



COLLIN COUNTY, TEXAS

ADDENDUM No. Two (2)

IFB NO. 2014-215

INVITATION FOR BIDS  
FOR

**Construction, Bridge, County Road 618 at Cedar Creek Culverts Replacement**

DATE: May 9, 2014

NOTICE TO ALL PROSPECTIVE BIDDERS:

YOU ARE HEREBY DIRECTED TO MAKE CHANGES TO THE INVITATION FOR BIDS IN ACCORDANCE WITH THE ATTACHED INFORMATION.

DELETE: 00410 Bid Form  
REPLACE WITH: 00410 Bid Form-Revised

DELTE: Bid Schedule  
REPLACE WITH: Bid Schedule-Revised

ADD: Pre-Bid Sign in Sheet

DELETE: Plan Sheet 2  
REPLACE WITH: Plan Sheet 2-Revised

DELETE: Plan Sheet 9  
REPLACE WITH: Plan Sheet 9-Revised

DELETE: Plan Sheet 12  
REPLACE WITH: Plan Sheet 12-Revised

DELETE: Plan Sheet 14  
REPLACE WITH: Plan Sheet 14-Revised

PLEASE NOTE ALL OTHER TERMS, CONDITIONS, SPECIFICATIONS DRAWINGS, ETC. REMAIN UNCHANGED.

SINCERELY,  
MICHALYN RAINS, CPPO, CPPB  
PURCHASING AGENT

## SECTION 00410 - BID FORM-REVISED

Bid of \_\_\_\_\_ Date \_\_\_\_\_  
(Name of Firm)

BID NO.: **2014-215**

TO: **COLLIN COUNTY, TEXAS (Owner)**

FOR: **CONSTRUCTION, COUNTY ROAD 618 AT CEDAR CREEK CULVERT  
REPLACEMENT**

The undersigned, as Bidder, declares that the only person or parties interested in this bid are those principals named herein, that his/her bid is made without collusion with any other person, firm or corporation, that he/she has carefully examined the Contract Documents including the Form of Contract, Invitation to Bidders, Instruction to Bidders, Specifications and the Drawings, therein referred to and has carefully examined the locations, conditions and classes of materials for the proposed work, and agrees that he/she will provide all the necessary labor, machinery, tools, equipment, apparatus and other items incidental to construction and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed therein.

It is understood that the following quantities of work to be done at unit prices are approximate only and are intended principally to serve as a guide in evaluating bids.

It is agreed that the quantities of work to be done at unit prices and materials to be furnished may be increased or diminished as may be considered necessary in the opinion of Collin County to complete the work fully as planned and contemplated, and that all quantities of work, whether increased or decreased, are to be performed at the unit prices set forth below except as provided for in the Contract Document.

It is understood and agreed that the Bid Security accompanying this bid will be returned to the bidder, unless in case of the acceptance of the bid the Bidder shall fail to execute a contract and file a Performance Bond, a Payment Bond, a Maintenance Bond and a Certificate of Insurance within ten (10) consecutive calendar days after its acceptance, in which case the Bid Security shall become the property of the Owner and shall be considered as payment for damages caused by delay and other inconveniences suffered by the Owner because of such failure of the Bidder.

It is understood and agreed that all work under this Contract will be completed within **one hundred twenty (120)** consecutive calendar days. Completion date will be established in the Notice to Proceed.

The undersigned proposes and agrees to perform all work of whatever nature required, in strict accordance with the drawings and specifications for the following sum of prices, to-wit:

Labor and Material Breakdown:

A: Total Material Cost Incorporated in Project\* \$ \_\_\_\_\_

B: Total Labor Cost Incorporated in Project\* \$ \_\_\_\_\_

C. Bid Grand Total\* \$ \_\_\_\_\_

\*Item A & B Must Add Up to C. the Bid Grand Total.

\* Bid Grand Total (written in words) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*NOTE: The contract award will be based on Total Bid Price

Collin County would like to offer the option for successful bidder to accept credit card payments for services rendered. Collin County currently uses MasterCard as its credit card provider.

Would your company be willing to accept monthly credit card payments? Yes No

If applicable, does your company offer any additional discounts for timely payment with or without credit card payment? Yes No

If yes, please explain \_\_\_\_\_

Receipt is hereby acknowledged of the following Addenda to the Contract Documents.

Addendum No. 1 dated \_\_\_\_\_ Received \_\_\_\_\_

Addendum No. 2 dated \_\_\_\_\_ Received \_\_\_\_\_

Addendum No. 3 dated \_\_\_\_\_ Received \_\_\_\_\_

Addendum No. 4 dated \_\_\_\_\_ Received \_\_\_\_\_

The undersigned Bidder hereby declares that he/she has visited the site of the Work and has carefully examined the Contract Documents pertaining to the Work covered by the above Bid, and he/she further agrees to commence work within ten (10) consecutive calendar days after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within **one hundred twenty (120)** consecutive calendar days subject to such extensions of time allowed by Specifications.

The undersigned Bidder agrees that this bid shall be good and may not be withdrawn for a period of ninety (90) consecutive calendar days after closing time for receiving bids.

The undersigned Bidder agrees that if he/she is notified of the acceptance of this bid within ninety (90) consecutive calendar days of the time set for opening of bids, he/she will execute a contract for the Work for the stated prices, and will execute and deliver to Owner within ten (10) consecutive calendar days after Collin County awards the contract, a Performance Bond and a Payment Bond for the total amount of the

Contract, and a one (1) year Maintenance Bond for ten percent (10%) of the total amount of the Contract and a Certificate of Insurance, as stipulated in the Contract Documents.

The undersigned Bidder further agrees that the enclosed Bid Security in the amount of five percent (5%) of the Greatest Amount of Bid is the agreed amount of liquidated damages which Collin County, Texas will suffer by the failure of the undersigned Bidder to execute the Contract and to furnish the Performance, Payment and Maintenance Bonds and by reason of such failure on the part of the undersigned Bidder, the Bid Security will immediately be forfeited to Collin County, Texas.

The undersigned Bidder also understands that the Commissioners' Court of Collin County, Texas reserves the right to reject any and/or all bids covered in this bid request and to waive informalities or defects in bids or to accept such bids as it shall deem to be in the best interest of Owner.

It is understood that the work proposed to be done will be accepted when fully completed in accordance with the Contract Documents.

Accompanying this bid, is a certified check, cashier's check or Bid Bond in the amount of five percent (5%) of the total amount bid. Also accompanying this bid, all the information required in Section 00200 – Instructions to Bidders.

