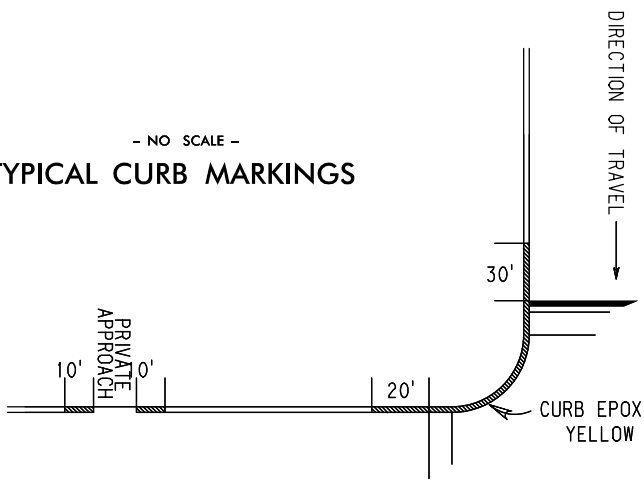
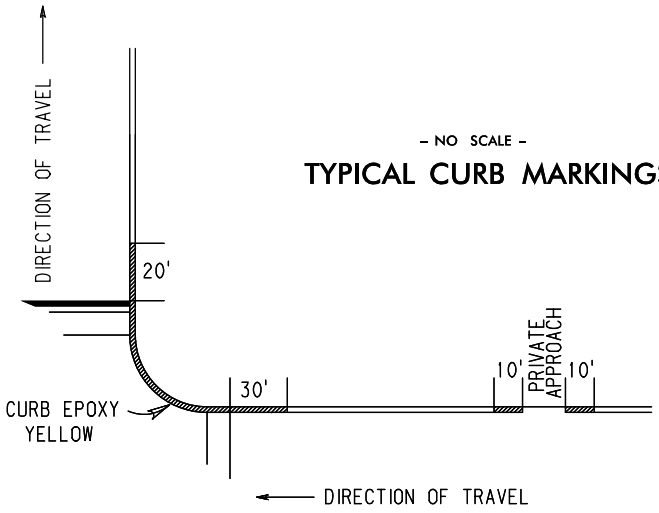


