

FED. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
6	RMC: 6421-21-001		1
STATE	STATE DIST. NO.	COUNTY	
TEXAS	22	Dimmit/Zavala	
CONT.	SECT.	JOB	HIGHWAY NO.
6421	21	001	US 83, ETC.

SHEET INDEX OF SHEETS
NO. DESCRIPTION

GENERAL

- 1 TITLE SHEET
- 2 LOCATION MAP - ZAVALA CO.
- 3 LOCATION MAP - DIMMIT CO.
- 4-5 GENERAL NOTES
- 6 ESTIMATE & QUANTITY SHEET
- 7 SUMMARY OF TRACTS & QUANTITIES - ZAVALA CO.
- 8 SUMMARY OF TRACTS & QUANTITIES - DIMMIT CO.

STANDARD SHEETS

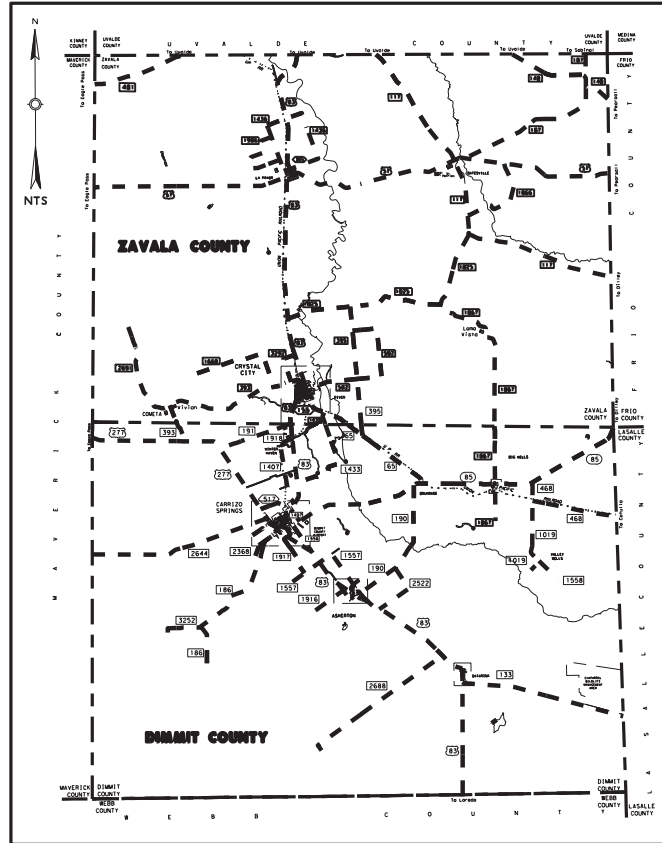
- 9 SWEEP-04
- 10 TCP (3-1)-13
- 11 TCP (3-2)-13

STATE OF TEXAS
TEXAS DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
HIGHWAY ROUTINE MAINTENANCE CONTRACT
PROJECT NO. RMC: 6421-21-001
PROJECT LENGTH : VARIOUS
PROJECT LIMITS : VARIOUS
COUNTY : DIMMIT AND ZAVALA
HIGHWAY : US 83, ETC.
FOR THE CLEANING & SWEEPING OF HIGHWAYS
& LITTER PICK UP

FINAL PLANS

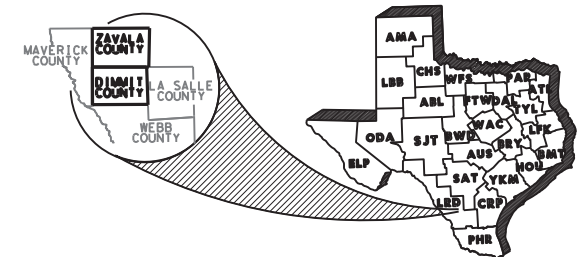
Letting Date : _____
 Work Began : _____
 Date Accepted : _____
 Contractor : _____
 Total Cost : _____



SUBMITTED FOR LETTING: 9/12/2022 2022
 APPROVED FOR LETTING: 9/21/2022 2022

DocuSigned by:
Cynthia M. Saldana
800D2BE96AC4DD
 DIRECTOR OF MAINTENANCE

DocuSigned by:
Maribel Rangel
800D2BE96AC4DD
 AREA ENGINEER



8/24/2022 T:\LRD05\TMT\FY 2022\MT Contracts\Cleaning and Sweeping of Highways\Zavala County\Microstation\001>TitleSheet.dgn

