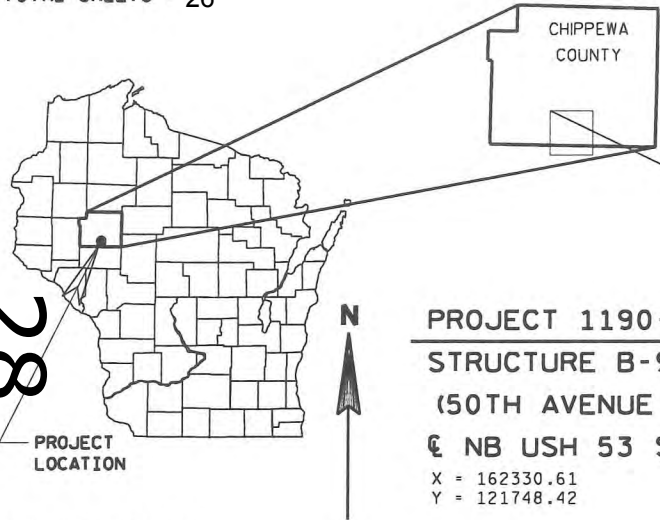


ORDER OF SHEETS

|             |   |  |
|-------------|---|--|
| Section No. | 1 | Title  |
| Section No. | 2 | Typical Sections and Details<br>(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 = 26



| DESIGN DESIGNATION | 40TH AVE. | 50TH AVE. | USH 53 |
|--------------------|-----------|-----------|--------|
| A.D.T. (2016)      | = 500     | 500       | 18,000 |
| A.D.T. (2036)      | = N/A     | N/A       | N/A    |
| D.H.V.             | = N/A     | N/A       | N/A    |
| D.                 | = N/A     | N/A       | N/A    |
| T.                 | = N/A     | N/A       | N/A    |
| DESIGN SPEED       | = 45 MPH  | 45 MPH    | 70 MPH |
| ESALS              | = N/A     | N/A       | N/A    |

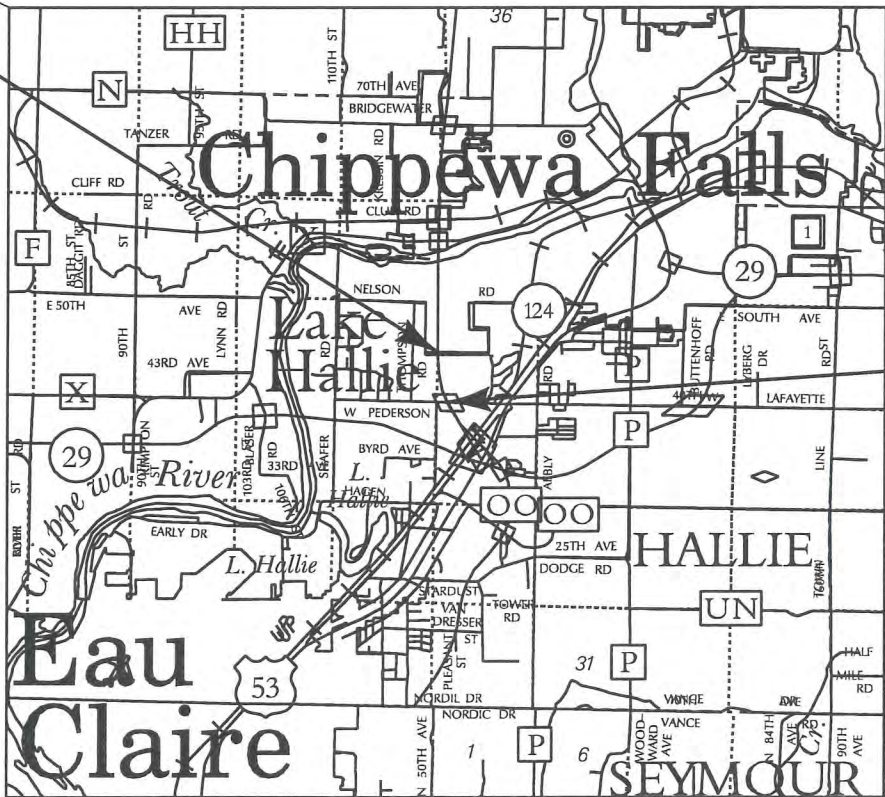
CONVENTIONAL SYMBOLS  
PLAN

|                                   |           |
|-----------------------------------|-----------|
| CORPORATE LIMITS                  | PL + 58.1 |
| PROPERTY LINE                     | PL + 58.1 |
| LOT LINE                          | ---       |
| LIMITED HIGHWAY EASEMENT          | ---       |
| EXISTING RIGHT OF WAY             | ---       |
| PROPOSED OR NEW R/W LINE          | ---       |
| SLOPE INTERCEPT                   | ---       |
| REFERENCE LINE                    | ---       |
| EXISTING CULVERT                  | ---       |
| PROPOSED CULVERT<br>(Box or Pipe) | ---       |
| COMBUSTIBLE FLUIDS                | CAUTION   |
| HIGH VOLTAGE                      | CAUTION   |
| MARSH AREA                        | ---       |
| WOODED OR SHRUB AREA              | ---       |

| PROFILE  |
|--|
| GRADE LINE                                     |
| ORIGINAL GROUND                                |
| MARSH OR ROCK PROFILE<br>(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                                 |

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
PLAN OF PROPOSED IMPROVEMENT  
EAU CLAIRE - CHIPPEWA FALLS  
BRPNT/40TH AV B-9-46/50TH AV B-9-47  
USH 53  
CHIPPEWA COUNTY

STATE PROJECT NUMBER  
1190-02-63



LAYOUT  
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.290 MI.

T-29-N  
T-28-N

PROJECT 1190-02-63  
STRUCTURE B-9-46  
(40TH AVENUE OVER USH 53)  
€ NB USH 53 STA 83+65.39  
X = 162930.32  
Y = 119676.22

T-28-N  
T-27-N

| STATE PROJECT | FEDERAL PROJECT |          |
|---------------|-----------------|----------|
|               | PROJECT         | CONTRACT |
| 1190-02-63    | ---             | ---      |
|               |                 |          |
|               |                 |          |
|               |                 |          |

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

CHISTOPHER D. MCMAHON  
E-29454  
EAU CLAIRE, WI  
PROFESSIONAL ENGINEER  
DATE 10/26/15

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
Surveyor: ----  
Designer: AYRES ASSOCIATES INC  
Project Manager: NICOLE PASSUELLO  
Regional Examiner: CHRISTINE KOSKI  
Regional Supervisor: MARK PLOEDERER

APPROVED FOR THE DEPARTMENT  
DATE: 10/28/15 Nicole Passuello  
(Signature)

E

GENERAL NOTES

WORK CONSISTS OF TRAFFIC CONTROL, CONTAINMENT ENCLOSURE ERECTION, ABRASIVE BLASTING SURFACE PREPARATION, AND APPLICATION OF NEW COATING SYSTEM FOR ALL STRUCTURAL STEEL OF PROJECT BRIDGE.

ENCLOSURE AND MATERIALS SHALL BE MAINTAINED TAUT AND IN SUCH A MANNER THAT IT WILL NOT OBSTRUCT/DISTRACT THE VIEW OF OR SNAG ON ANY PASSING VEHICLES.

USH 53 WILL BE KEPT OPEN TO A MINIMUM OF ONE LANE OF TRAFFIC AT ALL TIMES.

SIGNS AND DEVICES WILL BE IN CONFORMANCE WITH THE LATEST WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

DIGGERS

HOTLINE



Dial  or (800)242-8511

www.DiggersHotline.com

AREA CONTACTS

STATE OF WISCONSIN

DNR CONTACT: CHRIS WILLGER  
DNR/DOT LIASON  
OFC. OF EDGR. & ENV. REVIEW  
PHONE: (715) 839-1609

WISDOT STRUCT. MAINT. ENGINEER  
GREGORY HAIG  
CELL: (715) 577-0646

WISDOT BRPAINT & HAZMAT COORD.  
WILLIAM KOVALESKI, JR  
PHONE: (715) 225-9431

WISDOT ENVIRONMENTAL COORD.  
NICK SCHAFF  
PHONE: (715) 836-2068

CHIPPEWA COUNTY

COUNTY SHERIFF  
SHERIFF: JAMES L. KOWALCZYK  
32 E SPRUCE ST.  
CHIPPEWA FALLS, WI 54729  
NON-EMERG: (715) 726-7701  
EMERGENCY: 911

EMERGENCY MANAGEMENT  
DIRECTOR: DENNIS BROWN  
32 E SPRUCE ST.  
CHIPPEWA FALLS, WI 54729  
PHONE: (715) 726-7728

HIGHWAY COMMISSIONER  
COMMISSIONER: BRUCE STELZNER  
801 EAST GRAND AVENUE  
CHIPPEWA FALLS, WI 54729  
OFFICE: (715) 726-7914  
SHOP: (715) 726-7915

TOWN OF LAKE HALLIE

POLICE DEPARTMENT  
CHIEF: CAL D. SMOKOWICZ  
13138 30TH AVENUE  
CHIPPEWA FALLS, WI 54729  
NON-EMERG: (715) 726-2665  
EMERGENCY: 911

CHIPPEWA FIRE DISTRICT  
CHIEF: SCOTT BERNETTE  
13140 30TH AVENUE  
CHIPPEWA FALLS, WI 54729  
NON-EMERG: (715) 723-9020  
EMERGENCY: 911

STREET DEPARTMENT  
MANAGER: CRAIG BOWE  
PHONE: (715) 726-2660 EXT. 4

UTILITIES

COMMUNICATIONS

CHARTER COMMUNICATIONS  
1201 McCANN DRIVE  
ALTOONA, WI 54720  
ATTN: SHANE YODER  
715-831-8940 ext. 619  
715-370-7870 (cell)  
shane.yoder@charter.com

WATER

VILLAGE OF LAKE HALLIE  
13033 30th AVENUE  
CHIPPEWA FALLS, WI 54729  
ATTN: DARREN ADDY, WATER SUPT.  
715-726-2660 ext. 1  
dsaddy@lakehallie.us

GAS/PETROLEUM

VIKING GAS TRANSMISSION CO  
13506 CTH 00  
CHIPPEWA FALLS, WI 54729  
ATTN: ANTHONY RICCI  
715-726-2282  
715-559-8011 (cell)  
anthony.ricci@oneok.com

\* XCEL ENERGY  
24-HOUR EMERGENCY (GAS)  
800-895-2999  
1414 W. HAMILTON AVE.  
P.O. BOX 0008  
EAU CLAIRE, WI 54702-0008  
ATTN: SCOTT J. SEAHOLM  
715-737-2584  
715-577-3381 (cell)  
Scott.j.seaholm@xcelenergy.com

ELECTRICITY

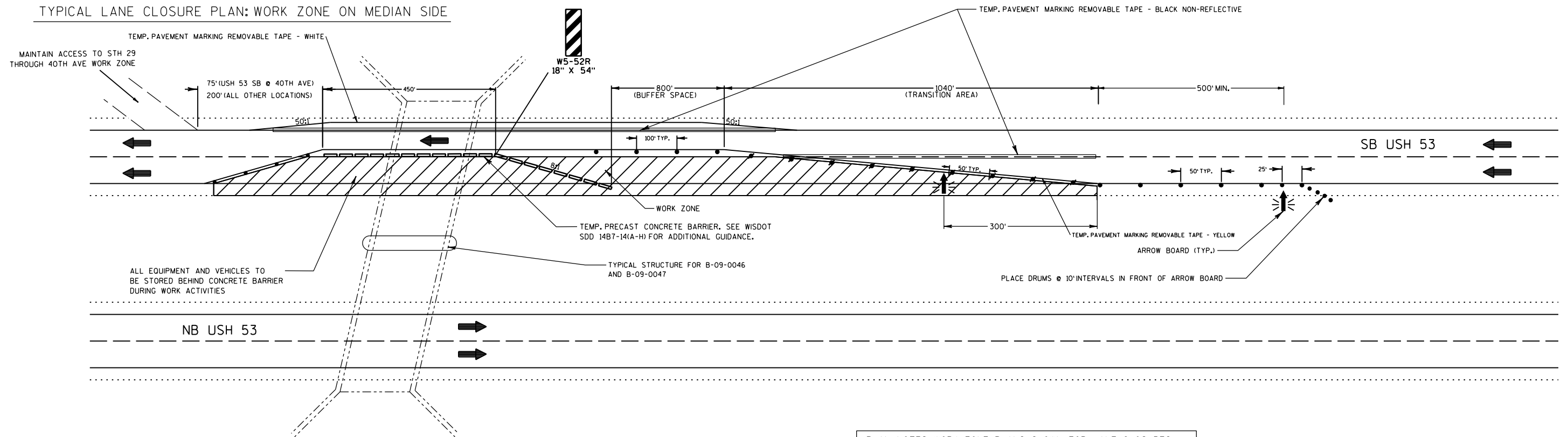
\* XCEL ENERGY  
1400 WESTERN AVE.  
EAU CLAIRE, WI 54703  
ATTN: JOE J. COOK  
715-737-1072  
612-207-0547 (cell)  
Joe.J.Cook@xcelenergy.com

ELECTRICITY - TRANSMISSION

\* XCEL ENERGY  
3505 MELBY ROAD  
EAU CLAIRE, WI 54702  
ATTN: CHARLES DIENGER  
715-737-1576  
651-955-1089 (cell)  
Charles.G.Dienger@xcelenergy.com

\* COPY ALL CORRESPONDENCE TO  
DAWN SCHULTZ  
XCEL ENERGY  
1414 W. HAMILTON AVE.  
P.O. BOX 0008  
EAU CLAIRE, WI 54702-0008  
715-737-2482  
dawn.schultz@xcelenergy.com

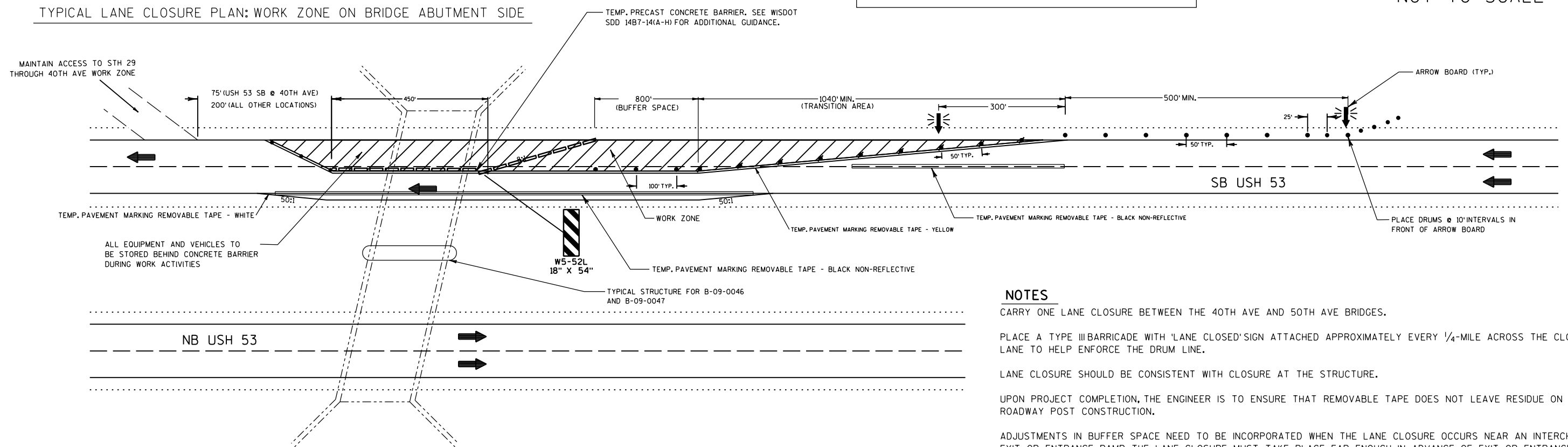
## TYPICAL LANE CLOSURE PLAN: WORK ZONE ON MEDIAN SIDE



PLAN NOTES: WORK ZONE PLANS SHOWN FOR LANE CLOSURES OF ONE TRAFFIC DIRECTION ONLY. REVERSE AND FLIP DETAILS FOR OPPOSITE DIRECTIONS OF TRAVEL. SEE WISDOT SDD 15D3-2 FOR ADDITIONAL GUIDANCE.

NOT TO SCALE

## TYPICAL LANE CLOSURE PLAN: WORK ZONE ON BRIDGE ABUTMENT SIDE



## NOTES

CARRY ONE LANE CLOSURE BETWEEN THE 40TH AVE AND 50TH AVE BRIDGES.

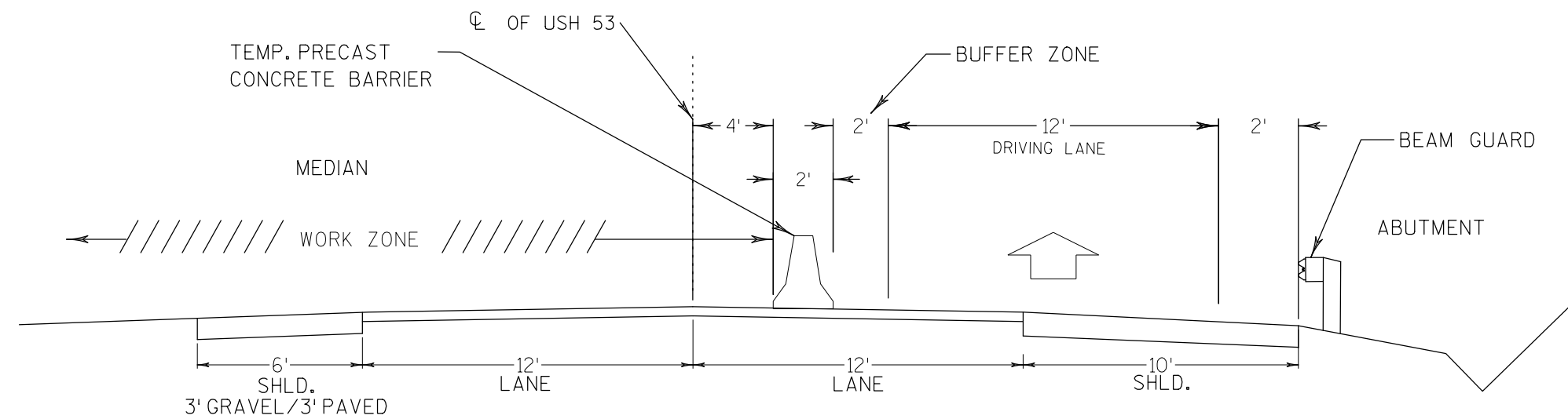
PLACE A TYPE III BARRICADE WITH 'LANE CLOSED' SIGN ATTACHED APPROXIMATELY EVERY 1/4-MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

LANE CLOSURE SHOULD BE CONSISTENT WITH CLOSURE AT THE STRUCTURE.

