WKE MAY 2019

PROJECT ID: 1030-37-70
WITH: 1030-38-70

COUNTY: MILWAUKEE

ORDER OF SHEETS


| | | |
|---|---|---|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| Section No. | 3 | Estimate of Quantities |
| Section No. | 3 | Miscellaneous Quantities |
| Section No. | 6 | Standard Detail Drawings |
| Section No. | 7 | Sign Plates |
| Section No. | 8 | Structure Plans |


TOTAL SHEETS = 214

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1030-37-70 | WISC 2019286 | 1 |
| | | |
| | | |
| | | |

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# MITCHELL INTERCHANGE

BRIDGES - IH 94/IH 43/IH 894

## IH 94
## MILWAUKEE COUNTY



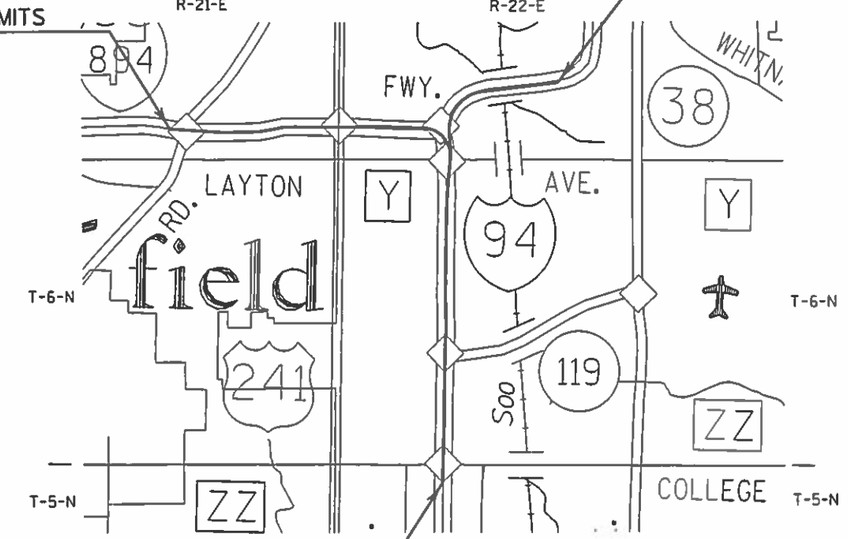
15

N

STATE PROJECT NUMBER
**1030-37-70**

CONSTRUCTION LIMITS
STA 1259ESW+00

END PROJECT 1030-37-70
STA 661+15




BEGIN PROJECT 1030-37-70
STA 436+00
X=599022.72
Y=257791.37

STRUCTURES

B-40-811
B-40-812
B-40-812CD
B-40-813
B-40-813CD
B-40-814
B-40-815
B-40-816
B-40-817
B-40-818
B-40-818CD
B-40-819
B-40-819CD
B-40-820
B-40-821 (TUNNEL 3)
B-40-823
B-40-824
B-40-827 (TUNNEL 2)
B-40-828
B-40-829
B-40-832 (TUNNEL 1)
B-40-833
B-40-834
B-40-835
B-40-836
B-40-837

DESIGN DESIGNATION

| | IH 94 AT LAYTON AVENUE | IH 94 AT HOWARD AVENUE | IH 894 |
|---|---|---|---|
| A.A.D.T. 2014 | = 153,400 | = 125,047 | = 132,793 |
| A.A.D.T. 2041 | = 174,100 | = 141,928 | = 150,723 |
| D.H.V. | = --- | = --- | = --- |
| D.D. | = 55 NB/45 SB | = 55 NB/45 SB | = 56 EB/44 WB |
| T. | = 21% | = --- | = 8.3% |
| DESIGN SPEED | = 60 MPH | = 60 MPH | = 60 MPH |
| ESALS | = 50,530,600 RIGID DESIGN | = --- | = --- |

CONVENTIONAL SYMBOLS

PLAN
- 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 (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (995.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY, NAD83 (1997) ADJUSTMENT

ELEVATIONS ALONG IH 894 SHOWN ON THIS PLAN ARE REFERENCED TO THE NAVD 88 (2007)

ELEVATIONS ALONG IH 94 SHOWN ON THIS PLAN ARE REFERENCED TO THE NAVD 88 (1991)

ORIGINAL PLANS PREPARED BY
ch2m: WISCONSIN
JOEL D. JURSS
E-32142
WAUKESHA
WI
PROFESSIONAL ENGINEER
1/31/19 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor: WISDOT
- Designer: JACOBS
- Project Manager: DEAN FILTZ, P.E.
- Regional Examiner:
- Regional Supervisor: WAFA ELQAQ, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 1/31/19 (Signature)

E

FILE NAME : 37_t1.dgn PLOT DATE : 30-JAN-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 5280:1

WISDOT/CADDS SHEET 10

## UTILITY CONTACTS

### AMERICAN TRANSMISSION COMPANY
IVAN KELLER
W234 N2000 RIDGEVIEW PARKWAY COURT
WAUKESHA, WI 53188
PHONE: (262) 506-6773
ikeller@atcllc.com

### AT&T WISCONSIN
MARK EDER
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me1754@att.com

### CHARTER COMMUNICATIONS
STEVE CRAMER
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MILWAUKEE, WI 53212
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steve.cramer@charter.com
wis.engineering@charter.com

### DOUGLAS PIPELINE COMPANY
MS. ANDI SHACKLETT
3829 WILLOW AVE, STE 203
PITTSBURGH, PA 15234
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ashacklett@douglaspipeline.com

### LEVEL 3 COMMUNICATIONS
BRAHIM GADDOUR
OSP ENGINEERING DEPT.
3235 INTERTECH DRIVE, SUITE 600
BROOKFIELD, WI 53045
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gaddour.brahim@level3.com
relo@level3.com

### MIDWEST FIBER NETWORKS
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### MILWAUKEE, CITY OF – LIGHTING / SIGNALS
DENNIS MILLER
841 N. BROADWAY, ROOM 920
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dennis.miller@milwaukee.gov

### MILWAUKEE, CITY OF - SEWERS
JASON BARMAN
841 N. BROADWAY, ROOM 821
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### MILWAUKEE, CITY OF - WATER
DAVE GOLDAPP
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### MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
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mklappasullivan@mmsd.com

MANHOLE ADJUSTMENT CONTACT:
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### TELEPORT COMMUNICATIONS AMERICA
c/o JENNIFER NAVARRO
NORTHWIND TECHNICAL SERVICES
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### USDI – GAS/PETROLEUM
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mweiler@usdi.us

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jim.todd@ameritech.net

### WE ENERGIES - ELECTRIC
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FAX: 414-221-2336
Nicole.smullen@we-energies.com

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nicholas.welch@we-energies.com

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### WINDSTREAM
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### WISDOT - LIGHTING
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### WISDOT - SIGNALS
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ELECTRICAL FIELD UNIT
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### WISDOT STOC
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## OTHER AGENCIES

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### GREENFIELD, CITY OF
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### MILWAUKEE, CITY OF
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### MILWAUKEE COUNTY TRANSIT SYSTEM
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### GENERAL MITCHELL FIELD
MR. DAVID SHIKHMAN
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### SOO LINE RAILROAD COMPANY
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MANAGER PUBLIC WORKS
CANADIAN PACIFIC PLAZA
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### MILWAUKEE COUNTY - MCDOT
GREG HEISEL, HIGHWAY MAINTENANCE MANAGER
10320 W. WATERTOWN PLANK ROAD, 1st FLOOR
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### MILWAUKEE COUNTY - MCDOT
ANDREA WEDDLE-HENNING, TRANSPORTATION DESIGN & CONSTRUCTION ENGINEERING MANAGER
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andrea.weddle-henning@milwaukeecountywi.gov

