

JEFFERSON COUNTY  
DRAINAGE DISTRICT NO.6

PLANS FOR  
8TH STREET REPAIR PROJECT

PROJECT NO.: IFB21-011/EC  
PROJECT: 8TH STREET REPAIR PROJECT  
LIMITS: ELINOR STREET to DITCH 110  
PROJECT LOCATION: 8TH STREET  
COUNTY: JEFFERSON COUNTY  
DESCRIPTION: FOR THE REPAIR OF CONCRETE AND ASPHALT PAVEMENT.

PROJECT BEGAN (ACTUAL WORK BEGAN):	DATE
PROJECT COMPLETED:	DATE
PROJECT CONSTRUCTED & FINAL PLANS:	<input checked="" type="checkbox"/> CONSTRUCTION <input type="checkbox"/> AS-BUILT
FINAL CONSTRUCTION COST:	\$
TCEQ PERMIT No.:	DD6 is MS4 Operator
GRADING PERMIT No.:	NA-Existing Road Foot Print
STREET-CUT & BARRICADE No.:	Filed with The City of Beaumont
DRIVEWAY PERMIT No.:	NA
BUILDING PERMIT No.:	NA
ELECTRICAL PERMIT No.:	Traffic Control Plan Attached
OTHER PERMIT No.:	NA
TDLR PROJECT No.:	NA
TDLR INSPECTION REQUIRED:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



BOARD OF DIRECTORS

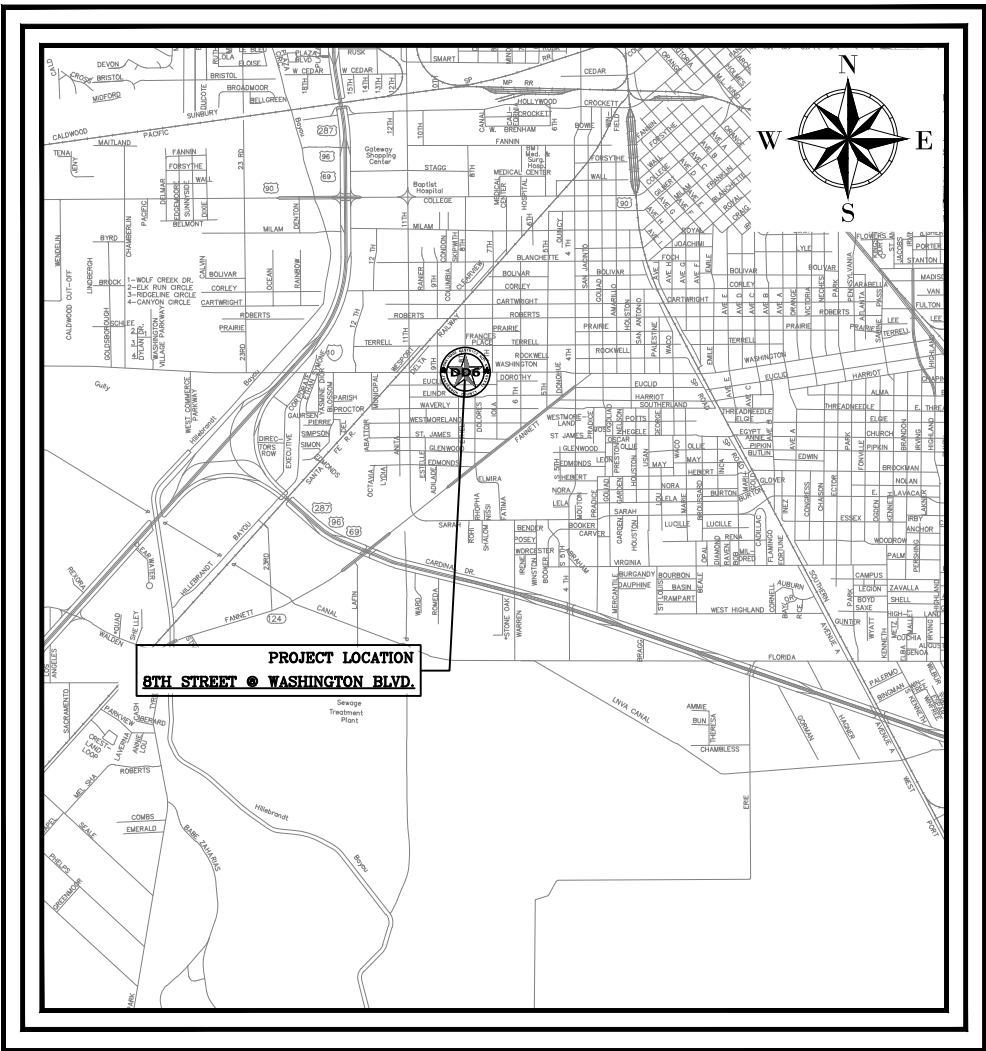
PRESIDENT: JOUSHUA W. ALLEN, SR.  
VICE PRESIDENT: BERNIE DALEO  
SECRETARY: CHARLES GUILLORY  
DIRECTOR: ANTHONY MALLEY, III  
DIRECTOR: CHARLES KIKER, III

GENERAL MANAGER

DR. JOSEPH G. MAJDALANI, P.E., C.F.M.

DISTRICT ENGINEER

DOUG CANANT, P.E., R.P.L.S., C.F.M.



LOCATION MAP

SCALE: NTS

APRIL 2021

Harold E. Crochet, Jr.

04/01/2021

PREPARED BY:  
HAROLD E. CROCHET, JR.  
PROJECT ENGINEER ASSISTANT

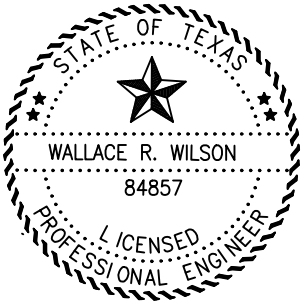
DATE

Wallace R. Wilson P.E.

04/01/2021

APPROVED BY:  
WALLACE R. WILSON, P.E. No.84857  
SENIOR ENGINEER

DATE



THE CONTRACTOR SHALL PROVIDE AND ERECT BARRICADES AND CONSTRUCTION SIGNS IN ACCORDANCE WITH BC (1-12)-14 AND THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT POINTS AS SHOWN ON THE TITLE SHEET AND PLAN SHEETS AND AS DIRECTED BY THE ENGINEER. REQUIRED SIGNS SHALL BE IN ACCORDANCE WITH BC(1)-04 THRU BC(12)-14 AND THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION ON NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MAY, 2012).

## INDEX OF SHEETS

## GENERAL

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
G01	TITLE SHEET
G02	INDEX OF SHEETS
G03 - 04	GENERAL NOTES & SPECIFICATIONS
G05 - 07	ESTIMATE & QUANTITY SUMMARY SHEETS

## TRAFFIC CONTROL PLAN

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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An approved Traffic Control Plan (TCP) is on file with the City of Beaumont and is available for review.

However, the Contractor must get an approved TCP from the City of Beaumont if the Contractor wants to use a different TCP.

## DRAINAGE DETAILS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## BRIDGES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## ROADWAY DETAILS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
RDT01 - 02	ROADWAY PLAN SHEET
RDT03	TYPICAL ROAD SECTION-CONCRETE
RDT04	TYPICAL ROAD SECTION-HMAC

## RETAINING WALL DETAILS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## UTILITIES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## TRAFFIC ITEMS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## RAILROAD

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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## TxDOT Standards

## DETAIL SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
JRCP-01	JOINTED REINFORCED CONCRETE PAVEMENT DETAILS
JRCP-02	JOINTED REINFORCED CONCRETE PAVEMENT DETAILS
JS-14	CONCRETE PAVING DETAILS JOINT SEALS
CCCG-21	CONCRETE CURB AND CURB AND GUTTER

## ENVIRONMENTAL ISSUES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
EC(1)-16	*TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES - SILT FENCE
EC(9)-16-1 to 3	*TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES - EROSION CONTROL LOGS

[illegible]

General Notes and Specifications

1. The Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, Adopted November 2014, will govern all specifications not directly addressed in this document.

2. Direct attention to comply with all ordinances and regulations of local municipal and county governments and the TCEQ (Texas Commission on Environmental Quality), which may be applicable on this project. General Construction Permit may be obtained online at <https://www.tceq.texas.gov/permitting/stormwater> through TCEQ. A Notice to Proceed will not be issued until all Permits are submitted to the City of Beaumont Public Works-Engineering Department for review. This will not be paid for directly and will be considered subsidiary to various bid items.

3. Any storm water permit and associated fees required for construction of this project shall be at the contractor's expense. Also, any temporary erosion, sediment and water control measures required shall be in accordance with the details shown in the plans, and all work and materials required will not be paid for directly but considered subsidiary to various bid items. Erosion control logs are to be utilized at every inlet within the affected area of construction and should remain in place throughout the duration of construction. Contractor shall submit SW3P plan prior to the start of construction. This will not be paid for directly and will be considered subsidiary to various bid items.

4. Procure all the necessary city and/or county permits and licenses before the start of this project.

5. Before excavating near existing utilities, contact the utility companies or the utility coordinating committee for exact locations to prevent damage or interference with present facilities. Notify the utility coordinating committee and the Texas One Call System at the following numbers:

Texas One Call, toll-free 1-800-245-4545

AT&T Communications	Entergy Distribution	CenterPoint Energy Entex	Spectrum	City of Beaumont	City of Beaumont
555 Main - Room 20760	North 11th/ Street	6090 College	602 N. Hwy 69	City Utilities	Public Works-Engineering
Beaumont, Texas 77701	Beaumont, Texas 77701	Beaumont, Texas 77707	Nederland, Texas 77627	Beaumont, Texas 77707	Beaumont, Texas 77707
(409) 839-1666	(409) 785-2136	(409) 860-7111	(409) 720-5565	(409) 785-4720	(409) 880-3725
Ray Hillin	Brian Cross	Robert Young	Adam LaRive	Edward Brown	David Tingle

Inspections:

1. All inspections shall be performed by the City of Beaumont.

2. City of Beaumont will determine if night work or weekend work is allowed.

This action does not relieve the Contractor of the responsibilities under the terms of the contract or the plans and specifications. Damage caused by the Contractor's operations shall be repaired and restored to service in a timely manner at no expense to DD6.

6. The approximate location of the known underground utility installations is as shown on the plans. Confirm the location of these utility lines and the exact location of any others which may exist. Assume full responsibility for notifying the utility involved in case of conflict or damage and he/she shall be responsible for damage that occurs due to his/her negligence. Remove and dispose of abandoned lines encountered that interfere with the construction of this project. Consider this work to be subsidiary to the various bid items of the contract.

7. Allow DD6 & City forces to enter this project to accomplish such work as shown in the plans (by others) and as may be deemed necessary by the engineer.

8. Maintain for the duration of this project, those sections of existing and proposed travel ways and appurtenances which are to be constructed, reconstructed, or modified under this project. City forces will maintain the existing sections of roadway and its appurtenances not a part of this project. Any portion of roadway and its appurtenances damaged by the contractor's forces shall be repaired by the contractor at his/her expense.

9. Place all equipment and vehicles not in operation a minimum of 10 feet from the travel way unless protected behind positive barrier. All damages caused by the Contractor shall be repaired at his/her expense. Protect all areas of the right of way which are not included in the actual limits of the proposed construction areas from destruction. Restore any damaged areas to original or better condition. No payment will be made for this work.

10. Assume ownership for all designated waste material and dispose of it at a place off of the right of way, as approved by the engineer.

11. Take reasonable measures to avoid the death of any migratory birds, their young or their eggs.

12. Control the dust caused by construction operations. For sweeping the finished concrete pavement, use one of the following types of sweepers or equal:

Tricycle Type	Truck Type -4 Wheel
Wayne Series 900	M-B Cruiser II
Elgin White Wing	Wayne Model 945
Elgin Pelican	Mobile TE-3
Mobile TE-4	Murphy 4042

13. The contractor shall be responsible for all maintenance of the travel way and appurtenances within the barricades for the duration of the project. Ingress and egress to adjacent property shall be maintained by the contractor at all times.

14. If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to DD6. If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

15. Material on hand will not be paid for.

16. Prior to final acceptance, all new and existing structures and extensions shall be cleaned and free of debris and dirt and all outfall channels unobstructed. This work will not be paid for directly but will be considered subsidiary to the various bid items.

17. Move existing signs, mailboxes, delineators and any other similar obstructions that interfere with construction to temporary locations approved by the engineer. Move them back to their permanent positions when the work progresses to the point where this is possible. Place the sign post back in accordance with the applicable standard sheets. This will not be paid for directly and will be considered subsidiary to various bid items.

18. Maintain adequate drainage throughout the limits of the project during all construction phases.

19. Verify material quantities and dimensions prior to ordering materials.

20. The Contractor will establish the project control point, points, or tangency, PI's (points of intersection), point of curvature (PC, PI, and PT) and bench marks at the beginning and end of the project on the plan view only. Contractor shall establish and maintain these points throughout construction. There will be no separate payment for this work, but it shall be considered subsidiary to various bid items.

21. When design details are not shown on the traffic control plans, provide signs and arrows conforming to the latest "Texas M.U.T.C.D." manual. The traffic control plan for the DD6 Project can be revised at DD6, However the Contractor must get an approved TCP from the City of Beaumont. This will not be paid for directly but shall be considered subsidiary to the various bid items.

22. All materials, labor and incidentals required for the contractor to provide for traffic across the streets and for temporary ingress and egress to private property shall be furnished by the contractor at no additional cost to DD6 and shall be considered as incidental to the various bid items in this project.

23. Expansion Joints to be placed at the end of each curve radius and at intervals not to exceed 30 feet on straight sections and should at minimum align to match existing construction joints.

24. Longitudinal Joints, construction Joints and Warp cuts shall be installed as shown on construction detail sheet and should at minimum match alignment of existing joints. Maximum spacing between joints not to exceed 30 feet.

25. Any saw-cutting required for the project shall not be paid for directly but shall be considered subsidiary to various bid items.

26. The Contractor will notify the Engineer 48 hours in advance of completed work per site. The Engineer will inspect each site and submit a punch list per location to the Contractor as necessary. The Contractor will not demobilize from site until the Engineer has approved all work including punch list items.

End of General Notes

<div>PROJECT LOCATION</div> <div>CITYCOUNTYSTATE</div> <div>BEAUMONTJEFFERSONTEXAS</div> <div>WATERSHEDDITCH NO.100110G3</div>			
		<div>8TH STREET REPAIR PROJECT</div> <div>GENERAL NOTES &amp; SPECIFICATIONS</div> <div>WALLACE R. WILSON, P.E. No.84857</div> <div>DATE04-12-2021</div>	
		<div>STATE OF TEXAS</div> <div>WALLACE R. WILSON</div> <div>84857</div> <div>PROFESSIONAL ENGINEER</div>	
		<div>NO. DATE</div> <div>DRN</div> <div>REVISION</div> <div>APPROV.</div>	

\*Grant Requirement: Buy America\*



Item 5: Control of Work

1. Station the project prior to commencing work. Mark the stations every 100 feet. Maintain stationing throughout the duration of the project. Remove the station markings at the completion of the project. Consider this work to be subsidiary to the various bid items of the contract.

1. Furnish all materials, labor and incidentals required to provide for traffic across the street and for temporary ingress and egress to private property. Consider this work to be subsidiary to the various bid items of the contract.

1. Compute and charge calendar days in accordance with Article 8.3.1.4, "Standard Workweek" & Article 8.3.1.6, "Other". Monday through Friday with the option of working Saturdays when the Engineer is provided sufficient advance notice.

- ### Item 9: Measurement and Payment

- ### Item 104: Removing Concrete

- Item 110: Excavation

- Item 310: Prime Coat and Blotter

- Item 340: Dense-Graded Hot Mix Asphalt (SQ)

- ### Item 360: Concrete Pavement

- Item 500: Mobilization

1. Mobilization shall not exceed ten (10) percent of the total construction items amount.

1. Submit changes to the traffic control plan to the City of Beaumont.

- Item 529: Concrete Curb

- End of Specifications**

**\*Grant Requirement: Buy America\***



Estimate					
Item		Description	Unit	Total	
Item No.	Description Code			Estimated Quantity	Final Quantity
310	001	Prime Coat and Blotter	Gal	309	
340	001	Dense Graded Hotmix Asphalt (SQ) (TY D) (SAC B ) (64-22)	Ton	128	
360	001	Concrete Pavement (Class-P/6")	SY	1,221	
500	001	Mobilizaton	LS	1	
529	001	Concrete Curb (Class-A/TY-II)	LF	1,031	
540	001	Erosion control	LS	1	
Alternate Bid Items					
360	001	Concrete Pavement (Class-P/6")	SY	636	
529	001	Concrete Curb (Class-A/TY-II)	LF	404	

Summary of Quantities								
Location		Item 310-001 Prime Coat and Blotter (Gal)	Item 340-001 Dense Graded Hotmix Asphalt (Ton)	Item 360-001 Concrete Pavement (Class-P/6")(SY)	Item 440-001 Reinforcement for Concrete	Item 500-001 Mobilizaton (LS)	Item 529-001 Concrete Curb (Class-A/TY II) (LF)	Item 540-001 Erosion control (LS)
0+00	14+20				See G6	1		1
0+25	0+63	17	7					
0+63	1+18	32	13					
1+18	1+88			202			140	
1+88	2+30			61			42	
2+30	2+70			116			80	
2+70	4+75			296			410	
4+75	5+20			130			90	
5+20	7+05			267			185	
8+00	8+37	20	8					
8+37	13+78	241	100					
13+78	14+20			149			84	
Total		309	128	1,221	--	1	1,031	1

\*Grant Requirement: Buy America\*

PROJECT LOCATION

CITY

COUNTY

STATE

BEAUMONT

JEFFERSON

TEXAS

WATERSHED


DITCH NO.