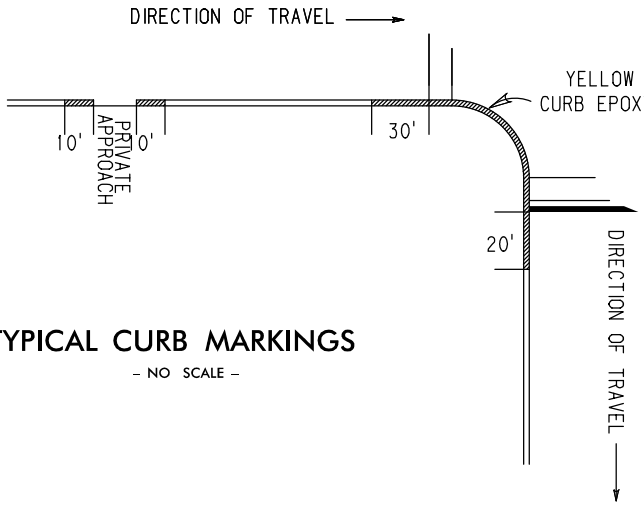

– NO SCALE –

**TYPICAL CURB MARKINGS**



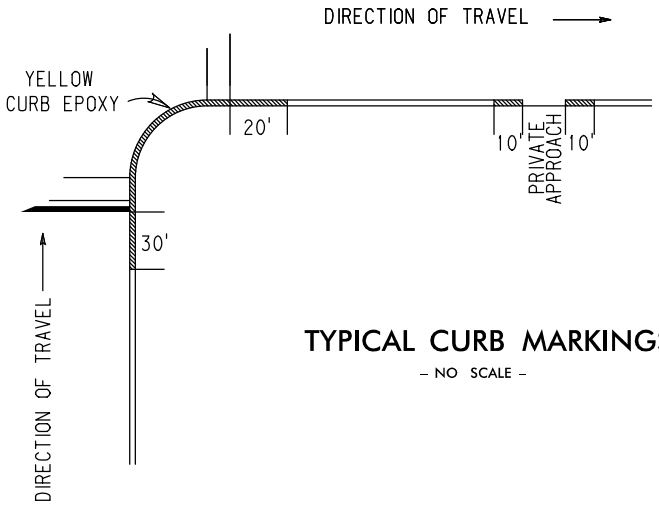

– NO SCALE –

**TYPICAL CURB MARKINGS**



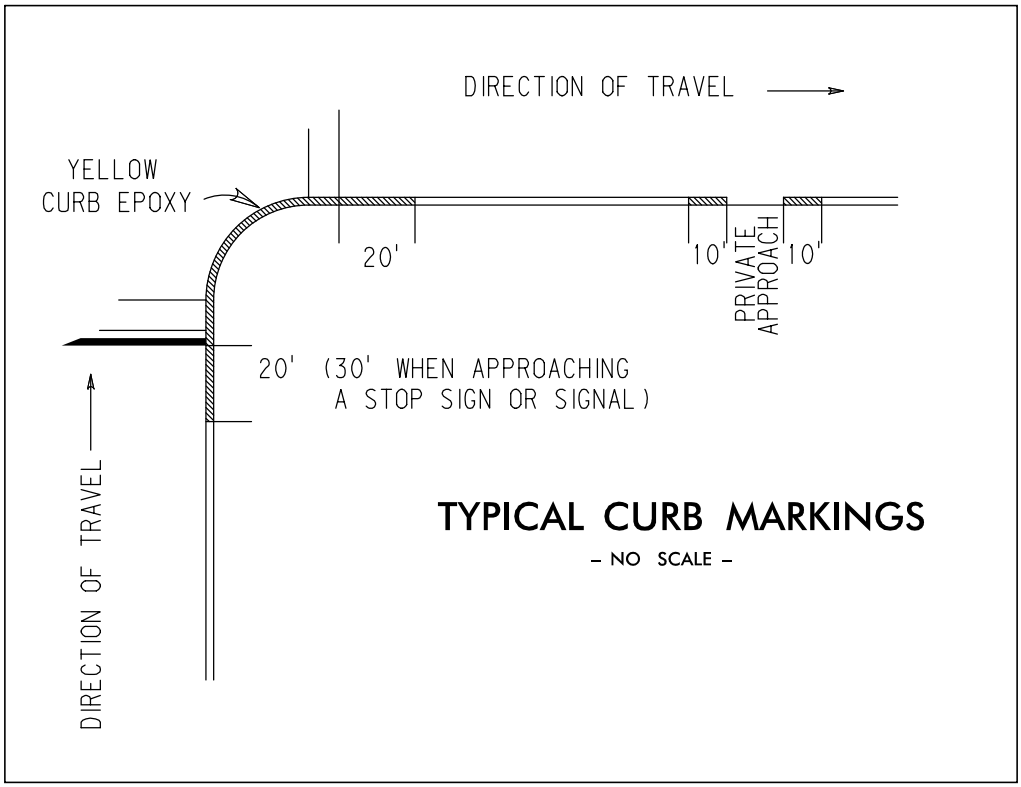

**TYPICAL CURB MARKINGS**

– NO SCALE –



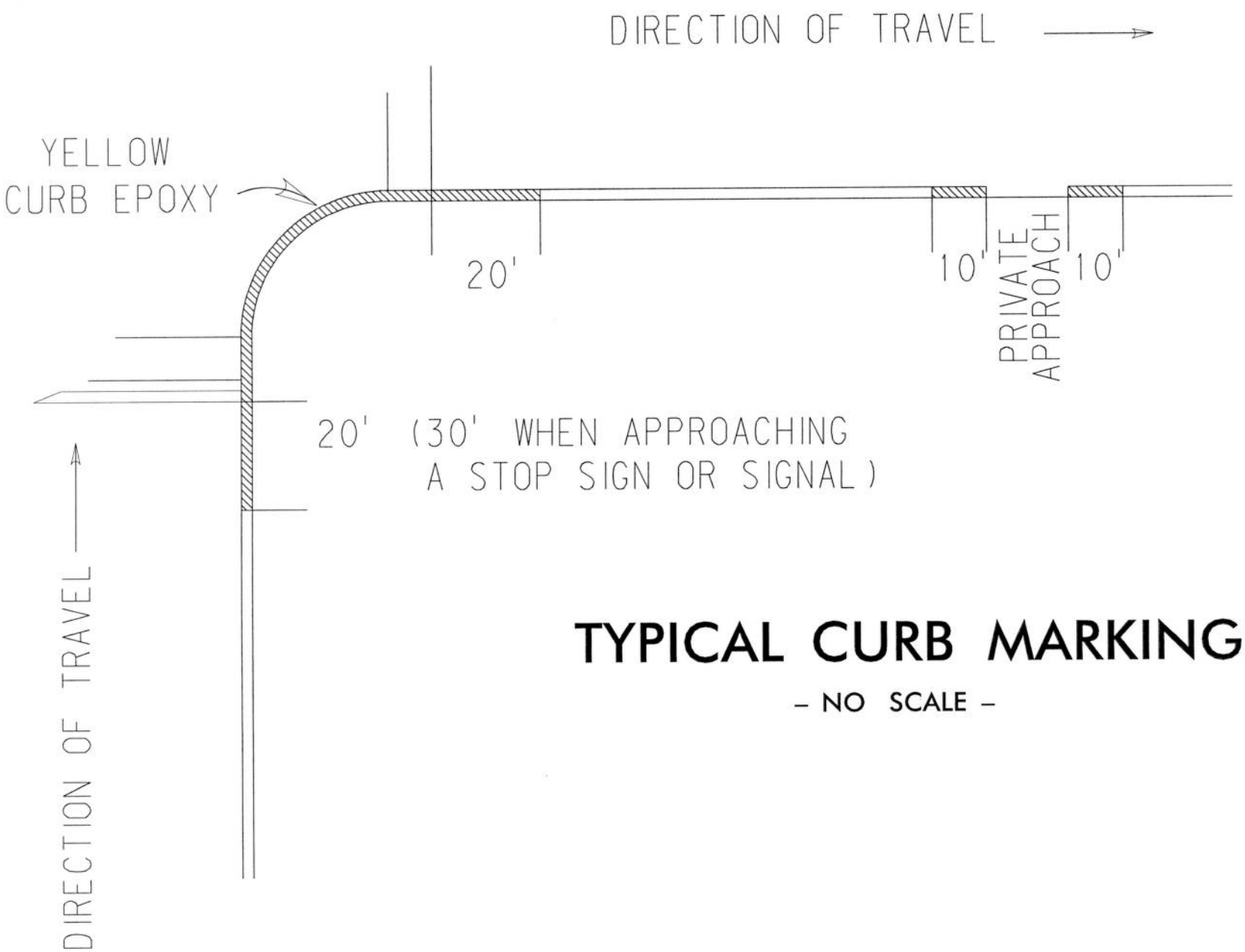

**TYPICAL CURB MARKINGS**

– NO SCALE –



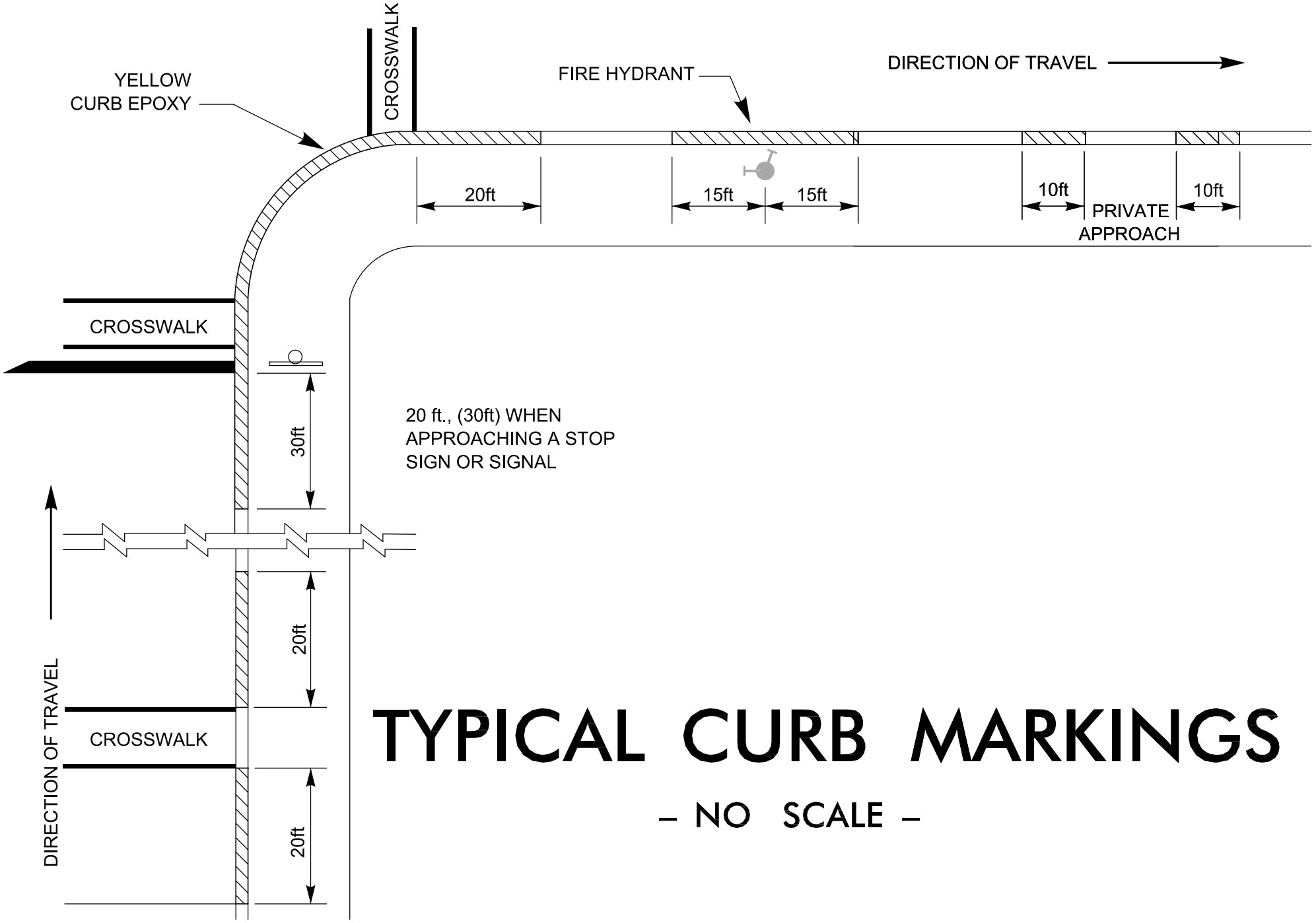

**TYPICAL CURB MARKINGS**

– NO SCALE –



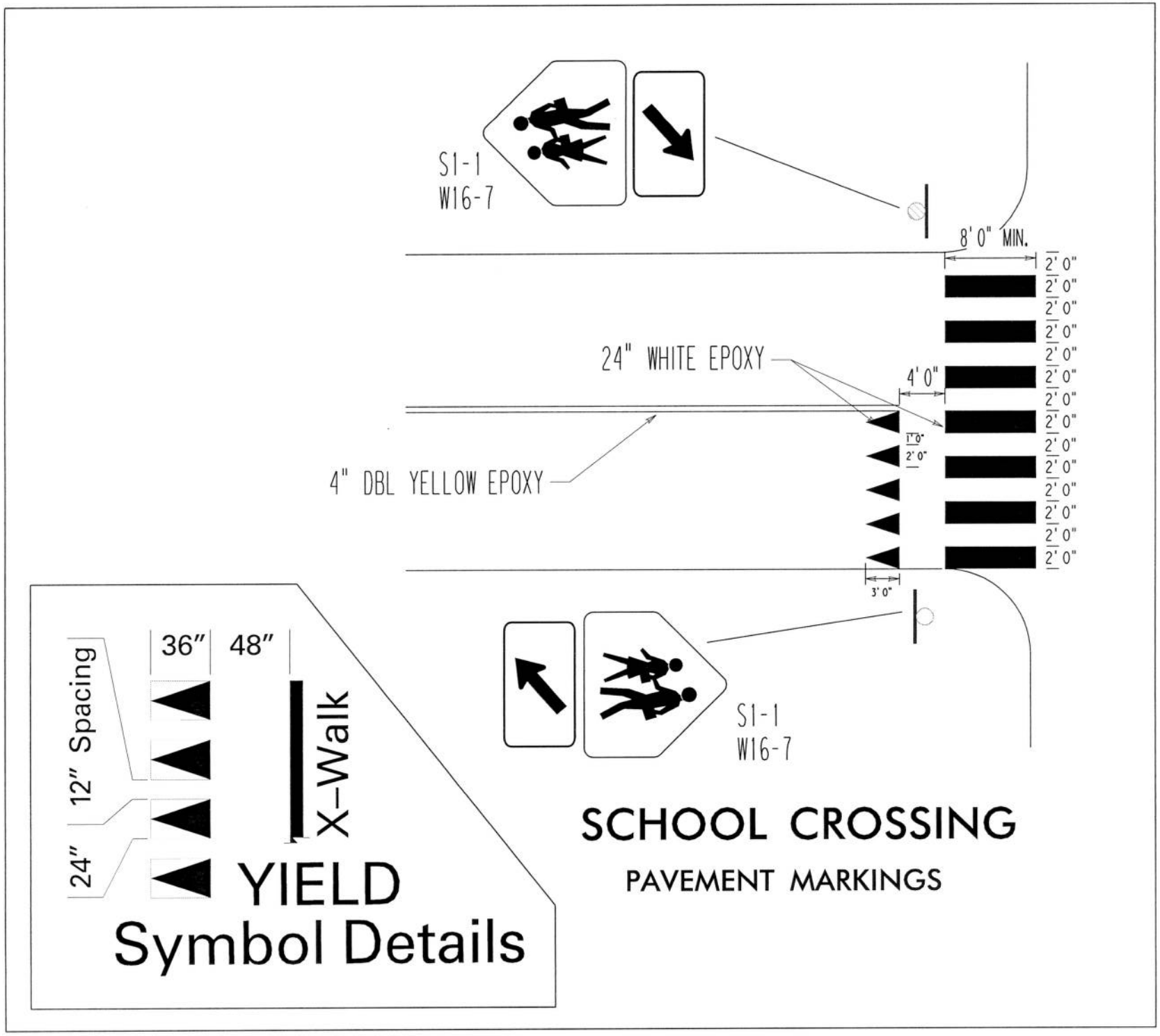

# TYPICAL CURB MARKINGS

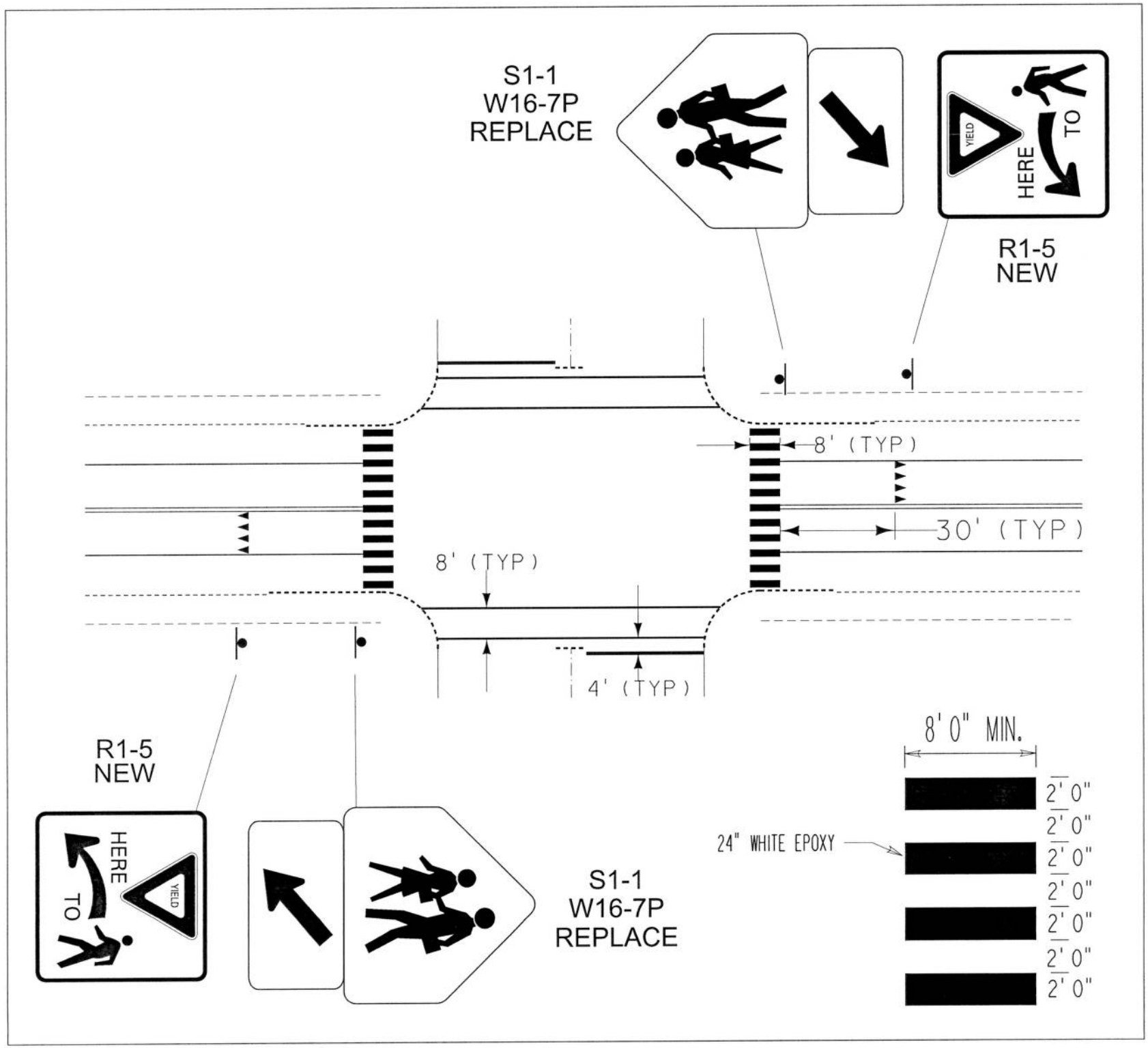
– NO SCALE –



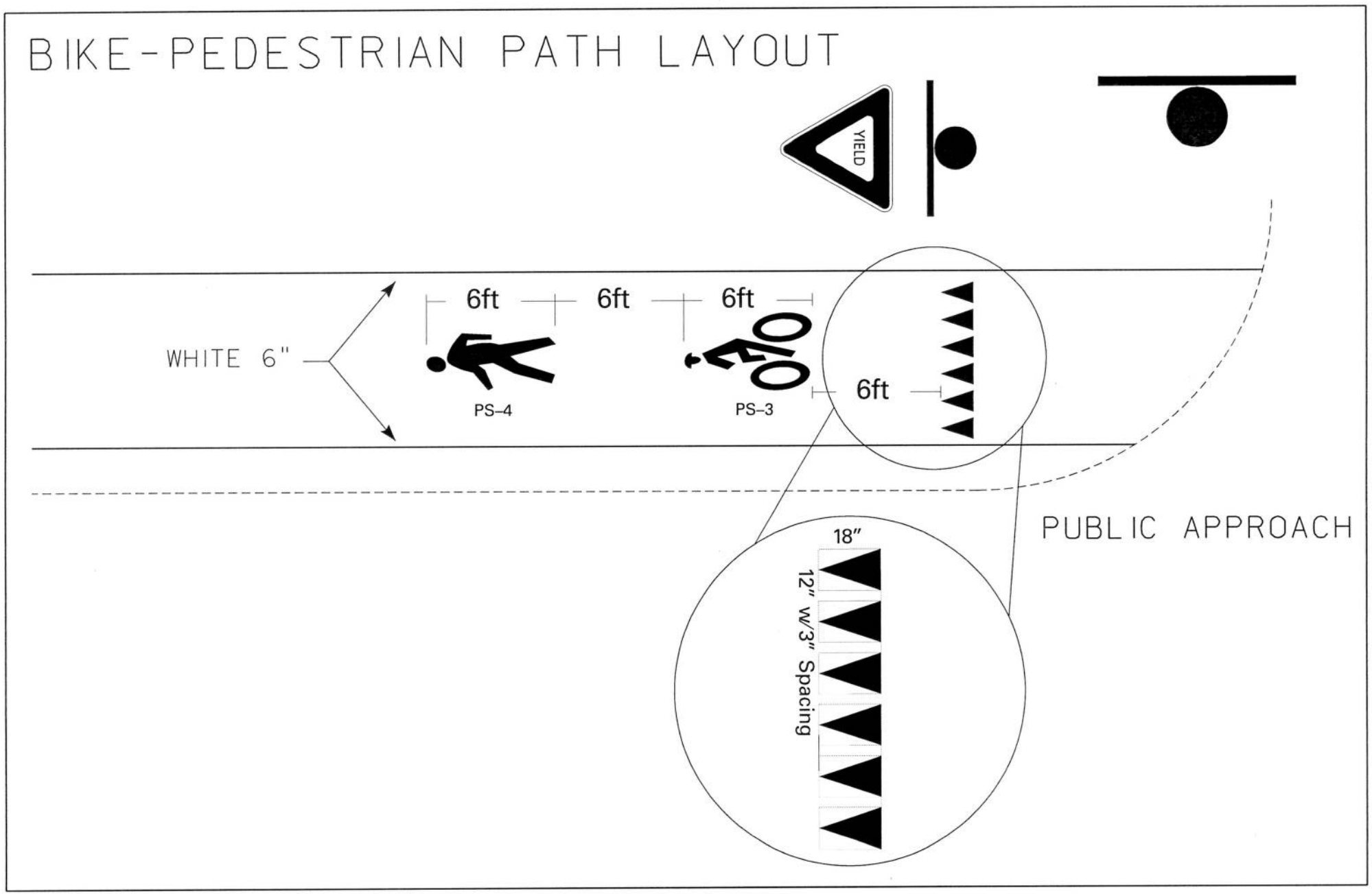

# TYPICAL CURB MARKINGS

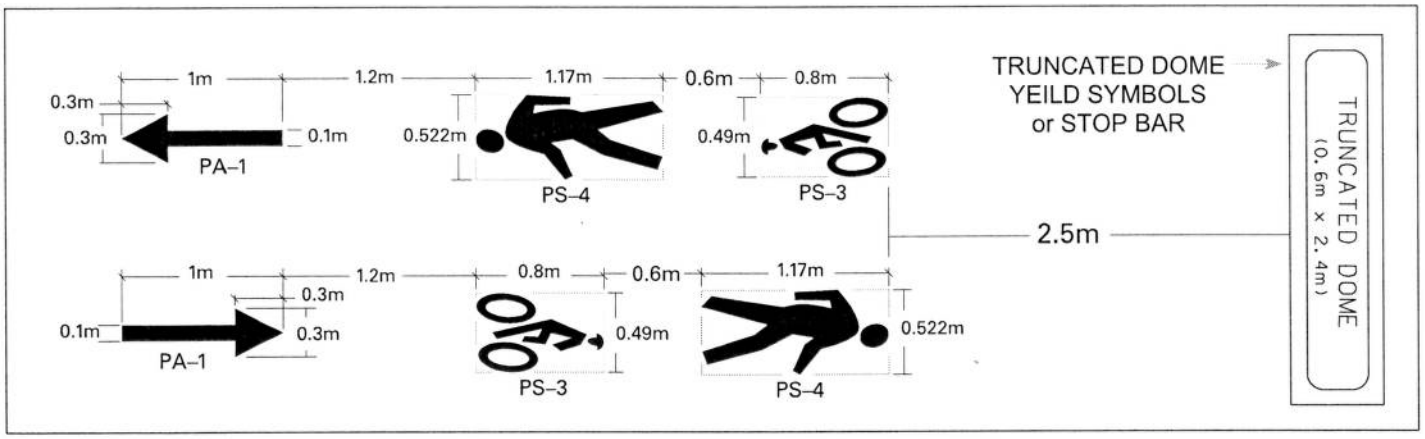
– NO SCALE –

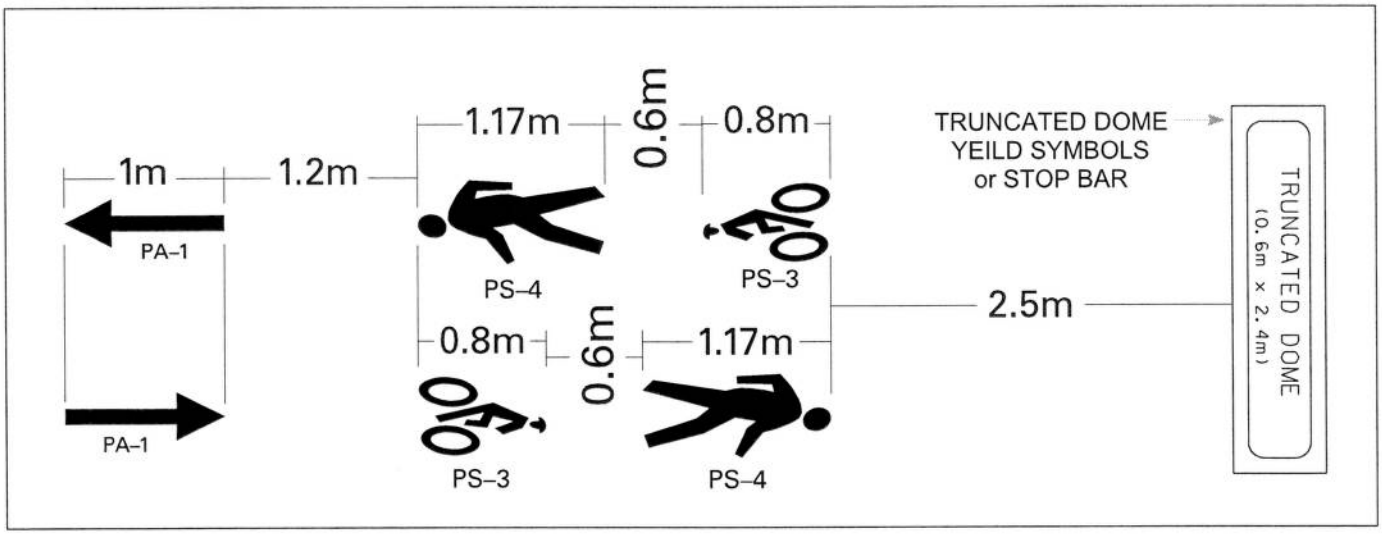

S1-1
W16-7
8' 0" MIN.
2' 0"
24" WHITE EPOXY
4' 0"
4" DBL YELLOW EPOXY
1' 0"
2' 0"
3' 0"
S1-1
W16-7
36"
48"
12" Spacing
24"
X-Walk
YIELD
Symbol Details
SCHOOL CROSSING
PAVEMENT MARKINGS

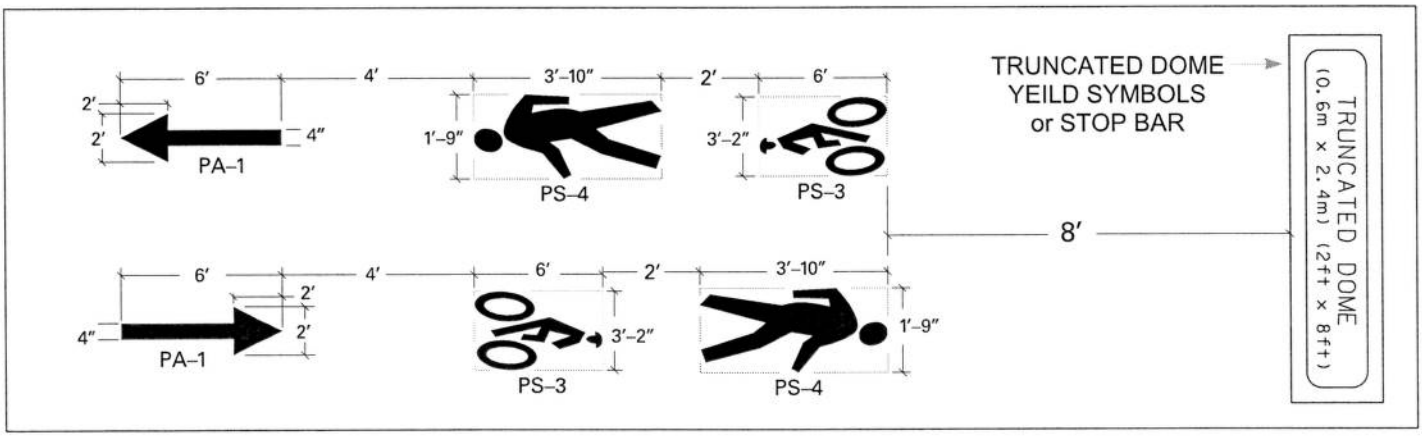

S1-1
W16-7P
REPLACE
YIELD
HERE
TO
R1-5
NEW
8' (TYP)
30' (TYP)
8' (TYP)
4' (TYP)
R1-5
NEW
HERE
TO
YIELD
S1-1
W16-7P
REPLACE
8' 0" MIN.
24" WHITE EPOXY
2' 0"
2' 0"
2' 0"
2' 0"
2' 0"
2' 0"

