INDEX OF SHEETS

SHEET NO.

DESCRIPTION

#TxDOT Standards

Title Sheet
2 - 3 General Notes
4 Estimate & Quantity
5 #RS-TCP-05
6 #TCP-AblCableBarrier

The standard sheets specifically identified on this sheet with a # have been selected by me or under my responsible supervision as being applicable to this project.

Docusigned by: Cal Hays, P.E.

1/25/2024

Cal W. Hays, P.E.

Date



STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED HIGHWAY ROUTINE MAINTENANCE CONTRACT

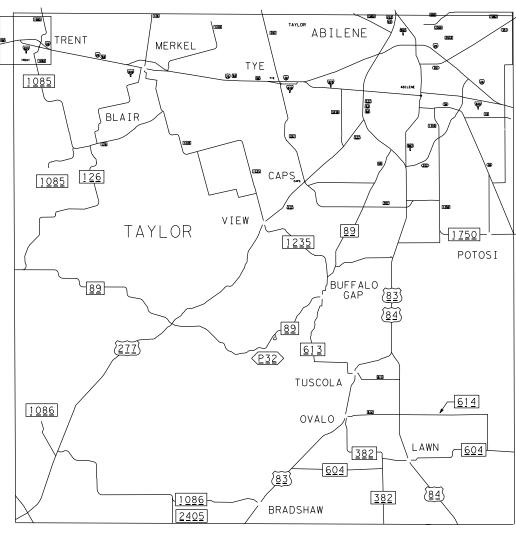
TYPE OF WORK:

MOWING HIGHWAY RIGHT OF WAY - RURAL

PROJECT NO. : RMC 6432-54-001

HIGHWAY: FM 89, ETC.

LIMITS OF WORK: Various locations in Taylor County



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GRAPHICS FILE		MAINTENANCE PROJECT NO.					
Title-MN	T.dgn F	RMC 6432-54-001					
CHECKED	STATE	STATE DIST.		COUNTY			
	TEXAS	08	TAYLOR				
CHECKED	CONT.	SECT.	JOB	HIGHWAY NO.			
	6432	54	001	FM89,etc.			

FINAL PLANS:

Date Contractor Began Work:
Date Work was Completed:
Date Work Accepted:
Final Contract Cost: \$

CERTIFICATION FOR FINAL PLANS:

Project was built according to the plans and specifications. These final plans reflect the work done and the quantities shown thereon and on the final estimate are final quantities.

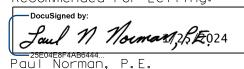
Area Engineer

TEXAS DEPARTMENT OF TRANSPORTATION

Submitted For Letting:

—DocuSigned by:	
Cal Hays, P.E.	1/25/2024
Cal W. Hays, P.I	E.
Maintenance Eng	ineer

Recommended For Letting:



Director of Maintenance

Approved For Letting:



Thomas G. Allbritton, P.E. District Engineer

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014 AND SPECIAL SPECIFICATION ITEMS INCLUDED IN THE CONTRACT SHALL GOVERN ON THIS PROJECT.

County: Taylor Highway: FM 89, etc.

Control: 6432-54-001

GENERAL NOTES

Item 2 Instructions to Bidders

Contractor questions will be accepted through email, phone, and in person by the below individuals:

Questions may be submitted via the Letting Pre-Bid Q&A web page. This webpage can be accessed from the Notice to Contractors dashboard located at the following Address: https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors

All contractor questions will be reviewed by the Engineer. All questions and any corresponding responses that are generated will be posted through the same Letting Pre-Bid Q&A web page.

The Letting Pre-Bid Q&A web page for each project can be accessed by using the dashboard to navigate to the project you are interested in by scrolling or filtering the dashboard using the controls on the left. Hover over the blue hyperlink for the project you want to view the Q&A for and click on the link in the window that pops up.

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 will be for the original bid quantities, terms, and conditions, plus any applicable change orders.

This is a non-site-specific contract, locations of tracts and work to be performed will be identified in individual work orders on an as need basis. Site information shown in the plans is for contractor's information only.

Item 7 Legal Relations and Responsibilities

No significant traffic generator events identified.

Cost for repair or replacement of appurtenances damaged by the contractor will be deducted from the contractor's monthly estimate.

Item 8 Prosecution and Progress

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 or all contracts at the same time.

Liquidated Damages as stated in Special Provision, "Schedule of Liquidated Damages", will be assessed if a cycle is not completed within the specified number of working days.

Item 9 Measurement and Payment

This is a <u>callout contract</u>, plans quantity measurement requirements are not applicable.