### MILWAUKEE PUBLIC SCHOOLS
MR. CHICO TORRES
MILWAUKEE PUBLIC SCHOOLS
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MILWAUKEE, WI 53205
PHONE: (414) 283-4641
torresdr@milwaukee.k12.wi.us

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
MR. ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4289
CELL: (920) 912-1036
rmerry@sewrpc.org

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

## STATE AGENCIES


WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MS. KRISTINA BETZOLD - ENVIRONMENTAL SPECIALIST
2300 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
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kristina.betzold@wisconsin.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
MR. DEAN FILTZ - PROJECT MANAGER
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dean.filtz@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
MS. BRENDA RUENGER - ENVIRONMENTAL ANALYST AND REVIEW SPECIALIST
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gregory.berry@dot.wi.gov


## GENERAL NOTES

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL “IN USE” SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM TRAFFIC CONTROL COVERING SIGNS

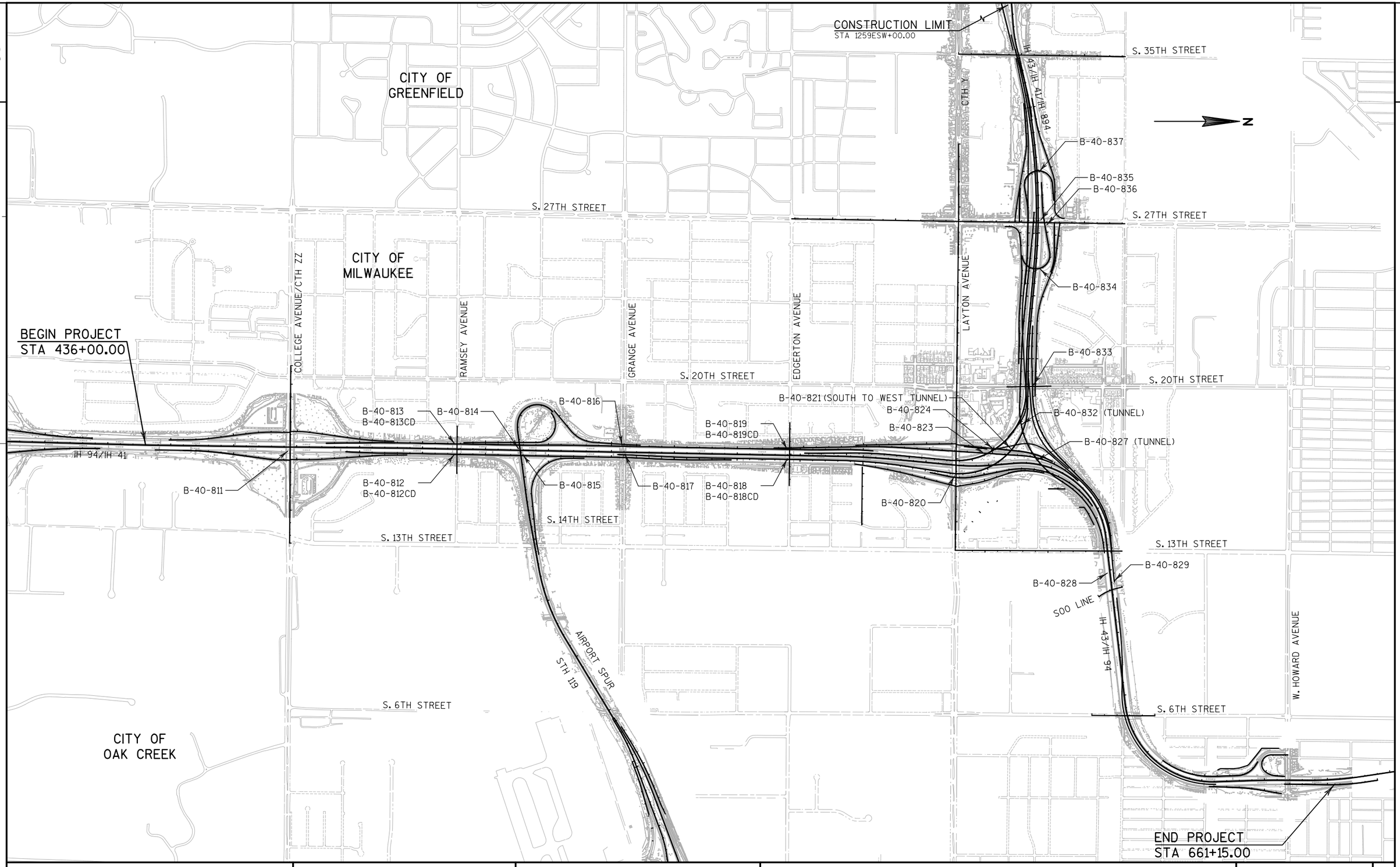
## STANDARD ABBREVIATIONS

| | |
|---|---|
| AEW | APRON END WALL |
| AGG | AGGREGATE |
| BAD | BASE AGGREGATE DENSE |
| BM | BENCH MARK |
| C&G | CURB AND GUTTER |
| C/L OR ℄ | CENTER OR CONSTUCTION LINE |
| CMCP | CULVERT PIPE CORRUGATED METAL |
| CONC | CONCRETE |
| CP | CULVERT PIPE |
| CPRC | CULVERT PIPE REINFORCED CONCRETE |
| CSD | CONCRETE SURFACE DRAIN |
| CTH | COUNTY TRUNK HIGHWAY |
| CY | CUBIC-YARD |
| D | DEGREE OF CURVE |
| Δ | DELTA |
| DISCH | DISCHARGE |
| FE | FIELD ENTRANCE |
| HMA | HOT MIX ASPHALT |
| INV | INVERT |
| L | LENGTH OF CURVE |
| LHF | LEFT HAND FORWARD |
| LT | LEFT |
| MIN | MINIMUM |
| M/L | MATCHLINE |
| NB | NORTHBOUND |
| NC | NORMAL CROWN |
| PAVT | PAVEMENT |
| PC | POINT OF CURVE |
| PCC | POINT OF COMPOUND CURVE |
| PE | PRIVATE ENTRANCE |
| PI | POINT OF INTERSECTION |
| PLE | PERMANENT LIMITED EASMENT |
| PT | POINT OF TANGENT |
| R | RADIUS OF CURVE |
| R/L | REFERENCE LINE |
| R/W | RIGHT OF WAY |
| RC | REVERSE CROWN |
| RCAEW | APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE |
| REQD | REQUIRED |
| RHF | RIGHT HAND FORWARD |
| RO | RUN OFF LENGTH |
| RRSP | RAILROAD SPIKE |
| RT | RIGHT |
| SALV | SALVAGED |
| SAPBC | SALVAGED ASPHALTIC PAVEMENT BASE COARSE |
| SB | SOUTHBOUND |
| SDD | STANDARD DETAIL DRAWING |
| SE | SUPER ELEVATION |
| SF | SQUARE FOOT |
| STA | STATION |
| SY | SQUARE YARD |
| T | TANGENT LENGTH |
| TLE | TEMPORARY LIMITED EASEMENT |
| VCL | VERTICAL CURVE LENGTH |
| VPC | POINT OF VERTICAL CURVE |
| VPI | POINT OF VERTICAL INTERSECTION |
| VPT | POINT OF VERTICAL TANGENT |