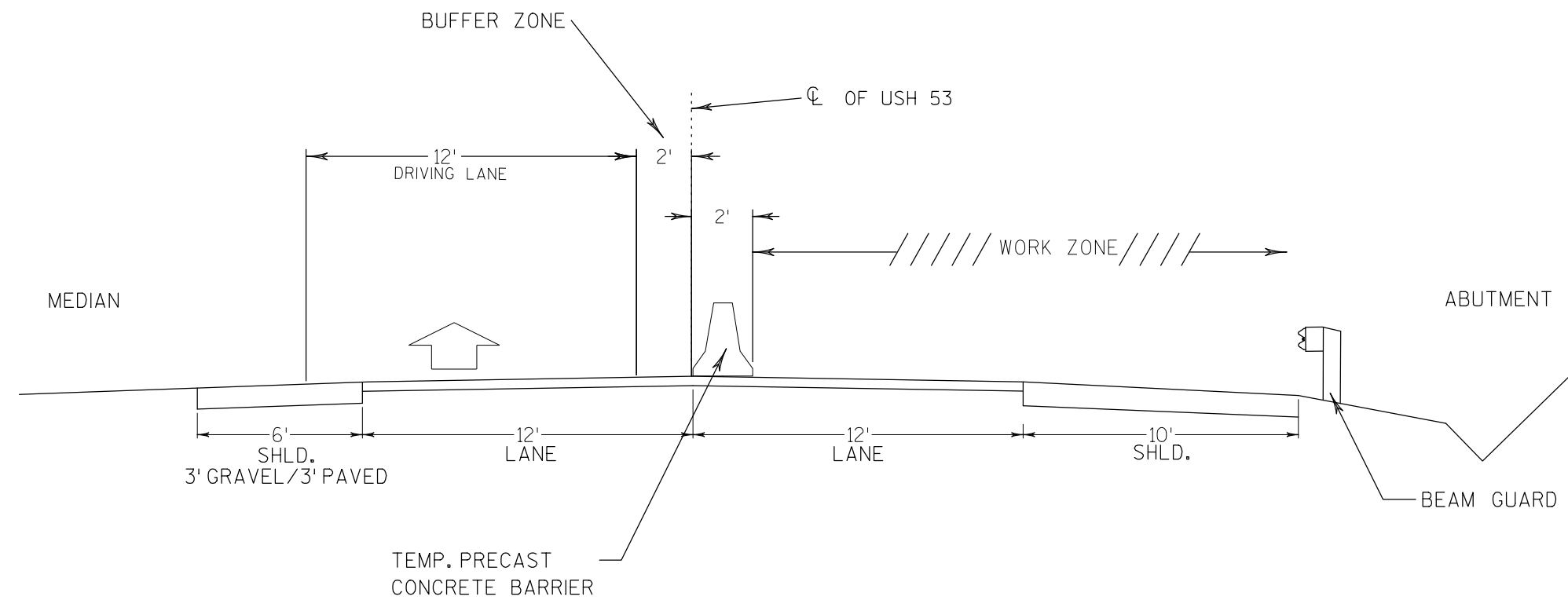
UPON PROJECT COMPLETION, THE ENGINEER IS TO ENSURE THAT REMOVABLE TAPE DOES NOT LEAVE RESIDUE ON THE ROADWAY POST CONSTRUCTION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF EXIT OR ENTRANCE RAMP TO ALLOW FOR ADEQUATE BUFFER SPACE.

MAINTAIN ACCESS TO STH 29 FROM 40TH AVE BRIDGE WORK ZONE AREA.



TYPICAL SECTION: WORK ZONE ON MEDIAN SIDE



TYPICAL SECTION: WORK ZONE ON BRIDGE ABUTMENT SIDE



|              |            |  |      |            |            |
|--------------|------------|--|------|------------|------------|
| DATE 05JAN16 |            | E S T I M A T E O F Q U A N T I T I E S  |      |            |            |
| LINE         |            |  |      |            | 1190-02-63 |
| NUMBER       | ITEM       | ITEM DESCRIPTION   | UNIT | TOTAL      | QUANTITY   |
| 0010         | 213.0100   | Finishing Roadway (project) 01. 1190-02-63   | EACH | 1.000      | 1.000      |
| 0020         | 517.1800.S | Structure Repainting Recycled Abrasive (structure) 01. B-9-46                          | LS   | 1.000      | 1.000      |
| 0030         | 517.1800.S | Structure Repainting Recycled Abrasive (structure) 02. B-9-47                          | LS   | 1.000      | 1.000      |
| 0040         | 517.4500.S | Negative Pressure Containment and Collection of Waste Materials (structure) 01. B-9-46 | LS   | 1.000      | 1.000      |
| 0050         | 517.4500.S | Negative Pressure Containment and Collection of Waste Materials (structure) 02. B-9-47 | LS   | 1.000      | 1.000      |
| 0060         | 517.6001.S | Portable Decontamination Facility  | EACH | 2.000      | 2.000      |
| 0070         | 603.8000   | Concrete Barrier Temporary Precast Delivered   | LF   | 2,400.000  | 2,400.000  |
| 0080         | 603.8125   | Concrete Barrier Temporary Precast Installed   | LF   | 4,800.000  | 4,800.000  |
| 0090         | 619.1000   | Mobilization   | EACH | 1.000      | 1.000      |
| 0100         | 642.5001   | Field Office Type B  | EACH | 1.000      | 1.000      |
| 0110         | 643.0100   | Traffic Control (project) 01. 1190-02-63   | EACH | 1.000      | 1.000      |
| 0120         | 643.0300   | Traffic Control Drums  | DAY  | 8,320.000  | 8,320.000  |
| 0130         | 643.0420   | Traffic Control Barricades Type III  | DAY  | 320.000    | 320.000    |
| 0140         | 643.0715   | Traffic Control Warning Lights Type C  | DAY  | 3,360.000  | 3,360.000  |
| 0150         | 643.0800   | Traffic Control Arrow Boards   | DAY  | 320.000    | 320.000    |
| 0160         | 643.0900   | Traffic Control Signs  | DAY  | 1,360.000  | 1,360.000  |
| 0170         | 643.0910   | Traffic Control Covering Signs Type I  | EACH | 2.000      | 2.000      |
| 0180         | 643.1050   | Traffic Control Signs PCMS   | DAY  | 80.000     | 80.000     |
| 0190         | 649.0400   | Temporary Pavement Marking Removable Tape 4-Inch                                       | LF   | 49,120.000 | 49,120.000 |
| 0200         | SPV.0045   | Special 01. Portable Changeable Message Sign (PCMS) Cellular Communications            | DAY  | 80.000     | 80.000     |

| FINISHING ROADWAY     |    |
|-----------------------|----|
| 213.0100<br>(PROJECT) |    |
| PROJECT NO.           | EA |
| 1190-02-63            | 1  |

| CONCRETE BARRIER TEMPORARY PRECAST |            |       |                               |           |           |                                    |
|------------------------------------|------------|-------|-------------------------------|-----------|-----------|------------------------------------|
| PROJECT ID                         | BRIDGE NO. | STAGE | LOCATION                      | 603.8000  | 603.8125  | COMMENT                            |
|                                    |            |       |                               | DELIVERED | INSTALLED |                                    |
|                                    |            |       |                               | LF        | LF        |                                    |
| 1190-02-63                         | B-6-46     | 1     | OUTSIDE NB & SB LANES CLOSED  | 1200      | 1200      | ANCHOR CONCRETE BARRIER PER DETAIL |
|                                    |            | 2     | INSIDE NB AND SB LANES CLOSED | ---       | 1200      | ANCHOR CONCRETE BARRIER PER DETAIL |
| 1190-02-63                         | B-6-47     | 1     | OUTSIDE NB & SB LANES CLOSED  | 1200      | 1200      | ANCHOR CONCRETE BARRIER PER DETAIL |
|                                    |            | 2     | INSIDE NB AND SB LANES CLOSED | ---       | 1200      | ANCHOR CONCRETE BARRIER PER DETAIL |
| TOTAL                              |            |       |                               | 2400      | 4800      |                                    |

| FIELD OFFICE                         |    |
|--------------------------------------|----|
| 642.5001<br>FIELD OFFICE<br>(TYPE B) |    |
| PROJECT NO.                          | EA |
| 1190-02-63                           | 1  |

| TRAFFIC CONTROL                          |    |
|--|----|
| 643.0100<br>TRAFFIC CONTROL<br>(PROJECT) |    |
| PROJECT NO.                              | EA |
| 1190-02-63                               | 1  |

| TRAFFIC CONTROL ITEMS |            |       |                               |                 |          |      |            |      |                |      |          |      |                     |      |               |      |  |
|-----------------------|------------|-------|-------------------------------|-----------------|----------|------|------------|------|----------------|------|----------|------|---------------------|------|---------------|------|--|
| PROJECT ID            | BRIDGE NO. | STAGE | LOCATION                      | DURATION (DAYS) | 643.0300 |      | 643.0420   |      | 643.0715       |      | 643.0800 |      | 643.1050            |      | SPV.0045.01   |      |  |
|                       |            |       |                               |                 | DRUMS    |      | BARRICADES |      | WARNING LIGHTS |      | ARROW    |      | PORTABLE CHANGEABLE |      | PCMS CELLULAR |      |  |
|                       |            |       |                               |                 | NO.      | DAYS | NO.        | DAYS | NO.            | DAYS | NO.      | DAYS | NO.                 | DAYS | NO.           | DAYS |  |
| 1190-02-63            | B-6-46     | 1     | OUTSIDE NB & SB LANES CLOSED  | 20              | 104      | 2080 | --         | --   | 42             | 840  | 4        | 80   | 1                   | 20   | 1             | 20   |  |
|                       |            | 2     | INSIDE NB AND SB LANES CLOSED | 20              | 104      | 2080 | --         | --   | 42             | 840  | 4        | 80   | 1                   | 20   | 1             | 20   |  |
|                       |            | 1 & 2 | BTWN BRIDGES                  | 40              | --       | --   | 8          | 320  | --             | --   | --       | --   | --                  | --   | --            | --   |  |
| 1190-02-63            | B-6-47     | 1     | OUTSIDE NB & SB LANES CLOSED  | 20              | 104      | 2080 | --         | --   | 42             | 840  | 4        | 80   | 1                   | 20   | 1             | 20   |  |
|                       |            | 2     | INSIDE NB AND SB LANES CLOSED | 20              | 104      | 2080 | --         | --   | 42             | 840  | 4        | 80   | 1                   | 20   | 1             | 20   |  |
| TOTAL                 |            |       |                               |                 |          | 8320 |            | 320  |                | 3360 |          | 320  |                     | 80   |               | 80   |  |

| TRAFFIC CONTROL SIGNS |            |       |                               |                 |          |      |
|-----------------------|------------|-------|-------------------------------|-----------------|----------|------|
|                       |            |       |                               |                 | 643.0900 |      |
| PROJECT ID            | BRIDGE NO. | STAGE | LOCATION                      | DURATION (DAYS) | NO.      | DAYS |
| 1190-02-63            | B-6-46     | 1     | OUTSIDE NB & SB LANES CLOSED  | 20              | 13       | 260  |
|                       |            | 2     | INSIDE NB AND SB LANES CLOSED | 20              | 13       | 260  |
|                       |            | 1 & 2 | BTWN BRIDGES                  | 40              | 8        | 320  |
| 1190-02-63            | B-6-47     | 1     | OUTSIDE NB & SB LANES CLOSED  | 20              | 13       | 260  |
|                       |            | 2     | INSIDE NB AND SB LANES CLOSED | 20              | 13       | 260  |
| TOTAL                 |            |       |                               |                 |          | 1360 |

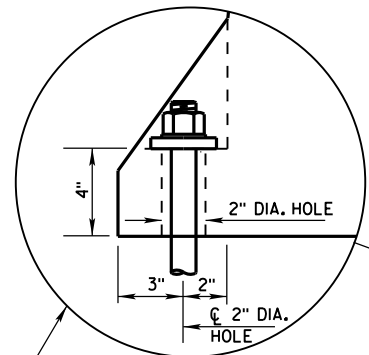
| TRAFFIC CONTROL COVERING SIGNS TYPE I |      |
|---------------------------------------|------|
| 643.0910                              |      |
| PROJECT ID                            | EACH |
| 1190-02-63                            | 2    |
| TOTAL                                 | 2    |

| TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH |            |       |                               |          |        |       |
|--|------------|-------|-------------------------------|----------|--------|-------|
|  |            |       |                               | 649.0400 |        |       |
| PROJECT ID                                       | BRIDGE NO. | STAGE | LOCATION                      | BLACK    | YELLOW | WHITE |
|  |            |       |                               | LF       | LF     | LF    |
| 1190-02-63                                       | B-6-46     | 1     | OUTSIDE NB & SB LANES CLOSED  | 4000     | 5080   | 3200  |
|  |            | 2     | INSIDE NB AND SB LANES CLOSED | 4000     | 5080   | 3200  |
| 1190-02-63                                       | B-6-47     | 1     | OUTSIDE NB & SB LANES CLOSED  | 4000     | 5080   | 3200  |
|  |            | 2     | INSIDE NB AND SB LANES CLOSED | 4000     | 5080   | 3200  |
| SUBTOTAL   |            |       |                               | 16000    | 20320  | 12800 |
| TOTAL  |            |       |                               | 49120    |        |       |

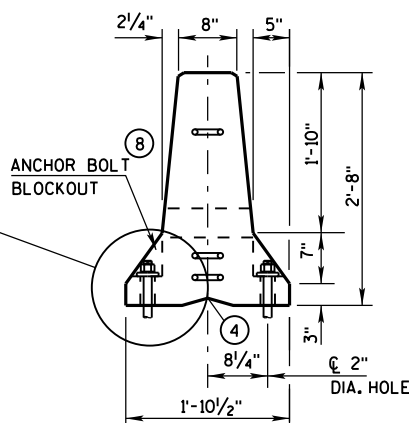
Standard Detail Drawing List

|           |   |
|-----------|---|
| 14B07-14A | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14B | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14C | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14D | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14E | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14F | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14G | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 14B07-14H | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"                               |
| 15C08-16A | PAVEMENT MARKING (MAINLINE)   |
| 15D03-02  | TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER |

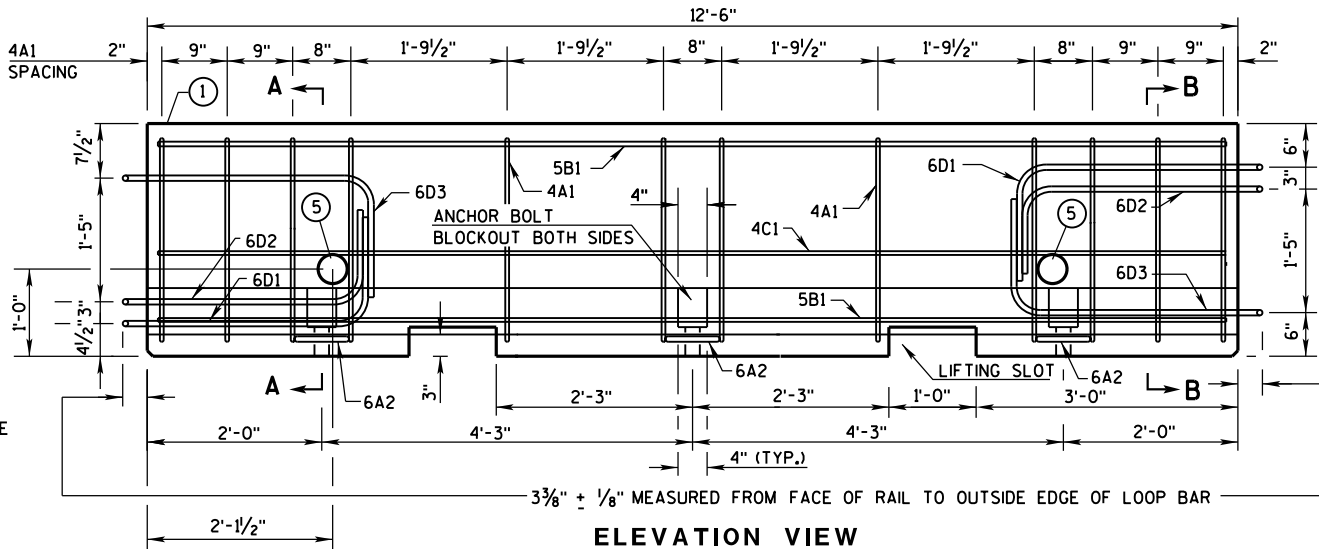




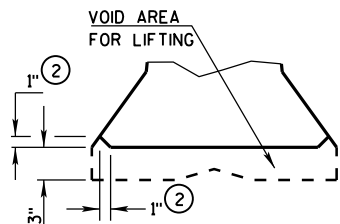
ANCHOR ON TRAFFIC SIDE  
ONLY WHEN REQUIRED  
(SEE SHEET D FOR ADDITIONAL  
ANCHOR DETAIL)



