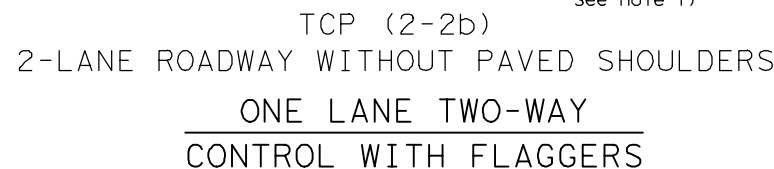
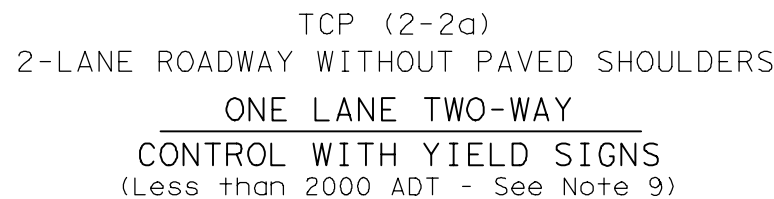


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FILE: X:\FTW_TPT\TxDOT_Standards\With_Pen_Table\Tcp(2-2)-18.dgn



Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent			
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L = WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

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

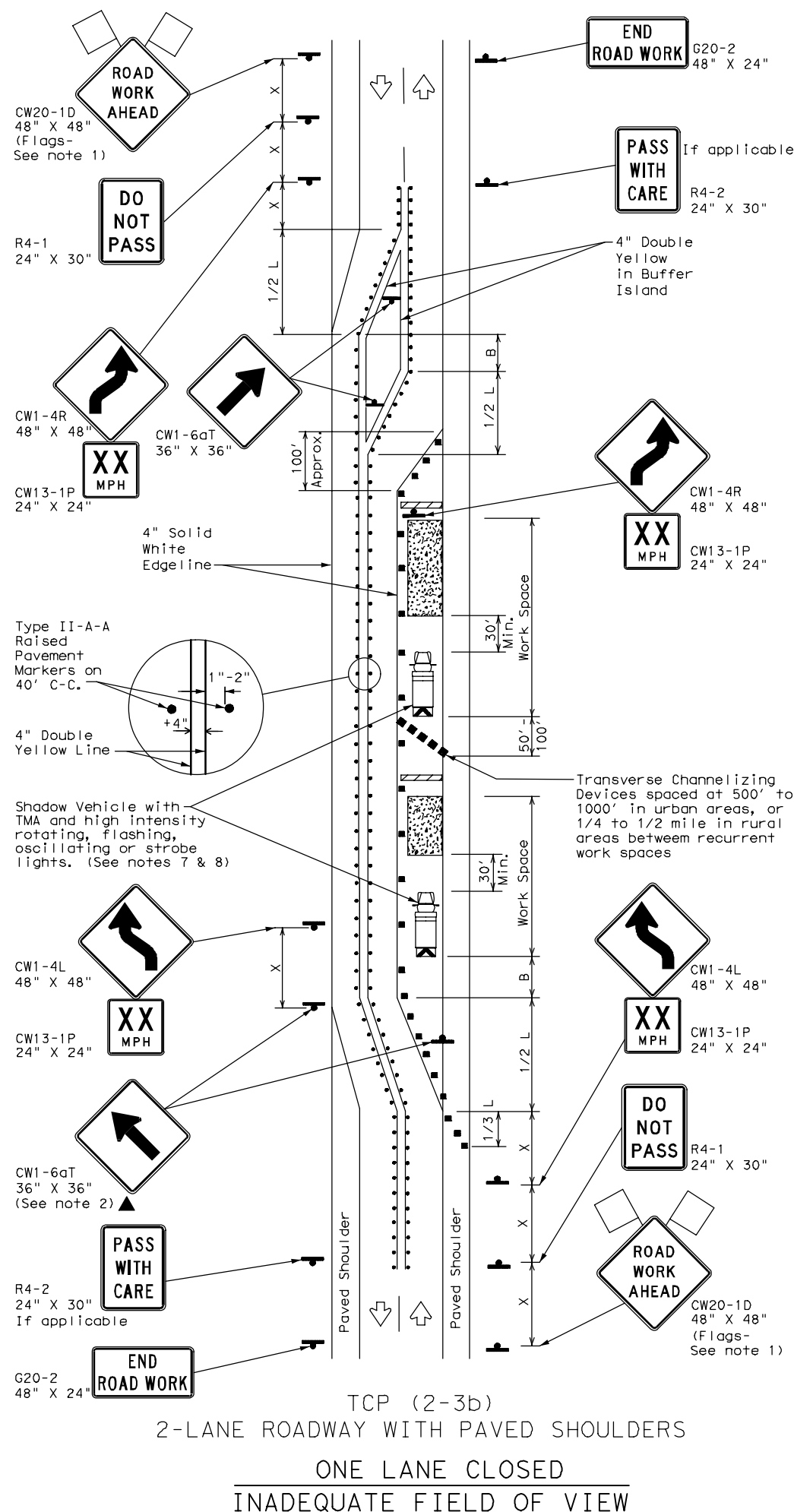
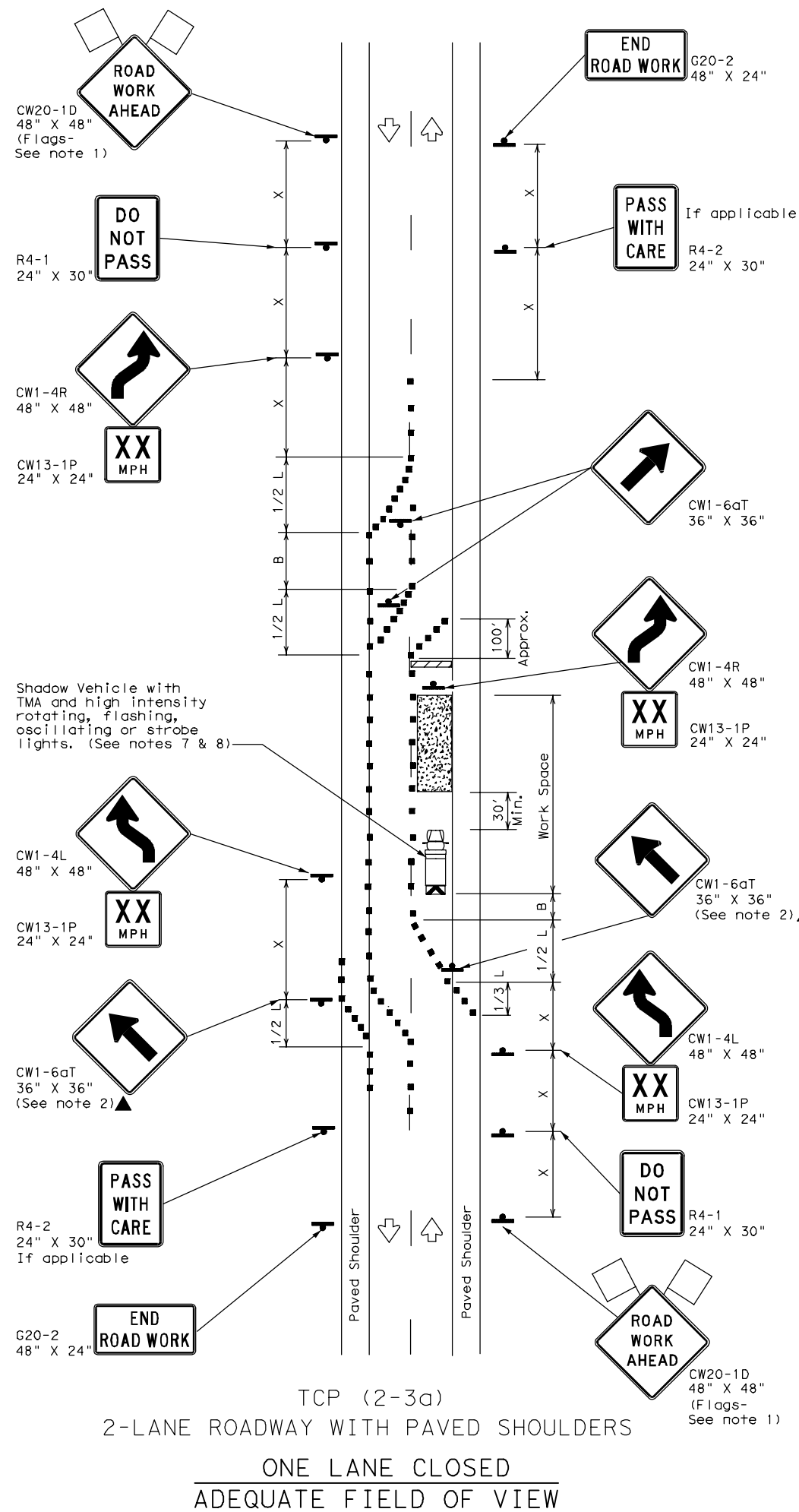
TCP (2-2a)

- TCP (2-2b)

10. Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
11. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the flagger and a queue of stopped vehicles. (See table above).
12. Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.

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LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Raised Pavement Markers Ty II-AA
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths * *			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B" "
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
* * Taper lengths have been rounded off.
L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)


