FHWA TEXAS DIVISION	STATE PROJECT NO.		SHEET NO.
			1.01
STATE	DISTRICT	COUNTY	
TEXAS	LBB	LUBBOCK,ETC.	
CONTROL	SECTION	JOB	HIGHWAY NO.
0905	00	118	VAR

FUNCTIONAL CLASSIFICATION: VARIES
DESIGN SPEED: VARIES
ADT: VARIES

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1. GENERAL	
1	TITLE SHEET
2	PROJECT INDEX

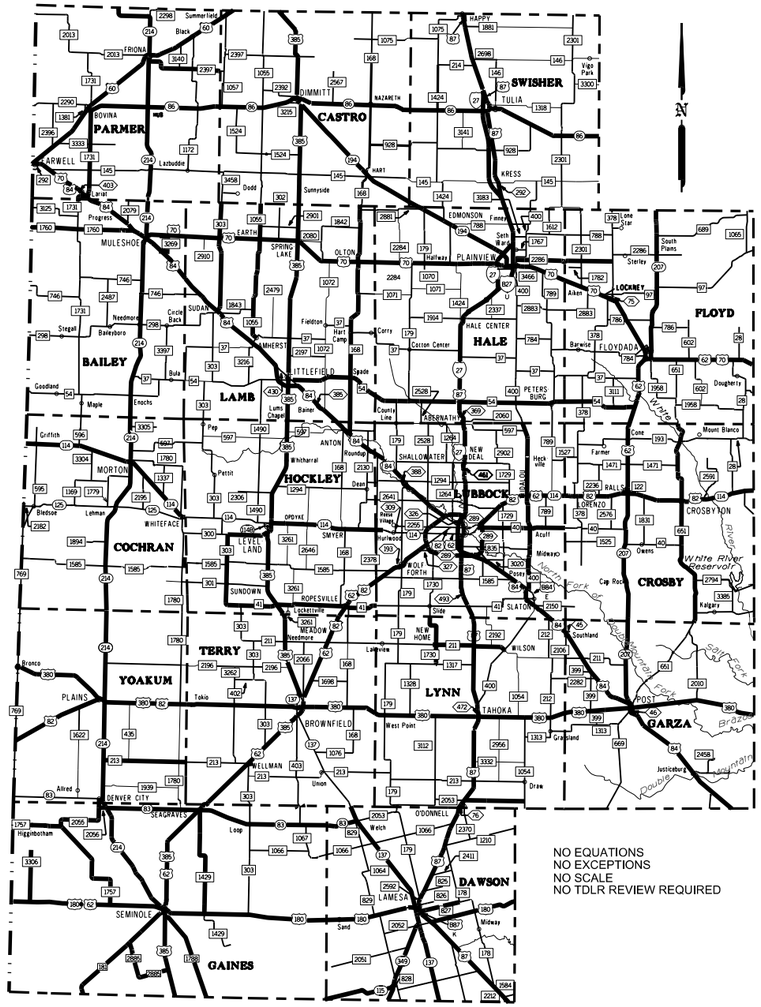
SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND CONTRACT PROVISION LISTED AND DATED AS FOLLOWS. SHALL GOVERN ON THIS PROJECT: SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000-008)

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY HIGHWAY IMPROVEMENT

STATE PROJECT NO C0905-00-118
CSJ 0905-00-118
NET LENGTH OF PROJECT 0.001 MILES

FOR THE CONSTRUCTION OF RAISED PAVEMENT MARKERS



NO EQUATIONS
NO EXCEPTIONS
NO SCALE
NO TDLR REVIEW REQUIRED

39 RR CROSSINGS BNSF- 014799K, 014781A, 014787R, 014840A
014854H, 014859S, 014869X, 014883T
014884A, 014898H, 014908L, 014910M
01918S, 014919Y, 015155L, 014981J
015001B, 015015J, 015021M, 017585D
017584W, 017513A, 017329M, 017280F
2756582V, 017271G, 275673X, 275674E
275675L, 017376V, 017382Y, 017216G

L&WR-276681T, 276677D, 275934V, 275935C
900272X, 017604F, 017627M

JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

SUBMITTED FOR LETTING: 12/2/2021
DocuSigned by: Jeremy T. Dearing, P.E.
AB1484D2F6DA4F6...
DIR. OF TRANSPORTATION OPERATIONS

12/2/2021
RECOMMENDED FOR LETTING:
DocuSigned by: Shelley C. Harris P.E.
F9884108931347C...
DISTRICT DESIGN ENGINEER

12/2/2021
APPROVED FOR LETTING:
DocuSigned by: Stacy P. Warren P.E.
642C665E4DDD46A...
DISTRICT ENGINEER

FILE: T:\LBBTRAFF\PROJECTS (CURRENT)\2022 RRPM\PLAN SHEETS\2022 RRPM Title.dgn
DATE: 12/1/2021 10:01:29 AM

GENERAL

	1.01	TITLE SHEET
	1.02	INDEX OF SHEETS
	1.03-1.03B	GENERAL NOTES
	1.04	ESTIMATE & QUANTITY
	1.05	PROJECT SUMMARY

TRAFFIC CONTROL PLAN STANDARDS

##	2.01	BC (1)-21
##	2.02	BC (2)-21
##	2.03	BC (3)-21
##	2.04	BC (4)-21
##	2.05	BC (5)-21
##	2.06	BC (6)-21
##	2.07	BC (7)-21
##	2.08	BC (8)-21
##	2.09	BC (9)-21
##	2.10	BC (10)-21
##	2.11	BC (11)-21
##	2.12	BC (12)-21
##	2.13	TCP (3-3)-14

PAVEMENT MARKINGS & DELINEATION

3.01	COUNTY LAYOUT BAILEY
3.02	BAILEY COUNTY CURVE ADVISORY RRPMs
3.03	COUNTY LAYOUT CASTRO
3.04	CASTRO COUNTY CURVE ADVISORY RRPMs
3.05	COUNTY LAYOUT COCHRAN
3.06	COCHRAN COUNTY CURVE ADVISORY RRPMs
3.07	COUNTY LAYOUT CROSBY
3.08	CROSBY COUNTY CURVE ADVISORY RRPMs
3.09	COUNTY LAYOUT DAWSON
3.10	DAWSON COUNTY CURVE ADVISORY RRPMs
3.11	COUNTY LAYOUT FLOYD
3.12	FLOYD COUNTY CURVE ADVISORY RRPMs
3.13	COUNTY LAYOUT GAINES
3.14	GAINES COUNTY CURVE ADVISORY RRPMs
3.15	COUNTY LAYOUT GARZA
3.16	GARZA COUNTY CURVE ADVISORY RRPMs
3.17	COUNTY LAYOUT HALE
3.18	COUNTY LAYOUT HALE CONCRETE
3.19	HALE COUNTY CURVE ADVISORY RRPMs
3.20	COUNTY LAYOUT HOCKLEY 1 OF 2
3.21	COUNTY LAYOUT HOCKLEY 2 OF 2
3.22	HOCKLEY COUNTY CURVE ADVISORY RRPMs
3.23	COUNTY LAYOUT LAMB
3.24	LAMB COUNTY CURVE ADVISORY RRPMs
3.25	COUNTY LAYOUT LUBBOCK 1 OF 2
3.26	COUNTY LAYOUT LUBBOCK 2 OF 2
3.27	COUNTY LAYOUT LUBBOCK CONCRETE
3.28	LUBBOCK COUNTY CURVE ADVISORY RRPMs
3.29	COUNTY LAYOUT LYNN
3.30	LYNN COUNTY CURVE ADVISORY RRPMs
3.31	COUNTY LAYOUT PARMER
3.32	PARMER COUNTY CURVE ADVISORY RRPMs
3.33	COUNTY LAYOUT SWISHER
3.34	COUNTY LAYOUT SWISHER CONCRETE
3.35	SWISHER COUNTY CURVE ADVISORY RRPMs
3.36	COUNTY LAYOUT TERRY
3.37	TERRY COUNTY CURVE ADVISORY RRPMs
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PAVEMENT MARKINGS & DELINEATION STANDARDS

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##	4.02	PM (3)-20
##	4.03	FMP (1)-12
##	4.04	FMP (2)-12
##	4.05	FMP (3)-12
##	4.06	FMP (4)-12
	4.07	FOUR LANE DIVIDED CROSSOVER DETAIL

RAILROAD SCOPE OF WORK SHEETS

5.01-5.02	NON-BRIDGE-PROJECT SHEETS
5.03-5.06	RAILROAD SCOPE OF WORK SHEET

ENVIRONMENTAL ISSUES

6.01	ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/28/2021

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE BY A ## HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

INDEX OF SHEETS

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			1.02
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2020 RRPM			12/28/2021

GENERAL NOTES:

General Requirements and Covenants - Items 1 thru 9
Contractor questions on this project are to be addressed to the following individual(s):

Jeremy.Dearing@txdot.gov (806)748-4564
Terry.Harris@txdot.gov (806)748-4465

Contractor questions will be accepted through email, phone, and in person by the above individuals.

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following Address:
https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting%20Responses/

All questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, CCSJ/Project Name. Check the FTP site regularly for any updates.

Item 1 – Abbreviations and Definitions
Contract Prosecution – Each contract awarded by the Department stands on its own and as such, is separate from other contracts. A contractor awarded multiple contracts, must be capable and sufficiently staffed to concurrently process any and all contracts at the same time.

Item 2 – Instructions to Bidders
The construction time determination schedule will be posted on the Contractor Q&A FTP site.

View the plans on-line or download from the web at:
http://www.dot.state.tx.us/business/plansonline/agreement.htm
Choose "I Agree" then, "Click here", then "State-Let-Construction", pick the letting month, then "Plans" and then choose the plans set.

Order plans from any of the plan reproduction companies shown on the web at:
http://www.dot.state.tx.us/business/contractors_consultants/repro_companies.htm

Item 5 – Control of the Work
At the end of each day remove from the ROW, inside or outside the project limits, any excess material and debris resulting from construction.

Correct any deficiencies identified during the final inspection including required paperwork.

Submit all required paperwork within 60 days of project acceptance.

County: VAR **Control:** 0905-00-118

Highway: VAR **Sheet 1.03**

Item 6 – Control of Materials
Use materials from pre-qualified producers. A list of material producers pre-qualified by the Construction Division (CST) of the Texas Department of Transportation (TxDOT) can be found at the following website:
http://www.txdot.gov/business/contractors_consultants/producer_list.htm

Item 7 – Legal Relations and Responsibilities
Coordinate street closures with the local fire, police, and other emergency personnel.

Maintain access to adjacent property at all times.

When applicable, comply with all requirements of the Environmental Permits Issues and Commitments (EPIC) sheets.

Dispose of all waste materials in compliance with local, state, and federal regulations. Submit a list of all approved waste sites to the Engineer for review.

All vehicles in the work zone shall use flashing amber strobe lights visible 360 degrees.

No significant traffic generator events identified.

Item 8 - Prosecution and Progress
This project is to be complete in 60 days and 4 months of barricades in accordance with the contract documents.

Work must begin by 4-18-2022.

Monthly schedule updates are a very important aspect of managing the progress of this project. The Engineer may withhold the monthly estimate if the schedule update has not been received.

A bar chart will be required on this project.

Do not begin work before sunrise or end work after sunset unless authorized by the Engineer, and remove all equipment from the roadway before sundown.

Perform any erosion control measures such as seeding or sodding before beginning the next phase, or land, unless otherwise authorized by the Engineer.

Working days will be computed and charged in accordance with Article 8.3.1.4 Standard Workweek.

Work hours will be restricted to off-peak hours as defined in the following table when working on any roads in Lubbock City Limits.

Peak Hours		Off-Peak Hours	
7 to 9 AM Monday through Friday	4 to 6 PM Monday through Friday	9AM to 4PM and 6 PM to 7 AM Monday through Friday	All day Saturday and Sunday

Shut down operations the working day before the following major traffic generating holidays: January 1st (New Year's); Last Monday in May (Memorial Day); July 4th (Independence Day); First Monday in September (Labor Day); Fourth Thursday in November (Thanksgiving); and December 24th (Christmas Eve).

Payment for final 3% mobilization will be made according to Article 500.3. Timeliness for submittal of required paperwork and correction of deficiencies is a consideration in developing the final contractor evaluation score.

Item 9 - Measurement and Payment

Submit material-on-hand payment requests at least three working days prior to the end of the month for payment on that month's estimate.

Item 502 - Barricades, Signs And Traffic Handling

Prior to beginning construction, the Engineer shall approve the routing of traffic and sequence of work.

Additional signs and barricades as directed by the Engineer shall be considered subsidiary to Item 502.

Provide flashing portable arrow panels for all lane closures.

To ensure the safety and convenience of traffic, flaggers may be required when construction machinery is being operated along, across, or adjacent to lanes carrying traffic. If considered necessary by the Engineer, supplemental signs and barricades may be required.

Barricades, Signs and Traffic Handling is a plan quantity item. If time is suspended, no additional compensation will be made.

Square tubing sign supports may be used for temporary construction signs. Aluminum and wood signs may be mounted if the vertical supports are embedded into the ground. Square tubing supports on skids which are typically held in place with sand bags can only support signs made of light weight flutted plastic.

County: VAR **Control:** 0905-00-118

Highway: VAR **Sheet 1.03A**

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Correct all noted deficiencies within 7 calendar days, otherwise, cease all operations until the noted deficiencies are corrected.

Like new traffic control devices will be required at the initial setup for all projects or as approved by the Engineer.

Provide flags and a CW8-15P "MOTORCYCLE WARNING" plaque on all CW20-1D "ROAD WORK AHEAD" signs except on side roads.

Use only the work zone speed limit and TCP signs that are relevant to the active work area and as directed. Reset signs for subsequent work phases as work progresses and approved by the Engineer. Reset normal speed limit signs at the ends of work zones.

All bid items and work requiring traffic control is the responsibility of the contractor, even when not explicitly detailed in the plans. Consider this work subsidiary to Item 502.

TMAs and Portable Changeable Message Boards will not be used as Arrow Boards.

Item 506 - Temporary Erosion, Sedimentation, and Environmental Controls

No SW3P is required for this project, but should it be determined a plan is needed, it will be developed by the State and implemented by the Contractor.

No N.O.I. is required for this project.

Sediments removed from BMPs shall be paid for by force account. The Contractor shall submit an invoice for the work.

The soil area disturbed by this project, including all disturbed areas within the limits of this project as described in the Contract and at Contractor project specific locations (PSLs) within one mile of the project limits, contributes to the establishment of the Texas Commission on Environmental Quality (TCEQ) Construction General Permit (CGP) requirements for storm water discharges. The Department will obtain an authorization from the TCEQ to discharge storm water for construction activities shown on the plans. The Contractor shall obtain the required authorization from the TCEQ for Contractor project specific locations (PSLs) for construction support activities off the right-of-way. As directed by the Engineer, the Contractor shall obtain any required authorization from the TCEQ for on-site PSLs. When the total area

disturbed within the project limits and at PSLs within one mile of the project limits exceeds five acres, the Contractor shall provide a copy of the Contractor's Notice of Intent (NOI) submission and Construction General Permit for PSLs on the right-of-way to the Engineer (and submit a copy of NOIs to appropriate MS4 operators).

Item 672 - Raised Pavement Markers

Install RPMs, TY II-AA, on all curves with advisory speeds posted 5 mph or more below the posted speed limit. Begin 800-feet before the PC, extend through the curve, continue 800-feet beyond the PT of the curve.

Leave Undamaged Raised Retroreflective Pavement Markers in place.

A Raised Retroreflective Pavement Marker will be considered "damaged" if any of the following conditions exist

- More than 25% of any reflective surface is non-reflective
- A crack which passes through the entire body of the marker
- A chip exceeding 25% of the surface area of the top of the marker body
- The marker is turned more than 20 degrees from the direction of traffic

All Raised Retroreflective Pavement Markers installed on concrete shall be installed with epoxy.

Item 6185 – Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

Provide 6 TMAs for mobile use. Mobile TMAs will be used for moving operations such as striping and RPM placement. Payment will be made by the day for each TMA used in mobile operations.

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0905-00-118 **DISTRICT** Lubbock **COUNTY** Lubbock
HIGHWAY Various

		CONTROL SECTION JOB		**0905-00-118**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00131572**			
		COUNTY		**Lubbock**			
		HIGHWAY		**Various**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	4.000		4.000	
	672-6006	REFL PAV MRKR TY I-A	EA	4,139.000		4,139.000	
	672-6007	REFL PAV MRKR TY I-C	EA	11,505.000		11,505.000	
	672-6009	REFL PAV MRKR TY II-A-A	EA	58,500.000		58,500.000	
	672-6010	REFL PAV MRKR TY II-C-R	EA	70,826.000		70,826.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	270.000		270.000	
	08	SAFETY CONTINGENCY (NON-PART)	LS	1.000		1.000	
		EROSION CONTROL MAINTENANCE (NON-PART)	LS	1.000		1.000	

County	Raised Reflective Pavement Markers			
	TY I-A (EA)	TY I-C (EA)	TY II-A-A (EA)	TY II C-R (EA)
Bailey	17	27	1,449	154
Castro	0	24	3,954	0
Cochran	0	105	1,979	0
Crosby	126	77	1,510	2,167
Dawson	222	315	2,546	2,089
Floyd	33	221	1,756	1,633
Gaines	301	595	2,006	1,878
Garza	153	86	1,470	1,406
Hale	134	967	6,506	3,030
Hockley	194	549	3,643	2,218
Lamb	251	190	3,021	1,368
Lubbock	1,601	6,601	16,185	44,035
Lynn	131	60	1,389	1,514
Parmer	273	321	1,571	3,107
Swisher	12	128	4,182	3,359
Terry	691	470	2,460	2,868
Yoakum	0	769	2,873	0
Totals	4,139	11,505	58,500	70,826

60 WORKING DAYS ASSUMPTION THAT PRODUCTION RATE 2400 RPMS PER DAY.

PROJECT SUMMARY SHEET

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			1.05
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/2/2021

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

SHEET 1 OF 12

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
4-03 7-13	DIST	COUNTY		SHEET NO.
9-07 8-14	LBB	LUBBOCK, ETC.		2.01
5-10 5-21				

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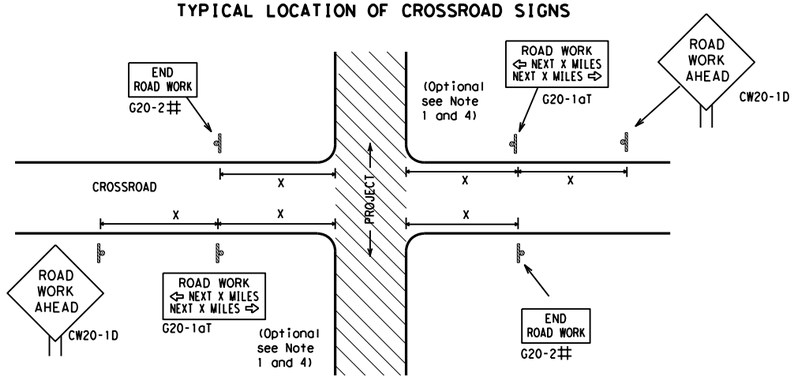
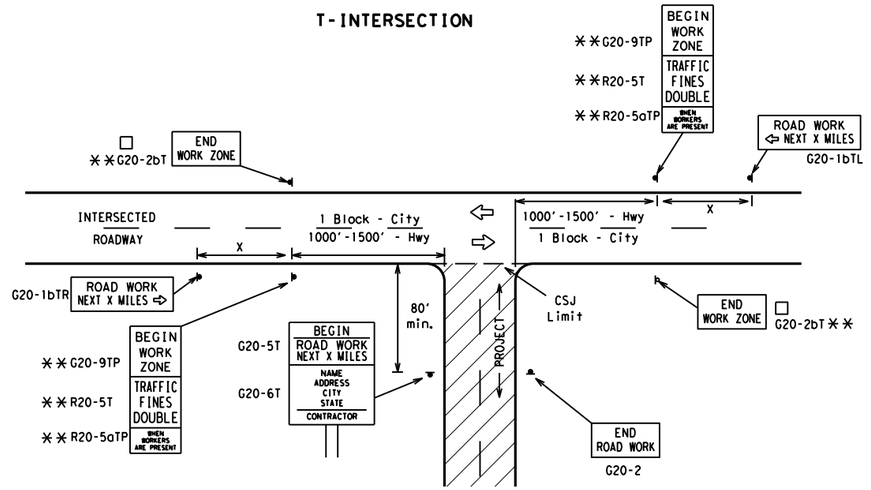
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
*	*[3]

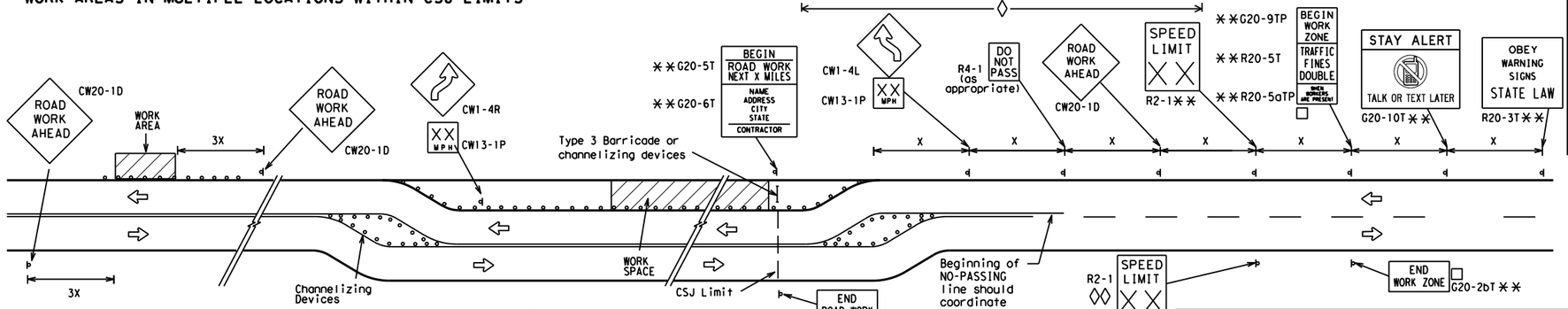
* For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

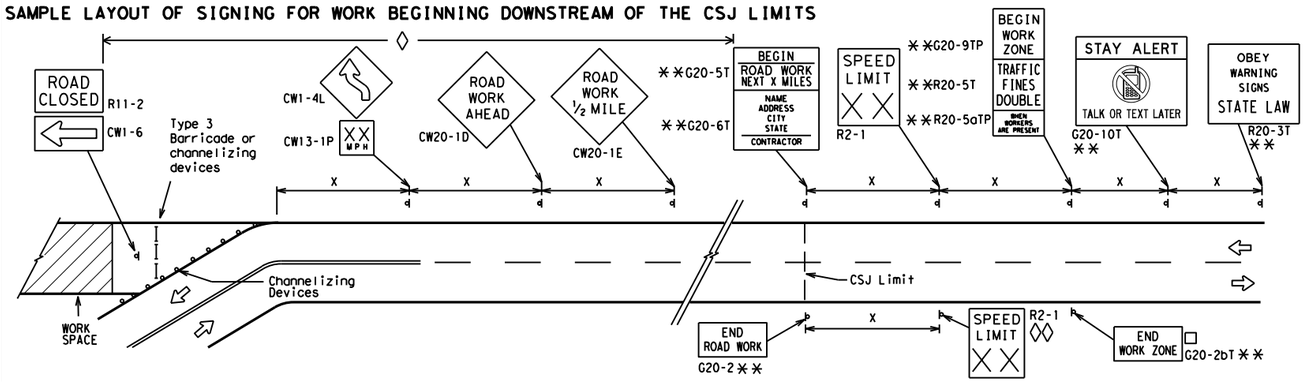
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

** CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND

⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

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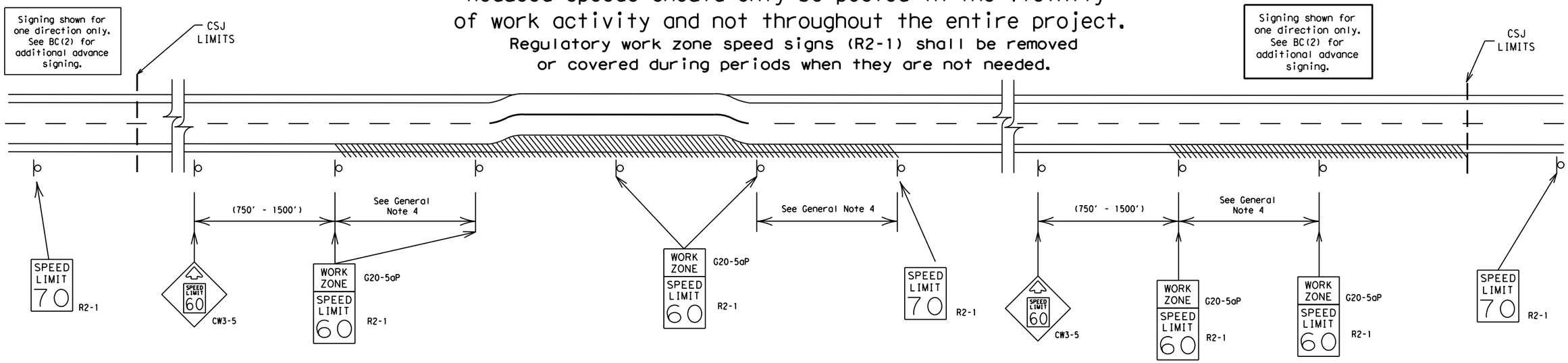
TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

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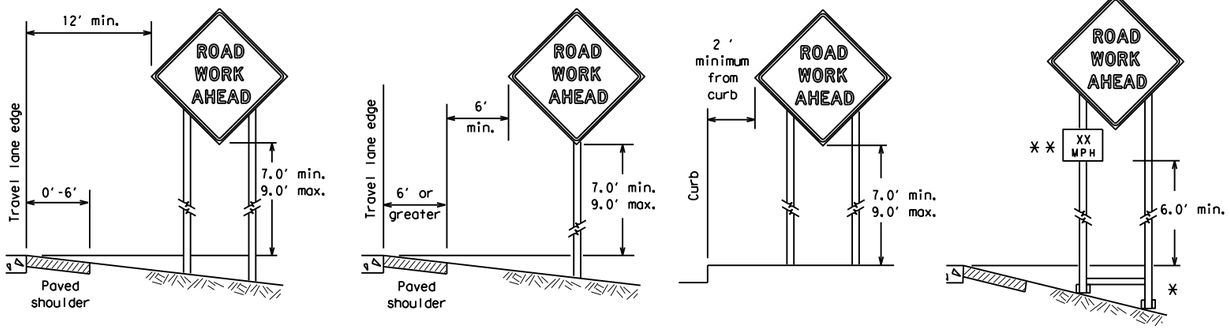
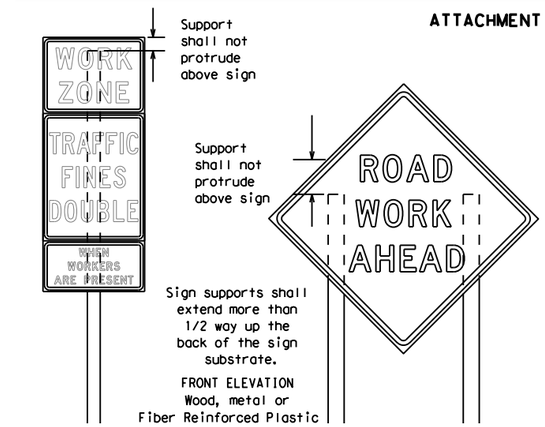
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

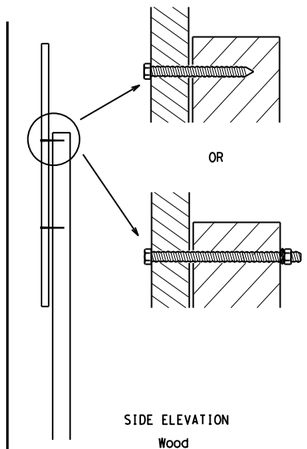


* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





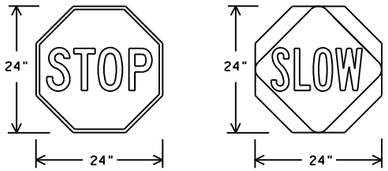
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

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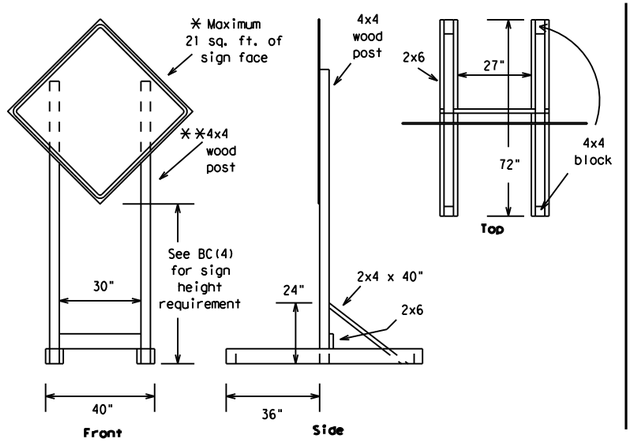
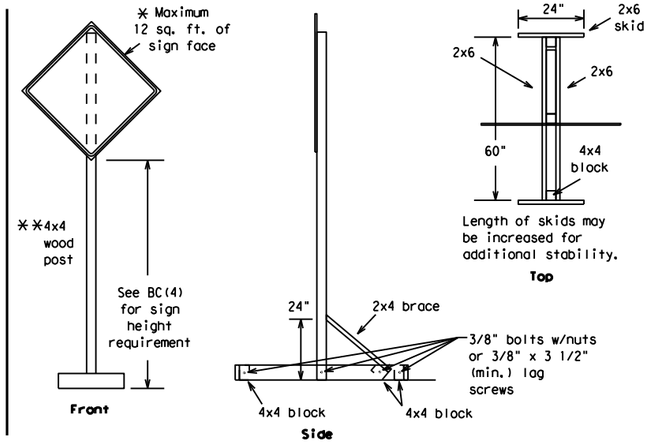
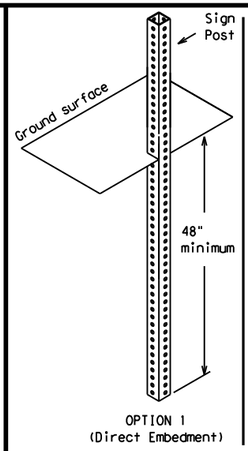
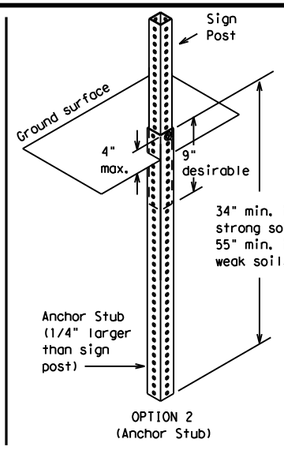


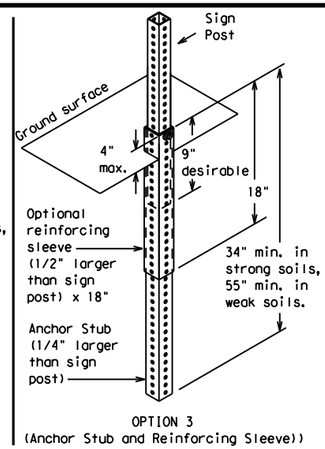


SKID MOUNTED WOOD SIGN SUPPORTS

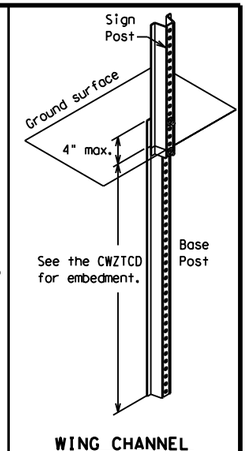
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS







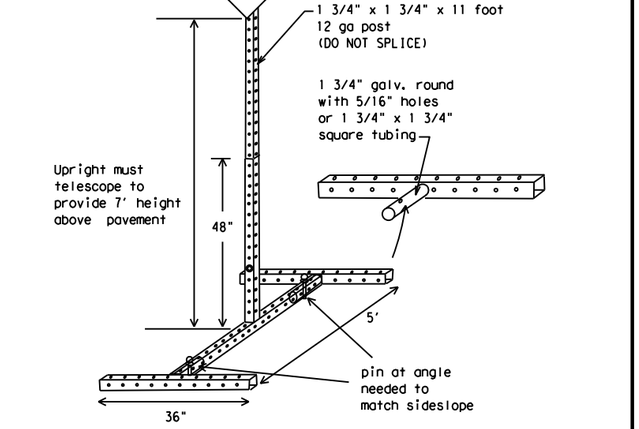
PERFORATED SQUARE METAL TUBING

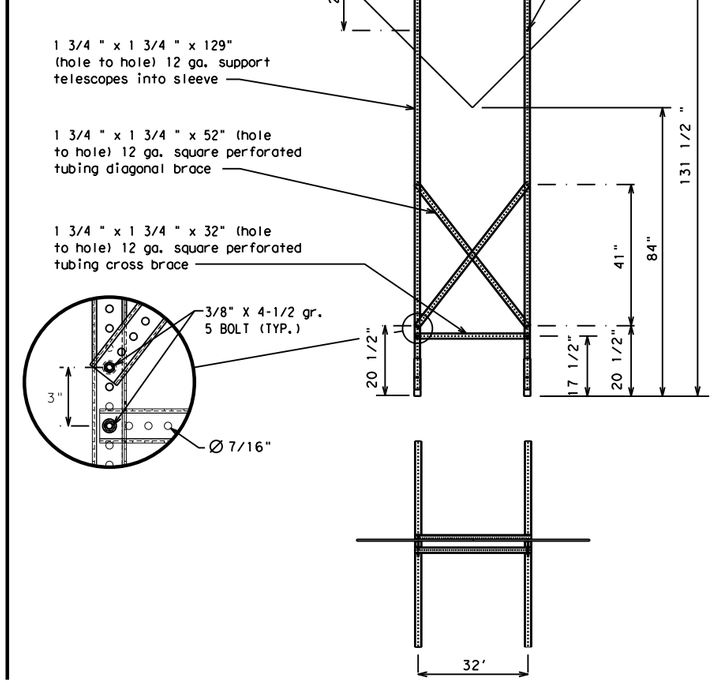


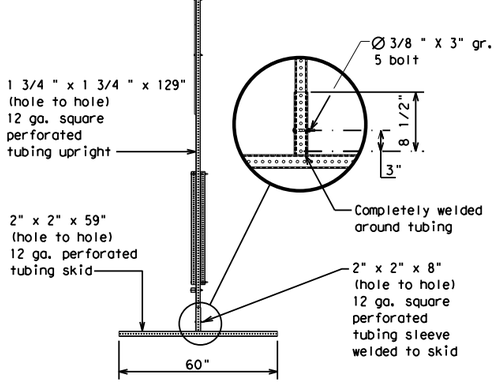
WING CHANNEL
Lap-splice/base bolted anchor

GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

☐ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

SHEET 5 OF 12

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation * IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

- FREEWAY CLOSED X MILE
- FRONTAGE ROAD CLOSED
- ROAD CLOSED AT SH XXX
- SHOULDER CLOSED XXX FT
- ROAD CLSD AT FM XXXX
- RIGHT LN CLOSED XXX FT
- RIGHT X LANES CLOSED
- RIGHT X LANES OPEN
- CENTER LANE CLOSED
- DAYTIME LANE CLOSURES
- NIGHT LANE CLOSURES
- I-XX SOUTH EXIT CLOSED
- VARIOUS LANES CLOSED
- EXIT XXX CLOSED X MILE
- EXIT CLOSED
- RIGHT LN TO BE CLOSED
- MALL DRIVEWAY CLOSED
- X LANES CLOSED TUE - FRI
- XXXXXXXX BLVD CLOSED

