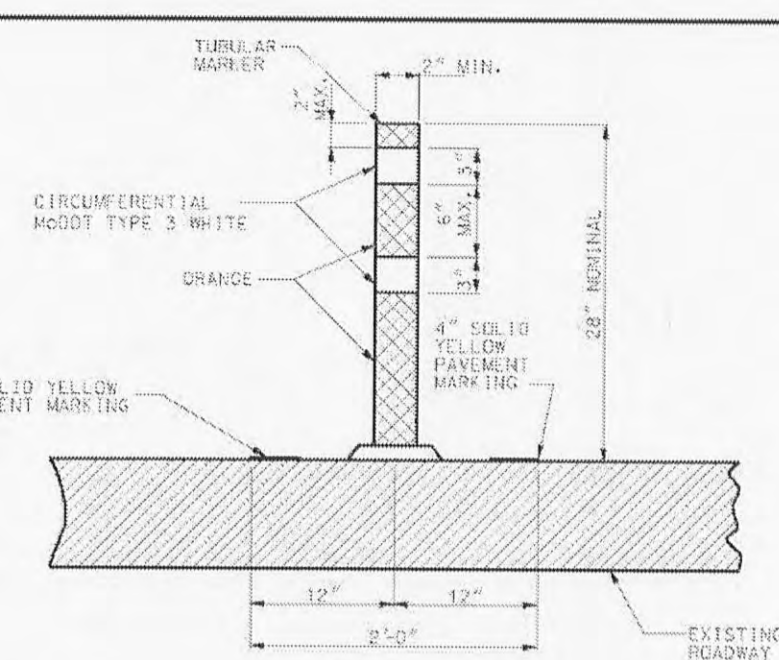


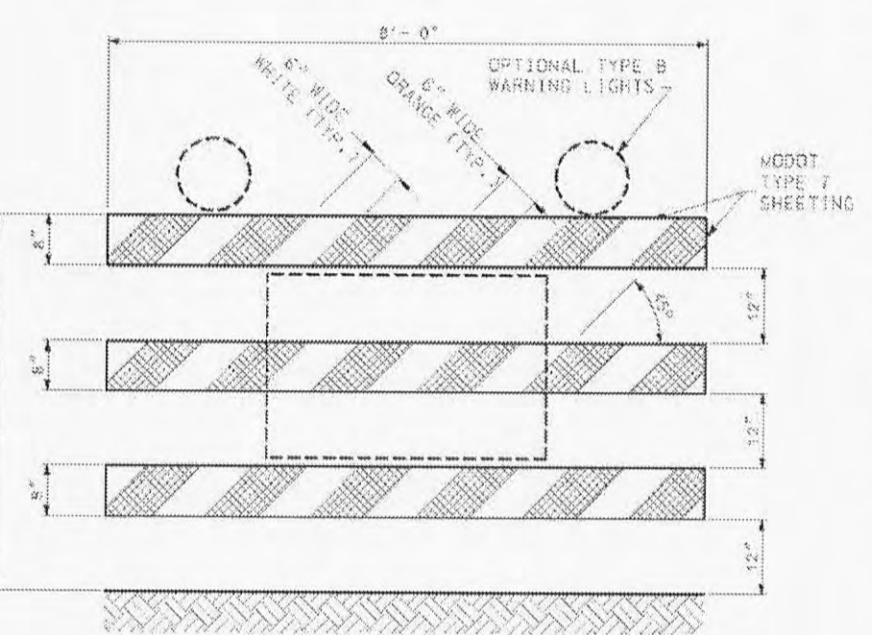
TWO LANE / TWO WAY TRAFFIC DELINEATION PLAN FOR DIVIDED HIGHWAY

IF RAISED PAVEMENT MARKERS ARE PRESENT, THE LINES SHALL BE REMOVED OR COVERED TO THE SATISFACTION OF THE ENGINEER.



SECTION A-A TUBULAR MARKER DETAIL

AN ADHESIVE, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, SHALL BE USED TO APPLY THE TUBULAR MARKER TO THE ROADWAY SURFACE. THE ADHESIVE SHALL PERMIT REMOVAL OF THE TUBULAR MARKER WITHOUT DAMAGE TO THE ROADWAY SURFACE.