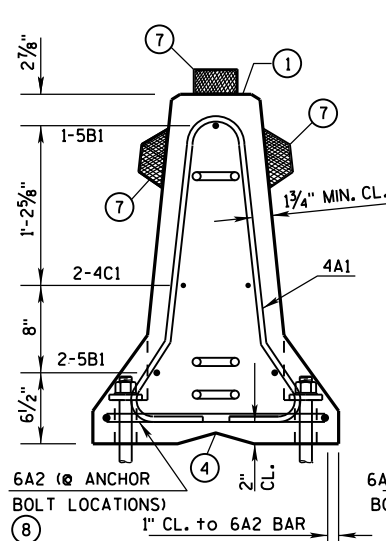
END VIEW



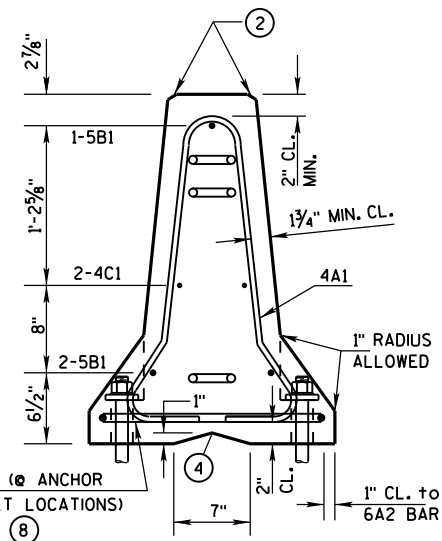
ELEVATION VIEW



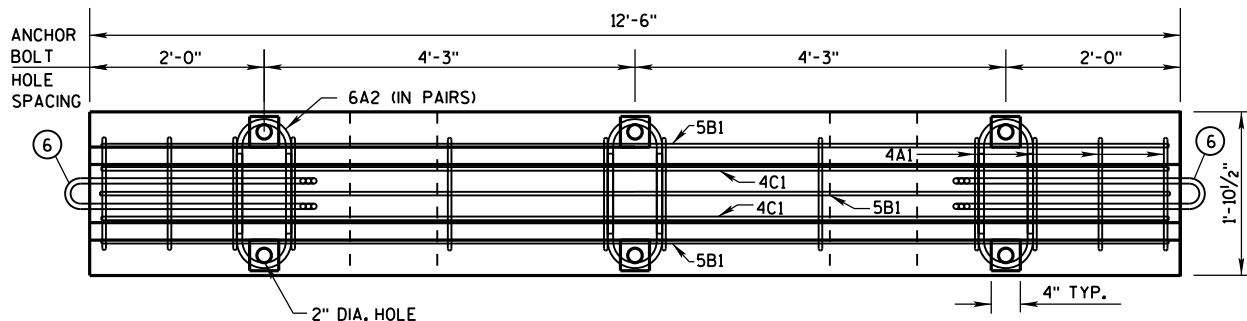
DETAIL "B"  
LIFTING SLOT DETAIL



SECTION A-A  
(STIRRUP PLACEMENT)

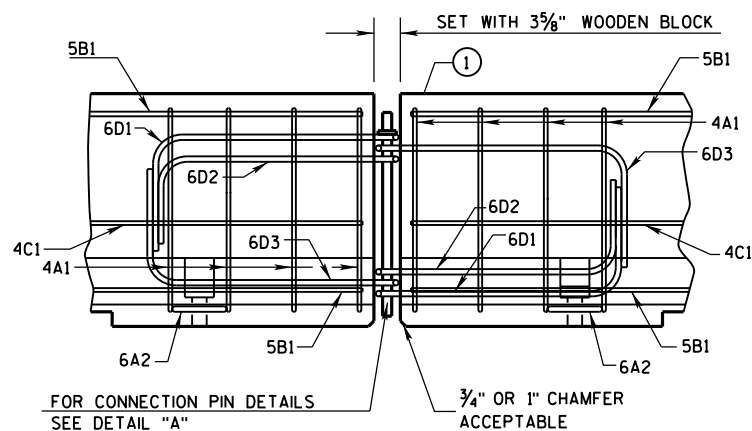


SECTION B-B  
(STIRRUP PLACEMENT)

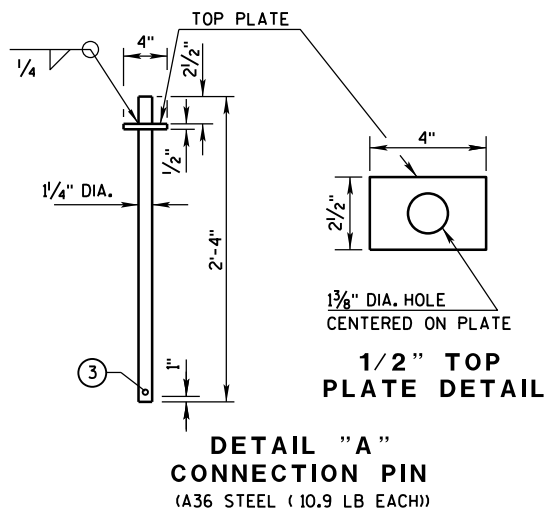


PLAN VIEW

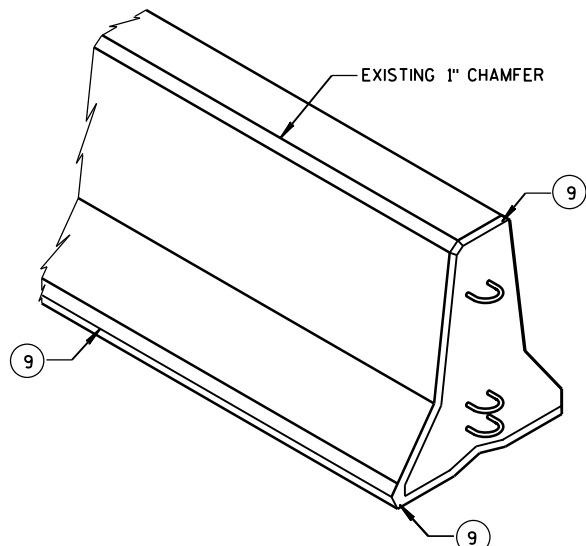
## DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"  
CONNECTION PIN  
(A36 STEEL (10.9 LB EACH))



## GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(g) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE 3/4" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-1/2" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN 1/8" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

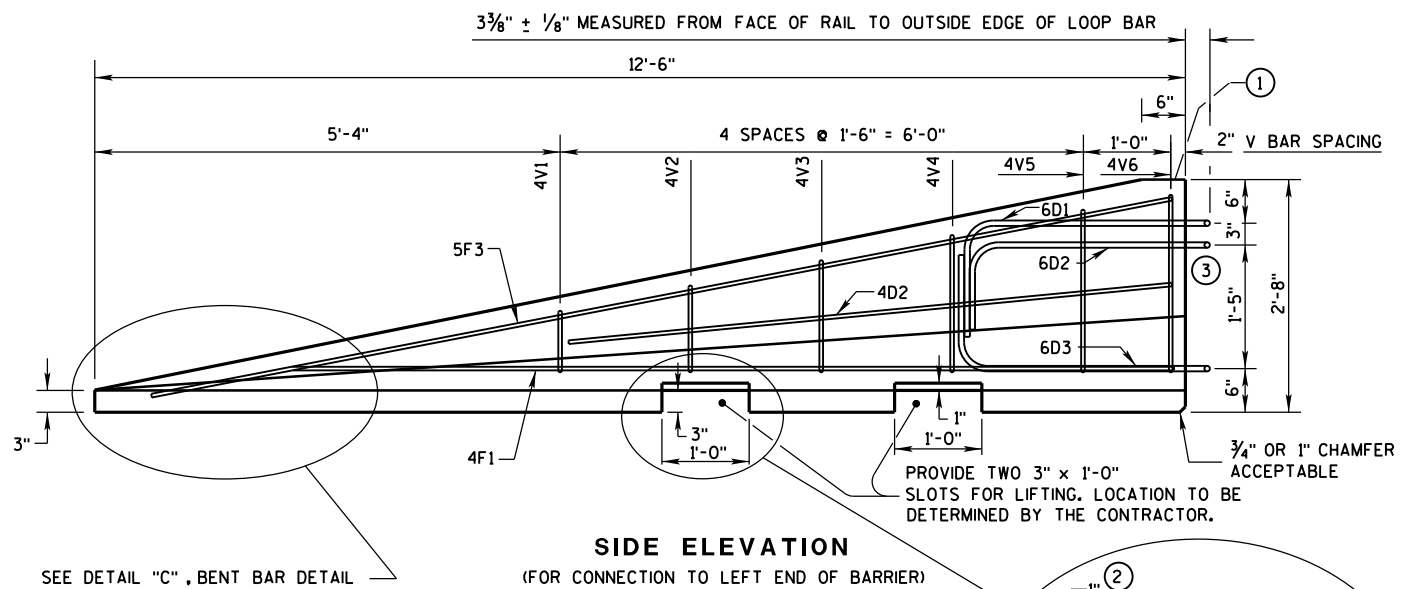
PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
  - TYPE: WICBTP
  - MANUFACTURER
  - DATE MANUFACTURED (MONTH AND YEAR)
- 1" CHAMFER TO PREVENT SPALLING.
- A 3/8" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- "V" NOTCH IS OPTIONAL.
- THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURER'S INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- SEE SHEET D FOR ANCHORING CRITERIA.
- 1" CHAMFER OPTIONAL.

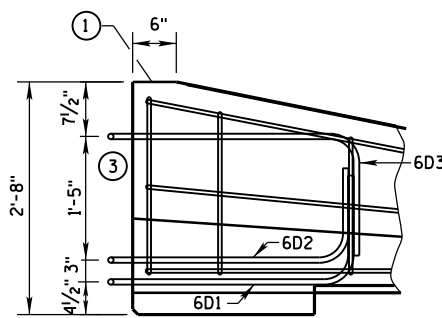
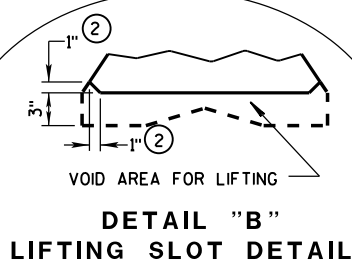
CONCRETE BARRIER  
TEMPORARY PRCAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)



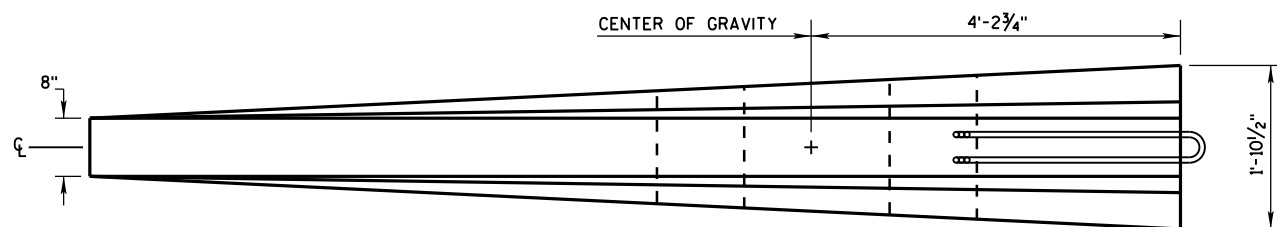
SIDE ELEVATION

LOOP BAR ASSEMBLY INVERTED  
FOR OPPOSITE END.

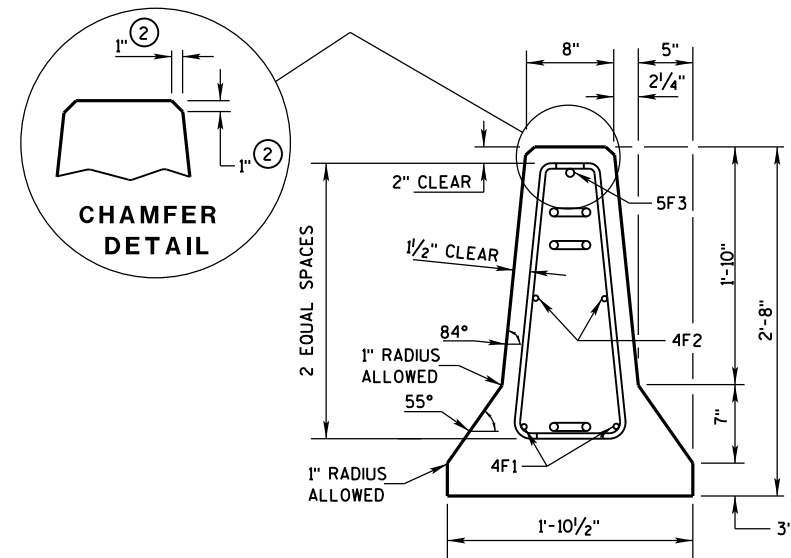
(FOR CONNECTION TO RIGHT END OF BARRIER)

## GENERAL NOTES

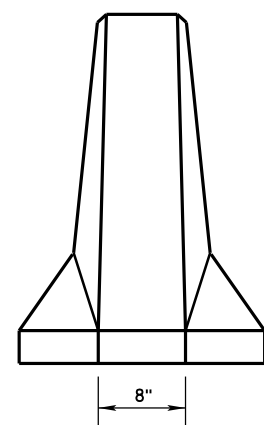
- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
  - a. TYPE WICBTP
  - b. MANUFACTURER
  - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



PLAN VIEW

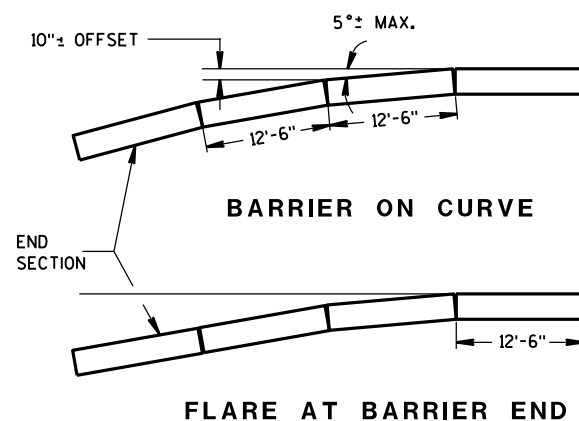


END SECTION



FRONT ELEVATION

## DETAILS OF BARRIER TAPER SECTION



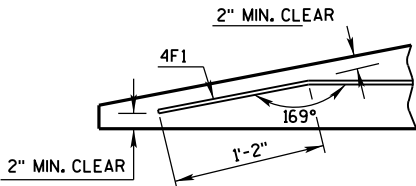
| POSTED<br>SPEED, (MPH) | FLARE<br>RATE |
|------------------------|---------------|
| 40 OR LESS             | 6:1           |
| 45 OR GREATER          | 8:1           |

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

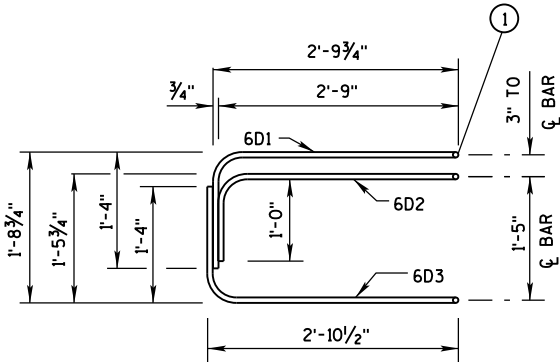
BARRIER TAPER SECTION  
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

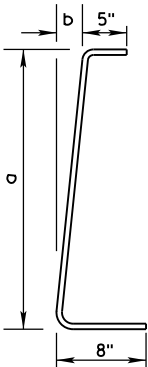
| BAR           | BAR SIZE | NO. OF BARS | LENGTH FT. |
|---------------|----------|-------------|------------|
| 4V1           | 4        | 2           | 1'-11"     |
| 4V2           | 4        | 2           | 2'-2"      |
| 4V3           | 4        | 2           | 2'-6"      |
| 4V4           | 4        | 2           | 2'-9"      |
| 4V5           | 4        | 2           | 3'-2"      |
| 4V6           | 4        | 2           | 3'-4"      |
| 4F1           | 4        | 2           | 12'-0"     |
| 4F2           | 4        | 2           | 7'-6"      |
| 5F3           | 5        | 1           | 11'-9"     |
| LOOP ASSEMBLY |          |             |            |
| 6D1           | 6        | 1           | 8'-5"      |
| 6D2           | 6        | 1           | 7'-7"      |
| 6D3           | 6        | 1           | 8'-6"      |



DETAIL "C"  
BENT BAR DETAIL



ELEVATION  
LOOP BAR ASSEMBLY



4V BARS  
2 AT EACH SIZE REQUIRED  
FOR STIRRUP ASSEMBLY

| BAR | a         | b      |
|-----|-----------|--------|
| V1  | 10"       | 1"     |
| V2  | 1'-1"     | 1 1/4" |
| V3  | 1'-5"     | 1 5/8" |
| V4  | 1'-8"     | 1 7/8" |
| V5  | 2'-0 1/2" | 2 3/8" |
| V6  | 2'-3"     | 2 3/4" |

TAPER BARRIER SECTION

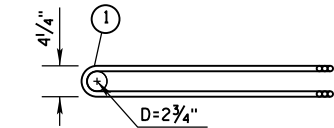
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION  
BILL OF MATERIALS

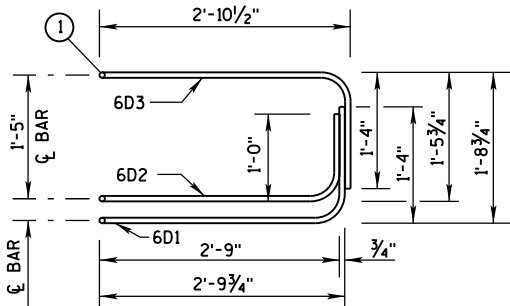
(PER 12'-6" BARRIER SECTION)

| BAR           | BAR SIZE | NO. OF BARS | LENGTH FT. |
|---------------|----------|-------------|------------|
| 4A1           | 4        | 12          | 6'-0"      |
| 6A2           | 6        | 6           | 2'-11"     |
| 5B1           | 5        | 3           | 12'-2"     |
| 4C1           | 4        | 2           | 12'-2"     |
| LOOP ASSEMBLY |          |             |            |
| 6D1           | 6        | 2           | 8'-5"      |
| 6D2           | 6        | 2           | 7'-7"      |
| 6D3           | 6        | 2           | 8'-6"      |