The undersigned certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final. The unit prices have been shown in words and figures for each item listed in this bid and it is understood that in the event of a discrepancy, the words shall govern.

Respectfully submitted,

Contractor: \_\_\_\_\_

By: \_\_\_\_\_

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

Address: \_\_\_\_\_

Seal and Authorization  
(If a Corporation)

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail  
Address: \_\_\_\_\_

END OF SECTION

**COLLIN COUNTY  
CONSTRUCTION, BRIDGES:  
CR 618 OVER CEDAR CREEK**

**BID SCHEDULE -REVISED**

ITEM NO.	SPECIAL REFERENCE SPEC ITEM	QUANTITY	UNIT	DESCRIPTION WITH BID PRICE WRITTEN IN WORDS	UNIT PRICE	EXTENDED AMOUNT
<b>CR618 OVER CEDAR CREEK</b>						
1	TxDOT ITEM 500	1	LS	MOBILIZATION, DEMOBILIZATION, BONDS, INSURANCE, for the sum of:  _____ DOLLARS and _____ CENTS PER LUMP SUM	\$	\$
2	TxDOT ITEM 100	5.01	STA	PREPARING ROW, including all appurtenant work, complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER STATION	\$	\$
3	TxDOT ITEM 316	602	GAL	CRS-2 Emulsion (0.45 GAL/SY), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER SQUARE YARD	\$	\$
4	TxDOT ITEM 316	14.7	TON	GRADE 3 AGGREGATE (22 LBS/SY), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER LB	\$	\$
5	TxDOT ITEM 316	562.0	GAL	CRS-2 Emulsion (0.42 GAL/SY), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER SQUARE YARD	\$	\$
6	TxDOT ITEM 316	11.4	TON	GRADE 4 AGGREGATE (17 LBS/SY), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER LB	\$	\$
7	TxDOT ITEM 247	162	CY	FL BS (TY A GR 4)(8"), complete in place for the sum of:  _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$
8	TxDOT ITEM 110	244	CY	EXCAVATION (ROADWAY AND CHANNEL), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$
9	TxDOT ITEM 132	405	CY	EMBANKMENT (FINAL)(DENS CONT)(TY C), complete in place, for the sum of:  _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$

**COLLIN COUNTY  
CONSTRUCTION, BRIDGES:  
CR 618 OVER CEDAR CREEK**

**BID SCHEDULE**

ITEM NO.	SPECIAL REFERENCE SPEC ITEM	QUANTITY	UNIT	DESCRIPTION WITH BID PRICE WRITTEN IN WORDS	UNIT PRICE	EXTENDED AMOUNT
10	TxDOT ITEM 164	0.68	ACRES	BROADCAST SEED (TYPE 1), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER ACRE	\$	\$
11	TxDOT ITEM 432	50	CY	RIPRAP (STONE PROTECTION)(18 IN), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$
12	TxDOT ITEM 462	1	EA	CAST IN PLACE CONC BOX CULVERT (20FT X 8FT), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER EACH	\$	\$
13	TxDOT ITEM 466	880	SF	WINGWALL (PW), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER SQUARE FOOT	\$	\$
14	TxDOT ITEM 502	4	MO	BARRICADES, SIGNS AND TRAFFIC HANDLING, complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER MONTH	\$	\$
15	TxDOT ITEM 552	559	LF	WIRE FENCE (5-WIRE BARBED WIRE), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER LINEAR FOOT	\$	\$
16		35	LF	PIPE FENCE (STEEL), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER LINEAR FOOT	\$	\$
17		1	EA	WATER CROSSING FENCE (30'), complete in place, for the sum of: _____ DOLLARS and _____ CENTS PER EACH	\$	\$
18		1	EA	GATE (INSTALL) (16') _____ DOLLARS and _____ CENTS PER EACH	\$	\$
19	TxDOT ITEM 666	950	LF	REF PAV MRK TY II (Y) 4" (SLD) _____ DOLLARS and _____ CENTS PER LINEAR FOOT	\$	\$