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

GENERAL NOTES

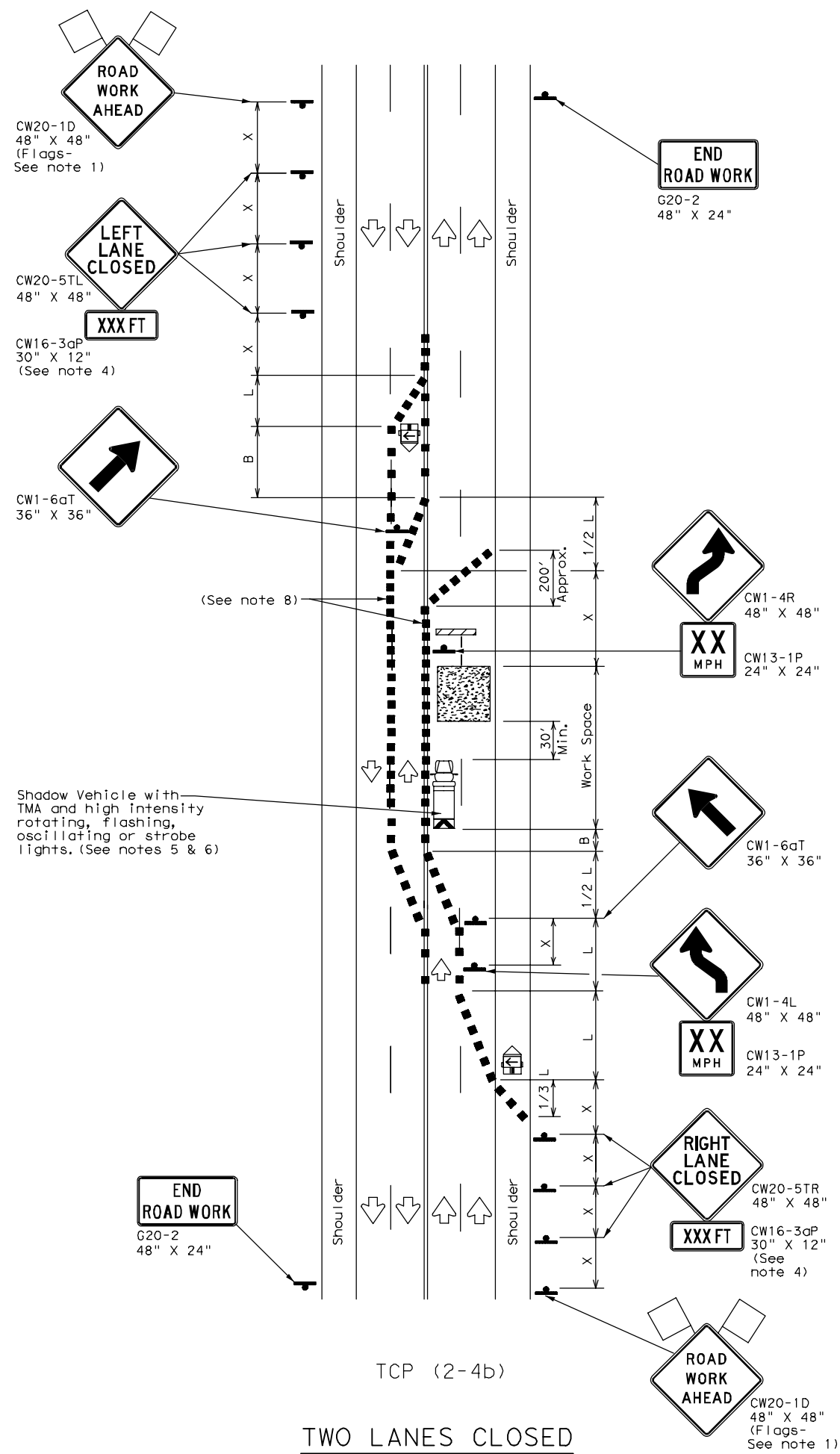
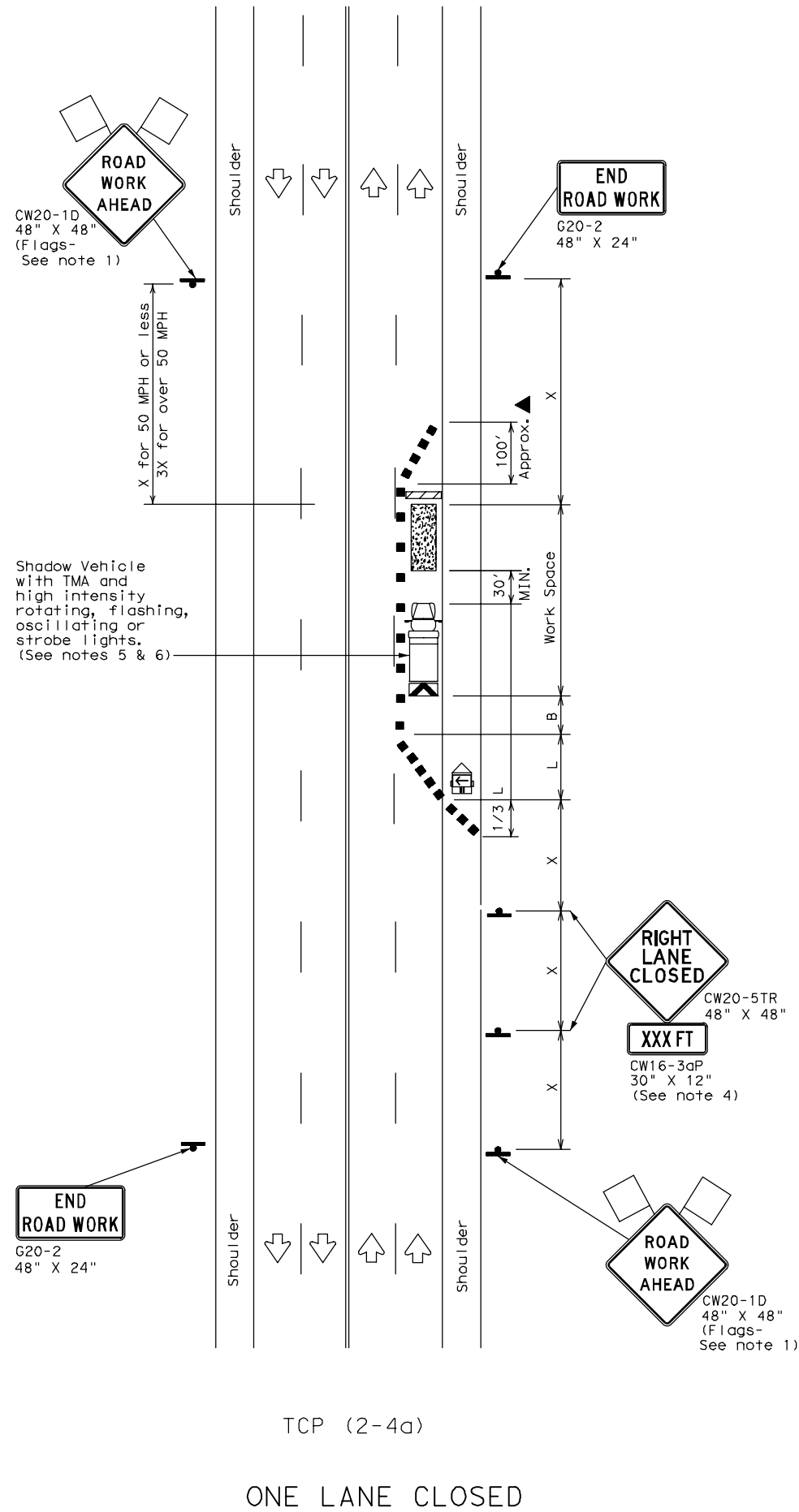
- Flags attached to signs where shown, are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
- When work space will be in place less than three days existing pavement markings may remain in place. Channelizing devices shall be used to separate traffic.
- Flagger control should NOT be used unless roadway conditions or heavy traffic volume require additional emphasis to safely control traffic. Flagger should be positioned at end of traffic queue.
- The R4-1 "DO NOT PASS," R4-2 "PASS WITH CARE" and construction regulatory speed zone signs may be installed within CW20-1D "ROAD WORK AHEAD" signs. Proper spacing of signs shall be maintained.
- Conflicting pavement marking shall be removed for long term projects.
- A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted.
- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.











TCP (2-3a)

- Conflicting pavement markings shall be removed for long-term projects. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter device spacing is intended for the area of the conflicting markings, not the entire work zone.

 Texas Department of Transportation		Traffic Operations Division Standard			
TRAFFIC CONTROL PLAN TRAFFIC SHIFTS ON TWO-LANE ROADS					
TCP (2-3) - 18					
FILE#	tcp(2-3)-18.dgn	DN#	CK#	DN#	CK#
© TxDOT December 1985		CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03 1-97 2-12 4-98 2-18		0902	90	083	CS
		DIST		COUNTY	SHEET NO.
		FTW		TARRANT	C8.22

DATE: 6/24/2020 4:16:55 PM
FILE: K:\FTW_TPT\TxDOT_Standards\With_Pen_Table\TCP(2-4)-18.dgn



LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

✖✖ Taper lengths have been rounded off.

L=Length of Taper (FT) W=Width of Offset(FT) S=Posted Speed(MPH)

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

GENERAL NOTES


1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP	(2-4a)
-----	--------

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED" signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

