

NWL

DEC 2015

PROJECT ID: 8996-00-98
WITH: N/A

COUNTY: CHIPPEWA

ORDER OF SHEETS

| | |
|---------------|--|
| Section No. 1 | Title |
| Section No. 2 | Typical Sections and Details (Includes Erosion Control Plans) |
| Section No. 3 | Estimate of Quantities |
| Section No. 3 | Miscellaneous Quantities |
| Section No. 4 | Right of Way Plat |
| Section No. 5 | Plan and Profile |
| Section No. 6 | Standard Detail Drawings |
| Section No. 7 | Sign Plates |
| Section No. 8 | Structure Plans |
| Section No. 9 | Computer Earthwork Data |
| Section No. 9 | Cross Sections |

TOTAL SHEETS = 46



PROJECT LOCATION

DESIGN DESIGNATION

| | | |
|---------------|---|--------|
| A.D.T. (2016) | = | 510 |
| A.D.T. (2036) | = | 620 |
| D.H.V. | = | 50 |
| D. | = | 0.100 |
| T. | = | 3.3% |
| DESIGN SPEED | = | 30 MPH |
| ESALS | = | N/A |

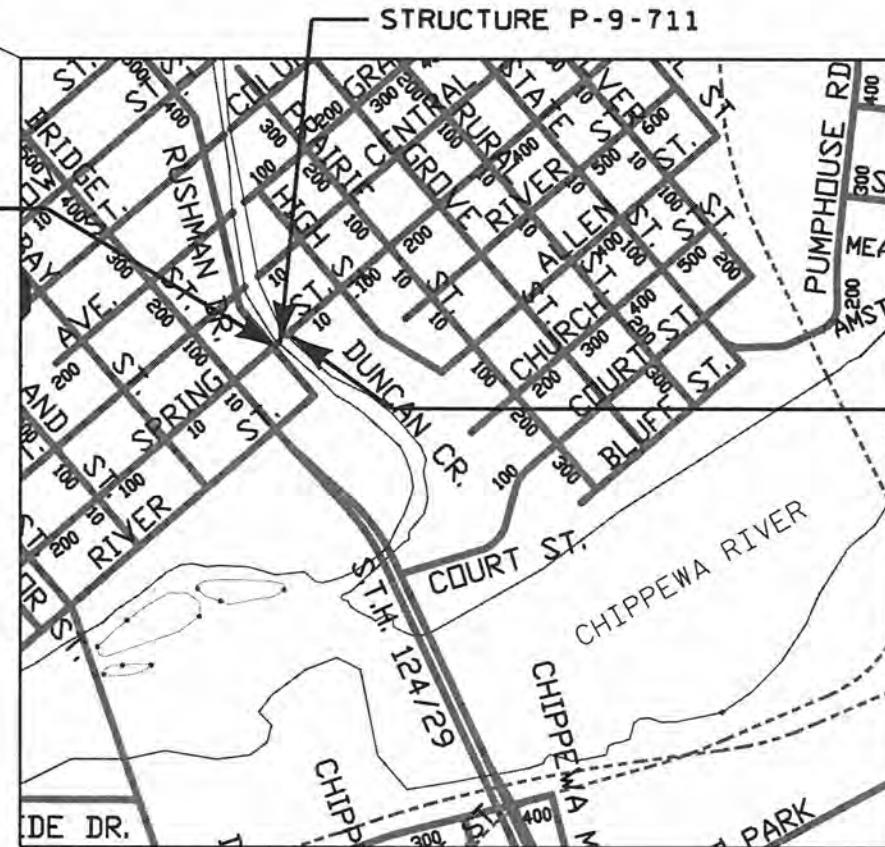
CONVENTIONAL SYMBOLS

| | |
|--------------------------------|--|
| CORPORATE LIMITS | |
| PROPERTY LINE | |
| LOT LINE | |
| LIMITED HIGHWAY EASEMENT | |
| EXISTING RIGHT OF WAY | |
| PROPOSED OR NEW R/W LINE | |
| SLOPE INTERCEPT | |
| REFERENCE LINE | |
| EXISTING CULVERT | |
| PROPOSED CULVERT (Box or Pipe) | |
| COMBUSTIBLE FLUIDS | |
| HIGH VOLTAGE | |
| MARSH AREA | |
| WOODED OR SHRUB AREA | |

| | |
|---|--|
| PROFILE | |
| GRADE LINE | |
| ORIGINAL GROUND | |
| MARSH OR ROCK PROFILE (To be noted as such) | |
| SPECIAL DITCH | |
| GRADE ELEVATION | |
| CULVERT (Profile View) | |
| UTILITIES | |
| OVERHEAD | |
| ELECTRIC | |
| FIBER OPTIC | |
| GAS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE | |
| WATER | |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |

| | |
|-------|--|
| ROCK | |
| LABEL | |
| OH | |
| E | |
| FO | |
| G | |
| SAN | |
| SS | |
| T | |
| W | |
| PP | |
| TP | |

BEGIN PROJECT
STA. 9+30.32
Y = 129468.78
X = 172061.02



LAYOUT
SCALE 0 500 FT.

TOTAL NET LENGTH OF CENTERLINE = 0.010 MI.

END PROJECT
STA. 10+75
Y = 129562.72
X = 172171.06

COORDINATES ON THIS PLAN ARE REFERENCED TO
THE WISCONSIN STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE.
SCALED FROM U.S.G.S. TOPOGRAPHIC MAP,
STANLEY QUAD, FOR IDENTIFICATION ONLY.

STATE PROJECT

8996-00-98

FEDERAL PROJECT

PROJECT CONTRACT

ACCEPTED FOR

City of Chippewa Falls

July 28, 2015
Date
Reddy Kubacki
Director of Public Works

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com



DATE 7/6/15

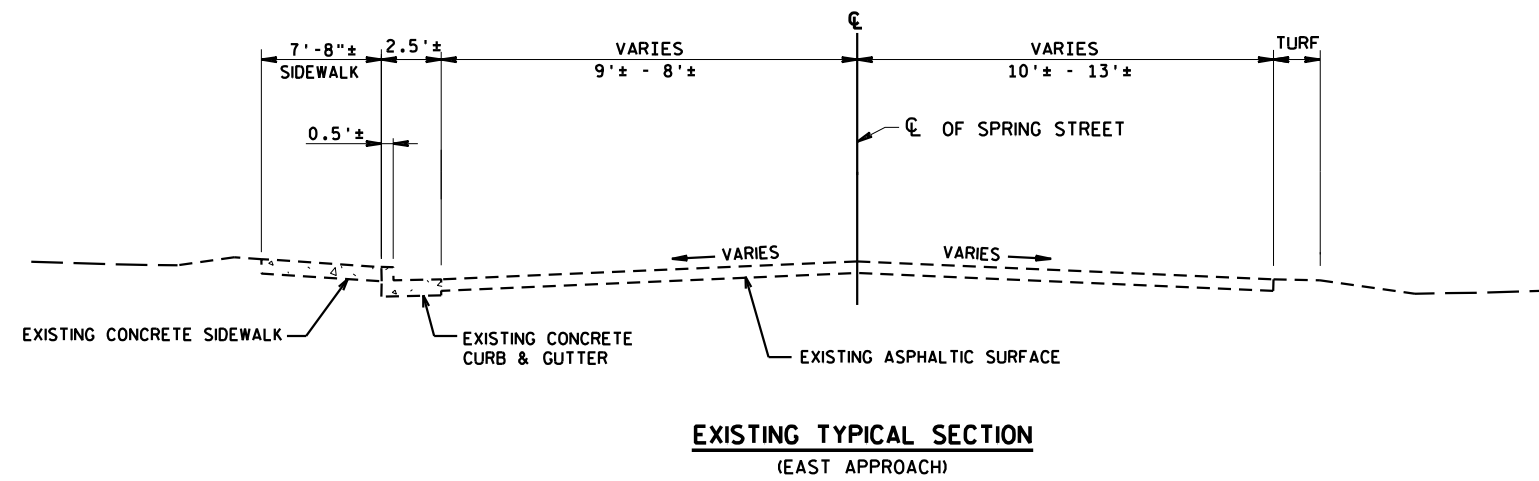
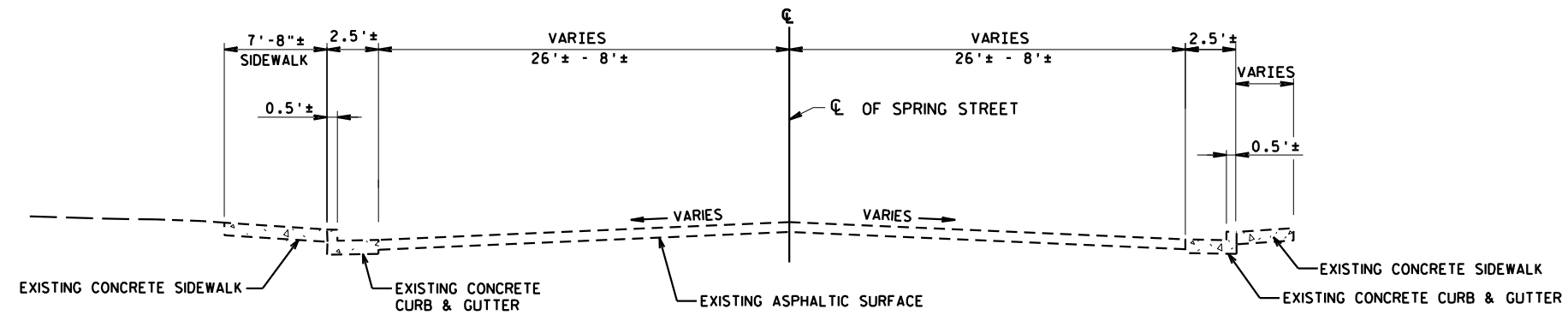
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor AYRES ASSOCIATES INC
Designer AYRES ASSOCIATES INC

Management Consultant KNIGHT E/A, INC.
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 7/30/15
Ryan B. McKane
Management Consultant Signature

E



GENERAL NOTES

NO TREES AND/OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 88.

UTILITIES

CITY OF CHIPPEWA FALLS
30 W. CENTRAL STREET
CHIPPEWA FALLS, WI 54729
ATTN: RICHARD RUBENZER
715-726-2701
rrubenzerc@chippewafalls-wi.gov

XCEL ENERGY
1414 WEST HAMILTON AVE.
EAU CLAIRE, WI 54702-0008
ATTN: DAWN SCHULTZ
715-737-2482
down.schultz@xcelenergy.com

AT&T
304 SOUTH DEWEY STREET
EAU CLAIRE, WI 54701
ATTN: RICK PODOLAK
715-839-5565
rp4514@att.com

ABBREVIATIONS

| | |
|-------|----------------------------|
| AC | ACRES |
| CHIS | CHISELED |
| CL | CENTERLINE |
| COR | CORNER |
| CWT | COUNT |
| CY | CUBIC YARD |
| EL | ELEVATION |
| GAL | GALLON |
| H | HOUSE |
| IP | IRON PIPE |
| LB | POUND |
| LF | LINEAR FEET |
| LS | LUMP SUM |
| LT | LEFT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| MON | MONUMENT |
| NORM | NORMAL |
| OAL | OVERALL LENGTH |
| PC | POINT OF CURVATURE |
| PD | PEDESTAL |
| PI | POINT OF INTERSECTION |
| PK | PARKER-KALON |
| PL | PROPERTY LINE |
| PLE | PERMANENT LIMITED EASEMENT |
| PP | POWER POLE |
| PT | POINT OF TANGENCY |
| R | RADIUS |
| REQ'D | REQUIRED |
| RT | RIGHT |
| R/W | RIGHT-OF-WAY |
| SF | SQUARE FEET |
| SHLDR | SHOULDER |
| STA | STATION |
| SY | SQUARE YARD |
| TLE | TEMPORARY LIMITED EASEMENT |
| VAR | VARIES |
| WL | WELL |

* * DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

DIGGERS HOTLINE

Dial **811** or (800)242-8511

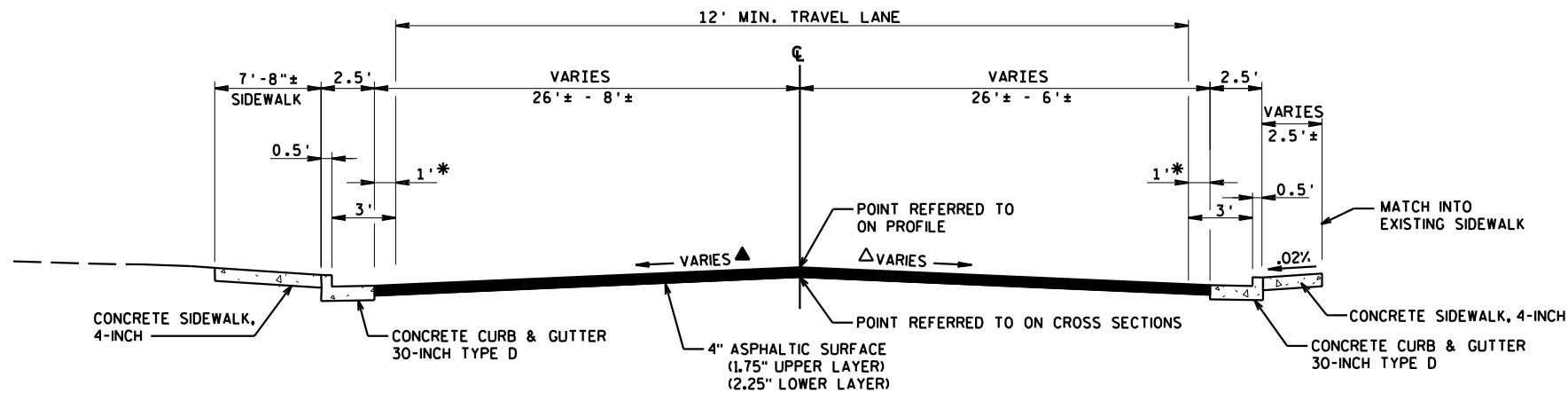
www.DiggersHotline.com

DESIGNER

AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: CHRIS McMAHON
715-834-3161
mcmahonc@AyresAssociates.com

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES CONTACT:

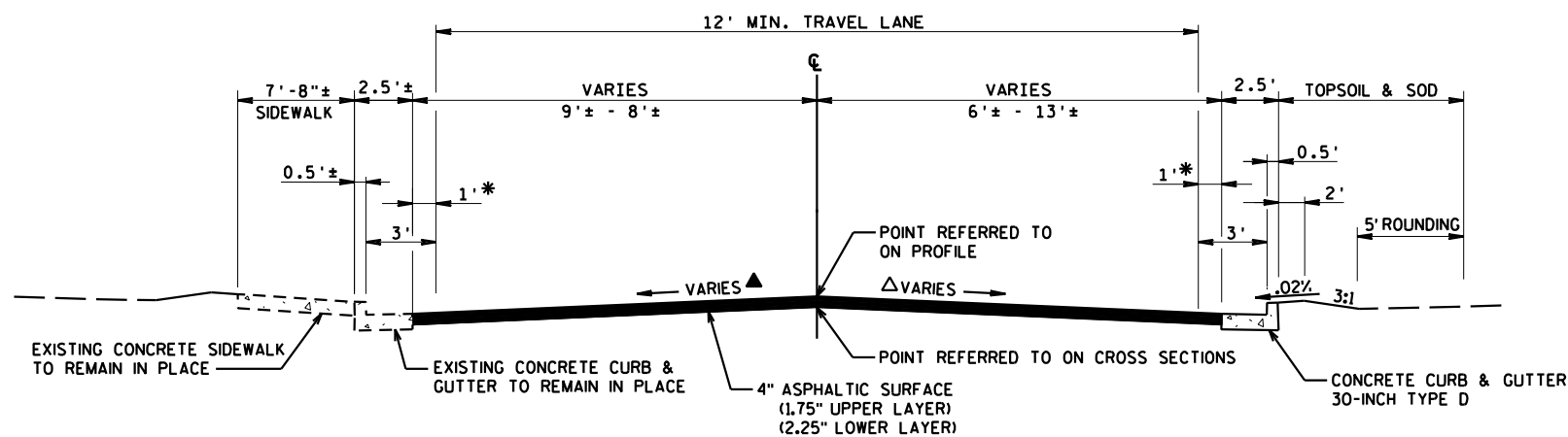
CHRIS WILLGER
1300 W. CLAIREMONT AVE.
EAU CLAIRE, WI. 54702
715-839-1609
christopherj.willger@wisconsin.gov



FINISHED TYPICAL SECTION

(WEST APPROACH)

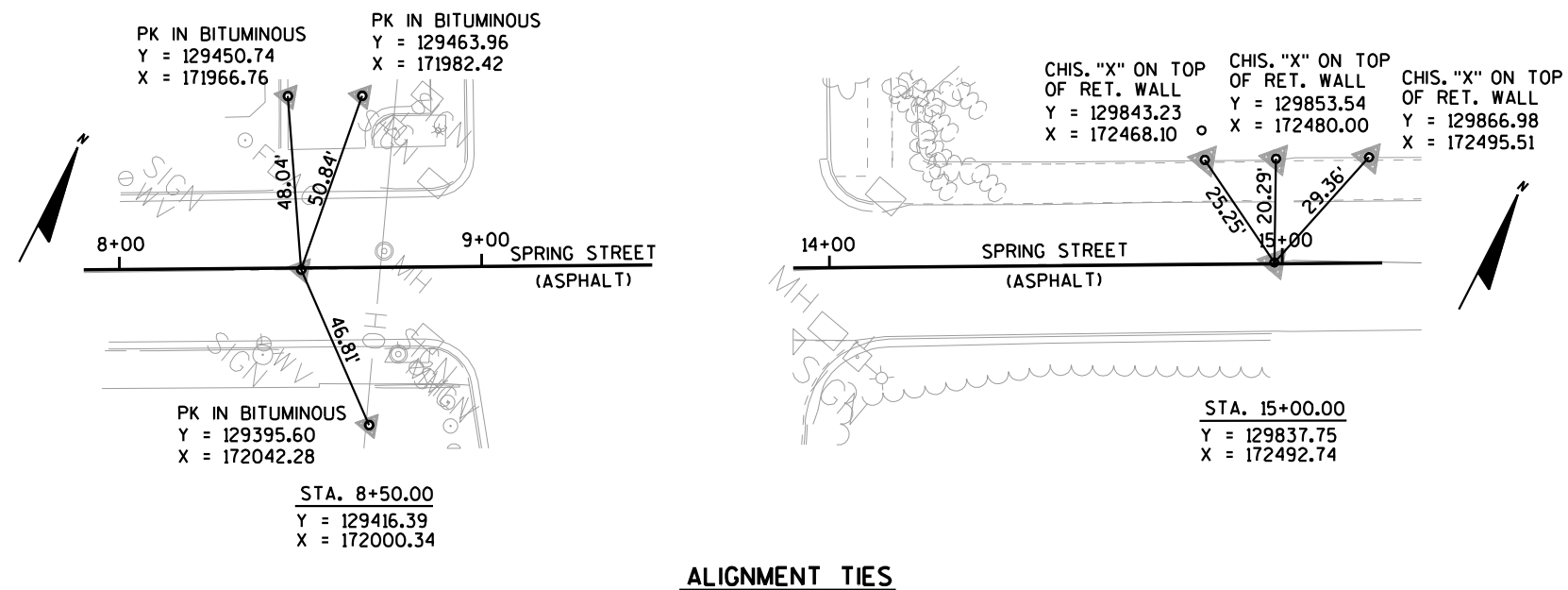
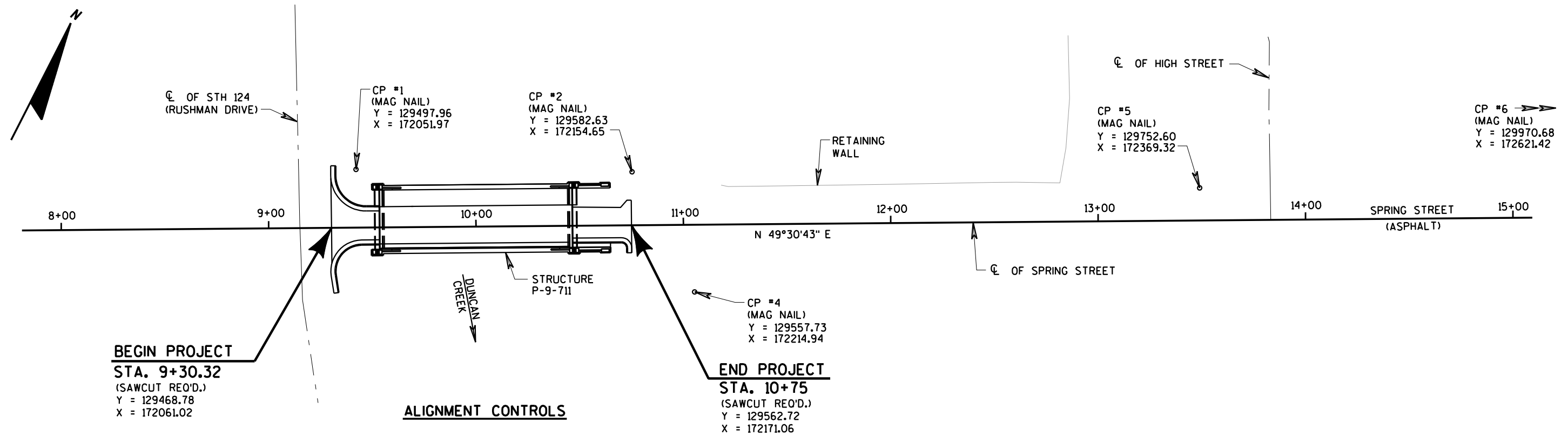
- * URBAN PAVED SHOULDER
- ▲ 0.4% - 2.4% (R = 1.8%)
- △ 2.2% - 3.7% (R = 3.2%)



FINISHED TYPICAL SECTION

(EAST APPROACH)

- * URBAN PAVED SHOULDER
- ▲ 0.2% - 2.0% (R = 1.2%)
- △ 0.6% - 1.4% (R = 1.0%)

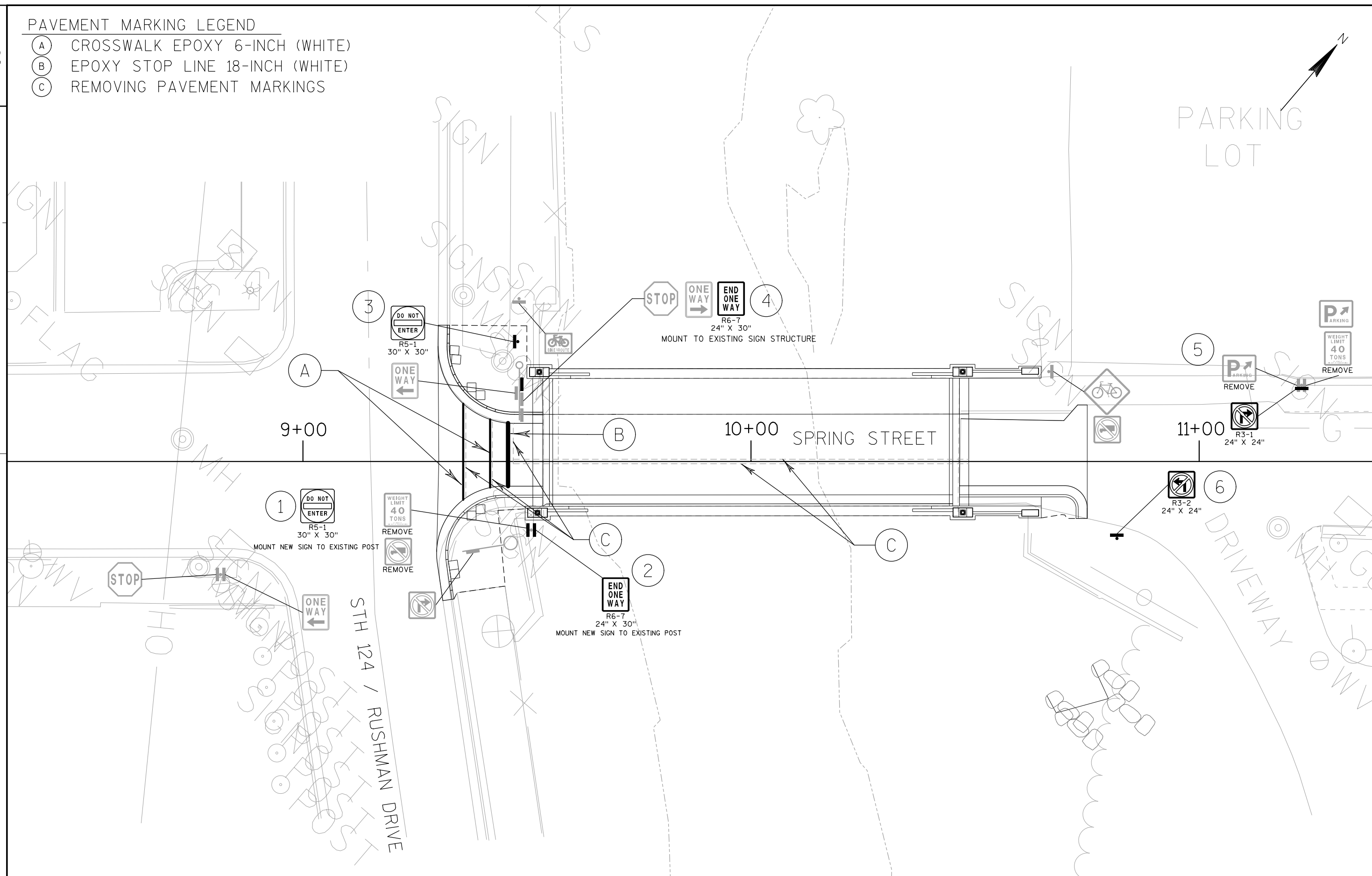




PAVEMENT MARKING LEGEND

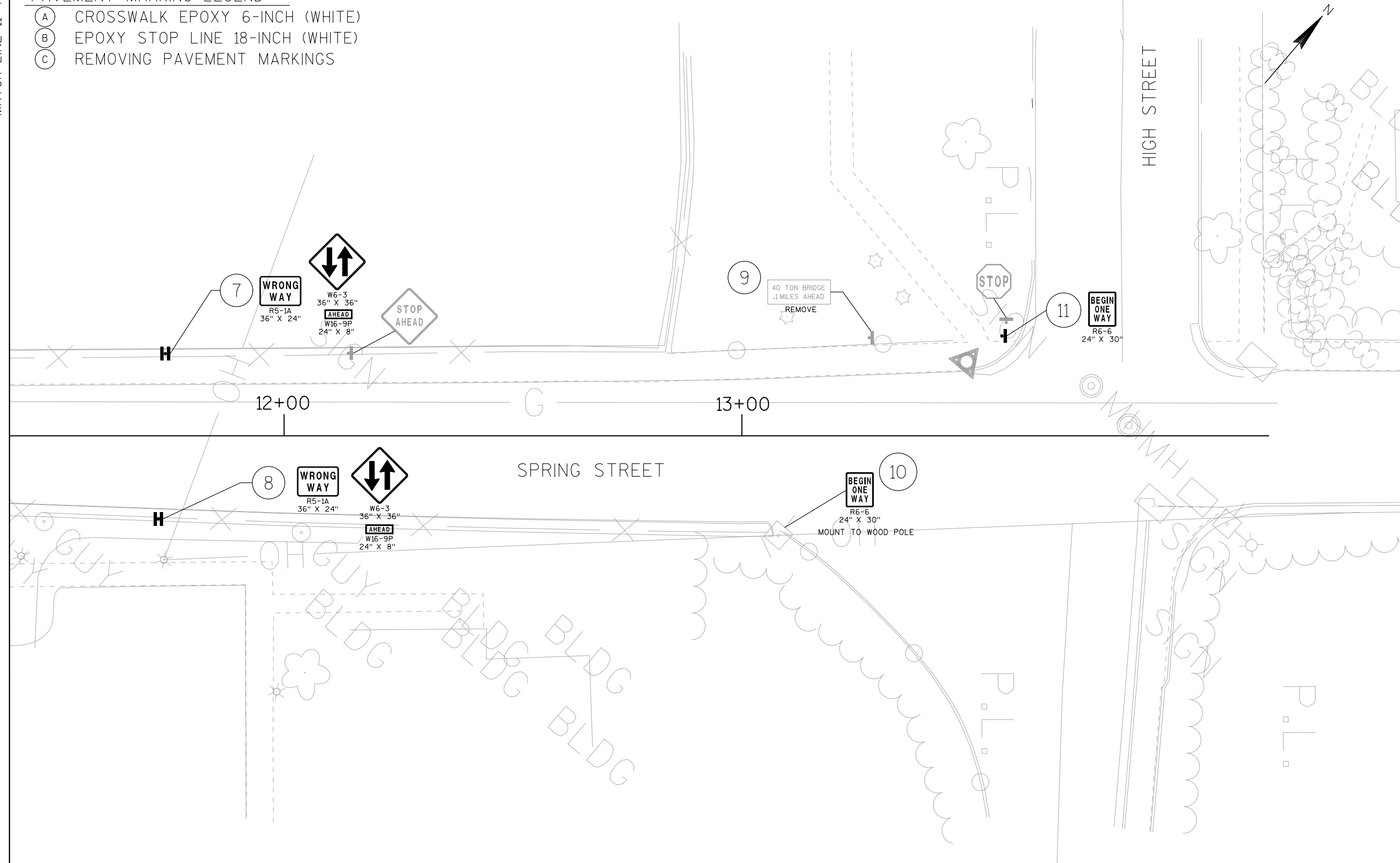
- (A) CROSSWALK EPOXY 6-INCH (WHITE)
- (B) EPOXY STOP LINE 18-INCH (WHITE)
- (C) REMOVING PAVEMENT MARKINGS