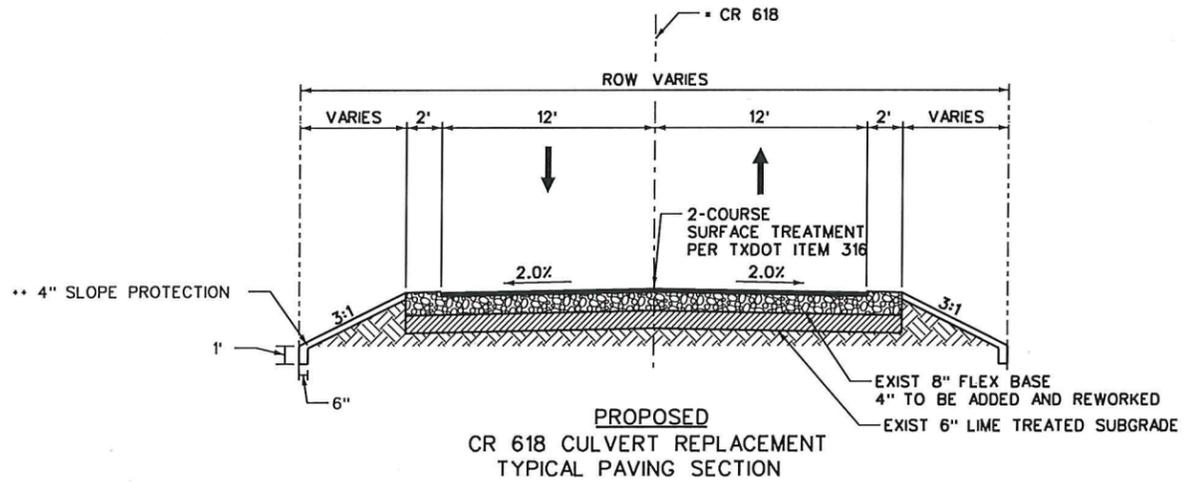
**COLLIN COUNTY  
CONSTRUCTION, BRIDGES:  
CR 618 OVER CEDAR CREEK**

**BID SCHEDULE**

ITEM NO.	SPECIAL REFERENCE SPEC ITEM	QUANTITY	UNIT	DESCRIPTION WITH BID PRICE WRITTEN IN WORDS	UNIT PRICE	EXTENDED AMOUNT
20		1	LS	SW3P MEASURES _____ DOLLARS and _____ CENTS PER LUMP SUM	\$	\$
21	TxDOT ITEM 310	468	GAL	PRIME COAT (CSS-1) (0.35GL/SY) _____ DOLLARS and _____ CENTS PER GALLON	\$	\$
22	TxDOT ITEM 530	130	SY	DRIVEWAY (FLEX BASE) _____ DOLLARS and _____ CENTS PER SQUARE YARD	\$	\$
23	TxDOT ITEM 496	71	LF	REMOVE STRUCTURE (CULVERT) _____ DOLLARS and _____ CENTS PER LINEAR FOOT	\$	\$
24	TxDOT ITEM 496	2	EA	REMOVE WINGWALL _____ DOLLARS and _____ CENTS PER EACH	\$	\$
25	TxDOT ITEM 432	38.5	CY	RIPRAP (CONC) (CL B) _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$
26	TxDOT ITEM 432	200	CY	SALVAGE AND RESET EXISTING RIPRAP _____ DOLLARS and _____ CENTS PER CUBIC YARD	\$	\$
27	TxDOT ITEM 432	80.0	CY	BEDDING MATERIAL (6 IN) _____ DOLLARS and _____ CENTS PER GALLON	\$	\$
28		30.0	GAL	MC-50 PRIME COAT _____ DOLLARS and _____ CENTS PER GALLON	\$	\$
29		150	SY	RE-BASE MATERIAL _____ DOLLARS and _____ CENTS PER SQUARE YARD	\$	\$
<b>CR618 OVER CEDAR CREEK TOTAL BID</b>						\$

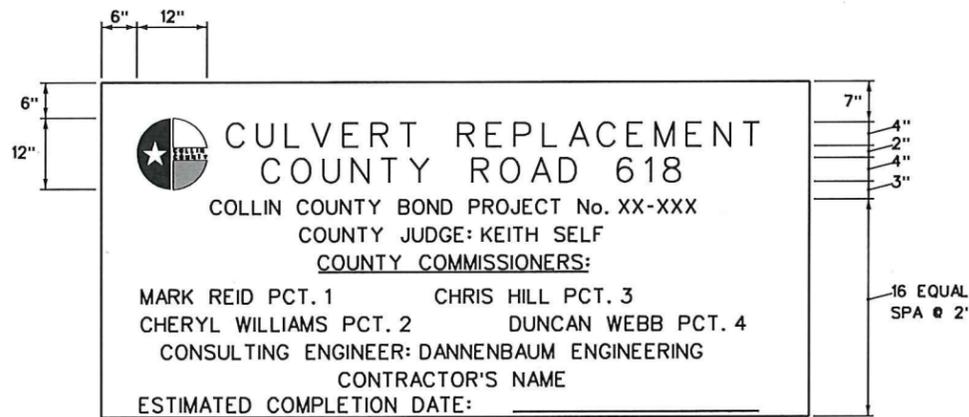


ESTIMATED QUANTITIES			
ITEM	ITEM DESCRIPTION	UNIT	CO RD 618
1	MOBILIZATION	LS	1
2	PREPARING ROW	STA	5.01
3	CRS-2 EMULSION (0.45 GAL/SY)	GAL	602
4	GRADE 3 AGGREGATE (22 LBS/SY)	TON	14.7
5	CRS-2 EMULSION (0.42 GAL/SY)	GAL	562
6	GRADE 4 AGGREGATE (17 LBS/SY)	TON	11.4
7	FLEX BASE (COMPLETE IN PLACE)	CY	162
8	EXCAVATION (ROADWAY AND CHANNEL)	CY	244
9	EMBANKMENT (ROADWAY AND CHANNEL)	CY	405
10	SEEDING FOR EROSION CONTROL	ACRE	0.68
11	RIPRAP (STONE PROTECTION) (18 IN)	CY	50
12	CAST-IN-PLACE CONCRETE BOX CULVERT (20' X 8')	EA	1
13	WINGWALLS (PW)	SF	880
14	BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	4
15	WIRE FENCE (TY D) (BARB WIRE)	LF	559
16	PIPE FENCE (STEEL)	LF	35
17	WATER CROSSING FENCE (30')	EA	1
18	ALUMINUM GATE (16')	EA	1
19	REF PAV MRK TY II(Y) 4" (SLD)	LF	950
20	SW3P MEASURES	LS	1
21	CSS-1 PRIME COAT (0.35 GAL/SY)	GAL	468
22	DRIVEWAYS (FLEX BASE)	SY	130
23	REMOVE STRUCTURE (CULVERT)	LF	71
24	REMOVE WINGWALL	EA	2
25	RIPRAP CONC (CL B)	CY	38.5
26	SALVAGE AND RESET EXISTING RIPRAP	CY	200
27	BEDDING MATERIAL (6 IN)	CY	80
28	PRIME-COAT MC-50	GAL	30
29	RE-BASE MATERIAL	SY	150



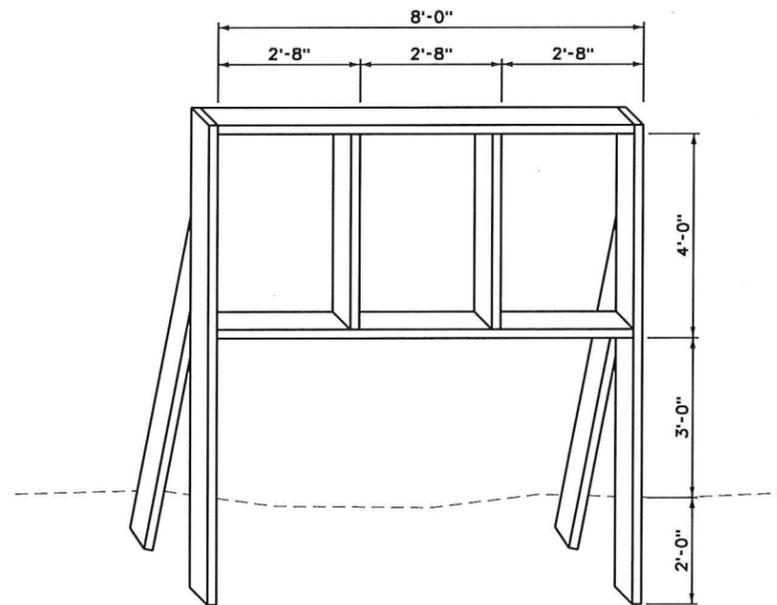
\*\*ALL DISTURBED AREAS SHALL BE SEEDED

\*\* REPLACE DISTURBED EXISTING SLOPE PROTECTION WITH RE-BASE MATERIAL WITH MC-50.



