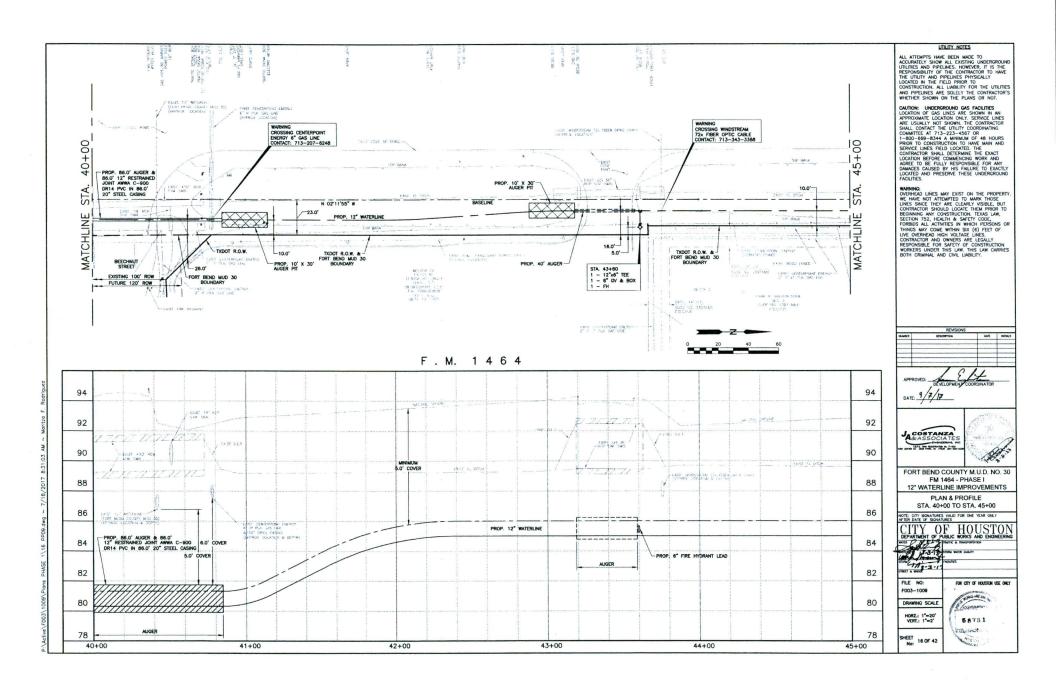


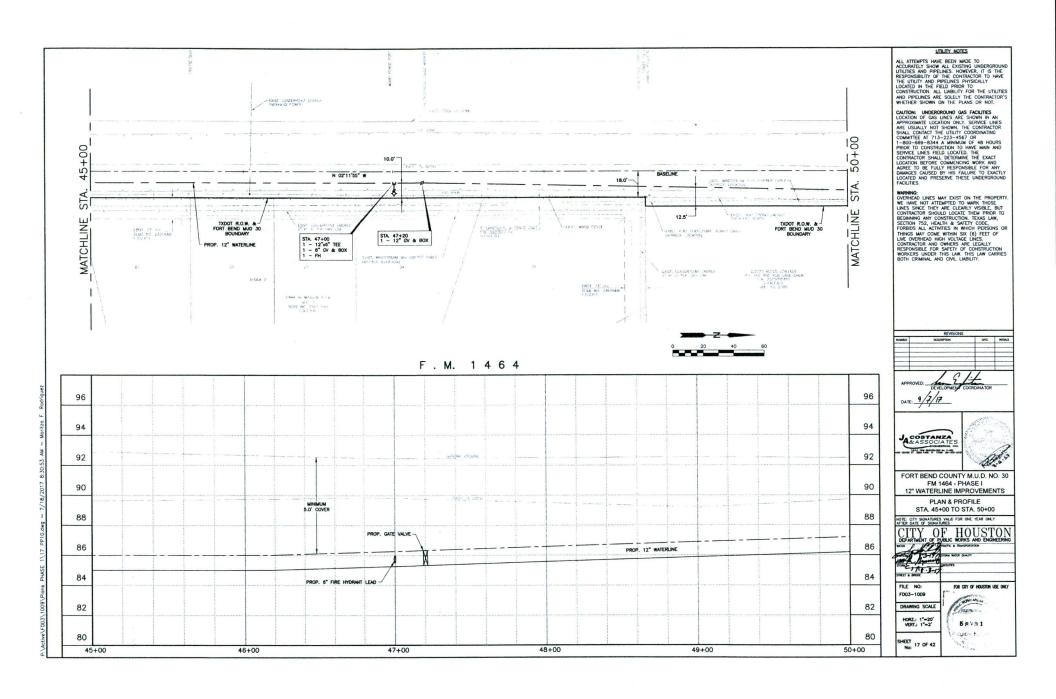


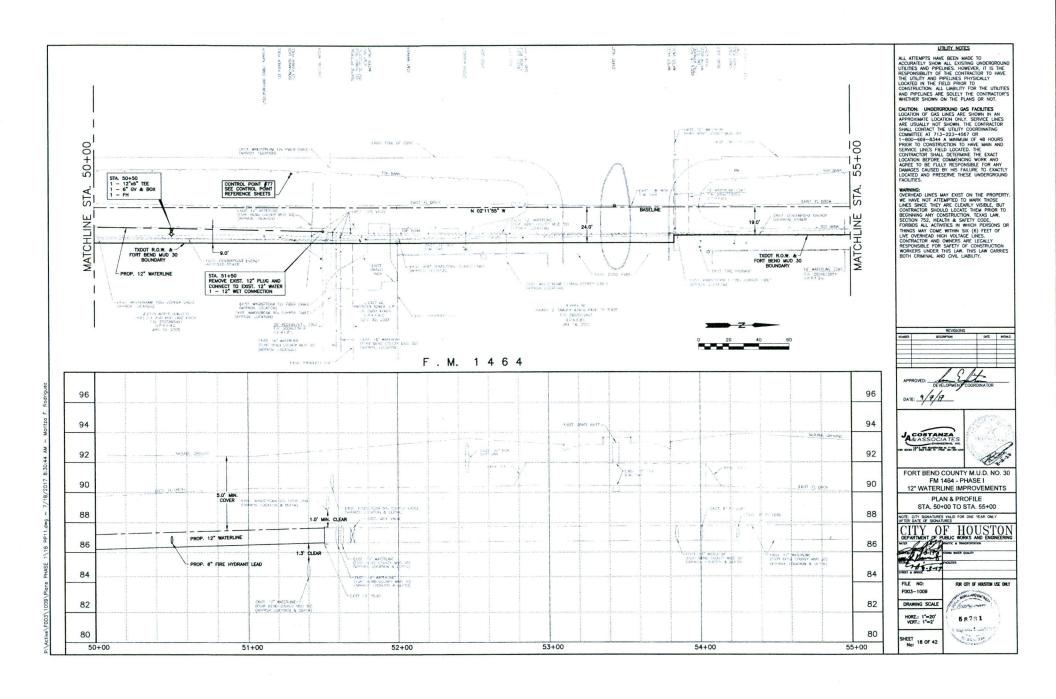


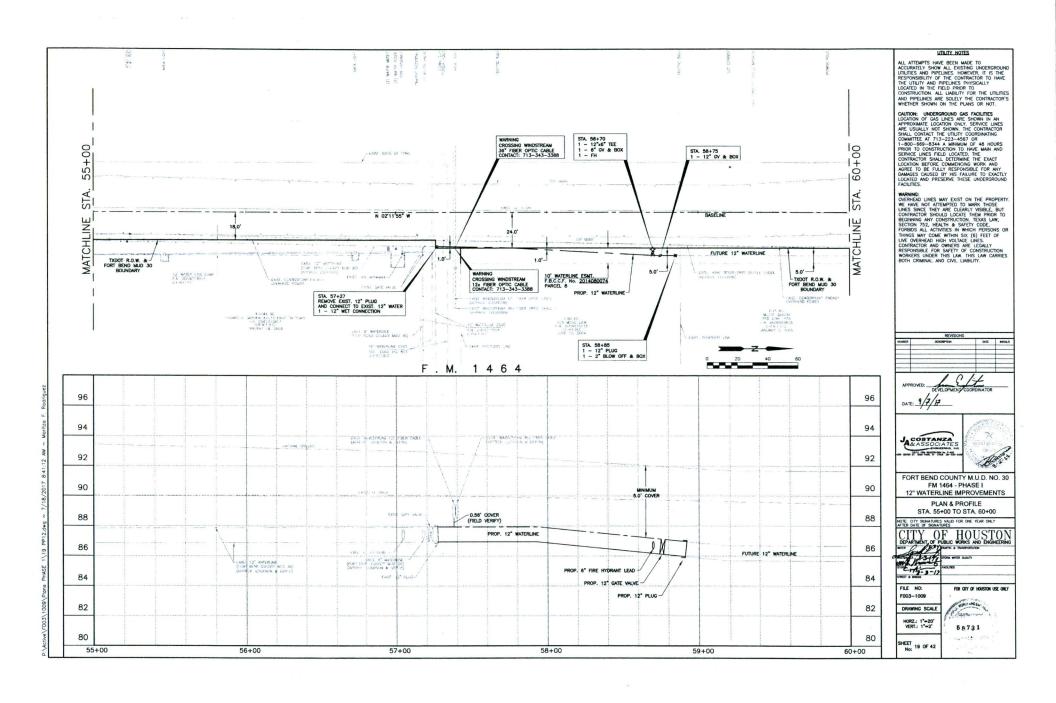