Other Condition List

- ROADWORK XXX FT
- ROAD REPAIRS XXXX FT
- FLAGGER XXXX FT
- LANE NARROWS XXXX FT
- RIGHT LN NARROWS XXXX FT
- TWO-WAY TRAFFIC XX MILE
- MERGING TRAFFIC XXXX FT
- CONST TRAFFIC XXX FT
- LOOSE GRAVEL XXXX FT
- UNEVEN LANES XXXX FT
- DETOUR X MILE
- ROUGH ROAD XXXX FT
- ROADWORK PAST SH XXXX
- ROADWORK NEXT FRI-SUN
- BUMP XXXX FT
- US XXX EXIT X MILES
- TRAFFIC SIGNAL XXXX FT
- LANES SHIFT *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

- MERGE RIGHT
- FORM X LINES RIGHT
- DETOUR NEXT X EXITS
- USE XXXXX RD EXIT
- USE EXIT XXX
- USE EXIT I-XX NORTH
- STAY ON US XXX SOUTH
- USE I-XX E TO I-XX N
- TRUCKS USE US XXX N
- WATCH FOR TRUCKS
- WATCH FOR TRUCKS
- EXPECT DELAYS
- EXPECT DELAYS
- PREPARE TO STOP
- REDUCE SPEED XXX FT
- END SHOULDER USE
- USE OTHER ROUTES
- WATCH FOR WORKERS
- STAY IN LANE *

Location List

- AT FM XXXX
- BEFORE RAILROAD CROSSING
- NEXT X MILES
- PAST US XXX EXIT
- XXXXXXX TO XXXXXXX
- US XXX TO FM XXXX

Warning List

- SPEED LIMIT XX MPH
- MAXIMUM SPEED XX MPH
- MINIMUM SPEED XX MPH
- ADVISORY SPEED XX MPH
- RIGHT LANE EXIT
- USE CAUTION
- DRIVE SAFELY
- DRIVE WITH CARE

** Advance Notice List

- TUE-FRI XX AM- X PM
- APR XX-XX X PM-X AM
- BEGINS MONDAY
- BEGINS MAY XX
- MAY X-X XX PM - XX AM
- NEXT FRI-SUN
- XX AM TO XX PM
- NEXT TUE AUG XX
- TONIGHT XX PM- XX AM

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Safety Division Standard

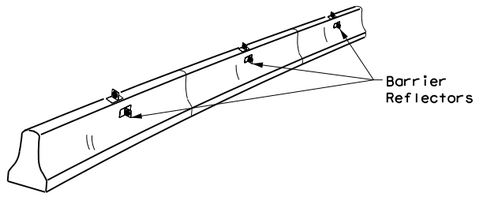
BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

FILE:	bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS		0905	00	118	VAR
9-07	8-14	DIST	COUNTY		SHEET NO.
7-13	5-21	LBB	LUBBOCK, ETC.		2.06

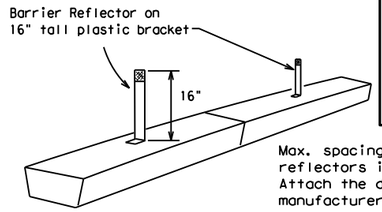
DATE: 12/27/2021 1:36:18 PM
FILE: T:\LBBTRAFF\PROJECTS (CURRENT)\2022 RRPM\Standards\2.01-2.12 bc(1-12)21.dgn

1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

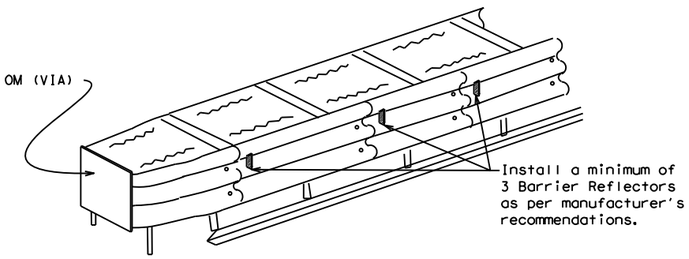


Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

LOW PROFILE CONCRETE BARRIER (LPCB)

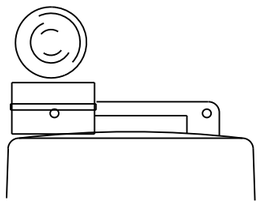


DELINEATION OF END TREATMENTS

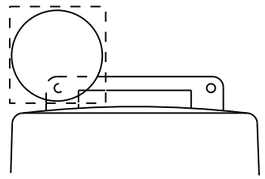
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

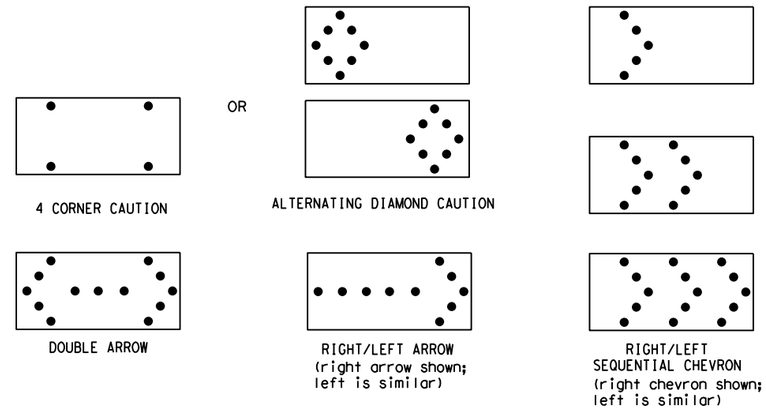
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:



5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION

Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	LBB	LUBBOCK, ETC.		2.07

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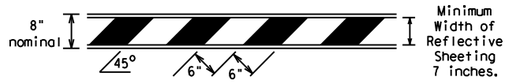
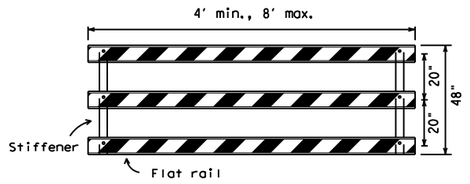
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



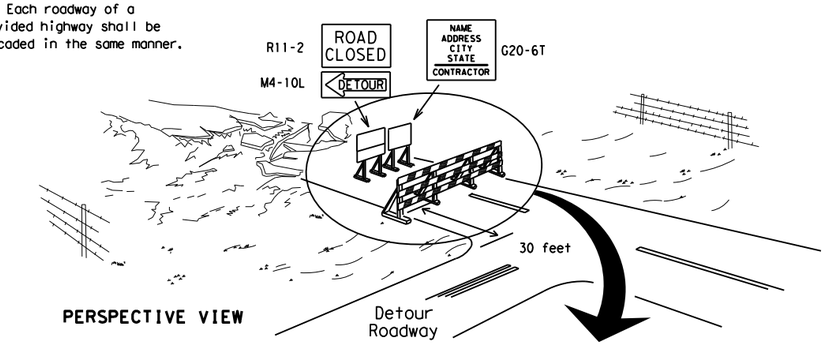
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

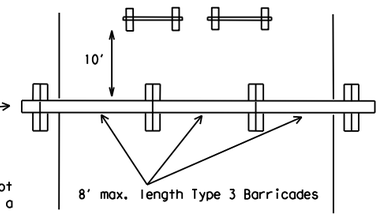
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

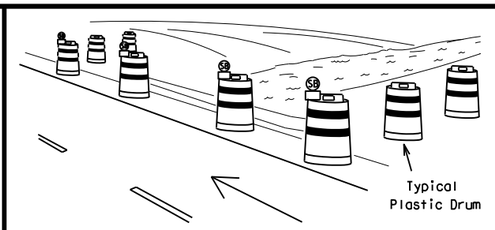
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

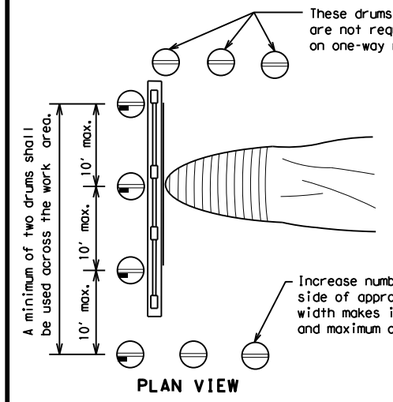
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

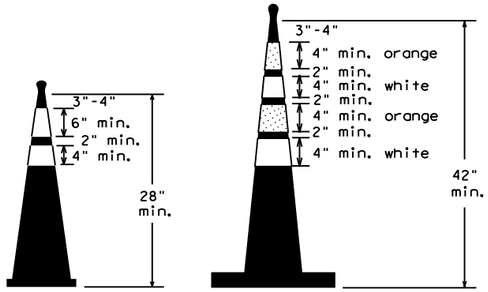
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

PLAN VIEW

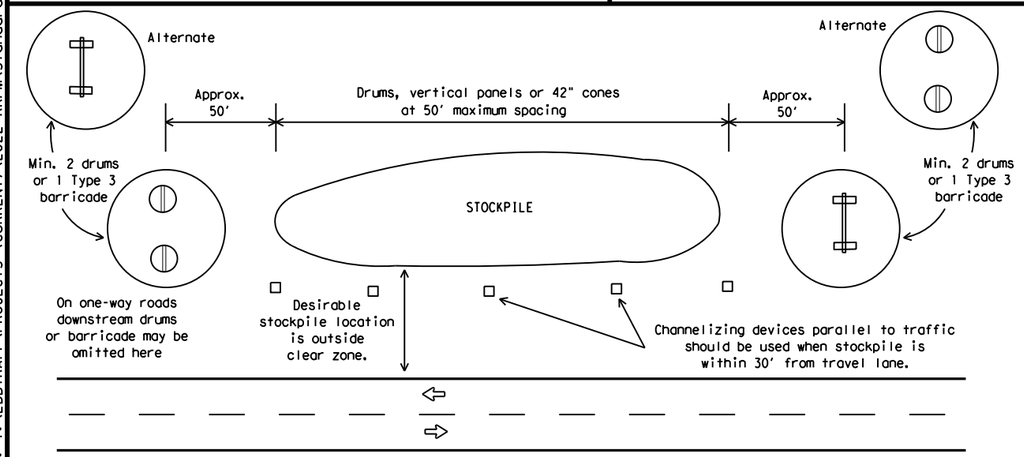
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	LBB	LUBBOCK, ETC.		2.10

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

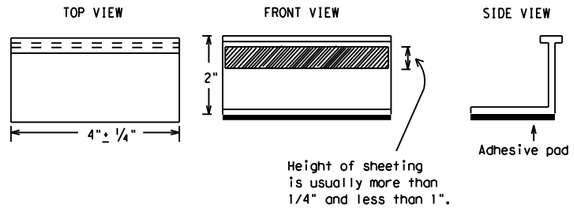
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
2-98 9-07 5-21	DIST	COUNTY		SHEET NO.
1-02 7-13	LBB	LUBBOCK, ETC.		2.11
11-02 8-14				

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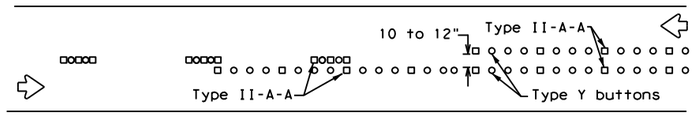
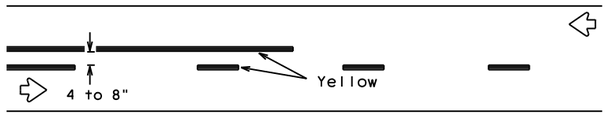
DATE: 12/27/2021 1:36:28 PM
FILE: T:\LBBTRAFF\PROJECTS (CURRENT)\2022 RRPM\Standards\2.01-2.12 bc(1-12)21.dgn

PAVEMENT MARKING PATTERNS

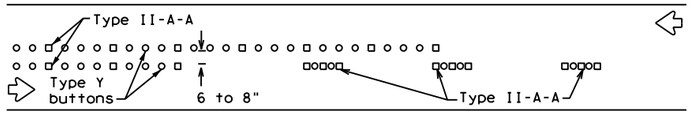
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



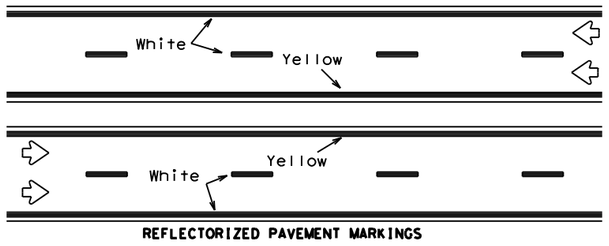
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



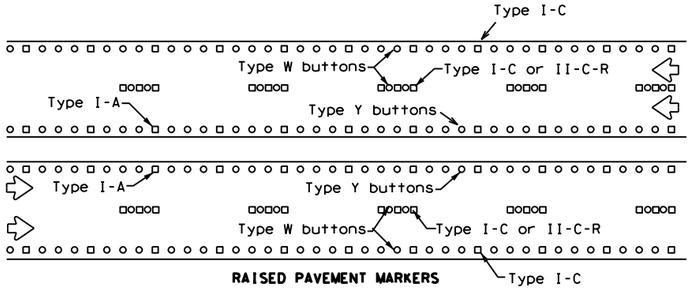
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



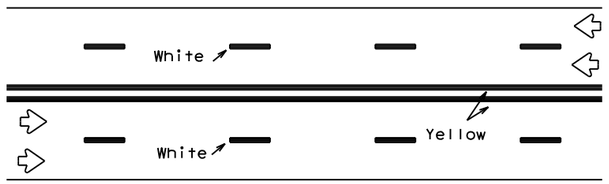
REFLECTORIZED PAVEMENT MARKINGS



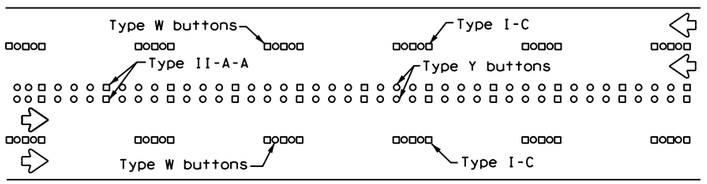
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



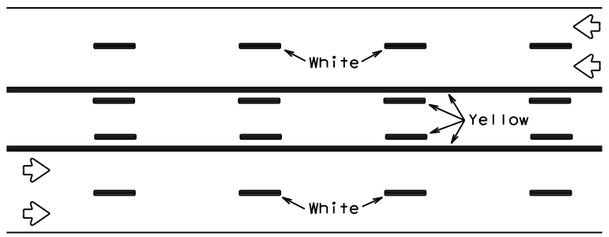
REFLECTORIZED PAVEMENT MARKINGS



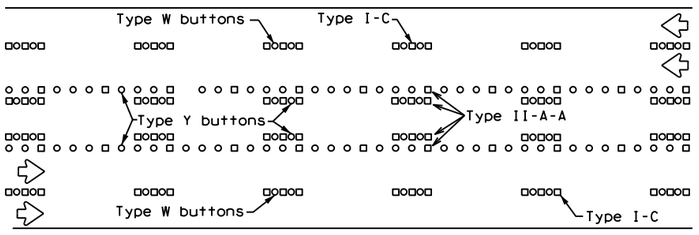
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

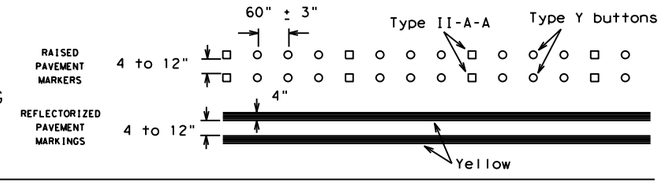
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

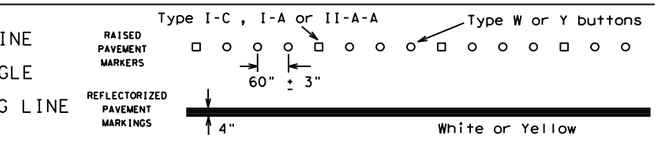
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

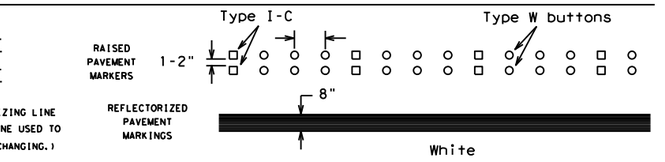


EDGE LINE OR SINGLE NO-PASSING LINE



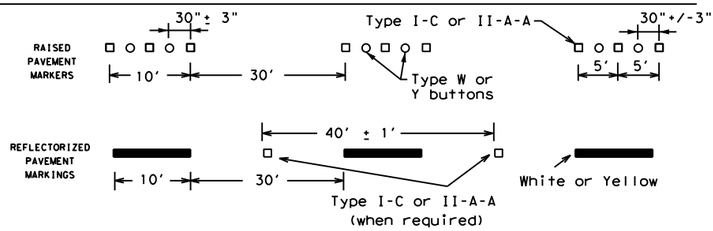
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

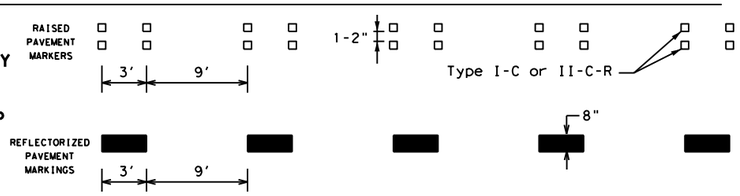


BROKEN LINES

CENTER LINE OR LANE LINE

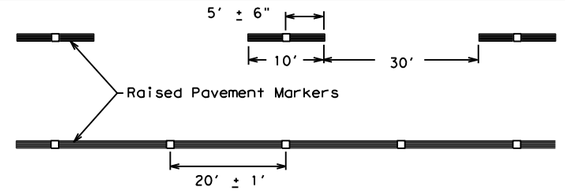


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

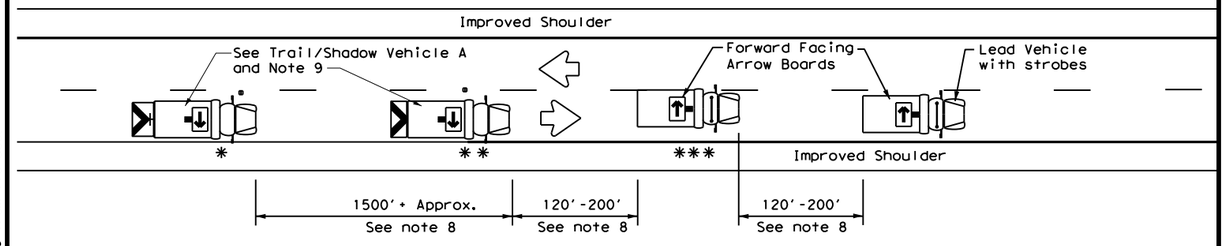
Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

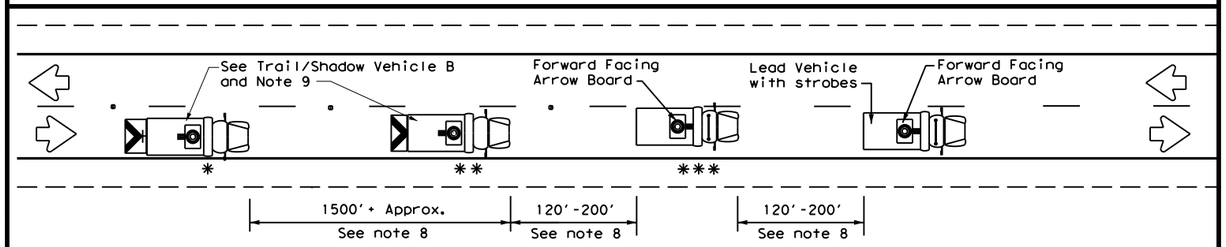
BC(12)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 1-97 9-07 5-21 2-98 7-13 11-02 8-14	0905	00	118	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		2.12



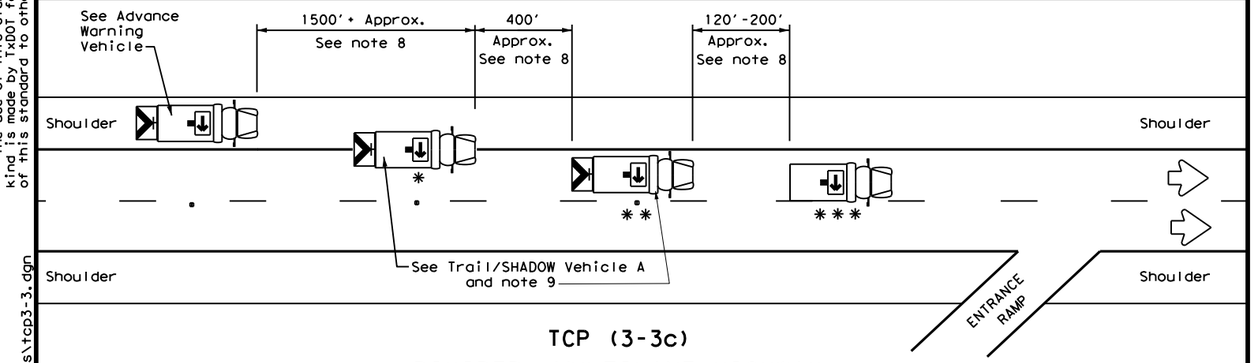
TCP (3-3a)

TWO LANE HIGHWAY WITH PAVED SHOULDERS
(WORK ON TRAVEL LANE)



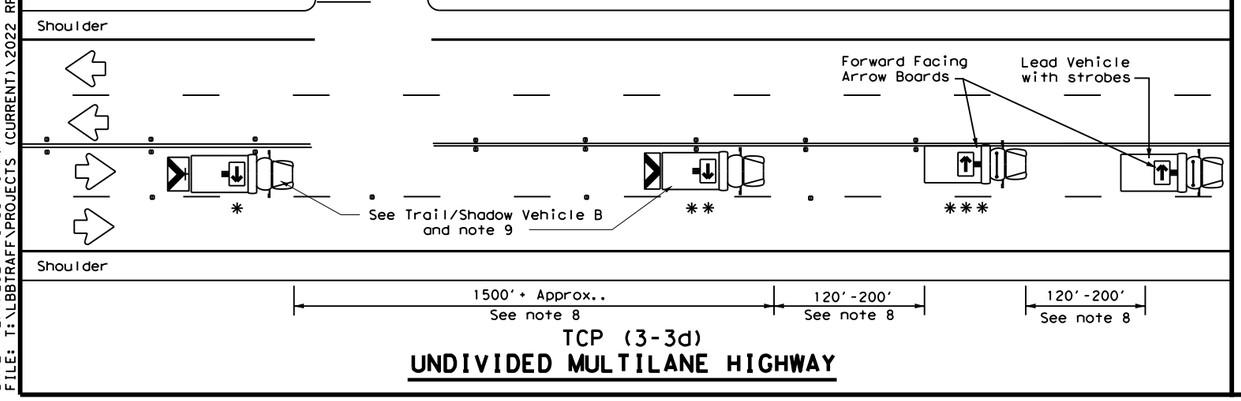
TCP (3-3b)

TWO LANE HIGHWAY WITHOUT PAVED SHOULDERS
(WORK ON TRAVEL LANE)



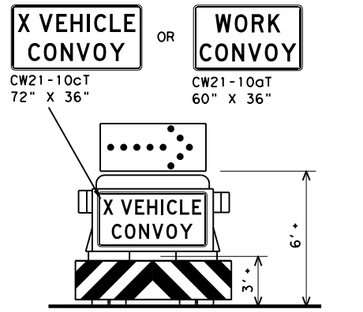
TCP (3-3c)

DIVIDED MULTILANE HIGHWAY



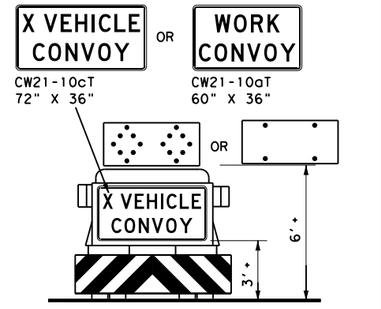
TCP (3-3d)

UNDIVIDED MULTILANE HIGHWAY



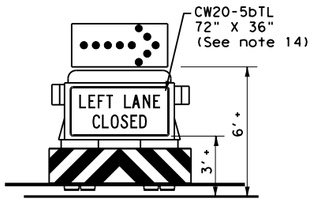
TRAIL/SHADOW VEHICLE A

with RIGHT Directional display
Flashing Arrow Board

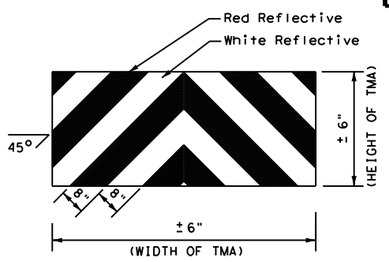


TRAIL/SHADOW VEHICLE B

with Flashing Arrow Board
in Caution Mode



ADVANCE WARNING VEHICLE



STRIPING FOR TMA

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

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

GENERAL NOTES

1. TRAIL, SHADOW, and LEAD vehicles shall be equipped with arrow boards as illustrated. When a LEAD vehicle is not used on two way roads the WORK vehicle must have an arrow board. For divided roadways, the arrow board on the WORK vehicle is optional based on the type of work being performed. The Engineer will determine if the LEAD vehicle and/or TRAIL vehicle are required based on prevailing roadway conditions, traffic volume, and sight distance restrictions.
2. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating, or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
3. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE, ADVANCE WARNING and TRAIL VEHICLE are required.
4. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DEPARTMENTAL MATERIAL SPECIFICATION DMS 8300, Type A.
5. Flashing arrow boards shall be Type B or Type C as per the Barricade and Construction (BC) standards. The board shall be controlled from inside the vehicle.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE and vehicle spacing between WORK VEHICLE and LEAD VEHICLE may vary according to terrain, work activity and other factors.
9. X VEHICLE CONVOY (CW21-10cT) or WORK CONVOY (CW21-10aT) signs shall be used on TRAIL VEHICLES and SHADOW VEHICLES as shown. As an option 48" x 48" diamond shaped WORK CONVOY (CW21-10T) or X VEHICLE CONVOY (CW21-10bT) signs may be used where adequate mounting space exists. When used, the X VEHICLE CONVOY sign shall have the number of the convoy vehicles displayed on the sign in the number designation "X" location. The X VEHICLE CONVOY sign shall not be used on the SHADOW VEHICLE if a TRAIL VEHICLE is used.
10. For divided highways with two or three lanes in one direction, the appropriate LEFT LANE CLOSED (CW20-5bTL), RIGHT LANE CLOSED (CW20-5bTR), or CENTER LANE CLOSED (CW20-5dT) sign should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board may be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. A double arrow shall not be displayed on the arrow board on the Advance Warning Vehicle.
12. For divided highways with three or four lanes in each direction, use TCP(3-2).
13. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
14. The Advance Warning Vehicle may straddle the edgeline when Shoulder width makes it necessary.
15. On two-lane two-way roadways, the work and protection vehicles should pull over periodically to allow motor vehicle traffic to pass. If motorists are not allowed to pass the work convoy, a DO NOT PASS (R4-1) sign should be placed on the back of the rearmost protection vehicle.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION/ REMOVAL
TCP(3-3)-14

FILE: tcp3-3.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT September 1987	CONT	SECT	JOB	HIGHWAY
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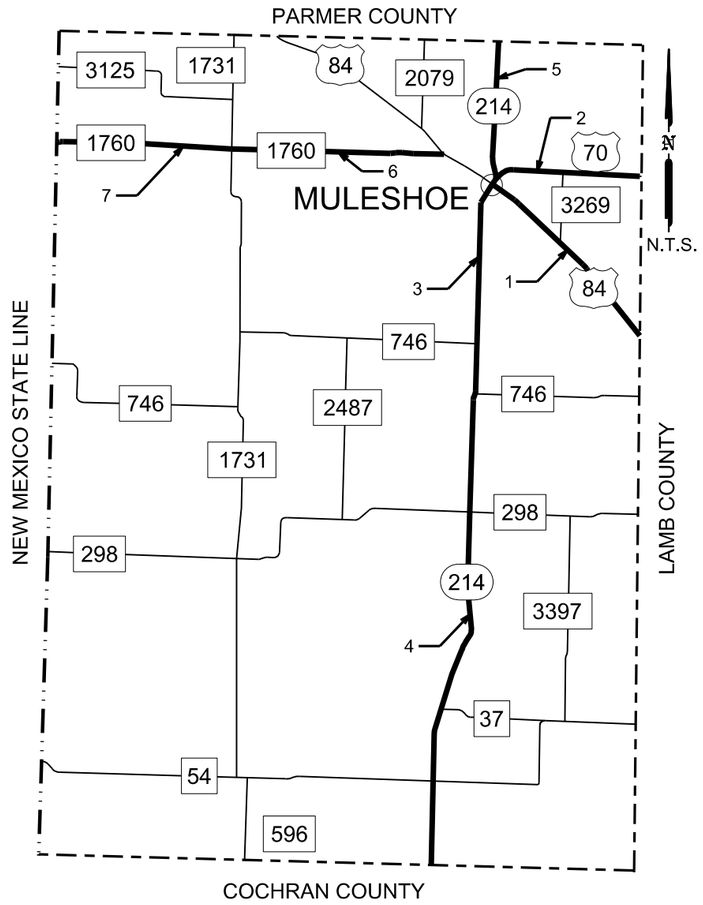
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 7-13	LBB	LUBBOCK, ETC.		2.13
1-97 7-14				

DATE: 12/1/2021 8:55:10 AM
FILE: I:\LBB\TRAFF\PROJECTS (CURRENT)\2022 RRPM\Standards\tcp3-3.dgn

County : Bailey	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	East 6th St. in Muleshoe to Lamb County Line	52	03	246+3.487	258+0.000	8.291	17	8	22	154
2	US	70	US 84 to Lamb County Line	145	01	250-0.863	254+1.611	6.501	0	12	89	0
3	SH	214	US 84 to FM 298	461	01	184-1.927	196-0.472	11.854	0	7	433	0
4	SH	214	FM 298 to Cochran County Line	461	02	196-0.472	210+0.173	13.970	0	0	448	0
5	SH	214	Parmer County Line to US 70	461	07	176+0.00	180+1.744	5.727	0	0	148	0
6	FM	1760	US 70 to FM 1731	1634	03	234-0.645	242+0.0298	7.965	0	0	73	0
7	FM	1760	FM 1731 to State Line	3286	01	226+0.000	234-0.649	8.065	0	0	81	0
						TOTAL		62.373	17	27	1,294	154



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

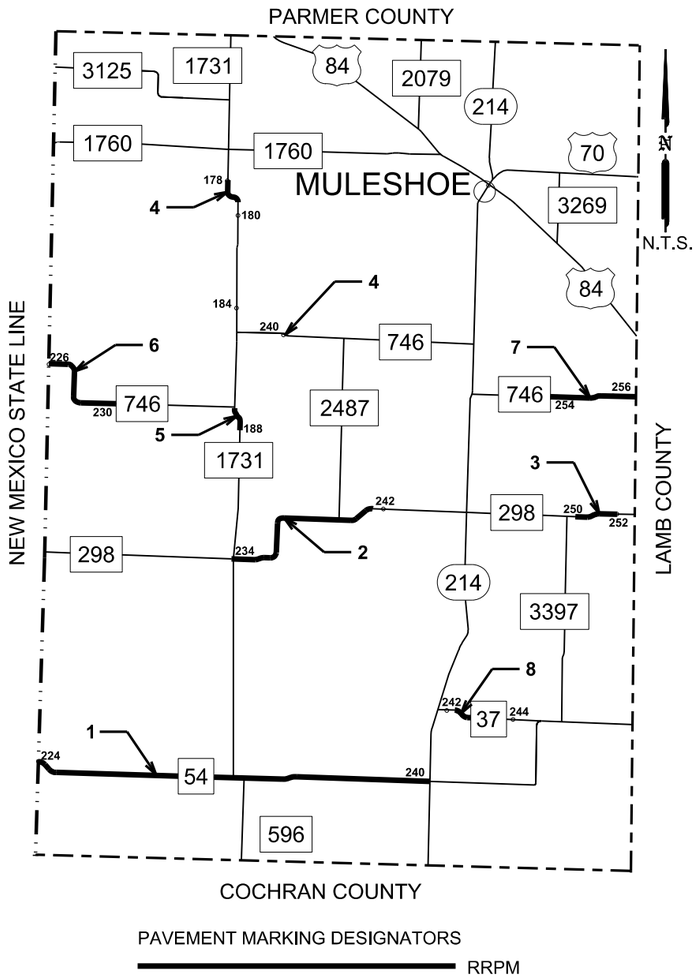
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
BAILEY

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.01
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs



PAVEMENT MARKING DESIGNATORS

RRPM

County : Bailey	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	54	ALL SPEED ADVISORY CURVES BETWEEN STATE LINE & SH 214	563	01	224	240	30
2	FM	298	ALL SPEED ADVISORY CURVES BETWEEN FM 1731 & SH 214	884	02	234	242	48
3	FM	298	ALL SPEED ADVISORY CURVES BETWEEN FM 3397 & LAMB CO. LINE	884	02	250	252	11
4	FM	1731	ALL SPEED ADVISORY CURVES BETWEEN FM 746 & FM 1760	968	04	178	180	17
5	FM	1731	ALL SPEED ADVISORY CURVES BETWEEN FM 298 & FM 746	968	05	184	188	13
6	FM	746	ALL SPEED ADVISORY CURVES BETWEEN THE STATE LINE & FM 1731	1084	01	226	230	13
7	FM	746	ALL SPEED ADVISORY CURVES BETWEEN FM 1731 & FM 2487	1084	01	240	240	11
8	FM	746	ALL SPEED ADVISORY CURVES BETWEEN SH 214 & LAMB CO. LINE	1084	02	254	256	15
9	FM	37	ALL SPEED ADVISORY CURVES BETWEEN SH 214 & FM 54	2044	01	242	244	14
						TOTAL		172

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

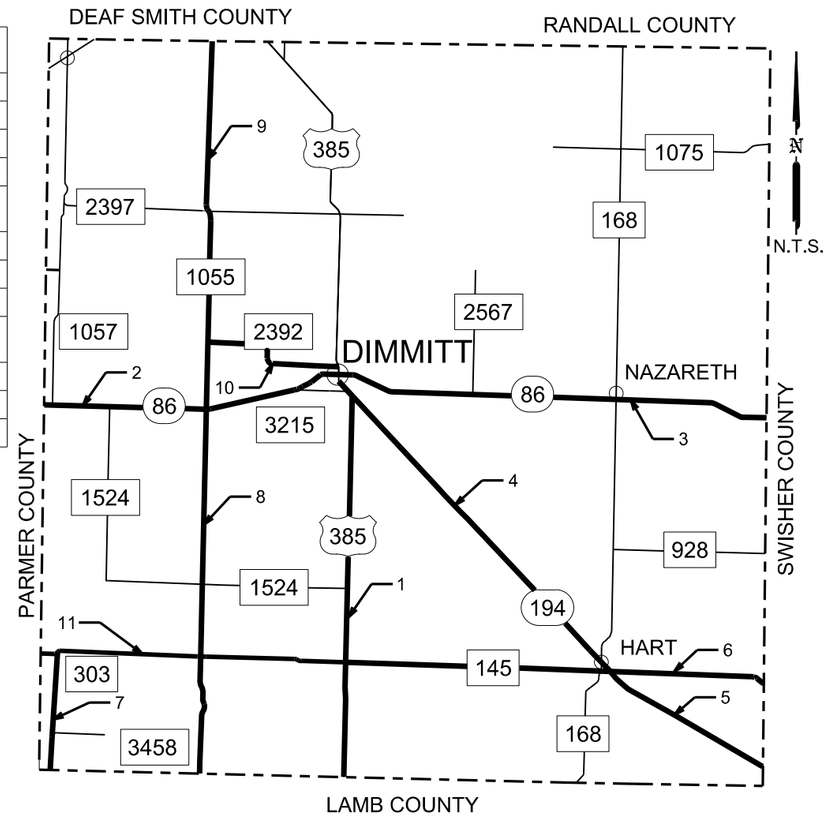
Jeremy T. Dearing, P.E.