**SIGN LAYOUT AND MESSAGE**

- NOTES:
- SIGN PANEL TO BE 3/4" EXTERIOR PLYWOOD.
  - FRAME TO BE 2" X 4" STOCK.
  - FRAME TO BE PAINTED IN FLAT BLACK.
  - PAINT BACKGROUND OF SIGN WHITE.
  - PAINT PROJECT NAME IN BLUE LETTERS.
  - "CONSULTING ENGINEER: DANNENBAUM ENGINEERING" TO BE PAINTED IN GLOSSY BLUE.
  - PAINT COLLIN COUNTY LOGO IN ITS STANDARD COLORS OF BLUE, RED, AND WHITE.
  - PAINT BALANCE OF MESSAGE IN GLOSSY BLACK.
  - ALL PAINT TO BE EXTERIOR BASE PAINT.
  - FOR SIGN PLACEMENT LOCATION INFORMATION SEE SHEET XX.



**SIGN FRAME DETAIL**

NO.	DATE	REVISION	APP.
1	5-8-14	ADDED QUANTITIES PER CHANGES	



*Bo L. Ratto* 5/8/14

**DANNENBAUM**

ENGINEERING COMPANY - DALLAS, LLC  
T.B.P.E. FIRM REGISTRATION #8996  
4141 BLUE LAKE CIRCLE, STE 240 DALLAS, TX 75244 (972) 239-2002



**COLLIN COUNTY, TEXAS**

**COUNTY ROAD 618 CULVERT REPLACEMENT**

**QUANTITIES & TYPICAL SECTION**

SHEET 1 OF 1			
DESIGN	COUNTY	DATE	SHEET NO.
GRAPHICS	COLLIN	5/8/2014	2
CHECK	TEXAS	SCALE: AS SHOWN	

SUSANNAH WALKER SURVEY  
ABSTRACT No. 953

13.3848 ACRES (DEED)  
C.W. BAILEY AND MARY ALICE BAILEY  
CO-TRUSTEES OF THE  
MELISSA LANE MCDONALD TRUST  
VOL. 2343, PG. 827  
R.P.R.C.C.T.

SUSANNAH WALKER SURVEY  
ABSTRACT No. 953

13.614 ACRES (CCAD)  
KERI ANN MCDONALD ELLIS  
VOL. 2343, PG. 835  
R.P.R.C.C.T.

Beginning chain CR618 description

Point 475897	N	7,144,151.9900 E	2,629,288.3240	Sta	10+00.00
Course from 475897 to 475898 S 88° 47' 39.30" E Dist 102.9808					
Point 475898	N	7,144,149.8230 E	2,629,391.2820	Sta	11+02.98
Course from 475898 to 475899 S 88° 55' 14.12" E Dist 93.6396					
Point 475899	N	7,144,148.0590 E	2,629,484.9050	Sta	11+96.62
Course from 475899 to 475900 S 89° 18' 24.62" E Dist 413.2212					
Point 475900	N	7,144,143.0600 E	2,629,898.0960	Sta	16+09.84
Course from 475900 to 475901 S 89° 21' 10.59" E Dist 247.6748					
Point 475901	N	7,144,140.2630 E	2,630,145.7550	Sta	18+57.52

Ending chain CR618 description

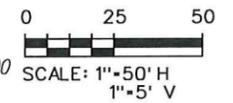
- NOTES:
- 1.) NEW FENCE SHOULD BE 5-STRAND BARBED WIRE WITH T-POSTS ON 10' CENTERS WITH ONE (1) WIRE STAY.
  - 2.) ALL CORNER POSTS TO BE 2 7/8" PIPE (CAPPED).

END PROJECT  
STA 16+75.00  
END (Y) DBL 4" (SLD)  
END TRANSITION  
MATCH EXISTING

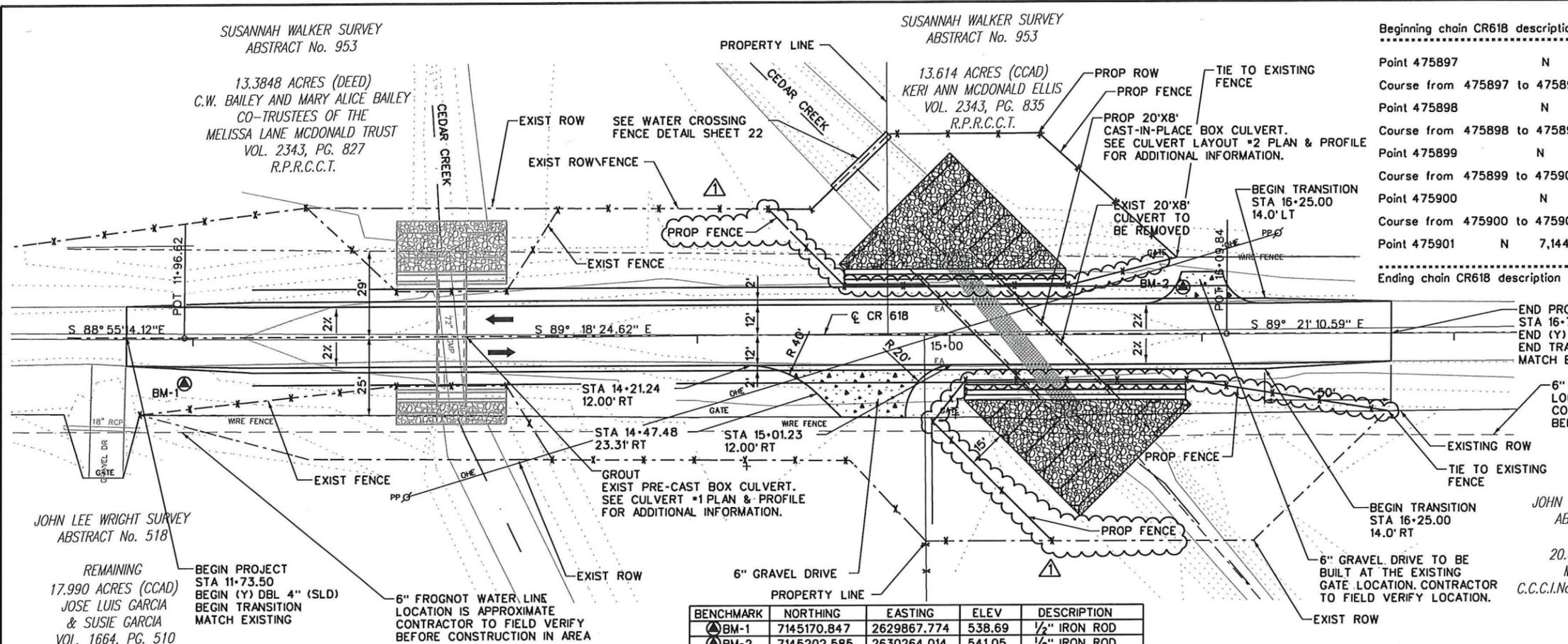
6" FROGNOT WATER LINE  
LOCATION IS APPROXIMATE  
CONTRACTOR TO FIELD VERIFY  
BEFORE CONSTRUCTION IN AREA