SHEET

100

110

G5




8TH STREET REPAIR PROJECT

ESTIMATE & QUANTITIES SHEET

WALLACE R. WILSON, P.E. No. 84857

DATE 04/19/2021

*Wallace R. Wilson P.E.*



NO. DATE

DRN

REVISION

APPROV.

Summary of Concrete Pavement						
Station to Station		Length (FT)	Width (FT)	Depth (IN)	Area (SY)	Volume (CY)
1+18	1+88	70	26	6	202	34
1+88	2+30	42	13	6	61	10
2+30	2+70	40	26	6	116	19
2+70	4+75	205	13	6	296	49
4+75	5+20	45	26	6	130	22
5+20	7+05	185	13	6	267	45
13+78	14+20	42	32	6	149	25
Total					1,221	204

Summary of Concrete Curb				
Station to Station		Sta. Length (FT)	Left/Right	Length (FT)
1+18	1+88	70	Lt/Rt	140
1+88	2+30	42	Lt	42
2+30	4+75	245	Lt/Rt	490
4+75	5+20	45	Lt/Rt	90
5+20	7+05	185	Lt	185
13+78	14+20	42	Lt/Rt	84
Total				1,031

Summary of Joint Seal			
Station to Station		Longitudinal Joint Length (FT)	Lateral Joints (FT)
1+18	7+05	587	913
Joint Seal is not paid for directly and shall be considered subsidiary to Item -360.			

Summary of Reinforcement							
Bar	Size	Weight (Lbs/Ft)	Length (L.F.)	Qty.	Total (L.F.)	Total Weight (Lbs)	Units
A1	No. 4	0.668	60.00	154	9,240	6,172	
A2	No. 4	0.668	45.00	14	630	421	
A3	No. 4	0.668	40.00	14	560	374	
A4	No. 4	0.668	122.3	756	9,321	6,227	
A5-Dowel Bar	1-1/8"	3.4	1.83	224	410	1,394	
A6-Tie Bar	No. 5	1.043	1.72	1,174	2,019	2,106	
A7	No. 5	1.043	60.00	18	1,080	1,126	
A8-Curb Dowel	No. 3	0.376	1.83	294	538	202	
Reinforcing Steel						18,023	LB
Concrete (Class-P)						204	CY
Concrete (Class-A)						10	CY
Reinforcement is not paid for directly and shall be considered subsidiary to Item -360.							

PROJECT LOCATION

CITY

COUNTY

STATE

BEAUMONT

JEFFERSON

TEXAS

WATERSHED


DITCH NO.

SHEET

100

110

G6




8TH STREET REPAIR PROJECT

QUANTITIES SUMMARY SHEET

WALLACE R. WILSON, P.E. No. 84857

DATE 04/19/2021



NO.

DATE

DRN

REVISION

APPROV.

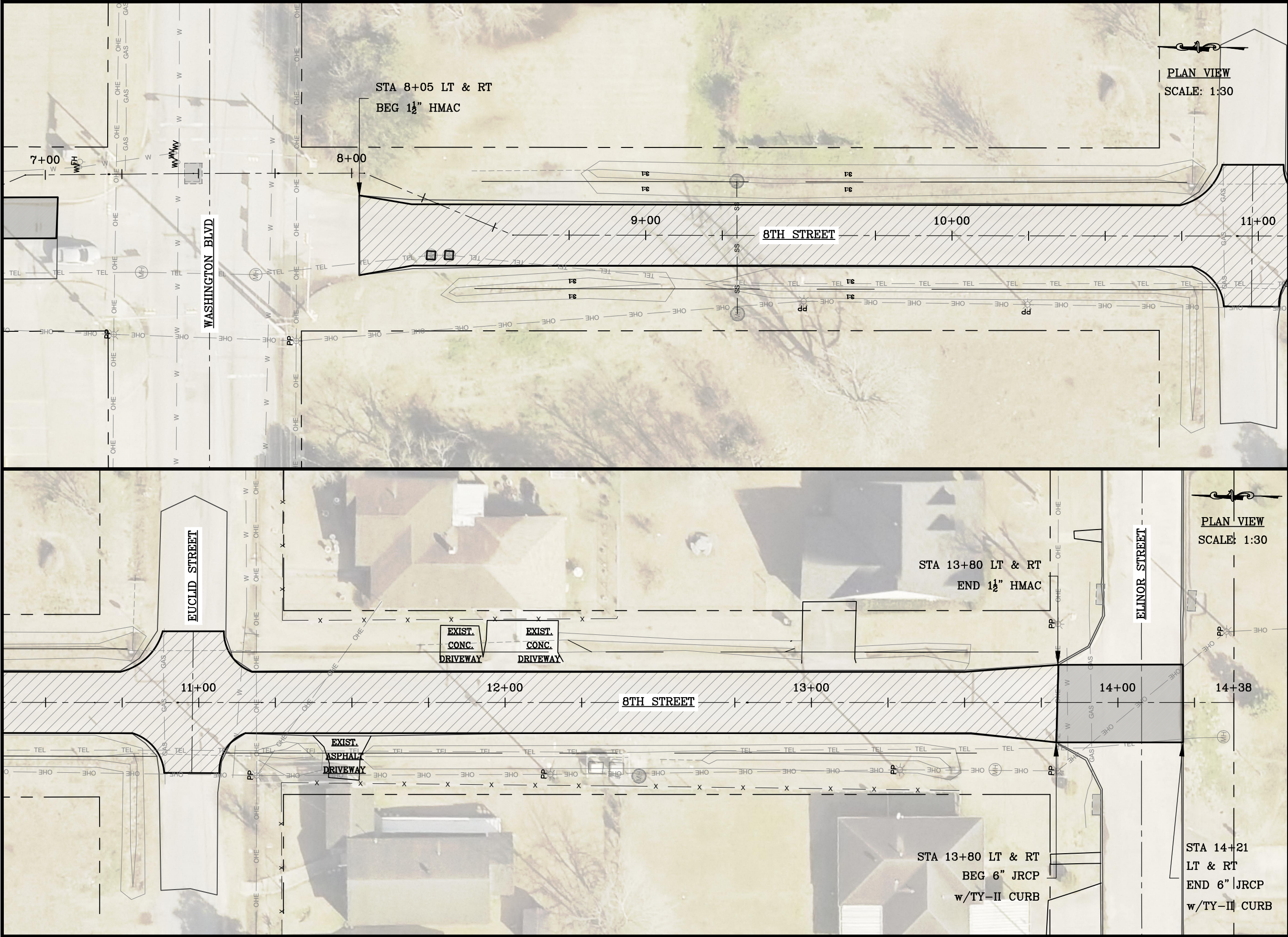
\*Grant Requirement: Buy America\*











6

5

4

3

2

1

NO. DATE

DRN

REVISION

APPROV.

STATE OF TEXAS

WALLACE R. WILSON

84857

PROFESSIONAL ENGINEER

LICENSE NO.

8TH STREET REPAIR PROJECT  
ROADWAY PLAN SHEET

WALLACE R. WILSON, P.E. No. 84857  
*Wallace R. Wilson P.E.*

DATE  
04/01/2021

PROJECT LOCATION

CITY	COUNTY	STATE
BEAUMONT	JEFFERSON	TEXAS
WATERSHED	DITCH NO.	SHEET
100	110	RDT02

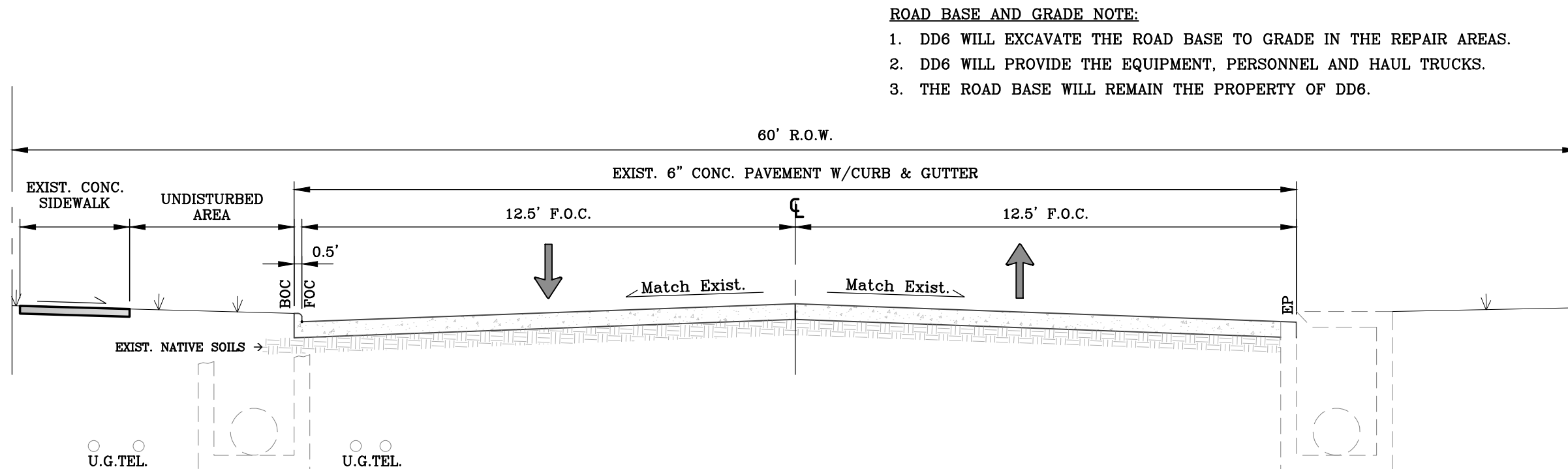
DRAINAGE DISTRICT NO. 6

JEFFERSON COUNTY, TEXAS

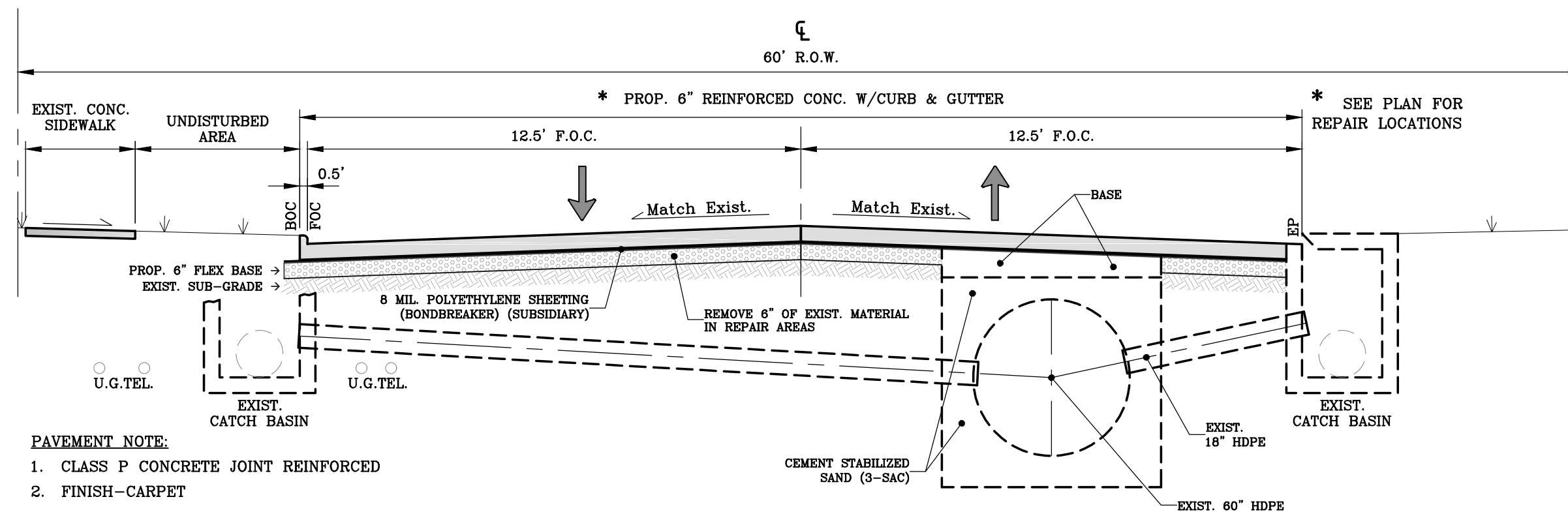
PLAN VIEW

SCALE: 1:30





EXIST. TYPICAL ROAD SECTION-CONCRETE  
ROAD CLASSIFICATION-LOCAL  
1:8



PAVEMENT NOTE:

1. CLASS P CONCRETE JOINT REINFORCED
2. FINISH-CARPET

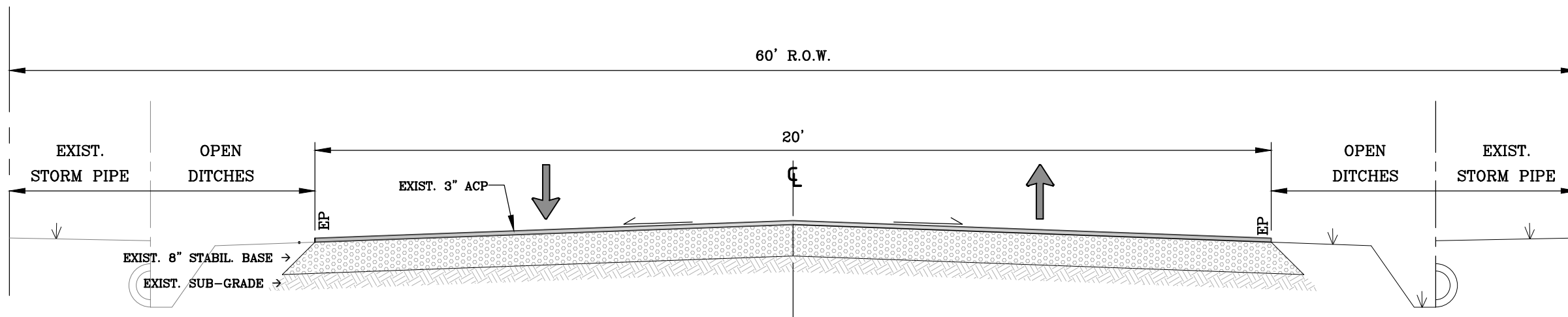
CURB & GUTTER NOTE:

1. CLASS A CONCRETE
2. FINISH-BROOM

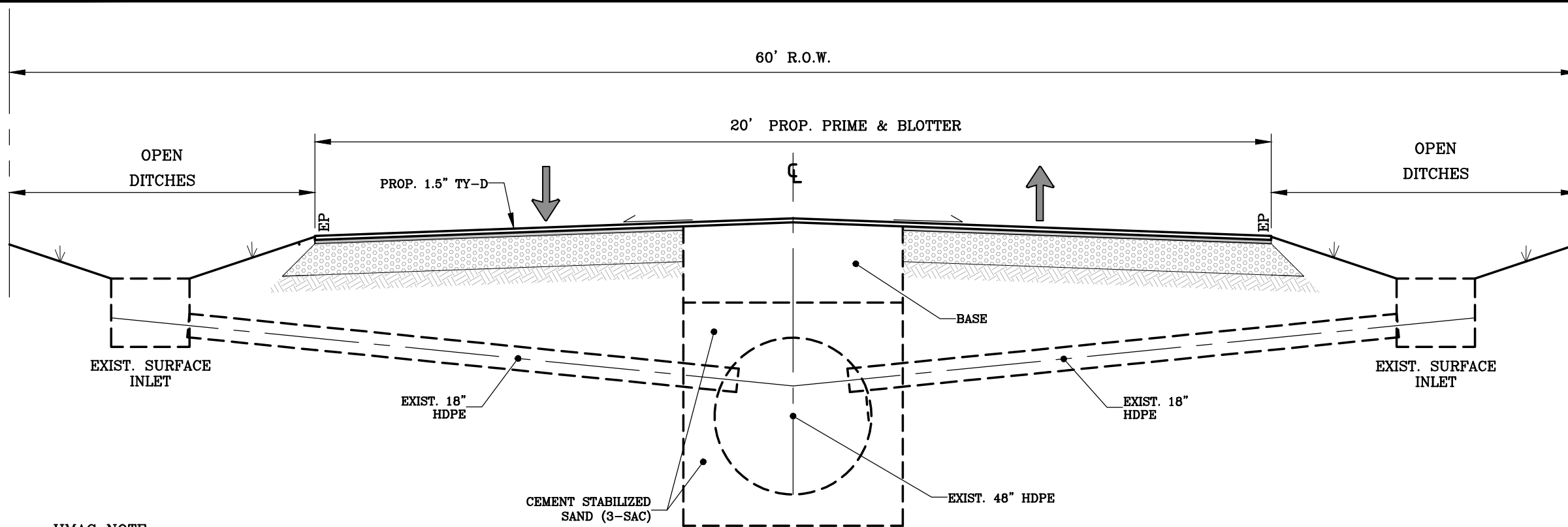
PROP. TYPICAL ROAD SECTION-CONCRETE  
ROAD CLASSIFICATION-LOCAL  
1:8

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EXIST. TYPICAL SECTION-ACP  
ROAD CLASSIFICATION-LOCAL  
1:8



HMAC NOTE:  
1. TY-D 64-22

PROP. TYPICAL SECTION-HMAC  
ROAD CLASSIFICATION-LOCAL  
1:8



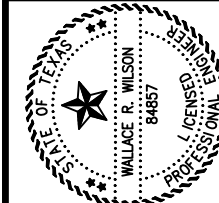
PROJECT LOCATION

CITY	COUNTY	STATE
BEAUMONT	JEFFERSON	TEXAS
WATERSHED	DITCH NO.	SHEET
100	110	RDT04

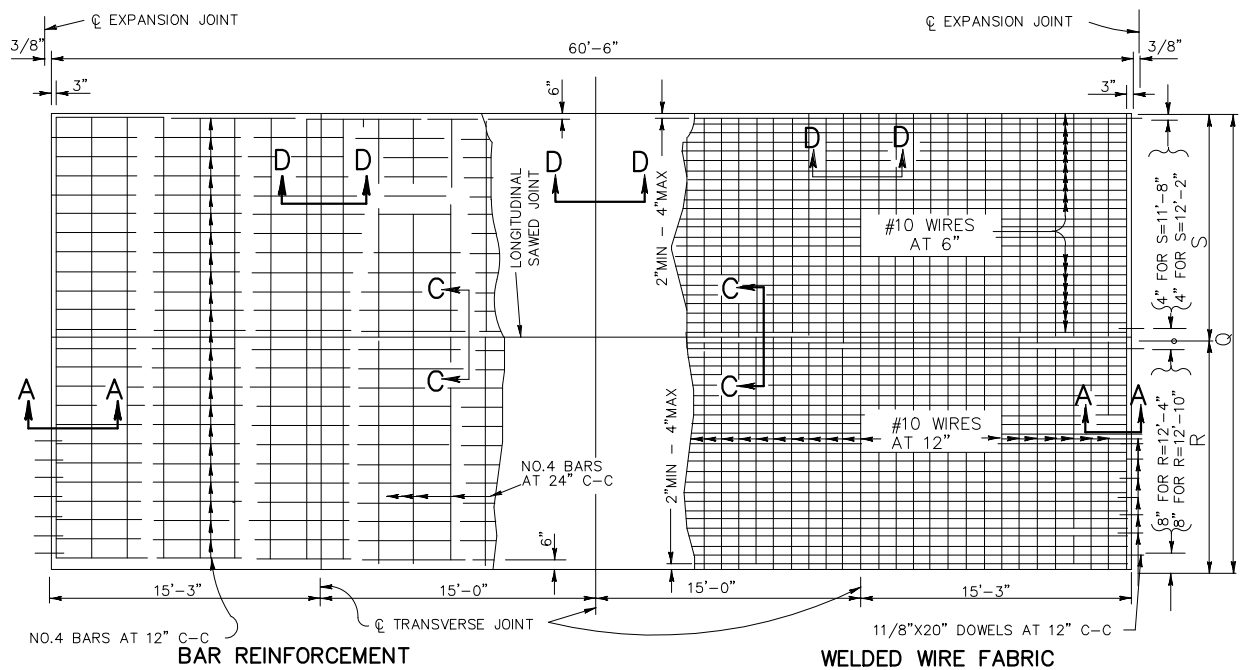
8TH STREET REPAIR PROJECT

TYPICAL SECTION - HMAC

WALLACE R. WILSON, P.E. No. 84857  
DATE 04/01/2021  
*Wallace R. Wilson P.E.*

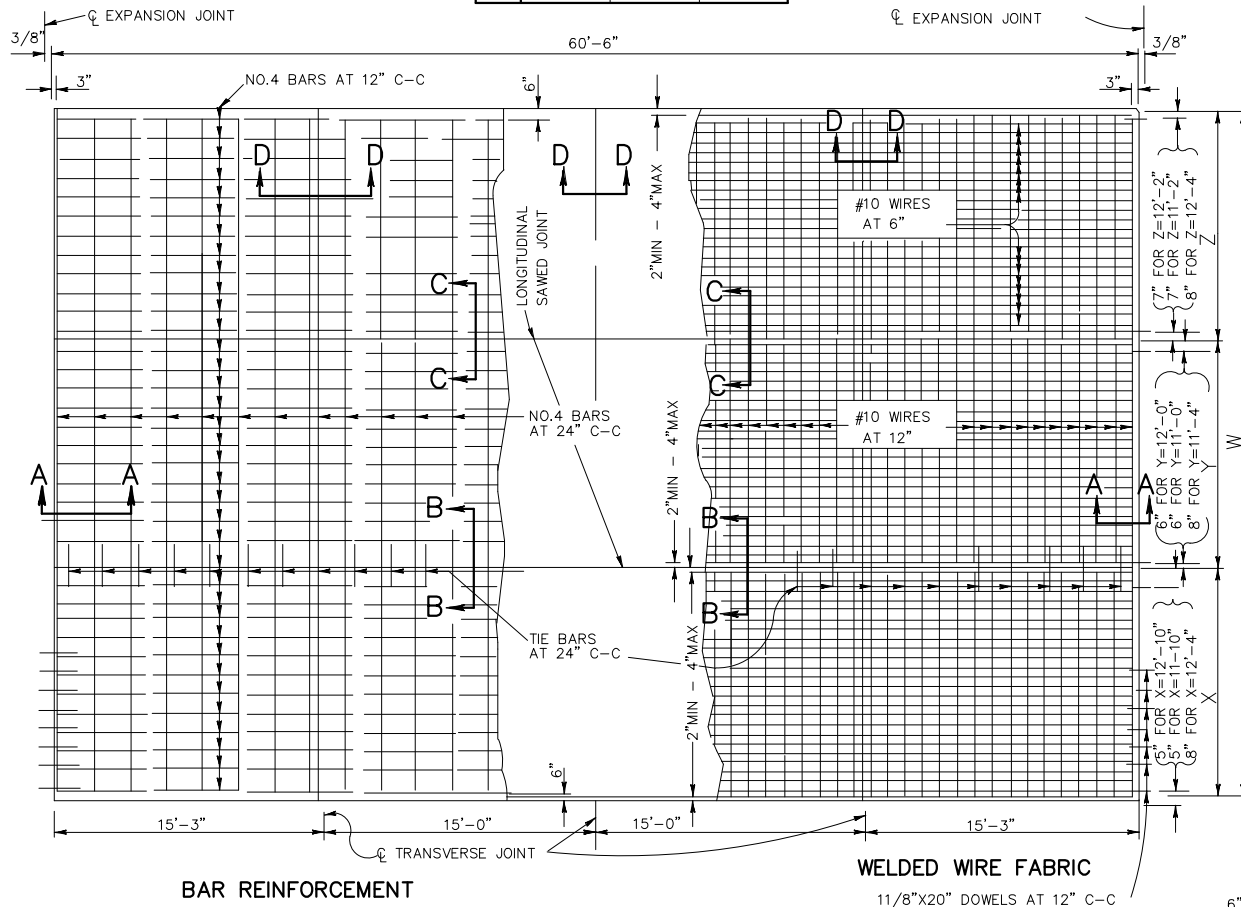


NO.	DATE	DRN	REVISION	APPROV.
6				
5				
4				
3				
2				
1				



TWO LANE PAVEMENT PLAN

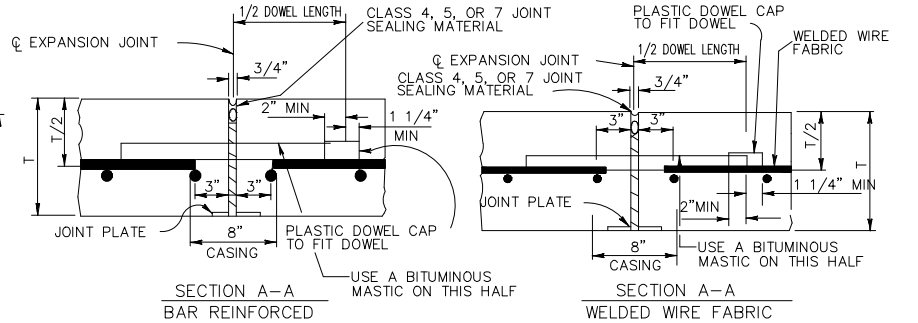
	WIDTH - Q		
	24'-0"	24'-6"	25'-0"
R	12'-4"	12'-4"	12'-10"
S	11'-8"	12'-2"	12'-2"



THREE LANE PAVEMENT PLAN

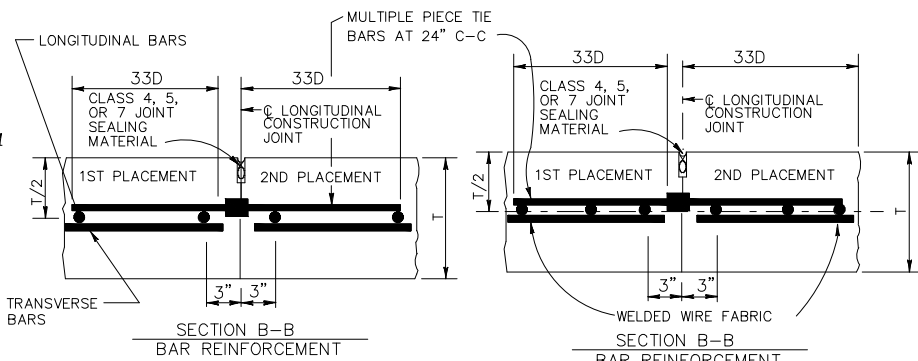
	WIDTH - W		
	37'-0"	36'-0"	34'-0"
X	12'-10"	12'-4"	11'-10"
Y	12'-0"	11'-4"	11'-0"
Z	12'-2"	12'-4"	11'-2"

D = DIAMETER  
R = RADIUS  
T = THICKNESS

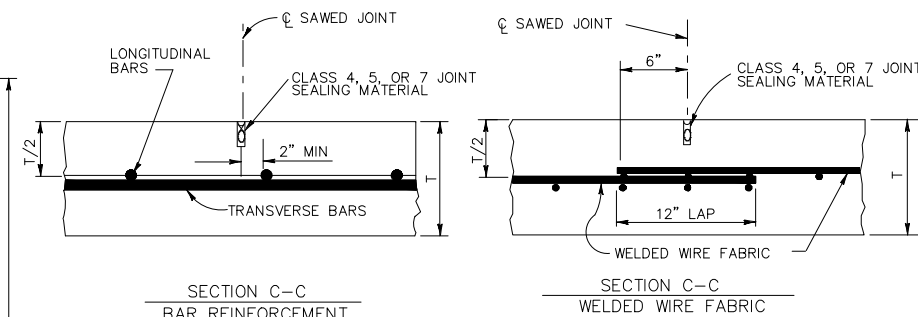


TRANSVERSE EXPANSION JOINTS

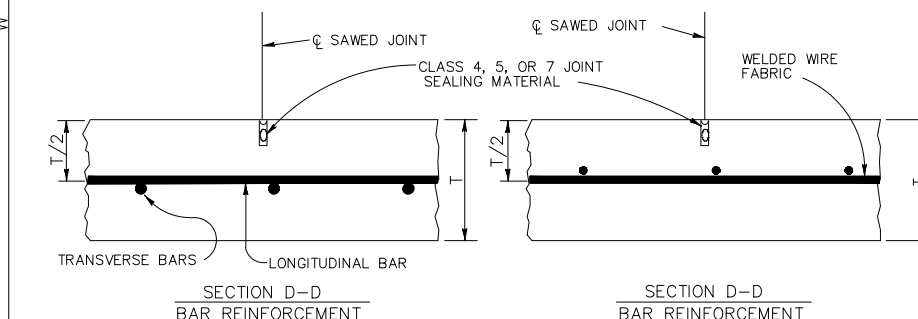
NOTE: DOWEL BARS CONFORMING TO ASTM A615 OR A616 GRADE 60 ARE ACCEPTABLE



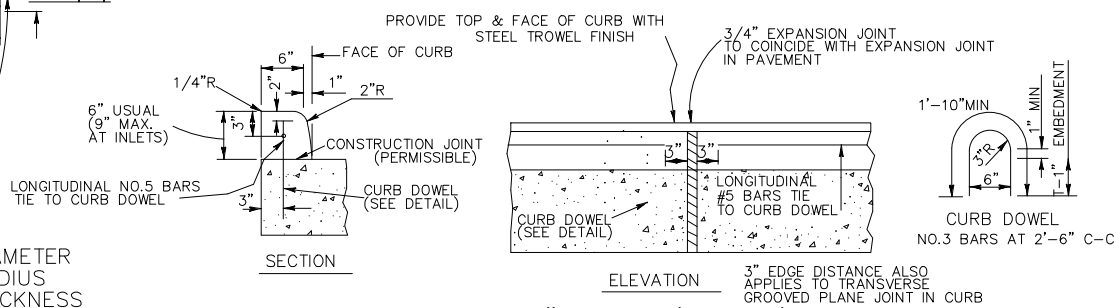
LONGITUDINAL CONSTRUCTION JOINTS



LONGITUDINAL SAWED JOINTS



TRANSVERSE SAWED JOINTS



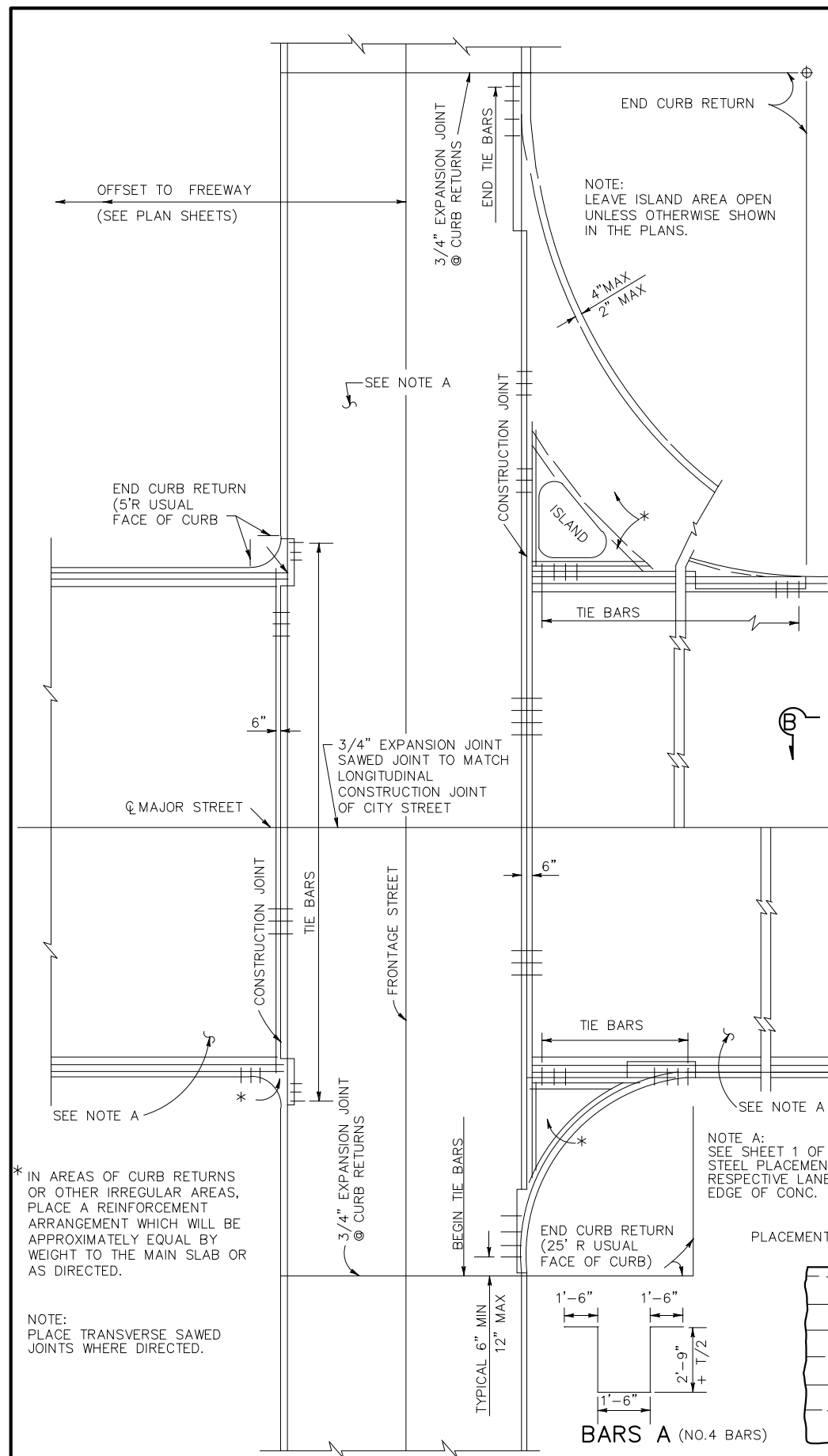
TYPICAL 6" CURB (DETAIL)