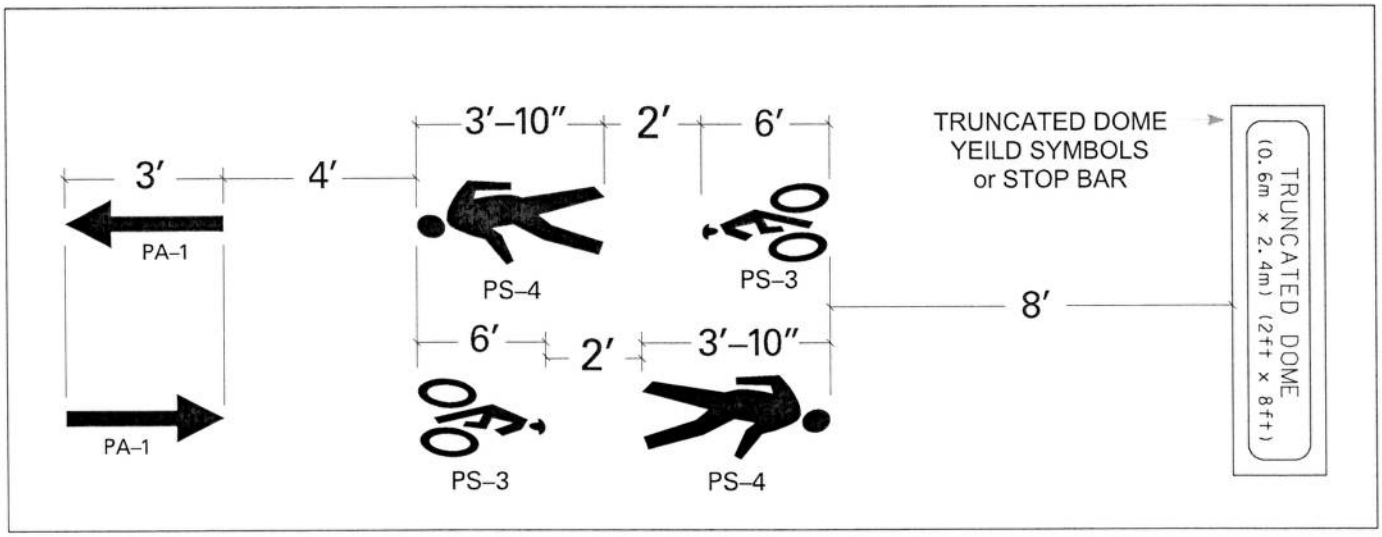
# BIKE-PEDESTRIAN PATH LAYOUT

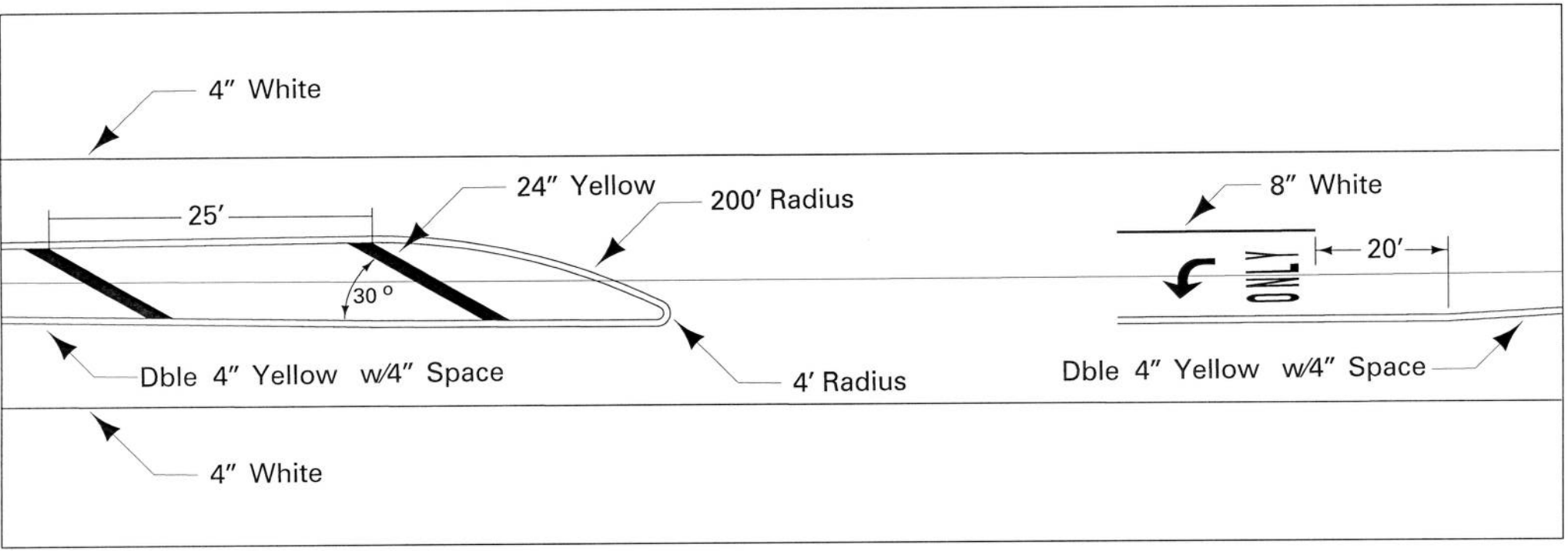


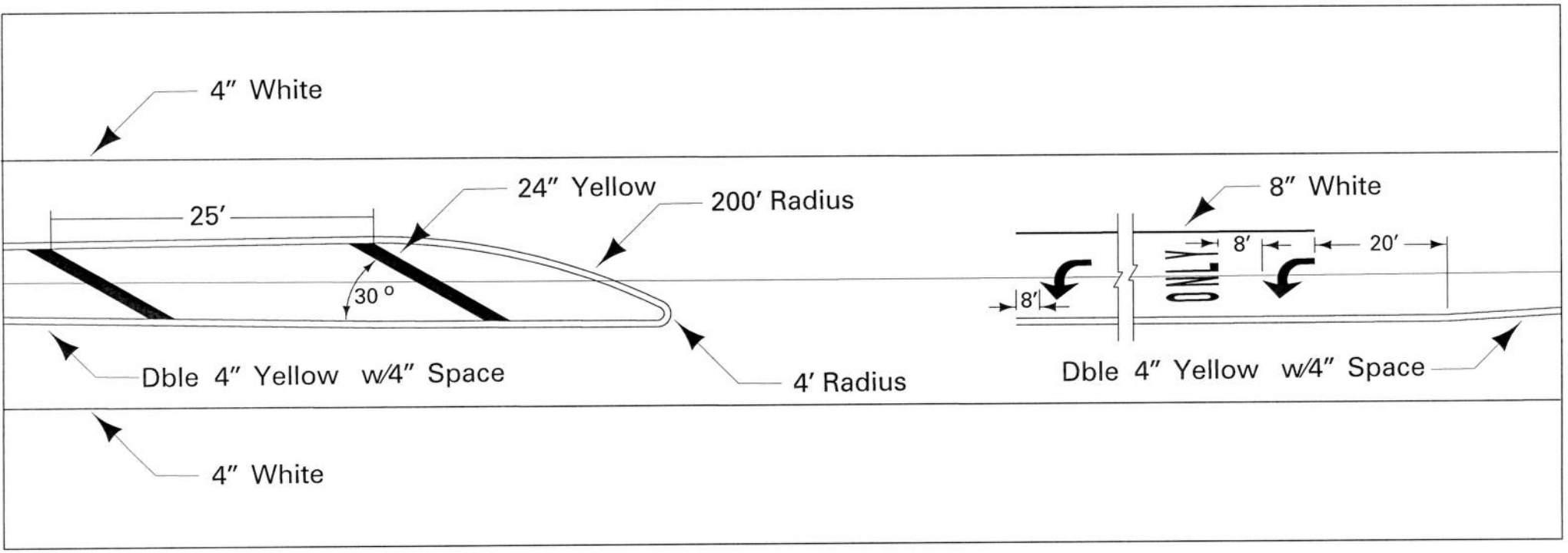

1m
1.2m
1.17m
0.6m
0.8m
0.3m
0.3m
0.1m
0.522m
0.49m
PA–1
PS–4
PS–3
TRUNCATED DOME
YEILD SYMBOLS
or STOP BAR
2.5m
TRUNCATED DOME
(0.6m × 2.4m)
1m
1.2m
0.8m
0.6m
1.17m
0.3m
0.3m
0.1m
0.49m
0.522m
PA–1
PS–3
PS–4

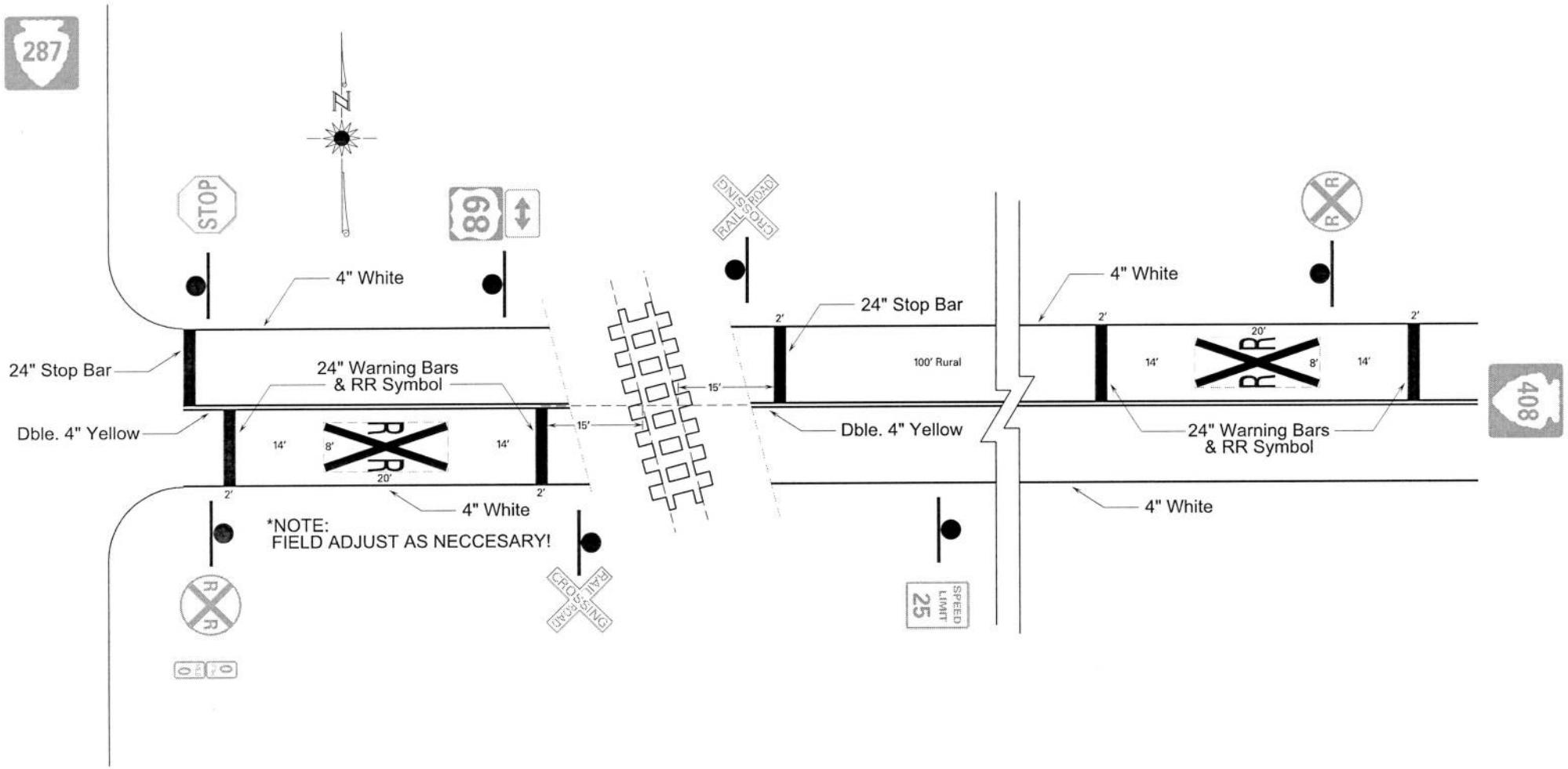

1m
1.2m
1.17m
0.6m
0.8m
PA–1
PS–4
PS–3
TRUNCATED DOME
YEILD SYMBOLS
or STOP BAR
2.5m
TRUNCATED DOME
(0.6m × 2.4m)
0.8m
0.6m
1.17m
PA–1
PS–3
PS–4


6′
4′
3′–10″
2′
6′
2′
2′
4″
1′–9″
3′–2″
PA–1
PS–4
PS–3
TRUNCATED DOME
YEILD SYMBOLS
or STOP BAR
8′
TRUNCATED DOME
(0.6m × 2.4m) (2ft × 8ft)
6′
4′
6′
2′
3′–10″
2′
2′
4″
3′–2″
1′–9″
PA–1
PS–3
PS–4

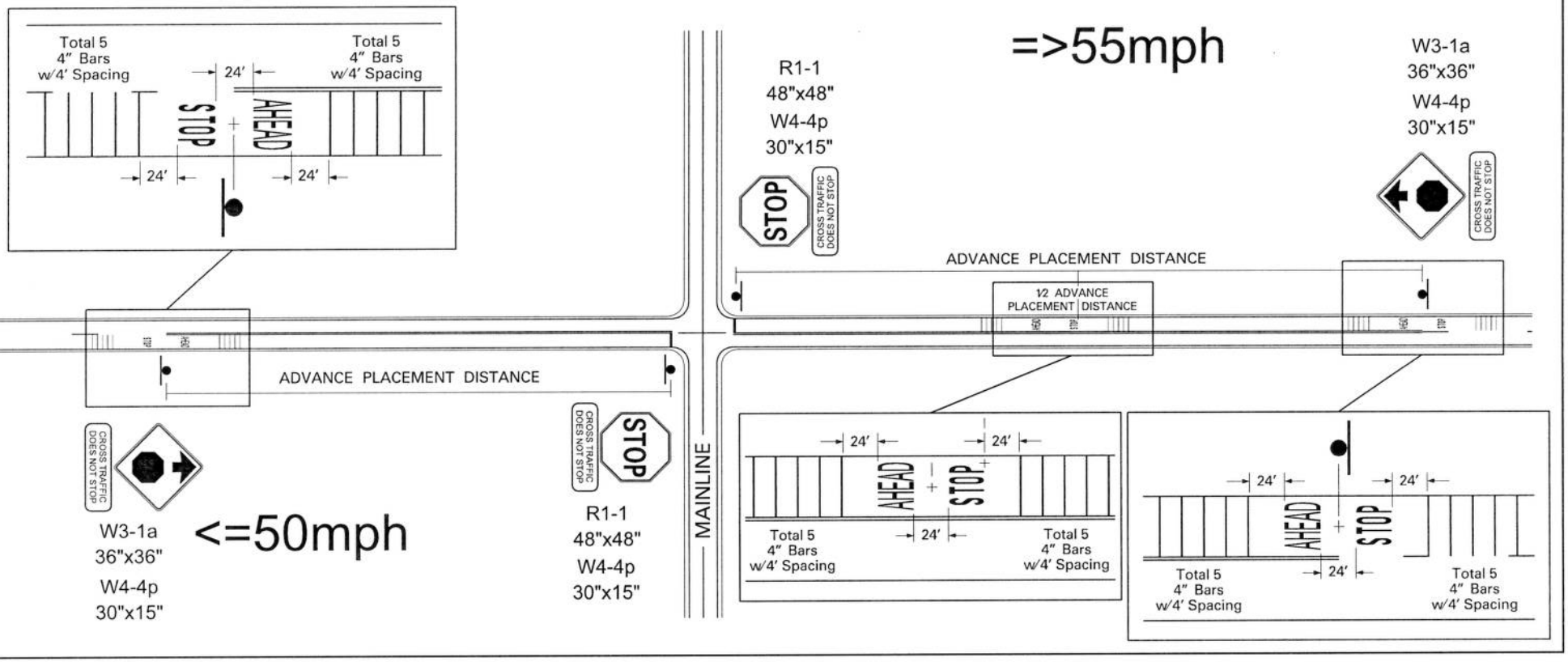

3′–10″
2′
6′
3′
4′
PA–1
PS–4
PS–3
TRUNCATED DOME
YEILD SYMBOLS
or STOP BAR
8′
TRUNCATED DOME
(0.6m × 2.4m) (2ft × 8ft)
6′
2′
3′–10″
PA–1
PS–3
PS–4


4″ White
24″ Yellow
200′ Radius
25′
30 °
Dble 4″ Yellow w/4″ Space
4′ Radius
4″ White
8″ White
ONLY
20′
Dble 4″ Yellow w/4″ Space

