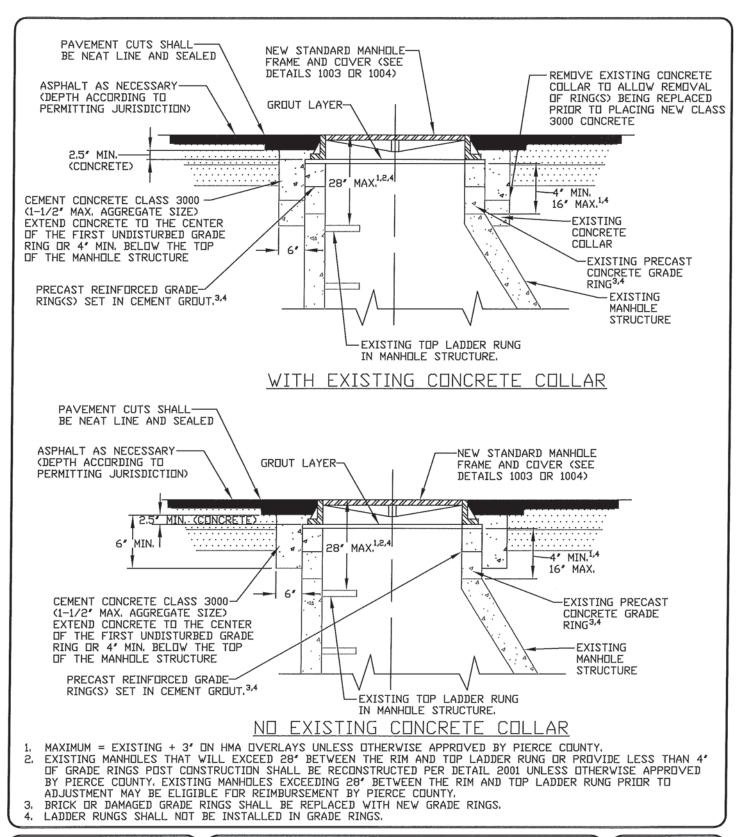
# **Appendix C Standard Plans**





PIERCE COUNTY PLANNING & PUBLIC WORKS

SEWER DIVISION 9850 64TH STREET WEST UNIVERSITY PLACE, WASHINGTON 98467-1078 (253) 798-4050

# STANDARD DETAILS

SCALE NTS

DATE

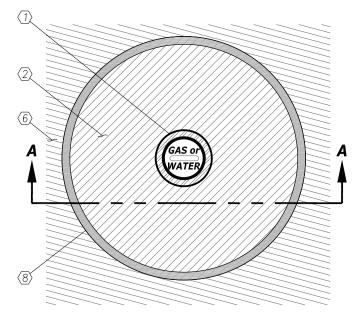
6/27/2018

STANDARD DETAIL NO.

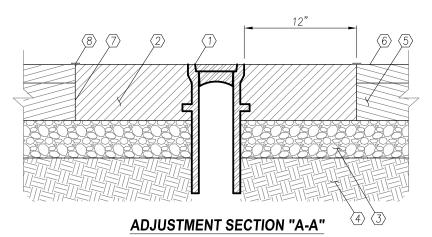
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EXISTING MANHOLE ADJUSTMENT

PAGE 1 OF 1



# **RESTORATION PLAN**



# **CONSTRUCTION NOTES:**

- (1) NEW OR EXISTING FRAME AND GRATE OR SOLID LID
- (2) 6" HMA (2) 3" LIFTS
- ⟨3⟩ 4" CSTC
- (4) COMPACTED SUBGRADE
- (5) EXISTING HMA
- (6) NEW 2" HMA OVERLAY OR HMA PATCH
- (7) TACK COAT
- (8) JOINT SEAL

## **GENERAL NOTES:**

- 1. MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE PER LATEST EDITION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION UNLESS OTHERWISE NOTED.
- 2. NEW CASTING MAY BE PROVIDED BY UTILITY.

APPROVED FOR PUBLICATION

Pul A. Bucick 01/10/20

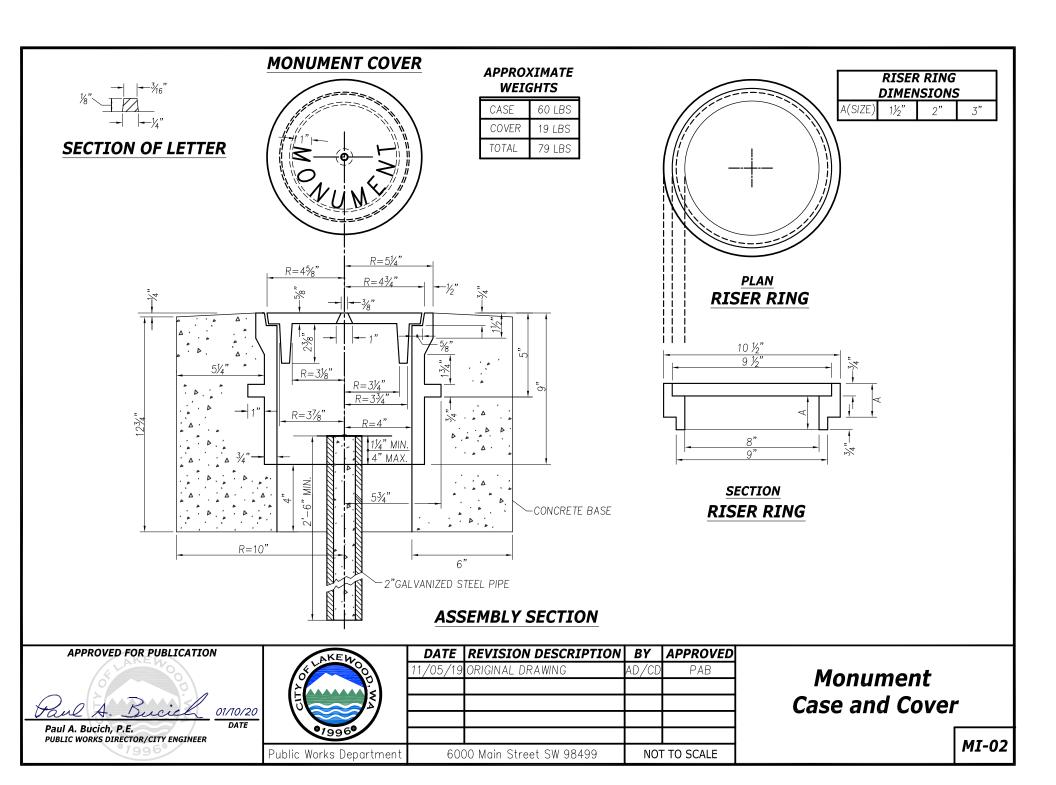
Paul A. Bucich, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