Item 502 Barricades, Signs, and Traffic Handling

Additional signs, barricades and traffic handling may be necessary to complete the work shown herein and will be provided by the contractor as required and will be considered subsidiary to the bid items.

Traffic control shall be in compliance with the "Texas Manual on Uniform Traffic

pg. A

Project Number: RMC 6432-54-001 County: Taylor

Highway: FM 89, etc. Control: 6432-54-001

GENERAL NOTES

Control Devices", the TCP standards included in the plans, and the "Compliant Work Zone Traffic Control Device" list.

When moving narrow strips of vegetation near cable barrier, metal beam guard fence, other areas identified by the Engineer and/or where conventional mowing operations impede traveling lanes, the Contractor will use the standard TCP-AblCableBarrier.

Work will not be allowed on both sides of the roadbed at the same time.

All workers are required to wear appropriate OSHA approved personal protective equipment, (fluorescent safety vest, hard hats, safety toed shoes, etc.), at all times while outside of vehicles on the project.

No mowing operations or moving of mowing equipment will be allowed before sunrise or after sunset. Trimming operations, for the day, must be completed at least 30 minutes before sunset.

All vehicles, including work trucks and tractors, must be equipped with highly visible omnidirectional amber flashing warning lights.

Item 730 Roadside Mowing

The Engineer will determine the sequence of tracts to be mowed.

In area where cable median barrier exist, narrow strips of vegetation will be mowed with a rigid frame mower or as approved in writing by the Engineer.

Slopes will be moved with no damage to the established vegetation.

Other construction and/or maintenance contracts may be underway on roadsides to be mowed in this contract. Mowing will not be required in these areas when approved by the Engineer.

For each cycle required, the Engineer will send the contractor a work order containing the following information:

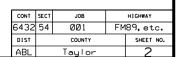
- Tract numbers in priority order and total number of acres to be mowed and litter removal.
- Working days allowed to complete the cycle
- Date when time charges for the cycle will begin
- Inspectors contact information

Working days allowed to complete a cycle will be determined by dividing the total number of acres by the production rate of 125 acres/working day, a fraction of a day will be rounded up to the nearest whole number. An additional 2 working days will be added to the total for each cycle when litter removal is required. If the total number of working days is not used during the completion of the work required within one cycle, the working days will <u>not</u> be carried forward to any cycle periods.

The Contractor is required to contact the inspector prior to beginning work each day.

pg. B

Department of Transportation



County: Taylor Highway: FM 89, etc.

Control: 6432-54-001

GENERAL NOTES

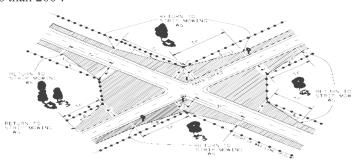
Always mow the entire width of medians and outer separations (areas between main lanes, ramps, and frontage road), before moving to another tract.

Perform hand trimming in areas where mowers are unable to access and hand trim 5 ft. behind guardrail or as directed by the Engineer.

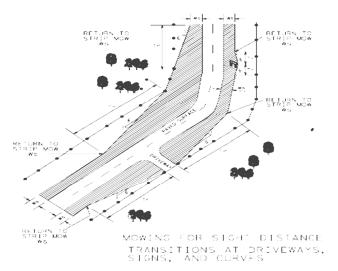
Definitions:

Full Width Mow – Mow entire width of right of way. Strip Mow – Mow 15 feet from edge of pavement or unpaved shoulder.

Strip mow as shown below at intersections and curves for sight distance. Transition Length (Tr) will be no less than 200'.



MOWING FOR SIGHT DISTANCE WITH TRANSITION FROM INTERSECTION BACK TO STRIP MOWING



Project Number: RMC 6432-54-001 County: Taylor

Highway: FM 89, etc. Control: 6432-54-001

GENERAL NOTES

Item 734 Litter Removal

Litter removal will be performed no more than 2 working days prior to the mowing cycle.

Pick up any litter remaining after mowing operation.

Only one cycle of litter removal will be paid per mowing cycle.

It is the intent of this item that TxDOT's right-of-way be mowed and litter-free after the contractor's mowing operation.