TYPE III MOVABLE BARRICADE

ONE TYPE III MOVABLE BARRICADE WILL BE REQUIRED TO COMPLETELY CLOSE EACH 8' OF PAVEMENT. SHOULDERS SHALL BE INCLUDED IN THE AREA TO BE CLOSED.

SIGNS SHALL BE LIGHT WEIGHT (ROLL-UP OR PLASTIC) AND OBTAIN NO MORE THAN 50 PERCENT OF THE TOP 2 RAILS OR 33 PERCENT OF ALL THREE RAILS. SEE SIGN MOUNTING REQUIREMENTS IN TABLE A ON SHEET 1.

TYPE B WARNING LIGHTS SHALL BE LIGHT WEIGHT (3.5 LBS. OR LESS) OR HAVE BATTERY EACH MOUNTED BEHIND EACH 18-INCH RAIL AND SHALL NOT COVER ANY PORTION OF THE BARRICADED FACE.

IF SIGNS OR LIGHTS CANNOT MEET THE ABOVE REQUIREMENTS, THEY SHALL BE MOUNTED ON SEPARATE CRASH-WORTHY DEVICES, LOCATED 7 TO 10 FEET BEHIND THE BARRICADE.

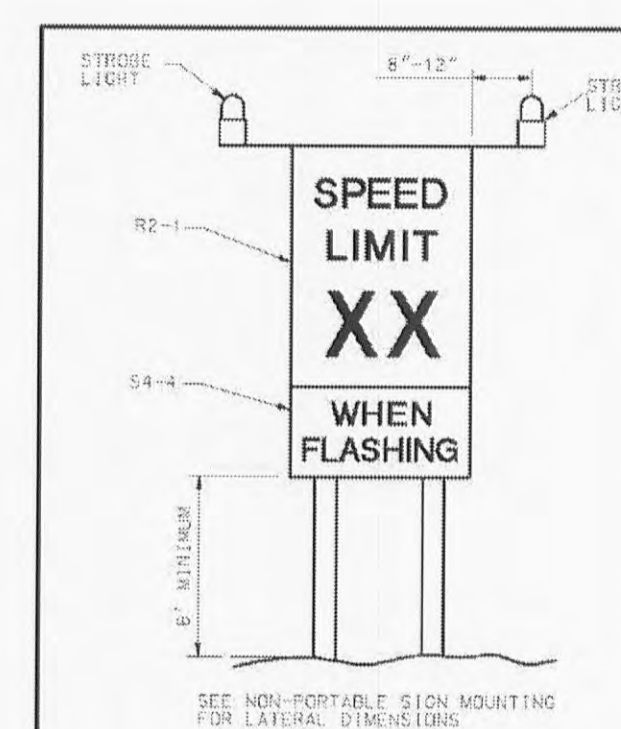
WHERE A BARRICADE ARRAY EXTENDS ACROSS A ROADWAY, THE STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN OR PASS.

WHERE BOTH RIGHT AND LEFT VEHICULAR MOVEMENTS ARE PROVIDED, THE STRIPES SHALL SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE ARRAY.

WHERE NO VEHICULAR MOVEMENTS ARE PROVIDED, THE STRIPES SHALL SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE ARRAY.

TYPE III MOVABLE BARRICADES SHALL BE ENTIRELY FREE STANDING AND PORTABLE. MARKING SHALL ONLY BE APPLIED TO THE FRONT OF EACH RAIL OR MAY BE APPLIED TO BOTH THE FRONT AND THE BACK OF EACH RAIL PROVIDED THE MARKING ON THE BACK DOES NOT CONFLICT WITH INTENDED OPPOSING TRAFFIC MOVEMENT. WHERE MARKING IS NOT PROVIDED ON THE BACKSIDE, STRIPS OF 1" WIDE MODOT TYPE 7 ORANGE SHEETING MAY BE APPLIED TO THE ENDS OF EACH RAIL TO HELP DELINEATE THE DEVICE.