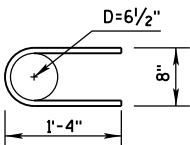


PLAN VIEW  
LOOP BAR ASSEMBLY

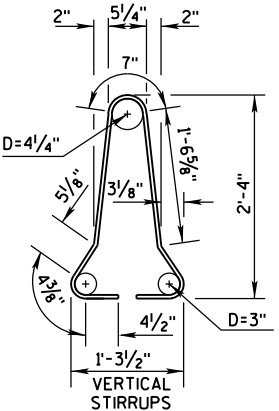
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

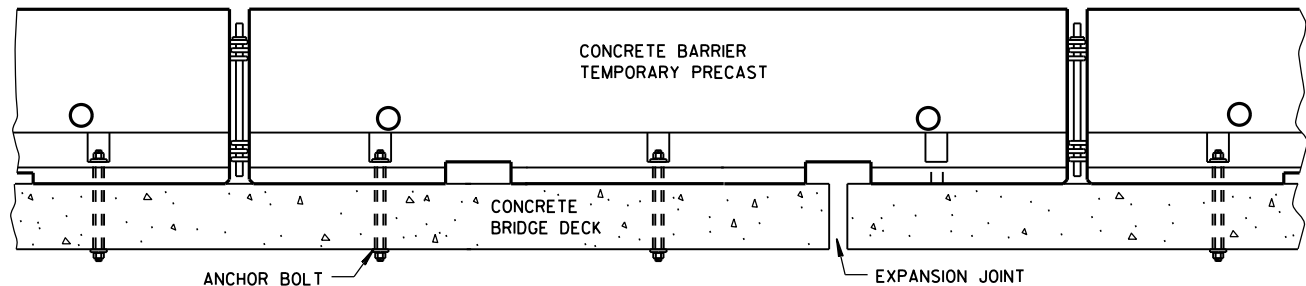
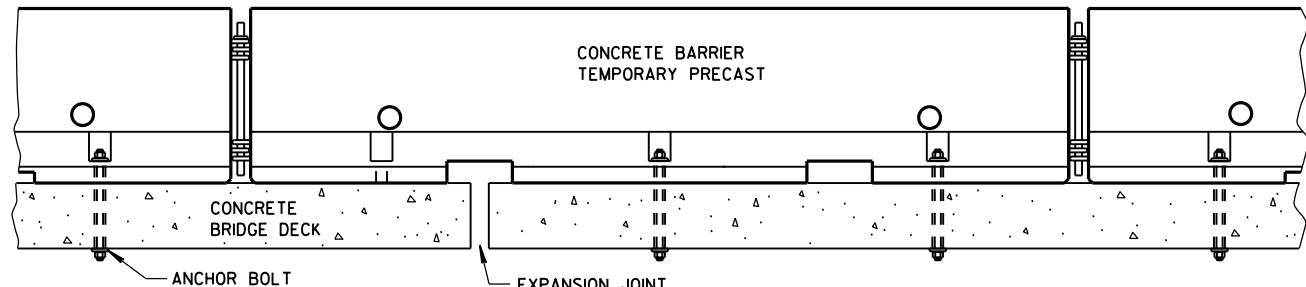


4A1

BARRIER SECTION

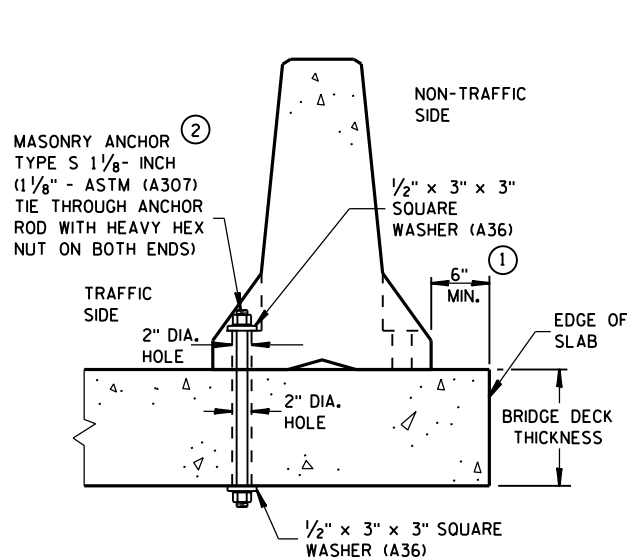
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



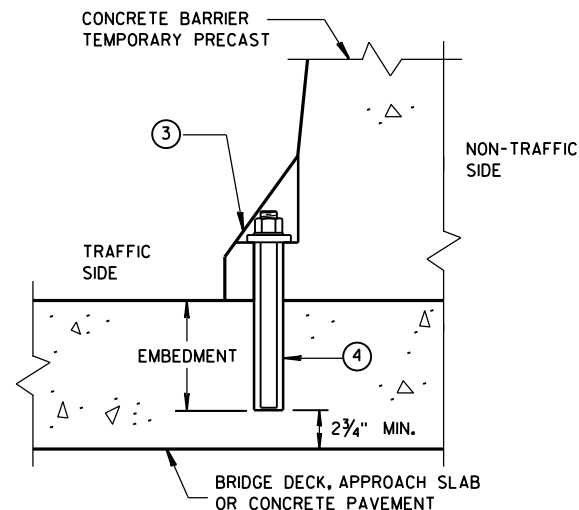
### TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



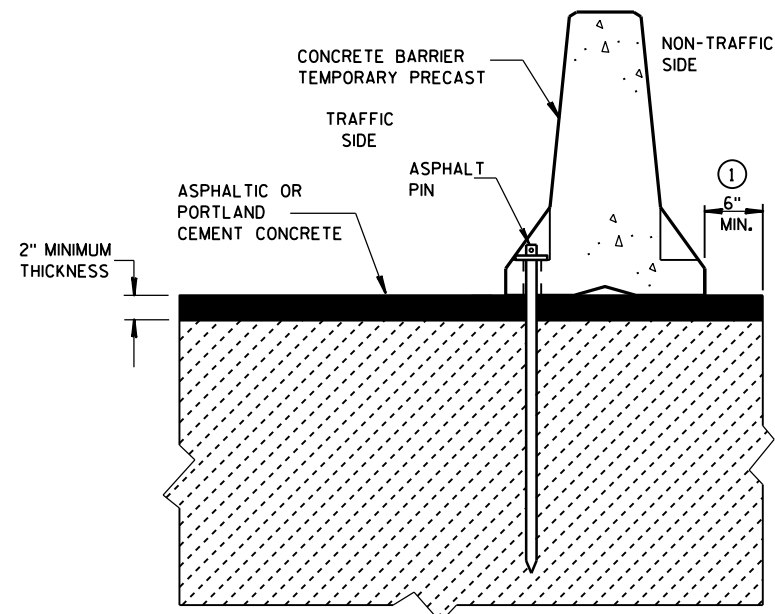
### THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



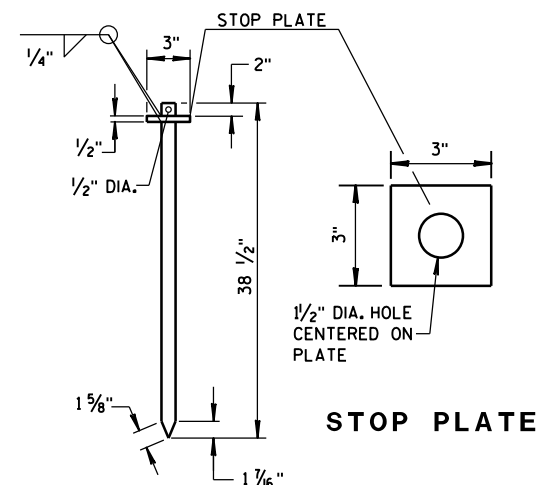
### REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

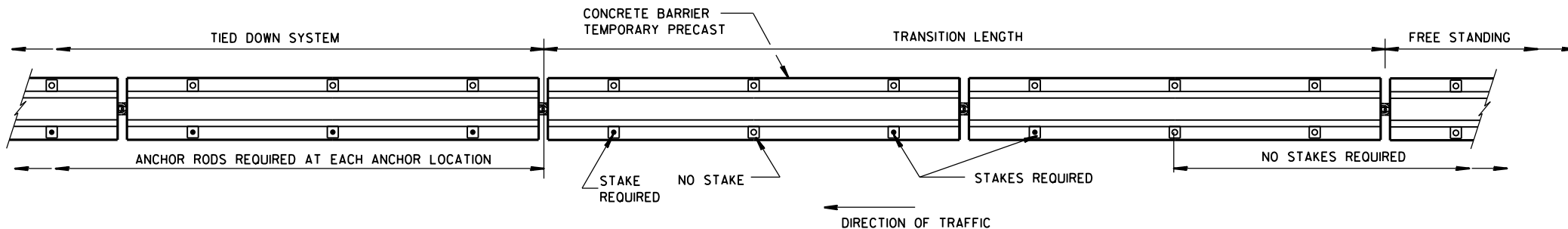


### STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



ASPHALT PIN  
(ASTM A36 STEEL)



PLAN VIEW

### FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

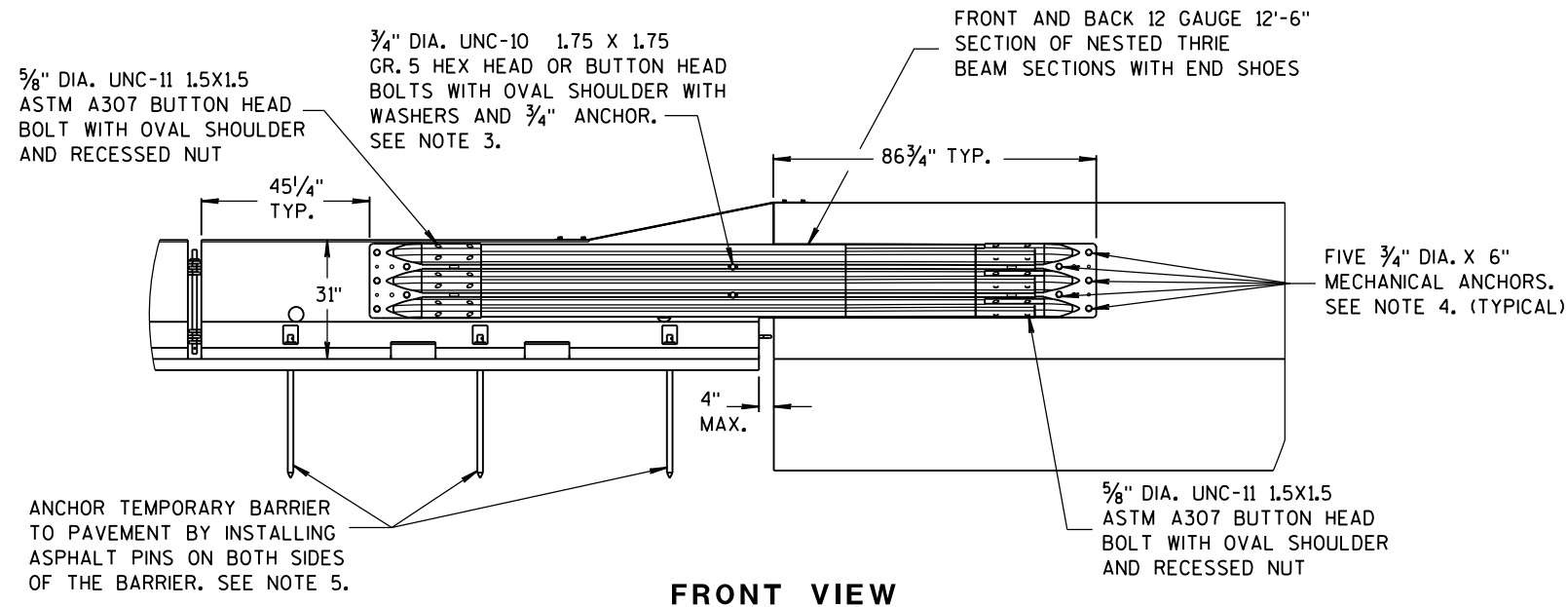
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

### GENERAL NOTES

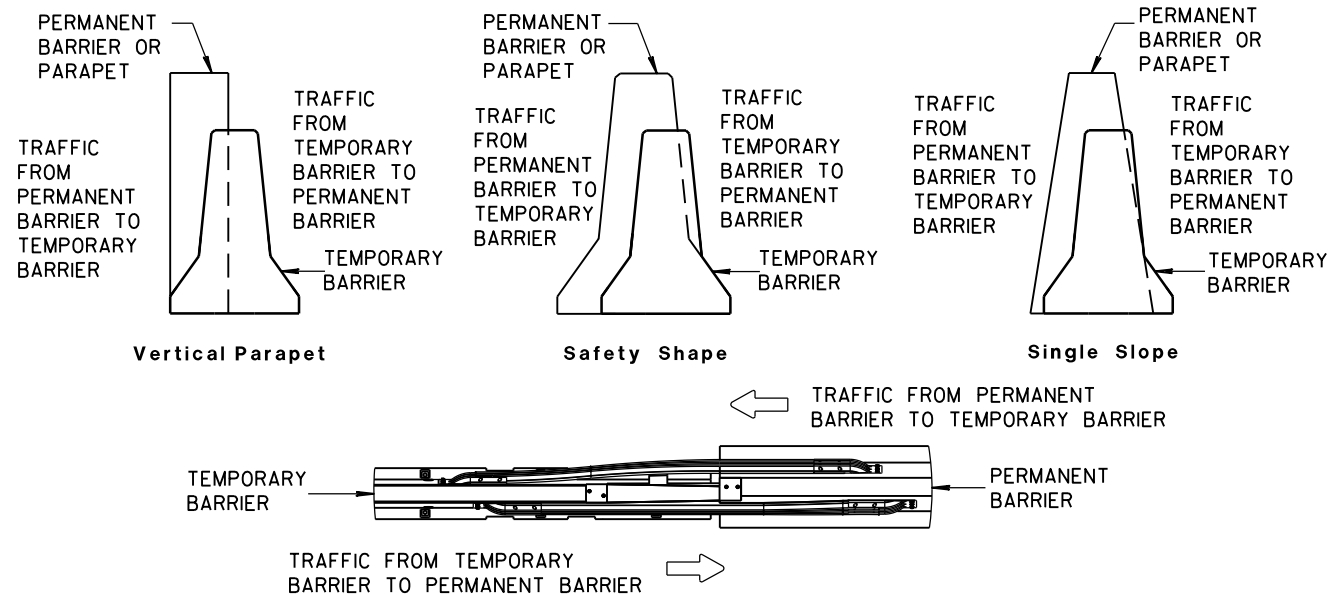
- ① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:  
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,  
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,  
IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF  
AND THE POSTED SPEED IS 45 MPH OR GREATER, OR  
  
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,  
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,  
IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF  
AND THE POSTED SPEED IS 40 MPH OR LESS.
- ② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.  
  
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT  
INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE  
BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE  
S 1 1/8"-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE  
ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.  
  
UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY  
FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CON-  
CRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR MATERIAL  
IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.
- ③ 1/8" DIAMETER A307 THREADED ROD, 1/2" x 3" x 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL,  
ASTM A563A HEAVY HEX NUT.
- ④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2  
AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



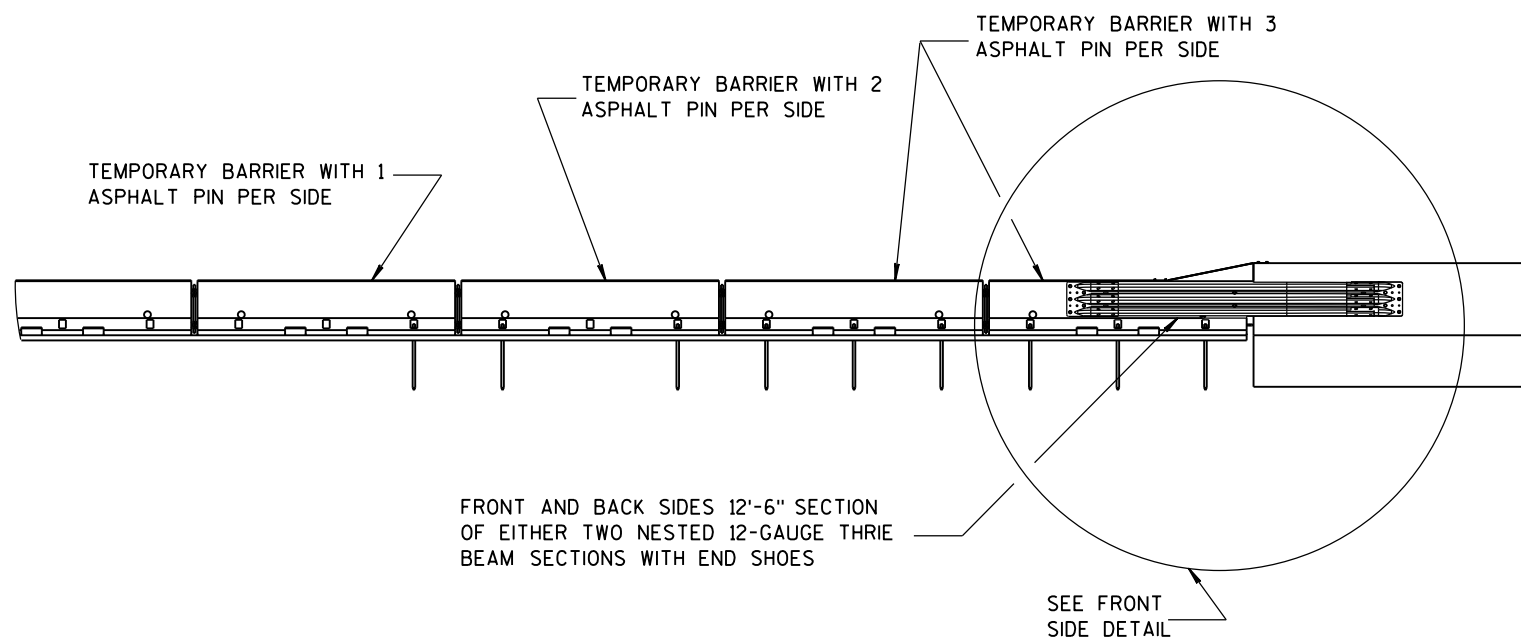
FRONT VIEW



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

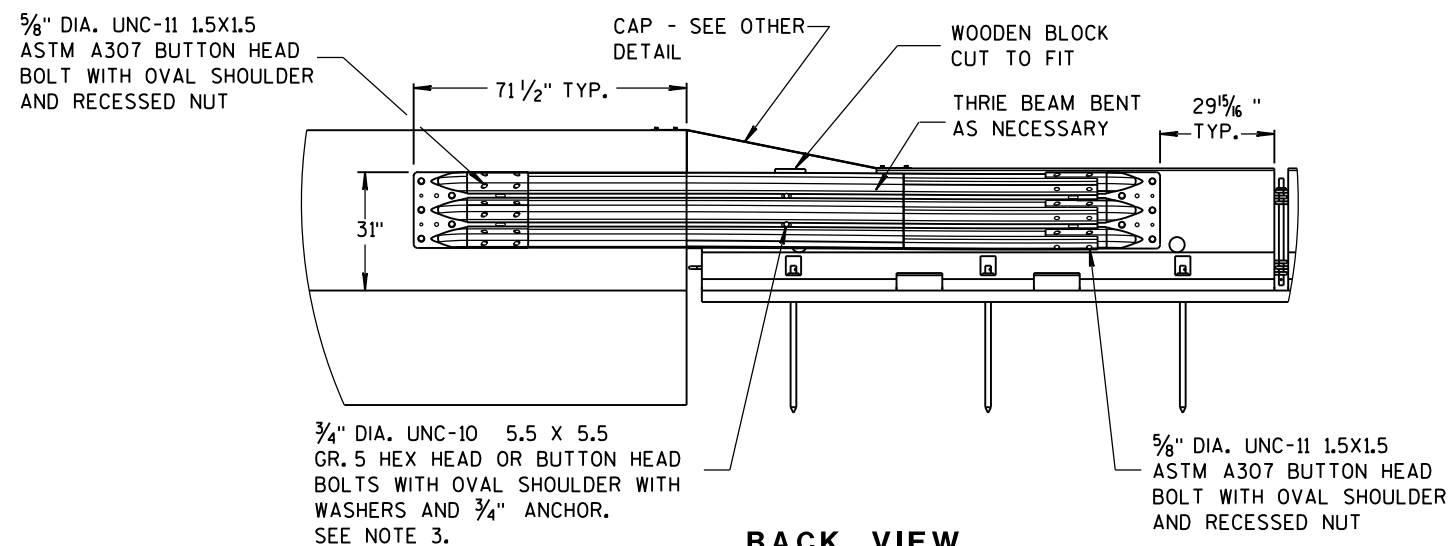
# NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

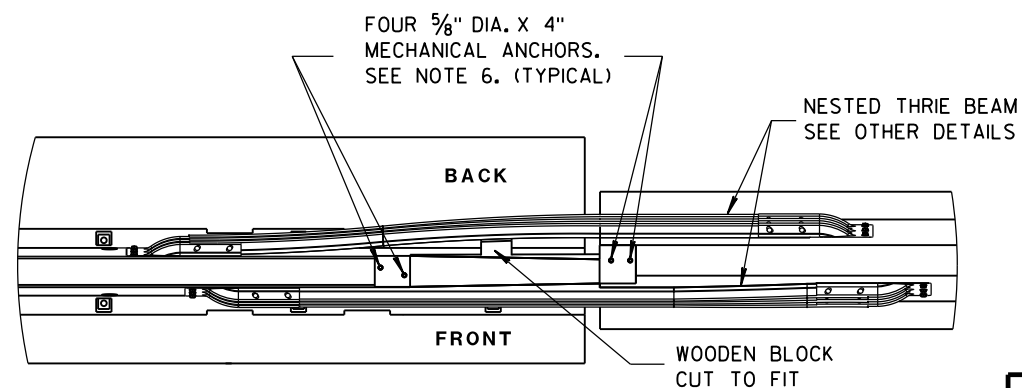


FRONT VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



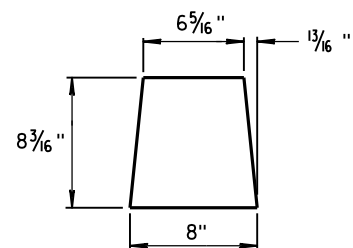
BACK VIEW



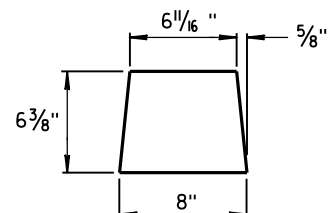
PLAN VIEW

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

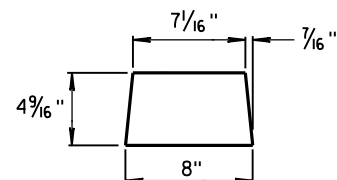
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



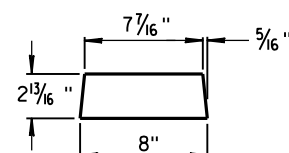
**GUSSET 1**



**GUSSET 2**

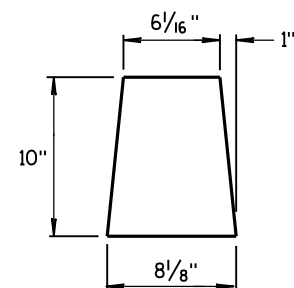


**GUSSET 3**

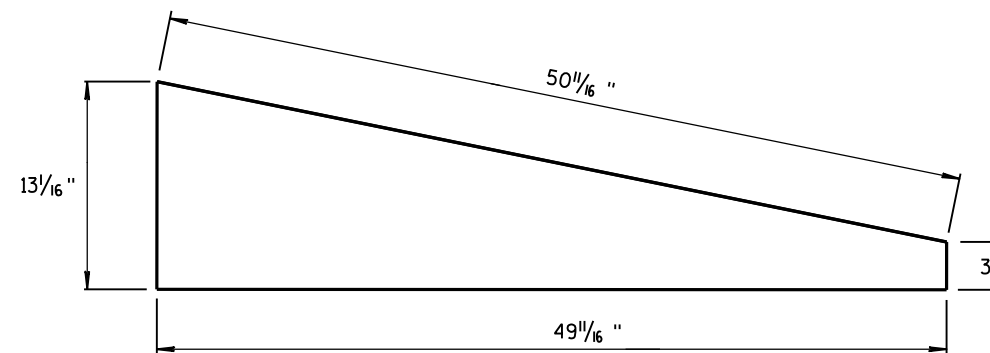


**GUSSET 4**

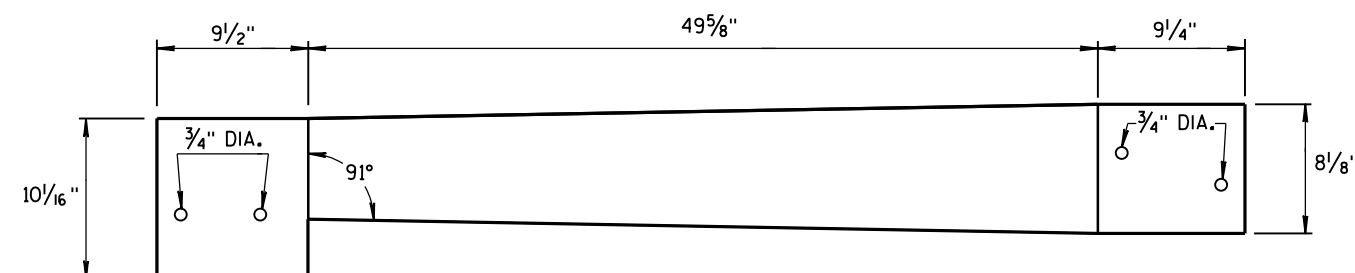
**GUSSETS**



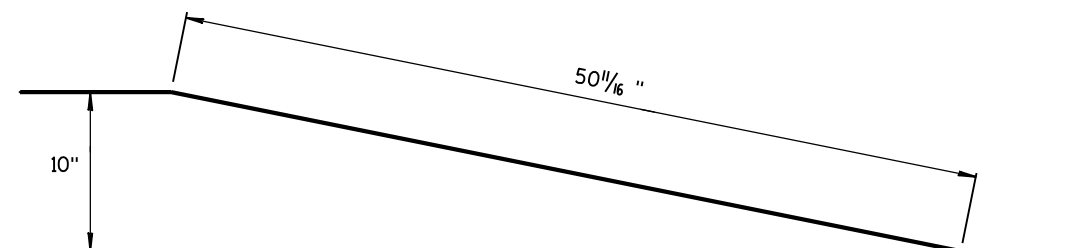
**END PLATE**



**SIDE PLATE**

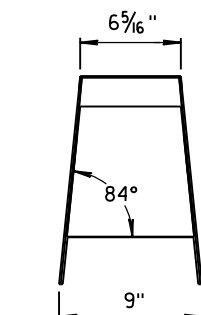
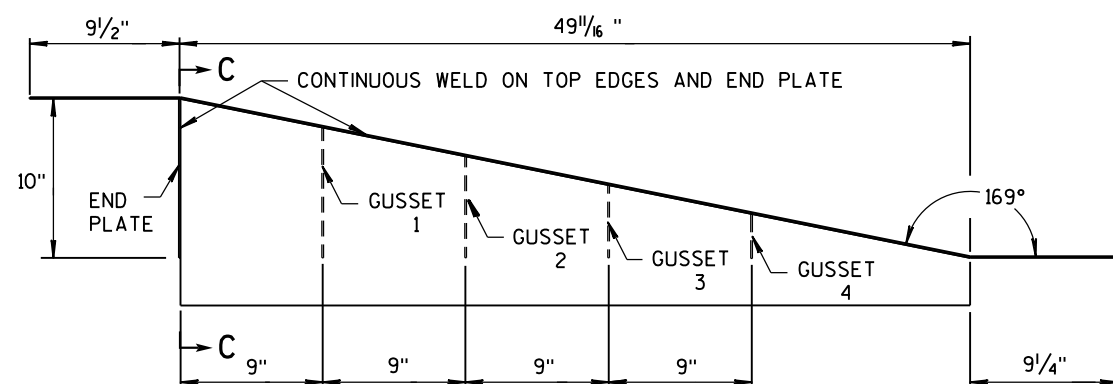
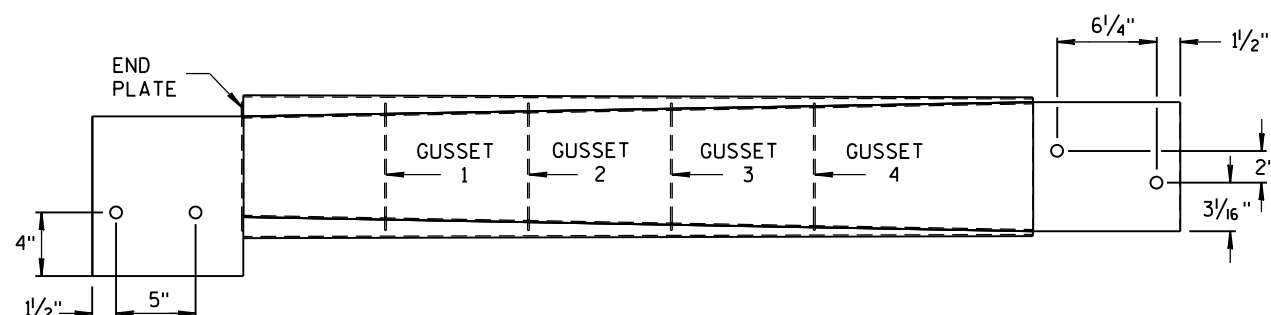


**TOP PLATE**



**SIDE, TOP AND END PLATES FOR CAP  
FROM TEMPORARY CONCRETE BARRIER  
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



**SECTION C-C**

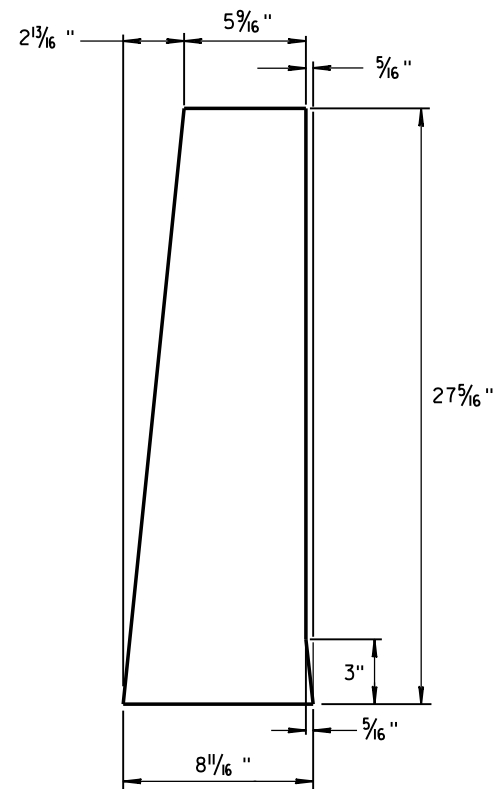
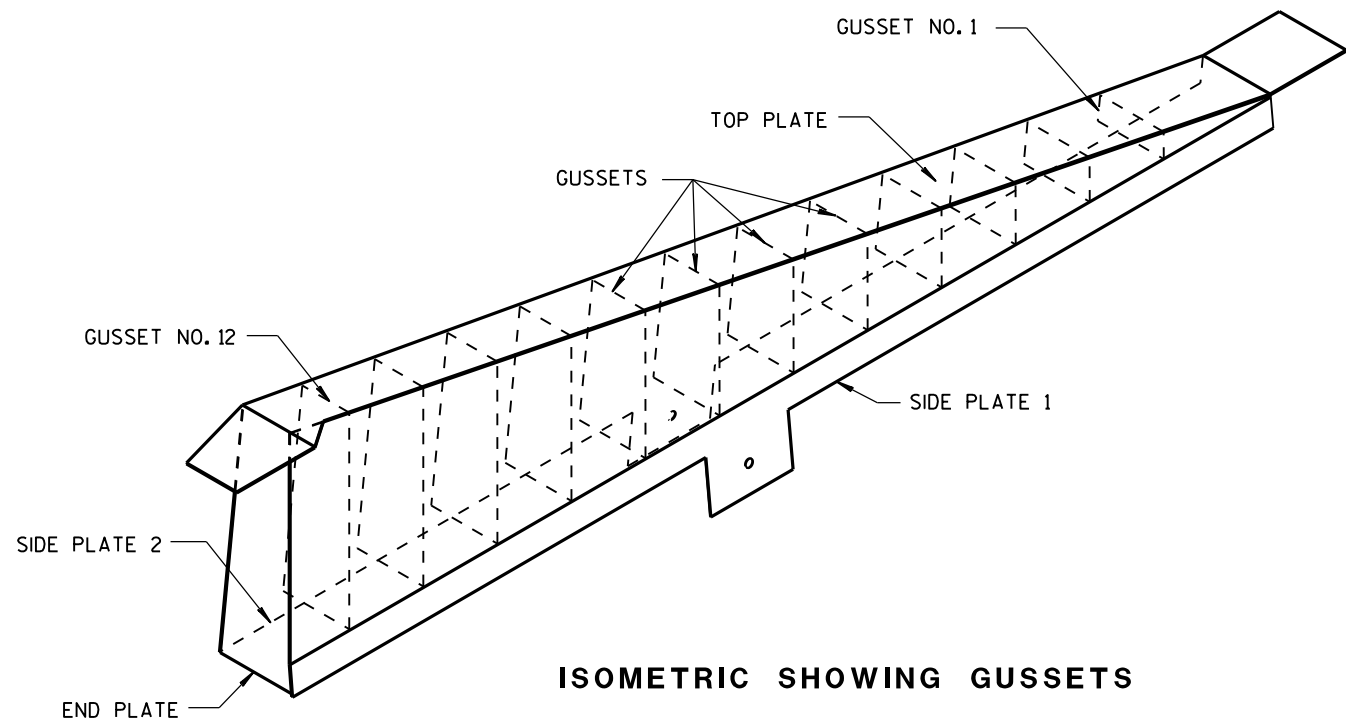
**NOTES**

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

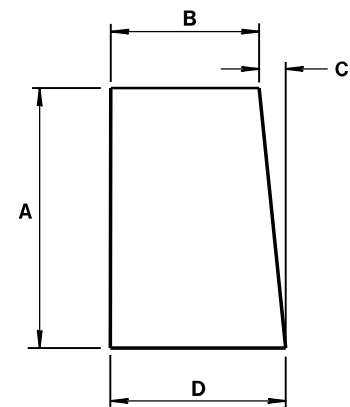
**CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