12/03/2021

BAILEY COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.02
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Castro	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	385	SH 194 to Lamb County Line	227	01	150-0.312	164+1.311	15.555	0	0	456	0
2	SH	86	Parmer County Line US 385	302	02	256+0.000	268+.0443	12.443	0	0	383	0
3	SH	86	US 385 to Swisher County Line	302	03	268+0.443	288+0.000	18.214	0	0	573	0
4	SH	194	US 385 to County Road 519	439	01	270-0.570	278-1.390	7.182	0	24	285	0
5	SH	194	County Road 519 to Swisher County Line	439	02	278-1.390	294+0.120	15.873	0	0	333	0
6	FM	145	US 3850 to Swisher County Line	754	04	270+0.792	290+0.000	19.208	0	0	464	0
7	FM	303	FM 145 to Lamb County Line	820	10	158-0.085	164-0.001	5.991	0	0	96	0
8	FM	1055	FM 2397 to Lamb County Line	1291	01	136+0.985	146-0.871	23.903	0	0	481	0
9	FM	1055	FM 2397 to Deaf Smith County Line	1291	08	130+0.023	136+0.985	6.096	0	0	211	0
10	FM	2392	FM 1055 to beginning of 4 lane	874	05	264-0.040	268+1.240	4.120	0	0	262	0
11	FM	145	US 385 to Parmer County Line	2419	01	258+0.070	270+0.792	12.072	0	0	325	0
						TOTAL		**140.657**	**0**	**24**	**3,869**	**0**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

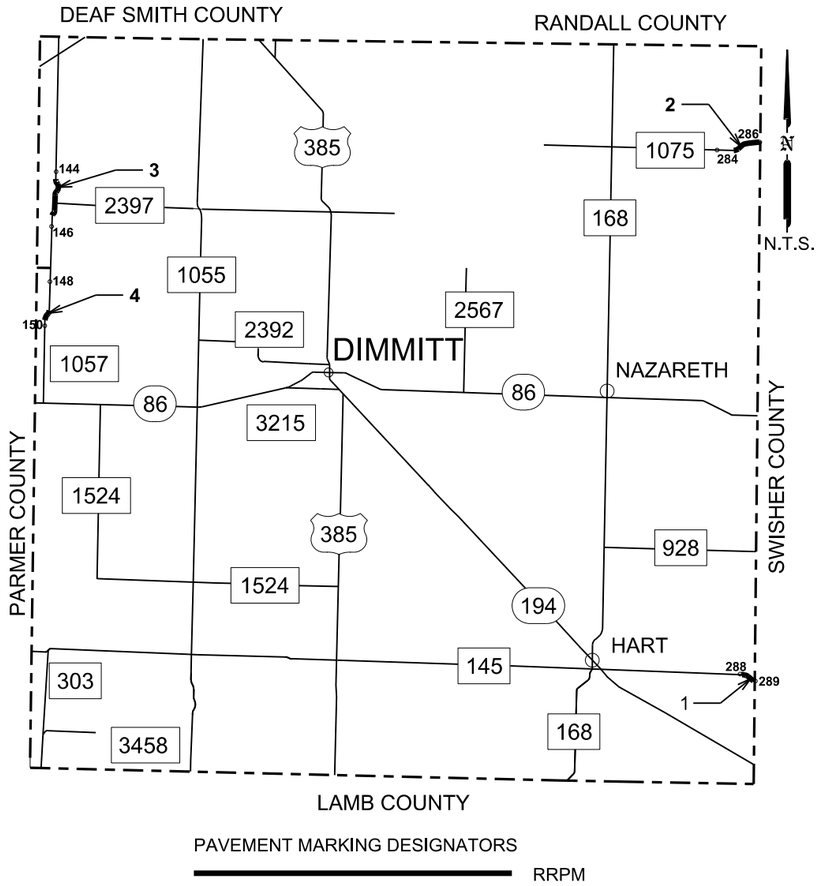
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
CASTRO

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.03
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs



PAVEMENT MARKING DESIGNATORS

RRPM

County : Castro	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	145	ALL SPEED ADVISORY CURVES NEAR SWISHER CO. LINE	754	04	288	289	9
2	FM	1075	ALL SPEED ADVISORY CURVES BETWEEN FM 168 & SWISHER CO. LINE	1256	01	284	286	27
3	FM	1057	ALL SPEED ADVISORY CURVES BETWEEN JUST NORTH & SOUTH OF FM 2397	1891	01	144	146	29
4	FM	1057	ALL SPEED ADVISORY CURVES BETWEEN SH 86 & FM 2397 (WEST)	1891	01	148	150	20
						TOTAL		85

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

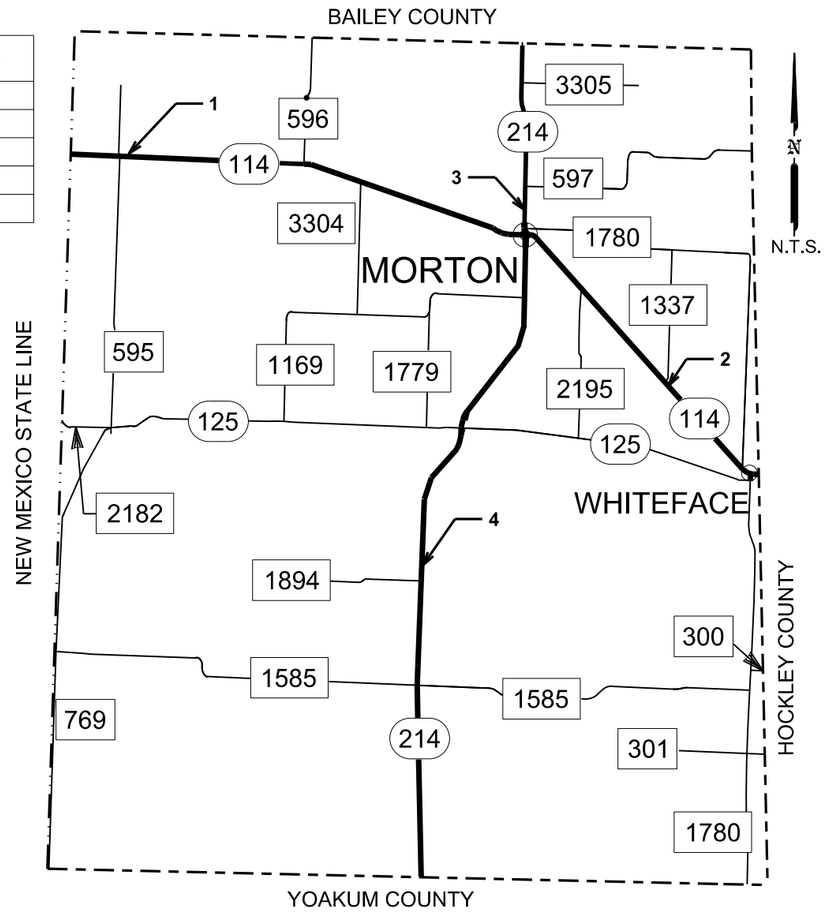
Jeremy T. Dearing, P.E.

12/03/2021

CASTRO COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.04
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Cochran	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	SH	114	Texas State Line to SH 214	130	01	224+0.000	240+0.510	16.510	0	34	667	0
2	SH	114	SH 214 to Hockley County Line	130	02	240+0.510	254+0.000	12.926	0	33	457	0
3	SH	214	Baily County Line to SH 114	461	03	210+0.179	218+0.887	8.714	0	6	180	0
4	SH	214	SH 114 to Yoakum County Line	461	04	218+0.887	244-0.011	25.912	0	32	522	0
						TOTAL		**64.062**	**0**	**105**	**1,826**	**0**



PAVEMENT MARKING DESIGNATORS

RRPM

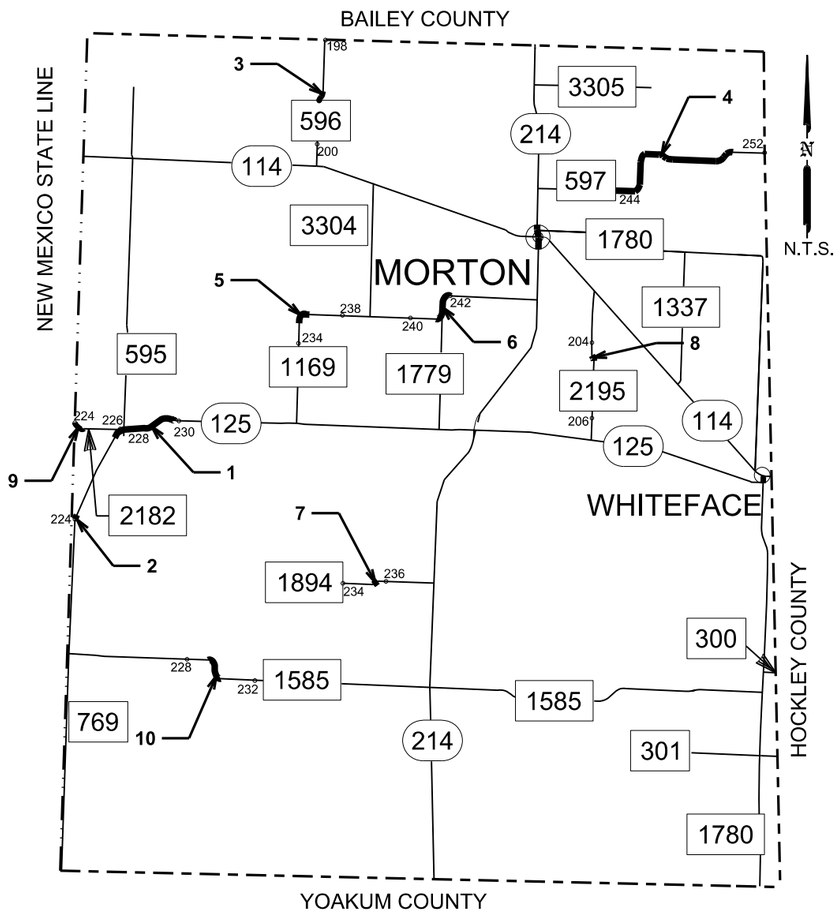
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
COCHRAN

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.05
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021



PAVEMENT MARKING DESIGNATORS

RRPM

CURVE ADVISORY RRPMs

County : Cochran	Hwy	Rdwy	Description	Cont	Sect	Begin TRM	END TRM	TY II-A-A
1	SH	125	ALL SPEED ADVISORY CURVES BETWEEN FM 595 & FM 1169	967	02	228	230	13
2	SH	125	ALL SPEED ADVISORY CURVES NEAR STATE LINE	967	02	224	224	5
3	FM	596	ALL SPEED ADVISORY CURVES BETWEEN SH 114 & BAILEY CO. LINE	968	02	198	200	12
4	FM	597	ALL SPEED ADVISORY CURVES BETWEEN SH 214 & HOCKLEY CO. LINE	969	01	244	252	44
5	FM	1169	ALL SPEED ADVISORY CURVES WEST OF FM 3304	1481	01	234	238	13
6	FM	1169	ALL SPEED ADVISORY CURVES BETWEEN SH 214 & FM 3304	1481	01	240	242	21
7	FM	1894	ALL SPEED ADVISORY CURVES BETWEEN END OF STATE MAINTENANCE & SH 214	1748	01	234	236	11
8	FM	2195	ALL SPEED ADVISORY CURVES BETWEEN SH 125 & SH 114	2080	01	204	206	11
9	FM	2182	ALL SPEED ADVISORY CURVES BETWEEN STATE LINE TO FM 595	2615	01	224	226	6
10	FM	1585	ALL SPEED ADVISORY CURVES BETWEEN FM 769 & SH 214	3126	01	228	232	17
						TOTAL		153

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

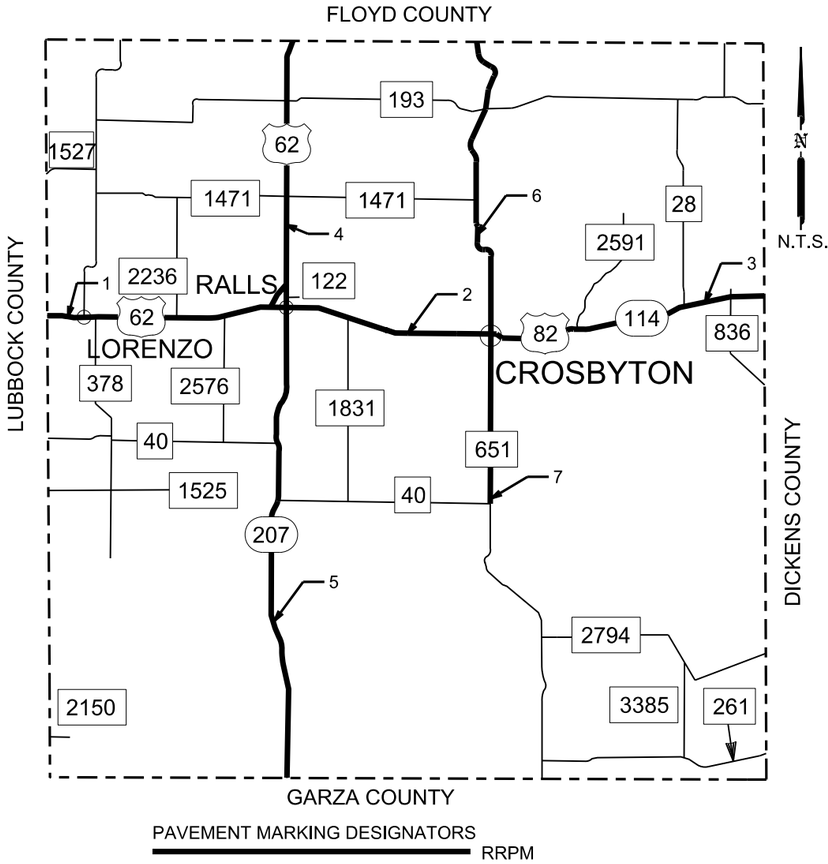
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

COCHRAN COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.06
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021



PAVEMENT MARKING DESIGNATORS

RRPM

County : Crosby	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	62	Lubbock County Line to TRM 344-1.145	131	03	350+0.000	344-1.145	14.854	57	53	75	900
2	US	82	TRM 344-1.145 to FM 2591	131	04	344-1.145	350+0.579	7.730	27	0	324	863
3	US	82	FM 2591 to Dickens County Line	131	05	350+0.579	358+0.602	8.016	42	0	0	404
4	US	62	Floyd County Line to US 62/82	453	02	360+0.550	370+0.532	11.115	0	0	37	0
5	SH	207	US 62 to Garza County Line	453	04	232+1.838	252+0.000	20.465	0	12	467	0
6	FM	651	Floyd County Line to begin of 4 lane	806	02	196-0.002	208+0.316	12.031	0	12	174	0
7	FM	651	Start of 2 lane to FM 40	806	03	210-0.371	216-0.096	6.275	0	0	40	0
						TOTAL		**80.486**	**126**	**77**	**1,117**	**2,167**

STATE OF TEXAS
JEREMY T. DEARING
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LICENSED
PROFESSIONAL ENGINEER

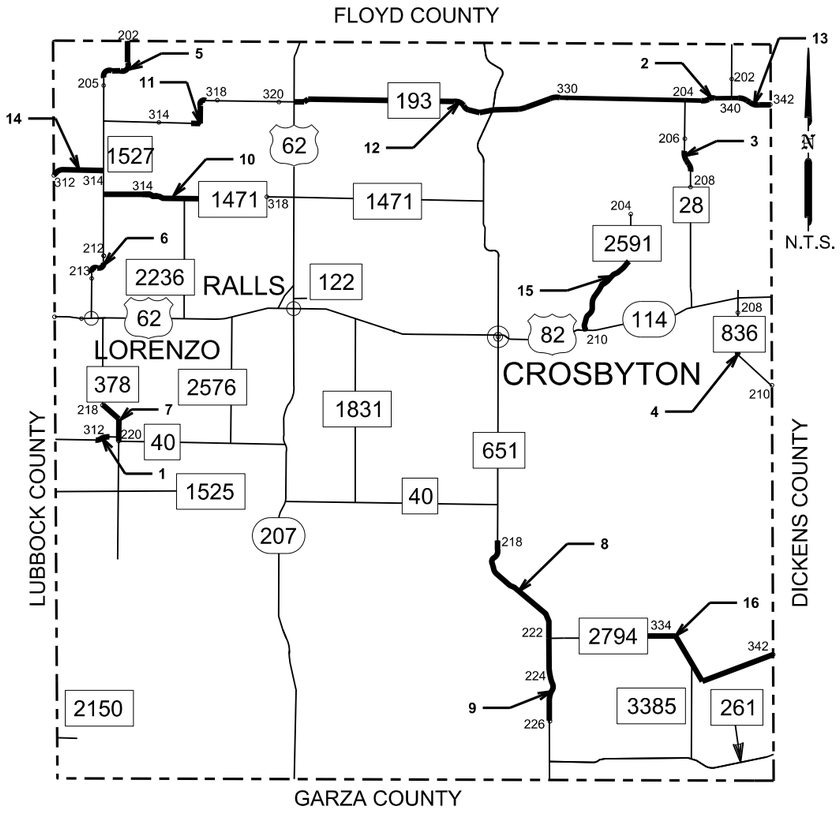
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
CROSBY

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.07
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs



PAVEMENT MARKING DESIGNATORS

RRPM

County : Crosby	Hwy	Rdwy	Description	Cont	Sect	Begin TRM	END TRM	TY II-A-A
1	FM	40	ALL SPEED ADVISORY CURVES BETWEEN LUBBOCK CO. LINE & FM 378	644	02	312	312	9
2	FM	28	ALL SPEED ADVISORY CURVES BETWEEN FM 28 (NORTH) & FM 28 (SOUTH)	651	02	202	204	11
3	FM	28	ALL SPEED ADVISORY CURVES BETWEEN FM 193 & US 82	651	02	206	208	22
4	FM	836	ALL SPEED ADVISORY CURVES BETWEEN US 82 & DICKENS CO. LINE	651	03	208	210	28
5	FM	378	ALL SPEED ADVISORY CURVES BETWEEN FM 193 & FLOYD CO. LINE	800	3	202	205	20
6	FM	378	ALL SPEED ADVISORY CURVES BETWEEN FM 1471 & US 62	800	3	212	213	26
7	FM	378	ALL SPEED ADVISORY CURVES BETWEEN US 62 & FM 40	800	4	218	220	25
8	FM	651	ALL SPEED ADVISORY CURVES BETWEEN FM 40 & FM 2794	806	03	218	222	17
9	FM	651	ALL SPEED ADVISORY CURVES BETWEEN FM 2794 & GARZA CO. LINE	806	03	224	226	5
10	FM	1471	ALL SPEED ADVISORY CURVES BETWEEN FM 378 & US 62	1143	01	314	318	33
11	FM	193	ALL SPEED ADVISORY CURVES BETWEEN FM 378 & US 62	1254	01	314	318	16
12	FM	193	WEST OF FM 651	1254	02	320	330	26
13	FM	193	ALL SPEED ADVISORY CURVES BETWEEN FM 28 (NORTH) & DICKENS CO. LINE	1254	02	340	342	15
14	FM	1527	ALL SPEED ADVISORY CURVES BETWEEN LUBBOCK CO. LINE & FM 378	1462	01	312	312	7
15	FM	2591	NORTH OF US 82	2616	01	204	208	46
16	FM	2794	ALL SPEED ADVISORY CURVES BETWEEN FM 651 & DICKENS CO. LINE	2777	01	334	342	87
						TOTAL		393

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

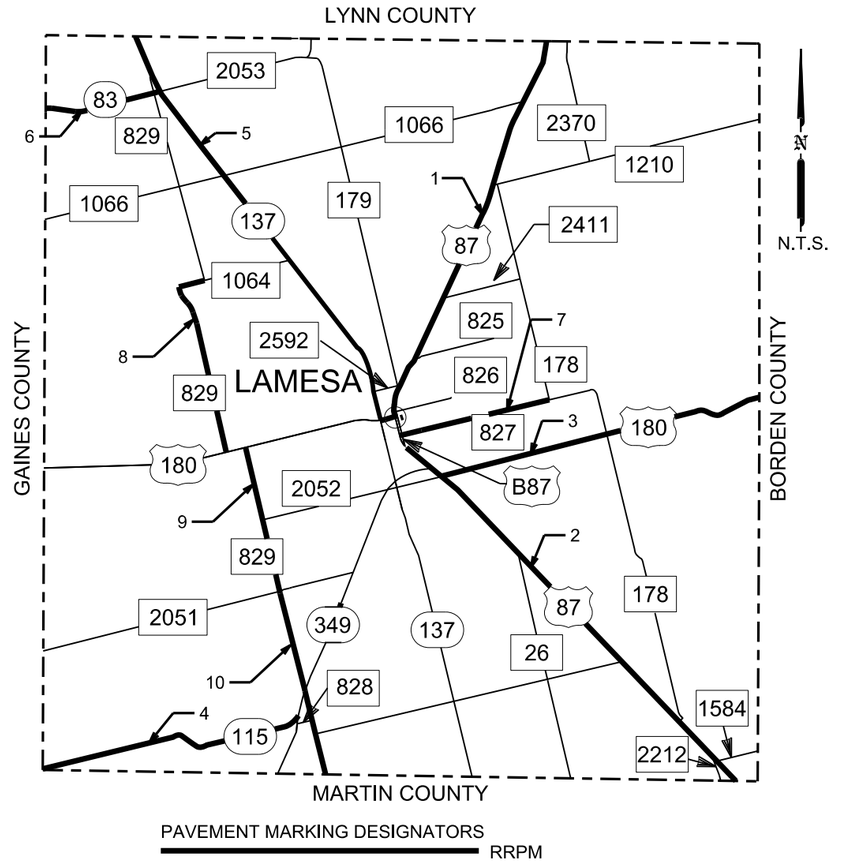
Jeremy T. Dearing, P.E.

12/03/2021

CROSBY COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.08
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Dawson	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	87	Lynn County Line to South 1st St in Lamesa	68	04	316+0.000	332+1.097	17.119	108	20	43	812
2	US	87	South 1st St in Lamesa to Martin County Line	68	05	332+1.097	354+0.000	20.333	114	213	194	1,277
3	US	180	US 87 to Borden County Line	295	01	288-1.135	306+0.645	13.971	0	20	410	0
4	SH	115	Gaines County Line to SH 349	354	07	284-0.035	296+0.000	11.359	0	0	399	0
5	SH	137	Lynn County Line to US 180	380	05	258-0.020	276-0.492	18.047	0	62	653	0
6	SH	83	Gaines County Line to SH 137	583	04	274+0.000	278+0.952	4.962	0	0	132	0
7	FM	827	US 87 to FM 178	959	02	286-0.050	292+0.286	6.024	0	0	156	0
8	FM	829	FM 1064 to US 180	1255	01	264+0.999	272+0.851	7.980	0	0	180	0
9	FM	829	US 180 to FM 2051	1255	03	272+0.923	278+1.678	6.755	0	0	150	0
10	FM	829	FM 2051 to Martin County Line	1638	01	278+1.663	286+1.657	7.734	0	0	177	0
						TOTAL		**114.284**	**222**	**315**	**2,494**	**2,089**



PAVEMENT MARKING DESIGNATORS

RRPM

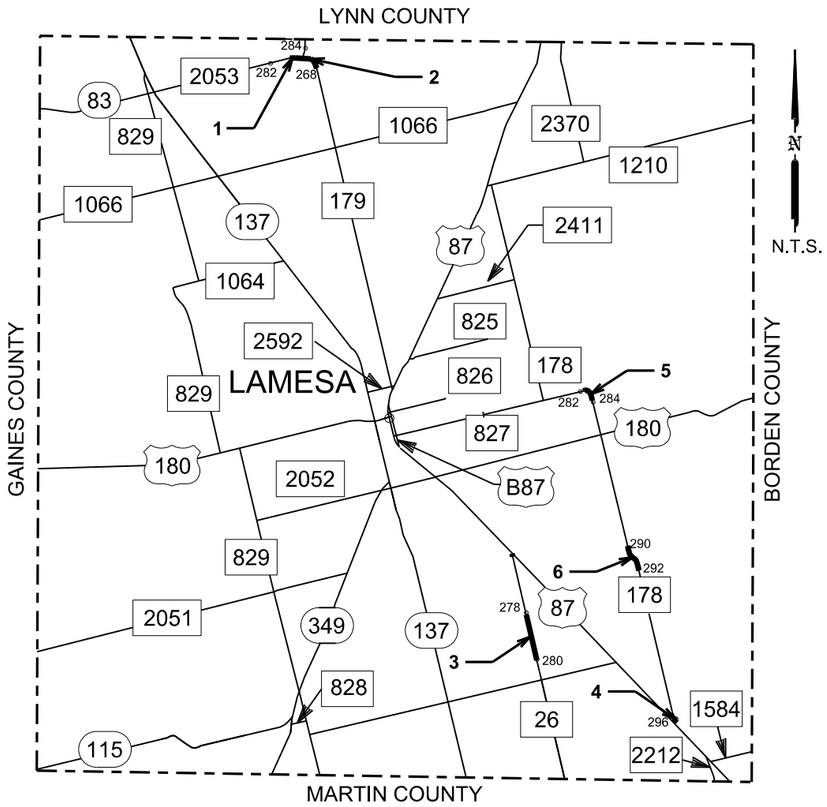
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
DAWSON

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.09
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs



PAVEMENT MARKING DESIGNATORS

RRPM

County : Dawson	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	2053	ALL SPEED ADVISORY CURVES BETWEEN SH 137 & FM 179	494	05	282	284	8
2	FM	179	ALL SPEED ADVISORY CURVES BETWEEN FM 2053 & FM 1066	494	05	264	268	2
3	FM	26	ALL SPEED ADVISORY CURVES BETWEEN US 87 & FM 828	637	01	278	280	15
4	FM	178	US 87 INTERSECTION	959	01	296	296	9
5	FM	178	NORTH OF US 180	959	02	282	284	8
6	FM	178	ALL SPEED ADVISORY CURVES BETWEEN US 180 & US 87	959	02	290	292	10
						TOTAL		52

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

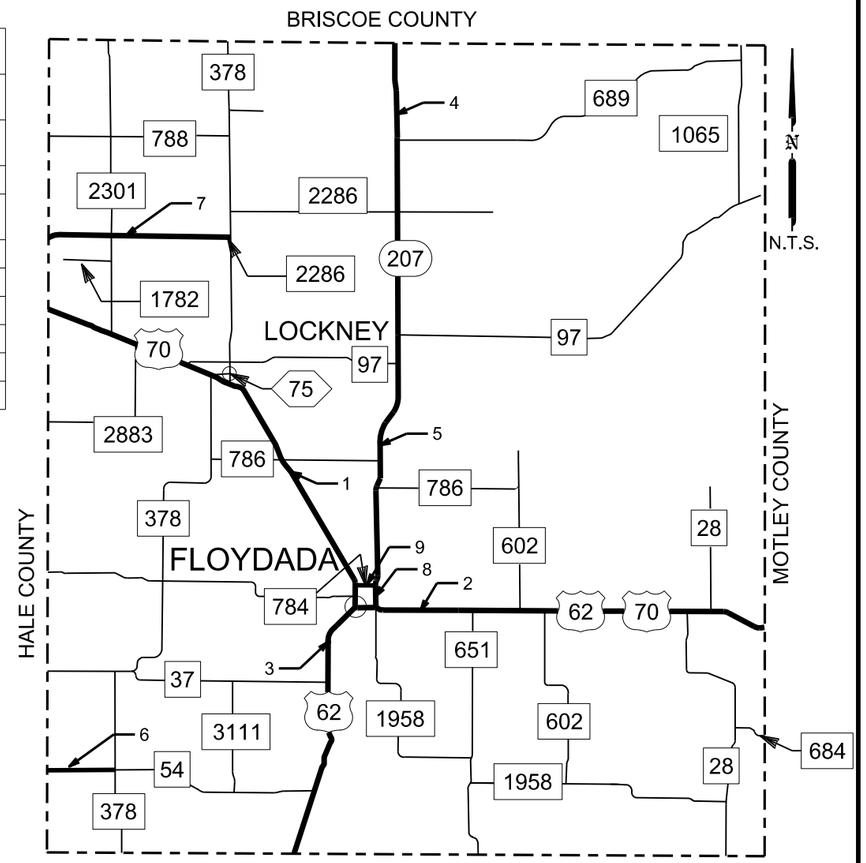
Jeremy T. Dearing, P.E.

12/03/2021

DAWSON COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.			SHEET NO.
6				3.10
STATE	DIST.	County		
TEXAS	LBB	LUBBOCK,ETC.		
CONT.	SECT.	JOB	HIGHWAY NO.	
0905	00	118	VAR	
FILE NAME			DATE	
2022 RRPM			12/1/2021	

County : Floyd	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	70	Hale County Line to North City Limits of Floydada	145	06	320+0.000	336+1.929	17.929	0	0	0	988
2	US	62/70	North City Limits of Floydada to Motley County Line	145	07	382-0.146	400+0.059	17.929	33	100	464	311
3	US	62	Crosby County Line to US 70	453	01	372+0.000	382+0.829	10.827	0	121	347	334
4	SH	207	Briscoe County Line to TRM 196+0.186	453	07	184+0.000	196+0.186	12.166	0	0	87	0
5	SH	207	TRM 196+0.186 to Missouri Street	453	08	196+0.186	206+0.894	10.728	0	0	270	0
6	FM	54	Hale County Line to FM 378	563	07	316+0.040	318+0.887	2.847	0	0	90	0
7	FM	2286	Hale County Line to FM 378	2125	02	310-0.009	316+1.546	6.154	0	0	54	0
8	SH	207	Missouri Street to US 62/70	2497	01	207-0.112	207+0.385	0.497	0	0	5	0
9	FM	784	US 70 to SH 207	3241	01	328-0.236	328+0.651	0.887	0	0	5	0
						TOTAL		79.964	33	221	1,322	1,633



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

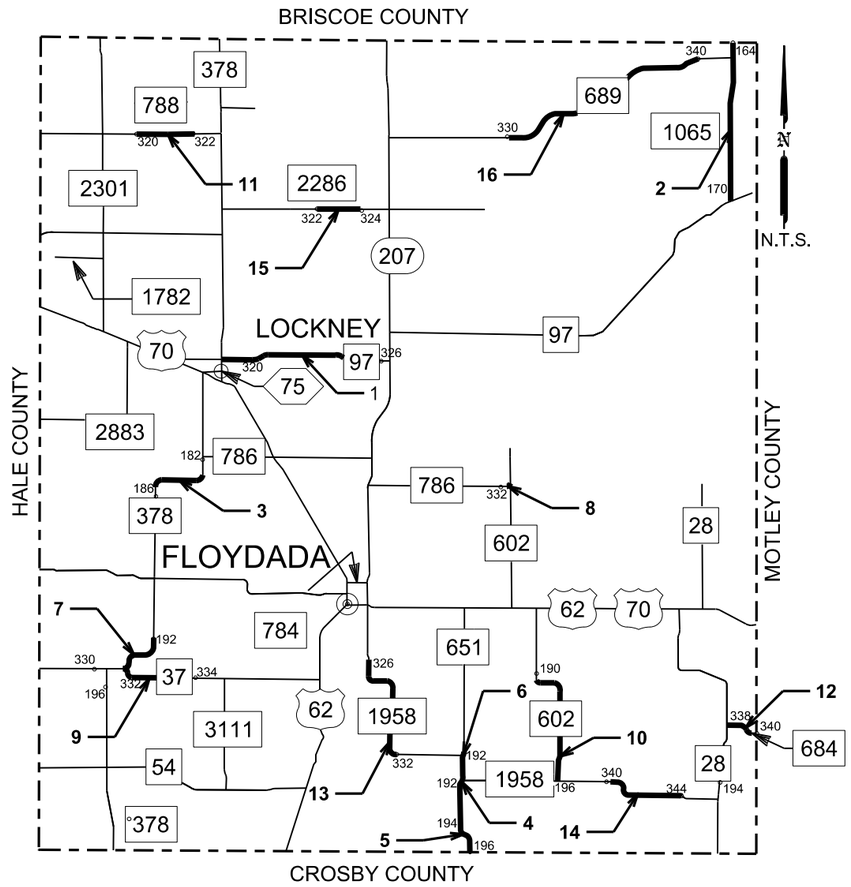
COUNTY LAYOUT
FLOYD

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.11
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Floyd	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	97	ALL SPEED ADVISORY CURVES BETWEEN FM 378 & SH 207	740	01	320	326	26
2	FM	1065	ALL SPEED ADVISORY CURVES BETWEEN Briscoe County Line to FM 97	740	02	164	170	64
3	FM	378	ALL SPEED ADVISORY CURVES BETWEEN FM 786 & FM 784	800	01	182	186	23
4	FM	651	ALL SPEED ADVISORY CURVES BETWEEN US 62 & FM 1958	806	01	192	192	15
5	FM	651	ALL SPEED ADVISORY CURVES BETWEEN FM 1958 & CROSBY CO. LINE	806	01	194	196	20
6	FM	651	ALL SPEED ADVISORY CURVES BETWEEN FM 1958 & CROSBY CO. LINE	806	05	192	192	11
7	FM	378	ALL SPEED ADVISORY CURVES BETWEEN FM 784 & FM 37	1128	01	1092	196	23
8	FM	786	ALL SPEED ADVISORY CURVES BETWEEN SH 207 & FM 602	1128	01	332	332	11
9	FM	37	ALL SPEED ADVISORY CURVES BETWEEN FM 378 & FM 3111	1627	01	332	334	11
10	FM	602	ALL SPEED ADVISORY CURVES BETWEEN US 62 & FM 1958	1628	01	190	196	32
11	FM	788	ALL SPEED ADVISORY CURVES BETWEEN FM 2301 & FM 378	2123	01	320	322	9
12	FM	684	ALL SPEED ADVISORY CURVES BETWEEN FM 28 & MOTLEY CO. LINE	2425	01	338	340	13
13	FM	1958	ALL SPEED ADVISORY CURVES BETWEEN US 62 & FM 651	2497	01	326	332	51
14	FM	1958	ALL SPEED ADVISORY CURVES BETWEEN FM 602 & FM 28	2497	02	340	344	26
15	FM	2286	ALL SPEED ADVISORY CURVES BETWEEN FM 378 & SH 207	2766	01	322	324	15
16	FM	689	ALL SPEED ADVISORY CURVES BETWEEN SH 207 & FM 1065	2766	03	330	340	84
							TOTAL	**434**

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

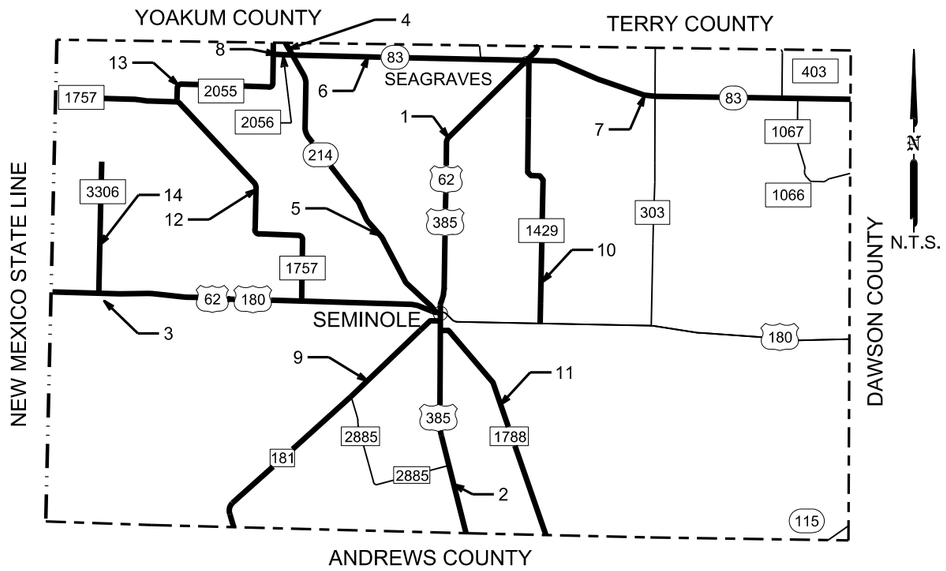
Jeremy T. Dearing, P.E.

