

STATE OF NEBRASKA  
DEPARTMENT OF ROADS

PLANS FOR CONSTRUCTION

N-23

LOOMIS TO HOLDREGE  
PHELPS COUNTY

PROJECT NO.	SHEET NO.
AFE-G008	1
▲ CONTRACT ID.	M7023
▲ CONTRACT ID.	
■ CONTRACT ID.	

INDEX OF SHEETS

- SHEET NO.
- 1 TITLE PAGE
  - 2-5 SUMMARY OF QUANTITIES & TYPICAL CROSS SECTION
  - 3 TRAFFIC CONTROL PLAN--VEHICLE SIGNING FOR PAINT STRIPING
  - 4 TEMPORARY PAVEMENT MARKING PLAN
  - 5 TYPICAL PAVEMENT MARKING PLAN--5" PAVEMENT MARKING

STANDARD PLANS

- 920-R6 (3 SHEETS) TRAFFIC CONTROL, CONSTRUCTION AND MAINTENANCE
- 922-R9 (2 SHEETS) TRAFFIC CONTROL FOR ASPHALT SURFACING

THE 2007 EDITION OF THE NEBRASKA STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS APPLY TO THIS PROJECT.

THE WORK ON THIS PROJECT CONSISTS OF GROUPS

8-SPECIALTY

▲ GROUPS 8 ARE INCLUDED IN THE LETTING OF JUNE 26, 2014

▲ GROUPS ARE INCLUDED IN THE LETTING OF

■ GROUPS ARE INCLUDED IN THE LETTING OF

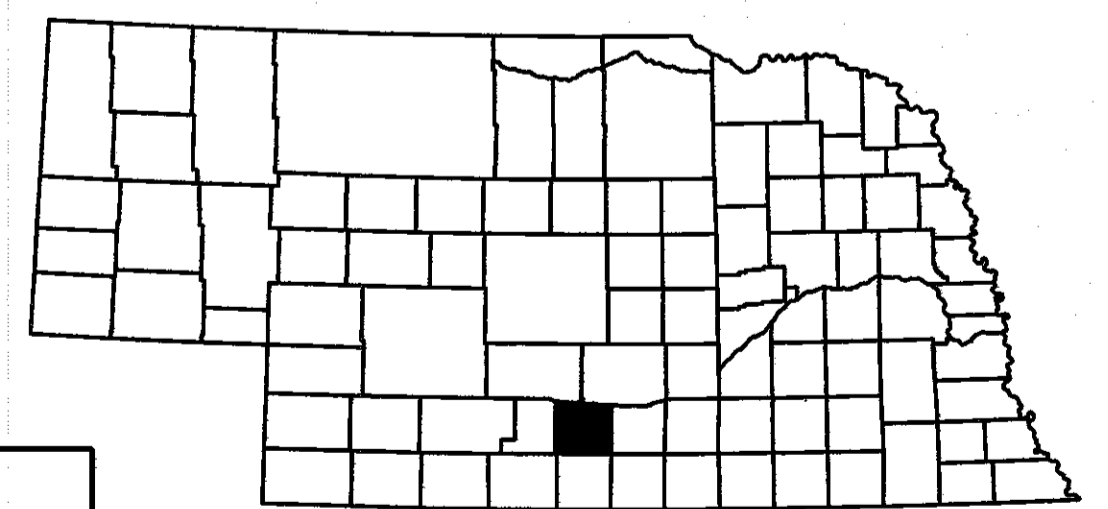
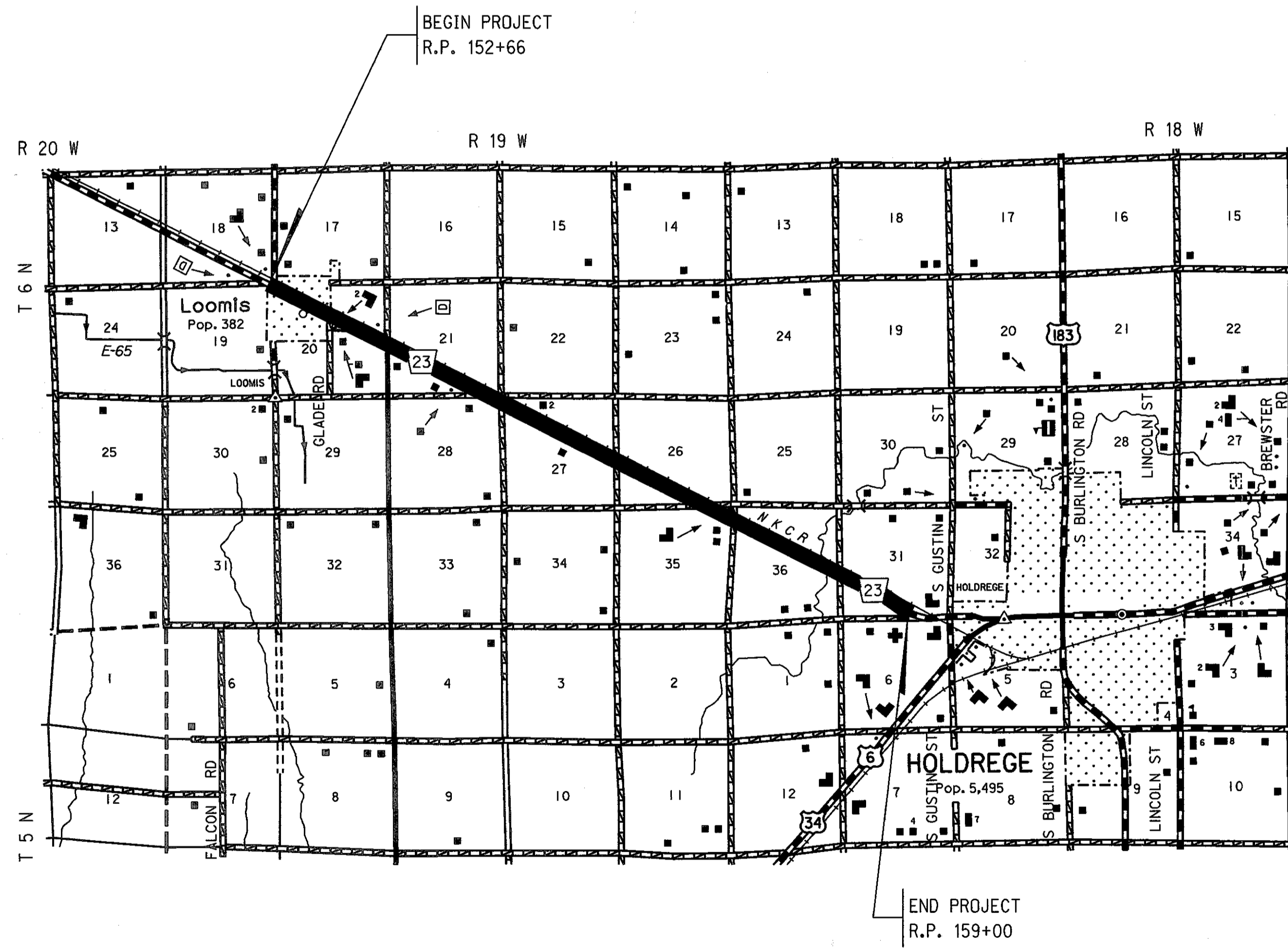
DESIGN DESIGNATION

MAINTENANCE

TRAFFIC

YEAR: 2012

ADT: 2,250

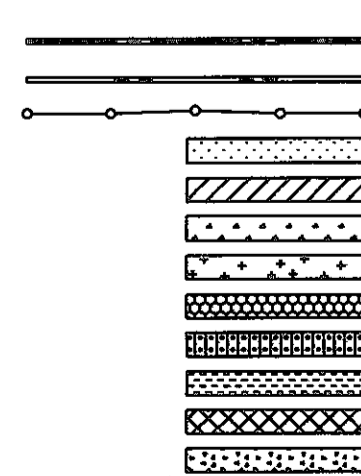


CONVENTIONAL SIGNS

- FENCE R.O.W. OR WIRE
- GUARDRAIL
- TRAVELED WAY
- DIKE
- CULVERT
- POWER POLE
- TELEPHONE POLE
- MAILBOX
- RAILROAD TRACKS
- MARSH
- TREE - CONIFEROUS
- TREE - DECIDUOUS

R.O.W. LEGEND

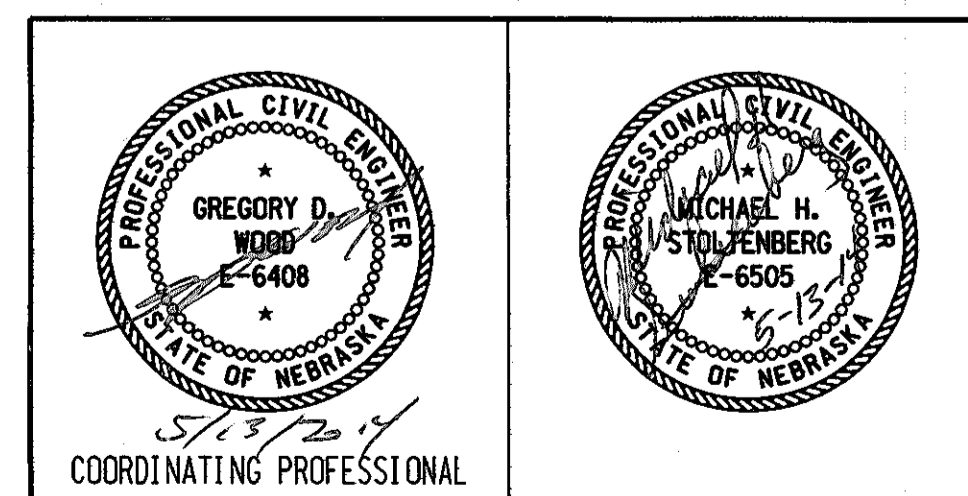
- NEW CONTROLLED ACCESS
- PREVIOUS CONTROLLED ACCESS
- LIMITS OF CONSTRUCTION
- PREVIOUS R.O.W.
- NEW R.O.W.
- EXISTING PERMANENT EASEMENT
- TEMPORARY EASEMENT
- EXCESS TAKING
- PERMANENT EASEMENT
- EXISTING RAILROAD EASEMENT
- NEW RAILROAD PERMANENT EASEMENT
- NEW RAILROAD TEMPORARY EASEMENT



REFERENCE POST NO. 152+66 TO REFERENCE POST NO. 159+00

EXCEPTIONS: FROM STA. TO STA.

TOTAL NET LENGTH OF PROJECT: 33,475.20 FEET 6.340 MILES



CONSTRUCTION DIVISION

Computer: DRCONSTRUCT10

User: dor17005

Date: 22-APR-2014 15:02

File: m7023psheet1.dgn  
Scale: 1:100

PROJECT NO.	SHEET NO.
AFE-G008	2-5

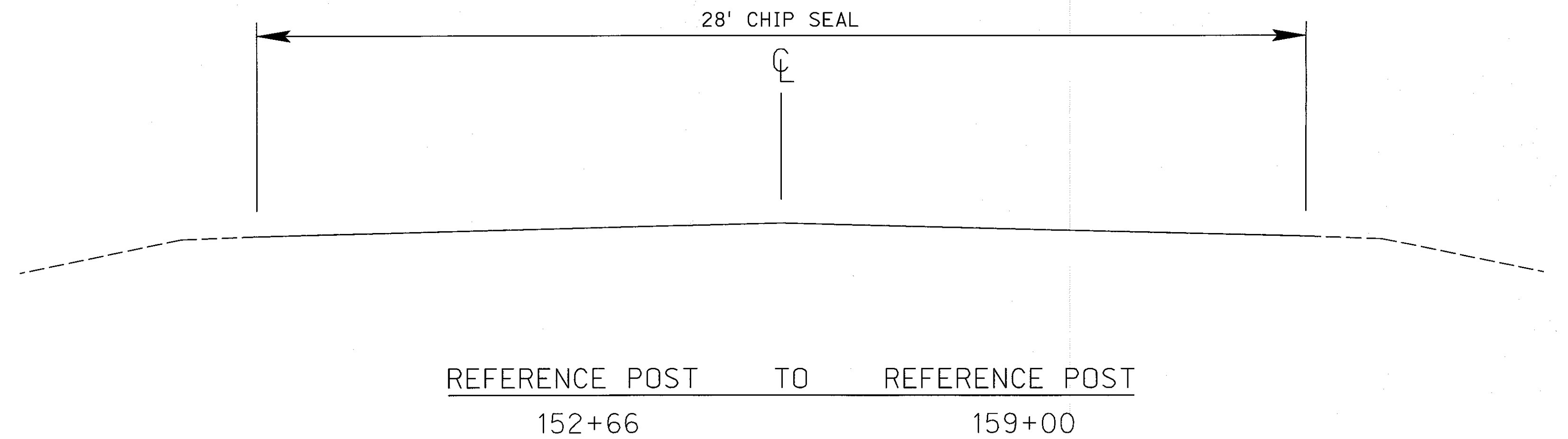
CONTRACT ID. M7023

# SUMMARY OF QUANTITIES

# TYPICAL CROSS SECTION

## SPECIALTY ITEMS GROUP 8

ITEM	QUANTITY	UNITS
BARRICADE, TYPE II	775.000	BDAY
BARRICADE, TYPE III	24.000	BDAY
SIGN DAY	378.000	EACH
TEMPORARY BROKEN LINES	335.000	STA
FLAGGING	10.000	DAY
FURNISHING AND OPERATING PILOT VEHICLE	5.000	DAY
MOBILIZATION	1.000	LS
5" PERMANENT PAVEMENT MARKING PAINT	80,500.000	LF
CHIP SEAL AGGREGATE	930.000	CY
CHIP SEAL EMULSIFIED ASPHALT	37,500.000	GAL