JOHN LEE WRIGHT SURVEY  
ABSTRACT No. 518

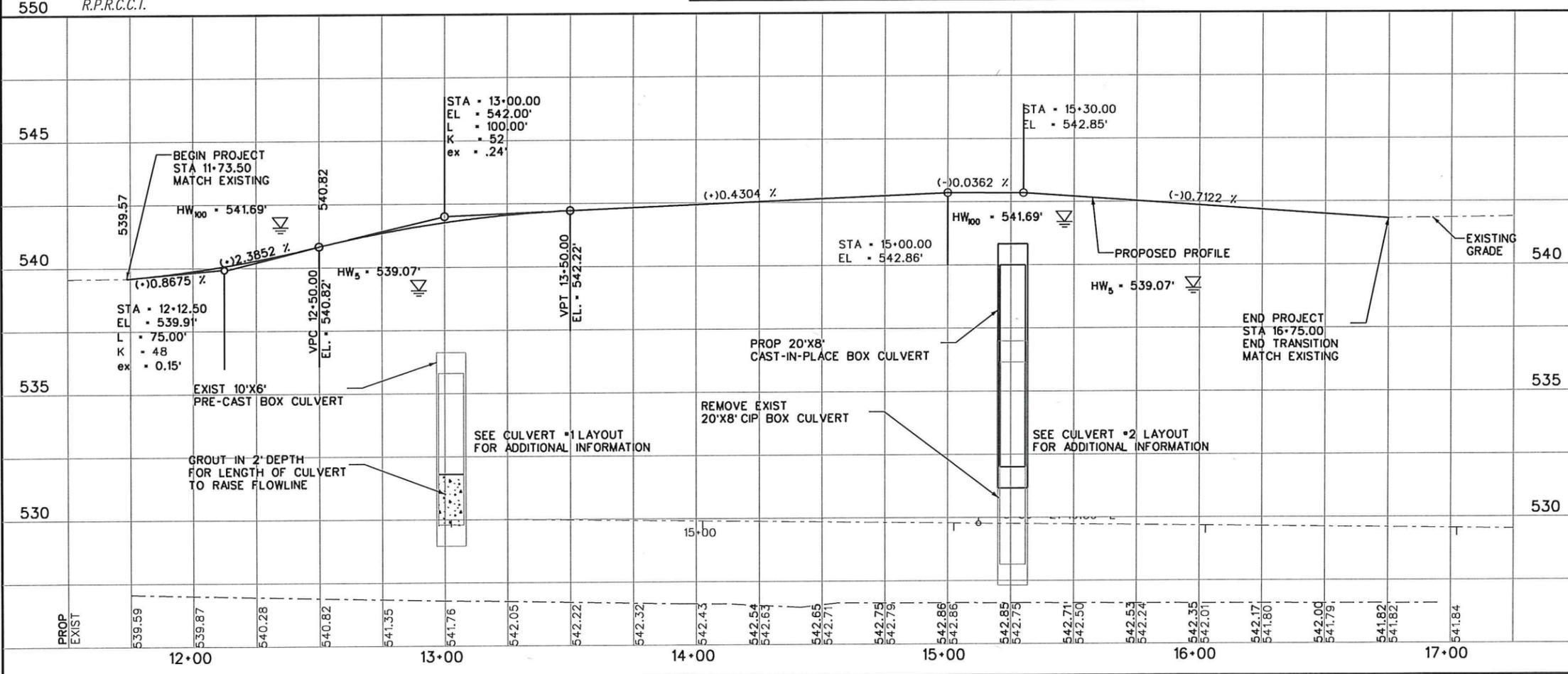
20.00 ACRES (DEED)  
MACRINA IBARRA  
C.C.C.I.No. 2006110001611700  
R.P.R.C.C.T.



ALL DIMENSIONS IN FEET  
UNLESS OTHERWISE SHOWN



BENCHMARK	NORTHING	EASTING	ELEV	DESCRIPTION
BM-1	7145170.847	2629867.774	538.69	1/2" IRON ROD
BM-2	7145202.585	2630264.014	541.05	1/2" IRON ROD



NO.	DATE	REVISION	APP.
1	5-8-14	ADDED ADDITIONAL WIRE FENCE	



*B. L. Ratto* 5/8/14

**DANNENBAUM**

ENGINEERING COMPANY - DALLAS, LLC  
T.B.P.E. FIRM REGISTRATION #8996  
4141 BLUE LAKE CIRCLE, STE 240 DALLAS, TX 75244 (972) 239-2002