END PLATE  
1/8" STEEL PLATE

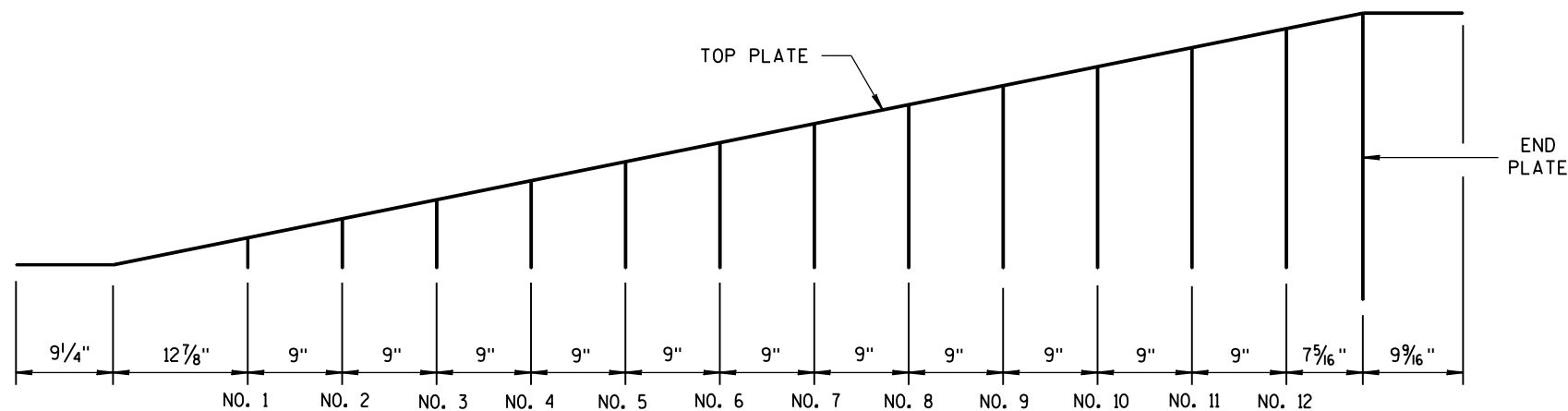


GUSSETS 1 - 12  
ALL GUSSETS 1/8" STEEL PLATE

| GUSSET DIMENSIONS |            |           |           |          |
|-------------------|------------|-----------|-----------|----------|
| GUSSET NO.        | A          | B         | C         | D        |
| 1                 | 2 7/8"     | 7 3/4"    | 1/4"      | 8        |
| 2                 | 4 1/16 "   | 7 9/16 "  | 1/2"      | 8        |
| 3                 | 6 1/2"     | 7 3/8 "   | 1 1/16 "  | 8 1/16 " |
| 4                 | 8 5/16 "   | 7 3/16 "  | 7/8"      | 8 1/16 " |
| 5                 | 10 1/8 "   | 7"        | 1 1/16 "  | 8 1/16 " |
| 6                 | 11 5/16 "  | 6 13/16 " | 1 1/4"    | 8 1/16 " |
| 7                 | 13 3/4"    | 6 5/8 "   | 1 7/16 "  | 8 1/16 " |
| 8                 | 15 9/16 "  | 6 7/16 "  | 1 9/16 "  | 8 1/16 " |
| 9                 | 17 3/8"    | 6 1/4"    | 1 13/16 " | 8 1/16 " |
| 10                | 19 3/16 "  | 6 1/16 "  | 1 15/16 " | 8 1/16 " |
| 11                | 21"        | 5 7/8 "   | 2 3/16 "  | 8 1/16 " |
| 12                | 22 13/16 " | 5 11/16 " | 2 5/16 "  | 8 1/16 " |

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.

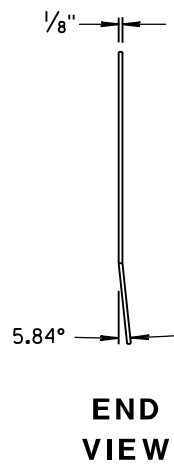
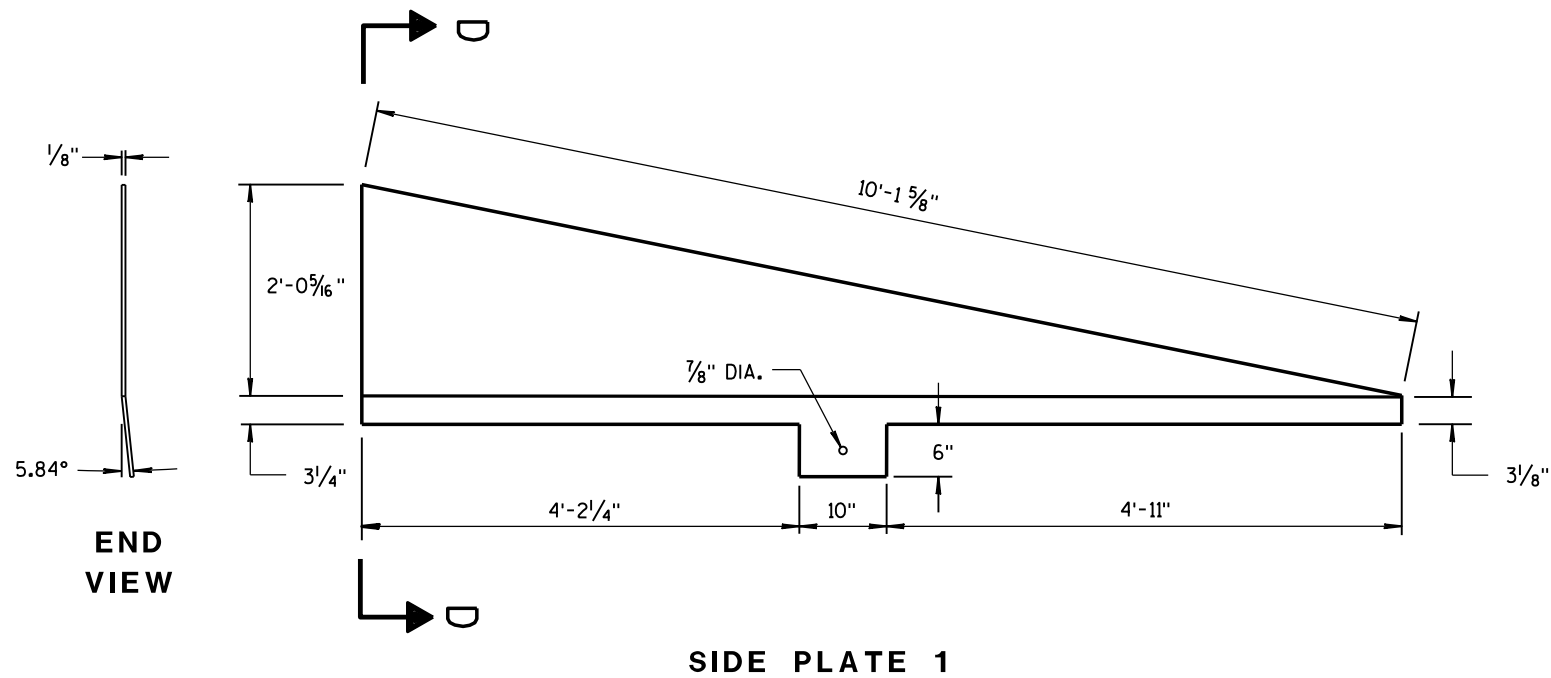
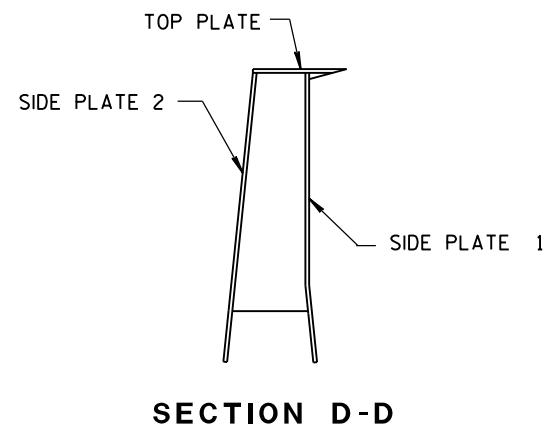
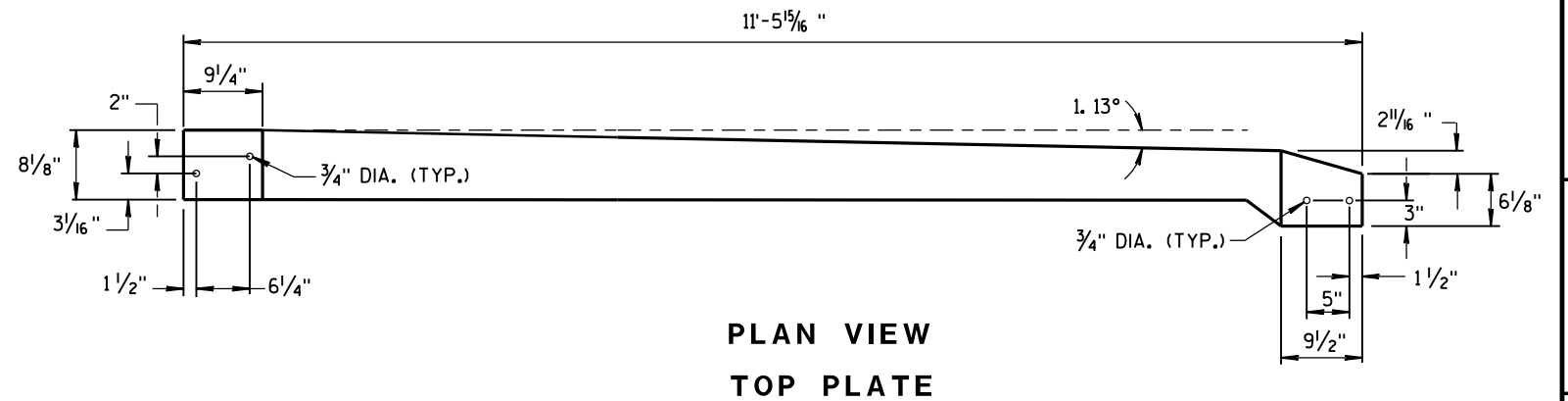
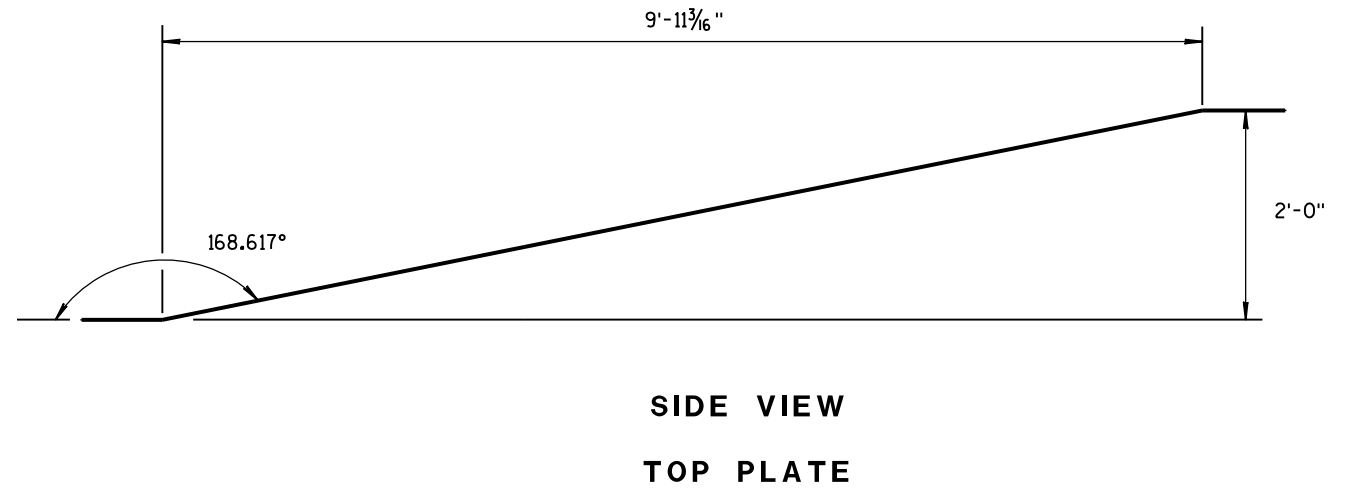
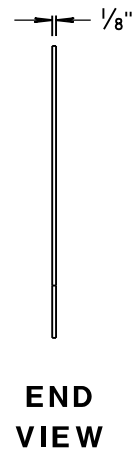
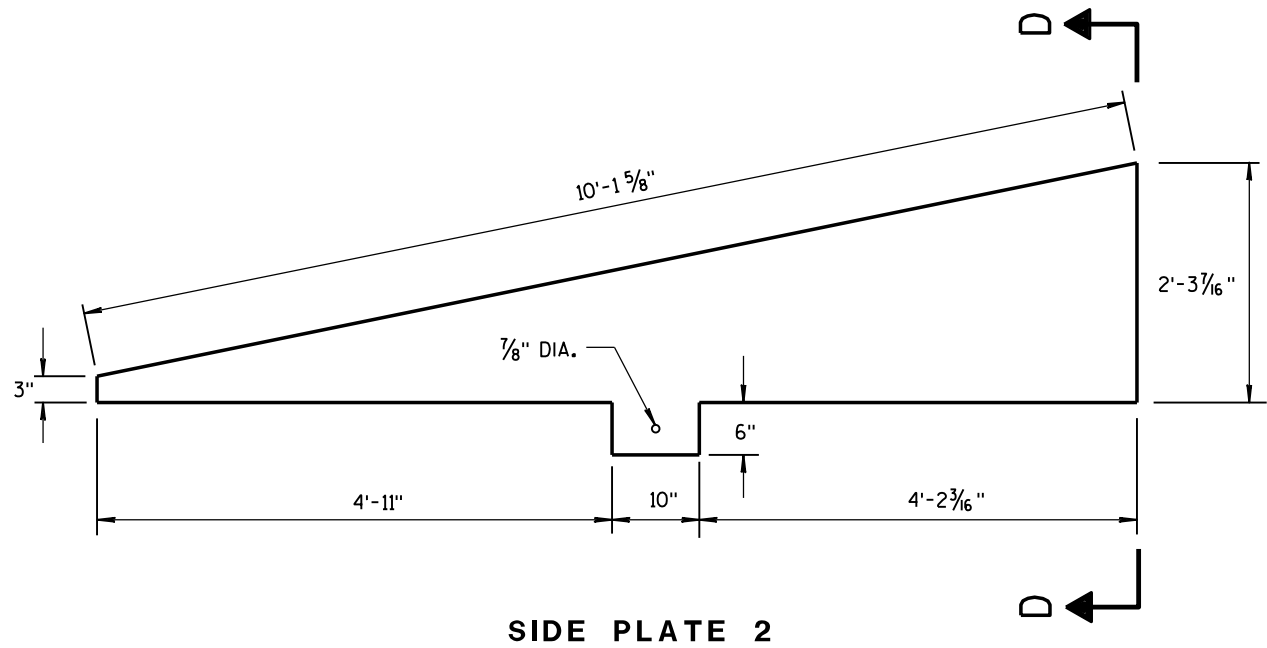


CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

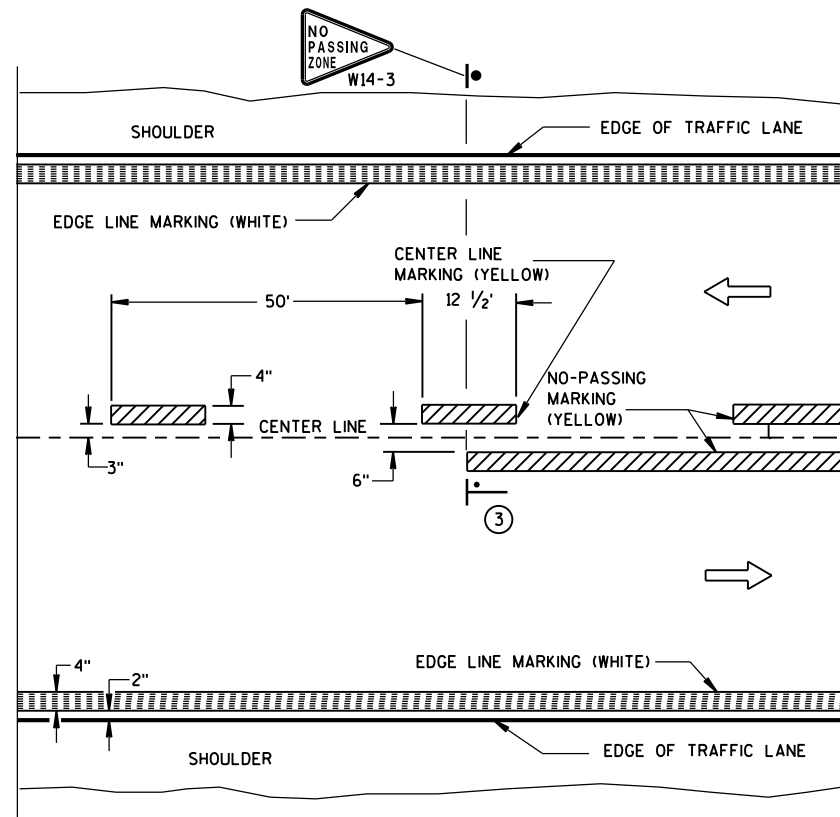
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