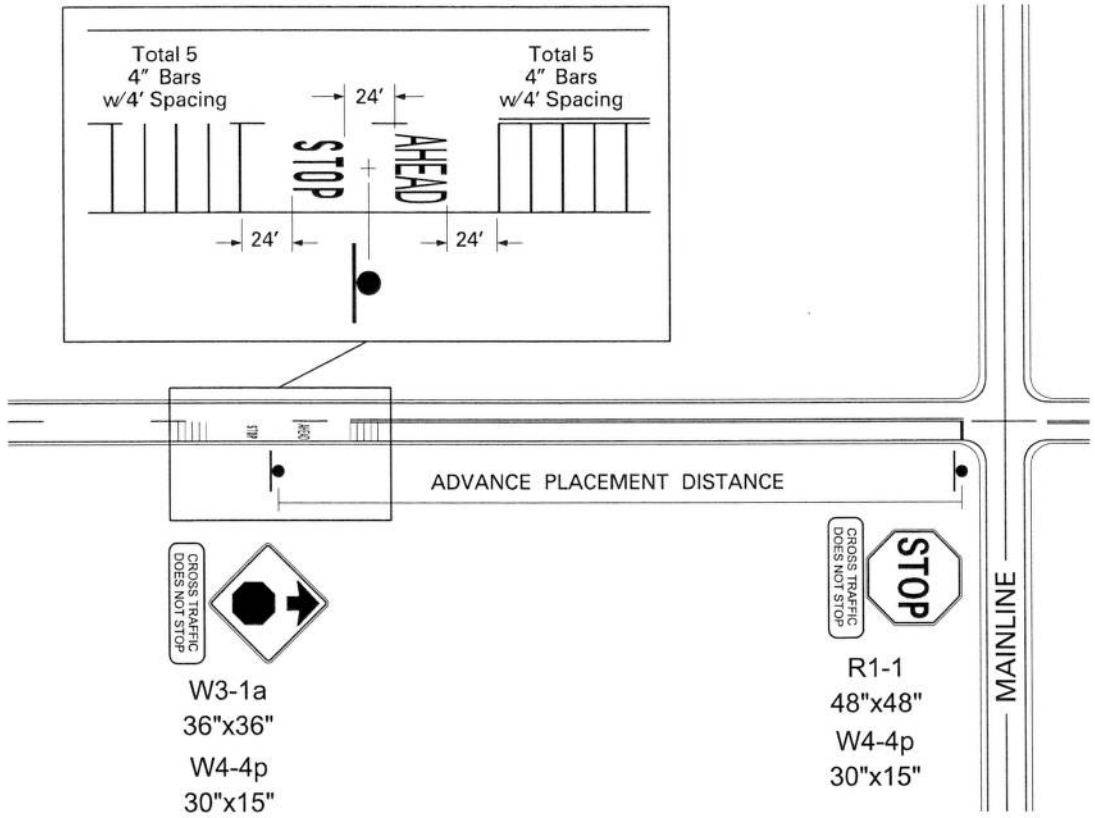

4″ White
24″ Yellow
200′ Radius
25′
30 °
Dble 4″ Yellow w/4″ Space
4′ Radius
4″ White
8″ White
8′
20′
ONLY
8′
Dble 4″ Yellow w/4″ Space


287
N
STOP
89
RAIL ROAD CROSSING
R R
4" White
24" Stop Bar
24" Warning Bars
& RR Symbol
Dble. 4" Yellow
14'
8'
20'
15'
2'
100' Rural
*NOTE:
FIELD ADJUST AS NECCESARY!
RAIL ROAD CROSSING
SPEED LIMIT
25
408

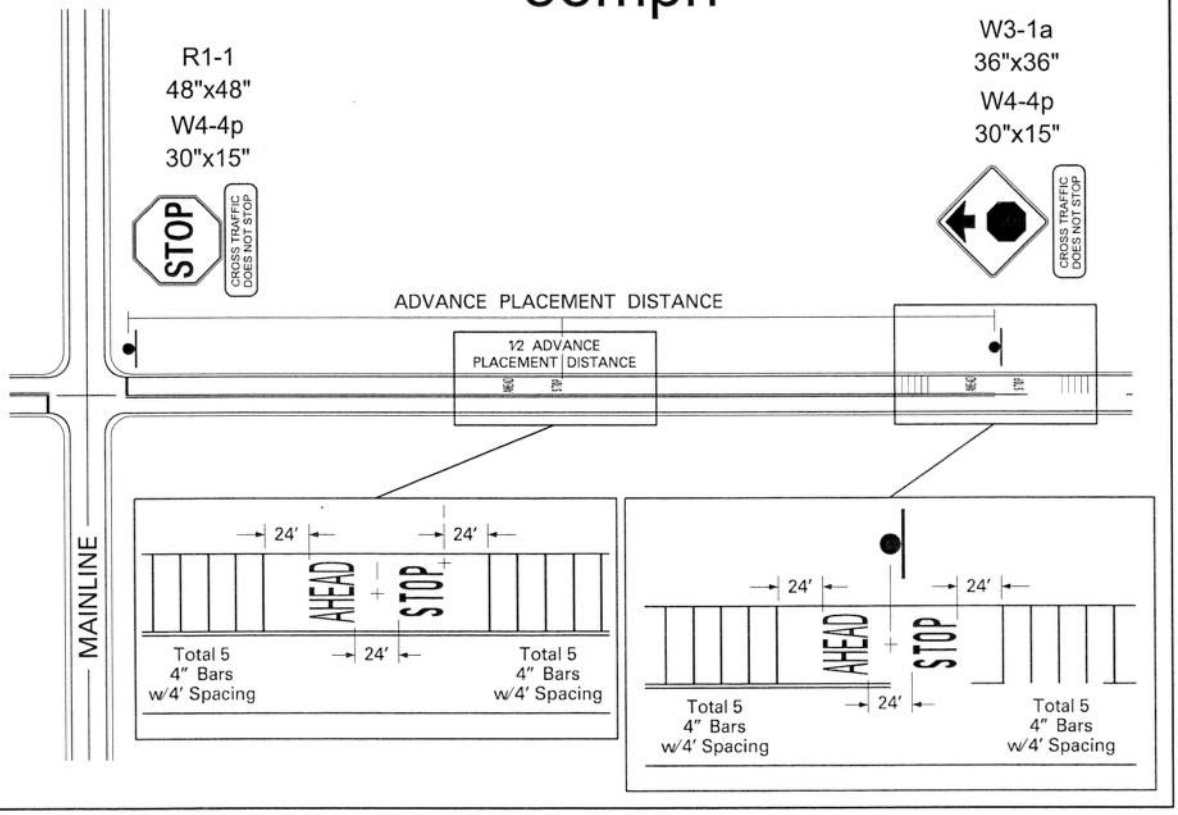
# STOP AHEAD PAVEMENT DETAIL

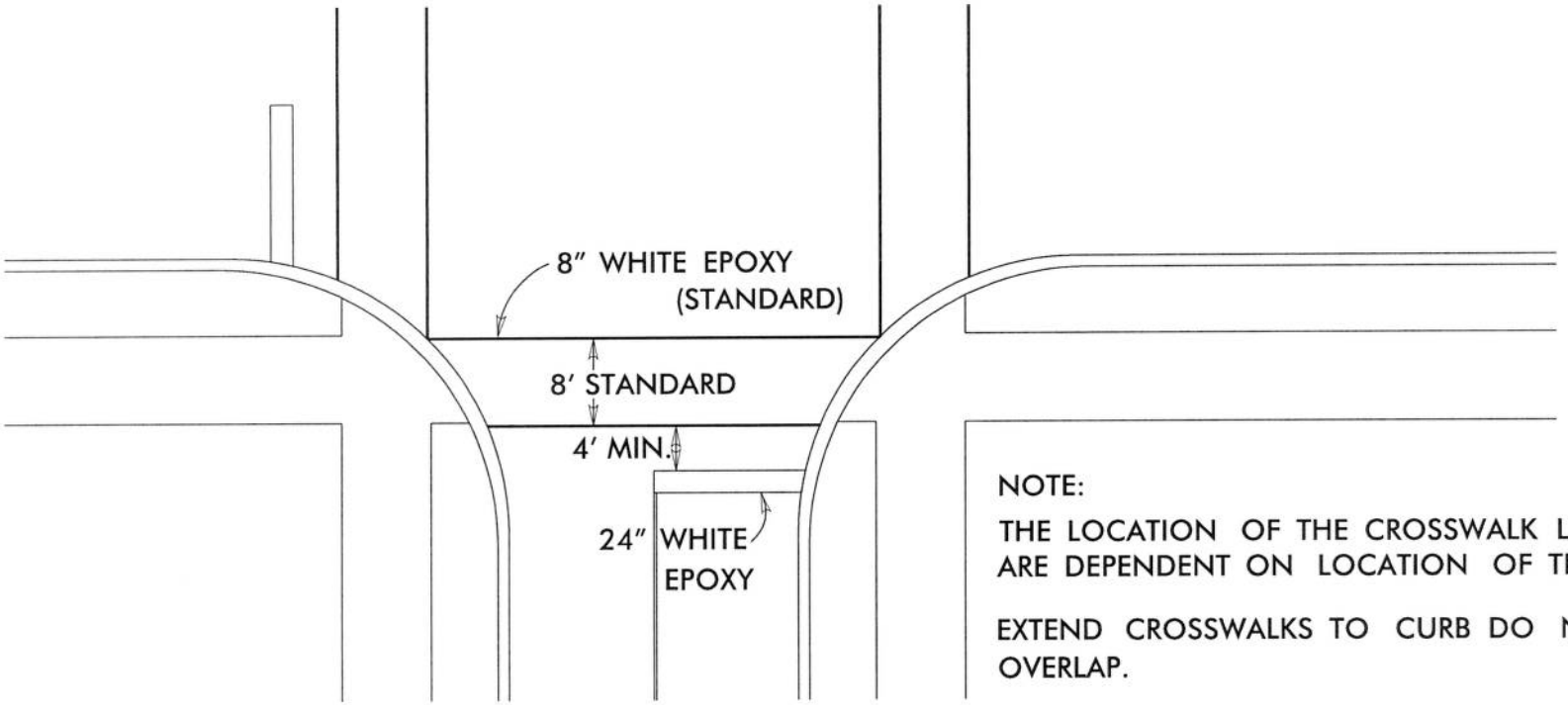


# STOP AHEAD PAVEMENT DETAIL
# <=50mph




# STOP AHEAD PAVEMENT DETAIL
# =>55mph



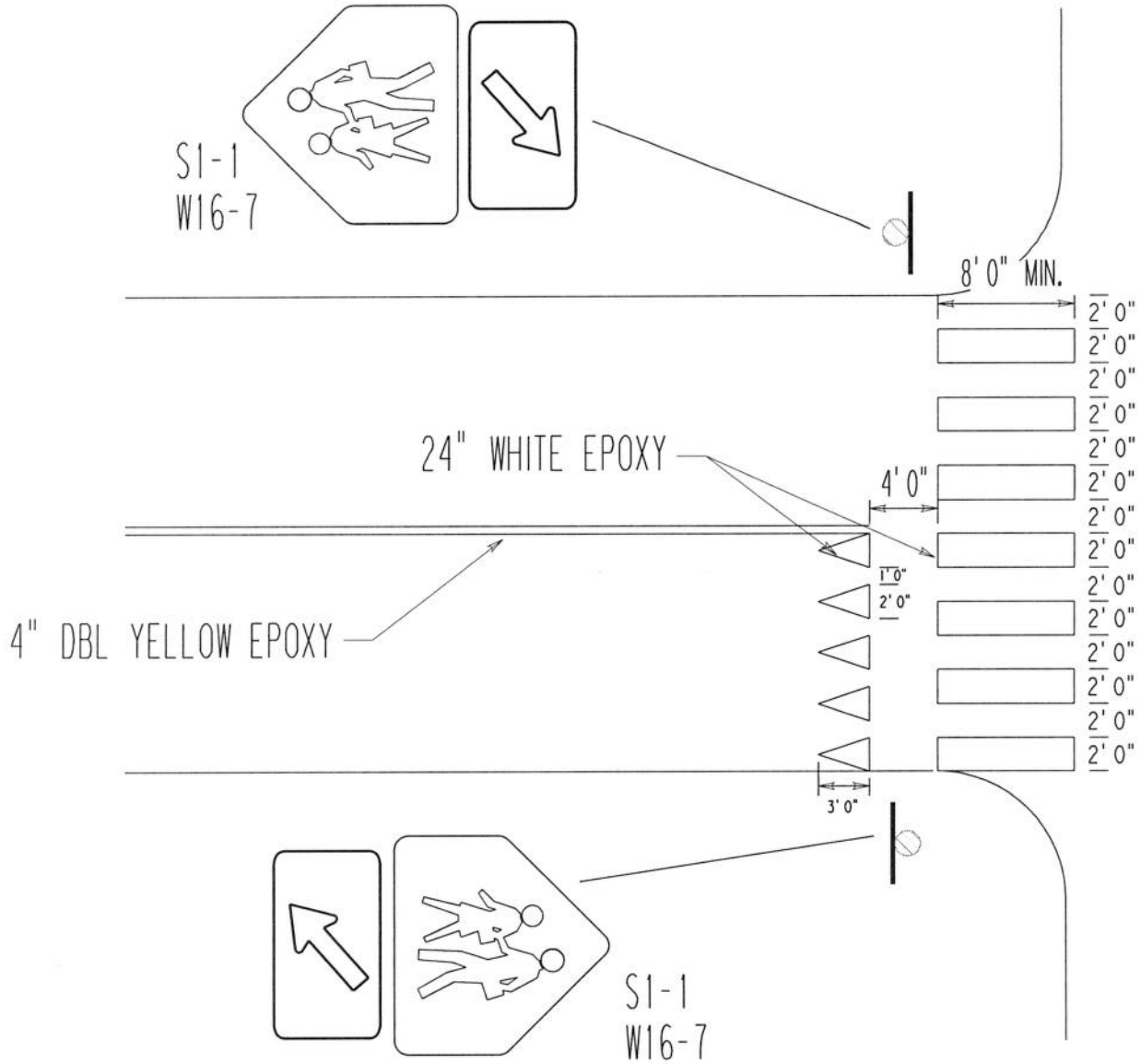



NOTE:

THE LOCATION OF THE CROSSWALK LINES ARE DEPENDENT ON LOCATION OF THE SIDEWALKS.

EXTEND CROSSWALKS TO CURB DO NOT OVERLAP.