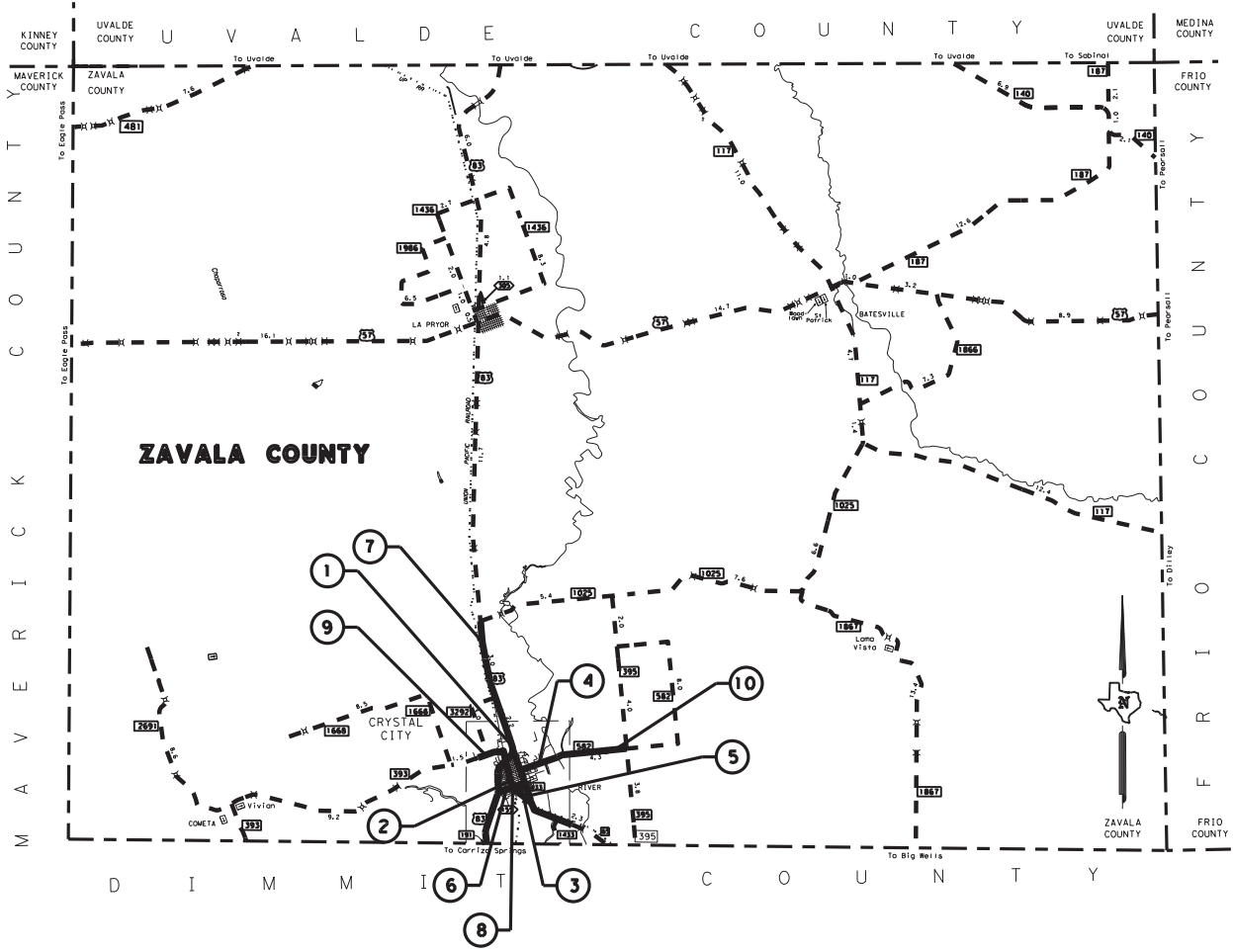
THE STANDARD SHEETS SPECIFICALLY IDENTIFIED WITH A SINGLE ASTERISK (*) HAVE BEEN ISSUED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

DATE 9/12/2022

DocuSigned by:
Cynthia M. Saldana
800D2BE96AC4DD
P. E.

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT.

9/12/2022 T:\LRDDST\MT\FY 2022\MT Contracts\Cleaning and Sweeping of Highways\Zavala County\Miscrstation\005\LocMap.dgn



ZAVALA SWEEPING						
SUMMARY OF TRACKS AND QUANTITIES						
TRACK	HWY	APROXIMATION			DESCRIPTION LIMITS	
		FROM RMN	TO RMN	MILES	FROM	TO
1	US0083	621	622	0.9	BUSHY CK. (PASS FM1433)	PLANT ST.
2	FM0065	410	411	1.1	US83	SL155
3	FM0582	414	415	0.5	FM65 (E. ZAVALA ST.)	FM1433 (7th AVE.)
4	FM0582	415	416	0.4	FM1433 (7th AVE.)	12th AVE.
5	FM1433	552	554	1.8	US83	HIDALGO ST.
6	SL0155	410	411	0.6	US83	FM65 (E. ZAVALA ST.)
TOTAL				5.3		

