



**REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT**

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

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2017-15103

Applicant: Jerdon Enterprise, L.P./LJA Engineering, Inc.

Job Location Site: Sienna Parkway, Missouri City, TX 77459

Bond No. *****6241 **Date of Bond:** 7/18/2017 **Amount:** \$59,862.25

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 1st day of August, 2017, Upon Motion of Commissioner _____, seconded by Commissioner _____, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

Presented to Commissioners Court and approved.

By: Charles O. Ay

Date Recorded _____ Comm. Court No. _____

for County Engineer

Clerk of Commissioners Court

N/A

By: _____

By: _____

Drainage District Engineer/Manager

Deputy



**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: 2017-15103

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: *****6241 Amount: \$59,862.25
- ☐ 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

7/24/17
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, Jerdon Enterprise, L.P. whose (address, phone) is 13403 Redfish Drive, Stafford, Texas 77477, 281-261-5000, Texas, hereinafter called the Principal, and Hartford Casualty Insurance Company, a Corporation existing under and by virtue of the laws of the state of Indiana and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at (name/address/phone) Hartford Casualty Insurance Company, 19450 State Hwy 249, #400, Houston, Texas 77070, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Michael Heidrick and whose address is Hartford, 3000 Internet Blvd., #600, 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 Fifty Nine Thousand, Eight Hundred Sixty Two and 25/100--- Dollars (\$59,862.25) 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 18th day of July , 2017 .

Jerdon Enterprise, L.P.
PRINCIPAL

BY

Will Cravens
Will Cravens - President

Hartford Casualty Insurance Company
SURETY

BY

Sharon Cavanaugh
Sharon Cavanaugh, Attorney-in-Fact

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

Agency Name: MARSH & MCLENNAN AGENCY LLC

Agency Code: 61-610074

KNOW ALL PERSONS BY THESE PRESENTS THAT:

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☒ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
- ☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, **up to the amount of Unlimited :**

Sharon Cavanaugh, C.W. Adams, Roxanne G. Brune, Sharen Groppell, David R. Groppell, Francine Hay, Beverly A. Ireland, Edward L. Moore, Kurt A. Risk, James W. Tomforde, Gloria Villa of HOUSTON, Texas

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT

ss. Hartford

COUNTY OF HARTFORD

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Nora M. Stranko

Nora M. Stranko
Notary Public

My Commission Expires March 31, 2018

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of 18th day of July, 2017
Signed and sealed at the City of Hartford.



Kevin Heckman

Kevin Heckman, Assistant Vice President

IMPORTANT NOTICE

To obtain information or make a complaint:

You may contact your agent.

You may call Hartford Insurance Group at the toll free telephone number for information or to make a complaint at:

1-800-392-7805

You may also write to The Hartford:

**The Hartford
Hartford Financial Products
2 Park Avenue, 5th Floor
New York, New York 10016
1-212-277-0400**

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

1-800-252-3439

You may write the Texas Department of Insurance

P.O. Box 149104
Austin, TX 78714-9104
Fax Number (512) 490-1007
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us

PREMIUM OR CLAIMS DISPUTES: Should you have a dispute concerning your premium or about a claim you should contact the agent 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 your information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja.

Puede comunicarse con su agente.

Usted puede llamar al numero de telefono gratis de The Hartford Insurance Group para informacion o para someter una queja al

1-800-392-7805

Usted tambien puede escribir a The Hartford.

**The Hartford
Hartford Financial Products
2 Park Avenue, 5th Floor
New York, New York 10016
1-212-277-0400**

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de compañías, 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 Number (512) 490-1007
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 su agente primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

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

Inquiries Regarding Claims

Hartford Fire Insurance Company
Hartford Casualty Insurance Company
Hartford Accident and Indemnity Company
Hartford Underwriters Insurance Company

Twin City Insurance Company
Hartford Insurance Company of Illinois
Hartford insurance Company of the Midwest
Hartford Insurance Company of the Southeast

Please address inquiries regarding **Claims** for all surety and fidelity products issued by The Hartford's underwriting companies to the following:

Phone Number : 888-266-3488
Fax - Claims : 860-757-5835 or 860-547-8265
E-mail : claims@1stepsurety.com

Mailing Address : The Hartford
The Hartford Fidelity & Bonding (BOND)
Hartford Plaza
690 Asylum Avenue
Hartford, CT 06115

ASPHALTIC CONCRETE PAVEMENT

1. ASPHALT MATERIAL AND WORKMANSHIP SHALL COMPLY WITH ASTM C 33, ASTM C 131, ASTM C 138, AND TROTT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES (1984 EDITION) AND SHALL BE APPROVED BY THE CITY ENGINEER. THE 0-100 UNLESS SPECIFICALLY NOTED AND APPROVED BY THE CITY OF MISSOURI CITY ENGINEER.
2. CONTRACTOR SHALL VERIFY ELEVATIONS AND SIZES AND THAT SAME COURSE IS READY TO SUPPORT WHEELED LOADS.
3. APPLY A PRIME COAT AS PER CITY OF MISSOURI CITY SPECIFICATIONS AND DO NOT APPLY JACK COAT UNTIL PRIME BASE COURSE HAS CURED AND IS APPROVED BY THE CONSTRUCTION INSPECTOR.
4. JACK COAT SHALL COMPLY CITY OF MISSOURI CITY AND TROTT STANDARDS.
5. DO NOT PLAST CUTBACK ASPHALT OVER 1 INCH THICKNESS.
6. DO NOT PLACE ASPHALT OVER 2 INCHES THICKNESS BELOW CURB AND PALMS. MATERIAL MAY BE PLACED WHEN AMBIENT TEMPERATURE IS 40°F AND FIRM.
7. ON PUBLIC ROADS, STREETS, AND RIGHT-OF-WAY, ASPHALT SHALL BE PLACED IN MAXIMUM 2-INCH LIFTS. IN THE EVENT MORE THAN ONE LIFT IS REQUIRED, EACH LIFT SHALL BE COMPACTED, TESTED, AND APPROVED BY THE CITY OF MISSOURI CITY ENGINEER. IF MORE THAN ONE LIFT IS PLACED, IF COMPLETELY CURED AND DRIED, A JACK COAT WILL BE REQUIRED BETWEEN LIFTS.
8. A CERTIFIED LAB SHALL BE ON SITE AT ALL TIMES TO TEST AND PROPERLY DOCUMENT THE CONSTRUCTION METHODS AND QUALITY OF MATERIALS.
9. ROLLING PATTERNS SHALL BE ESTABLISHED BY THE CONTRACTOR, AS RECOMMENDED BY THE LAB TO ACHIEVE THE DESIRED FINISH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY OF THE CHANGES IN THE PLACEMENT OR MACHINE COLOR, WHICH AFFECT COMPACTION. COMPACTION OF SOIL SHALL BE ACHIEVED.
10. ASPHALT SHALL NOT BE PLACED ON HOT BASE.
11. NO "WASHBURN" ARE ALLOWED.
12. IF THE SURFACE WHEELS FORMERLY PLACED, BUT, ON CONSEQUENCES IN ANY MANNER OTHER TO THAT SPECIFIED, THE CONTRACTOR WILL CORRECT THIS CONDITION AT HIS EXPENSE TO THE SATISFACTION OF THE CITY OF MISSOURI CITY ENGINEER.
13. THE CONTRACTOR SHALL PROTECT THE PAVEMENT UNIT, DIRECTED BY THE CITY ENGINEER TO OPEN SOIL PAVEMENT TO TRAFFIC.
14. REE QUALITY SHALL COMPLY WITH TROTT ITEM 655, "REE QUALITY FOR PAVEMENT FACIES".

STORM SEWER NOTES

1. STORM SEWERS SHALL BE DESIGNED AND CONSTRUCTED WITH CITY OF MISSOURI CITY INFRASTRUCTURE DESIGN MANUAL AND IN ACCORDANCE WITH CITY OF MISSOURI CITY CONSTRUCTION DETAILS.
2. ALL PIPE STRUCTURES SHALL BE INSTALLED, BOXED, AND BACKFILLED IN ACCORDANCE WITH CITY OF MISSOURI CITY STANDARD DETAIL DRAWINGS.
3. ALL CURRENT STABILIZED SHAW (C.S.S.) SHALL BE 24 PER CIRCUM TO AND MEET MINIMUM C.S.S. STRENGTHS CORRESPONDING TO SIZE.
4. ALL STORM SEWERS UNDER AND WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS SHALL BE 18-INCH DIAMETER UNLESS OTHERWISE SPECIFIED BY THE CITY OF MISSOURI CITY.
5. PROPOSED STORM SEWER HANDICAP RAMP JOINTS SHALL BE RECESSED WITH A BRICK WALLS WITH FULL MORTAR HIND AND BED JOINTS AND GROUTED WITH A MINIMUM OF 1/2-INCH MORTAR ENDS AND OUTSIDE UNLESS OTHERWISE NOTED.
6. HANDICAPS IN HANDICAP RAMPS ARE NOT ALLOWED
7. ALL STORM SEWER MARKERS SHALL BE OF MISSOURI CITY TYPE "T" UNLESS OTHERWISE NOTED AND SHALL BE LOCATED AT A MINIMUM OF THREE (3) FEET EACH OF CURB. IF CORNER EXISTS, RACK OVER MANHOLE IS MUST PROVIDED CURB. (MAXIMUM RACK OF 1-1/2 INCH COURSE OF BLOCK).
8. MIN ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY. UTILITY CONTRACTOR SHALL ADJUST ELEVATION OF FINAL GRADING. SLOPED SHALL BE MAILED FOR STORM WATER DRAINAGE AWAY FROM PROJECT FINAL GRADING.
9. FIN ELEVATIONS SHALL BE PROPERLY ADJUSTED TO GRADE IN PAVEMENT AND SIDEWALKS. APPROVED BLOCKS SHALL BE USED IN PAVEMENT.
10. ALL STORM SEWER MANHOLE COVERS MUST INCLUDE "STORM SEWER" AND "JUMP NO WATER". "JUMPS TO WATERWAYS" WITH CITY OF MISSOURI CITY TABLEM.
11. UNIFORM STORM SLOVER SIZE SHALL BE 24-INCH DIAMETER.
12. UNIFORM STORM SLOVER DEPTH SHALL BE 24-INCH DEPTHER.
13. UNIFORM STORM SLOVER SPACING SHALL BE 24-INCH SPACING.
14. CHANGING ANOTHER EXISTING OR PROPOSED MANHOLE. ALL INLET LIDS SHALL BE 24" R.C.P. OR LARGER. ALL STORM SEWER PIPE SHALL BE RUBBER GASKETED. ALL OUP PIPE SHALL BE IN ACCORDANCE WITH C.O.M.C. APPROVED PRODUCT LIST AND STANDARD DETAILS.
15. CONTRACTOR SHALL VERIFY NATURAL GROUND SHOTS PRIOR TO MANHOLE CONSTRUCTION
16. CONTRACTOR TO PROVIDE A MINIMUM OF 6-INCHES CLEARANCE AT STORM AND WATER LINE CROSSINGS AND A MINIMUM OF TWELVE (12) INCHES AT SANITARY SEWER CROSSING.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING, AND RESTORING ANY BACKLOGGED UNPAVED STREET DISCLOSED AS A RESULT OF THIS WORK.
18. ALL PATCHES SHALL BE RESTORED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL PATCHES SHALL BE MATCHED TO EXISTING SURFACE. ALL PATCHES SHALL BE REFINISHED AS NECESSARY WHEN IN RUNNING DWYS OF EACH EXISTENCE (NO SPANATE WAT).
19. THE JUNITY CONTRACTOR SHALL BORSH CUT ALL PAVEMENT SHOULDS IN PROPER ALIGNMENT AND SLOPE TO WITHIN 0.2 FT. OF FINISH GRADE. THE PAVING CONTRACTOR, UPON COMPLETION OF PAVING, SHALL COMPLETE FINAL GRADING ALIGNMENT OF SHOULDS AND RESTORE ALL AREAS WITHIN RIGHT-OF-WAY FOR USE OF OTHER TRAFFIC.
20. REFER TO KENSA, NOTES AND C.S.S. NOTES.

SANITARY SEWER NOTES

- [illegible]

- [illegible]

WATER DISTRIBUTION NOTES

1. WATER MAINS, WATER SERVICE LINES AND ASSOCIATED APPURTENANCES SHALL BE DESIGNED AND CONSTRUCTED AS PER REQUIREMENTS OF THE CITY OF MISSISSAUGA CITY INFRASTRUCTURE DESIGN MANUAL, AND CORRESPONDING STANDARD CONSTRUCTION DETAILS SHEETS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND COVELET JAKES BEFORE INFORMATION DEFICIT ON APPROVED CONSTRUCTION DOCUMENTS AND/OR INFORMATION AVAILABLE IN PRESENT SPECIFICATIONS, CITY OF MISSISSAUGA CITY INFRASTRUCTURE STANDARDS SHALL GOVERN.
2. ALL MATERIALS AND PRODUCTS USED IN THE CONSTRUCTION OF WATER MAINS, WATER SERVICE LINES AND APPURTENANCES SHALL COMPLY WITH THE CITY OF MISSISSAUGA CITY INFRASTRUCTURE DESIGN MANUAL REQUIREMENTS. THE CONTRACTOR ASSUMES ALL RISKS AS ASSIGNED BY THE DEPARTMENT OF PUBLIC WORKS.
3. ALL GATE VALVES INSTALLED BY THIS GRADE SHALL BE OF RISE-RING STEEL DESIGN.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER DISTRIBUTION SYSTEM

- [illegible]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
REQUIRED.

- [illegible]

T E X A S
 DEPARTMENT OF PUBLIC WORKS
 SHAW & KUMAR, P.E., CITY ENGINEER
 04/24/2014

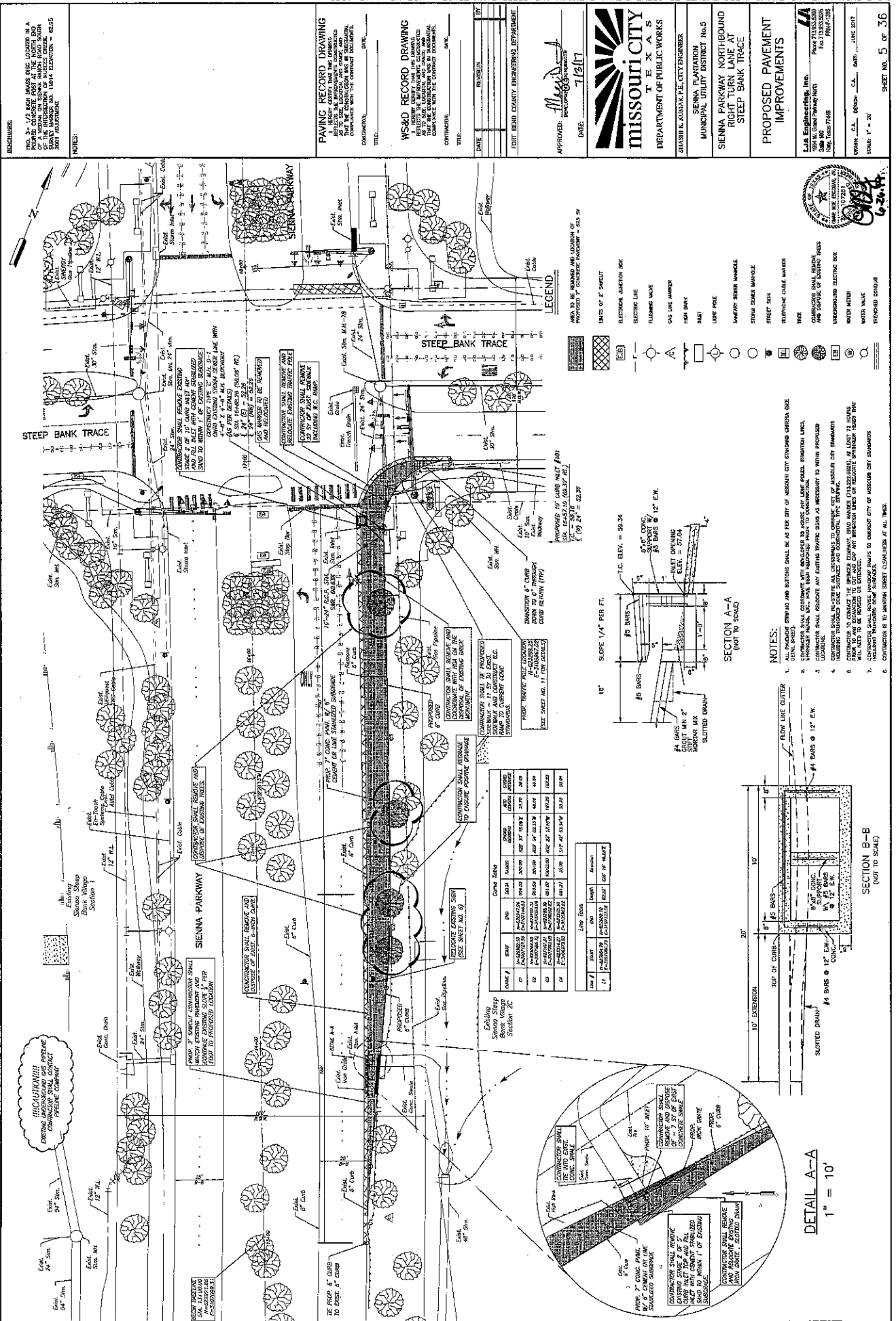


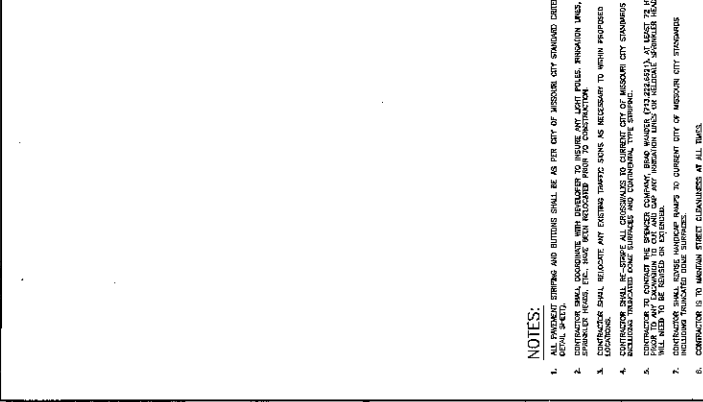
04/24/2014
 10 27 28 AM
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LIA ENGINEERING, INC.
 10200 E. 15TH AVE. SUITE 100
 DENVER, CO 80231
 303.755.1000
 WWW.LIAENGINEERING.COM