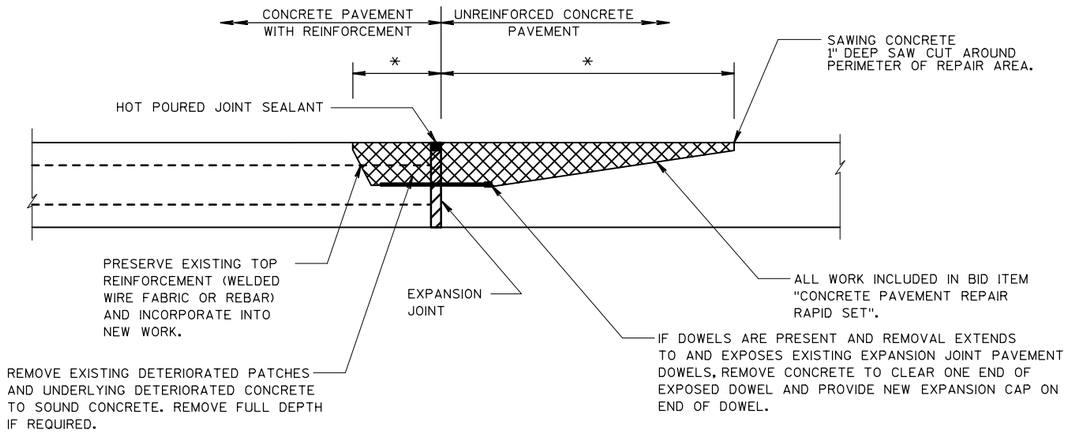
## ORDER OF SECTION 2 DETAIL SHEETS


GENERAL NOTES
PROJECT OVERVIEW
CONSTRUCTION DETAILS
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
DETOURS

2




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | PROJECT OVERVIEW | SHEET 4 | E |
|---|---|---|---|---|---|




## CONCRETE PAVEMENT REPAIR

* DIMENSIONS TO BE DETERMINED BY ENGINEER IN THE FIELD

B-40-814
B-40-818CD
B-40-819CD
B-40-824
B-40-827
B-40-828
B-40-829
B-40-832
B-40-835
B-40-836

2

## EROSION CONTROL LEGEND

- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C

NOTES

1) INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

## PERMANENT MARKING LINE LEGEND

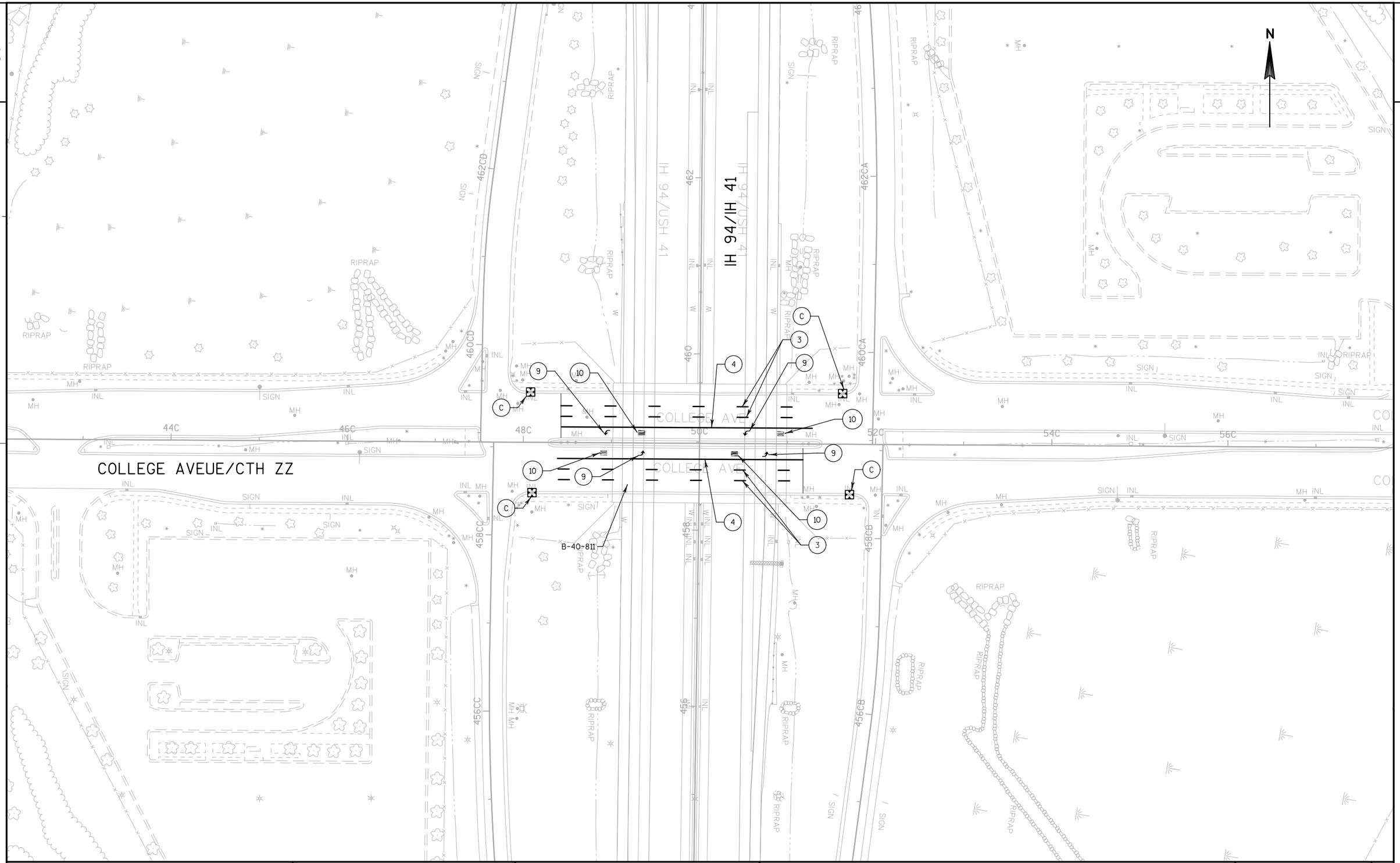
1. MARKING LINE EPOXY 4-INCH (WHITE)
2. MARKING LINE EPOXY 4-INCH (YELLOW)
3. MARKING LINE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
6. MARKING CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
7. MARKING CONTRAST EPOXY 8-INCH (WHITE)
8. MARKING CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
9. MARKING ARROW EPOXY TYPE 2 (WHITE)
10. MARKING WORD EPOXY (WHITE)
11. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
12. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. MARKING STOP LINE EPOXY 18-INCH (WHITE)
14. MARKING CHEVRON EPOXY 24-INCH (WHITE)

NOTES

1) RESTORE ALL PERMANENT MARKING LINES PRIOR TO OPENING FACILITY TO TRAFFIC, AS DIRECTED BY THE ENGINEER.

2) PLACE TEMPORARY MARKING LINE PAINT PRIOR TO OPENING FACILITY TO TRAFFIC WHEN MULTIPLE NIGHTS REQUIRED TO COMPLETE WORK.