### TYPES OF ASPHALTIC OIL TO BE USED

CHIP SEAL: CRS-2P



CONSTRUCTION DIVISION

Computer: DRCONSTRUCTIO

User: dor17005

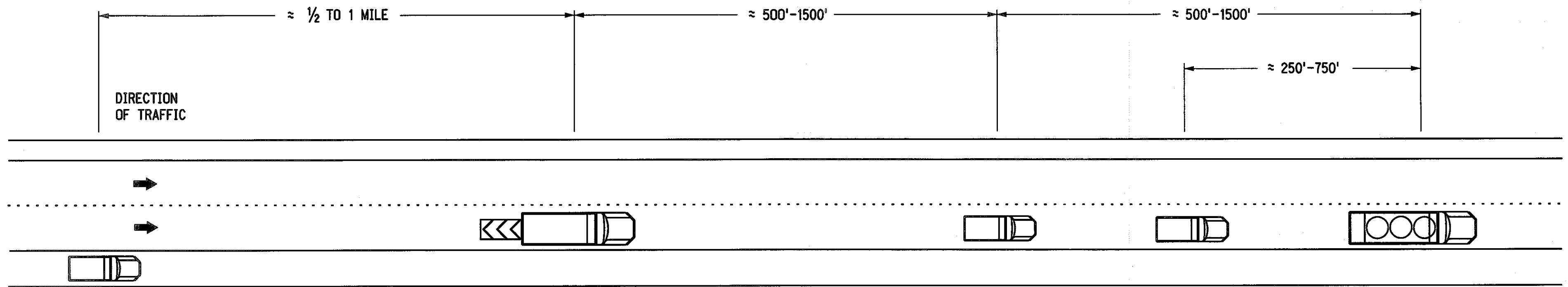
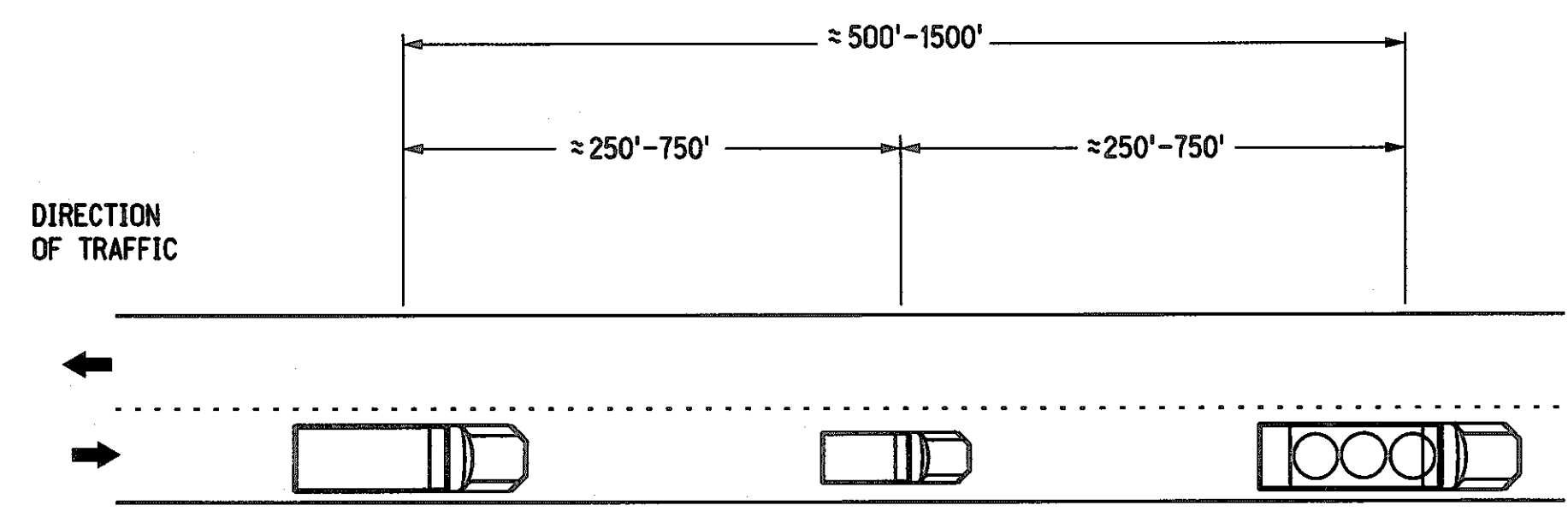
Date: 13-MAY-2014 11:57

File: m7023psset11e.dgn  
Scale: 1:100

# SIGNING PLAN

## STRIPING ON RURAL TWO-LANE TWO-WAY ROADS

## STRIPING ON RURAL MULTI-LANE ROADWAY



REAR VEHICLE WITH 2 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT (TMA OPTIONAL)

OPTIONAL VEHICLE WITH 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

STRIPING VEHICLE WITH 4 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

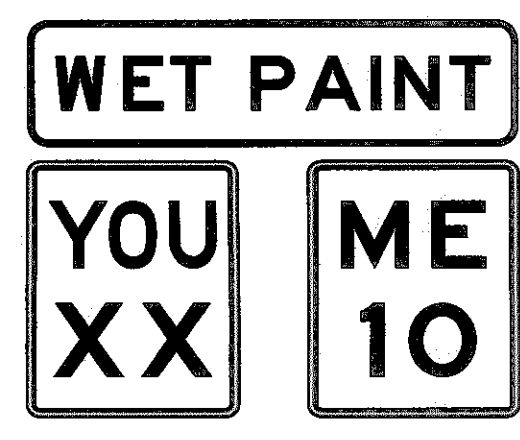
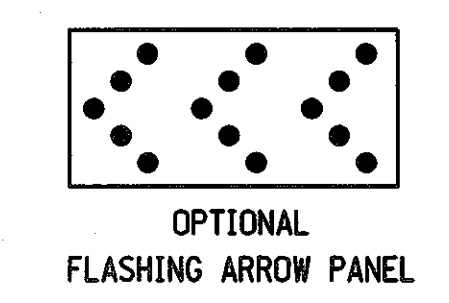
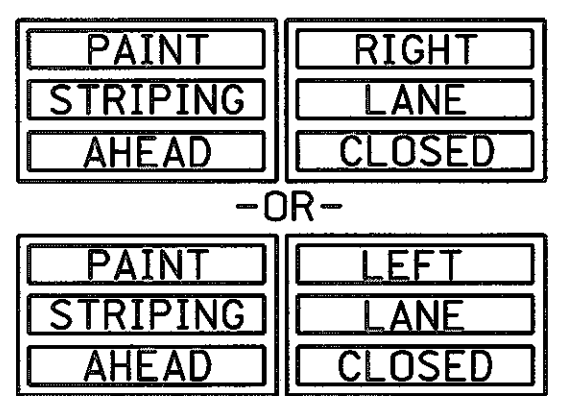
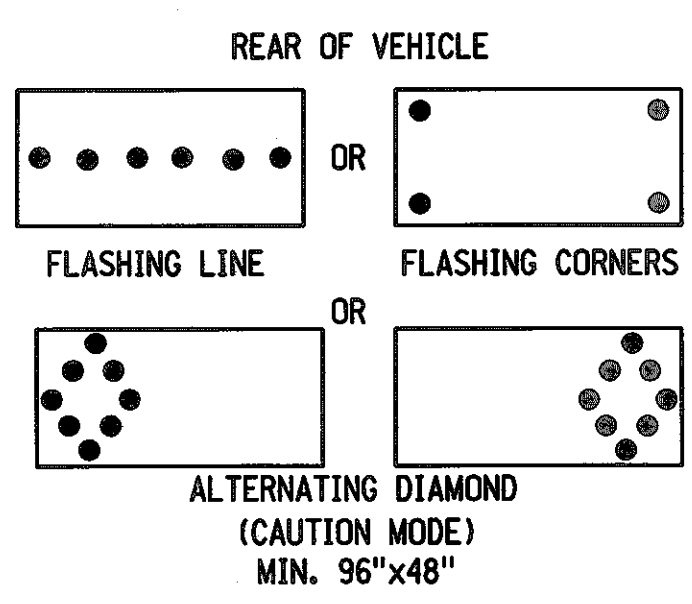
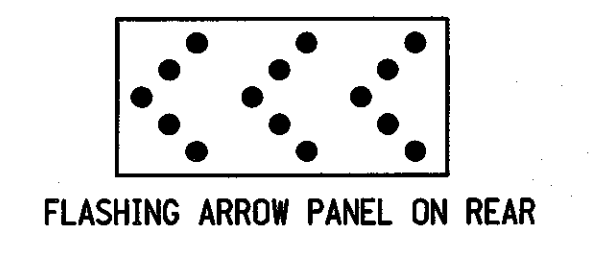
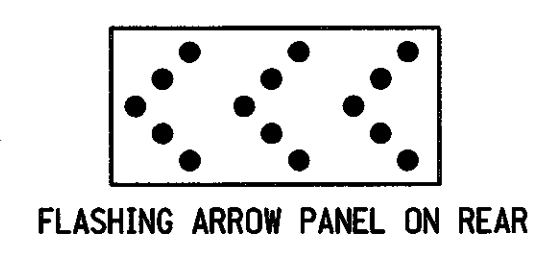
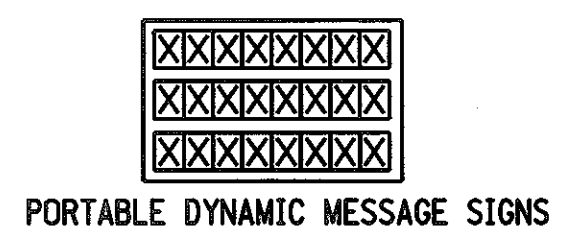
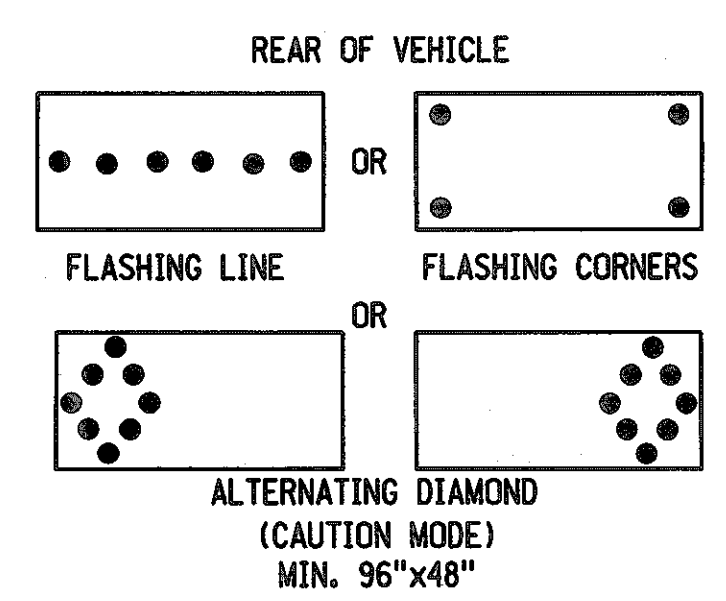
WARNING VEHICLE WITH 2 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