MATCH LINE 11+40



PAVEMENT MARKING LEGEND

- (A) CROSSWALK EPOXY 6-INCH (WHITE)
(B) EPOXY STOP LINE 18-INCH (WHITE)
(C) REMOVING PAVEMENT MARKINGS



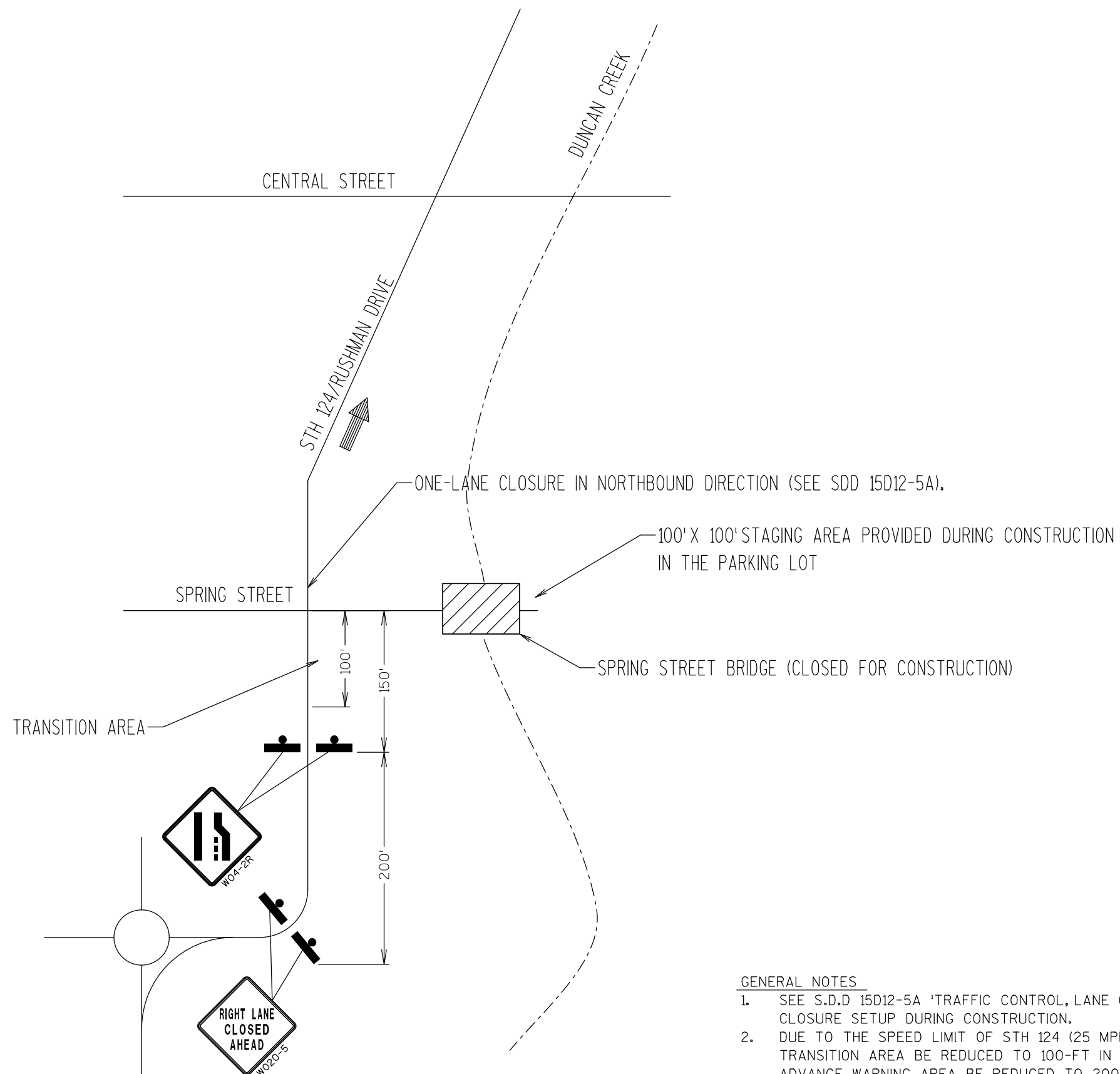
LEGEND



WARNING SIGNS



DIRECTION OF TRAVEL



GENERAL NOTES

1. SEE S.D.D 15D12-5A 'TRAFFIC CONTROL, LANE CLOSURE' FOR PROPOSED LANE CLOSURE SETUP DURING CONSTRUCTION.
2. DUE TO THE SPEED LIMIT OF STH 124 (25 MPH) IT IS RECOMMENDED THAT THE TRANSITION AREA BE REDUCED TO 100-FT IN ADVANCE OF SPRING STREET AND ADVANCE WARNING AREA BE REDUCED TO 200-FT TO ACCOMMODATE THE URBAN WORK ZONE ENVIRONMENT.

| DATE 05OCT15 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|-------------|--|------|-----------|------------|
| LINE | | | | | 8996-00-98 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0010 | 204.0110 | Removing Asphaltic Surface | SY | 125.000 | 125.000 |
| 0020 | 204.0150 | Removing Curb & Gutter | LF | 78.000 | 78.000 |
| 0030 | 204.0155 | Removing Concrete Sidewalk | SY | 55.000 | 55.000 |
| 0040 | 211.0100 | Prepare Foundation for Asphaltic Paving (project) 01. 8996-00-98 | LS | 1.000 | 1.000 |
| 0050 | 213.0100 | Finishing Roadway (project) 01. 8996-00-98 | EACH | 1.000 | 1.000 |
| 0060 | 455.0605 | Tack Coat | GAL | 8.000 | 8.000 |
| 0070 | 465.0105 | Asphaltic Surface | TON | 25.000 | 25.000 |
| 0080 | 502.0100 | Concrete Masonry Bridges | CY | 5.000 | 5.000 |
| 0090 | 502.3200 | Protective Surface Treatment | SY | 275.000 | 275.000 |
| 0100 | 502.5002 | Masonry Anchors Type L No. 4 Bars | EACH | 224.000 | 224.000 |
| 0110 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 450.000 | 450.000 |
| 0120 | 509.0301 | Preparation Decks Type 1 | SY | 3.000 | 3.000 |
| 0130 | 509.0302 | Preparation Decks Type 2 | SY | 3.000 | 3.000 |
| 0140 | 509.2000 | Full-Depth Deck Repair | SY | 1.000 | 1.000 |
| 0150 | 509.2500 | Concrete Masonry Overlay Decks | CY | 15.000 | 15.000 |
| 0160 | 509.9005. S | Removing Concrete Masonry Deck Overlay (structure) 01. P-09-0711 | SY | 210.000 | 210.000 |
| 0170 | 517.1010. S | Concrete Staining (structure) 01. P-09-0711 | SF | 6,700.000 | 6,700.000 |
| 0180 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 115.000 | 115.000 |
| 0190 | 602.0405 | Concrete Sidewalk 4-Inch | SF | 590.000 | 590.000 |
| 0200 | 602.0505 | Curb Ramp Detectable Warning Field Yellow | SF | 32.000 | 32.000 |
| 0210 | 611.8110 | Adjusting Manhole Covers | EACH | 1.000 | 1.000 |
| 0220 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0230 | 625.0105 | Topsoil | CY | 1.000 | 1.000 |
| 0240 | 628.1504 | Silt Fence | LF | 20.000 | 20.000 |
| 0250 | 628.1520 | Silt Fence Maintenance | LF | 20.000 | 20.000 |
| 0260 | 628.1905 | Mobilizations Erosion Control | EACH | 1.000 | 1.000 |
| 0270 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 1.000 | 1.000 |
| 0280 | 631.1000 | Sod Lawn | SY | 5.000 | 5.000 |
| 0290 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 2.000 | 2.000 |
| 0300 | 634.0812 | Posts Tubular Steel 2x2-Inch X 12-FT | EACH | 1.000 | 1.000 |
| 0310 | 634.0818 | Posts Tubular Steel 2x2-Inch X 18-FT | EACH | 2.000 | 2.000 |
| 0320 | 637.2220 | Signs Type II Reflective SH | SF | 73.170 | 73.170 |
| 0330 | 638.2602 | Removing Signs Type II | EACH | 5.000 | 5.000 |
| 0340 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0350 | 643.0100 | Traffic Control (project) 01. 8996-00-98 | EACH | 1.000 | 1.000 |
| 0360 | 646.0600 | Removing Pavement Markings | LF | 247.000 | 247.000 |
| 0370 | 647.0566 | Pavement Marking Stop Line Epoxy 18-Inch | LF | 15.000 | 15.000 |
| 0380 | 647.0766 | Pavement Marking Crosswalk Epoxy 6-Inch | LF | 45.000 | 45.000 |
| 0390 | 650.5000 | Construction Staking Base | LF | 52.000 | 52.000 |
| 0400 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 115.000 | 115.000 |
| 0410 | 650.9910 | Construction Staking Supplemental Control (project) 01. 8996-00-98 | LS | 1.000 | 1.000 |
| 0420 | 650.9920 | Construction Staking Slope Stakes | LF | 9.000 | 9.000 |
| 0430 | 690.0150 | Sawing Asphalt | LF | 77.000 | 77.000 |
| 0440 | 690.0250 | Sawing Concrete | LF | 45.000 | 45.000 |
| 0450 | 715.0502 | Incentive Strength Concrete Structures | DOL | 500.000 | 500.000 |
| 0460 | SPV.0165 | Special 01. Fiber Wrap Reinforcing | SF | 2,600.000 | 2,600.000 |

| | | | | | | |
|--------------|-----------|---|------|-----------|-----------|--|
| DATE 05OCT15 | | E S T I M A T E O F Q U A N T I T I E S | | | | |
| LINE | | 8996-00-98 | | | | |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY | |
| 0470 | SPV. 0165 | Speci al 02. Concrete Surface Repair | SF | 1,100.000 | 1,100.000 | |
| | | Speci al | | | | |

204.0110 REMOVING ASPHALTIC SURFACE (CATEGORY 0010)

| STATION TO STATION | LOCATION | SY |
|------------------------------|----------|-----|
| Sta. 9+30.32 to Sta. 9+53.50 | Mainline | 60 |
| Sta. 10+46.50 to Sta. 10+75 | Mainline | 65 |
| TOTAL | | 125 |

204.0150 REMOVING CURB & GUTTER (CATEGORY 0010)

| STATION TO STATION | LOCATION | LF |
|------------------------------|----------|----|
| Sta. 9+30.32 to Sta. 9+53.50 | RT | 40 |
| Sta. 9+30.32 to Sta. 9+53.50 | LT | 38 |
| TOTAL | | 78 |

204.0155 REMOVING CONCRETE SIDEWALK (CATEGORY 0010)

| STATION TO STATION | LOCATION | SY |
|------------------------------|----------|----|
| Sta. 9+30.32 to Sta. 9+45 | RT | 20 |
| Sta. 9+30.32 to Sta. 9+53.50 | LT | 35 |
| TOTAL | | 55 |

211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (CATEGORY 0010)

| LOCATION | LS |
|--------------------|----|
| PROJECT 8996-00-98 | 1 |

213.0100 FINISH ROADWAY (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8996-00-98 | 1 |

455.0605 TACK COAT (CATEGORY 0010)

| STATION TO STATION | LOCATION | GAL |
|------------------------------|----------|-----|
| Sta. 9+30.32 to Sta. 9+53.50 | Mainline | 4 |
| Sta. 10+46.50 to Sta. 10+75 | Mainline | 4 |
| TOTAL | | 8 |

465.0105 ASPHALTIC SURFACE (CATEGORY 0010)

| STATION TO STATION | LOCATION | TON |
|------------------------------|----------|------|
| Sta. 9+30.32 to Sta. 9+53.50 | Mainline | 12.5 |
| Sta. 10+46.50 to Sta. 10+75 | Mainline | 12.5 |
| TOTAL | | 25 |

601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (CATEGORY 0010)

| STATION TO STATION | LOCATION | LF |
|------------------------------|----------|-----|
| Sta. 9+30.32 to Sta. 9+53.50 | RT | 43 |
| Sta. 9+30.32 to Sta. 9+53.50 | LT | 38 |
| Sta. 10+46.50 to Sta. 10+75 | RT | 34 |
| TOTAL | | 115 |

602.0405 CONCRETE SIDEWALK 4-INCH (CATEGORY 0010)

| STATION TO STATION | LOCATION | SF |
|------------------------------|----------|-----|
| Sta. 9+30.32 to Sta. 9+53.50 | RT | 235 |
| Sta. 9+30.32 to Sta. 9+53.50 | LT | 315 |
| Sta. 10+46.50 to Sta. 10+65 | RT | 40 |
| TOTAL | | 590 |

602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (CATEGORY 0010)

| STATION TO STATION | LOCATION | SF |
|--------------------|----------|----|
| Sta. 9+33 | 25' RT | 8 |
| Sta. 9+33 | 23' LT | 8 |
| Sta. 9+39 | 10' RT | 8 |
| Sta. 9+39 | 13' LT | 8 |
| TOTAL | | 32 |

611.8110 ADJUSTING MANHOLE COVER (CATEGORY 0010)

| STATION | LOCATION | EACH |
|-----------|----------|------|
| Sta. 9+45 | 22' LT | 1 |

619.1000 MOBILIZATION

| LOCATION | EACH |
|------------------------------------|------|
| PROJECT 8996-00-98 (CATEGORY 0010) | 0.1 |
| PROJECT 8996-00-98 (CATEGORY 0020) | 0.9 |
| TOTAL | 1 |

625.0105 TOPSOIL (CATEGORY 0010)

| STATION TO STATION | LOCATION | CY |
|-----------------------------|----------|-----|
| Sta. 10+65 to Sta. 10+72.50 | RT | 0.8 |
| Undistributed | | 0.2 |
| TOTALS | | 1 |

SILT FENCE (CATEGORY 0010)

| STATION TO STATION | LOCATION | 628.1504 | 628.1520 |
|--------------------------|----------|---------------|---------------------------|
| | | SILT FENCE LF | SILT FENCE MAINTENANCE LF |
| Sta. 10+63 to Sta. 10+75 | RT | 15 | 15 |
| Undistributed | | 5 | 5 |
| TOTALS | | 20 | 20 |

MOBILIZATIONS EROSION CONTROL & EMERGENCY EROSION CONTROL (CATEGORY 0010)

| LOCATION | 628.1905 | 628.1910 |
|--------------------|------------------------------------|--|
| | MOBILIZATIONS EROSION CONTROL EACH | MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
| PROJECT 8996-00-98 | 1 | 1 |

631.1000 SOD LAWN (CATEGORY 0010)

| STATION TO STATION | LOCATION | SY |
|-----------------------------|----------|----|
| Sta. 10+65 to Sta. 10+72.50 | RT | 4 |
| Undistributed | | 1 |
| TOTALS | | 5 |

642.5001 FIELD OFFICE TYPE B (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8996-00-98 | 1 |

643.0100 TRAFFIC CONTROL (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8996-00-98 | 1 |

CONSTRUCTION STAKING

| CATEGORY | LOCATION | 650.5000 | 650.5500 | 650.9910 | 650.9920 |
|----------|----------------------------|----------|----------------------------------|--------------------------|-----------------|
| | | BASE LF | CURB GUTTER AND CURB & GUTTER LF | SUPPLEMENTARY CONTROL LS | SLOPE STAKES LF |
| 0010 | Sta. 9+30.32 to Sta. 10+75 | 52 | 115 | 1 | 9 |
| 0020 | P-09-0711 | --- | --- | --- | --- |
| TOTALS | | 52 | 115 | 1 | 9 |

690.0150 SAWING ASPHALT (CATEGORY 0010)

| STATION | LOCATION | LF |
|--------------|----------|----|
| Sta. 9+30.32 | Mainline | 52 |
| Sta. 10+75 | Mainline | 25 |
| TOTAL | | 77 |

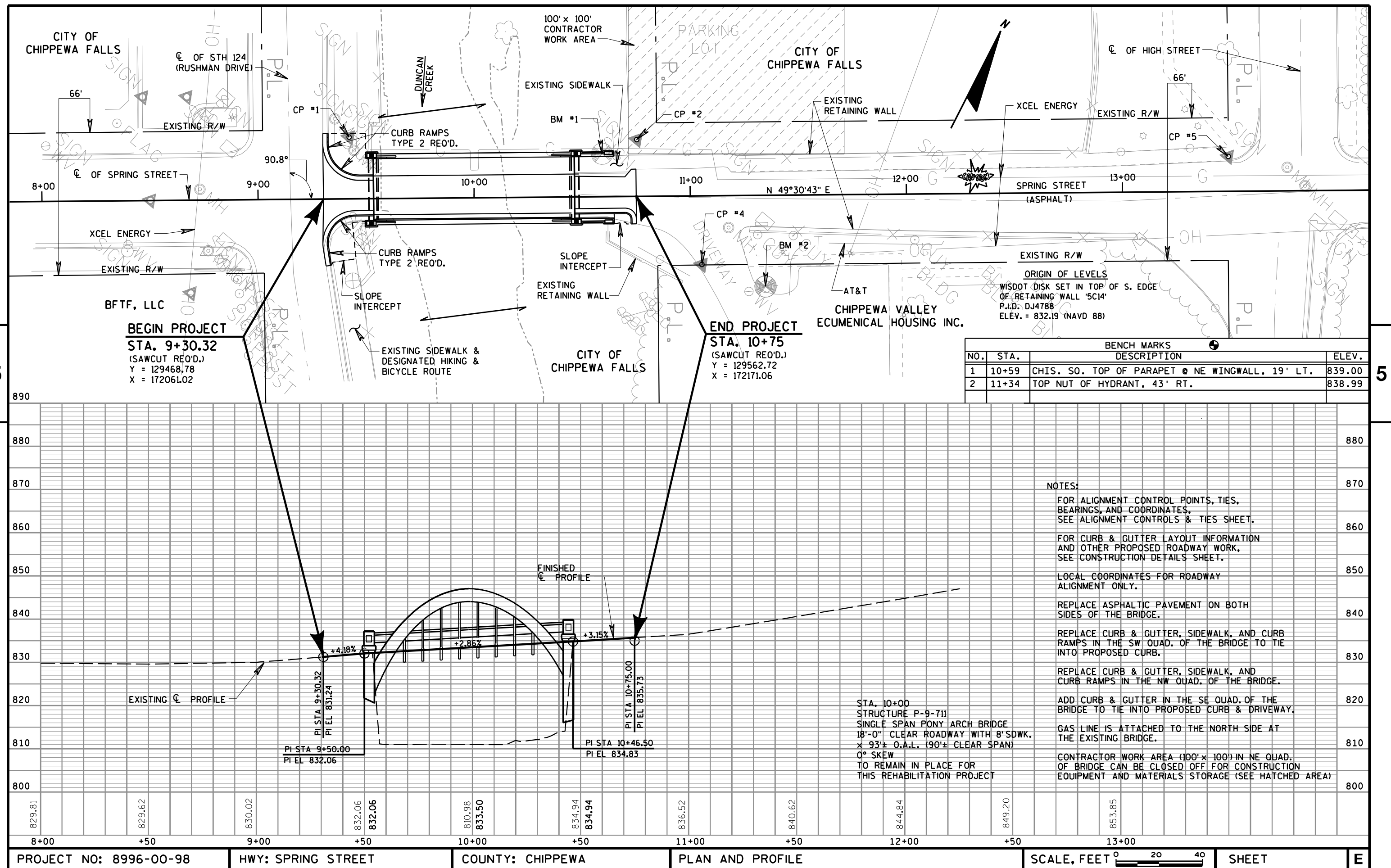
690.0250 SAWING CONCRETE (CATEGORY 0010)

| STATION TO STATION | LOCATION | LF |
|---------------------------|----------|----|
| Sta. 9+30.32 to Sta. 9+45 | RT | 19 |
| Sta. 9+30.32 to Sta. 9+50 | LT | 26 |
| TOTAL | | 45 |

| PAVEMENT MARKING | | | |
|-------------------------|----------|-----------------|--------------|
| | 646.0600 | 647.0566 | 647.0766 |
| | REMOVING | STOP LINE EPOXY | CROSSWALK |
| | PAVEMENT | 18-INCH | EPOXY 6-INCH |
| | MARKINGS | (WHITE) | (WHITE) |
| LOCATION | LF | LF | LF |
| STA. 9+00 TO STA. 14+00 | 247 | 15 | 45 |

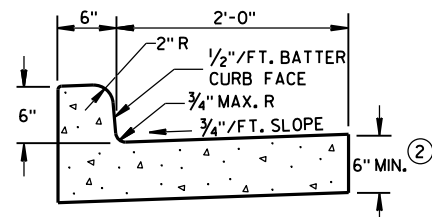
| PERMANENT SIGNING | | | | | | | | | |
|-------------------|------------|------------|-------------|---------------|------------|----------------|----------------|----------|---|
| | | | | 637.2220 | 634.0614 | 634.0812 | 634.0818 | 638.2602 | |
| | | | | SIGNS TYPE II | POSTS WOOD | POSTS TUBULAR | POSTS TUBULAR | REMOVING | |
| | | | | REFLECTIVE SH | 4X6-INCH | STEEL 2X2-INCH | STEEL 2X2-INCH | SIGNS | |
| SIGN NO. | SIGN CODE* | WIDTH (IN) | HEIGHT (IN) | SF | X 14-FT | X 12-FT | X 18-FT | TYPE II | NOTES |
| 1 | R5-1 | 30 | 30 | 6.25 | -- | -- | -- | 2 | MOUNT TO EXISTING SIGN POLE |
| 2 | R6-7 | 24 | 30 | 5.00 | -- | -- | -- | -- | MOUNT TO EXISTING SIGN POLE W/ SIGN NO. 1 |
| 3 | R5-1 | 30 | 30 | 6.25 | 1 | -- | -- | -- | |
| 4 | R6-7 | 24 | 30 | 5.00 | -- | -- | -- | -- | MOUNT TO SIGN STRUCTURE |
| 5 | R3-1 | 24 | 24 | 4.00 | -- | -- | -- | 2 | |
| 6 | R3-2 | 24 | 24 | 4.00 | -- | 1 | -- | -- | |
| 7 | R5-1A | 36 | 24 | 6.00 | -- | -- | 1 | | |
| | W6-3 | 36 | 36 | 9.00 | -- | -- | -- | -- | MOUNT W/ SIGN NO. 7 |
| | W16-9P | 24 | 8 | 1.33 | -- | -- | -- | -- | MOUNT W/ SIGN NO. 7 |
| 8 | R5-1A | 36 | 24 | 6.00 | -- | -- | 1 | -- | |
| | W6-3 | 36 | 36 | 9.00 | -- | -- | -- | -- | MOUNT W/ SIGN NO. 8 |
| | W16-9P | 24 | 8 | 1.33 | -- | -- | -- | -- | MOUNT W/ SIGN NO. 8 |
| 9 | -- | -- | -- | -- | -- | -- | -- | 1 | |
| 10 | R6-6 | 24 | 30 | 5.00 | -- | -- | -- | -- | MOUNT TO WOOD POLE |
| 11 | R6-6 | 24 | 30 | 5.00 | 1 | -- | -- | -- | |
| | | | | 73.17 | 2 | 1 | 2 | 5 | |

*ALL SIGNS ARE SIGN SIZE 2S

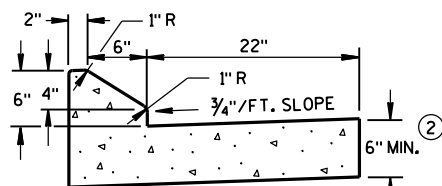


Standard Detail Drawing List

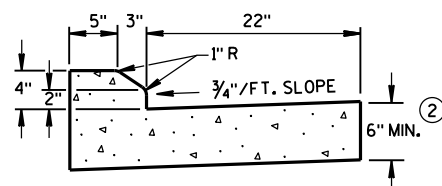
| | |
|-----------|--|
| 08D01-18 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08D05-16A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-16B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-16C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-16D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-16E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08E09-06 | SILT FENCE |
| 15C02-05A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-05B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C33-01 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D12-05A | TRAFFIC CONTROL, LANE CLOSURE |



TYPES A & D ①

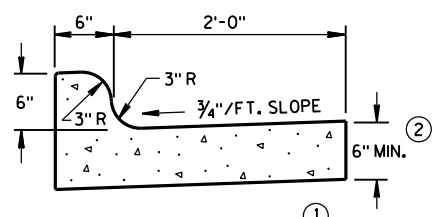


6" SLOPED CURB TYPES G & J ①



4" SLOPED CURB TYPES G & J ①

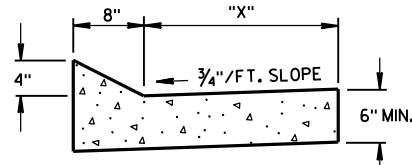
CONCRETE CURB & GUTTER 30"



TYPES K & L ①

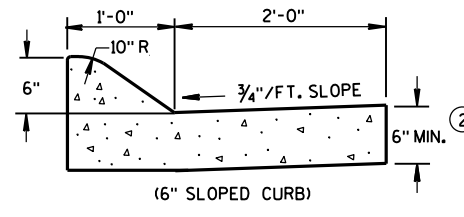
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

CONCRETE CURB & GUTTER 30"

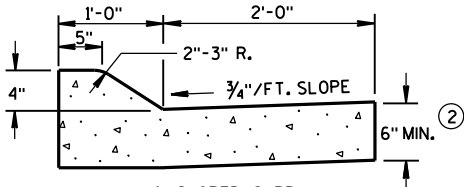


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

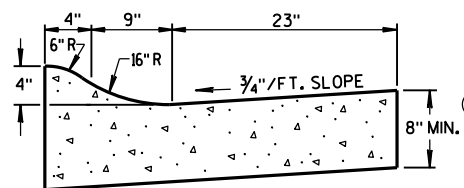
| TBT & TBT | "X" |
|-----------|-----|
| 30" | 22" |
| 36" | 28" |



(6" SLOPED CURB)

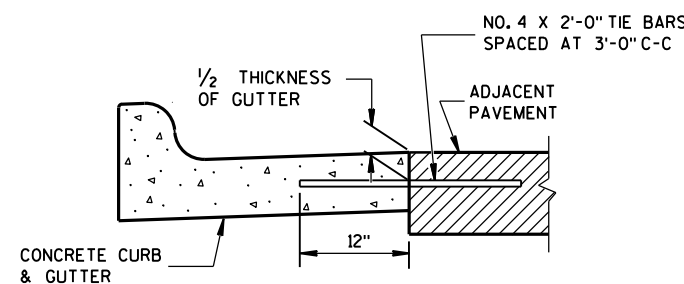


TYPES A & D ①

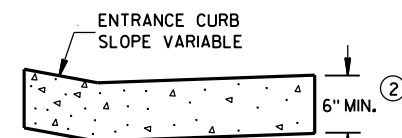


4" SLOPED CURB TYPES R & T ① ④

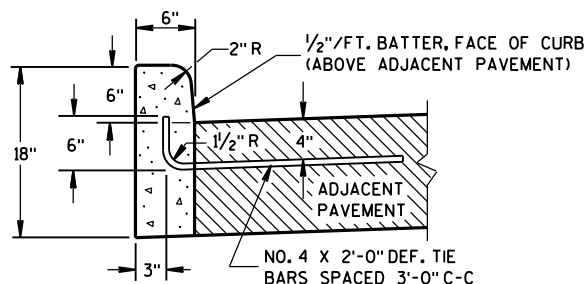
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

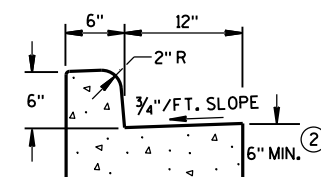


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

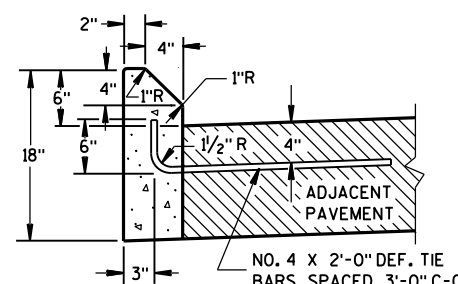


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

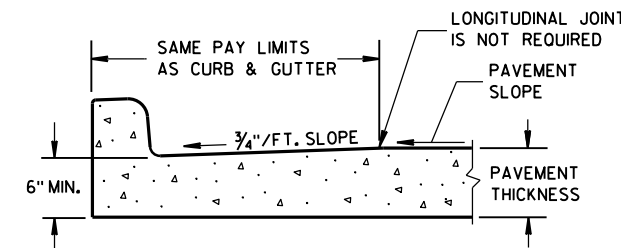
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

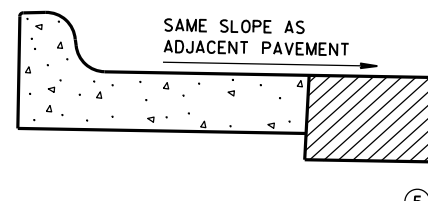
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

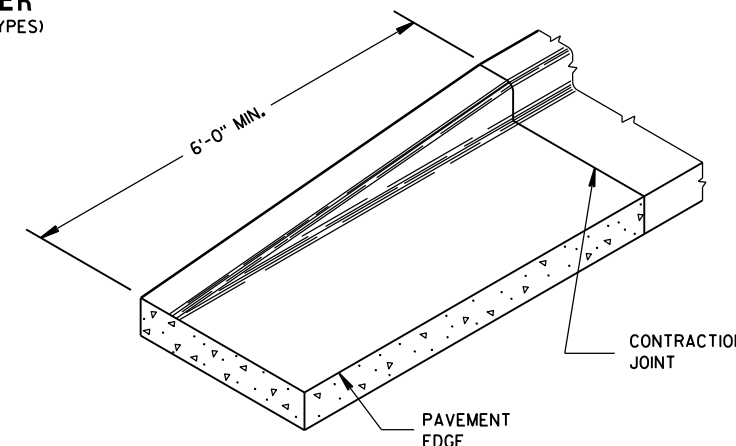
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



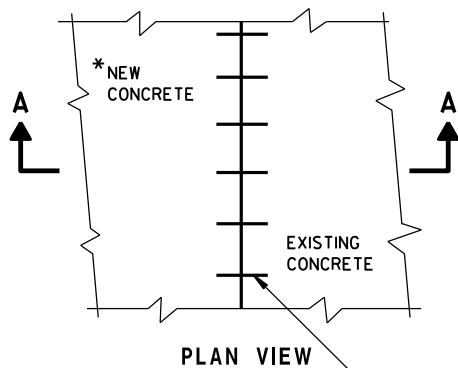
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