# GENERAL NOTES

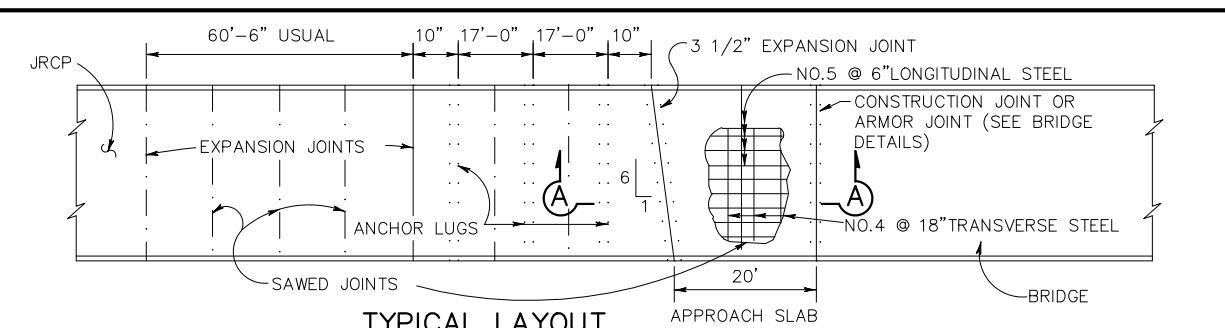
- MULTIPLE PIECE TIE BARS ARE REQUIRED AT LONGITUDINAL CONSTRUCTION JOINTS. USE MULTIPLE PIECE TIE BAR ASSEMBLIES WITH STOP TYPE COUPLINGS AND WITH THREADS ON THE BARS. ENSURE THE MULTIPLE PIECE TIE BAR ASSEMBLIES DEVELOP A MINIMUM ULTIMATE TENSILE STRENGTH EQUAL TO 1.25 TIMES THE YIELD STRENGTH OF THE TRANSVERSE BARS BEING JOINED. USE DEFORMED REINFORCING BARS FOR TIE BARS. TIE BAR ASSEMBLIES MADE FROM STEELS OTHER THAN ASTM GRADE 60 AND WITH DEFORMATIONS OTHER THAN ASTM STANDARD MAY BE USED IF IT CAN BE PROVEN TO THE ENGINEER THAT THEY ARE IN EVERY RESPECT THE EQUAL OF THE ASSEMBLIES SPECIFIED. LABORATORY TESTING OF THE PROPOSED ASSEMBLIES, AT THE CONTRACTOR'S EXPENSE, MAY BE REQUIRED.
- FORM CONSTRUCTION JOINTS WITH METAL OR WOOD FORMS EQUAL IN DEPTH TO THE NOMINAL DEPTH OF THE PAVEMENT OR BY OTHER MEANS APPROVED PRIOR TO THEIR USE.
- SAW LONGITUDINAL AND TRANSVERSE JOINTS AS SOON AS SAWING CAN BE ACCOMPLISHED WITHOUT DAMAGE TO THE PAVEMENT AND BEFORE 24 HOURS AFTER PLACING THE CONCRETE, THE EXACT TIME WILL BE APPROVED BY THE ENGINEER. PREFORMED JOINT WITH ASPHALT STRIP IS NOT ACCEPTABLE.
- LONGITUDINAL JOINTS ARE SHOWN OFFSET FOUR INCHES FROM THE THEORETICAL LANE LINE AND MAY BE OFFSET TO EITHER SIDE IF THE WIDTH OF THE WIRE FABRIC IS PROPERLY ADJUSTED.
- ONE OF THE LONGITUDINAL JOINTS OF PAVEMENT SLABS WIDER THAN TWO LANES MAY BE A CONSTRUCTION JOINT. FOR PAVEMENT SLABS WIDER THAN 15 FT. PROVIDE A LOGITUDINAL SAWED JOINT UNLESS OTHERWISE DIRECTED.
- FORM THE JOINT SEAL SPACE AT TRANSVERSE EXPANSION JOINTS BY USING A STRAIGHT FORM PLACED BEHIND THE LONGITUDINAL FLOAT. LOOSEN THE FORM AS SOON AS THE CONCRETE WILL RETAIN ITS SHAPE AND EDGE WITH AN APPROVED EDGING TOOL. TOOL BOTH EDGES OF LONGITUDINAL CONSTRUCTION JOINTS TO A 1/8IN. RADIUS AT THE PAVEMENT SURFACE.
- DO NOT DISCHARGE CONCRETE FROM THE MIXER DIRECTLY ON TOP OF OR ON THE SIDES OF THE EXPANSION JOINT ASSEMBLIES.
- LAP TRANSVERSE EDGES OF SHEETS OF WELDED WIRE FABRIC 12 INCHES EXCEPT AT TRANSVERSE EXPANSION JOINTS. LAP LONGITUDINAL EDGES 6 INCHES EXCEPT AT LONGITUDINAL CONSTRUCTION JOINTS.
- DOWEL BARS MAY BE COATED WITH STAINLESS STEEL, MONEL METAL, OR IN ACCORDANCE WITH THE ITEM "REINFORCING STEEL" SECTION ON EPOXY COATING; WITH A WELDED DOWEL ASSEMBLY SUPPORT, AS APPROVED. ENSURE THE CASING CONFORMS TO THE REQUIREMENTS OF ONE OF THE GRADES OF ASTM A167-70 OR A176-71 AND IS NOT LESS THAN 0.010 INCH THICK. PROVIDE A CASING AT LEAST 8 INCHES LONG AND THAT COVERS THE MIDDLE 8 INCHES OF THE DOWEL.
- SECURE DOWELS PARALLEL TO THE PAVEMENT SURFACE AND PERPENDICULAR TO THE JOINT WITH THE AID OF APPROVED WELDED WIRE BASKET ARRANGEMENTS. ENSURE WELDED WIRE BASKET ARRANGEMENTS DO NOT CROSS THE EXPANSION JOINT. UNIFORMLY COAT DOWELS WITH A BITUMINOUS MASTIC ON THE END WITH THE DOWEL CAP.
- DO NOT BEND TIE BARS AND DOWEL BARS. TO PREVENT DISPLACEMENT OF WIRE FABRIC BY CONCRETE PLACEMENT, TIE THE FABRIC PANEL TOGETHER AND TIE THE INITIAL FABRIC PANELS OF EACH SLAB TO THE DOWEL BASKET OR AS DIRECTED.
- TOOL PAVEMENT EDGES TO A RADIUS OF 1/8 IN. WITH AN APPROVED EDGING TOOL.
- DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS, AND CROWN-SLOPE ARE ELSEWHERE SHOWN ON THE PLANS.
- THE CONTRACTOR HAS THE OPTION OF USING WELDED WIRE FABRIC OR BAR REINFORCEMENT. LOCATE THE LONGITUDINAL STEEL AT THE CENTER OF THE SLAB. TAKE NECESSARY PRECAUTIONS TO INSURE THAT THE FINAL POSITION OF STEEL IS WITHIN 1/2 IN. OF THE SLAB CENTER. ENSURE THE LONGITUDINAL AND TRANSVERSE STEEL SPACING DOES NOT VARY MORE THAN ONE-TWELFTH OF SPACING SHOWN.
- LONGITUDINAL STEEL MAY BE SPLICED WITH 33 TIMES BAR DIAMETER LAPS.
- FOR LANE WIDTHS NOT SHOWN OR FOR VARIABLE PANEL LENGTHS AND WIDTHS, SPACE REINFORCING STEEL AND DOWELS AS DIRECTED.
- USE APPROVED BAR MAT CHAIRS. DO NOT EXCEED CHAIR SPACING OF 30 IN. C-C (TRANSVERSE) AND 48 IN. C-C (LONGITUDINAL). GALVANIZING THE CHAIRS IS NOT REQUIRED.
- OBTAIN BOARDS FOR EXPANSION JOINT FILLER FROM REDWOOD TIMBER.
- PROVIDE AND CONSTRUCT THE JOINT PLATE AS APPROVED.
- WHEN CURB IS PLACED SEPARATELY FROM THE CONCRETE PAVEMENT, PROVIDE THE REINFORCING STEEL AS SHOWN IN THE CURB DETAIL. THE CURB REINFORCING STEEL MAY BE OMITTED WHEN THE CURB IS PLACED MONOLITHICALLY.

(GENERAL NOTES CONTINUED ON SHEET 2 OF 2)

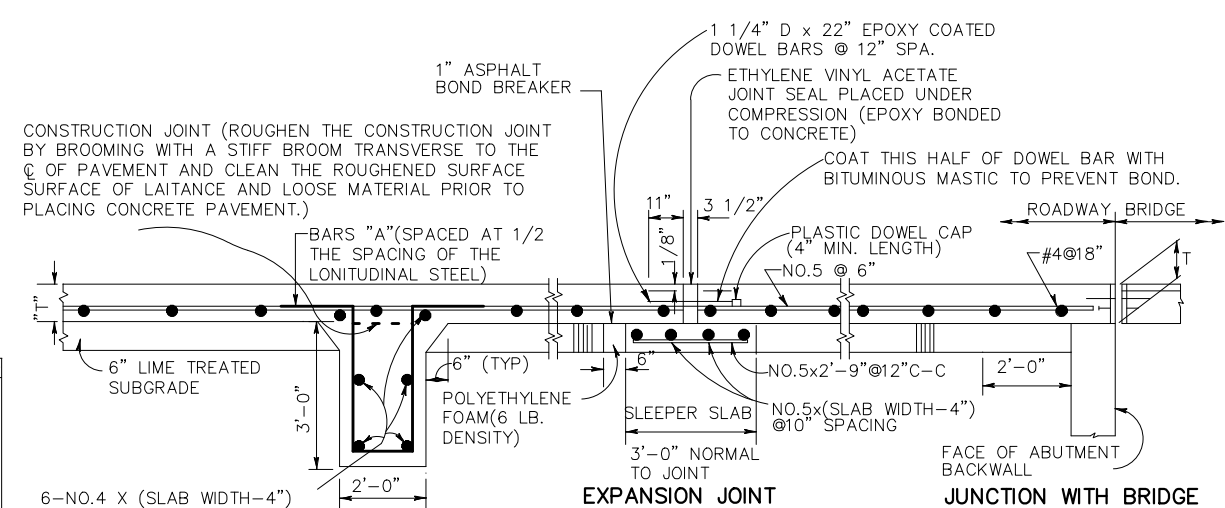
<b>Texas Department of Transportation</b> Houston District									
<b>JOINTED REINFORCED CONCRETE PAVEMENT DETAILS</b> (FOR PAVEMENT THICKNESS 10 INCHES OR LESS)									
<b>JRCP</b> SHEET 1 OF 2									
FILE: STDB-2.dgn	DN:	CK:	DW:	CK:					
© TxDOT MAR.2004	DIST	FED REG	PROJECT NO.		SHEET				
REVISIONS 5/05 2004 SPECS 7/2010 ADDED NOTE 8/2015 MODIFIED NOTES		HOU	6						
		COUNTY	CONTROL	SECT	JOB	HIGHWAY			



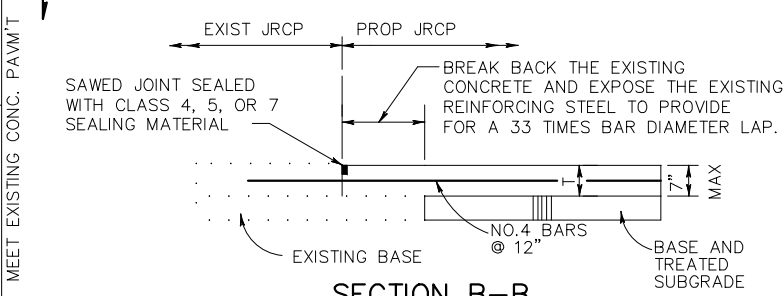
INTERSECTION OF MAJOR STREET WITH FRONTAGE STREET  
TYPICAL REINFORCING PLAN



TYPICAL LAYOUT  
(TERMINAL ANCHORAGE AT BRIDGES)



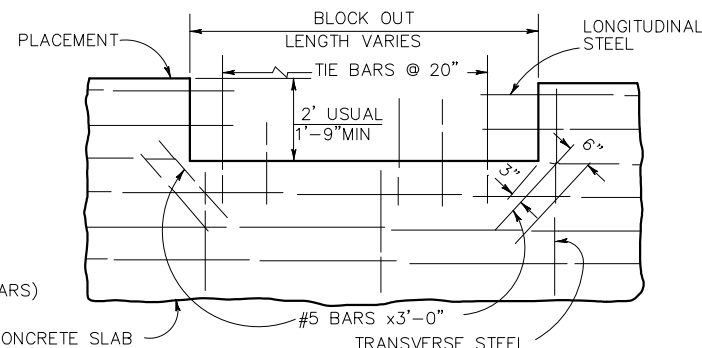
SECTION A-A



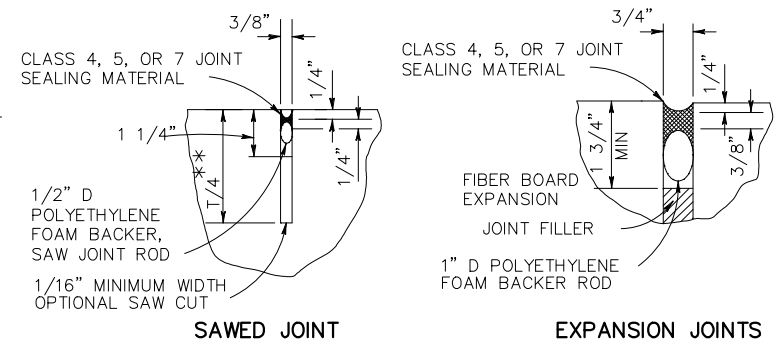
SECTION B-B  
(FOR PROPOSED PAVEMENT DEPTHS OF 7" MAX)

REPLACE ANY BENT LONGITUDINAL REINFORCING. IF THERE IS NOT SUFFICIENT EXPOSED REINFORCING TO PROVIDE A MINIMUM OF A 33 TIMES BAR DIAMETER LAP, REMOVE THE EXISTING PAVEMENT AND SUFFICIENTLY EXPOSE THE EXISTING REINFORCING TO PROVIDE A 33 TIMES BAR DIAMETER LAP. REPLACE ANY SHEAR BARS THAT ARE DISTURBED, BY DRILLING AND GROUTING AS REQUIRED BY NOTE #29. PERFORM THIS CORRECTIVE ACTION AT NO EXPENSE TO THE DEPARTMENT.

NOTE A:  
SEE SHEET 1 OF 2 FOR  
STEEL PLACEMENT FOR THE  
RESPECTIVE LANE WIDTHS.  
EDGE OF CONC.