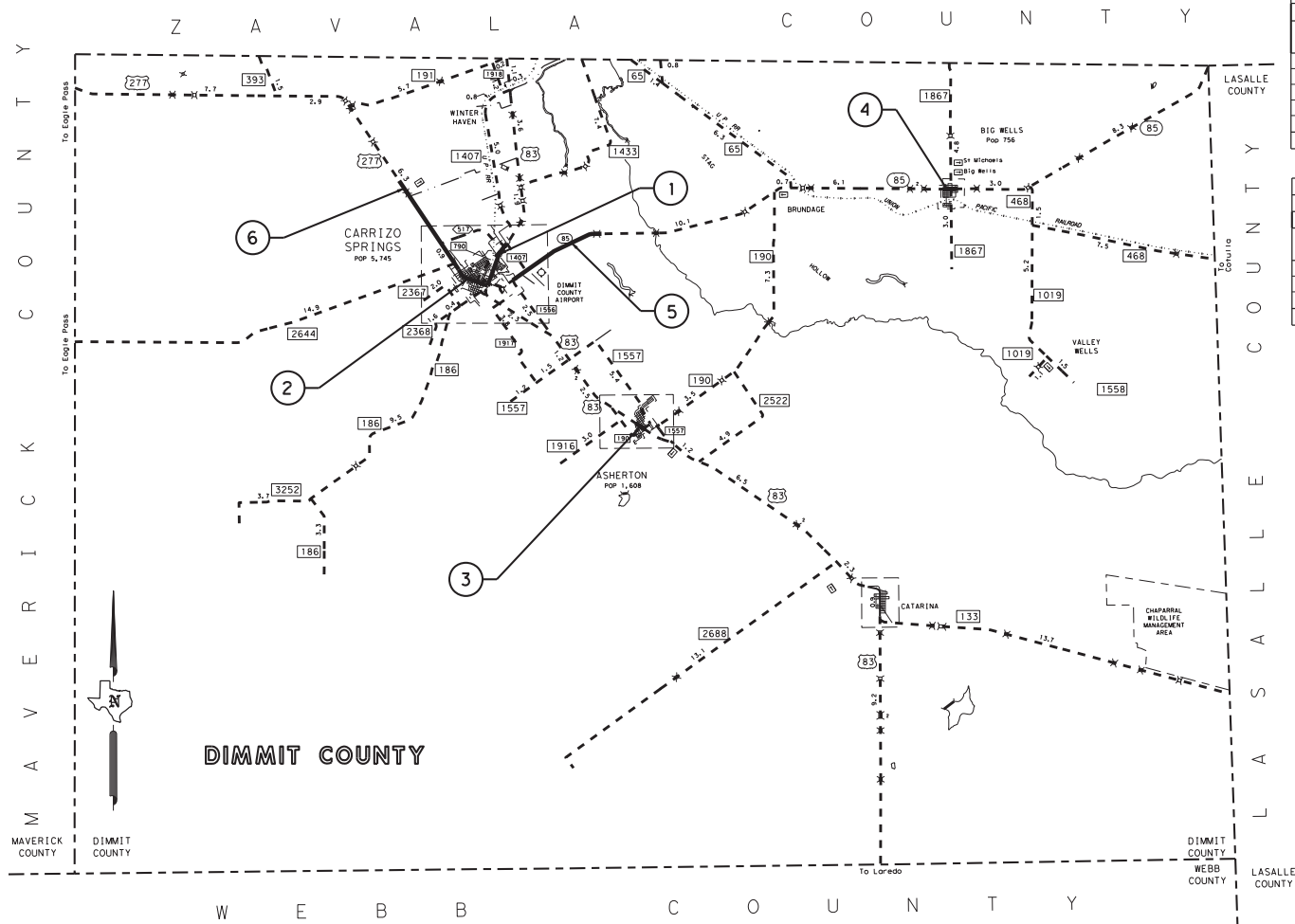
ZAVALA LITTER REMOVAL						
SUMMARY OF TRACKS AND QUANTITIES						
TRACK	HWY	APROXIMATION			DESCRIPTION LIMITS	
		FROM RMN	TO RMN	MILES	FROM	TO
7	US83	616	626	9.3	DIM/ZAV CO.LINE (SOUTH)	FM1025
8	FM65	411	414	2.2	FM1433 (SOUTH)	INT. SL155 / FM582
9	FM393	416	417	1.0	FM3292	US83
10	FM582	415	419	3.9	12th AVE.	FM395
TOTAL				16.4		



LOCATION MAP

DN:	DN:	STATE:	SHEET NUMBER:	SHEET NO.:
CR:	CR:	TEXAS		
FED. RD. DIV. NO.:	STATE DIV. NO.:	COUNTY:	CONTROL SECTION:	JOB HIGHWAY NO.:
6	22	DIMITT/ZAVALA	6421 21 001	US 83, ETC.

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DIMMIT SWEEPING						
SUMMARY OF TRACKS AND QUANTITIES						
TRACK	HWY	APROXIMATION			DESCRIPTION LIMITS	
		FROM RMN	TO RMN	MILES	FROM	TO
1	US83	633	635	1.8	FM1407	US277
2	US277	650	651	1.3	23rd STREET	US83
3	US83	643	643.5	0.5	MAINS ST.	AUSTIN ST.
4	SH85	426	426.5	0.5	JEFFERSON ST.	PECAN ST.
TOTAL				4.1		

DIMMIT LITTER REMOVAL						
SUMMARY OF TRACKS AND QUANTITIES						
TRACK	HWY	APROXIMATION			DESCRIPTION LIMITS	
		FROM RMN	TO RMN	MILES	FROM	TO
5	SH85	409	413	3.6	FM1556	SOLDIER BRIDGE
6	US277	646	650	4.2	N 23th St	RMN646
TOTAL				7.8		



LOCATION MAP

DN:	DN:	STATE:	SHEET NUMBER:		SHEET NO.
CR:	CR:	TEXAS			
FED. NO.	STATE	COUNTY	CONTROL	SECTION	JOB
6	22	DIMITT/ZAVALA	6421	21	001 US 83, ETC.

GENERAL NOTES:

The contract becomes effective upon receipt of a work authorization letter by the Engineer and covers one (1) years. Provide sufficient staff to concurrently pursue each contract in the event that additional sweeping/litter contracts are awarded to the same contractor. Provide and maintain an e-mail address for receipt of work order and correspondence throughout the term of this contract.

Contractor questions on this project are to be emailed to the following individual(s): Irazema Cavazos at Irazema.Cavazos@txdot.gov

Contractor questions will only be accepted through email to the above individuals.

All contracto's questions will be reviewed by the Area 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_Responses/

All questions submitted that generate a response will be posted through this site. This site is organized by: District, Project type (Construction or Maintenance), Letting Date, CCSJ/Project Name.

Plans may be reviewed at Laredo District office of the Texas Department of Transportation, 1817 Bob Bullock, Laredo, Texas 78043. The contact person is Irazema Cavazos at Irazema.Cavazos@txdot.gov

Questions concerning the specifications, work requirements, etc. of this contract should be directed to Rogelio Chapa, E.I.T, at Rogelio.Chapa@txdot.gov.

Once work has started on any type of cycle of work, continuously prosecute the work until all work on that cycle is satisfactorily completed. Repair and/or replace damaged rails, sign posts, etc., caused by the Contractor's actions during the performance of work. Complete repairs within a time limit as determined by the Engineer.

