ROAD DEPARTMENT

ADDENDUM NO. 1

PAVING OF SPRING RIVER RD: S CENTURY DR TO FS BOUNDARY

The Bidding Documents for the PAVING OF SPRING RIVER RD: S CENTURY DR TO FS BOUNDARY project are amended as follows:

SCHEDULE OF BID ITEMS

- ***Replace the Schedule of Bid Items with the attached.***

SPECIAL PROVISIONS

- ***Add the following to the Special Provisions:***

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

PROJECT PLANS

- ***Replace Sheet No. 1, 5, 6, 7 and 15 with the attached.***
- ***Append the attached Oregon Standard Drawings to the Plans.***

The Bidding Documents for the PAVING OF SPRING RIVER RD: S CENTURY DR TO FS BOUNDARY project are amended as described above.

Cody Smith, PE
County Engineer/Assistant Director

2/16/2024
Date

61150 SE 27th Street Bend, Oregon 97702
(541) 388-6581 road@deschutes.org www.deschutes.org

I acknowledge receipt of Addendum No. 1.

_____
BIDDER NAME

_____ _____
SIGNATURE OF BIDDER Date

THIS ADDENDUM, EXCLUDING ATTACHMENTS[1], SHALL BE SIGNED AND SUBMITTED WITH THE BID PROPOSAL BY THE BIDDER.

[1] CONTRACTOR SHALL INCLUDE THE REVISED SCHEDULE OF BID ITEMS WITH THE BID PROPOSAL SUBMISSION.

PAVING OF SPRING RIVER RD:
S CENTURY DR TO FS BOUNDARY
DESCHUTES COUNTY, OREGON

SCHEDULE OF BID ITEMS

ITEM NO.	SPEC SECTION	ITEM	UNIT	QTY	UNIT PRICE	AMOUNT	
		Part 00200 - Temporary Features and Appurtenances					
001	00210	Mobilization	LS	1	$	$	
002	00221	Temporary Protection and Direction of Traffic	LS	1	$	$	
003	00222	Temporary Signs	SQFT	459	$	$	
004	00222	Portable Changeable Message Signs	EACH	3	$	$	
005	00223	Flagger	HOUR	571	$	$	
006	00223	Pilot Car	HOUR	99	$	$	1
007	00225	Stripe Removal	FOOT	550	$	$	
008	00280	Inlet Protection, Type 3	EACH	4	$	$	1
		Part 00300 - Roadwork					
009	00310	Asphalt Pavement Sawcutting	FOOT	489	$	$	1
		Part 00600 - Bases					
010	00620	Cold Plane Pavement Removal, 3 Inches Deep	SQYD	30500	$	$	
011	00640	Aggregate Shoulders	TON	625	$	$	
~~012~~	~~00640~~	~~Aggregate Base~~	~~TON~~	~~75~~	~~XXXXXXXXXX~~	~~XXXXXXXXXX~~	1
		Part 00700 - Wearing Surfaces					
013	00744	Level 3, 1/2 Inch ACP Mixture	TON	5200	$	$	
014	00748	13-inch Asphalt Concrete Pavement Widening & Repair	SQYD	122	$	$	
		Part 00800 - Permanent Traffic Safety and Guidance Devices					
015	00855	Bi-Directional Yellow Type IAR Markers, Recessed	EACH	266	$	$	
016	00865	Thermoplastic, Sprayed, Surface, Non-Profiled	FOOT	72000	$	$	
017	00867	Pavement Legend, Type AB: Bicycle Lane Stencil	EACH	6	$	$	
018	00867	Pavement Legend, Type AB: "STOP"	EACH	3	$	$	
019	00867	Pavement Bar, Type AB	SQFT	75	$	$	
020	00868	Green Bicycle Lane, Paint	SQFT	12672	$	$	1

TOTAL BID: _____

FOR DESCHUTES COUNTY USE ONLY

ADD _____ % FOR NON-RESIDENT BIDDER _____

TOTAL BID _____

REVISIONS

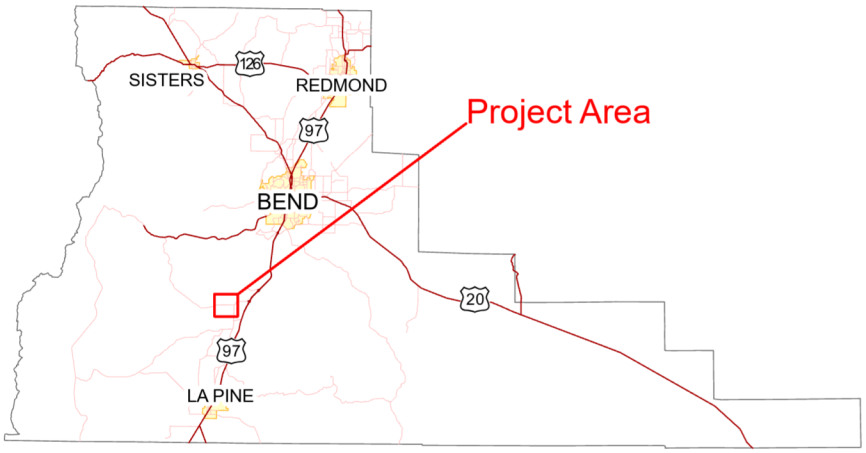
1 REVISE QUANTITY FOR ITEM NO. 006 - PILOT CAR
ADD ITEM NO. 008 - INLET PROTECTION, TYPE 3
ADD ITEM NO. 009 - ASPHALT PAVEMENT SAWCUTTING
DELETE ITEM NO. 012 - AGGREGATE BASE
CHANGE ITEM NO. 020 NAME TO "GREEN BICYCLE LANE, PAINT"

DESCHUTES COUNTY ROAD DEPARTMENT

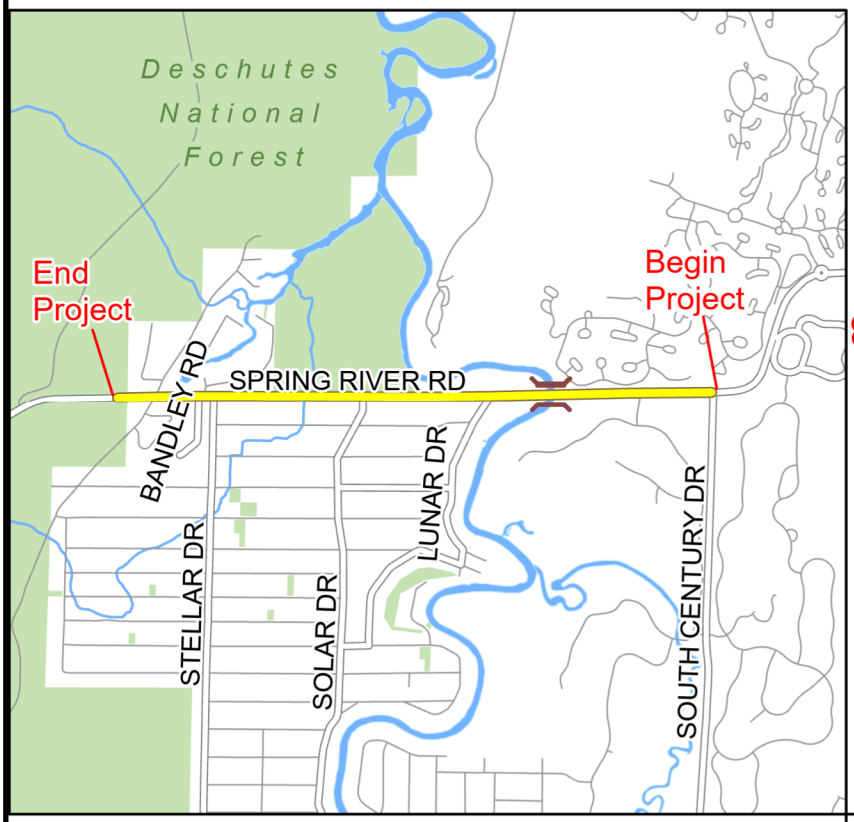
PLANS FOR

PAVING OF SPRING RIVER RD: S CENTURY DR TO FS BOUNDARY

FEBRUARY 2024



INDEX OF SHEETS



OREGON STANDARD DRAWING NO.

RD610	ASPHALT CONCRETE PAVEMENT (ACP) DETAILS
RD1010	INLET PROTECTION TYPE 2, 3, 6, 7, 10 AND 11 ⚠1
TM500	PAVEMENT MARKINGS STANDARD DETAIL BLOCKS
TM502	PAVEMENT MARKINGS STANDARD DETAIL BLOCKS
TM503	PAVEMENT MARKINGS STANDARD DETAIL BLOCKS
TM517	RECESSED PAVEMENT MARKERS
TM 521	DURABLE & HIGH PERFORMANCE PAVEMENT MARKINGS, SURFACE & GROOVE INSTALLED, NON-PROFILED
TM530	INTERSECTION PAVEMENT MARKINGS
TM560	ALIGNMENT LAYOUT: GENERAL
TM800	TABLES, ABRUPT EDGE AND PCMS DETAILS
TM821	TEMPORARY SIGN SUPPORTS
TM822	TEMPORARY SIGN SUPPORTS
TM855	2-LANE, 2-WAY ROADWAYS

REVISIONS

⚠1 ADD STD DWG RD1010

LOCATION MAP

NOT TO SCALE

N

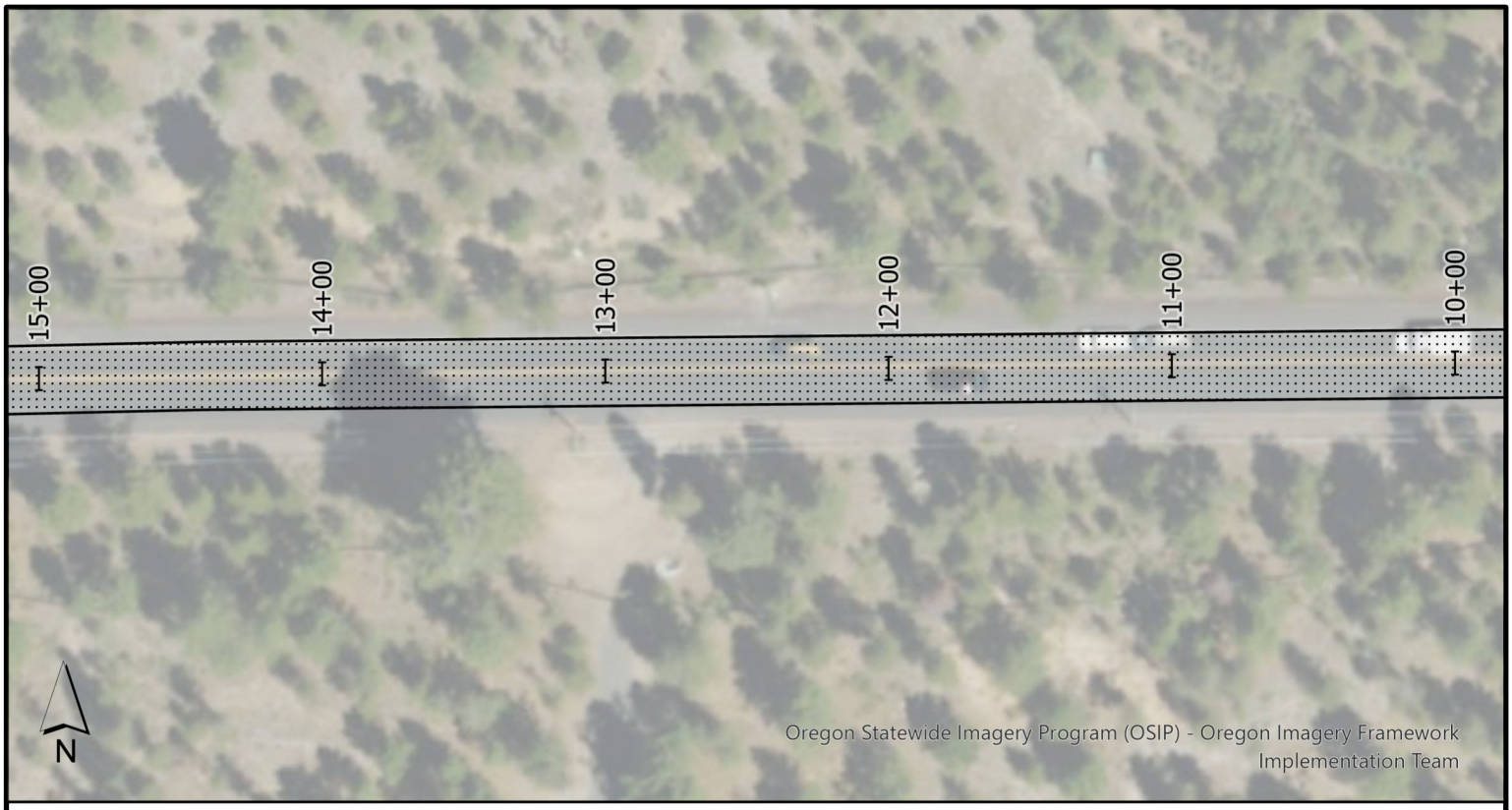
Bridges
Project Centerline
County Routes
Road Centerlines
Streams
Rivers
Forest Service Land