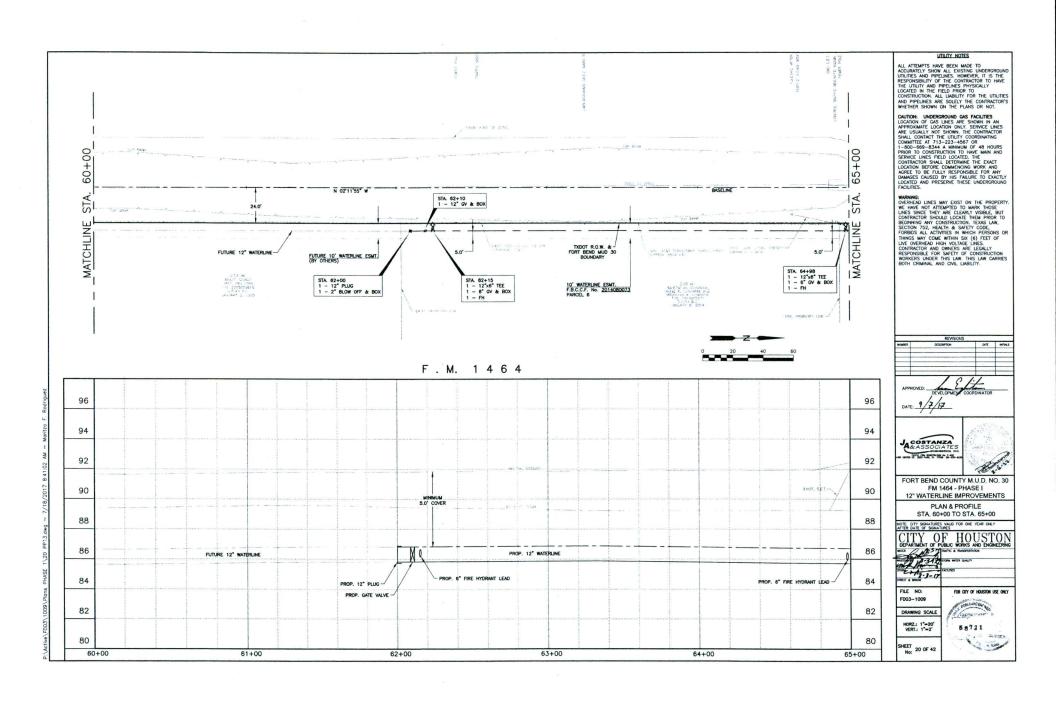


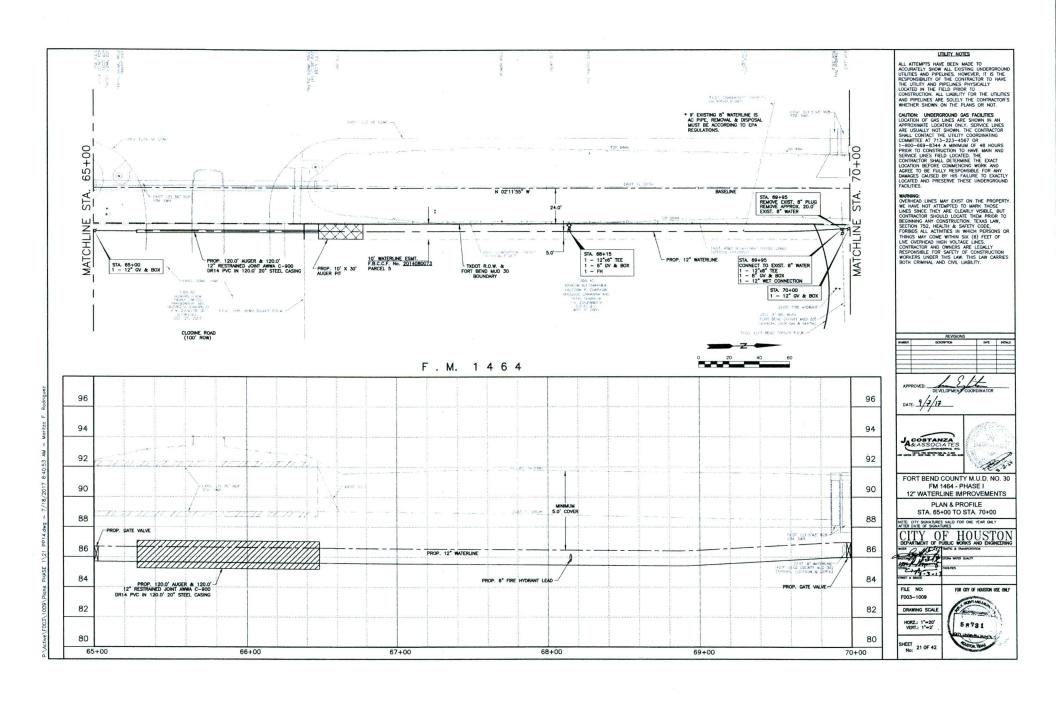


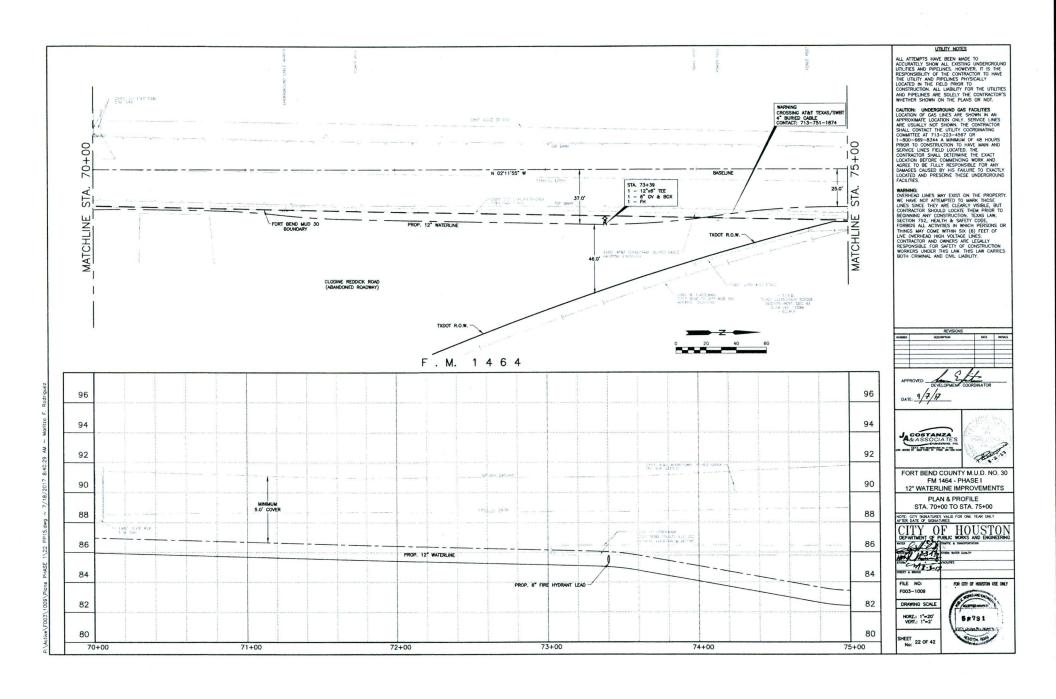


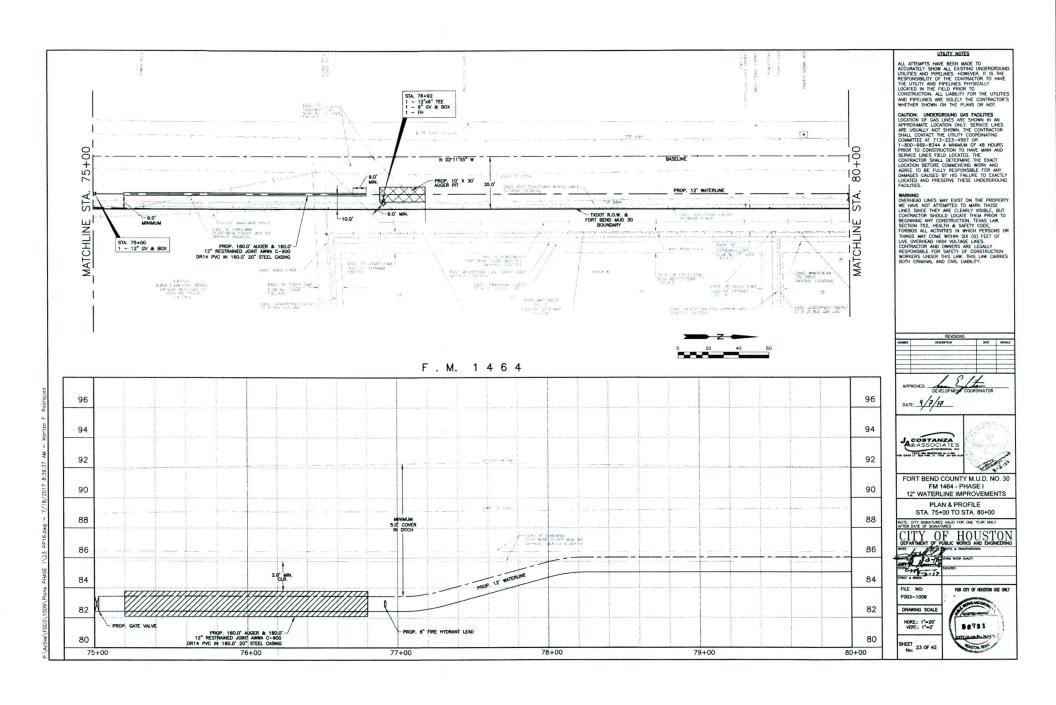