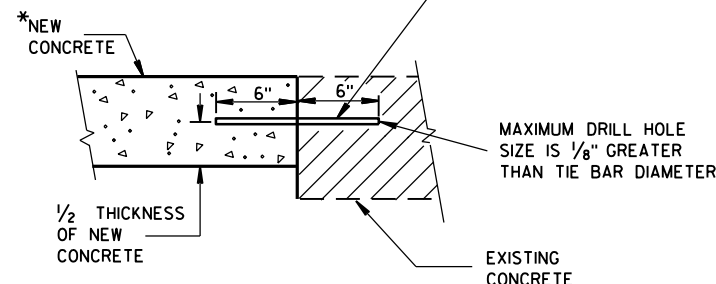
END SECTION CURB & GUTTER



PLAN VIEW

*NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

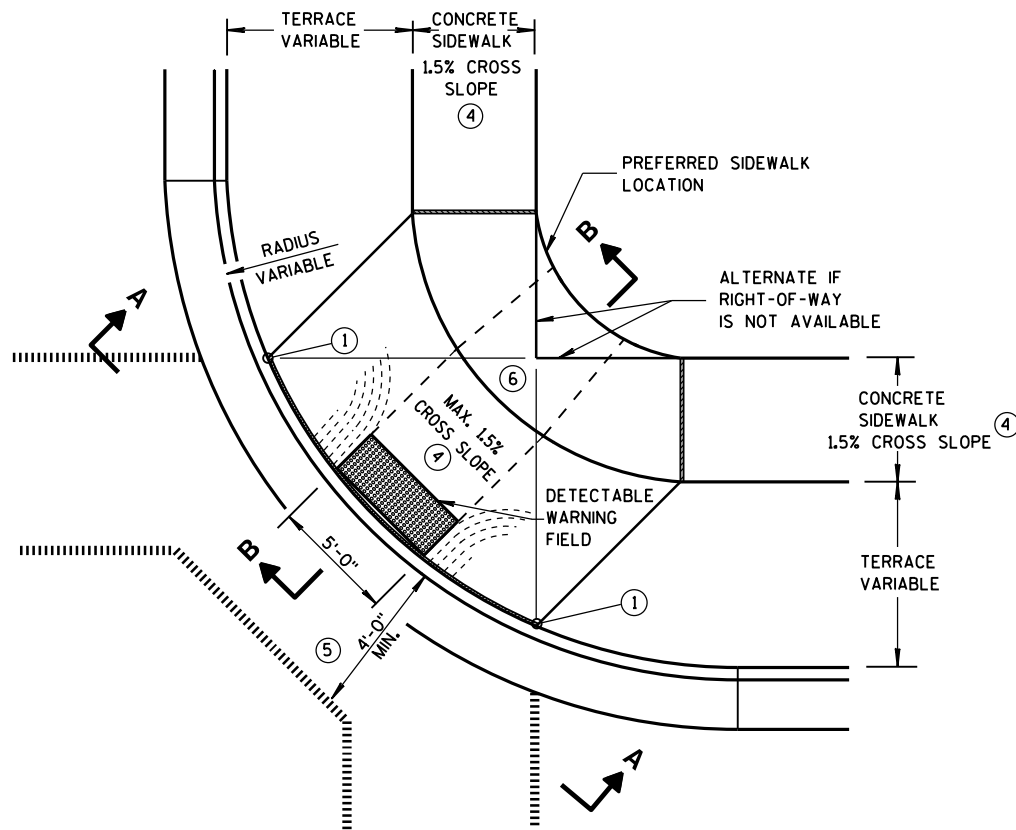


SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

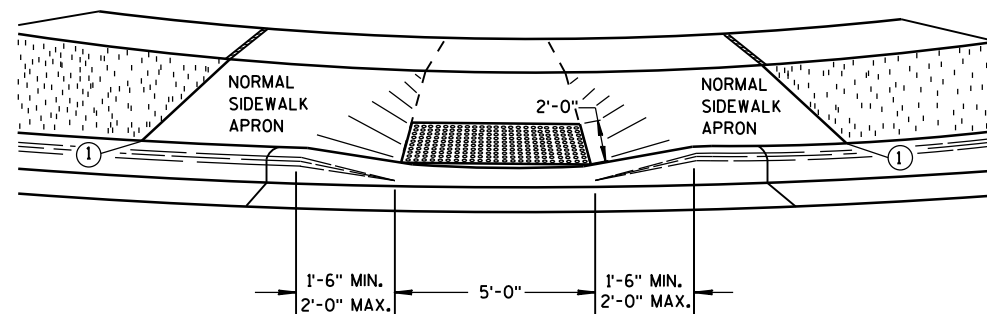
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

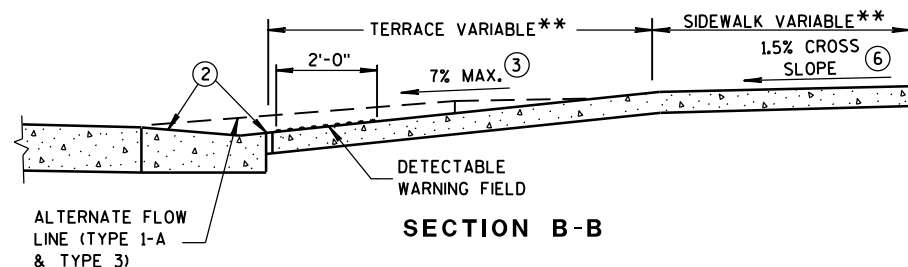


**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)

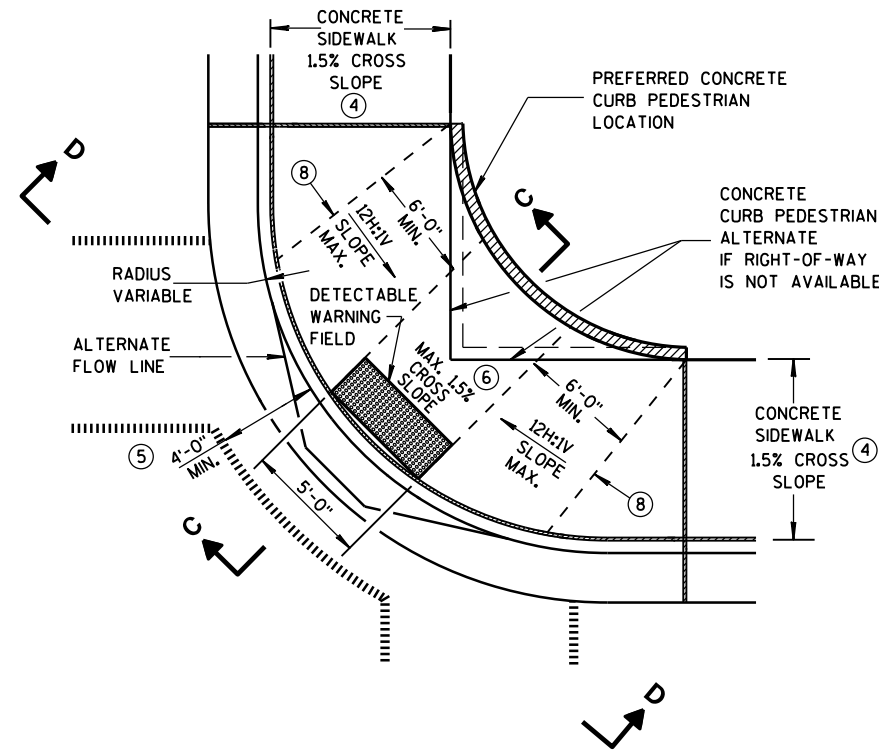


VIEW A-A

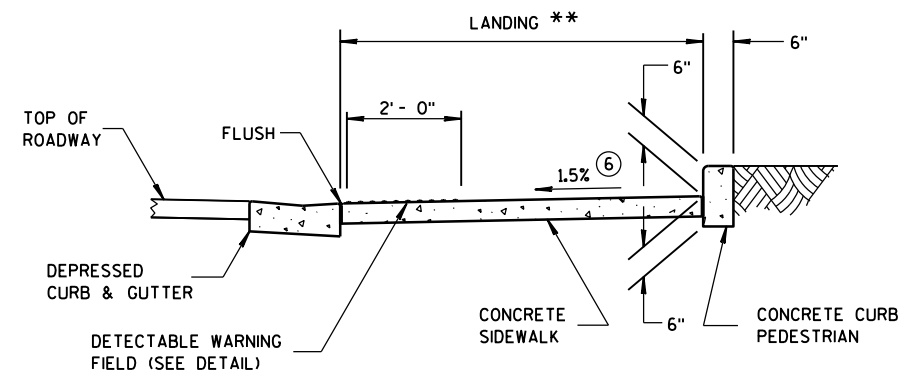
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



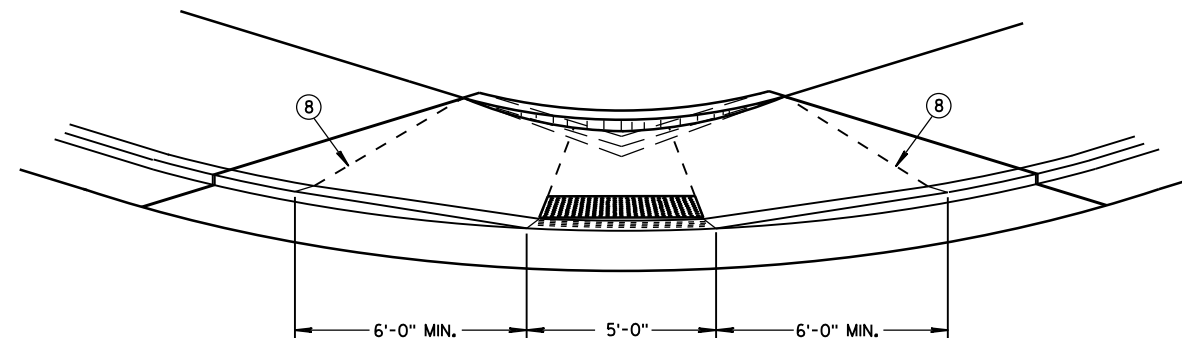
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

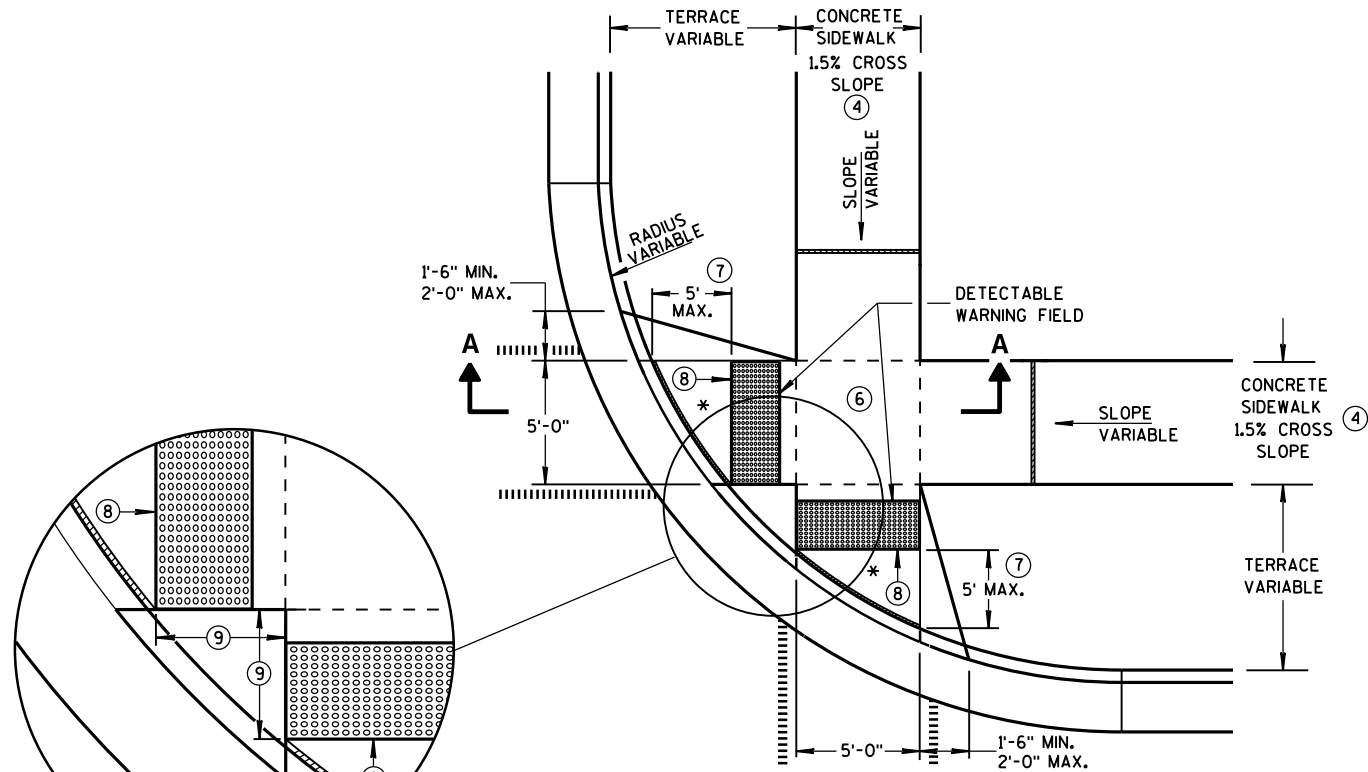
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

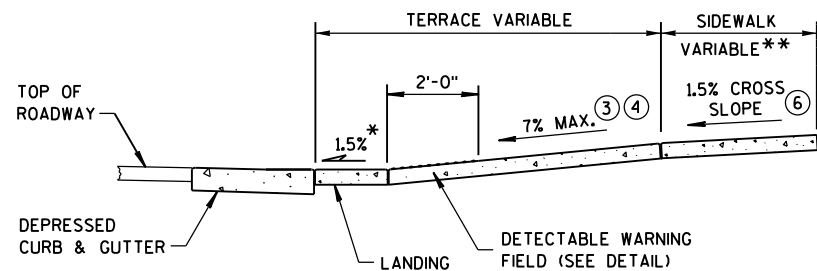
**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



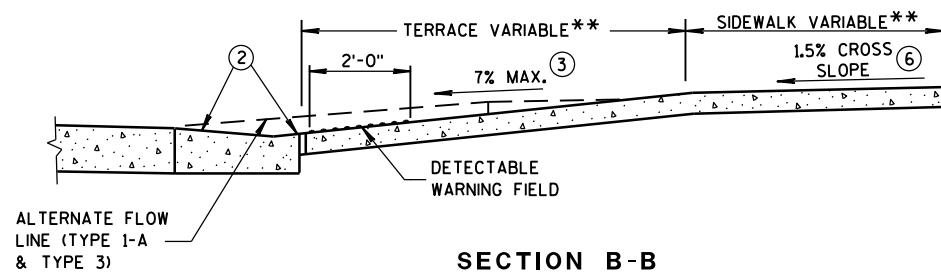
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B

GENERAL NOTES

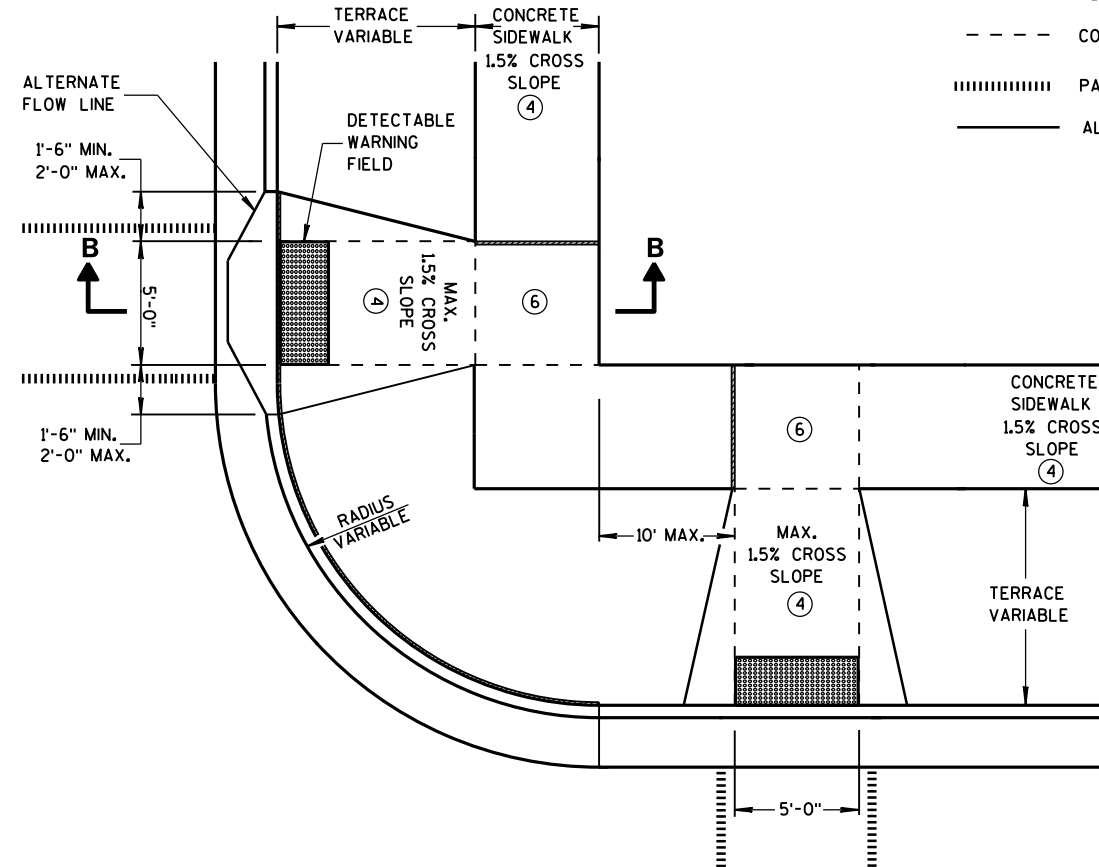
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

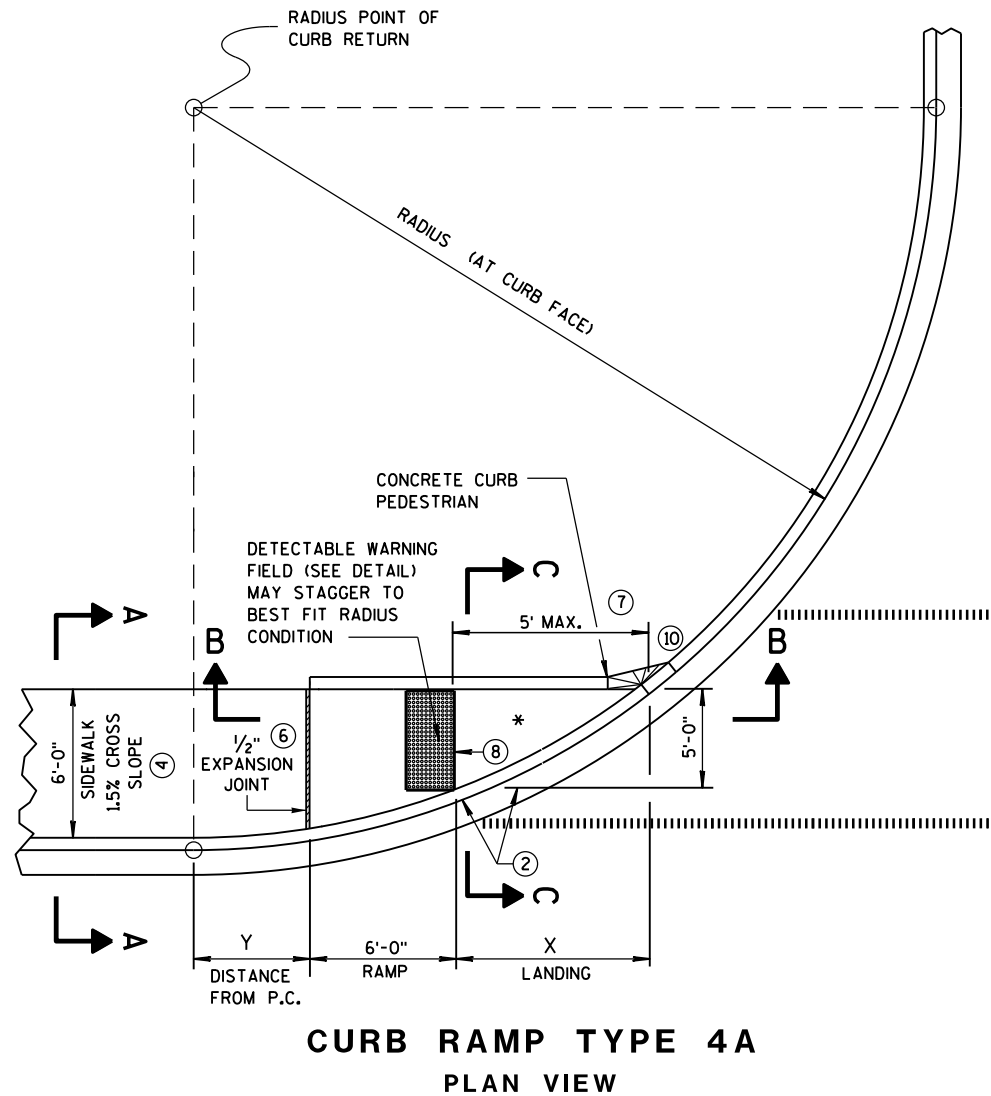
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



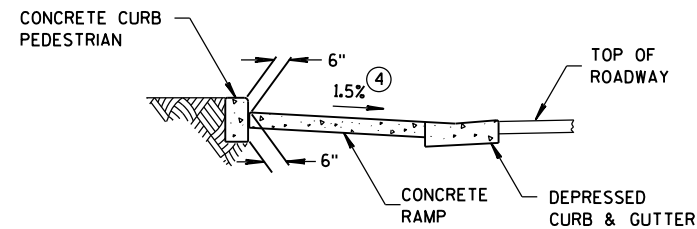
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

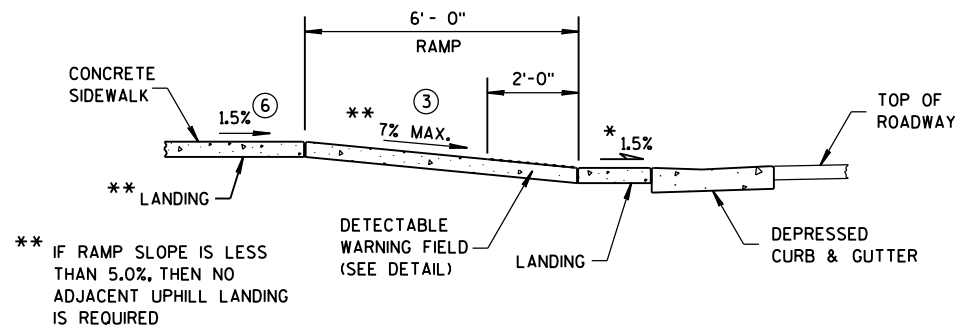
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A



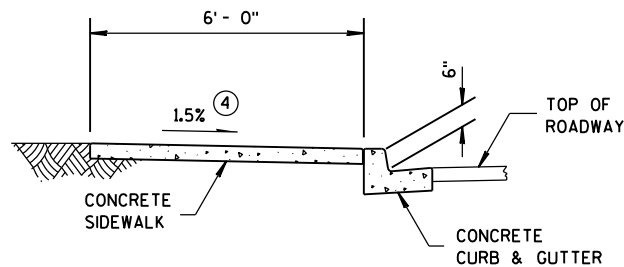
SECTION B-B FOR TYPE 4A

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

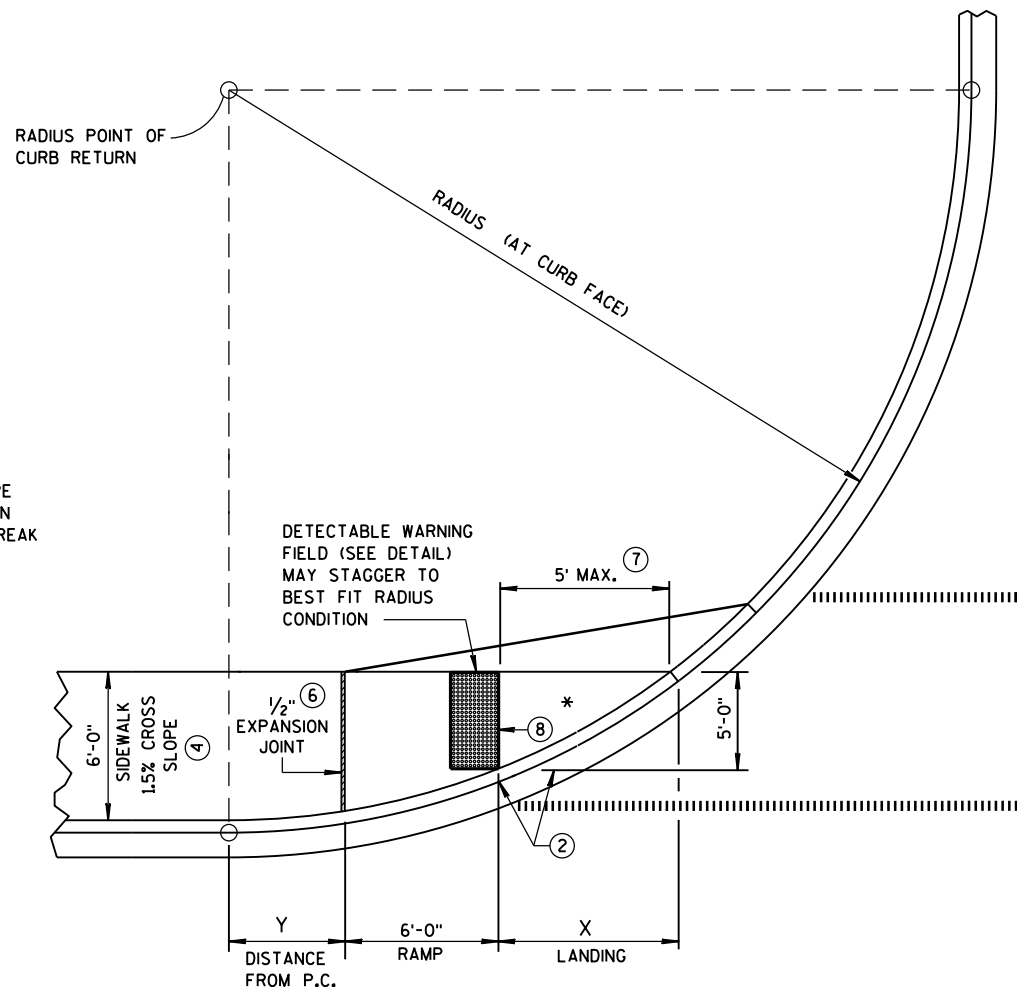
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

| RADIUS (AT CURB FACE) | X | Y |
|-----------------------|------------------------|-----------------------|
| 20 FEET | 6'-1 $\frac{3}{4}$ " | 2'-7 $\frac{1}{4}$ " |
| 30 FEET | 7'-11 $\frac{3}{4}$ " | 4'-8 $\frac{1}{4}$ " |
| 40 FEET | 9'-5 $\frac{1}{4}$ " | 6'-5" |
| 50 FEET | 10'-8 $\frac{3}{4}$ " | 7'-11 $\frac{1}{4}$ " |
| 60 FEET | 11'-10 $\frac{1}{4}$ " | 9'-3 $\frac{1}{2}$ " |

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



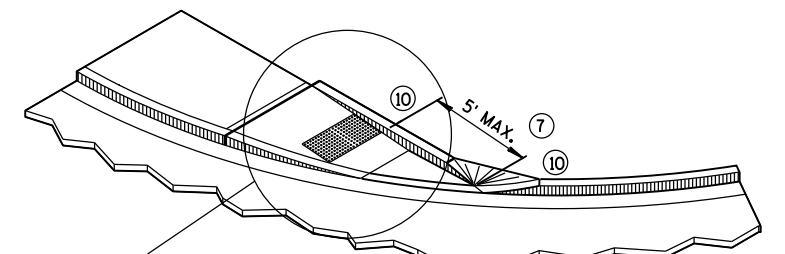
CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

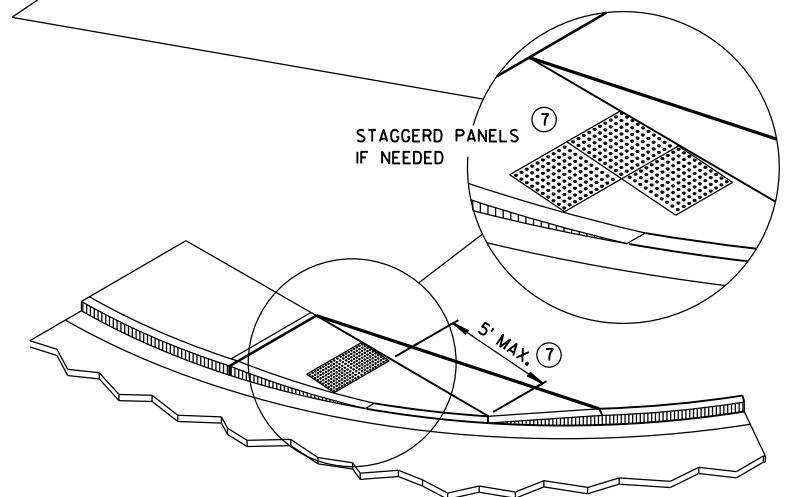
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



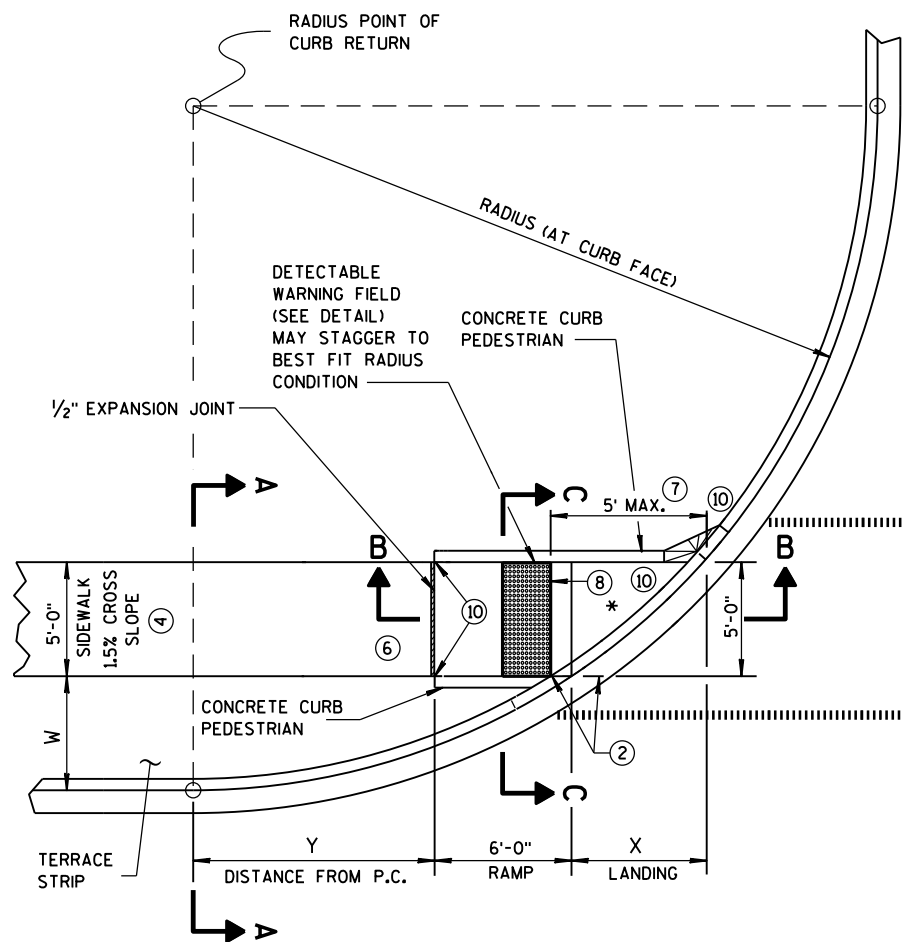
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