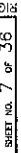
CONSTRUCTION PLANS FOR:
 'SIENNA PLANTATION'
 MUNICIPAL UTILITY DISTRICT NO. 0790
 T.C.E.D., P.W.S. NO. 07904680
 SIENNA PARKWAY NORTH BOUNDARY
 FROM AT AND TO
 STEEP BANK TRACE

SHEET NO. 009 OF 010
 SCALE: 1" = 40' HORIZ.
 1" = 20' VERT.
 DATE: 04/24/2014
 DRAWN BY: JES





62	60	58	56	54	52	50	48	46	44



ITEM NO.	DESC. CODE	DESCRIPTION	UNIT	QUANTITY
416	6034	DRILL SHAFT (TRF SIG POLE) (48 IN)	LF	22
618	6046	CONDT (PVC) (SCH 80) (2")	LF	30
618	6047	CONDT (PVC) (SCH 80) (2") (BORE)	LF	215
618	6053	CONDT (PVC) (SCH 80) (3")	LF	15
618	6054	CONDT (PVC) (SCH 80) (3") (BORE)	LF	110
620	6009	ELEC CONDR INCL 6" DARE	LF	405
624	6005	TRAY CABLE (4 COND) (12 ANG)	LF	670
624	6010	GROUND BOX TY D (16/9/22) W/AFRON	EA	1
690	6011	INSTALL HRY TRF SIG (UPGRADE)	EA	1
694	6007	TRF SIG CBL (TY A) (12 ANG) (2 COND)	LF	335
694	6009	TRF SIG CBL (TY A) (12 ANG) (1 COND)	LF	335
694	6012	TRF SIG CBL (TY A) (12 ANG) (1 COND)	LF	670
694	6022	RELOCATE UP SIGNAL POLE AS3M	EA	1
694	6005	WYDS COMMUNICATION CABLE (COAXIAL) (PER MANUFACTURER SPECS TO MATCH EXISTING)	LF	325

* SUBSIDIARY TO OTHER PAY ITEMS

REVISIONS

NOTES

DATE	BY	VISION	BY

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: *[Signature]*
RESIDENT ENGINEER
DATE: 7/13/17



SEAN K. KUMAR, P.E., CITY ENGINEER

SIENNA PLANNING

MUNICIPAL UTILITY DISTRICT No. 5

SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACE

TRAFFIC SIGNAL
QUANTITIES

LJA Engineering, Inc.
10000 Katy Freeway, Suite 100
Houston, Texas 77055-2000
Phone: 281.713.5500
Fax: 281.713.5500
LJA PROJECT NO.: 1415-1552
SHEET NO.: 8 OF 36

SCALE: 1" = 30'

NOTES:

- RELOCATE EXISTING SIGNAL POLE TO NEW LOCATION AS SHOWN ON THE PLAN. ADJUST SIGNAL HEADS TO THE CENTER OF TRAVELLED LANE.
- 1. EXISTING SIGNAL EQUIPMENTS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- 2. ADJUST PHASES 2 & 5 VIVOS DETECTION ZONES FOR THE RELOCATED VIVOS CAMERA V3.
- 3. THE CONTRACTOR SHALL CONTACT MR. KEVIN CLUMMINS, CITY OF MISSOURI CITY, AT 281-403-8587 TO PROGRAM THE SIGNAL CONTROLLER.



MISSOURI CITY
TEXAS
DEPARTMENT OF PUBLIC WORKS

SIENNA PLANTATION
MUNICIPAL UTILITY DISTRICT No.5

TRAFFIC SIGNAL
MODIFICATIONS LAYOUT

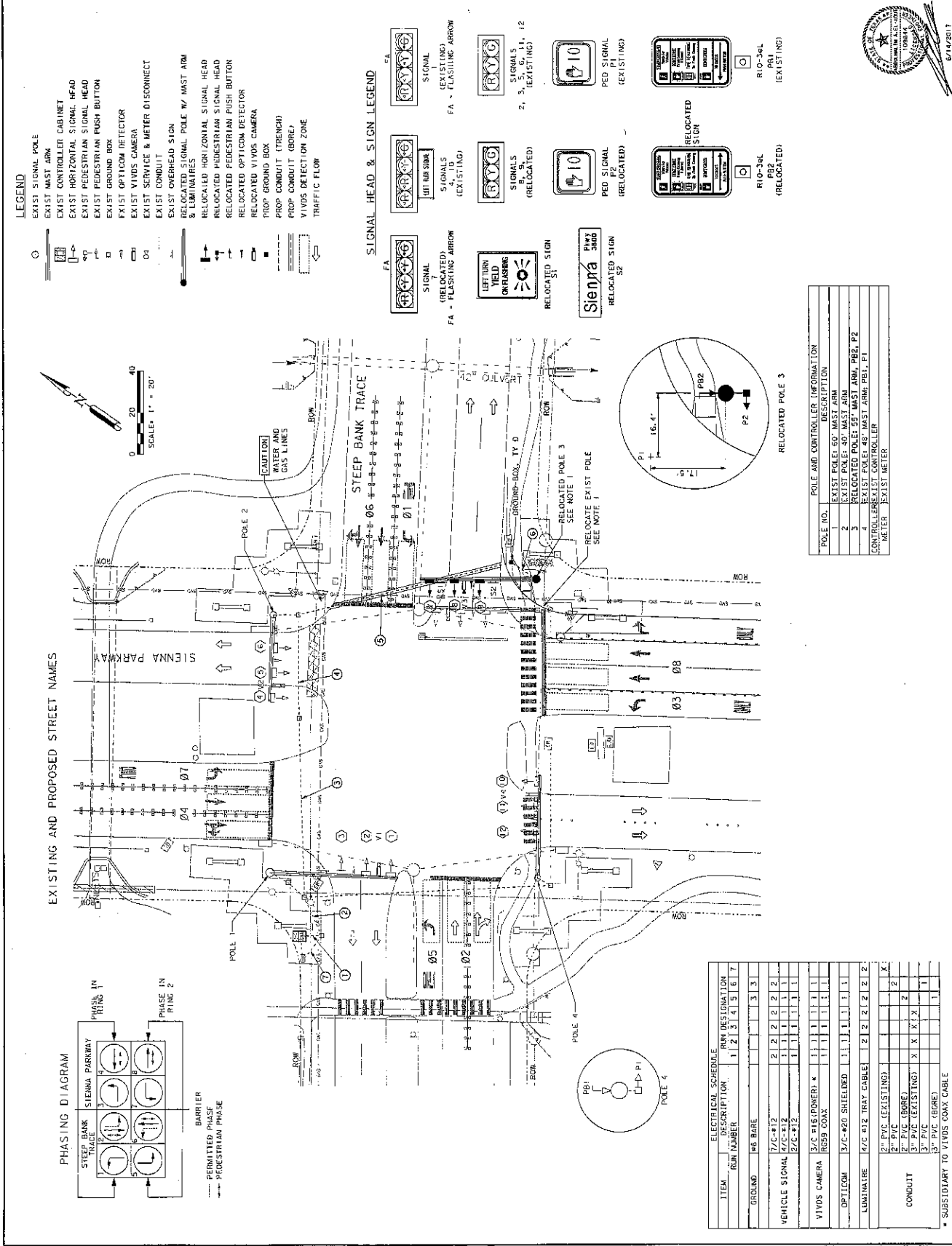
LJA Engineering, Inc.
2828 Briarpark Drive
Suite 600
Houston, Texas 77042
Phone 713.953.5200
Fax 713.953.5000
FPII - F-11

LJA PROJECT NO.: 1415-1552

DRAWN: J.O. DESIGN: J.O. DATE: MAY 28 1961

SCALE: 1" = 20'

SHEET NO. 9 OF 36



GENERAL NOTES FOR ALL ELECTRICAL WORK

1. All work shall be done in accordance with the latest edition of the National Electrical Code (NEC) and all applicable local codes and ordinances.
2. All materials and equipment shall be of the highest quality and shall be approved by the local authority having jurisdiction.
3. All work shall be done in a neat and workmanlike manner.
4. All work shall be done in accordance with the manufacturer's instructions.
5. All work shall be done in accordance with the following specifications:
 - a. All conductors shall be of the type and size specified in the schedule.
 - b. All conductors shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All conductors shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All conductors shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All conductors shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
6. All work shall be done in accordance with the following specifications:
 - a. All equipment shall be of the type and size specified in the schedule.
 - b. All equipment shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All equipment shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All equipment shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All equipment shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
7. All work shall be done in accordance with the following specifications:
 - a. All work shall be done in accordance with the manufacturer's instructions.
 - b. All work shall be done in accordance with the NEC and all applicable local codes and ordinances.
 - c. All work shall be done in a neat and workmanlike manner.

Table with 2 columns: Conductor Size (AWG) and Dimensions (inches).

Conductor Size (AWG)	Dimensions (inches)
14	1/2 x 1/2 x 1/2
12	3/4 x 3/4 x 3/4
10	1 x 1 x 1
8	1 1/4 x 1 1/4 x 1 1/4
6	1 3/4 x 1 3/4 x 1 3/4
4	2 x 2 x 2
3	2 1/4 x 2 1/4 x 2 1/4
2	2 3/4 x 2 3/4 x 2 3/4
1	3 x 3 x 3
0	3 1/2 x 3 1/2 x 3 1/2
00	4 x 4 x 4
000	4 1/2 x 4 1/2 x 4 1/2
0000	5 x 5 x 5

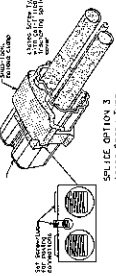
ELECTRICAL DETAILS
CONDUITS & NOTES
ED(13)-14

Table with 2 columns: Conductor Size (AWG) and Dimensions (inches).

Conductor Size (AWG)	Dimensions (inches)
14	1/2 x 1/2 x 1/2
12	3/4 x 3/4 x 3/4
10	1 x 1 x 1
8	1 1/4 x 1 1/4 x 1 1/4
6	1 3/4 x 1 3/4 x 1 3/4
4	2 x 2 x 2
3	2 1/4 x 2 1/4 x 2 1/4
2	2 3/4 x 2 3/4 x 2 3/4
1	3 x 3 x 3
0	3 1/2 x 3 1/2 x 3 1/2
00	4 x 4 x 4
000	4 1/2 x 4 1/2 x 4 1/2
0000	5 x 5 x 5

ELECTRICAL CONDUITS

1. All work shall be done in accordance with the latest edition of the National Electrical Code (NEC) and all applicable local codes and ordinances.
2. All materials and equipment shall be of the highest quality and shall be approved by the local authority having jurisdiction.
3. All work shall be done in a neat and workmanlike manner.
4. All work shall be done in accordance with the manufacturer's instructions.
5. All work shall be done in accordance with the following specifications:
 - a. All conductors shall be of the type and size specified in the schedule.
 - b. All conductors shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All conductors shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All conductors shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All conductors shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
6. All work shall be done in accordance with the following specifications:
 - a. All equipment shall be of the type and size specified in the schedule.
 - b. All equipment shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All equipment shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All equipment shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All equipment shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
7. All work shall be done in accordance with the following specifications:
 - a. All work shall be done in accordance with the manufacturer's instructions.
 - b. All work shall be done in accordance with the NEC and all applicable local codes and ordinances.
 - c. All work shall be done in a neat and workmanlike manner.



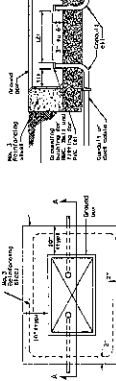
SPlice OPTION 3
- Series Type

1. All work shall be done in accordance with the latest edition of the National Electrical Code (NEC) and all applicable local codes and ordinances.
2. All materials and equipment shall be of the highest quality and shall be approved by the local authority having jurisdiction.
3. All work shall be done in a neat and workmanlike manner.
4. All work shall be done in accordance with the manufacturer's instructions.
5. All work shall be done in accordance with the following specifications:
 - a. All conductors shall be of the type and size specified in the schedule.
 - b. All conductors shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All conductors shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All conductors shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All conductors shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
6. All work shall be done in accordance with the following specifications:
 - a. All equipment shall be of the type and size specified in the schedule.
 - b. All equipment shall be installed in accordance with the NEC and all applicable local codes and ordinances.
 - c. All equipment shall be supported in accordance with the NEC and all applicable local codes and ordinances.
 - d. All equipment shall be protected in accordance with the NEC and all applicable local codes and ordinances.
 - e. All equipment shall be terminated in accordance with the NEC and all applicable local codes and ordinances.
7. All work shall be done in accordance with the following specifications:
 - a. All work shall be done in accordance with the manufacturer's instructions.
 - b. All work shall be done in accordance with the NEC and all applicable local codes and ordinances.
 - c. All work shall be done in a neat and workmanlike manner.

ELECTRICAL DETAILS
CONDUCTORS
ED(13)-14

Table with 2 columns: Conductor Size (AWG) and Dimensions (inches).

Conductor Size (AWG)	Dimensions (inches)
14	1/2 x 1/2 x 1/2
12	3/4 x 3/4 x 3/4
10	1 x 1 x 1
8	1 1/4 x 1 1/4 x 1 1/4
6	1 3/4 x 1 3/4 x 1 3/4
4	2 x 2 x 2
3	2 1/4 x 2 1/4 x 2 1/4
2	2 3/4 x 2 3/4 x 2 3/4
1	3 x 3 x 3
0	3 1/2 x 3 1/2 x 3 1/2
00	4 x 4 x 4
000	4 1/2 x 4 1/2 x 4 1/2
0000	5 x 5 x 5



SECTION A - A
PLAN VIEW

Table with 2 columns: Conductor Size (AWG) and Dimensions (inches).

Conductor Size (AWG)	Dimensions (inches)
14	1/2 x 1/2 x 1/2
12	3/4 x 3/4 x 3/4
10	1 x 1 x 1
8	1 1/4 x 1 1/4 x 1 1/4
6	1 3/4 x 1 3/4 x 1 3/4
4	2 x 2 x 2
3	2 1/4 x 2 1/4 x 2 1/4
2	2 3/4 x 2 3/4 x 2 3/4
1	3 x 3 x 3
0	3 1/2 x 3 1/2 x 3 1/2
00	4 x 4 x 4
000	4 1/2 x 4 1/2 x 4 1/2
0000	5 x 5 x 5

Table with 2 columns: Conductor Size (AWG) and Dimensions (inches).

Conductor Size (AWG)	Dimensions (inches)
14	1/2 x 1/2 x 1/2
12	3/4 x 3/4 x 3/4
10	1 x 1 x 1
8	1 1/4 x 1 1/4 x 1 1/4
6	1 3/4 x 1 3/4 x 1 3/4
4	2 x 2 x 2
3	2 1/4 x 2 1/4 x 2 1/4
2	2 3/4 x 2 3/4 x 2 3/4
1	3 x 3 x 3
0	3 1/2 x 3 1/2 x 3 1/2
00	4 x 4 x 4
000	4 1/2 x 4 1/2 x 4 1/2
0000	5 x 5 x 5



SECTION A - A
PLAN VIEW

MISSOURI CITY TEXAS
DEPARTMENT OF PUBLIC WORKS
SEAN K. KIMMEL, P.E., CITY ENGINEER
SIENNA PLANTATION
MUNICIPAL UTILITY DISTRICT No. 5
SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACE

APPROVED: *[Signature]*
DATE: 7/13/17

DATE: 7/13/17
BY: *[Signature]*

FOR: FORT BEND COUNTY ENGINEERING DEPARTMENT

PROJECT NO. 1413-1522
DRAWING NO. 1413-1522
DATE: 7/13/17
BY: *[Signature]*

SCALE: 1" = 10' 0"

ELECTRICAL DETAILS
GROUND BOXES
ED(13)-14

DATE: 7/13/17
BY: *[Signature]*

FOR: FORT BEND COUNTY ENGINEERING DEPARTMENT

PROJECT NO. 1413-1522
DRAWING NO. 1413-1522
DATE: 7/13/17
BY: *[Signature]*

SCALE: 1" = 10' 0"

ELECTRICAL DETAILS
CONDUCTORS
ED(13)-14

DATE: 7/13/17
BY: *[Signature]*

FOR: FORT BEND COUNTY ENGINEERING DEPARTMENT

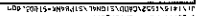
PROJECT NO. 1413-1522
DRAWING NO. 1413-1522
DATE: 7/13/17
BY: *[Signature]*

SCALE: 1" = 10' 0"

[illegible]

DATE	REVISION	BY
FORT BEND COUNTY ENGINEERING DEPARTMENT		
		
APPROVED	DATE	
	7/13/17	
		
MISSOURI CITY TEXAS		
DEPARTMENT OF PUBLIC WORKS		
SEASHI L. KUMAR P.E., CITY ENGINEER		
SIENNA PLANTATION		
MUNICIPAL UTILITY DISTRICT No. 5		
SIENNA PARKWAY NORTHBOUND		
RIGHT TURN LANE AT		
STEEP BANK TRACE		
MAST ARM AND		
SIGNAL POLE DETAILS		
LJA Engineering Inc. 11000 Katy Freeway, Suite 800 Houston, Texas 77054 Phone: 281.770.4200 Fax: 281.770.4205 PPN-F-1106		
LJA PROJECT NO.:	1412-11027	
DRAWN BY:	JG	DATE: MAY 2017
CHECKED BY:		
SCALE:		

[illegible]