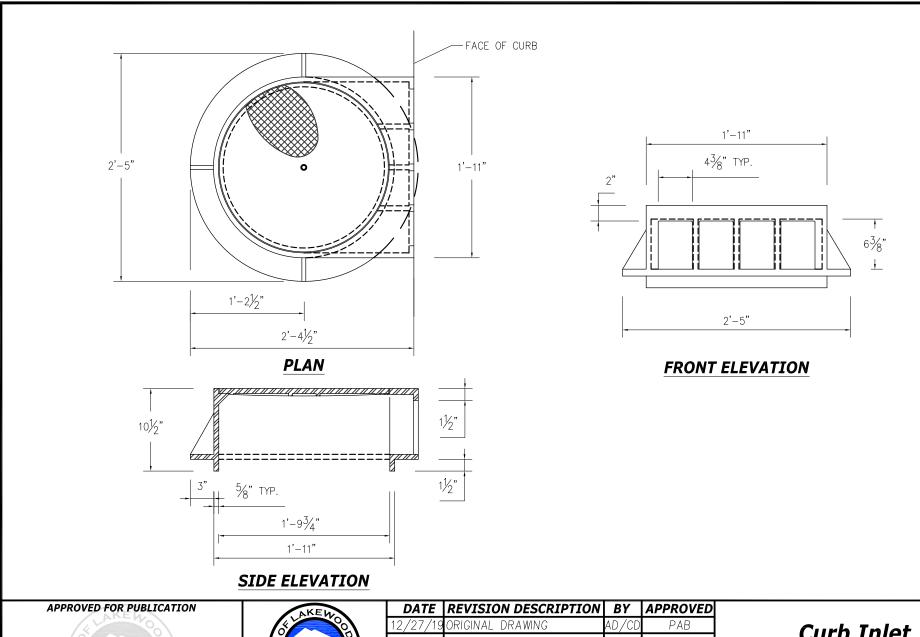


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nt	600	00 Main Street SW 98499	NOT	TO SCALE

Valve Casing
Adjustment and Restoration

MI-03





Paul A. Bucich, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

Public Works Department

01/10/20

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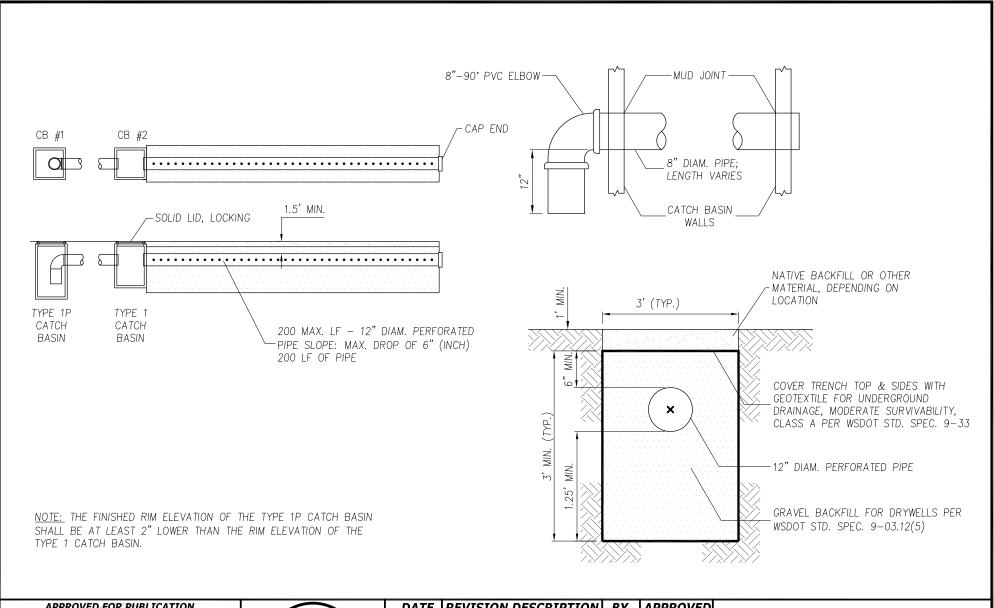
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Curb Inlet Frame and Cover

SW-01



# APPROVED FOR PUBLICATION

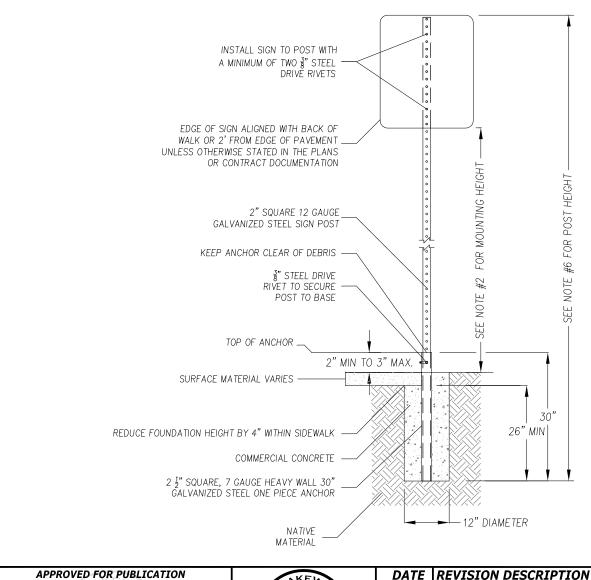
01/10/20 Paul A. Bucich, P.E. PUBLIC WORKS DIRECTOR/CITY ENGINEER

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Public	Works	Department

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# Infiltration Trench Detail

SW-03



- VERIFY AND STAKE LOCATIONS OF TRAFFIC SIGNS FOR ENGINEER APPROVAL AND ADJUSTMENT PRIOR TO INSTALLATION.
- 2. MOUNTING HEIGHT SHALL BE 7 FEET UNLESS OTHERWISE APPROVED BY THE ENGINEER WITH EXCEPTION TO:
  - A) MOUNTING HEIGHT FOR SECONDARY SIGNS MOUNTED BELOW ANOTHER SIGN MAY BE REDUCED BY 1 FOOT WHEN NOT LOCATED WITHIN SIDEWALK.
  - B) MOUNTING HEIGHT FOR ARROW AND CHEVRON SIGNS
    SHALL BE 5 FEET WHEN NOT LOCATED WITHIN SIDEWALK.
- 3. SIGN FACE SHALL BE TYPE 4 SHEETING.
- 4. ALL HARDWARE AND FASTENERS SHALL BE GALVANIZED STEEL UNLESS OTHERWISE NOTED.
- 5. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISH GRADE EXCEPT WHEN COVERED BY SIDEWALK.
- 6. FOR SIGNS OTHER THAN CHEVRON OR ARROW (WI-6, WI-8):
  - A) USE 12' POST FOR SIGNS UP TO 30" TALL;
  - B) USE 14' POST FOR SIGNS 30-54" TALL;
  - C) CONTACT ENGINEER FOR SIGNS TALLER THAN 54"

Paul A. Bucich O1/07/21

Paul A. Bucich, P.E.