12/03/2021

FLOYD COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.12
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Gaines	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	62/385	Terry County Line to US 180	228	02	246-0.210	264+1.755	19.151	87	360	441	639
2	US	385	US 180 to Andrews County Line	228	03	292-0.908	304+0.881	13.733	86	38	90	546
3	US	62	State Line to US 385	294	01	221+1.260	245+1.798	24.538	128	52	133	693
4	SH	83	Yoakum County Line to SH 214	461	08	236-0.011	238-0.886	1.125	0	4	20	0
5	SH	214	SH 83 to US 62/180	461	09	276-0.835	292+1.562	18.397	0	112	173	0
6	SH	83	SH 214 to US 62/385	583	02	238-0.886	250+0.574	13.460	0	18	240	0
7	SH	83	US 62/385 to Dawson County Line	583	03	252-0.244	274+0.000	20.637	0	1	185	0
8	FM	2056	FM 2055 to SH 214	583	09	236-0.037	236+1.138	1.175	0	0	8	0
9	FM	181	US 385 to Andrews County Line	961	01	272-0.043	292-0.008	20.035	0	10	183	0
10	FM	1429	SH 83 to US 180	1704	01	256-0.040	272+0.866	16.906	0	0	116	0
11	FM	1788	US 385 to Andrews County Line	1718	03	266-0.083	280-0.264	13.819	0	0	91	0
12	FM	1757	State Line to US 62/180	1836	01	222-0.063	246+0.575	24.121	0	0	194	0
13	FM	2055	FM 1757 to Yoakum County Line	1865	02	256-0.006	264+1.851	9.857	0	0	60	0
14	FM	3306	US 62/180 to End of State Maintenance	3501	04	262+0.009	270+0.094	8.009	0	0	53	0
						TOTAL		**204.963**	**301**	**595**	**1,987**	**1,878**



PAVEMENT MARKING DESIGNATORS

RRPM

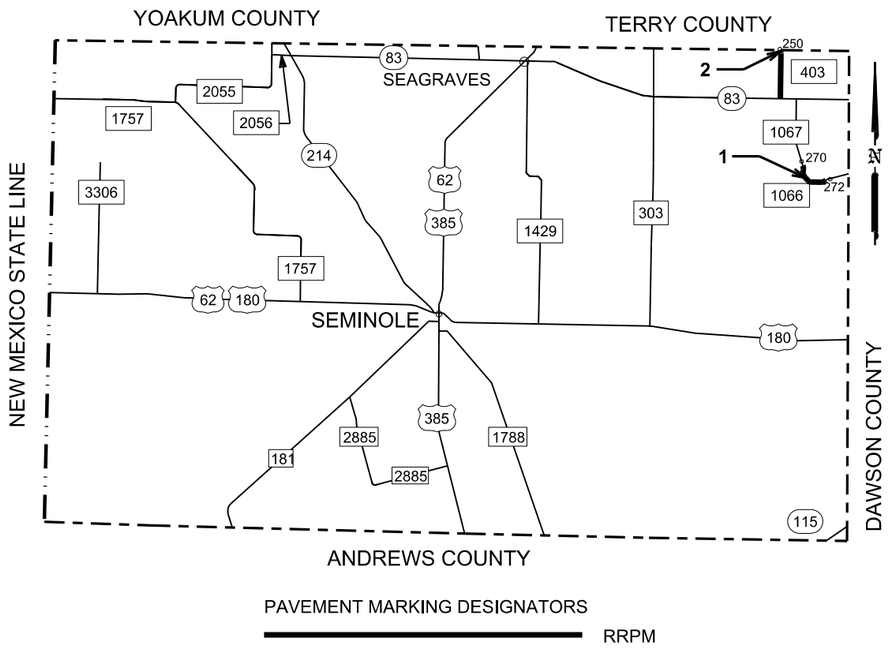
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
GAINES

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.13
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021



PAVEMENT MARKING DESIGNATORS

RRPM

CURVE ADVISORY RRPMs

County : Gaines	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	1066	ALL SPEED ADVISORY CURVES BETWEEN SH 83 & DAWSON CO. LINE	820	07	270	272	10
2	FM	403	ALL SPEED ADVISORY CURVES BETWEEN SH 83 & TERRY CO. LINE	881	02	250	250	9
						TOTAL		19

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

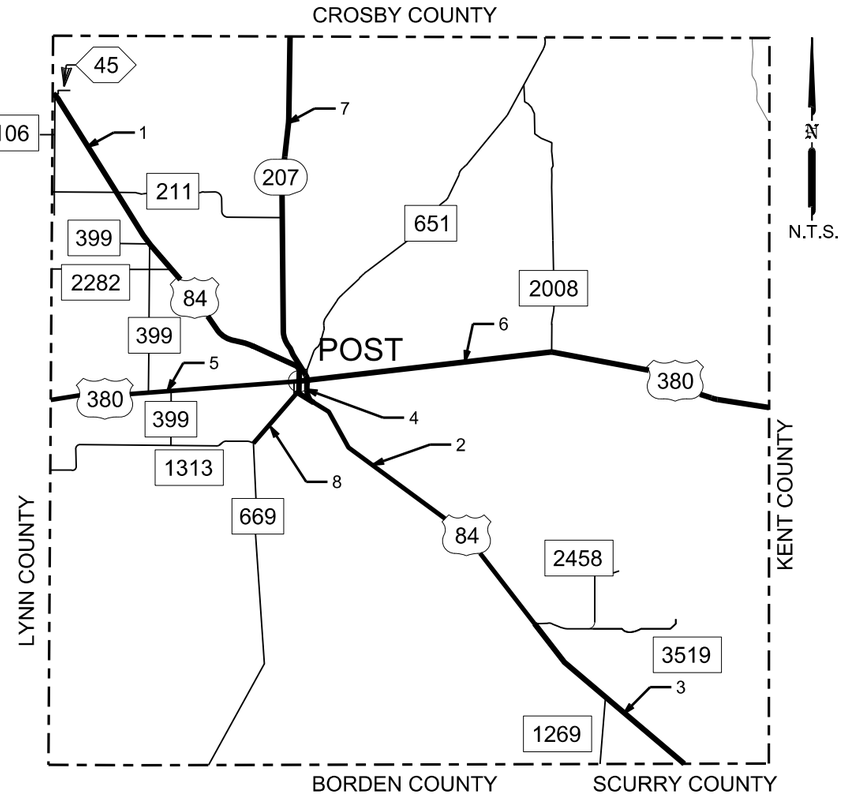
Jeremy T. Dearing, P.E.

12/03/2021

GAINES COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.14
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Garza	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	Lynn County Line to US 84 Bridge	53	04	344+0.000	360+0.159	16.159.	90	72	126	793
2	US	84	US 84 Bridge to FM 2458	53	05	360+0.159	374+1.552	15.393	42	0	0	404
3	US	84	FM 2458 to Scurry County Line	53	06	374+1.552	382+1.954	8.410	21	0	0	209
4	SL	46	US 380 to US 84	53	14	290+0.010	290+0.957	0.967	0	5	19	0
5	US	380	Lynn County Line to US 84	297	07	318+0.000	328+0.510	10.510	0	0	300	0
6	US	380	RR Crossing to Kent County Line	298	01	328+0.871	350+0.001	21.128	0	0	700	0
7	SH	207	Crosby County Line to US 380	453	05	352+0.000	366+0.471	14.474	0	6	146	0
8	FM	669	US 380 to FM 1313	453	05	240-0.841	242+0.149	2.990	0	3	40	0
						TOTAL		**73.872**	**153**	**86**	**1,331**	**1,406**



PAVEMENT MARKING DESIGNATORS

RRPM

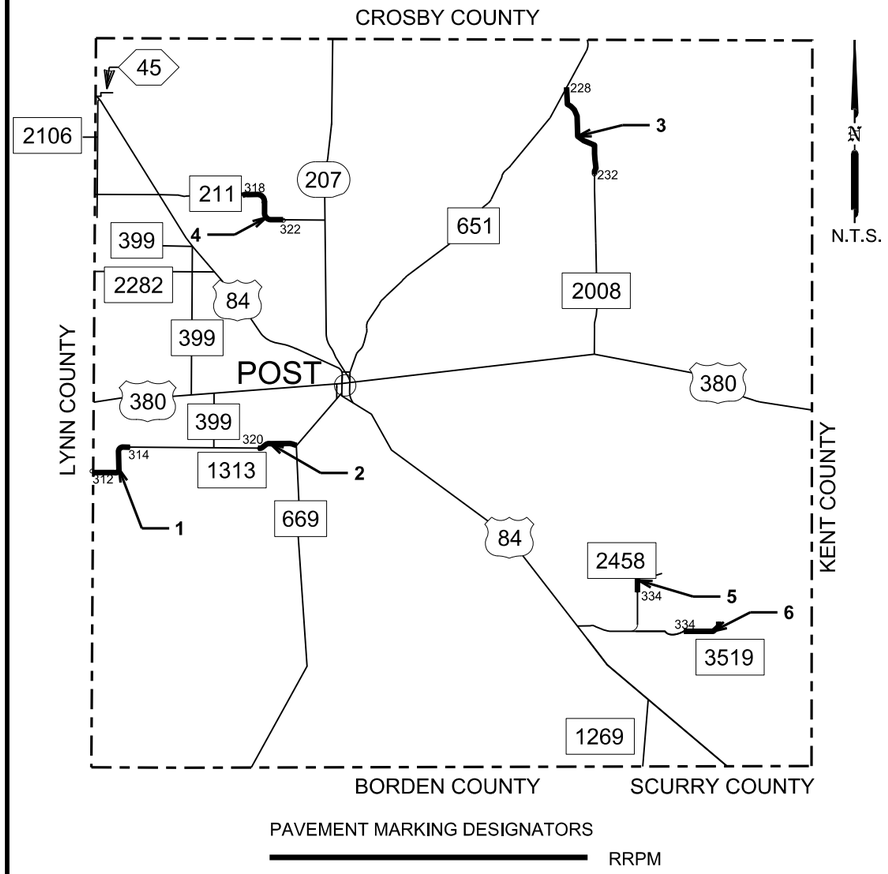
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
GARZA

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.15
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021



PAVEMENT MARKING DESIGNATORS

RRPM

CURVE ADVISORY RRPMs

County : Garza	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	1313	ALL SPEED ADIVISORY CURVES BETWEEN LYNN CO. LINE & FM 399	453	01	312	314	11
2	FM	1313	ALL SPEED ADIVISORY CURVES BETWEEN FM 399 & FM 669	453	01	320	320	10
3	FM	2008	ALL SPEED ADVISORY CURVES BETWEEN FM 651 & TRM 232	2180	02	228	232	45
4	FM	211	ALL SPEED ADVISORY CURVES BETWEEN US 84 & SH 207	2498	01	314	322	38
5	FM	2458	ALL SPEED ADVISORY CURVES NORTH OF FM 3519	2767	01	334	EOP	16
6	FM	3519	ALL SPEED ADVISORY CURVES EAST OF FM 2458	2767	02	334	EOP	19
						TOTAL		139

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

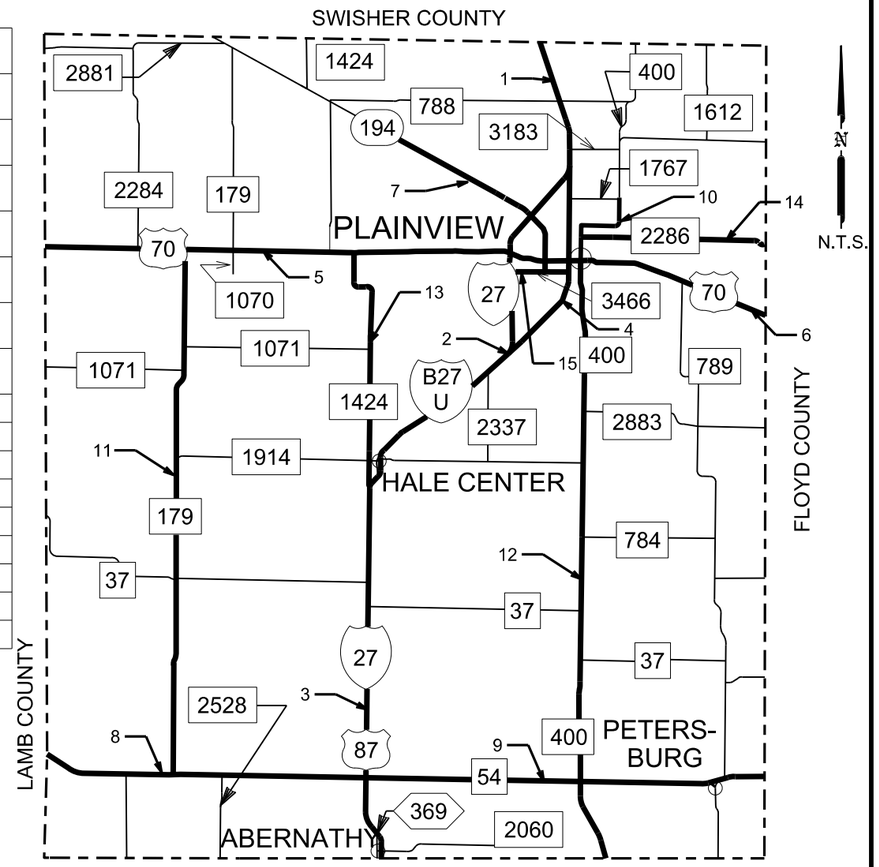
Jeremy T. Dearing, P.E.

12/03/2021

GARZA COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.16
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Hale	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	IH	27	0.193 Miles South of US 70 to Swisher County Line (F.R.)	67	04	49-0.079	58+0.887	9.960	0	19	418	90
2	IH	27	S. Hale Center City Limits to 0.193 Miles S. of US 70 (F.R.)	67	05	38-0.520	48+0.927	11.449	0	61	870	0
3	IH	27	Lubbock County Line to S Hale Center City Limits (F.R.)	67	06	22-0.816	37+0.484	16.308	0	58	1,125	0
4	BI	27	South Off Ramp of IH 27 to North On Ramp of IH 27	67	09	170-2.218	176+1.020	9.282	86	143	318	90
5	US	70	Lamb County Line to Austin St in Plainview	145	04	228+0.000	310+0.077	22.139	0	356	2,352	0
6	US	70	Austin St in Plainview to Floyd County Line	145	06	310+0.077	320+0.000	8.375	33	75	90	4
7	SH	194	FM 3466 to Seal Coat Construction	439	05	310+1.547	312+1.112	1.565	0	11	22	2
8	FM	54	Lamb County Line to IH 27	563	05	284+0.001	298-0.415	13.584	0	0	106	1
9	FM	54	IH 27 to Floyd County Line	563	06	298-0.415	316+0.008	18.423	0	0	118	0
10	FM	400	US 70 to FM 1767	800	05	170+0.625	174+0.237	3.612	0	0	128	0
11	FM	179	US 70 to FM 54	880	01	174-1.869	192+1.677	21.640	0	0	165	0
12	FM	400	US 70 to Lubbock County Line	1041	01	174+0.642	200+0.012	25.370	0	11	189	0
13	FM	1424	US 70 to IH 27	1629	02	178-0.175	186+0.436	8.611	0	0	70	0
14	FM	2286	FM 400 to Floyd County Line	2125	01	302-0.044	310-0.010	8.034	0	0	58	0
15	FM	3466	IH 27 to BI 27	3485	01	290-0.291	292+0.075	2.366	0	20	39	0
							TOTAL	180.718	119	754	6,068	187



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

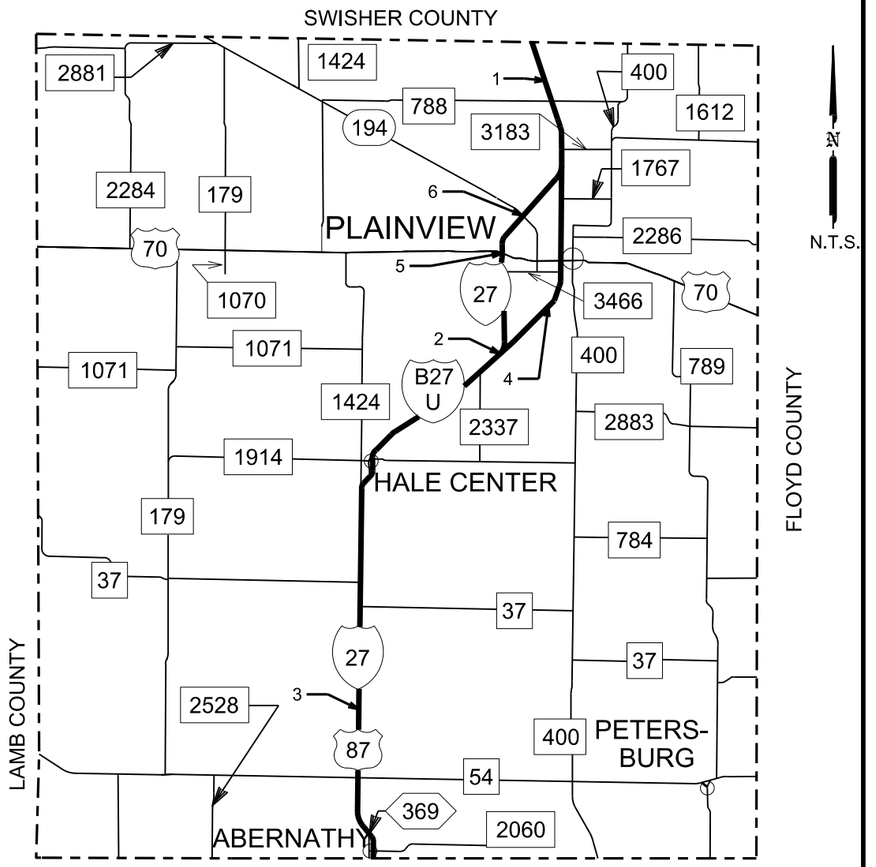
12/03/2021

COUNTY LAYOUT
HALE

FED.RD. DIV.NO.	STATE PROJECT NO.			SHEET NO.
6				3.17
STATE	DIST.	County		
TEXAS	LBB	LUBBOCK,ETC.		
CONT.	SECT.	JOB	HIGHWAY NO.	
0905	00	118	VAR	
FILE NAME			DATE	
2022 RRPM			12/1/2021	

CONCRETE

County : Hale	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	IH	27	0.193 Miles South of US 70 to Swisher County Line (M.L.)	67	04	49-0.079	58+0.887	9.960	0	19	0	864
2	IH	27	S. Hale Center City Limits to 0.193 Miles S. of US 70 (M.L.)	67	05	38-0.520	48+0.927	11.449	0	61	0	943
3	IH	27	Lubbock County Line to S Hale Center City Limits (M.L.)	67	06	22-0.816	37+0.484	16.308	0	58	0	961
4	BI	27	North Bridge Intersection and South Bridge Intersection	67	09	170-2.218	176+1.020	9.282	15	15	38	15
5	US	70	IH 27 Frontage Rd Intersection	145	04	228+0.000	310+0.077	22.139	0	30	30	30
6	SH	194	IH 27 Frontage Rd Intersection	439	05	308+0.436	312+0.992	4.556	0	30	30	30
						TOTAL		**73.694**	**15**	**213**	**98**	**2,843**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

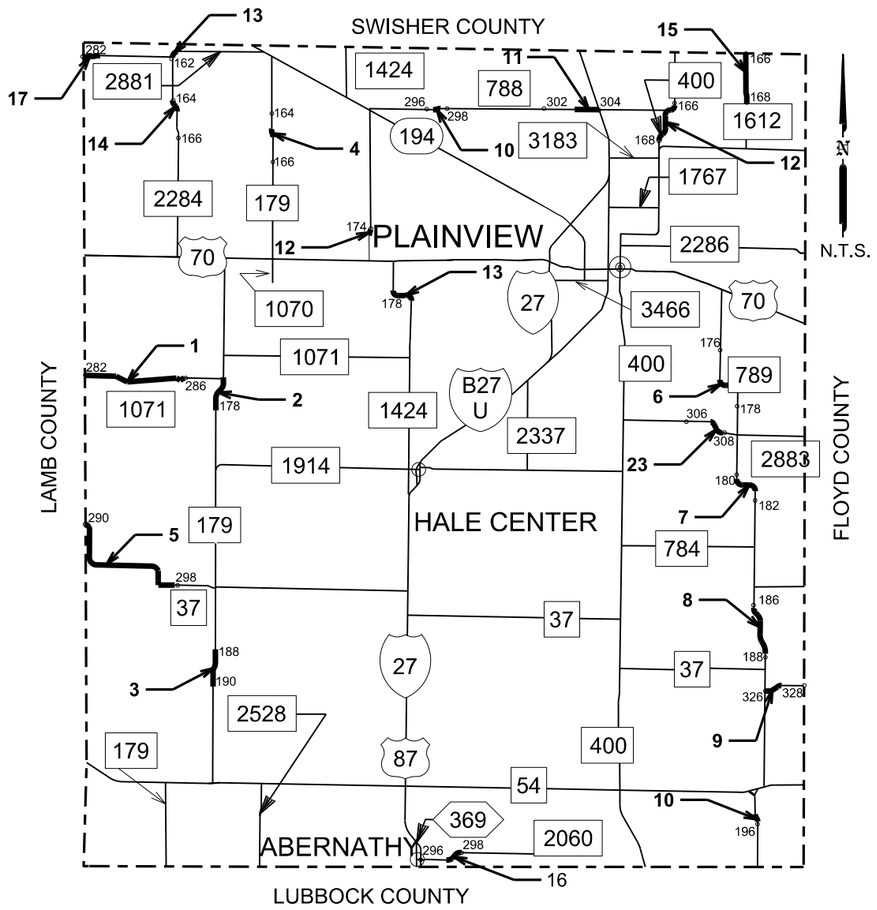
COUNTY LAYOUT
HALE CONCRETE

FED.RD. DIV.NO.	STATE PROJECT NO.			SHEET NO.
6				3.18
STATE	DIST.	County		
TEXAS	LBB	LUBBOCK,ETC.		
CONT.	SECT.	JOB	HIGHWAY NO.	
0905	00	118	VAR	
FILE NAME			DATE	
2022 RRPM			12/1/2021	

CURVE ADVISORY RRPMs

County : Hale	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	1071	ALL SPEED ADVISORY CURVES BETWEEN LAMB CO. LINE & FM 179	565	03	282	286	33
2	FM	179	ALL SPEED ADVISORY CURVES BETWEEN FM 1071 & FM 1914	880	01	178	178	13
3	FM	179	ALL SPEED ADVISORY CURVES BETWEEN FM 37 & FM 54	880	01	188	190	11
4	FM	179	ALL SPEED ADVISORY CURVES BETWEEN SH 194 & US 70	880	05	164	166	8
5	FM	37	ALL SPEED ADVISORY CURVES BETWEEN LAMB CO. LINE & FM 179	884	06	290	298	49
6	FM	789	ALL SPEED ADVISORY CURVES BETWEEN US 70 & FM 2883	1126	01	176	178	16
7	FM	789	ALL SPEED ADVISORY CURVES BETWEEN FM 2883 & FM 784	1126	01	180	182	19
8	FM	789	ALL SPEED ADVISORY CURVES BETWEEN FM 784 & FM 37	1126	01	186	188	26
9	FM	37	ALL SPEED ADVISORY CURVES BETWEEN FM 789 & FLOYD CO. LINE	1126	03	326	328	30
10	FM	788	ALL SPEED ADVISORY CURVES East of SH 194	1629	02	296	298	17
11	FM	788	ALL SPEED ADVISORY CURVES West pf IH 27	1906	01	302	304	19
12	FM	400	ALL SPEED ADVISORY CURVES BETWEEN SWISHER CO. LINE AND FM 3183	1906	02	166	168	19
13	FM	2881	ALL SPEED ADVISORY CURVES BETWEEN FM 2884 & SH 194	1907	02	162	162	25
14	FM	2284	ALL SPEED ADVISORY CURVES BETWEEN FM 2881 & SH 194	2046	02	162	162	0
14	FM	2284	ALL SPEED ADVISORY CURVES BETWEEN FM 2881 & US 70	2046	02	164	166	20
15	FM	1612	ALL SPEED ADVISORY CURVES BETWEEN SWISHER CO. LINE & FM 788	2332	02	166	168	10
16	FM	2060	ALL SPEED ADVISORY CURVES BETWEEN IH 27 & TRM 298	2500	01	296	298	10
17	FM	2881	ALL SPEED ADVISORY CURVES BETWEEN LAMB CO. LINE & FM 2284	2902	02	282	286	15
						TOTAL		**340**

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

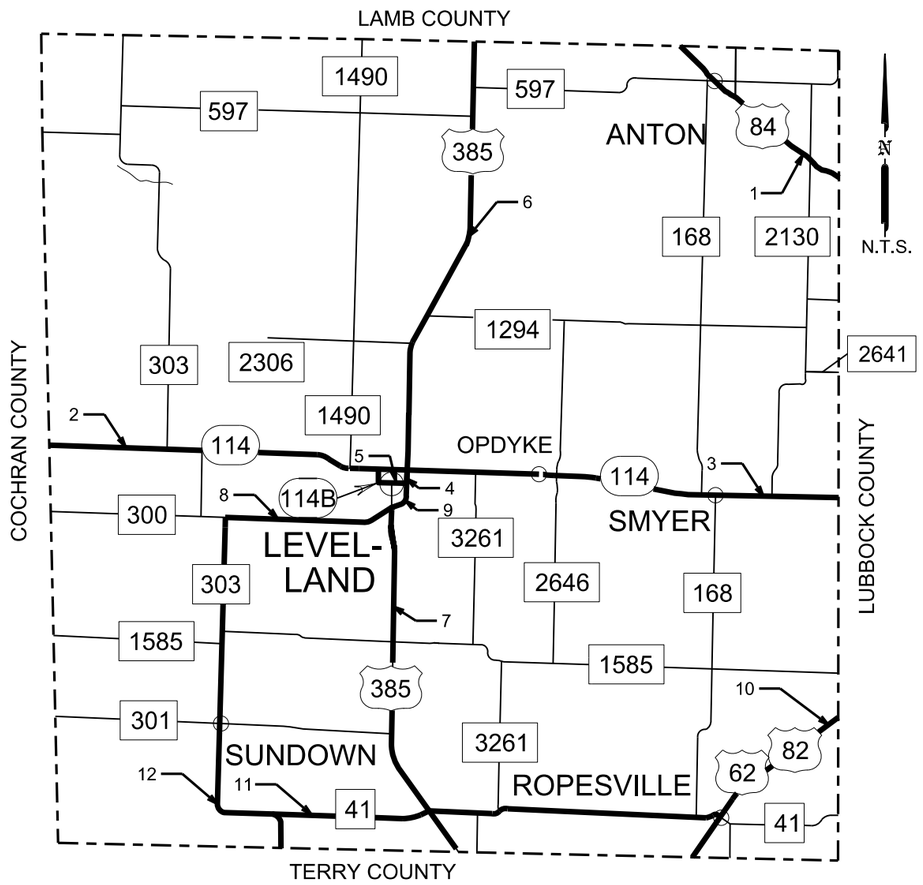
Jeremy T. Dearing, P.E.

12/03/2021

HALE COUNTY CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.19
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Hockley	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	Lamb County Line to Lubbock County Line	52	06	292-0.018	300-0.008	8.010	48	0	0	461
2	SH	114	Cochran County Line to US 385	130	03	260-0.083	266+1.802	7.885	0	45	0	270
3	SH	114	US 385 to Lubbock County Line	130	04	266+1.802	286+0.000	16.600	92	112	230	1,338
4	US	385	SH 114 to BS 114B	130	07	218-0.070	218+0.390	0.460	0	23	27	0
5	BS	114B	US 385 to SH 114	130	07	262+1.551	262-0.033	1.584	0	35	41	0
6	US	385	Lamb County Line to SH 114	227	05	200+0.000	216+0.446	16.430	0	182	868	0
7	US	385	FM 300 to Terry County Line	227	06	218+1.000	232+0.000	13.611	0	23	405	0
8	FM	300	BS 114B to US 385	227	06	266+0.092	266-0.863	0.955	0	13	18	5
9	US	385	BS 114B to FM 300	227	12	216+1.000	218+1.000	1.317	0	57	55	16
10	US	62	Terry County Line to Lubbock County Line	380	02	304+0.000	312+0.073	8.092	54	56	384	128
11	FM	41	FM 303 to US 62/82	645	01	254-0.073	272-0.778	17.295	0	0	180	0
12	FM	303	FM 300 to Terry County Line	721	01	222-0.305	238+0.001	16.306	0	0	180	0



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

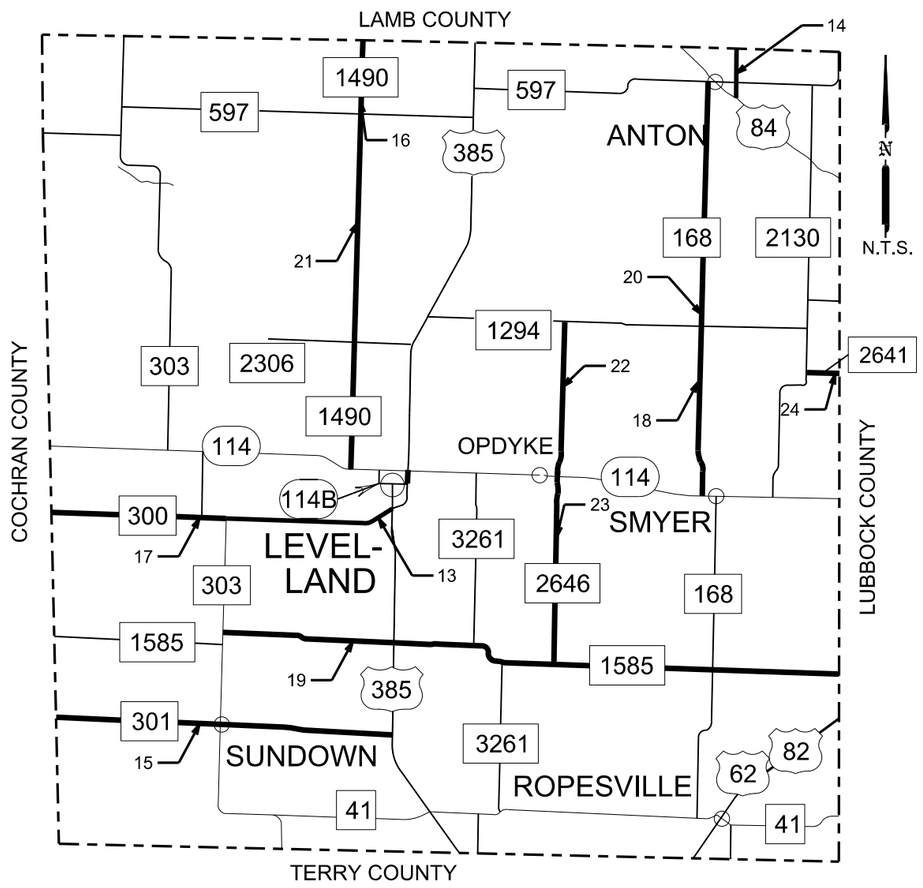
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
HOCKLEY 1 OF 2

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.20
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Hockley	Hwy	Rdwy	Description Limits	Cont	Sect	BegIn TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
13	FM	300	FM 303 to US 385	721	01	258+0.890	266-0.721	6.389	0	2	61	0
14	FM	168	US 84 to Lamb County Line	874	06	204+0.054	202-0.013	2.067	0	1	35	0
15	FM	301	Cochran County Line to US 385	885	02	250-0.003	262+0.677	12.680	0	0	67	0
17	FM	300	Cochran County Line to FM 303	1341	02	252+0.002	258+0.890	6.888	0	0	44	0
18	FM	168	SH 114 to FM 41	1630	02	220+0.888	232+0.961	12.073	0	0	368	0
18	FM	168	FM 1294 to SH 114	1866	04	214+0.018	220+0.344	6.316	0	0	47	0
19	FM	1585	FM 303 to Lubbock County Line	2182	02	260-1.022	282+1.064	24.086	0	0	200	0
20	FM	168	FM 597 to FM 1294	2334	01	206-1.069	214+0.018	9.087	0	0	96	0
21	FM	1490	FM 597 to SH 114	2904	01	198+0.685	212+0.046	13.361	0	0	147	0
22	FM	2646	FM 1294 to SH 114	2692	02	204-0.050	210-0.255	5.795	0	0	0	0
23	FM	2646	SH 114 to FM 1585	2692	02	210-0.236	216+0.686	6.922	0	0	0	0
24	FM	2641	FM 2130 to Lubbock County Line	2740	01	278-0.043	280+0.015	2.058	0	0	51	0
						TOTAL		**107.722**	**194**	**549**	**3,525**	**2,218**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

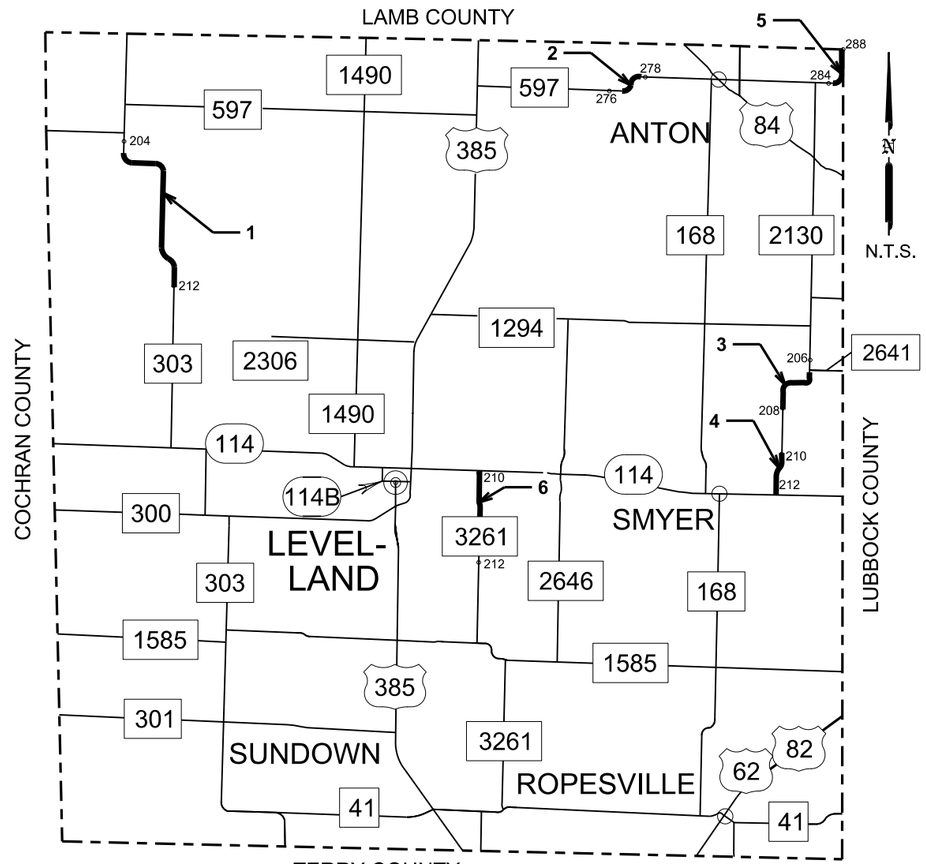
12/03/2021

COUNTY LAYOUT
HOCKLEY 2 OF 2

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.21
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Hockley	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	303	ALL SPEED ADVISORY CURVES BETWEEN FM 597 & SH 114	820	03	204	212	37
2	FM	597	ALL SPEED ADVISORY CURVES WEST OF FM 168	1291	06	276	278	14
3	FM	2130	ALL SPEED ADVISORY CURVES BETWEEN FM 2641 & TRM 208	1630	01	206	208	9
4	FM	2130	ALL SPEED ADVISORY CURVES BETWEEN TRM 210 & SH 114	1630	01	210	212	27
5	FM	597	ALL SPEED ADVISORY CURVES BETWEEN FM 2130 & LUBBOCK CO. LINE	2047	01	284	288	23
6	FM	3261	SPEED ADVISORY CURVES SOUTH OF SH 114	2692	02	210	212	8
						TOTAL		118

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

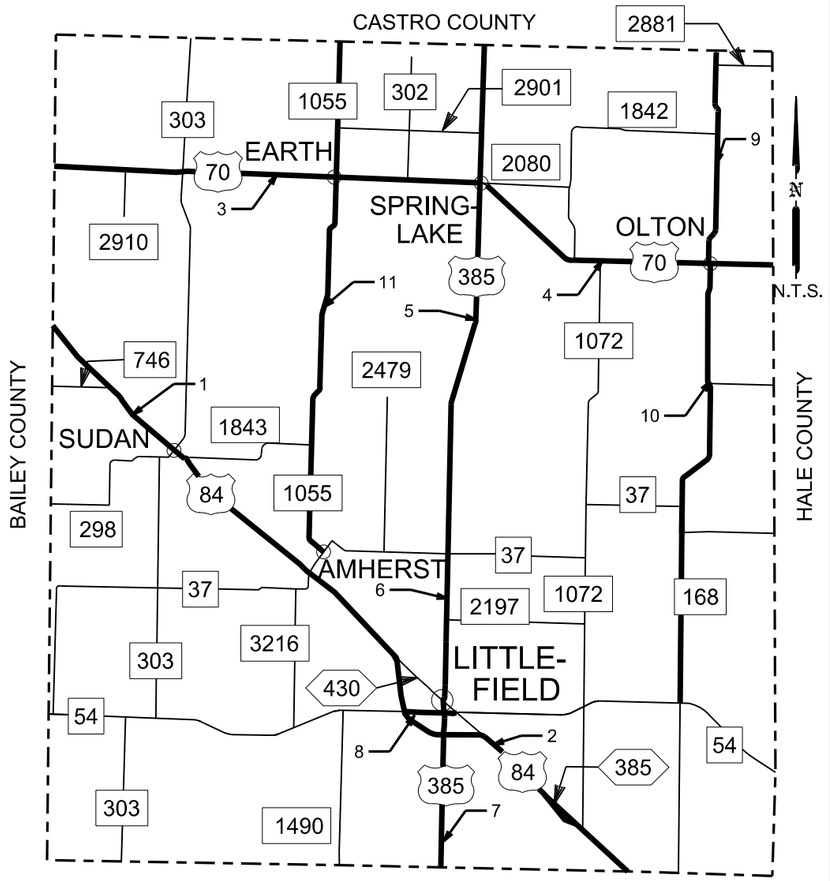
Jeremy T. Dearing, P.E.