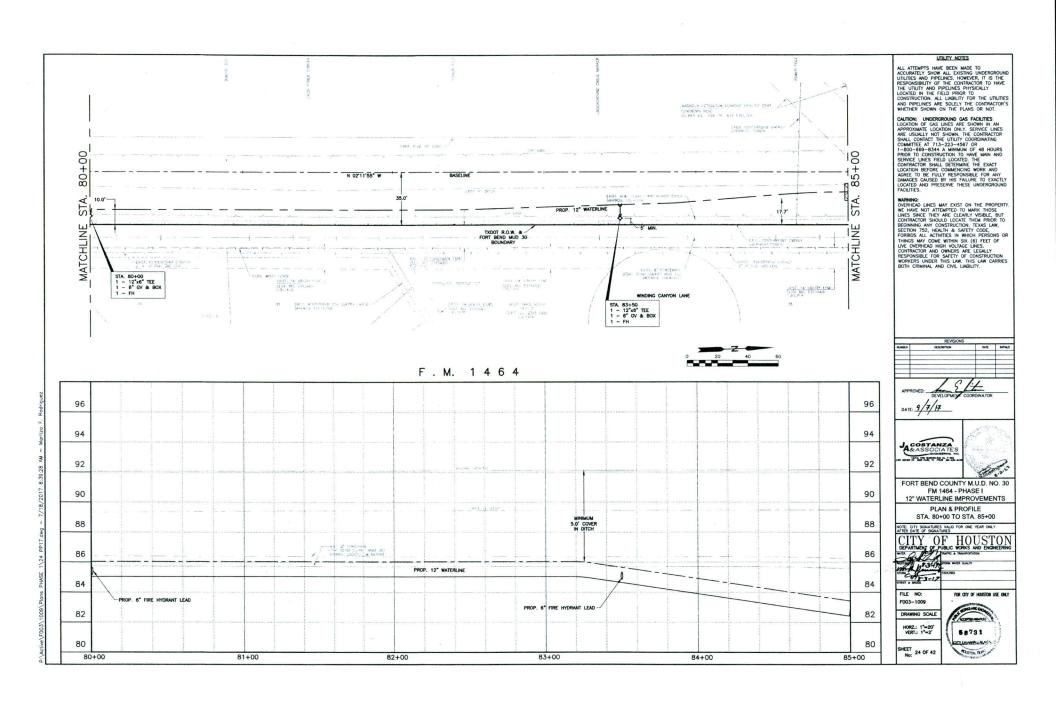


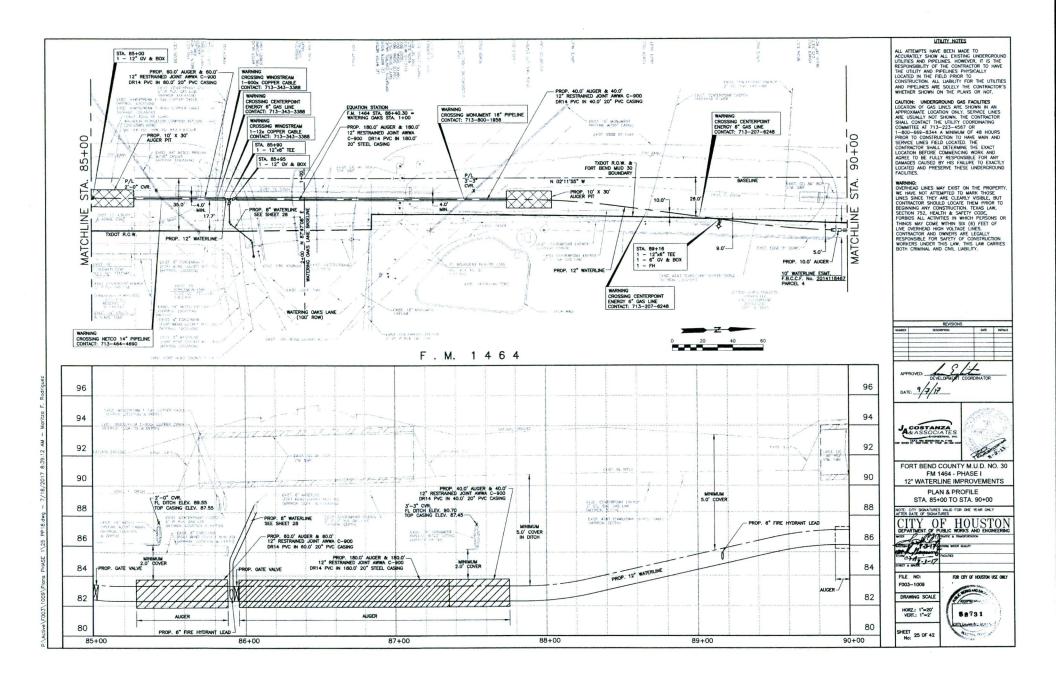


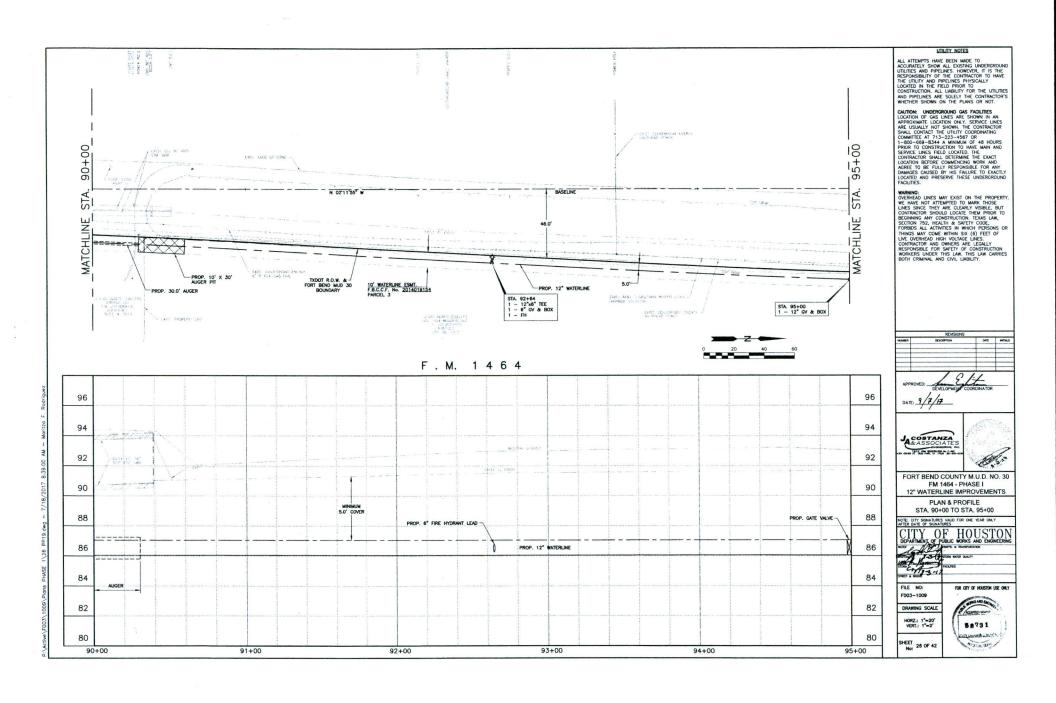