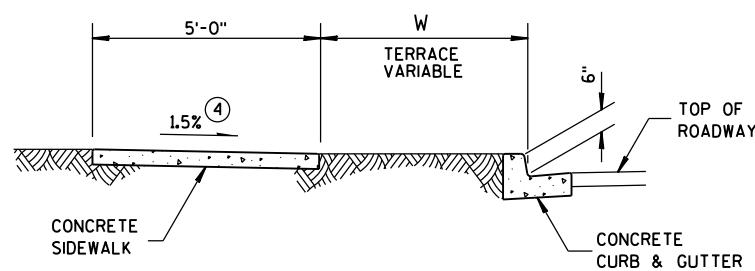
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

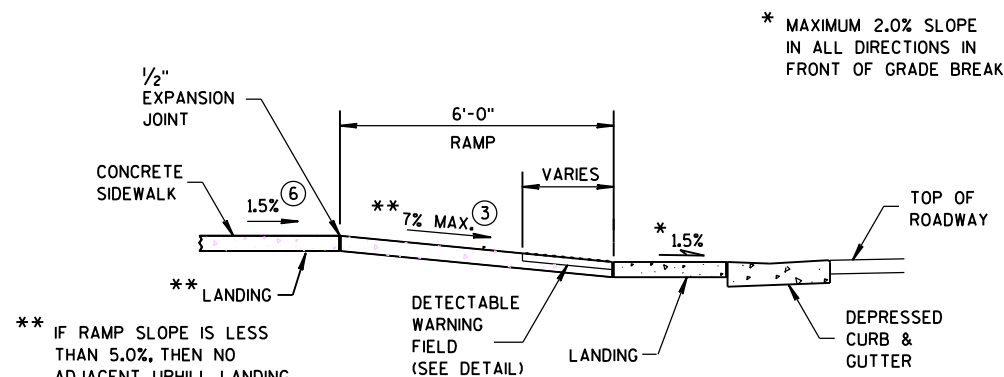
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4B
PLAN VIEW

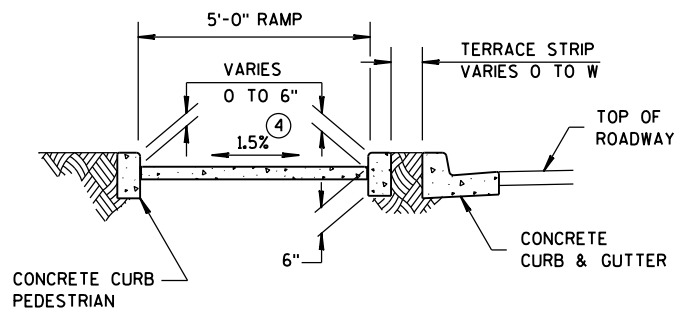


SECTION A-A FOR TYPE 4B

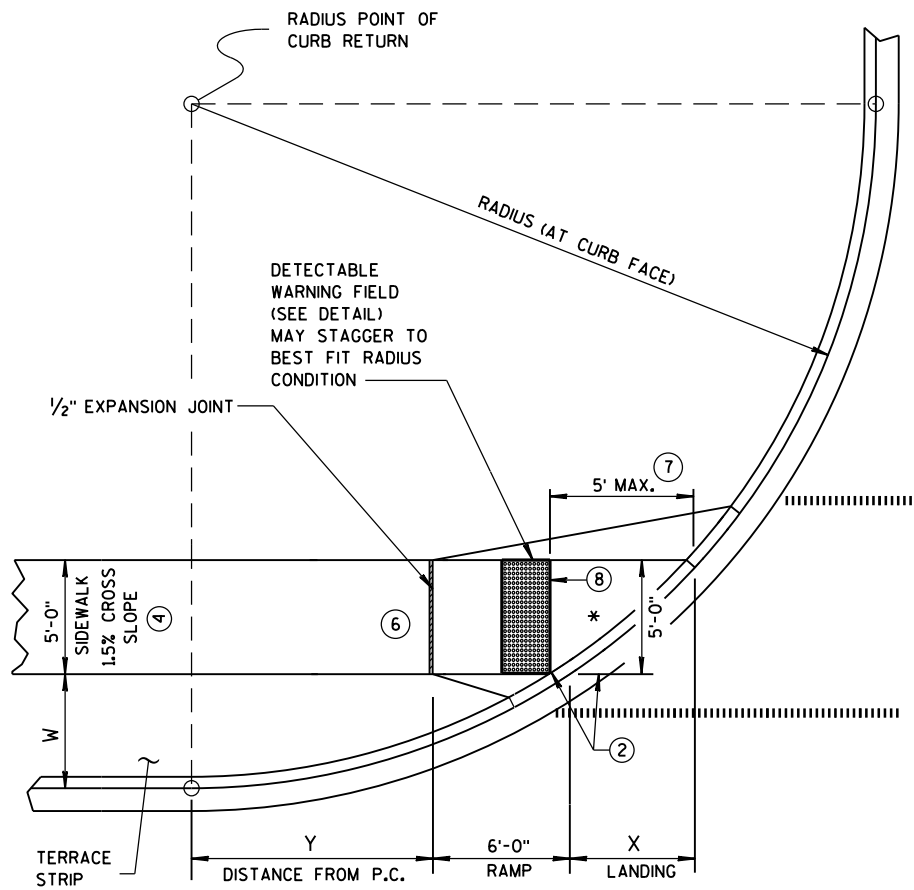


SECTION B-B FOR TYPE 4B

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

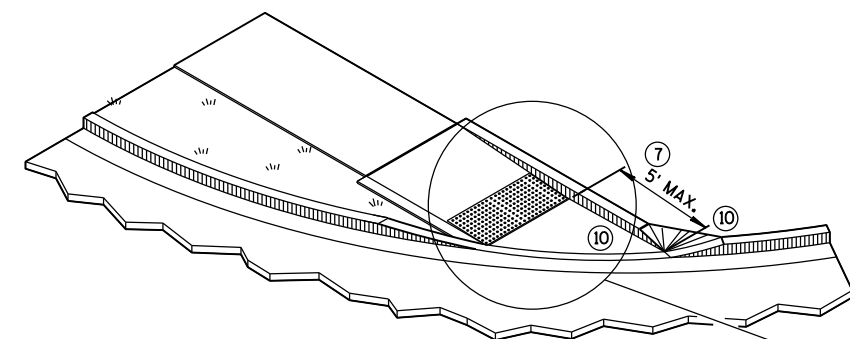


CURB RAMP TYPE 4B1
PLAN VIEW

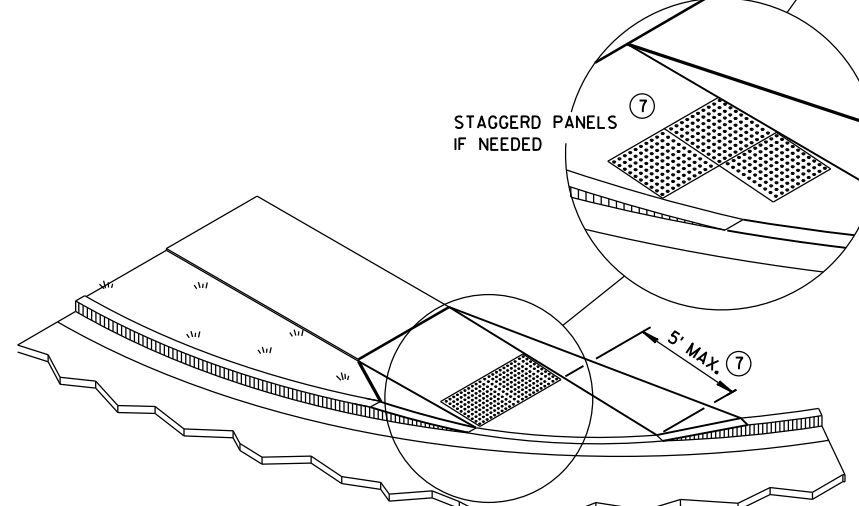
| RADIUS (AT CURB FACE) | W = 3' - 0" | | W = 4' - 0" | | W = 5' - 0" | | W = 6' - 0" | | W = 7' - 0" | |
|--------------------------|-------------|------------|-------------|------------|-------------|-------------|-------------|------------|-------------|------------|
| | X | Y | X | Y | X | Y | X | Y | X | Y |
| 20 FEET | 5'-5 1/2" | 4'-6 1/2" | 4'-8 1/2" | 6'-0" | 4'-1" | 7'-2 3/4" | 3'-7" | 8'-3 1/2" | 3'-1 1/2" | 9'-2 1/2" |
| 30 FEET | 7'-3 3/4" | 7'-1" | 6'-5 1/2" | 8'-11 1/2" | 5'-9 1/4" | 10'-7" | 5'-2 1/2" | 12'-0" | 4'-8 3/4" | 13'-3 1/4" |
| 40 FEET | 8'-9 1/2" | 9'-2 1/2" | 7'-10" | 11'-5 1/4" | 7'-1" | 13'-4 1/2" | 6'-5 3/4" | 15'-3/4" | 5'-11 1/2" | 16'-7 1/4" |
| 50 FEET | 10'-3/4" | 11'-3/4" | 9'-1/4" | 13'-7 1/4" | 8'-2 1/2" | 15'-9 1/2" | 7'-6 1/2" | 17'-9" | 6'-11 3/4" | 19'-6 1/4" |
| 60 FEET | 11'-2 1/2" | 12'-8 3/4" | 10'-3/4" | 15'-6 1/2" | 9'-2 1/4" | 17'-11 3/4" | 8'-5 3/4" | 20'-1 3/4" | 7'-10 1/2" | 22'-1 1/2" |

GENERAL NOTES

- INTERMEDIATE RADII CAN BE INTERPOLATED
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
 - 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
 - 7 WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
 - 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - 10 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B

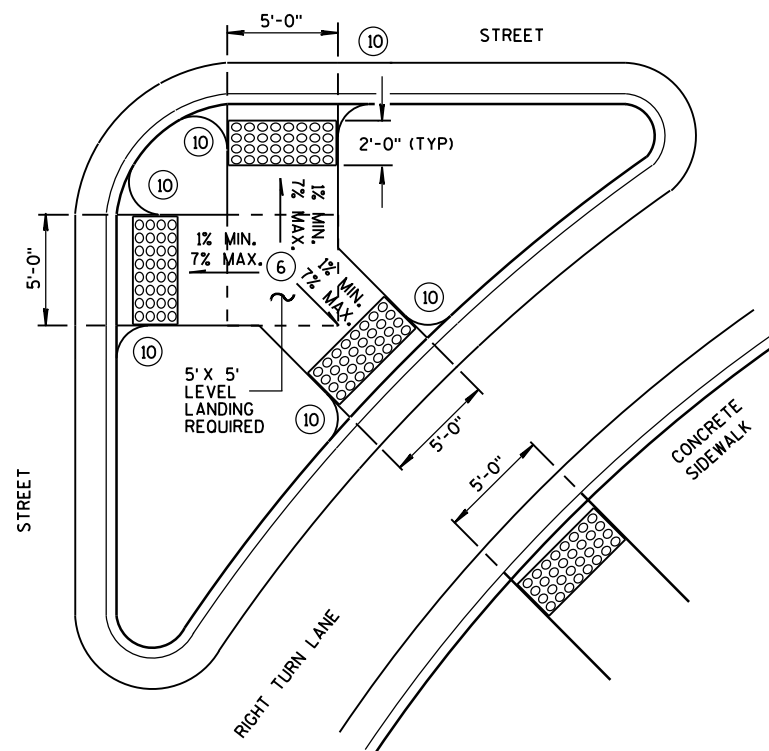


ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

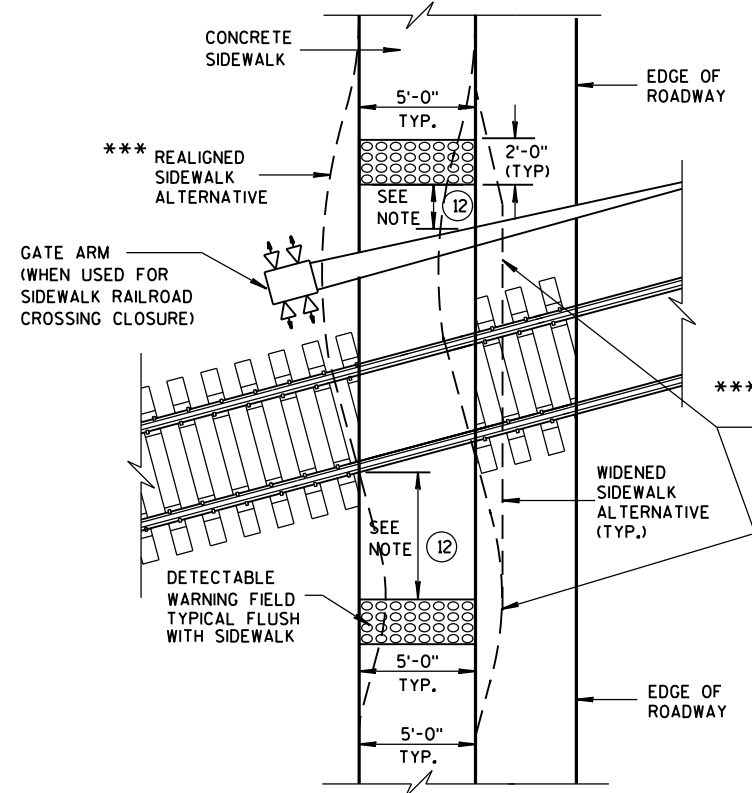
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS

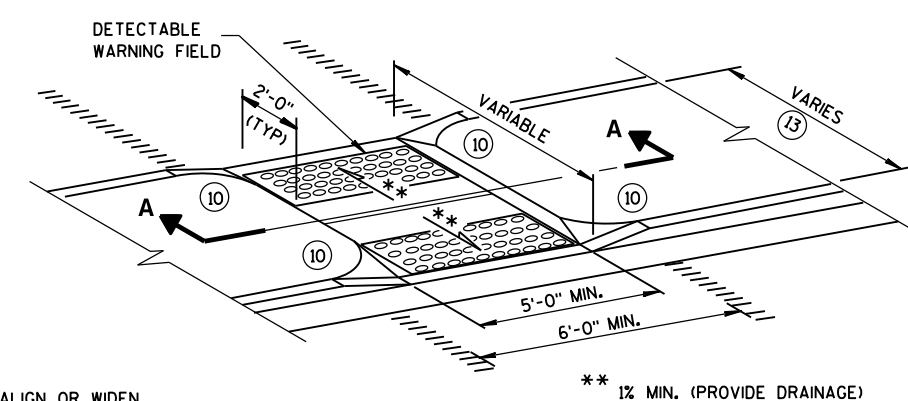


TYPE 6

DETECTABLE WARNING AT ISLANDS

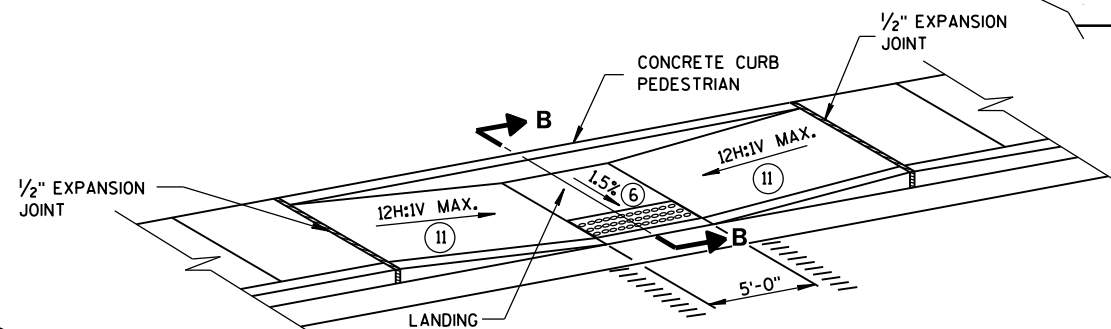


TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING

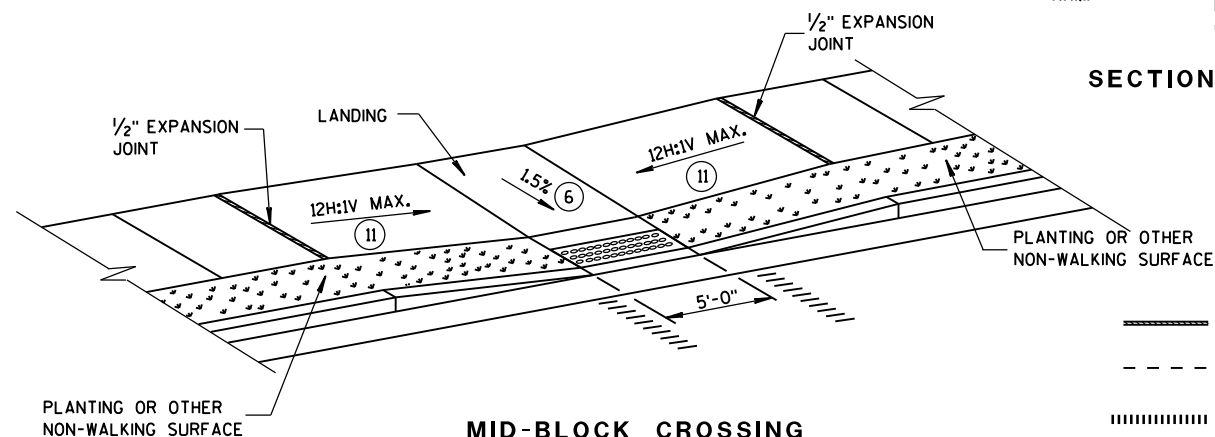


MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED
BY DESIGNER



MID-BLOCK CROSSING
TYPE 7A



MID-BLOCK CROSSING
TYPE 7B

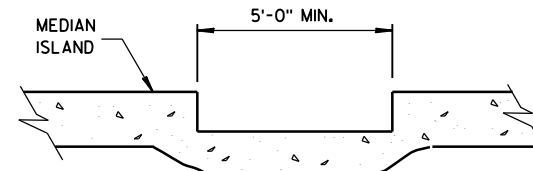
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

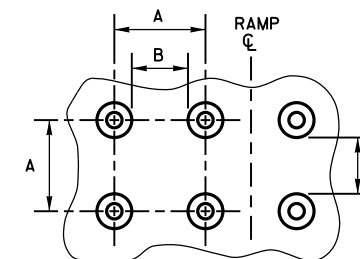
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 15 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



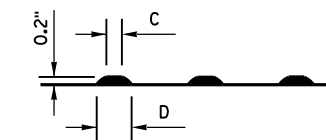
SECTION A-A



PLAN VIEW

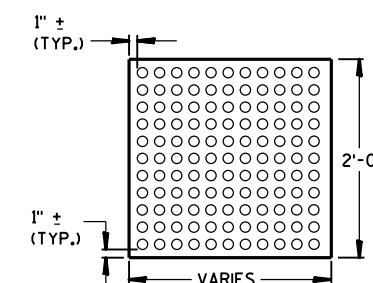
| | MIN. | MAX. |
|---|-------|------|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

* THE C DIMENSION IS 50% TO
65% OF THE D DIMENSION.



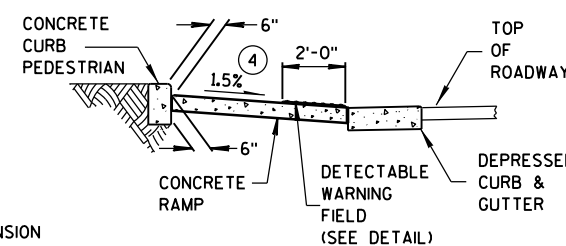
ELEVATION VIEW

TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

SECTION B-B



LEGEND

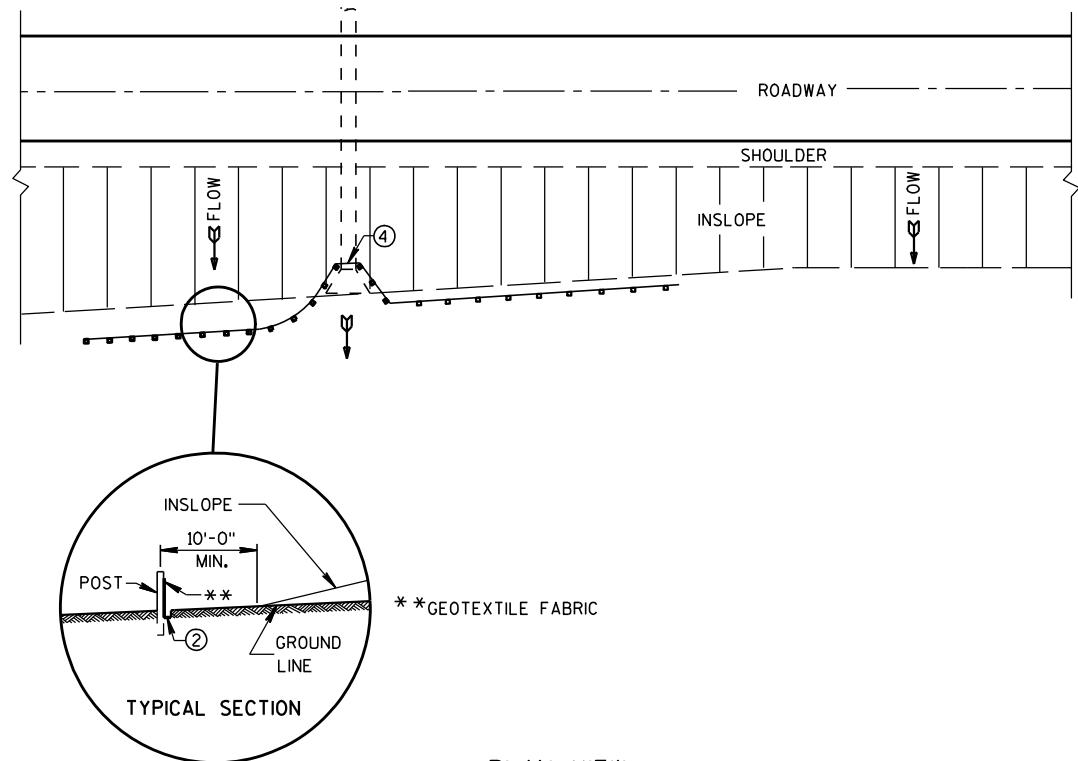
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

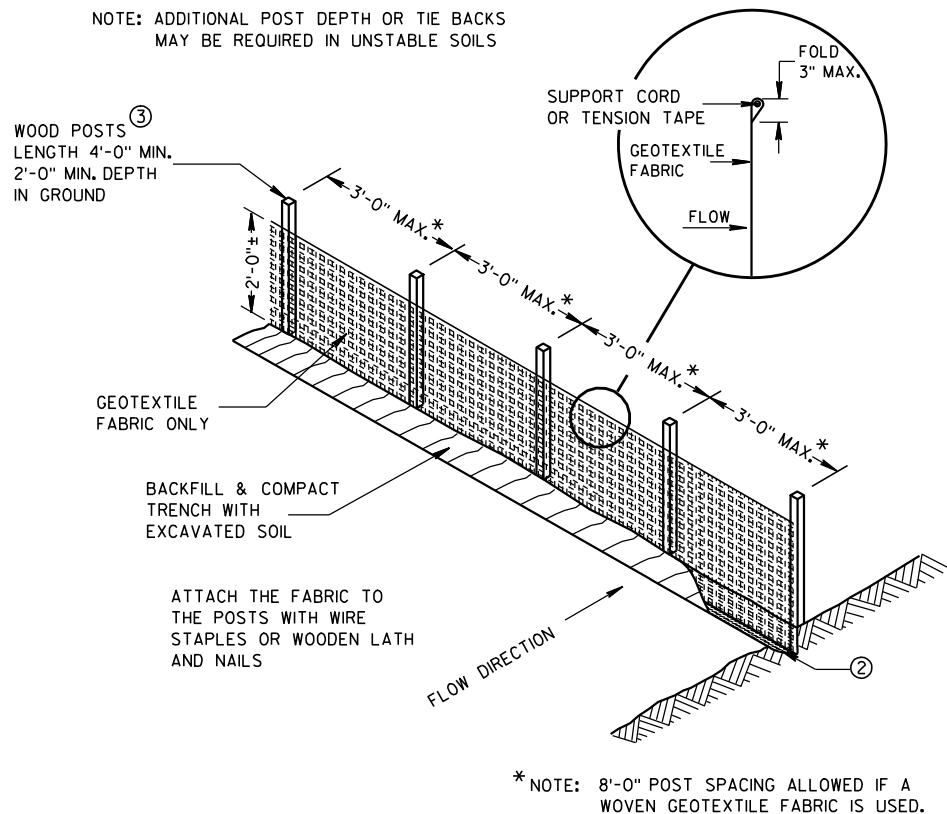
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
FHWA

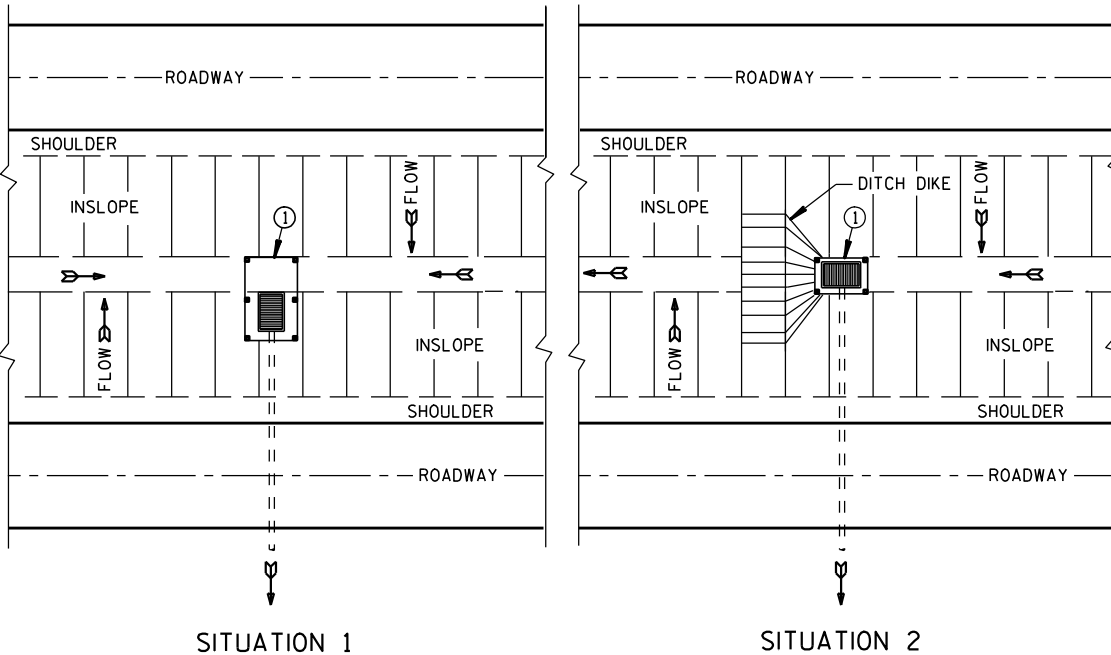
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



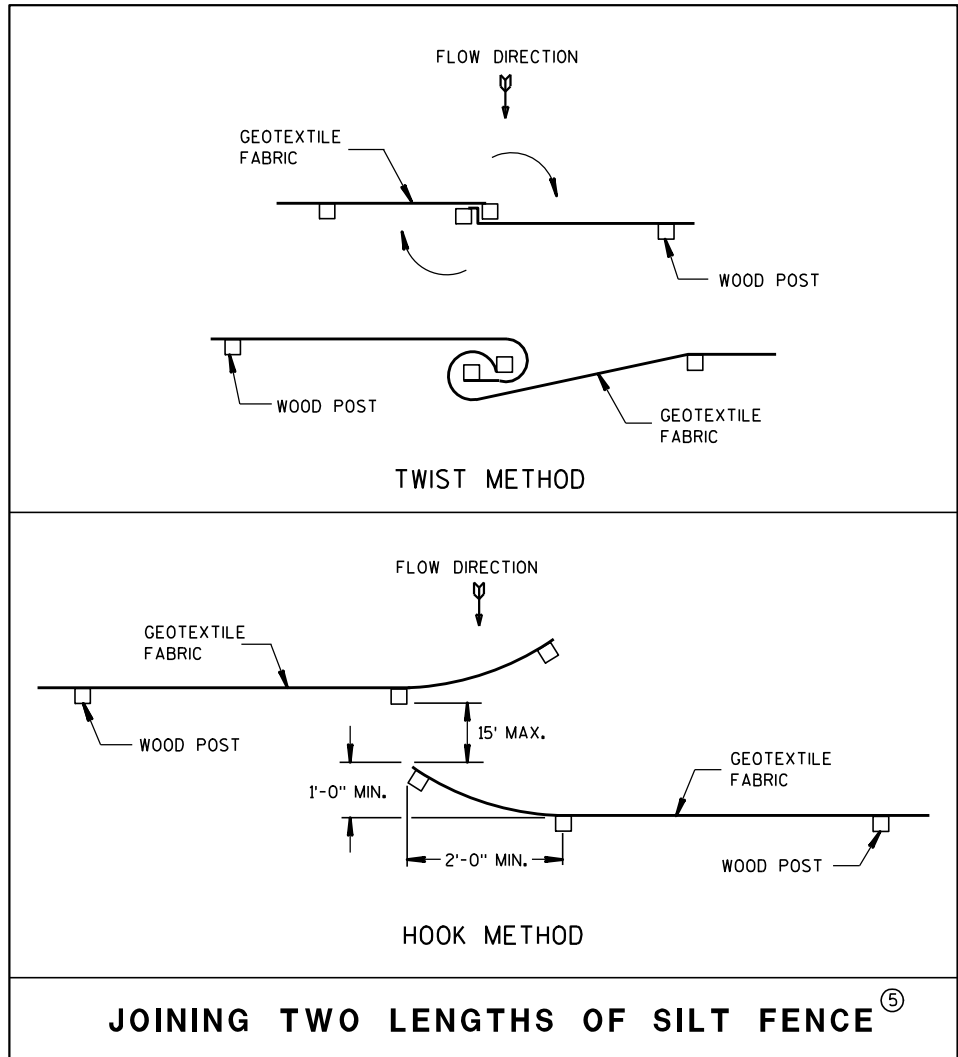
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

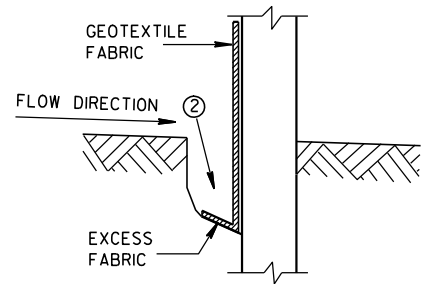


JOINING TWO LENGTHS OF SILT FENCE

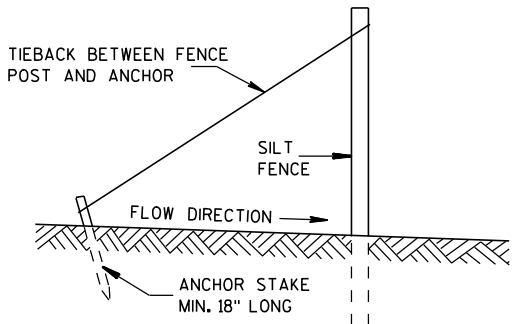
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