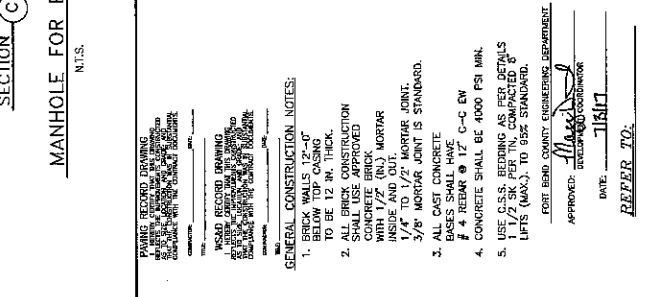
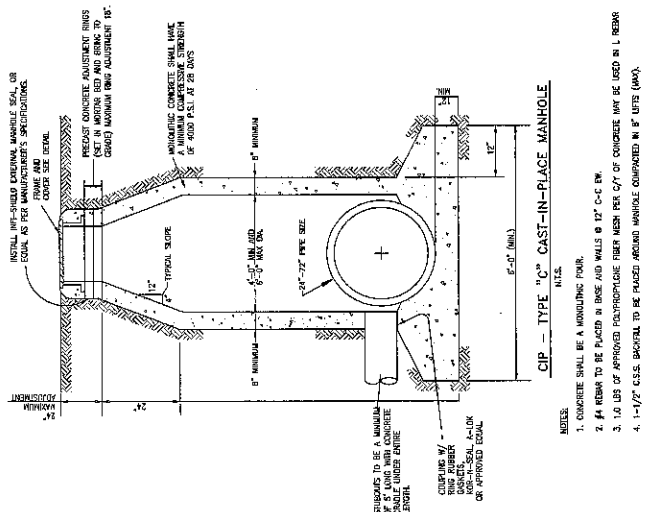
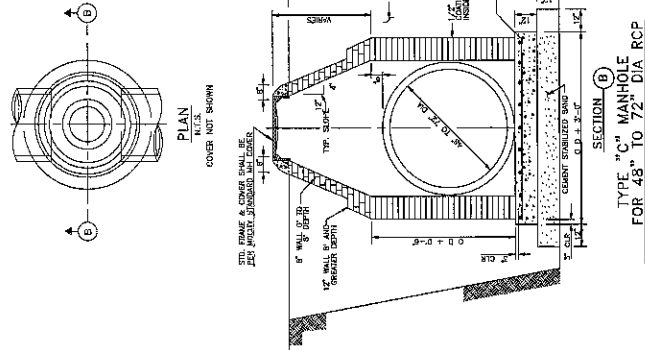
7/3/17
PULP COORDINATOR

SIENNA PLANTATION
MUNICIPAL UTILITY DISTRICT No. 5

SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACE

TRAFFIC SIGNAL
WORK DETAILS

SHEET NO. 12 OF 36

[illegible][illegible]

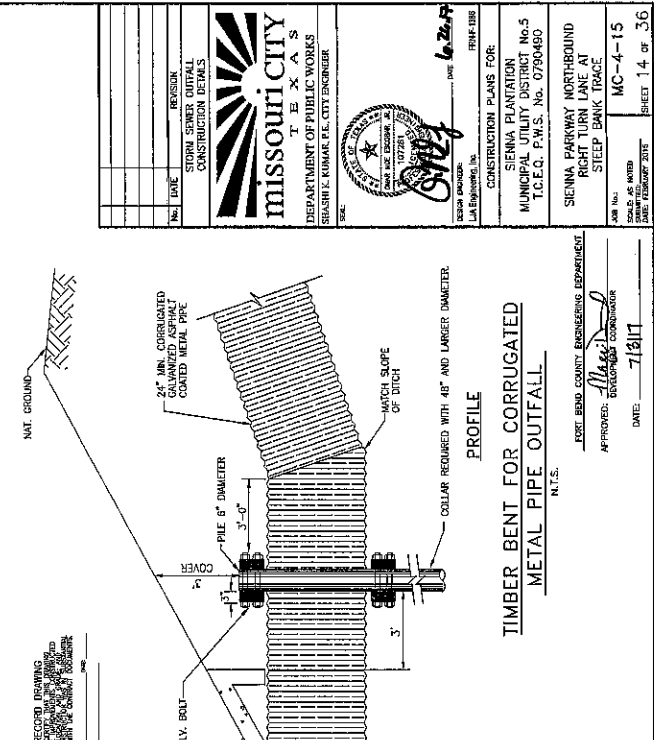
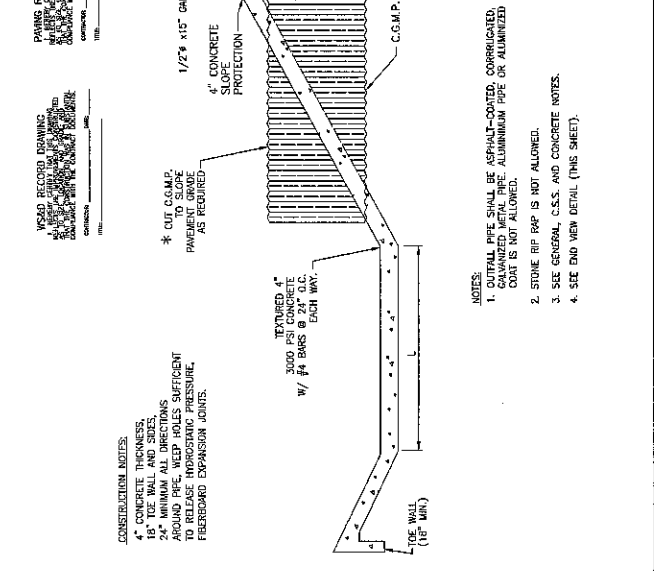
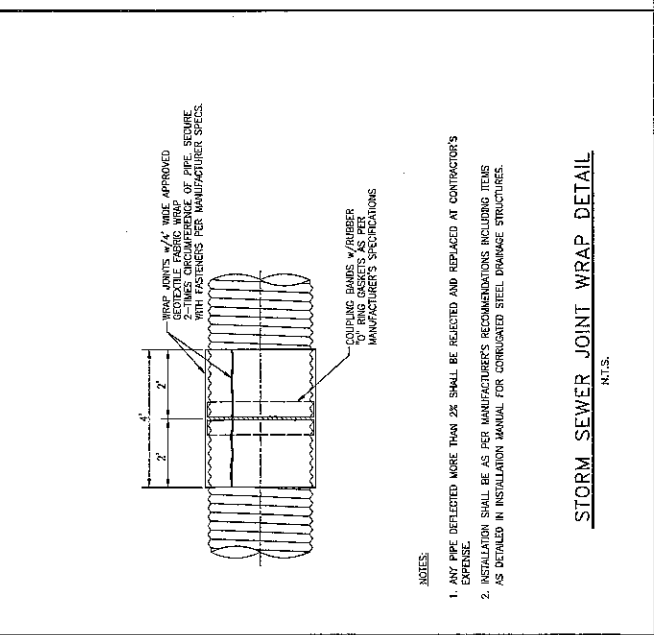
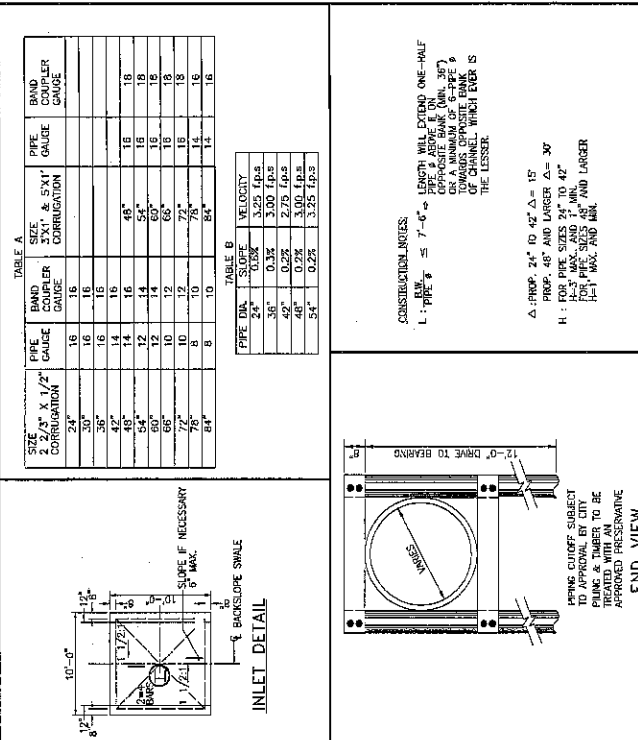
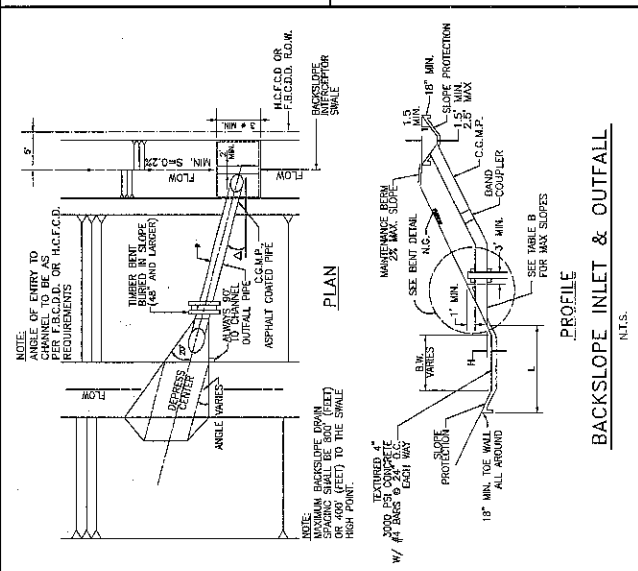
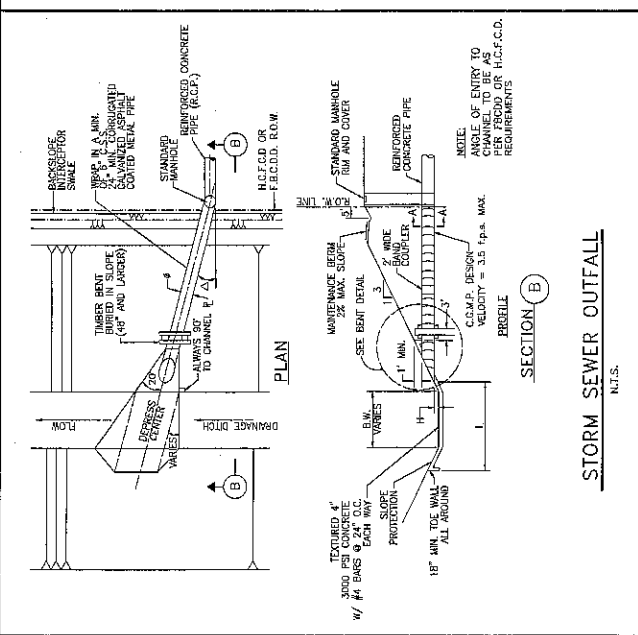


TABLE A

PIPE SIZE 24" X 12"	PIPE CORRUPTION	BAND CORRUPTION	Pipe Gauge	Band Gauge
24"	16	16		
30"	16	16		
36"	16	16		
42"	16	16		
48"	16	16		
54"	16	16		
60"	16	16		
66"	16	16		
72"	16	16		
78"	16	16		
84"	16	16		

TABLE B

PIPE DIA.	SLOPE	VELOCITY
24"	0.02	3.25 f.p.s.
30"	0.02	3.25 f.p.s.
36"	0.02	3.25 f.p.s.
42"	0.02	3.25 f.p.s.
48"	0.02	3.25 f.p.s.
54"	0.02	3.25 f.p.s.
60"	0.02	3.25 f.p.s.
66"	0.02	3.25 f.p.s.
72"	0.02	3.25 f.p.s.
78"	0.02	3.25 f.p.s.
84"	0.02	3.25 f.p.s.

CONSTRUCTION NOTES:
1. PIPE $\leq 7'-6"$ LENGTH WILL EXTEND ONE-HALF PIPE SIZE BEYOND THE END OF THE CHANNEL, WHICH EVER IS THE LESSER.
2. PROPOSED 24" TO 42" $\Delta = 15'$
3. PROPOSED 48" AND LARGER $\Delta = 30'$
4. FOR PIPE SIZES 24" TO 42"
FOR PIPE SIZES 48" AND LARGER
1/2" MAX. AND 1/2"

MISSOURI CITY
T E X A S
DEPARTMENT OF PUBLIC WORKS
SUSAN E. KUMAR, P.E., CITY ENGINEER

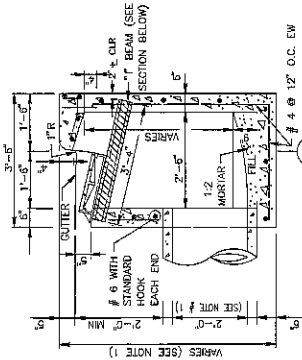
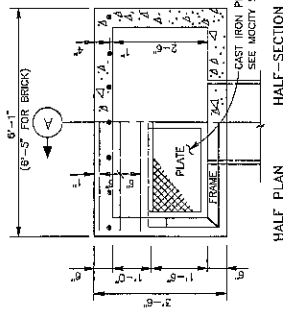
STORM SEWER OUTFALL
CONSTRUCTION DETAILS

PROFILE
TIMBER BENT FOR CORRUGATED METAL PIPE OUTFALL

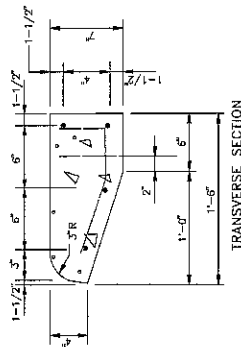
NOTES:
1. OUTFALL PIPE SHALL BE ASPHALT-COATED, CORRUGATED, GALVANIZED METAL PIPE, ALUMINUM PIPE OR ALUMINIZED COIN IS NOT ALLOWED.
2. STONE RIP RAP IS NOT ALLOWED.
3. SEE GENERAL C.S.S. AND CONCRETE NOTES.
4. SEE END VIEW DETAIL (THIS SHEET).

APPROVED: *[Signature]*
DATE: 7/18/11

"B-B" INLET (REPLACEMENT ONLY)



SECTION A



ACCEPTABLE
ALTERNATE STEEL
BEAM SIZES:
S14.7.5
S14.7.5
(UNANIMOUS)

NO.	SIZE	LENGTH	SHAPE	LOC.
1	#4	9'-10"	ST	HOR.
2	#4	9'-10"	ST	VERT.
3	#4	9'-10"	ST	VERT.
4	#4	9'-10"	ST	VERT.
5	#4	9'-10"	ST	VERT.
6	#4	9'-10"	ST	VERT.
7	#4	9'-10"	ST	VERT.

PRECAST CURB BEAM

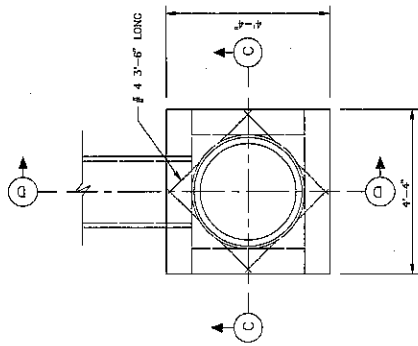
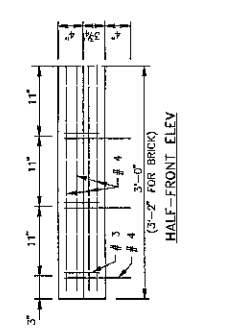
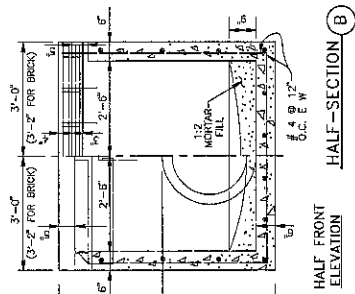
NO.	SIZE	LENGTH	SHAPE	LOC.
1	#4	9'-10"	ST	HOR.
2	#4	9'-10"	ST	VERT.
3	#4	9'-10"	ST	VERT.
4	#4	9'-10"	ST	VERT.
5	#4	9'-10"	ST	VERT.
6	#4	9'-10"	ST	VERT.
7	#4	9'-10"	ST	VERT.

GENERAL NOTES:

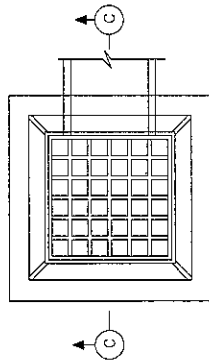
- USE STD CAST IRON FRAME & PLATES. LEAD SHALL LEAVE INLET AT LOCATION WHEN BRICK INLETS ARE BUILT INTO BRICKWORK. THEN BRICK INLETS ARE BUILT INTO BRICKWORK. BEAMS TO BE 4 INCHES LONGER.

NOTES:

- DIMENSION VARIES BASED ON PIPE DIAMETER AND WALL THICKNESS.
- CENTER REINFORCING IN SLAB AND WALLS. CAST INTO WALLS AS SHOWN.

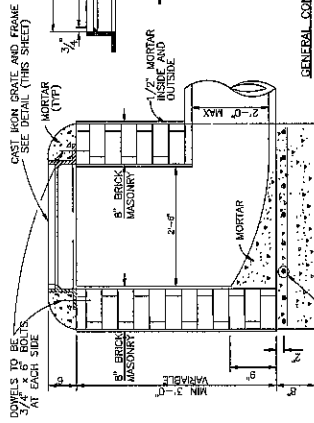


PLAN

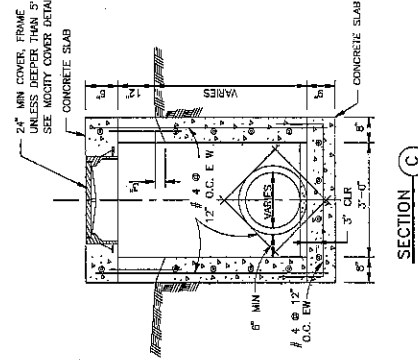


PLAN

FRAME



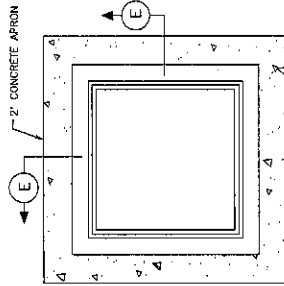
SECTION A



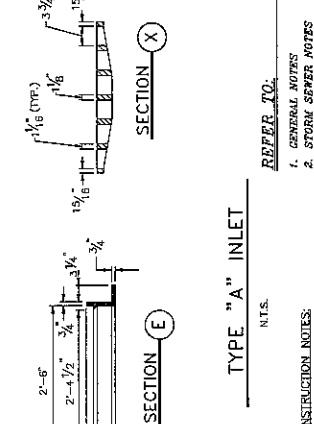
SECTION C

TYPE "E" INLET

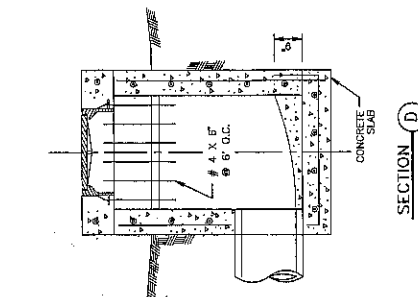
N.T.S.