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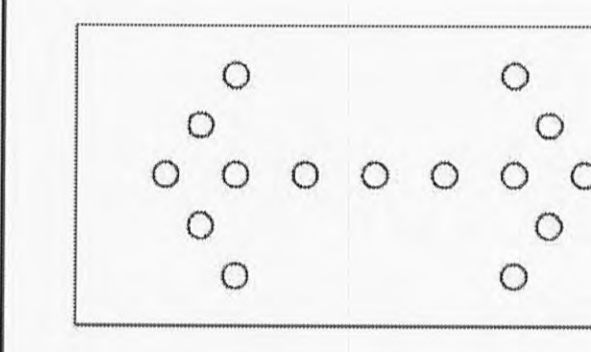


SPEED LIMIT AND STROBE LIGHT ASSEMBLY

THE ASSEMBLY SHALL ONLY BE USED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE ASSEMBLY SHALL BE COVERED OR ROTATED SO THE SIGNS ARE NOT VISIBLE TO TRAFFIC WHEN WORK IS SUSPENDED OR THE CONDITIONS REQUIRING THE SPEED REDUCTION IS NOT PRESENT FOR 48 HOURS OR MORE.

THE STROBE LIGHTS SHALL BE TURNED OFF WHEN THE SPEED LIMIT IS NOT IN EFFECT.



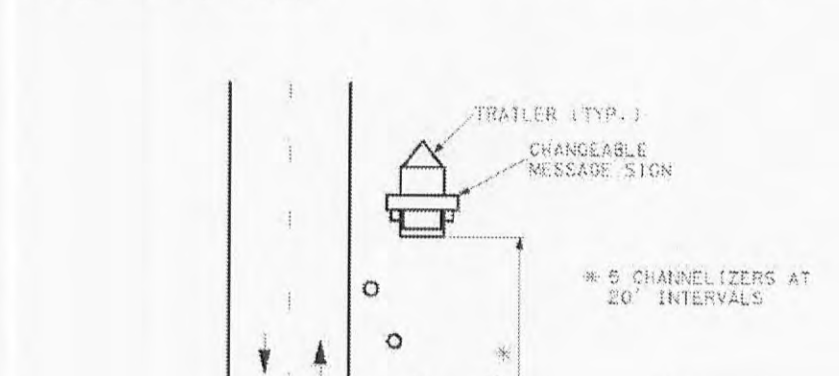
FLASHING ARROW PANEL REQUIREMENTS

PANEL MOUNTING HEIGHT SHALL BE AT LEAST 7 FEET FROM THE ROADWAY SURFACE TO THE LOWEST POINT ON THE PANEL. THE BOTTOM OF THE PANEL SHALL BE RELATIVELY LEVEL WHEN IN USE.

STROBE LIGHT REQUIREMENTS

STROBE LIGHTS SHALL BE SHIELDED SO THEY WILL NOT BE DIRECTLY VISIBLE FROM THE REAR. NO DIRECT PAYMENT WILL BE MADE FOR THE BATTERIES REQUIRED TO POWER THE STROBE LIGHTS.

AT THE CONTRACTOR'S OPTION, THE STROBE LIGHTS MAY BE CONTROLLED BY A SWITCH LOCATED ON THE SIGN OR MAY BE A STANDBY TWO CHANNEL DIGITAL TRANSMITTER AND RECEIVER UNIT. IF THE TRANSMITTER AND RECEIVER METHOD IS USED, ONE TRANSMITTER SHALL BE FURNISHED TO THE ENGINEER AT THE TIME OF INSTALLATION OF THE SPEED LIMIT ASSEMBLY. THE TRANSMITTER SHALL BE RETURNED TO THE CONTRACTOR AT THE COMPLETION OF THE PROJECT. THE TRANSMITTER AND RECEIVERS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE PROJECT IS COMPLETED. NO DIRECT PAYMENT WILL BE MADE FOR THE COST OF THE TRANSMITTER AND RECEIVER.