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

BASIS OF ESTIMATE FOR MOBILE TMAs							
TMA (Mobile)							
LOCATION	Standard	Required	Additional	TOTAL			
Inside lanes of IH	TCP- AblCableBarrier	2		2			
20							

pg. C

001

FM89, etc.

pg. D

TAYLOR COUNTY (RURAL) 2024 MOWING LOCATION AND ITEM QUANTITY SUMMARY

			ITEM 730-6001 STRIP MOWING				TEM 730-60 WIDTH MC		ITEM 6185-6005 TMA MOBILE OPERATION		
TRACT HWY		LIMITS		ACRES	TOTAL ACRES	CYCLES	ACRES	TOTAL ACRES	DAYS for STRIP MOW	DAYS for FULL- WIDTH MOWS	TOTAL DAYS
1	FM 2404	FROM US 83 TO JONES CO/L	1	15	15	2	27	54			0
2	FM 707	FROM JONES CO/L TO ABILENE WEST C/L	1	89	89	2	106	212			0
*3	¹ FM 1085	FROM JONES CO/L TO FM 126	1	47	47	2	97	194			0
4	FM 2035	FROM NOLAN CO/L TO FM 1085	1	31	31	2	46	92			0
*5	² FM 126	FROM NOLAN CO/L TO JONES CO/L	1	107	107	2	153	306			0
6	FM 1235	FROM JONES CO/L TO FM 89	1	153	153	2	232	464			0
*7	³ FM 89	FROM FM 707 TO FM 126	1	177	177	2	275	550			0
8	US 277	FROM ABILENE S C/L TO RUNNELS CO/L	1	154	154	2	231	462			0
9	FM 1086	FROM US 83 TO SHEP	1	96	96	2	157	314			0
10	SH 153	FROM NOLAN CO/L TO RUNNELS CO/L	1	18	18	2	41	82			0
11	FM 2405	FROM FM 1086 TO RUNNELS CO/L	1	8	8	2	13	26			0
*12	⁴ US 83	FROM US 84 TO RUNNEL CO/L	1	66	66	2	118	236			0
13	FM 614	FROM US 83 TO 12.4 MILES EAST OF US 84	1	31	31	2	47	94			0
14	FM 382	FROM FM 614 TO RUNNELS CO/L	1	43	43	2	62	124			0
*15	⁵ FM 613	FROM FM 89 TO US 84	1	50	50	2	52	104			0
16	US 84	FROM US 83 TO COLEMAN CO/L	1	68	68	2	106	212			0
*17	⁶ FM 604	FROM US 83 TO CALLAHAN CO/L	1	68	68	2	99	198			0
18	US 83	FROM IBERIS ROAD TO US 84	1	72	72	2	115	230	2	4	6
19	FM 204	FROM US 83 TO FM 1750	1	19	19	2	27	54			0
20	FM 707	FROM ABILENE EAST C/L TO FM 1750	1	4	4	2	4	8			0
21	FM 1750	FROM ABILENE S C/L TO SH 36 (CALLAHAN CO/L)	1	23	23	2	40	80			0
22	SH 36	FROM ABILENE C/L TO CALLAHAN CO/L	1	26	26	2	31	62			0
23	SH 351	FROM ABILENE C/L TO SHACKELFORD CO/L	1	21	21	2	45.5	91			0
24	FM 2833	FROM ABILENE NORTH C/L TO JONES CO/L	1	8	8	2	12	24			0
25	FM 1082	FROM SH 351 TO JONES CO/L	1	7	7	2	13	26			0
26	FM 3308	FROM ABILENE C/L TO FM 2833	1	9	9	2	13	26			0
				1410	1410		2162.5	4325	2	4	6

*Notes:

- 1. Tract 3...FM 1085 Non-mow area from IH 20 South frontage road to CR 683.
- 2. Tract 5...FM 126 Non-mow area from IH 20 South frontage road to S11th St.
- 3. Tract 7...FM 89 Non-mow area from FM 613 to CR 692.
- 4. Tract 12...US 83 Non-mow area from Kent St. to CR 621.
- 5. Tract 15...FM 613 Non-mow area from Garza St. to Railroad Ave.
- 6. Tract 17...FM 604 Non-mow area from 7th St. to Railroad Ave.

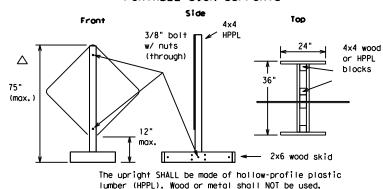
	STATE	DISTRICT	
© 2023 /	TEXAS	ABL	
Texas Department of Transportation	CONTROL	SECTION	
	6/32	5.4	

	FHWA DIVISION		PROJECT NO	•	SHEET NO.			
	6	F	RMC 6432-54-001					
	STATE	DISTRICT						
)	TEXAS	ABL	Taylor					
	CONTROL	SECTION	N JOB HIGHWAY NO					
	6432	54	001 FM89,etc.					