SECTION E



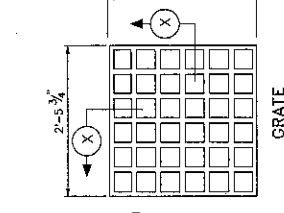
SECTION A



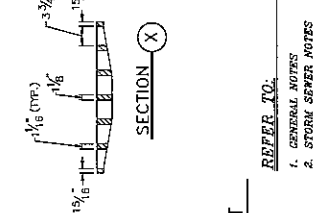
SECTION D

TYPE "E" INLET

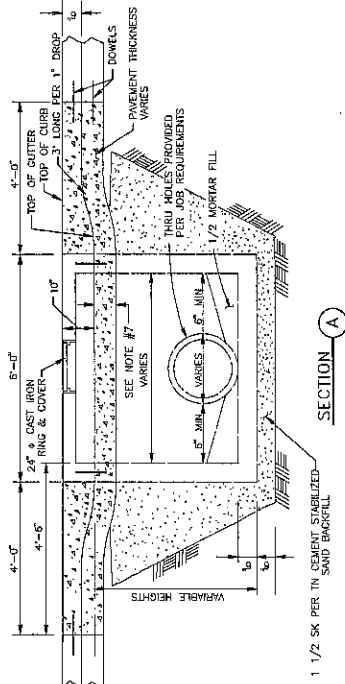
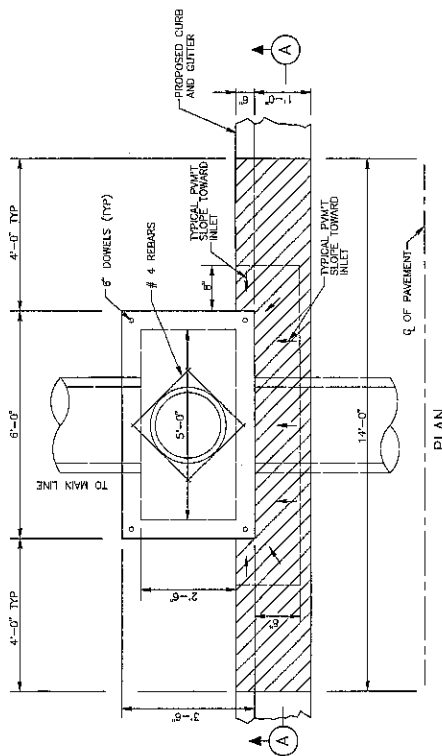
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SECTION E



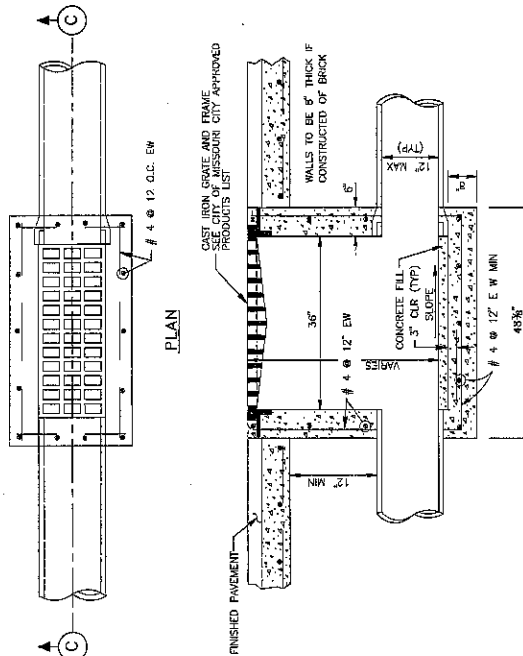
SECTION A



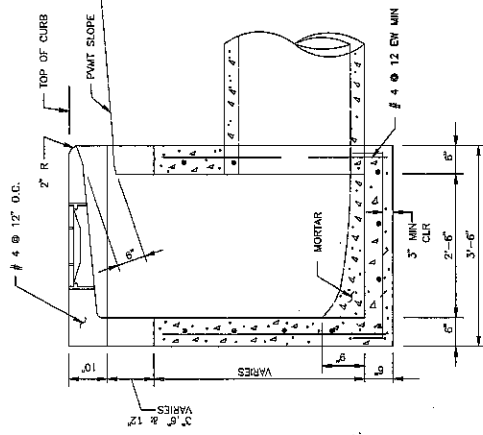
TYPE "H-2" INLET

NOTES:

1. INLET WALLS MAY BE EXTENDED USING PRECAST RISER SECTION.
2. INLET TOPS MUST BE SECURED TO THE INLET WALL USING #6 DOWELS DRILLED AND GROUTED A MINIMUM DEPTH OF 5" INTO THE INLET WALL.
3. INLET BACKFILL SHALL BE CEMENT STABILIZED SAND TO THE TOP OF INLET FIRST STAGE.
4. INLET REBARS SHALL BE #4 STEEL REBAR TO CONFORM TO ASTM A615 ON REQUIRED CORNERS OR EQUAL.
5. PRECAST INLET MUST BE CONSTRUCTED TO SPECIFICATIONS (SEE GENERAL NOTES).
6. TOPS POURED-IN-PLACE REQUIRE #4 REBAR @ 12" O.C. EACH WAY.
7. 3,500 PSI CONCRETE MINIMUM AND 3" THICK MINIMUM.
8. PAVEMENT DEPTH AT INLET SHALL BE EQUAL TO OR GREATER THAN REQUIRED PAVEMENT DEPTH.
9. DEPRESS



SECTION C TYPE "D" INLET



REFER TO:

1. GENERAL NOTES
2. SEE C.S.S., PAYMENT NOTES

TYPE "H-2" PRECAST INLET

N.T.S.

APPROVED: *[Signature]*
DATE: 7/15/17

USED RECORD DRAWING
PROJECT NO. 1415-1552
SHEET 16 OF 36

PAVING RECORD DRAWING
PROJECT NO. 1415-1552
SHEET 16 OF 36

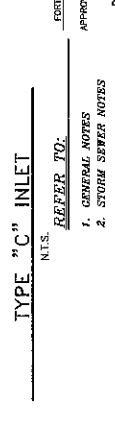
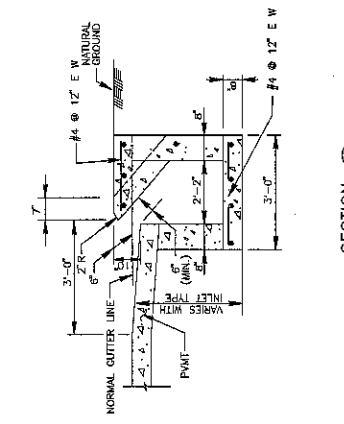
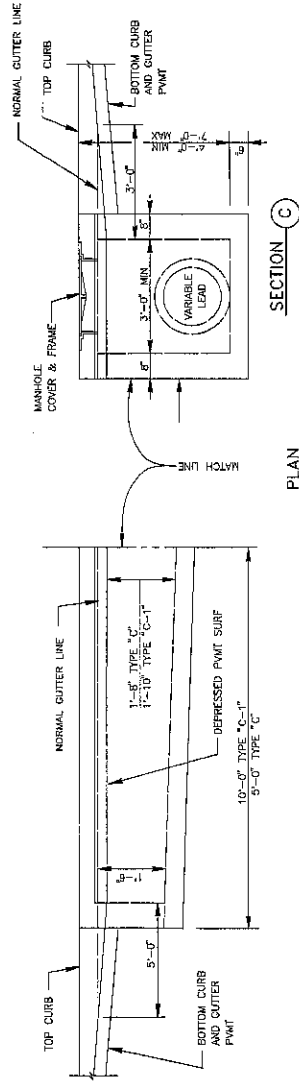
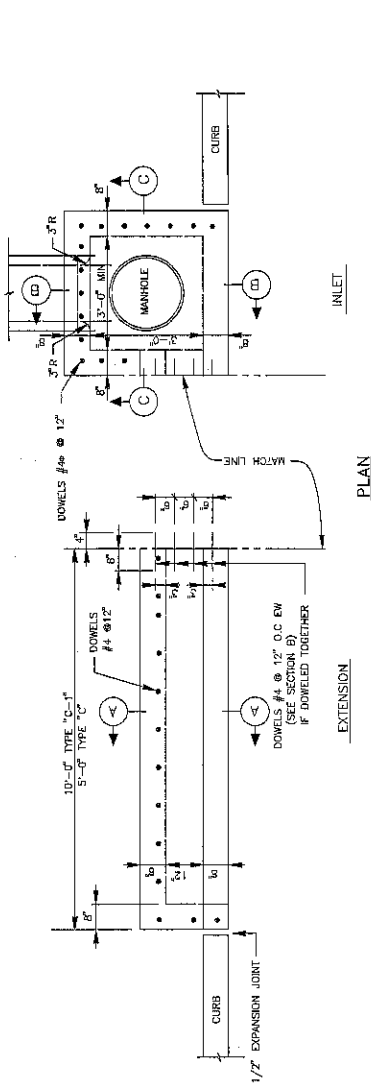
missouri city T E X A S DEPARTMENT OF PUBLIC WORKS SHASEL K. KIDMAR, P.E., CITY ENGINEER		CONSTRUCTION PLANS FOR SENA PLANTATION MUNICIPAL UTILITY DISTRICT NO. 5 T.G.E.O. P.W.S. No. 0790490 SENA PARKWAY NORTHBOUND RIGHT TURN LANE AT STEEP BANK TRACE	JOB NO. MC-6-15 SHEET 16 OF 36
DATE: 6/24/17 BY: <i>[Signature]</i> CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i>	CONSTRUCTION PLANS FOR SENA PLANTATION MUNICIPAL UTILITY DISTRICT NO. 5 T.G.E.O. P.W.S. No. 0790490 SENA PARKWAY NORTHBOUND RIGHT TURN LANE AT STEEP BANK TRACE	DATE: 7/15/17 BY: <i>[Signature]</i> CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i>	

GENERAL NOTES:

- TYPE "C" INLET WITH ONE EXTENSION
- TYPE "C-1" INLET WITH DOUBLE EXTENSION
- TYPE "C-2" INLET WITH EXTEN. ON EACH SIDE
- TYPE "C-2A" INLET WITH NO EXTENSION

NOTES:

- FOR TYPE "C-1" INLETS PROVIDE A CENTER 6"X6" COLUMNS IN THE CURB LINE BETWEEN ALL EXTENSIONS.
- WALLS TO BE 6" IF BUILT WITH REINFORCED CONCRETE. WHEN BUILT WITH BRICK WALL, USE STRAIGHT WALL IN BACK WITH 6" REINFORCED CONCRETE TOP SLABS DOWELLED INTO BRICK WALLS WITH #4 X 8" @ 12" O.C.



MISSOURI CITY
T B X A S
DEPARTMENT OF PUBLIC WORKS
RESHNIK KIMMEL P.E. CITY ENGINEER

PROJECT: STORM SEWER INLET
CONSTRUCTION DETAILS III

DATE: 6/24/17

DESIGNER: [Signature]

CHECKED: [Signature]

APPROVED: [Signature]

CONSTRUCTION PLANS FOR:

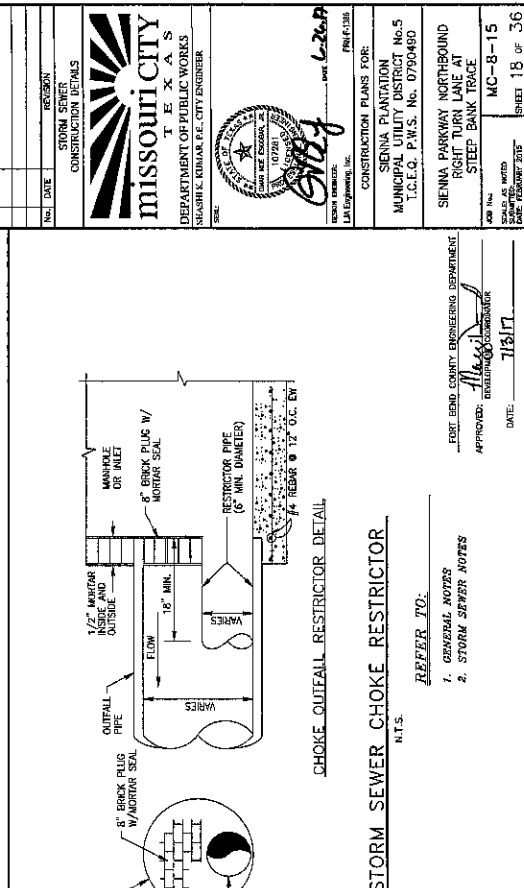
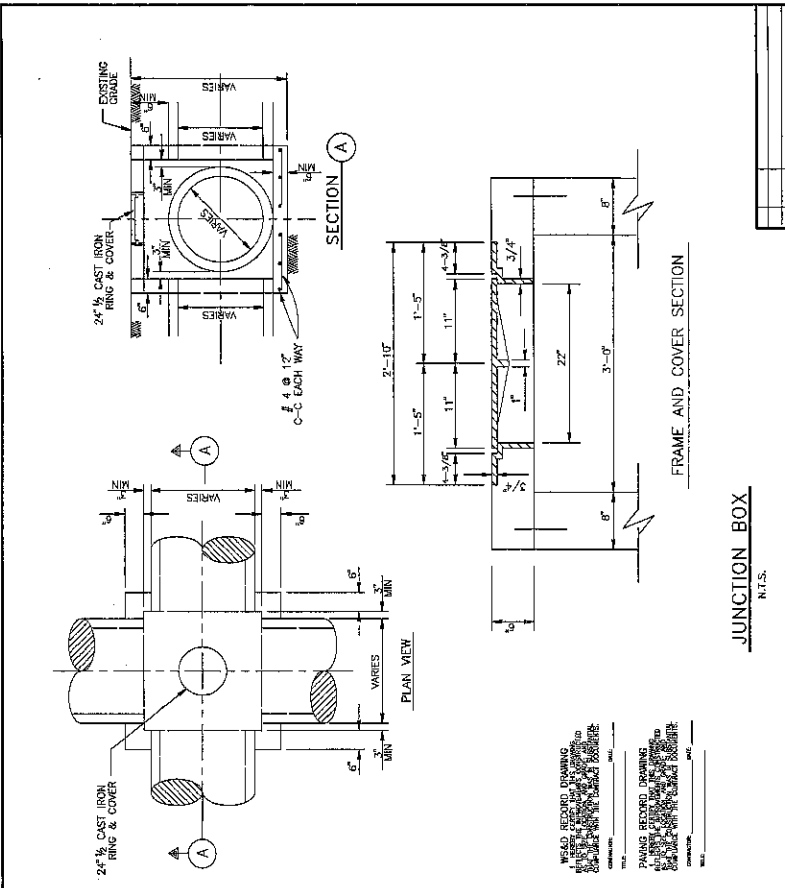
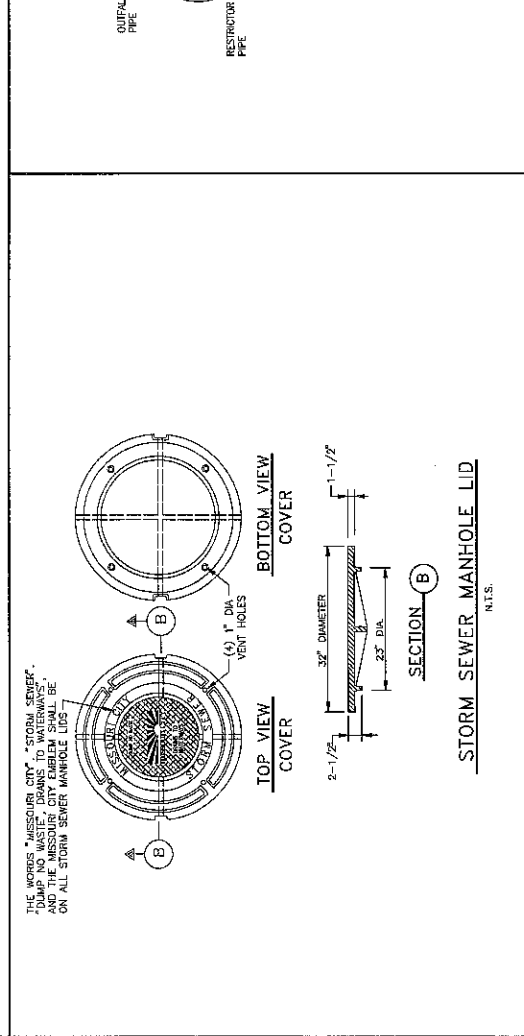
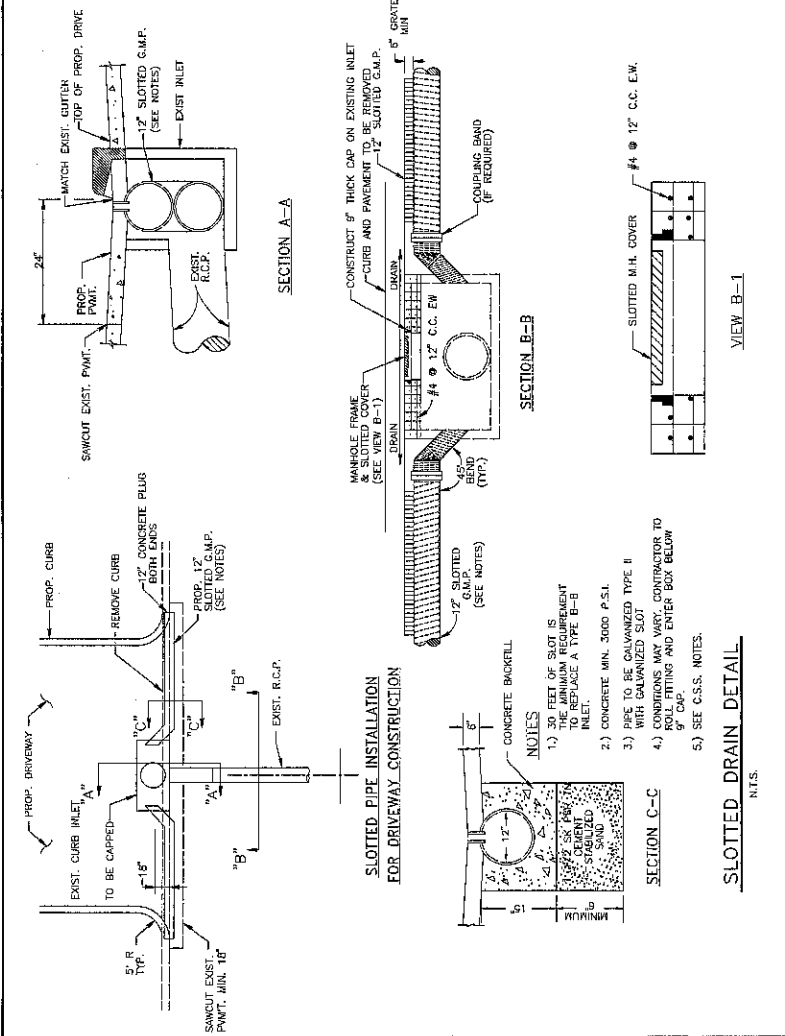
SIENNA PLANTATION
MUNICIPAL UTILITY DISTRICT No.5
T.C.E.Q. P.W.S. No. 0790460

SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACE

MC-7-15
SHEET 17 OF 36

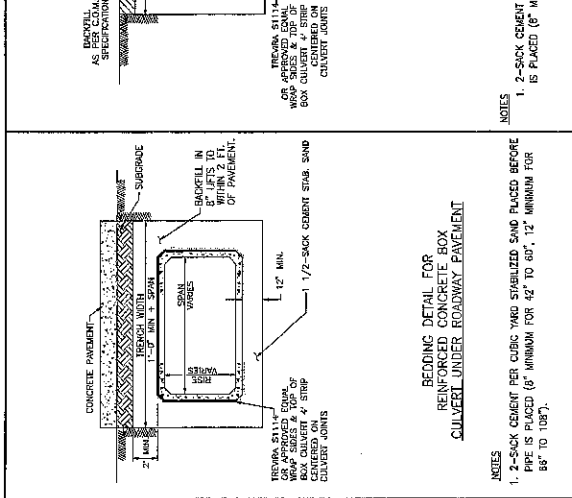
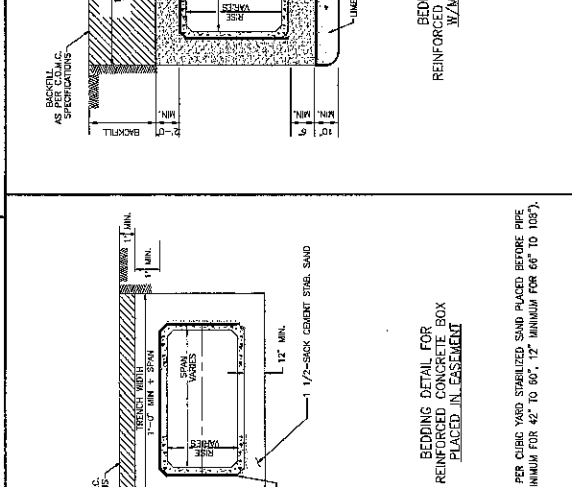
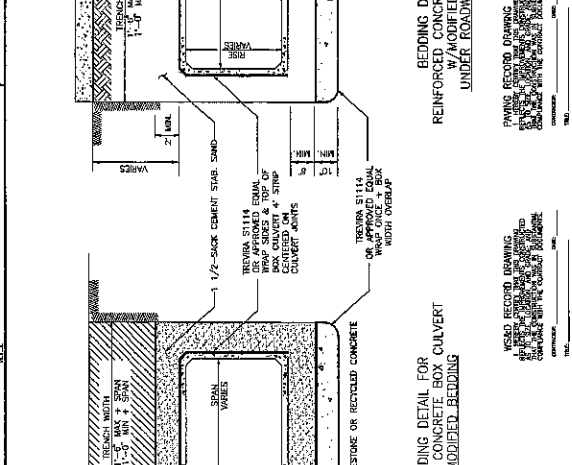
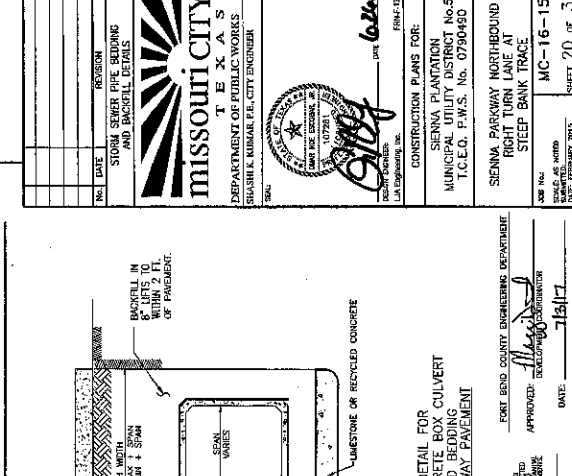
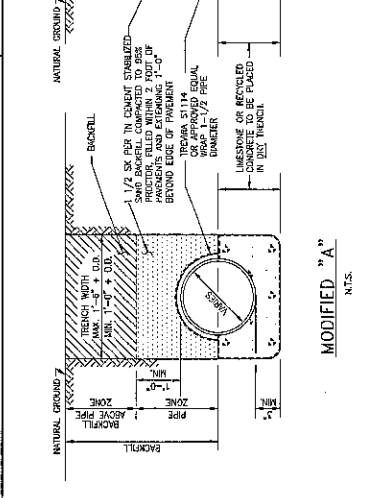
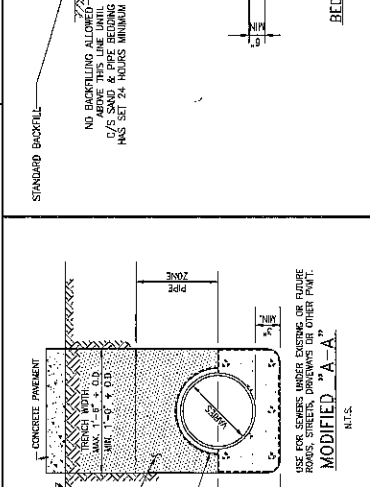
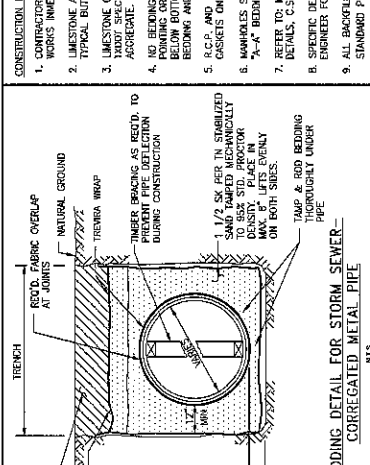
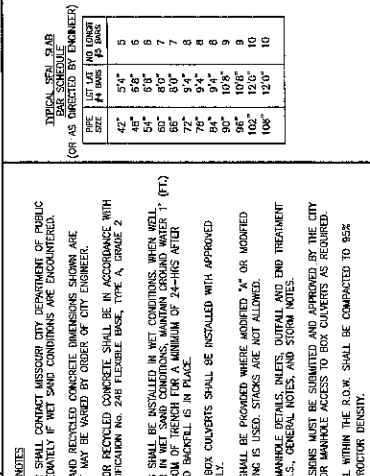
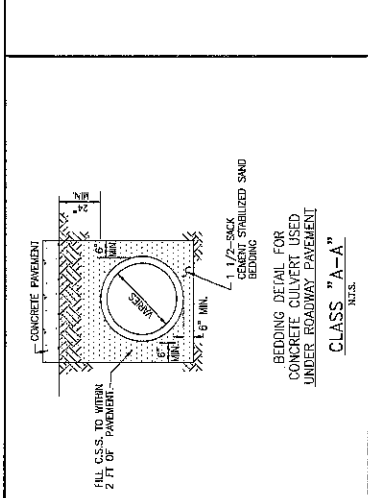
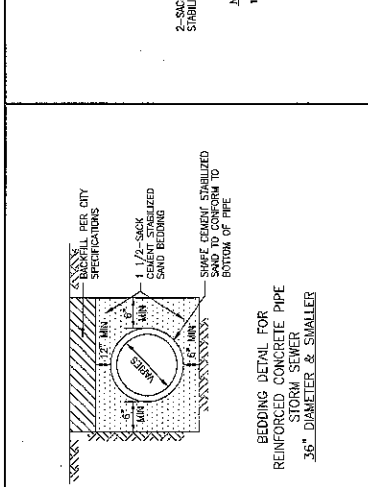
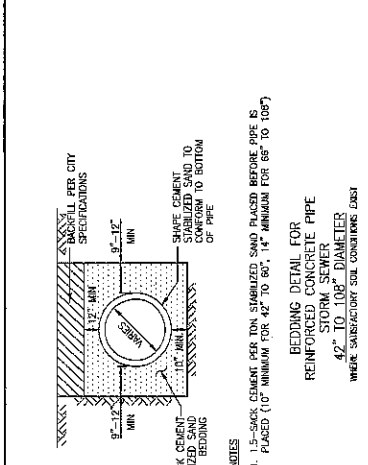
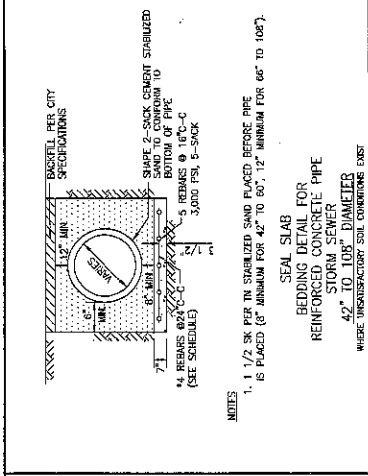
FOR BIDD COUNTY ENGINEERING DEPARTMENT
APPROVED: [Signature]
DATE: 7/19/17

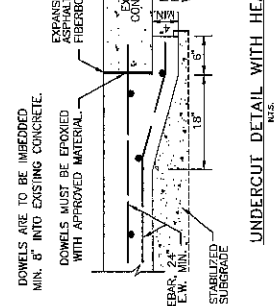
REFER TO:
1. GENERAL NOTES
2. STORM SEWER NOTES



RIGHT TURN LANE AND PAVING IMPROVEMENTS TO SERVE SIENNA PARKWAY AND STEEP BANK TRACE - JOB NO. 1413-1552

MISSOURI CITY T E X A S DEPARTMENT OF PUBLIC WORKS SIENNA PARKWAY NORTHBOUND RIGHT TURN LANE AT STEEP BANK TRACE	
DATE: 10/17/17	DESIGNER: [Signature]
CONSTRUCTION PLANS FOR	PROJECT NO. 1413-1552
SIENNA PARKWAY NORTHBOUND MUNICIPAL UTILITY DISTRICT NO. 5 T.C.E.Q. P.W.S. NO. 0790480	DATE: 10/17/17
SIENNA PARKWAY NORTHBOUND RIGHT TURN LANE AT STEEP BANK TRACE	DATE: 10/17/17
SCALE: AS NOTED	DATE: 10/17/17
NO. 18 OF 36	NO. 18 OF 36

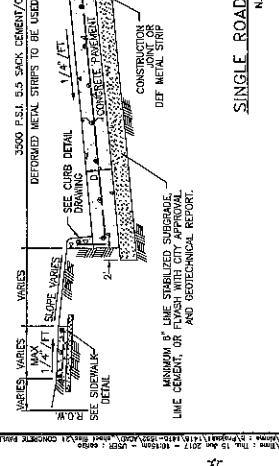
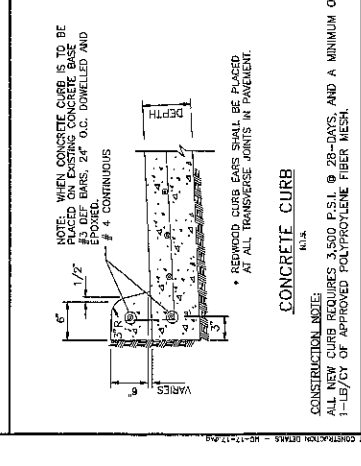
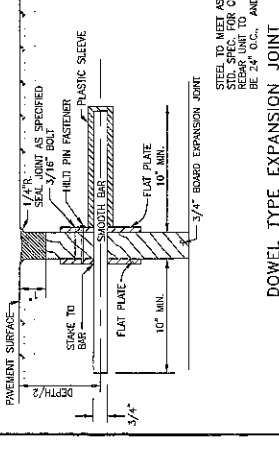
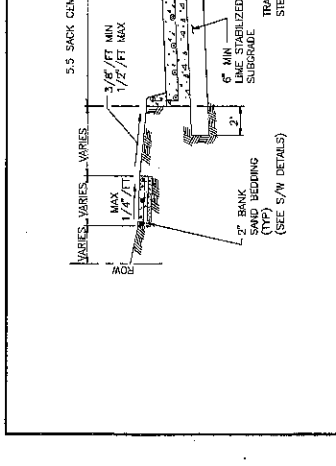
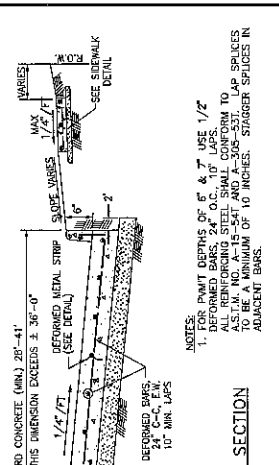
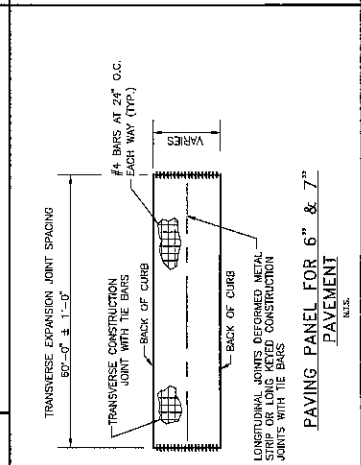
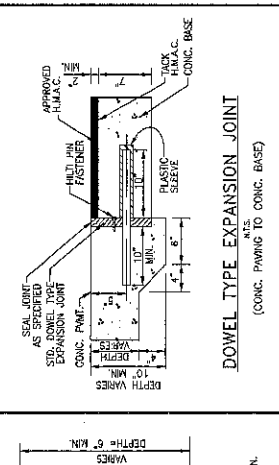
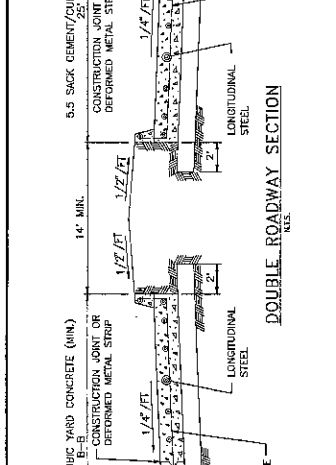
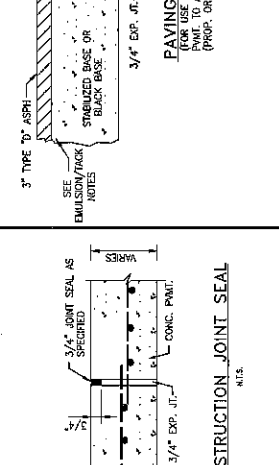
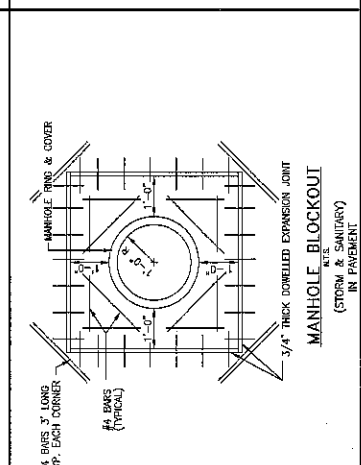
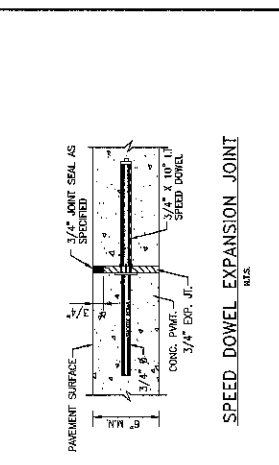
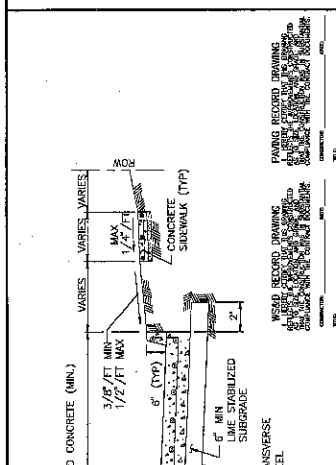
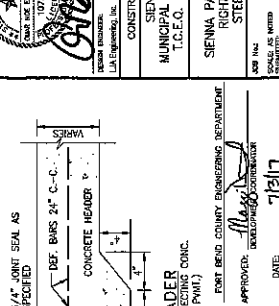


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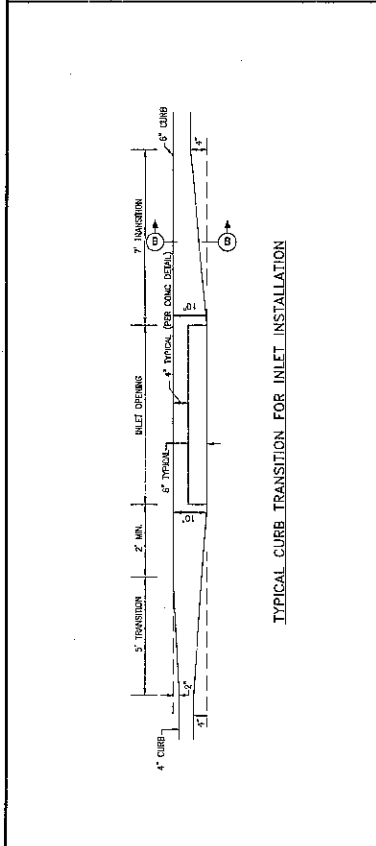
THE LOCATION OF CONSTRUCTION JOINTS AND DEFORMED STRIPS MAY BE VARIED, WITH THE APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS, TO SUIT THE PROPOSED CONSTRUCTION METHODS OF THE CONTRACTOR. MAXIMUM SPACING FOR LONGITUDINAL CONTROL JOINTS 15'-0".