REAR VEHICLE W/TMA WITH 2 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

TRAILING VEHICLE WITH 2-360° BEACONS OR APPROVED MINI-BAR LIGHT AND OPTIONAL DRONE RADAR OR CB ALERT WARNING RADIO

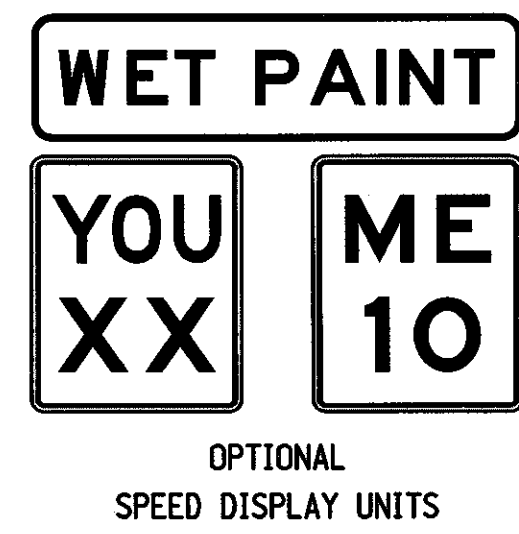
OPTIONAL VEHICLE WITH 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

STRIPING VEHICLE WITH 4 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT



### TRUCK MOUNTED ATTENUATOR SYSTEM:

1. THE CONTACTOR SHALL FURNISH A FEDERALLY APPROVED TRUCK MOUNTED ATTENUATOR SYSTEM, MOUNTED ON A MINIMUM 16,000 POUND TRUCK. THE TRUCK SHALL BE EQUIPPED WITH 60" X 30" FLASHING ARROW PANEL, SECURELY MOUNTED ON THE TRUCK. THE TMA SYSTEM SHALL BE LOCATED IN THE FIELD AS REQUIRED BY THE MANUFACTURER. A COMPLETE SET OF REPLACEMENT MODULES SHALL BE AVAILABLE NEAR THE PROJECT SITE IN THE EVENT OF DAMAGE TO THE INSTALLED TMA. DAMAGED TMA'S SHALL BE REMOVED FROM THE ROADWAY AND PROJECT WORK STOPPED UNTIL REPAIRS TO THE UNIT HAVE BEEN COMPLETED.
2. THE TRUCK MOUNTED ATTENUATOR SHALL BE AN NCHRP 350 OR MASH TEST LEVEL 3 APPROVED TMA FOR 100 km PER HOUR (60 MPH).
3. THE TRUCK SHALL BE A 16,000 TO 35,000 POUND (GVW) VEHICLE AS REQUIRED BY THE TMA MANUFACTURER.
4. THE FLASHING ARROW PANEL SHALL BE SECURELY MOUNTED AS HIGH AS PRACTICABLE ON THE VEHICLE. THE ARROW PANEL SHALL NOT COME LOOSE UPON IMPACT TO THE TMA.



### RURAL MULTI-LANE NOTES:

1. WHEN WORKING ON INSIDE (LEFT) LANES VEHICLES SHALL MOVE TO SIMILAR POSITIONS IN THAT LANE.
2. WARNING VEHICLE WILL REMAIN ON RIGHT SHOULDER WHEN AN 8' OR WIDER PAVED INSIDE (LEFT) SHOULDER DOES NOT EXIST.
3. REAR VEHICLE WITH TMA SHALL NOT BE SUPPLY VEHICLE UNLESS PAINT IS UNLOADED.

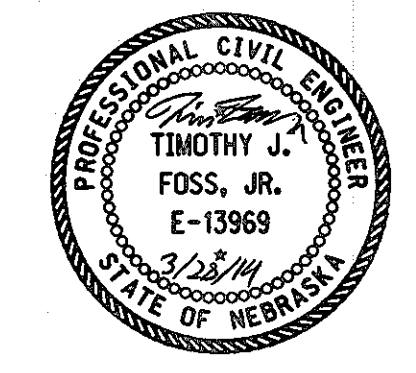
### GENERAL NOTES:

- REAR VEHICLE SHALL BE PLACED IN ADVANCE OF HORIZONTAL OR VERTICAL CURVES TO PROVIDE ADVANCE WARNING FOR WORK OPERATIONS HIDDEN BY CURVES.
- VEHICLE SPACING MAY VARY DEPENDING ON RATE OF APPLICATION, SPEED, AND DRYING TIME.
- WHEN OPTIONAL CB ALERT WARNING RADIOS ARE USED THE TRANSMITTER MUST REMAIN WITH ONE OF THE VEHICLES IN THE STRIPING TRAIN.

### RURAL TWO-LANE NOTES:

1. CAUTION MODE ON STRIPING UNIT AND REAR VEHICLE SHALL BE ALTERNATING DIAMOND OR THE FLASHING 4 CORNER LIGHTS IF THE DIAMOND MODE IS NOT AVAILABLE.

NEBRASKA DEPARTMENT OF ROADS TRAFFIC ENGINEERING DIVISION			
TRAFFIC CONTROL PLAN			
DESIGNED	TJF	VEHICLE SIGNING FOR PAINT STRIPING	
REVIEWED			
APPROVED	DATE DRAWN	TRAFFIC ENGINEER	DATE
	12/12		