PUBLIC WORKS DIRECTOR/CITY ENGINEER

Public Works Department

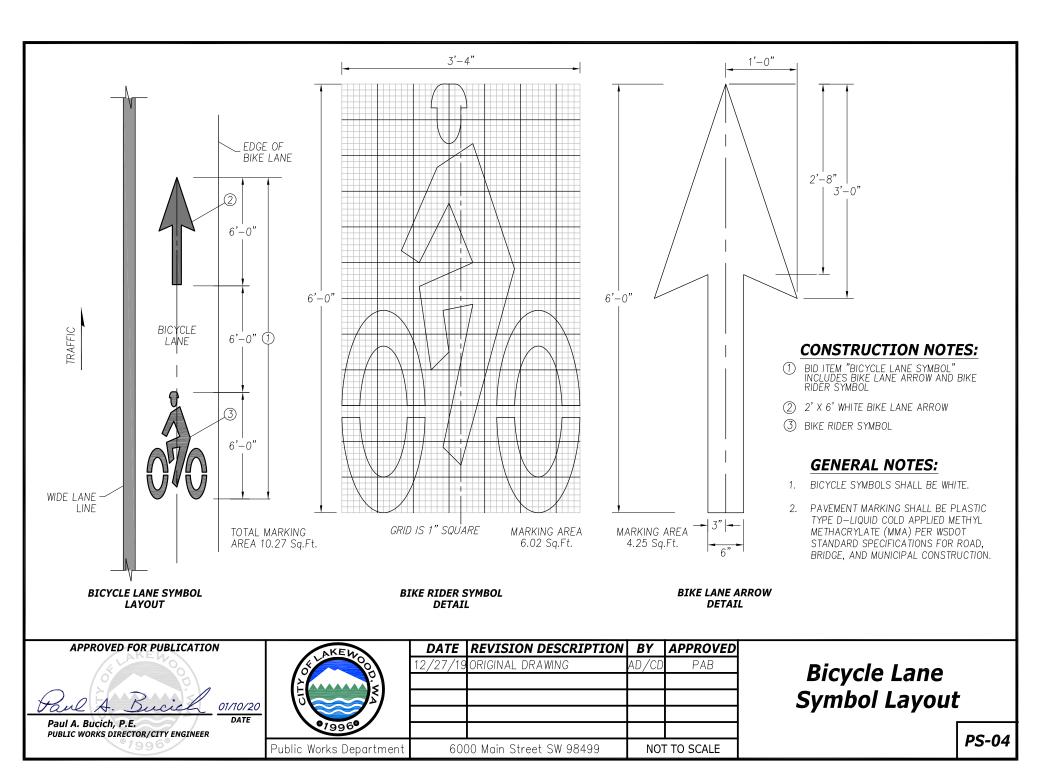
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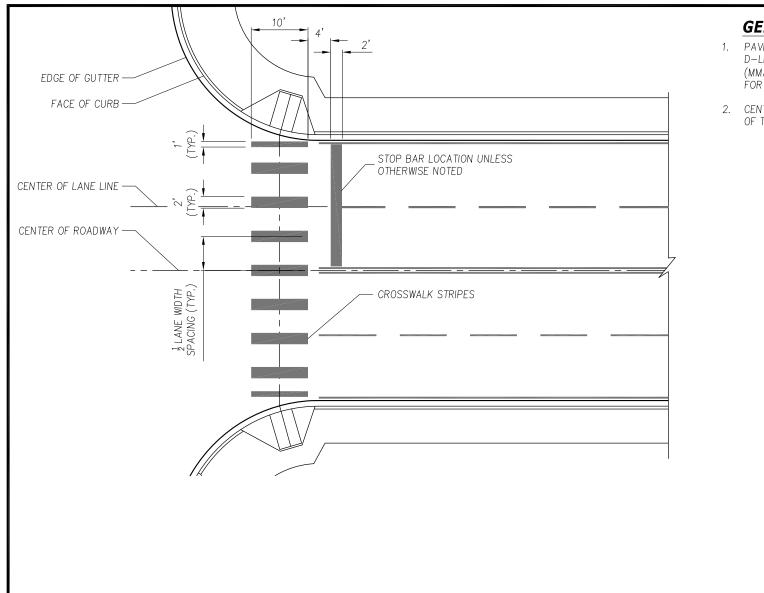
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6000 Main Street SW 98499 NOT TO SCALE

Steel Post Street Sign Support

PS-03





- 1. PAVEMENT MARKING SHALL BE PLASTIC TYPE D-LIQUID COLD APPLIED METHYL METHACRYLATE (MMA) PER WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- 2. CENTER CROSSWALK ON CURB RAMP ON EACH SIDE OF THE STREET.

APPROVED FOR PUBLICATION

Paul A. Bucich, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

O1/10/20
DATE

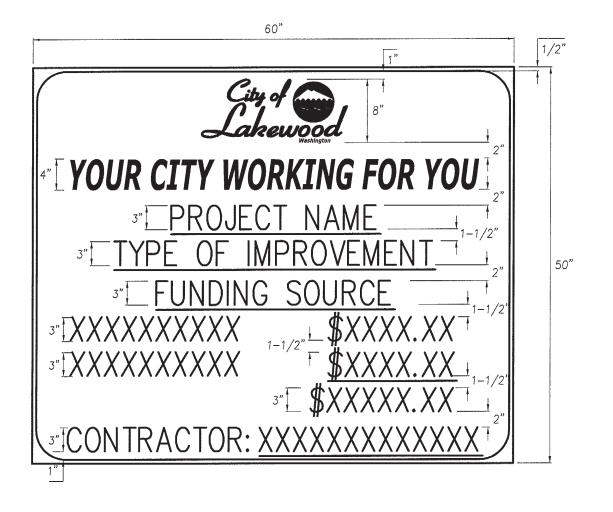
Public Works Department

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Crosswalk and Stop Bar

PS-05



- MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE PER LATEST EDITION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION UNLESS OTHERWISE NOTED.
- 2. ENGINEER WILL PROVIDE FUNDING SOURCE NUMBERS AFTER PROJECT AWARD.
- 3. SIGN SHALL BE BLUE WRITING ON WHITE BACKGROUND.

APPROVED FOR PUBLICATION

Don E. Wickstrom, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

City of Sakewood

Public Works Department

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Project Sign

PS-0.7

#### CHANNELIZATION TAPER FORMULA, T1

T, = WS (45 MPH OR MORE) S = SPEED LIM

 $T_1 = \frac{WS^2}{60}$  (0 TO 40 MPH)

S = SPEED LIMIT (MPH)

W = OFFSET FROM NORMAL CENTER LINE (FT.) T,= LENGTH OF TAPER (FT.)