COUNTY ROAD 618 CULVERT REPLACEMENT

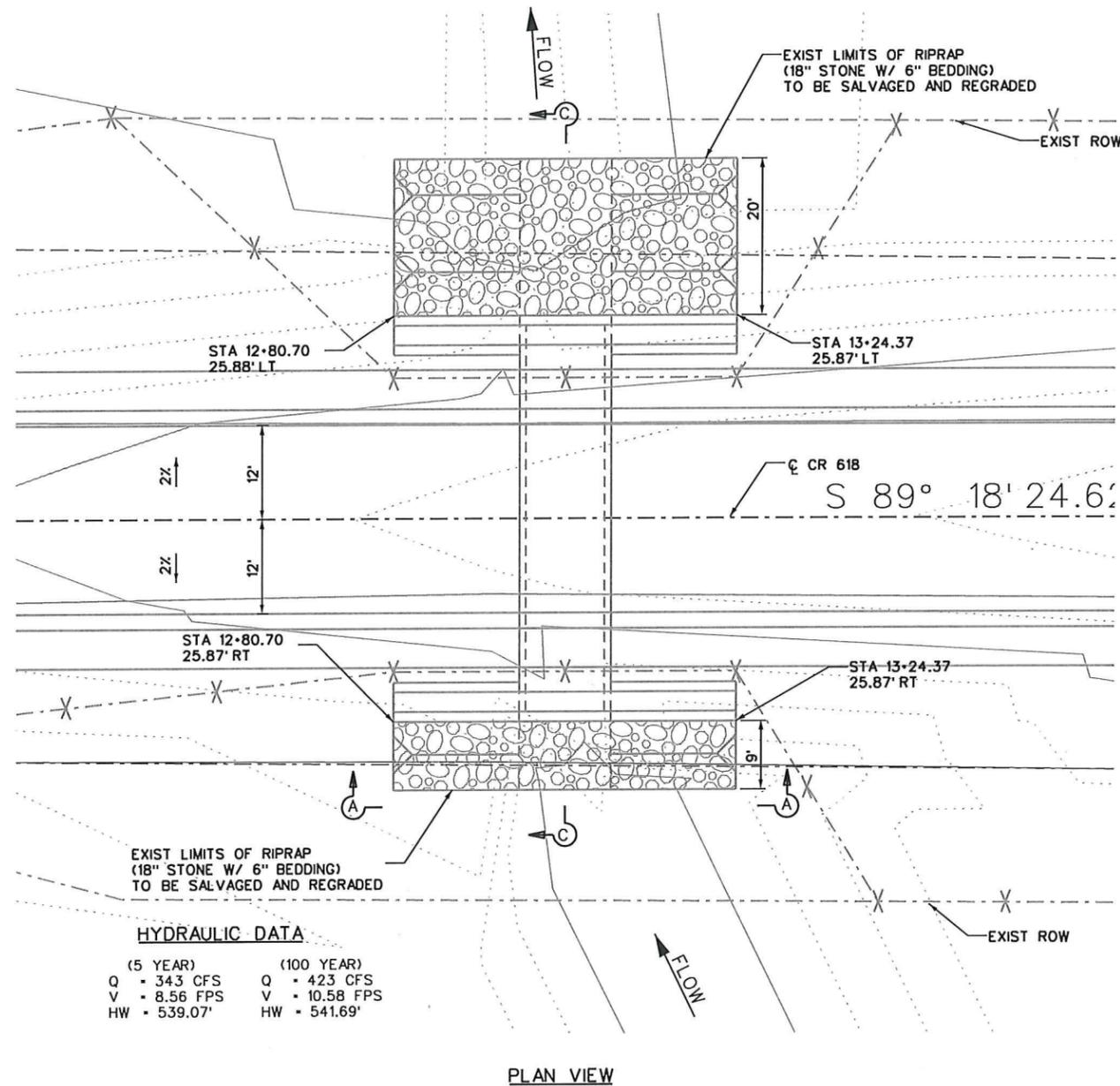
ROADWAY  
PLAN & PROFILE

SHEET 1 OF 1

DESIGN	TF	COUNTY		SHEET NO.
GRAPHICS	KJA	COLLIN		9
CHECK	MGV	STATE	DATE: 5/8/2014	
CHECK	RF	TEXAS	SCALE: AS SHOWN	

FILE: G:\1220\4433-52\MAIN LANE\618p&p.dgn  
DATE: 5/8/2014

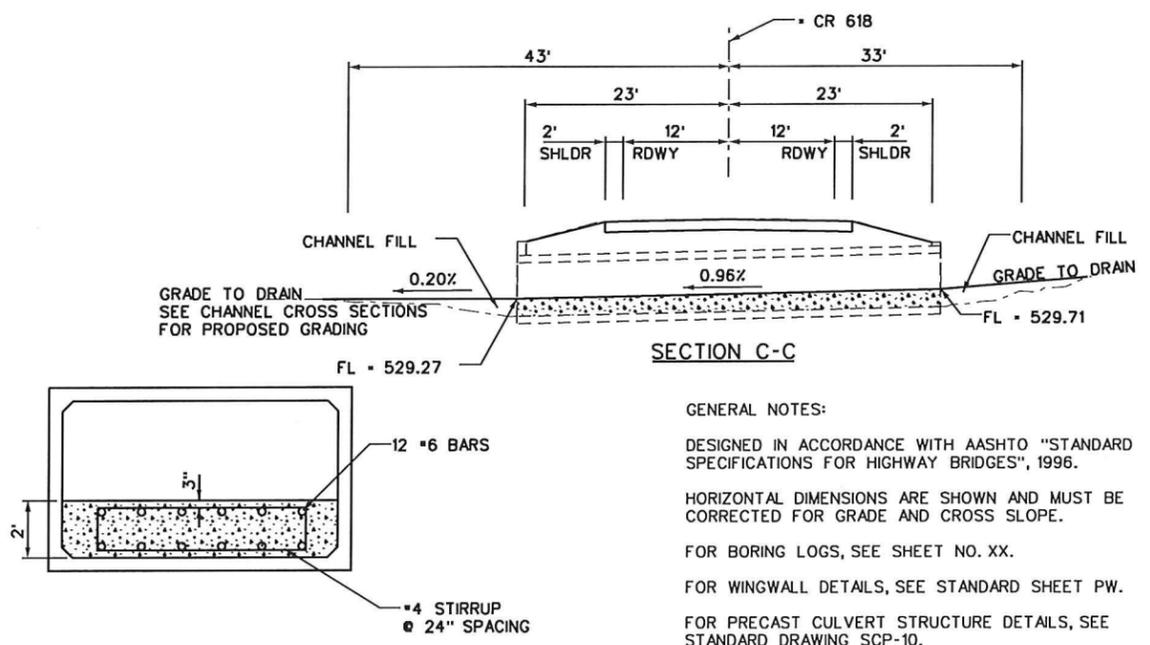
... \4433-52\MAIN LANE\618p&p.dgn



**HYDRAULIC DATA**

(5 YEAR)	(100 YEAR)
Q = 343 CFS	Q = 423 CFS
V = 8.56 FPS	V = 10.58 FPS
HW = 539.07'	HW = 541.69'

PLAN VIEW



SECTION C-C

**GENERAL NOTES:**

DESIGNED IN ACCORDANCE WITH AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", 1996.

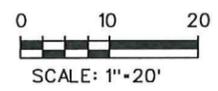
HORIZONTAL DIMENSIONS ARE SHOWN AND MUST BE CORRECTED FOR GRADE AND CROSS SLOPE.

FOR BORING LOGS, SEE SHEET NO. XX.

FOR WINGWALL DETAILS, SEE STANDARD SHEET PW.

FOR PRECAST CULVERT STRUCTURE DETAILS, SEE STANDARD DRAWING SCP-10.

HINGED ALUMINUM GATE TO BE PLACED HIGH ENOUGH TO KEEP OUT OF NORMAL WATER SURFACE ELEVATION WHILE PREVENTING PASSAGE OF CATTLE AND HAVING FREE MOVEMENT FOR FUTURE PASSAGE AND DEBRIS REMOVAL.



ALL BIDDERS AND THE CONTRACTOR ARE RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND FOR ASSESSING TO THEIR OWN SATISFACTION ANY POTENTIAL CONFLICT BETWEEN THE EQUIPMENT, PLANT OR OPERATION OF EACH UTILITY AND THE PLANNED CONSTRUCTION.

THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND PIPE LINES, CONDUITS AND STRUCTURES BY CONTACTING OWNERS OF UNDERGROUND UTILITIES AND BY PROSPECTING IN ADVANCE OF EXCAVATION AND ALL OTHER CONSTRUCTION OPERATIONS.

SUBSURFACE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IT IS NOT TO BE CONSTRUED AS PART OF THE PLANS AND SPECIFICATIONS GOVERNING CONSTRUCTION OF THE PROJECT. ALL BIDDERS AND THE CONTRACTOR ARE RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO ALL SUBSURFACE CONDITIONS AND LIMITS.

BIDDERS AND THE CONTRACTOR ARE RESPONSIBLE FOR ALL EROSION CONTROL MEASURES ASSOCIATED WITH THIS PROJECT. THIS SHALL INCLUDE FURNISHING, INSTALLING, REMOVING AND MAINTAINING SILT FENCES, HAY BALES, TEMPORARY SEEDING OR OTHER MEANS NECESSARY IN PREVENTING STORM WATER POLLUTION.

NO.	DATE	REVISION	APP.
1	5-8-14	RIPRAP CONC (CL B) FOR CULVERT FILL	



*Bo L Ratto 5/8/14*

**DANNENBAUM**

ENGINEERING COMPANY - DALLAS, LLC  
T.B.P.E. FIRM REGISTRATION #8996  
4141 BLUE LAKE CIRCLE, STE 240 DALLAS, TX 75244 (972) 239-2002