# TYPICAL PAVEMENT MARKINGS FOR PEDESTRIAN CROSSINGS



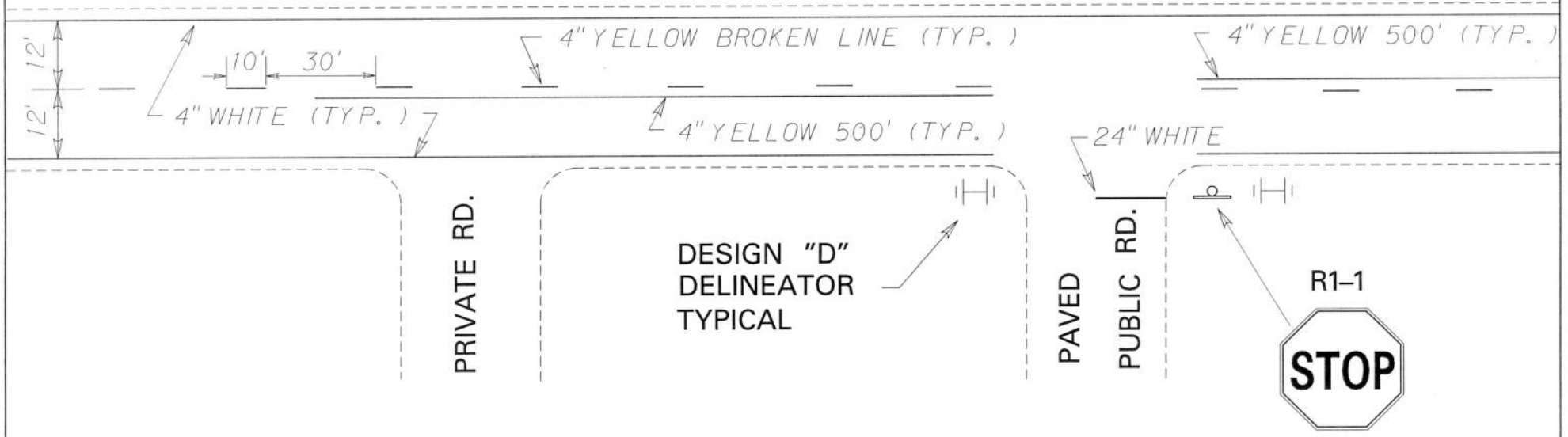

# SCHOOL CROSSING

## PAVEMENT MARKINGS

# TYPICAL

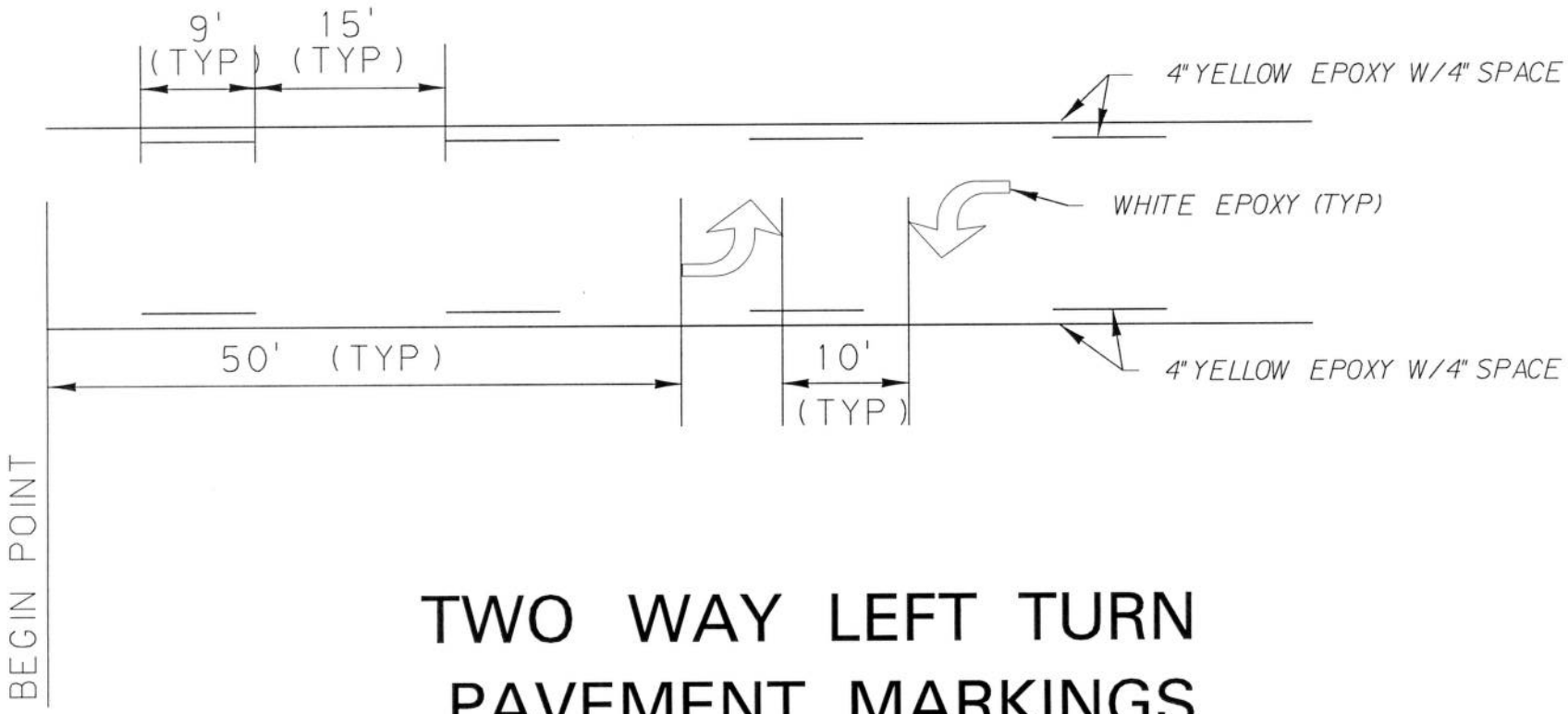
# PAVEMENT MARKINGS

NO SCALE

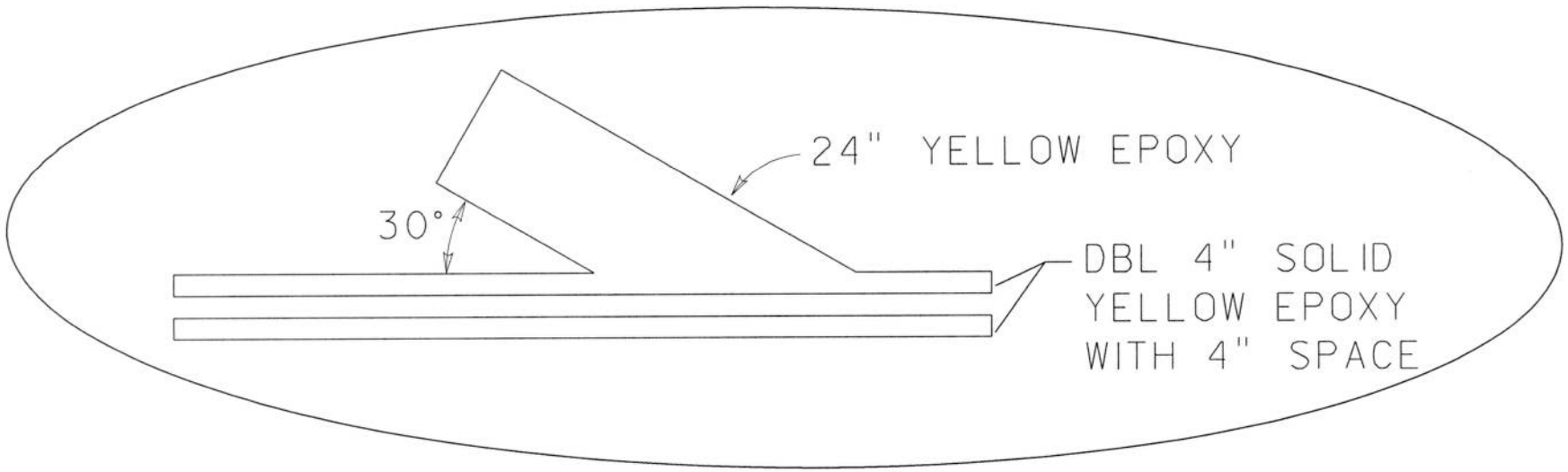



NOTE: FINAL CENTERLINE CONFIGURATION AND NO PASSING ZONES TO BE DETERMINED BY THE PROJECT MANAGER.

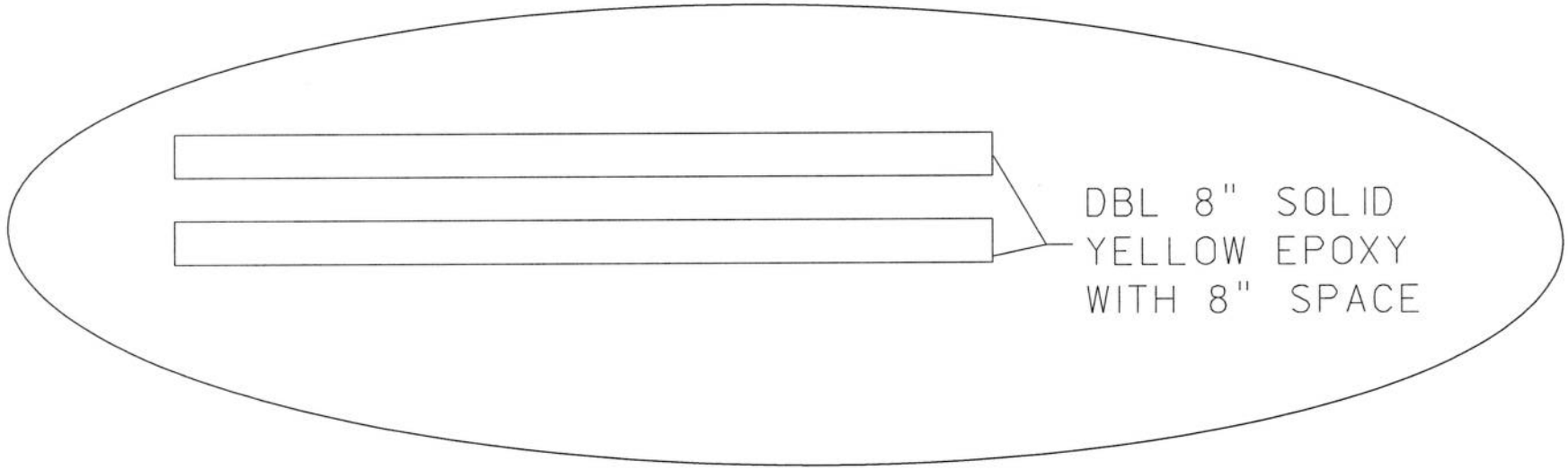
ALL PAVEMENT MARKINGS TO BE EPOXY UNLESS OTHERWISE SPECIFIED.