TRAFFIC ENGINEERING DIVISION

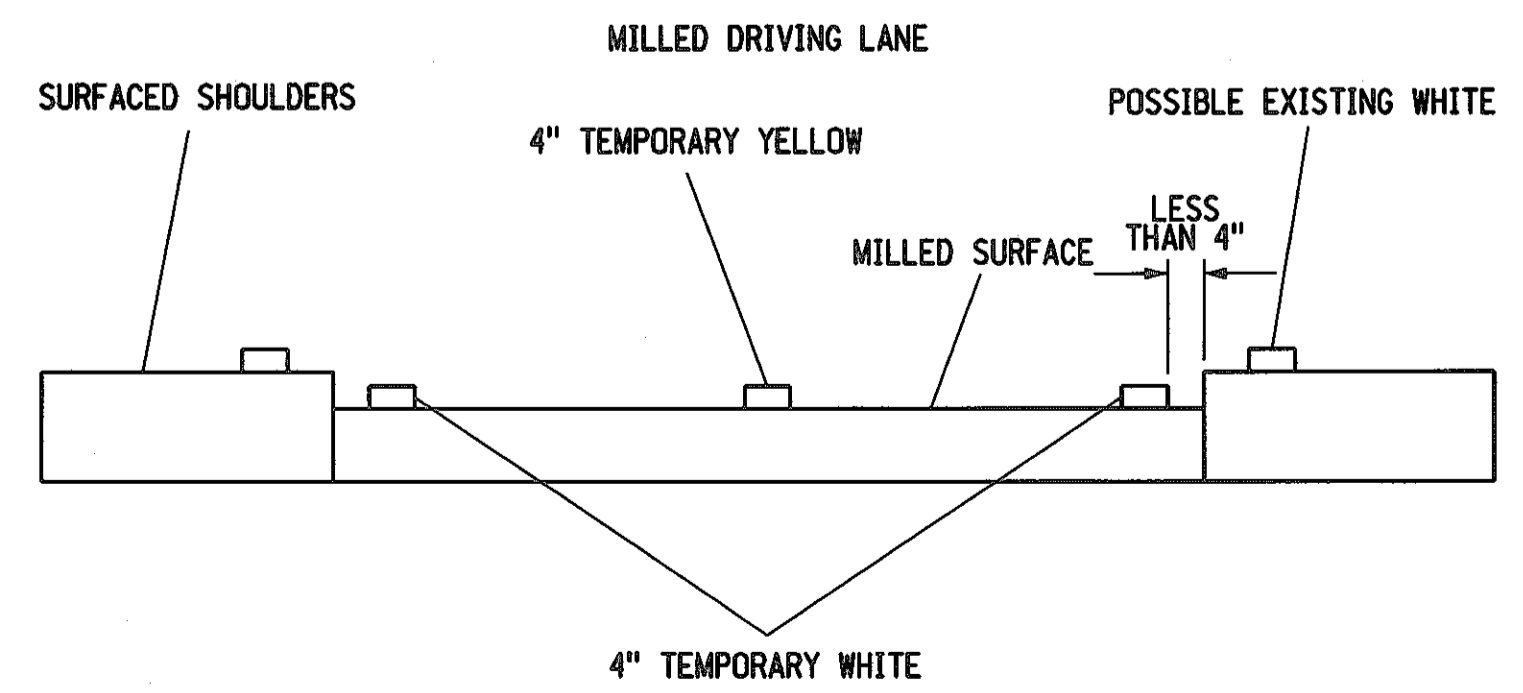
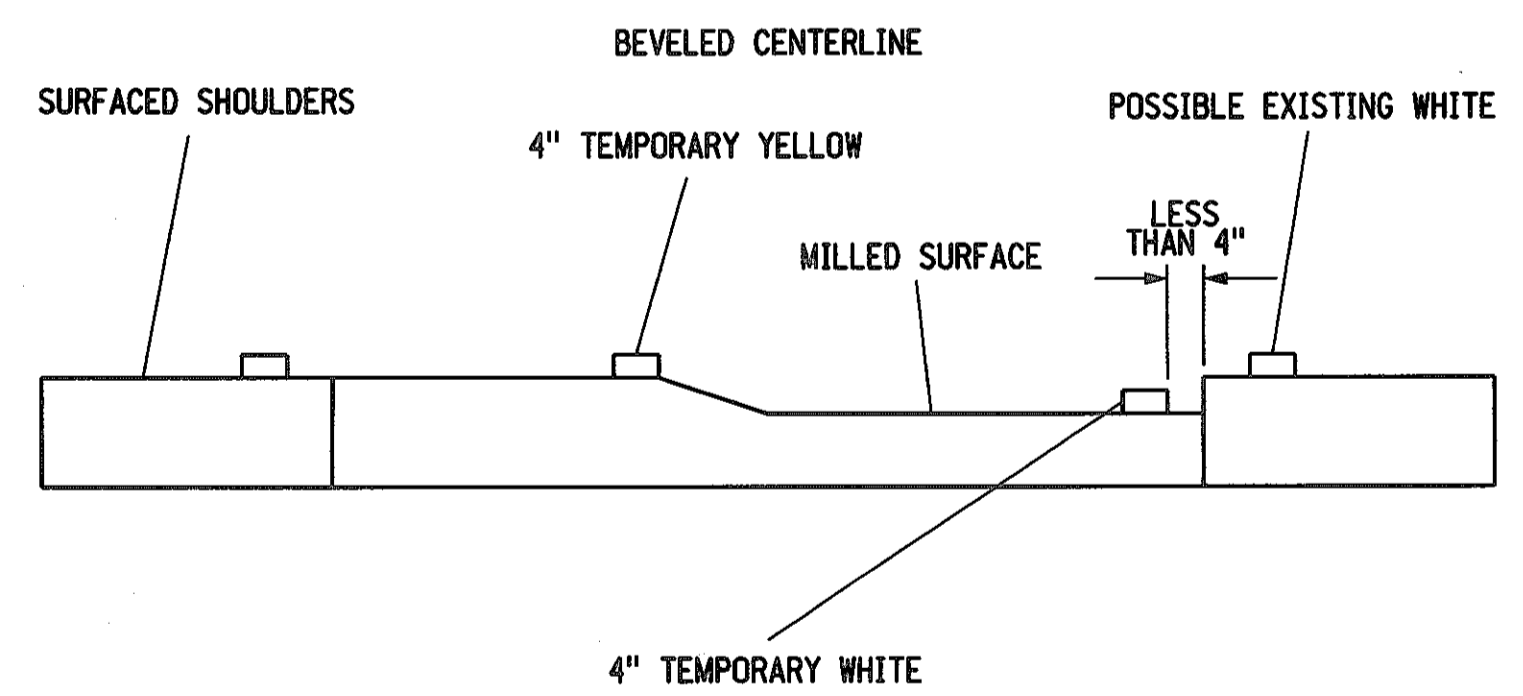
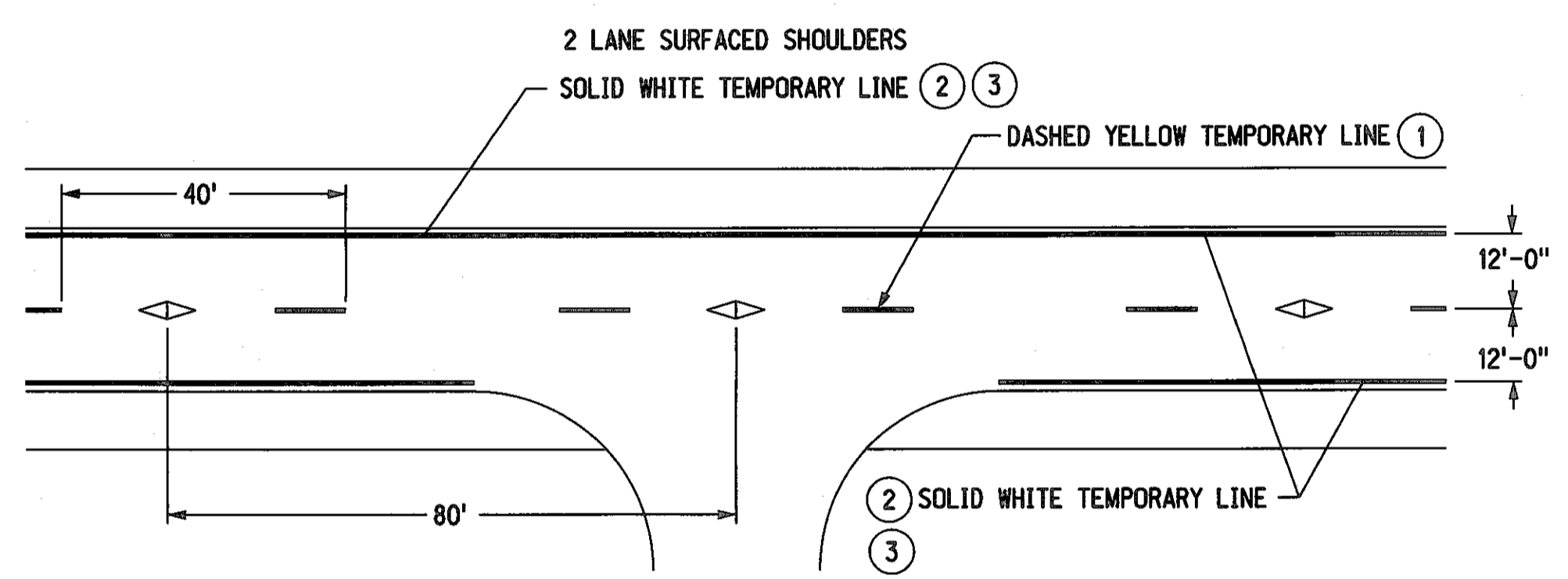
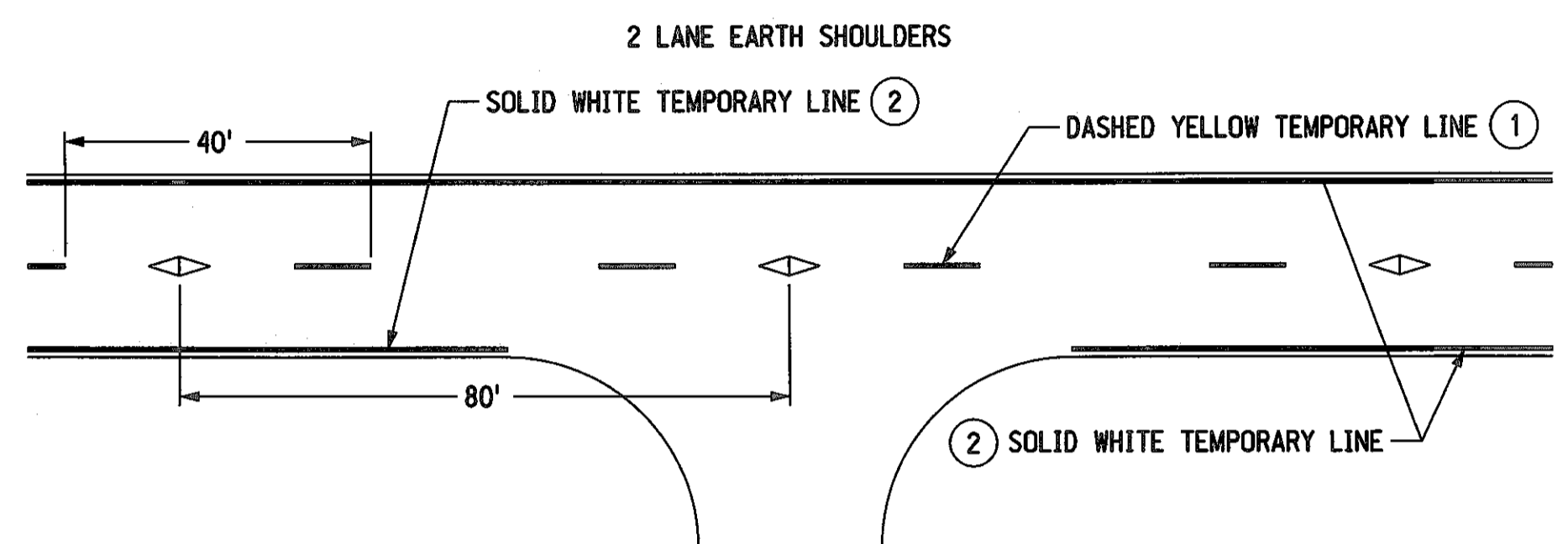
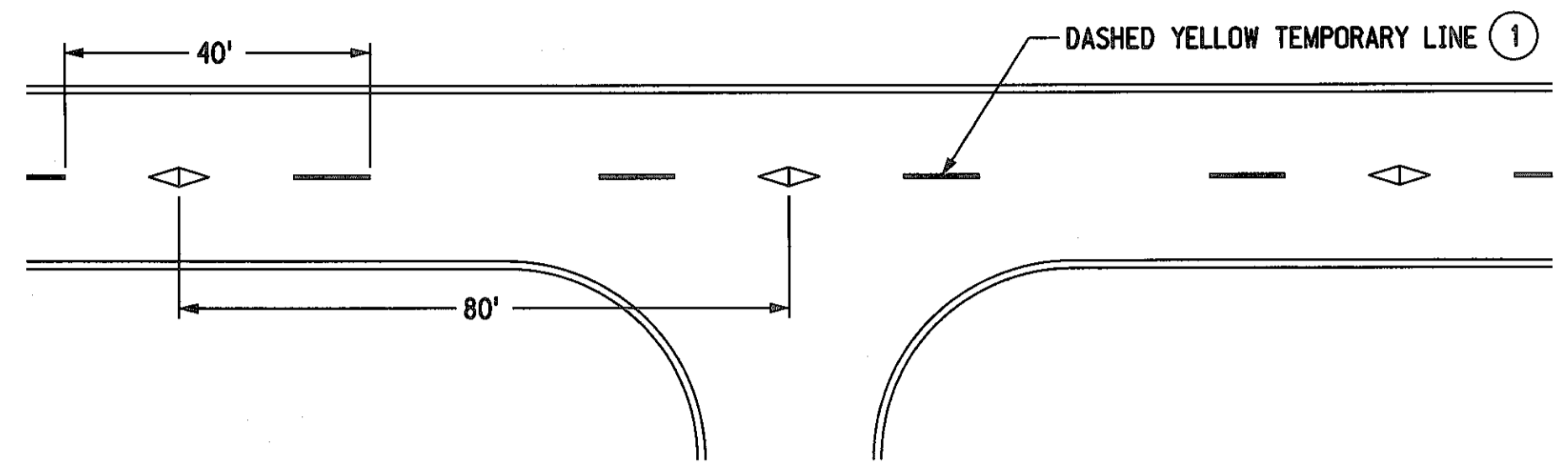
Computer: DRTRAFFIC46