CHANGEABLE MESSAGE SIGN

PORTABLE WARNING LIGHTS

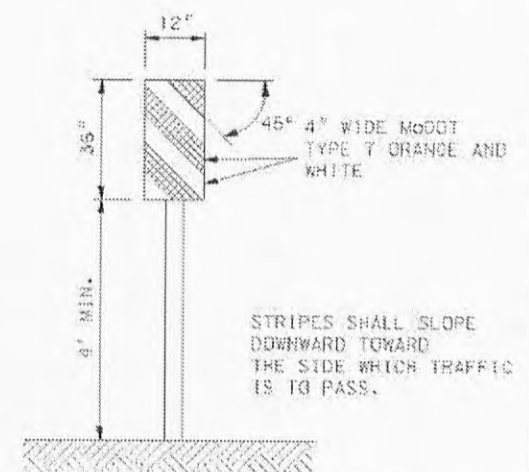
LENS DIRECTIONAL FACES: TYPE A LOW INTENSITY 1 OR 2, TYPE B HIGH INTENSITY 1, TYPE C STEADY BURN 1 OR 2. FLASHING RATE PER MINUTE: 56 TO 75, 56 TO 75, 56 TO 75. MINIMUM ON-TIME (%): 100, 100, 100. HOURS OF OPERATION: DUSK TO DAWN, 24 HRS/DAY, DUSK TO DAWN.

TYPE A AND C LIGHTS SHALL BE VISIBLE ON A CLEAR NIGHT FROM A DISTANCE OF 3000 FEET (2). TYPE B LIGHTS SHALL BE VISIBLE ON A SUNNY DAY WHEN VIEWED WITHOUT THE SUN DIRECTLY IN OR BEHIND THE DEVICE FROM A DISTANCE OF 1000 FEET (2).

(1) LENGTH OF TIME THAT INSTANTANEOUS INTENSITY IS EQUAL TO OR GREATER THAN EFFECTIVE INTENSITY.

(2) THIS VISIBILITY MUST BE MAINTAINED WITHIN A SOLID ANGLE 8° ON EACH SIDE OF THE VERTICAL AXIS, AND 5° ABOVE AND 5° BELOW THE HORIZONTAL AXIS.

PORTABLE WARNING LIGHTS SHALL BE BATTERY- OR SOLAR-POWERED.



TYPE 3 OBJECT MARKERS

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
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FOR INFORMATION ONLY

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE CURRENT EDITION OF MoDOT'S STANDARD DRAWINGS

LOCATION OF ACTIVITY (I.E., WORKERS' EQUIPMENT, MATERIALS) OR TYPE OF OPERATION	POSTED SPEED GREATER THAN 55 MPH		POSTED SPEED LESS THAN OR EQUAL TO 55 MPH	
	PROTECTED	UNPROTECTED	PROTECTED	UNPROTECTED
MULTILANE FACILITY				
BEYOND 30' OF EOTP	POSTED	POSTED	POSTED	POSTED
10' TO 30' OF EOTP	POSTED	POSTED-10	POSTED	POSTED
WITHIN 10' OF EOTP	POSTED	POSTED-10	POSTED	POSTED-10
IN TRAFFIC LANE	POSTED-10	POSTED-20 (MIN. 45 MPH)	POSTED-10	POSTED-10
HEAD-TO-HEAD	POSTED-10	POSTED-10	POSTED-10	POSTED-10
2-LANE / 2-WAY OPERATION				
BEYOND 30' OF EOTP	POSTED	POSTED	POSTED	POSTED
10' TO 30' OF EOTP	POSTED	POSTED-10 (MIN. 55 MPH)	POSTED	POSTED
WITHIN 10' OF EOTP	POSTED	POSTED-20 (MIN. 45 MPH)	POSTED	POSTED-10
1-LANE / 2-WAY OPERATION		35 MPH *		
TEMPORARY CLOSURE WITH FLAGGER		35 MPH *		

* CONDITIONS MAY ALLOW FOR SPEEDS GREATER THAN 35 MPH.

LEGEND:

"EOTP" = EDGE OF THROUGH PAVEMENT

"PROTECTED" INDICATES THAT ACTIVITY IS PHYSICALLY SHIELDED BY A CRASH-WORTHY DEVICE (TRAFFIC BARRIER, GUARDRAIL, IMPACT ATTENUATORS, ETC.).