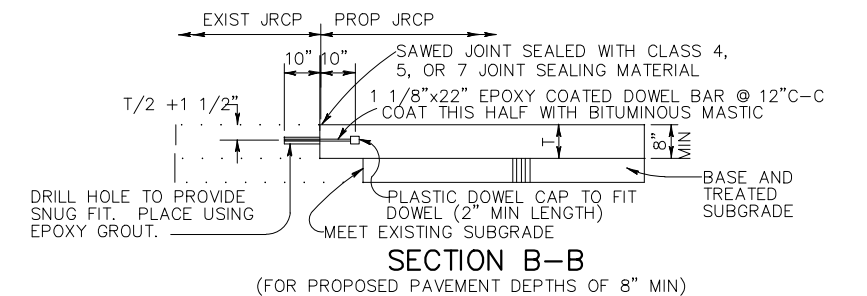


DETAIL OF BLOCKOUT



JOINT SEALING DETAILS

- GENERAL NOTES (CONTINUED FROM SHEET 1 OF 2)
- CONSTRUCT ANCHOR LUGS, EXPANSION JOINTS, AND SLEEPER SLABS AS DETAILED IN SECTION A-A. THESE WILL BE PAID FOR IN ACCORDANCE WITH ITEM, "CONCRETE PAVEMENT TERMINALS."
  - REINFORCING STEEL FOR TERMINAL ANCHOR SYSTEMS MAY BE GRADE 40 OR GRADE 60.
  - PLACE CONCRETE FOR ANCHOR LUGS AS SOON AS POSSIBLE AFTER COMPLETING EXCAVATION, TO PRESERVE THE INHERENT SOIL CHARACTERISTICS. EXCAVATING FOR AND PLACING CONCRETE FOR ANCHOR SYSTEM MAY BE IN PREFORMED SECTIONS CORRESPONDING TO THE WIDTH OF PAVING PLACEMENT.
  - APPLY A STEEL TROWEL FINISH TO SLEEPER SLABS AND AND COAT WITH AN ASPHALT BOND BREAKER.
  - THE DETAILS FOR ANCHORS, LUGS, EXPANSION JOINTS, AND SLEEPER SLABS ARE NOT APPLICABLE UNLESS SHOWN ELSEWHERE IN THE PLANS.
  - APPROACH SLAB WILL BE PAID FOR IN ACCORDANCE WITH THE ITEM "CONCRETE STRUCTURES."
  - WITHIN 5 MINUTES OF SAWING, COMPLETELY REMOVE THE RESULTING SLURRY FROM THE JOINT BY FLUSHING WITH HIGH PRESSURE WATER. THEN ALLOW THE JOINT TO DRY FOR A MINIMUM OF 48 HOURS BEFORE SANDBLASTING THE JOINT.
  - DO NOT SHEAR CUT DOWEL BARS.
  - SIZE ADDITIONAL SHEAR BARS AS LONGITUDIAL BARS AND SPACE THEM MIDWAY BETWEEN ALTERNATE LONGITUDINAL BARS ALONG THE TRANSVERSE CONSTRUCTION JOINT FORMED AT THE LEAVE-OUT.
  - IF THE CONCRETE DESIGN REQUIRES GREATER THAN 5.5 SACKS OF CEMENTITIOUS MATERIAL PER CUBIC YARD, WRITTEN APPROVAL BY THE AREA ENGINEER WILL BE REQUIRED. ENSURE CONCRETE PAVEMENT MIXES PLACED FROM APRIL 1 TO OCTOBER 31 CONTAIN A MINIMUM OF 25 PERCENT BY WEIGHT OF CLASS "F" FLY ASH.
  - IN LOCATIONS WHERE THE PLANS CALL FOR FAST TRACK CONCRETE PAVEMENT IN LIEU OF JRCP (LAID ON COMPACTED OR STABILIZED SUBGRADE), USE DETAILS IN THIS STANDARD IN CONJUNCTION WITH THE APPROPRIATE FAST TRACK CONCRETE SPECIFICATION. IF THE JRCP IS LAID UPON A BASE STRUCTURE, ADD 3" TO THE FAST TRACK PAVEMENT THICKNESS TO COMPENSATE FOR THE BASE.



**Texas Department of Transportation**  
Houston District

**JOINTED REINFORCED CONCRETE PAVEMENT DETAILS**

EXPANSION JOINT DESIGN  
(FOR PAVEMENT THICKNESS 10 INCHES OR LESS)

JRCP SHEET 2 OF 2

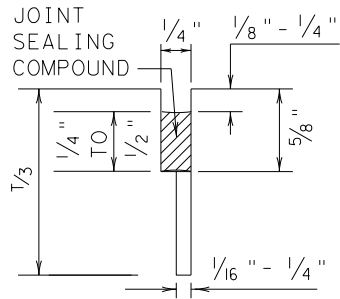
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© TxDOT MAR.2004	DIST	FED REG	PROJECT NO.	SHEET
REVISIONS 5/05 2004 SPECS 7/2010 ADDED NOTE 9/2013 ADDED NOTE 8/2015 MODIFIED NOTES	HOU	6		
	COUNTY	CONTROL	SECT	JOB
				HIGHWAY



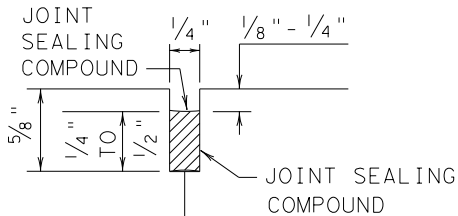
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DATE:  
FILE:

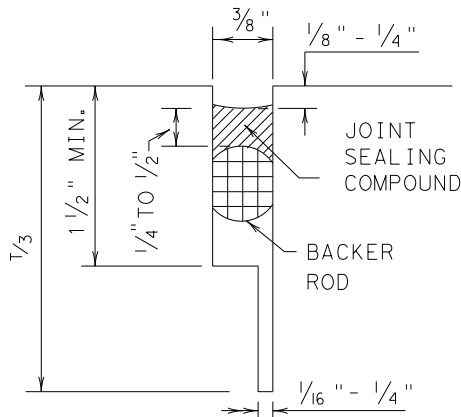
## METHOD B: JOINT SEALING COMPOUND



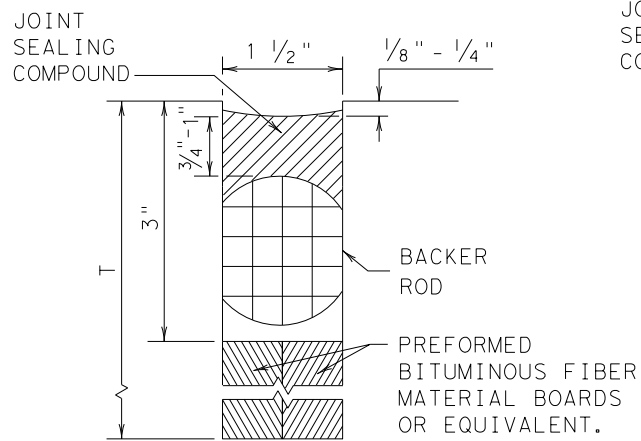
LONGITUDINAL SAWED  
CONTRACTION JOINT



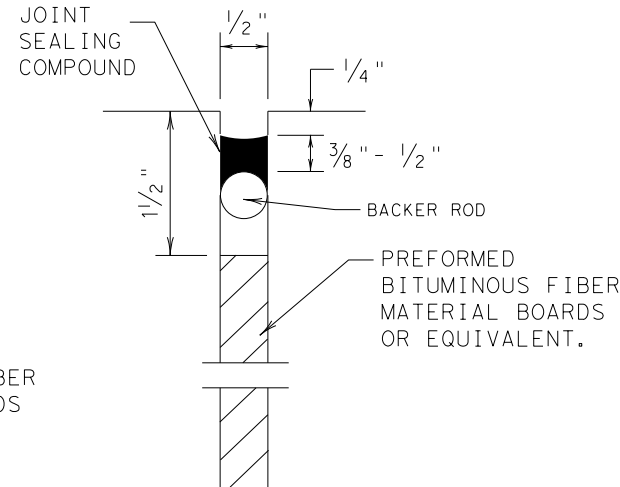
LONGITUDINAL OR TRANSVERSE  
CONSTRUCTION JOINT



TRANSVERSE SAWED  
CONTRACTION JOINT

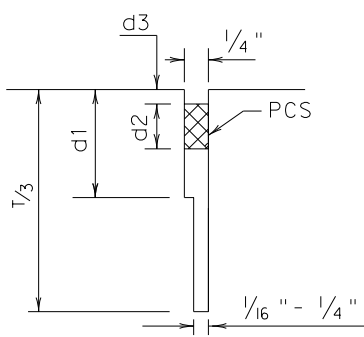


TRANSVERSE FORMED  
EXPANSION JOINT

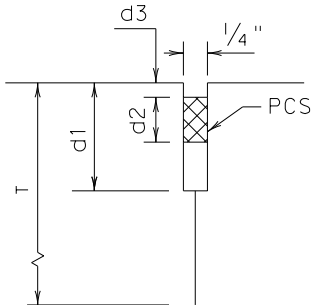


FORMED  
ISOLATION JOINT

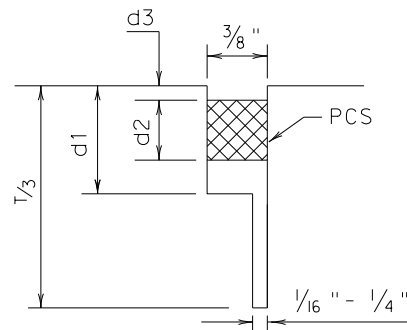
## METHOD A: PREFORMED COMPRESSION SEALS (PCS) (DMS-6310 CLASS 6)



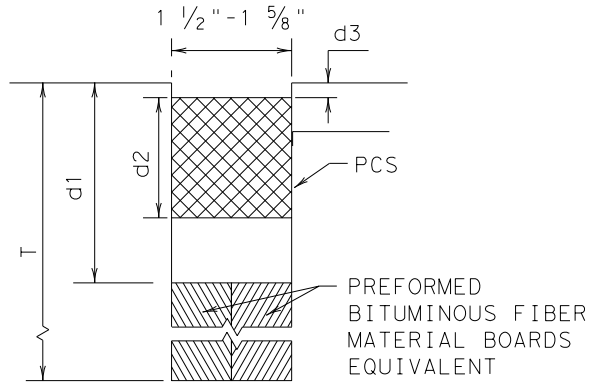
LONGITUDINAL SAWED  
CONTRACTION JOINT



LONGITUDINAL  
CONSTRUCTION JOINT



TRANSVERSE SAWED  
CONTRACTION JOINT



TRANSVERSE FORMED  
EXPANSION JOINT

## GENERAL NOTES

1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. THE JOINT RESERVOIR FOR SEALANT OR PCS SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS AND THE SAWED JOINTS.
4. DIMENSIONS d1, d2, AND d3 SHOWN IN METHOD A SHALL BE IN ACCORDANCE WITH THE PREFORMED COMPRESSION SEAL MANUFACTURER'S RECOMMENDATION.
5. REFER TO DMS-6310 "JOINT SEALANTS AND FILLERS" FOR THE CLASSIFICATIONS.
6. FOR SAWED LONGITUDINAL JOINT, LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT, USE JOINT SEALANT CLASS 5 OR 8 UNLESS OTHERWISE SHOWN ON THE PLAN OR APPROVED.
7. FOR TRANSVERSE SAWED CONTRACTION, TRANSVERSE FORMED EXPANSION JOINT, AND ISOLATION JOINT USE JOINT SEALANT CLASS 5 OR 8 AT NEW JOINTS. USE JOINT SEALANT CLASS 4,5,7,OR 8 FOR MAINTAINING EXISTING JOINTS.
8. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 "CLEANING AND SEALING JOINTS" OR ITEM 713 "CLEANING AND SEALING JOINTS AND CRACKS (CONCRETE PAVEMENT)".
9. ISOLATION JOINTS ACCOMMODATE HORIZONTAL AND VERTICAL MOVEMENTS THAT OCCUR BETWEEN A PAVEMENT AND A STRUCTURE. ISOLATION JOINTS MAY BE USED FOR BRIDGE ABUTMENTS, INTERSECTIONS, CURB AND GUTTER, OLD AND NEW PAVEMENTS, OR AROUND DRAINAGE INLETS, MANHOLES, FOOTINGS AND LIGHTING STRUCTURES.



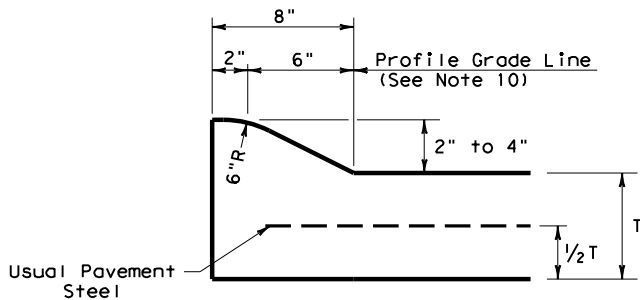
## CONCRETE PAVING DETAILS JOINT SEALS

JS-14

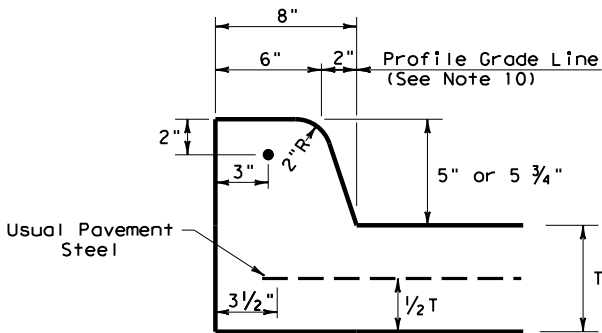
FILE: js14.dgn	DN: TxDOT	DN: HC	DN: HC	CK: AN
© TxDOT: DECEMBER 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	

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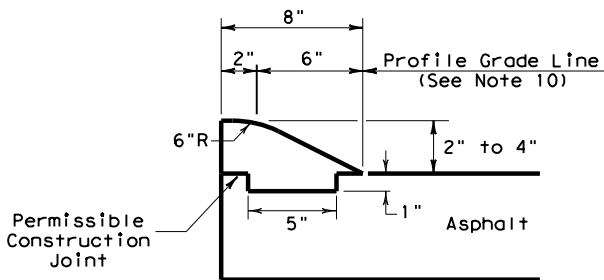
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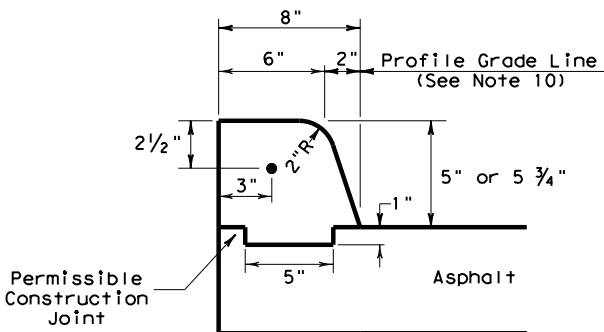
TYPE I CURB (MONOLITHIC)  
2" - 4" HEIGHT



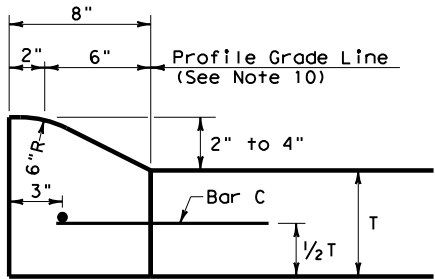
TYPE II CURB (MONOLITHIC)  
5" - 5 3/4" HEIGHT



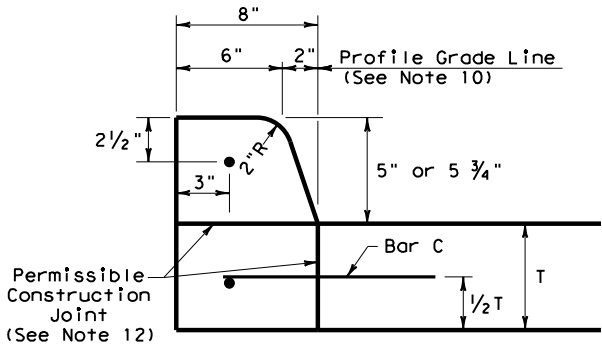
TYPE III CURB (KEYED)  
2" - 4" HEIGHT



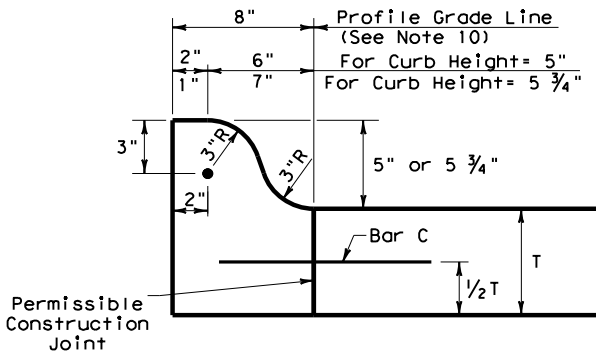
TYPE IV CURB (KEYED)  
5" - 5 3/4" HEIGHT