User: DOR23027

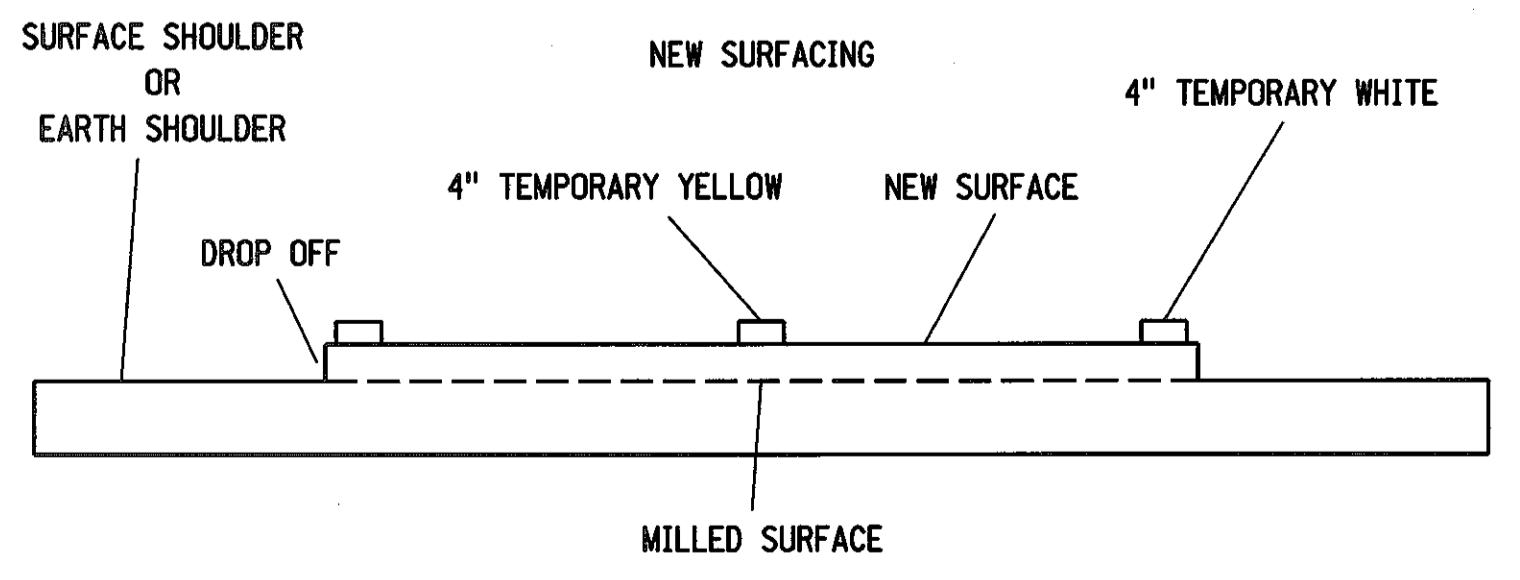
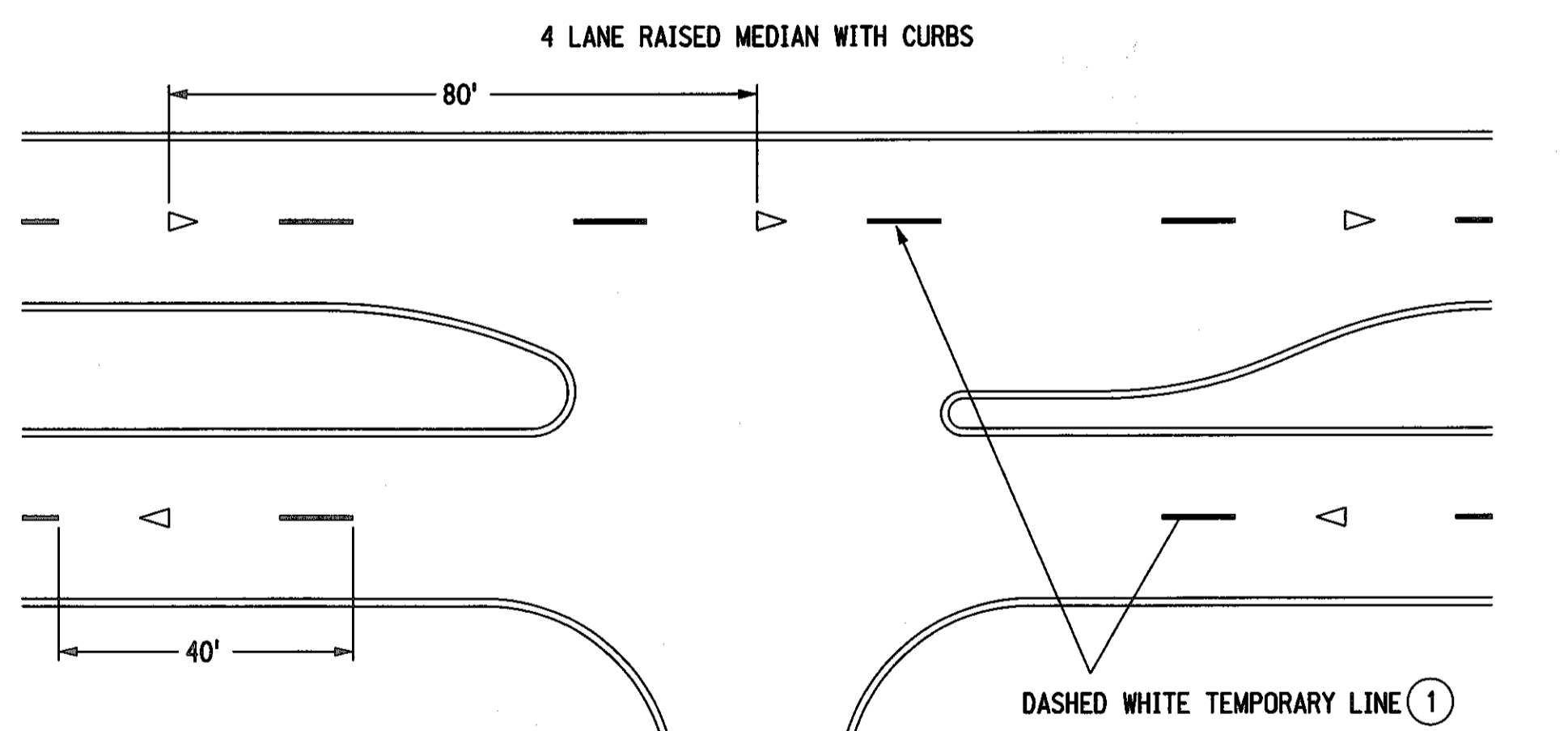
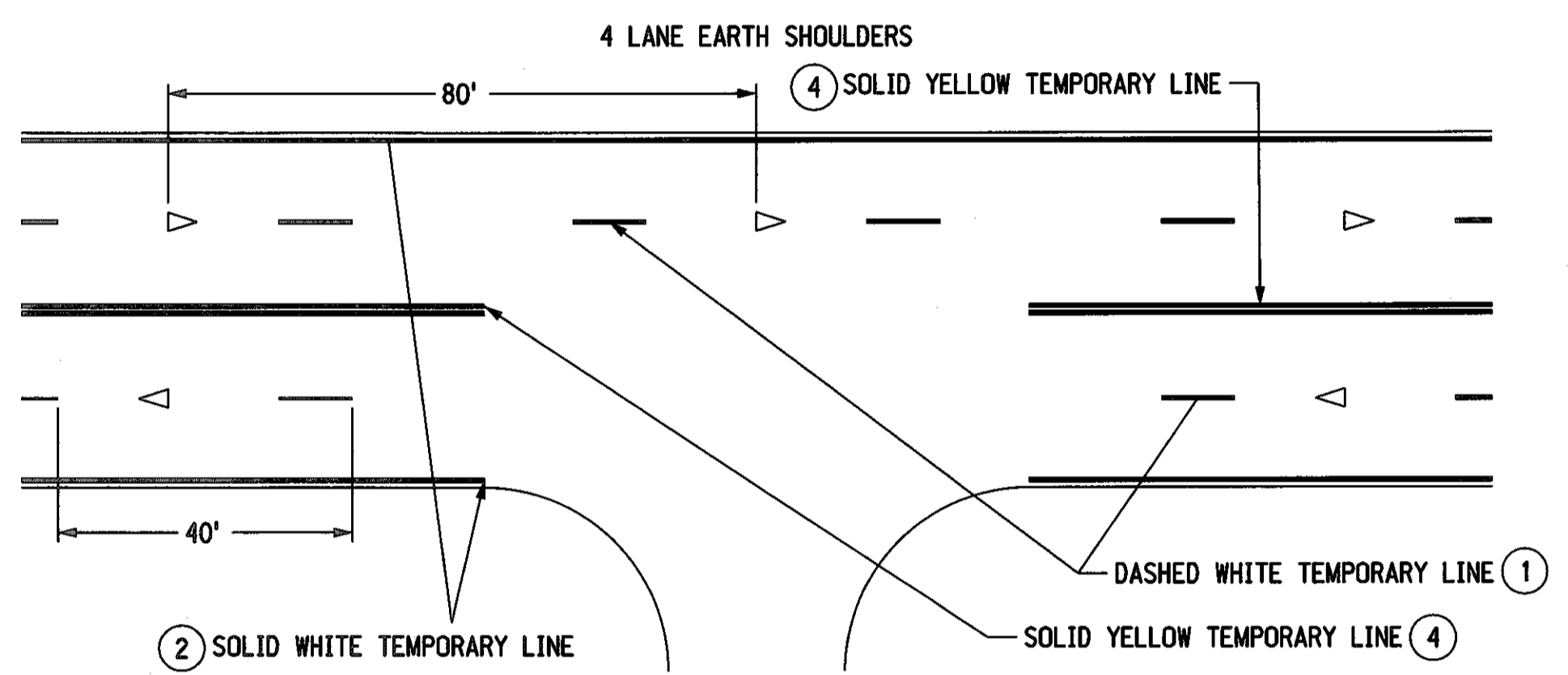
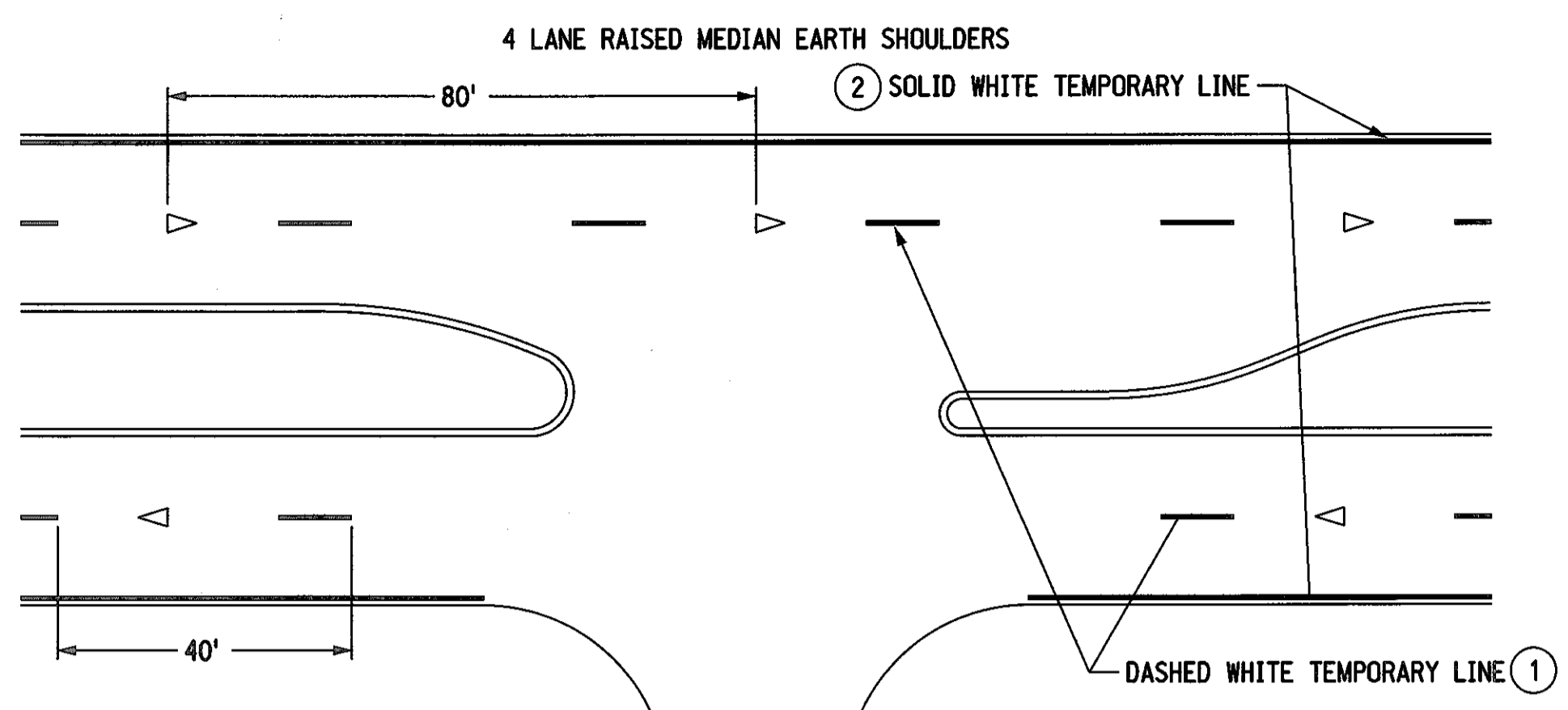
Date: 28-MAR-2014 10:26