12/03/2021

HOCKLEY COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.22
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Lamb	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	Bailey County Line to FM 37	52	04	258-0.051	272+0.679	14.730	95	51	111	709
2	US	84	FM 37 to Hockley County Line	52	05	272+0.679	292-0.003	19.318	156	0	0	659
3	US	70	Bailey County Line to US 385	145	02	256-0.021	274-0.305	17.716	0	75	518	0
4	US	70	US 385 to Hale County Line	145	03	274-0.305	288+0.035	14.340	0	47	298	0
5	US	385	Castro County Line to CR 72	227	02	166+0.000	180+0.711	14.710	0	17	330	0
6	US	385	CR 72 to SL 430	227	03	180+0.711	192+0.994	11.381	0	0	285	0
9	FM	54	SL 430 to Hale County Line	563	04	270-0.552	284+0.001	14.553	0	0	371	0
10	FM	303	US 70 to US 84	820	01	168+1.672	182-1.051	11.277	0	0	359	0
9	FM	168	Castro County Line to US 70	874	02	166-0.007	175-0.332	8.675	0	0	64	0
10	FM	168	FM 37 West to FM 54	874	03	186-0.769	202-0.013	16.756	0	0	120	0
11	FM	1055	Castro County Line to FM 37	1291	02	160+0.028	180+1.469	21.441	0	0	150	0
						TOTAL		**164.897**	**251**	**190**	**2,886**	**1,368**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

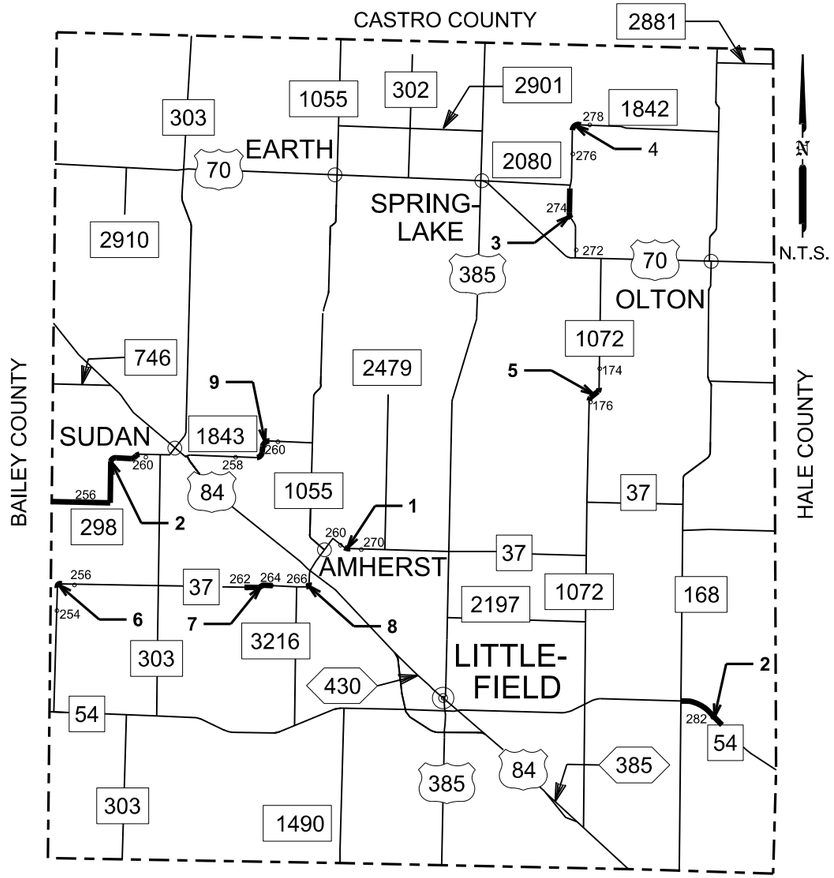
COUNTY LAYOUT
LAMB

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.23
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Lamb	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	37	SPEED ADVISORY CURVES EAST OF AMHERST	52	08	268	270	9
2	FM	298	ALL SPEED ADVISORY CURVES BETWEEN FM 303 & BAILEY CO. LINE	884	03	256	260	40
3	FM	1842	SPEED ADVISORY CURVES NORTH OF US 70	1252	02	272	274	12
4	FM	1842	ALL SPEED ADVISORY CURVES BETWEEN FM 2080 & TRM 278	1252	02	276	278	12
5	FM	1072	ALL SPEED ADVISORY CURVES BETWEEN US 70 & FM 37	1252	03	174	176	14
6	FM	37	ALL SPEED ADVISORY CURVES BETWEEN FM 54 & FM 303	1631	01	254	256	9
7	FM	37	ALL SPEED ADVISORY CURVES BETWEEN FM 303 & FM 3216	1631	01	262	264	13
8	FM	37	SPEED ADVISORY CURVES SOUTH OF AMHERST	1631	01	266	266	7
9	FM	1843	ALL SPEED ADVISORY CURVES BETWEEN US 84 & FM 1055	1783	01	258	260	19
							TOTAL	135

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



HOCKLEY COUNTY

PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

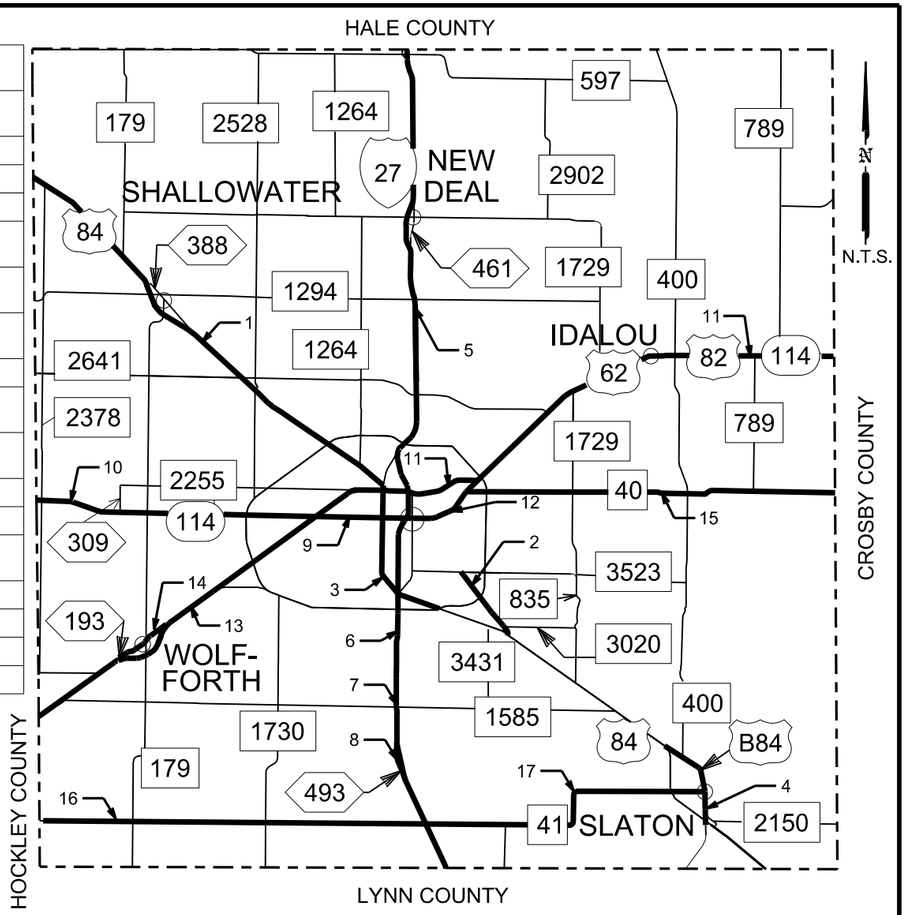
Jeremy T. Dearing, P.E.

12/03/2021

LAMB COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.24
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Lubbock	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	Hockley County Line to US 82 at 4th St	52	07	300+0.000	316+1.757	17.540	160	328	363	1,859
2	SS	331	FM 835 to FM 3020	53	01	216-0.005	218+0.630	2.635	0	0	59	2,039
3	US	84	4th St to IH 27	53	18	318-0.432	326+0.037	8.490	74	677	840	1,014
4	BU	84E	US 84 to US 84	53	19	334-0.529	336+1.803	3.933	72	79	0	1,040
5	IH	27	MM 6+0.295 to Hale County Line (F.R.)	67	07	6+0.295	21+0.183	14.890	25	3	257	860
6	IH	27	MM 0+0.000 to MM 6+0.295 (F.R.)	67	11	0+0.000	6+0.295	5.524	18	3	5	628
7	US	87	MP 0+0.000 to Lynn County Line (M.L. & F.R.)	68	01	0+000	284+0.000	9.932	0	0	105	1,678
8	SL	493	US 87 to US 87	68	14	220+1.915	222+1.015	1.100	0	0	45	0
9	US	62	Marsha Sharp Freeway to East Broadway	130	05	296+0.489	332+0.439	5.462	0	308	454	843
10	SH	114	Hockley County Line to Marsha Sharp Freeway	130	05	286+0.000	296+0.489	15.478	9	1,187	1,486	311
11	US	62/82	East Broadway to South FM 789	131	02	332+0.439	346-0.936	12.625	0	65	349	489
12	US	82	Ave A to Us 62/SH 114	131	08	312-1.088	212+1.692	2.780	0	15	78	109
13	US	62	Hockley County Line to Ave Q (M.L & F.R.)	380	01	314+0.373	331+0.393	17.020	7	6	87	1,197
14	SL	193	62/82 to US 62/82	380	14	284-0.073	286+0.062	2.135	29	27	391	5,387
15	FM	40	US 62 to Crosby County Line	644	01	296-0.070	304+0.317	8.337	0	3	505	6
16	FM	41	Hockley County Line to US 87	645	01	278+0.016	292+0.556	14.540	0	0	275	0
17	FM	41	US 87 to BU 84E	645	02	292+0.574	304+0.055	11.481	0	11	459	9



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

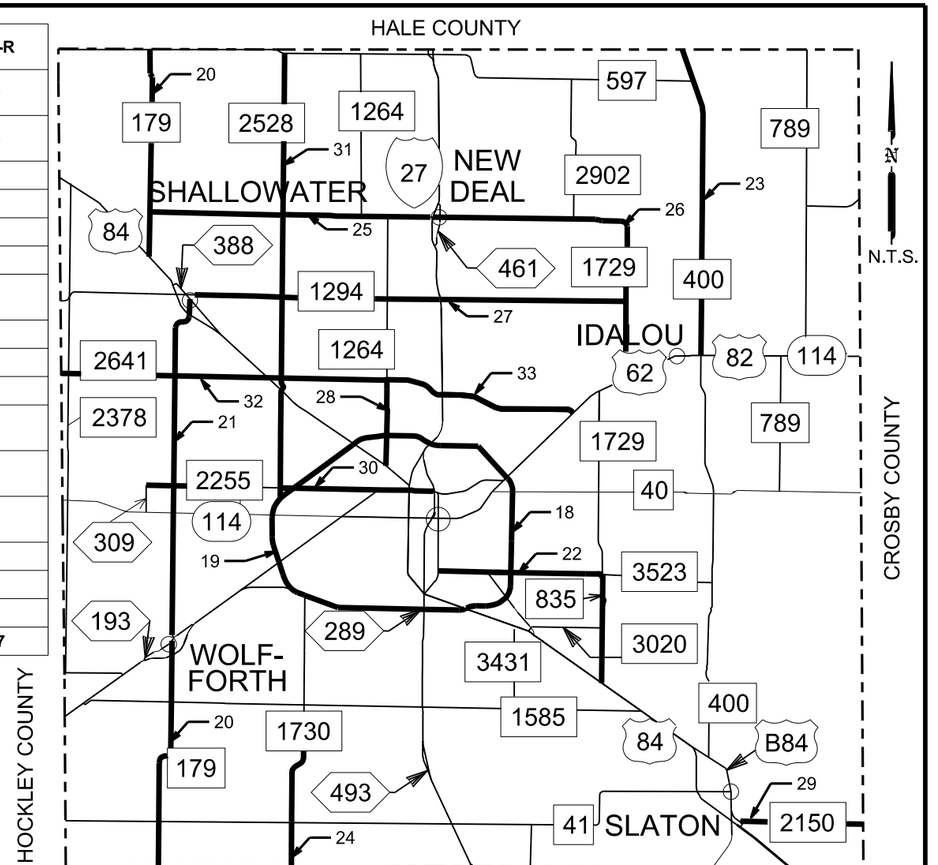
Jeremy T. Dearing, P.E.

12/03/2021

COUNTY LAYOUT
LUBBOCK 1 of 2

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.25
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/2/2021

County : Lubbock	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
18	SL	289	US 62/82 N.E. clockwise to US 62/82 S.W. (M.L.)	783	01	301-0.813	314+0.098	13.923	293	0	113	4,950
19	SL	289	US 62/82 S.W. clockwise to US 62/82 N.E. (M.L. & F.R.)	783	02	288-0.109	300+0.840	12.183	338	40	66	4,945
20	FM	179	Hale County Line to US 84	880	03	200-0.015	206+1.628	7.643	0	0	227	0
21	FM	179	SL 388 to Lynn County Line	880	04	212-1.464	232+0.846	22.310	0	540	1,260	23
22	FM	835	IH 27 to US 84	933	01	296-0.153	306+0.618	10.787	0	497	967	21
23	FM	400	Hale County Line to US 62	1041	02	200+0.012	211+0.287	11.275	0	0	360	0
24	FM	1730	(Slide Rd) from FM 1585 to Lynn County Line	1344	02	222+1.565	228+0.000	4.435	0	298	612	0
25	FM	1729	FM 179 to SL 461	1632	01	286-0.047	296+0.965	11.012	0	0	536	15
26	FM	1729	SL 461 to US 62	1632	02	296+0.965	310-1.183	11.852	0	0	464	0
27	FM	1294	SL 388 to FM 1729	1866	01	288+0.847	306+0.055	17.208	0	68	485	0
28	FM	1264	(University Ave) from FM 2641 to US 84	1867	01	208+0.832	212+0.266	3.116	0	85	246	271
29	FM	2150	US 84 to End of State Maintanence	2183	01	306-0.143	310+0.702	4.845	0	0	0	275
30	FM	2255	(4th St) from SS 309 to Valencia Ave	2256	01	284+0.999	292+1.659	8.660	0	1,029	540	0
31	FM	2528	FM 597 to South of SL 289	2501	01	198-0.909	212+1.553	16.462	0	75	486	0
32	FM	2641	Hockley County Line to IH 27	2740	02	280+0.011	294+0.329	14.318	0	5	495	10
33	FM	2641	IH 27 to US 62	2740	03	294+0.329	298+1.482	5.100	0	4	310	8
							TOTAL	175.129	1,025	5,353	12,925	27,987



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

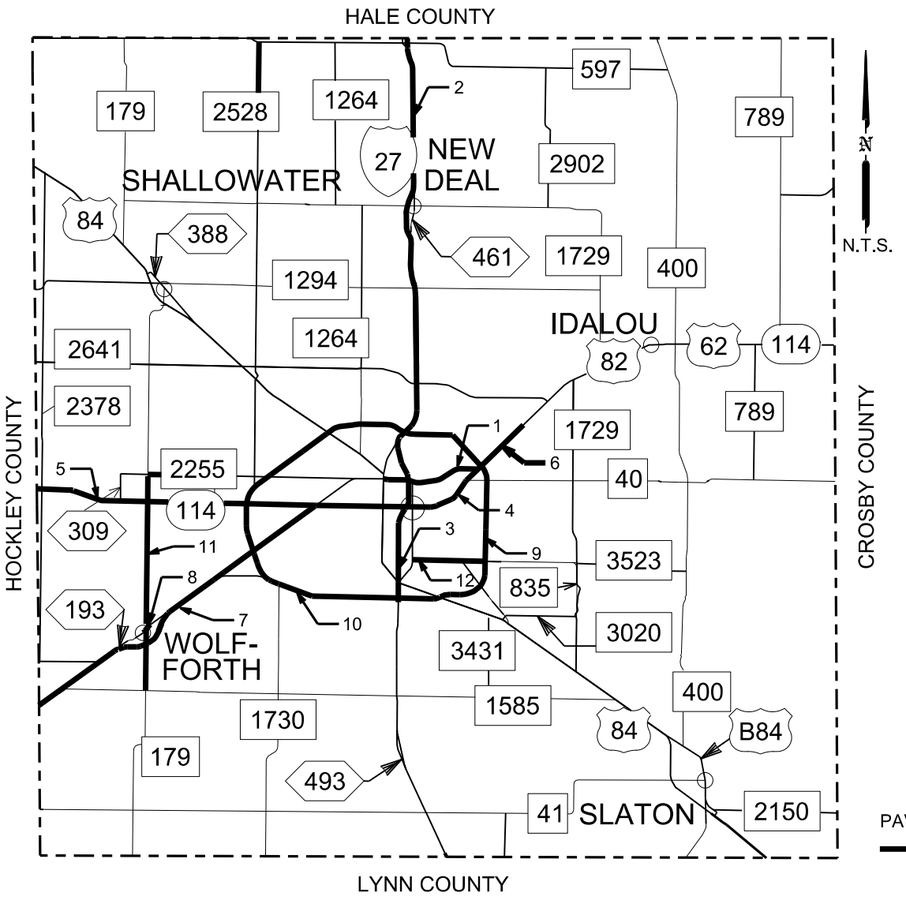
12/03/2021

COUNTY LAYOUT
LUBBOCK 2 of 2

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.26
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/2/2021

CONCRETE

County : Lubbock	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	82	Ave Q to Ave A	53	01	312-1.088	314+0.373	3.461	0	38	195	300
2	IH	27	MM 6+0.295 to Hale County Line (M.L & F.R. Int.)	67	07	6+0.295	21+0.183	14.890	75	8	771	2,580
3	IH	27	MM 0+0.000 to MM 6+0.295 (M.L. & F.R. Int.)	67	11	0+0.000	6+0.295	5.524	55	8	14	1,883
4	US	62	Marsha Sharp Freeway Bridge, Univiersity Int., & IH 27 Int.	130	05	296+0.489	332+0.439	5.462	0	206	303	562
5	SH	114	SL 289 Int. and Quaker Ave Int.	130	05	286+0.000	296+0.489	15.478	6	791	991	208
6	US	82	Ave A to US 62/SH 114	131	08	312-1.088	212+1.692	2.780	0	44	233	326
7	US	62	SL 193 to Ave Q (M.L & F.R.)	380	01	314+0.373	331+0.393	17.020	20	18	260	3,592
8	SL	193	FM 179 Int.	380	14	284-0.073	286+0.062	2.135	0	18	30	0
9	SL	289	US 62/82 N.E. clockwise to US 62/82 S.W. (M.L. & F.R. Int.)	783	01	301-0.813	314+0.098	13.923	195	0	75	3,300
10	SL	289	US 62/82 S.W. clockwise to US 62/82 N.E. (M.L. & F.R. Int.)	783	02	288-0.109	300+0.840	12.183	225	27	44	3,297
11	FM	179	SH 114 Int. and 82nd Street Int.	880	04	212-1.464	232+0.846	22.310	0	105	60	0
12	FM	835	IH 27 Int. and Ave A Int.	933	01	296-0.153	306+0.618	10.787	0	90	30	0
						TOTAL		**125.953**	**576**	**1,355**	**3,006**	**16,048**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

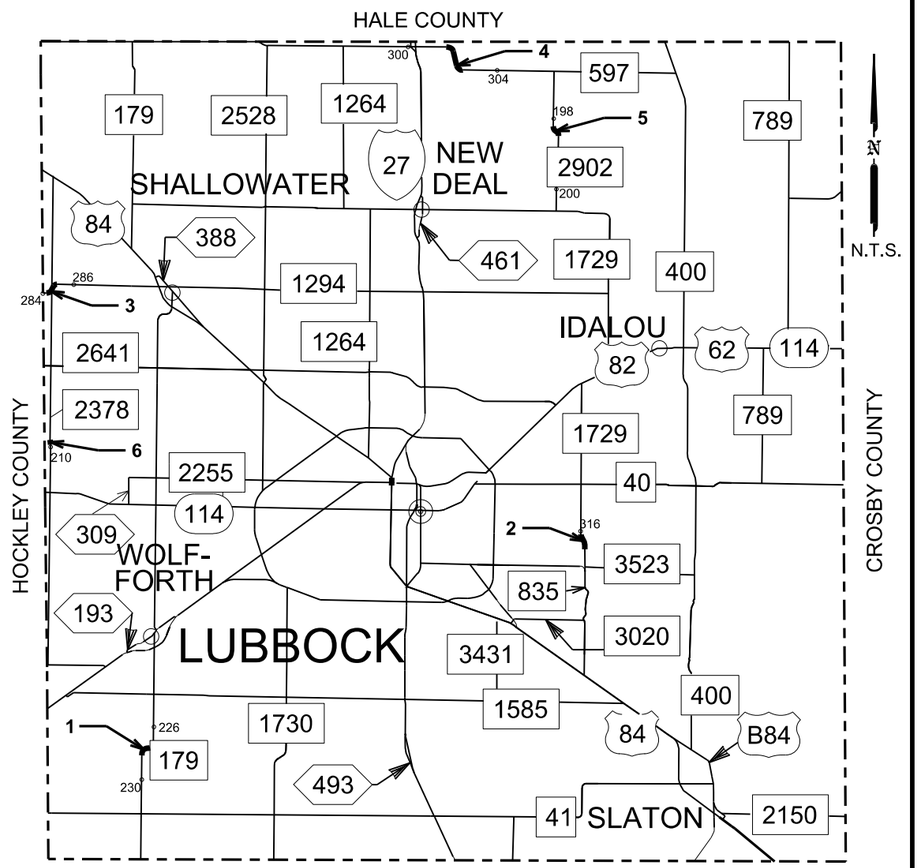
COUNTY LAYOUT
LUBBOCK CONCRETE

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.27
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Lubbock	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	179	ALL SPEED ADVISORY CURVES BETWEEN FM 1585 & FM 41	880	04	226	230	11
2	FM	1729	SPEED ADVISORY CURVES NORTH OF FM 3523	1632	03	316	316	12
3	FM	1294	SPEED ADVISORY CURVES NEAR THE HOCKLEY CO. LINE	1866	01	284	286	13
4	FM	597	ALL SPEED ADVISORY CURVES BETWEEN IH 27 & FM 2902	2047	02	300	304	16
5	FM	2902	ALL SPEED ADVISORY CURVES BETWEEN FM 597 & FM 1729	2932	03	198	200	21
6	FM	2378	SPEED ADVISORY CURVES NORTH OF SH 114	2933	02	210	210	12
							TOTAL	**85**

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

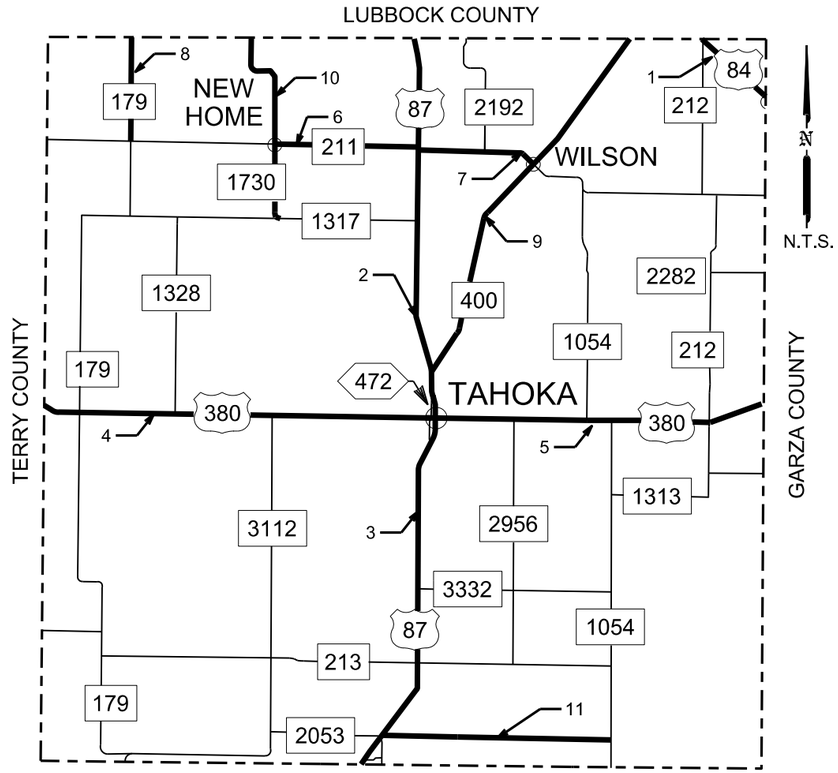
Jeremy T. Dearing, P.E.

12/03/2021

LUBBOCK COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.28
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Lynn	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	84	Lubbock County Line to Garza County Line	53	03	340+0.000	344+0.000	3.751	96	0	0	150
2	US	87	Lubbock County Line to Centerline of Cemetery RD BRG	68	02	284+0.000	300+0.844	16.765	0	0	248	1,076
3	US	87	Centerline of Cemetery RD BRG to Dawson County Line	68	03	300+0.844	316+0.000	14.076	35	0	0	288
4	US	380	Terry County Line to SL 472	297	05	286-0.087	302+0.258	16.266	0	12	549	0
5	US	380	SL 472 to Garza County Line	297	06	302+0.258	316+2.77	14.019	0	35	150	0
6	FM	211	FM 1730 to US 87	721	04	290-0.471	296-0.232	6.329	0	0	49	0
7	FM	211	US 87 to FM 400	721	05	296-0.045	302-0.308	5.737	0	8	69	0
8	FM	179	Lubbock County Line to FM 211	880	06	232-0.045	236+0.400	4.445	0	1	30	0
9	FM	400	Lubbock County Line to US 87	1041	04	232+0.007	248+0.532	16.525	0	3	30	0
10	FM	1730	Lubbock County Line to FM 1317	1344	01	228-0.016	236+0.116	8.132	0	1	65	0
11	FM	2053	US 87 to FM 1054	1966	03	298-0.278	306+1.200	9.478	0	0	78	0
						TOTAL		115.523	131	60	1,268	1,514



PAVEMENT MARKING DESIGNATORS

RRPM

Jeremy T. Dearing, P.E.

12/03/2021

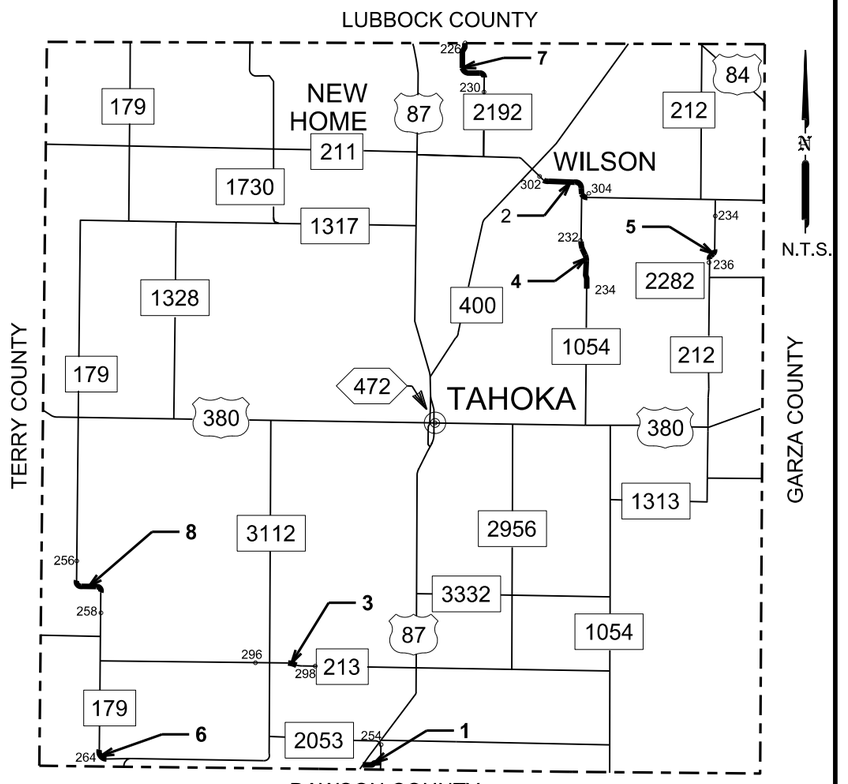
COUNTY LAYOUT
LYNN

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.29
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Lynn	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	SL	76	SPEED ADVISORY CURVES EAST OF US 87	68	09	254	254	6
2	FM	211	ALL SPEED ADVISORY CURVES BETWEEN FM 400 & TRM 304	721	05	302	304	22
3	FM	213	ALL SPEED ADVISORY CURVES BETWEEN FM 3112 & US 87	879	04	296	298	13
4	FM	1054	ALL SPEED ADVISORY CURVES BETWEEN FM 211 & TRM 234	933	03	232	234	8
5	FM	212	ALL SPEED ADVISORY CURVES BETWEEN FM 211 & FM 2282	1055	01	234	236	12
6	FM	179	SPEED ADVISORY CURVES WEST OF FM 2053	1967	01	264	264	24
7	FM	2192	ALL SPEED ADVISORY CURVES BETWEEN LUBBOCK CO. LINE & FM 211	2082	02	226	230	22
8	FM	179	SPEED ADVISORY CURVES NORTH OF FM 213	2184	01	256	258	14
							TOTAL	121

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

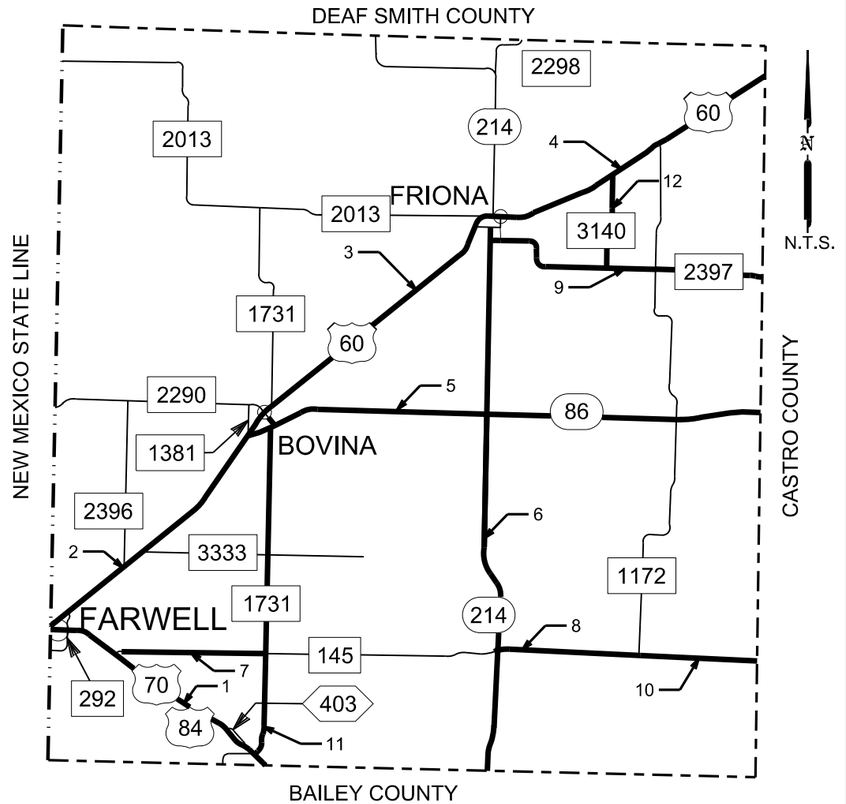
Jeremy T. Dearing, P.E.