When the contract is extended by agreement, a performance and/or payment bond, if required, shall be executed in the amount of the extension before the additional work begins.

When notified by work order for request of service, begin physical work within 10 business days of notification and work continuously to completing tracts assigned.

Notify the Engineer's office by telephone each morning by 8:15 a.m. that work is scheduled, with work location and time of arrival or reason for not working that day.

Liquidated damages will be assessed per work order(s) which exceed the total allocated work days for tracts assigned on work order. In the event that job performance is not to the satisfaction of the Engineer, sub marginal work is subject to special provision "Schedule of Liquidated Damages".

SUPERVISION:

The Engineer's representative in charge of all work in this contract is the maintenance section supervisor listed below. The Pre-Work Meeting will be held at this location and all requests for payment are certified by this office.

Dimmit County
Juan D. Moreno
2001 N. 1st St.
Carrizo Springs, Tx 78834
830.876.2535

Zavala County
Arnulfo Longoria, Jr.
544 West US57
LaPryor, TX 78872
830.365.4211

Work must commence within two weeks of work order letter to contractor. Work per tract has to be completed in the number of days listed on the summary of tracts and quantities sheet (weather permitting) or less. Contractor must work continuously to complete items on tracts called out (with exception of Saturday, Sundays or National Holidays) unless approved by the Maintenance Supervisor. Approval by Maintenance Supervisor for non-continual work on tracts does not relieve the Contractor from completing work by original tract completion date.

LIMITS:

Cover the roadways and limits as shown on the plans.

ITEM 4 SCOPE OF WORK:


If agreed upon in writing by both parties to the Contract, the Contract may be extended for an additional period of time not to exceed the original Contract time period. The extended Contract shall be for the original bid quantities, terms and conditions plus any approved, applicable change orders.

ITEM 7 LEGAL RELATIONS & RESPONSIBILITIES:

Roadway closures during the following key dates and/or special events are prohibited: January 1, the last Monday in May, July 4, the first Monday in September, the fourth Thursday in November, and December 24 or 25.

ITEM 502 BARRICADES, SIGNS AND TRAFFIC HANDLING:

Furnish and install all signs, barricades and other incidentals necessary for proper traffic control, in accordance with part VI of the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" and in accordance with the standard plan sheets. Provide a truck-mounted attenuator (TMA) for the shadow vehicle and trail vehicles per standard. A minimum of two (2), truck-mounted attenuators are needed for all work operations. Additional devices may be needed to supplement these requirements. All warning signs shall be factory made and in satisfactory condition. Each sign will have two safety flags attached to it at all times. It will not be permissible to hang or lean these sign on or against the State's sign post, guardrails, bridge rail, etc. All traffic control devices shall be provided by the contractor. Traffic control shall not be paid for directly, but shall be subsidiary to pertinent bid items.



GENERAL NOTES

DN	DN	STATE	SHEET NUMBER		SHEET NO.
CR	CR	TEXAS			
FED. RD. DIV. NO.	STATE DIST. NO.	COUNTY	CONTROL SECTION	JOB	HIGHWAY NO.
6	22	DIMITT/ZAVALA	6421 21	001	US #3, ETC.

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Report and deliver all lost and found items to the Engineer. Employees are required to wear proper safety equipment. Contractor is responsible for supplying proper safety equipment for employees.

ITEM 734 LITTER REMOVAL:

Begin removing litter ten business days after notification. Refer to the 2014 "Standard Specifications for Construction and Maintenance of Highways, Streets, Bridges" for additional information. Remove all litter from the entire ROW, including all shoulders but excluding the traveled lanes.

ITEM 738 CLEANING AND SWEEPING HIGHWAYS

Disposal of any collected debris at a state-approved landfill site is mandatory and no exceptions will be allowed.

Provide a minimum of 2 fully operational sweepers during each scheduled working day for this contract. No exceptions will be considered without a written request.

Loose aggregate accumulated by traffic barrier, raised medians, rail, etc. will be removed from the roadway. This work will be considered subsidiary to Item 738 "Cleaning and Sweeping Highways"

Whole tires, rubber and scrap metal debris picked up from the ROW may be disposed of at the respective Maintenance Office in accordance with applicable federal, state, and local regulations.

Refer to the 2014 "Standard Specifications for Construction and Maintenance of Highways, Streets, Bridges" for additional information.

ITEM 6185 TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER:


The total number of truck mounted attenuators (TMA) required when utilizing the traffic control standards are shown in the table below:

TCP 1 Series	Scenario	Required TMA
(3-1)-13	All	2
(3-2)-13	All	3

Shadow vehicles equipped for truck mounted attenuators (TMA) for stationary operations must be available for use at any as determined by the Engineer.

The Contractor will be responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMA needed for the project for those times per plan requirements. Additional TMA's used that are not specified in the plans in which the Contractor expect compensations will require prior approval from the Engineer.

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TEXAS DEPARTMENT OF TRANSPORTATION
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GENERAL NOTES

DN	DN	STATE	SHEET NUMBER	SHEET NO.
CR	CR	TEXAS		
FED. RD. DIV. NO.	STATE DIST. NO.	COUNTY	CONTROL SECTION	JOB HIGHWAY NO.
6	22	DIMMIT/ZAVALA	6421 21	001 US #3, ETC.