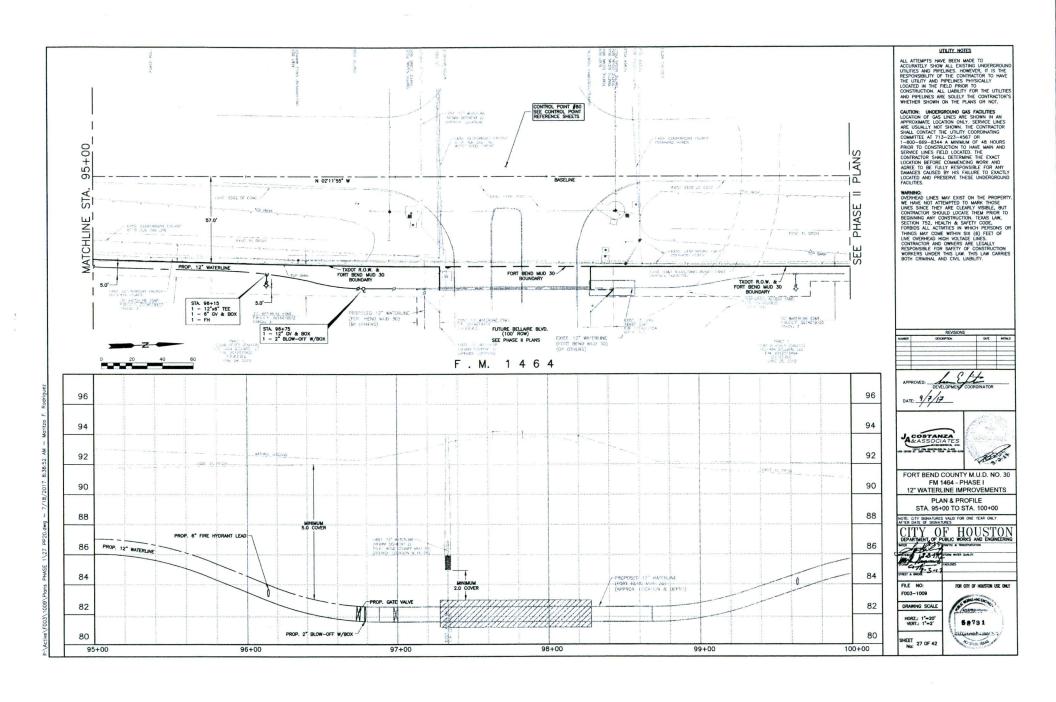


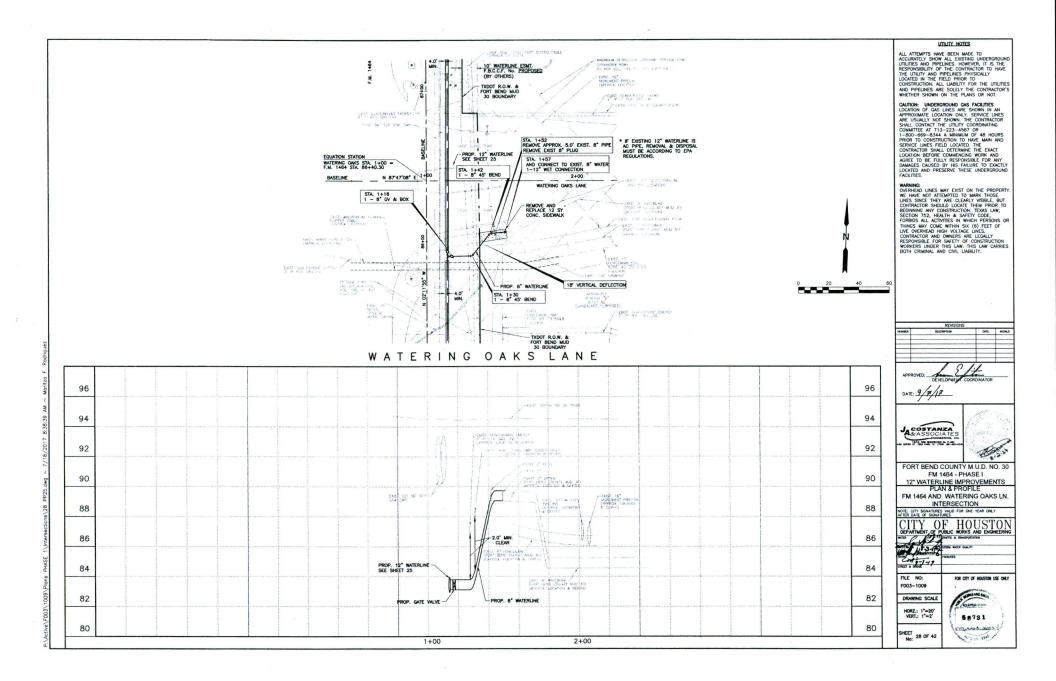


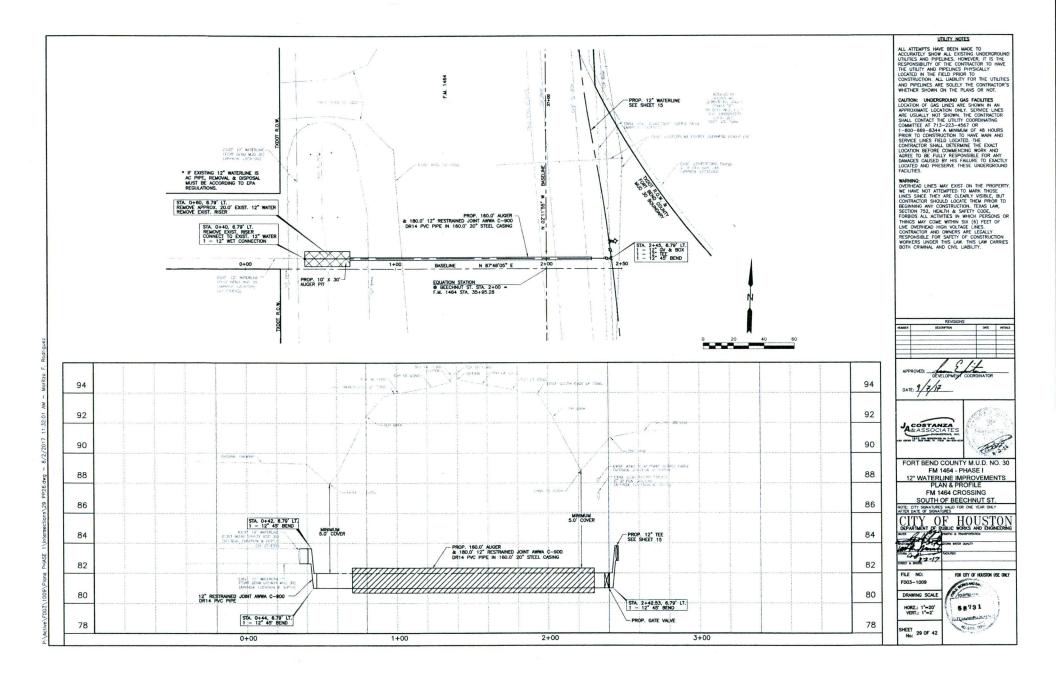


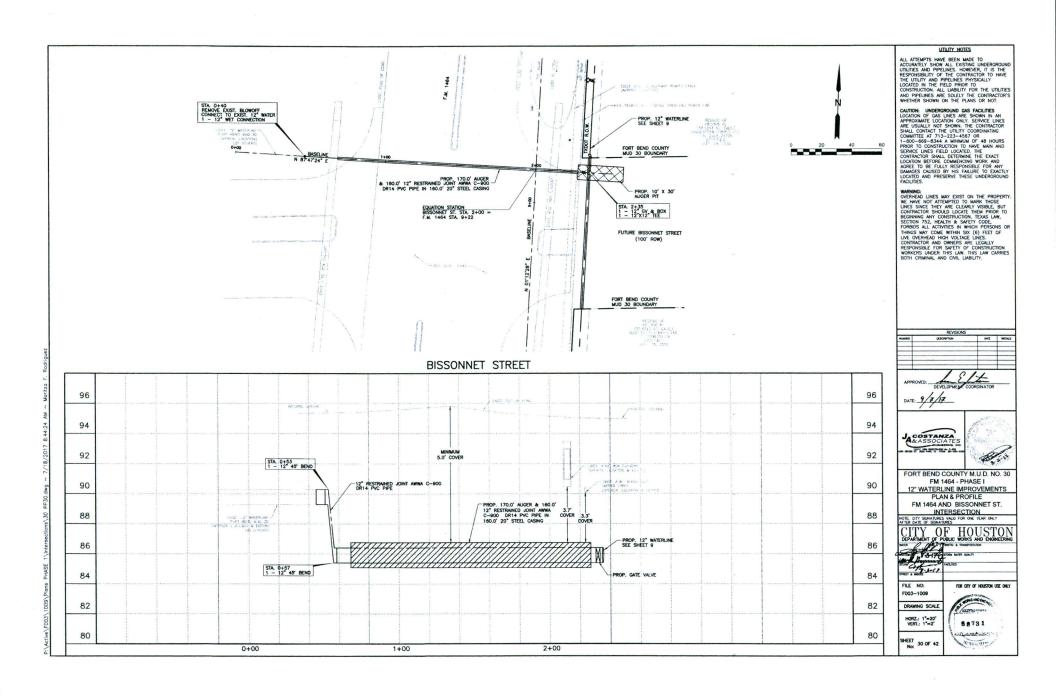