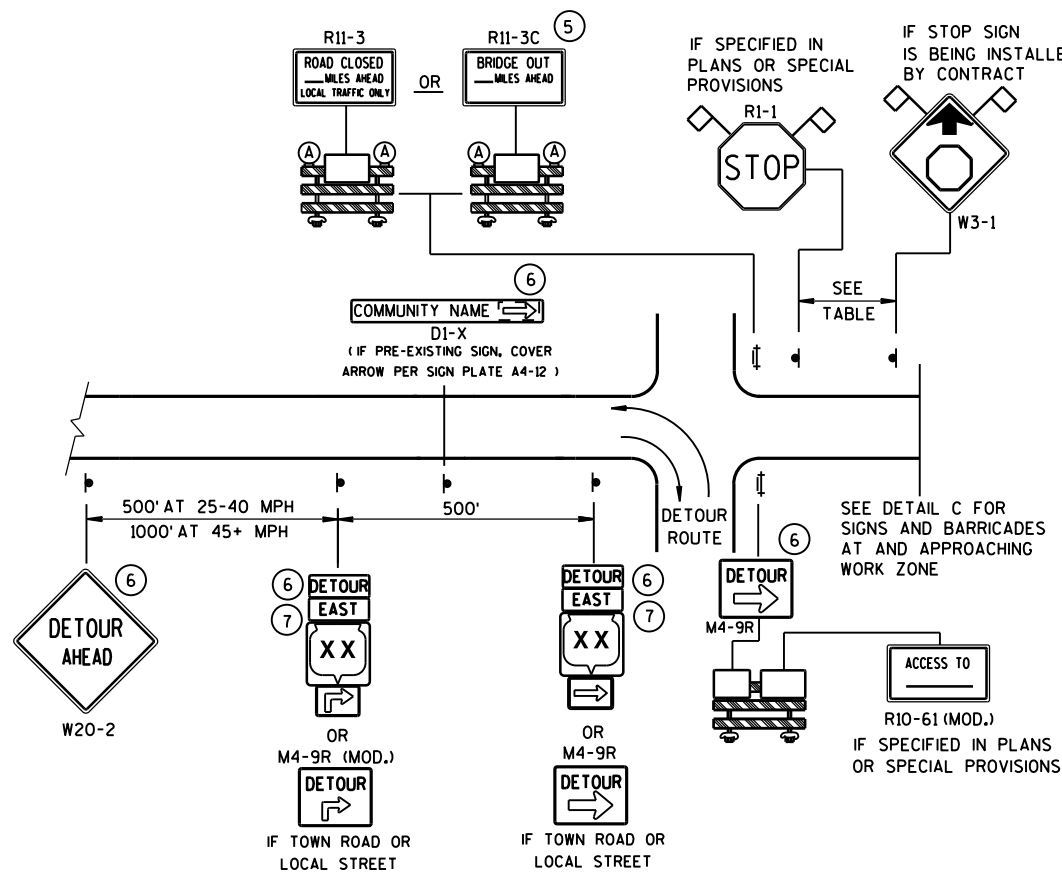


TRENCH DETAIL

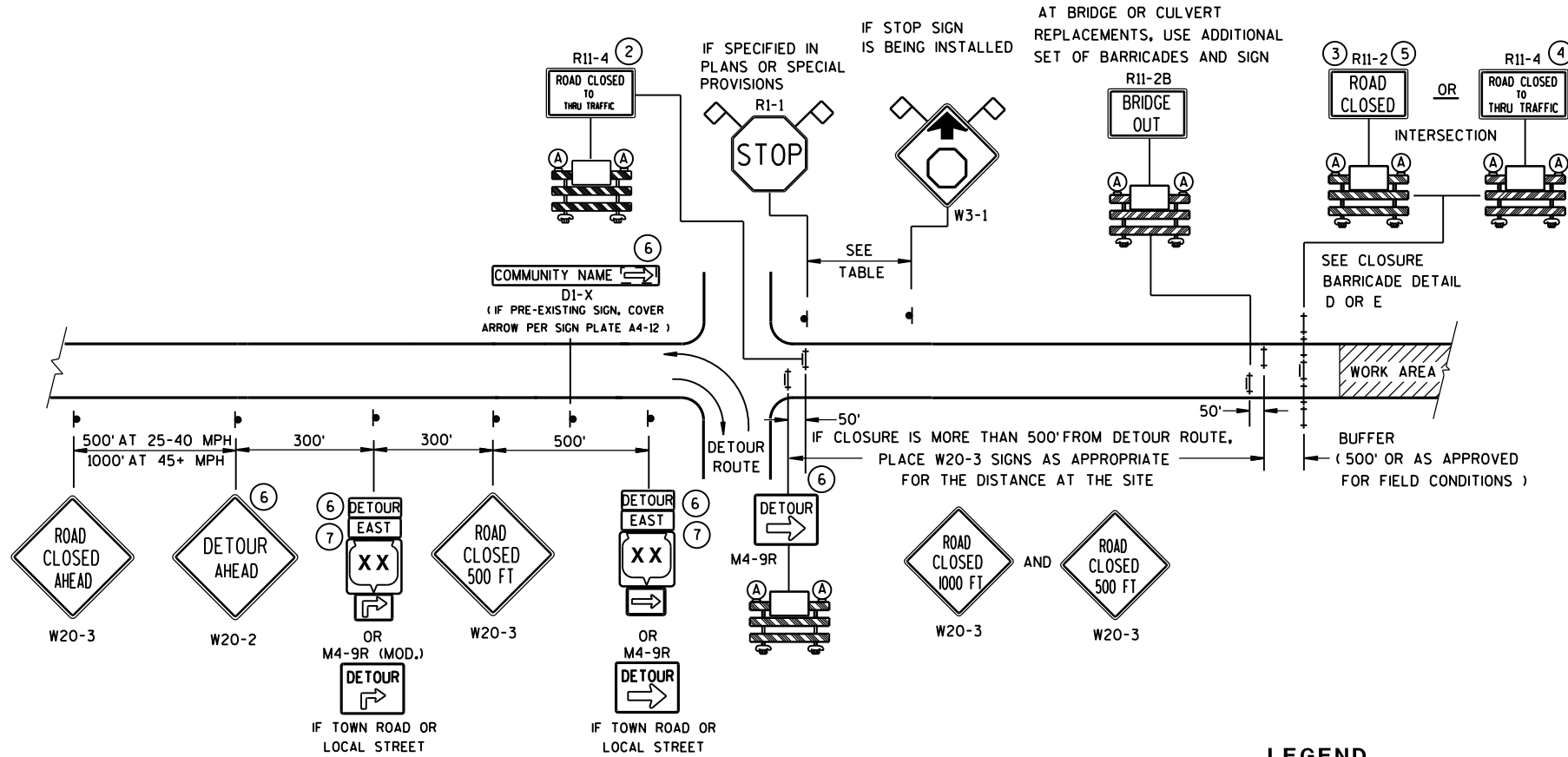


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

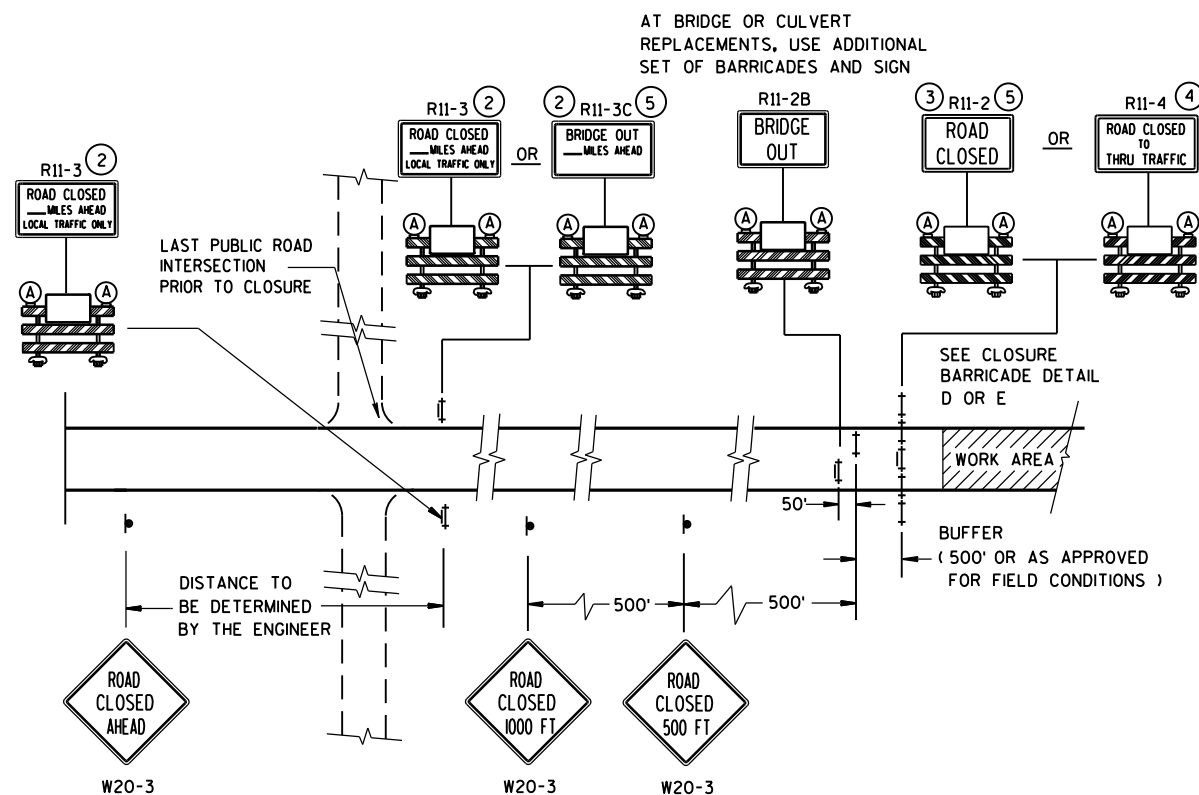
| SILT FENCE | |
|--|--|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 4-29-05 DATE | /S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER |
| FHWA | |



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

- SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

DETOUR EAST
M4-8
M3-X
XX OR XX OR XX
M1-4 M1-5A M1-6

OR
M05-1 M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

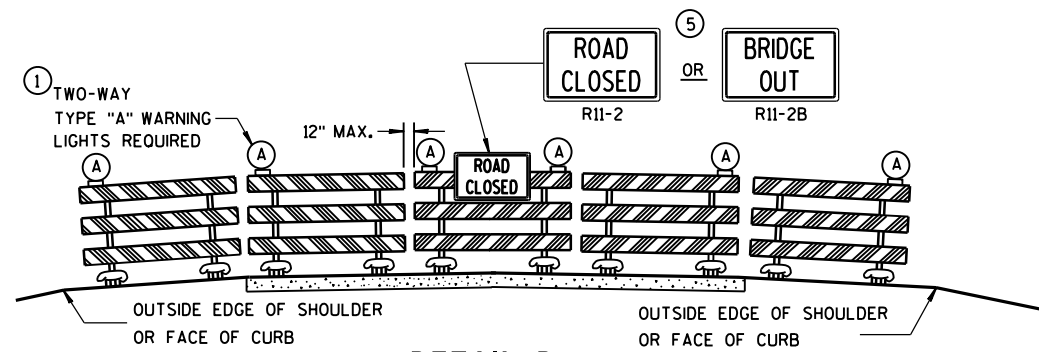
| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (FT) |
|-------------------|--|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

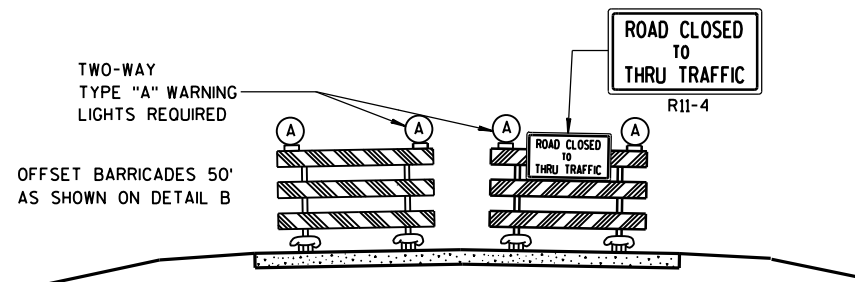
BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

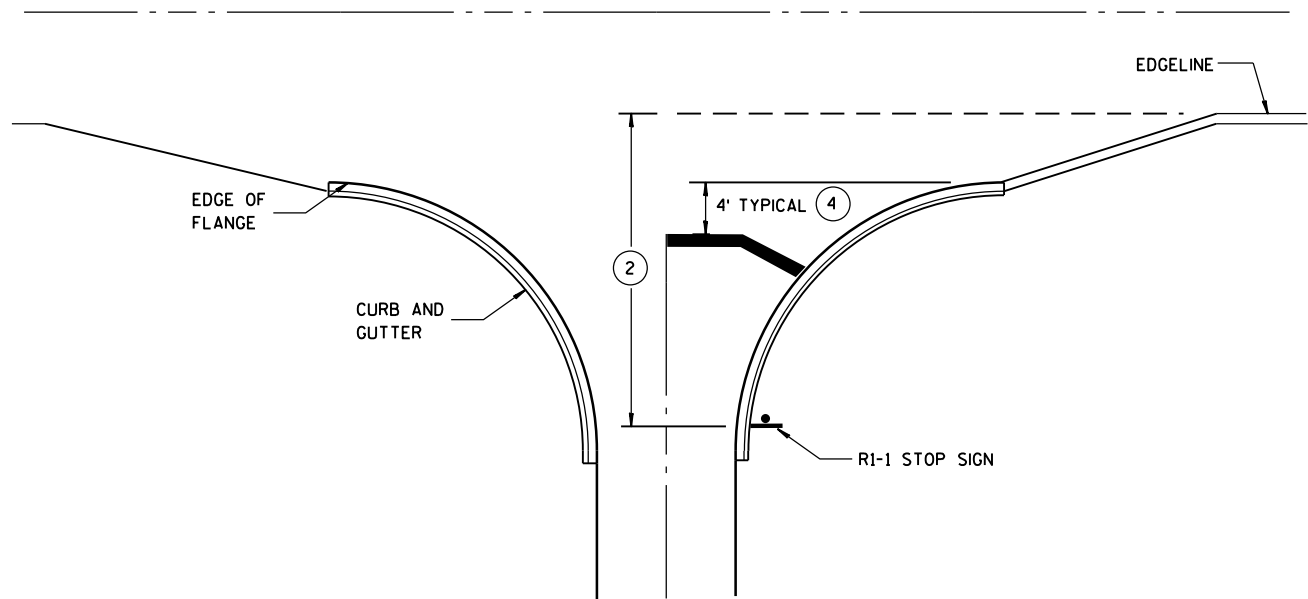
R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

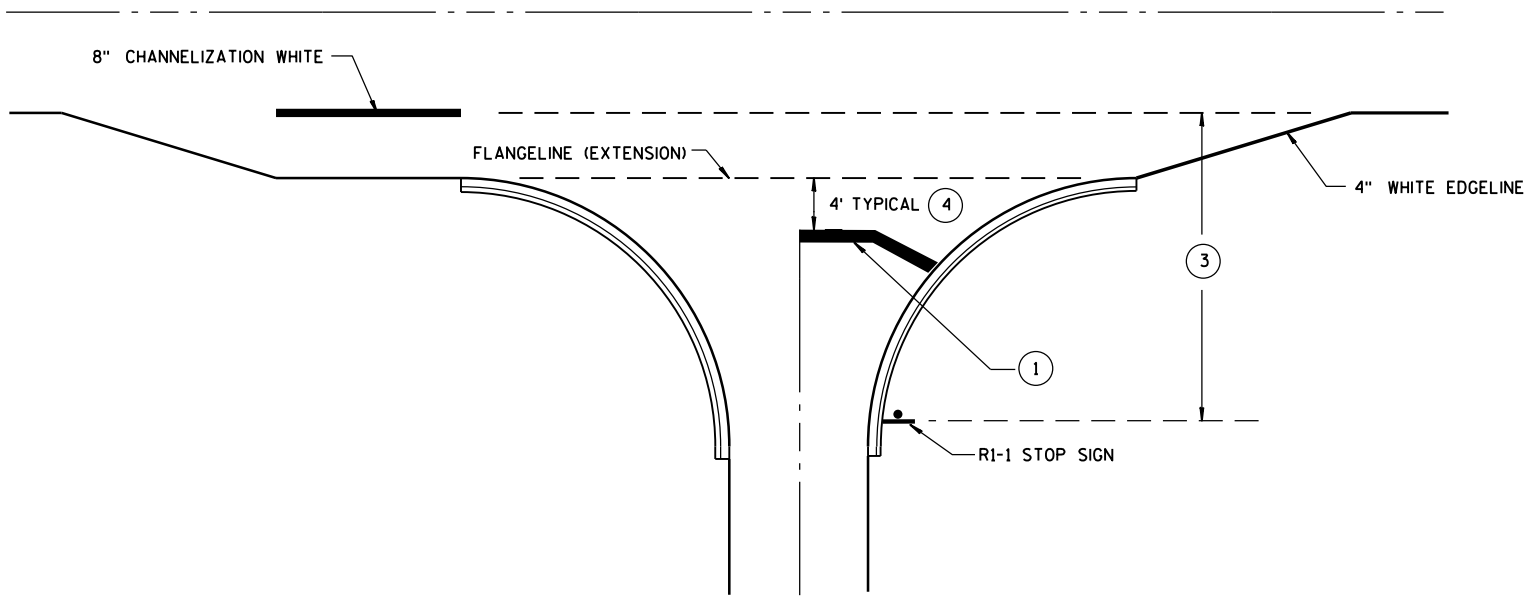
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

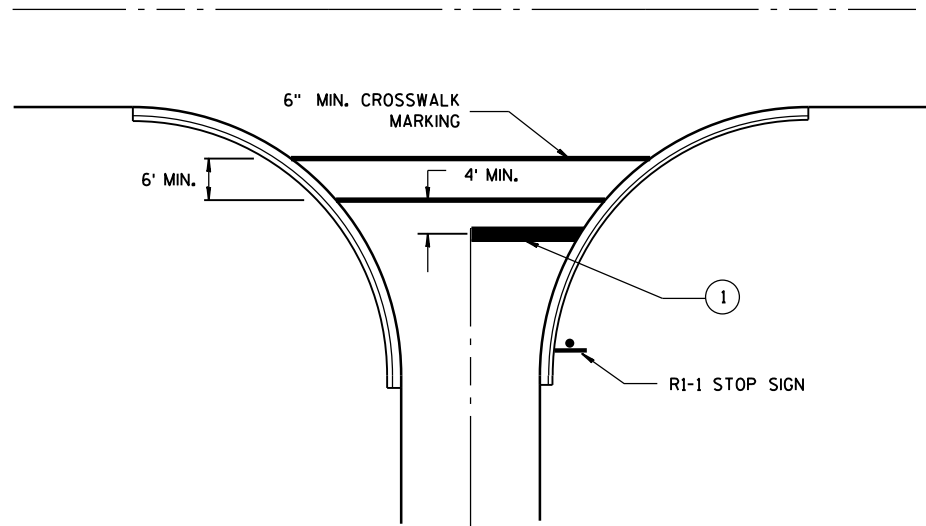
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



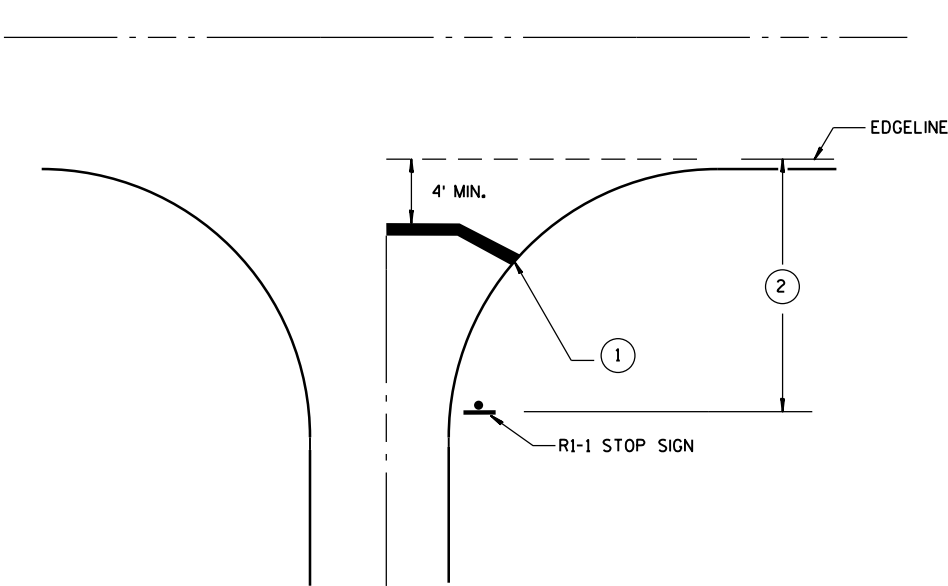
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE /S/ Travis Feltz
STATE TRAFFIC ENGINEER
FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

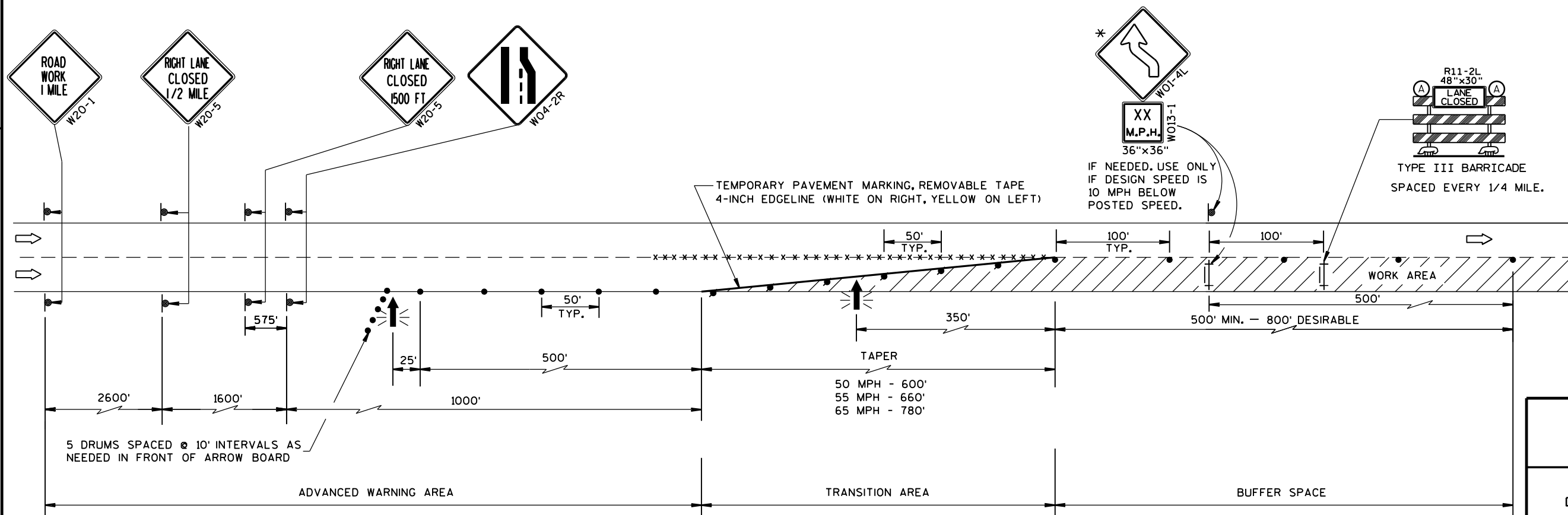
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

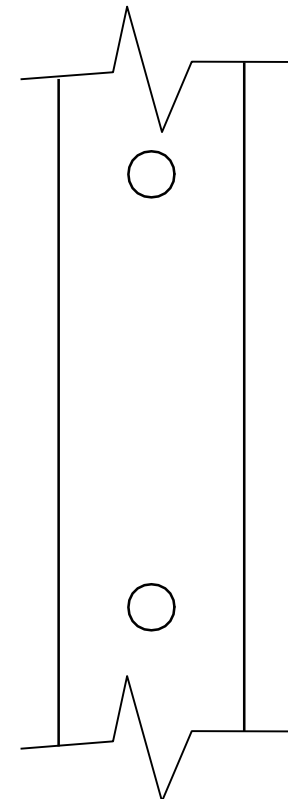
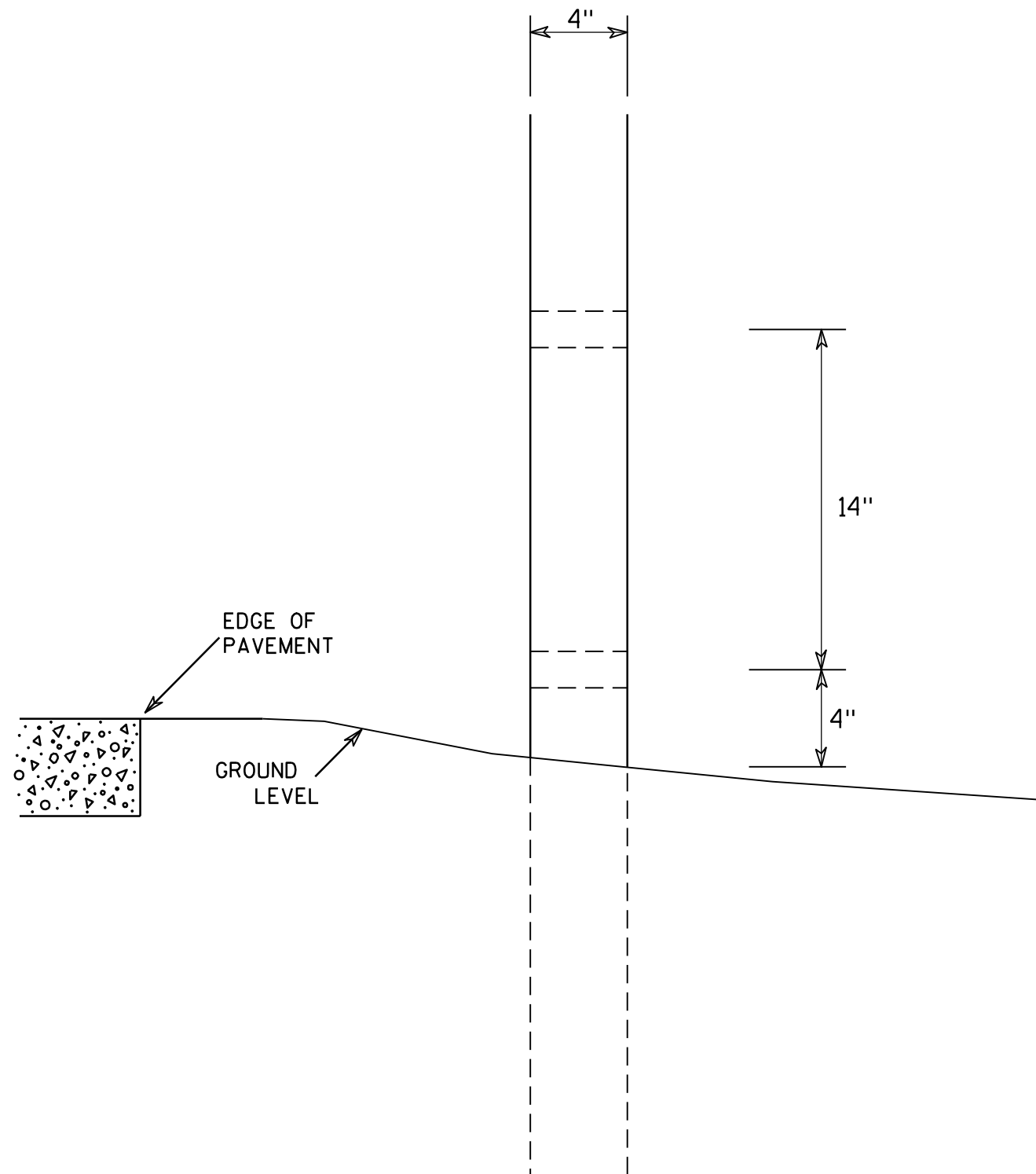
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



| | |
|--|---|
| TRAFFIC CONTROL, LANE CLOSURE | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED Feb. 2015 DATE | /S/ Travis Fettes STATE TRAFFIC ENGINEER OF DESIGN |
| FHWA | |



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO: 8996-00-98

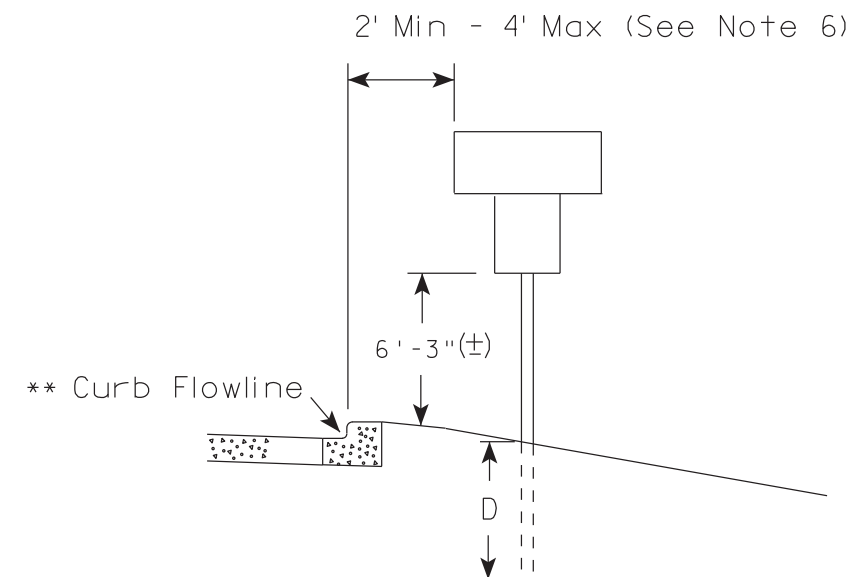
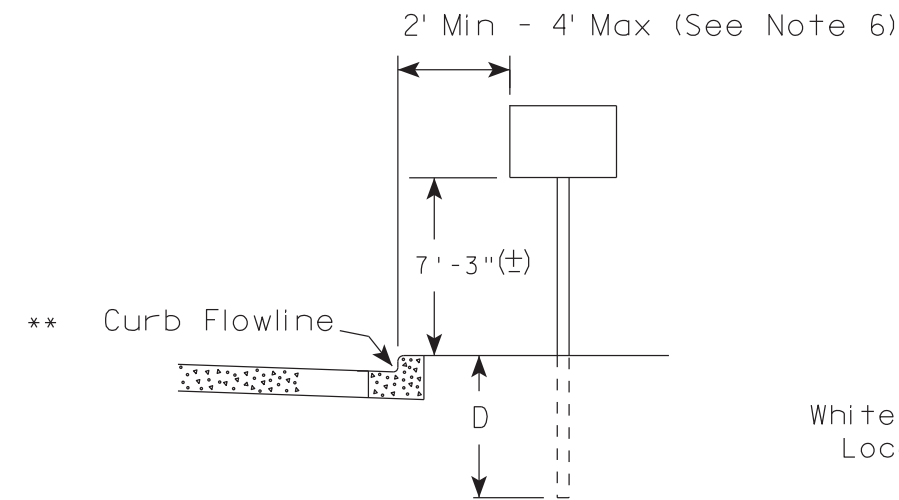
HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