T1 SHALL BE 50% LARGER WHEN LOCATED IN A CURVE

T1 SHALL BE A MINIMUM LENGTH OF 90 FEET

#### TURN LANE STORAGE LENGTH, P

TO BE DETERMINED BY AN ENGINEERING STUDY

MIN. - - - 100 FEET

DESIRABLE - - - - 125 FEET TO 150+ FEET

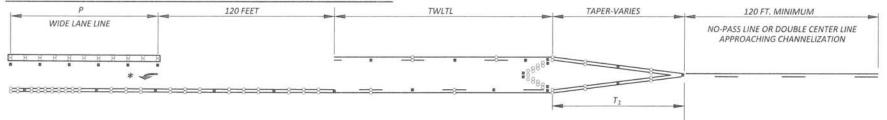
POCKET LENGTHS SHORTER THAN MINIMUM BY APPROVAL OF COUNTY ENGINEER

# \* ARROW SPACING FOR LEFT- / RIGHT-TURN POCKETS

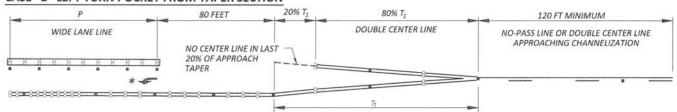
POCKET LENGTH (P)			SPACING AS MEASURED		
MORE THAN	UP TO	USE	TO TAIL OF ARROW		
130 FEET 255 FEET		1 ARROW** 2 ARROWS** 3 ARROWS**			

<sup>\*\*</sup>ONLY(S) REQUIRED FOR DROP LANES (SEE CASE C)
AND FOR "TEE" INTERSECTIONS (SEE CASE E) - SEE SHEET 2 OF 9.

#### CASE "A" LEFT-TURN POCKET FROM TWO-WAY LEFT-TURN CENTER LINE



#### CASE "B" LEFT TURN POCKET FROM TAPER SECTION



SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

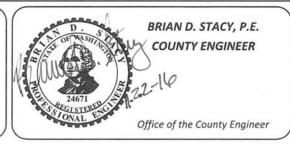
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# **Pierce County**

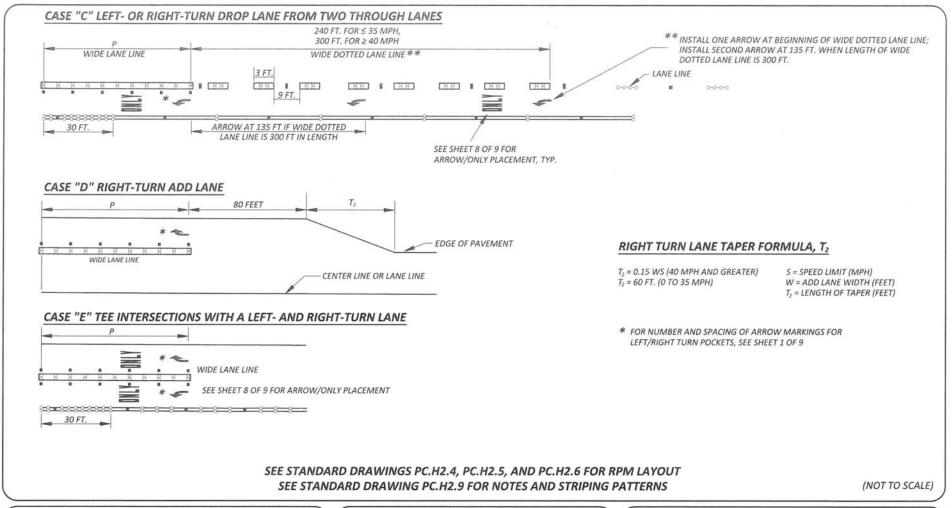
#### **Public Works**

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PAVEMENT MARKINGS

SHEET 1 OF 9





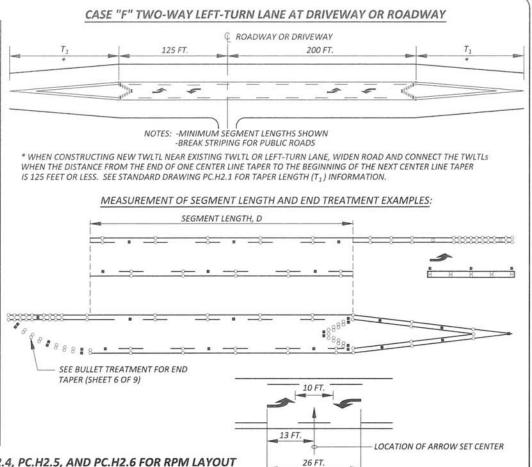
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Tacoma Mall Office Building
4301 South Pine Street, Suite 628
Tacoma, Washington 98409
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PAVEMENT MARKINGS

SHEET 2 OF 9

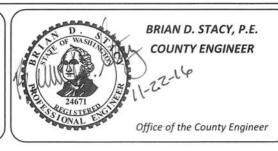
# TWO-WAY LEFT-TURN LANE ARROW PLACEMENT # OF SEGMENT LENGTH, D ARROW LOCATION OF CENTER OF ARROW SET SETS 0 FT. - 100 FT. 0 NONE 101 FT. - 300 FT. 301 FT. - 500 FT. 2 75 FT. 501 FT. - 850 FT. 3 75 FT. 75 FT. 851 FT. - 1200 FT. 4 75 FT. \*\* SPACE BALANCE OF SETS EVENLY OVER THE 1201 FT. - 1550 FT. REMAINDER OF THE SEGMENT. D+200 ROUND UP TO THE OVER 1550 FT. NEAREST WHOLE NUMBER 350



SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS



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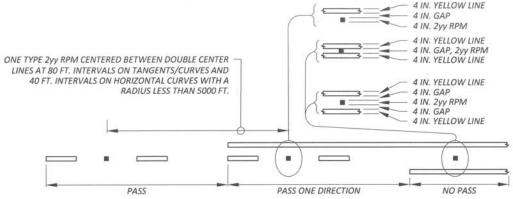


PAVEMENT MARKINGS SHEET 3 OF 9

PC.H2.3

(NOT TO SCALE)

# RPM LAYOUT FOR TWO-LANE ROADS (NARROW AND WIDE PATTERN)



# RPM LAYOUT FOR MULTI-LANE ROADS (NARROW PATTERN)

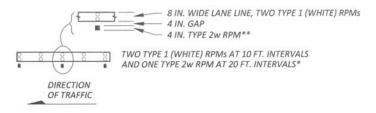


INSTALL TYPE 1 (YELLOW) RPMs, ONE ON EACH LINE WITH A TYPE 2yy RPM CENTERED BETWEEN BOTH LINES AND TYPE 1 SETS. RPMs SHALL BE SPACED AT 80 FT. INTERVALS ON TANGENTS/CURVES AND 40 FT. INTERVALS ON HORIZONTAL CURVES WITH RADII LESS THAN 5000 FT.

- OMIT TYPE 1 RPMs ON TYPE D STRIPING.
- \*\* TYPE 2w RPM GOES IN THE TURN LANE. IN THE CASE OF SIDE-BY-SIDE TURN LANES, BOTH LANES SHALL HAVE TYPE 2w RPMs.

SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

#### RPM LAYOUT FOR WIDE LANE LINE

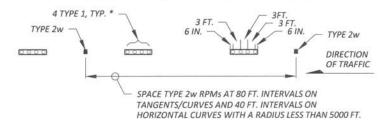


#### RPM LAYOUT FOR WIDE DOTTED LANE LINE



WIDE DOTTED LANE LINE WITH TWO DOUBLE ROWS OF TYPE 1 (WHITE)
RPMs EQUALLY SPACED. CENTERED BETWEEN EVERY SECOND WIDE
DOTTED LANE LINE INSTALL DOUBLE ROW OF TYPE 2w RPMs.\*

#### RPM LAYOUT FOR PAINTED LANE LINES



(NOT TO SCALE)

# Pierce County

#### **Public Works**

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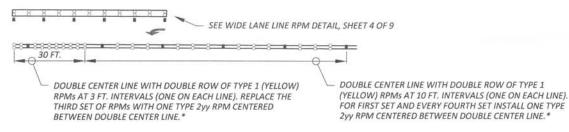


PAVEMENT MARKINGS

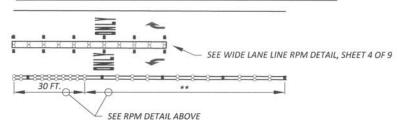
SHEET 4 OF 9

#### RPM LAYOUT FOR TURN LANES

#### LEFT-TURN LANE FROM TAPER OR TWO-WAY LEFT-TURN LANE

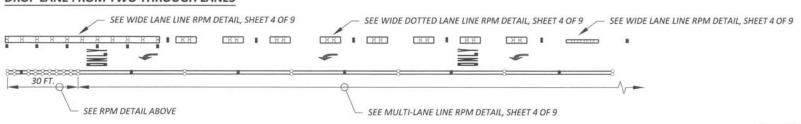


#### TEE INTERSECTIONS WITH A LEFT- AND RIGHT-TURN LANE



- \* OMIT TYPE 1 RPMs ON TYPE D STRIPING.
- \*\* THIS RPM PATTERN APPLIES 30 FT. FROM THE STOP LINE TO CENTER LINE TAPER AND 90 FT. IF NO CENTER LINE TAPER.

#### DROP LANE FROM TWO THROUGH LANES



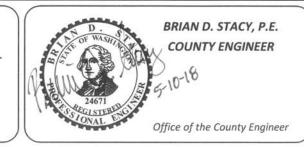
#### SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

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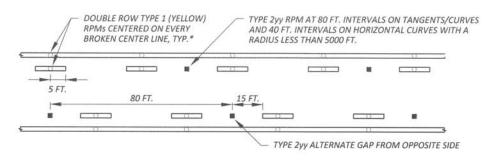
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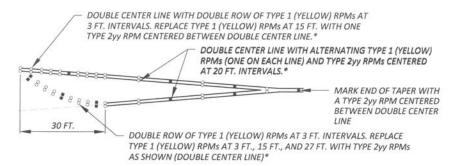
PAVEMENT MARKINGS

SHEET 5 OF 9

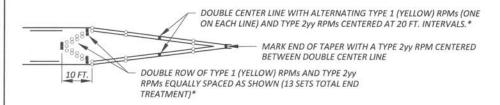
#### RPM LAYOUT FOR TWO-WAY LEFT-TURN LANE



#### **BULLET TREATMENT FOR END OF TAPER**



#### RPM LAYOUT FOR END OF TAPER/ BEGINNING OF TWO-WAY LEFT-TURN LANE



## RAISED PAVEMENT MARKERS (RPMs)

TYPE 1	NON-REFLECTIVE	YELLOW OR WHITE
TYPE 2yy	REFLECTIVE FACE BOTH SIDES	YELLOW AND YELLOW
TYPE 2w	REFLECTIVE FACE ONE SIDE, APPROACH DIRECTION	WHITE

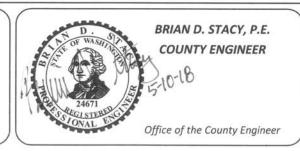
OMIT TYPE 1 RPMs ON TYPE D STRIPING.

#### SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

(NOT TO SCALE)

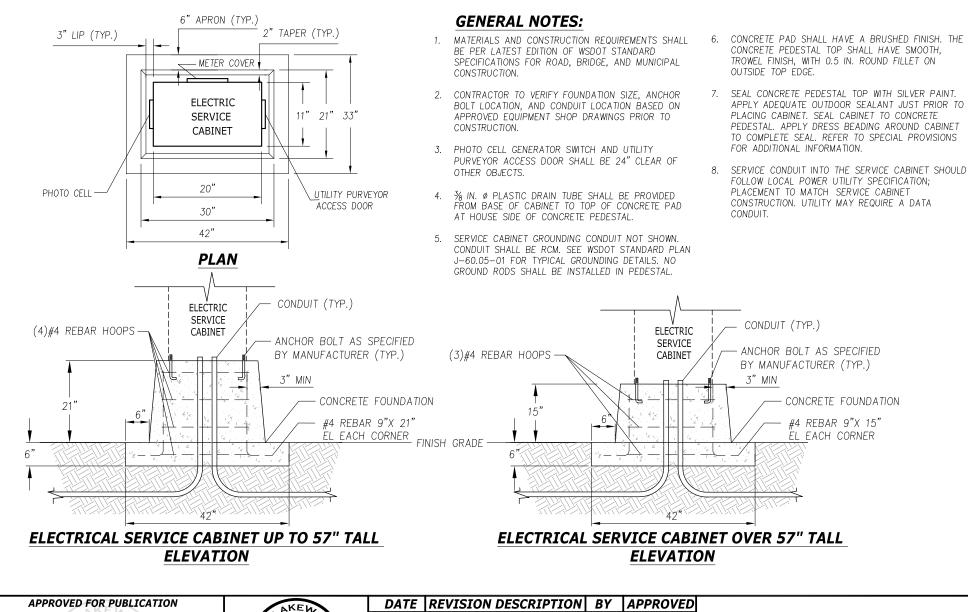


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PAVEMENT MARKINGS

SHEET 6 OF 9



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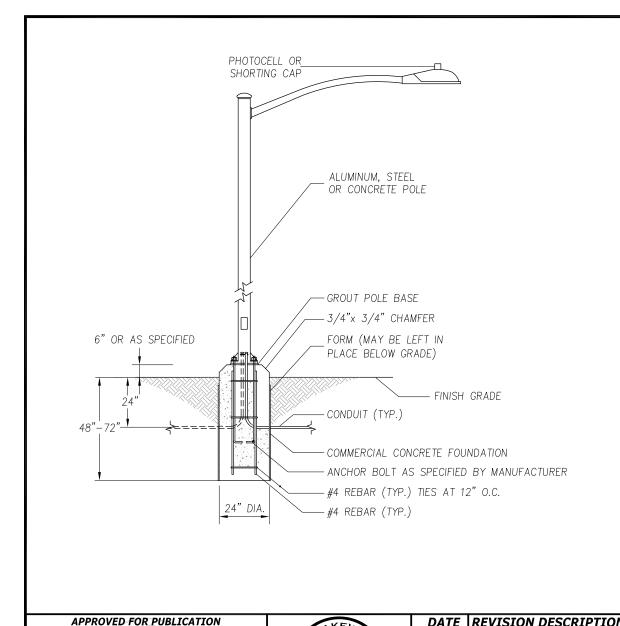
Paul A. Bucich, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