Estimate & Quantity Sheet

CONTROLLING PROJECT ID 6421-21-001

DISTRICT Laredo
HIGHWAY US0083

COUNTY Zavala

CONTROL SECTION JOB				6421-21-001		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00190950			
COUNTY				Zavala			
HIGHWAY				US0083			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	734-6004	LITTER REMOVAL - TRACT (1)	AC	1,335.000		1,335.000	
	734-6005	LITTER REMOVAL - TRACT (2)	AC	672.000		672.000	
	738-6002	CLEANING / SWEEPING (CENTER MEDIAN)	MI	113.000		113.000	
	738-6004	CLEANING / SWEEPING (OUTSIDE MAIN LANE)	MI	113.000		113.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	117.000		117.000	

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ZAVALA SWEEPING																
SUMMARY OF TRACKS AND QUANTITIES																
TRACK #	HWY	APPROXIMATE		LIMITS DESCRIPTION		ITEM	738-6002	738-6004	FOR CONTRACTOR'S INFORMATION							
		FROM RMN	TO RMN			DESC.	CLEANING SWEEPING (CENTER MEDIAN)	CLEANING SWEEPING (OUTSIDE MAINLANE)	CYCLES	TRACT TIME ALLOWANCE	APPROX ROADWAY LENGTH (INSIDE)	APPROX ROADWAY LENGTH (OUTSIDE)	APPROX FRONTAGE ROAD LENGTH	APPROX RAMP LENGTH	APPROX HANDWORK SWEEPING	TRACK SUM TOTAL
		UNITS	MI	MI	(PER YEAR)	(DAY)	(CL MI.)	(CL MI.)	(CL MI.)	(CL MI.)	SY					
1	US0083	621	622	BUSHY CK. (PASS FM1433)	PLANT ST.		10.8	10.8	12	0.25	0.90	0.90				1.8
2	FM0065	410	411	US83	SL155		13.2	13.2	12	0.25	1.1	1.1				2.2
3	FM0582	414	415	FM65 (E. ZAVALA ST.)	FM1433 (7th AVE.)		6.0	6.0	12	0.25	0.50	0.50				1.0
4	FM0582	415	416	FM1433 (7th AVE.)	12th AVE.		4.8	4.8	12	0.25	0.40	0.40				0.8
5	FM1433	552	554	US83	HIDALGO ST.		21.0	21.0	12	0.25	1.75	1.75				3.5
6	SL0155	410	411	US83	FM65 (E. ZAVALA ST.)		7.6	7.6	12	0.25	0.63	0.63				1.3
TOTAL							63.4	63.4		1.5	5.3	5.3	0.0	0.0	0.0	

ZAVALA LITTER PICK-UP										
SUMMARY OF TRACKS AND QUANTITIES										
TRACK #	HIGHWAY	APPROX.		LENGTH MI	DESCRIPTION LIMITS		734-6004	FOR CONTRACTOR'S INFORMATION		
		FROM RMN	TO RMN		LITTER REMOVAL-TRACT (1)	CYCLES	QUANTITY	ALLOWANCE TIME/TRACK		
		AC	PER YEAR	AC/CYC	DAY(S)					
7	US83	616	626	9.3	DIM/ZAV CO.LINE (SOUTH)	FM1025	1039.5	6	173.3	5
8	FM65	411	414	2.2	FM1433 (SOUTH)	INT. SL155 / FM582	113.0	6	18.8	1
9	FM393	416	417	1.0	FM3292	US83	43.6	6	7.3	0.5
10	FM582	415	419	3.9	12th AVE.	FM395	139.0	6	23.2	1
TOTALS				16.4			1335.2		222.53	7.5

TEXAS DEPARTMENT OF TRANSPORTATION
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SUMMARY OF TRACT & QUANTITIES - ZAVALA CO.

DN:	DN:	STATE:	SHEET NUMBER:	SHEET NO.:
CR:	CR:	TEXAS:		
FED. RD. DIV. NO.:	STATE DIST. NO.:	COUNTY:	CONTROL SECTION:	JOB HIGHWAY NO.:
6	22	DIMMIT/ZAVALA	6421 21	001 US #3, ETC.

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DIMMIT SWEEPING									FOR CONTRACTOR'S INFORMATION				
SUMMARY OF TRACKS AND QUANTITIES													
TRACK #	HWY	APPROXIMATE		LIMITS DESCRIPTION		ITEM	738-6002	738-6004	CYCLES (PER YEAR)	TRACT TIME ALLOWANCE (DAY)	APPROX ROADWAY LENGTH (INSIDE) (CL MI.)	APPROX ROADWAY LENGTH (OUTSIDE) (CL MI.)	TRACK SUM TOTAL
		FROM RMN	TO RMN			DESC.	CLEANING SWEEPING (CENTER MEDIAN)	CLEANING SWEEPING (OUTSIDE MAINLANE)					
		FROM	TO	UNITS	MI	MI							
1	US83	633	635	FM1407	US277		21.6	21.6	12	0.50	1.8	1.8	3.6
2	US277	650	651	23rd STREET	US83		15.6	15.6	12	0.50	1.3	1.3	2.6
3	US83	643	643.5	MAINS ST.	AUSTIN ST.		6.0	6.0	12	0.25	0.5	0.5	1.0
4	SH85	426	426.5	JEFFERSON ST.	PECAN ST.		6.0	6.0	12	0.25	0.5	0.5	1.0
TOTAL							49.2	49.2		1.5	4.1	4.1	

DIMMIT LITTER PICK-UP								FOR CONTRACTOR'S INFORMATION		
SUMMARY OF TRACKS AND QUANTITIES										
TRACK #	HIGHWAY	APPROX.		LENGTH MI	DESCRIPTION LIMITS		734-6004	CYCLES PER YEAR	QUANTITY AC/CYC	ALLOWANCE TIME/TRACK DAY(S)
		FROM RMN	TO RMN		LITTER REMOVAL-TRACT (2)					
		FROM	TO	AC						
5	SH85	409	413	3.6	FM1556	SOLDIER BRIDGE	328.8	6	54.8	3
6	US277	646	650	4.2	N 23th St	RMN646	342.7	6	57.1	3
TOTALS				7.8			671.6		111.9	6