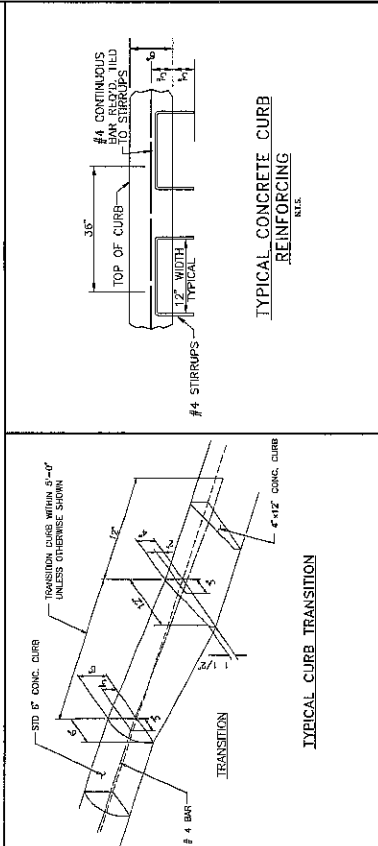
REFORMED METAL STRIP
METS.
mississippi
DEPARTMENT
SHASHI K. KUMAR
SAS



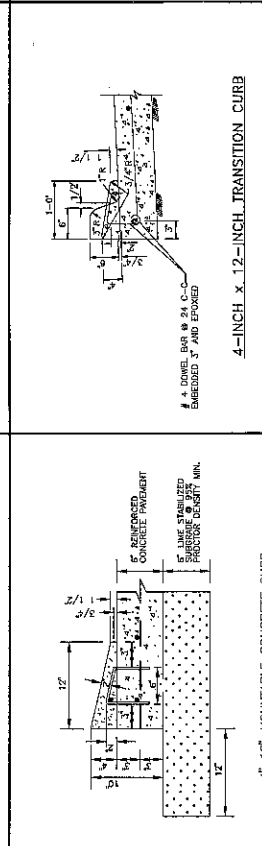
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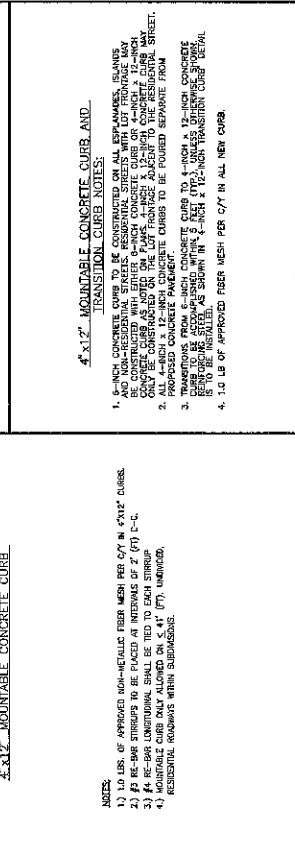
TYPICAL CURB TRANSITION FOR INLET INSTALLATION



TYPICAL CONCRETE CURB REINFORCING

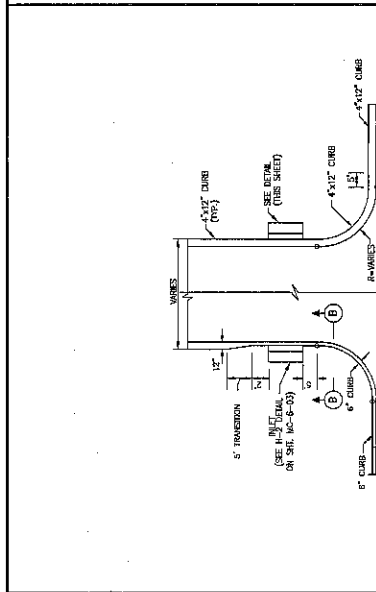


TYPICAL CURB TRANSITION

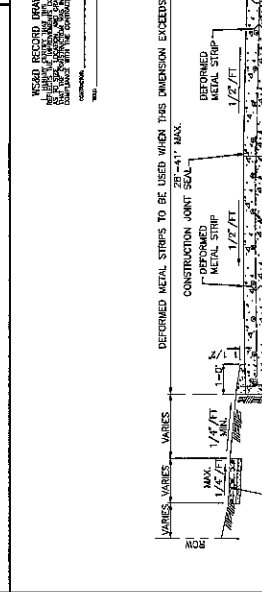
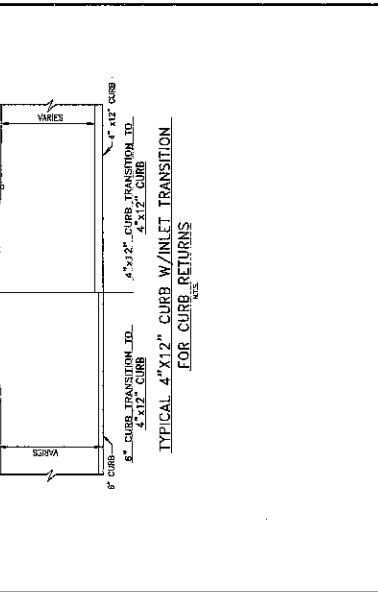


4' x 12' MOUNTABLE CONCRETE CURB

- NOTES:
- 1.0 LB. OF APPROVED POLYPROPYLENE FIBER MESH PER C/Y IN 4' x 12' CURB.
 2. REBAR STRIPS TO BE PLACED AT INTERVALS OF 2' (7) C-C.
 3. REBAR LONGITUDINAL SHALL BE TIED TO EACH STRIP.
 4. MOUNTABLE CURB MAY BE ALIGNED ON 4' (7) INCHES.



TYPICAL 4' x 12' CURB W/INLET TRANSITION FOR CURB RETURNS



TYPICAL SINGLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH 4' x 12' CURB

- SEE 4' x 12' MOUNTABLE CURB DETAIL (THIS SHEET)

- CONSTRUCTION NOTES:
1. 6 INCH, 5.5 SACK CEMENT PER CUBIC YARD CONCRETE, 3500 PSI REINFORCED CONCRETE WITH #4 BARS 24 INCHES C-C, E.W. IS THE MINIMUM ACCEPTABLE PAVEMENT CONSTRUCTION FOR RESIDENTIAL STREETS.
 2. 7 INCH, 5.5 SACK CEMENT PER CUBIC YARD CONCRETE, 3500 PSI REINFORCED CONCRETE WITH #4 BARS 24 INCHES C-C, E.W. IS THE MINIMUM ACCEPTABLE PAVEMENT CONSTRUCTION FOR COLLECTOR AND THOROUGHFARE STREETS.
 3. TRANSVERS: EXPANSION JOINTS ARE REQUIRED AT MAXIMUM SPACING OF 60'-0" C-C, AND VERTICAL CURB JOINTS TO BE SEALED WITH SPECIAL JOINT SEALANT ASTM-D-1180-74 OR ASTM-D-1173-60 (ELASTOMERIC TYPE, HOT POURING)
 4. FOR PAVEMENT FINISH USE BURAP DRAG OR BELIED FINISH. CURING COMPOUND REQUIRED ON ALL CONCRETE.
 5. GEOTECH REPORT OR CITY ENGINEER MAY REQUIRE PAVEMENT DEPTHS GREATER THAN 7" (8").
 6. STORM WATER POLLUTION PROTECTION SHALL BE DESIGNED, CONSTRUCTED, MAINTAINED AND OPERATED IN ACCORDANCE WITH THE STORM WATER QUALITY MANUAL OF THE CITY OF MISSOURI CITY.
 7. UNSUBS: SUBGRADE SHALL BE EXCAVATED AND REPLACED WITH COLENT STABILIZED SAND.
 8. USE 1 1/2" REDWOOD STAKES FOR HEADERS.
 9. EDE ALL SIES WITH EDING TOOL.
 10. DOWEL SHALL BE 3/4" DIAMETER, WITH MINIMUM 8" PENETRATION (BOTH SIES).
 11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF MISSOURI CITY OF ANY PROBLEM PRIOR TO CONSTRUCTION OF DOWEL.
 12. REFER TO GENERAL C.S.S. AND PAVEMENT NOTES.
 13. 1.0 LB. OF APPROVED POLYPROPYLENE FIBER MESH PER C/Y IN 4' x 12' CURB REQUIRED.

MISSOURI CITY
DEPARTMENT OF PUBLIC WORKS
SHARUK KUMAR, P.E., CITY ENGINEER

REVISION
DATE
BY

RESIDENTIAL CURB
CONSTRUCTION DETAILS

DATE: 6-20-24
DRAWN BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

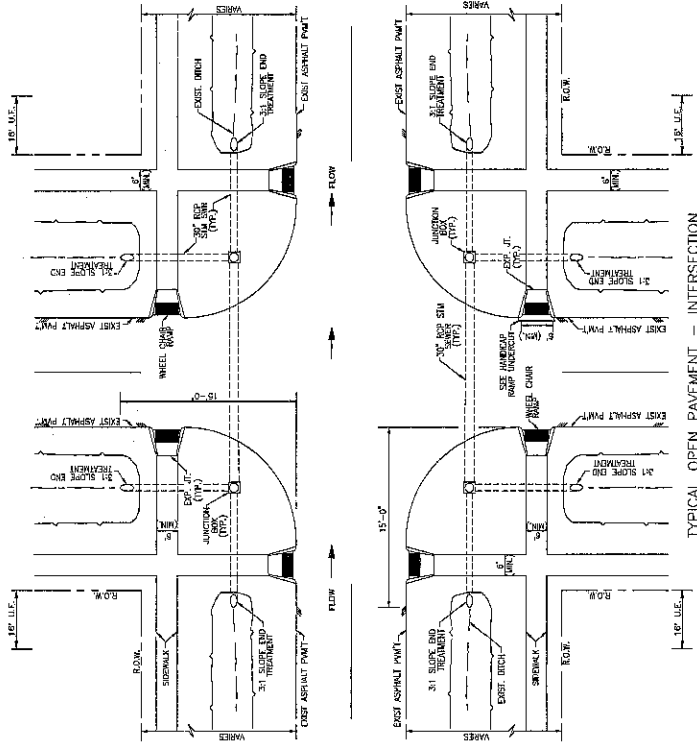
CONSTRUCTION PLANS FOR
SIENNA PLANTATION
MUNICIPAL UTILITY DISTRICT No.5
T.C.C. P.W.S. No. 0780490

SIENNA DISBOY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACK

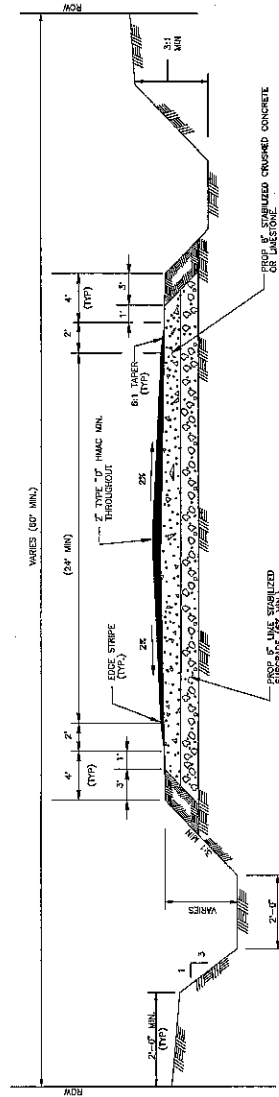
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MC-18-15
SHEET 22 OF 36

NO.	DATE	REVISION
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 MISSOURI CITY TEXAS DEPARTMENT OF PUBLIC WORKS SHASHI K. KUMAR, P.E., CITY ENGINEER		
		
DATE: 6-20-17		
CONSTRUCTION PLANS FOR: SIENNA PLANTATION MUNICIPAL UTILITY DISTRICT NO. 5 T.C.E.O. P.W.S. No. 0750490		
SIENNA PARKWAY NORTHBOUND RIGHT TURN LANE AT STEEP BANK TRACE		
JOB NO.: MC-19-15		
DATE: 7/14/17		
SHEET 23 OF 36		



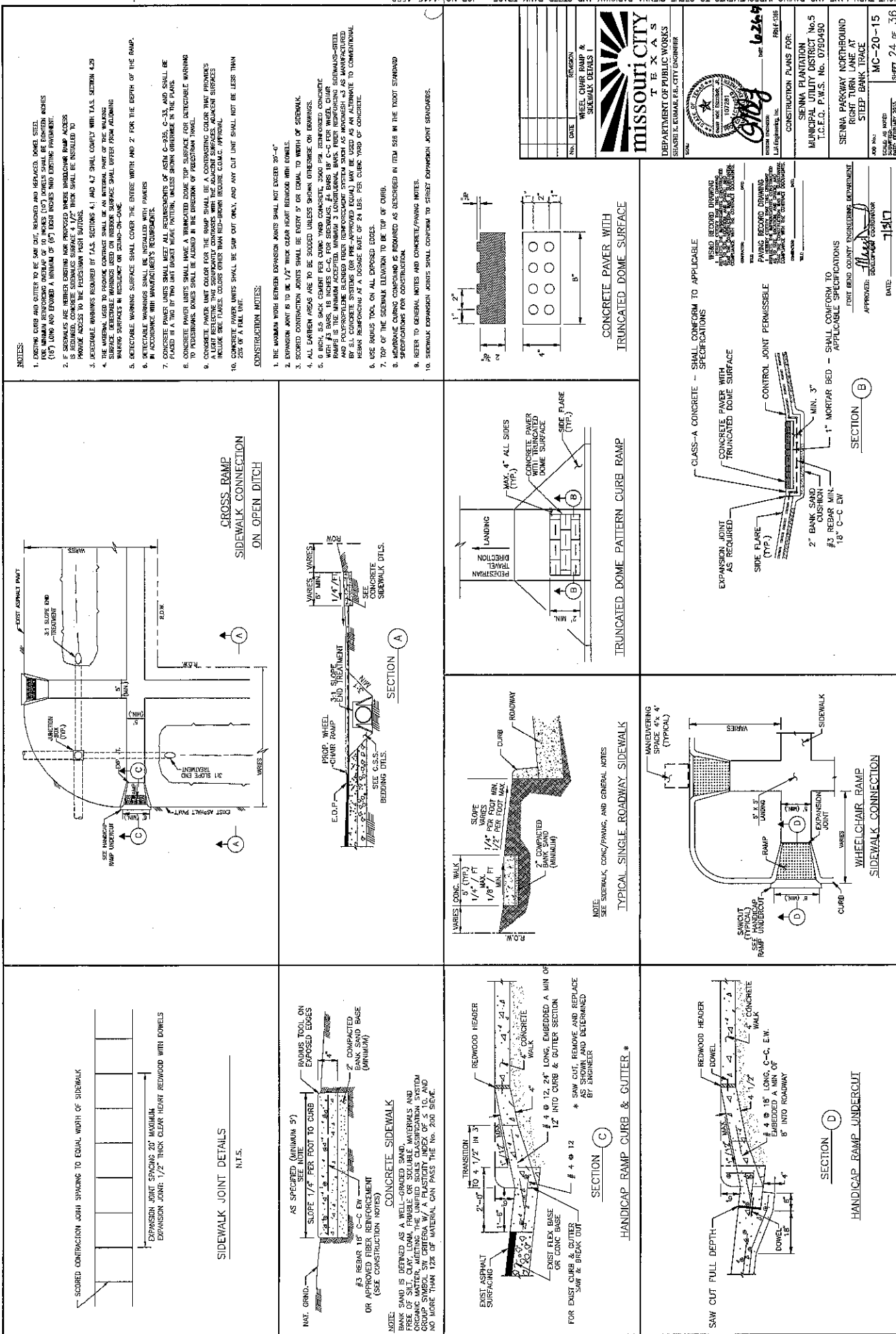
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DATE: 6-20-17
BY: [Signature]
CHECKED: [Signature]



- REFER TO:
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 2. ASPHALT NOTES
 3. BASE NOTES
 4. TACK & EMULSION NOTES