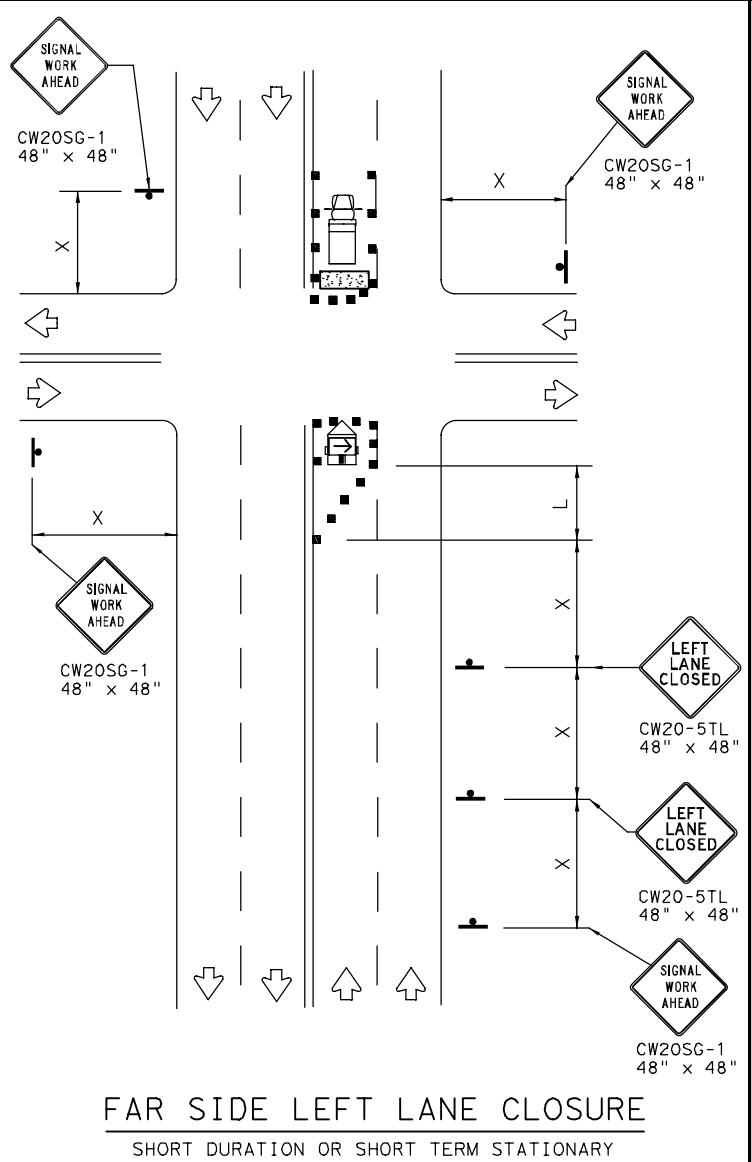
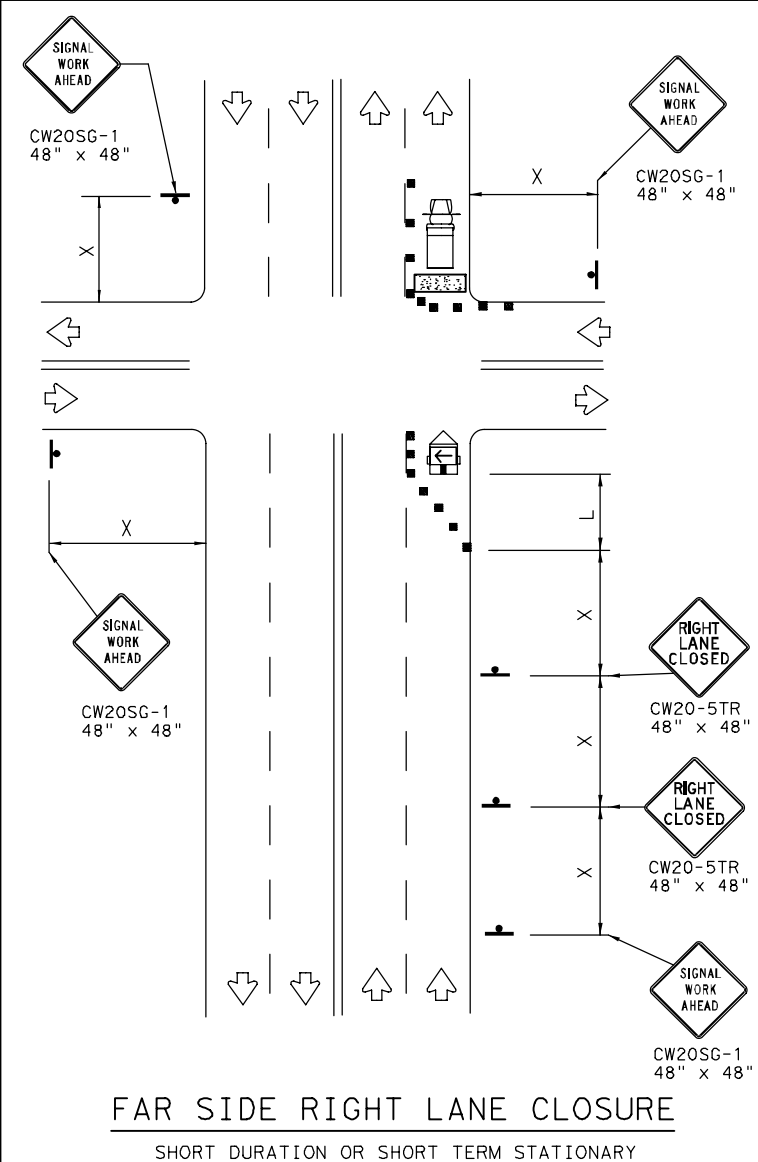
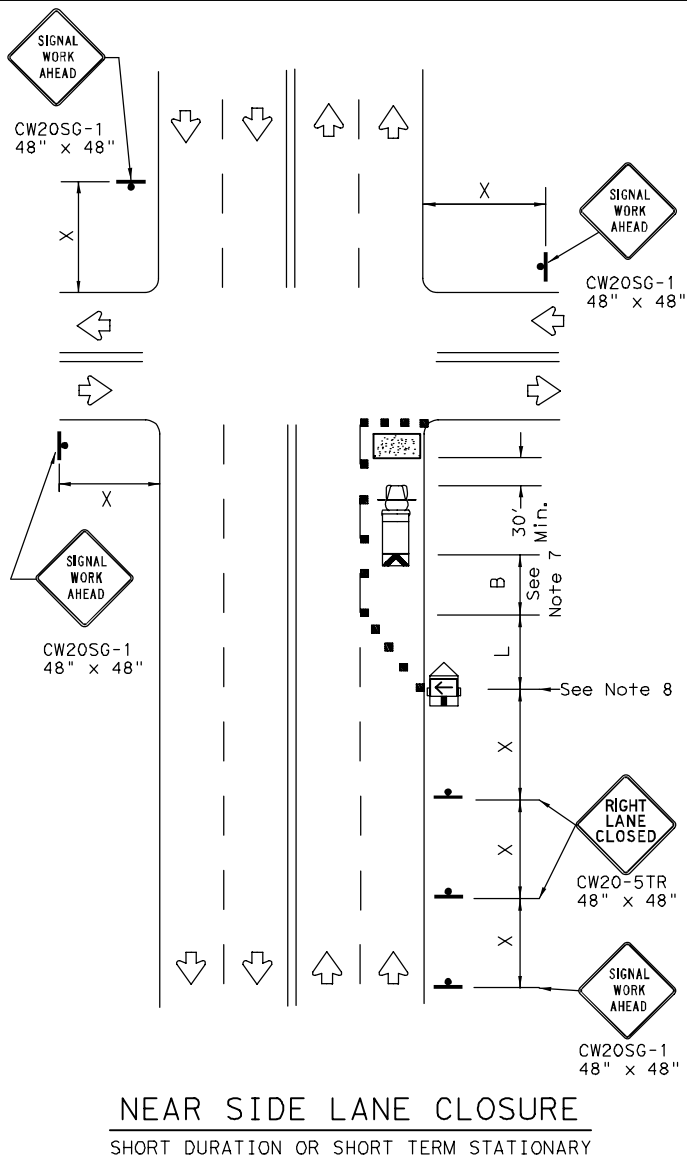
TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at $1/2(S)$ where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

 Texas Department of Transportation	Traffic Operations Division Standard			
<h1 style="margin: 0;">TRAFFIC CONTROL PLAN</h1> <h1 style="margin: 0;">LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS</h1>				
<h2 style="margin: 0;">TCP (2-4) - 18</h2>				
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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
8-95 3-03 1-97 2-12 4-98 2-18 REVISIONS	0902	90	083	CS
	DIST	COUNTY		SHEET NO.
	FTW	TARRANT		C8. 23
164				

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LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths * X			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)

WORKERS IN BUCKET TRUCKS SHALL NOT WORK ABOVE OPEN LANES OF TRAFFIC.

GENERAL NOTES

- The minimum size channelizing device is the 28" cone. 42" Two-piece cones, drums, vertical panels or barricades will be required when the device must be left unattended at night.
- Obstructions or hazards at the work area shall be clearly marked and delineated at all times.
- Flaggers and Flagger Symbol (CW20-7) signs may be required according to field conditions.
- Vehicles parked in roadway shall be equipped with at least two high intensity rotating, flashing, oscillating or strobe type lights.
- High level warning devices (flag trees) may be used at corners of the vehicle.
- When work operations are performed on existing signals, the signals may be placed in flashing red mode when approved by the engineer. If existing signals do not have power, All-Way Stop (R1-1 and R1-3P) signs may be implemented when approved by the engineer.
- For Short-Term Stationary work the buffer space "B" from the above table should be used if field conditions permit. For Short Duration (less than 1 hour) any buffer space provided will enhance the safety of the setup.
- The arrow board at this location may be omitted for Short Duration work if the work vehicle has an arrow board in operation. As an option, the arrow board may be placed at the end of the taper in the closed lane if space is not available at the beginning of the taper.
- Signs and devices for the NEAR SIDE LANE CLOSURE may be altered for a left lane closure by using a LEFT LANE CLOSED (CW20-5TL) and adding channelizing devices on the centerline to protect the work space from opposing traffic.

SHEET 1 OF 2



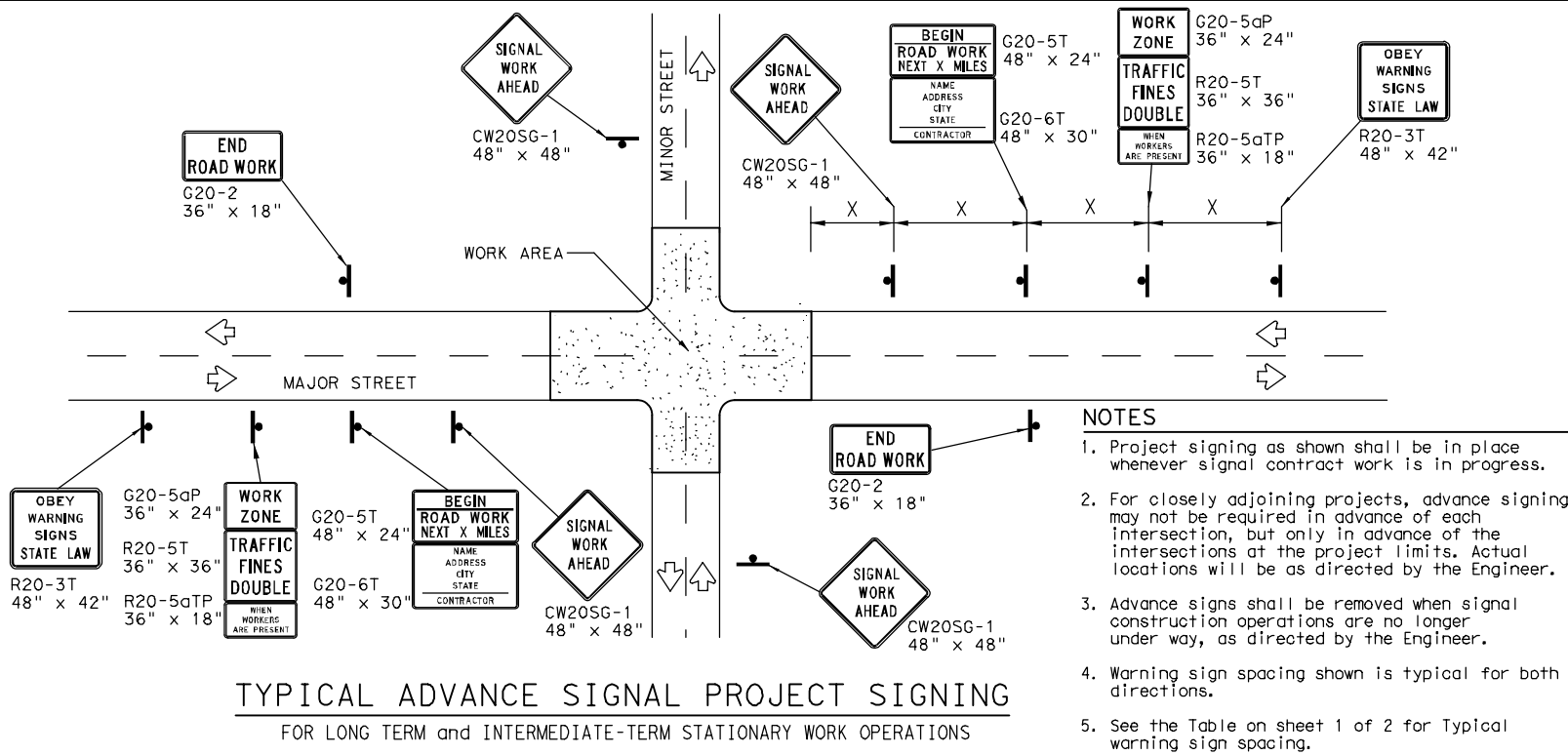
TRAFFIC SIGNAL WORK TYPICAL DETAILS

WZ(BTS-1)-13

FILE: wzbts-13.dgn	DN: TxDOT	CK: TxDOT	DN: TxDOT	CK: TxDOT
©TxDOT April 1992	CONT	SECT	JOB	HIGHWAY
REVISIONS	0902	90	083	CS
2-98 10-99 7-13	DIST	COUNTY	SHEET NO.	
4-98 3-03	FTW	TARRANT	C8.24	

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TYPICAL ADVANCE SIGNAL PROJECT SIGNING
FOR LONG TERM and INTERMEDIATE-TERM STATIONARY WORK OPERATIONS

GENERAL NOTES FOR WORK ZONE SIGNS

- Signs shall be installed and maintained in a straight and plumb condition.
- 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.
- The Contractor shall furnish the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD).
- The Contractor shall furnish sign supports and substrates listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD), installed as per the manufacturer's recommendations.
- Temporary signs that have damaged or cracked substrates and/or damaged or marred reflective sheeting shall be replaced as directed by the Engineer.
- 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".
- Damaged wood posts shall be replaced. Splicing wood posts will not be allowed.