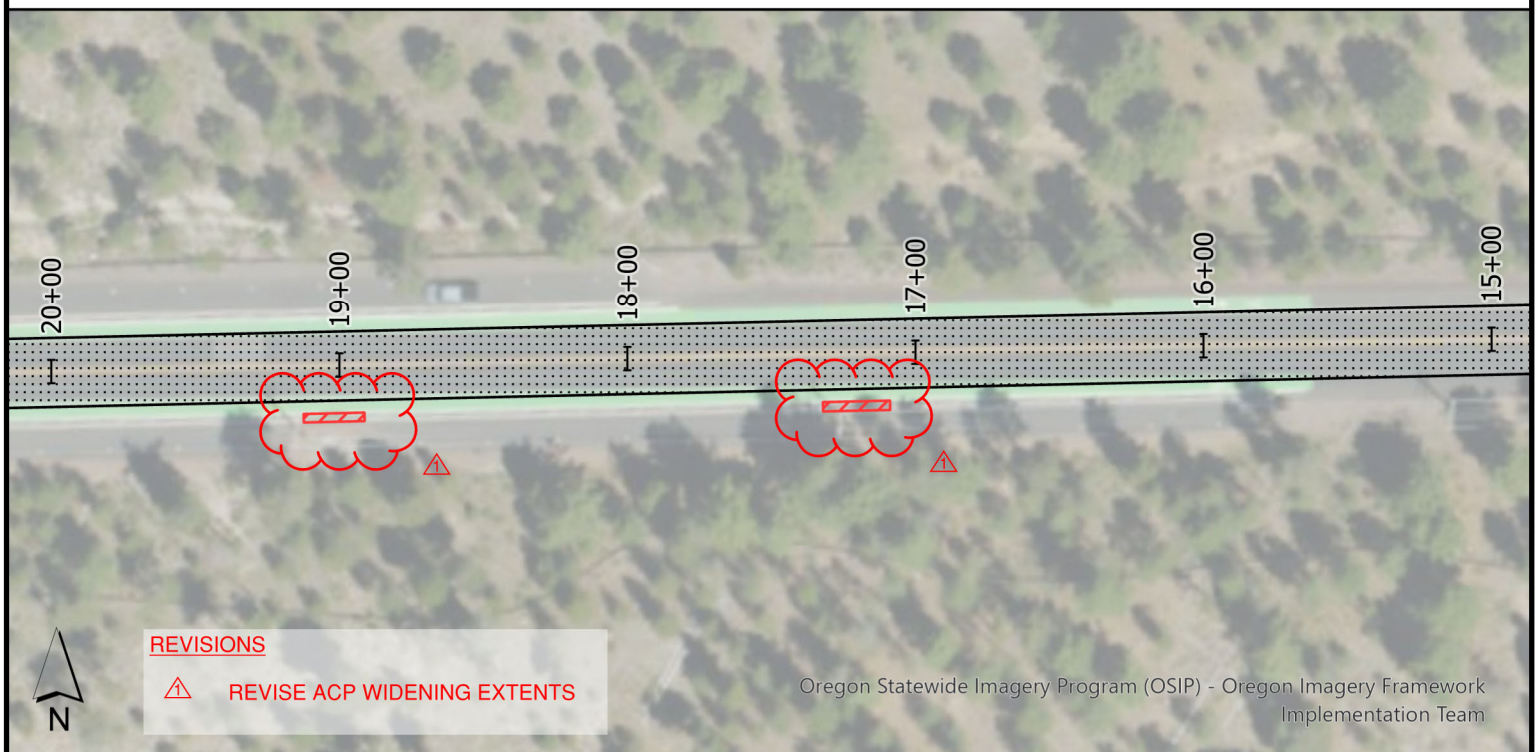
DESCHUTES COUNTY ROAD DEPARTMENT

TITLE:	SHEET NO:
COVER SHEET	1 of 16

DATE:	SCALE:	
2/13/2024	N.T.S.	DRAFTER: R. PINKSTON REVIEWED BY: C. SMITH

ArcGIS_Projects\Engineering\Projects\SpringRiverRd_2024





REVISIONS

⚠ REVISE ACP WIDENING EXTENTS

LEGEND

3" GRIND & INLAY
(SEE TYPICAL SECTION, SHEET 2)

ACP WIDENING
(SEE DETAIL, SHEET 4)

NOTES:

INSTALL THERMOPLASTIC CENTERLINE STRIPING, TYPE D R-40

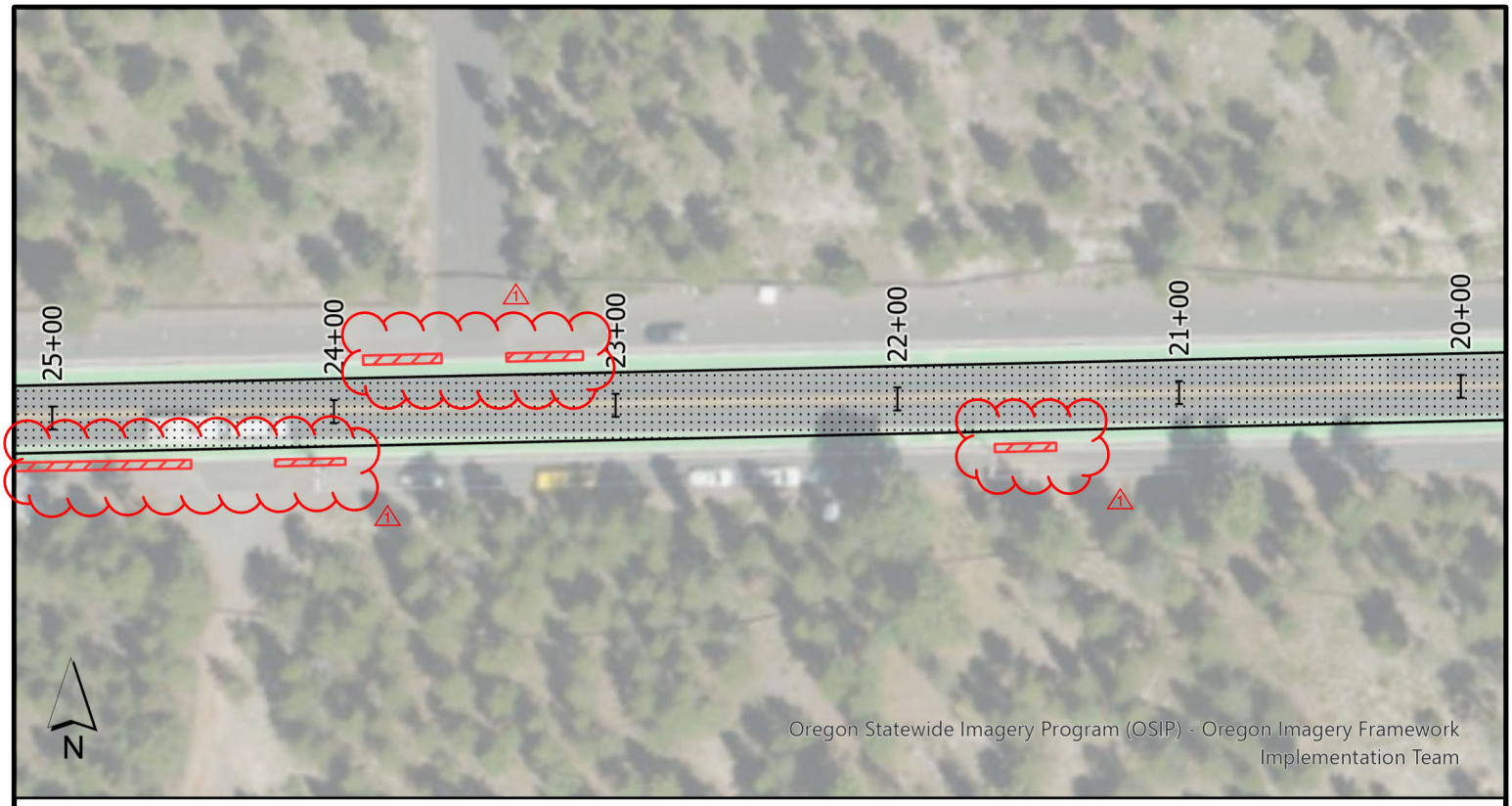
INSTALL THERMOPLASTIC EDGELINE STRIPING, TYPE W-2

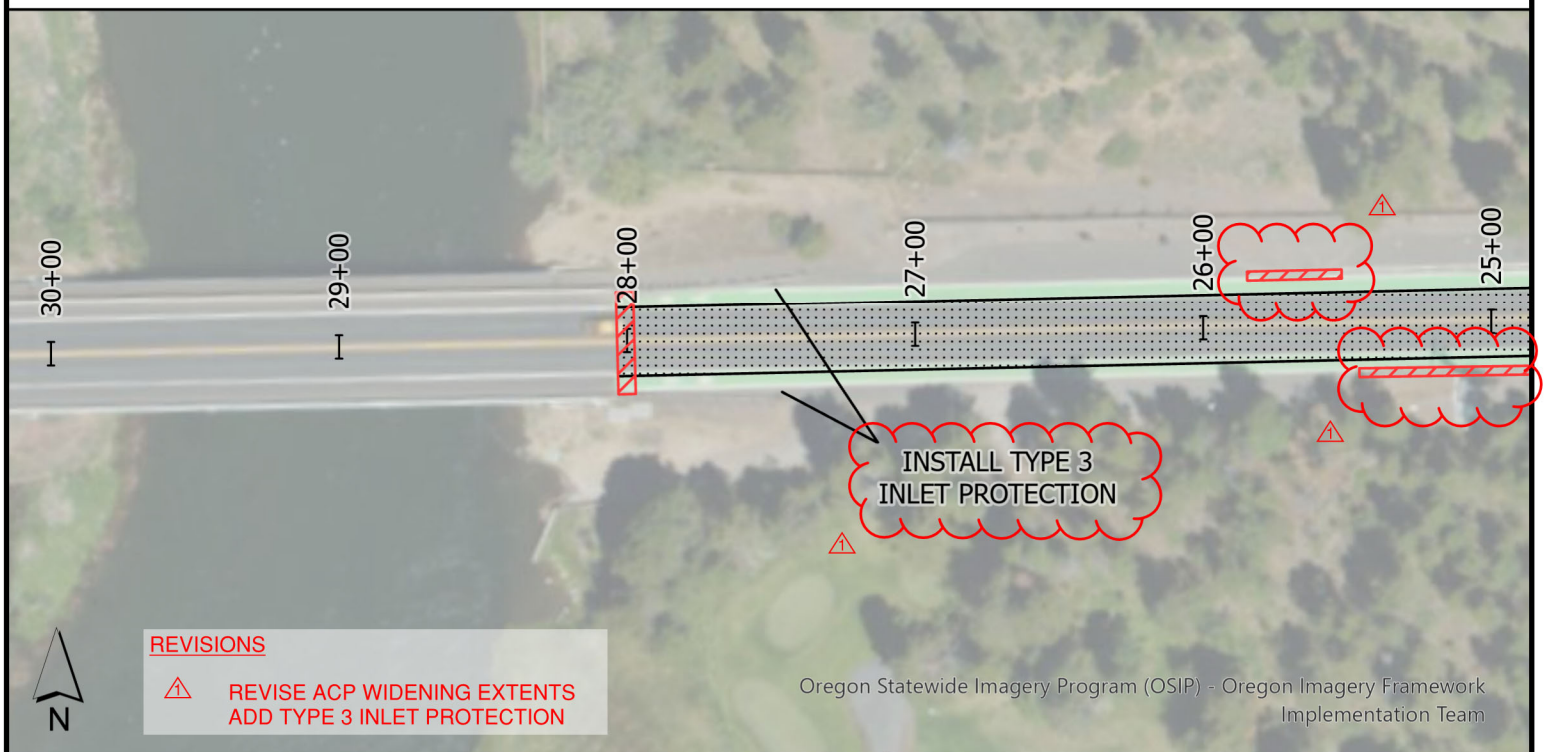
REPLACE GREEN BICYCLE LANE PAVEMENT MARKING AND BICYCLE LEGENDS ACCORDING TO EXISTING LAYOUT AFTER COMPLETION OF PAVING