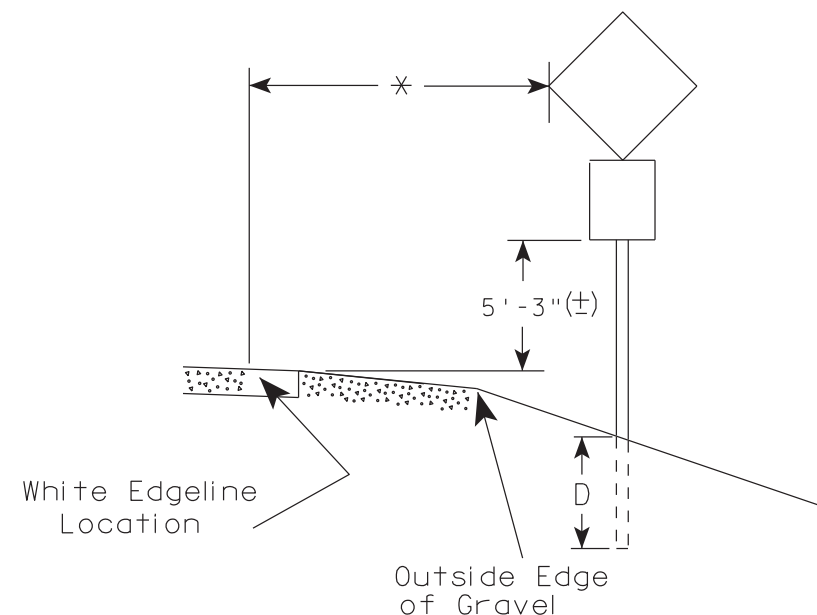
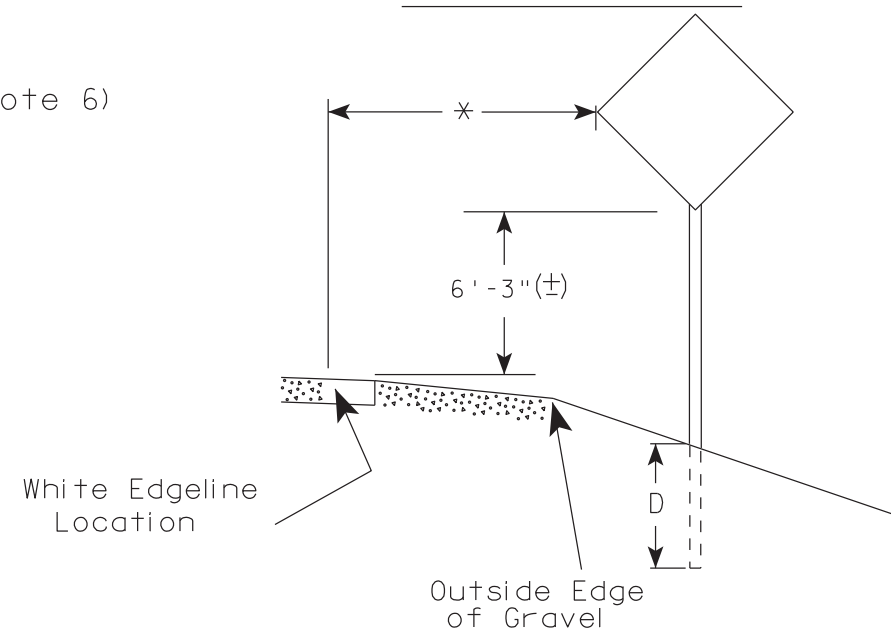
E

URBAN AREA



✱✱ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

RURAL AREA (See Note 2)



* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

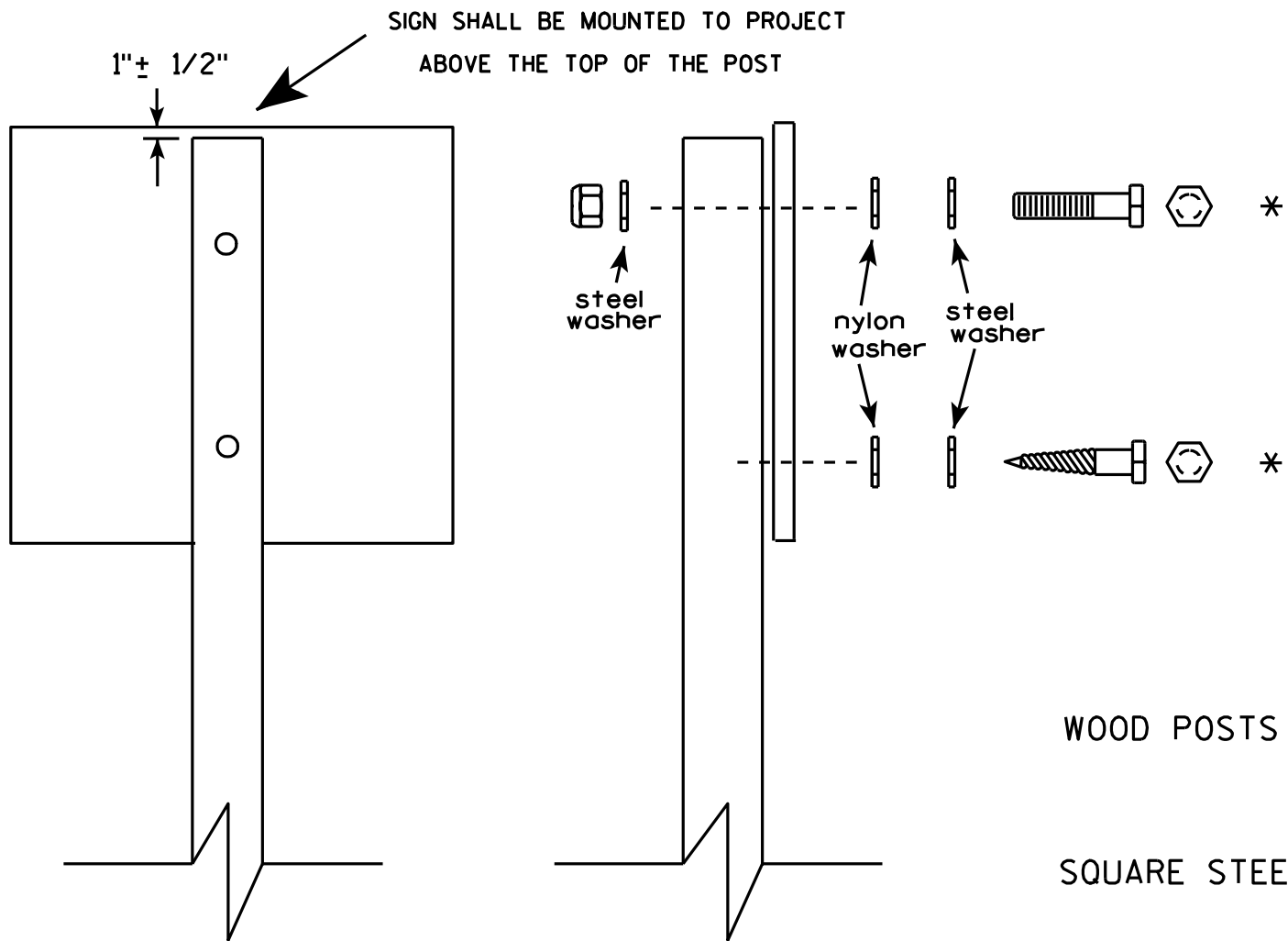
| Area of Sign Installation (Sq. Ft.) | D (Min) |
|--|--------------|
| 20 or Less | 4' |
| Greater than 20 | 5' |

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

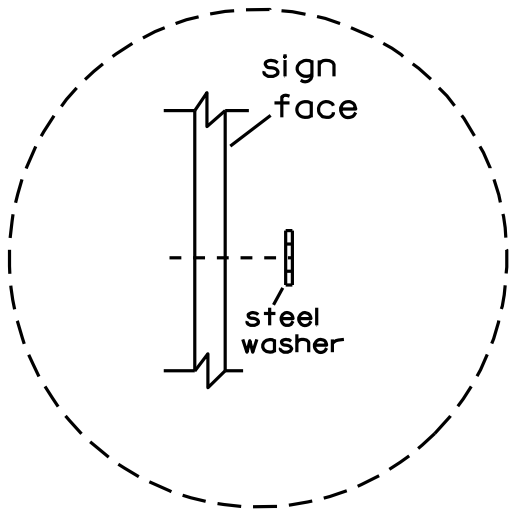


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

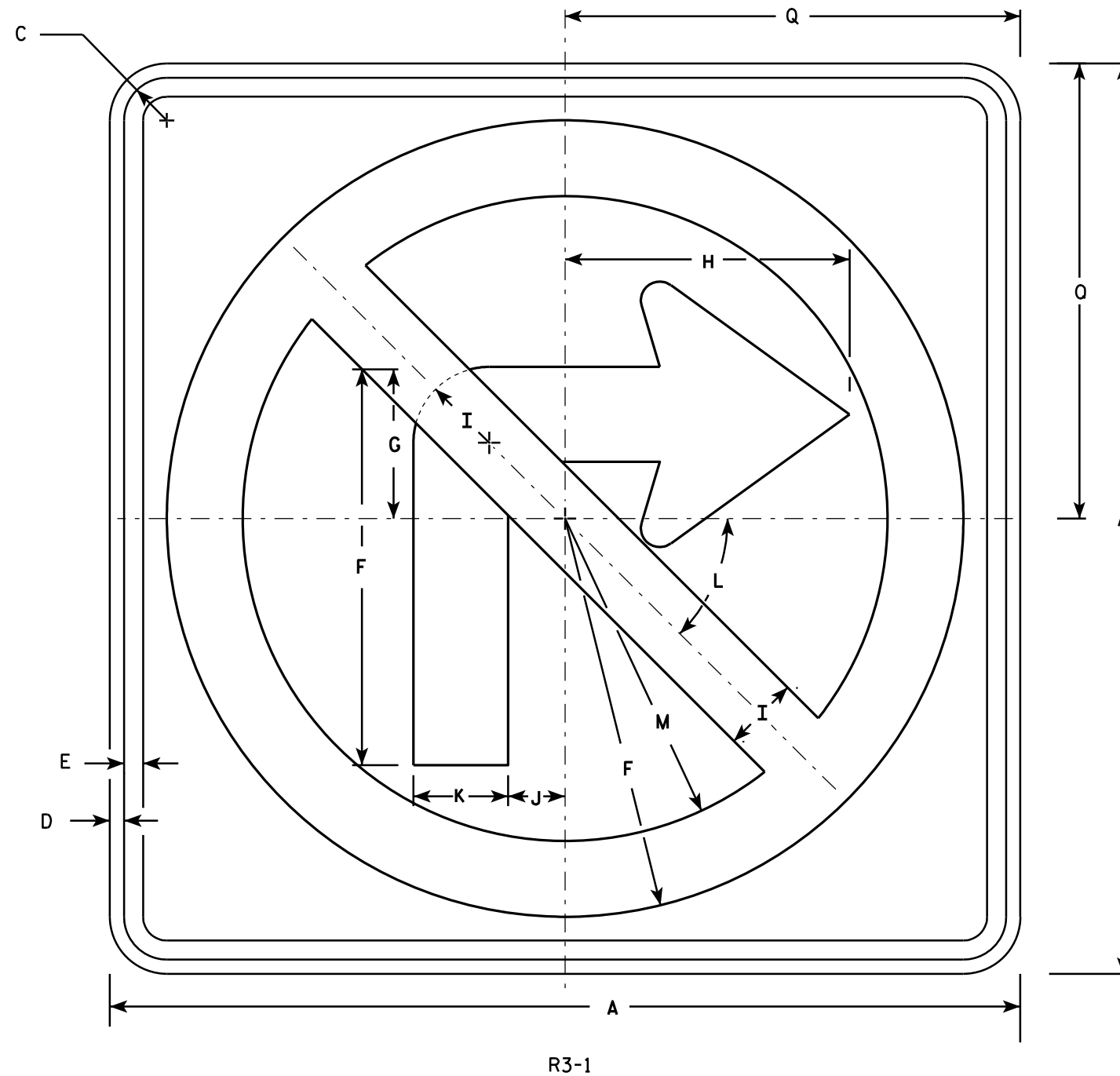
- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

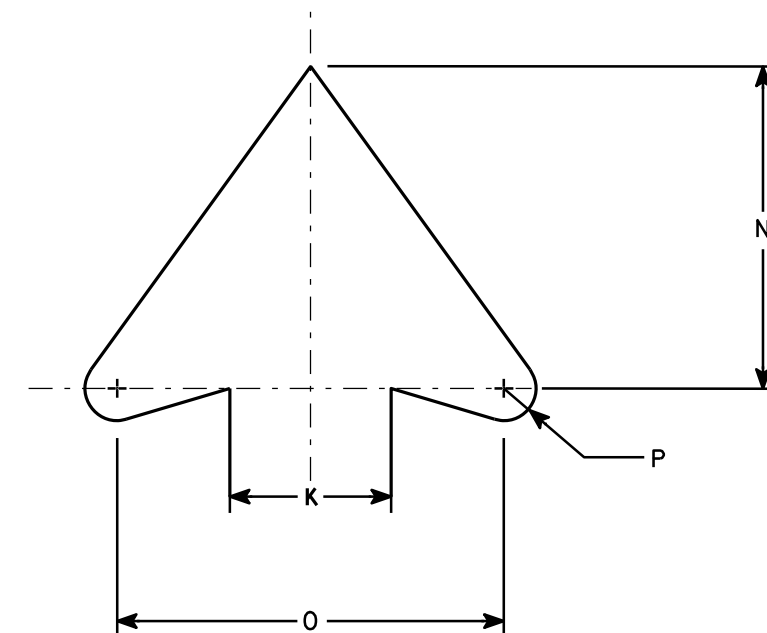
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

| | |
|----------------------------------|---|
| ATTACHMENT OF SIGNS TO POSTS | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 3/23/10 | PLATE NO. A4-8.7 |



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|--------|---|-------|-------|-----|--------|-------|----|-----|----|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45 | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | 24 | | | | | | | | | | 16.0 |

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

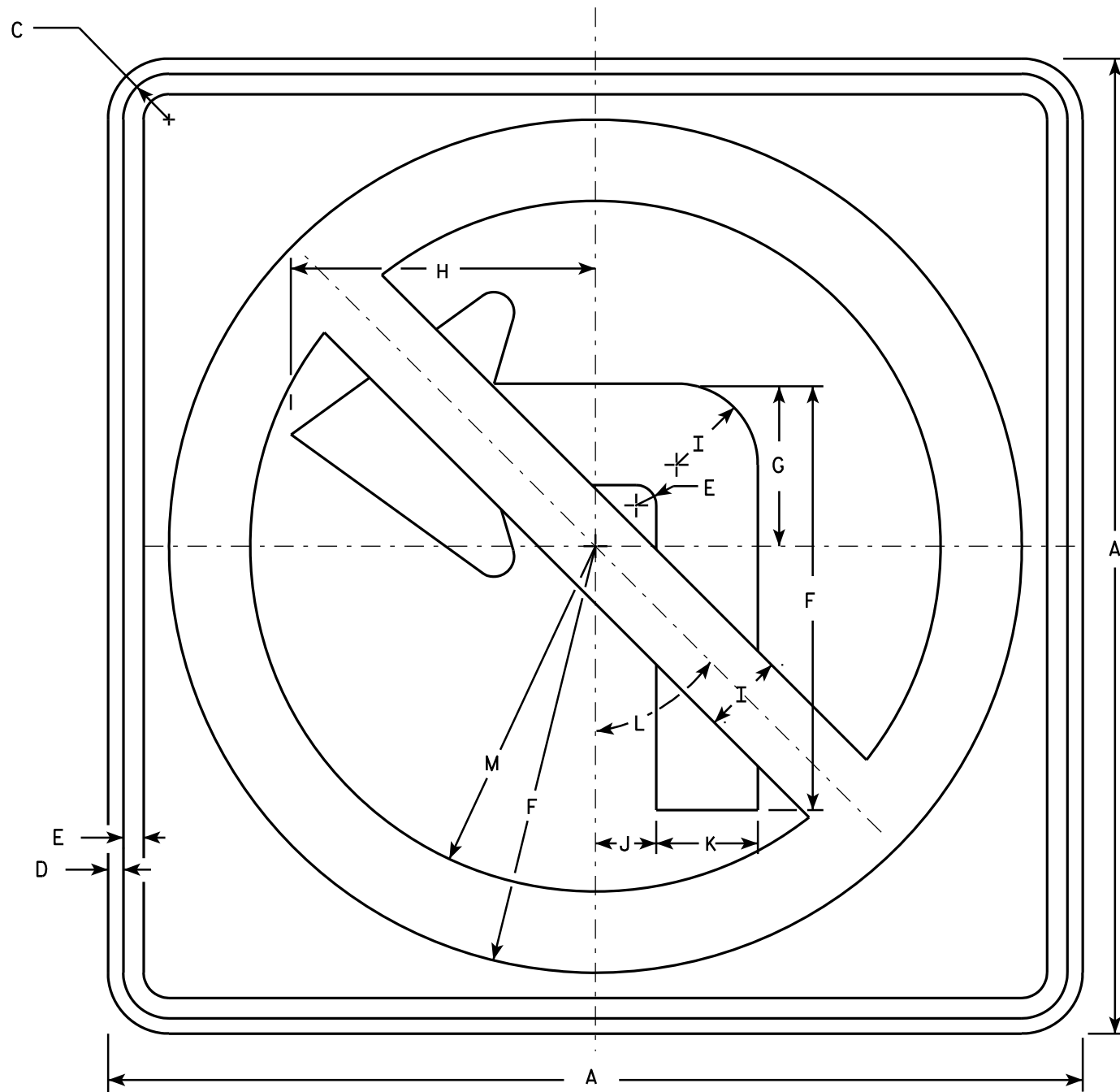
PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

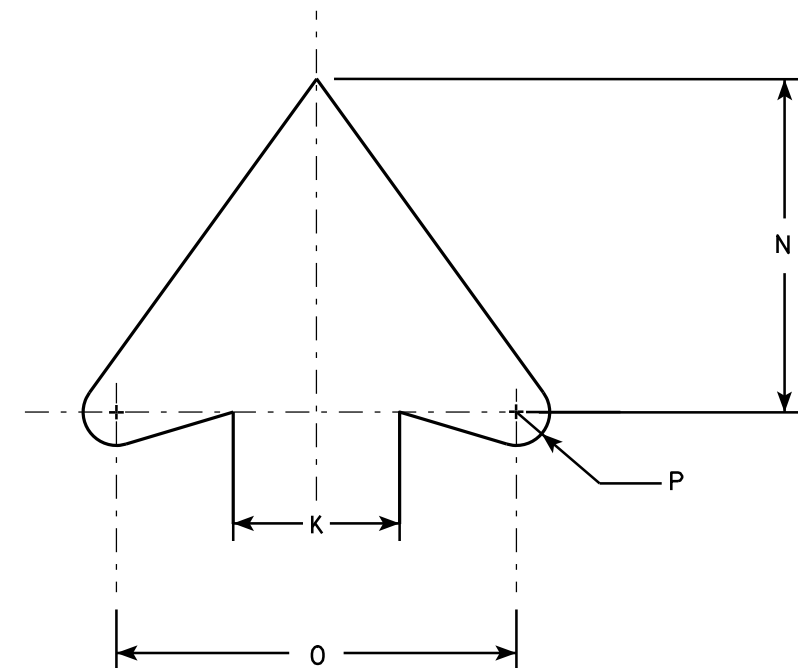
E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|--------|---|-------|-------|-----|--------|-------|----|-----|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | | | | | | | | | | | 16.0 |

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO: 8996-00-98

HWY: SPRING STREET

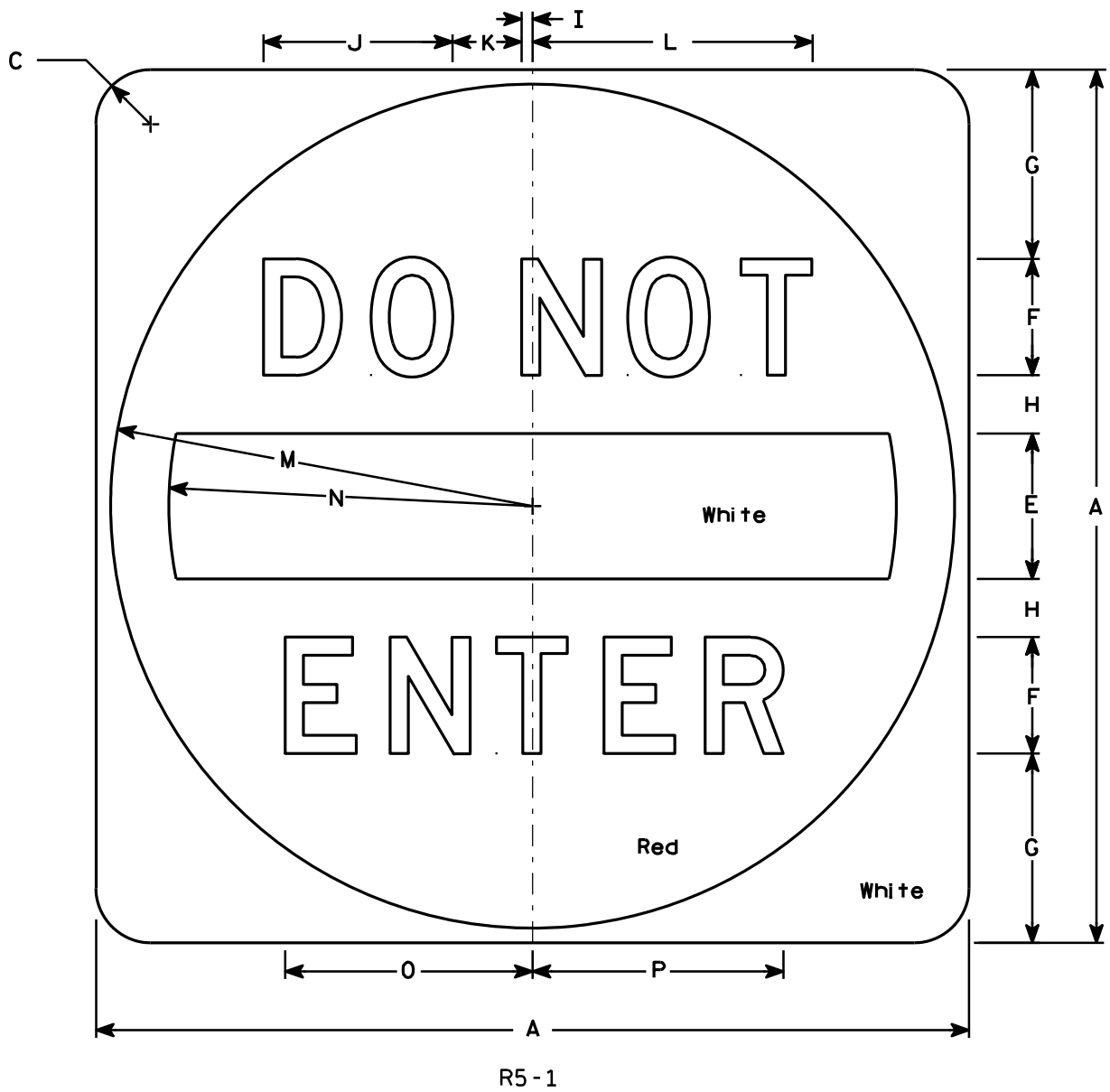
COUNTY: CHIPPEWA

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - See detail
 - Message - White - Type H Reflective
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|---|---|---|-------|-------|-----|-------|-------|--------|--------|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 7⁄8 | | 5 | 4 | 6 1⁄2 | 2 | 3⁄8 | 6 1⁄2 | 2 3⁄8 | 9 5⁄8 | 14 1⁄2 | 12 1⁄2 | 8 1⁄2 | 8 5⁄8 | | | | | | | | | | | 6.26 |
| 2M | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | | 8 | 6 | 11 | 3 | 5⁄8 | 9 3⁄4 | 3 5⁄8 | 14 1⁄2 | 23 1⁄2 | 20 | 12 3⁄4 | 12 7⁄8 | | | | | | | | | | | 16.0 |

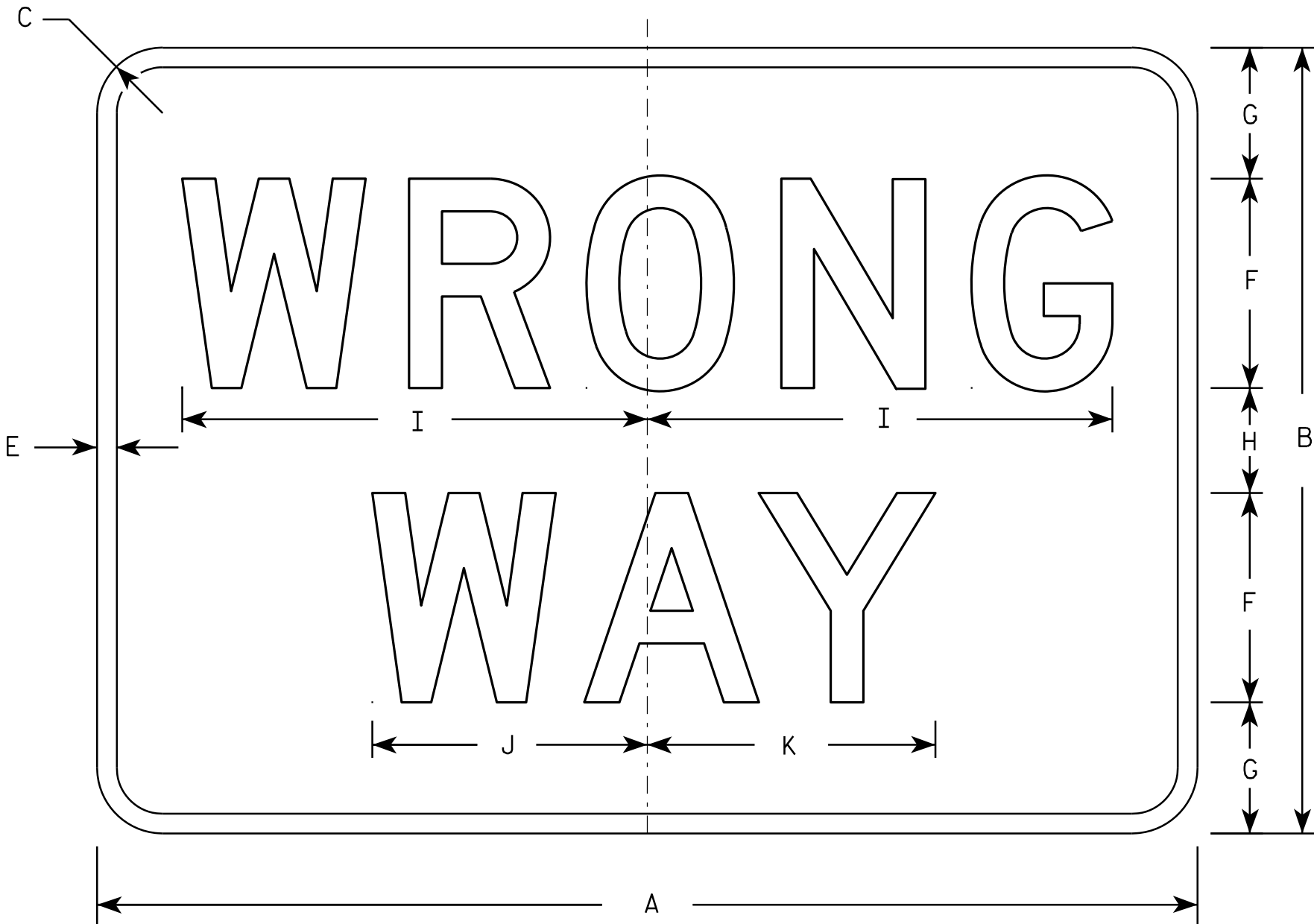
STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15



R5-1A

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Red
 - Message - White
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|---|-----|---|-------|---|--------|--------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 30 | 18 | 1 1/2 | | 1/2 | 5 | 3 | 2 | 11 | 6 1/2 | 6 7/8 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 36 | 24 | 2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2



R6 - 6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D except Line 1 is Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|------|----|----|-------|-----|-----|----|-------|-------|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 1/2 | 2 1/2 | 9 1/8 | 8 1/8 | 8 1/2 | | | | | | | | | | | | | | | |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 3 1/4 | 2 3/4 | 12 1/4 | 10 1/2 | 11 1/2 | | | | | | | | | | | | | | | |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 15 1/4 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 4 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 15 1/4 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