DURATION OF WORK

- Work zone durations are defined in Part 6, Section 6G.02 of the Texas Manual on Uniform Traffic Control Devices (TMUTCD).

SIGN MOUNTING HEIGHT

- Sign height of Long-term/Intermediate-term warning signs shall be as shown on Figure 6F-1 of the TMUTCD.
- Sign height of Short-term/Short Duration warning signs shall be as shown on Figure 6F-2 of the TMUTCD.
- Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

REMOVING OR COVERING

- When sign messages may be confusing or do not apply, the signs shall be removed or completely covered, unless otherwise approved by the Engineer.
- 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. Burlap, or heavy materials such as plywood or aluminum shall not be used to cover signs.
- Duct tape or other adhesive material shall NOT be affixed to a sign face.
- Signs and anchor stubs shall be removed and holes backfilled upon completion of the work.

REFLECTIVE SHEETING

- All signs shall be retroreflective and constructed of sheeting meeting the requirements of the DMS and color usage table shown on this sheet.

SIGN SUPPORT WEIGHTS

- Weights used to keep signs from turning over should be sandbags filled with dry, cohesionless material.
- 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.
- 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.
- 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.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

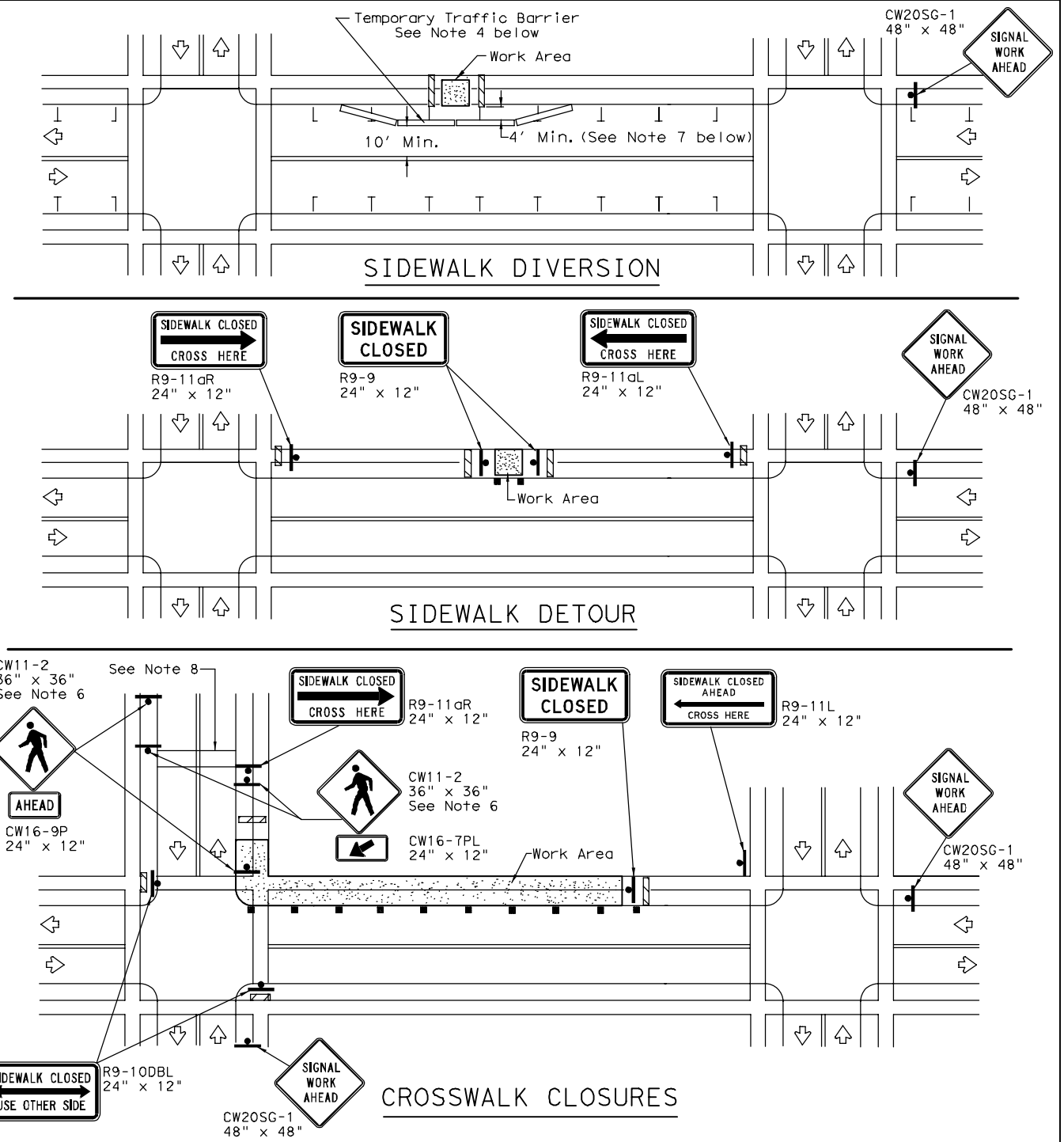
LEGEND	
	Sign
	Channelizing Devices
	Type 3 Barricade

DEPARTMENTAL MATERIAL SPECIFICATIONS

SIGN FACE MATERIALS	DMS-8300
FLEXIBLE ROLL-UP REFLECTIVE SIGNS	DMS-8310

COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE B _{FL} OR TYPE C _{FL} SHEETING
WHITE	BACKGROUND	TYPE A SHEETING
BLACK	LEGEND & BORDERS	ACRYLIC NON-REFLECTIVE SHEETING


Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be found at the following web address:
http://www.txdot.gov/txdot_library/publications/construction.htm



PEDESTRIAN CONTROL

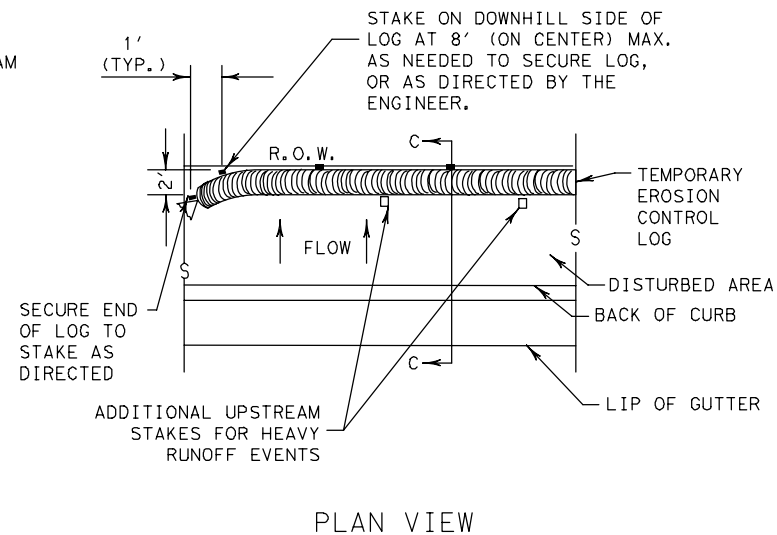
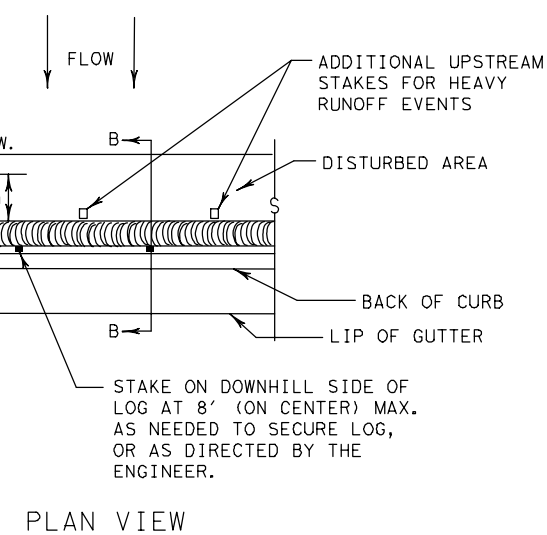
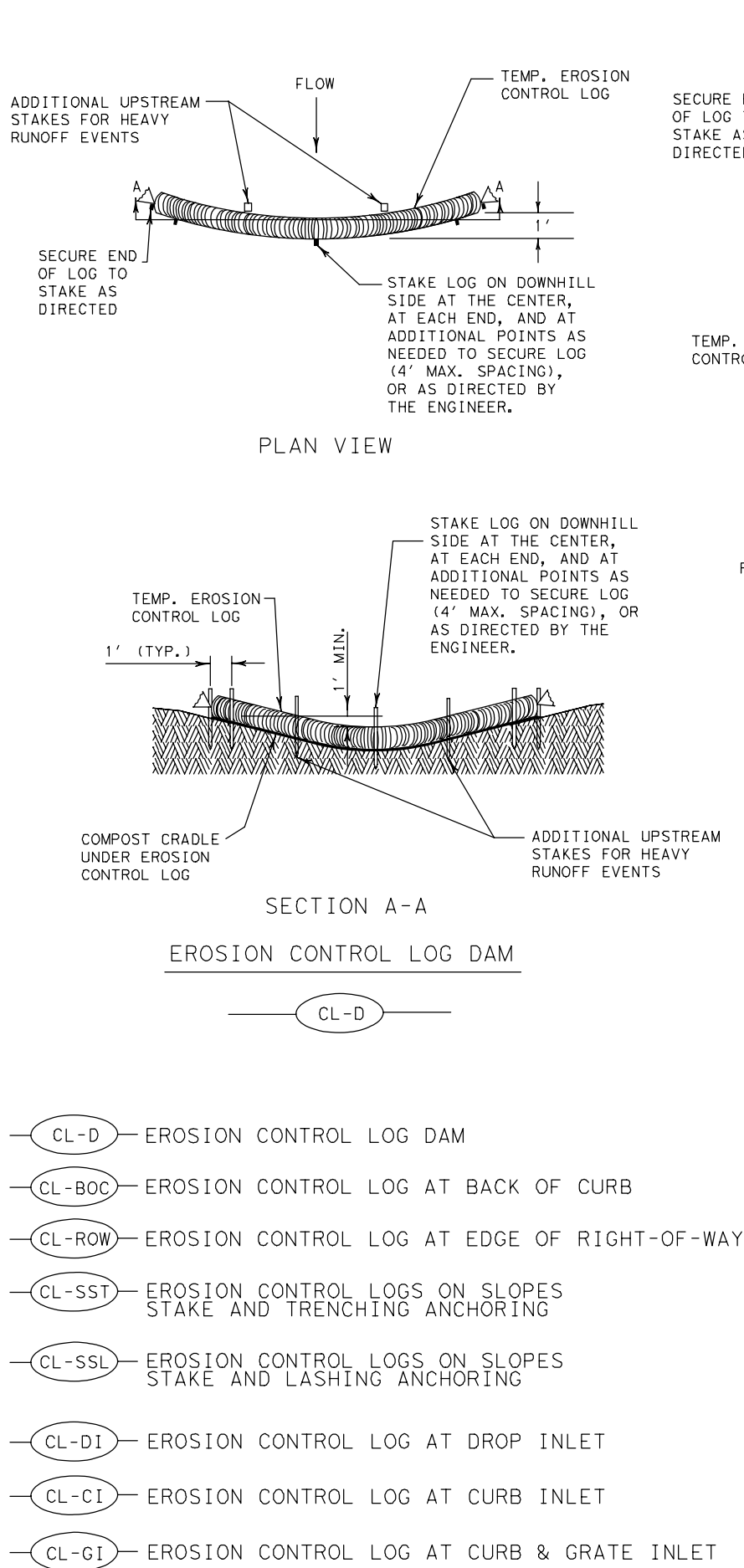
- Holes, trenches or other hazards shall be adequately protected by covering, delineating or surrounding the hazard with orange plastic pedestrian fencing or longitudinal channelizing devices, or as directed by the Engineer.
- "CROSSWALK CLOSURES" as detailed above will require the Engineer's approval prior to installation.
- R9 series signs shown may be placed on supports detailed on the BC standards or CWZTCD list, or when fabricated from approved lightweight plastic substrates, they may be mounted on top of a plastic drum at or near the location shown.
- For speeds less than 45 mph longitudinal channelizing devices may be used instead of traffic barriers when approved by the Engineer. Attenuation of blunt ends and installation of water filled devices shall be as per BC(9) and manufacturer's recommendations.
- Location of devices are for general guidance. Actual device spacing and location must be field adjusted to meet actual conditions.
- Where pedestrians with visual disabilities normally use the closed sidewalk Detectable Pedestrian Barricades should be used instead of the Type 3 Barricades shown.
- The width of existing sidewalk should be maintained if practical.
- Pavement markings for mid-block crosswalks shall be paid for under the appropriate bid items.
- When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