COLLIN COUNTY, TEXAS

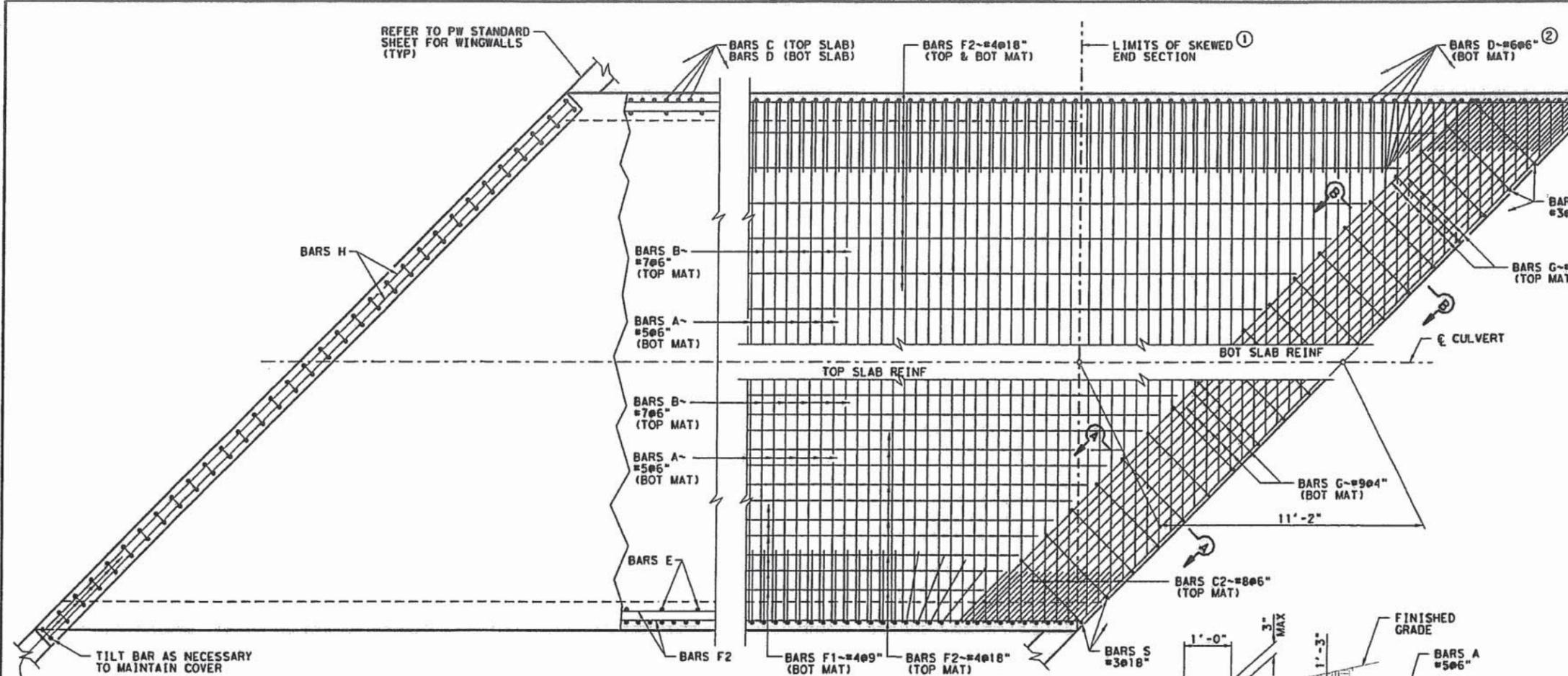
COUNTY ROAD 618 CULVERT REPLACEMENT

EXIST CULVERT #1  
PLAN & PROFILE  
10X6 BOX CULVERT

SHEET 1 OF 1

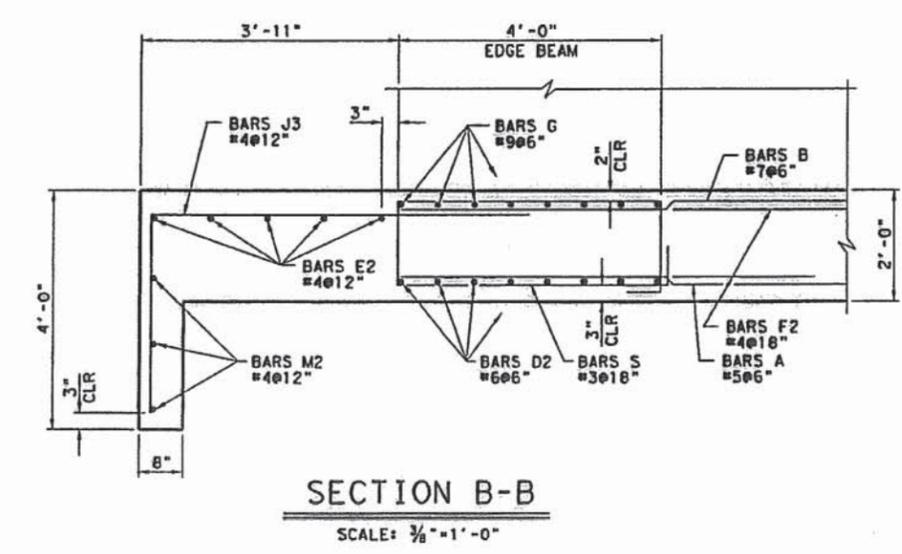
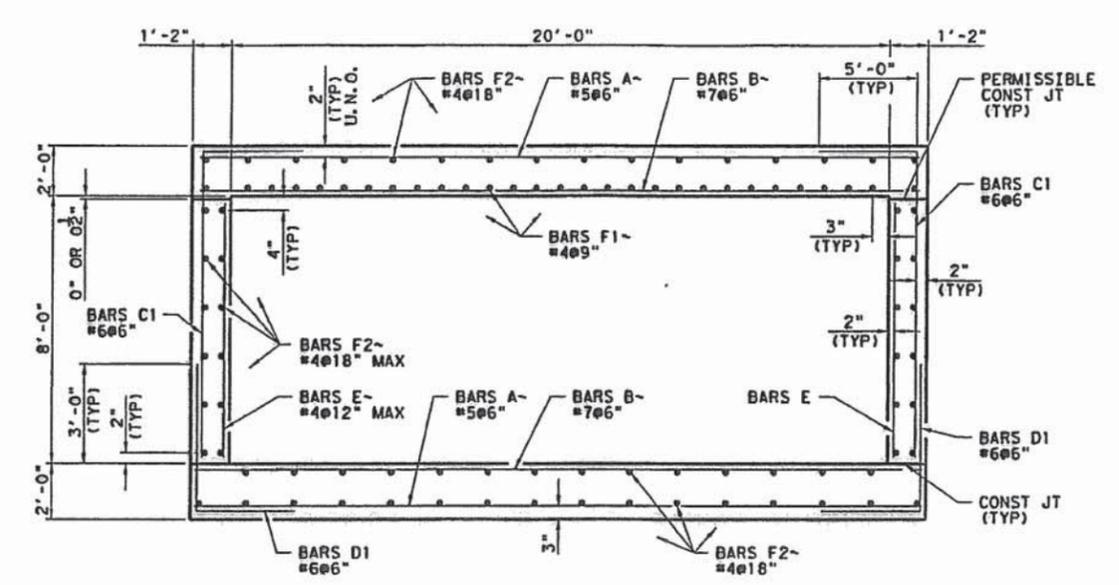
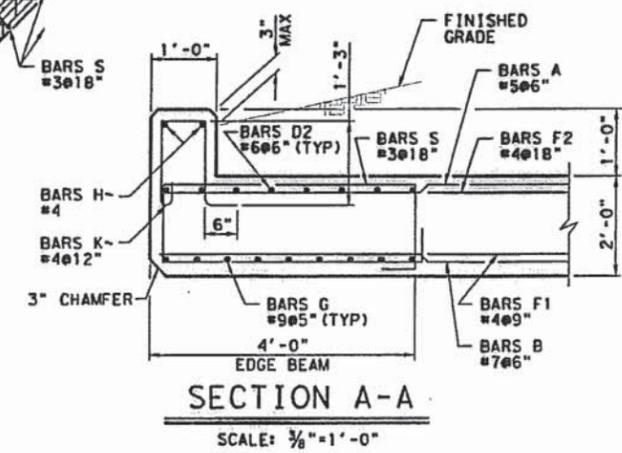
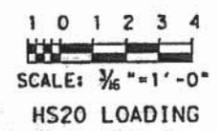
DESIGN	TF	COUNTY		SHEET NO.
GRAPHICS	KJA	COLLIN		12
CHECK	MGV	STATE	DATE: 5/8/2014	
CHECK	RF	TEXAS	SCALE: AS SHOWN	

FILE: G:\1220\4433-52\DRAIN\AGE\618drainage01.dgn  
DATE: 5/8/2014



- GENERAL NOTES:**
- DESIGNED ACCORDING TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", 17TH EDITION, 2002.
  - DESIGNED TO THE MAXIMUM FILL HEIGHT OF 6 FT.
  - ALL REINFORCING STEEL SHALL BE GRADE 60.
  - ALL CONCRETE SHALL BE CLASS "C" WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,600 PSI. ESTIMATED CONCRETE FOR CULVERT AND CURB = 252 CY.
  - THE USE OF PERMANENT FORMS IS NOT ALLOWED.
  - REINFORCING BARS SHALL BE ADJUSTED TO PROVIDE A MINIMUM OF 1 1/4 INCHES CLEAR COVER.
  - THE BOTTOM EDGE OF THE TOP SLAB SHALL BE CHAMFERED 3 INCHES AT THE ENTRANCE.
  - CONSTRUCTION JOINTS SHOWN AT THE FLOW LINE MAY BE RAISED A MAXIMUM OF 6 INCHES AT THE CONTRACTOR'S OPTION. IF THIS OPTION IS USED, BARS E MAY BE CUT OFF OR RAISED.
  - SEE TxDOT STANDARD SCC-MD FOR SKEWED ENDS, ANGLE SECTIONS AND LENGTHENING DETAILS FOR NOTES NOT SHOWN.

- ① THE LENGTH OF BARS A & B WILL VARY IN THE SKEWED END SECTIONS.
- ② WHEN NECESSARY TO AVOID FOULING IN ACUTE CORNERS THE SLAB EXTENSION LEG OF BARS C & BARS D MAY BE SHORTENED TO A MINIMUM OF 1'-6".



NO.	DATE	REVISION	APP.

1-15-10

*Michel S. Maksoud*  
SIGNATURE OF REGISTRANT

STATE OF TEXAS  
MICHEL S. MAKSOUD  
80639  
REGISTERED PROFESSIONAL ENGINEER

**DANNENBAUM**  
ENGINEERING CORPORATION  
T.B.P.E. FIRM REGISTRATION #392  
2180 WEST ALABAMA, HOUSTON, TX 77098 (713) 520-9570

**COLLIN COUNTY, TEXAS**

COUNTY ROAD 618 OVER CEDAR CREEK

20' x 8'  
CULVERT DETAILS

SHEET 1 OF 1

DESIGN	WPC	COUNTY	DEC. INC.	PROJECT NO.	SHEET NO.
GRAPHICS	WSW	COLLIN		4433-52	14
CHECK	MW	STATE	DATE:	01/15/2010	
CHECK	JK	TEXAS	SCALE:	AS SHOWN	

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DATE: 01/15/2010

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