R6 - 6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-6.1

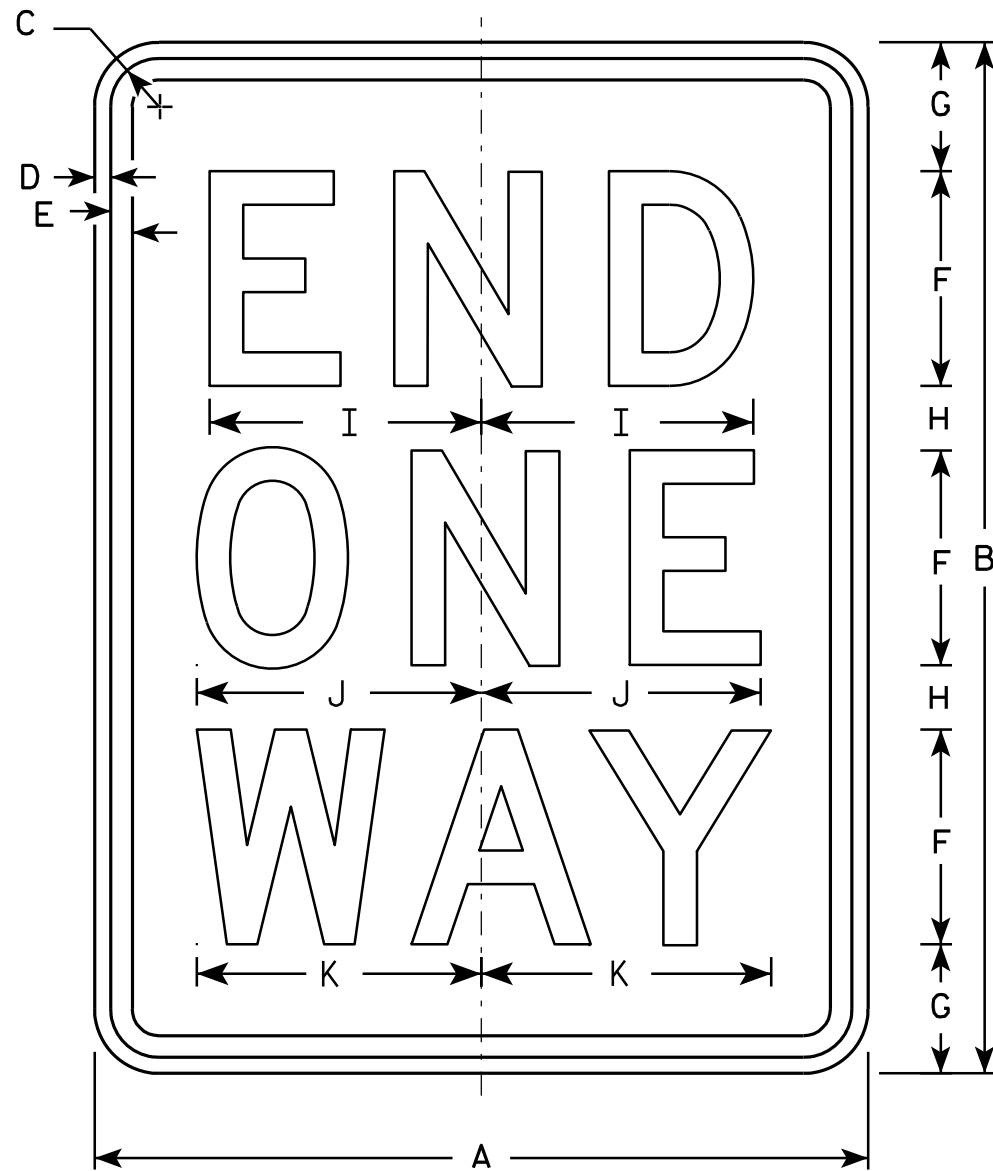
PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

E



R6 - 7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z |
|------|----|----|-------|-----|-----|----|-------|-------|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 1/2 | 2 1/2 | 8 | 8 1/8 | 8 1/2 | | | | | | | | | | | | | | | |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 3 1/4 | 2 3/4 | 10 1/8 | 10 1/2 | 11 1/2 | | | | | | | | | | | | | | | |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 12 5/8 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 4 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 12 5/8 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

R6 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-7.1

PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

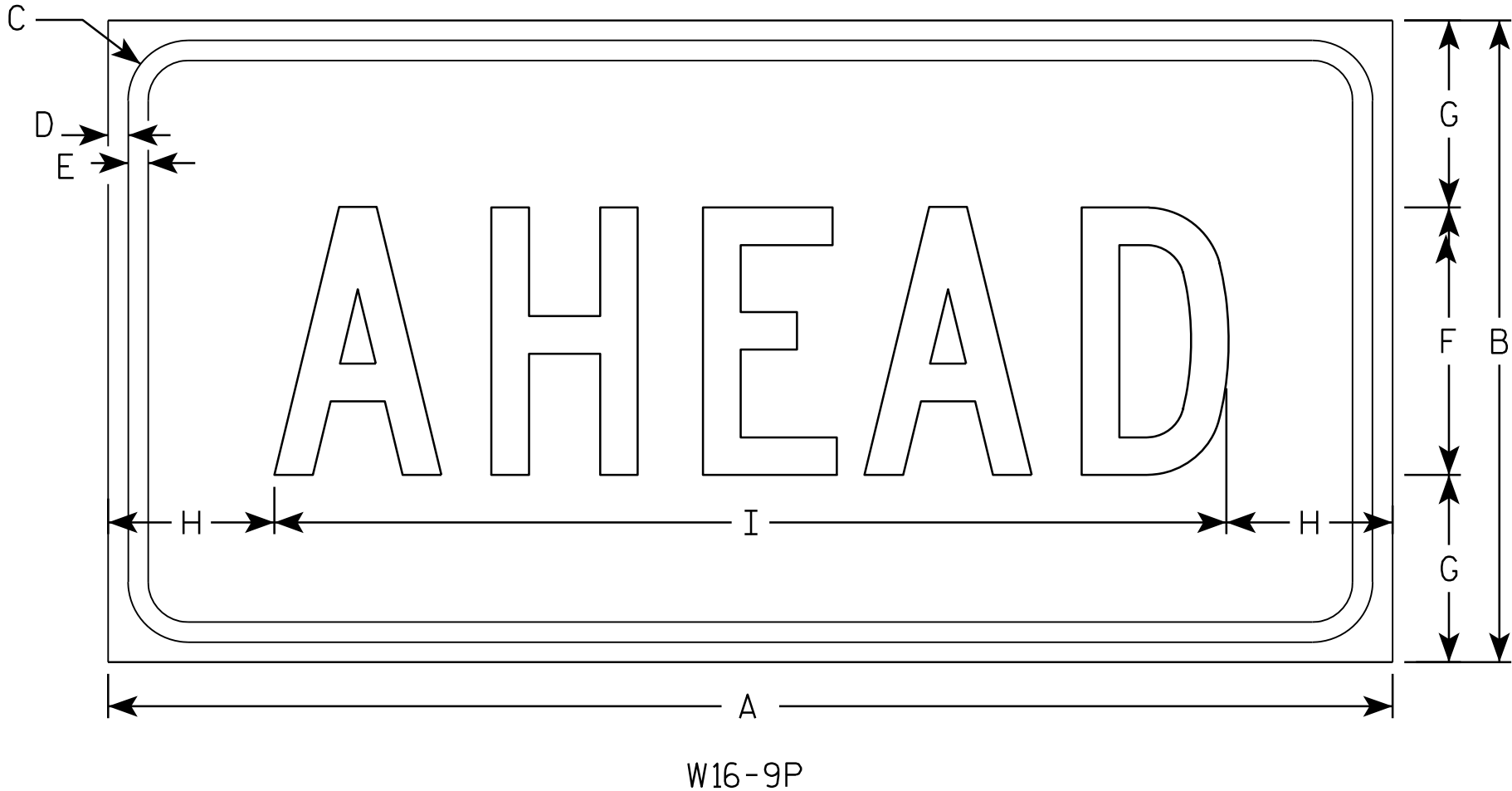
E

7

7

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|----|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 5 | 3 1/2 | 3 1/8 | 17 3/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 3 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 10 | 7 | 6 1/8 | 35 3/4 | | | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

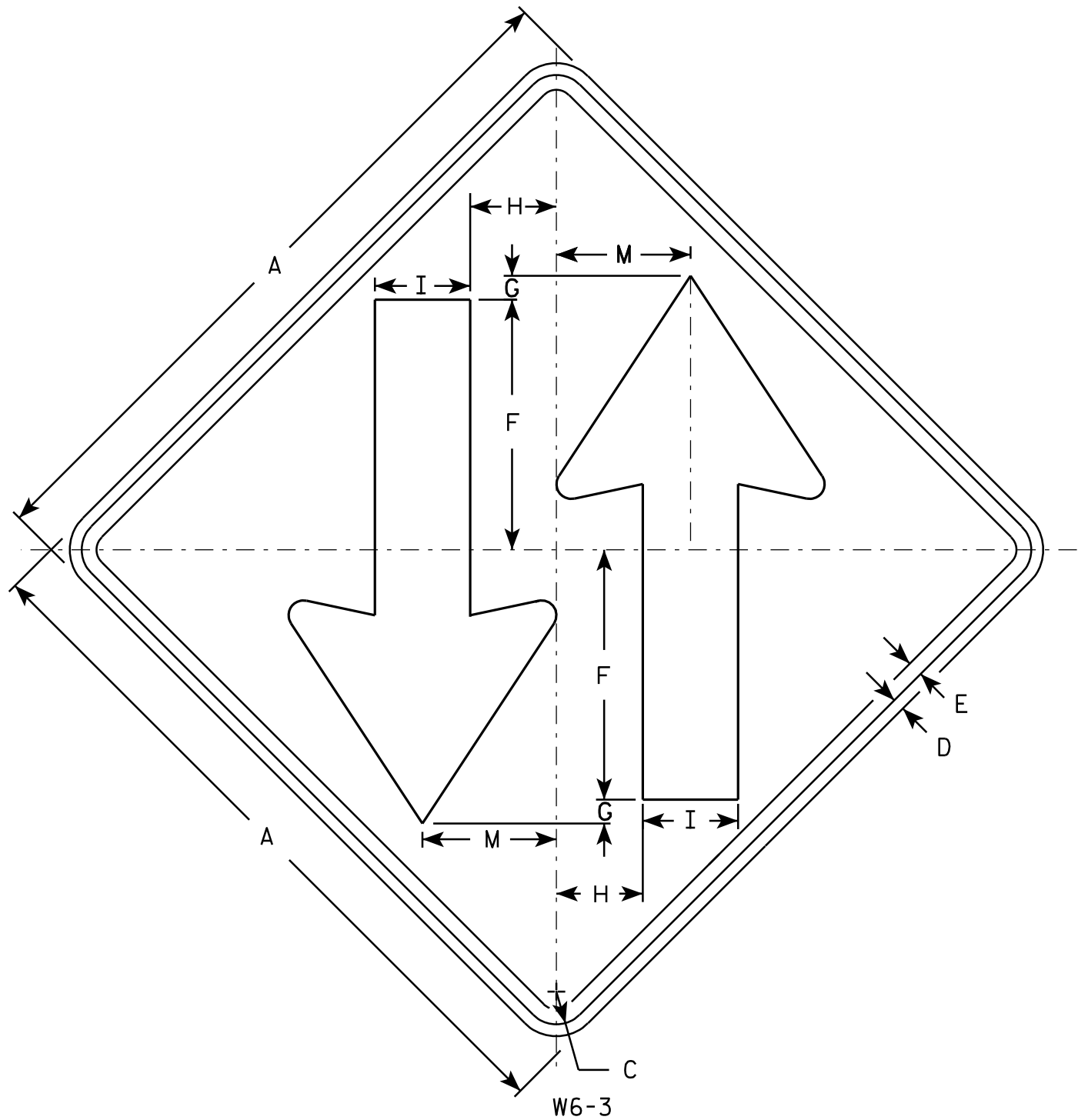
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

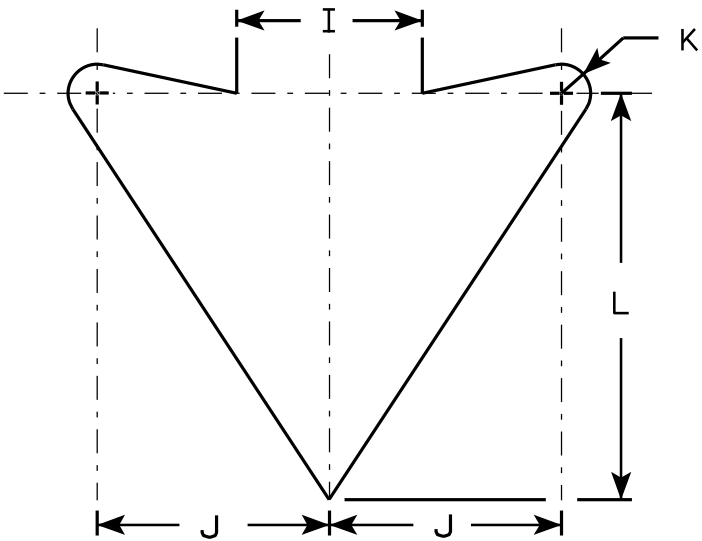
7



W6-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|-------|---|---|-----|--------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 10 1/2 | 1 | 3 5/8 | 4 | 5 | 5/8 | 8 3/4 | 5 5/8 | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 1 | 4 1/4 | 5 | 6 | 3/4 | 10 1/2 | 6 3/4 | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 1 | 4 1/4 | 5 | 6 | 3/4 | 10 1/2 | 6 3/4 | | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 15 1/2 | 1 | 6 | 6 | 8 | 1 | 14 | 9 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 15 1/2 | 1 | 6 | 6 | 8 | 1 | 14 | 9 | | | | | | | | | | | | | | 16.0 |

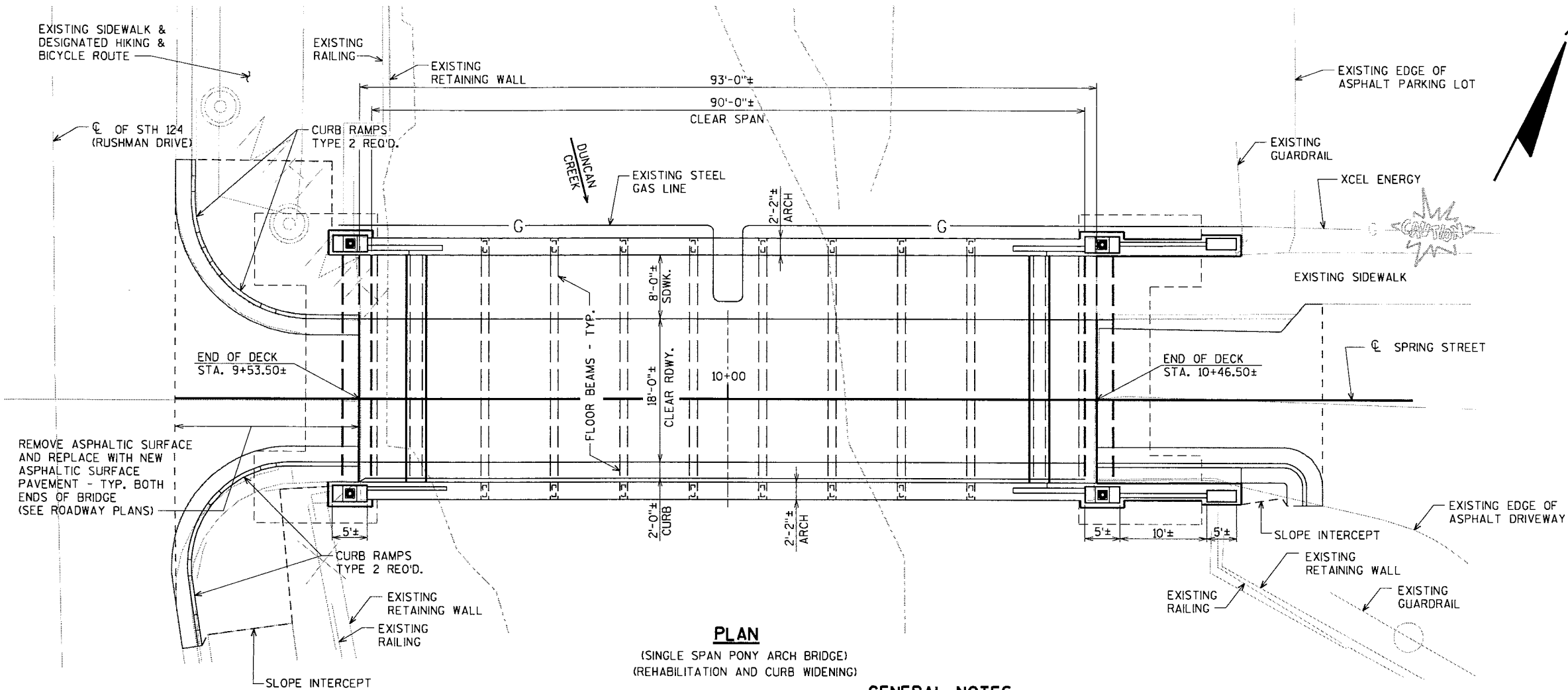
STANDARD SIGN

W6 - 3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10



PLAN
(SINGLE SPAN PONY ARCH BRIDGE)
(REHABILITATION AND CURB WIDENING)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF THE DECK, CURB FACES, TOP OF CURB, AND TOP OF SIDEWALK.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

THE EXISTING CONCRETE OVERLAY, ESTIMATED TO BE 2-INCHES THICK, SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "REMOVING CONCRETE MASONRY DECK OVERLAY P-09-0711".

THE NEW PROFILE GRADE LINE SHALL MATCH THE EXISTING PROFILE. THE TOP OF EXISTING DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR RE-ESTABLISHING THE PROFILE. THE OVERLAY THICKNESS SHALL MATCH THE THICKNESS OF THE EXISTING OVERLAY THAT IS REMOVED IN ORDER TO MAINTAIN ACCURATE RATINGS.

ALL EXISTING CONCRETE WILL BE STAINED WHITE, FEDERAL STANDARD COLOR NUMBER 37886 (WHITE) EXCEPT SIDEWALK, UNDERSIDE OF DECK, AND WHERE FIBER WRAP REINFORCING IS APPLIED.

FIBER WRAP REINFORCING SHALL BE APPLIED TO THE CONCRETE STRUCTURAL ELEMENTS OF THE EXISTING STRUCTURE AS SHOWN IN THESE PLANS AND IN ACCORDANCE WITH THE "FIBER WRAP REINFORCING" SPECIAL PROVISION. THE CONCRETE STRUCTURAL ELEMENTS INCLUDE THE ARCHES AND HANGERS. THE FIBER WRAP REINFORCING WILL BE PAINTED WHITE USING ACRYLIC PAINT, FEDERAL STANDARD COLOR 37886 (WHITE).

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY, DECKS".

"PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", "FULL-DEPTH DECK REPAIR" AND "CONCRETE SURFACE REPAIR" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

CRACKS AND JOINTS IN THE OVERLAY SHALL BE SEALED WITH A LOW-VISCOCITY CRACK SEALER (SEE STANDARD SPEC. SECTION 502.2.11 CRACK SEALER. COST IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

MATERIALS, EQUIPMENT, ETC. SHALL NOT BE STOCKPILED/STORED ON THE BRIDGE DECK WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

FOR ELEVATIONS,
SEE SHEET 3

FOR TYPICAL SECTION,
SEE SHEET 2

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-11
OPERATING RATING: HS-18
LOAD POSTING: 40 TONS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY $f'_c = 4,000$ p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) $f_y = 60,000$ p.s.i.

TRAFFIC DATA:

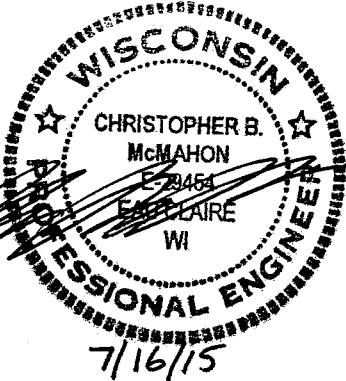
A.D.T. = 510 (2016)
A.D.T. = 620 (2036)
R.D.S. = 25 M.P.H.

TOTAL ESTIMATED QUANTITIES

| BID NUMBER | BID ITEMS | AMOUNT |
|-------------|--|----------|
| 502.0100 | CONCRETE MASONRY BRIDGES | 5 CY |
| 502.5002 | MASONRY ANCHORS TYPE L NO. 4 BARS | 224 EACH |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | 275 SY |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | 450 LB |
| 509.0301 | PREPARATION DECKS TYPE 1 | 3 SY |
| 509.0302 | PREPARATION DECKS TYPE 2 | 3 SY |
| 509.2000 | FULL-DEPTH DECK REPAIR | 1 SY |
| 509.2500 | CONCRETE MASONRY OVERLAY DECKS | 15 CY |
| 509.9005.S | REMOVING CONCRETE MASONRY DECK OVERLAY P-09-0711 | 210 SY |
| 517.1010.S | CONCRETE STAINING P-09-0711 | 6,700 SF |
| SPV.0165.01 | FIBER WRAP REINFORCING | 2,600 SF |
| SPV.0165.02 | CONCRETE SURFACE REPAIR SPECIAL | 1,100 SF |

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION & DETAILS
3. CONCRETE SURFACE REPAIR DETAILS
4. STRUCTURE STAINING & FIBER WRAP DETAILS



BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
CHRIS MCMAHON
(715)-834-3161

| | | | |
|--|---|-------------------|------------------|
| NO. | DATE | REVISION | BY |
| ORIGINAL PLANS PREPARED BY AYRES ASSOCIATES 3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | William C. Dreher CHIEF STRUCTURES DESIGN ENGINEER | | 09/22/15 DATE |
| STRUCTURE P-9-711 | | | |
| SPRING STREET OVER DUNCAN CREEK | | | |
| COUNTY | CHIPPewa | TOWN/CITY/VILLAGE | CHIPPewa FALLS |
| DESIGN SPEC. | REHABILITATION | N/A | |
| DESIGNED BY | KLW | DESIGN CK'D. | CBM |
| DRAWN BY | CBM | PLANS CK'D. | CBM |
| GENERAL PLAN | | | SHEET 1 OF 4 |

\$PRNAME\$ U:\42-0740.00 - City of Chippewa Falls, Spring Street over Duncan Creek\BRIDGE\42-0740 typ.dgn

STATE PROJECT NUMBER

8996-00-98

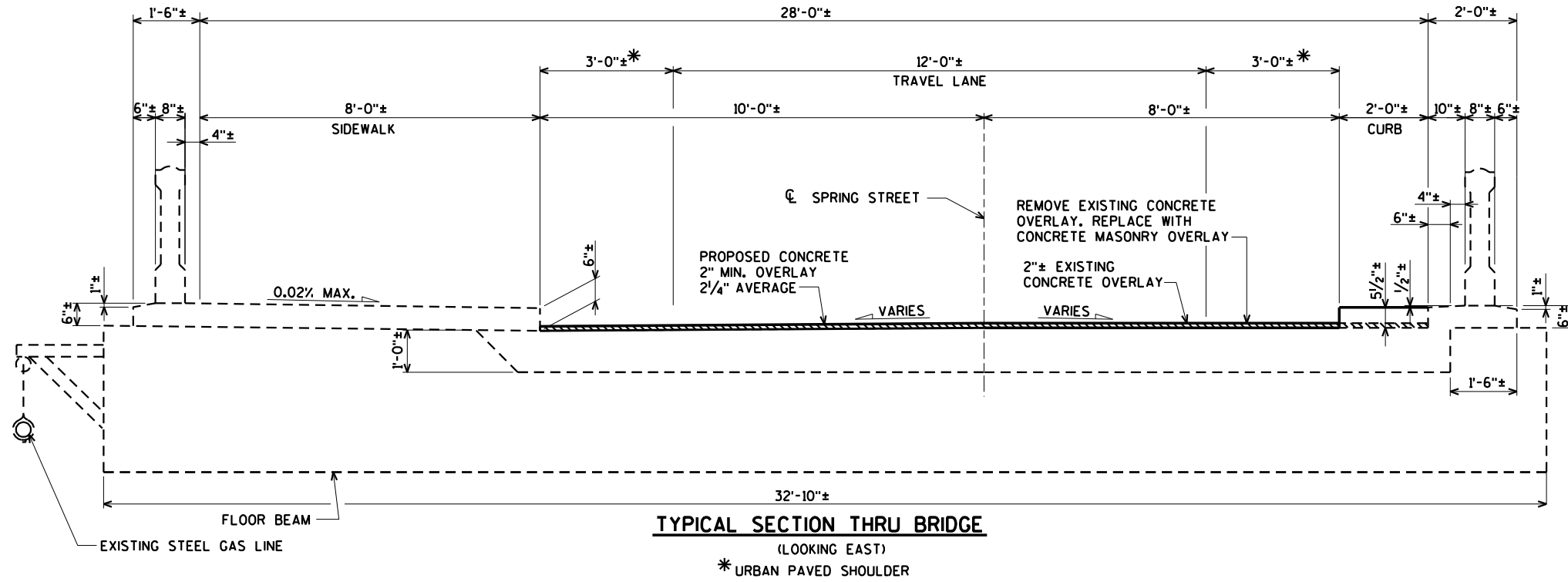
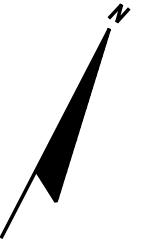
BILL OF BARS

| BAR. NO. | COATED BAR | NO. REQ'D. | LENGTH | BENT BAR | BUNDLED BAR SERIES | 450# COATED |
|----------|------------|------------|--------|----------|--------------------|----------------------|
| | | | | | | LOCATION |
| S401 | X | 112 | 1-11 | X | | PROPOSED CURB TRANS. |
| S402 | X | 112 | 2-5 | | | PROPOSED CURB TRANS. |
| S403 | X | 6 | 31-9 | | | PROPOSED CURB LONG. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

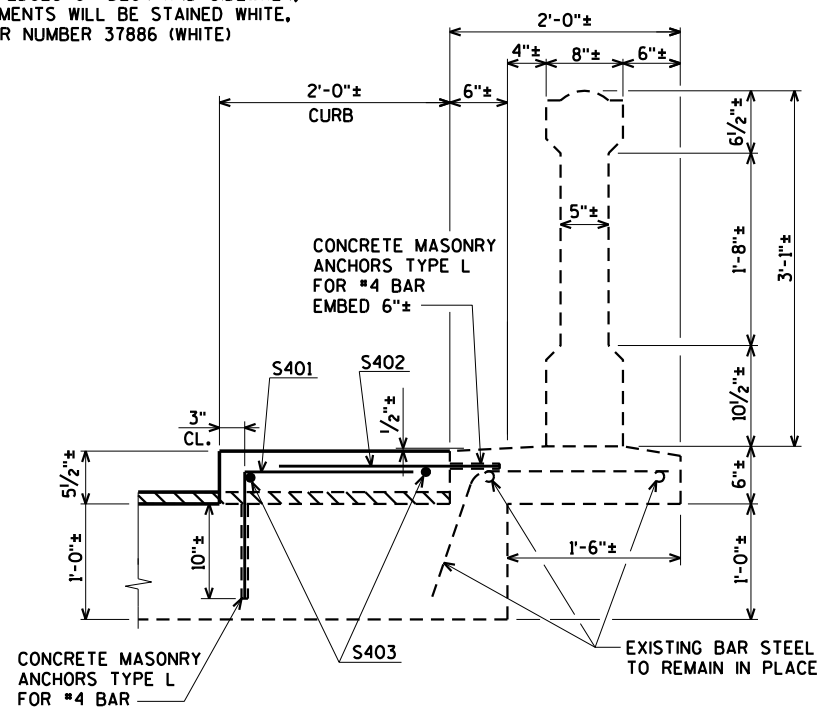
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



S401

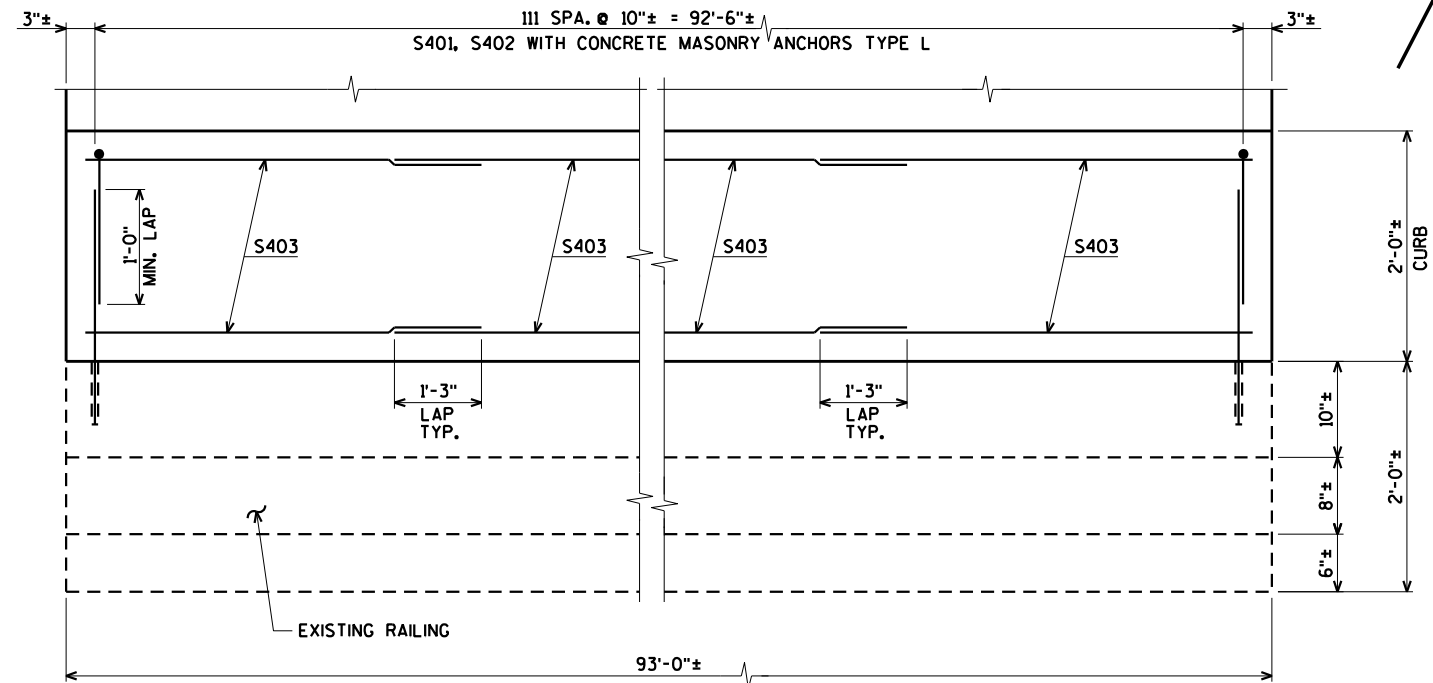


NOTE:
EXISTING RAILINGS, CURB, EDGES OF DECK AND SIDEWALK,
FLOOR BEAMS, AND ABUTMENTS WILL BE STAINED WHITE,
FEDERAL STANDARD COLOR NUMBER 37886 (WHITE)



PROPOSED CURB DETAIL

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED
2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.