File: ptemp-1 r5.dgn  
 Scale: 1:100

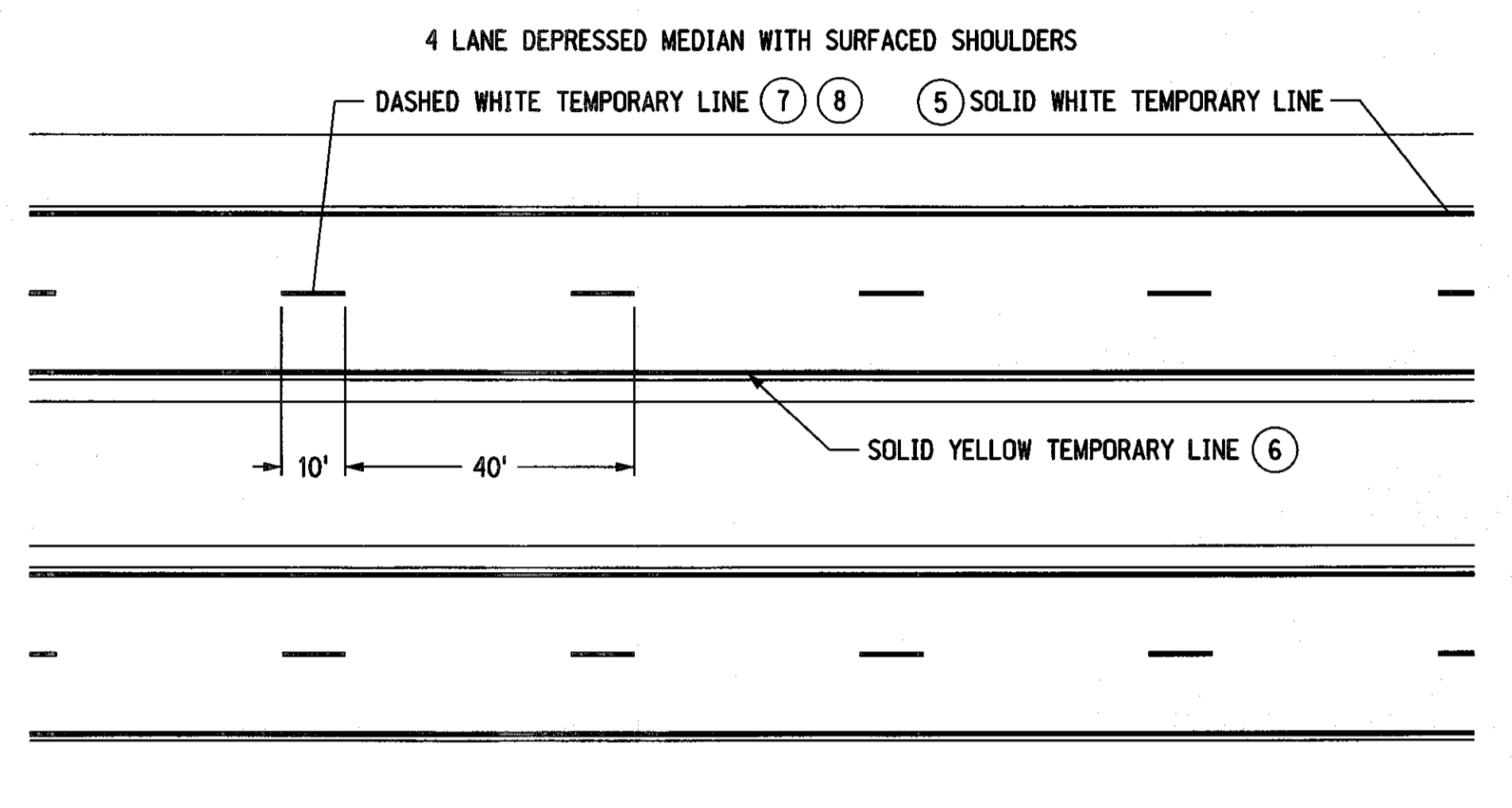
### 2 LANE ROADWAYS



### 4 LANE ROADWAYS



### FREEWAY/RURAL EXPRESSWAY



### NOTES

- ① LOWER LAYERS: TEMPORARY DASHED LINE SHALL BE 4" X 10' PAINTED LINE AT 40' INTERVALS OR 4" X 4' TYPE I TAPE LINE AT 40' INTERVALS. TAPE OR PAINT WILL BE SUPPLEMENTED WITH AN OVERLAY MARKER EVERY 80 FEET.
  - OVERLAY MARKERS ARE NOT REQUIRED ON MILLED SURFACES, HYDRATED LIME SURFACES AND STABILIZED SURFACES.
- TOP LAYER: BROKEN LINE MARKINGS
  - INSTALL 4" X 4' TAPE AT 40' INTERVALS SUPPLEMENTED WITH AN OVERLAY MARKER EVERY 80 FEET.
  - OR USE NO TAPE, BUT INSTALL 2 RAISED PAVEMENT MARKERS SPACED 5' APART AT 40' INTERVALS.
- SOLID LINE MARKINGS
  - 4" WIDE PAINTED LINE OR PAVEMENT MARKING TAPE. RAISED PAVEMENT MARKERS MAY BE USED IN LIEU OF PAINT OR TAPE, INSTALLED AT 10' INTERVALS.
- ARMOR COATS  
 FOG SEALS: 2 OVERLAY MARKERS 5' APART, PER 40 FOOT CYCLE (NO PAINT OR TAPE).
- ② TEMPORARY SOLID LINE SHALL BE 4" WIDE PAINTED LINE.
- ③ EDGE LINE SHALL BE PLACED SO THAT THE OUTSIDE EDGE OF PAINT IS THE REQUIRED DISTANCE FROM CENTERLINE ON THE TOP LIFT
- ④ TEMPORARY CENTERLINE SHALL BE TWO 4" PAINTED LINES SPACED 4" APART, CENTERED ABOUT THE JOINT LINE.
- ⑤ EDGELINE SHALL BE 4" PAINTED LINE. PLACED TO THE LEFT OF JOINT LINE.
- ⑥ ALL LAYERS: EDGELINE SHALL BE PLACED 12'-0" FROM THE CENTER JOINT LINE. (RIGHT OF SHOULDER JOINT LINE WHEN APPLICABLE)
- ⑦ MILLED SURFACE OR LOWER LIFTS: THE TEMPORARY WHITE DASH LINE SHALL BE 4" X 10' MINIMUM PAINTED LINE AT 40' INTERVALS, PLACED TO THE LEFT OF THE JOINT LINE.
- ⑧ TOP LIFT: THE TEMPORARY WHITE DASH LINE SHALL BE 4" IN WIDTH X MINIMUM 8' TO MAXIMUM 10' LENGTH, PLACED 2" TO THE LEFT OF THE JOINT LINE. THE INTERVAL (CYCLE) SHALL BE 40' ± 2" TO ALLOW FOR THE PERMANENT PAVEMENT MARKING.
- ⑨ ALL TEMPORARY PAVEMENT MARKING THAT WILL BE COVERED BY PERMANENT PAVEMENT MARKING SHALL COMPLY WITH THE ALIGNMENT AND LOCATION REQUIREMENTS OF THE FINAL PAVEMENT MARKING MATERIAL. TEMPORARY PAVEMENT MARKINGS THAT ARE NOT COVERED BY THE PERMANENT MARKINGS SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE.

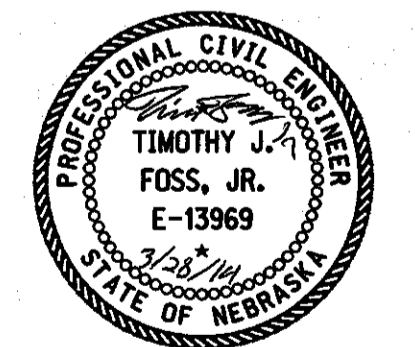
ROADWAY WIDTH	SHOULDER TYPE	DISTANCE FROM C/ OF ROADWAY TO OUTSIDE EDGE OF PAVEMENT
LESS THAN 24'	SURFACED	EDGE OF LANE
LESS THAN 24'	EARTH	PAVEMENT EDGE
24'	EARTH	PAVEMENT EDGE
24'	SURFACED	12'-0" *
24' TO 28'	EARTH	12'-0" *

\* SEE NOTE 3

CENTERLINE MARKING SHALL BE PLACED ON THE "SOUTH" SIDE OF THE CENTER JOINT ON EAST-WEST ROADS AND ON THE "EAST" SIDE OF THE CENTER JOINT ON NORTH-SOUTH ROADS