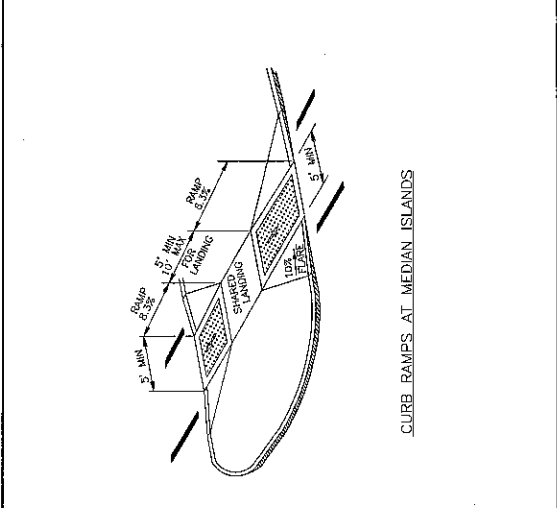
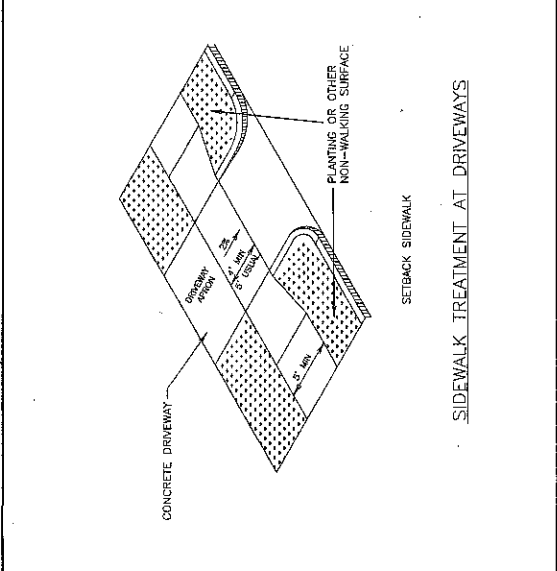
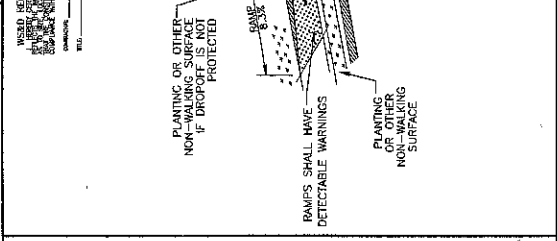
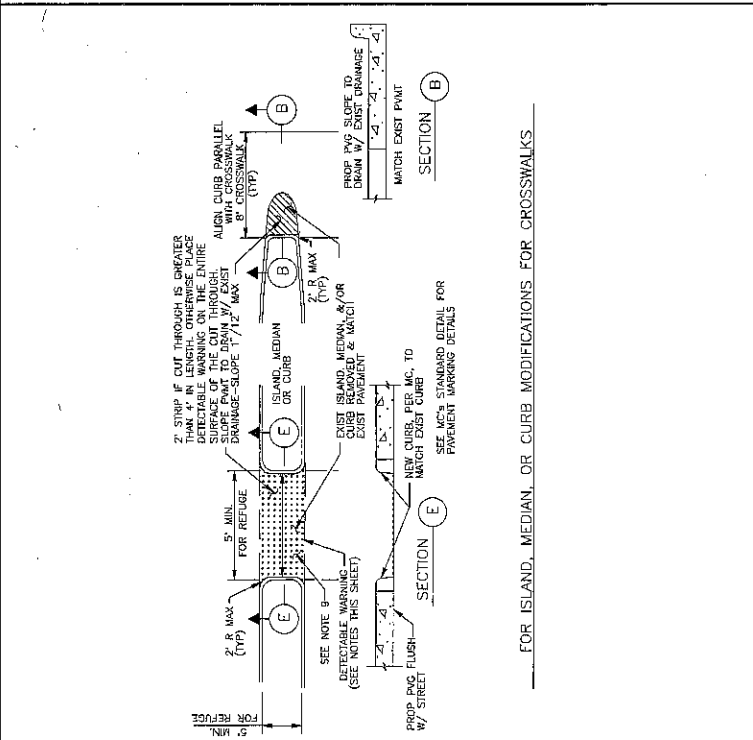
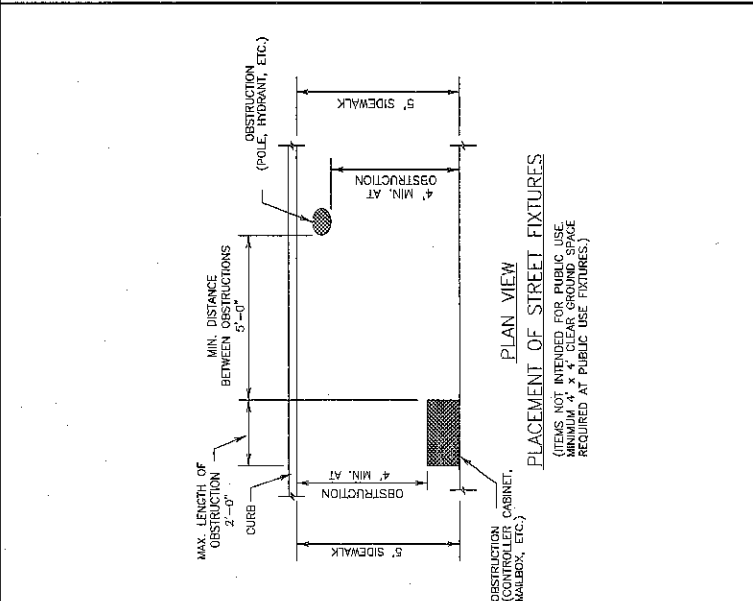
ASPHALT PAVEMENT - DITCH SECTION
CROSS SECTION

FOR: BERD COUNTY ENGINEERING DEPARTMENT
APPROVED: [Signature]
DATE: 7/14/17



NOTES:

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE EXISTING POSSIBLE SLOPE THAT WILL BE SHOWN PROPERLY SHOULD BE SHOWN. RAMP LENGTH ON GRADE OF APPROACH DRIVEWAYS MAY BE ADJUSTED AS DIRECTED.
2. THE MINIMUM SIDEWALK WIDTH IS 5' (FEET). THE LANDING SHALL BE 5' x 5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALKS AND RAMP SURFACES IS 2% TYPICAL. SIDEWALK CROSS SLOPE SHALL BE CHANGED TO 1% (PERCENT) IN LEVEL THROUGH 1/4" (1/4") ARE NOT PERMITTED.
3. MAXIMUM SPACE AT THE BOTTOM OF CURB RAMP SHALL BE A MINIMUM OF 5' x 5' WITH 1% CHANGED TO 2% (PERCENT) IN LEVEL THROUGH 1/4" (1/4") ARE NOT PERMITTED.
4. WHEN THE SIDEWALK AND RAMP ARE NOT IN THE SAME PLANE, THE RAMP SHALL BE CHANGED TO 2% (PERCENT) IN LEVEL THROUGH 1/4" (1/4") ARE NOT PERMITTED.
5. A RAMP OF A RAMP HAS A RISE GREATER THAN 1/4" (1/4") OR A HORIZONTAL PROJECTION GREATER THAN 72" INCHES, THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES, WITH THE FOLLOWING EXCEPTIONS:
 - A) HANDRAILS ARE NOT REQUIRED ON CURB RAMP, CURB RAMP SHALL BE PROVIDED WHEREAS AN ACCESSIBLE ROUTE CROSSED (PONDICIES) A CURB.
 - B) THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. WHERE STRUCTURALLY REQUIRED, THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. WHERE STRUCTURALLY REQUIRED, THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. WHERE STRUCTURALLY REQUIRED, THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY.
6. RAMP TEXTURES MUST BE CONSISTENT OF TRUNCATED CONCRETE SURFACES. IN ACCORDANCE WITH ADA COMPLIANCE, THE RAMP SURFACE SHALL BE CONSISTENT WITH THE SIDEWALK SURFACE. THE RAMP SURFACE SHALL BE CONSISTENT WITH THE SIDEWALK SURFACE. THE RAMP SURFACE SHALL BE CONSISTENT WITH THE SIDEWALK SURFACE.
7. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE, AND REQUIREMENTS MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADJUSTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION AND PUBLIC SAFETY (TxDOT). SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.
8. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE, AND REQUIREMENTS MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADJUSTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION AND PUBLIC SAFETY (TxDOT). SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.
9. SMALL CHANGELAND ISLANDS, WHICH CAN NOT PROVIDE A MINIMUM 5' x 5' LANDING AT THE TOP OF RAMP, SHALL BE CUT THROUGH LEVEL WITH THE SURFACE OF THE STREET.
10. CURB RAMP SHALL BE CUT THROUGH LEVEL WITH THE SURFACE OF THE STREET. CURB RAMP SHALL BE CUT THROUGH LEVEL WITH THE SURFACE OF THE STREET. CURB RAMP SHALL BE CUT THROUGH LEVEL WITH THE SURFACE OF THE STREET.
11. EXISTING FEATURES THAT COMPLY WITH T.A.S. MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
12. TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO AS NOT TO OBSTRUCT THE ACCESSIBLE ROUTE.



MISSOURI CITY
T E X A S
DEPARTMENT OF PUBLIC WORKS
SHANEK K. KUMAR, P.E., CITY ENGINEER

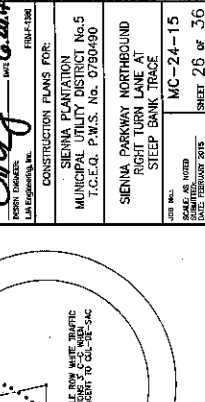
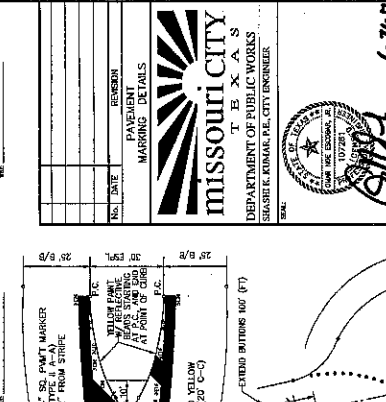
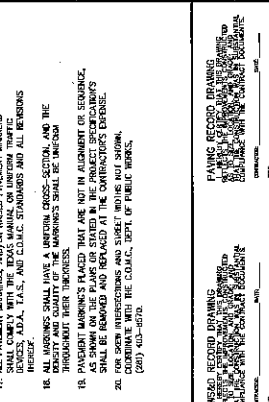
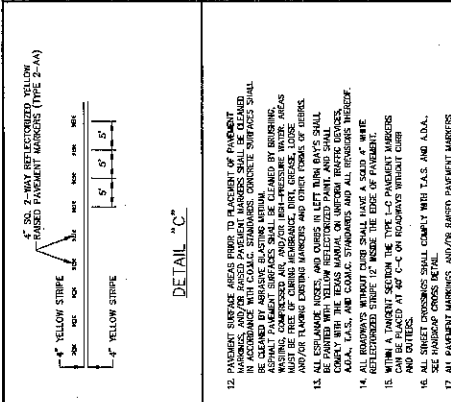
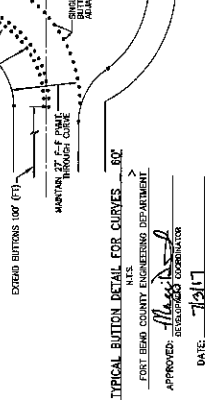
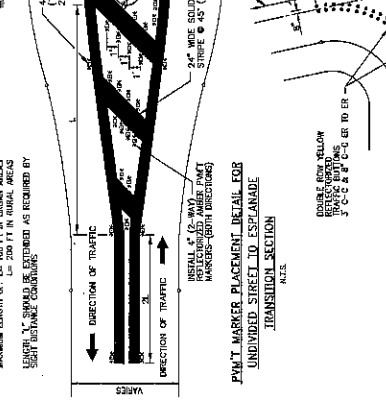
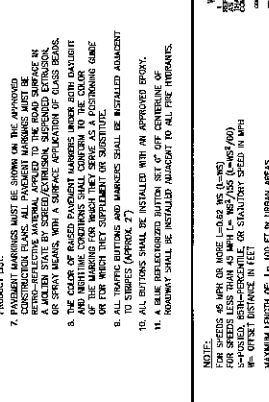
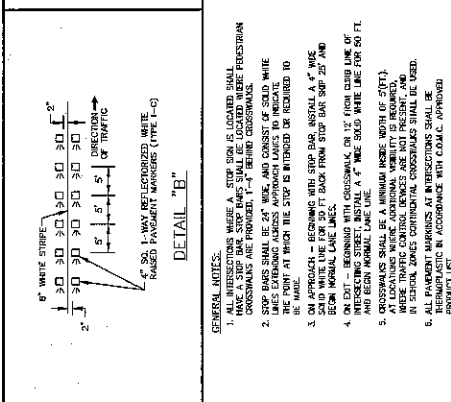
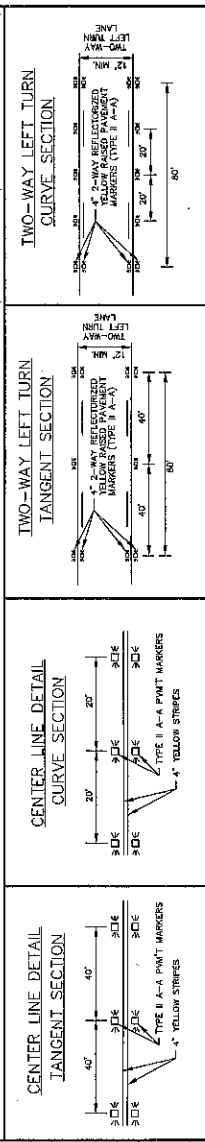
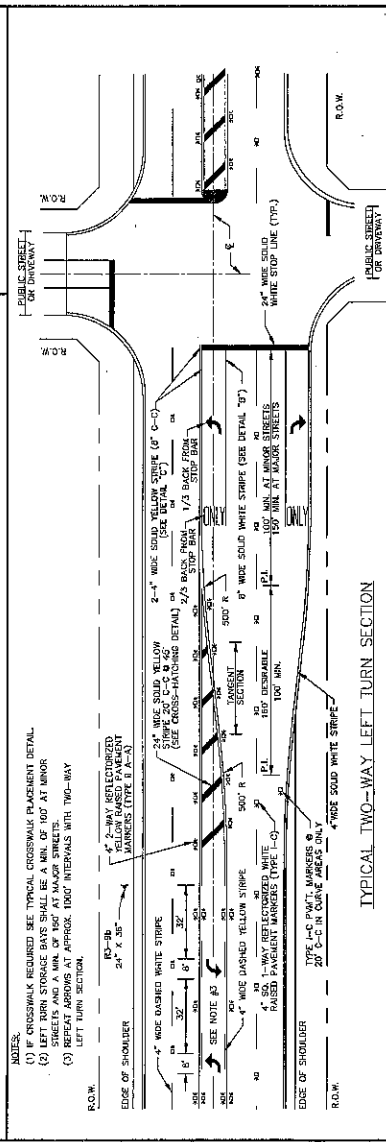
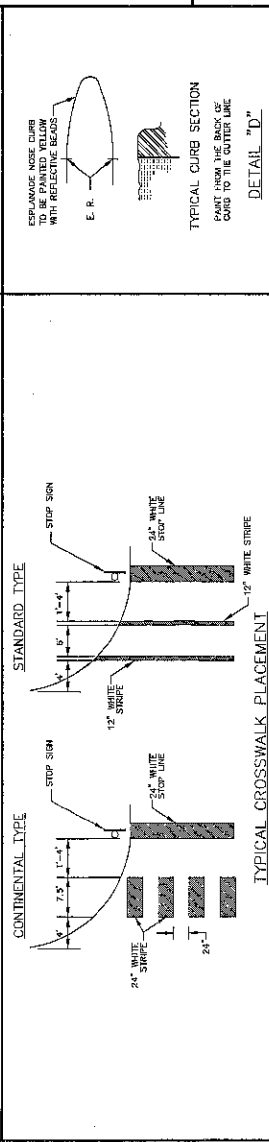
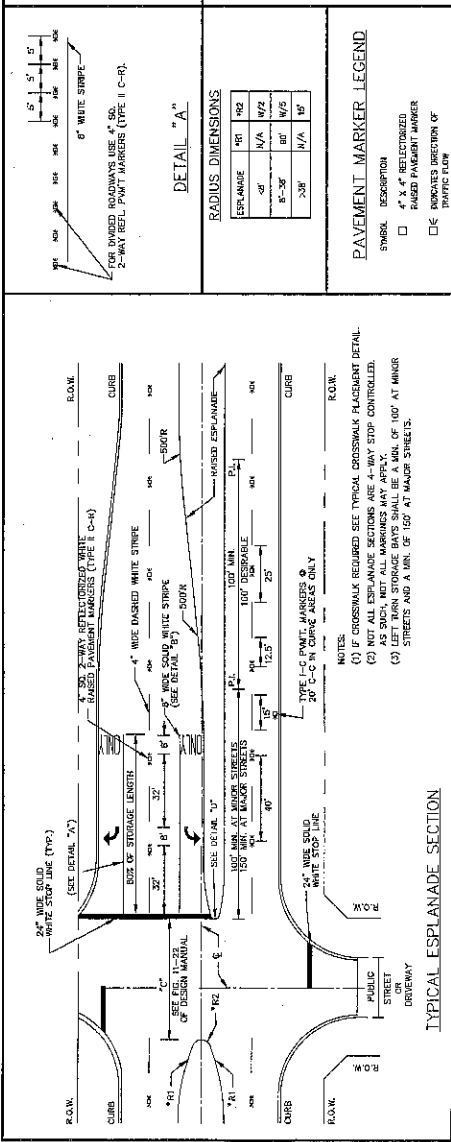
WHEEL CHAIR RAMP &
SIDEWALK DETAILS 1

CONSTRUCTION PLANS FOR
SIENNA PARKWAY
MUNICIPAL UTILITY DISTRICT No. 5
T.C.E.D. P.W.S. NO. 0700460

SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEL BANK TRACE

MC-21-15
SHEET 25 OF 36

DATE: 1/11/17



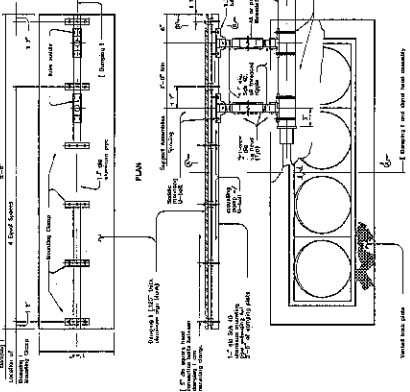
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DESIGN NOTES

1. All materials shall conform to the Missouri Department of Transportation (MoDOT) Standard Specifications for Highway Construction, 2014 Edition, as amended, and the Missouri Department of Transportation (MoDOT) Standard Specifications for Bridge Construction, 2014 Edition, as amended, and the Missouri Department of Transportation (MoDOT) Standard Specifications for Traffic Control, 2014 Edition, as amended.

2. The design of this structure is based on the following assumptions:

- a. The structure shall be designed for a design speed of 35 mph.
- b. The structure shall be designed for a design live load of HS20.
- c. The structure shall be designed for a design wind speed of 70 mph.
- d. The structure shall be designed for a design flood flow of 100 cfs.
- e. The structure shall be designed for a design seismicity of 0.15g.
- f. The structure shall be designed for a design temperature range of -40 to 120 degrees Fahrenheit.
- g. The structure shall be designed for a design soil strength of 1.5 ksf.
- h. The structure shall be designed for a design bearing capacity of 10 ksf.
- i. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- j. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- k. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- l. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- m. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- n. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- o. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- p. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- q. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- r. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- s. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- t. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- u. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- v. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- w. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- x. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- y. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.
- z. The structure shall be designed for a design ultimate strength of 1.5 times the design service load.



DAMPING PLATE MOUNTING DETAILS



MAST ARM DAMPING DETAIL

RECORD DRAWING

DATE: 7/13/17

BY: [Signature]

CHECKED: [Signature]

APPROVED: [Signature]

RECORD DRAWING

DATE: 7/13/17

BY: [Signature]

CHECKED: [Signature]

APPROVED: [Signature]



CONSTRUCTION PLANS FOR:

SIENNA PARKWAY

MUNICIPAL UTILITY DISTRICT No. 5

T.C.E.Q. P.W.S. No. 0750490

SIENNA PARKWAY NORTHBOUND

RIGHT TURN LANE AT

STEEP BANK TRACE

JOB NO. MC-28-15

DATE AS NOTED

DATE FEBRUARY 2017

SHEET 29 OF 36

REVISIONS

FIG. 3 - 1/2 INCH BARS WERE LOCATED IN A FORMED CONCRETE FOOT AT THE NORTH END OF THE INTERSECTION OF SIENNA PARKWAY AND STEEP BANK TRACE. 10114 EXAMINER - 6225

NOTES

PAVING RECORD DRAWING

1. PAVING CONTRACT HAS BEEN COMPLETED AND THE PAVING CONTRACTOR HAS BEEN PAID IN FULL. THE PAVING CONTRACTOR HAS BEEN PAID IN FULL. THE PAVING CONTRACTOR HAS BEEN PAID IN FULL.