# TWO WAY LEFT TURN PAVEMENT MARKINGS TYPICAL

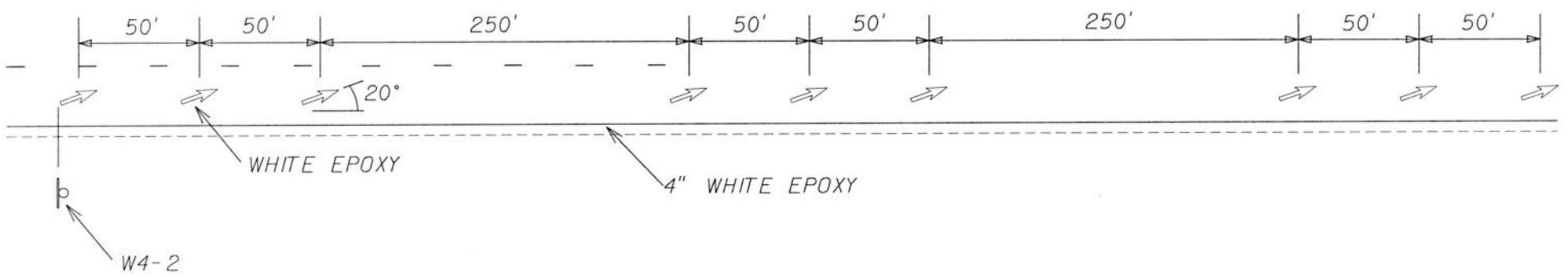



# MEDIAN DETAIL



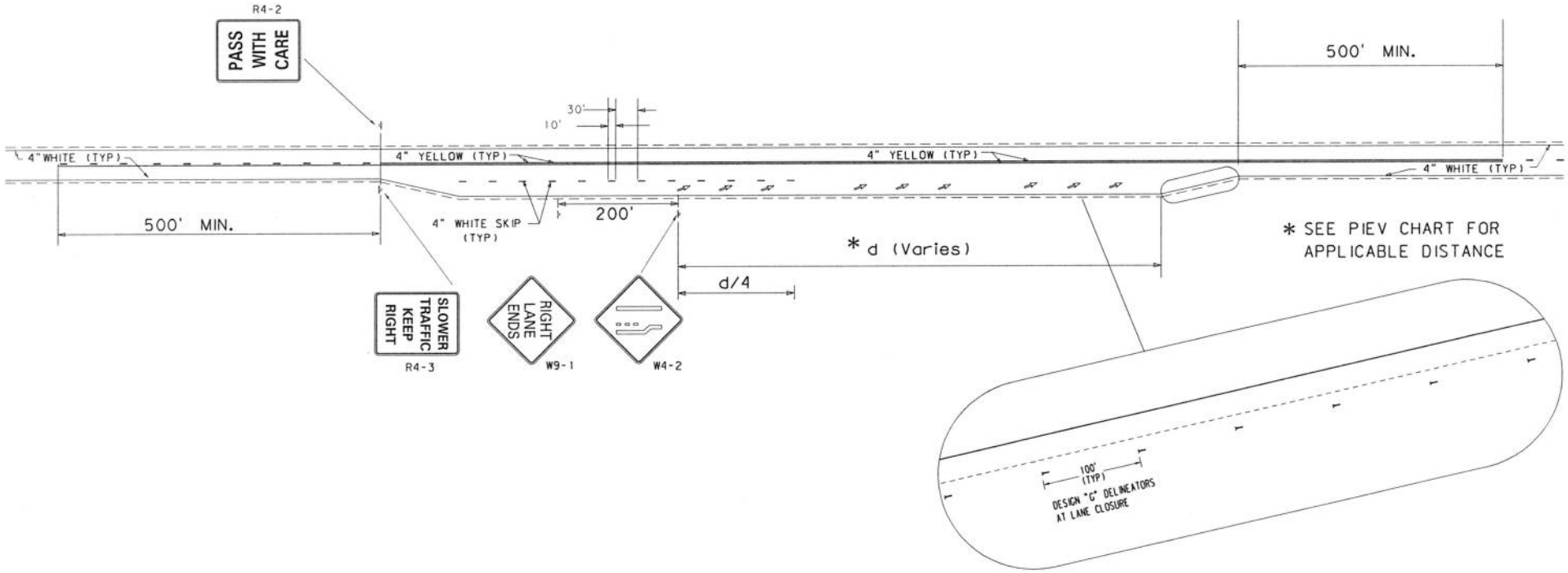
# MERGE ARROWS (20 $^{o}$ ) DETAIL

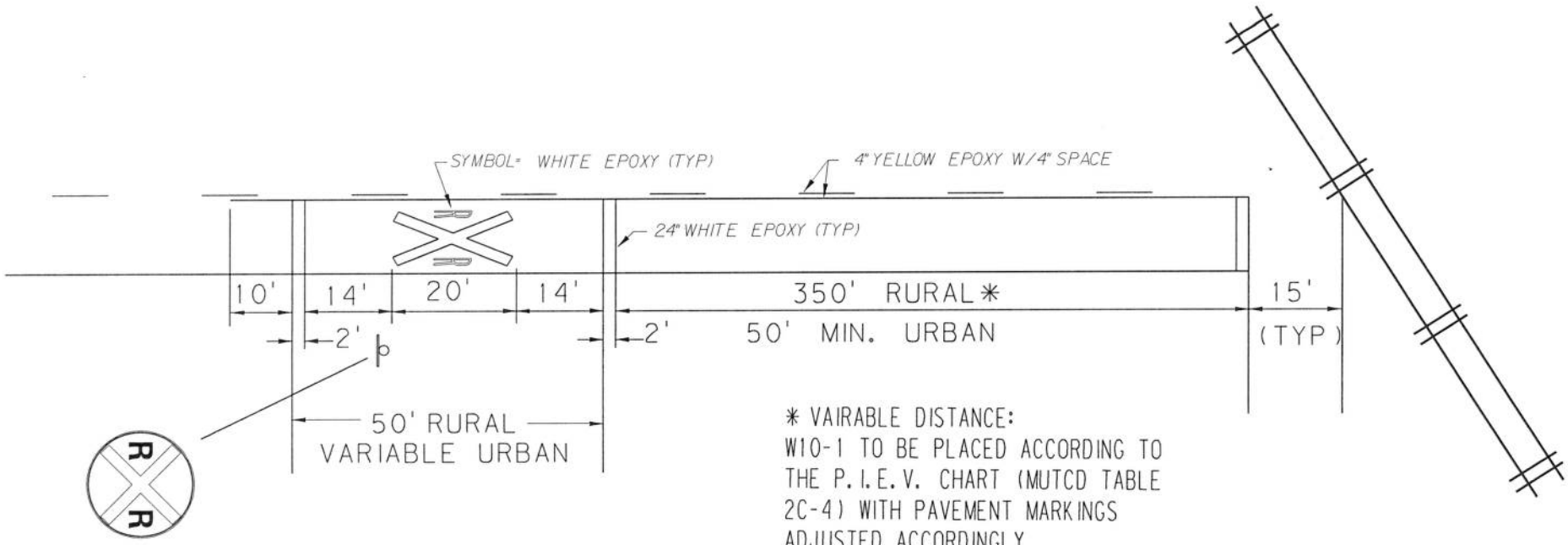
NO SCALE



# TYPICAL
# CLIMBING LANE
# PAVEMENT MARKINGS

NOT TO SCALE

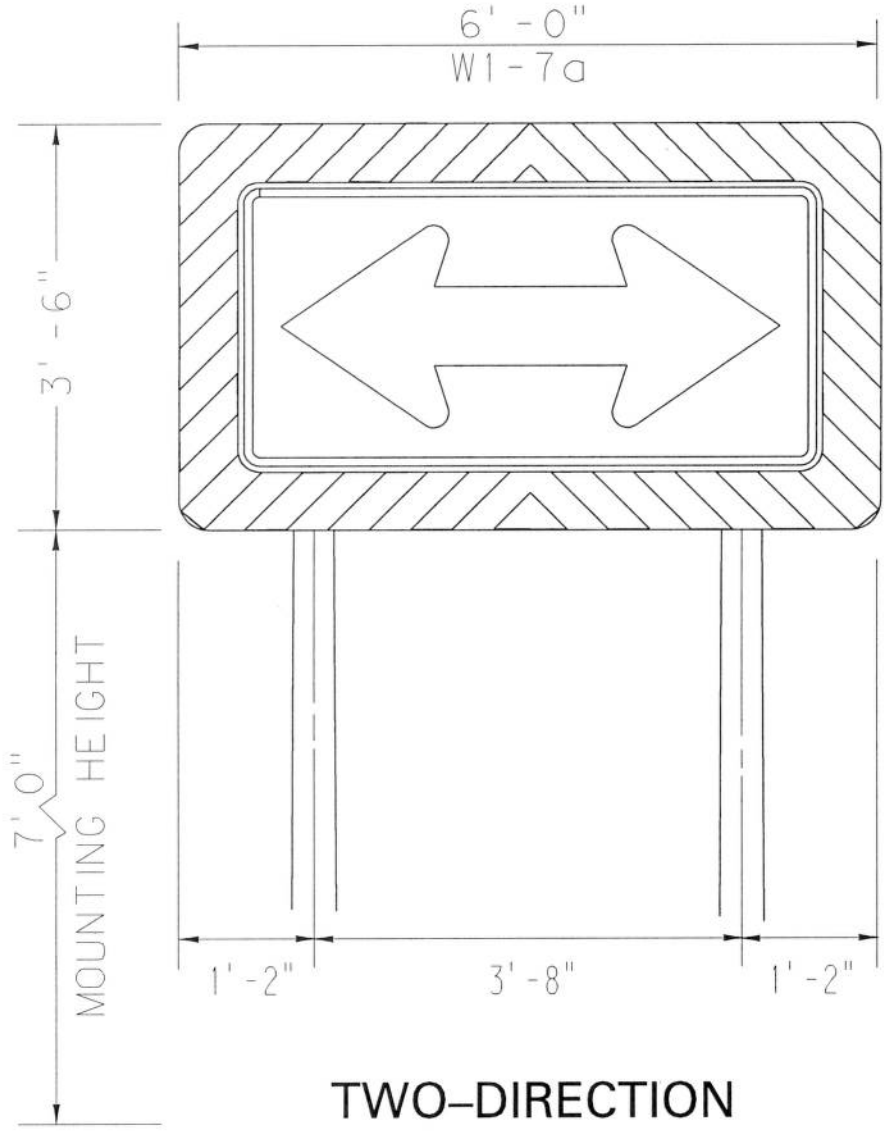


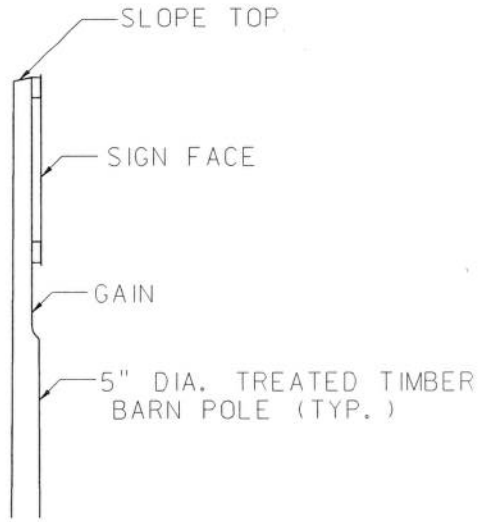



W10-1 TO BE PLACED WITHIN PAVEMENT MARKING AREA

* VAIRABLE DISTANCE:
W10-1 TO BE PLACED ACCORDING TO THE P.I.E.V. CHART (MUTCD TABLE 2C-4) WITH PAVEMENT MARKINGS ADJUSTED ACCORDINGLY

# RAILROAD CROSSING
# PAVEMENT MARKINGS
# TYPICAL



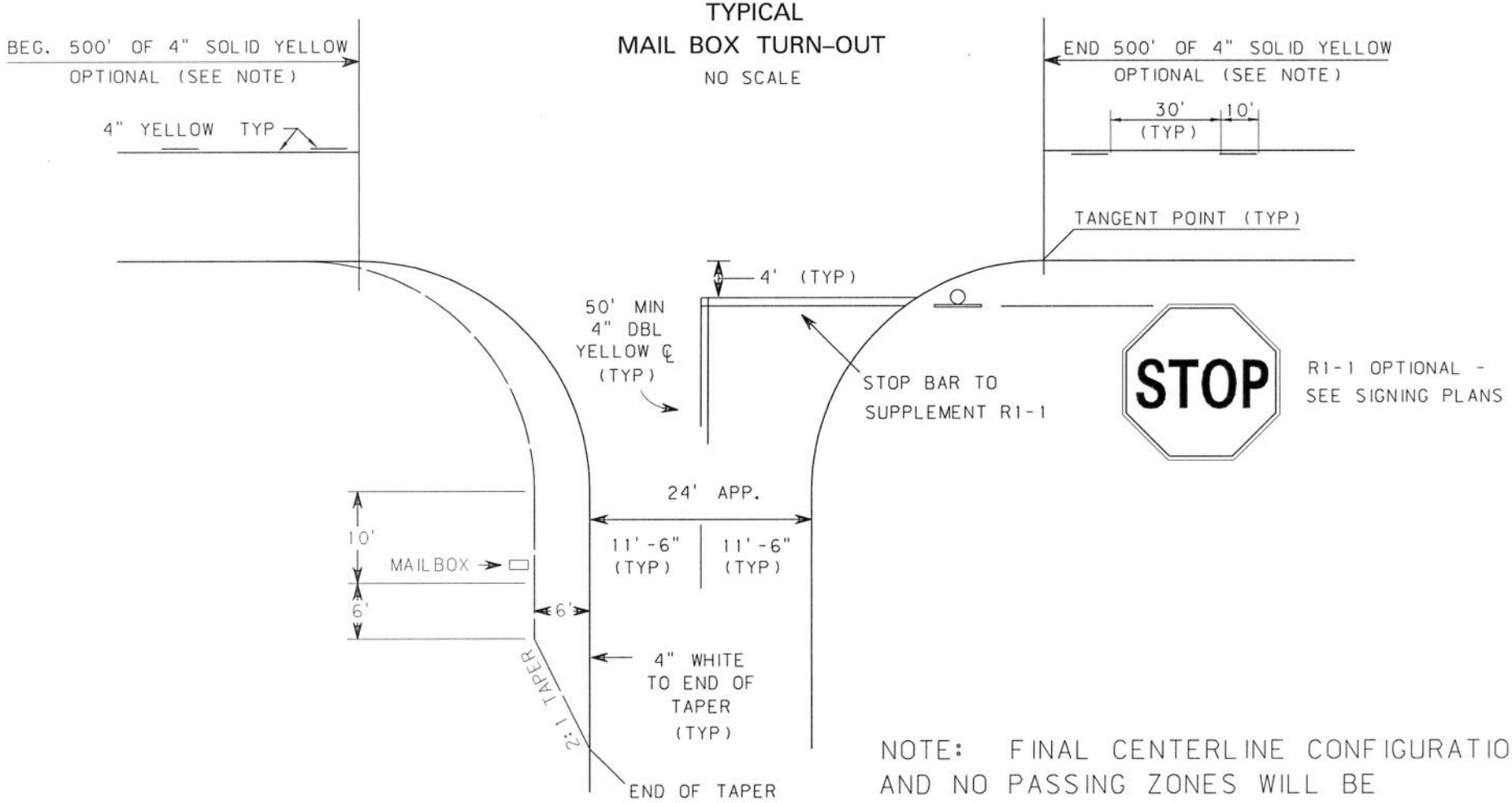

NOTE: MOUNT 60"x30" W1-7 TWO-DIRECTION ARROW DESIGN ON 72"X42" ALUMINUM INCREMENT WITH 6" WIDE DIAGONAL BORDER AROUND THE PERIMETER. DIAGONAL STRIPES ARE 3" IN WIDTH APPLIED AT A 45 DEGREE ANGLE.

NOTE: DETERMINE POLE LENGTHS IN THE FIELD TO COMPLY WITH MOUNTING HEIGHTS AND EMBEDMENT DEPTHS.

# TWO-DIRECTION LARGE ARROW

# TYPICAL
# MAIL BOX TURN-OUT

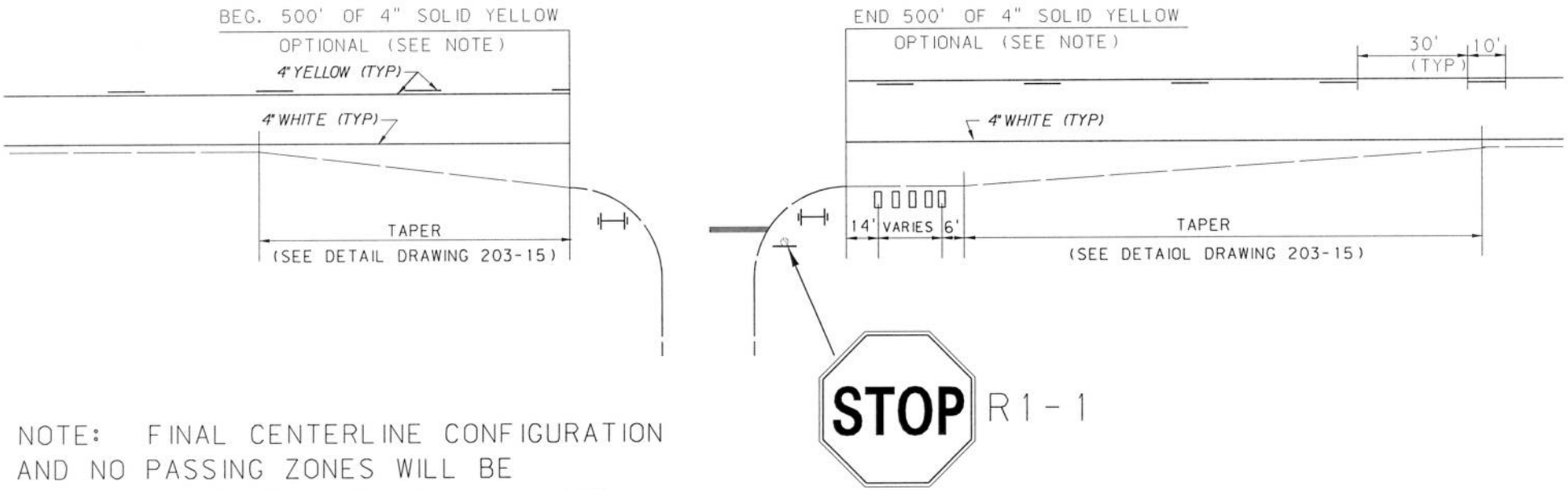
NO SCALE




NOTE: FINAL CENTERLINE CONFIGURATION AND NO PASSING ZONES WILL BE DETERMINED BY THE PROJECT MANAGER

# TYPICAL
# MAIL BOX TURN-OUT
# AT APPROACH

NO SCALE



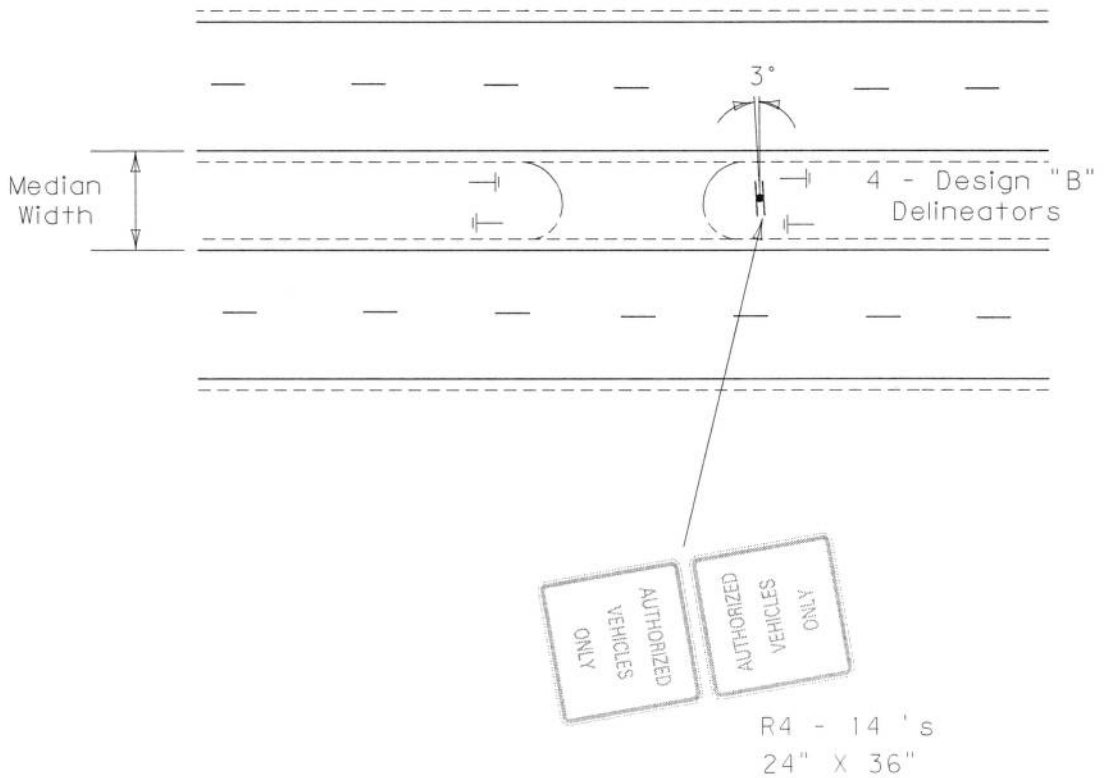

NOTE: FINAL CENTERLINE CONFIGURATION AND NO PASSING ZONES WILL BE DETERMINED BY THE PROJECT MANAGER

NOTES:

1. For Median Widths of 76 feet or less, mount the R4-14 signs back to back. Install at the centerline of the Median and on the side of the U - Turn away from the nearest Interchange.

2. For Median Widths greater then 76 feet, install the R4 - 14 signs separately on both sides of the U - Turn at clearances specified in the Sign Location and Specifications.

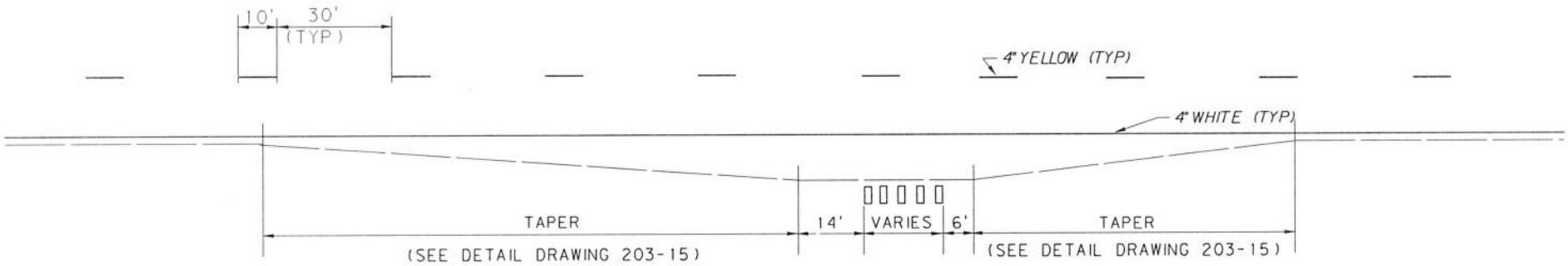
3. For openings though Median Guard Rails, install the sign post in line with the Guard Rail Posts.