DESCHUTES COUNTY ROAD DEPARTMENT

PLAN:	SHEET NO:
STA 10+00 to 20+00	5 of 16

DATE:	SCALE:	DRAFTER: R. PINKSTON
2/13/2024	N.T.S.	REVIEWED BY: C. SMITH





REVISIONS

⚠1 REVISE ACP WIDENING EXTENTS
ADD TYPE 3 INLET PROTECTION

LEGEND

3" GRIND & INLAY
(SEE TYPICAL SECTION, SHEET 2)

ACP WIDENING/REPAIR
(SEE DETAIL, SHEET 4)

NOTES:

REMOVE EXISTING CENTERLINE STRIPING ACROSS BRIDGE

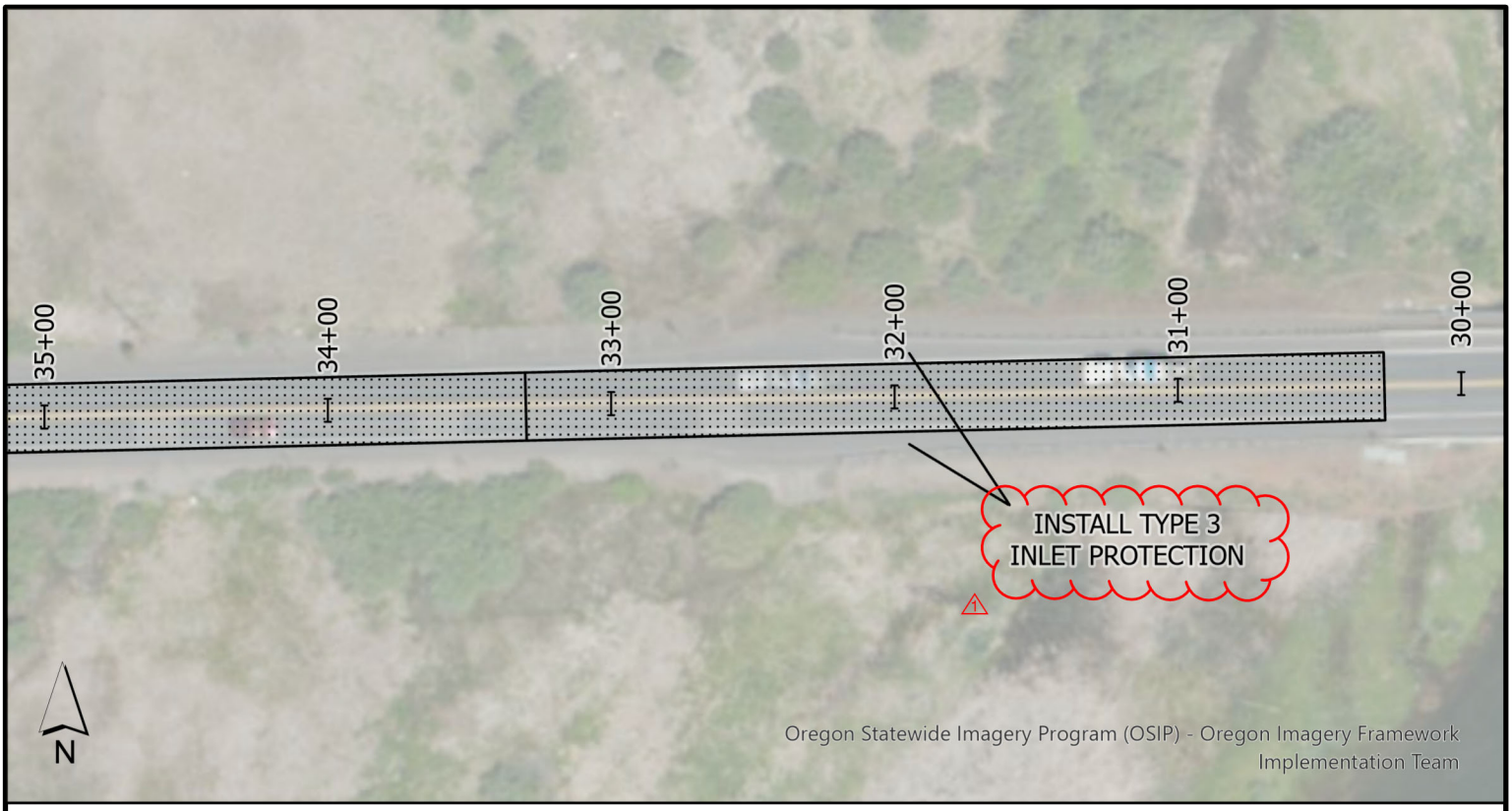
INSTALL THERMOPLASTIC CENTERLINE STRIPING, TYPE D R-40

INSTALL THERMOPLASTIC EDGELINE STRIPING, TYPE W-2

REPLACE GREEN BICYCLE LANE PAVEMENT MARKING AND BICYCLE LEGENDS ACCORDING TO EXISTING LAYOUT AFTER COMPLETION OF PAVING

DESCHUTES COUNTY ROAD DEPARTMENT

PLAN: STA 20+00 to 30+00		SHEET NO: 6 of 16
DATE: 2/14/2024	SCALE: N.T.S.	DRAFTER: R. PINKSTON REVIEWED BY: C. SMITH



REVISIONS

1 ADD TYPE 3 INLET PROTECTION

LEGEND

3" GRIND & INLAY
(SEE TYPICAL SECTION, SHEET 2)

SURVEY MONUMENT

NOTES:

REMOVE EXISTING CENTERLINE STRIPING ACROSS BRIDGE

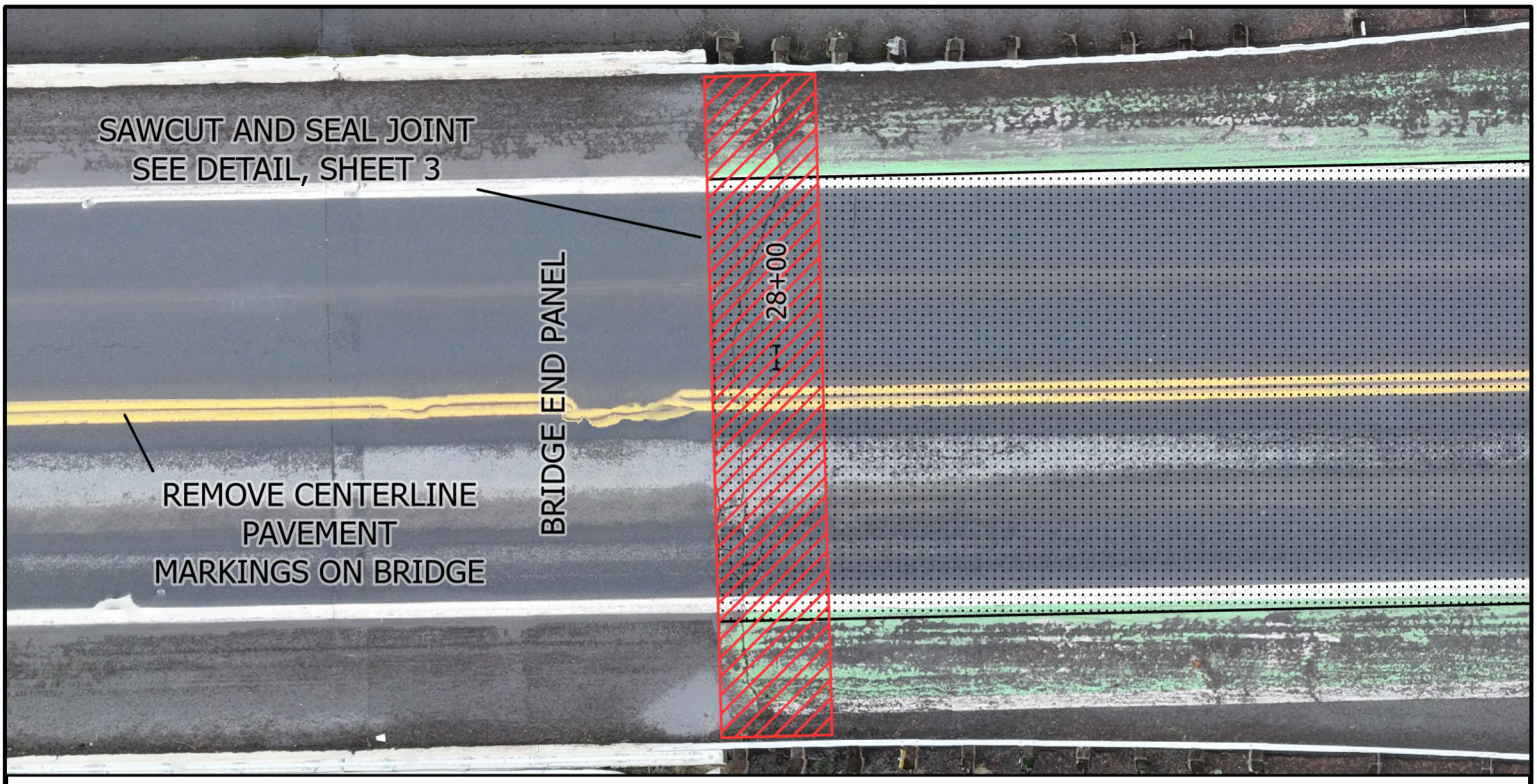
INSTALL THERMOPLASTIC CENTERLINE STRIPING, TYPE D R-40

INSTALL THERMOPLASTIC EDGELINE STRIPING, TYPE W-2

DESCHUTES COUNTY ROAD DEPARTMENT

PLAN:	SHEET NO:
STA 30+00 to 40+00	7 of 16

DATE:	SCALE:	DRAFTER: R. PINKSTON
2/14/2024	N.T.S.	REVIEWED BY: C. SMITH



REVISIONS

⚠ REVISE ACP WIDENING EXTENTS

LEGEND

3" GRIND & INLAY
(SEE TYPICAL SECTION, SHEET 2)

ACP WIDENING/REPAIR
(SEE DETAIL, SHEET 3)

NOTES:

WIDENING AND REPAIR LIMITS WILL BE MARKED IN THE FIELD.

REMOVE EXISTING PARKING AREA PAVEMENT MARKINGS. FOG SEAL ABRADED AREA WITH TACK COAT.

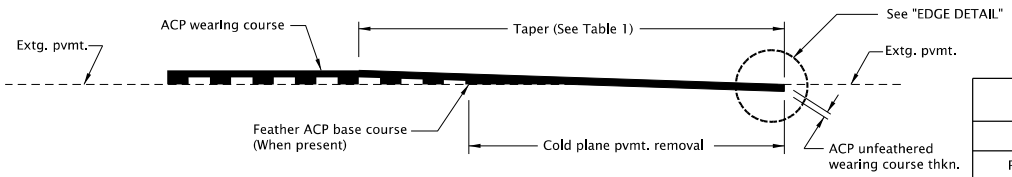
REPLACE GREEN BICYCLE LANE PAVEMENT MARKING AND BICYCLE LEGENDS ACCORDING TO EXISTING LAYOUT AFTER COMPLETION OF PAVING.

REPLACE EXISTING WHITE PAVEMENT MARKINGS ADJACENT TO BIKE LANE, TYPE W AND W-2.