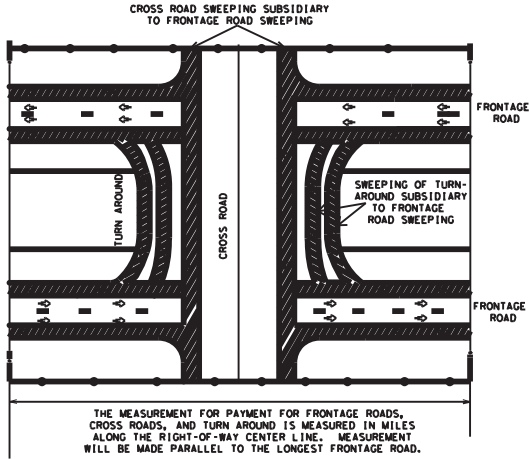


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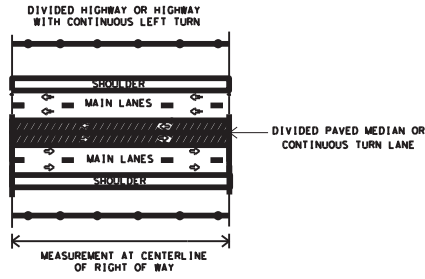
SUMMARY OF TRACT & QUANTITIES - DIMMIT CO.

DN:	DN:	STATE:	SHEET NUMBER:	SHEET NO.:
CD:	CD:	TEXAS		
FED. RD. DIV. NO.:	STATE DIST. NO.:	COUNTY:	CONTROL SECTION:	JOB HIGHWAY NO.:
6	22	DIMMIT/ZAVALA	6421 21	001 US #3, ETC.

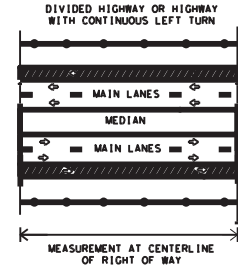
FRONTAGE ROAD SWEEPING



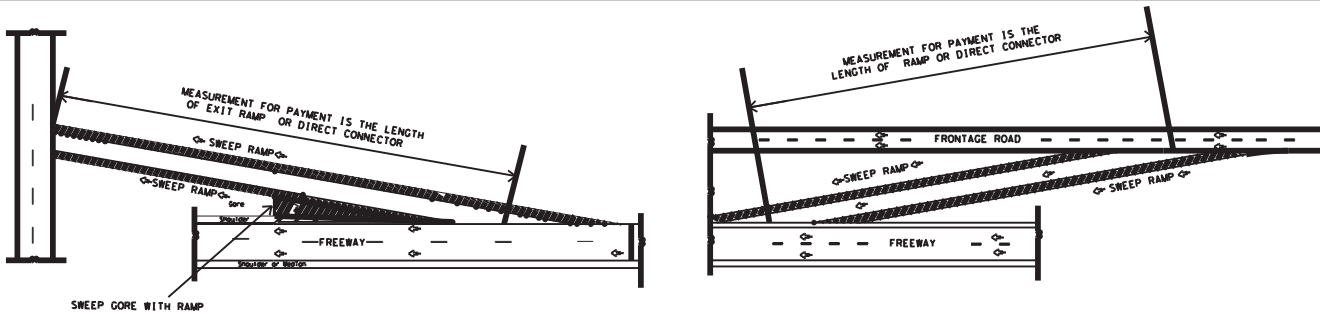
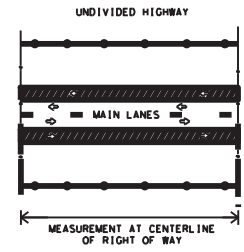
CENTER MEDIAN SWEEPING



OUTSIDE MAIN LANE SWEEPING



OUTSIDE MAIN LANE SWEEPING

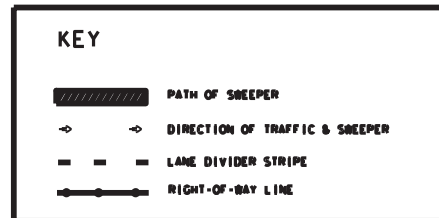


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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

PAYMENT ITEM	NORMAL NUMBER OF PASSES OF THE SWEEPER	MEASUREMENT OF CENTER LINE MILES	OTHER AREAS SUBSIDIARY TO PAYMENT ITEM
SWEEPING (CENTER MEDIAN)	2	OF RIGHT OF WAY	NONE
SWEEPING (OUTSIDE MAIN LANE)	2	OF RIGHT OF WAY	NONE
SWEEPING (ONE FRONTAGE ROAD)	2	OF RIGHT OF WAY	CROSS ROADS & TURN AROUNDS
SWEEPING (TWO FRONTAGE ROADS)	4	OF RIGHT OF WAY	CROSS ROADS & TURN AROUNDS
SWEEPING (RAMP)	2	OF RAMP	GORE AREA
SWEEPING (DIRECT CONNECTOR)	2	OF CONNECTOR	GORE AREA