# MEDIAN U – TURN SIGNING

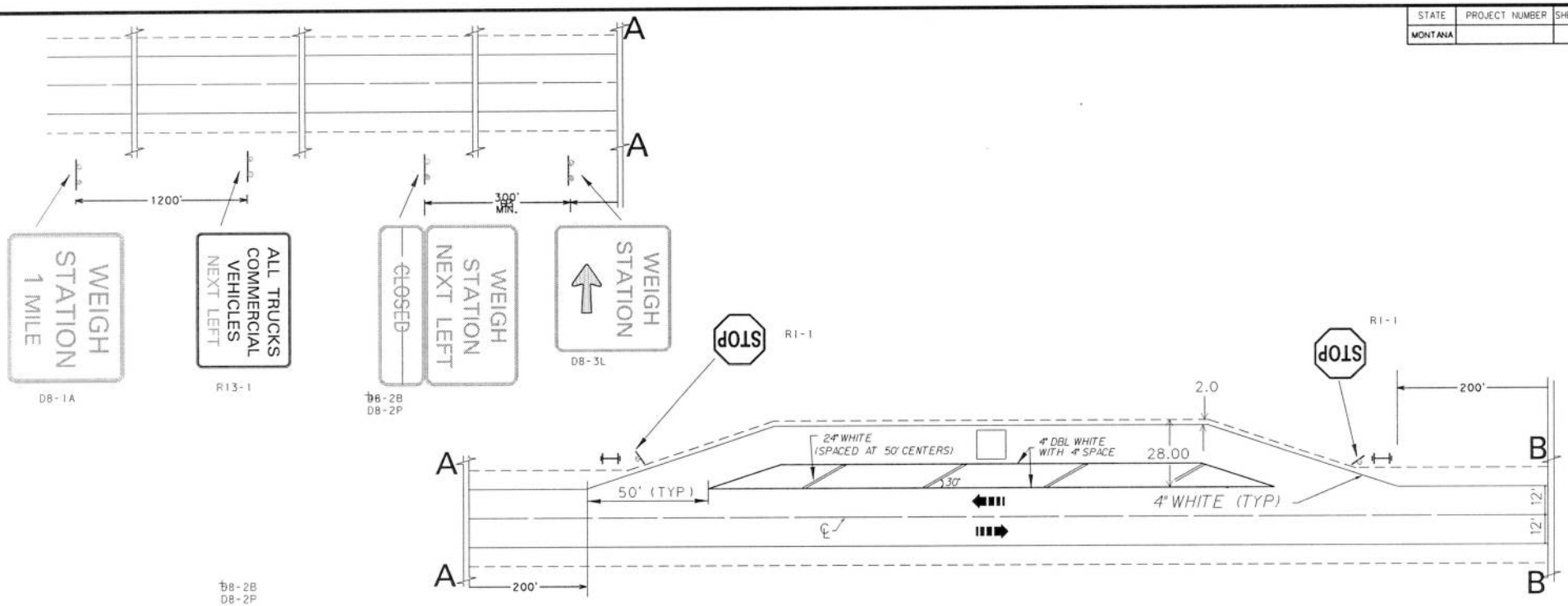
# TYPICAL
# MAIL BOX TURN-OUT

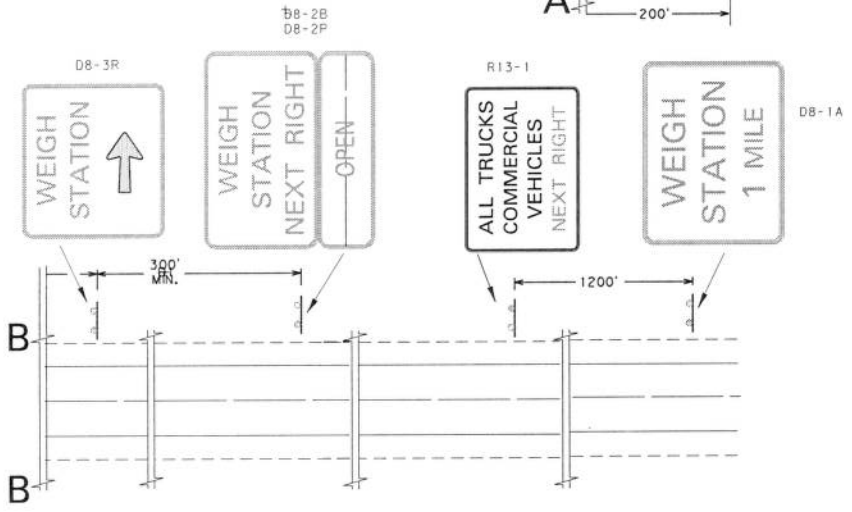
NO SCALE




AS SHOWN FOR MAIL BOX TURN OUTS
WITH APPROACHES NOT REGULATED
BY STOP OR YIELD SIGNS

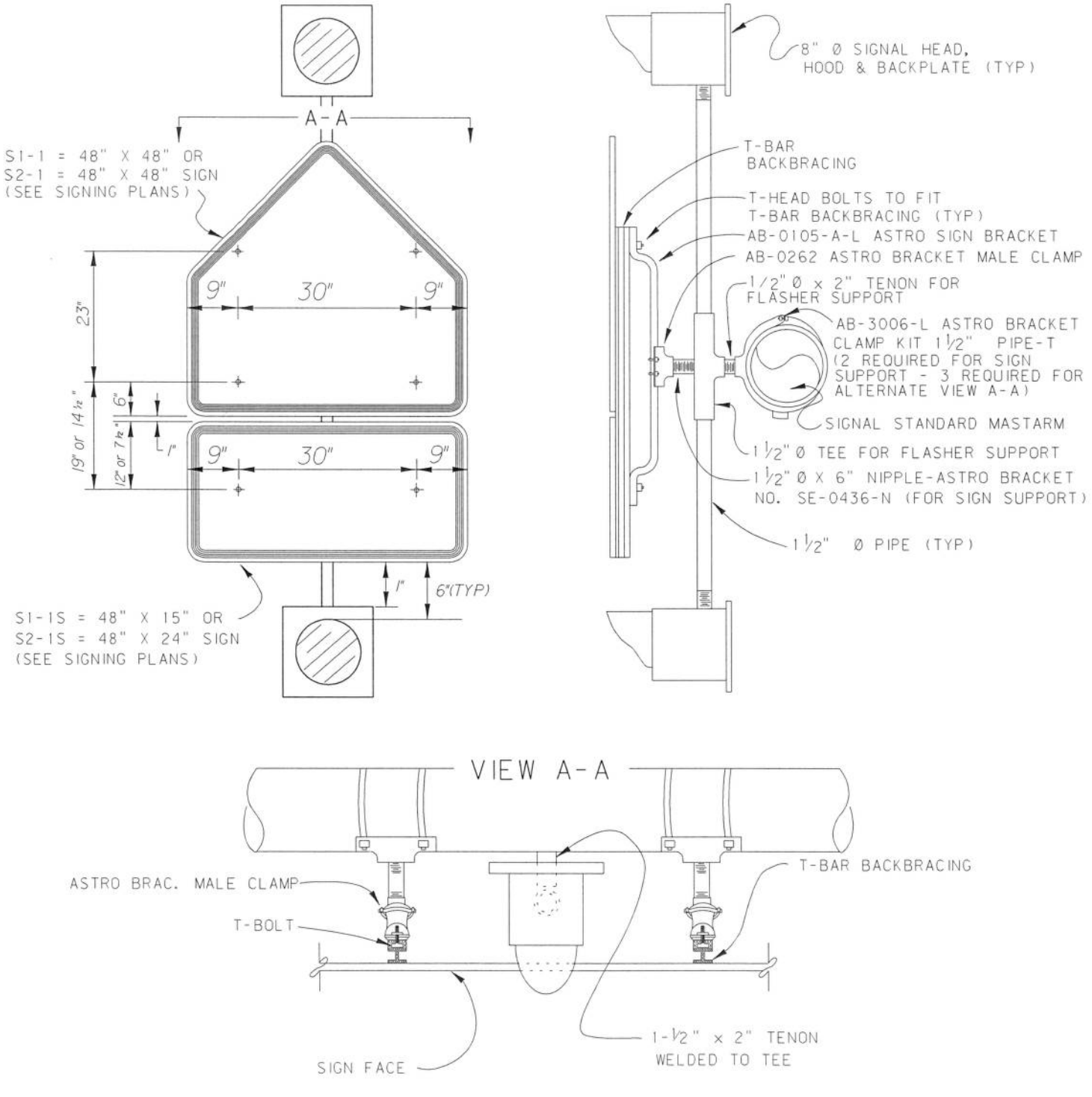
| STATE | PROJECT NUMBER | SHEET NO |
|---|---|---|
| MONTANA | | |



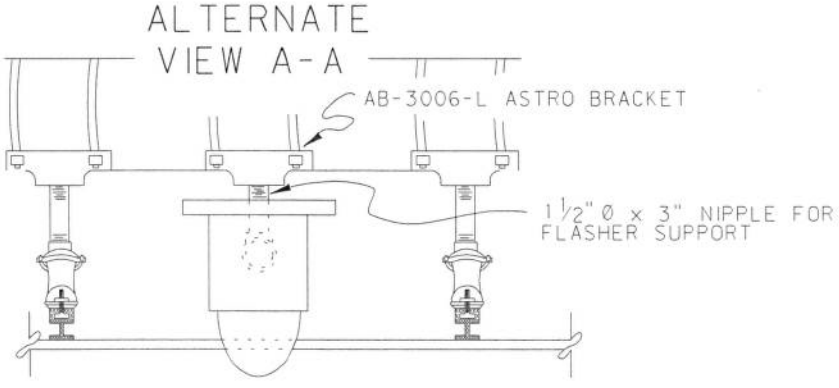

# PORTABLE SCALE DETAIL

SCALE : 1"=20'










# OVERHEAD
# SCHOOL CROSSING
# SIGN MOUNTING

NO SCALE

## NOTES

MOUNT ALL SIGNS LEVEL HORIZONTALLY ON THE MASTARM AS SHOWN AND CENTERED OVER THE APPROPRIATE DRIVING LANE.

INCLUDE MOUNTING HARDWARE IN THE UNIT BID PRICE FOR SIGNS.

DESIGN AND FURNISH ALL MOUNTING BRACKETS, FOUNDATION AND OVERHEAD CANTILEVER STRUCTURE-SIGNAL FOR PLACEMENT OF SIGNS AT STATIONS __+__ RT & __+__ LT.

PROVIDE SHOP DRAWINGS ACCORDING TO STANDARD SPECIFICATIONS.

DESIGN *AND INSPECT* STRUCTURE IN ACCORDANCE WITH THE CURRENT AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARES AND TRAFFIC SIGNALS, INCLUDING THE FATIGUE REQUIREMENTS IN SECTION 11 AND ANY AMENDMENTS THERETO.

DESIGN WIND VELOCITY SHALL BE 90 M.P.H.

DESIGN AREA = AREA W/RESPECT TO MAX. WIND LOADWIND IS PERPENDICULAR TO STRUCTURE, AS SHOWN.)

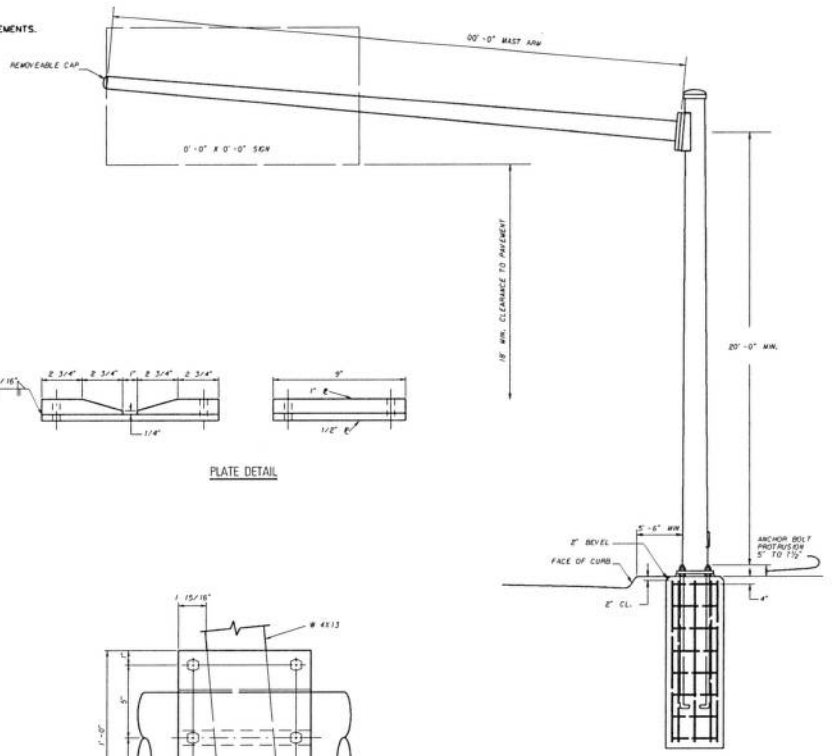
DESIGN WEIGHT = DEAD LOAD

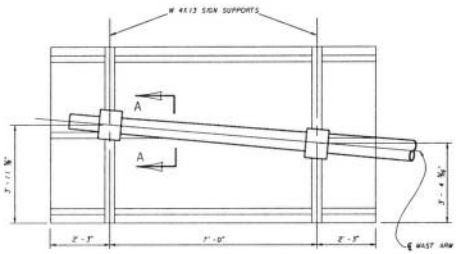
WELDING PROCEDURES, SYMBOLS, BASE METAL SPECIFICATIONS & GRADES MUST BE CALLED OUT PRIOR TO FABRICATION OR APPROVAL.

GALVANIZE POLES AND ARMS TO ASTM DESIGNATION : A123.

GALVANIZE ACCESSORIES TO ASTM DESIGNATION : A153.

SEE DETAILED DRAWING 619-04 FOR POST CLIP AND BACK BRACING REQUIREMENTS.

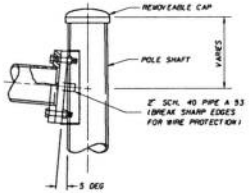


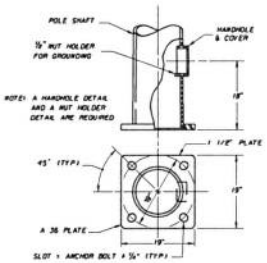

ELEVATION
(BACK OF SIGN)



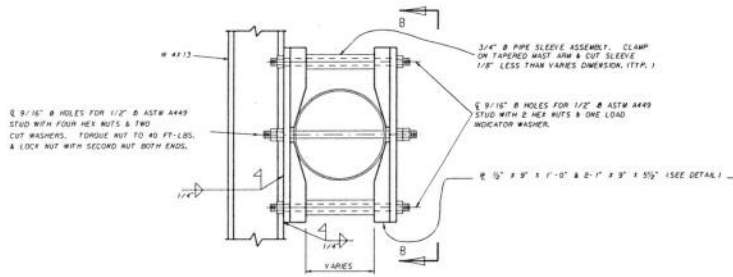

PLATE DETAIL




ARM CONNECTION



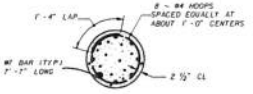

BASE DETAIL




SECTION A-A




VIEW B-B



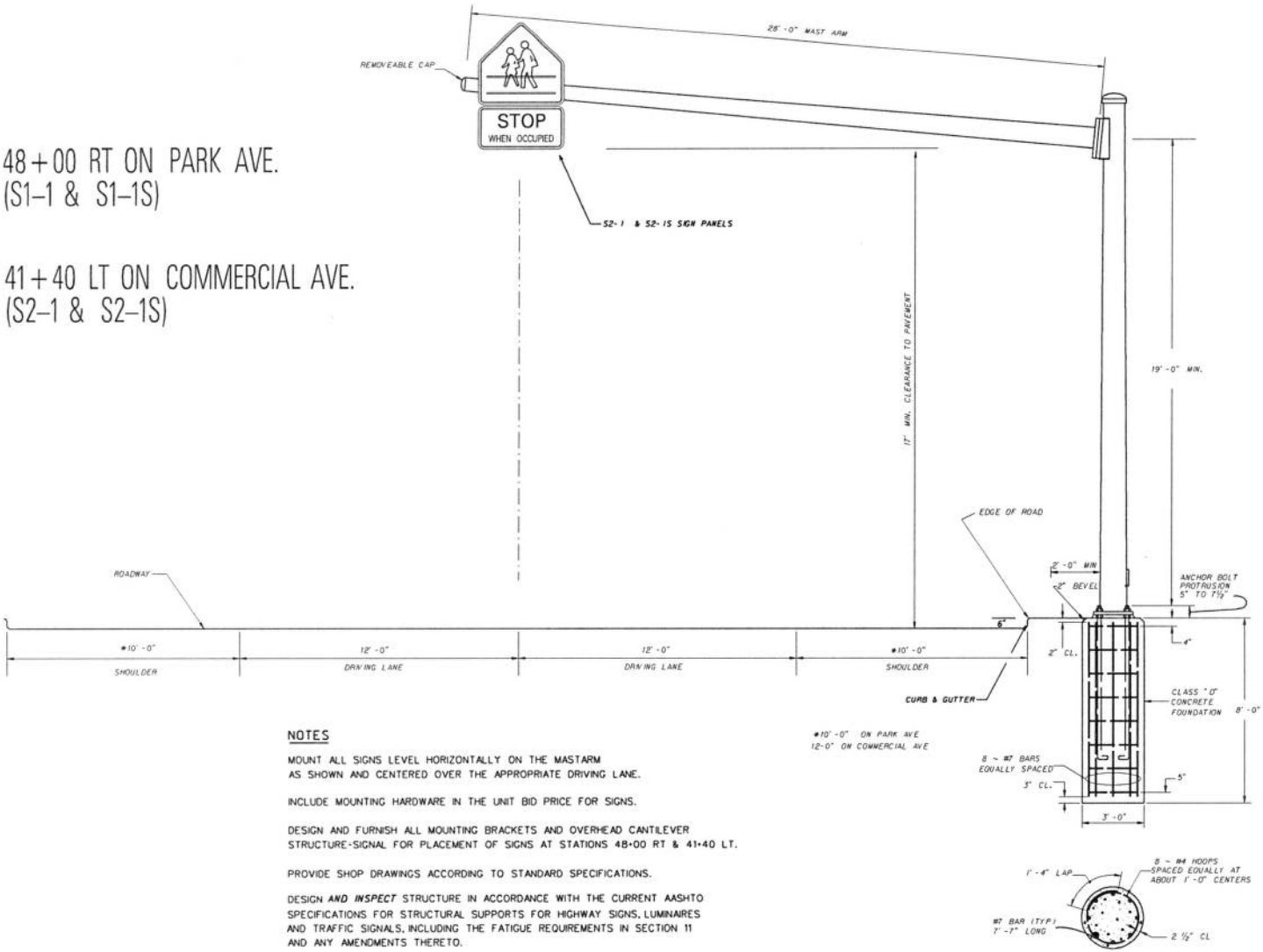

TYPICAL FOUNDATION

# SIGN CLAMP
# FOR HORIZONTAL MAST ARM

# OVERHEAD CANTILEVER STRUCTURE

48+00 RT ON PARK AVE.
(S1-1 & S1-1S)

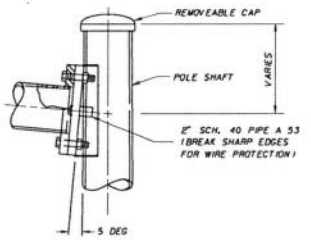
41+40 LT ON COMMERCIAL AVE.
(S2-1 & S2-1S)



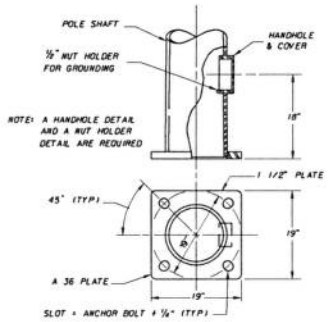




TYPICAL FOUNDATION




ARM CONNECTION




BASE DETAIL

## NOTES

MOUNT ALL SIGNS LEVEL HORIZONTALLY ON THE MASTARM AS SHOWN AND CENTERED OVER THE APPROPRIATE DRIVING LANE.