SHEET 2 OF 2

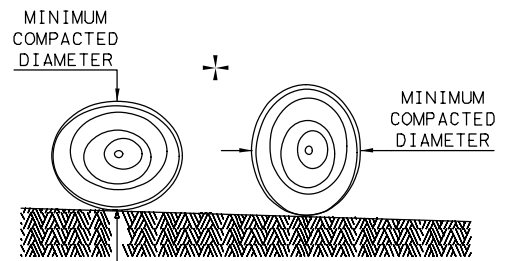
 Texas Department of Transportation		Traffic Operations Division Standard							
TRAFFIC SIGNAL WORK BARRICADES AND SIGNS									
WZ (BTS-2) - 13									
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©TxDOT	April 1992	CONT	SECT	JOB		HIGHWAY			
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2-98	10-99	7-13	DIST	COUNTY			SHEET NO.		
4-98	3-03		FTW	TARRANT			C8. 25		
115									

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



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

SEDIMENT BASIN & TRAP USAGE GUIDELINES

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

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


Control logs should be placed in the following locations:

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

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

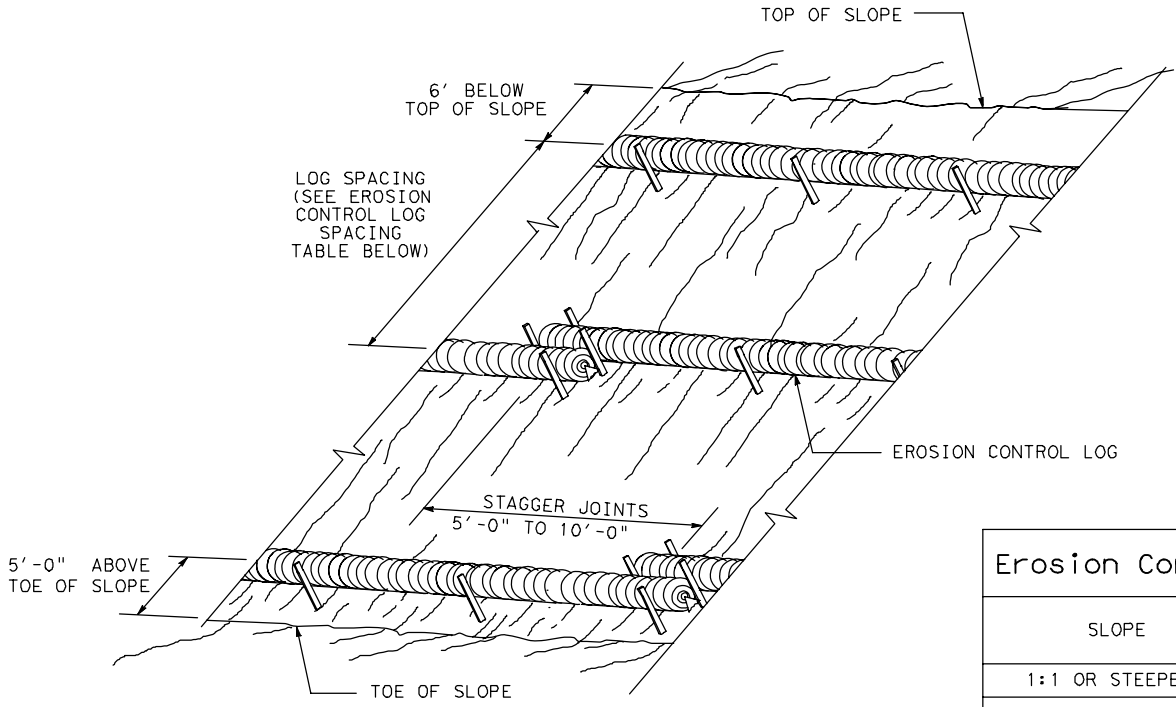
Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.

SHEET 1 OF 3

 Texas Department of Transportation				Design Division Standard					
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES EROSION CONTROL LOG EC(9) - 16									
FILE: ec916		DN: TxDOT		CK: KM		DW: LS/PT		CK: LS	
© TxDOT: JULY 2016		CONT		SECT		JOB		HIGHWAY	
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		FTW		TARRANT				C8.26	

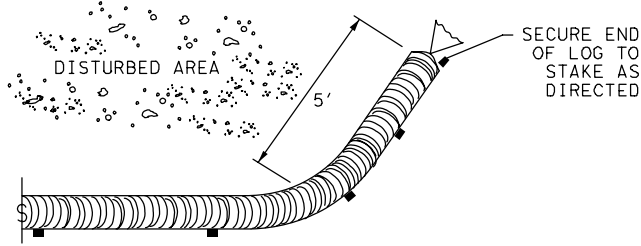
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EROSION CONTROL LOGS ON SLOPES
STAKE AND TRENCHING ANCHORING