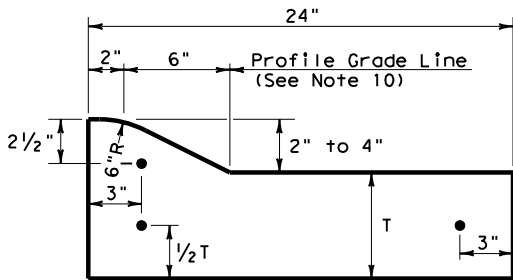
TYPE I CURB  
2" - 4" HEIGHT



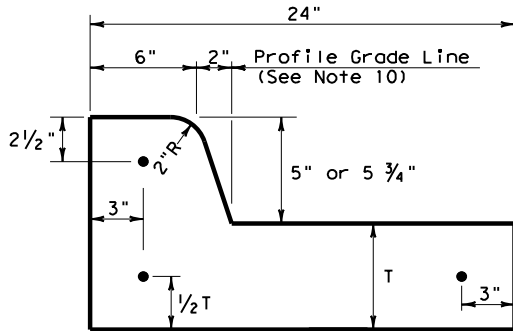
TYPE II CURB  
5" - 5 3/4" HEIGHT



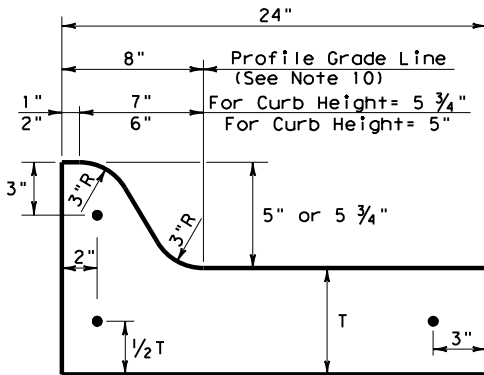
TYPE IIa CURB  
5" - 5 3/4" HEIGHT



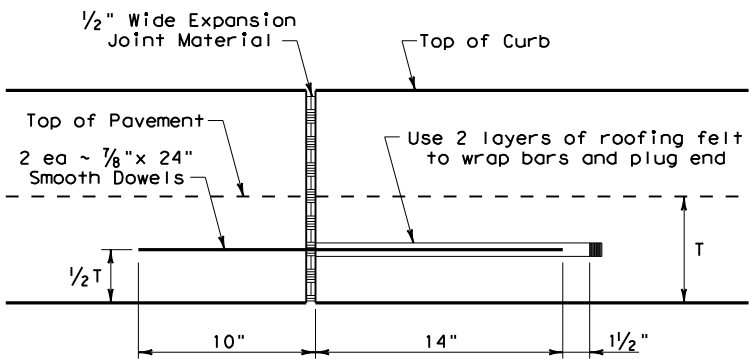
TYPE I CURB AND GUTTER  
2" - 4" HEIGHT



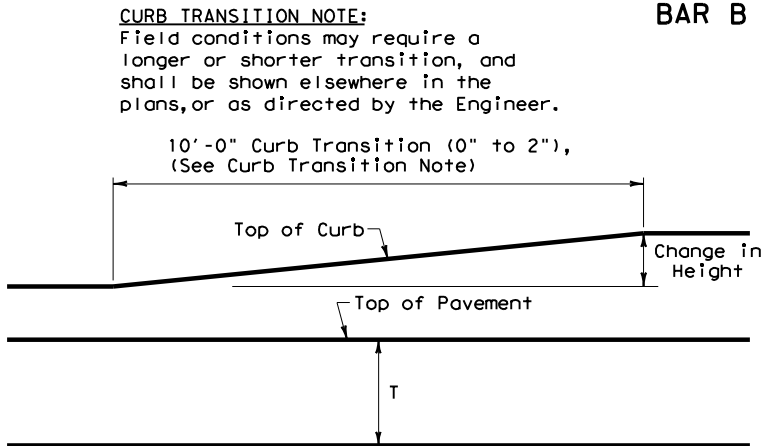
TYPE II CURB AND GUTTER  
5" - 5 3/4" HEIGHT



TYPE IIa CURB AND GUTTER  
5" - 5 3/4" HEIGHT



EXPANSION JOINT DETAIL

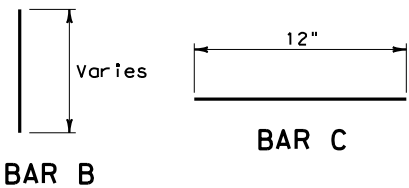


CURB TRANSITION


Note: To be paid for as Highest Curb

GENERAL NOTES

1. All materials and construction shall be in accordance with Item 529, "Concrete Curb, Gutter, and Combined Curb and Gutter."
2. Concrete shall be Class A.
3. When reinforcing bars are used, they shall be No.4 unless otherwise shown. The use of fiber reinforced concrete in lieu of reinforcing steel is acceptable. Use fibers meeting the requirements of DMS 4550, "Fibers for Concrete," and dose fibers in accordance with Material Producers List (MPL) "Fibers for Class A and B Concrete Applications."
4. Round exposed sharp edges with a rounding tool, to a minimum radius of 1/4 inch.
5. All existing curbs and driveways to be removed shall be sawed or removed at existing joints.
6. Where concrete curb is to be placed on existing concrete pavement, Bar B may be drilled and the grouted in place, or may be inserted into fresh concrete.
7. Expansion and contraction joints shall be constructed to match pavement joints in all curbs and curb and gutter adjacent to jointed concrete pavement. Where placement of curb or curb and gutter is not adjacent to concrete pavement, expansion joints shall be provided at structures, curb returns at streets, and at locations directed by The Engineer.
8. Vertical and horizontal dowel bars and transverse reinforcing bars shall be placed at four feet C-C.
9. Dimension 'T' shown is the thickness of concrete pavement. When curb is installed adjacent to flexible pavement dimension 'T' is 8" maximum.
10. Usual profile grade line. Refer to typical sections and plan-profile sheets for exact locations.
11. One-half inch expansion joint material shall be provided where curb or curb and gutter is adjacent to sidewalk or riprap.
12. When horizontal permissible construction joints are used, the longitudinal pavement steel shall be placed in accordance with pavement details shown elsewhere in the plans. Reinforcing steel for curb section shall then conform to that required for concrete curb.
13. Bar B used as needed to support curb reinforcing steel during concrete placement.

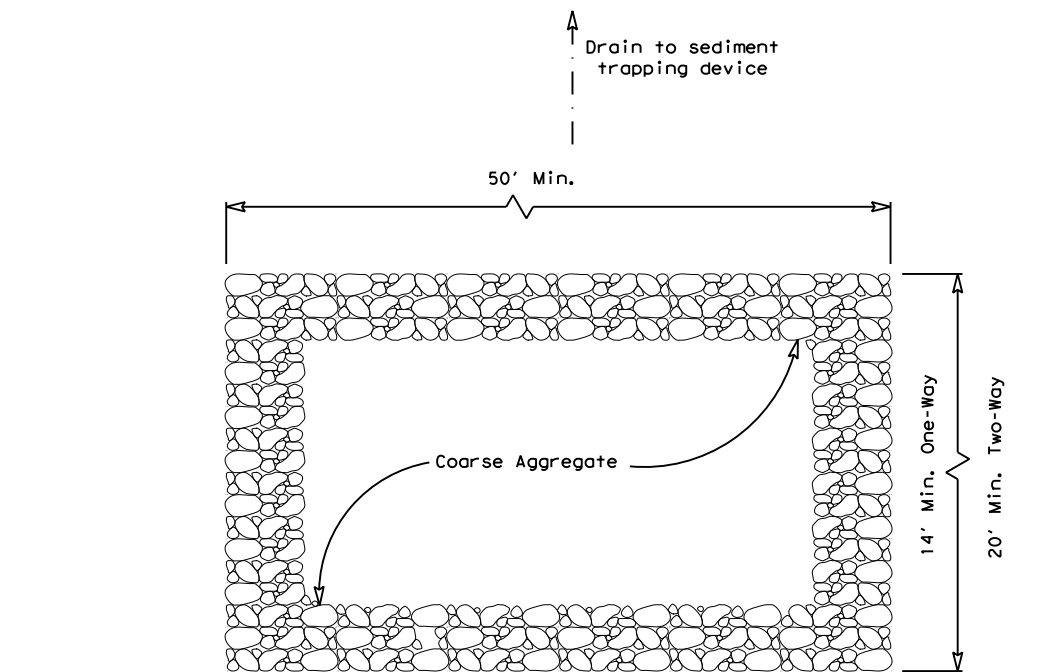


CURB TRANSITION NOTE:  
Field conditions may require a longer or shorter transition, and shall be shown elsewhere in the plans, or as directed by the Engineer.

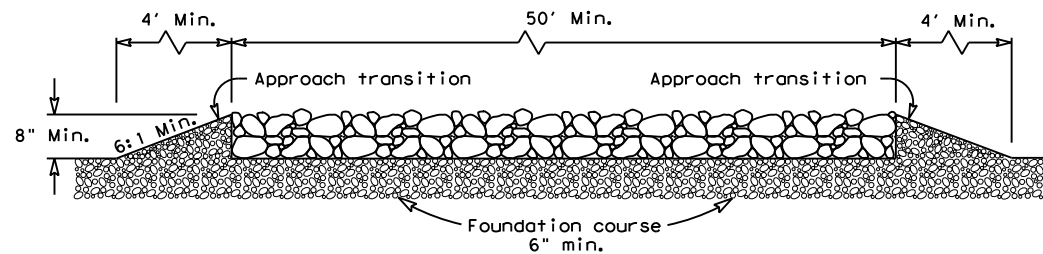
 <b>Texas Department of Transportation</b>				<b>Design Division Standard</b>	
<div>CONCRETE CURB AND CURB AND GUTTER</div>					
<div>CCCCG-21</div>					
FILE: cccg21.dgn		DN: TxDOT	CK: AN	DW: SS	CK: KM
© TxDOT: FEBRUARY 2021		CONT	SECT	JOB	HIGHWAY
REVISIONS					
		DIST	COUNTY		SHEET NO.

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DATE: \$DATES\$  
FILE: \$FILES\$



PLAN VIEW

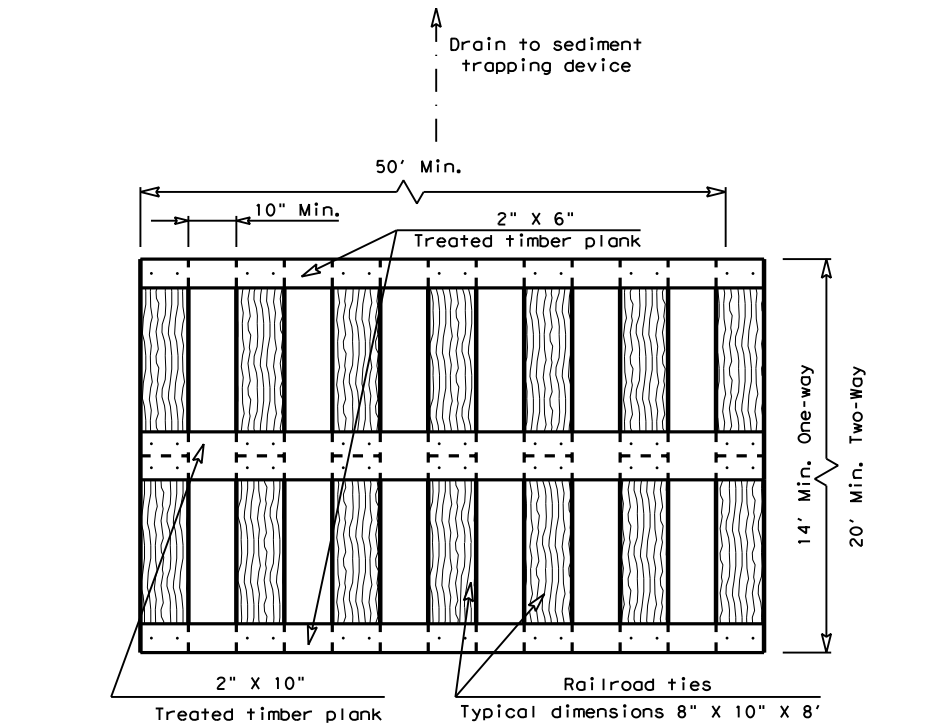


ELEVATION VIEW

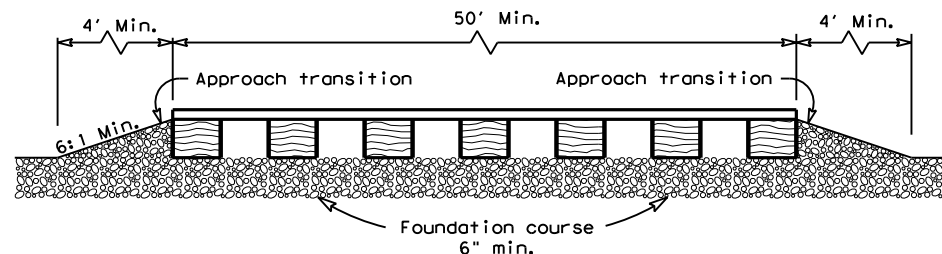
CONSTRUCTION EXIT (TYPE 1)  
ROCK CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4" to 8".
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materials approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



PLAN VIEW

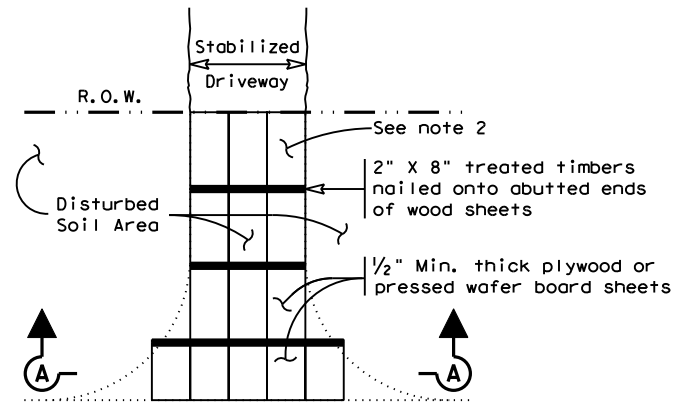


ELEVATION VIEW

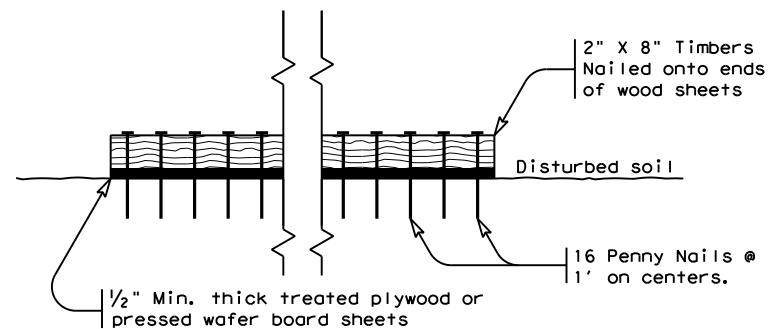
CONSTRUCTION EXIT (TYPE 2)  
TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with 1/2" x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



PLAN VIEW



SECTION A-A  
CONSTRUCTION EXIT (TYPE 3)  
SHORT TERM

GENERAL NOTES (TYPE 3)

1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.



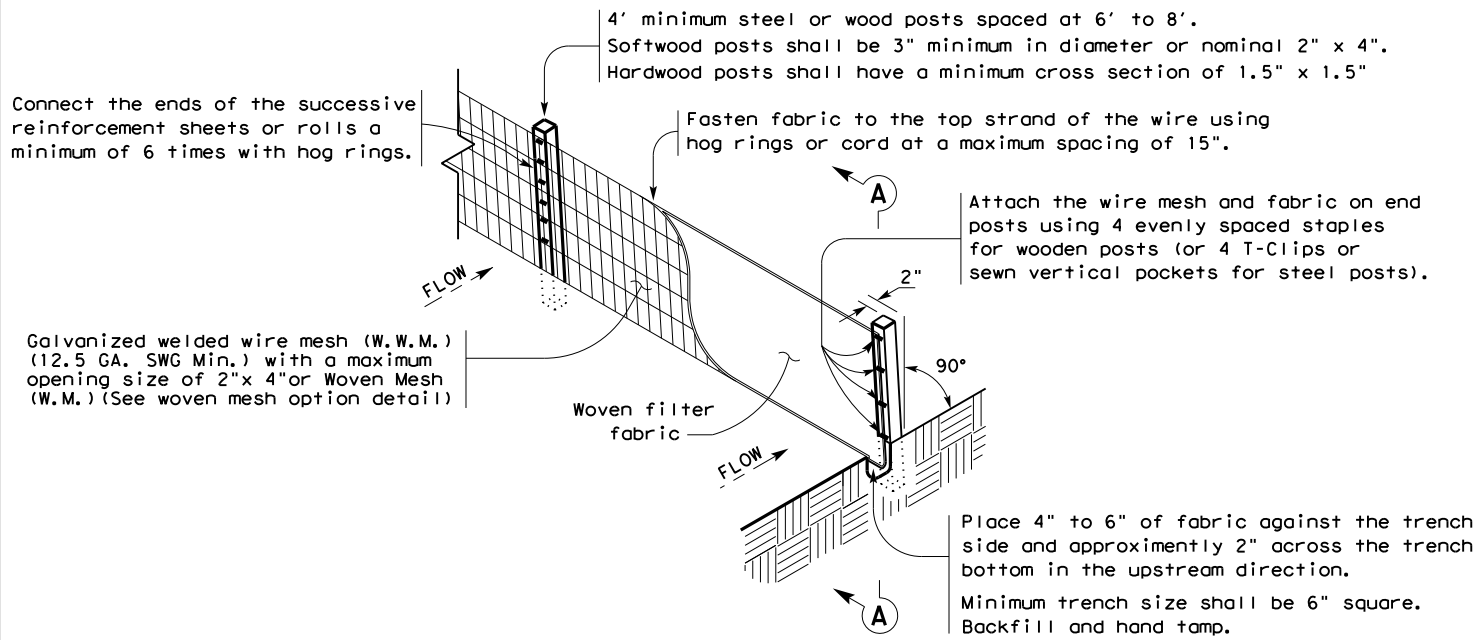
TEMPORARY EROSION,  
SEDIMENT AND WATER  
POLLUTION CONTROL MEASURES  
CONSTRUCTION EXITS  
EC(3)-16

FILE: ec316	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	\$CS\$	\$SS\$	\$JS\$	\$HWYS\$
	DIST	COUNTY		SHEET NO.
	\$DST\$	\$CTY\$	\$EC(3A-16\$	