N

DESCHUTES COUNTY ROAD DEPARTMENT

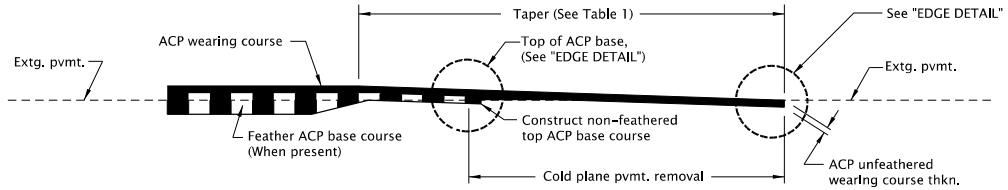
PLAN: ACP WIDENING/REPAIR & STRIPING REMOVAL		SHEET NO: 15 of 16
DATE: 2/14/2024	SCALE: N.T.S.	DRAFTER: R. PINKSTON REVIEWED BY: C. SMITH



METHOD A *

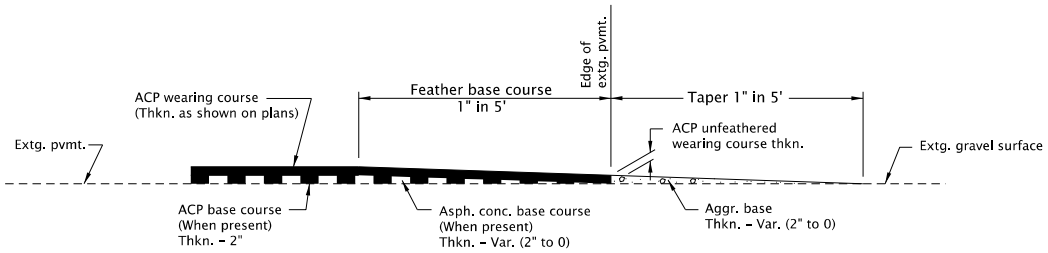
* See project plans for method.

TABLE 1	
TAPER LENGTHS	
Posted Speed	Taper Length
< 45 mph	1" per 50'
≥ 45 mph	1" per 100'

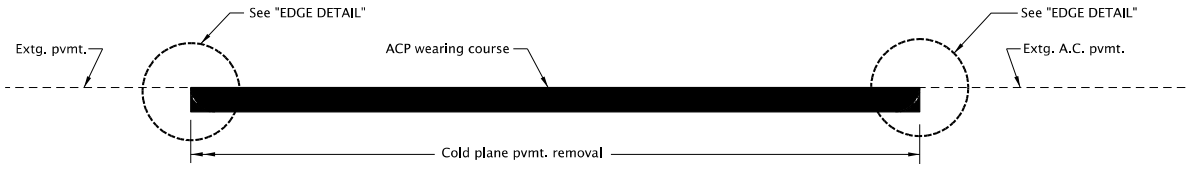


METHOD B *

ACP PAVEMENT MATCH AT PROJECT ENDS OR BRIDGE ENDS WHEN NOT OVERLAYING THE BRIDGE

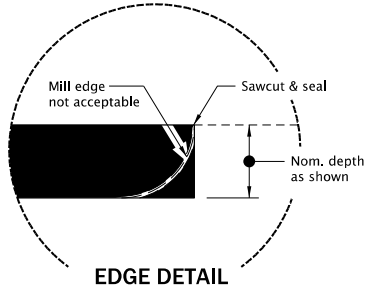


METHOD OF FEATHERING ACP PAVEMENT AT GRAVEL APPROACHES



METHOD OF MATCHING EXTG. ACP INLAY SURFACING

(Inlay to extg. asphalt conc. pvmt.)



EDGE DETAIL

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

ASPHALT CONCRETE PAVEMENT (ACP) DETAILS

2024

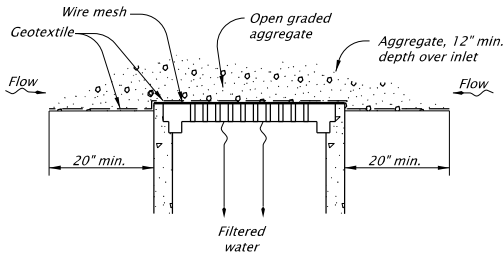
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 25-JUL-2017 | **RD610**

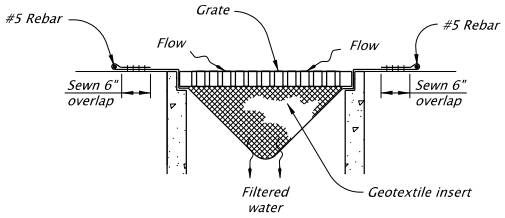
Effective Date: December 1, 2023 - May 31, 2024

20-JUL-2020

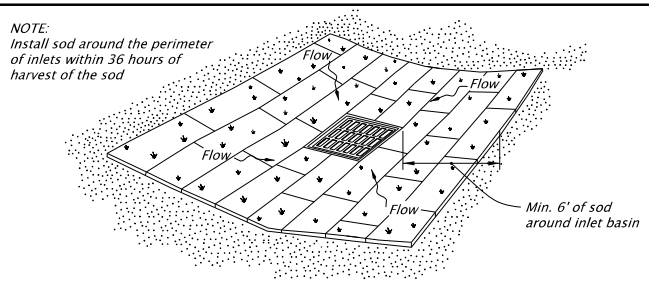
RD610.dgn



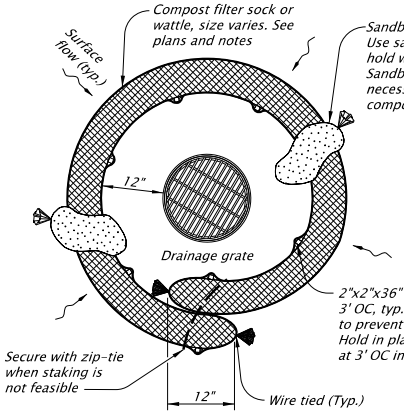
GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2
NOT TO SCALE



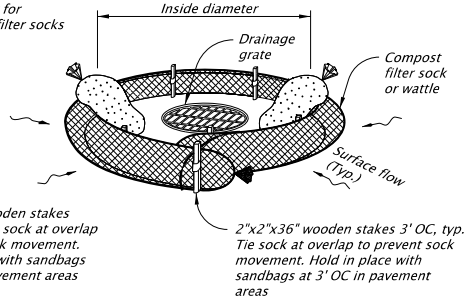
PREFABRICATED FILTER INSERT - TYPE 3
NOT TO SCALE



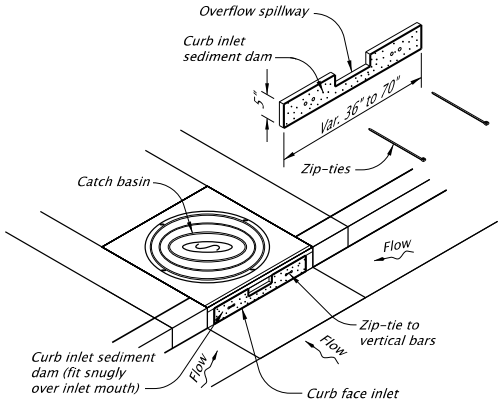
SOD PROTECTION - TYPE 6
NOT TO SCALE



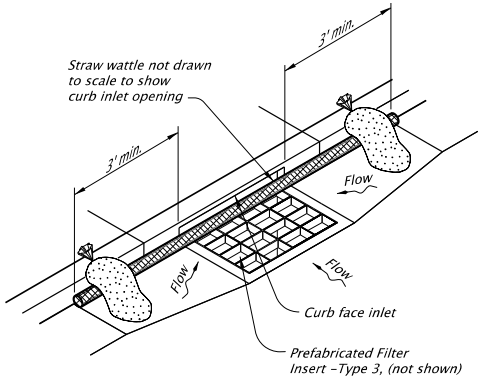
AREA DRAIN PLAN



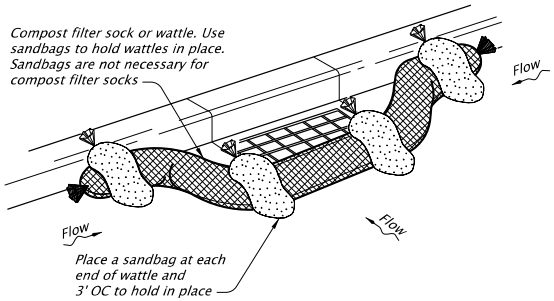
AREA DRAIN PERSPECTIVE VIEW



CURB INLET SEDIMENT DAM - TYPE 10
NOT TO SCALE



WATTLE BARRIER WITH FILTER INSERT - TYPE 11
NOT TO SCALE



CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7
NOT TO SCALE

NOTES:
Type 2 - Geotextile/wire mesh/aggregate
Place the wire mesh over the grate.
Place sediment fence geotextile over the wire mesh and perimeter area around structure.
Install aggregate over the geotextile fabric.

Type 3 - Prefabricated filter inserts
Install prefabricated filter inserts according to the plans, special provisions, and manufacturer recommendations.
Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMP's to prevent the potential of sediments entering project storm systems.
Field fabricated inserts are not allowed.

Type 7 - Compost filter sock
Drive 2"x2" wood stakes a minimum of 6" into ground and flush with the top of the sock.
Overlap ends of sock per manufacturers recommendations (12"min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic areas.

(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas or areas where the larger socks can be used safely.
use synthetic mesh socks for temporary installations.

Type 10 - Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 - Wattle barrier with filter insert
Install prefabricated filter insert per Type 3 detail.
Install wattles over opening and 36" to each side of opening tight against curb. Adjust wattle to force storm water to flow through filter insert or wattle prior to leaving the site.
Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

INLET PROTECTION TYPE 2, 3, 6, 7, 10 AND 11

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS
01-2021	MOVED NOTES UP FROM OVERLAPPING THE SHEET BORDER

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1010**

Effective Date: June 1, 2024 - November 30, 2024

07-01-2020

TM500.dgn

W

4" WHITE LINE

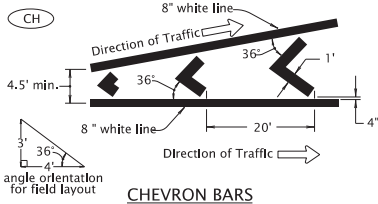
W-2

8" WHITE LINE

Y

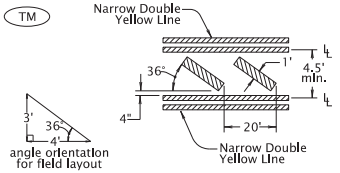
4" YELLOW LINE

CH



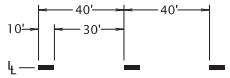
CHEVRON BARS
1' WHITE BARS AT 20' SPACING

TM



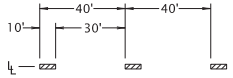
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 20' SPACING

WB



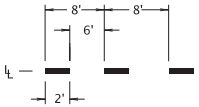
4" WHITE BROKEN LINE

YB



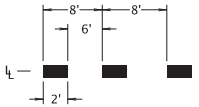
4" YELLOW BROKEN LINE

WD



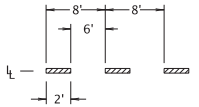
4" WHITE DOTTED LINE
For lane extensions

WD-2



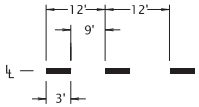
8" WHITE DOTTED LINE
For lane extensions and bike lane extensions

YD



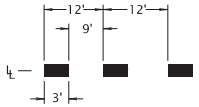
4" YELLOW DOTTED LINE
For lane extensions

DLL



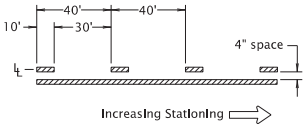
4" WHITE DOTTED LANE LINE
For lane lines in acceleration/deceleration lanes

DLL-2



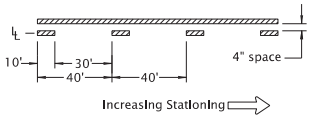
8" WHITE DOTTED LANE LINE
For lane lines in drop lanes

NPR



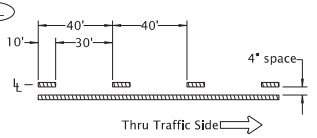
NO-PASS RIGHT
4" YELLOW LINES

NPL



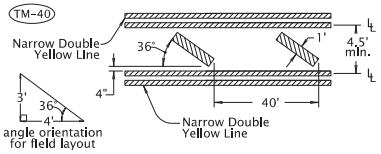
NO-PASS LEFT
4" YELLOW LINES

TWL



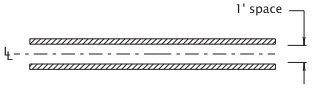
TWO-WAY LEFT TURN
4" YELLOW LINES

TM-40



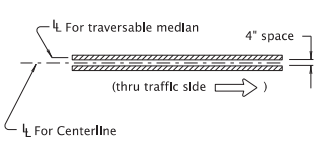
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 40' SPACING
For use at painted medians where distance between left turn refuges exceeds 200'