12/03/2021

LYNN COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.30
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Parmer	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	70	N.M. State Line to Bailey County Line	52	01	226+0.000	236+0.705	10.705	54	62	128	508
2	US	60	N.M. State Line to 5.3 Miles W of Bovina	168	01	226+0.000	232+1.441	7.492	47	77	106	564
3	US	60	5.3 Miles W of Bovina to TRM 248+1.650	168	02	232+1.441	248+1.650	16.209	53	31	0	1,046
4	US	60	TRM 248+1.650 to Castro County Line	168	03	248+1.650	266+0.000	14.827	119	123	292	989
5	SH	86	US 60 to Castro County Line	302	01	256+0.000	234-0.058	21.876	0	19	287	0
6	SH	214	SH 214A in Friona to Bailey County Line	461	06	160+0.977	176+0.000	15.023	0	4	165	0
7	FM	145	US 70/84 to FM 1731	754	01	230-0.035	236+0.383	6.418	0	0	52	0
8	FM	145	SH 214 to FM 1172	754	02	246+0.123	252+0.197	6.064	0	0	50	0
9	FM	2397	SH 214 to Castro County Line	755	01	246+0.116	260+0.021	13.905	0	0	135	0
10	FM	145	FM 1172 to Castro County Line	820	09	252+0.197	258+0.070	5.900	0	0	46	0
11	FM	1731	US 60 to US 70/84	1634	01	155-0.648	168+0.606	14.254	0	5	95	0
12	FM	3140	US 60 to FM 2397	3243	01	136-0.056	140+0.041	4.097	0	0	35	0
						TOTAL		**136.770**	**273**	**321**	**1,391**	**3,107**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

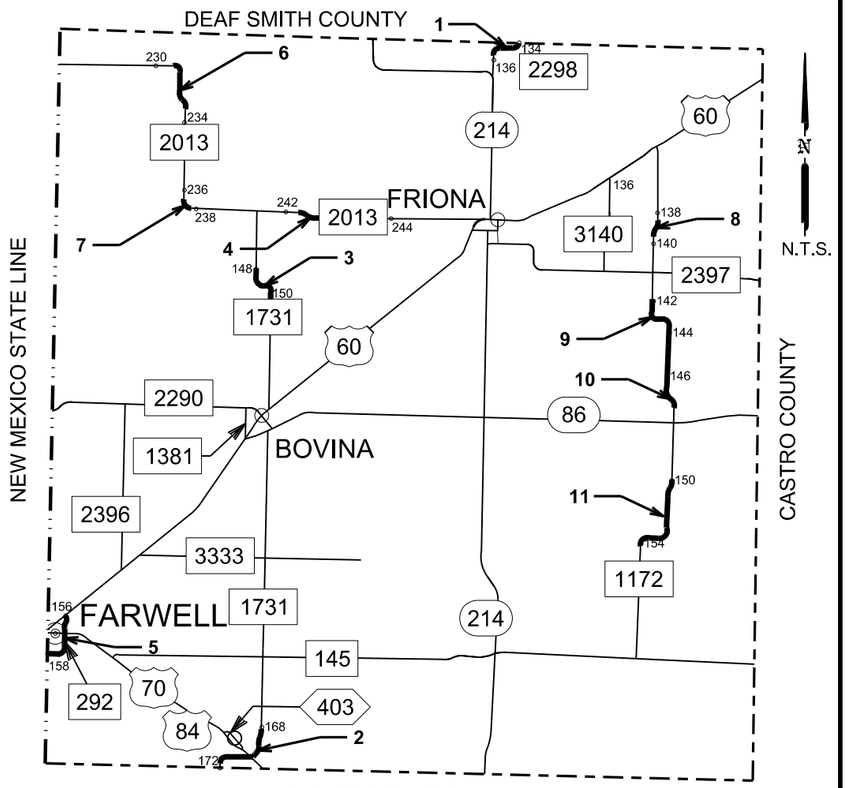
COUNTY LAYOUT
PARMER

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.31
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Parmer	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	2298	SPEED ADVISORY CURVES SOUTH OF DEAF SMITH CO. LINE	461	16	134	136	19
6	FM	2397	SPEED ADVISORY CURVES NEAR CASTRO CO. LINE	755	01	258	258	0
2	FM	1731	SPEED ADVISORY CURVES IN LARIAT	1634	02	164	172	23
3	FM	1731	SPEED ADVISORY CURVES SOUTH OF FM 2013	1634	04	148	150	15
4	FM	2013	ALL SPEED ADVISORY CURVES BETWEEN FM 1731 & TRM 244	1634	04	242	244	11
5	FM	292	ALL SPEED ADVISORY CURVES BETWEEN STATE LINE & US 60	1904	01	148	161	7
6	FM	2013	ALL SPEED ADVISORY CURVES BETWEEN STATE LINE & TRM 234	2185	01	230	234	19
7	FM	2013	SPEED ADVISORY CURVES WEST OF FM 1731	2185	01	236	238	8
8	FM	1172	ALL SPEED ADVISORY CURVES BETWEEN US 60 & FM 2397	2444	01	138	140	12
9	FM	1172	ALL SPEED ADVISORY CURVES BETWEEN FM 2397 & SH 86	2444	01	142	144	18
10	FM	1172	ALL SPEED ADVISORY CURVES BETWEEN FM 2397 & SH 86	2444	01	146	148	9
11	FM	1172	ALL SPEED ADVISORY CURVES BETWEEN SH 86 & FM 145	3243	01	150	154	39
							TOTAL	180

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

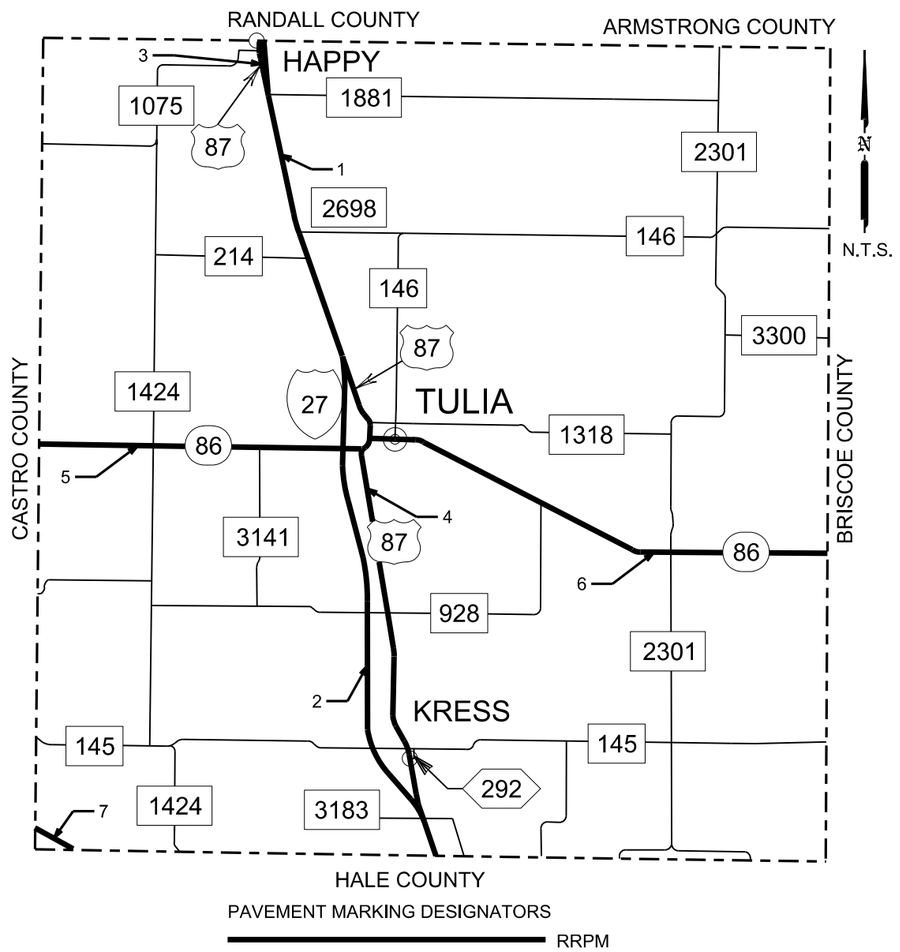
Jeremy T. Dearing, P.E.

12/03/2021

PARMER COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.32
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Swisher	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	IH	27	SH 86 to Randall County Line East F.R. and CR 128 to SH 86 West F.R	67	02	76-1.314	90+0.302	15.616	0	43	1,303	0
2	IH	27	Hale County Line to SH 86 East F.R.	67	03	59-0.065	76-1.314	15.800	0	53	775	0
3	US	87	Randall County Line to IH 27	67	10	180+0.000	180+1.568	1.568	12	32	776	72
4	US	87	IH 27 North of Tulia to IH 27 South of Kress	67	18	194-1.618	208+1.526	17.143	0	0	0	1,204
6	SH	86	US 87 to Briscoe County Line	303	01	300+0.623	318+1.581	18.300	0	0	593	0
7	SH	194	Castro County Line to Hale County Line	439	03	294+0.000	296+0.000	1.960	0	0	48	0
							TOTAL	**70.387**	**12**	**128**	**3,855**	**1,276**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

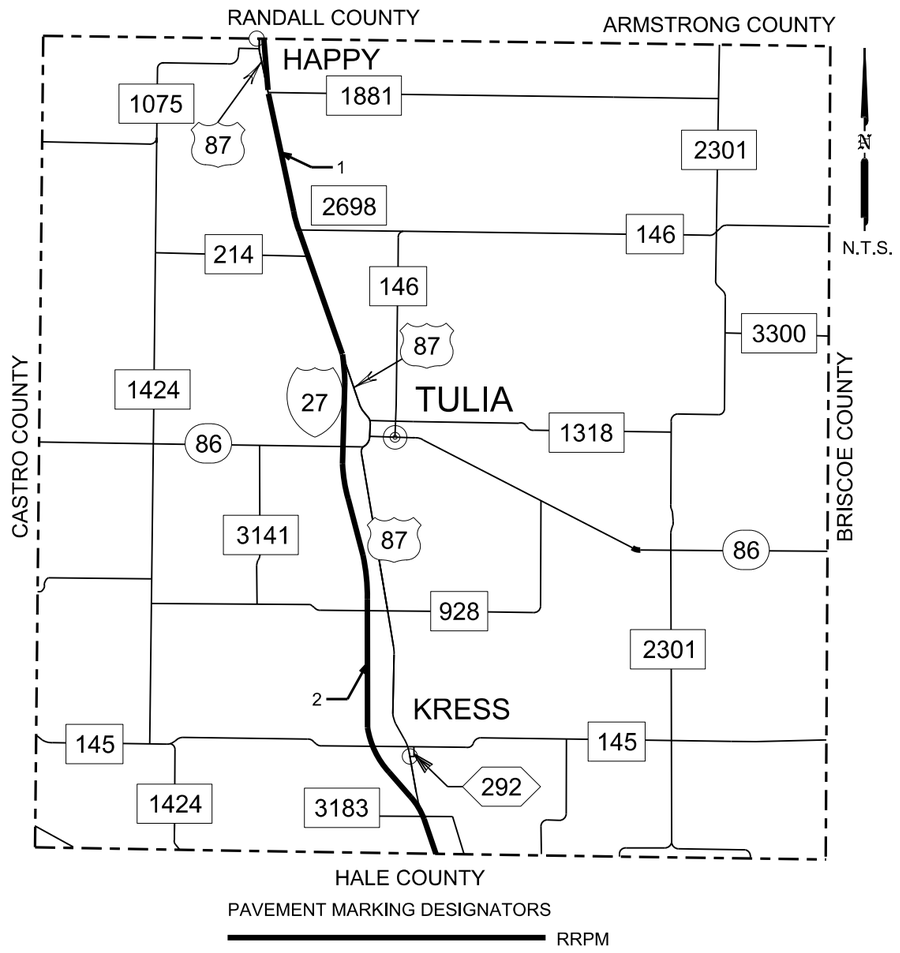
12/03/2021

COUNTY LAYOUT
SWISHER

FED.RD. DIV.NO.	STATE PROJECT NO.			SHEET NO.
6				3.33
STATE	DIST.	County		
TEXAS	LBB	LUBBOCK,ETC.		
CONT.	SECT.	JOB	HIGHWAY NO.	
0905	00	118	VAR	
FILE NAME			DATE	
2022 RRPM			12/1/2021	

CONCRETE

County : Swisher	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	IH	27	SH 86 to Randall County Line (M.L.)	67	02	76-1.314	90+0.302	15.616	0	0	0	874
2	IH	27	Hale County Line to SH 86 (M.L.)	67	03	59-0.065	76-1.314	15.800	0	0	0	1,209
						TOTAL		**31.416**	**0**	**0**	**0**	**2,083**



STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.
12/03/2021

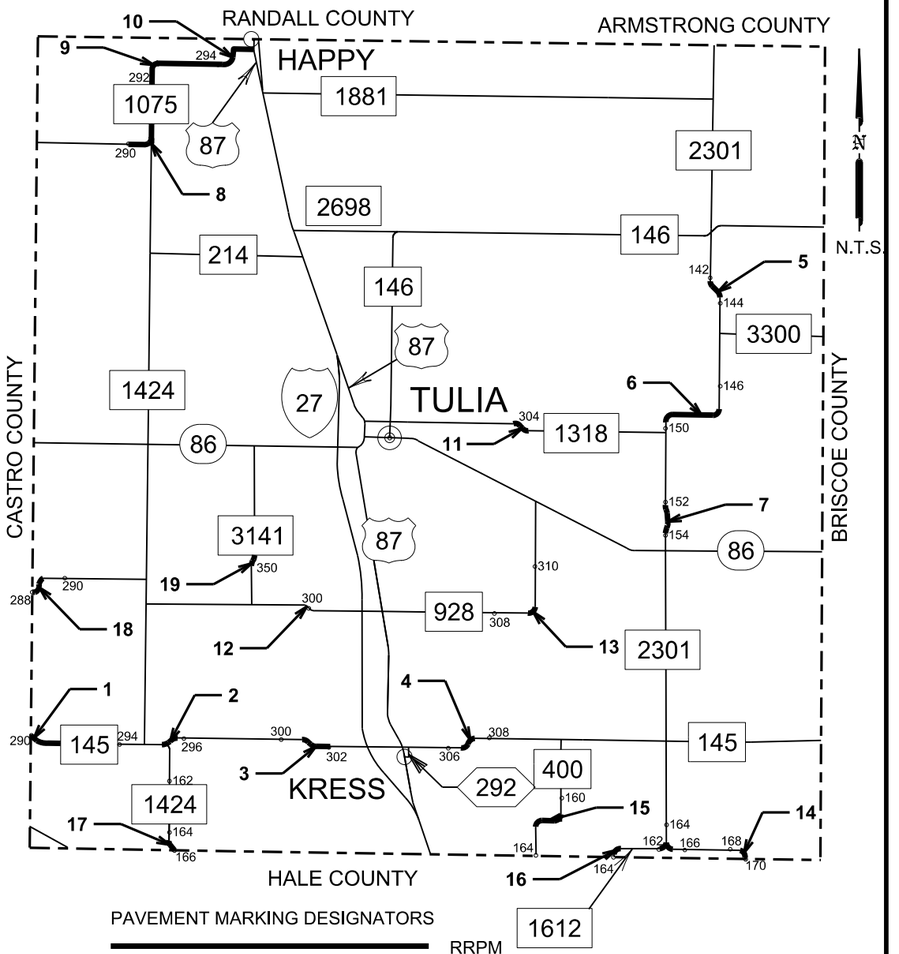
COUNTY LAYOUT
SWISHER CONCRETE

FED.RD. DIV.NO.	STATE PROJECT NO.			SHEET NO.
6				3.34
STATE	DIST.	County		
TEXAS	LBB	LUBBOCK,ETC.		
CONT.	SECT.	JOB	HIGHWAY NO.	
0905	00	118	VAR	
FILE NAME			DATE	
2022 RRPM			12/1/2021	

CURVE ADVISORY RRPMs

County : Swisher	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	145	SPEED ADVISORY CURVES NEAR CASTRO CO. LINE	754	05	290	290	11
2	FM	145	SPEED ADVISORY CURVES EAST OF FM 1424	754	05	294	296	16
3	FM	145	SPEED ADVISORY CURVES WEST OF IH 27	754	05	300	302	13
4	FM	145	ALL SPEED ADVISORY CURVES BETWEEN US 87 & FM 400	754	06	306	308	14
5	FM	2301	ALL SPEED ADVISORY CURVES BETWEEN FM 146 & FM 3300	789	04	142	144	33
6	FM	2301	ALL SPEED ADVISORY CURVES BETWEEN FM 3300 & FM 1318	789	04	146	150	25
7	FM	2301	ALL SPEED ADVISORY CURVES BETWEEN FM 1318 & SH 86	789	04	152	154	19
8	FM	1075	SPEED ADVISORY CURVES WEST OF FM 1424	1256	01	290	290	16
9	FM	1075	ALL SPEED ADVISORY CURVES BETWEEN FM 1424 & IH 27	1256	01	292	294	20
10	FM	1075	ALL SPEED ADVISORY CURVES BETWEEN FM 1424 & IH 27	1256	01	296	296	18
11	FM	1318	ALL SPEED ADVISORY CURVES BETWEEN FM 146 & FM 2301	1345	01	304	304	11
12	FM	928	ALL SPEED ADVISORY CURVES BETWEEN FM 3141 & IH 27	1635	01	300	300	11
13	FM	928	ALL SPEED ADVISORY CURVES BETWEEN SH 86 & US 87	1635	02	308	310	8
14	FM	2301	ALL SPEED ADVISORY CURVES BETWEEN FM 1612 & HALE CO. LINE	1863	03	164	170	24
15	FM	400	ALL SPEED ADVISORY CURVES BETWEEN FM 145 & HALE CO. LINE	1907	01	160	164	25
16	FM	1612	ALL SPEED ADVISORY CURVES BETWEEN FM 2301 & HALE CO. LINE	233	02	162	164	22
17	FM	1424	SPEED ADVISORY CURVES NEAR HALE CO. LINE	2499	02	164	164	12
18	FM	928	SPEED ADVISORY NEAR CASTRO CO. LINE	3003	02	288	290	18
19	FM	3141	ALL SPEED ADVISORY CURVES BETWEEN SH 86 & FM 928	3244	01	350	350	11
						TOTAL		**327**

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



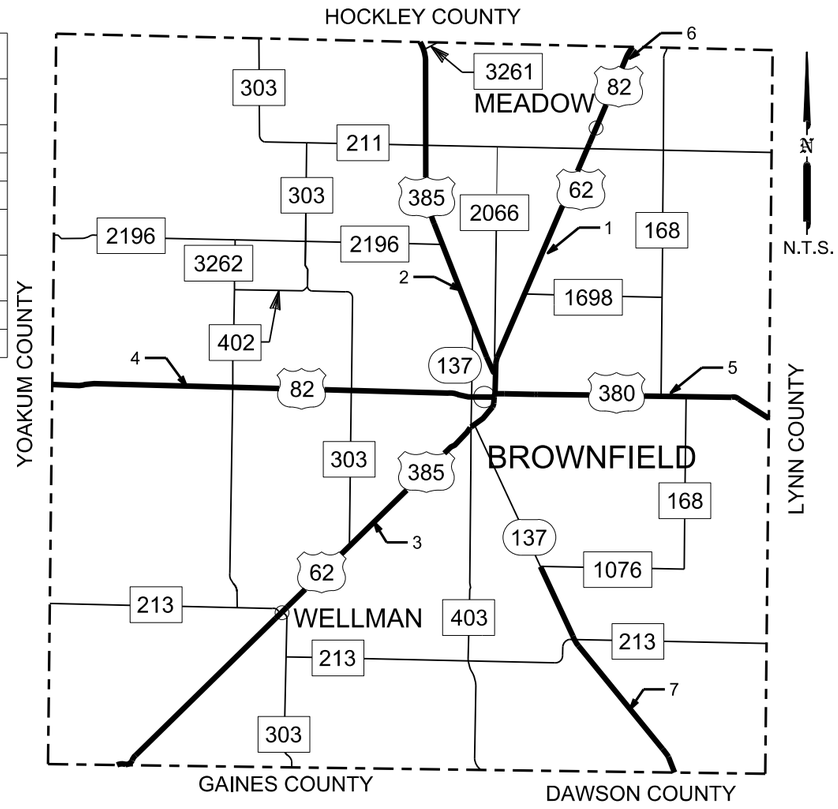
Jeremy T. Dearing, P.E.

12/03/2021

SWISHER COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.35
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2020 RRPM			12/1/2021

County : Terry	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	62	US 82/380 to Morehead St in Meadow	227	07	288+0.614	300-0.397	9.400	560	70	300	1840
2	US	385	Hockley Co Line to US 62/82	227	09	232+0.000	244+2.198	14.215	0	0	288	72
3	US	62	Gaines County Line to US 82/380	228	01	266+0.244	288-0.397	21.379	11	100	0	770
4	US	82	Yoakum County Line to US 62/385	297	03	252+0.000	270+0.571	18.567	0	300	743	0
5	US	380	US 62 to Lynn County Line	297	04	274-1.248	286+0.015	13.230	90	0	725	0
6	US	62	Hockley County line to Morehead St in Meadow	380	03	298+1.568	302+1.200	3.633	0	0	21	186
7	SH	137	FM 1076 to Dawson County Line	380	04	247+0.112	256+1.264	10.152	30	0	212	0
						TOTAL		90.576	691	470	2,289	2,868



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

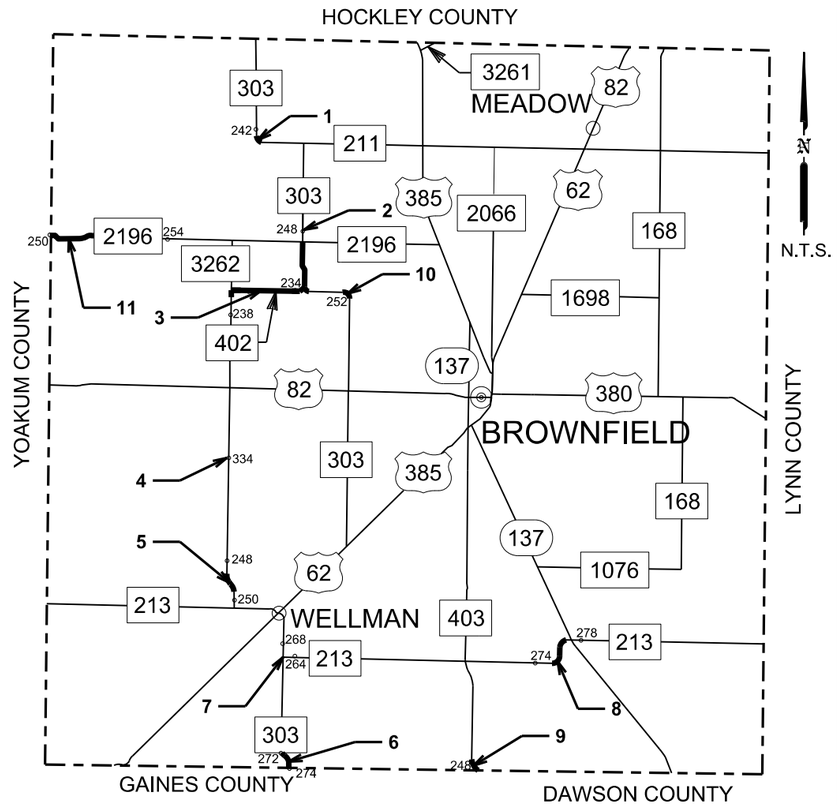
COUNTY LAYOUT
TERRY

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.36
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Terry	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	303	ALL SPEED ADVISORY CURVES BETWEEN FM 211 & HOCKLEY CO. LINE	721	01	242	242	11
2	FM	303	ALL SPEED ADVISORY CURVES BETWEEN FM 211 & FM 402	820	05	248	252	9
3	FM	402	ALL SPEED ADVISORY CURVES BETWEEN FM 303 & US 82	820	05	234	238	38
4	FM	402	ALL SPEED ADVISORY CURVES BETWEEN US 82 & FM 213	820	06	246	246	9
5	FM	402	ALL SPEED ADVISORY CURVES BETWEEN US 82 & FM 213	820	06	248	250	13
6	FM	303	SPEED ADVISORY CURVES NEAR GAINES CO. LINE	820	08	272	274	8
7	FM	213	SPEED ADVISORY CURVES SOUTH OF WELLMAN	879	03	264	268	6
8	FM	213	ALL SPEED ADVISORY CURVES BETWEEN FM 403 & SH 137	879	03	274	278	21
9	FM	403	SPEED ADVISORY CURVES NEAR DAWSON CO. LINE	881	01	248	248	11
10	FM	303	ALL SPEED ADVISORY CURVES BETWEEN FM 402 & US 82	1716	01	248	252	10
11	FM	2196	ALL SPEED ADVISORY CURVES BETWEEN YOAKUM CO. LINE & FM 3262	2069	02	250	254	35
							TOTAL	171

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

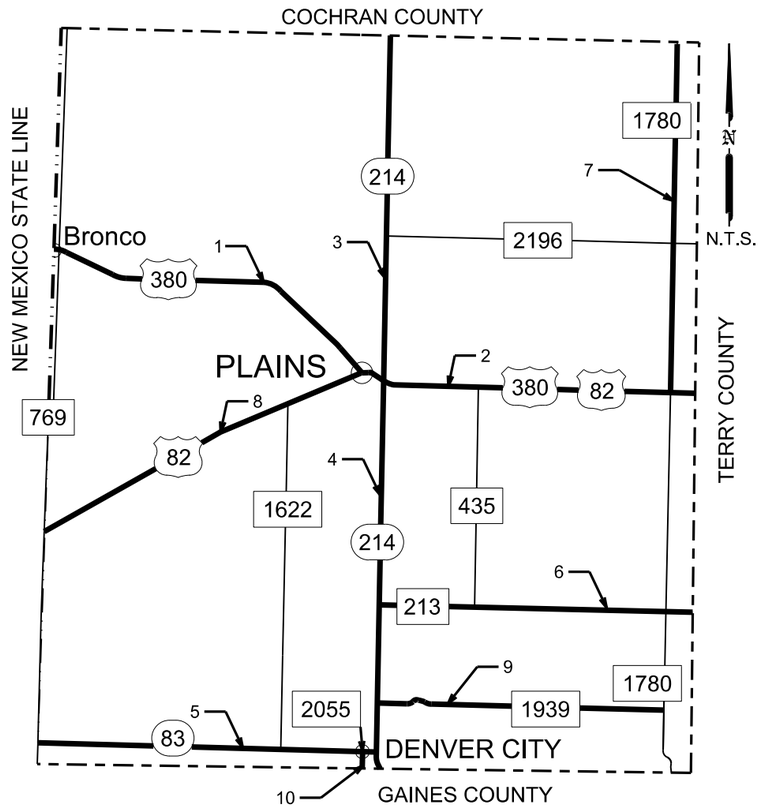
Jeremy T. Dearing, P.E.

12/03/2021

TERRY COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.37
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

County : Yoakum	Hwy	Rdwy	Description Limits	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Length (MI)	TY I-A	TY I-C	TY II-A-A	TY II-C-R
1	US	380	N.M. State Line to US 82	297	01	224-0.019	238+0.866	14.870	0	159	382	0
2	US	82	Ref Mkr 238 (+) 0.866 to Terry Co Line.	297	02	238+0.866	252+0.000	12.097	0	237	533	0
3	SH	214	Cochran County Line to us 82/380	461	05	244-0.001	258+0.054	14.055	0	1	80	0
4	SH	214	Gaines County Line to US 82/380	461	08	236-0.012	258+0.054	22.066	0	62	263	0
5	SH	83	State Line to SH 214	583	01	220+0.000	232+2.272	14.240	0	203	720	0
6	FM	213	SH 214 to Terry County Line	879	01	238-0.038	252+0.006	14.044	0	0	161	0
7	FM	1780	Cochran County Line to US 82/380	967	04	232+0.005	246+0.044	14.039	0	0	74	0
8	US	82	N.M. State Line to TRM 236+1.203	1253	01	222-0.009	236+1.203	15.027	0	107	496	0
10	FM	2055	SH 83 to Gaines County Line	1865	01	254-0.022	256+0.032	2.054	0	0	14	0
							TOTAL	**122.492**	**0**	**769**	**2,813**	**0**



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

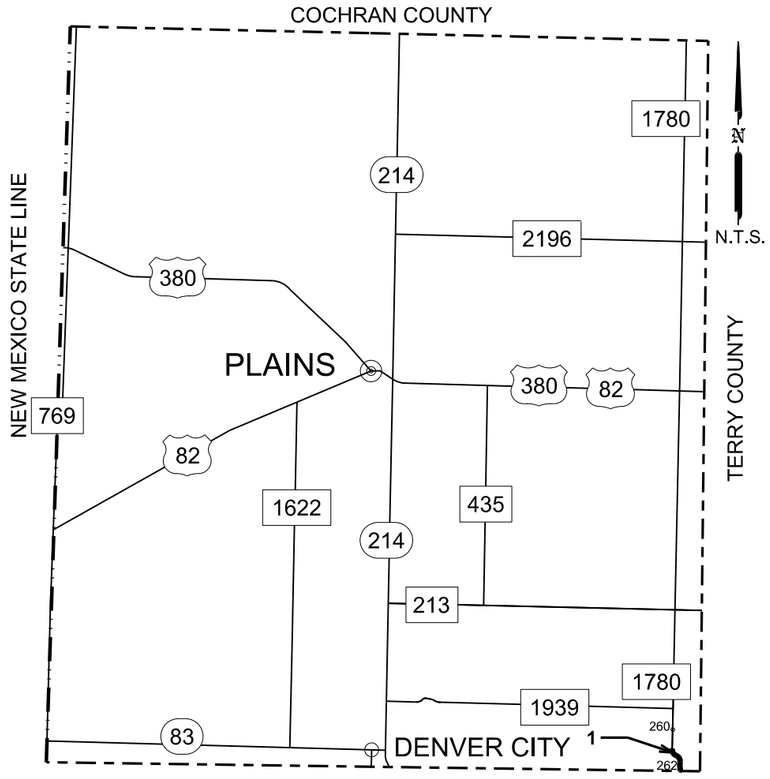
COUNTY LAYOUT
YOAKUM

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			3.38
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2022 RRPM			12/1/2021

CURVE ADVISORY RRPMs

County : Yoakum	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	END TRM (MI)	TY II-A-A
1	FM	1780	ALL SPEED ADVISORY CURVES BETWEEN FM 1939 & GAINES CO. LINE	1632	02	260	262	60
						TOTAL		**60**

NOTE: INSTALL RPMS 800 FEET BEFORE THE PC, EXTEND THROUGH THE CURVE, CONTINUE 800 FEET BEYOND THE PT OF THE CURVE.



PAVEMENT MARKING DESIGNATORS

RRPM

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

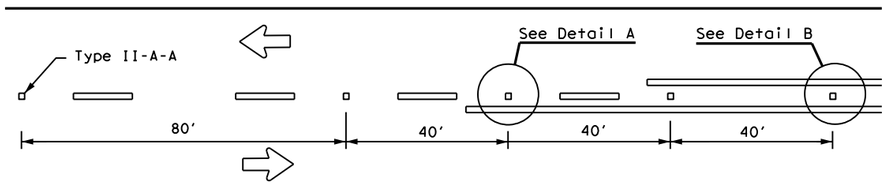
Jeremy T. Dearing, P.E.

12/03/2021

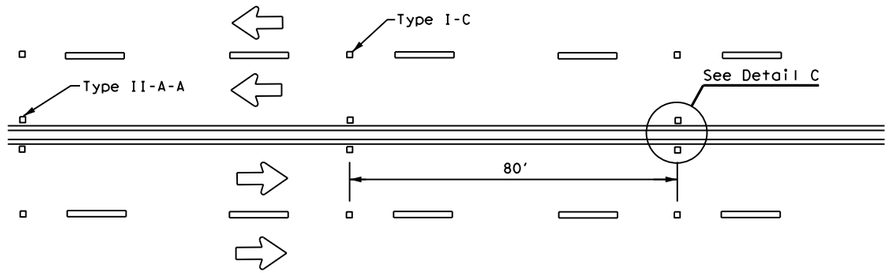
YOAKUM COUNTY
CURVE ADVISORY RRPMs

FED.RD. DIV.NO.	STATE PROJECT NO.		SHEET NO.
6			**3.39**
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILE NAME			DATE
2020 RRPM			12/1/2021

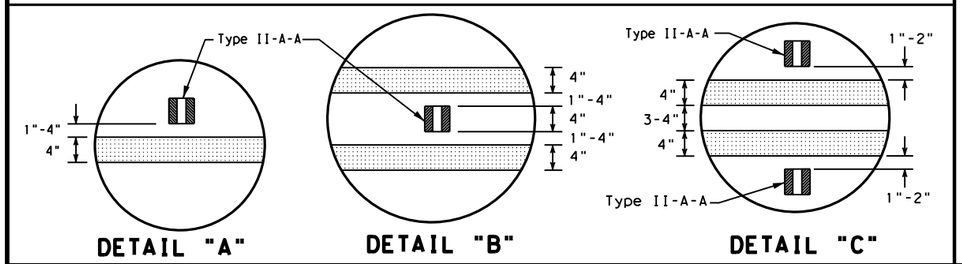
REFLECTIVE RAISED PAVEMENT MARKERS FOR VEHICLE POSITIONING GUIDANCE



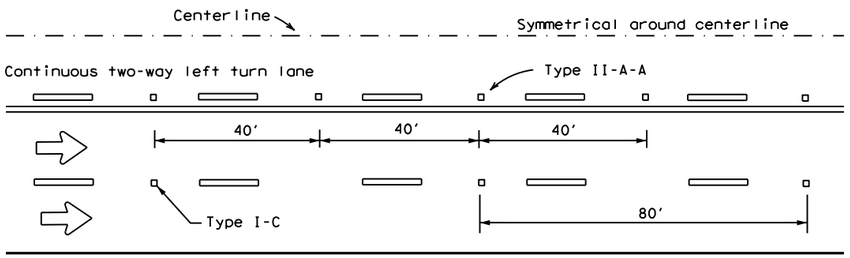
CENTERLINE FOR ALL TWO LANE ROADWAYS



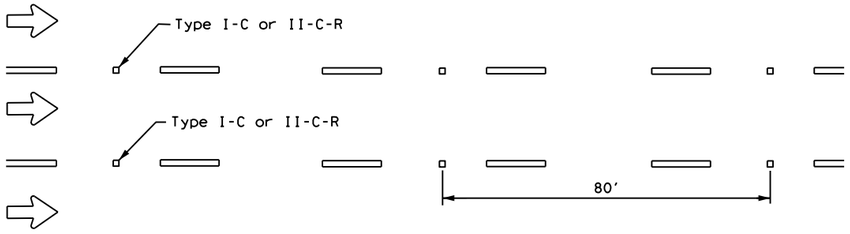
CENTERLINE & LANE LINES FOR FOUR LANE TWO-WAY HIGHWAYS



DETAIL "A" **DETAIL "B"** **DETAIL "C"**

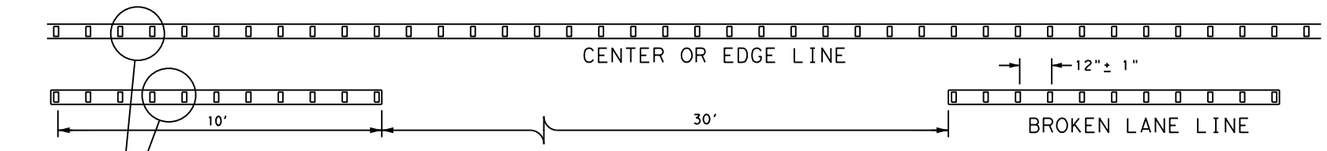


CENTERLINE AND LANE LINES FOR TWO-WAY LEFT TURN LANE



LANE LINES FOR ONE-WAY ROADWAY (NON-FREEWAY FACILITIES)

Raised pavement markers Type II-C-R shall have clear face toward normal traffic and red face toward wrong-way traffic.



REFLECTORIZED PROFILE PATTERN DETAIL

USING REFLECTIVE PROFILE PAVEMENT MARKINGS

A quick field check for the thickness of base line and profile marking is approximately equal to a stack of 5 quarters to a maximum height of 7 quarters.

4" EDGE LINE, CENTER LINE OR LANE LINE

OPTIONAL 6" EDGE LINE, CENTER LINE OR LANE LINE

NOTE

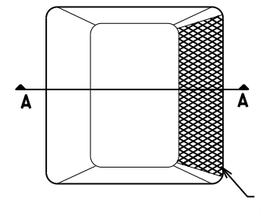
Profile markings shall not be placed on roadways with a posted speed limit of 45 MPH or less.