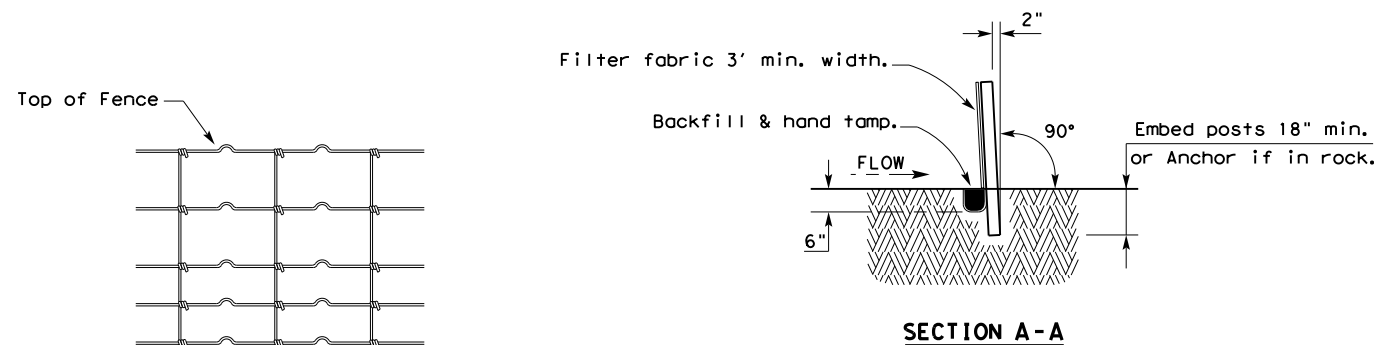
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DATE  
FILE



#### TEMPORARY SEDIMENT CONTROL FENCE

SCF



#### HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA. SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

#### SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT<sup>2</sup>. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

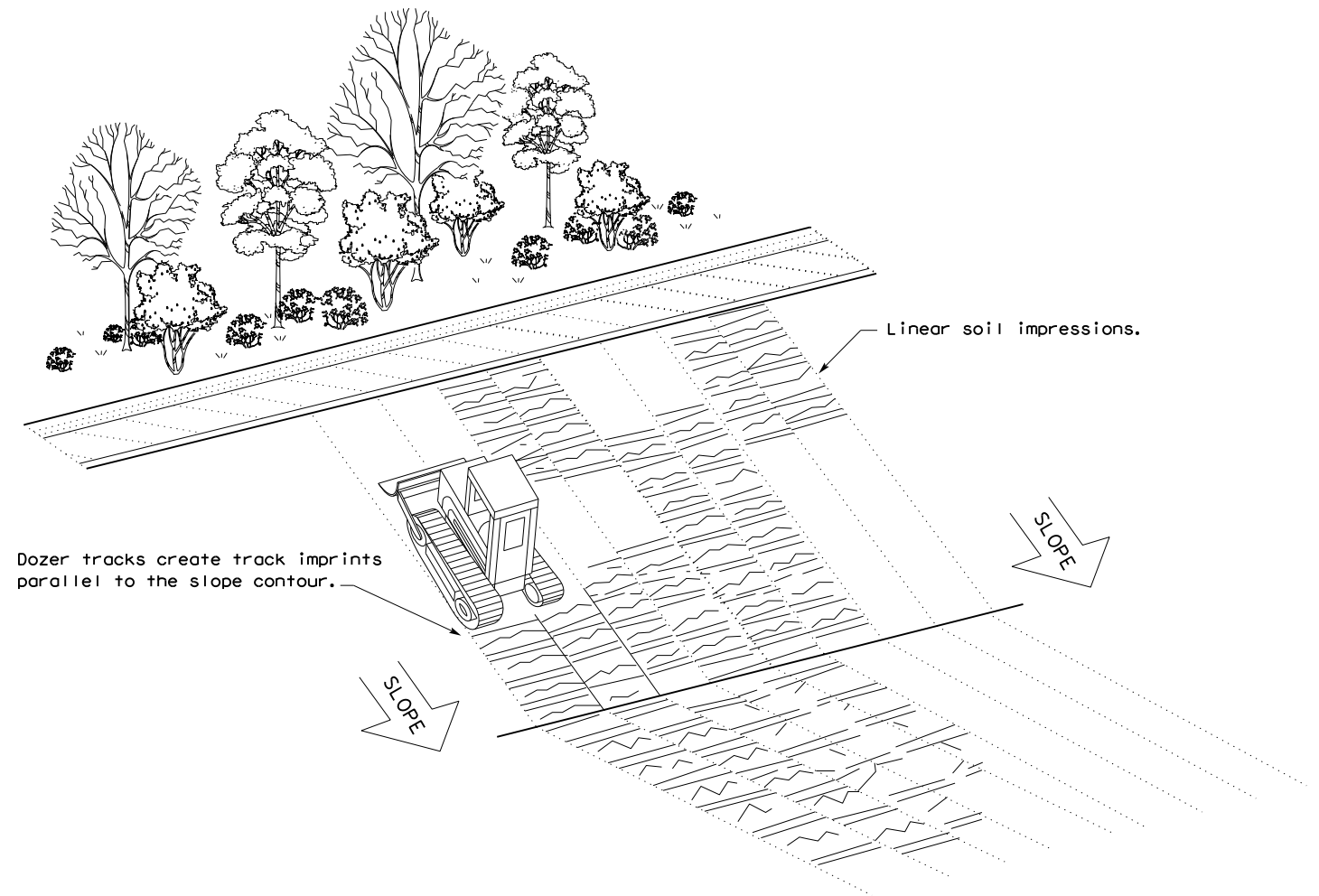
#### LEGEND

Sediment Control Fence


SCF

#### GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continuous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.

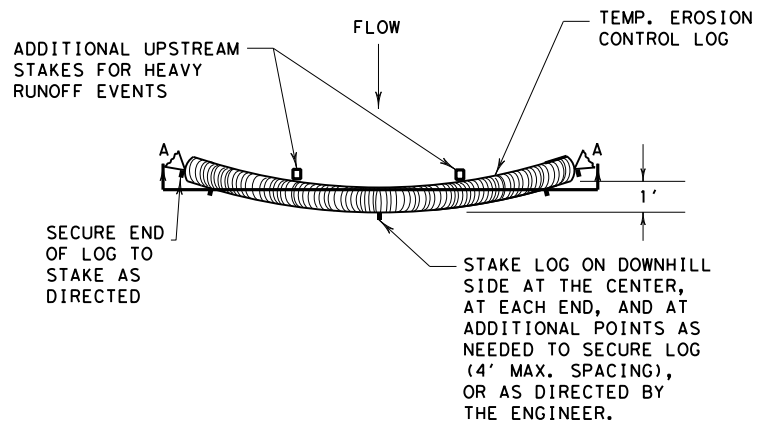


#### VERTICAL TRACKING

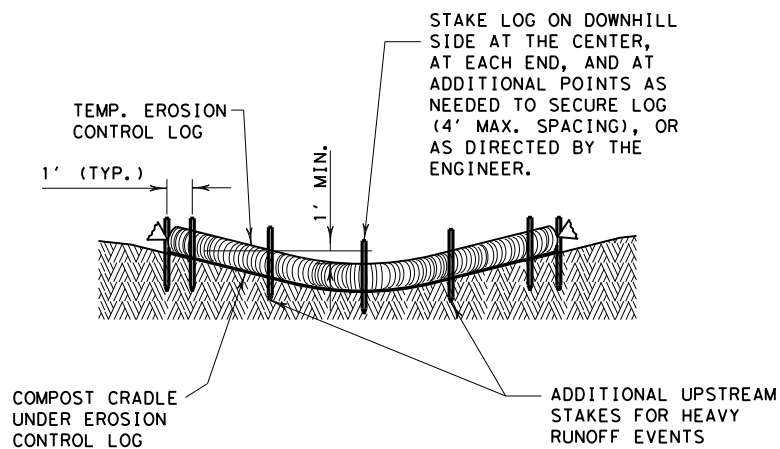
 Texas Department of Transportation				Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES FENCE & VERTICAL TRACKING					
EC(1)-16					
FILE: ec116	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS	
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY	
REVISIONS		DIST	COUNTY	SHEET NO.	

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PLAN VIEW



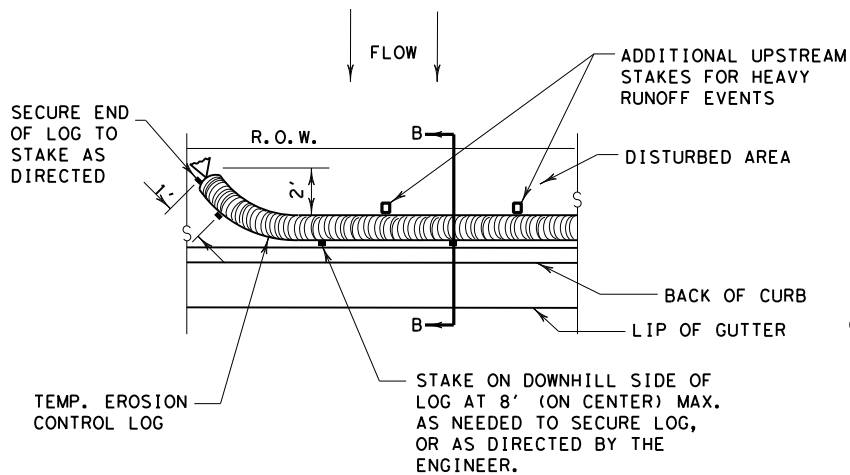
SECTION A-A

EROSION CONTROL LOG DAM

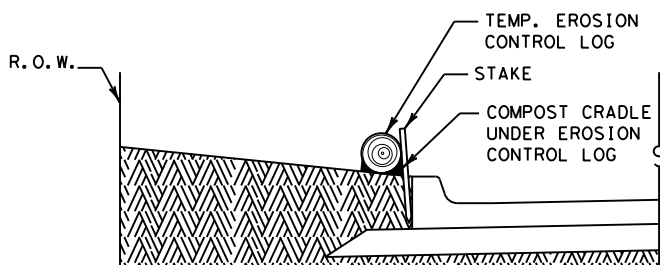
CL-D

LEGEND

- CL-D EROSION CONTROL LOG DAM
- CL-BOC EROSION CONTROL LOG AT BACK OF CURB
- CL-ROW EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY
- CL-SST EROSION CONTROL LOGS ON SLOPES STAKE AND TRENCHING ANCHORING
- CL-SSL EROSION CONTROL LOGS ON SLOPES STAKE AND LASHING ANCHORING
- CL-DI EROSION CONTROL LOG AT DROP INLET
- CL-CI EROSION CONTROL LOG AT CURB INLET
- CL-GI EROSION CONTROL LOG AT CURB & GRATE INLET



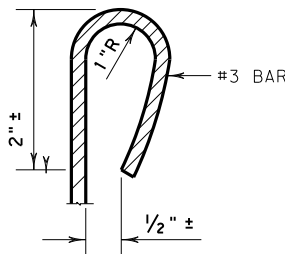
PLAN VIEW



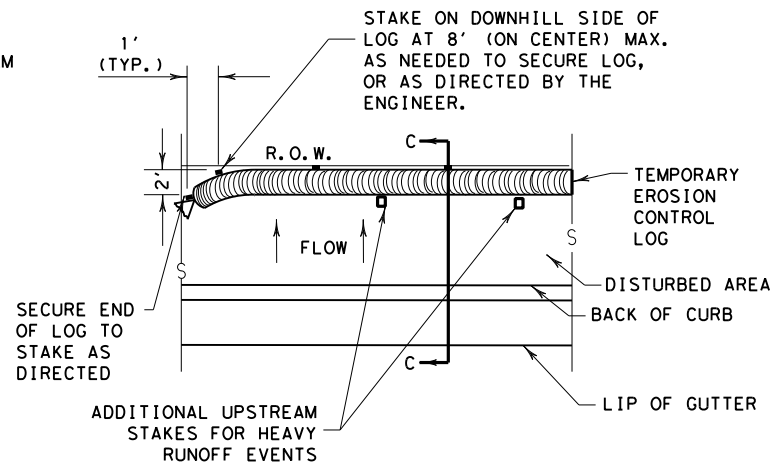
SECTION B-B

EROSION CONTROL LOG AT BACK OF CURB

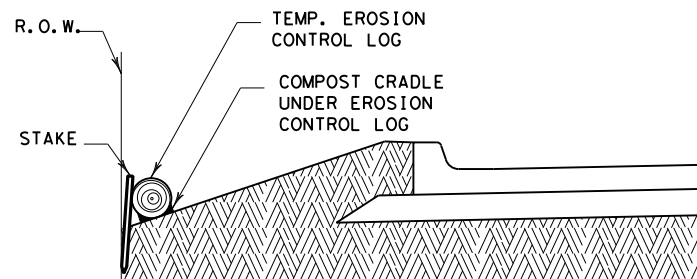
CL-BOC



REBAR STAKE DETAIL



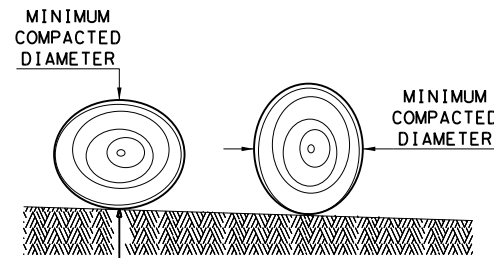
PLAN VIEW



SECTION C-C

EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY

CL-ROW



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

GENERAL NOTES:

1. EROSION CONTROL LOGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
2. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED.
3. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
4. FILL LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE THE MINIMUM COMPACTED DIAMETER SPECIFIED IN THE PLANS WITHOUT EXCESSIVE DEFORMATION.
5. STAKES SHALL BE 2" X 2" WOOD OR #3 REBAR, 2'-4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED BY THE ENGINEER.
6. DO NOT PLACE STAKES THROUGH CONTAINMENT MESH.
7. COMPOST CRADLE MATERIAL IS INCIDENTAL & WILL NOT BE PAID FOR SEPARATELY.
8. SANDBAGS USED AS ANCHORS SHALL BE PLACED ON TOP OF LOGS & SHALL BE OF SUFFICIENT SIZE TO HOLD LOGS IN PLACE.
9. TURN THE ENDS OF EACH ROW OF LOGS UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE LOG.
10. FOR HEAVY RUNOFF EVENTS, ADDITIONAL UPSTREAM STAKES MAY BE NECESSARY TO KEEP LOG FROM FOLDING IN ON ITSELF.

SEDIMENT BASIN & TRAP USAGE GUIDELINES

An erosion control log sediment trap may be used to filter sediment out of runoff draining from an unstabilized area.

**Log Traps:** The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Control logs should be placed in the following locations:

1. Within drainage ditches spaced as needed or min. 500' on center
2. Immediately preceding ditch inlets or drain inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way
5. Just before the drainage leaves the construction limits where drainage flows away from the project.

The logs should be cleaned when the sediment has accumulated to a depth of 1/2 the log diameter.

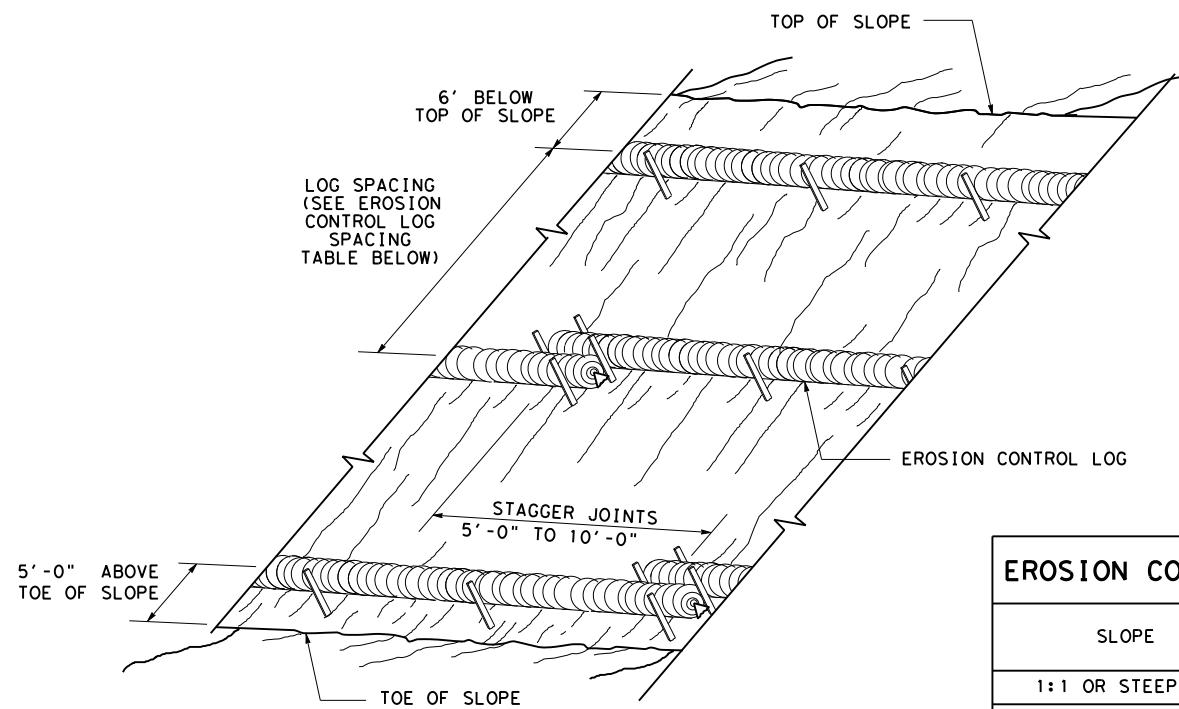
Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.