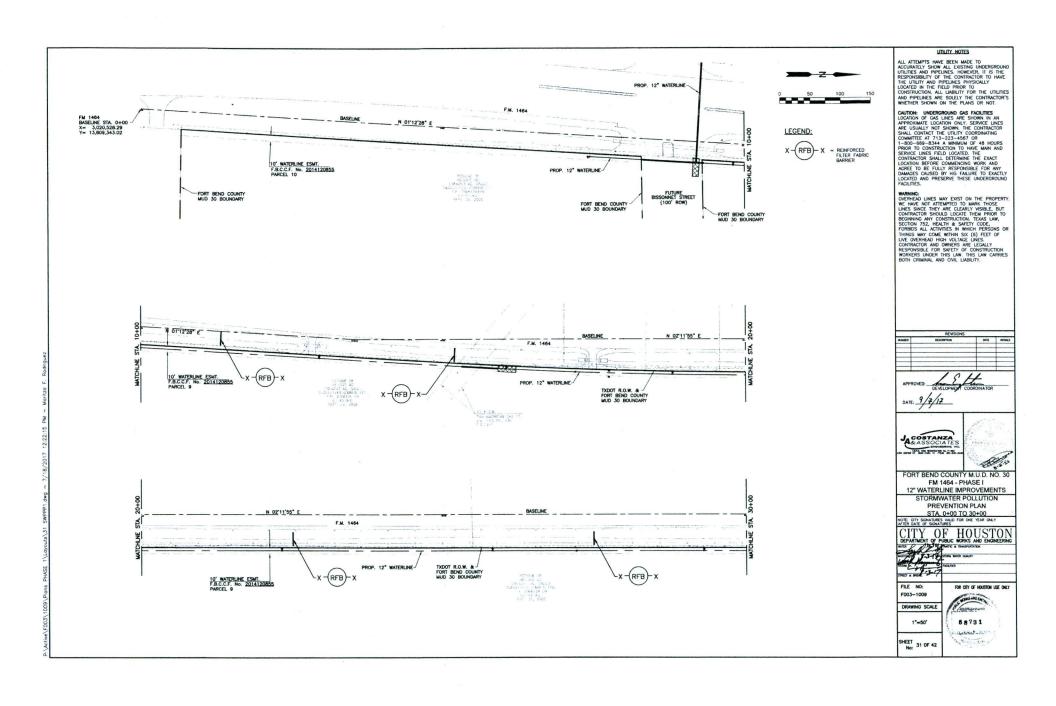


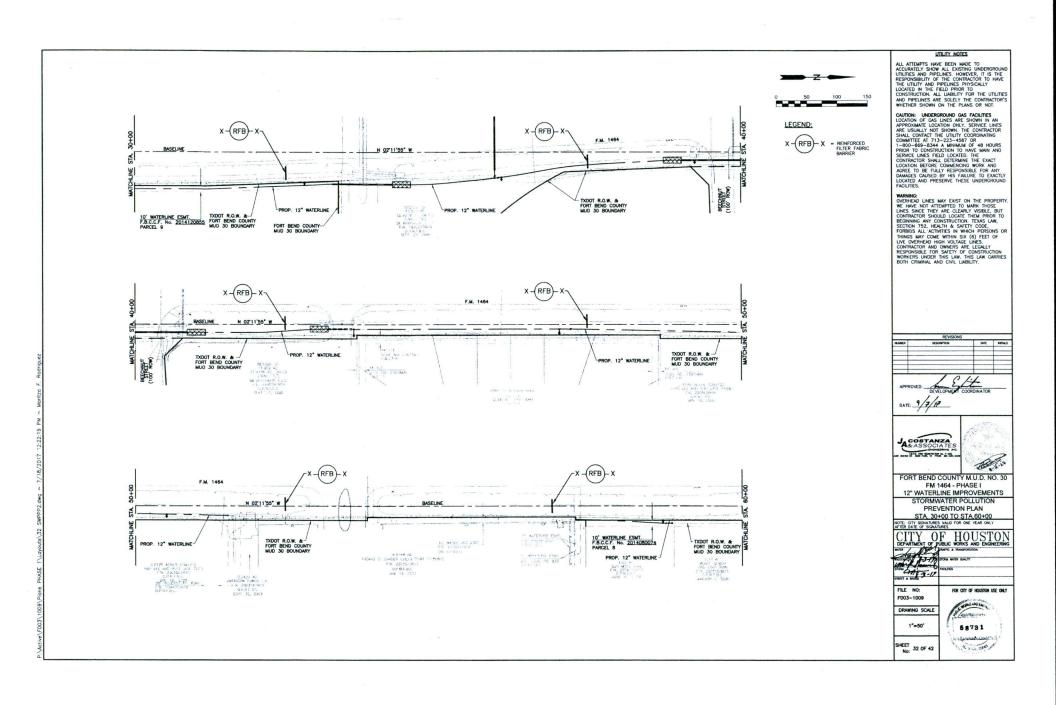


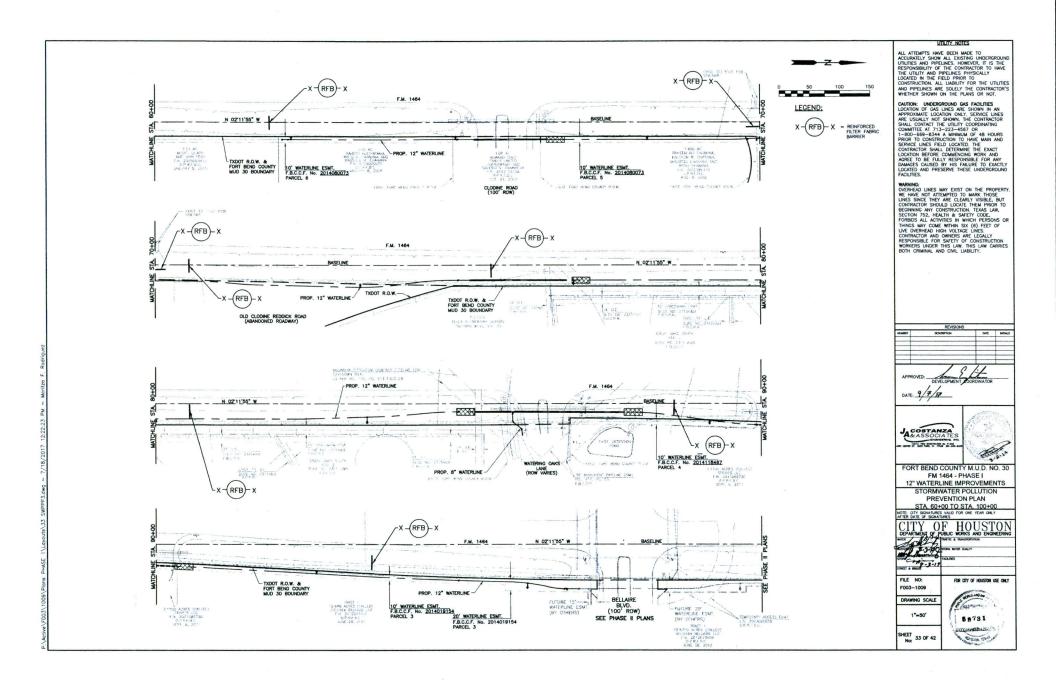


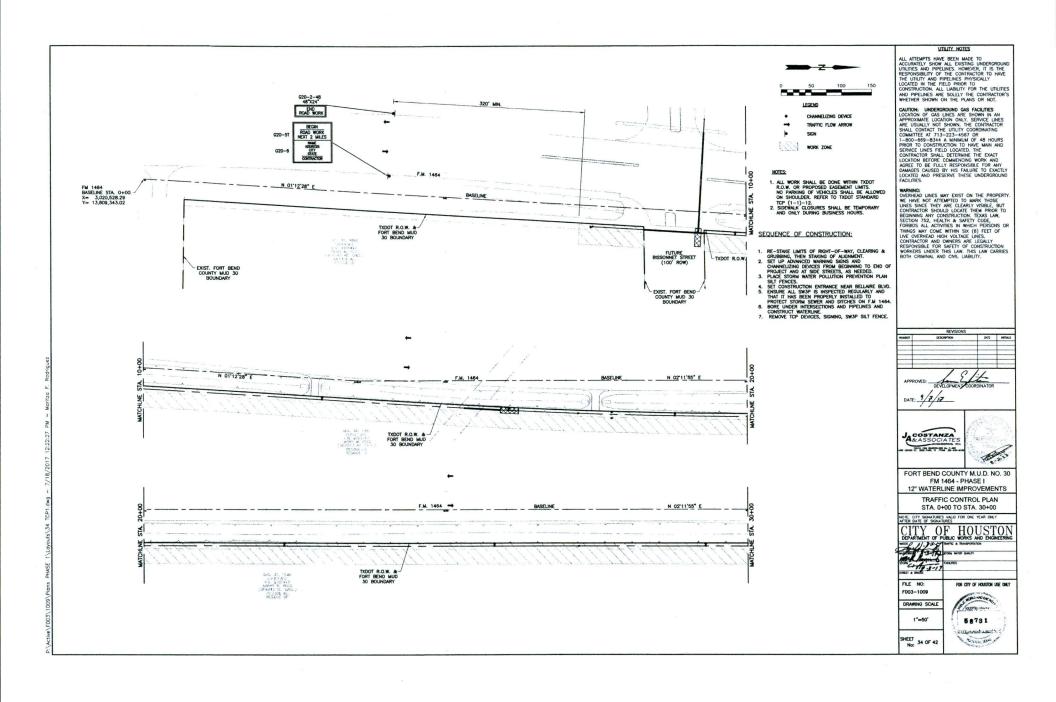