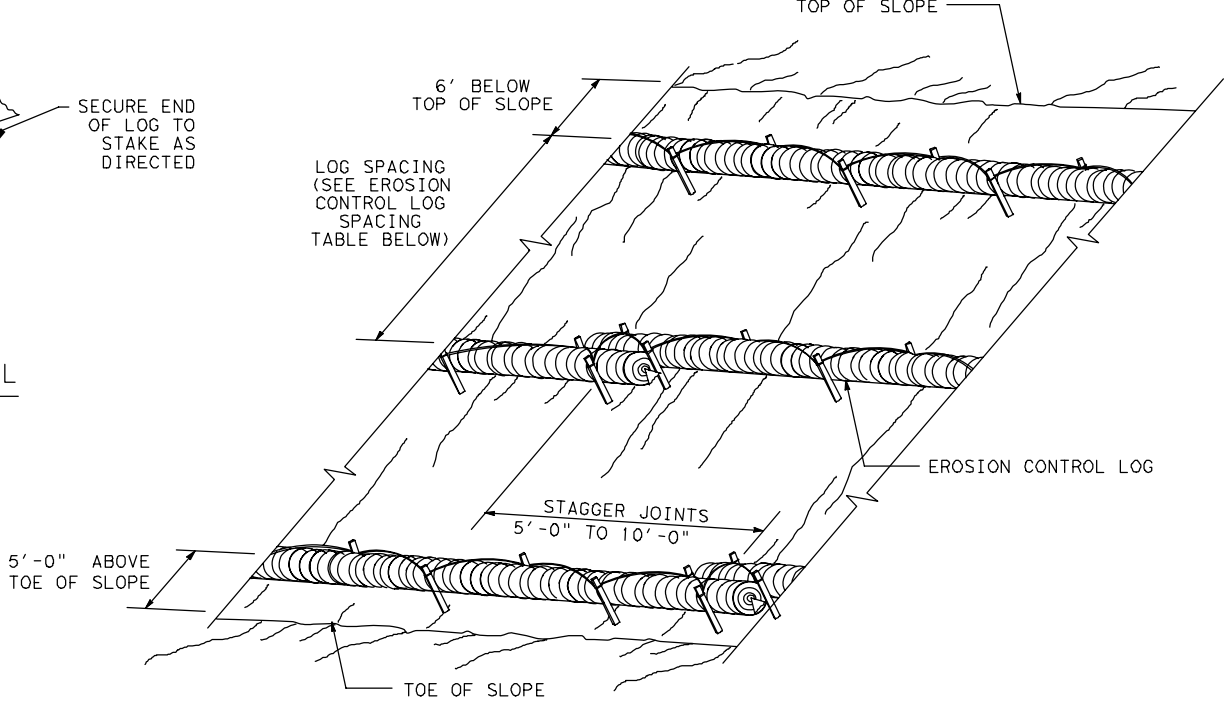
CL-SST



END SECTION RAP DETAIL

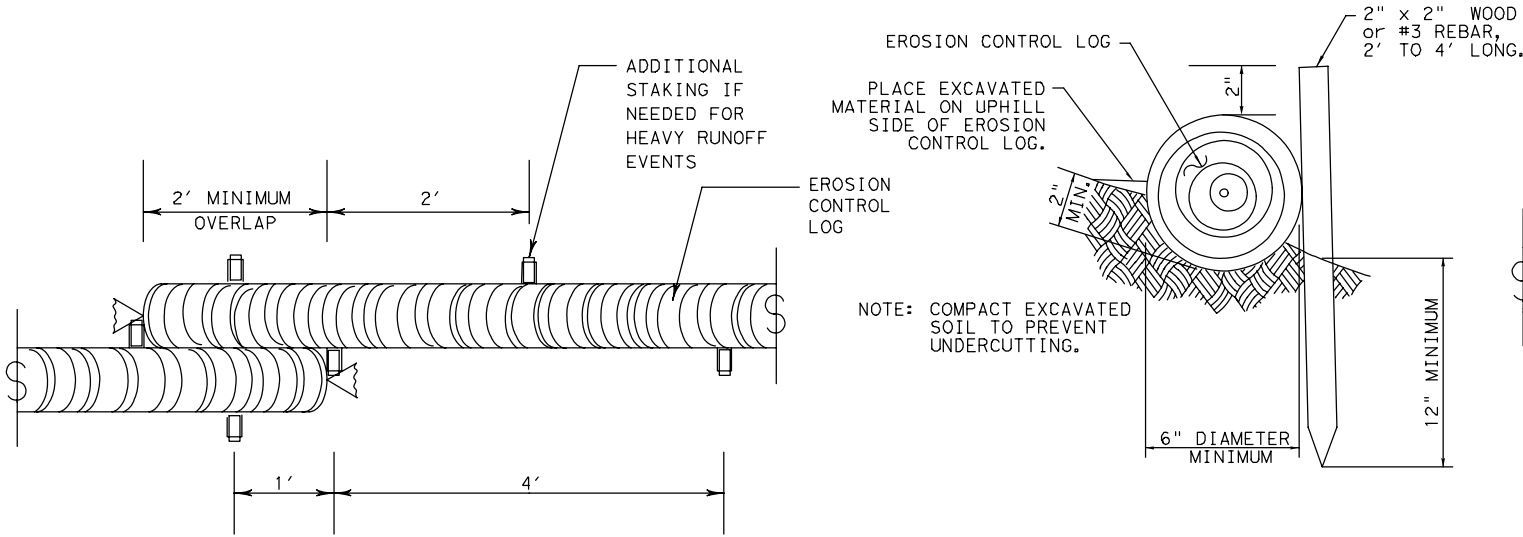
Erosion Control Log Spacing Table				
SLOPE	LOG DIAMETER			
	6"	8"	12"	18"
1:1 OR STEEPER	5'	10'	15'	20'
2:1	10'	20'	30'	40'
3:1	15'	30'	45'	60'
4:1 OR FLATTER	20'	40'	60'	80'

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



EROSION CONTROL LOGS ON SLOPES
STAKE AND LASHING ANCHORING

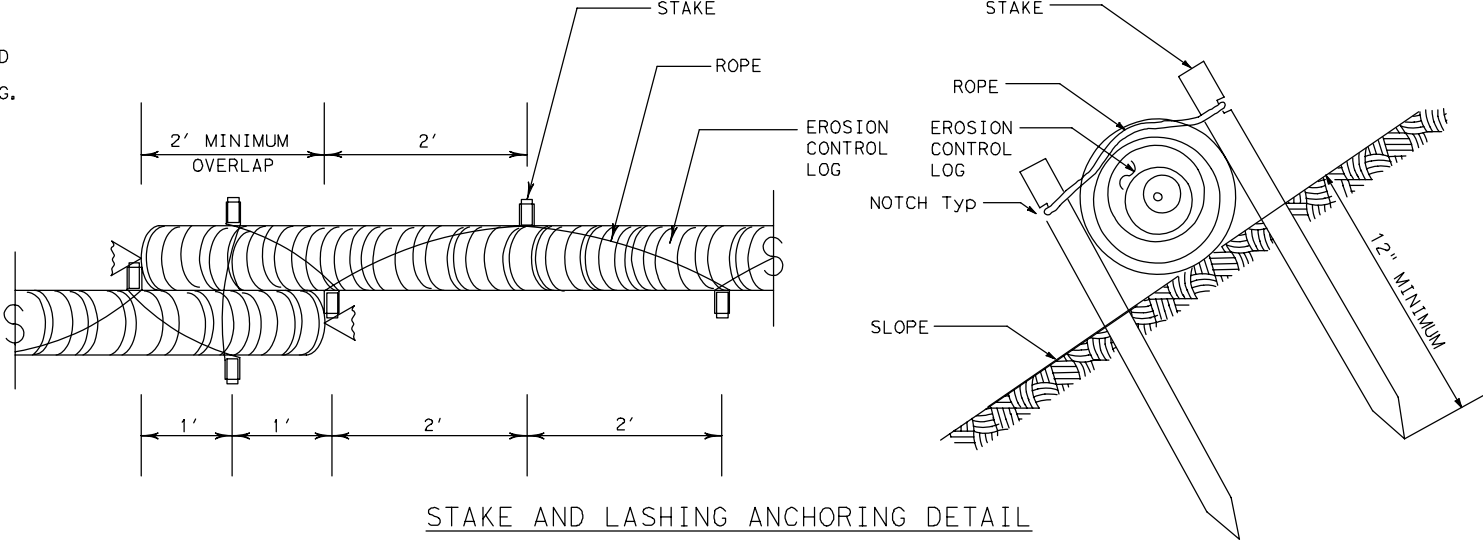
CL-SSL



STAKE AND TRENCHING ANCHORING DETAIL

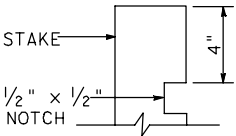
CL-SST

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



STAKE AND LASHING ANCHORING DETAIL

CL-SSL



STAKE NOTCH DETAIL

SHEET 2 OF 3

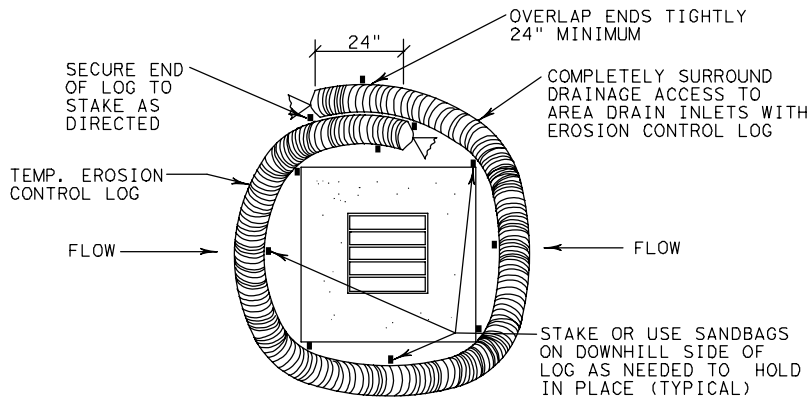


TEMPORARY EROSION,
SEDIMENT AND WATER
POLLUTION CONTROL MEASURES
EROSION CONTROL LOG
EC(9)-16

FILE: ec116	DN: TxDOT	CK: KM	OW: LS/PT	CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	0902	90	083	CS
	DIST	COUNTY		SHEET NO.
	FTW	TARRANT		C8.27

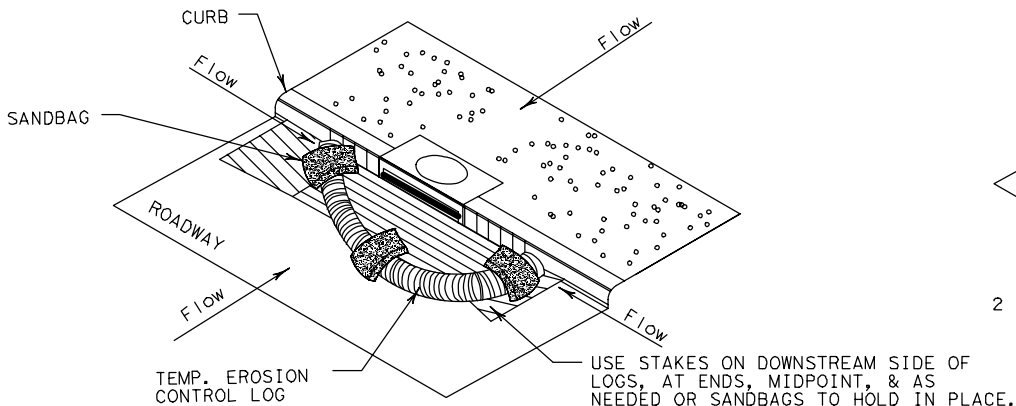
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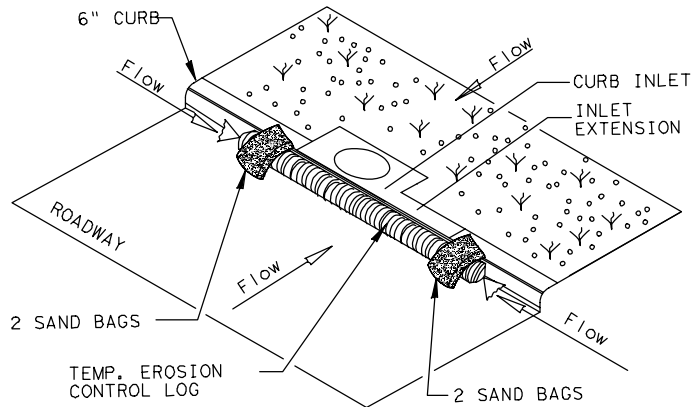
EROSION CONTROL LOG AT DROP INLET