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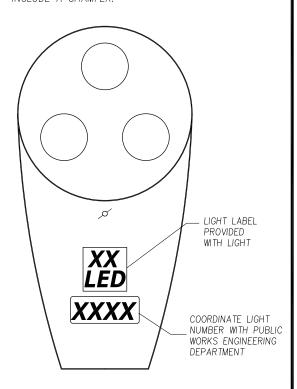
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t	600	0 Main Street SW 98499	NOT TO SCALE	

# Service Cabinet Pedestal

IS-04



- 1. MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE PER CITY OF LAKEWOOD ENGINEERING STANDARDS MANUAL SECTION 9.1.
- FOUNDATION DEPTH SHALL BE 48" FOR ALUMINUM AND STEEL POLES AND 72" FOR CONCRETE POLES.
- 3. IF A STREET LIGHT IS PLACED IN A SIDEWALK, THE TOP OF THE FOUNDATION SHALL BE FLUSH WITH THE TOP OF SIDEWALK, AND THE FOUNDATION SHALL NOT INCLUDE A CHAMFER.



# STREET LIGHT LABELING

Paul A. Bucick O1/10/20

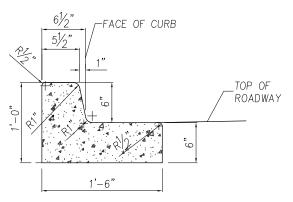
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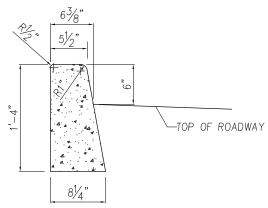
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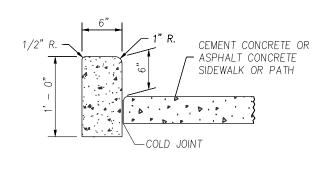
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Street Lights

IS-06







# TRAFFIC CURB AND GUTTER

TRAFFIC BARRIER CURB

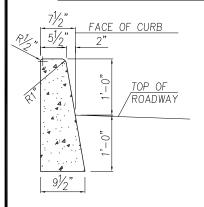
# **PEDESTRIAN CURB**

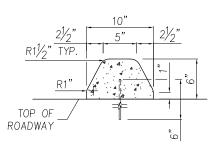
-FACE OF CURB

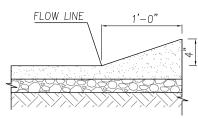
VARIES FROM 6" TO 0" MAINTAIN 1H:6V SLOPE ON FACE OF CURB

TOP OF

ROADWAY







# 

TRUCK BARRIER CURB

**EXTRUDED CURB** 

HMA WEDGE CURB

# **DEPRESSED CURB AND GUTTER**

1'-6"

(AT CURB RAMPS AND DRIVEWAY ENTRANCES)

# **GENERAL NOTES:**

 MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE PER LATEST EDITION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

#### APPROVED FOR PUBLICATION

Paul A. Bucich O1/10/20

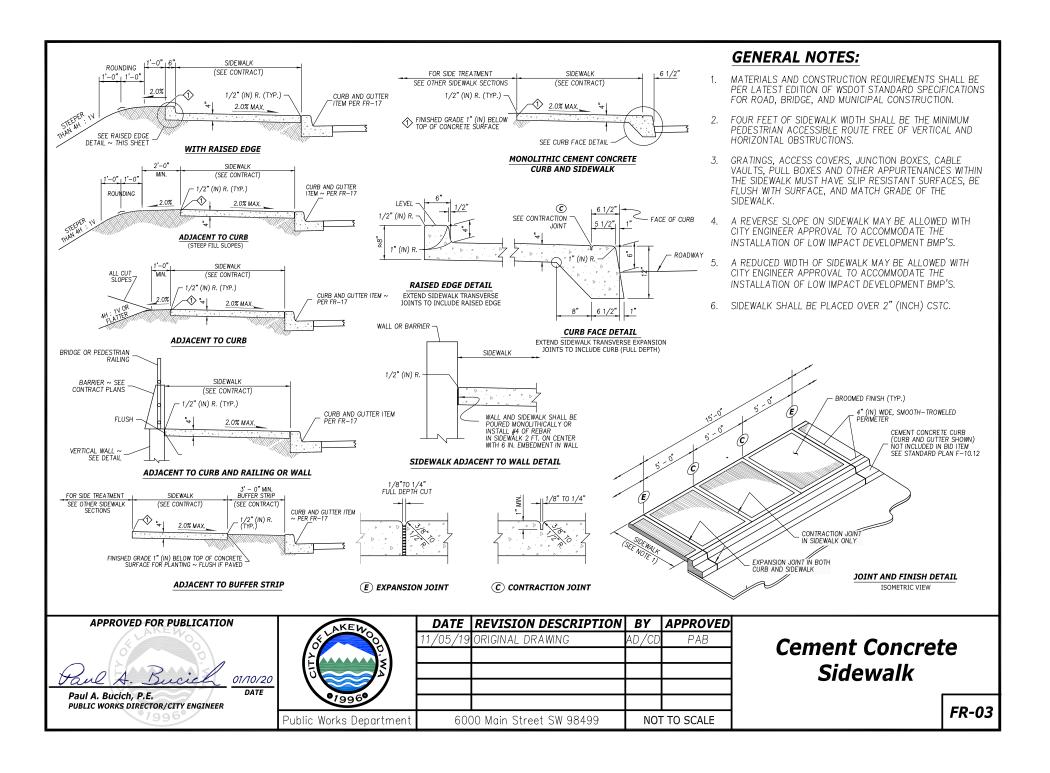
Paul A. Bucich, P.E.
PUBLIC WORKS DIRECTOR/CITY ENGINEER