D



DOUBLE NO-PASS
TWO 4" YELLOW LINES

ND

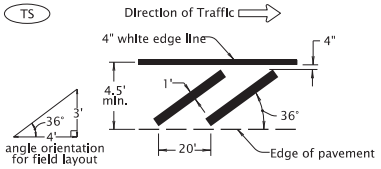


NARROW DOUBLE NO-PASS
TWO 4" YELLOW LINES

NDW

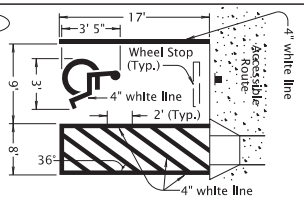
NARROW DOUBLE NO-LANE CHANGE
TWO 4" WHITE LINES

TS



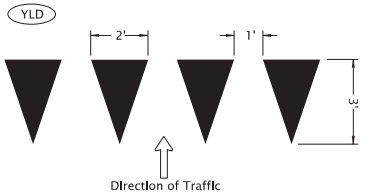
TRANSVERSE SHOULDER BARS
1' WHITE BARS AT 20' SPACING

HC



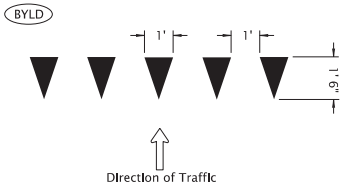
DISABLED PARKING DETAIL (white)

YLD



YIELD LINE (white)

BYLD



BICYCLE YIELD LINE (white)

LEGEND

Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

℄ — Lane line dimensions are shown on the striping plans

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

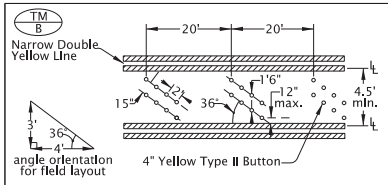
DATE	REVISION DESCRIPTION
07-2020	Changed Min. widths for CH, TM, TM-40, and TS

CALC. BOOK NO. N/A | SDR DATE 07-01-2020 | **TM500**

Effective Date: December 1, 2023 - May 31, 2024

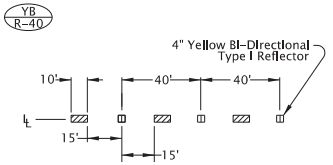
TM502.dgn 01-03-2022

TM B



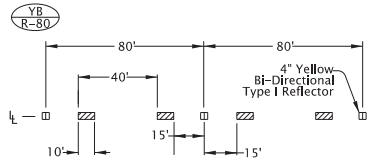
TRANSVERSE MEDIAN BAR SUBSTITUTION BUTTON

YB R-40



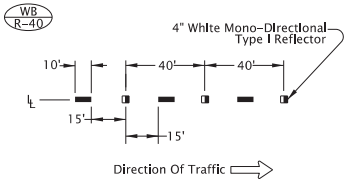
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE

YB R-80



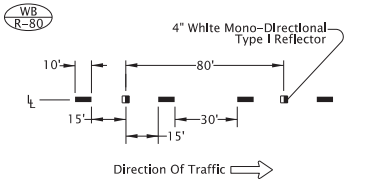
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE

WB R-40



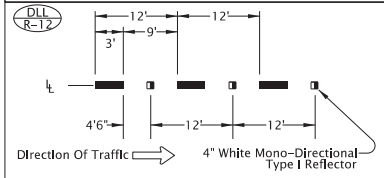
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE

WB R-80



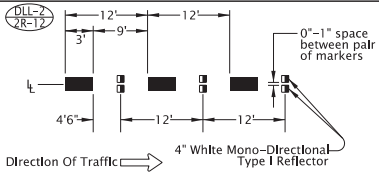
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE

DLL R-12



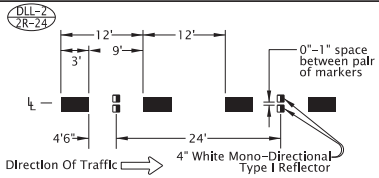
WHITE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE DOTTED LANE LINE

DLL-2 2R-12



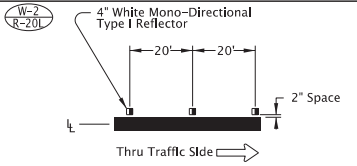
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE

DLL-2 2R-24



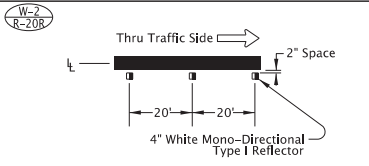
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE

W-2 R-20L



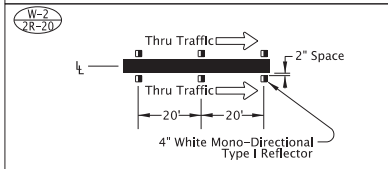
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 R-20R



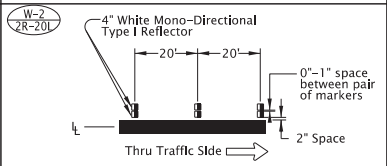
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 2R-20



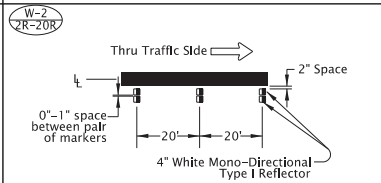
CHANNELIZING LANE LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 2R-20L



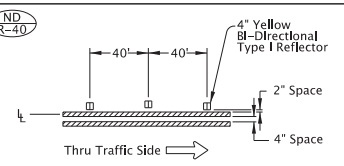
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE

W-2 2R-20R



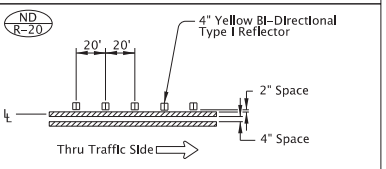
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE

ND R-40



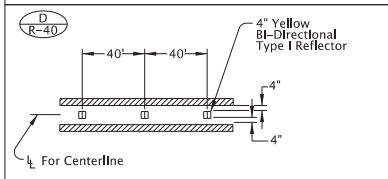
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

ND R-20



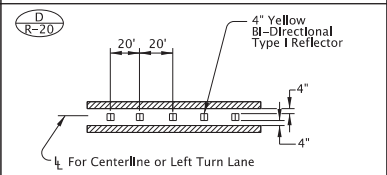
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

D R-40



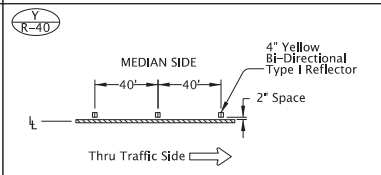
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

D R-20



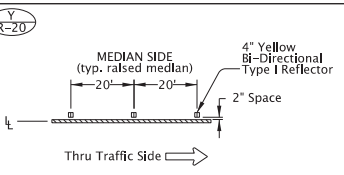
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

Y R-40



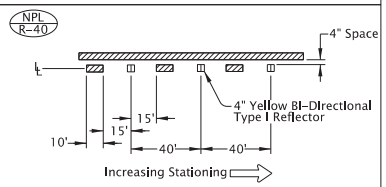
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE

Y R-20



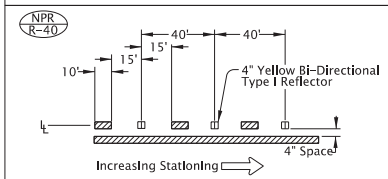
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE

NPL R-40



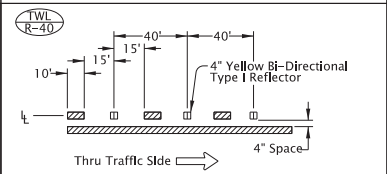
NO-PASS LEFT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

NPR R-40



NO-PASS RIGHT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

TWL R-40



TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

General note:

1) Surface mount Raised Pavement Markers (RPMs) unless otherwise specified.

LEGEND

- Direction Of Travel, Increasing Stationing or Thru Traffic Side
- ℄ — Lane line dimensions are shown on the striping plans
- Mono-directional crystal white marker reflects white to the left in this symbol
- Bi-directional yellow marker reflects yellow both left and right in this symbol

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Changed min. width of TM/B from 6' to 4.5'
01-2022	Removed "LANE" from W-2/R-20R title

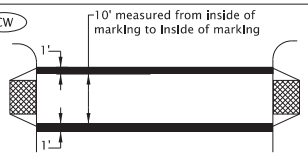
CALC. BOOK NO. N/A | SDR DATE 01-03-2022 | **TM502**

Effective Date: December 1, 2023 - May 31, 2024

07-08-2022

TM503.dgn

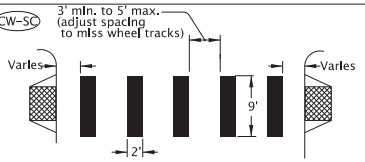
CW



STANDARD CROSSWALK
TWO 1' WHITE BARS

Install per Standard Drawing TM530

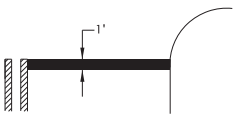
CW-SC



STAGGERED CONTINENTAL CROSSWALK
2' WHITE BARS

Install per Standard Drawing TM530

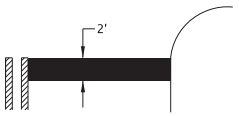
S



STOP BAR
1' WHITE BAR

Install per Standard Drawing TM530

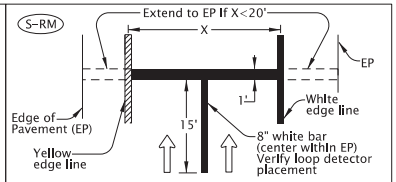
S-2



STOP BAR – LARGE
2' WHITE BAR

Install per Standard Drawing TM530

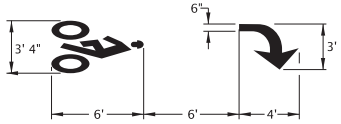
S-RM



RAMP METER STOP BAR
1' & 8" WHITE BARS

For multi-lane ramp meter applications

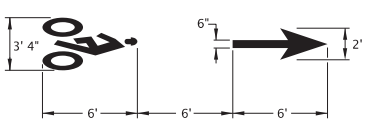
BR



BIKE RIGHT TURN STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

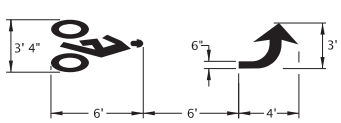
BS



BIKE LANE STANDARD STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

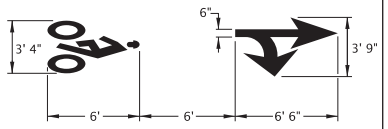
BL



BIKE LEFT TURN STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

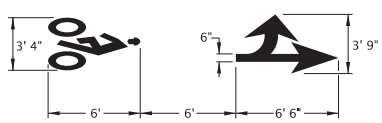
BRS



BIKE RIGHT TURN STRAIGHT STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

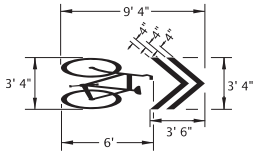
BLS



BIKE LEFT TURN STRAIGHT STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

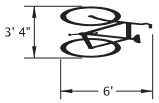
SLM



SHARED LANE MARKING (white)

Center marking within lane width or as shown
For proportion details, see current version of Standard Highway Signs

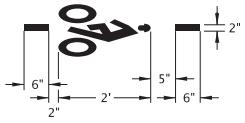
B



BIKE STENCIL (white)

Used for Intersection Bicycle Box applications
Place marking within bicycle box, centerd with motor vehicle lane width

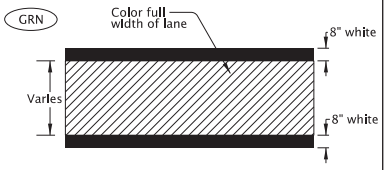
BD



BICYCLE DETECTOR MARKING (white)

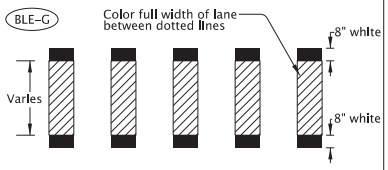
PLace Bicycle Detector Pavement Marking in optimum loction where bicycle acuates the traffic signal

GRN



GREEN SUPPLEMENTAL BICYCLE LANE
SOLID LINE (green)

BLE-G



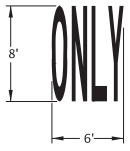
GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)

BUS

BUS (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

ON



ONLY (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

SCH

SCHOOL (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

SCH-LG

SCHOOL – LARGE (white)