2




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 7 | E |
|---|---|---|---|---|---|

2

CONTINUE 8-INCH DOT PATTERN SOUTH
TO COLLEGE AVENUE EXIT RAMP GORE
STA 5473CS+70

STA 5488CS+00
MATCH EXISTING

EB IH 94 CD ROAD

IH 94/IH 41

WB IH 94 CD ROAD

IH 94/IH 41

B-40-813

B-40-812

B-40-814

B-40-815

RAMSEY AVE

STH 119/AIRPORT SPUR

RIPRAP

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 8 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_03.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

S. 19TH

S. 15T

W. MAPLEWOOD

W. DENIS

PLACE

GRANGE AVE

IH 94/IH 41

B-40-817

B-40-816

3

C

5516CS

5514CS

5512CS

5510CS

5508CS

5516CN

5514CN

5512CN

5510CN

5508CN

516

514

512

510

508

MS96L

MS96SW

MS96E

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 9 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_04.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

EB IH 94 CD ROAD

WB IH 94 CD ROAD

IH 41

IH 94

EDGERTON AVE

STA 5532CS+00
MATCH EXISTING

STA 5541CS+75
MATCH EXISTING

STA 376SW+00
MATCH EXISTING

B-40-819

B-40-818

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 10 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_05.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

EB IH 94 CD ROAD

IH 41

IH 94

LAYTON AVE

B-40-823

B-40-824

B-40-821
(TUNNEL)

B-40-820

RIPRAP

TUNNEL

TRAFFIC GATE

FLAG

SIGN

MH

INL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 11 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_06.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

2

N

SOO LINE (CP)

16CPA

14CPB

14CPA

12CPA

10CPB

13TH ST

IH 94

STA 351NW+12
MATCH EXISTING

STA 349WN+40
MATCH EXISTING

B-40-829

B-40-828

22TX

24TX

PARKING

PKNG

MH

INL

SIGN

350NW

348NW

352NW

354NW

356NW

358NW

354WN

350WN

352WN

52WE

596

594

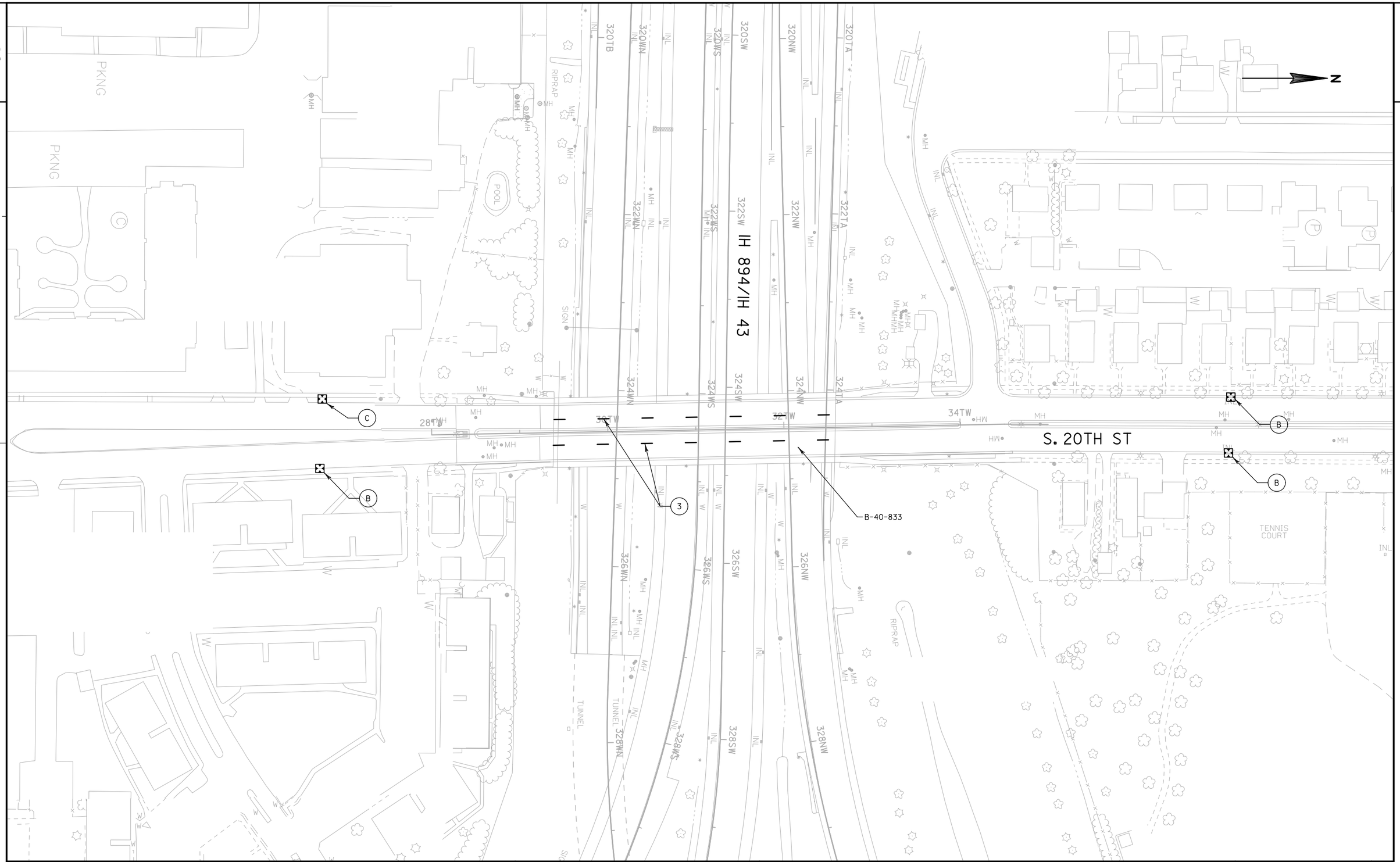
592

604

| PROJECT NO: 3700-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 12 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_07.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

2




| PROJECT NO: 3700-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MAKING | SHEET 13 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_08.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

IH 43/IH 41/IH 894

13

B

B-40-834

2

6

1

B

4_015

4_016

PILE

RIPRAP

RIPRAP

WALLS

PKNG

S. LOUISIANA

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 14 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_09.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

N

IH 43/IH 41/IH 894

S.27TH ST

B-40-837

B-40-836

B-40-835

| PROJECT NO: 1030-37-70 | HWY: IH-94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 15 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_10.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

B-40-827
(TUNNEL)

B-40-832
(TUNNEL)

IH 43

N

RIPRAP

TUNNEL

INL

MH

W

SIGN

AIR VENTS

FIFTEENTH

SOUTH

WEST

POOL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EROSION CONTROL/PAVEMENT MARKING | SHEET 16 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_pm_11.dgn PLOT DATE : 01-FEB-2019 PLOT BY : Jpieroni PLOT NAME : PLOT SCALE : 100:1

**LEGEND**

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

LAYTON AVENUE

46L

48L

50L

52L

54L

LC

564LC

566LD

568LD

570LD

572LD

574LD

576LD

1562NS

1564NS

1566NS

1568NS

1570NS

1572NS

1574NS

1576NS

344WS

342WS

340WS

338WS

336WS

564

566

568

570

572

574

576

IH 94 SB

IH 94 NB

332WS

332SW

332WN

334WS

334SW

334WN

336WS

336SW

336WN

338WS

338SW

340WS

340SW

342SW

344SW

346SW

1564SN

1566SN

1568SN

1570SN

1572SN

1574SN

1576SN

1578SN

564LB

566LA

568LA

570LA

572LA

574LA

576LA

578LA

PART OF (1) (2) (3) 566

REMOVE

NEW W1-8 36"X48"

BLINKER CHEVRON

MOVE 50 MPH (1) (2) (3)

NEW W1-8 36"X48"

BLINKER CHEVRON

(4) MOVE 50 MPH PLAQUE

15 FT. TYPE I POLE WITH SOLAR PANEL + BATTERY PACK

ESTR W1-8 50 MPH (4) PART OF

MOVE PLAQUE568LA TO FIRST CHEVRON IN SYSTEM

TRAFFIC GATE

RIPRAP

AIR VENTS

| PROJECT NO: 1030-37-70 | HWY: 43/94/894 | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 17 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\CAD\10303700\SIGN\023201_PS.DWG
LAYOUT NAME - SHEET 01

PLOT DATE : 12/28/2018 10:17 AM PLOT BY : SANTIAGO PEREZ, EDGA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

## GENERAL NOTES FOR TRAFFIC CONTROL

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

2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.

3) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

4) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

5) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

7) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.

8) 16" X 16" ORANGE FLAGS SHALL BE INCIDENTAL TO TRAFFIC CONTROL SIGN BID ITEM.

9) INSTALL PROPOSED TRAFFIC CONTROL SIGNS ON BOTH OUTSIDE SHOULDER AND MEDIAN SIDE OF ALL DIVIDED ROADWAYS.

10) ALL TRAFFIC CONTROL SIGNS LOCATED IN MEDIANS SHALL BE MOUNTED ON CONCRETE BARRIER UNLESS OTHERWISE NOTED, SEE TRAFFIC CONTROL DETAILS.

11) COVER DETOUR SIGNS WHEN NOT IN USE. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

## GENERAL NOTES FOR EROSION CONTROL

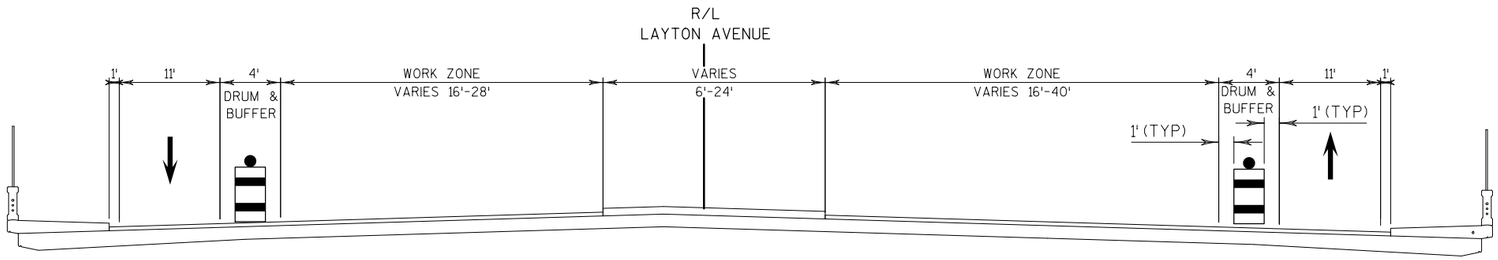
1) PLACE INLET PROTECTION ON INLETS ADJACENT TO STRUCTURES PRIOR TO PERFORMING WORK, AS DIRECTED BY THE ENGINEER.

## TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A AND ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FIXED MESSAGE SIGN GROUND MOUNT
- TRAFFIC CONTROL ARROW BOARD
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC CONTROL DRUM
- TRAFFIC FLOW ARROW
- WORK ZONE THIS STAGE

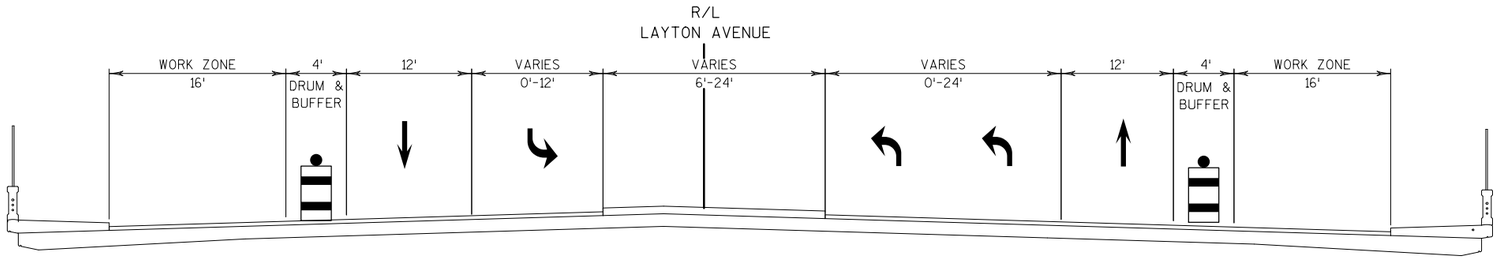
2

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL GENERAL NOTES AND LEGEND | SHEET 18 | E |
|---|---|---|---|---|---|




TYPICAL SECTION LAYTON AVENUE B-40-820

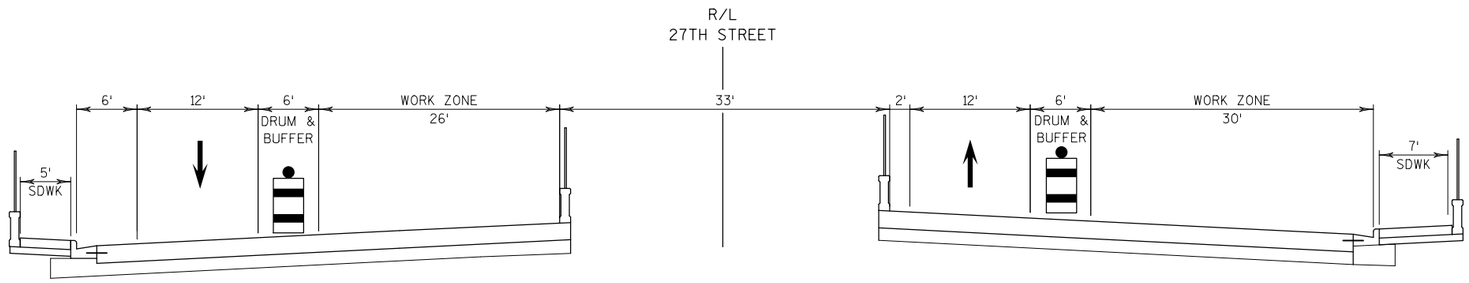
STAGE 1 CONSTRUCTION
(LOOKING EAST)




TYPICAL SECTION LAYTON AVENUE B-40-820

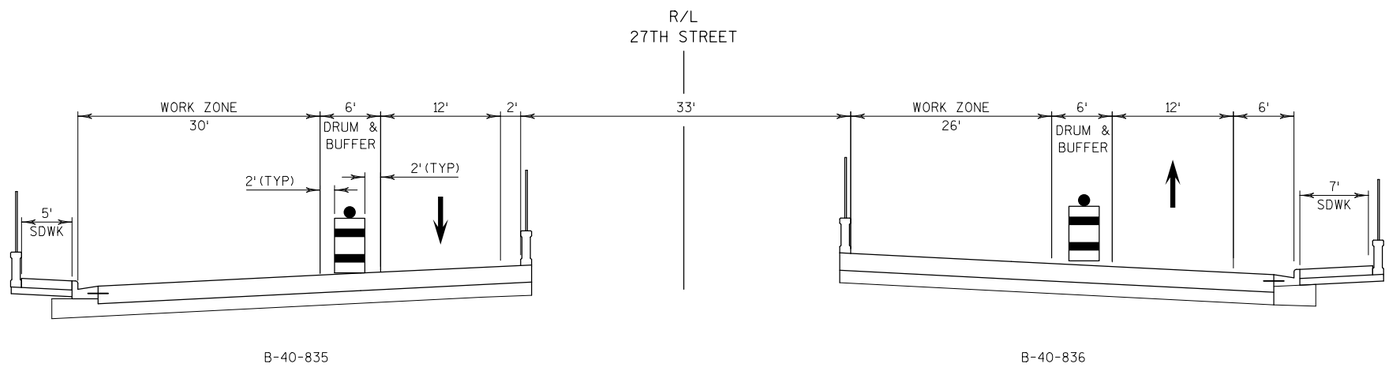
STAGE 2 CONSTRUCTION
(LOOKING EAST)