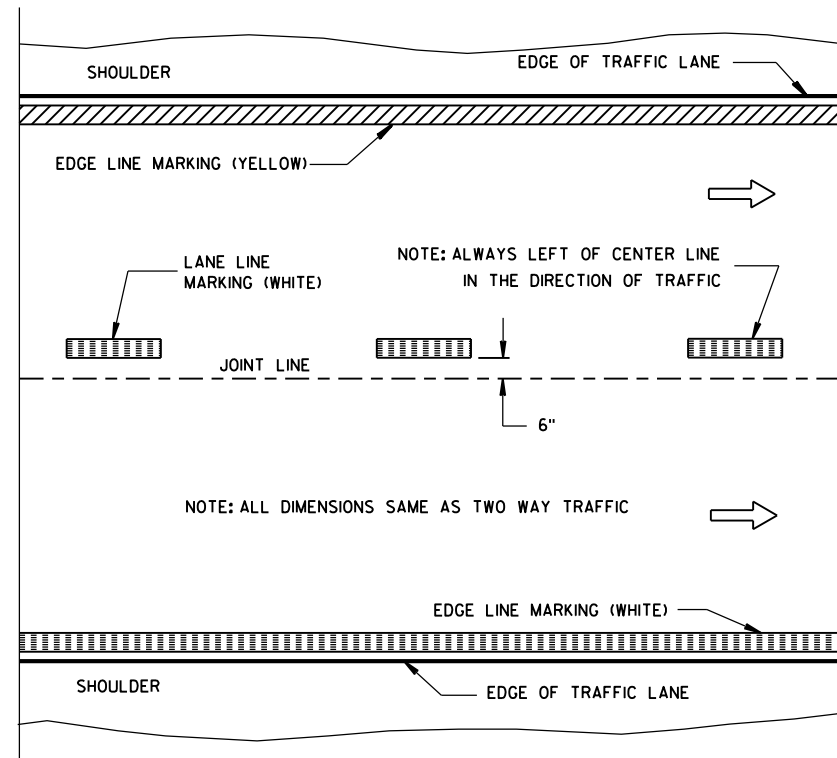


CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 56" PERMANENT CONCRETE BARRIER

|  |   |
|--|---|
| CONCRETE BARRIER<br>TEMPORARY PRECAST, 12'-6"      |   |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |   |
| APPROVED<br>June 2014<br>DATE                      | /S/ Jerry H. Zogg<br>ROADWAY STANDARD DEVELOPMENT<br>ENGINEER |
| FHWA   |   |

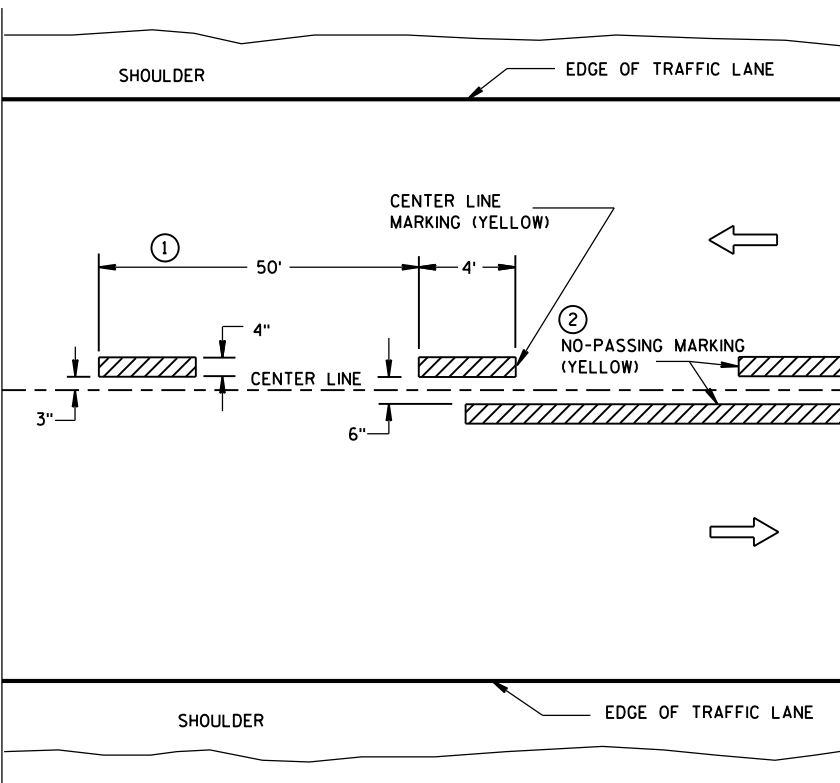


TWO WAY TRAFFIC

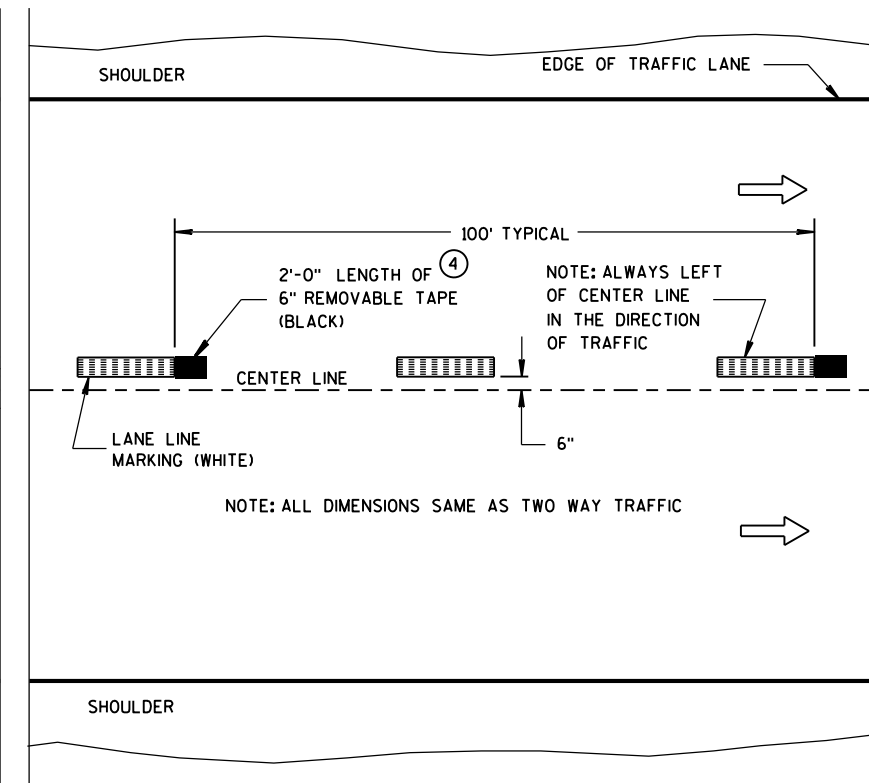


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

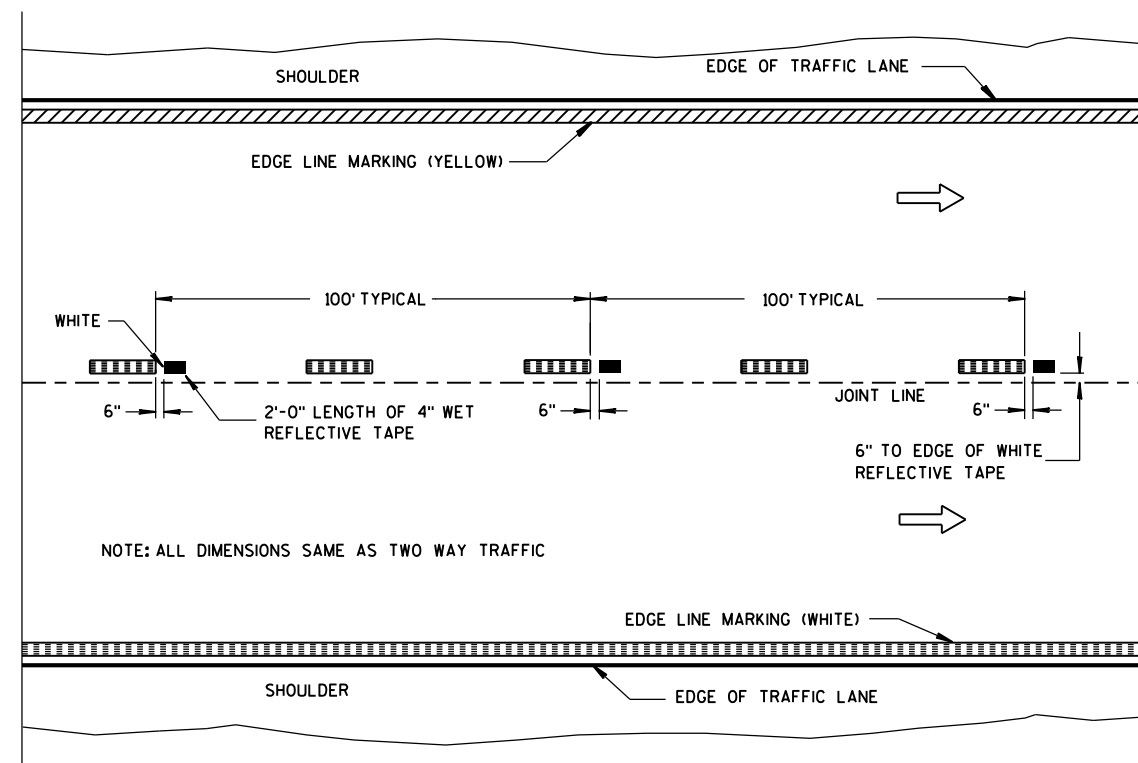
## GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

## NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO  
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

## LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

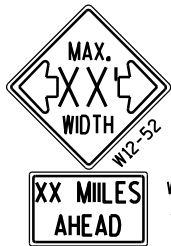
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
5-13-2013  
DATE  
FHWA

/S/ Travis Feltes  
STATE TRAFFIC ENGINEER

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA



W02-52  
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



LOCATED 500 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



R2-1  
48"x60"  
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

\* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

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

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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" 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 OR AS APPROVED BY THE ENGINEER.

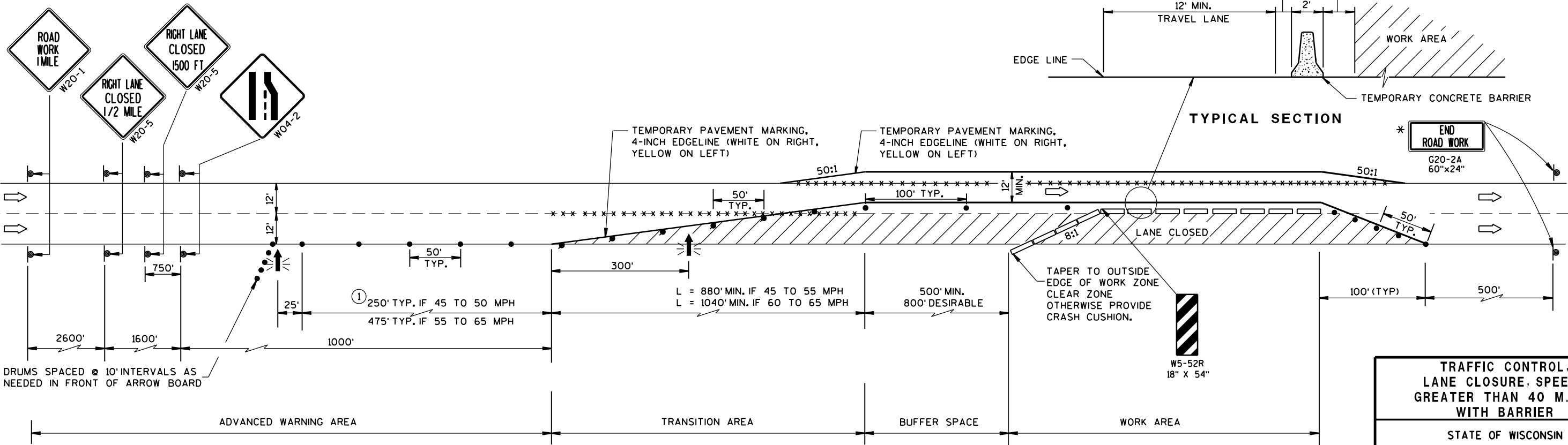
- ① CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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 OR INTERSECTION. THE LANE CLOSURE 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.



|  |                                  |
|--|----------------------------------|
| TRAFFIC CONTROL,<br>LANE CLOSURE, SPEEDS<br>GREATER THAN 40 M.P.H.<br>WITH BARRIER |                                  |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION                                 |                                  |
| APPROVED<br>8/2013   | /S/ Travis Feltes                |
| DATE   | STATE TRAFFIC ENGINEER OF DESIGN |
| FHWA   |                                  |



2 SPAN STEEL PLATE GIRDER BRIDGE



—TYPE "G" RAIL  
WITH CONCRETE PARAPET

— ABRASIVE BLAST AND  
REPAINT ALL STRUCTURAL  
STEEL AREAS  
(INCLUDING BEARINGS)

—BITUMINOUS COATED  
CRUSHED AGGREGATE - TYP.

DRAWINGS SHALL NOT BE SCALED.  
DIMENSIONS AND VERTICAL CLEARANCES ARE BASED ON ORIGINAL  
STRUCTURE PLANS.  
THE COLOR OF THE FINISH EPOXY TOP COAT FOR THE GIRDERS  
AND CONNECTING STRUCTURAL STEEL SHALL BE LIGHT GRAY (FEDERAL  
STANDARD COLOR NO. 26293).  
ESTIMATED STRUCTURAL STEEL SURFACE AREA = 12,400 SF

LIVE LOAD (TAKEN FROM HSI - 7/23/2015):

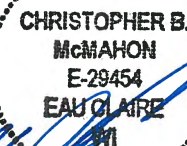
DESIGN LOADING: HS-20  
INVENTORY RATING: HS-14  
OPERATING RATING: HS-24  
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 160 KIPS

USH 53  
A.D.T. = 18,000 (2016)  
R.D.S. = 70 M.P.H.

A.D.T. = 500 (2006)  
R.D.S. = 45 M.P.H.

| BID ITEM NUMBER | BID ITEMS   | UNIT | TOTAL |
|-----------------|---|------|-------|
| 517.1800.S.01   | STRUCTURE REPAINTING RECYCLED ABRASIVE B-9-46                         | LS   | 1     |
| 517.4500.S.01   | NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIAL B-9-46 | LS   | 1     |
| 517.6001.S      | PORTABLE DECONTAMINATION FACILITY                                     | EA   | 1     |

1. GENERAL PLAN
2. CROSS SECTION DETAILS
3. SUPERSTRUCTURE DETAILS



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

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

ORIGINAL PLANS PREPARED BY

**AYRES**  
**ASSOCIATES**

3433 Oakwood Hills Parkway  
Eau Claire, WI 54701  
[www.AyresAssociates.com](http://www.AyresAssociates.com)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 11/19/15  
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-9-46

40TH AVENUE OVER USH 53

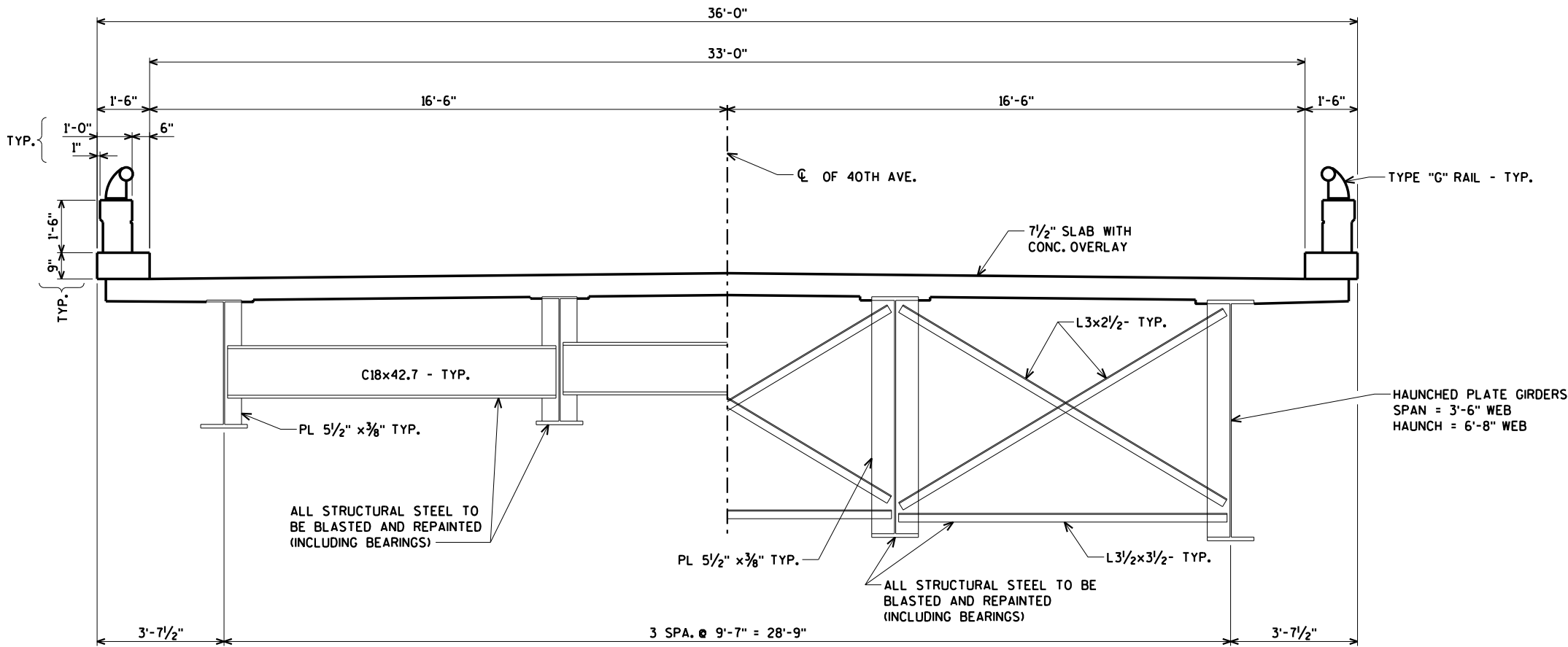
|        |          |                   |        |
|--------|----------|-------------------|--------|
| COUNTY | CHIPPEWA | TOWN/CITY/VILLAGE | HALLIF |
|--------|----------|-------------------|--------|

|              |                |     |
|--------------|----------------|-----|
| DESIGN SPEC. | REHABILITATION | N/A |
|--------------|----------------|-----|

|                    |                     |                 |                    |
|--------------------|---------------------|-----------------|--------------------|
| DESIGNED<br>BY CBM | DESIGN<br>CK'D. JCK | DRAWN<br>BY JCK | PLANS<br>CK'D. CBM |
|--------------------|---------------------|-----------------|--------------------|