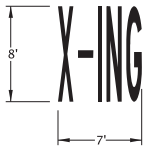
Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

CRS-LG

CROSSING – LARGE (white)

Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

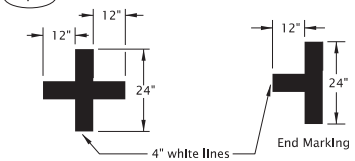
XNG



X-ING (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

P



ON-STREET PARKING DETAIL (white)

General Note:

1. Arrow, letter, and bike symbol dimensions nominal.

LEGEND

Direction of Trave

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

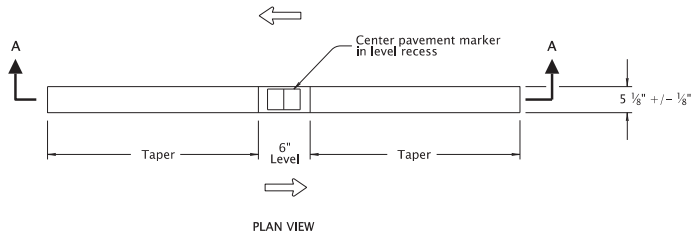
DATE	REVISION DESCRIPTION
07-2022	Added note for measurement of Standard Crosswalk

CALC. BOOK NO. N/A | SDR DATE 07-08-2022 | **TM503**

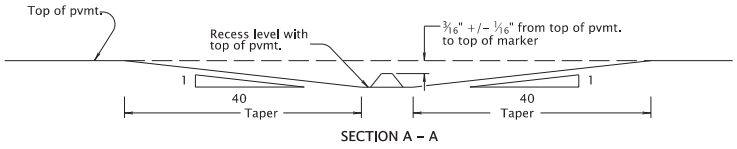
Effective Date: December 1, 2023 - May 31, 2024

07-06-2021

TM517.dgn

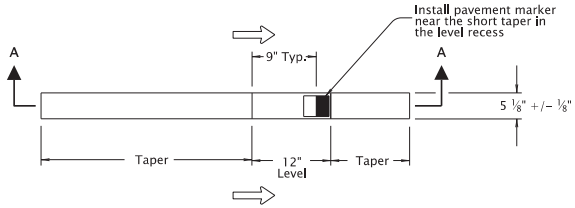


PLAN VIEW

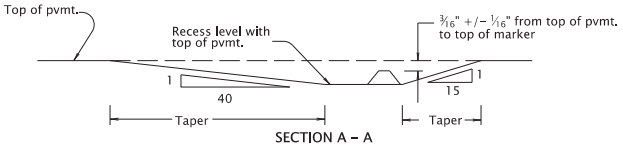


SECTION A – A

BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL



PLAN VIEW



SECTION A – A

MONO-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL

LEGEND

Direction of Travel

Bi-directional yellow marker reflects yellow both left and right in this symbol

Mono-directional crystal white marker reflects white to the left in this symbol

To be accompanied by Standard Dwg. Nos. TM502 and TM515

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

RECESSED PAVEMENT MARKERS

2024

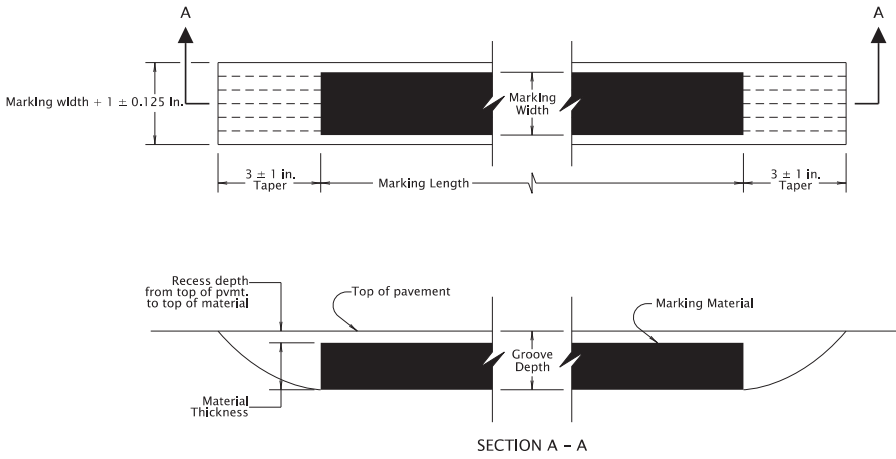
DATE	REVISION DESCRIPTION
07-2021	Updated to better fit ODOT drafting standards

CALC. BOOK NO. N/A

SDR DATE 07-06-2021

TM517

Effective Date: December 1, 2023 - May 31, 2024

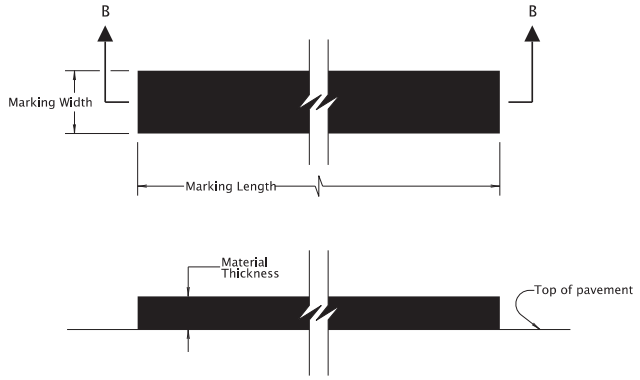


SECTION A – A

GROOVE INSTALLED GROOVE AND MATERIAL DIMENSIONS

Pavement Marking Material Type	Groove Depth	Recess Depth	Material Thickness
Durable Method 'A' & Method 'D'	220 ± 20 mils	45 ± 5 mils	Var.
High Performance	60 ± 10 mils	Var.	25 mils

GROOVE INSTALLED MARKINGS



SECTION B – B

SURFACE INSTALLED MATERIAL THICKNESS

Pavement Marking Material Type	Thickness
Durable Method 'A' & Method 'B' & Method 'D'	120 mils
High Performance	25 mils

SURFACE INSTALLED MARKINGS

General Notes:

1) See Standard Drawing TM500 and/or project plans for marking length and width dimensions.
2) See Standard Specification 00850.46 for marking installation tolerances.

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DURABLE & HIGH PERFORMANCE PAVEMENT MARKINGS SURFACE & GROOVE INSTALLED NON-PROFILED

2024

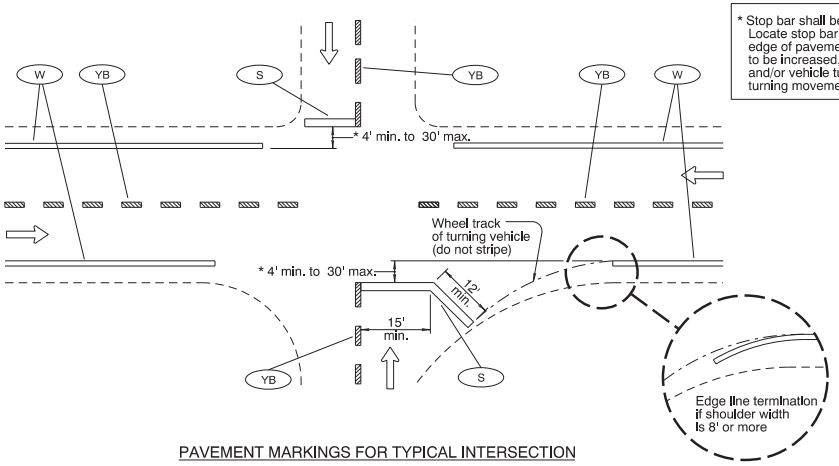
DATE	REVISION DESCRIPTION
07-2021	Changed groove width for 4 in. markings
01-2023	Changed groove width back to previous width for 4 in. markings

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2023 | TM521

Effective Date: December 1, 2023 – May 31, 2024

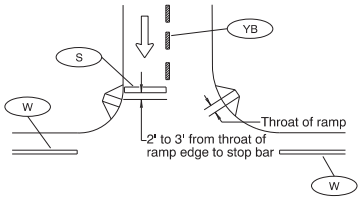
06-JUL-2022

TM530.dgn

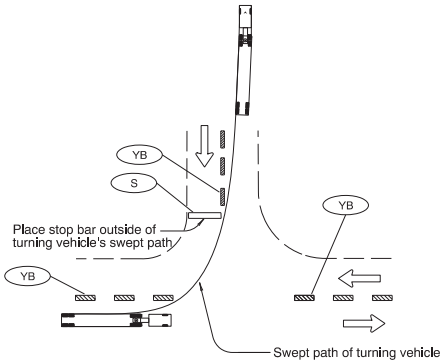


PAVEMENT MARKINGS FOR TYPICAL INTERSECTION

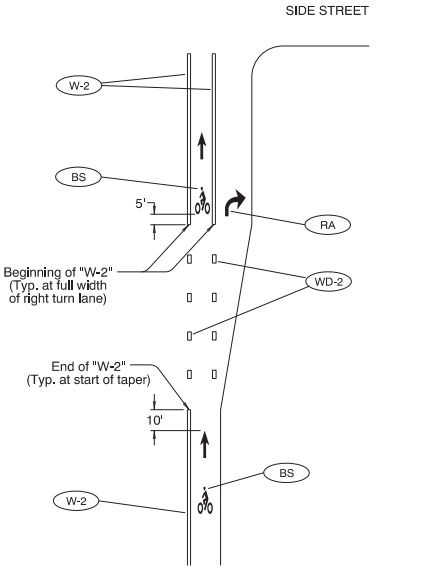
* Stop bar shall be placed as near as possible to the intersecting traveled way. Locate stop bar 4' min. to 30' max. in advance of the extended fog line, edge of pavement, or curb face. Minimum stop bar distance may need to be increased, depending on location of pedestrian ramps (see Detail "A") and/or vehicle turn radii (see Detail "B"). Field verify sight distance and truck turning movements.



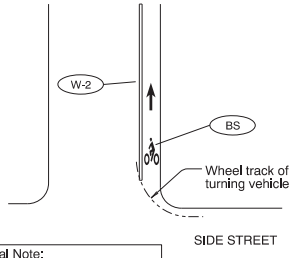
Detail "A"
STOP BAR PLACEMENT WITH RESPECT TO PEDESTRIAN RAMPS



Detail "B"
STOP BAR PLACEMENT WITH RESPECT TO TURN RADII

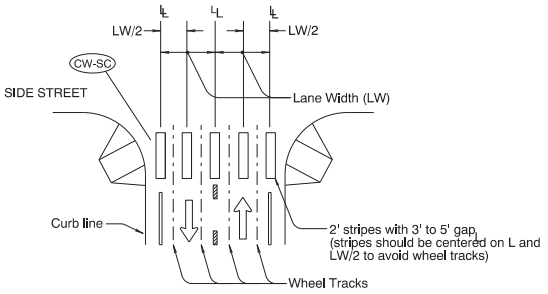


INSTALLATION OF BIKE LANE STENCILS FOR BIKE LANE SEPARATED BY RIGHT TURN LANE

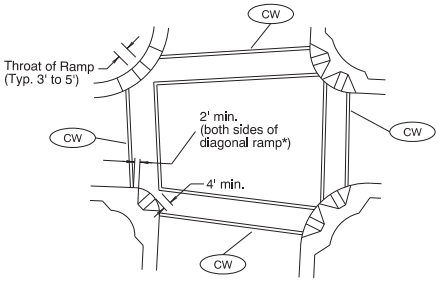


General Note:
Install bike lane stencil to avoid right turning vehicle wheel tracks.

INSTALLATION OF BIKE LANE STENCILS FOLLOWING INTERSECTIONS



STAGGERED CONTINENTAL LAYOUT



STANDARD CROSSWALK BARS AT INTERSECTION
* = Refer to Std Dwg RD916

General Note:
1. Install crosswalk bars such that the throat of the ADA ramp is entirely within crosswalk markings, or 5' back of extended fog line, edge of pavement, or curb face.