GENERAL NOTES

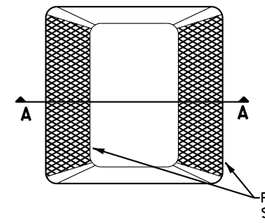
1. All raised pavement markers placed in broken lines shall be placed in line with and midway between the stripes.
2. On concrete pavements the raised pavement markers should be placed to one side of the longitudinal joints.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

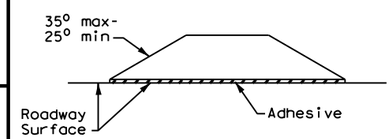
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



Type I (Top View)



Type II (Top View)



SECTION A

RAISED PAVEMENT MARKERS

Texas Department of Transportation

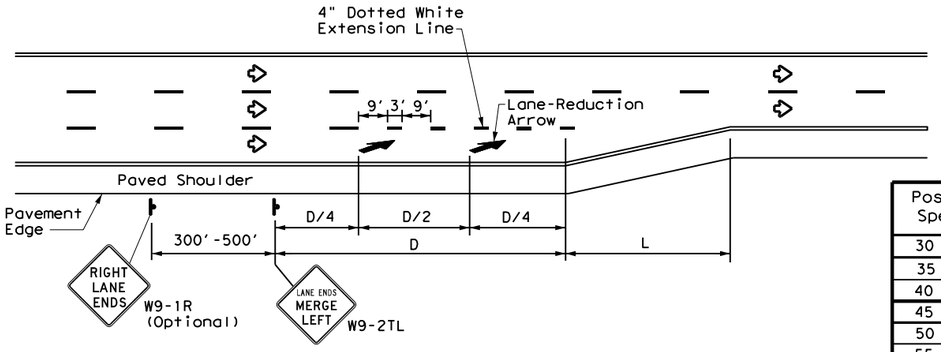
Traffic Safety Division Standard

POSITION GUIDANCE USING RAISED MARKERS RELECTORIZED PROFILE MARKINGS PM(2)-20

FILE: pm2-20.dgn	DN:	CK:	DW:	CK:
©TxDOT April 1977	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-92 2-10 5-00 2-12 8-00 6-20	0905	00	118	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		4.01

22B

DATE:
FILE:

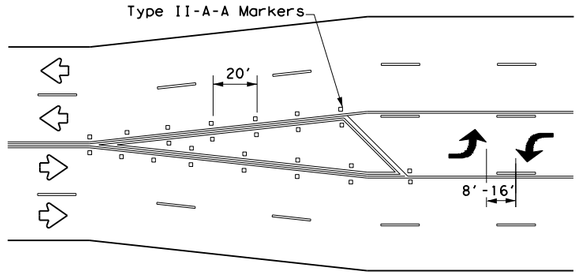


LANE REDUCTION

Posted Speed	D (ft)	L (ft)
30 MPH	460	$L=\frac{WS^2}{60}$
35 MPH	565	
40 MPH	670	
45 MPH	775	L=WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	

NOTES

1. Lane reduction pavement markings are used where the number of through lanes is reduced because of narrowing of the roadway or because of a section of on-street parking in what would otherwise be a through lane. For Texas Super 2 Passing Lanes, see TS2(PL) standard sheets.
2. On divided highways, an additional W9-1R "RIGHT LANE ENDS" sign may be installed in the median aligned with the W9-1R sign on the right side of the highway.
3. Lane reduction arrows are required for speeds of 45 mph or greater. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
4. For lane reductions on Freeways and Expressways, signing shall conform to the TxDOT Freeway Signing Handbook.



A two-way left-turn (TWLT) lane-use arrow pavement marking should be used at or just downstream from the beginning of a two-way left-turn lane within a corridor. Repeating the marking after each intersection or dedicated turn bay is not required unless stated elsewhere in the plans.

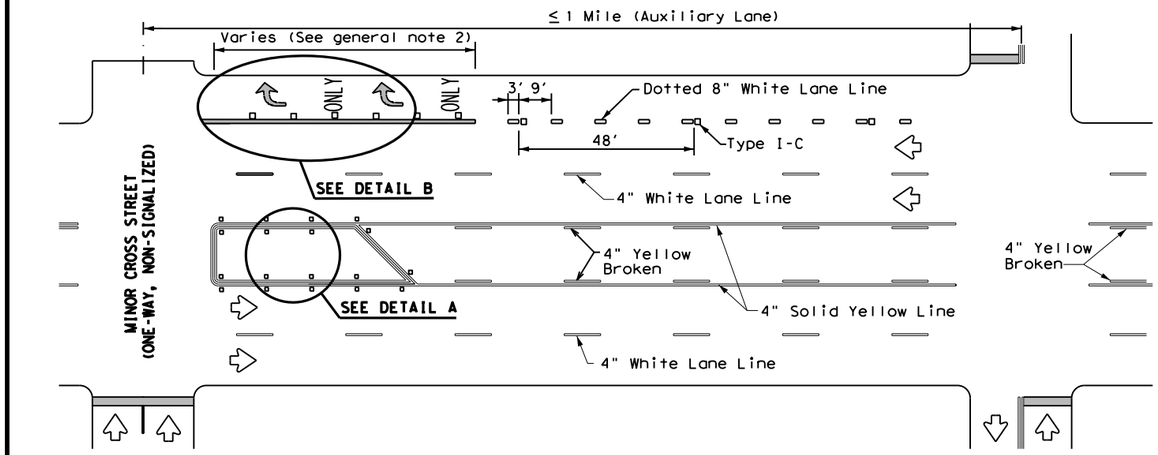
TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY

GENERAL NOTES

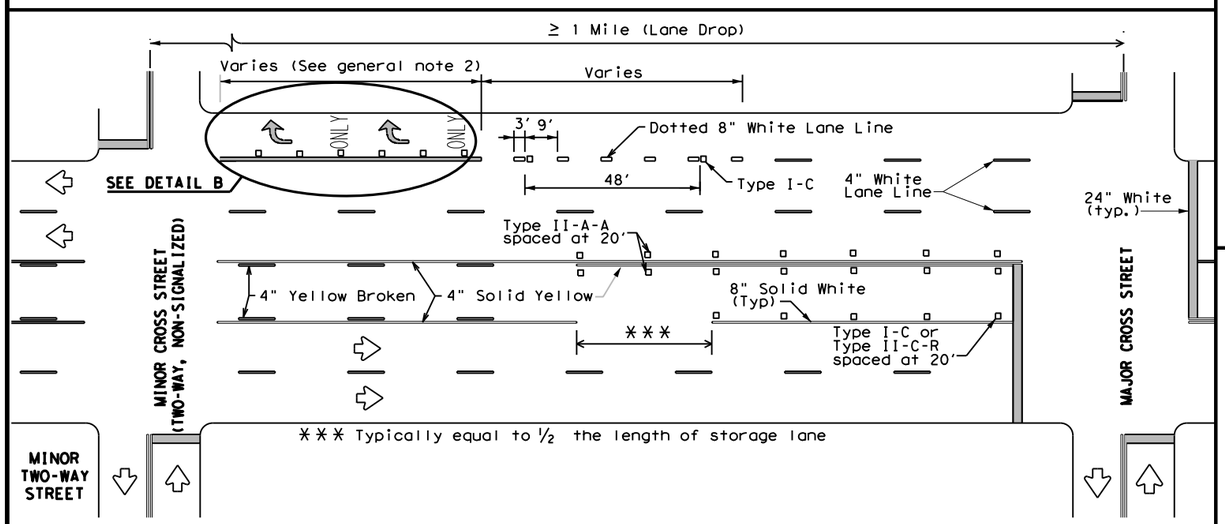
1. Lane use word and arrow markings shall be used where through lanes approaching an intersection become mandatory turn lanes. Lane use word and arrow markings should be used in auxiliary lanes of substantial length. Lane use arrow markings or word and arrow markings may be used in other lanes and turn bays for emphasis. Details for words and arrows are as shown in the Standard Highway Sign Designs for Texas.
2. When lane-use words and arrow markings are used, two sets of arrows should be used if the length of the bay is greater than 180 feet. When a single lane use arrow or word and arrow marking is used for a short turn lane, it should be located at or near the upstream end of the full-width turn lane.
3. Use raised pavement marker Type I-C with undivided highways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.
4. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

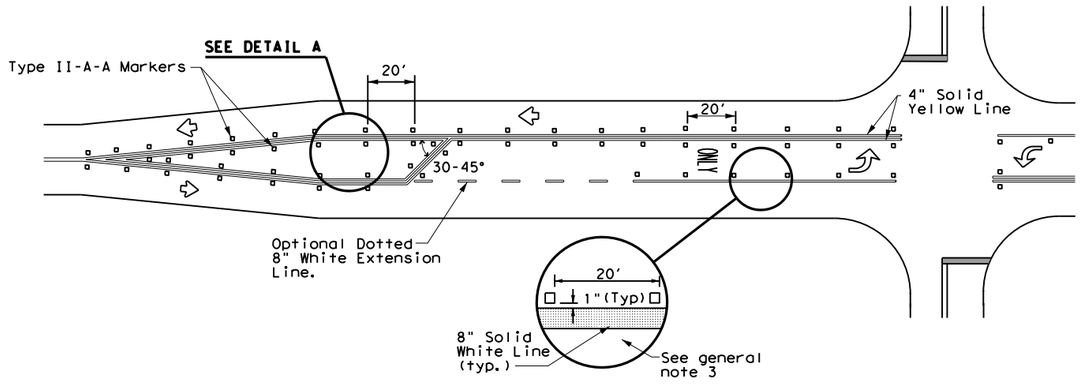
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



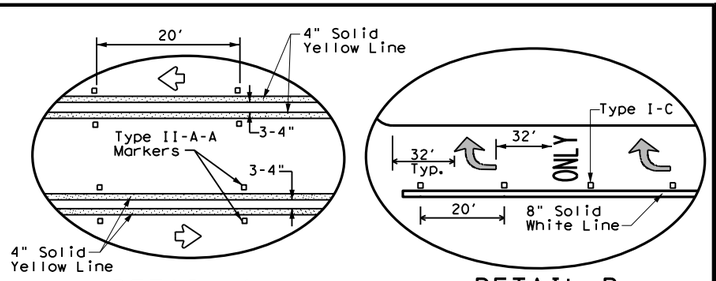
TYPICAL TWLTL AT ONE-WAY STREET AND RIGHT TURN AUXILIARY LANE



TYPICAL TWLTL AT TWO-WAY CROSS STREET AND RIGHT TURN LANE DROP



TYPICAL TWO-LANE HIGHWAY INTERSECTION WITH LEFT TURN BAYS



Texas Department of Transportation

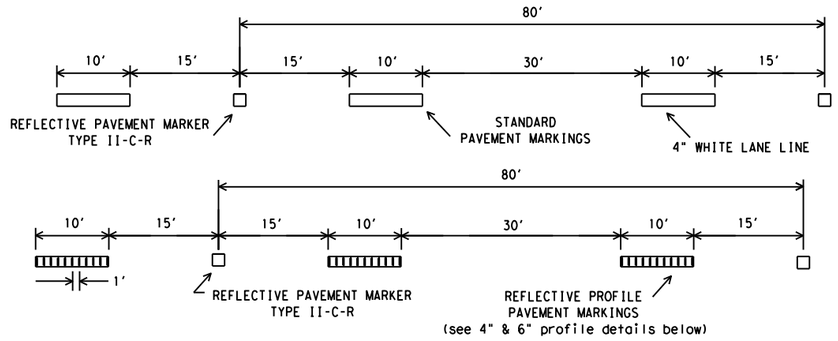
Traffic Safety Division Standard

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS PM(3)-20

FILE: pm3-20.dgn	DN:	CK:	DW:	CK:
© TxDOT April 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
5-00 2-10	DIST	COUNTY		SHEET NO.
8-00 2-12	LBB	LUBBOCK, ETC.		4.02
3-03 6-20				

220

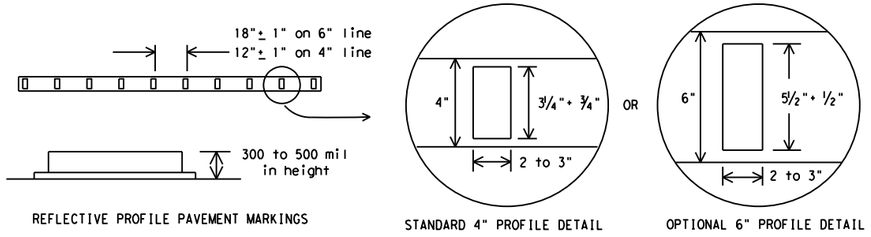
DATE:
FILE:



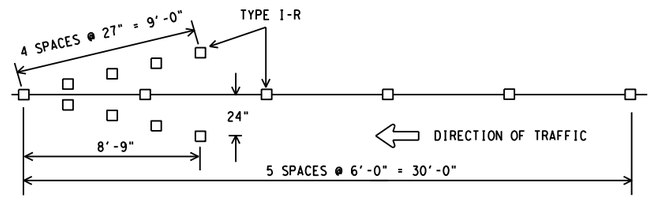
PAVEMENT MARKERS (REFL) TYPE II-C-R SHALL BE SPACED ON 80' CENTERS WITH THE CLEAR FACE TOWARD NORMAL TRAFFIC AND THE RED FACE TOWARD WRONG WAY TRAFFIC.

TRAFFIC LANE LINES PAVEMENT MARKING DETAILS

EDGELINES SHOULD TYPICALLY BE 4" WIDE AND THE MATERIALS SHALL BE AS SPECIFIED IN THE PLANS.
IF RAISED PROFILE PAVEMENT MARKINGS ARE USED SEE DETAILS BELOW.



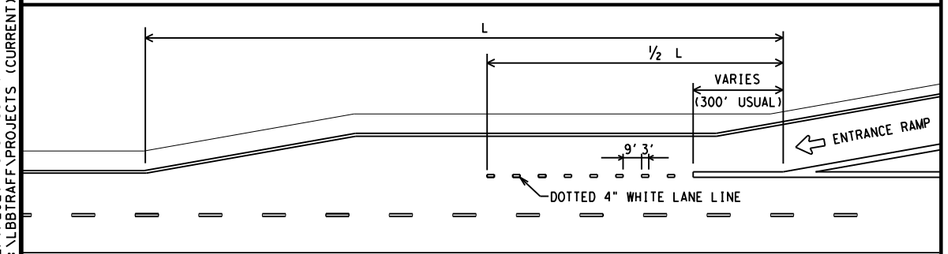
EDGELINE PAVEMENT MARKINGS



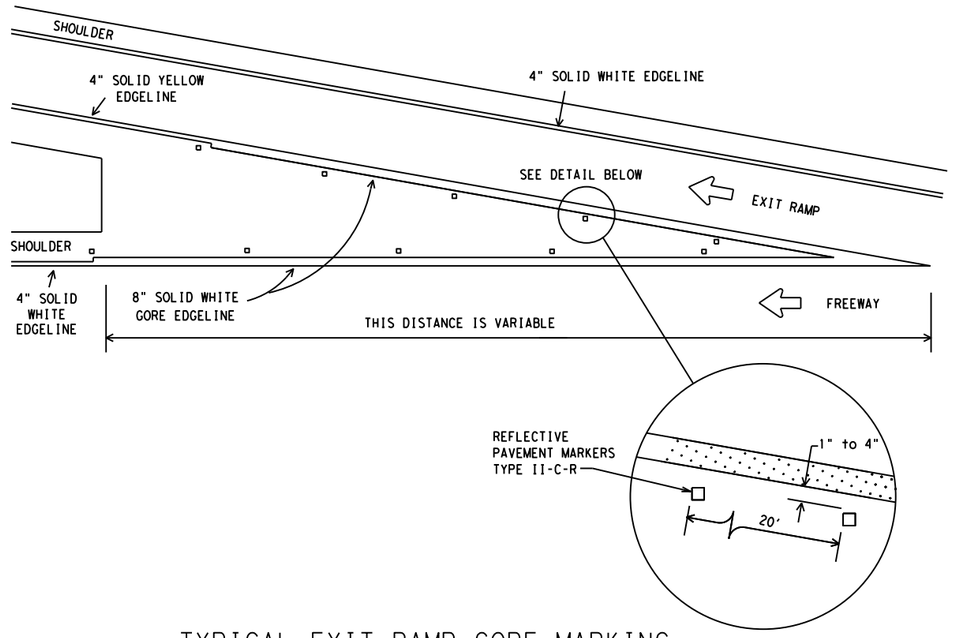
ALL RAISED MARKERS IN THE WRONG WAY ARROW SHALL BE TYPE I-R REFLECTORIZED PAVEMENT MARKERS WITH THE REFLECTORIZED SURFACE FACING THE WRONG WAY TRAFFIC. TYPE II-C-R SHALL NOT BE USED.

REFLECTORIZED WRONG WAY ARROWS, NOT TO EXCEED TWO, MAY BE PLACED ON EXIT RAMPS.
LOCATION OF THE ARROWS SHALL BE AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

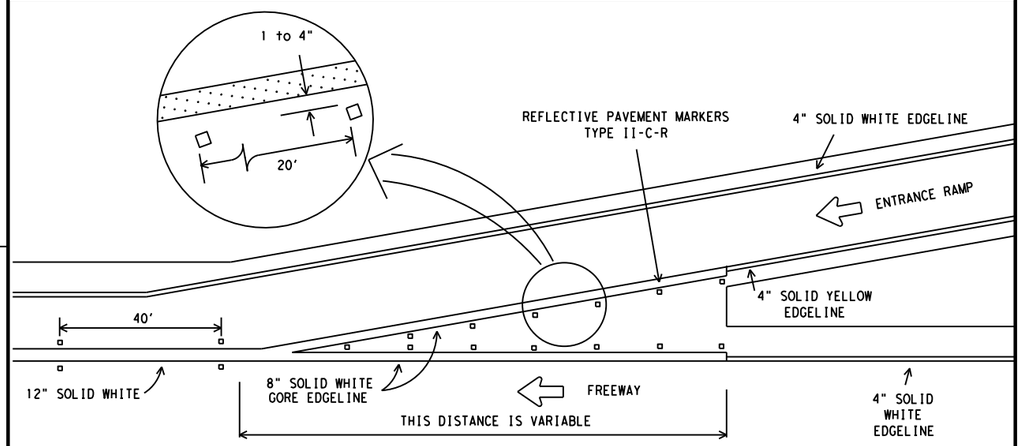
WRONG WAY ARROW DETAIL



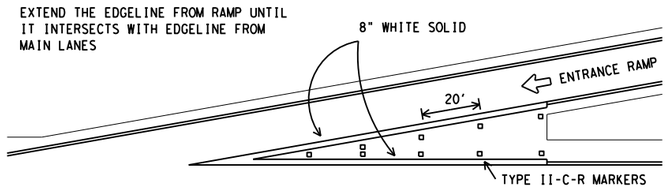
PARALLEL ACCELERATION LANE



TYPICAL EXIT RAMP GORE MARKING



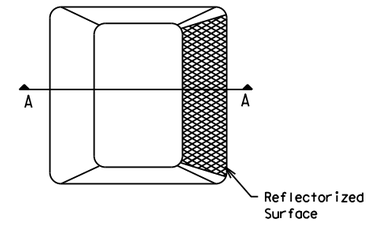
TYPICAL ENTRANCE RAMP GORE MARKING



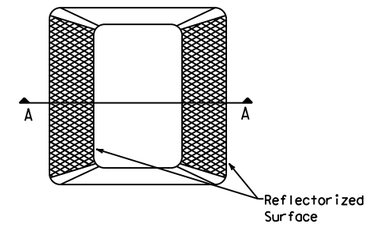
TAPERED ACCELERATION LANE

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

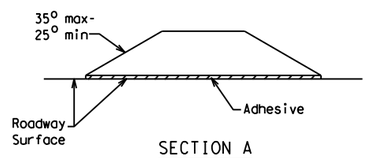
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



Type I (Top View)



Type II (Top View)



SECTION A

RAISED PAVEMENT MARKERS

Texas Department of Transportation
Traffic Operations Division

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS

FPM(1)-12

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS
4-92 2-10
5-00 2-12
8-00
2-08

CONT	SECT	JOB	HIGHWAY
0905	00	118	VAR
DIST	COUNTY		SHEET NO.
LBB	LUBBOCK, ETC.		4.03

23A

DATE: 12/1/2021 8:54:55 AM
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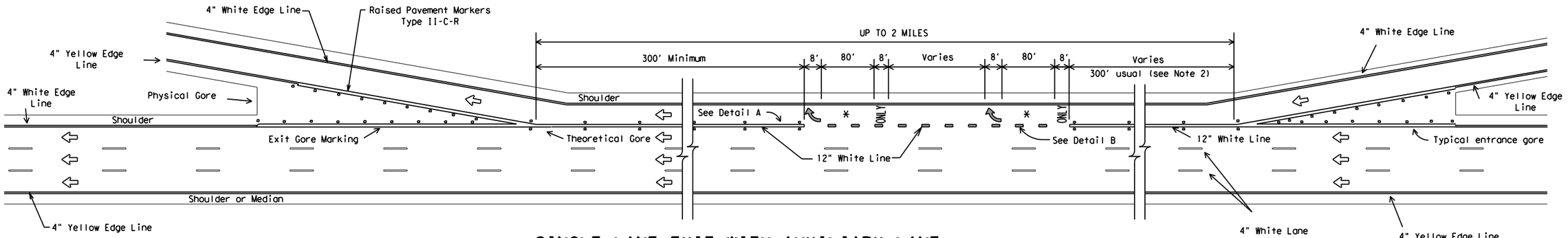
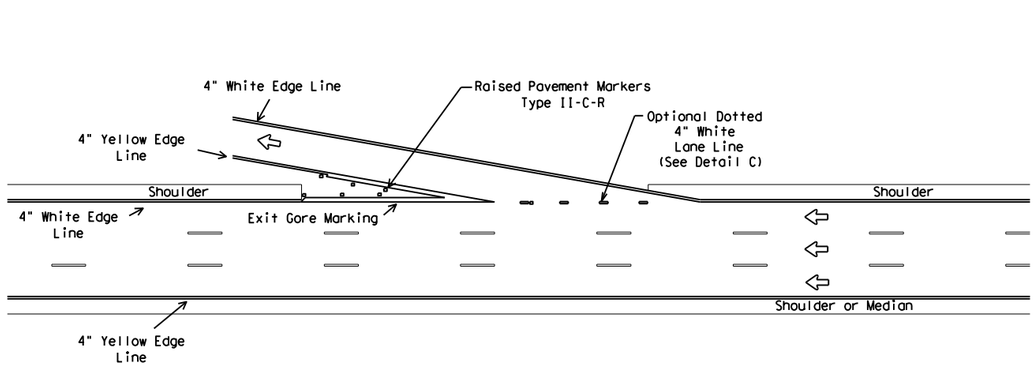
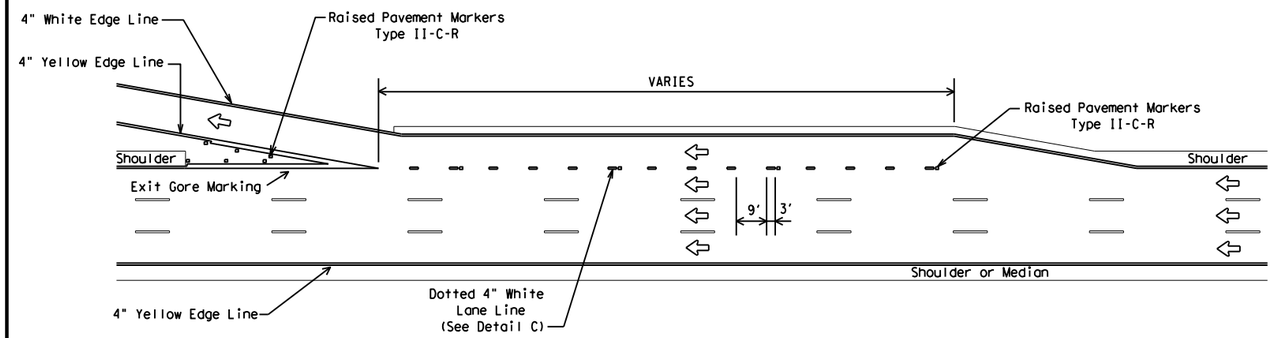


SINGLE LANE EXIT WITH AUXILIARY LANE

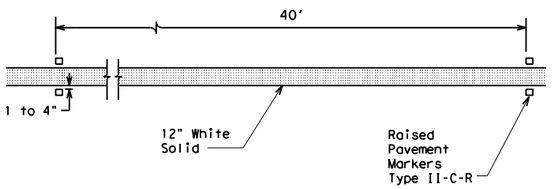
(See Note 2)



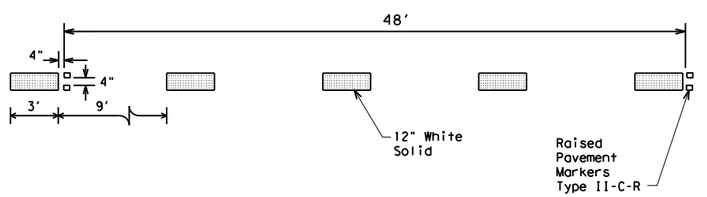
TAPERED DECELERATION LANE



PARALLEL DECELERATION LANE

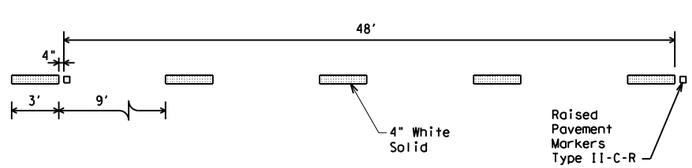


DETAIL A



DETAIL B

Wide (12") Dotted Lane Line (See Note 3)



DETAIL C

Normal (4") Dotted Lane Line (See Note 4)

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") Dotted Lane Line (See Detail B) is used to separate a through lane from a lane drop at normal exit ramp and from an auxiliary lane between an entrance and exit ramp.
4. Normal (4") Dotted Lane Line (See Detail C) is used at parallel acceleration and deceleration lanes.

LEGEND	
⇦	Denotes direction of traffic.
↱	Pavement marking arrows (white)
✳	Arrow markings are optional, however "ONLY" is required if arrow is used

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation
Traffic Operations Division

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS ENTRANCE AND EXIT RAMPS

FPM(2)-12

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS
4-92 2-10
8-95 2-12
5-00
8-00

CONT	SECT	JOB	HIGHWAY
0905	00	118	VAR
DIST	COUNTY		SHEET NO.
LBB	LUBBOCK, ETC.		4.04

23B

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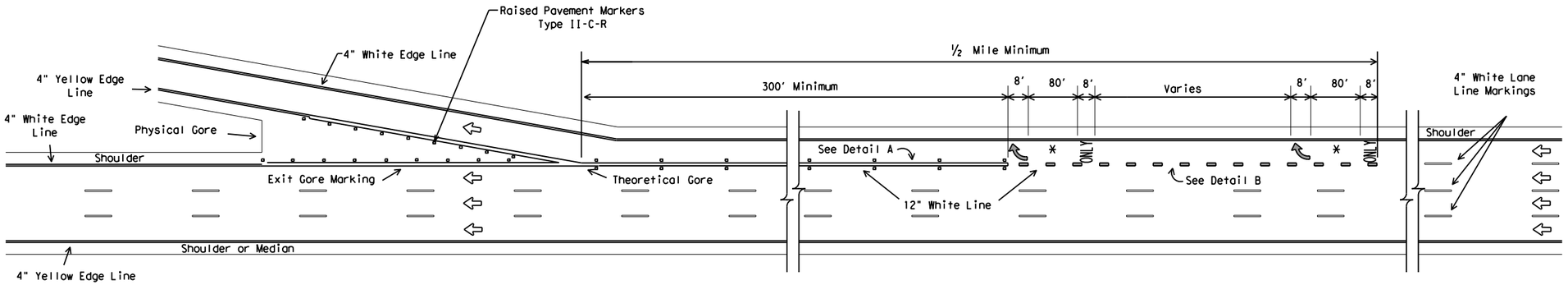
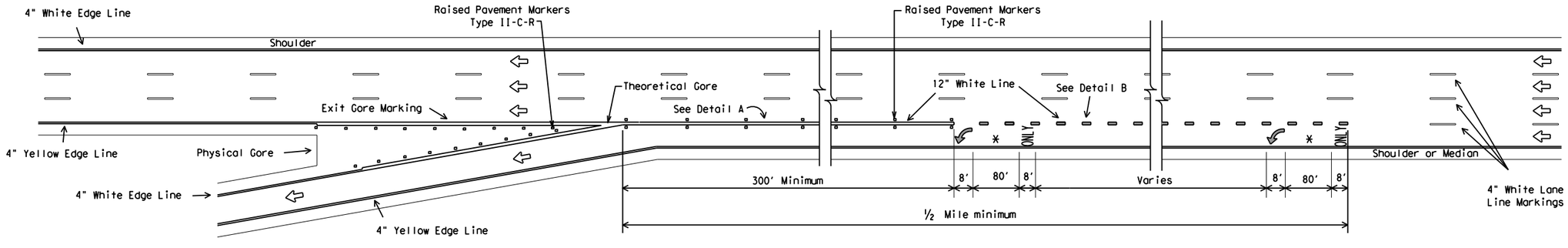


SINGLE LANE EXIT - LANE DROP OR EXIT ONLY

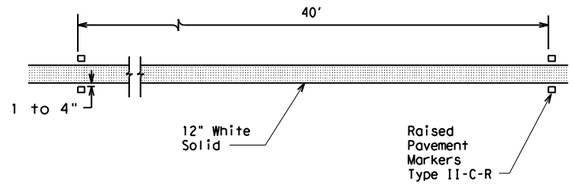


SINGLE LANE EXIT - LANE DROP OR EXIT ONLY (LEFTHAND)

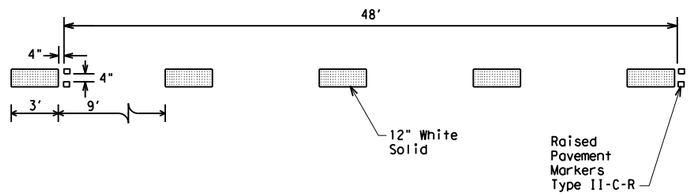
LEGEND	
⇦	Denotes direction of traffic.
↱	Pavement marking arrows (white)
✳	Arrow markings are optional, however "ONLY" is required if arrow is used

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") Dotted Lane Line (See Detail B) is used to separate a through lane from a lane drop at normal exit ramp and from an auxiliary lane between an entrance and exit ramp.



DETAIL A



DETAIL B

Wide (12") Dotted Lane Line (See Note 3)

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation
Traffic Operations Division

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS LANE DROP (EXIT ONLY) EXIT RAMPS

FPM(3)-12

REVISIONS
5-00
8-00
2-10
2-12

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

CONT	SECT	JOB	HIGHWAY
0905	00	118	VAR

DIST	COUNTY	SHEET NO.
LBB	LUBBOCK, ETC.	4.05

23C

DATE: 12/1/2021 8:55:00 AM
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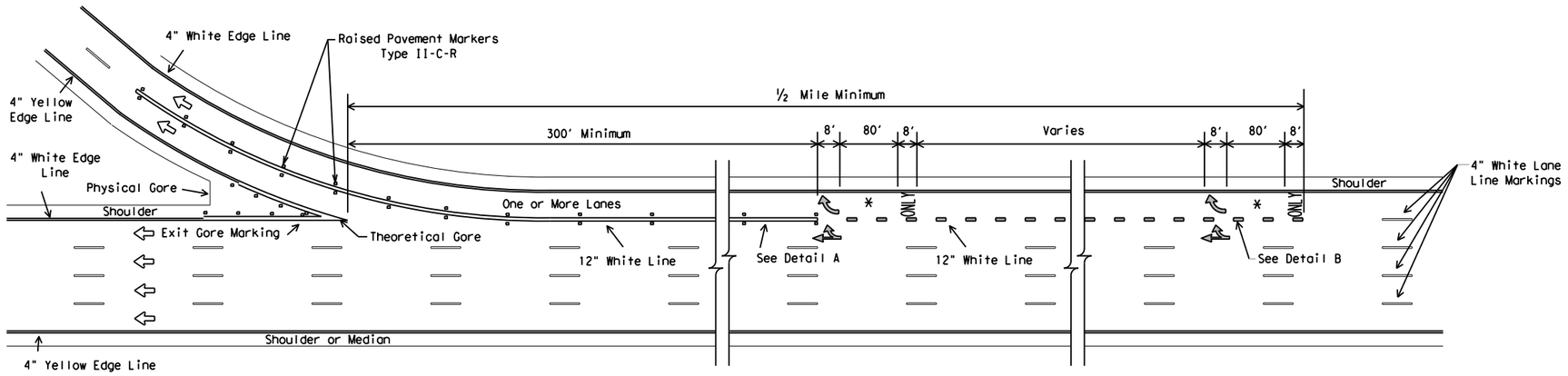
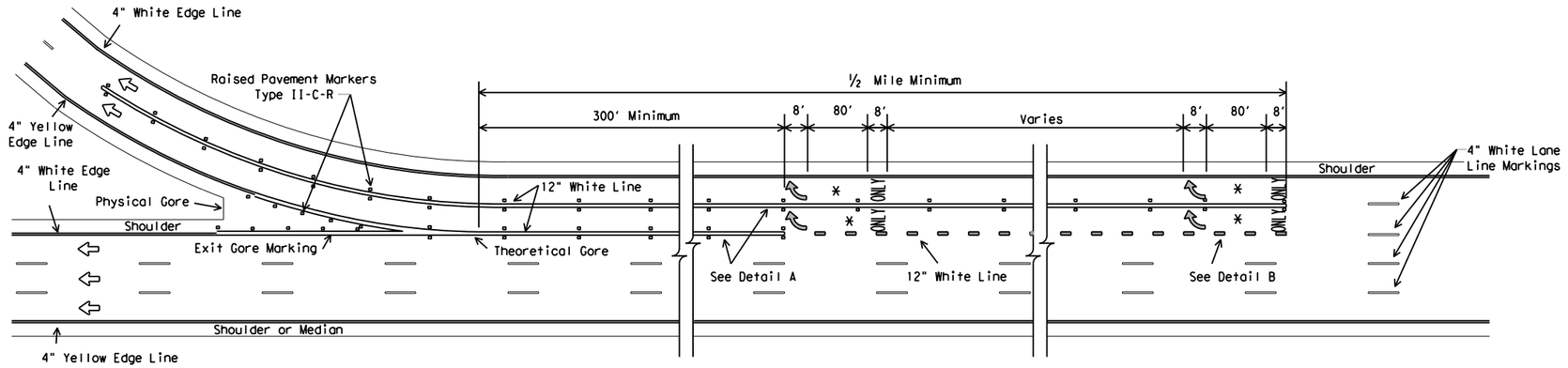


MULTIPLE LANE EXIT - EXIT ONLY WITH OPTION LANE

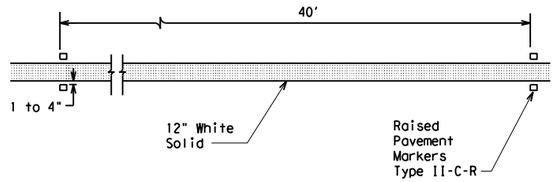


MULTIPLE LANE EXIT ONLY

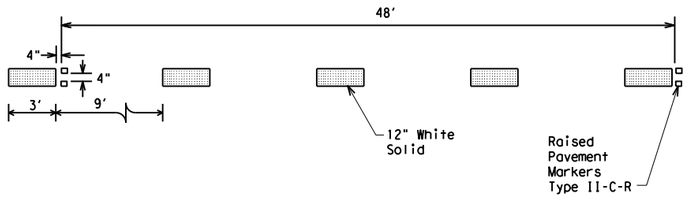
LEGEND	
⇦	Denotes direction of traffic
	Pavement marking arrow (white)
	Optional Pavement Marking Arrows (white)
✳	Arrow markings are optional, however "ONLY" is required if arrow is used

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") Dotted Lane Line (See Detail B) is used to separate a through lane from a lane drop at normal exit ramp and from an auxiliary lane between an entrance and exit ramp.