"UNPROTECTED" INDICATES THAT ACTIVITY IS NOT SHIELDED BY A CRASH-WORTHY DEVICE. IT MAY ONLY BE DELINEATED BY CHANNELIZING DEVICES OR PAVEMENT MARKINGS.

"POSTED" INDICATES POSTED (EXISTING) SPEED PRIOR TO WORK ACTIVITY.

"POSTED-XX" INDICATES A REDUCTION IN THE SPEED LIMIT BY THE AMOUNT SHOWN IN MPH.

"MULTILANE FACILITY" OR "2-LANE/2-WAY OPERATION" INDICATES EXISTING GEOMETRICS PRIOR TO WORK ACTIVITY.

WORK ZONE SPEED LIMIT

GENERAL NOTES:

REDUCED SPEEDS SHALL NOT BE BELOW 45 MPH EXCEPT WHEN LOCAL ORDINANCE PROVIDES FOR A LOWER SPEED, THE LOWER SPEED SHALL BE USED WHEN APPLICABLE.

ON DIVIDED HIGHWAYS, THE REDUCED SPEED IS APPLICABLE TO THE AFFECTED DIRECTION OF TRAVEL ONLY.

IF A SPEED REDUCTION IS USED, EXISTING SPEED LIMIT SIGNS WITHIN THE WORK ZONE SHALL BE COVERED OR REMOVED. SPEED LIMIT SIGNS INDICATING THE NORMAL SPEED LIMIT SHALL BE INSTALLED AT THE END OF THE WORK ZONE, PROVIDED NO FURTHER WORK ZONES WILL BE ENCOUNTERED WITHIN THE NEXT 1/2 MILE.

IF THERE ARE GEOMETRICS IN THE WORK ZONE THAT REQUIRE A LOWER SPEED THAN THE SPEED INDICATED IN THE CHART (I.E., TEMPORARY BYPASS, NARROW LANES, ETC.), APPROPRIATE WARNING SIGNS WITH ADVISORY SPEED PLATES SHALL BE USED TO ADVISE OF THIS SPECIALIZED SITUATION.

TEMPORARY SPEED LIMIT SIGNS AND REDUCED SPEED AHEAD SIGNS SHALL BE COVERED OR REMOVED WHEN THE CONDITIONS REQUIRING REDUCED SPEEDS DO NOT EXIST.

SPECIAL ACTIVITY WITHIN A WORK ZONE MAY REQUIRE A LOWER SPEED LIMIT THAN THE GENERAL WORK ZONE SPEED LIMIT. THE FURTHER REDUCED SPEED LIMIT SHALL BE EFFECTIVE ONLY FOR THE DURATION OF THAT ACTIVITY AND ONLY FOR THE SPECIFIC AREA OF THAT ACTIVITY.

FOR SPEED REDUCTIONS GREATER THAN 20 MPH, THE SPEED LIMIT SHOULD BE REDUCED IN 2 STAGES.

DEVIATIONS FROM THIS CHART SHALL BE DOCUMENTED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
TEMPORARY TRAFFIC CONTROL DEVICES WORK ZONE SPEED LIMITS			
DATE: _____	EFFECTIVE 08-01-2007	616.10AH	5 B