LEGEND
Direction of Travel
L - Lane line dimensions are shown on the striping plans

To be accompanied by Standard Dwg. Nos. TM500 thru TM504

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

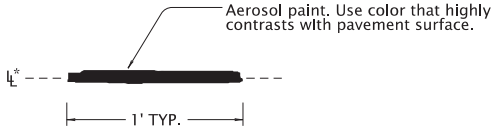
INTERSECTION PAVEMENT MARKINGS (CROSSWALK, STOP BAR & BIKE LANE STENCIL)

2024

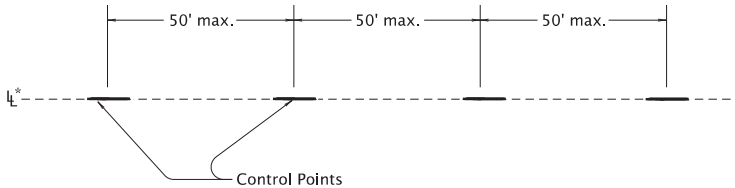
DATE	REVISION DESCRIPTION
07-2022	Added Roadway Standard Drawing reference to detail for clarity

CALC. BOOK NO. N/A | SDR DATE 06-JUL-2022 | **TM530**

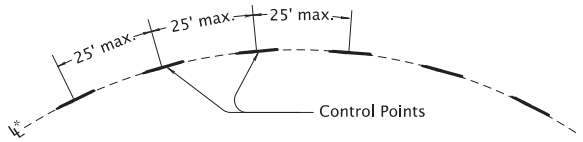
Effective Date: December 1, 2023 - May 31, 2024



CONTROL POINT



CONTROL POINT LAYOUT – TANGENT SECTIONS



CONTROL POINT LAYOUT – CURVE SECTIONS

General note:

1.) Use control points to make continous narrow guideline as specified.

* Control points are placed along the lane line for all longitudinal lines except the following:

(ND) For center lines only	A control point layout 4" offset from the lane line is required for a ND line when used as a center line.

LEGEND

℄— Lane line dimensions are shown on the striping plans.

To be accompanied by Standard Dwg. Nos. TM500 thru TM504

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

ALIGNMENT LAYOUT: GENERAL

2024

DATE	REVISION DESCRIPTION
07-2020	Extended accompanied by drawings to include TM504

CALC. BOOK NO. N/A | SDR DATE 07-01-2020 | **TM560**

Effective Date: December 1, 2023 - May 31, 2024

07-01-2020

TM560.dgn

01-JUL-2022

TM800.dgn

TAPER TYPES & FORMULAS	
TAPER	FORMULA
Merging (Lane Closure)	"L"
Shifting	"L"/2 or ½"L"
Shoulder Closure	"L"/3 or ⅓"L"
Flagging (See Drg. TM850)	50' – 100'
Downstream (Termination)	Varies (See Drawings)

★ Use Pre-Construction Posted Speed to select the Speed from the Tables below:

TEMPORARY BARRIER FLARE RATE TABLE	
★SPEED (mph)	MINIMUM FLARE RATE
≤ 30	8:1
35	9:1
40	10:1
45	12:1
50	14:1
55	16:1
60	18:1
65	19:1
70	20:1

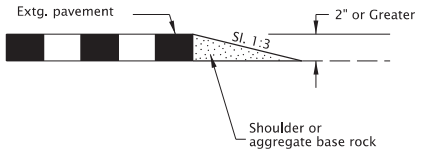
MINIMUM LENGTHS TABLE					
	"L" VALUE FOR TAPERS (ft)				BUFFER "B" (ft)
★ SPEED (mph)	W = Lane or Shoulder Width being closed or shifted				
	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	800	210
55	550	660	770	880	250
60	600	720	840	960	285
65	650	780	910	1000	325
70	700	840	980	1000	365
FREEWAYS					
55	1000	1000	1000	1000	250
60	1000	1000	1000	1000	285
65	1000	1000	1000	1000	325
70	1000	1000	1000	1000	365

NOTES:
- For Lane closures where W < 10', use "L" value for W = 10'.
- For Shoulder closures where W < 10', use "L" value for W = 10' or calculate "L" using formula, for Speeds ≥ 45: L = WS, Speeds < 45: L = S^2W/60, S = Speed, W=Width

TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE				
★ SPEED (mph)	Sign Spacing (ft)			Max. Channelizing Device Spacing (ft)
	A	B	C	
20 – 30	100	100	100	20
35 – 40	350	350	350	20
45 – 55	500	500	500	40
60 – 70	700	700	700	40
Freeway	1000	1500	2640	40

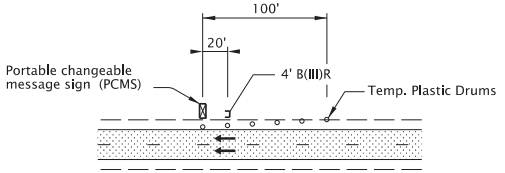
NOTES:
- Place traffic control devices on 10 ft. spacing for intersection and access radii.
- When necessary, sign spacing may be adjusted to fit site conditions. Limit spacing adjustments to 30% of the "A" dimension for all speeds.

NOTES:
- When paved shoulders adjacent to excavations are less than four feet wide protect longitudinal abrupt edge as shown.
- Use aggregate wedge when abrupt edge is 2 inches or greater.



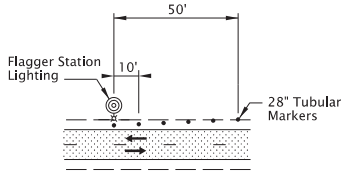
EXCAVATION ABRUPT EDGE

NOTES:
- Install PCMS beyond the outside shoulder, when possible.
- Use the appropriate type of barricade panels for PCMS location. Right shoulder, use Type B(III)R Left shoulder, use Type B(III)L
- Use six drums in shoulder taper on 20' spacing. The drums and barricade may be omitted when PCMS is placed behind a roadside barrier.
- Detail as shown is used for trailered and non-crashworthy components of:
  - Portable Traffic Signals
  - Smart Work Zone Systems



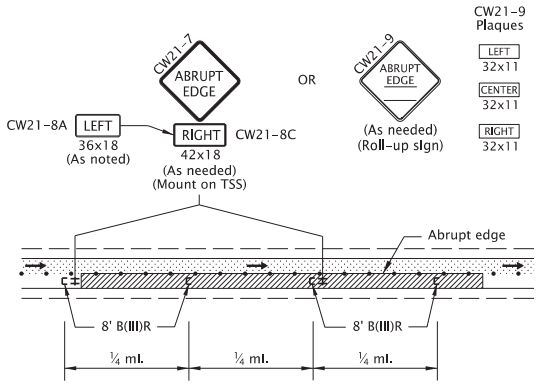
PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) INSTALLATION

NOTES:
- Install Flagger Station Lighting beyond the outside shoulder, where practical.
- Use six tubular markers in shoulder taper on 10' spacing.
- Place cart / generator / power supply off of the shoulder, as far as practical.



FLAGGER STATION LIGHTING DELINEATION

NOTES:
- Abrupt edges may be created by paving, operations, excavations or other roadway work. Use abrupt edge signing for longitudinal abrupt edges of 1 inch or greater.
- If the excavation is located on left side of traffic, replace the 8' B(III)R barricades with 8' B(III)L barricades and replace the "RIGHT" (CW21-8C) riders with "LEFT" (CW21-8A) riders.
- Continue signing and other traffic control devices throughout excavation area at spacings shown.
- If roll-up signs are used, attach the correct (CW21-9) plaques to the sign face using hook and loop fasteners. Place roll-up signs in advance of barricades.



TYPICAL ABRUPT EDGE DELINEATION

GENERAL NOTES FOR ALL TCP DRAWINGS:
- Signs and other Traffic Control Devices (TCD) shown are the minimum required.
- Place a barricade approx. 20' ahead of all sequential arrow boards.
- Arrows shown in roadway are directional arrows to indicate traffic movements.
- All signs are 48" x 48" unless otherwise shown. Use fluorescent orange sheeting for the background of all temporary warning signs.
- All diamond shaped warning signs mounted on barrier sign supports shall be 36" by 36". All other signs mounted on barrier sign supports shall not exceed 12 sq. ft. in total sign area.
- Low speed highways have a pre-construction posted speed of 40 mph or less. High speed highways have a pre-construction posted speed of 45 mph or higher.
- Do not locate sign supports in locations designated for bicycle or pedestrian traffic.
- Combine drawing details to complete temporary traffic control for each work activity.
- Coordinate and control pedestrian movements through a Temporary Accessible Route using Flaggers, Traffic Control Measures, or as directed.
- To be accompanied by Dwg. Nos. TM820 & TM821.

∘ ∘ ∘ Temp. Plastic Drums See TCD Spacing Table for max. spacing.

• • • 28" Tubular Markers See TCD Spacing Table for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

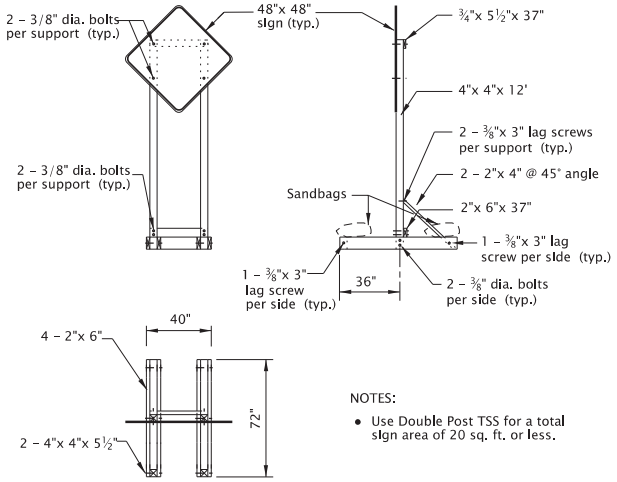
TABLES, ABRUPT EDGE AND PCMS DETAILS

2024

DATE	REVISION DESCRIPTION
07-2022	Added a note for TPARs

CALC. BOOK NO. N/A | SDR DATE 01-JUL-2022 | **TM800**

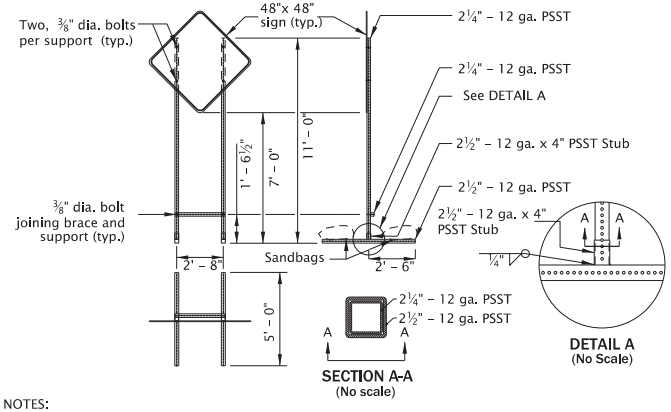
Effective Date: December 1, 2023 – May 31, 2024



NOTES:

- Use Double Post TSS for a total sign area of 20 sq. ft. or less.

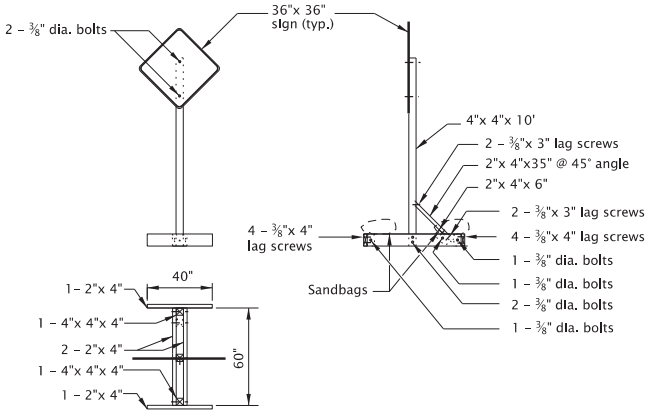
DOUBLE POST DETAIL



NOTES:

- Use PSST TSS's for a total sign area of 16 sq. ft. or less.
- All members shall have a minimum yield stress of 50 ksi.
- Galvanize steel according to ASTM A653 with coating designation G90. Remove Galvanizing from steel before welding. Repair Galvanizing according to ASTM A780.
- Use A325 Bolts or equivalent.
- 2¼" - 12 ga. PSST to extend entire length inside of the 2½" - 12 ga. x 4" PSST Stub.
- Do not use bolt to secure 2¼" PSST inside of the 2½" - 12 ga. x 4" PSST Stub.
- Weld steel according to American Welding Society (AWS) D.1.1.