EXAMPLES OF SIGN SUPPORTS

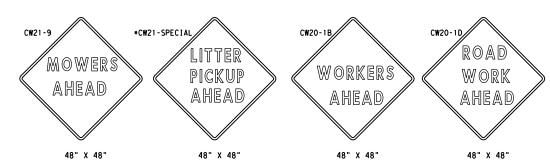
SHORT TERM DURATION. DAYTIME USE ONLY PORTABLE SIGN SUPPORTS



1 Foot Mounting Height

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 will NOT be allowed.



SIGN IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND

MOWERS AHEAD SIGNS ARE USED FOR MOWING OPERATIONS.

LITTER PICKUP AHEAD, ROAD WORK AHEAD AND WORKER AHEAD SIGNS ARE USED AS DIRECTED FOR OTHER MAINTENANCE OPERATIONS WHEN ALL WORK OCCURS OFF OF THE PAVED HIGHWAY SURFACE.

ROLL-UP SIGNS CONFORMING TO DMS-8310 AND THE CWZTCD ALLOWED

Letter dimensions and spacing for "CW21-SPECIAL" is the same as C20-1D>

See the CWZTCD for the type of sign substrate

that can be used for each approved sign support.

WORK

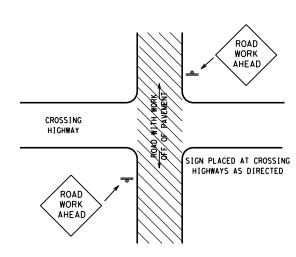
Flags as required by Engineer or as shown on plans

12" min.

24" max.

approved

substrate \triangle



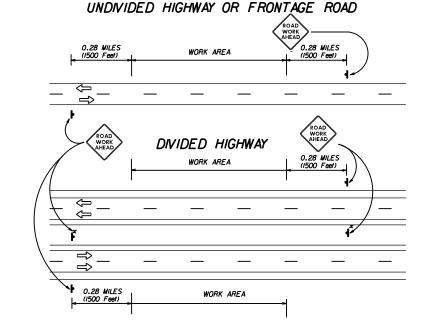
TYPICAL LOCATION OF SIGNS AT HIGHWAY CROSSING

SIGNS MAY REMAIN IN PLACE ONLY DURING DAYLIGHT HOURS. SIGNS ARE TO BE PLACED 6'TO 12' OFF OF THE PAVED SURFACE UNLESS ROAD WORK AHEAD SIGNS SHOWN AS EXAMPLES, ONE

WORK AREA IS A MAXIMUM OF 2.0 MILES UNLESS OTHERWISE DIRECTED.

OF THE FOUR TYPE SIGNS WILL BE USED AS DIRECTED.

* SIGNS IN THE MEDIAN ARE REQUIRED WHEN WORK OCCURS IN MEDIAN



TRAFFIC CONTROL PLAN FOR WORK OFF OF THE PAVED SURFACE.

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.
- Wooden sign posts shall be painted white.
- Barricades shall NOT be used as sign supports.
- Nails shall NOT be used to attach signs to any support.
- All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and quide the traveling public safely through the work zone.
- 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. The additional signs requested by the Engineer/Inspector shall not be subsidiary.
- The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). 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 that the Engineer can verify the correct procedures are being followed.
- The Contractor is responsible for sign installations and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
- 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".
- 10. 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 VI)

- 1. The Contractor is responsible for ensuring the sign support and substrate meets crashworthiness. For mowing
- operation all signs and supportS are Short-term Duration for daytime work. 2. The Contractor shall furnish the sign sizes shown on this sheet or as directed by the Engineer.

SIGN SUBSTRATES

- The Contractor shall ensure that the sign substrate is allowed 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.
- "Mesh" type materials are NOT an approved sign substrate.
- 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 faces.

REFLECTIVE SHEETING

- Reflectorized signs shall be constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 or DMS-8310. The DMS specifications can be accessed from the following web address:
 - http://manuals.dot.state.tx.us:80/dynaweb/colmates/@Generic__CollectionView.cs=default:ts=default
- White sheeting, meeting the requirements of DMS-8300 Type C (High Specific Intensity), shall be used for signs with white background and channelizing devices.
- Orange sheeting, meeting the requirements of DMS-8300 Type E (Fluorescent Prismatic), shall be used for 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

- Signs should be removed or completely covered when not mowing.
- 2. Duct tape or other adhesive material shall NOT be affixed to a sign face.
- 3. Signs and supports shall be removed by the end of the day.

- Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry cohesionless sand is recommended.
- 2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- Rock, concrete, iron, steel or other solid objects will not be permitted for use as sign support weights.
 - 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.
 - Rubber ballasts (such as those used with cones or edgeline channelizers) shall NOT be used as sign support weights.
- 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 supports.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

Any sign, sign support or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced or repaired as soon as possible by the Contractor at the Contractor's expense.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-auglified products and their sources and may be obtained by contacting:

Standards Engineer Traffic Operations Division - TE Texas Department of Transportation 125 East 11th Street Austin, Texas 78701-2483 Phone (512) 416-3120 Fox (512) 416-3299

This site is printable.

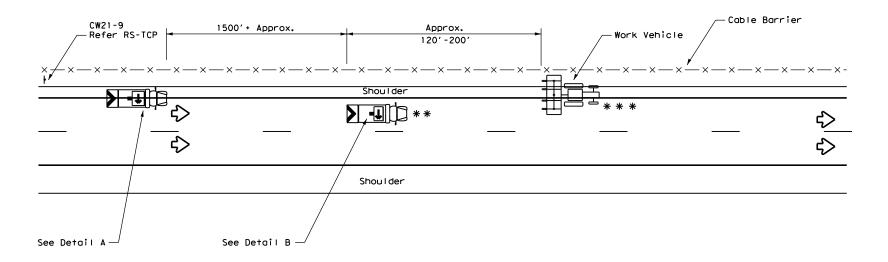
Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - www.dot.state.tx.us Click on "About TxDOT". Click on "Organizational Chart" Click on Traffic Operations Box Click on "Compliant Work Zone Traffic Control Devices". Click on "View PDF".

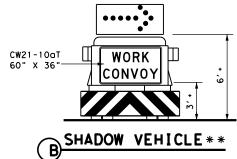


ROADSIDE TRAFFIC CONTROL PLAN

SHEET 1 OF 1 RS-TCP-05 NOT TO						SCALE					
FILE: RSTCPO5.DGN DN			LJB	ck: JG		DW: - CK: - NEG NO.			NEG NO.:	:	
© TxDOT FEBRUARY 2005			STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT S					SHEET	
REVISED: September 17, 2004 08			08	N/A	N/A 5				5		
REVISED: FEBRUARY 2, 2005 Sign placement in TCP			COUNTY			CONTROL	SECTION	JOB	HIGHWAY		
REVISED:			Taylor				6432	54	001	FM89,etc.	







LEFT LANE CLOSURE ADJACENT TO CABLE BARRIER

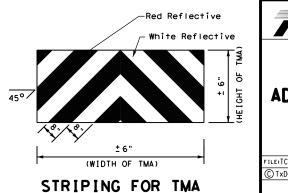
Note: An engineer's seal is not required in accordance with 137.33.m of the Texas Engineering Act and Board Rules.

LEGEND								
*	Trail Vehicle		ARROW BOARD DISPLAY					
* *	Shadow Vehicle							
* * *	Work Vehicle	RIGHT Directional						
	Heavy Work Vehicle	4	LEFT Directional					
	Truck Mounted Attenuator (TMA)	#	Double Arrow					
♣	Traffic Flow	0	CAUTION (Alternating Diamond or 4 Corner Flash)					

TYPICAL USAGE								
MOBILE	SHORT DURATION	SHORT TERM STATIONARY		LONG TERM STATIONARY				
1								

GENERAL NOTES

- 1. ADVANCE WARNING and 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.
- 2. A TRAIL VEHICLE is not required.
- 3. 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 and SHADOW 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.
- 6. Each vehicle shall have two-way radio communication capability.
- When work convoys must change lanes, the ADVANCE WARNING VEHICLE should change lanes first to shadow the other convoy vehicles.
- Vehicle spacing between the ADVANCED WARNING VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the ADVANCE WARNING VEHICLE in time to slow down and/or change lanes as they approach the ADVANCED WARNING VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE may vary according to terrain, work activity and other factors.
- 9. Standard 48" X 48" diamond shaped warning signs with the same message as those shown may be used where adequate mounting space exists.
- 10. 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 and legibility of the floshing 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.
- 11. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
- 12. The Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.





Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS ADJACENT TO CABLE BARRIER

TCP-AblCobleBorrier

CP-AblCableBarrier.dgn	DN: TxDOT		ck: TxDOT DW:		TxDOT	ck: TxDOT	
DOT February 2017	CONT	SECT	JOB		HWY		
REVISIONS	6432	54	001	FM89,etc.		9,etc.	
	DIST	COUNTY SHEET			SHEET NO.		
	08	Taylor 6			6		