DETAIL A



DETAIL B

Wide (12") Dotted Lane Line (See Note 3)

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation
Traffic Operations Division

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS LANE DROP (EXIT ONLY) DETAILS

FPM(4)-12

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS
5-00
8-00
2-10
2-12

CONT	SECT	JOB	HIGHWAY
0905	00	118	VAR
DIST	COUNTY		SHEET NO.
LBB	LUBBOCK, ETC.		4.06

23D

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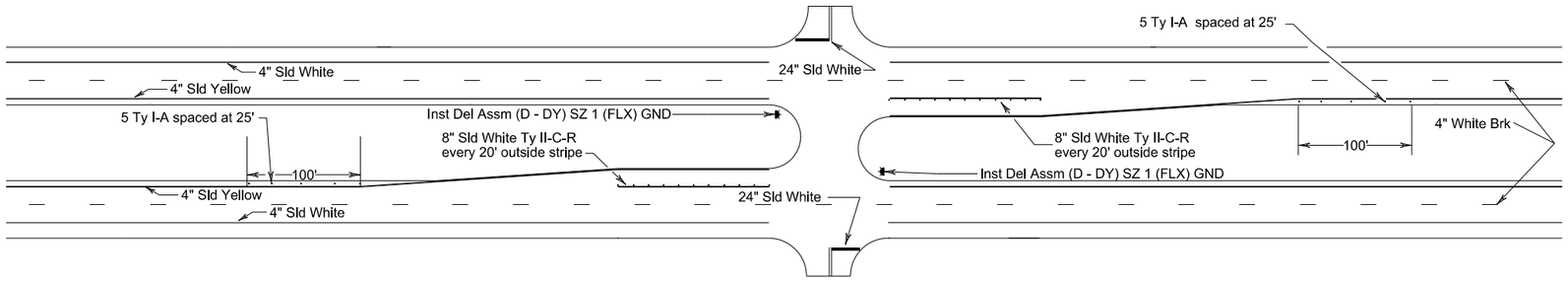
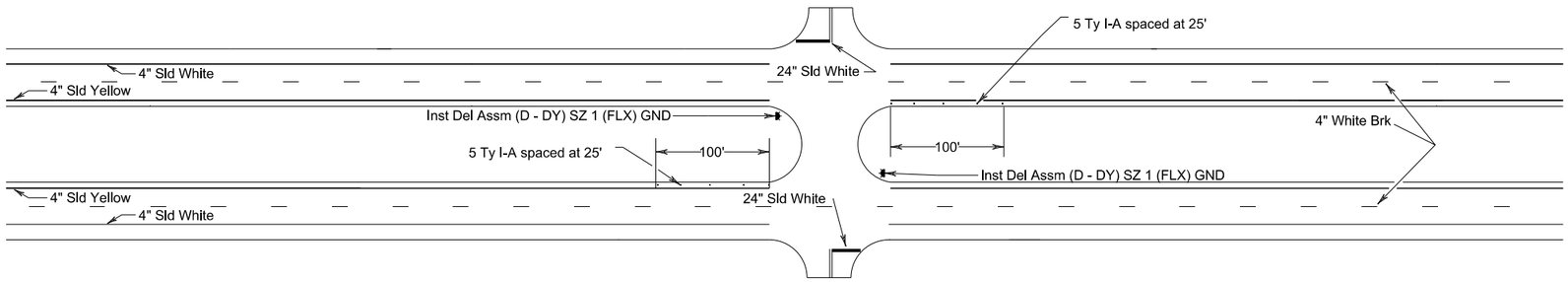


Crossovers With Decel Lanes



Crossovers Without Decel Lanes

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

12/03/2021

4-LANE DIVIDED CROSSOVER DETAIL

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
6			4.07
STATE	STATE DIST. NO.	COUNTY	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	118	VAR
FILENAME	FOUR LANE CROSSOVER		

PART 1 - GENERAL

1.01 DESCRIPTION

This project includes construction work within the right of way and/or properties of the Railroad and adjacent to its tracks, wire lines and other facilities. These sheets describe the minimum special requirements for coordination with the Railroad when working upon, over or under Railroad Right of Way or when impacting current or future Railroad operations. Coordinate with the Railroad while performing the work outlined herein, and afford the same cooperation with the Railroad as with TxDOT. Complete all submittals and work in accordance with TxDOT Standard Specifications, Railroad Guidelines and AREMA recommendations as modified by these minimum special requirements or as directed in writing by the Railroad Designated Representative.

For purposes of this project, the Railroad Designated Representative is the person or persons designated by the Railroad Manager of Industry and Public Projects to handle specific tasks related to the project.

1.02 REQUEST FOR INFORMATION / CLARIFICATION

Submit Requests for Information ("RFI") involving work within any Railroad Right of Way to the TxDOT Engineer. The TxDOT Engineer will submit the RFI to the Railroad Designated Representative for review and approval for RFI's corresponding to work within Railroad Right of Way. Allow six (6) weeks total time for review and approval, which includes four (4) weeks for review and approval by the Railroad.

1.03 PLANS / SPECIFICATIONS

TxDOT has received written Railroad approval of the plans and specifications for this project. Any revisions or changes in the plans after award of the Contract must have the approval of TxDOT and the Railroad.

PART 2 - UTILITIES AND FIBER OPTIC

Construct all utility installations in accordance with current AREMA recommendations, Railroad, TxDOT and owning utility specifications and requirements. Railroad general guidelines can be found on the Railroad website or by contacting the Railroad Designated Representative.

PART 3 - CONSTRUCTION

3.01 GENERAL

A. Perform all work in compliance with all applicable Railroad, Federal Railroad Administration (FRA), and TxDOT rules and regulations. Arrange and conduct work in a manner that does not endanger or interfere with the safe operation of the tracks and property of the Railroad and the traffic moving on such tracks, or the wires, signals and other property of the Railroad, its tenants or licensees, at or in the vicinity of the Work. The safe operation of railroad train movements takes precedence over any work to be performed by the Contractor. The Contractor is responsible for train delay cost and lost revenue claims due to any delays or interruption of train operations resulting from Contractor's construction or other activities.

B. Construction activities within 15 feet of the operational tracks will only be allowed if absolutely necessary and the Railroad's Designated Representative grants approval. Construction activities within 15 feet of the operational track(s) preferably allow the tracks to stay operational. In such cases, coordination and approval by the Railroad Track Manager is required with regard to schedule, flagging, and slow orders. See Sections 3.07 and 3.08 for additional information.

C. Provide track protection for all work equipment (including rubber tired equipment) operating within 25 feet from nearest rail. When not in use, keep Contractor machinery and materials at least 50 feet from the Railroad's nearest track.

D. Vehicular crossings of railroad track are allowed only at existing crossings, or haul road crossings developed with Railroad approval.

E. The Contractor is also advised that new railroad facilities within the project may be built by the Railroad. If applicable, these facilities are delineated in the plans. Be aware of the limits of responsibilities and coordinate efforts with the Railroad and TxDOT.

F. Railroad requirements do not allow work within 50 feet of track centers when a train passes the work site and all personnel must clear the area within 50 feet of the track centerline and secure all equipment. Additional allowances may be pursued as outlined in 3.02 and 3.03.

G. All permanent clearances shall be verified before project closing.

3.02 RAILROAD OPERATIONS

A. Trains and/or equipment are expected on any track, at any time, in either direction. Become familiar with the train schedules in this location and structure bid assuming intermittent track windows in this period, as defined in Paragraph B that follows.

B. All railroad tracks within and adjacent to the contract site are active, and rail traffic over these facilities shall be maintained throughout the Project. Activities may include both through moves and switching moves to local customers. railroad traffic and operations will occur continuously throughout the day and night on these tracks and shall be maintained at all times as defined herein. Coordinate and schedule the work so that construction activities do not interfere with railroad operations.

C. Coordinate work windows with TxDOT and the Railroad's Designated Representative. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

1. Conditional Work Window: A Conditional Work Window is a period of time that railroad operations have priority over construction activities. When construction activities may occur on and/or adjacent to the railroad tracks within 25 feet of the nearest track, a railroad flag person will be required. At the direction of the railroad flag person, upon approach of a train, and when trains are present on the tracks, the tracks must be cleared (i.e., no construction equipment, materials or personnel within 25 feet, or as directed by the Railroad Designated Representative, from the tracks). Conditional Work Windows are available for the Project.

2. Absolute Work Window: An Absolute Work Window is a period of time that construction activities are given priority over railroad operations. During this time frame, the designated railroad track(s) will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window, the railroad tracks and/or signals must be completely operational for train operations and all Railroad, Public Utilities Commission (PUC) and FRA requirements, codes and regulations for operational tracks must be satisfied. In the situation where the operating tracks and/or signals have been affected, the Railroad will perform inspections of the work prior to placing that track back into service. Railroad flag persons will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for Railroad review.

3.03 RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES

A. Do not perform any work within Railroad Right of Way without a valid executed Right of Entry Agreement if required on this project.

B. Give advance notice to the Railroad as required in the "Contractor's Right of Entry Agreement" before commencing work in connection with construction upon or over Railroad Right of Way and observe the Railroad's rules and regulations with respect thereto.

C. Perform all work upon Railroad Right of Way in a manner to avoid interference with or endanger the operations of the Railroad. Whenever work may affect the operations or safety of trains, submit the work method to the Railroad Designated Representative for approval. Approval does not relieve the Contractor from liability. Do not commence any work which requires flagging service or inspection service until the flagging protection required by the Railroad is available at the job site. See Section 3.15 for railroad flagging requirements.

D. Make requests in writing for both Absolute and Conditional Work Windows, at least 30 days in advance of any work. Include in the written request:
1. Exactly what the work entails.
2. The days and hours that work will be performed.
3. The exact location of work, and proximity to the tracks.
4. The type of window requested and the amount of time requested.
5. The designated contact person.

Provide a written confirmation notice to the Railroad at least 48 hours before commencing work in connection with approved work windows when work is within 25 feet of nearest rail. Perform all work in accordance with previously approved work plans.

E. Make provisions to protect operations and property of the Railroad should a condition arising from, or in connection with the work, require immediate and unusual action. If in the judgment of the Railroad Designated Representative such provisions are insufficient, the Railroad Designated Representative may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense and without cost to the Railroad or TxDOT. The Railroad or TxDOT shall have the right to order the Contractor to temporarily cease operations in the event of an emergency or, if in the opinion of the Railroad Designated Representative, the Contractor's operations could endanger railroad operations. In the event of such an order, immediately notify TxDOT of the order.

3.04 INSURANCE

Do not begin work upon or over Railroad Right of Way until furnishing the Railroad with the insurance policies, binders, certificates and endorsements required by the "Contractor's Right of Entry Agreement", and until the Railroad Designated Representative has advised TxDOT that such insurance is in accordance with the Agreement.

3.05 RAILROAD SAFETY ORIENTATION

A. Complete the railroad course "Orientation for Contractor's Safety", and maintain current registration prior to working on railroad property. This course is required to be completed annually by Contractor and Subcontractor personnel working on site.

"UPRR, BNSF, KCS/TEXMEX will not accept on-track safety training certificates from other railroads. Refer to Railroad specific contractor right of entry for training information."

B. Know and follow the "Contractor's Right of Entry Agreement" EXHIBIT D, MINIMUM SAFETY REQUIREMENTS regarding clothing, personal protective equipment, and general safety requirements.

3.06 COOPERATION

The Railroad will cooperate with Contractor so that work may be conducted in an efficient manner, and will cooperate with Contractor in enabling use of Railroad Right of Way in performing the work.

3.07 MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK AND OTHER TEMPORARY STRUCTURES

Abide by the following minimum temporary clearances during the course of construction:
A. 15' - 0" (BNSF)(UPRR)and 14'-0" (KCS) horizontal from centerline of track
B. 22' (KCS) and 21' - 6" (UPRR & BNSF) vertically above top of rail.

For construction clearance less than listed above, obtain local Railroad Operating Unit review and approval.

3.08 APPROVAL OF REDUCED CLEARANCES

A. Maintain minimum track clearances during construction as specified in Section 3.07.

B. Submit any proposed infringement on the specified minimum clearances to the Railroad Designated Representative through TxDOT at least 30 days in advance of the work. Do not proceed with such infringement without written approval by the Railroad Designated Representative.

C. Do not commence work involving an approved infringement without receiving written assurance from the Railroad Designated Representative that arrangements have been made for any necessary flagging service.

Texas Department of Transportation | Rail Division

RAILROAD REQUIREMENTS FOR NON-BRIDGE CONSTRUCTION PROJECTS

FILE:	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
	CONT	SECT	JOB	HIGHWAY
REVISIONS March 2020	0905	00	118	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		5.01

DATE:
FILE:

3.09 MAINTENANCE OF RAILROAD FACILITIES

A. Maintain all ditches and drainage structures free of silt or other obstructions resulting from Contractor's operations. Repair eroded areas and any other damage within Railroad Right of Way and repair any other damage to the property of the Railroad, or its tenants.

B. Perform all such maintenance and repair of damages due to the Contractors's operations at Contractor's expense.

C. Submit a proposed method of erosion control for review by the Railroad prior to beginning any grading on the project site. Comply with all applicable local, state and federal regulations when developing and implementing such erosion control.

3.10 SITE INSPECTIONS BY RAILROAD's DESIGNATED REPRESENTATIVE

A. In addition to the office reviews of construction submittals, site inspections may be performed by the Railroad Designated Representative at significant points during construction, including the following if applicable:
   1. Pre-construction meetings.
   2. Pile driving/drilling of caissons or drilled shafts.
   3. Reinforcement and concrete placement for railroad bridge substructure and/or superstructure.
   4. Erection of precast concrete or steel bridge superstructure.
   5. Placement of waterproofing (prior to placing ballast on bridge deck).
   6. Completion of the bridge structure.

B. Site inspection is not limited to the milestone events listed above. Site visits to check progress of the work may be performed at any time throughout the construction as deemed necessary by the Railroad.

C. Provide a detailed construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work to TxDOT for submittal to the Railroad Designated Representative for review prior to commencement of work. Include the anticipated dates when the above listed events will occur. Update this schedule for the above listed events as necessary and each month at a minimum to allow the Railroad to schedule site inspections.

3.11 RAILROAD REPRESENTATIVES

Railroad representatives, conductors, flag person or watch person will be provided by the Railroad at expense of TxDOT to protect Railroad facilities, property and movements of its trains or engines. In general, the Railroad will furnish such personnel or other protective services as follows:

A. When any part of any equipment is standing or being operated within 25 feet, measured horizontally, from nearest rail of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.

B. For any excavation below elevation of track subgrade if, in the opinion of the Railroad Designated Representative, track or other railroad facilities may be subject to settlement or movement.

C. During any clearing, grubbing, excavation or grading in proximity to railroad facilities, which, in the opinion of the Railroad Designated Representative, may endanger railroad facilities or operations.

D. During any Contractor's operations when, in the opinion of the Railroad Designated Representative, railroad facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.

E. Arrange with the Railroad Designated Representative to provide the adequate number of flag persons to accomplish the work.

3.12 COMMUNICATIONS AND SIGNAL LINES

If required, the Railroad will rearrange its communications and signal lines, its grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by the Railroad's forces in connection with its operation at expense of TxDOT. This work by the Railroad will be done by its own forces and it is not a part of the Work under this Contract.

3.13 TRAFFIC CONTROL

Coordinate any operations that control traffic across or around railroad facilities with the Railroad Designated Representative.

3.14 CONSTRUCTION EXCAVATIONS AND BORING ACTIVITIES UNDER TRACK

A. Take special precaution and care in connection with excavating and shoring. Excavations for construction of footings, piers, columns, walls or other facilities that require shoring shall comply with requirements of TxDOT, OSHA, AREMA and Railroad "Guidelines for Temporary Shoring".

B. The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration. Regardless, contact the necessary call center to determine if such cable systems are present:

   UPRR 1-800-336-9193
   7:00 AM to 9:00 PM CST Monday-Friday except holidays,
   staffed 24 hrs/day for emergencies
   48 hrs notice required

   BNSF 1-800-533-2891
   24 hour number
   5 working days notice required

   KCS 1-800-344-8377
   Texas One Call, a 24 hour number
   48 hrs notice required, excluding weekends and holidays

   If a telecommunications system is buried anywhere on or near railroad property, coordinate with TxDOT, the Railroad and the Telecommunication Company(ies) to arrange for relocation or protective measures prior to beginning work on or near railroad property. Refer to the project General Notes for additional information.

C. Projects involving a boring or jack and bore operation under track such as drainage pipes or culverts and utilities require an installation plan reviewed and approved by the Railroad and TxDOT prior to proceeding with such construction. A railroad inspector and contractor assisted monitoring of ground and track movement is required to maintain safe passage of rail traffic. Stop installation and do not allow passage of trains if movements in excess of $\frac{1}{4}$ inch vertical or horizontal is detected in the tracks. Immediately repair the damage to the satisfaction of TxDOT and the Railroad before proceeding.

3.15 RAILROAD FLAGGING

Per the Right of Entry Agreement for flagging, notify the Railroad Representative at least 10 working days in advance of Contractor's work and at least 30 working days in advance of any Contractor's work in which any person or equipment will be within 25 feet of nearest rail or as specified in the Contractor Right of Entry (CROE).

3.16 CLEANING OF RIGHT-OF-WAY

When work is complete, remove all tools, implements, and other materials brought into Railroad Right of Way and leave the right of Way in a clean and presentable condition to the satisfaction of TxDOT and the Railroad.

Texas Department of Transportation | Rail Division

RAILROAD REQUIREMENTS FOR NON-BRIDGE CONSTRUCTION PROJECTS

FILE:	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT October 2018	CONT	SECT	JOB	HIGHWAY
REVISIONS March 2020	0905	00	118	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		5.02

DATE:
FILE:

DATE:
FILE:

I. WORK AT CROSSING LOCATIONS (AT GRADE, HIGHWAY OVERPASS, HIGHWAY UNDERPASS, PEDESTRIAN, OR CLOSED/ABANDONED)

DOT #: SEE ATTACHMENT
Crossing Type: ** SEE ATTACHMENT
RR Company Owning Track at Crossing: SEE ATTACHMENT
Operating RR Company at Track: SEE ATTACHMENT
RR MP: SEE ATTACHMENT
RR Subdivision: SEE ATTACHMENT
City: SEE ATTACHMENT
County: SEE ATTACHMENT
CSJ at this Crossing: SEE ATTACHMENT
Highway/Roadway name crossing the railroad: SEE ATTACHMENT
# of regularly scheduled trains per day at this crossing: SEE ATTACHMENT
# of switching movements per day at this crossing: SEE ATTACHMENT
% of estimated contract cost of work within railroad ROW: SEE ATTACHMENT

Scope of Work at this Crossing to Be Performed by State Contractor:
REMOVE AND REPLACEMENT FO RAISED PAVEMENT MARKERS

Scope of Work at this Crossing to Be Performed by Railroad Company:
N/A

** Choose: Highway Overpass, Highway Underpass, At Grade, Pedestrian, or Closed/Abandoned

II. OTHER PROJECT WORK WITHIN RAILROAD RIGHTS-OF-WAY (ROW)

N/A

III. FLAGGING & INSPECTION

of Days of Railroad Flagging Expected: 4

On this project, night or weekend flagging is:

☒ Expected
☐ Not Expected

Flagging services will be provided by:

☒ Railroad Company: TxDOT will pay flagging invoices
☐ Outside Party: Contractor will pay flagging invoices, to be reimbursed by TxDOT

Contractor must incorporate flaggers into anticipated construction schedule. The Railroad requires a 30 day notice if their flaggers are to be utilized. If Contractor falls behind schedule due to their own negligence and is not ready for scheduled flaggers, any flagging charges will be paid by Contractor.

Contact Information for Flagging:

☐ UPRR - UP.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☒ BNSF - BNSF.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ KCS - KCS.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- Bottom Line On-Track Safety Services
bottomline076@aol.com, 903-767-7630

☐ OTHERS

Contractor must incorporate Construction Inspection into anticipated construction schedule.

☒ Not Required

☐ Required: Contact Information for Construction Inspection:

IV. CONSTRUCTION WORK TO BE PERFORMED BY THE RAILROAD

On this project, construction work to be performed by a railroad company is:

☐ Required
☒ Not Required

Coordinate with TxDOT for any work to be performed by the Railroad Company. TxDOT must issue a work order for any work done by the Railroad Company prior to the work being performed.

V. RAILROAD INSURANCE REQUIREMENTS

Railroad reference number shall be provided by TxDOT CST or DO.

The Contractor shall confirm the insurance requirements with the Railroad as the insurance limits are subject to change without notice.

Insurance policies must be issued for and on behalf of the Railroad. Where more than one Railroad Company is operating on the same right of way or where several Railroad Companies are involved and operate on their own separate rights of way, provide separate insurance policies in the name of each Railroad Company.

No direct compensation will be made to the Contractor for providing the insurance coverages shown below or any deductibles. These costs are incidental to the various bid items.

Type of Insurance	Amount of Coverage (Minimum)
Workers Compensation	$500,000 / $500,000 / $500,000
Commercial General Liability	$2,000,000 / $4,000,000
Business Automobile	$2,000,000 combined single limit
Railroad Protective Liability	
☐ Not Required	
☒ Non - Bridge Projects	$2,000,000 / $6,000,000
☐ Bridge Projects	$5,000,000 / $10,000,000
☐ Other	

VI. CONTRACTOR'S RIGHT OF ENTRY (ROE) AGREEMENT

On this project, an ROE agreement is:

☒ Not Required
☐ Required: TxDOT CST to assist in obtaining with the UPRR (see Item 5, Article 8.3)
☐ Required: Contractor to obtain (see Item 5, Article 8.4)

With the following railroad companies: BNSF

To view previously approved ROE Agreement templates agreed upon between the State and Railroad, see:

http://www.txdot.gov/inside-txdot/division/rail/samples.html

Approved ROE Agreement templates are not to be modified by the Contractor.

Contractor shall not operate within Railroad Right of Way without an executed Construction & Maintenance Agreement between the State and the Railroad and an executed ROE agreement between the Contractor and the Railroad if required on project.

VII. RAILROAD COORDINATION MEETING

On this project, a Railroad Coordination Meeting is:

☒ Not Required
☐ Required

See Item 5, Article 8.1 for more details.

VIII. SUBCONTRACTORS

Contractor shall not subcontract work without written consent of TxDOT. Subcontractors are required to maintain the same insurance coverage as required of the Contractor.

IX. EMERGENCY NOTIFICATION

In Case of Railroad Emergency
Call BNSF Emergency Line
Railroad Emergency Line at 800-832-5452
Location: DOT VAR.
RR Milepost VAR.
Subdivision VAR.

Texas Department of Transportation | Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:	
©TxDOT June 2014	CONT	SECT	JOB	HIGHWAY	
REVISIONS	0905	00	118	VAR	
3/2020	DIST	COUNTY		SHEET NO.	
	LBB	LUBBOCK, ETC.		5.03	

DOT#	CROSSING TYPE	TRACK OWNER	TRACK OPERATOR	RR MP	SUBDIVISION	CITY	COUNTY	CSJ	TRAINS PER DAY	SWITCHING MOVEMENTS	% OF WORK
014799K	PUBLIC	BNSF	BNSF	622.41	HEREFORD	FROINA	PARMER	90500118	82	0	0
014781A	PUBLIC	BNSF	BNSF	635.35	HEREFORD	BOVINA	PARMER	90500118	41	0	0
014787R	PUBLIC	BNSF	BNSF	647.27	HEREFORD	FARWELL	PARMER	90500118	90	0	0
014840A	PUBLIC	BNSF	BNSF	10.48	SLATON	LARIAT	PARMER	90500118	18	0	0
014854H	PUBLIC	BNSF	BNSF	22.17	SLATON	MULESHOE	BAILEY	90500118	18	0	0
014859S	PUBLIC	BNSF	BNSF	26.02	SLATON	MULESHOE	BAILEY	90500118	18	0	0
014869X	PUBLIC	BNSF	BNSF	38.03	SLATON	SUDAN	LAMB	90500118	16	0	0
014883T	PUBLIC	BNSF	BNSF	53.12	SLATON	LITTLEFIELD	LAMB	90500118	16	0	0
014884A	PUBLIC	BNSF	BNSF	53.87	SLATON	LITTLEFIELD	LAMB	90500118	16	0	0
014898H	PUBLIC	BNSF	BNSF	66.21	SLATON	ANTON	HOCKLEY	90500118	16	0	0
014908L	PUBLIC	BNSF	BNSF	75.71	SLATON	SHALLOWATER	LUBBOCK	90500118	16	0	0
014910M	PUBLIC	BNSF	BNSF	77.71	SLATON	SHALLOWATER	LUBBOCK	90500118	16	0	0
014918S	PUBLIC	BNSF	BNSF	82.08	SLATON	LUBBOCK	LUBBOCK	90500118	16	0	0
014919Y	PUBLIC	BNSF	BNSF	82.7	SLATON	LUBBOCK	LUBBOCK	90500118	16	0	0
015155L	PUBLIC	BNSF	BNSF	86.03	SLATON	LUBBOCK	LUBBOCK	90500118	2	2	0
014981J	PUBLIC	BNSF	BNSF	677.88	SLATON	LUBBOCK	LUBBOCK	90500118	20	0	0
015001B	PUBLIC	BNSF	BNSF	688.66	SLATON	SLATON	LUBBOCK	90500118	20	0	0
015015J	PUBLIC	BNSF	BNSF	703.23	SLATON	POST	GARZA	90500118	18	0	0
015021M	PUBLIC	BNSF	BNSF	713.68	SLATON	POST	GARZA	90500118	18	0	0
017585D	PUBLIC	BNSF	BNSF	0.81	CROSBYTON	LUBBOCK	LUBBOCK	90500118	4	2	0
017584W	PUBLIC	BNSF	BNSF	0.74	CROSBYTON	LUBBOCK	LUBBOCK	90500118	4	2	0
017513A	PUBLIC	BNSF	BNSF	0.75	CROSBYTON	LUBBOCK	LUBBOCK	90500118	2	2	0
017329M	PUBLIC	BNSF	BNSF	653.92	PLAINVIEW	ABERNATHY	HALE	90500118	6	0	0
017280F	PUBLIC	BNSF	BNSF	629.87	PLAINVIEW	PLAINVIEW	HALE	90500118	12	0	0
276582V	PUBLIC	BNSF	BNSF	324.06	DIMMITT SPUR	PLAINVIEW	HALE	90500118	6	4	0
017271G	PUBLIC	BNSF	BNSF	627.94	PLAINVIEW	PLAINVIEW	HALE	90500118	12	0	0
275673X	PUBLIC	BNSF	BNSF	326.64	DIMMITT SPUR	PLAINVIEW	HALE	90500118	4	2	0
275674E	PUBLIC	BNSF	BNSF	326.62	DIMMITT SPUR	PLAINVIEW	HALE	90500118	4	2	0
275675L	PUBLIC	BNSF	BNSF	326.6	DIMMITT SPUR	PLAINVIEW	HALE	90500118	4	2	0
017376V	PUBLIC	BNSF	BNSF	603.78	PLAINVIEW	TULIA	SWISHER	90500118	0	0	0
017382Y	PUBLIC	BNSF	BNSF	600.78	PLAINVIEW	TULIA	SWISHER	90500118	8	0	0
017216G	PUBLIC	BNSF	BNSF	600.61	PLAINVIEW	TULIA	SWISHER	90500118	12	0	0

Texas Department of Transportation

Traffic Operations Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
10/2015	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		5.04

12/1/2021 8:54:15 AM
T:\LBBTRAFF\PROJECTS (CURRENT)\2022 RRPM\PLAN SHEETS\Scope of Work Sheet 2 of 4.dgn

DATE:
FILE:

I. WORK AT CROSSING LOCATIONS (AT GRADE, HIGHWAY OVERPASS, HIGHWAY UNDERPASS, PEDESTRIAN, OR CLOSED/ABANDONED)

DOT #: SEE ATTACHMENT
Crossing Type: ** SEE ATTACHMENT
RR Company Owning Track at Crossing: SEE ATTACHMENT
Operating RR Company at Track: SEE ATTACHMENT
RR MP: SEE ATTACHMENT
RR Subdivision: SEE ATTACHMENT
City: SEE ATTACHMENT
County: SEE ATTACHMENT
CSJ at this Crossing: SEE ATTACHMENT
Highway/Roadway name crossing the railroad: SEE ATTACHMENT
# of regularly scheduled trains per day at this crossing: SEE ATTACHMENT
# of switching movements per day at this crossing: SEE ATTACHMENT
% of estimated contract cost of work within railroad ROW: SEE ATTACHMENT

Scope of Work at this Crossing to Be Performed by State Contractor:
REPLACEMENT OF PAVEMENT MARKINGS

Scope of Work at this Crossing to Be Performed by Railroad Company:
N/A

** Choose: Highway Overpass, Highway Underpass, At Grade, Pedestrian, or Closed/Abandoned

II. OTHER PROJECT WORK WITHIN RAILROAD RIGHTS-OF-WAY (ROW)

N/A

III. FLAGGING & INSPECTION

of Days of Railroad Flagging Expected: 3

On this project, night or weekend flagging is:

☒ Expected
☐ Not Expected

Flagging services will be provided by:

☒ Railroad Company: TxDOT will pay flagging invoices
☐ Outside Party: Contractor will pay flagging invoices, to be reimbursed by TxDOT

Contractor must incorporate flaggers into anticipated construction schedule. The Railroad requires a 30 day notice if their flaggers are to be utilized. If Contractor falls behind schedule due to their own negligence and is not ready for scheduled flaggers, any flagging charges will be paid by Contractor.

Contact Information for Flagging:

☐ UPRR - UP.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ BNSF - BNSF.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ KCS - KCS.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- Bottom Line On-Track Safety Services
bottomline076@aol.com, 903-767-7630

☒ OTHERS Christopher Cline, L&WR
312-834-6487
christopher.cline@watcocompanies.com

Contractor must incorporate Construction Inspection into anticipated construction schedule.

☒ Not Required

☐ Required: Contact Information for Construction Inspection:

IV. CONSTRUCTION WORK TO BE PERFORMED BY THE RAILROAD

On this project, construction work to be performed by a railroad company is:

☐ Required
☒ Not Required

Coordinate with TxDOT for any work to be performed by the Railroad Company. TxDOT must issue a work order for any work done by the Railroad Company prior to the work being performed.

V. RAILROAD INSURANCE REQUIREMENTS

Railroad reference number shall be provided by TxDOT CST or DO.

The Contractor shall confirm the insurance requirements with the Railroad as the insurance limits are subject to change without notice.

Insurance policies must be issued for and on behalf of the Railroad. Where more than one Railroad Company is operating on the same right of way or where several Railroad Companies are involved and operate on their own separate rights of way, provide separate insurance policies in the name of each Railroad Company.

No direct compensation will be made to the Contractor for providing the insurance coverages shown below or any deductibles. These costs are incidental to the various bid items.

Type of Insurance	Amount of Coverage (Minimum)
Workers Compensation	$500,000 / $500,000 / $500,000
Commercial General Liability	$2,000,000 / $4,000,000
Business Automobile	$2,000,000 combined single limit
Railroad Protective Liability	
☐ Not Required	
☒ Non - Bridge Projects	$2,000,000 / $6,000,000
☐ Bridge Projects	$5,000,000 / $10,000,000
☐ Other	

VI. CONTRACTOR'S RIGHT OF ENTRY (ROE) AGREEMENT

On this project, an ROE agreement is:

☒ Not Required
☐ Required: TxDOT CST to assist in obtaining with the UPRR (see Item 5, Article 8.3)
☐ Required: Contractor to obtain (see Item 5, Article 8.4)
With the following railroad companies: _____

To view previously approved ROE Agreement templates agreed upon between the State and Railroad, see:

http://www.txdot.gov/inside-txdot/division/rail/samples.html

Approved ROE Agreement templates are not to be modified by the Contractor.

Contractor shall not operate within Railroad Right of Way without an executed Construction & Maintenance Agreement between the State and the Railroad and an executed ROE agreement between the Contractor and the Railroad if required on project.

VII. RAILROAD COORDINATION MEETING

On this project, a Railroad Coordination Meeting is:

☒ Not Required
☐ Required

See Item 5, Article 8.1 for more details.

VIII. SUBCONTRACTORS

Contractor shall not subcontract work without written consent of TxDOT. Subcontractors are required to maintain the same insurance coverage as required of the Contractor.

IX. EMERGENCY NOTIFICATION

In Case of Railroad Emergency
Call L&WR Emergency Line
Railroad Emergency Line at 888-783-4316
Location: DOT VAR.
RR Milepost VAR.
Subdivision VAR.

Texas Department of Transportation | Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:	
©TxDOT June 2014	CONT	SECT	JOB	HIGHWAY	
REVISIONS	0905	00	118	VAR	
3/2020	DIST	COUNTY		SHEET NO.	
	LBB	LUBBOCK, ETC.		5,05	

DOT#	CROSSING TYPE	TRACK OWNER	TRACK OPERATOR	RR MP	SUBDIVISION	CITY	COUNTY	CSJ	TRAINS PER DAY	SWITCHING MOVEMENTS	% OF WORK
276681T	PUBLIC	WATCO	L&WR	367.47	SOUTH PLAINS	DIMMITT	CASTRO	90500118	4	0	0
276677D	PUBLIC	WATCO	L&WR	368.14	DIMMITT	DIMMITT	CASTRO	90500118	3	0	0
275934V	PUBLIC	WATCO	L&WR	350.97	DIMMITT	HART	CASTRO	90500118	1	0	0
275935C	PUBLIC	WATCO	L&WR	350.82	DIMMITT	HART	CASTRO	90500118	1	0	0
900272X	PUBLIC	WATCO	L&WR	3.34	LEHMAN	LUBBOCK	LUBBOCK	90500118	2	0	0
017604F	PUBLIC	WATCO	L&WR	8.26	LEHMAN	LUBBOCK	LUBBOCK	90500118	2	0	0
017627M	PUBLIC	WATCO	L&WR	24.99	WHITEFACE	LEVELLAND	HOCKLEY	90500118	4	0	0

Texas Department of Transportation

Traffic Operations Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	118	VAR
10/2015	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		5.06

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres distrubed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

☒ No Action Required ☐ Required Action

Action No.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

- ☒ No Permit Required
- ☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
- ☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
- ☐ Individual 404 Permit Required
- ☐ Other Nationwide Permit Required: NWP# _______

Required Actions: None

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☐ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☐ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

☒ No Action Required ☐ Required Action

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.

☒ No Action Required ☐ Required Action

Action No.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ No Action Required ☒ Required Action

Action No.

1. Do not handle or harm Texas horned lizzards, prairie dogs, barn swallows or burrowing owls
2. No prairie dog towns can be damaged or crossed with equipment without approval of the Engineer
3. No nests of burrowing owls (in prairie dog holes) or barn swallows (likely on structures such as bridges) can be disturbed or damaged between February 15th and October 1st

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the Engineer immediately.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous productsused on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SW3P:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
FHWA:	Federal Highway Administration	PSL:	Project Specific Location
MOA:	Memorandum of Agreement	TCEQ:	Texas Commission on Environmental Quality
MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
MS4:	Municipal Separate Stormwater Sewer System	TPWD:	Texas Parks and Wildlife Department
MBTA:	Migratory Bird Treaty Act	TxDOT:	Texas Department of Transportation
NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corp of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES (cont)

Contact the Engineer if any of the follwing are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canister, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☒ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notifiy DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discoverd on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☒ No Action Required ☐ Required Action

Action No.

Texas Department of Transportation
Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: AM	DW: VP	CK: AR
© TxDOT January 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 12-12-2011 (DS)	0905	00	118	VAR
	DIST		COUNTY	SHEET NO.
	LBB		LUBBOCK	6.01

DATE: 12/04/2019
FILE: ...PROJECTS (CURRENT)\2022 RRPM\PLAN SHEETS\2022 RRPM EPIC.dgn