SHEET 1 OF 3

		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES			
EROSION CONTROL LOG			
EC(9) - 16			
FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT
© TxDOT: JULY 2016	CONT	SECT	JOB
REVISIONS		HIGHWAY	
DIST		COUNTY	
		SHEET NO.	

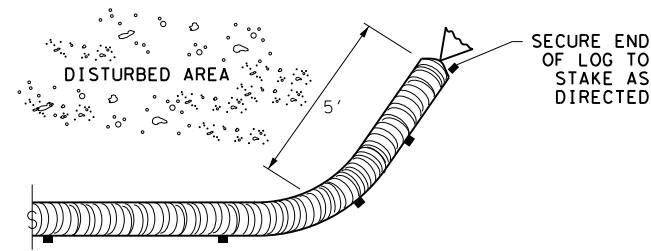
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EROSION CONTROL LOGS ON SLOPES  
STAKE AND TRENCHING ANCHORING

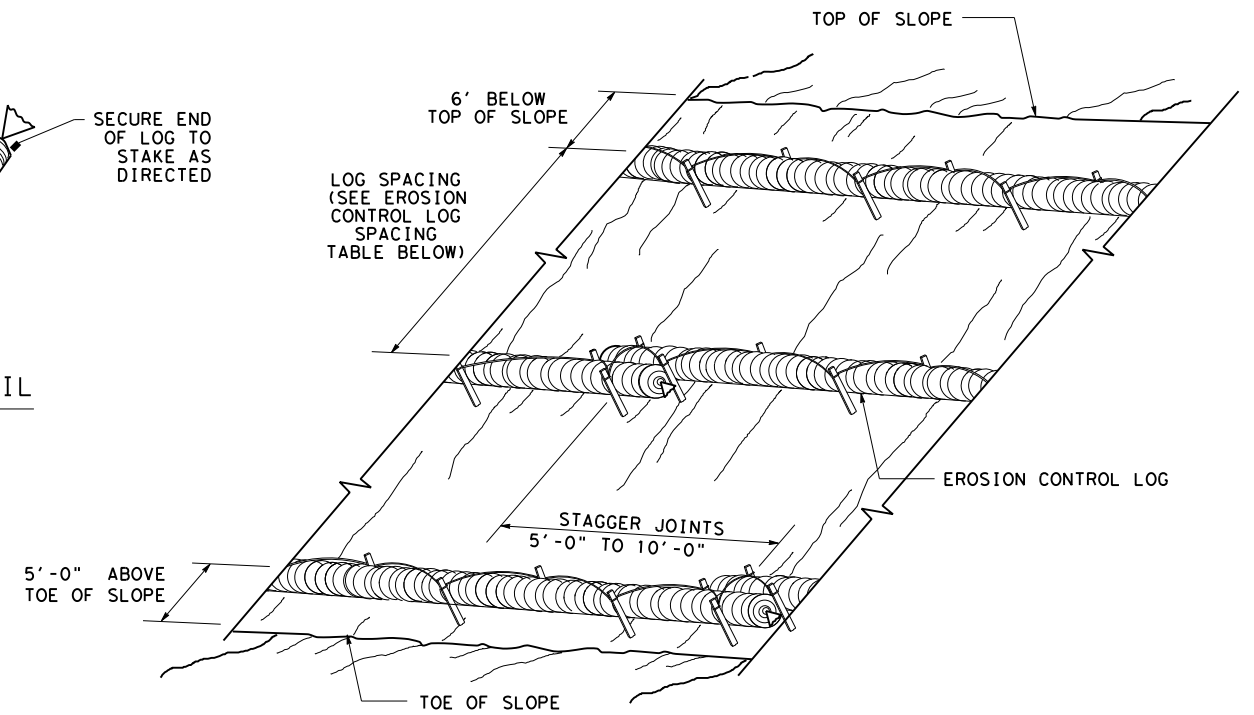
CL-SST



END SECTION RAP DETAIL

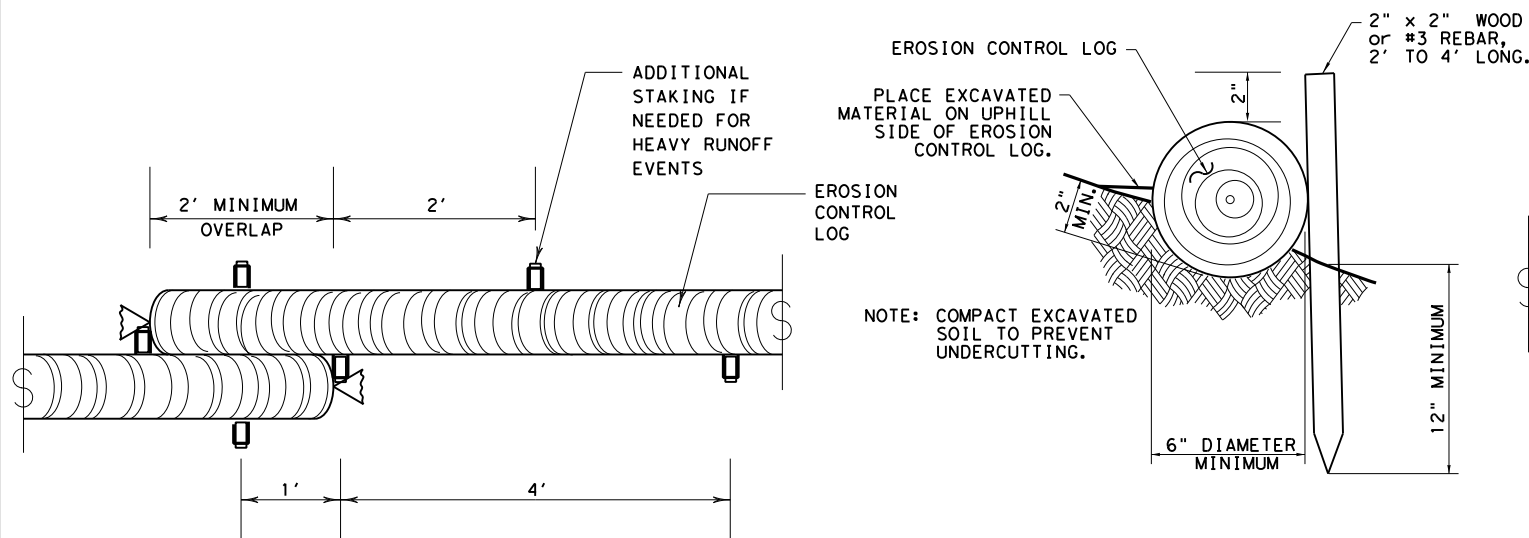
EROSION CONTROL LOG SPACING TABLE				
SLOPE	LOG DIAMETER			
	6"	8"	12"	18"
1:1 OR STEEPER	5'	10'	15'	20'
2:1	10'	20'	30'	40'
3:1	15'	30'	45'	60'
4:1 OR FLATTER	20'	40'	60'	80'

\* ADJUSTMENTS CAN BE MADE FOR SOIL TYPE:  
SOFT, LOAMY SOILS-ADJUST ROWS CLOSER TOGETHER;  
HARD, ROCKY SOILS- ADJUST ROWS FARTHER APART



EROSION CONTROL LOGS ON SLOPES  
STAKE AND LASHING ANCHORING

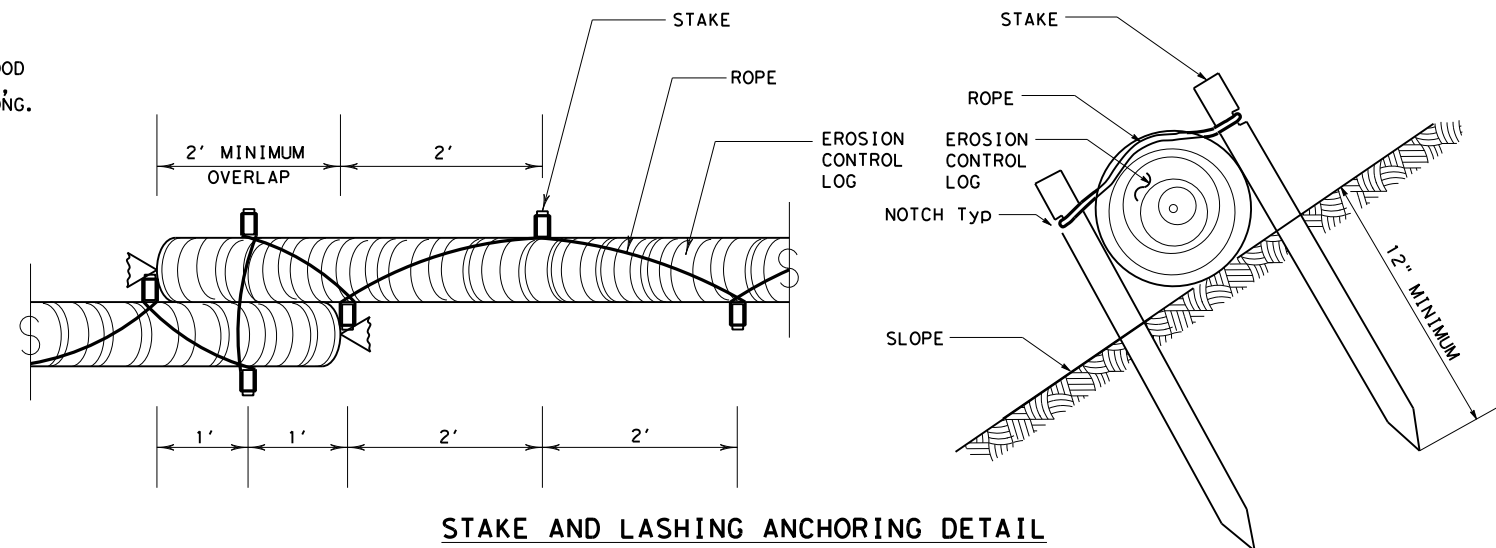
CL-SSL



STAKE AND TRENCHING ANCHORING DETAIL

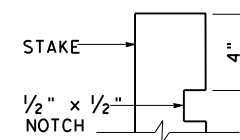
CL-SST

TRENCH DEPTH TABLE	
LOG DIAMETER	DEPTH
6"	2"
8"	3"
12"	4"
18"	5"



STAKE AND LASHING ANCHORING DETAIL

CL-SSL



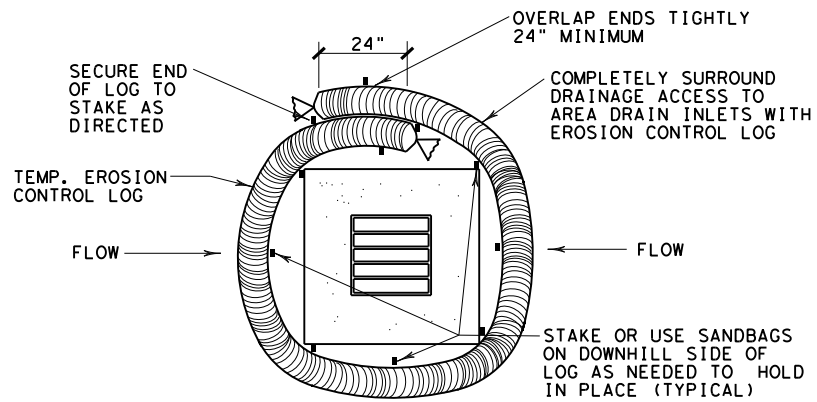
STAKE NOTCH DETAIL

SHEET 2 OF 3

		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES			
EROSION CONTROL LOG			
EC(9) - 16			
FILE: ec116	DN: TxDOT	CK: KM	DW: LS/PT
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REVISIONS	DIST	COUNTY	SHEET NO.

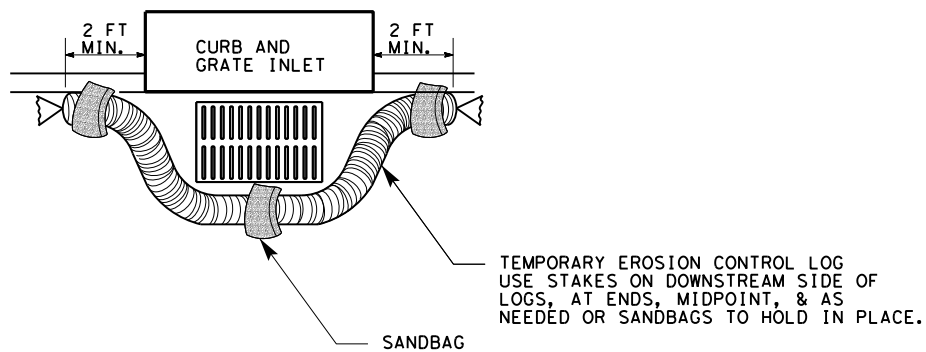
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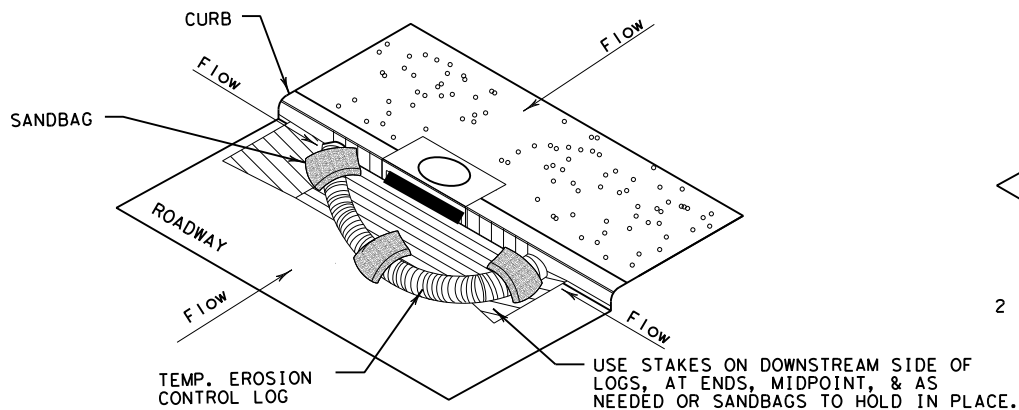
EROSION CONTROL LOG AT DROP INLET

CL-DI



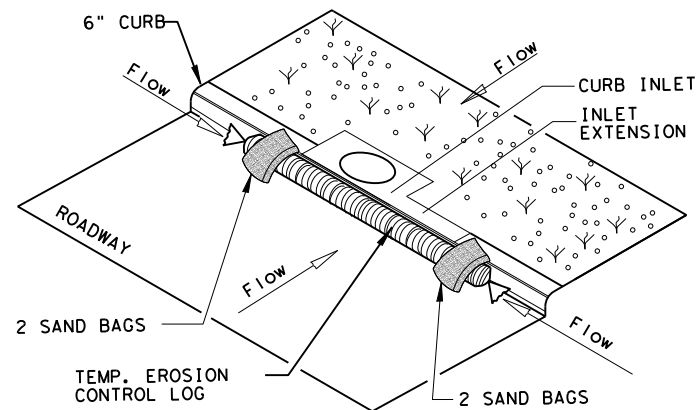
EROSION CONTROL LOG AT CURB & GRADE INLET

CL-GI



EROSION CONTROL LOG AT CURB INLET

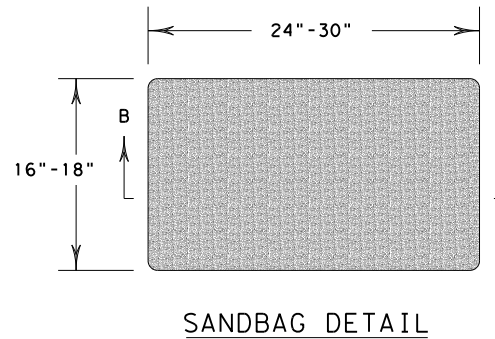
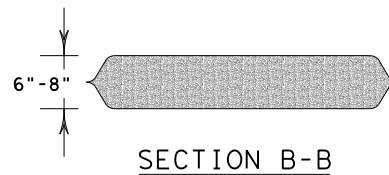
CL-CI




EROSION CONTROL LOG AT CURB INLET

CL-CI

NOTE:  
EROSION CONTROL LOGS USED AT CURB INLETS  
SHOULD ONLY BE USED IF THEY WILL NOT IMPEDE  
TRAFFIC OR FLOOD THE ROADWAY OR WHEN THE  
STORM SEWER SYSTEM IS NOT FULLY FUNCTIONAL.



SHEET 3 OF 3

 <i>Texas Department of Transportation</i>			<i>Design Division Standard</i>		
<div>TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURE EROSION CONTROL LOG EC (9) - 16</div>					
FILE: ec916		DN: TxDOT	CK: KM	DW: LS/PT	CK: LS
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REVISIONS		DIST	COUNTY		SHEET N