2



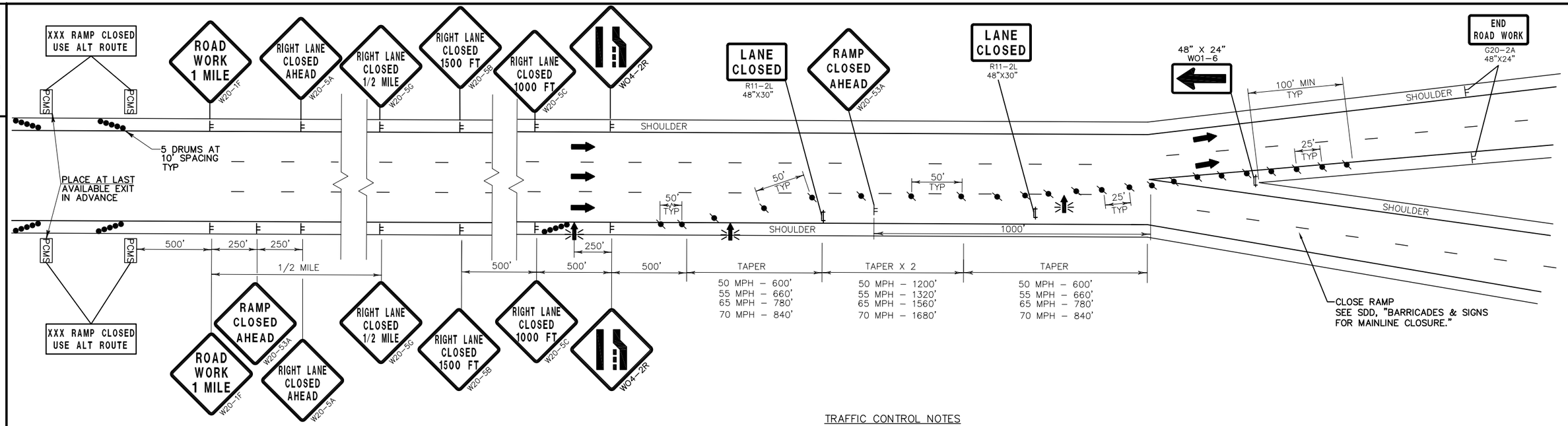

## TYPICAL SECTION 27TH STREET B-40-835/836

STAGE 1 CONSTRUCTION
(LOOKING NORTH)




## TYPICAL SECTION 27TH STREET B-40-835/836

STAGE 2 CONSTRUCTION
(LOOKING NORTH)




## LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) AND TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD

## TRAFFIC CONTROL NOTES

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

ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

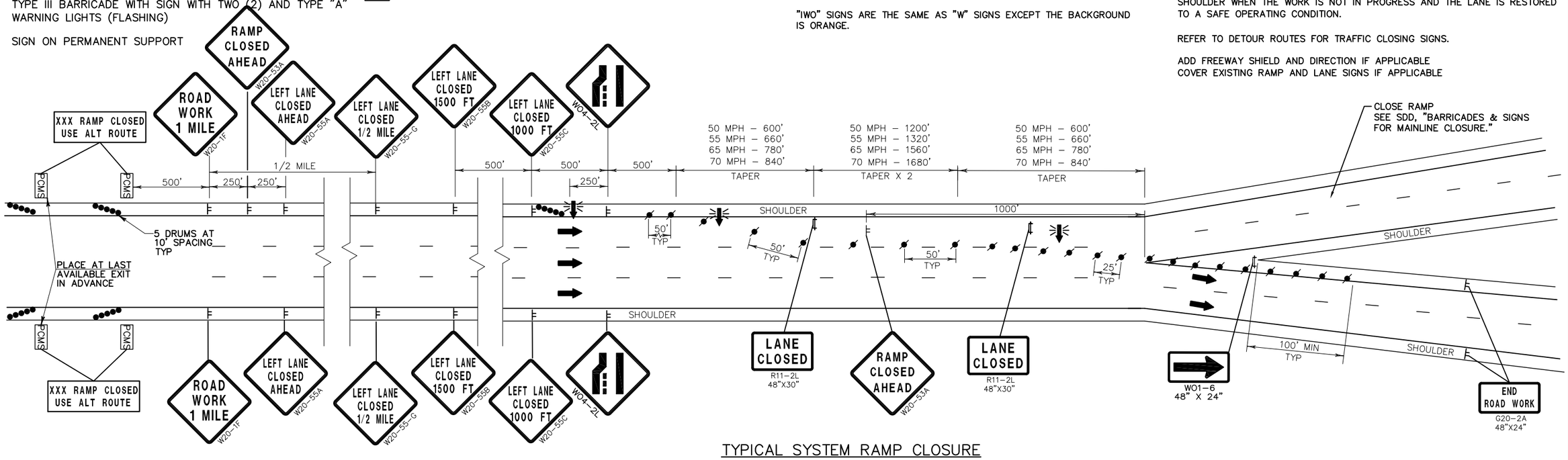
"IWO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

ALL SHORT-TERM LANE CLOSURE SIGNS SHALL BE COMPLETELY REMOVED OR COVERED AND ALL ARROW BOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

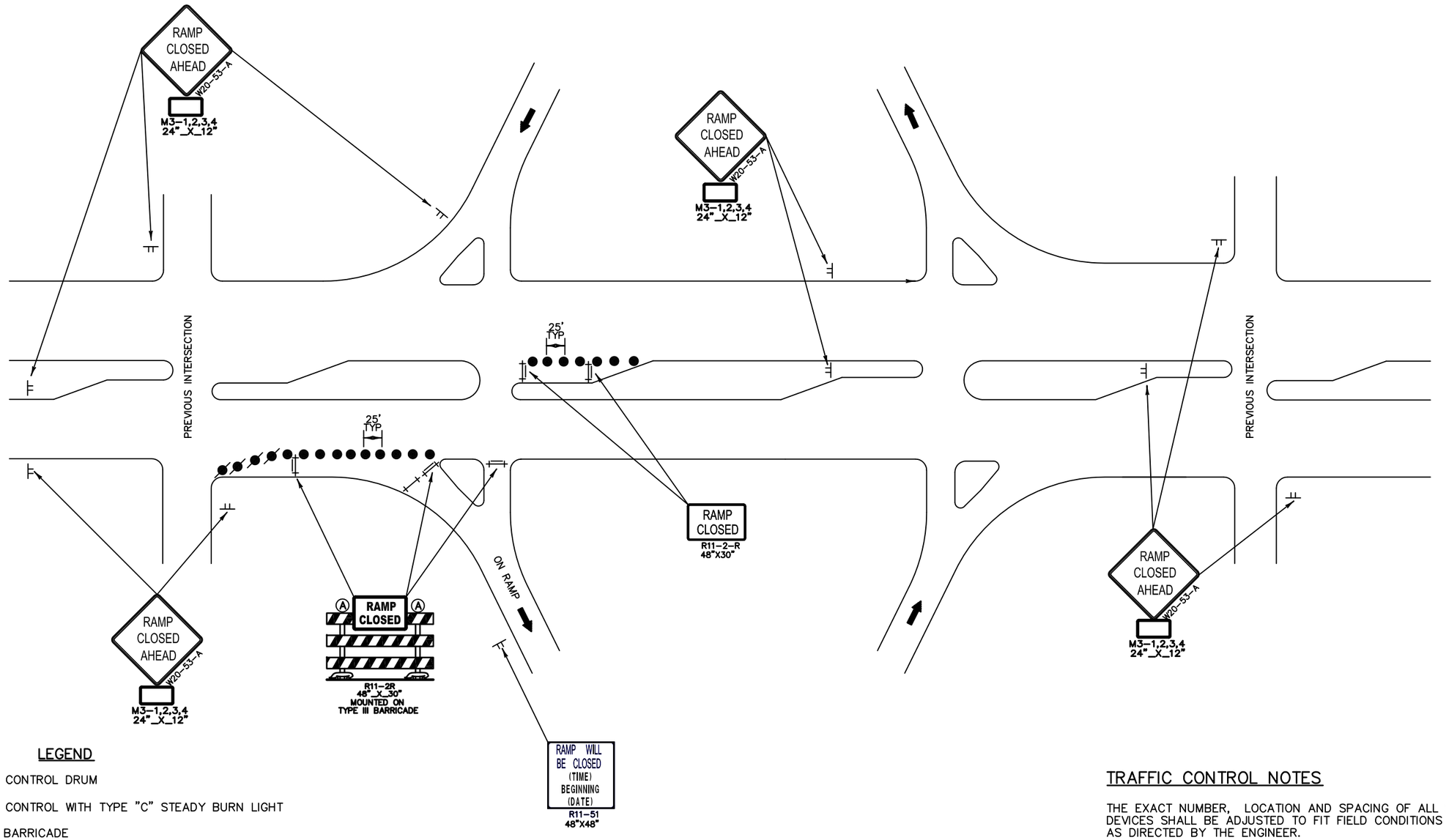
REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.