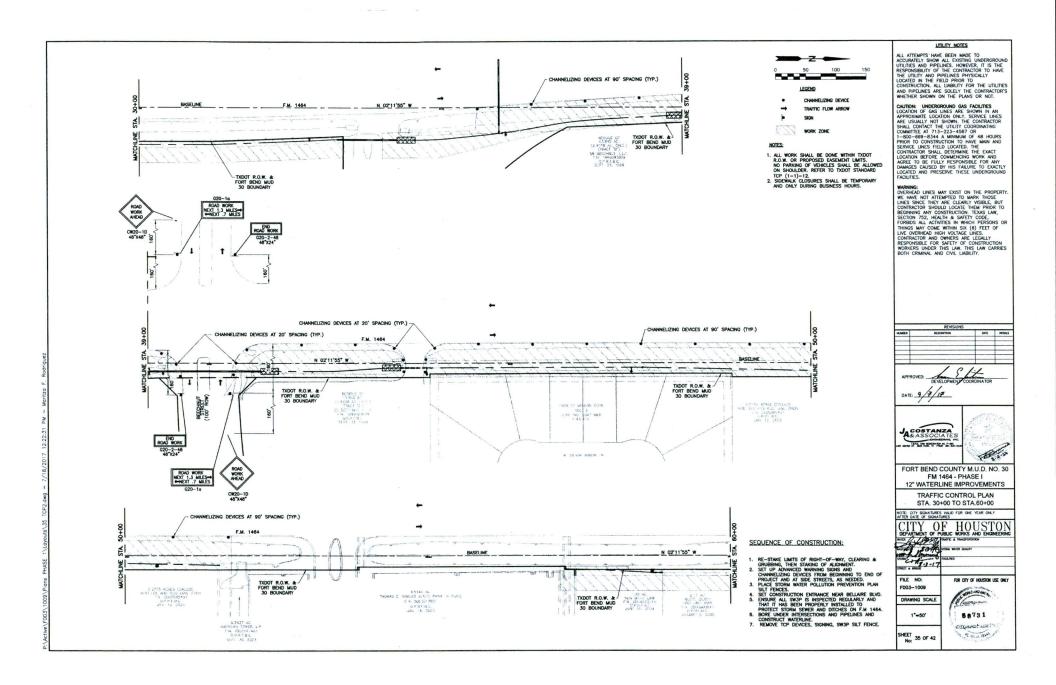


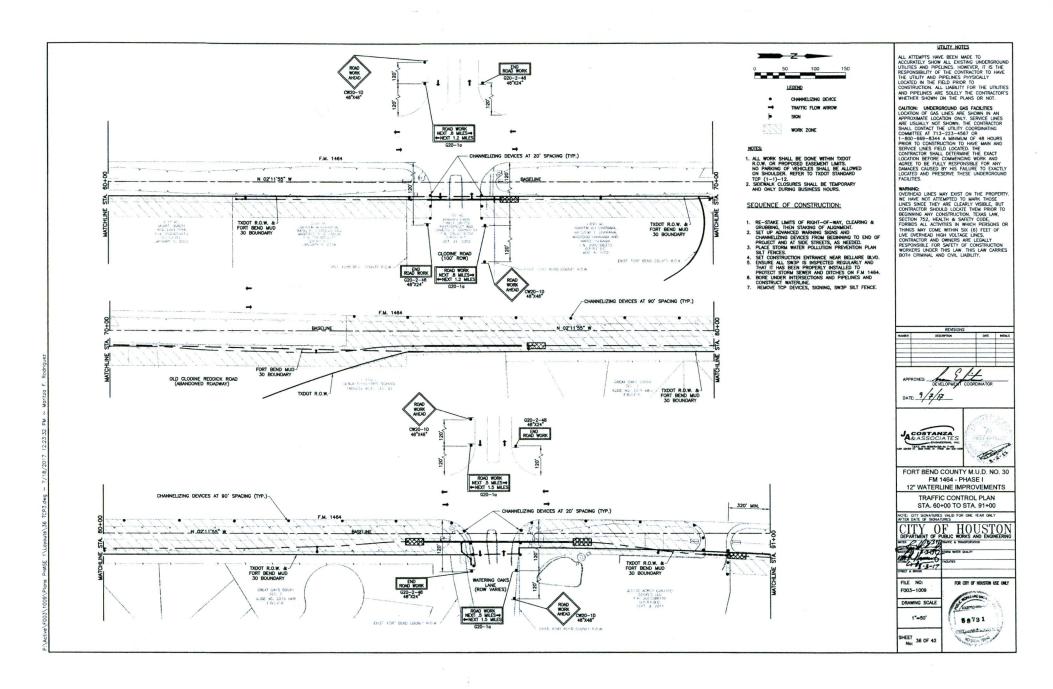


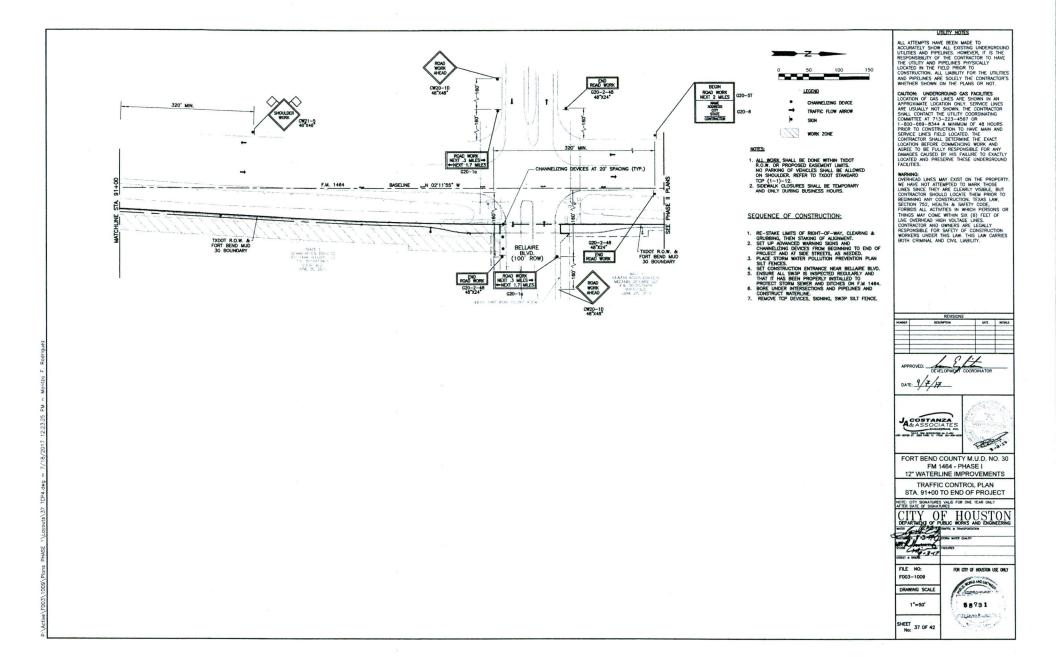




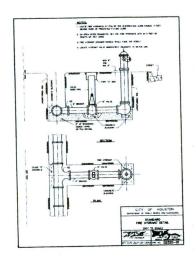








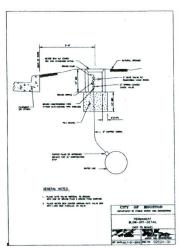
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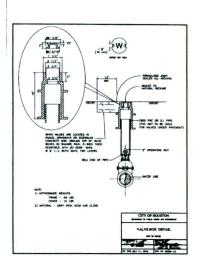