Texas Department of Transportation
 Maintenance Division
 Standard Plans

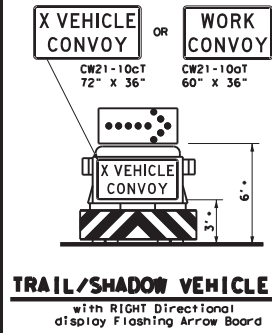
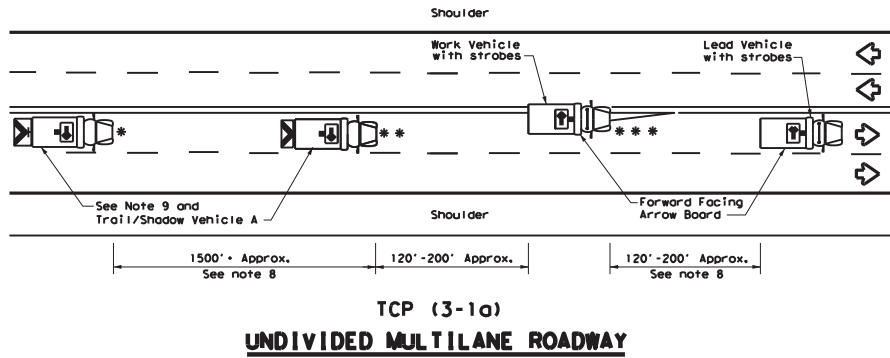
SWEEPING HIGHWAYS

SWEEP - 04

SHEET 1 OF 1 NOT TO SCALE

FILE: SWEEP04.DGN	DW: LJB	CK: JG	DW: -	CK: -	NEG NO.:
© TxDOT MAY 2004	STATE DISTRICT	FED. NO. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET
REVISED:	22	6	RMC: 6421-21-001		9
REVISED:	COUNTY		CONTROL	SECTION	JOB
REVISED:	DINWIT/ZAVALA		6421	21	001
					US 83, ETC.

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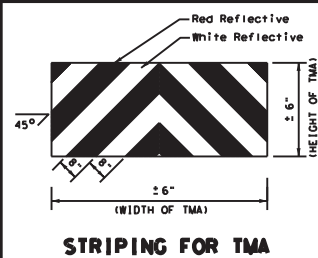
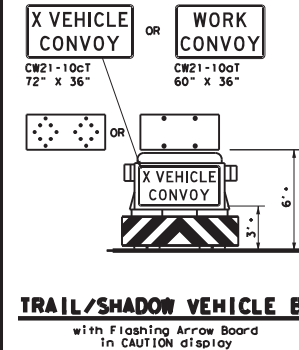
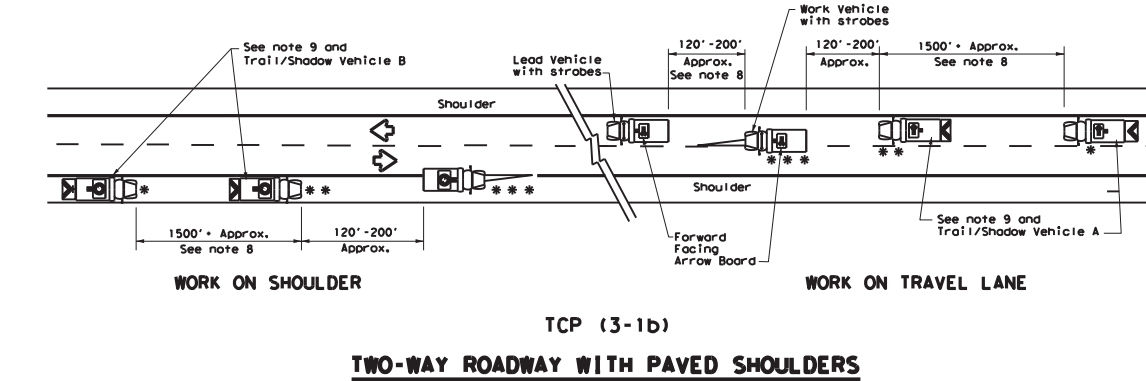


LEGEND		ARROW BOARD DISPLAY	
*	Trail Vehicle		
**	Shadow Vehicle		
** *	Work Vehicle	▶	RIGHT Directional
▶	Heavy Work Vehicle	◀	LEFT Directional
◀▶	Truck Mounted Attenuator (TMA)	◀▶	Double Arrow
◀▶	Traffic Flow	◀▶	CAUTION (Alternating Diamond or 4 Corner Flash)

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 the WORK vehicle must be equipped with an arrow board. 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 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 work 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. On two-lane two-way roadways, the work and protection vehicles shall 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
UNDIVIDED HIGHWAYS**

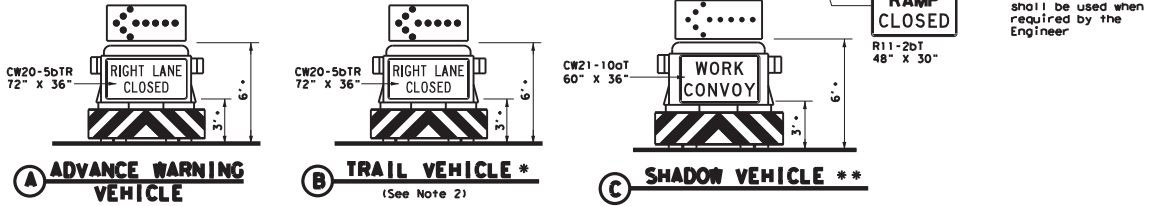
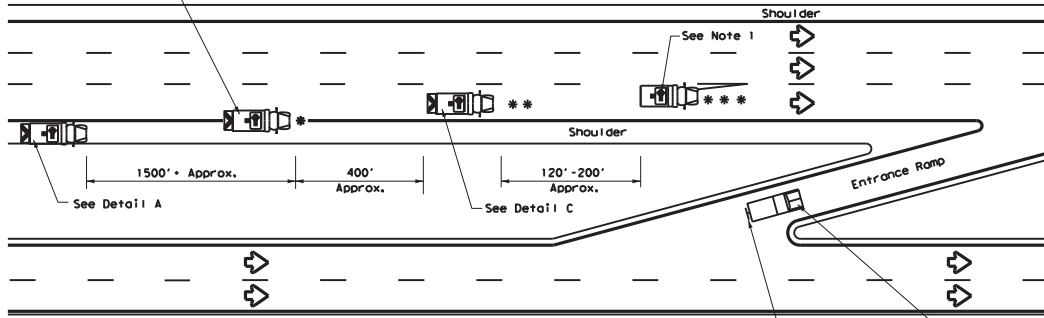
TCP (3-1)-13