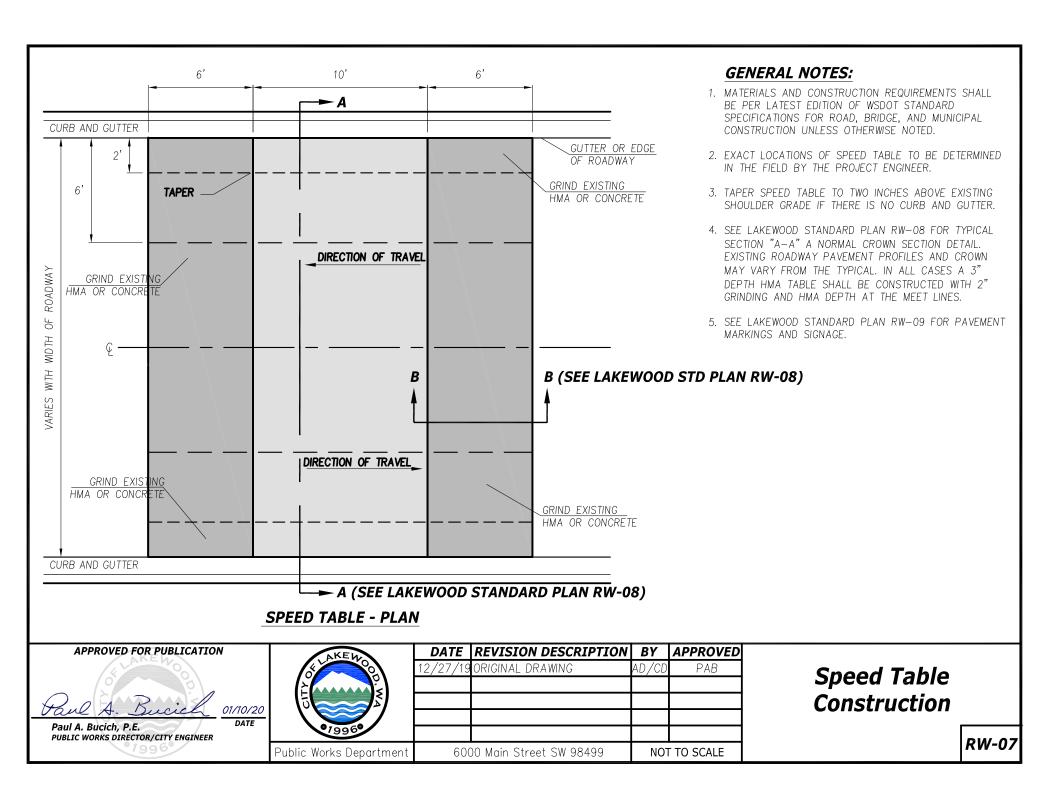


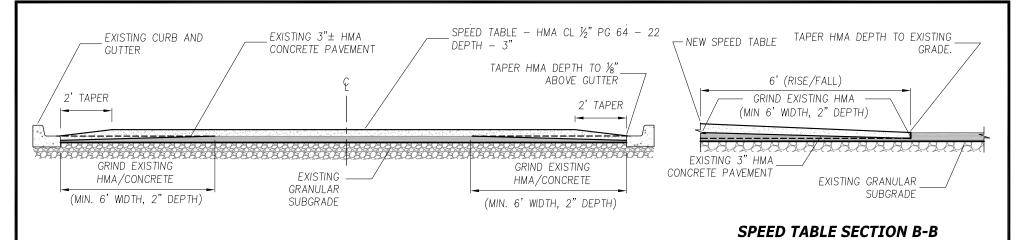
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	11/2/09	ORIGINAL DRAWING	AD	DEW
	2/28/12	REVISED DRAWING	TB/LC	DEW
	3/2/15	REMOVED TYPE "C" CURB	LC	DEW
	9/7/17	REVISED DRAWING	TJM	DEW
	1/16/19	REVISED DRAWING	CD	PAB
t	6000 Main Street SW 98499		NOT	TO SCALE

**Curbs** 

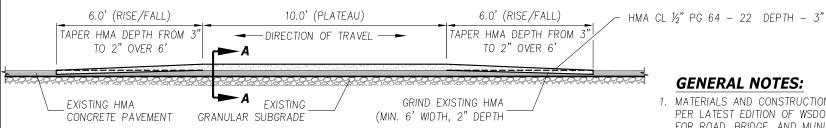
FR-04







# SPEED TABLE SECTION A-A



## SPEED TABLE CENTER PROFILE

# **GENERAL NOTES:**

- 1. MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE PER LATEST EDITION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION UNLESS OTHERWISE NOTED.
- 2. EXACT LOCATION OF SPEED TABLES TO BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER.
- 3. IF CURB AND GUTTER DOES NOT EXIST, TAPER SPEED TABLE TO TWO INCHES ABOVE EXISTING SHOULDER GRADE.