### LEGEND

- ◁ OVERLAY MARKER
- ◁ BIDIRECTIONAL OVERLAY MARKER



### NEBRASKA DEPARTMENT OF ROADS TRAFFIC ENGINEERING DIVISION

#### TYPICAL PAVEMENT MARKING

DESIGNED	DV	TEMPORARY PAVEMENT MARKING PLAN	DATE
REVIEWED	MAN		
DATE DRAWN	8/06	TRAFFIC ENGINEER	



TRAFFIC ENGINEERING DIVISION

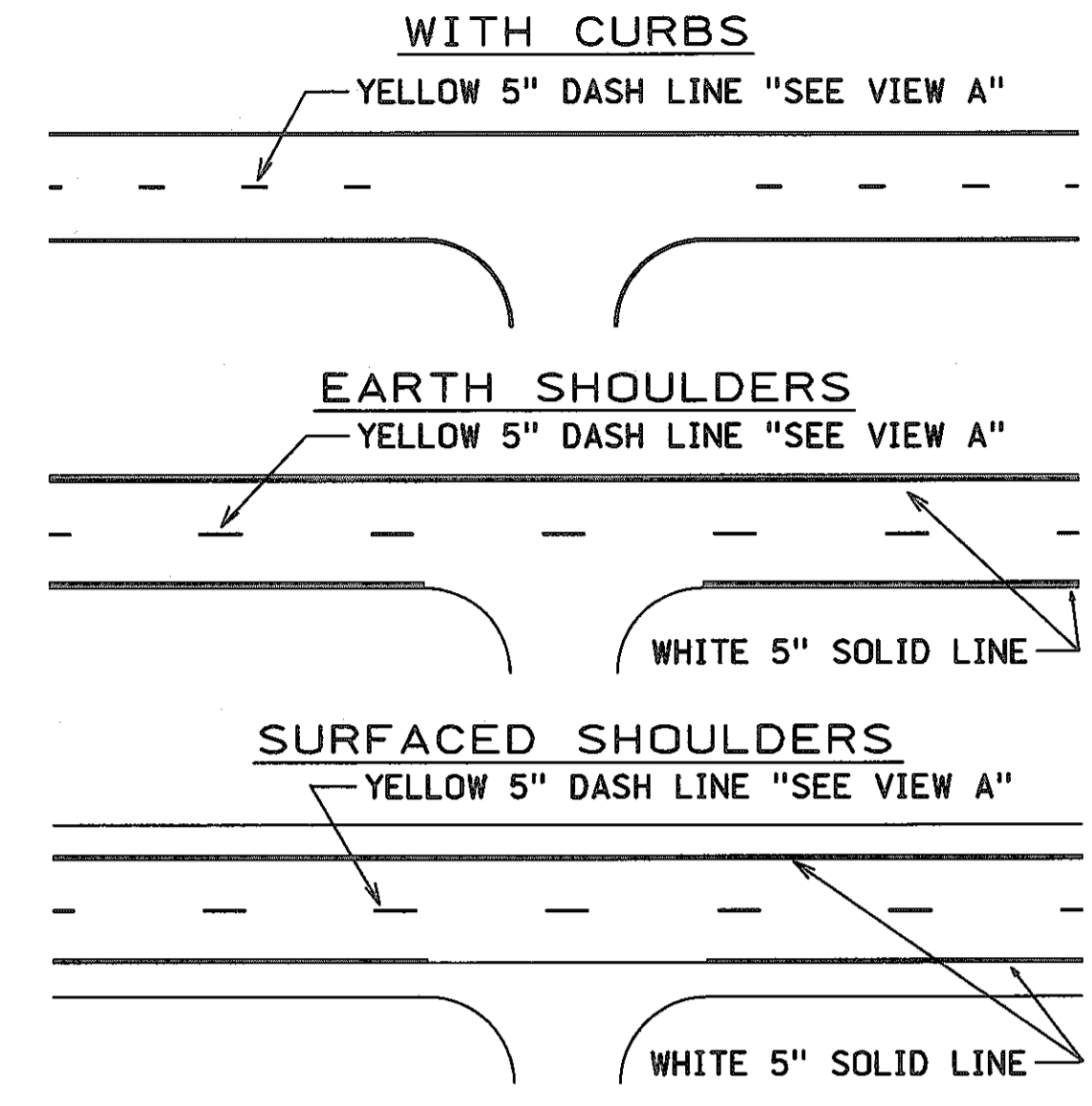
Computer: DRTRAFFIC46

User: DOR23027

Date: 28-MAR-2014 10:20

File: pspfm-2 r1.dgn  
 Scale: 1:100

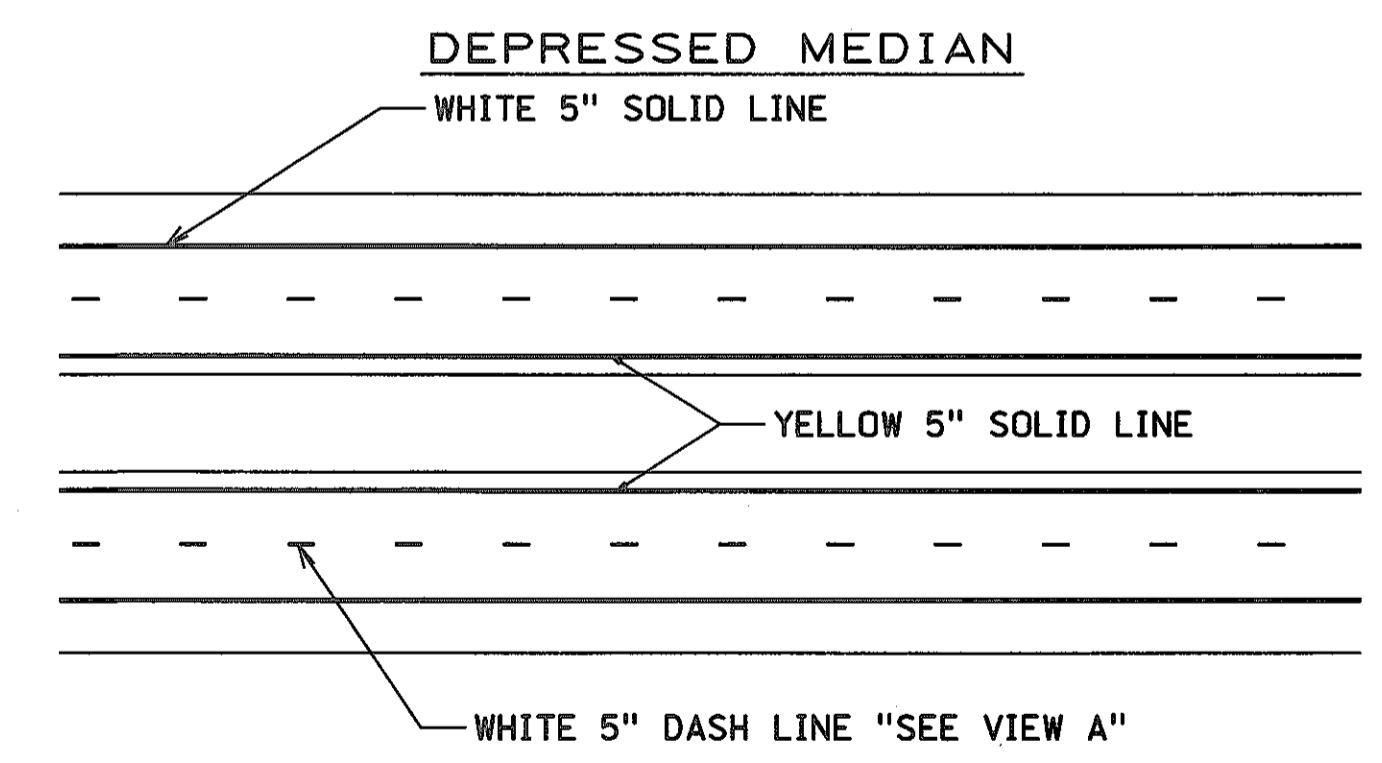
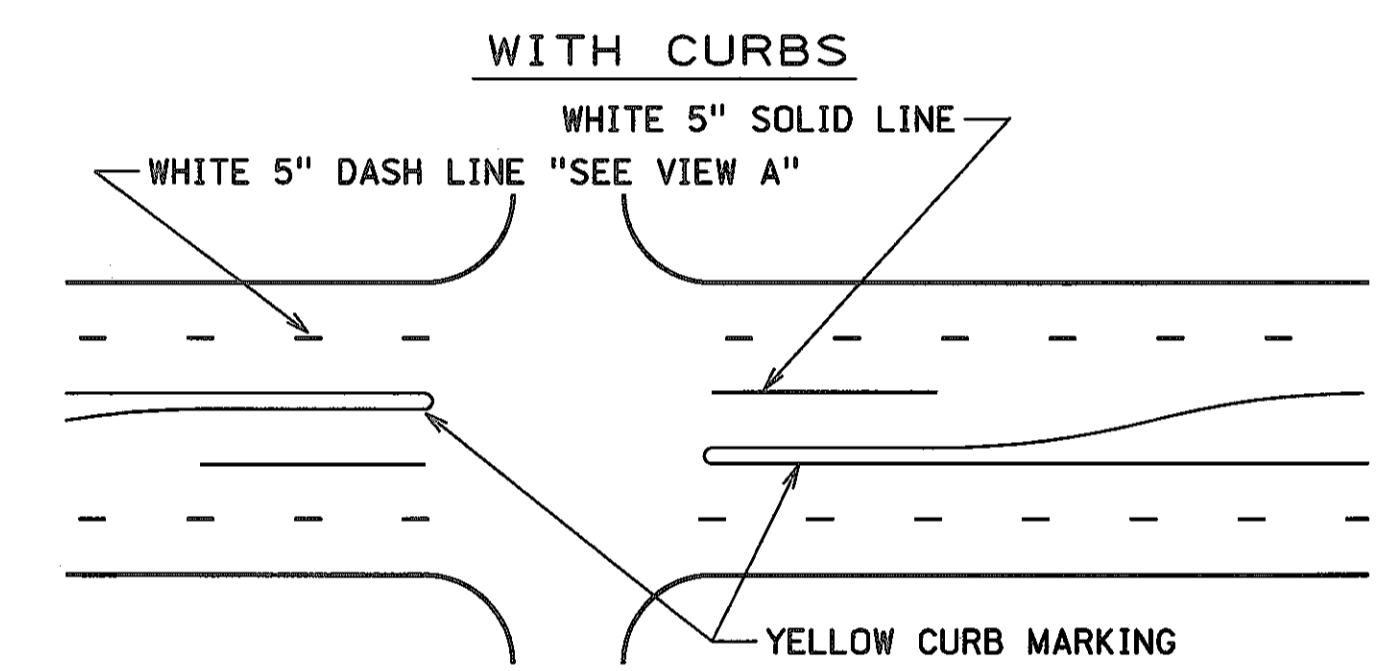
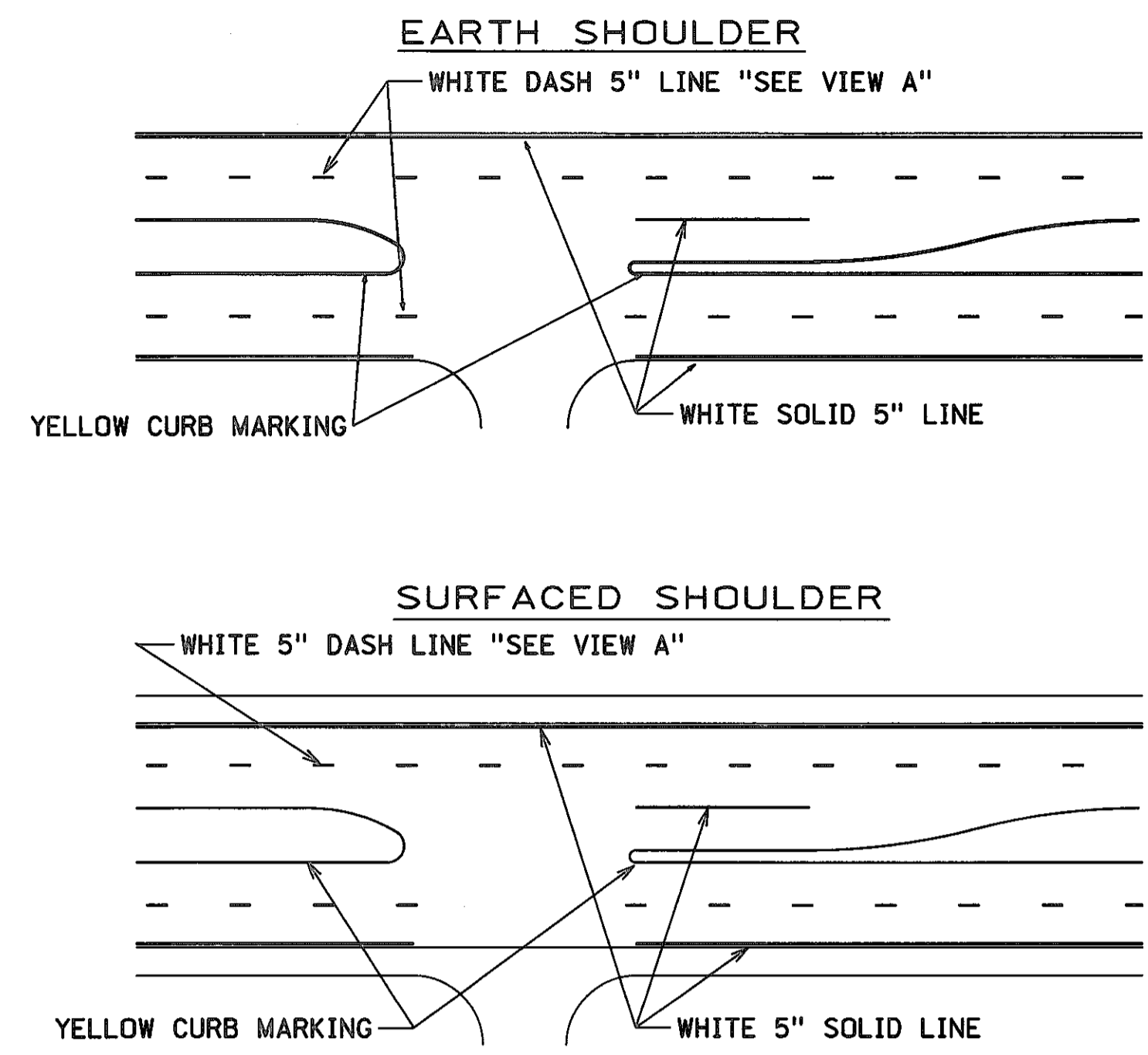
**2 LANE ROADWAYS**



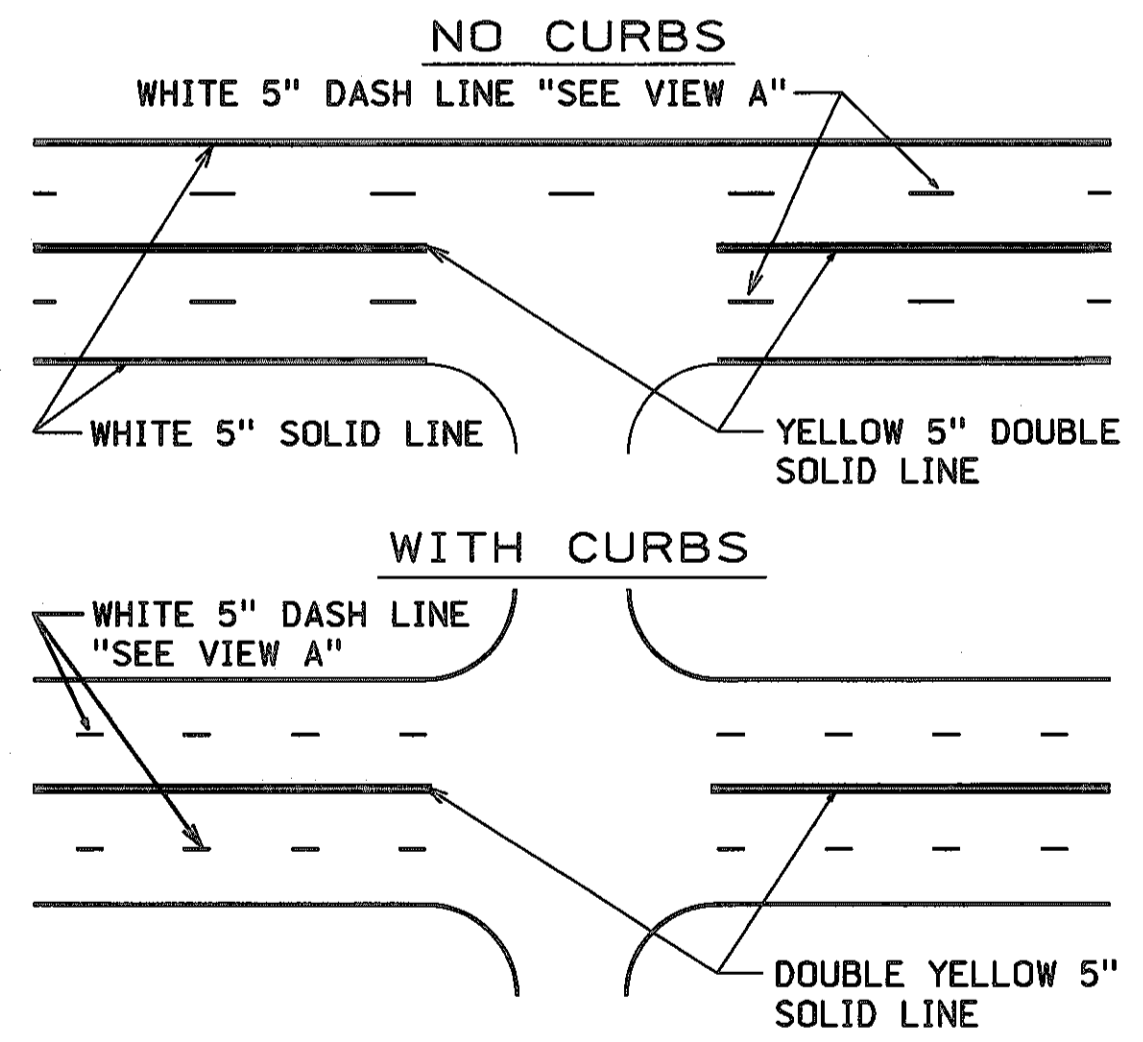
2-LANE ROADWAY REQUIRED LOCATION FOR EDGE LINES		
ROADWAY WIDTH	SHOULDER TYPE	DISTANCE FROM CENTERLINE OF ROADWAY TO OUTSIDE EDGE OF PAVEMENT EDGELINE
LESS THAN 24 FT	SURFACED	12 FT 0 IN
LESS THAN 24 FT	EARTH	PAVEMENT EDGE
24 FT	EARTH	PAVEMENT EDGE
24 FT	SURFACED	12 FT 0 IN
GREATER THAN 24 FT	EARTH	12 FT 0 IN

CENTERLINE MARKING SHALL BE PLACED ON THE "SOUTH" SIDE OF THE CENTER JOINT ON EAST-WEST ROADS AND ON THE "EAST" SIDE OF THE CENTER JOINT ON NORTH-SOUTH ROADS