INCLUDE MOUNTING HARDWARE IN THE UNIT BID PRICE FOR SIGNS.

DESIGN AND FURNISH ALL MOUNTING BRACKETS AND OVERHEAD CANTILEVER STRUCTURE-SIGNAL FOR PLACEMENT OF SIGNS AT STATIONS 48+00 RT & 41+40 LT.

PROVIDE SHOP DRAWINGS ACCORDING TO STANDARD SPECIFICATIONS.

DESIGN ***AND INSPECT*** STRUCTURE IN ACCORDANCE WITH THE CURRENT AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, INCLUDING THE FATIGUE REQUIREMENTS IN SECTION 11 AND ANY AMENDMENTS THERETO.

DESIGN WIND VELOCITY SHALL BE 90 M.P.H.

DESIGN AREA = AREA W/RESPECT TO MAX. WIND LOAD ( WIND IS PERPENDICULAR TO STRUCTURE, AS SHOWN.)

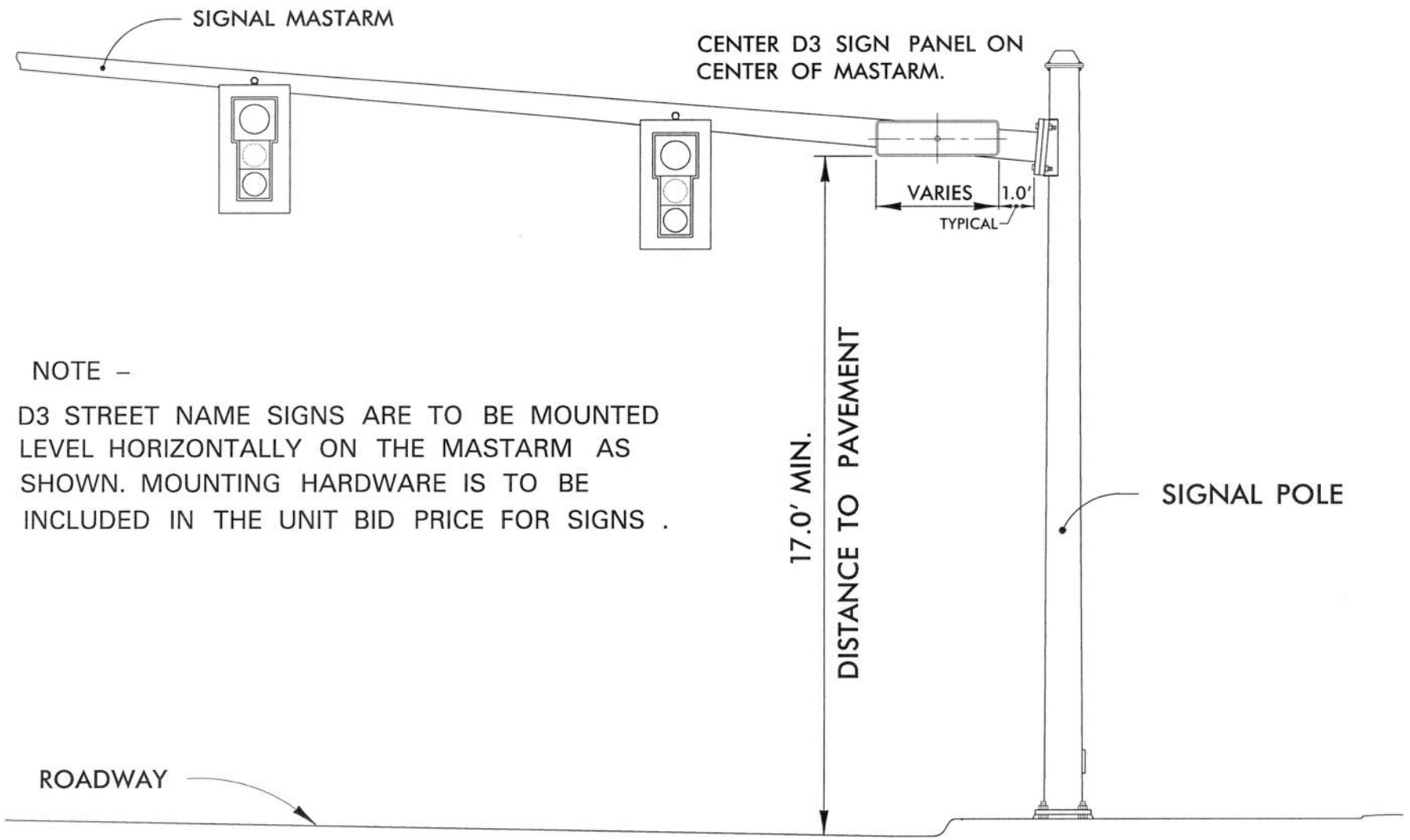
DESIGN WEIGHT = DEAD LOAD

SUPPLY ANCHOR BOLTS A449 OR EQUAL, GALVANIZE TOP END AND THREAD 12" MIN.

WELDING PROCEDURES, SYMBOLS, BASE METAL SPECIFICATIONS & GRADES MUST BE CALLED OUT PRIOR TO FABRICATION OR APPROVAL.

GALVANIZE POLES AND ARMS TO ASTM DESIGNATION : A123.

GALVANIZE ACCESSORIES TO ASTM DESIGNATION : A153.

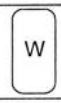



NOTE –

D3 STREET NAME SIGNS ARE TO BE MOUNTED LEVEL HORIZONTALLY ON THE MASTARM AS SHOWN. MOUNTING HARDWARE IS TO BE INCLUDED IN THE UNIT BID PRICE FOR SIGNS .

# D3 OVERHEAD SIGN DETAIL

NO SCALE

| | | | | | |
|---|---|---|---|---|---|
|  | DESIGN "A" | |  |  | Continous Delineation - Rt Shoulder all Routes |
|  | DESIGN "B" | |  |  | Lt Shoulder Interstate Ramps |
|  | DESIGN "C" | |  |  | Curves < 573' Inside & Outside of Curve |
|  | DESIGN "D" | |  |  | Non-Interstate: Stop or Yield Sign Approaches<br>Interstate: Ramp Termination @ Cross Road |
|  | DESIGN "E" | |  |  | Gores & Island Noses |
|  | DESIGN "F" | |  |  | Curves 1,433' to 765' Radi - Outside Only<br>Curves 764' to 573' Radi - Inside & Outside |
|  | DESIGN "G" | |  |  | Rt Shoulder Interstate Ramps |
|  | DESIGN "H" | |  |  | Lt Shoulder Interstate Routes |
|  | DESIGN "J" | |  |  | Truck Escape Ramps Only! |
|  | TOP MOUNT "A" | |  |  | Continous Delineation - Rt Shoulder all Routes |
|  | TOP MOUNT "F" | |  |  | Curves 1,433' to 765' Radi - Outside Only<br>Curves 764' to 573' Radi - Inside & Outside |
|  | TOP MOUNT "H" | |  |  | Lt Shoulder Interstate Routes |
|  | White FLEX SURF MNT | |  |  | Continous Delineation - Rt Shoulder all Routes |
|  | Yellow FLEX SURF MNT | |  |  | Lt Shoulder Interstate Routes<br>Gores & Island Noses |
|  | White REFL BARRIER | |  |  | Continous Delineation - Rt Shoulder all Routes |
|  | Yellow REFL BARRIER | |  |  | Lt Shoulder Interstate Routes |

○ SINGLE SQUARE TUBE WITH SLIP BASE BREAKAWAY REQUIRED. SEE DETAILED DRAWING 619-14

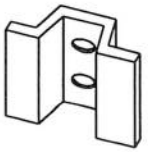
▲ SINGLE SQUARE TUBE BREAKAWAY REQUIRED. MOUNTED IN HEAVY DUTY STUB. SEE DETAILED DRAWING 619-14

╳ STANDARD BREAKAWAY DEVICE.
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.
- FOR STEEL POST SEE DETAILED DRAWING 619-12.

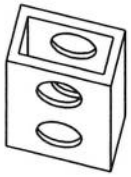
☆ TELESCOPED SQUARE TUBES (56mm & 64mm) WITH SLIP BASE BREAKAWAY REQUIRED. MOUNTED IN HEAVY DUTY STUB. SEE DETAILED DRAWING 619-14.

■ FRANGIBLE SIGN POST BREAKAWAY DEVICE REQUIRED. SEE SPECIAL PROVISIONS.

BB REQD. = BACKBRACING REQUIRED



Steel U



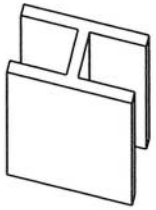
Posts – Tubular Steel – Sq. – Perf.



Posts – Tubular Steel



S Shape Steel Structural Sign



W Shape Steel Structural Sign

URBAN Hatch Spacing

First 5 Hatches @ RURAL: 4.5m /15′
Remainder Hatches @ RURAL: 7.6m /25′

RURAL Hatch Spacing

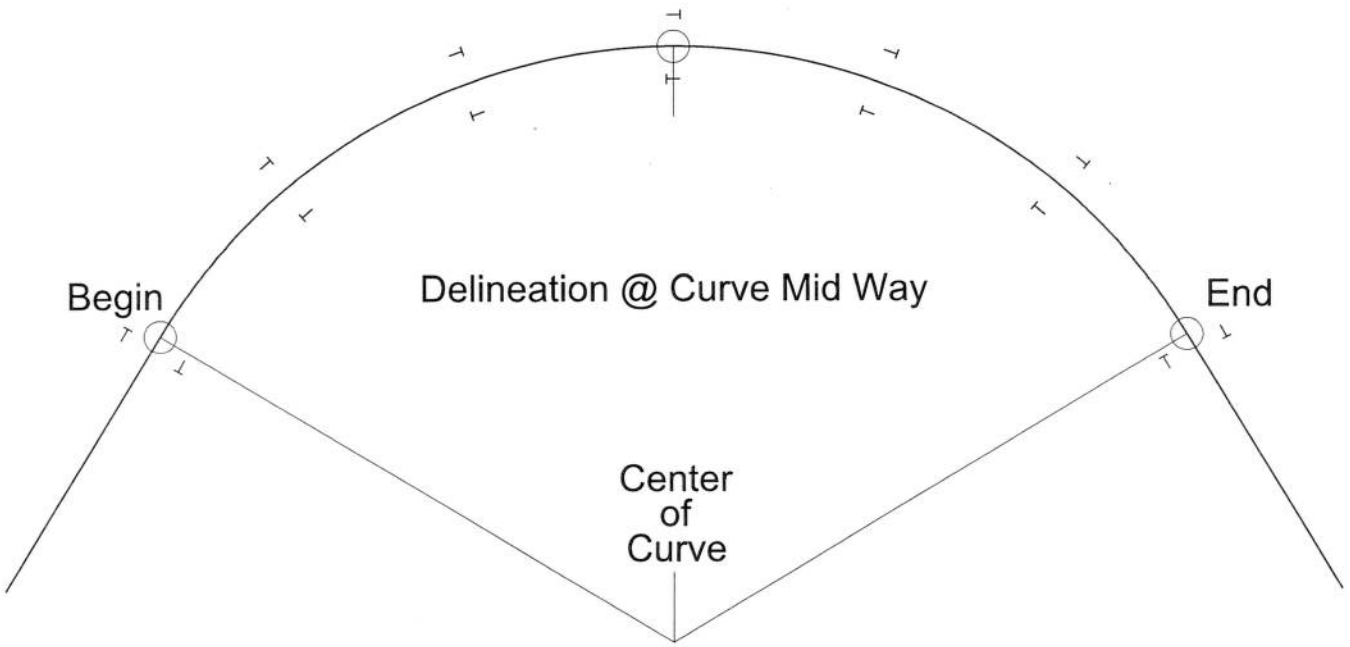
First 5 Hatches @ RURAL: 7.5m /25′
Remainder Hatches @ RURAL: 15m /50′

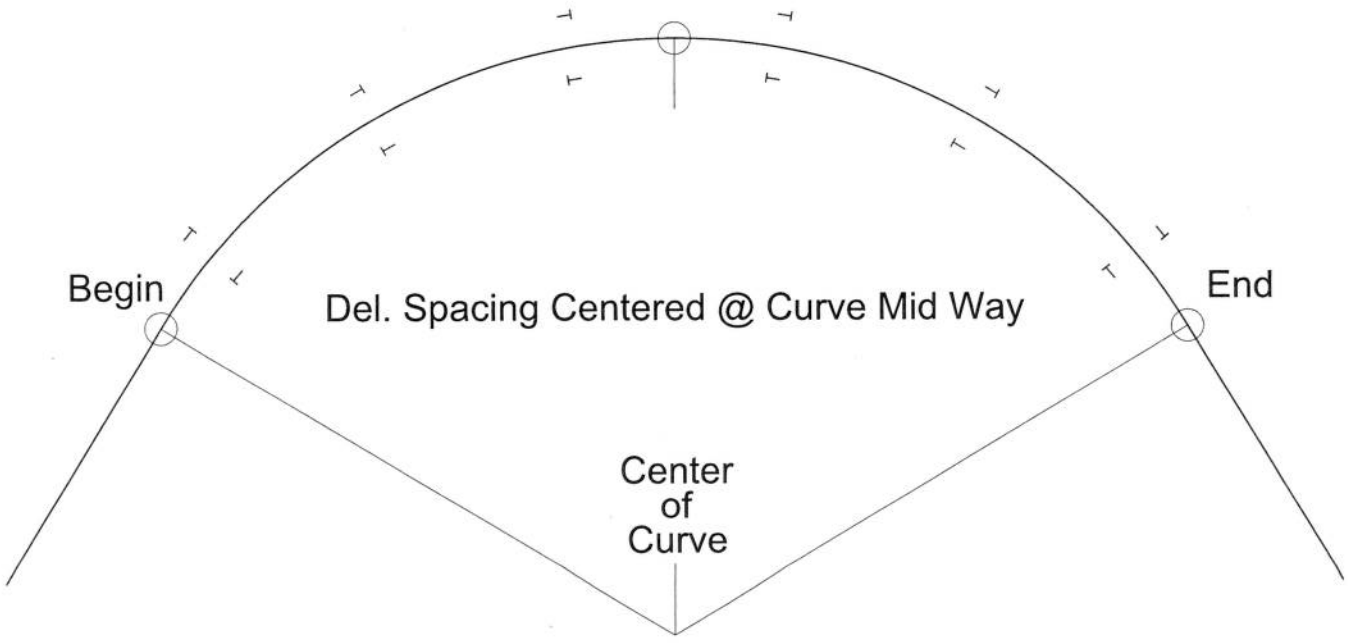
URBAN Hatch Spacing

First 5 Hatches @ RURAL: 2.1m / 7′
Remainder Hatches @ RURAL: 4.5m /15′

RURAL Hatch Spacing

First 5 Hatches @ RURAL: 4.5m /15′
Remainder Hatches @ RURAL: 9.1m /30′


Begin
Delineation @ Curve Mid Way
End
Center
of
Curve


Begin
Del. Spacing Centered @ Curve Mid Way
End
Center
of
Curve