FILE#	tcp3-1.dgn	DN#	TxDOT	CK#	TxDOT	DN#	TxDOT	CK#	TxDOT
REV#	December 1985	CONT		SECT		JOB		HIGHWAY	
2-94	4-98	6421	21	001		US 83, ETC.			
8-95	7-13								
1-97									
				22		DIMMIT-ZAVALA		10	

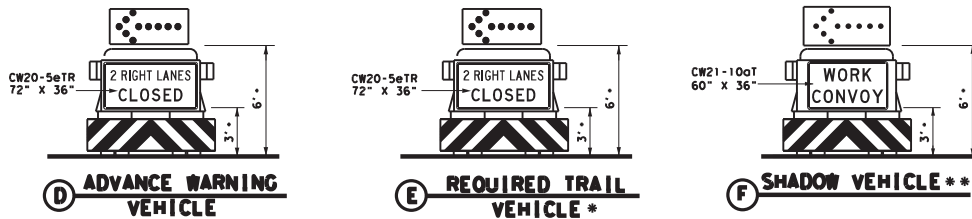
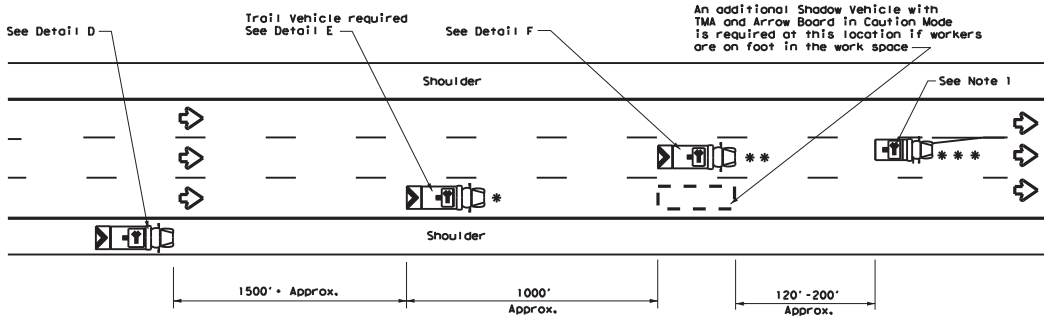
DATE: FILE:

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DATE: FILE:



RIGHT LANE CLOSURE ON DIVIDED HIGHWAY - TCP(3-2a)



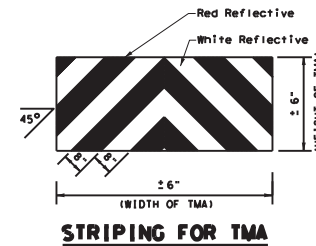
INTERIOR LANE CLOSURE ON MULTI-LANE DIVIDED HIGHWAY - TCP(3-2b)

LEGEND		
* Trail Vehicle		ARROW BOARD DISPLAY
** Shadow Vehicle		
*** Work Vehicle		RIGHT Directional
		LEFT Directional
		Double Arrow
		CAUTION (Alternating Diamond or 4 Corner Flash)

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

GENERAL NOTES

- ADVANCE WARNING, TRAIL & SHADOW vehicles shall be equipped with Type B or Type C flashing arrow boards as per the Barricade and Construction (BC) standards. Arrow boards on WORK vehicles will be optional based on the type of work being performed. The arrow boards shall be operated from inside the vehicle.
- For TCP(3-2a) the Engineer will determine if the TRAIL VEHICLE is required based on prevailing roadway conditions, traffic volume, & sight distance restrictions. All other vehicles shown for both TCP(3-2a) & TCP(3-2b) are required.
- 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.
- The use of truck mounted attenuators (TMA) on the ADVANCE WARNING, SHADOW, & TRAIL vehicles are required.
- Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DMS 8300, Type A.
- Each vehicle shall have two-way radio communication capability.
- When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
- Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work 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 & SHADOW VEHICLE may vary according to terrain, work activity & other factors.
- Standard 48" X 48" diamond shaped warning signs with the same message as those shown may be used where adequate mounting space exists.
- The signs shown should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or a 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 & legibility of the flashing arrow board, must 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.
- Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
- The principles on this sheet may be used to close lanes from the left side of the roadway considering the number of lanes, shoulder width, sight distance, & ramp frequency.
- Signs & flashing arrow board modes shall be appropriately altered when implementing left lane closures or interior closures which close the left lanes.
- The Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.



STRIPING FOR TMA

		Traffic Operations Division Standard	
TRAFFIC CONTROL PLAN MOBILE OPERATIONS DIVIDED HIGHWAYS			
TCP(3-2)-13			
FILE#	tcp3-2.dgn	DN#	TxDOT
REV#	1	DATE	12/19/85
CONT	DEC 1985	JOB	MOBILE
REV#	1	COUNTY	US 83, ETC.
DIST	22	DISTRICT	11