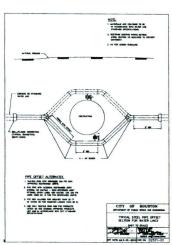
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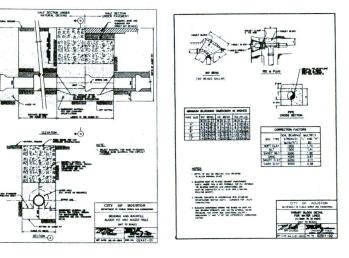
WATER DISTRIBUTION MAIN MEDDING AND BACKFEL FOR OPEN OUT TRENCHES

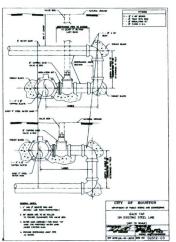
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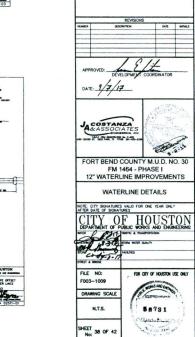


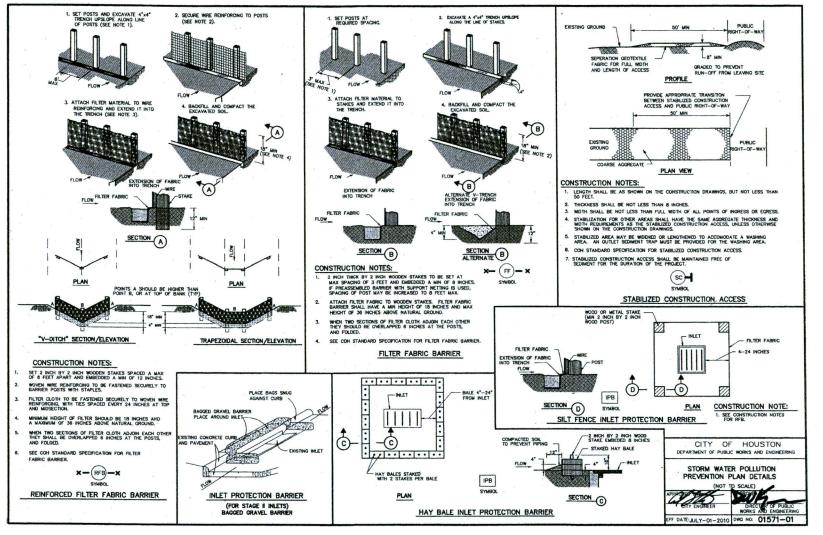




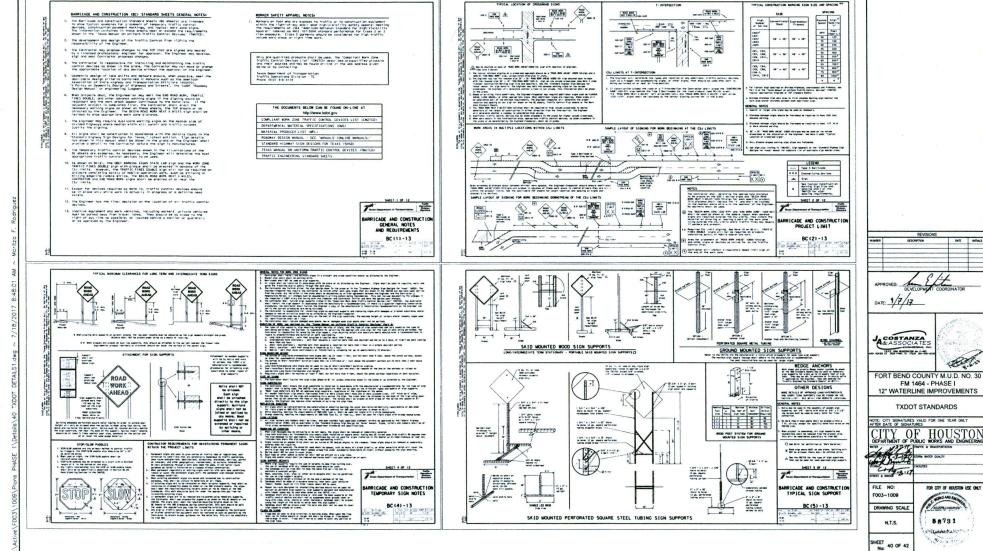


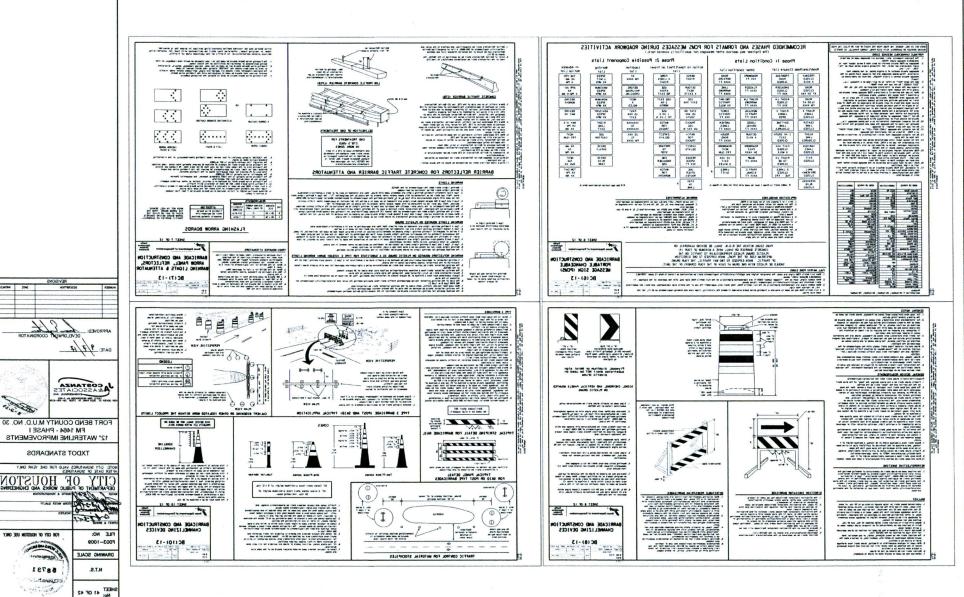












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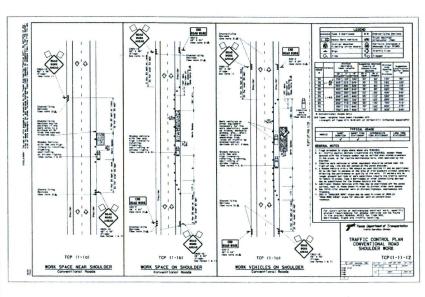
TXDOT STANDARDS

OF HOUSTON

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CITYMONE Comment of



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WARREN SCOPPINE ME NORS

APPROVED: DE VELOPALISM CORPONATOR

DATE: 9/2/17

A& ASSOCIATES

FORT BEND COUNTY M.U.D. NO. 30 FM 1464 - PHASE I 12" WATERLINE IMPROVEMENTS

TXDOT STANDARDS

NOTE: CITY SIGNATURES VALID FOR ONE YEAR ONLY AFTER DATE OF SIGNATURES

CITY OF HOUST(

DEPARTMENT OF PUBLIC WORK
MITH OF PUBLIC WORK
MISTRAFIT OF PUBLIC TOWN

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FILE NO: F003-1009 DRAWING SCALE

N.T.S.

SHEET No: 42 OF 42

Active/F003\1009\Plans PHASE 1\Details\42 TXD0T DETAILS3.dwg ~ 7/18/2017 8:47:41 AM ~ Maritzo F. K