WS&D RECORD DRAWING

1. THE DESIGNER HAS BEEN PAID IN FULL. THE DESIGNER HAS BEEN PAID IN FULL. THE DESIGNER HAS BEEN PAID IN FULL.

MISSOURI CITY

SEVEN PLANTATION MUNICIPAL UTILITY DISTRICT No. 5 SIENNA PARKWAY NORTHEAST TURN LANE AT STEEP BANK TRACE

EROSION CONTROL DETAILS

LSA Engineering, Inc.

10114 EXAMINER - 6225

10114 EXAMINER - 6225

10114 EXAMINER - 6225

STABILIZED CONSTRUCTION EXIT

CONSTRUCTION NOTES:

1. EXIT SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
2. THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
3. WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
4. STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE, THICKNESS, AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT, UNLESS OTHERWISE NOTED.
5. STABILIZED AREAS MAY BE USED FOR TRUCK DRIVING, UNLESS OTHERWISE NOTED.
6. STABILIZED CONSTRUCTION EXIT SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.

FILTER FABRIC FENCE

CONSTRUCTION NOTES:

1. 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 18 INCHES.
2. ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC SHALL HAVE A MIN HEIGHT OF 24 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 6 INCHES AT THE JOINTS.

STRAW BALE DROP INLET PROTECTION BARRIER

CONSTRUCTION NOTES:

1. SET 2 INCH BY 2 INCH WOOD STAKES SPACED A MAX OF 6 FEET APART AND EMBEDDED A MIN OF 18 INCHES.
2. FILTER FABRIC TO BE FASTENED SECURELY TO WOODEN STAKES WITH 16 GAUGE WIRE.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOODEN STAKES WITH 16 GAUGE WIRE.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 24 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 6 INCHES AT THE JOINTS.

ALL WATER LINE PIPE MATERIAL SHALL CONFORM TO THE FOLLOWING:

SIZE	DEPTH	MATERIAL
1" - 17"	3' - 8'	ASTM A2041, SER 21 (CLASS 200)
18" - 24"	8' - 10'	ASTM A2041, SER 14 (CLASS 200)
26" - 36"	10' - 12'	ASTM A2041, SER 14 (CLASS 200)
42" - 60"	12' - 14'	ASTM A2041, SER 14 (CLASS 200)
72" - 96"	14' - 16'	ASTM A2041, SER 14 (CLASS 200)

*STEEL SECTIONS SHALL BE USED FOR WATER LINES OVER 12" DEPTH, CONFORMING TO ASTM A-2041, SER 14, CLASS 200.

ALL SANITARY SEWER PIPE MATERIAL SHALL CONFORM TO THE FOLLOWING:

SIZE	DEPTH	MATERIAL
18" - 24"	8' - 10'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
26" - 36"	10' - 12'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
42" - 60"	12' - 14'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
72" - 96"	14' - 16'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN

POURABLE RIGID PIPE SHALL BE C-151, (ANSI A21.51) WITH PROTECTIVE 401 GEOTECH ENJOY LINDING OR APPROVED EQUAL.

*FRANCE MAN < 12" - MEET OR EXCEED C-200, DR 18, (CLASS 225 PIPE)

*FRANCE MAN > 12" - MEET OR EXCEED C-200, DR 18, (CLASS 225 PIPE)

ALL STORM SEWER PIPE MATERIAL SHALL CONFORM TO THE FOLLOWING:

SIZE	DEPTH	MATERIAL
18" - 24"	8' - 10'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
26" - 36"	10' - 12'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
42" - 60"	12' - 14'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN
72" - 96"	14' - 16'	ASTM A2041, SER 28 (115 PSI) COLOR GREEN

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*FRANCE MAN > 12" - MEET OR EXCEED C-200, DR 18, (CLASS 225 PIPE)

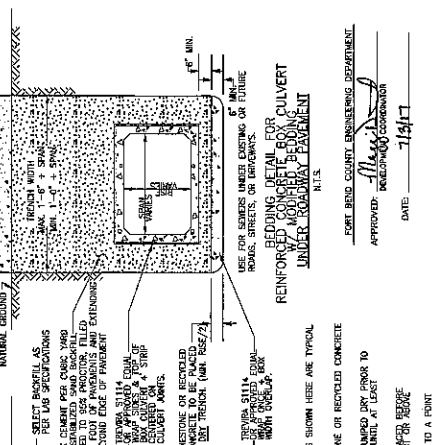
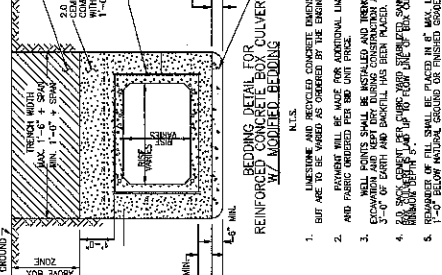
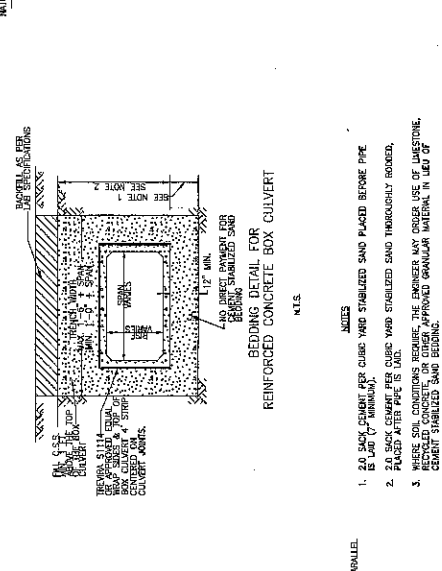
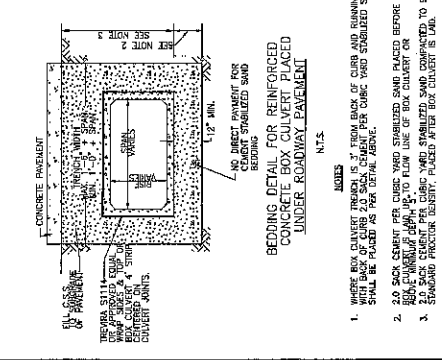
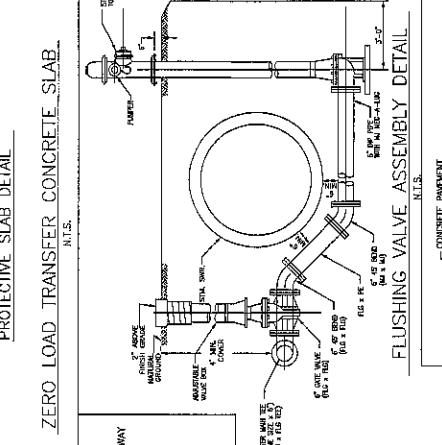
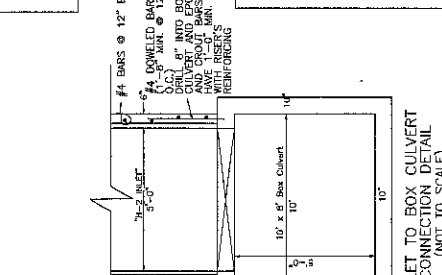
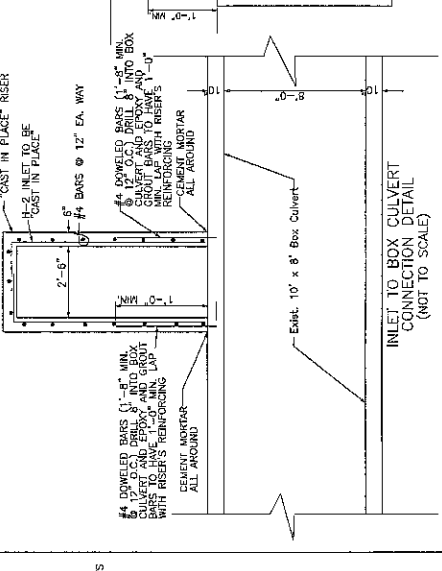
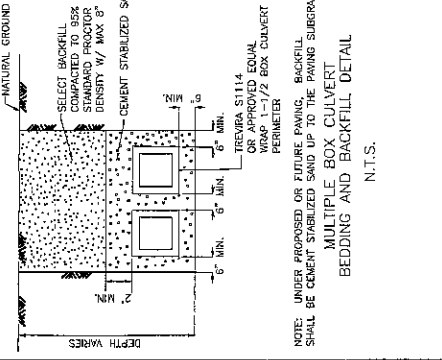
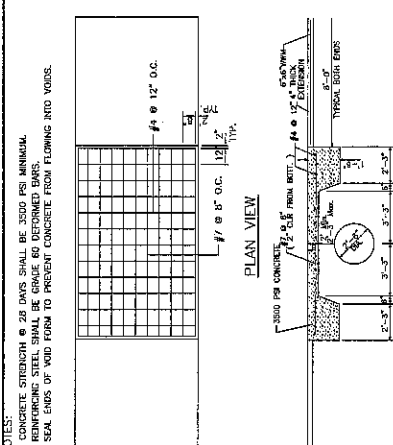
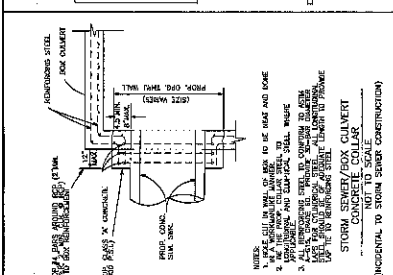
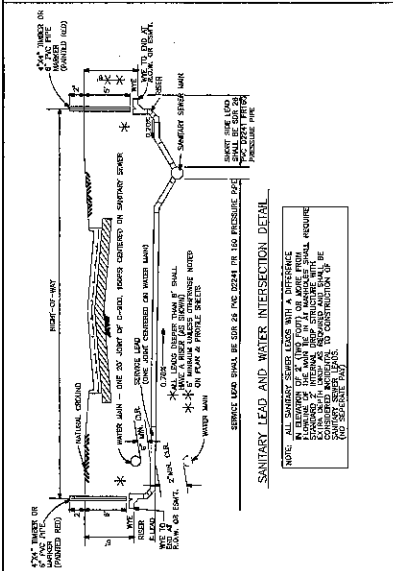
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*FRANCE MAN < 12" - MEET OR EXCEED C-200, DR 18, (CLASS 225 PIPE)

*FRANCE MAN > 12" - MEET OR EXCEED C-200, DR 18, (CLASS 225 PIPE)



NOTES:

- CONCRETE STRENGTH @ 28 DAYS SHALL BE 3500 PSI MINIMUM.
- REINFORCING STEEL SHALL BE GRADE 60 DEFORMED BARS.
- SEAL ENDS OF JOINT FORM TO PREVENT CONCRETE FROM FLOWING INTO JOINTS.

MISSOURI CITY
T E X A S
DEPARTMENT OF PUBLIC WORKS
SHARON K. KIMMEL, P.E., CITY ENGINEER

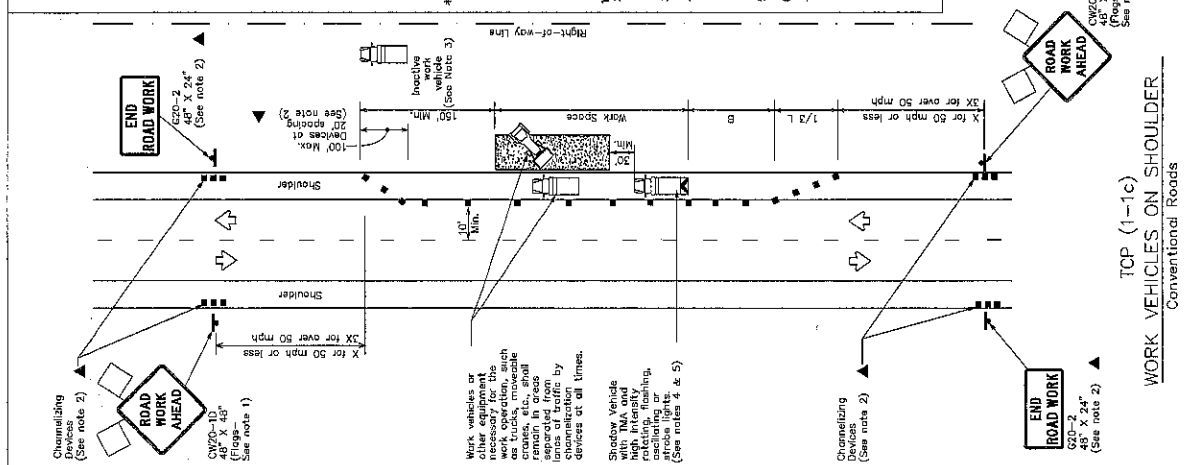
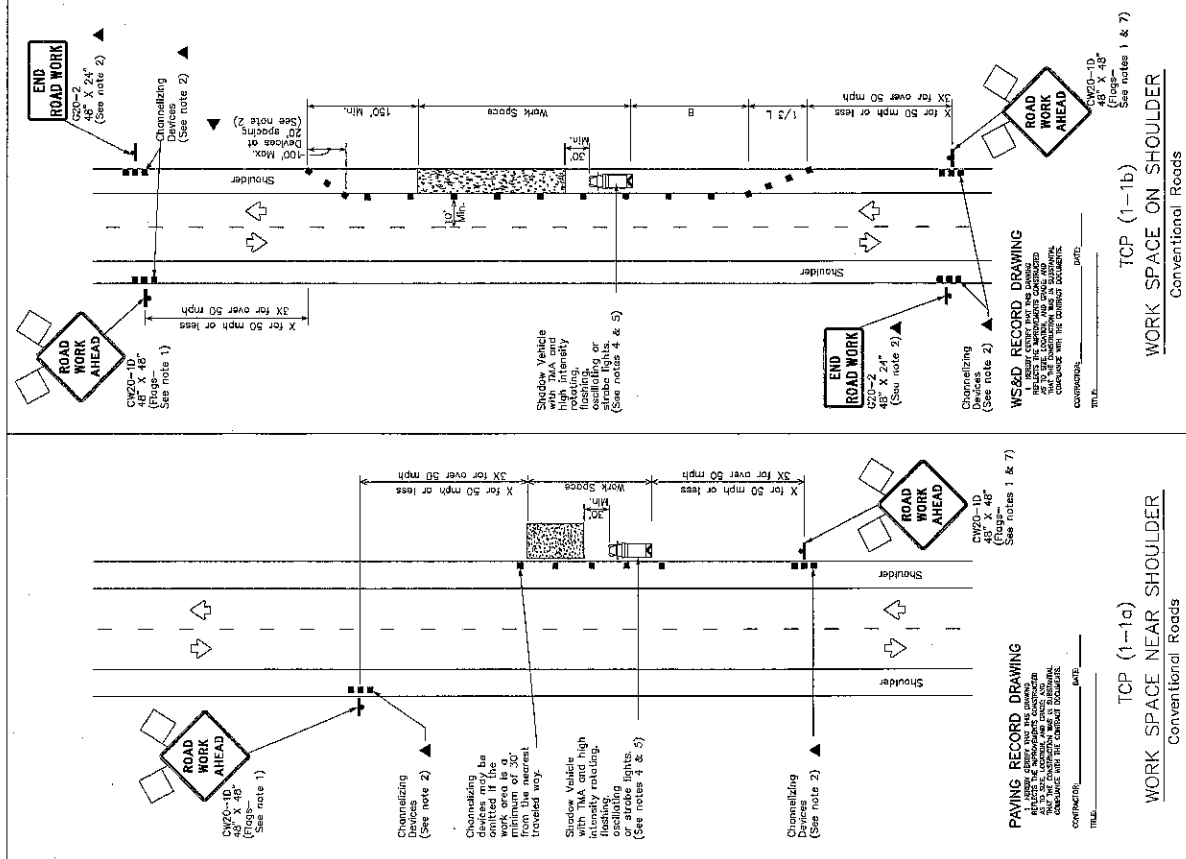
CONSTRUCTION PLANS FOR
SIENNA PARKWAY NORTHBOUND
RIGHT TURN LANE AT
STEEP BANK TRACE

DATE: 6.28.19

SCALE: AS NOTED

SHEET 32 OF 36

DISCLAIMER: The use of this standard is governed by the "Taxi 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.



LEGEND		
	Type 3 Barricade	
	Heavy Work Vehicle	
	Trailer Mounted Flashing Arrow Board	
	Sign	
	Truck Mounted Attenuator (TMA)	
	Portable Chippable Message Sign (POMS)	
	Traffic Flow	
	Flag	
	Frogger	

[illegible]

L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE					
	MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓		✓			

GENERAL NOTES

- [illegible]

For construction or maintenance contract work, specific project requirements for shadow vehicles can be found in the project GENERAL NOTES for Item 502, Barriercodes, Signs and Traffic Handling.

 Texas Department of Transportation
Traffic Operations Division

TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD
SHOULDER WORK

TCP(1-1)-12

2-94	2-12	MISSOURI		MISSOURI		MISSOURI	
8-85	8-85	MISSOURI		MISSOURI		MISSOURI	
1-97	1-97	MISSOURI		MISSOURI		MISSOURI	
4-98	4-98	MISSOURI		MISSOURI		MISSOURI	

Maxide 7/13/17

REVISIONS

1. ALL NOTES, SPECIFICATIONS AND ORDINANCES ARE IN FULL FORCE AND EFFECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

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PAVING RECORD DRAWING

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MISSOURI CITY

TE X A S

DEPARTMENT OF PUBLIC WORKS

APPROVED: *[Signature]* DATE: 1/14/17

FOR THE CITY ENGINEER

SIENNA PLANTATION

MUNICIPAL UTILITY DISTRICT NO. 5

SIENNA PARKWAY NORTHBOUND

RIGHT TURN LANE AT

STEEP BANK TRAIL

BARRICADE AND CONSTRUCTION STANDARD

LJA Engineering, Inc.

1604 E. Grand Parkway/100B

PO Box 109

Spring, TX 77477-0109

Phone 713.652.6208

Fax 713.652.6208

www.lja-engineering.com

SCALE

AS SHOWN

SHEET NO. 34 OF 36

GENERAL NOTES

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OBVIOUS WARNING SIGNS

STATE LAW

2 of 12

BC(0)-07

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SHEET NO. 34 OF 36