WARNING SIGNS									
SIGN	SIZE (HxL)	AREA (SQ. FT.)	COLOR	REFL. BACK	SHEETING	DESCRIPTION			
SPECIAL	36x36	9.00	BF	OR	MODOT FL. OR PRESH OIL/CLOSE GRAVEL	(3)			
F05-2	48x36	12.00	BK	OR	MODOT FL. OR EXIT OPEN				
F06-20	48x36	12.00	BF	OR	MODOT FL. OR TEXT CLOSED				
W01-1L	48x48	16.00	BK	OR	MODOT FL. OR TURN (SYMBOL LEFT ARROW)				
W01-1R	48x48	16.00	BK	OR	MODOT FL. OR TURN (SYMBOL RIGHT ARROW)				
W01-2L	48x48	16.00	BK	OR	MODOT FL. OR CURVE (SYMBOL LEFT ARROW)				
W01-2R	48x48	16.00	BK	OR	MODOT FL. OR CURVE (SYMBOL RIGHT ARROW)				
W01-3L	48x48	16.00	BK	OR	MODOT FL. OR REVERSE TURN (SYMBOL LEFT ARROW)				
W01-3R	48x48	16.00	BK	OR	MODOT FL. OR REVERSE TURN (SYMBOL RIGHT ARROW)				
W01-4L	48x48	16.00	BK	OR	MODOT FL. OR DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)	(2)			
W01-4R	48x48	16.00	BK	OR	MODOT FL. OR DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)	(2)			
W01-4SL	48x48	16.00	BK	OR	MODOT FL. OR TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)	(2)			
W01-4SR	48x48	16.00	BK	OR	MODOT FL. OR TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)	(2)			
W01-6	48x32	8.00	BK	OR	MODOT FL. OR HORIZONTAL ARROW (SYMBOL)	(1)			
W01-6R	48x32	8.00	BK	OR	MODOT FL. OR HORIZONTAL ARROW (SYMBOL ON BARRICADE)	(1)			
W01-7	48x24	6.00	BK	OR	MODOT FL. OR DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)				
W01-7R	48x24	6.00	BK	OR	MODOT FL. OR DOUBLE HEAD HORIZONTAL ARROW (SYMBOL ON BARRICADE)	(1)			
W01-8	48x24	6.00	BK	OR	MODOT FL. OR CHEVRON (SYMBOL)				
W01-8R	48x24	6.00	BK	OR	MODOT FL. OR CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)				
W03-1a	48x48	16.00	BK	OR	MODOT FL. OR STOP AHEAD (SYMBOL)				
W03-2a	48x48	16.00	BK	OR	MODOT FL. OR FIELD AHEAD (SYMBOL)				
W03-3	48x48	16.00	BK	OR	MODOT FL. OR SIGNAL AHEAD (SYMBOL)				
W03-4	48x48	16.00	BK	OR	MODOT FL. OR BE PREPARED TO STOP				
W03-5	48x48	16.00	BK	OR	MODOT FL. OR REDUCE SPEED AHEAD (SYMBOL)				
W04-1L	48x48	16.00	BK	OR	MODOT FL. OR MERGE (SYMBOL FROM LEFT)				
W04-1R	48x48	16.00	BK	OR	MODOT FL. OR MERGE (SYMBOL FROM RIGHT)				
W05-1	48x48	16.00	BK	OR	MODOT FL. OR ROAD/BRIDGE/RAMP NARROWS	(4)			
W05-2	48x48	16.00	BK	OR	MODOT FL. OR ONE LANE BRIDGE				
W05-3	48x48	16.00	BK	OR	MODOT FL. OR NARROW LANES	(3)			
W06-1	48x48	16.00	BK	OR	MODOT FL. OR DIVIDED HIGHWAY (SYMBOL)				
W06-2	48x48	16.00	BK	OR	MODOT FL. OR DIVIDED HIGHWAY ENDS (SYMBOL)				
W06-3	48x48	16.00	BK	OR	MODOT FL. OR TWO WAY TRAFFIC (SYMBOL)				
W07-3a	30x24	5.00	BK	OR	MODOT FL. OR NEXT 3/4 MILE (PLAQUE)				
W08-1	48x48	16.00	BK	OR	MODOT FL. OR BUMP				
W08-2	48x48	16.00	BK	OR	MODOT FL. OR DIP				
W08-3	48x48	16.00	BK	OR	MODOT FL. OR PAVEMENT ENDS				
W08-4	48x48	16.00	BF	OR	MODOT FL. OR SOFT SHOULDER				
W08-5	48x48	16.00	BK	OR	MODOT FL. OR SLIPPERY WHEN WET (SYMBOL)				
W08-6	48x48	16.00	BK	OR	MODOT FL. OR TRUCK CROSSING				
W08-6a	48x48	16.00	BK	OR	MODOT FL. OR TRUCK ENTRANCE	(2)			
W08-7	36x36	9.00	BK	OR	MODOT FL. OR LOOSE GRAVEL				
W08-8	48x48	16.00	BK	OR	MODOT FL. OR LOW SHOULDER				
W08-9	48x48	16.00	BK	OR	MODOT FL. OR SHOULDER DROP-OFF				
W08-11	48x48	16.00	BK	OR	MODOT FL. OR UNEVEN LANES				
W08-12	36x36	9.00	BK	OR	MODOT FL. OR RIG CENTER STRIPE				
W10-1	48x48	16.00	BK	OR	MODOT TYPE 3 RAILROAD CROSSING				
W12-1	24x24	4.00	BF	OR	MODOT FL. OR DOUBLE DOWN ARROW (SYMBOL)				
W12-2	48x48	16.00	BK	OR	MODOT FL. OR LOW CLEARANCE (SYMBOL)				
W12-2a	24x18	3.00	BF	OR	MODOT FL. OR LOW CLEARANCE (PLAQUE)	(1)			
W12-30a-D	18x24	2.00	BF	OR	MODOT FL. OR HIGHWAY LOW CLEARANCE (FEET AND INCHES)	(1)			
SPECIAL	1200x60	60.00	BK	OR	MODOT FL. OR LOW CLEARANCE XX FT XX IN XX MILES AHEAD	(1)			
W16-1	30x24	6.00	BK	OR	MODOT FL. OR WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD	(1)			
W16-2	30x24	6.00	BK	OR	MODOT FL. OR XXX FEET (PLAQUE)				
W16-3	30x24	6.00	BK	OR	MODOT FL. OR R MILE (PLAQUE)				
W170-1	48x48	16.00	BK	OR	MODOT FL. OR ROAD/BRIDGE/RAMP WORK AHEAD	(4)			
W170-2	48x48	16.00	BK	OR	MODOT FL. OR DETOUR AHEAD				
W170-3	48x48	16.00	BK	OR	MODOT FL. OR ROAD CLOSED AHEAD				
W170-4	48x48	16.00	BK	OR	MODOT FL. OR ONE LANE ROAD AHEAD				
W170-5	48x48	16.00	BK	OR	MODOT FL. OR RIGHT/LEFT/LEFT LANE CLOSED AHEAD	(4)			