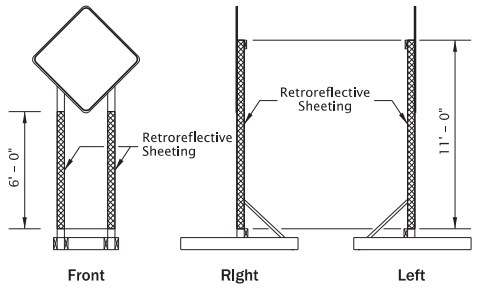
PERFORATED STEEL SQUARE TUBE (PSST) DETAIL



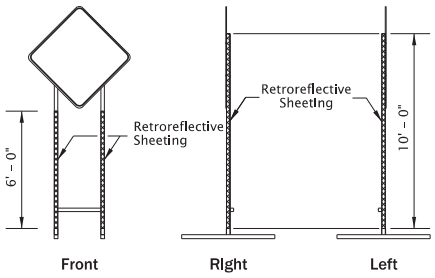
NOTES:

- Use Single Post TSS for a total sign area of 12 sq. ft. or less.
- Use Single Post TSS for mounting "Business Access" (CG20-11) signs. Do not mount signs on Type II or III Barricades.

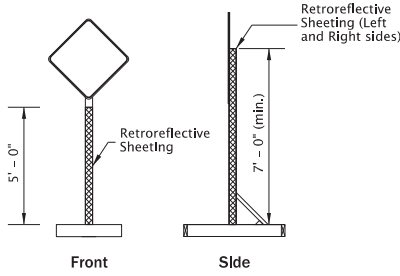
SINGLE POST DETAIL



Double Post



Perforated Steel Square Tube (PSST)



Single Post

TEMPORARY SIGN SUPPORT GENERAL NOTES:

- Do not tip over TSS at any time.
- Do not locate TSS's in locations that block pedestrian or bicycle traffic.
- For wooden TSS's, use either Douglas Fir or Hem Fir, which is surfaced four sides (S4S) and free of heart center (FOHC).
- See "Temporary Sign Placement" detail on TM822 for sign installation heights.
- Do not place or stack ballast more than 24" above the ground.
- When not in use, locate TSS as far from Public Traffic as practicable and turn away from traffic, or cover the sign. Do not cover reflective sheeting on the TSS posts.
- Place a minimum of 50 lbs of sandbags on each of the four TSS supports legs. (25 lb. max per bag) (min. 100 lbs per side of each TSS).
- See Dwg. No. TM204 for flag board mounting detail.

NOTES:

- Apply fluorescent orange, ANSI Type VIII or IX retroreflective sheeting to TSS posts, as shown, for all temporary signs, except "STOP" and "DO NOT ENTER". For "STOP" and "DO NOT ENTER" signs, used red ANSI Type III or IV retroreflective sheeting on the TSS posts.
- Apply sign post retroreflectivity to each TSS post facing front; and to the left and right sides of the TSS, as shown. Use 3" wide sheeting for wood post TSS's. Use 2" wide sheeting for PSST TSS's.
- Sheeting may be applied directly to post material; or applied to a rigid, lightweight substrate, then securely attached to the posts.

SIGN POST REFLECTIVE SHEETING PLACEMENT

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TEMPORARY SIGN SUPPORTS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2023 | TM821

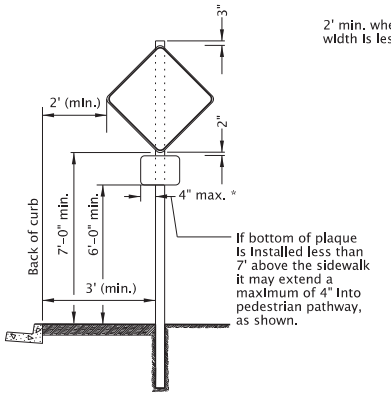
Effective Date: December 1, 2023 – May 31, 2024

01-JUL-2020

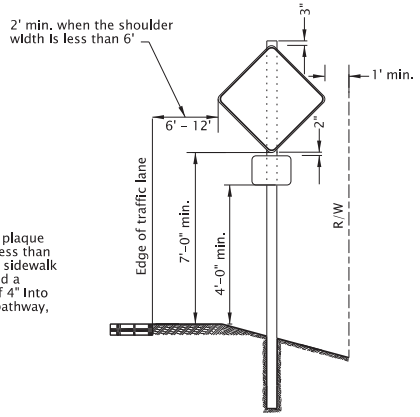
TM822.dgn

NOTES:

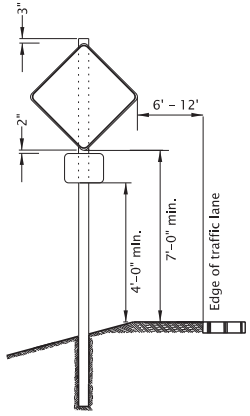
- Do not block bicycle lanes, sidewalks, or TPAR's with sign supports. Maintain minimum widths for these facilities according TCP Design Manual, MUTCD, ADA, or as directed.
- To be accompanied by Dwg. Nos. TM670, TM671, TM687, TM688 & TM689.



Urban Areas With Curb/Sidewalk

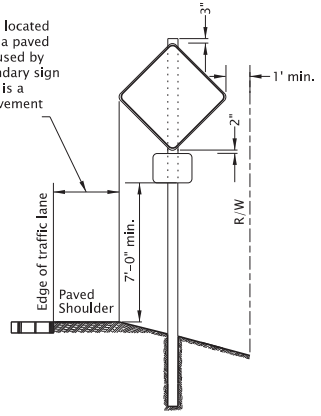


Rural Areas



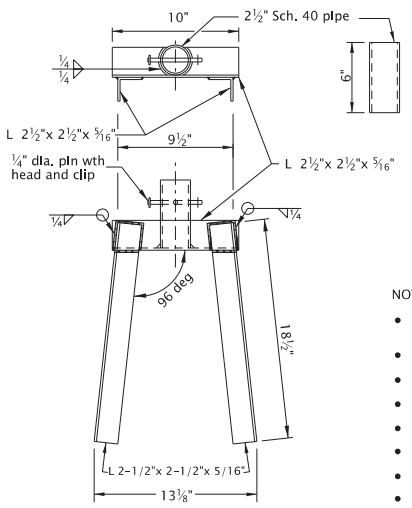
Divided Highway/Freeway Medians
No Curb/Sidewalk

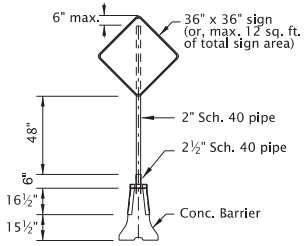
Where temporary signs are located adjacent to or intrude into a paved shoulder or other surface used by bicycle traffic, install secondary sign (plaque) so bottom of sign is a minimum of 7'0" above pavement surface, as shown.



Rural or Urban Areas - Curb or No Curb
Bicycles On Shoulder

TEMPORARY SIGN PLACEMENT





NOTES:

- Drill additional holes so sign can be rotated 90 degrees and pinned when not in use.
- All structural steel shall conform to ASTM A36.
- Support fits both 32" and 42" tall "F" barrier.
- Use for supporting a maximum 12 sq. ft. of total sign area.
- Place support at connection between two concrete barrier sections.
- Weld steel according to American Welding Society (AWS) D.1.1.
- Do not use clipped signs.
- Follow manufacturer recommendation when installing signs on barrier other than concrete.

CONCRETE BARRIER SIGN SUPPORT

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TEMPORARY SIGN SUPPORTS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 01-JUL-2020 | **TM822**

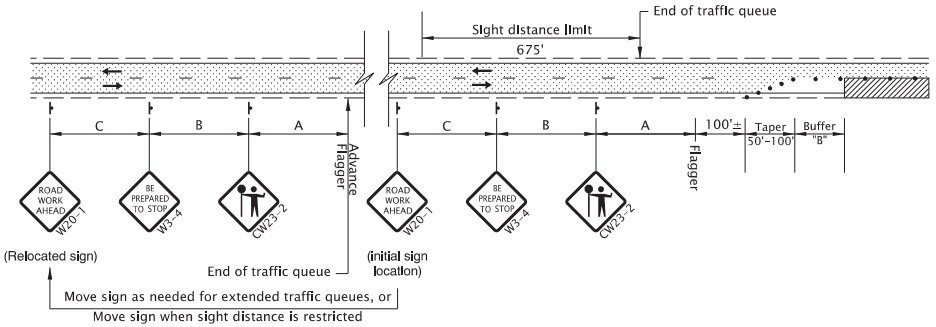
Effective Date: December 1, 2023 - May 31, 2024

13-JAN-2023

TM855.dgn

NOTES:

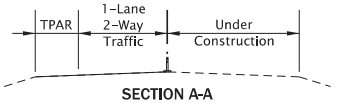
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
- Relocate initial "ROAD WORK AHEAD" (W20-1) sign in advance of additional "BE PREPARED TO STOP" (W3-4) and Flagger Ahead (CW23-2) signs, as shown.
- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.



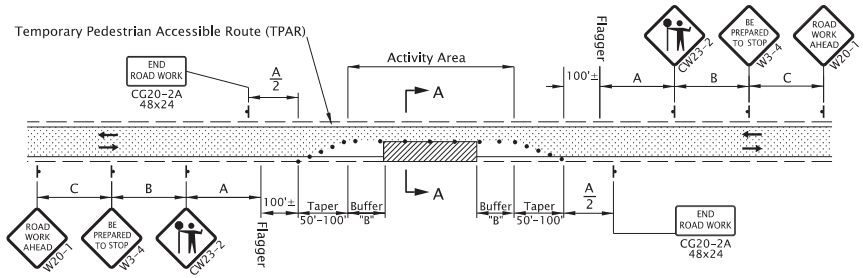
ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES

NOTE:

- When using pilot cars with flaggers to control traffic during paving operations, the Tubular Marker spacing along centerline may be increased to 200' within the Activity Area, as shown or as directed.
- Include "WAIT FOR FLAGGER" (CR4-23) signs mounted on Type II Barricade located approx. 50' before each Flagger.
- Coordinate and control pedestrians movements through the TPAR using Flaggers, other TCM, or as directed. When the existing shoulder is greater than or equal to 4' wide, provide a minimum of 4' of width for the TPAR.



SECTION A-A



2-Lane, 2-Way Roadway
ONE LANE CLOSURE

GENERAL NOTES FOR ALL DETAILS:

- This drawing is only intended to be used where an Automated Flagger Assistance Device (AFAD) cannot be utilized.
- The "FLAGGER" (CW23-2) symbol sign shall be used only in conjunction with the "BE PREPARED TO STOP" (W3-4) sign.
- Cover existing passing zone signing, as directed.
- Install temporary striping as required.
- To determine Taper Length ("L") and Buffer Length ("B"), use the "MINIMUM LENGTHS TABLE" shown on Dwg. No. TM800.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. No. TM800.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- At night, flagger stations shall be illuminated according to the FLAGGER STATION LIGHTING DELINEATION detail on Dwg No. TM800.
- To be accompanied by Dwg. Nos. TM820 & TM821.

•••••••• 28" Tubular Markers on 10'max. spacing arround Intersection radii.

• • • • • 28" Tubular Markers on 20' max. spacing for flagger tapers and stations

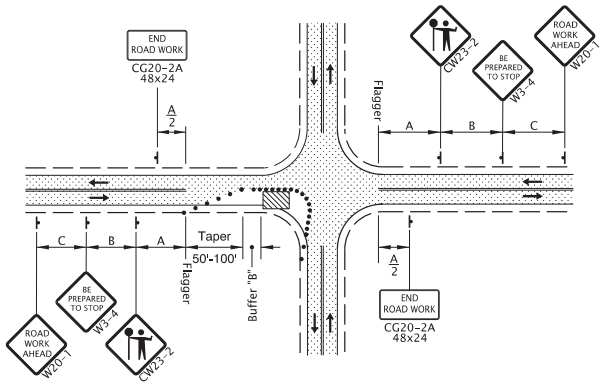
• • • 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION

NOTE:

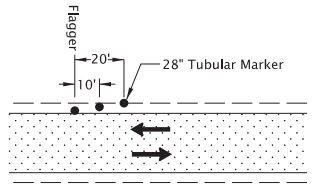
- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection



2-Lane, 2-Way Roadway
ONE LANE CLOSURE, INTERSECTION

NOTE:

- Use a minimum of 3 tubular markers in shoulder taper on 10' spacing for flagger station delineation.



FLAGGER STATION DELINEATION

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

2-LANE, 2-WAY ROADWAYS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2023 | **TM855**

Effective Date: December 1, 2023 - May 31, 2024