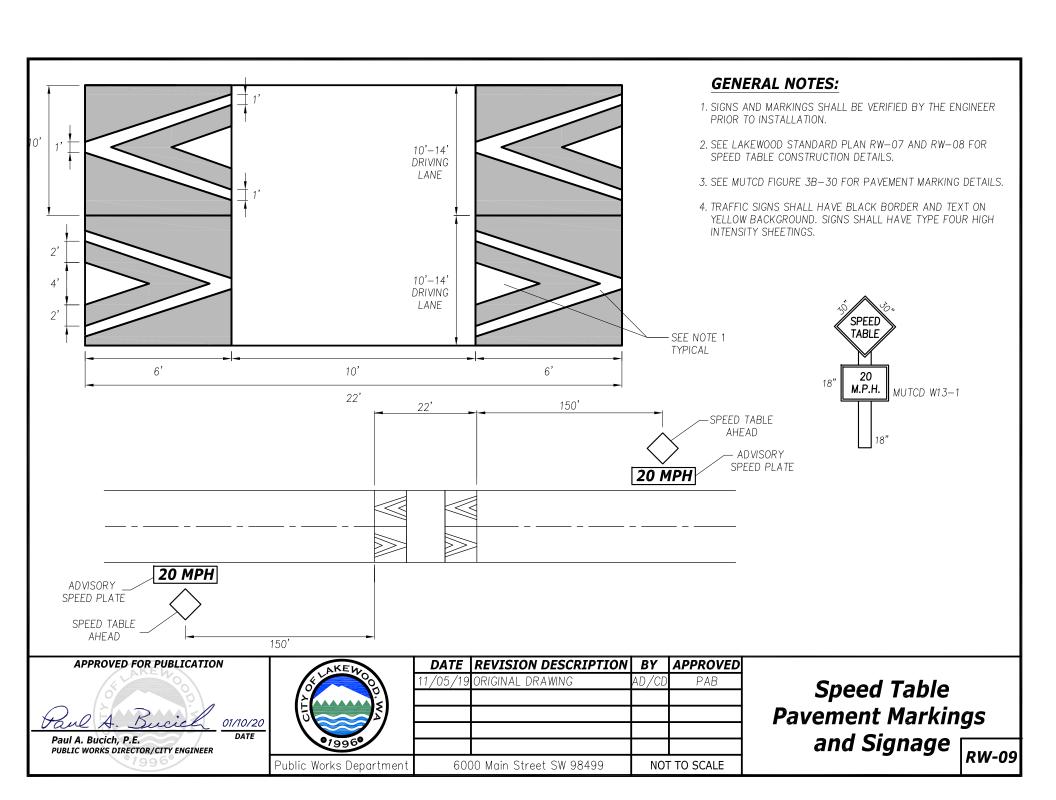
APPROVED FOR PUBLICATION 01/10/20

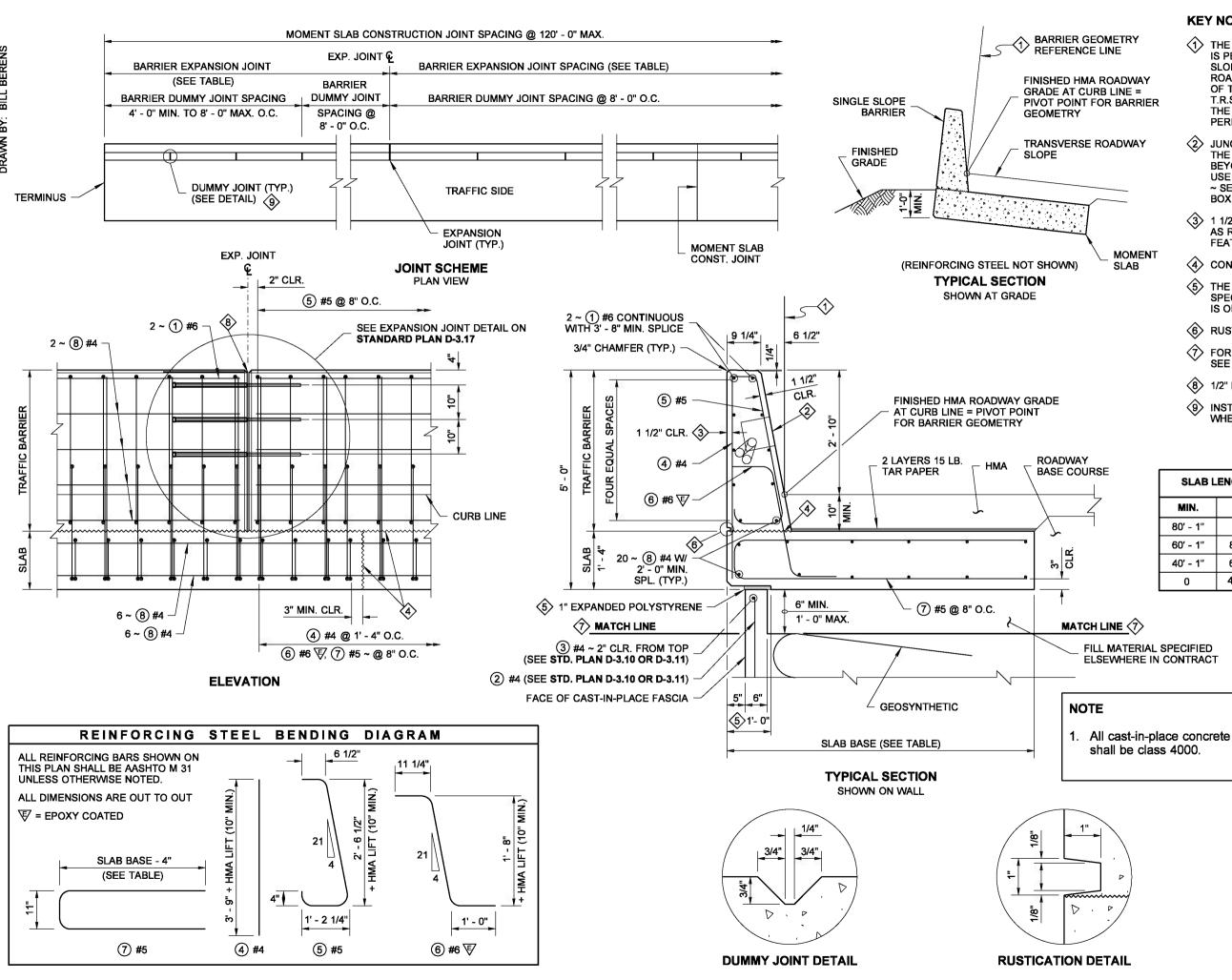
Paul A. Bucich, P.E. PUBLIC WORKS DIRECTOR/CITY ENGINEER

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Speed Table Details

**RW-08** 

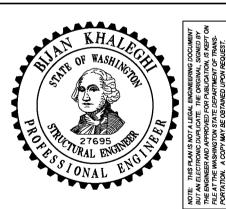




#### **KEY NOTES**

- THE BARRIER GEOMETRY REFERENCE LINE (B.G.R.L.) IS PERPENDICULAR TO THE TRANSVERSE ROADWAY SLOPE (T.R.S.). FOR SUPERELEVATED TRANSVERSE ROADWAY SLOPES. THE B.G.R.L. ON THE LOW SIDE OF THE ROADWAY SHALL BE PERPENDICULAR TO THE T.R.S. UP TO A MAXIMUM OF 8% SUPERELEVATION; THE B.G.R.L. ON THE HIGH SIDE SHALL ALWAYS BE PERPENDICULAR TO THE T.R.S..
- 2 JUNCTION BOX (MOUNT BOX SO COVER IS FLUSH WITH THE BARRIER FACE WITH A 0" TOLERANCE PROTRUDING BEYOND THE BARRIER FACE AND 1/8" RECESSED). USE NEMA 4X JUNCTION BOX WITH STATIONARY-FORMS ~ SEE STANDARD PLAN J-40.36. USE NEMA 3R JUNCTION BOX WITH SLIP-FORMS ~ SEE STANDARD PLAN J-40.37.
- 3 1 1/2" MIN. CONCRETE COVER ~ INCREASE THE COVER AS REQUIRED TO ACCOMMODATE ARCHITECTURAL FEATURES AND FINISH.
- (4) CONSTRUCTION JOINT WITH ROUGHENED SURFACE.
- THE NOTCH, DETAILED BY THESE DIMENSIONS AND SPECIFICATIONS, IS REQUIRED ONLY IF THE BARRIER IS ON WALL FACING.
- 6 RUSTICATION ~ SEE RUSTICATION DETAIL
- FOR STRUCTURAL DETAILS BELOW THE MATCH LINE, SEE STANDARD PLANS D-3.09, D-3.10 OR D-3.11.
- (8) 1/2" EXPANSION JOINT WITH PREMOLDED JOINT FILLER.
- INSTALL BARRIER DUMMY JOINTS ON TRAFFIC SIDE ONLY WHEN ARCHITECTURAL FEATURES ARE SPECIFIED.

SLAB LENGTH		SLAB	BASE	BARRIER EXPANSION JOINT SPACING			
MIN.	MAX.	ON WALL	AT GRADE	MIN.	MAX.		
80' - 1"		7' - 0"	5' - 0"	80' - 0"	120' - 0"		
60' - 1"	80' - 0"	8' - 0"	6' - 0"	60' - 0"	80' - 0"		
40' - 1"	60' - 0"	9' - 0"	7' - 0"	40' - 0"	60' - 0"		
0	40' - 0"	CONTACT BRIDGE OFFICE					



# **PERMANENT GEOSYNTHETIC WALL** SINGLE SLOPE BARRIER STANDARD PLAN D-3.15-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III

6/10/13