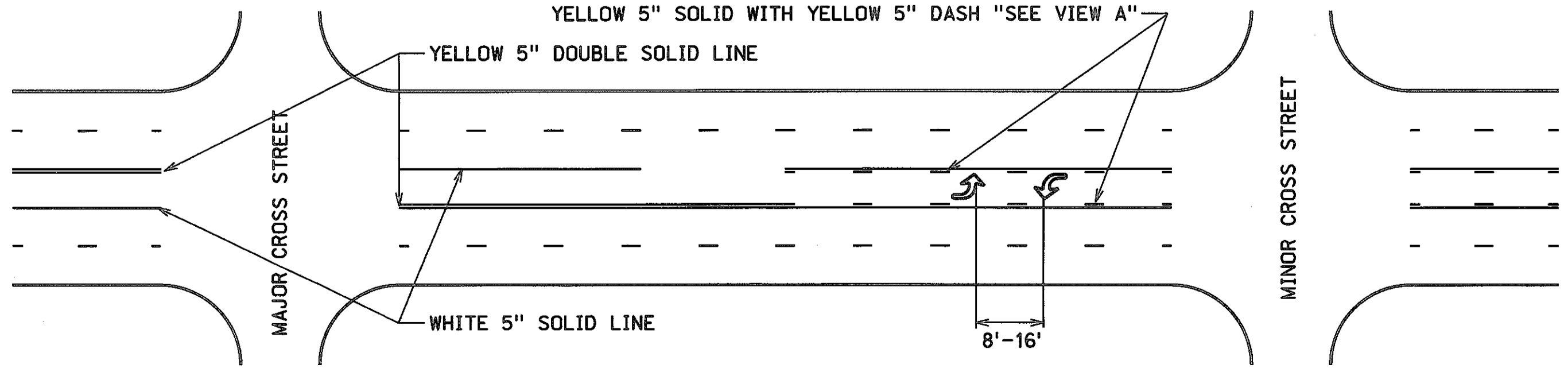
**4 LANE DIVIDED ROADWAY**



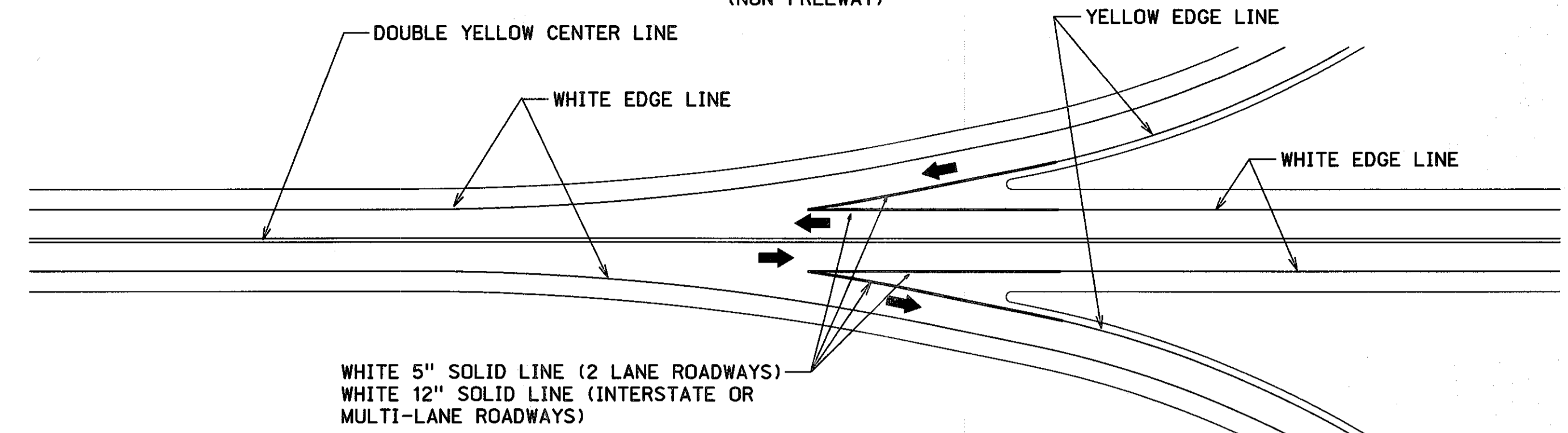
**4 LANE ROADWAYS**



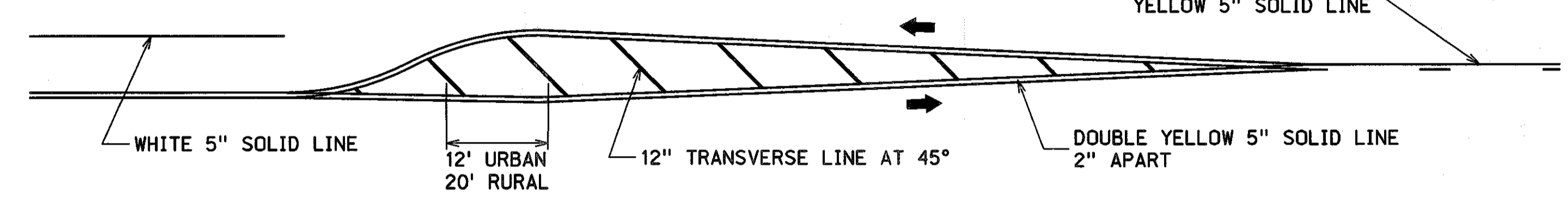
**3 OR 5 LANE WITH COMMON LEFT TURN LANE**



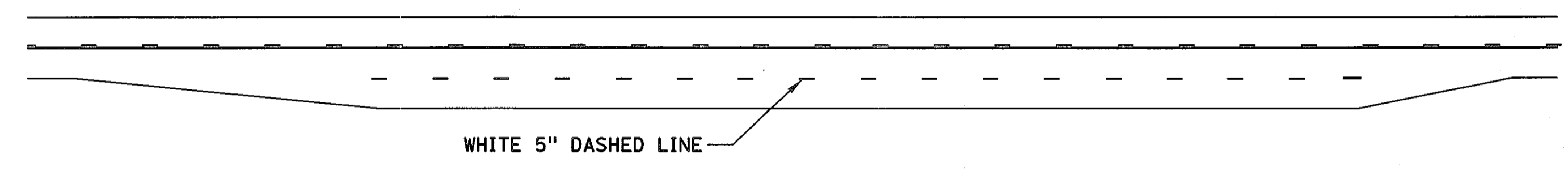
**GORE MARKINGS (NON-FREEWAY)**



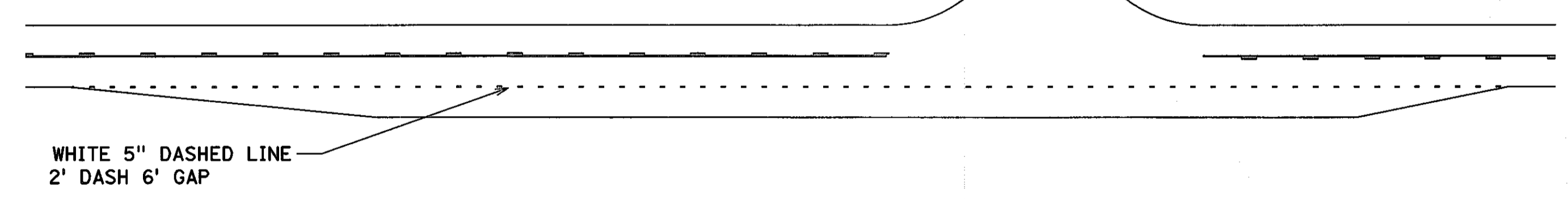
**ISLAND MARKING**



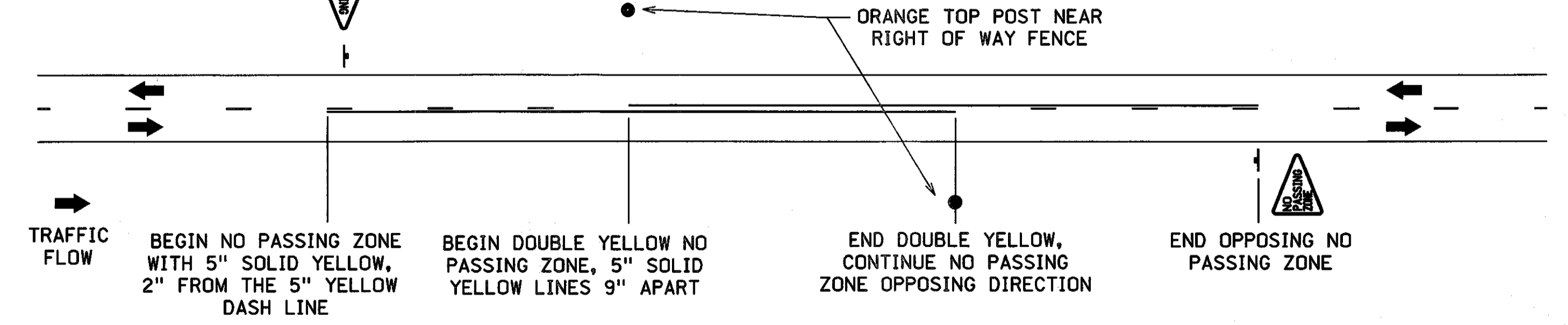
**PASSING LANE MARKING**



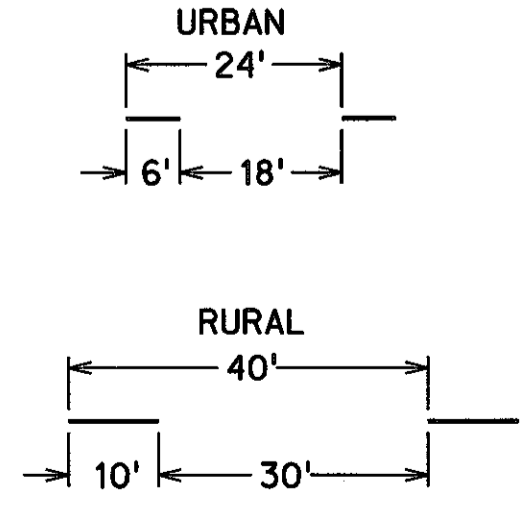
**FLY-BY LANE MARKING**



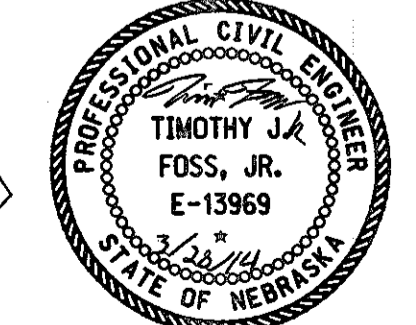
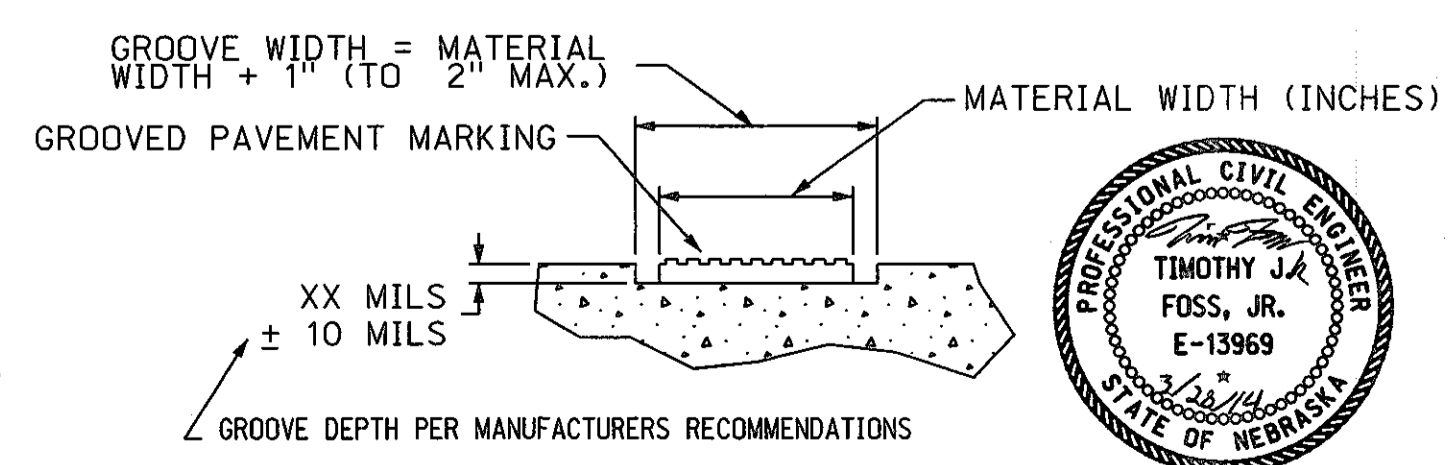
**TYPICAL NO PASSING ZONE MARKINGS**



**VIEW A**



**PERMANENT PAVEMENT MARKINGS INSTALLED IN GROOVES**



<b>NEBRASKA DEPARTMENT OF ROADS</b>			
<b>TRAFFIC ENGINEERING DIVISION</b>			
<b>TYPICAL PAVEMENT MARKING PLAN</b>			
DESIGNED	TJF	5" PAVEMENT MARKING	
REVIEWED			
APPROVED	DATE DRAWN	TRAFFIC ENGINEER	DATE
	12/12		