- SIGN DEFINITION, ARROW, BORDER AND SPACING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS BY THE U.S. DEPARTMENT OF TRANSPORTATION - FHWA."
- REFER TO THE LATEST EDITION OF MUTCD PART 11 BY THE U.S. DEPARTMENT OF TRANSPORTATION - FHWA FOR SIGN DEFINITION, ARROW, BORDER AND SPACING. SIGN CONTOUR BY THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS BY THE U.S. DEPARTMENT OF TRANSPORTATION - FHWA."
- ARROW, BORDER AND SPACING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS BY THE U.S. DEPARTMENT OF TRANSPORTATION - FHWA."
- USE OF A SUPPLEMENTAL PLATE FOR LINE 1 IS ACCEPTABLE.
- PLATE AND APPLICABLE REGULATORY SIGN MAY BE MANUFACTURED AS ONE SIGN.

GENERAL NOTES:

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS BY THE U.S. DEPARTMENT OF TRANSPORTATION - FHWA, UNLESS SPECIFIED OTHERWISE.

SIGN DIMENSIONS SHOWN ARE MINIMUM. NO ADDITIONAL PAYMENT WILL BE MADE IF CONTRACTORS USE LARGER SIGNS.

NO ADDITIONAL PAYMENT WILL BE MADE FOR PLATES. ALL PLATES SHALL HAVE A BORDER. PLATES SHALL NOT HAVE A BORDER.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
TEMPORARY TRAFFIC CONTROL DEVICES WARNING SIGNS			
DATE: _____	EFFECTIVE 08-01-2007	616.10AH	6 B

SHEET NO.

15

Job No. 157-07

Date: 1/16/08

Scale: NTS

Drawn by: BEC

Design by: BEC

Approved by: CMB

File Name: PLN

REVISIONS	