CL-DI



EROSION CONTROL LOG AT CURB INLET

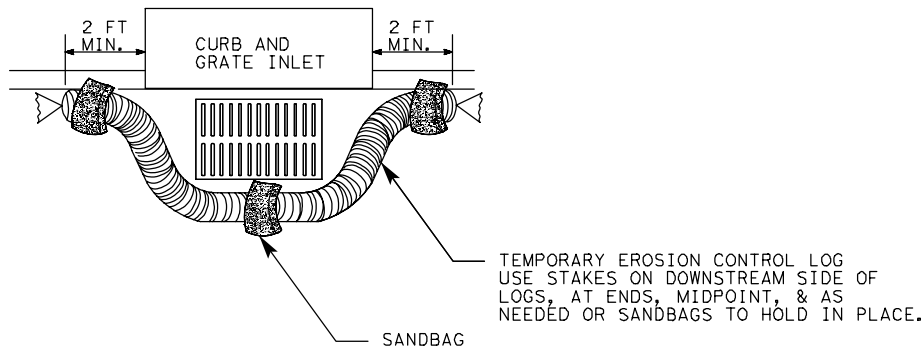
CL-CI



EROSION CONTROL LOG AT CURB INLET

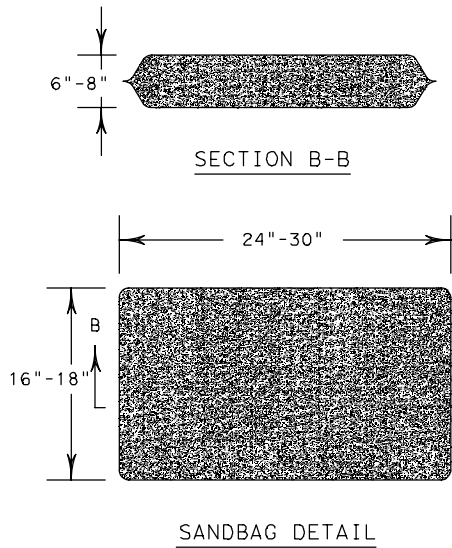
CL-CI

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



EROSION CONTROL LOG AT CURB & GRADE INLET

CL-GI



SANDBAG DETAIL

SHEET 3 OF 3



Design
Division
Standard

TEMPORARY EROSION,
SEDIMENT AND WATER
POLLUTION CONTROL MEASURES
EROSION CONTROL LOG

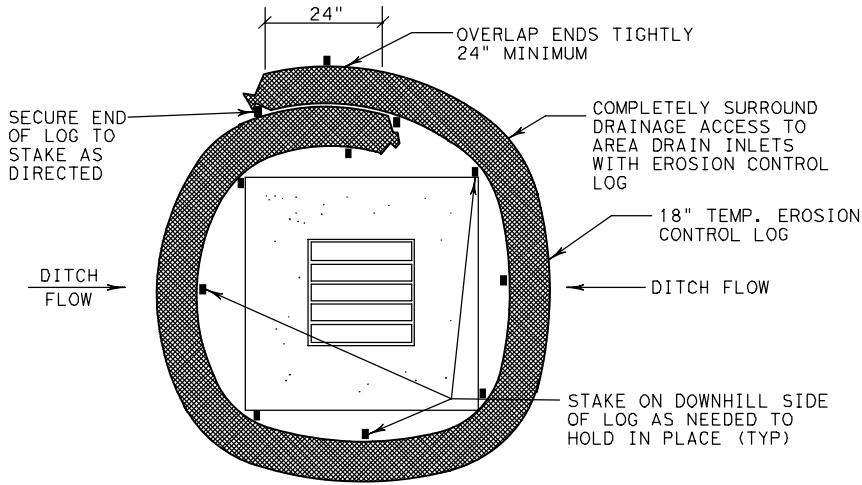
EC(9)-16

FILE: ec916	DN: TxDOT	CK: KM	OW: LS/PT	CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	0902	90	083	CS
	DIST	COUNTY	SHEET NO.	
	FTW	TARRANT	C8.28	

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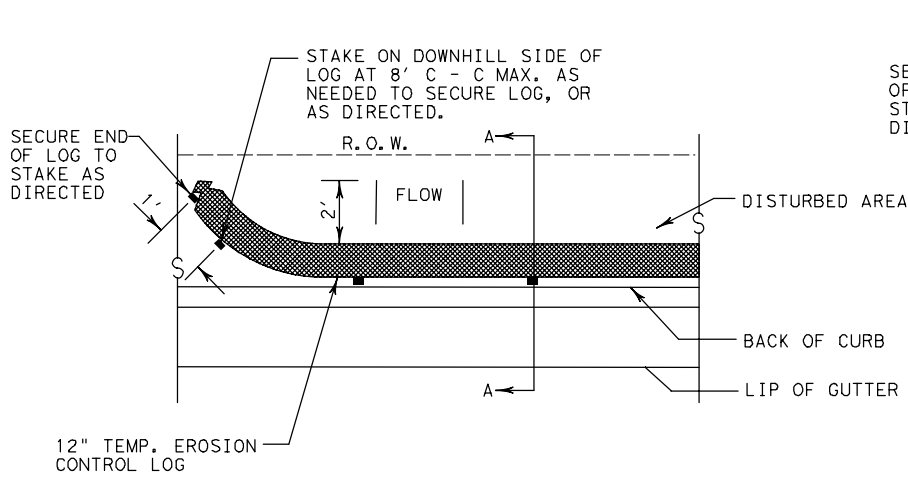
https://www.dot.state.tx.us/ftw/specinfo/standard.htm <teclfw.dgn>

LEVELS DISPLAYED															
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	

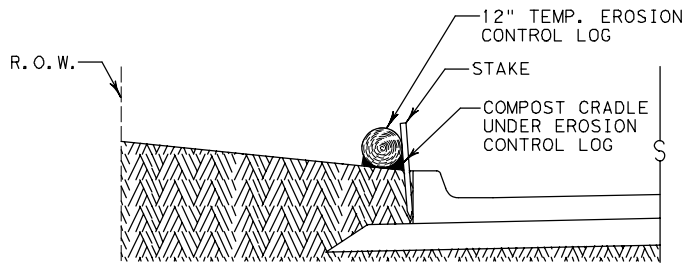


LOGS PLACED AT AREA DRAIN INLETS

NTS



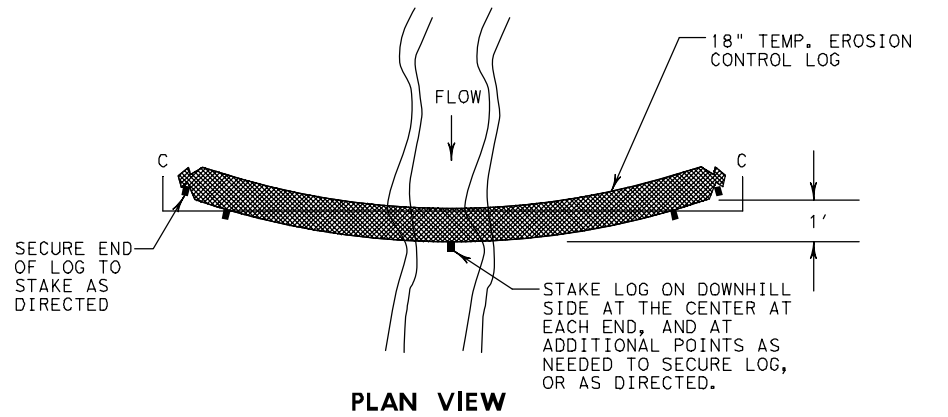
PLAN VIEW



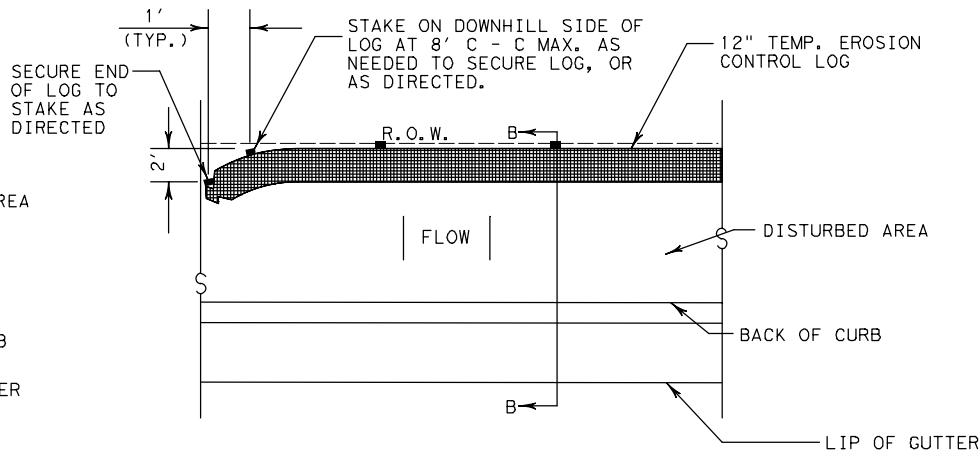
SECTION A-A

LOG PLACED AT BACK OF CURB

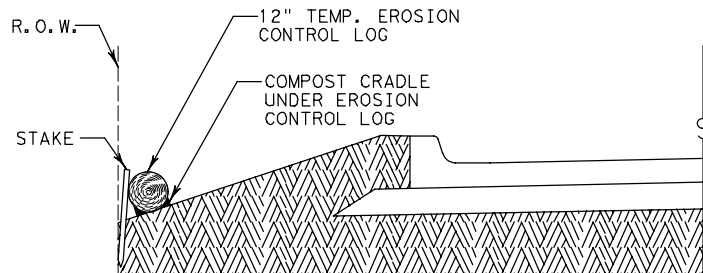
NTS



PLAN VIEW



PLAN VIEW



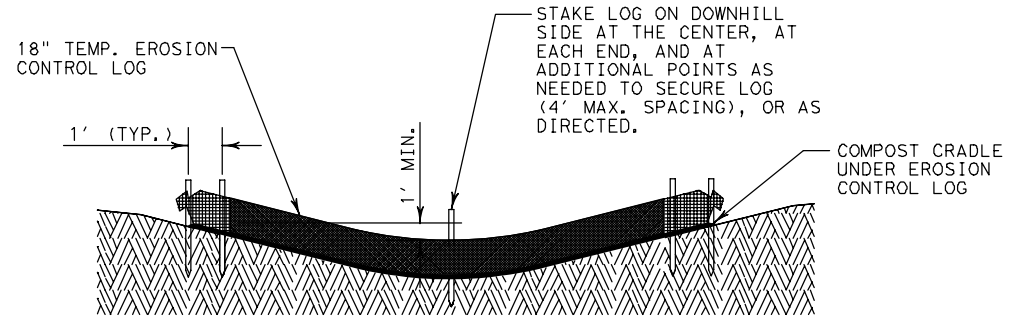
SECTION B-B

LOG PLACED AT EDGE OF RIGHT-OF-WAY

NTS

EROSION CONTROL LOG CHECK DAM

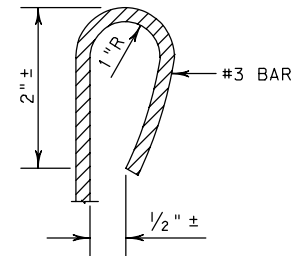
NTS



SECTION C-C

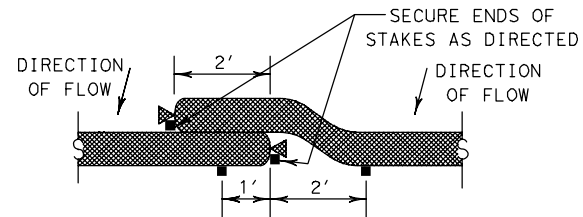
GENERAL NOTES:

1. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED. MAXIMUM LENGTH OF LOGS SHALL BE 60' FOR 18" DIAMETER OR 30' FOR 12" DIAMETER LOGS.
2. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
3. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION.
4. STAKES SHALL BE 2" X 2" WOOD OR #3 REBAR, 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED.
5. DO NOT PLACE STAKES THROUGH CONTAINMENT MESH.



REBAR STAKE DETAIL

NTS



LAP DETAIL

NTS

 Texas Department of Transportation
FORT WORTH DISTRICT

TEMPORARY EROSION
CONTROL LOGS

TECL-04 (FW)

FED. RD. DIV. NO.	PROJECT NO.			HIGHWAY NO.
6				CS
STATE	DISTRICT	COUNTY	C8.29	
TEXAS	FTW	TARRANT		
CONTROL	SECTION	JOB		
0902	90	083		

ORIGINAL OCT. 2004

FILENAME:K:\FTW\TPTO\061018211-CFW-2018-SRTS\CADD\STANDARDS\epic-fw.dgn
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ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

ENDANGERED AND/OR THREATENED SPECIES/WILDLIFE/MIGRATORY BIRDS

SPECIES IN PROJECT AREA	HABITAT	SPECIAL NOTES
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

DO NOT DISTURB OR HARM SPECIES AND/OR THEIR HABITAT IF LISTED ABOVE. VERIFY PRESENCE AND LIMITS OF HABITAT WITH AREA ENGINEER BEFORE CLEARING TREES. MINIMIZE DISTURBANCE TO AREA WILDLIFE.