PLAN AT PROPOSED CURB

| | | | |
|---|------|-------------|--------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE P-9-711 | | | |
| DRAWN BY | CLS | PLANS CK'D. | KLW |
| TYPICAL SECTION & DETAILS | | | SHEET 2 OF 4 |

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

\$PRNAME\$
U:\42-0740.00 - City of Chippewa Falls, Spring Street over Duncan Creek\BRIDGE\42-0740\gpr\REHAB.dgn

8

CONCRETE SURFACE REPAIR

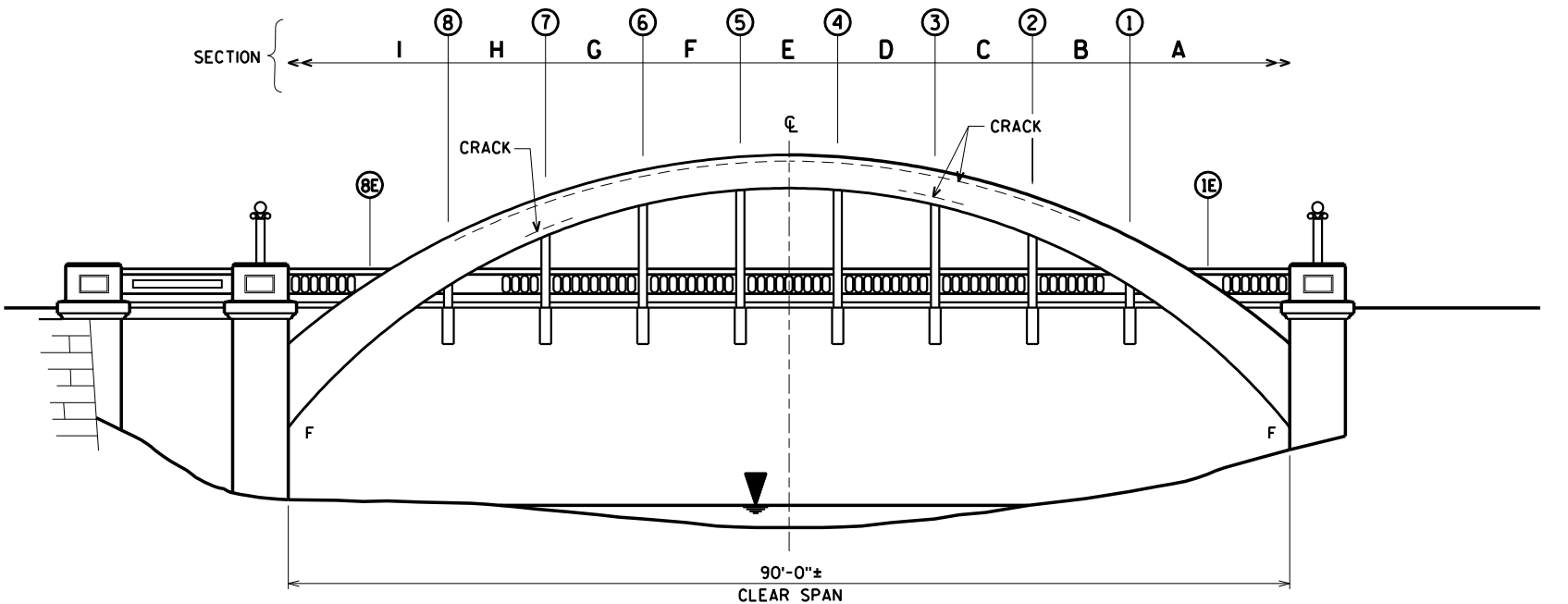
| NORTH SIDE CONCRETE SURFACE REPAIR | | | |
|------------------------------------|----------------------|---|-----|
| SECTION | CONCRETE ELEMENT | DESCRIPTION | SF |
| A | VERTICALS IN RAILING | 4 VERTICALS NEEDING REPAIR | 4 |
| 1 | HANGER | NO CRACKS | 0 |
| 1-B | FLOOR BEAM | ENDS ARE DISTRESSED WITH SPALLS AND CRACKS | 60 |
| 8E | FLOOR BEAM | NO CRACKS | 0 |
| B | VERTICALS IN RAILING | 3 VERTICALS NEEDING REPAIR | 3 |
| 2 | HANGER | CRACKED INSIDE AND OUTSIDE FACES | 10 |
| B-H | ARCH | CRACKED ALONG INSIDE FACE TOP | 70 |
| C | VERTICALS IN RAILING | NO CRACKS | 0 |
| 3 | HANGER | CRACKED ON INSIDE FACE TOP | 5 |
| C-D | ARCH | CRACKED ON INSIDE FACE BOTTOM | 5 |
| C-D | SIDEWALK | SPALLED ON INSIDE FACE | 5 |
| D | VERTICALS IN RAILING | NO CRACKS | 0 |
| 4 | HANGER | CRACKED INSIDE FACE | 10 |
| D-E | SIDEWALK | SPALLED ON INSIDE FACE | 1 |
| E | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 1 |
| 5 | HANGER | CRACKED ON OUTSIDE FACE TOP | 5 |
| F | VERTICALS IN RAILING | 3 VERTICALS NEEDING REPAIR | 3 |
| 6 | HANGER | NO CRACKS | 0 |
| G | VERTICALS IN RAILING | 3 VERTICALS NEEDING REPAIR | 3 |
| 7 | HANGER | CRACKED INSIDE AND OUTSIDE FACES | 10 |
| G-H | ARCH | CRACKED ON INSIDE FACE BOTTOM | 5 |
| H | ARCH | CRACKED ON TOP | 10 |
| H | VERTICALS IN RAILING | 3 VERTICALS NEEDING REPAIR, SPALLED TOP INSIDE FACE | 5 |
| 8 | HANGER | NO CRACKS | 0 |
| I | VERTICALS IN RAILING | NO CRACKS | 0 |
| I | SIDEWALK | CRACKED ON EAST END WITH SPALL ON INSIDE FACE | 10 |
| 8E | FLOOR BEAM | SPALLED ON BOTH SIDES WITH EXPOSED REBAR | 5 |
| I | ARCH | CRACKED ON INSIDE FACE BOTTOM UNDER DECK | 5 |
| SUBTOTAL | | | 235 |

| SOUTH SIDE CONCRETE SURFACE REPAIR | | | |
|------------------------------------|----------------------|---|-----|
| SECTION | CONCRETE ELEMENT | DESCRIPTION | SF |
| A | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 1 |
| A | RAILING END BLOCK | CRACKED AND SPALLED ALL AROUND | 20 |
| A | ARCH | TOP DETERIORATED EXPOSED LATTICE STEEL | 5 |
| A | ARCH | CRACKED ON INSIDE FACE BOTTOM UNDER DECK | 5 |
| 1E | FLOOR BEAM | SPALLED ON SIDE WITH EXPOSED REBAR | 5 |
| 1 | HANGER | NO CRACKS | 0 |
| 1-B | FLOOR BEAM | ENDS ARE DISTRESSED WITH SPALLS AND CRACKS | 80 |
| B | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 1 |
| 2 | HANGER | 20% CRACKED | 10 |
| C | VERTICALS IN RAILING | 1 VERTICALS NEEDING REPAIR | 1 |
| 3 | HANGER | CRACKED ON OUTSIDE FACE BOTH SIDES | 20 |
| D | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 1 |
| D | ARCH | CRACKED ON TOP | 10 |
| 4 | HANGER | CRACKED ON BOTTOM | 5 |
| D-E | ARCH | CRACKED ON INSIDE FACE TOP | 10 |
| E | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 1 |
| 5 | HANGER | CRACKED ON BOTTOM AND CRACKED MID HEIGHT ON INSIDE FACE | 15 |
| E-F | ARCH | CRACKED ON INSIDE FACE BOTTOM | 15 |
| F | VERTICALS IN RAILING | NO CRACKS | 0 |
| 6 | HANGER | CRACKED INSIDE FACE ONE CORNER | 10 |
| G | VERTICALS IN RAILING | 4 VERTICALS NEEDING REPAIR | 4 |
| G | ARCH | SPALLS ON BOTTOM AND CRACKED ON INSIDE FACE TOP | 10 |
| 7 | HANGER | CRACKED AND SPALLED ON INSIDE AND OUTSIDE FACES | 10 |
| H | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 2 |
| H | RAILING | SPALL INSIDE FACE AT ARCH, CRACK/SPALL INSIDE FACE BOTTOM AT ARCH | 5 |
| 8 | HANGER | NO CRACKS | 0 |
| H-I | CURB | SPALLED TOP OF CURB | 1 |
| I | VERTICALS IN RAILING | 2 VERTICALS NEEDING REPAIR | 2 |
| 8E | FLOOR BEAM | NO CRACKS | 0 |
| I | CURB | DETERIORATED CONCRETE AT WINGWALL | 1 |
| I | RAILING END BLOCK | BOTTOM OF RAILING SPALLED OFF AT END | 5 |
| I | ARCH | TOP OF ARCH SPALLED | 10 |
| I | ARCH | CRACK ON INSIDE FACE BOTTOM UNDER DECK EXPOSED REBAR | 5 |
| SUBTOTAL | | | 270 |

| UNDERSIDE CONCRETE SURFACE REPAIR | | | |
|-----------------------------------|------------------|--|------|
| SECTION | CONCRETE ELEMENT | DESCRIPTION | SF |
| B-H | DECK | DISTRESSED CONCRETE BETWEEN FLOOR BEAMS ON SOUTH SIDE EDGE | 75 |
| H | DECK | HOLE THROUGH BOTTOM OF DECK WITH EXPOSED REBAR & SPALLS | 5 |
| I | ABUTMENT | SPALLING AND DELAMINATED CONCRETE | 10 |
| 3 | FLOOR BEAM | SPALL ON BOTTOM OF FLOOR BEAM | 5 |
| SUBTOTAL | | | 95 |
| UNDISTRIBUTED | | | 500 |
| TOTAL | | | 1100 |

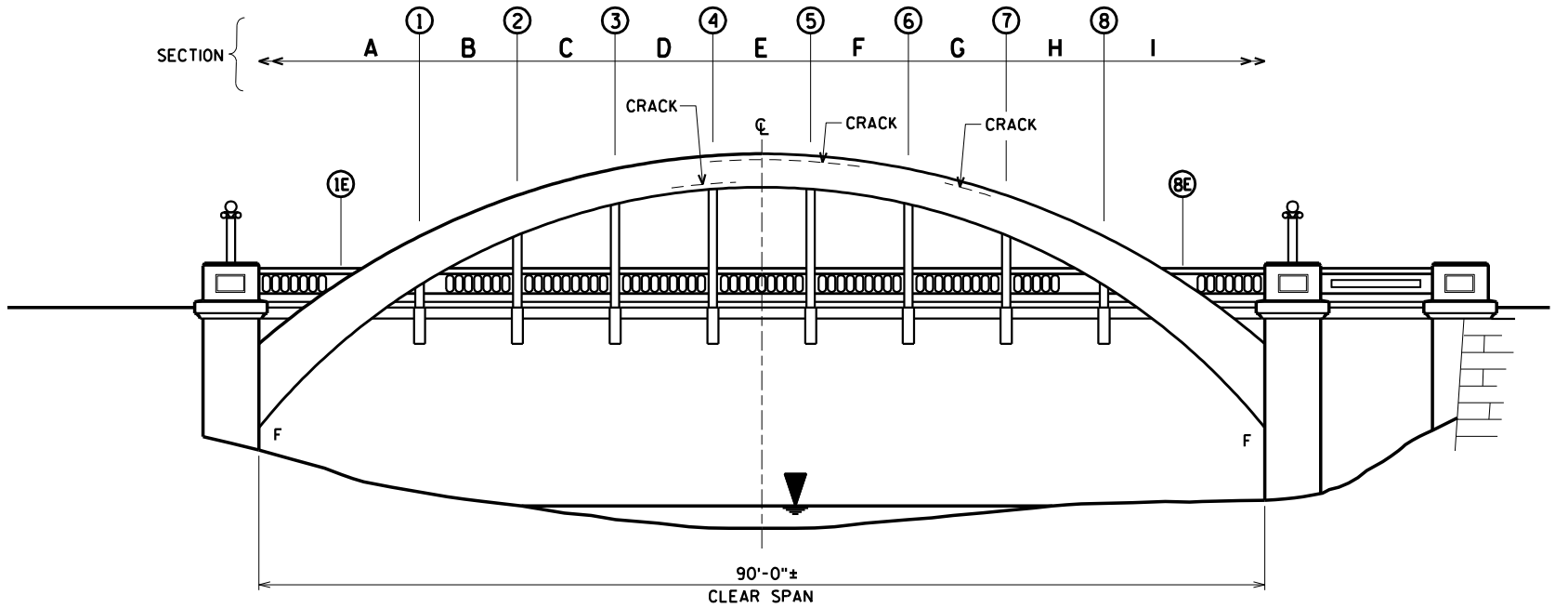
STATE PROJECT NUMBER

8996-00-98



LEGEND

— CRACK ON OUTSIDE
FACE OF ARCH
--- CRACK ON INSIDE
FACE OF ARCH

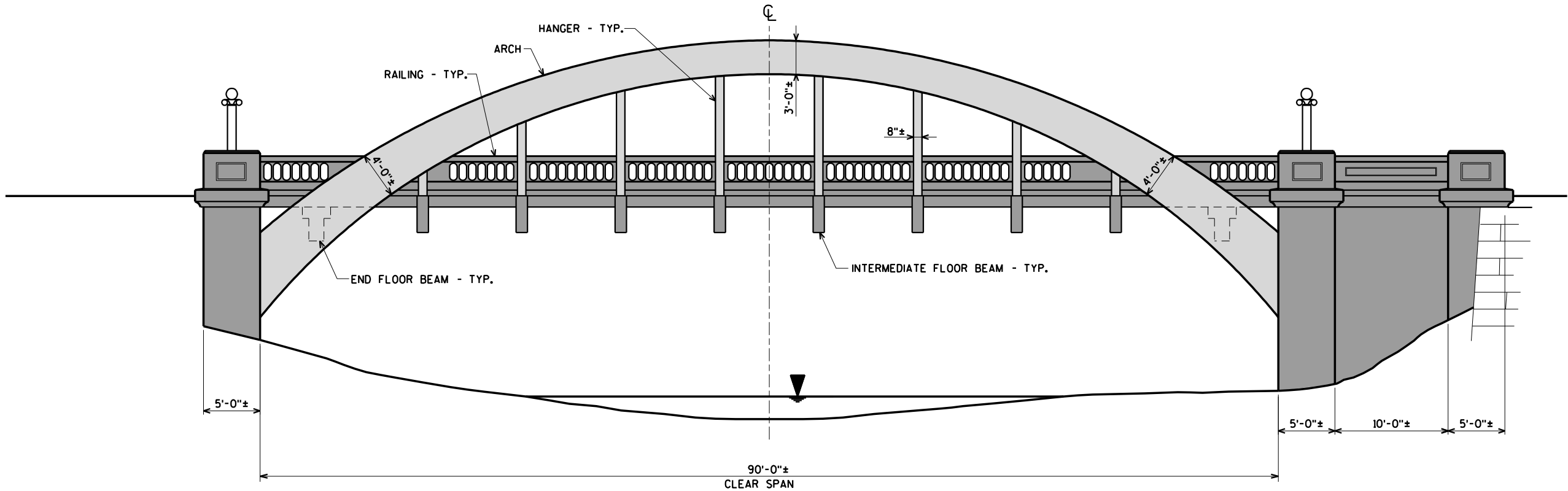


NOTE:

EXPOSED STEEL WILL BE CLEANED AND PAINTED PRIOR TO PLACING THE CONCRETE FOR CONCRETE SURFACE REPAIR. EXPOSED STEEL AREAS ARE TO BE PHOTOGRAPHED AND LOCATION LABELED BY THE ENGINEER. SEE SPECIAL PROVISION "CONCRETE SURFACE REPAIR SPECIAL, SPV.0165.02".

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

| NO. | DATE | REVISION | BY |
|--|------|----------|-----------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION STRUCTURE P-9-711 | | | |
| DRAWN BY | | CLS | PLANS CK'D. KLW |
| CONCRETE SURFACE REPAIR DETAILS | | | SHEET 3 OF 4 |

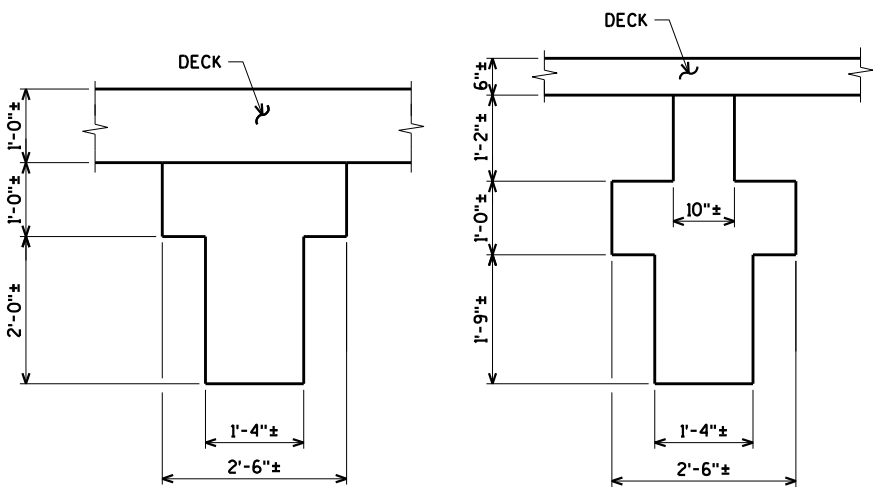


LEGEND

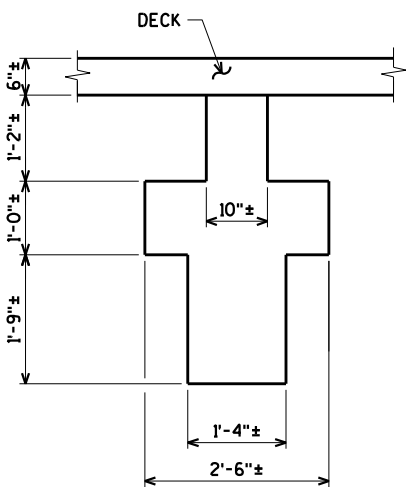
- APPLY FIBER WRAP REINFORCING TO STRUCTURAL ELEMENTS.
PAINT FIBER WRAPPED AREAS WHITE USING ACRYLIC PAINT.
(ARCHES AND HANGERS) FEDERAL STANDARD COLOR 37886 (WHITE)
- STAIN CONCRETE WHITE. (RAILING, CURB, ABUTMENTS, END OF DECK, FLOOR BEAMS)
FEDERAL STANDARD COLOR 37886 (WHITE)

ELEVATION

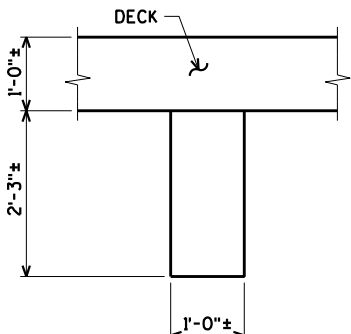
SOUTH SIDE LOOKING NORTH AT OUTSIDE FACE



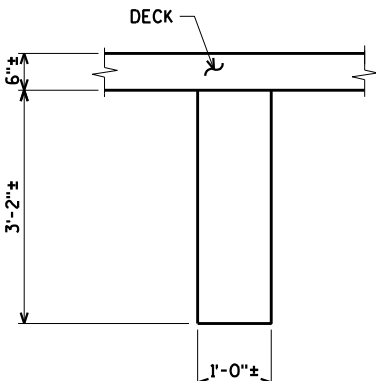
DETAIL OF END FLOOR BEAMS



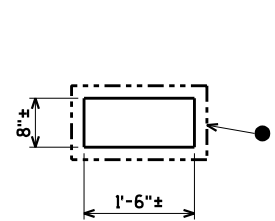
DETAIL OF END FLOOR BEAMS
AT SIDEWALK



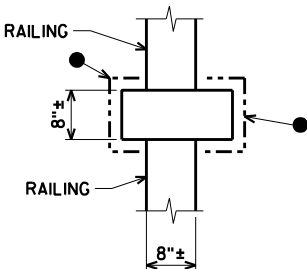
DETAIL OF INTERMEDIATE FLOOR BEAMS



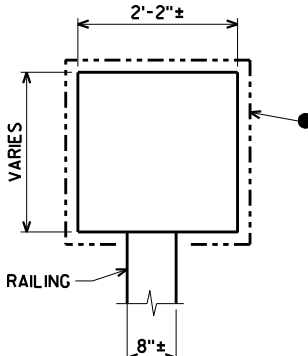
DETAIL OF INTERMEDIATE FLOOR BEAMS
AT SIDEWALK



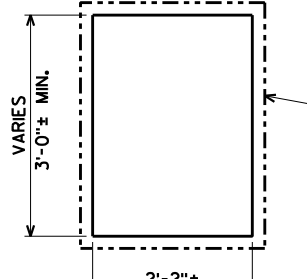
CROSS SECTION THRU HANGER



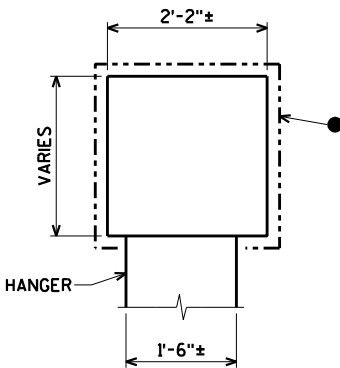
SECTION THRU HANGER AT RAILING



SECTION THRU ARCH AT RAILING



SECTION THRU ARCH



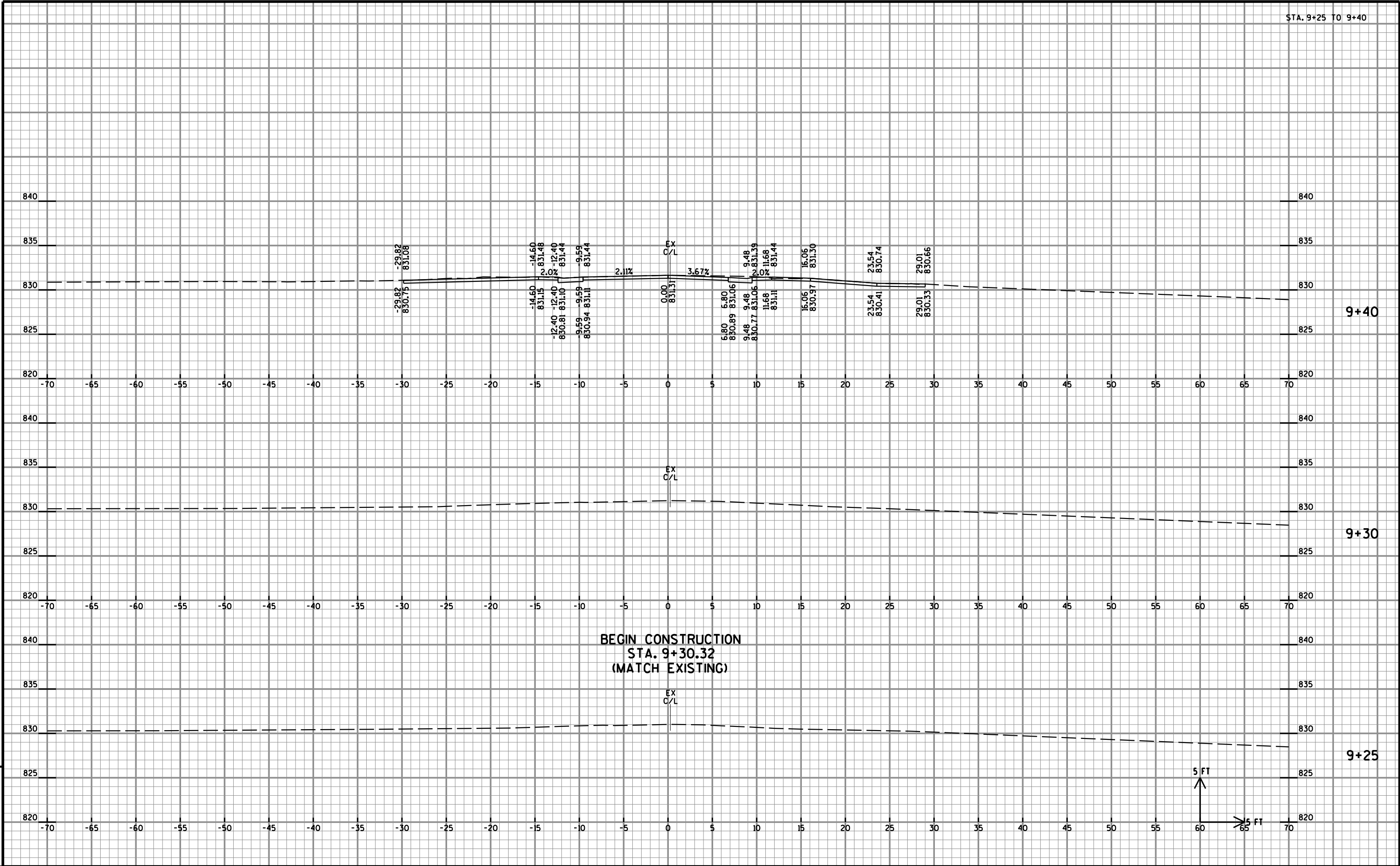
SECTION THRU ARCH AT HANGER

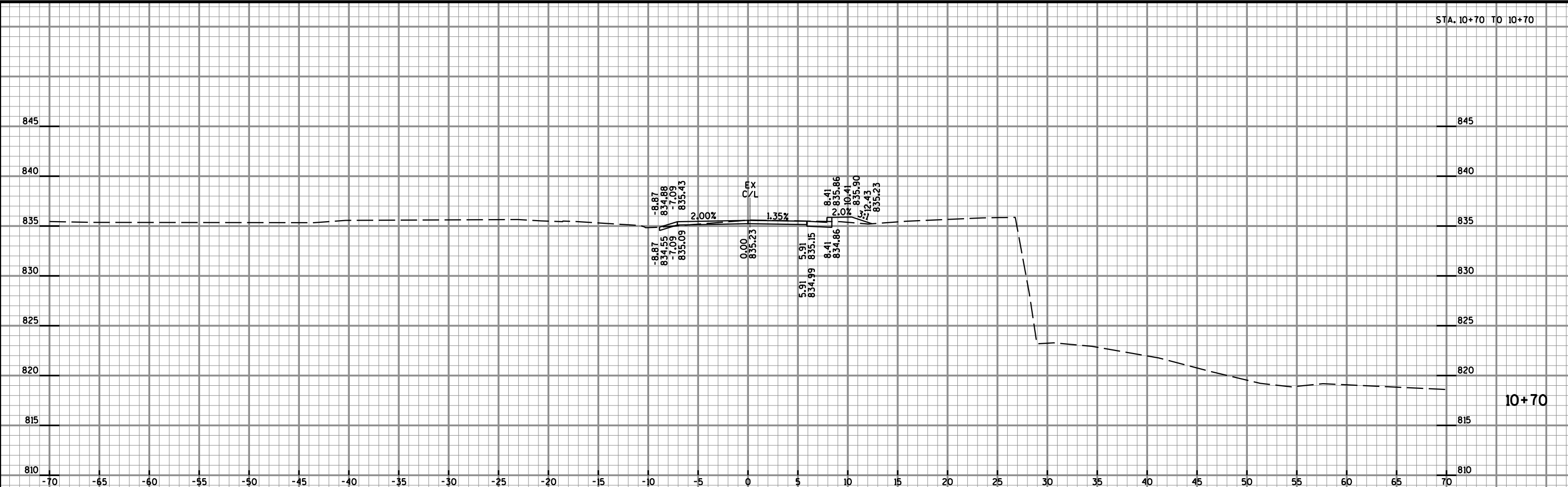
FIBER WRAP REINFORCEMENT AND FLOOR BEAM DETAILS

● FIBER WRAP REINFORCEMENT

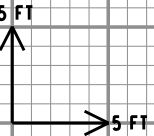
ORIGINAL PLANS PREPARED BY
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Eau Claire, WI 54701
www.AyresAssociates.com

| | | | |
|---|------|-------------|--------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE P-9-711 | | | |
| DRAWN BY | CLS | PLANS CK'D. | KLW |
| STRUCTURE STAINING & FIBER WRAP DETAILS | | | SHEET 4 OF 4 |

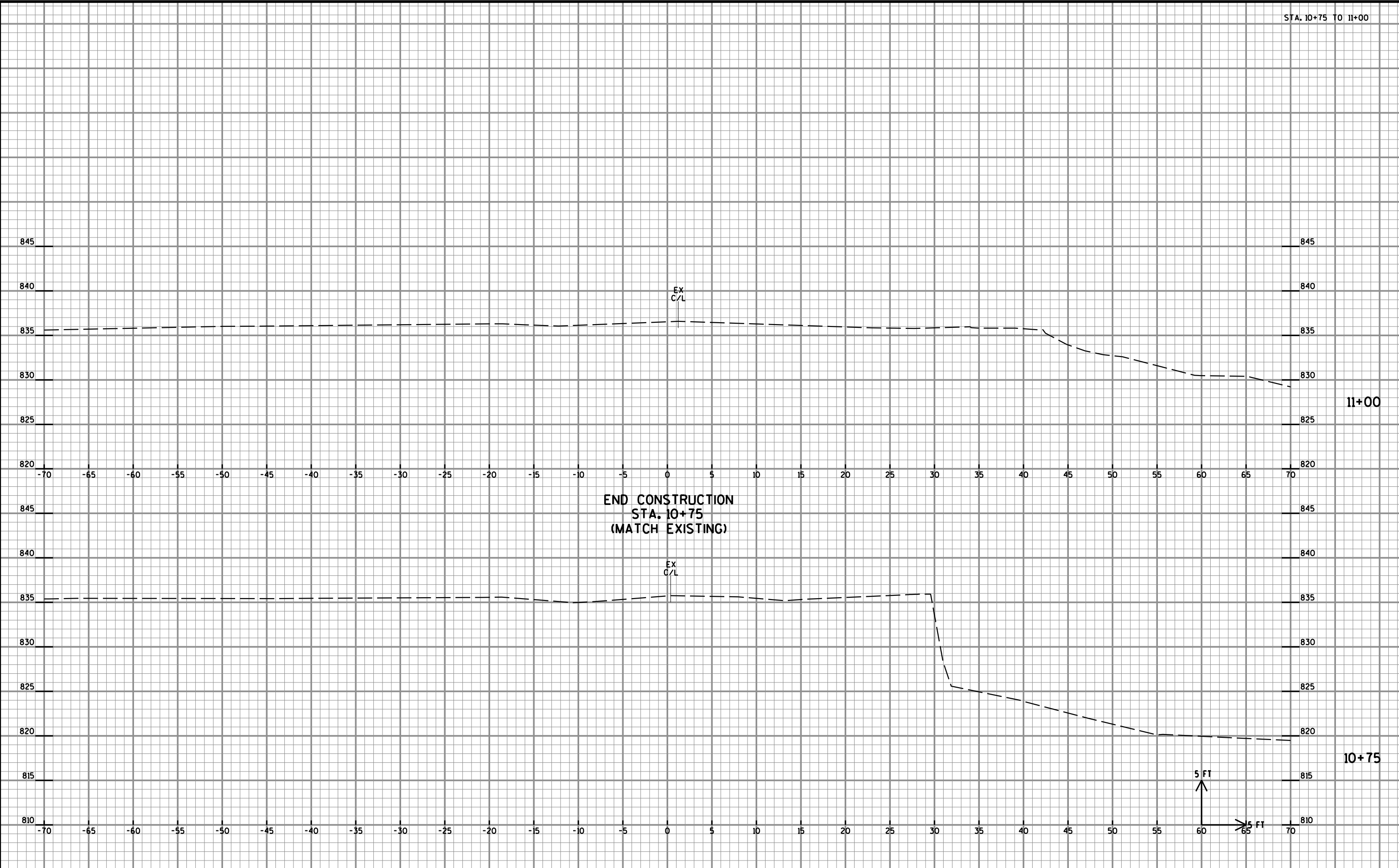




9



9



PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

CROSS SECTIONS

SHEET

E

Notes



Wisconsin Department of Transportation

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through innovation and exceptional service.

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