# GENERAL PLAN

SHEET 1 OF 3



IN SPAN

AT PIER

CROSS SECTION THRU ROADWAY

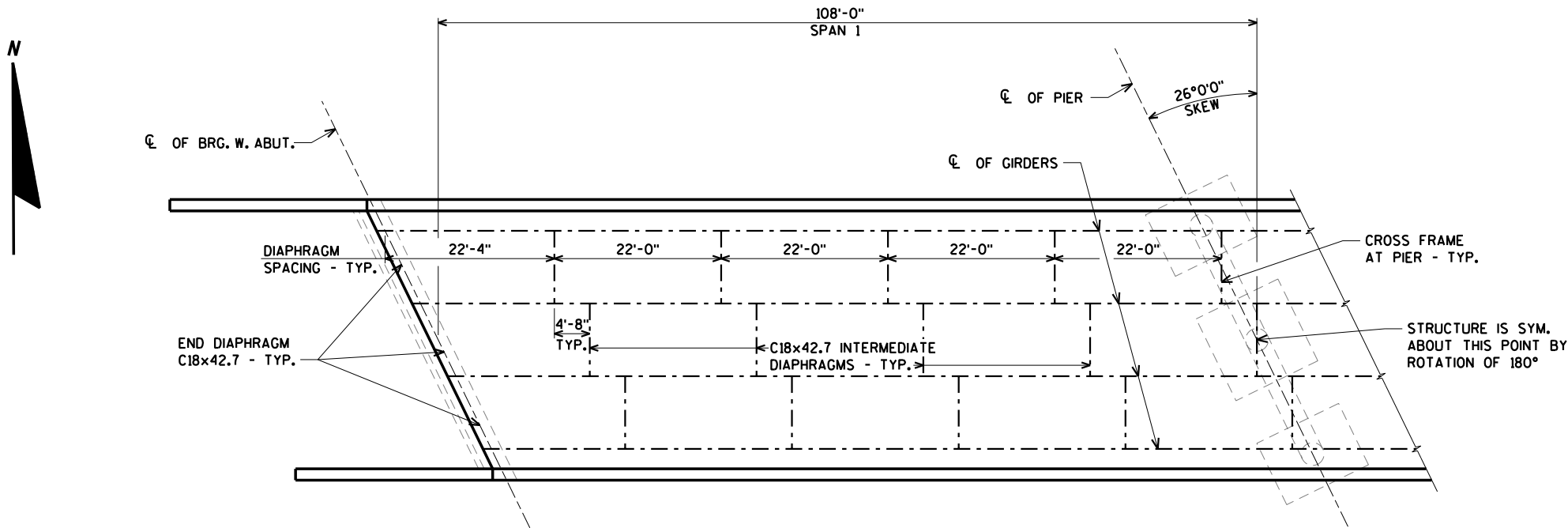
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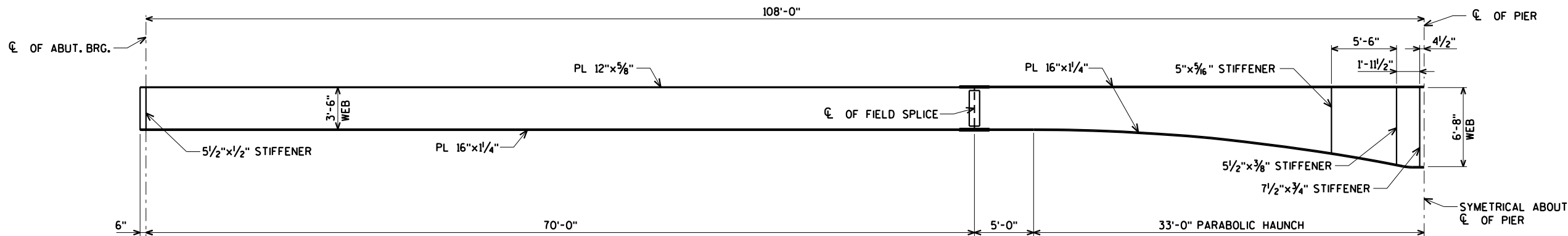
8

|  |      |                    |              |
|--|------|--------------------|--------------|
| NO.  | DATE | REVISION           | BY           |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |      |                    |              |
| STRUCTURE B-9-46                                   |      |                    |              |
| DRAWN<br>BY JCK                                    |      | PLANS<br>CK'D. CBM |              |
| CROSS SECTION<br>DETAILS                           |      |                    | SHEET 2 OF 3 |

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



**SUPERSTRUCTURE FRAMING HALF PLAN**



**TYPICAL GIRDER ELEVATION**

ecpdf.plt  
B-9-46\_gp.prel.dgn

|  |      |                 |              |
|--|------|-----------------|--------------|
| NO.  | DATE | REVISION        | BY           |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |      |                 |              |
| STRUCTURE B-9-46                                   |      |                 |              |
| DRAWN BY JCK                                       |      | PLANS CK'D. CBM |              |
| SUPERSTRUCTURE DETAILS                             |      |                 | SHEET 3 OF 3 |

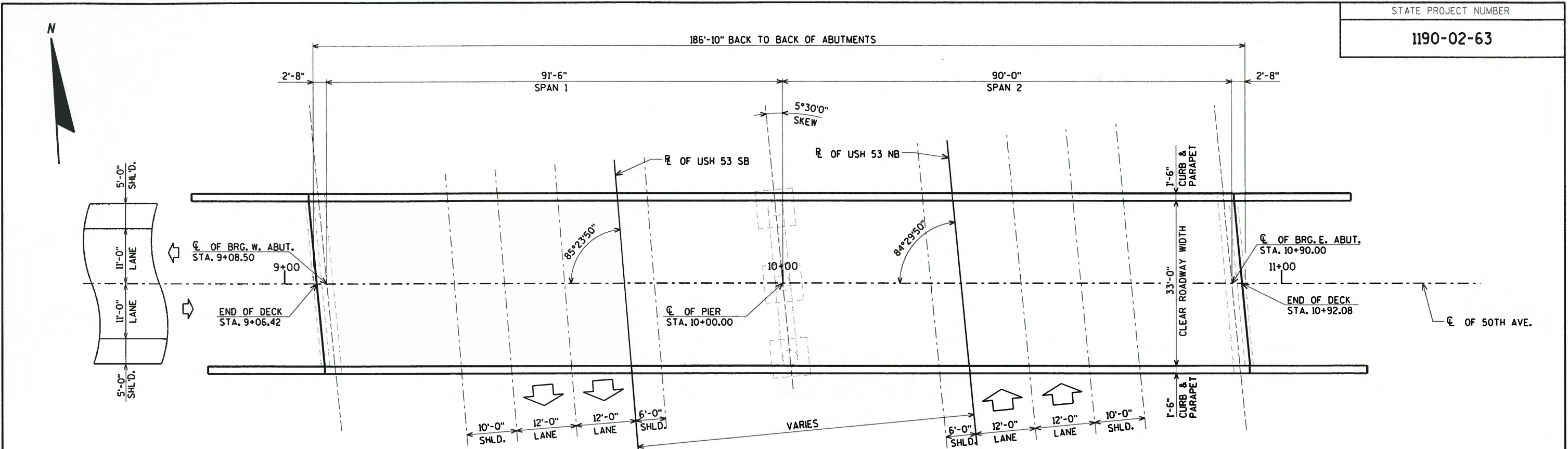
ORIGINAL PLANS PREPARED BY  
**AYRES ASSOCIATES**  
3433 Oakwood Hills Parkway  
Eau Claire, WI 54701  
www.AyresAssociates.com



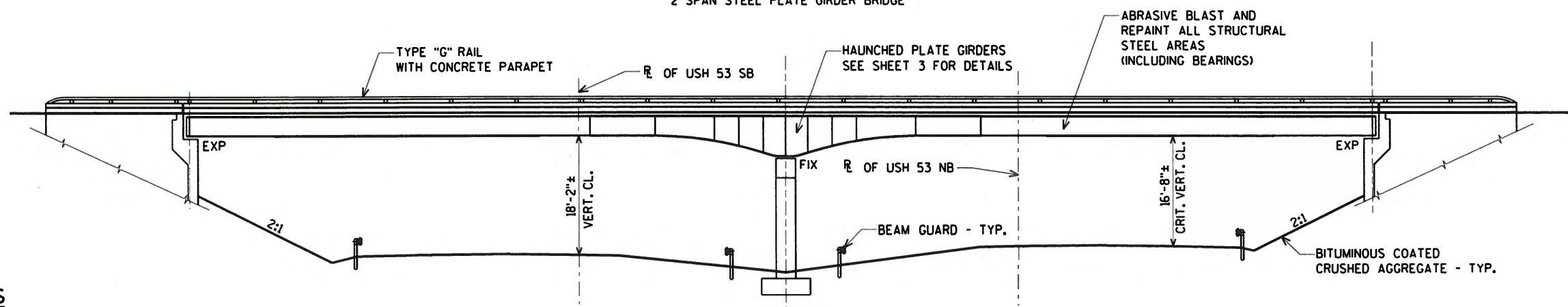
\$PRENAME\$ U:\42-0990.00 - USH 53 Bridge Painting - 40th Ave & 50th Avenue\Structure\B-9-47.dwg

CHECKED BY: DATE: BACK CHECKED BY: DATE: CORRECTED BY: DATE:

8



PLAN  
2 SPAN STEEL PLATE GIRDER BRIDGE



ELEVATION  
(NORMAL TO R OF USH 53 LOOKING NORTH)

### GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.  
DIMENSIONS AND VERTICAL CLEARANCES ARE BASED ON ORIGINAL  
STRUCTURE PLANS.  
THE COLOR OF THE FINISH EPOXY TOP COAT FOR THE GIRDERS  
AND CONNECTING STRUCTURAL STEEL SHALL BE LIGHT GRAY (FEDERAL  
STANDARD COLOR NO. 26293).  
ESTIMATED STRUCTURAL STEEL SURFACE AREA = 9,100 SF

### DESIGN DATA

LIVE LOAD (TAKEN FROM HSI - 7/28-2015):

DESIGN LOADING: HS-20  
INVENTORY RATING: HS-12  
OPERATING RATING: HS-21  
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 150 KIPS

### TRAFFIC DATA

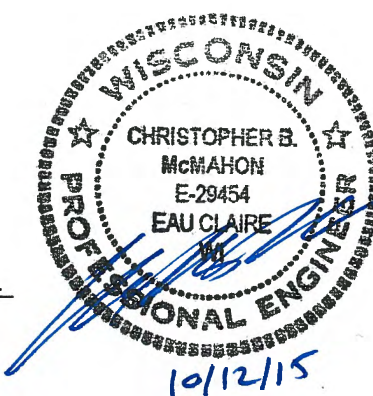
USH 53  
A.D.T. = 18,000 (2016)  
R.D.S. = 70 M.P.H.  
50TH AVENUE  
A.D.T. = 500 (2006)  
R.D.S. = 45 M.P.H.

### TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS   | UNIT | TOTAL |
|-----------------|---|------|-------|
| 517.1800.S.02   | STRUCTURE REPAINTING RECYCLED ABRASIVE B-9-47                         | LS   | 1     |
| 517.4500.S.02   | NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIAL B-9-47 | LS   | 1     |
| 517.6001.S      | PORTABLE DECONTAMINATION FACILITY                                     | EA   | 1     |

### LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION DETAILS
3. SUPERSTRUCTURE DETAILS



BRIDGE OFFICE CONTACT:  
WILLIAM DREHER  
(608)-266-8489  
CONSULTANT CONTACT:  
CHRIS MCMAHON  
(715)-834-3161

|  |                |                   |              |
|--|----------------|-------------------|--------------|
| NO.  | DATE           | REVISION          | BY           |
| ORIGINAL PLANS PREPARED BY<br><b>AYRES ASSOCIATES</b> 3433 Oakwood Hills Parkway<br>Eau Claire, WI 54701<br>www.AyresAssociates.com                            |                |                   |              |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION<br>ACCEPTED <i>William C. Dreher</i> <sup>SR</sup> <b>11/19/15</b><br>CHIEF STRUCTURES DESIGN ENGINEER DATE |                |                   |              |
| <b>STRUCTURE B-9-47</b>  |                |                   |              |
| 50TH AVENUE OVER USH 53  |                |                   |              |
| COUNTY   | CHIPPewa       | TOWN/CITY/VILLAGE | HALLIE       |
| DESIGN SPEC.   | REHABILITATION | N/A               |              |
| DESIGNED BY  | CBM            | DESIGN CK'D.      | JCK          |
| DRAWN BY   | JCK            | PLANS CK'D.       | CBM          |
| <b>GENERAL PLAN</b>  |                |                   | SHEET 1 OF 3 |

8

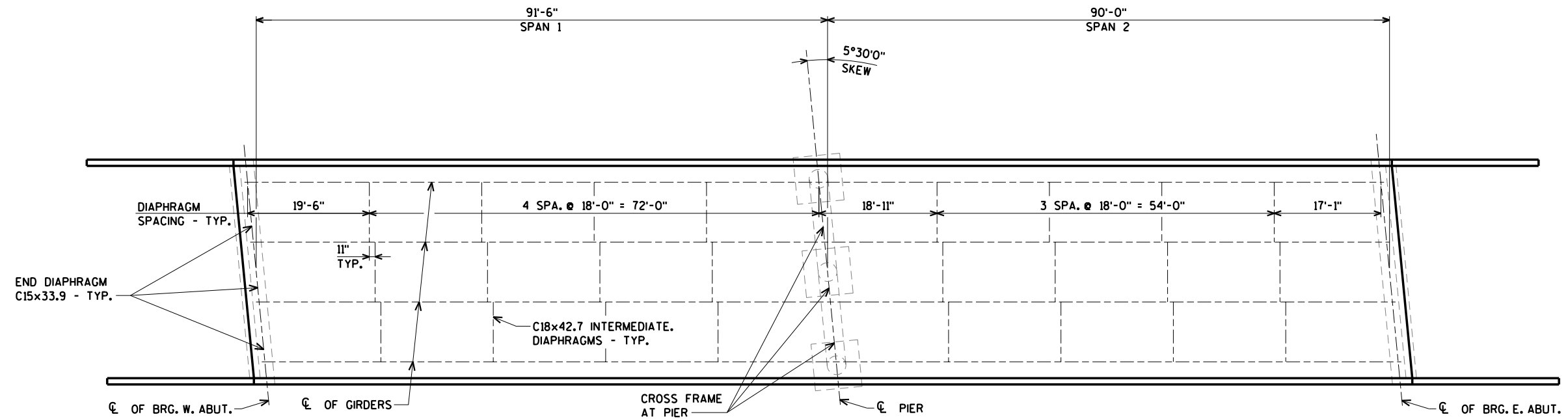




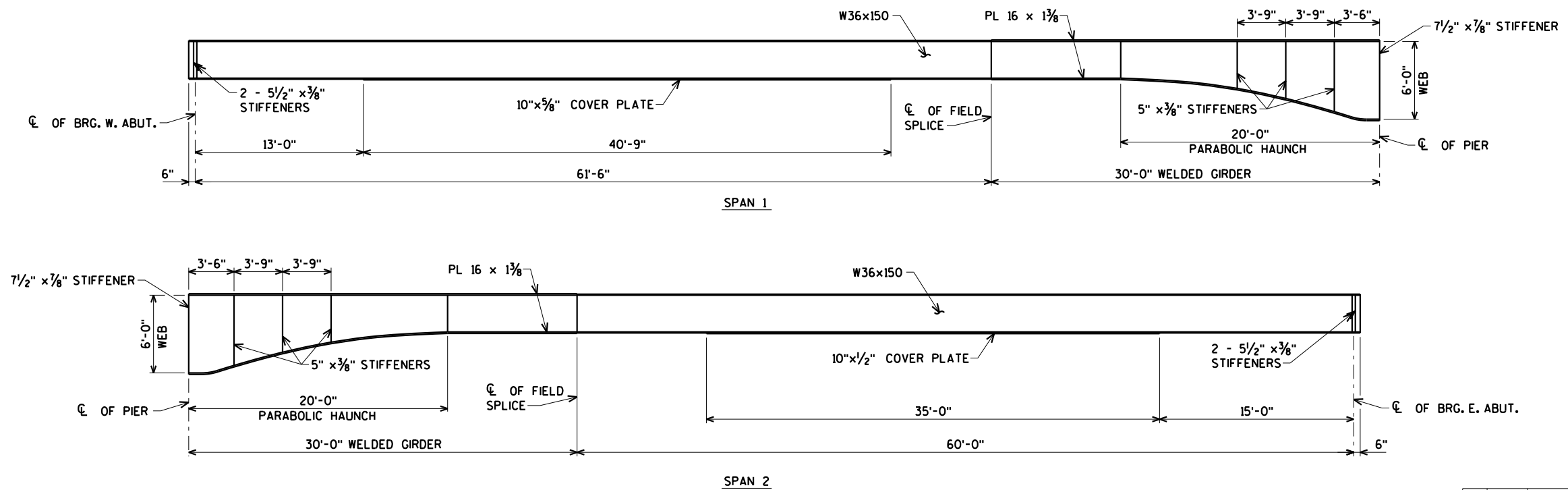
\$PRNAME\$  
U:\42-0990.00 - USH 53 Bridge Painting - 40th Ave & 50th Ave\Structure\B-9-47\_gp\_FINAL.dgn

STATE PROJECT NUMBER

1190-02-63



**SUPERSTRUCTURE FRAMING PLAN**



**TYPICAL GIRDER ELEVATION**

| NO.  | DATE | REVISION        | BY           |
|--|------|-----------------|--------------|
|  |      |                 |              |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |      |                 |              |
| STRUCTURE B-9-47                                   |      |                 |              |
| DRAWN BY JCK                                       |      | PLANS CK'D. CBM |              |
| SUPERSTRUCTURE DETAILS                             |      |                 | SHEET 3 OF 3 |

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

## Notes



## ***Wisconsin Department of Transportation***

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