COMMENTS

NOT APPLICABLE

HISTORICAL/ARCHEOLOGICAL:

CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF ARTICLE 7.17 OF TxDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES, AND SPECIAL PROVISIONS.

KNOWN ITEMS OF HISTORICAL INTEREST IN PROJECT AREA :

___ BUILDINGS (LIST IF APPLICABLE)	NOT APPLICABLE
___ BRIDGES	NOT APPLICABLE
___ CEMETERIES	NOT APPLICABLE
___ HISTORIC MARKERS/PLAQUES	NOT APPLICABLE
<input checked="" type="checkbox"/> OTHER	NOT APPLICABLE

IF HISTORICAL OR ARCHEOLOGICAL SITES ARE DISCOVERED DURING CONSTRUCTION, CONTRACTOR SHALL IMMEDIATELY NOTIFY AREA ENGINEER AND THE DISTRICT ENVIRONMENTAL QUALITY COORDINATOR.

DO NOT ENDANGER HISTORICAL BUILDINGS OR STRUCTURES (MORE THAN 50 YEARS OF AGE) OR ARCHEOLOGICAL SITES.

COMMENTS

~~NOT APPLICABLE~~ SEE SHEET C0.03E FOR HISTORICAL PROTECTION GENERAL NOTES

NOISE:

THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF ARTICLE 7.15 OF TxDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES, AND SPECIAL PROVISIONS.

NOISE LEVELS IN RESIDENTIAL AREAS AND OTHER SENSITIVE AREAS SHOULD BE KEPT TO A MINIMUM BETWEEN THE HOURS OF 7PM AND 7AM OR AS DIRECTED BY THE ENGINEER. AVOID ROUTING OF CONSTRUCTION EQUIPMENT THROUGH RESIDENTIAL OR SENSITIVE AREAS IF LISTED BELOW.

COMMENTS

NOT APPLICABLE

NOISE WALLS:

DO NOT LEAVE GAPS BETWEEN PANELS OR POSTS IN NOISE WALLS. IF NEOPRENE PADS ARE REQUIRED, ENSURE THAT THEY ARE PLACED BETWEEN PANELS. DO NOT DAMAGE OR CAUSE EROSION TO ADJACENT PROPERTIES. ENSURE COLOR CONTINUITY FOR CONCRETE MIX THROUGHOUT CONSTRUCTION.

COMMENTS

THERE ARE NO NOISE WALLS PROPOSED FOR THIS PROJECT.

WATER QUALITY:

REFER TO STORMWATER POLLUTION PREVENTION PLAN SHEET
AVOID SEDIMENT RUNOFF
AVOID POLLUTION
CONTAIN & PROPERLY DISPOSE OF POTENTIALLY HAZARDOUS SUBSTANCES.
ALL WORK SHOULD BE PERFORMED ACCORDING TO ALL APPLICABLE STATUTES.

COMMENTS

ADEQUATELY MAINTAIN SW3P MEASURES. PROTECT ANY EXCAVATED MATERIALS FROM RUNOFF.

WATERS OF U.S. AND/OR WETLANDS:

THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF ARTICLES 7.18 AND 7.19 OF TxDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES, AND SPECIAL PROVISIONS.

NO FILLING, DREDGING OR EXCAVATING IN ANY WATER BODIES, RIVERS, CREEKS, STREAMS OR WETLAND AREAS UNLESS SPECIFICALLY AUTHORIZED BY UNITED STATES ARMY CORPS OF ENGINEERS PERMIT AND APPROVED BY THE ENGINEER. CONTRACTOR MUST OBTAIN ANY REQUIRED PERMIT FOR IMPACTS TO WATERS OF THE U.S. DUE TO CONSTRUCTION METHODS OTHER THAN THOSE SPECIFIED IN THE PLANS. CONTRACTOR MUST COORDINATE SUCH PERMITS WITH THE TxDOT DISTRICT ENVIRONMENTAL QUALITY COORDINATOR. DO NOT PLACE EXCAVATED MATERIAL, CONSTRUCTION DEBRIS, ETC., OFF-SITE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.

☐ NA U.S. ARMY CORPS OF ENGINEERS PERMIT (See Below)
___ STREAM/WATERWAY CROSSING
___ WETLAND CROSSING

☐ NA U.S. COAST GUARD PERMIT

THE CONTRACTOR SHALL CONTACT THE TxDOT DISTRICT ENVIRONMENTAL QUALITY COORDINATOR IF WORK WILL RESULT IN IMPACTS TO JURISDICTIONAL WATERS OF U.S. BEYOND THOSE IDENTIFIED IN THE PLANS.

THE FOLLOWING CORPS OF ENGINEERS PERMITS HAVE BEEN IDENTIFIED AS APPLICABLE TO THIS PROJECT:

___ NWP 3-MAINTENANCE (3)	___ NWP 23-CATEGORICAL EXCLUSION (3)
___ NWP 13-BANK STABILIZATION (3)	___ NWP 25-STRUCTURAL DISCHARGES (3)
___ NWP 14-LINEAR TRANSPORTATION (3,9)	___ NWP 27-STREAM/WETLAND RESTORATION (3)
___ NWP 18-MINOR DISCHARGES (3,9)	___ NWP 33-TEMP. CONST., ACCESS, DEWATERING (3)
___ NWP 19-MINOR DREDGING (3)	

(#, **) APPLICABLE SECTION 401 GENERAL CONDITIONS:
Gen.Cond.3 - CATEGORY I AND CATEGORY II BMP'S REQUIRED
Gen.Cond.9 - CATEGORY III BMP'S REQUIRED.

COMMENTS (Specifidc location where each permit identified above is applicable)

NOT APPLICABLE

BEST MANAGEMENT PRACTICES:

CATEGORY I BMP'S: (EROSION CONTROL)	
___ TEMPORARY VEGETATION	___ BLANKETS, MATTING
___ MULCH	___ SOD
___ INTERCEPTOR SWALE	___ DIVERSION DIKE
___ EROSION CONTROL COMPOST	___ MULCH FILTER BERMS AND SOCKS
<input checked="" type="checkbox"/> COMPOST FILTER BERMS AND SOCKS	___ COMPOST BLANKETS

CATEGORY II BMP'S: (SEDIMENTATION CONTROL)	
___ SILT FENCE	___ STRAW BALE DIKE
___ TRIANGULAR FILTER DIKE	___ BRUSH BERMS
___ STONE OUTLET SEDIMENT TRAPS	___ SEDIMENT BASINS
___ EROSION CONTROL COMPOST	___ MULCH FILTER BERMS AND SOCKS
<input checked="" type="checkbox"/> COMPOST FILTER BERMS AND SOCKS	___ COMPOST BLANKETS

CATEGORY III BMP'S: (POST-CONSTRUCTION TSS CONTROL)	
___ RETENTION/IRRIGATION	___ CONSTRUCTED WETLANDS
___ EXTENDED DETENTION BASIN	___ WET BASINS
___ VEGETATED FILTER STRIPS	___ VEGETATION-LINED DITCHES
___ GRASSY SWALES	___ SAND FILTER SYSTEMS
___ EROSION CONTROL COMPOST	___ MULCH FILTER BERMS AND SOCKS
___ COMPOST FILTER BERMS AND SOCKS	___ COMPOST BLANKETS

VEGETATION:

A MIX OF GRASSES AND FORBS AS SPECIFIED IN ITEM 164 SHALL BE USED TO REVEGETATE THE R.O.W.

AVOID REMOVAL OF NATIVE VEGETATION WHEN POSSIBLE. NOTIFY TxDOT DISTRICT ENVIRONMENTAL QUALITY COORDINATOR 72 HOURS BEFORE REMOVAL OF TREES GREATER THAN 6" DIAMETER, NOT DESIGNATED FOR REMOVAL ON PLANS. DO NOT REMOVE TREES NEXT TO RIVERS, CREEKS, OR STREAMS UNLESS APPROVED BY THE TxDOT DISTRICT ENVIRONMENTAL QUALITY COORDINATOR.

FLAGGING SHALL BE USED BY CONTRACTOR TO DESIGNATE TREES TO BE REMOVED. APPROVAL FOR REMOVAL OF TREES SHALL BE OBTAINED FROM DISTRICT ENVIRONMENTAL QUALITY COORDINATOR.

DISTURBED AREAS SHALL BE RESTORED AND RESEEDED IN ACCORDANCE WITH APPLICABLE SPECIFICATION ITEMS, AND/OR AS SHOWN ON SEEDING LAYOUTS IN ACCORDANCE WITH EXECUTIVE ORDER 13112 ON INVASIVE SPECIES AND THE EXECUTIVE MEMORANDUM ON BENEFICAL LANDSCAPING. LANDSCAPING SHALL BE LIMITED TO SEEDING AND REPLANTING THE ROW WITH NATIVE SPECIES OF PLANTS UNLESS OTHERWISE SPECIFIED IN THE PLANS.

COMMENTS

VEGETATION MANAGEMENT PRACTICES:

COMMENTS

KEEP VEGETATION REMOVAL TO A MINIMUM NECESSARY TO ACCOMPLISH CONSTRUCTION ACTIVITIES.

HAZARDOUS MATERIAL:

CONDUCT AND DOCUMENT ALL OF THE FOLLOWING:

CONDUCT SAFETY MEETING PRIOR TO CONSTRUCTION (MAKING WORKERS AWARE OF THE POTENTIAL HAZARDS THEY MAY ENCOUNTER);

READ AND FOLLOW THE HEALTH AND SAFETY PLAN AS SHOWN IN THE SPECIFICATIONS PRIOR TO CONSTRUCTION; AND

CONTACT/COORDINATE WITH THE APPROPRIATE AGENCY 7 TO 10 DAYS PRIOR TO CONSTRUCTION.

CONTACT AREA ENGINEER IF ANY OF THE FOLLOWING ARE DETECTED:

DEAD OR DISTRESSED VEGETATION (NOT IDENTIFIED AS NORMAL)
TRASH PILES, DRUMS, CANISTERS, BARRELS, ETC.
UNDESIRABLE SMELLS OR ODORS
EVIDENCE OF LEACHING OR SEEPAGE OF SUBSTANCES

COMMENTS

NO SPECIFIC CONCERNS. NO KNOWN HAZARDOUS MATERIAL SITES WITHIN PROJECT AREA.

___ SPECIFIC SITE DETAILS SHOWN ON
ADDITIONAL LAYOUT SHEETS
☒ NO SITE-SPECIAL DETAILS INCLUDED



ENVIRONMENTAL PERMITS,
ISSUES AND COMMITMENTS

EPIC (FW)

SHEET 1 OF 1

ORIG.: SEP. 2007	DIST.	FED. NO.	PROJECT NO.		HIGHWAY
REVISIONS:	FTW	6			CS
	COUNTY	CONT.	SECT.	JOB	SHEET
	TARRANT	0902	90	083	C8.30