ADD FREEWAY SHIELD AND DIRECTION IF APPLICABLE
COVER EXISTING RAMP AND LANE SIGNS IF APPLICABLE




## TYPICAL SYSTEM RAMP CLOSURE

| PROJECT NO:1030-37-70 | HWY:IH 94 | COUNTY:MILWAUKEE | TRAFFIC CONTROL – CONSTRUCTION DETAIL | SHEET E |
|---|---|---|---|---|







## LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

## TRAFFIC CONTROL NOTES

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

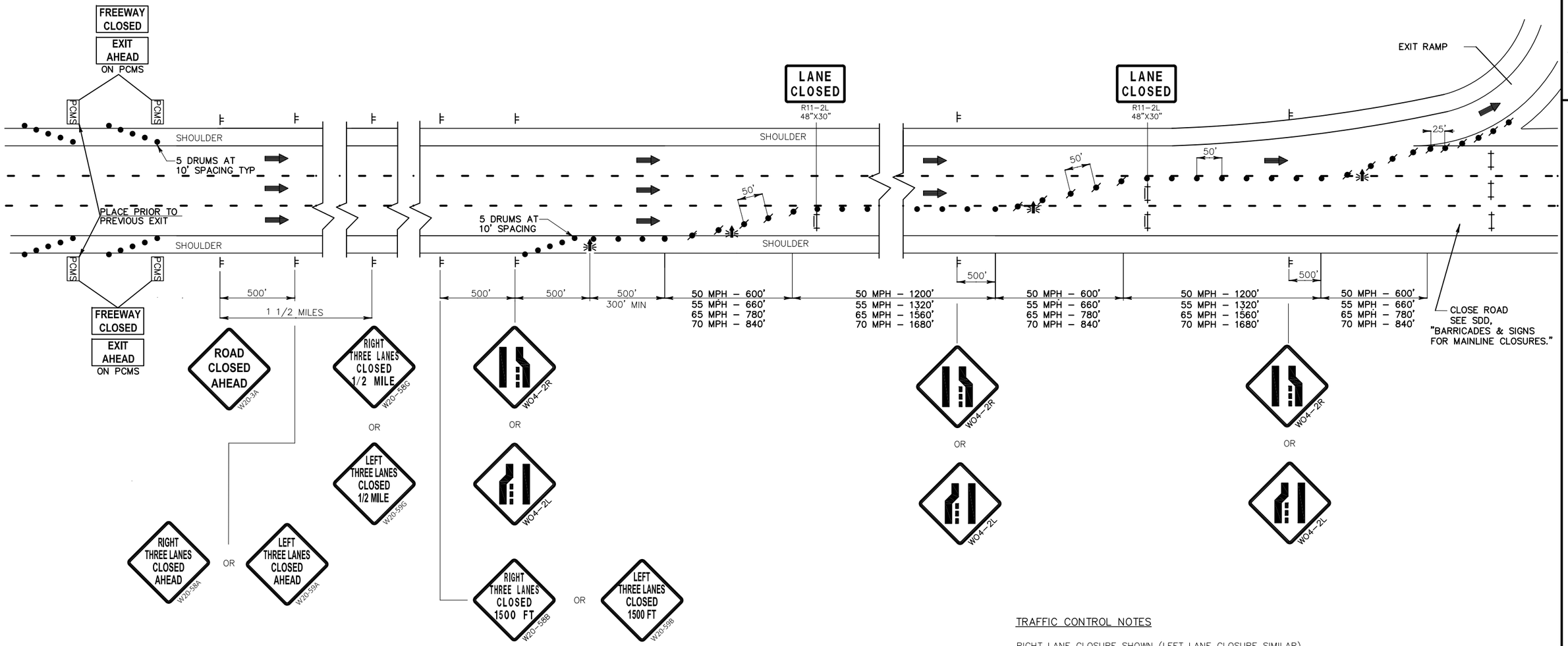
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

SHORT TERM DEFINED AS 7 DAYS OR LESS.
FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

## TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
## SHORT TERM ONLY

| PROJECT NO:1030-37-70 | HWY:IH 94 | COUNTY:MILWAUKEE | TRAFFIC CONTROL – CONSTRUCTION DETAIL | SHEET | E |
|---|---|---|---|---|---|




## LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA

## THREE LANE FULL FREEWAY CLOSURE

## TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR).

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

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

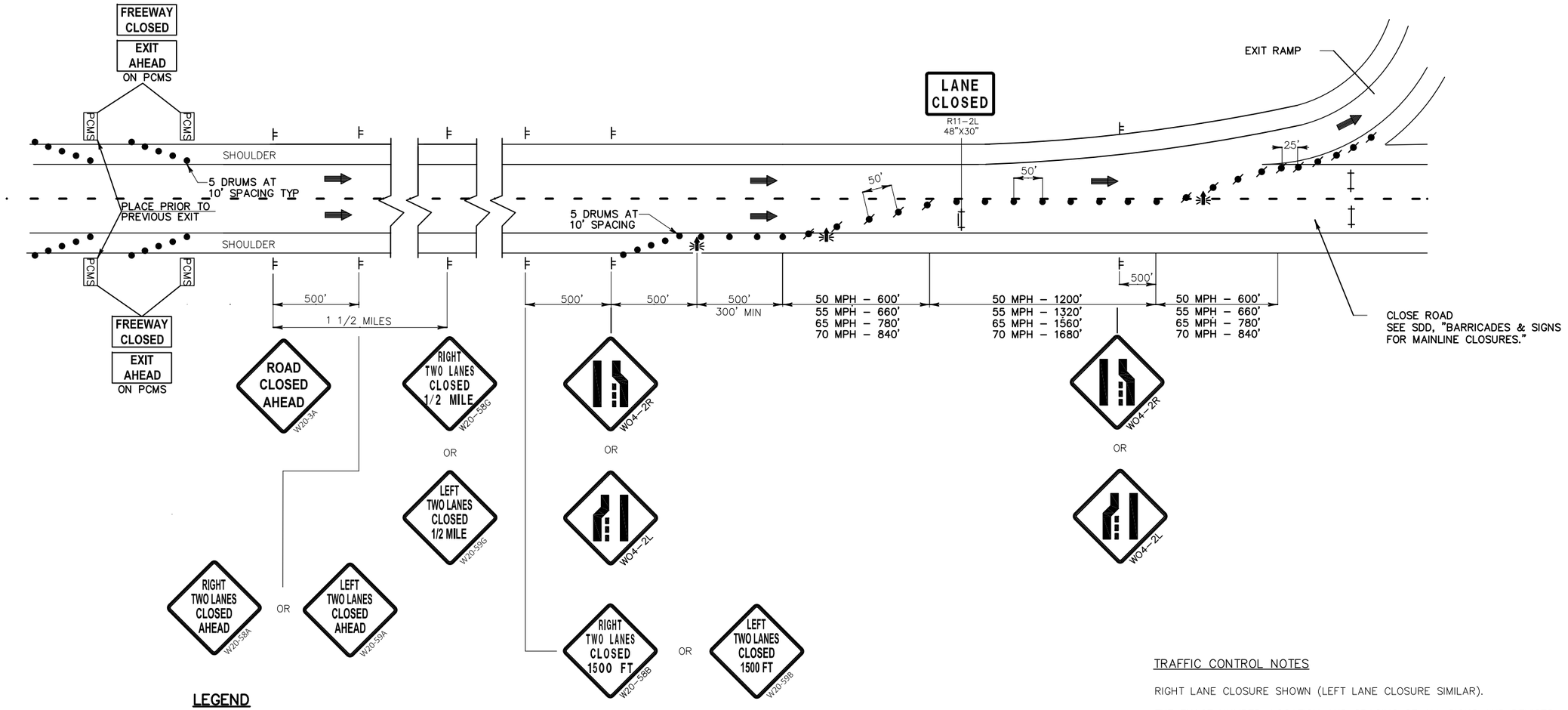
IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS, WITH LANE CLOSED SIGN.

REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.

| PROJECT NO:1030–37–70 | HWY:IH 94 | COUNTY:MILWAUKEE | TRAFFIC CONTROL – CONSTRUCTION DETAIL | SHEET E |
|---|---|---|---|---|

2




## LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA

## TWO LANE FULL FREEWAY CLOSURE

### TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR).

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

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS, WITH LANE CLOSED SIGN.

REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.

| PROJECT NO:1030–37–70 | HWY:IH 94 | COUNTY:MILWAUKEE | TRAFFIC CONTROL – CONSTRUCTION DETAIL | SHEET | E |
|---|---|---|---|---|---|

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W01-4R

EB IH 94 CD ROAD

IH 94

WB IH 94 CD ROAD

360' LANE SHIFT

TO AIRPORT

USE LAYTON

PCMS

PCMS MESSAGE OR AS PROVIDED BY THE ENGINEER TO BE LOCATED 2500' FROM ARROWBOARD ON EB IH 94/IH 41/IH 43

LANE CLOSED
R11-2L
48" X 30"

CD ROAD TO CLOSE

<DAY>
<TIME>

PCMS MESSAGE OR AS PROVIDED BY THE ENGINEER.
PLACE 3 DAYS PRIOR TO CLOSURE

LANE CLOSED
R11-2L
48" X 30"

CLOSE EB IH 94 RIGHT LANE
SEE SDD "TRAFFIC CONTROL LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EB IH 94 CD ROAD CLOSURE DETAIL | SHEET 25 | E |
|---|---|---|---|---|---|

FILE NAME : 375_01_EB IH94 CD Road Closure.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 150:1

2

2

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

PCMS MESSAGE OR AS
PROVIDED BY THE ENGINEER.

IH 94
EAST

FOLLOW
CD ROAD

94 EAST
KEEP LEFT

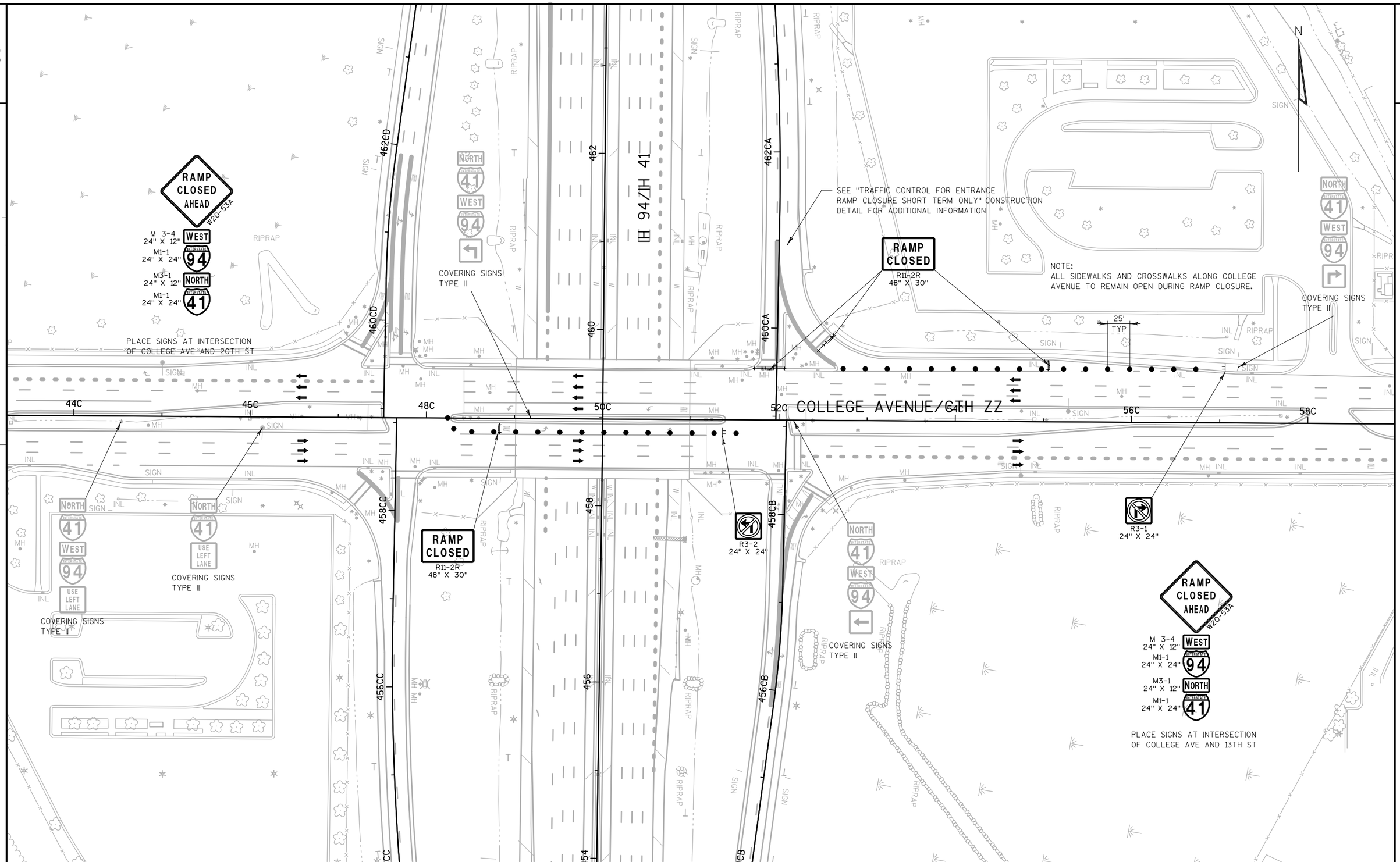
PCMS MESSAGE OR AS
PROVIDED BY THE ENGINEER.

CLOSE LEFT LANE
SEE SDD "TRAFFIC CONTROL LANE CLOSURE"
FOR REQUIRED TRAFFIC CONTROL

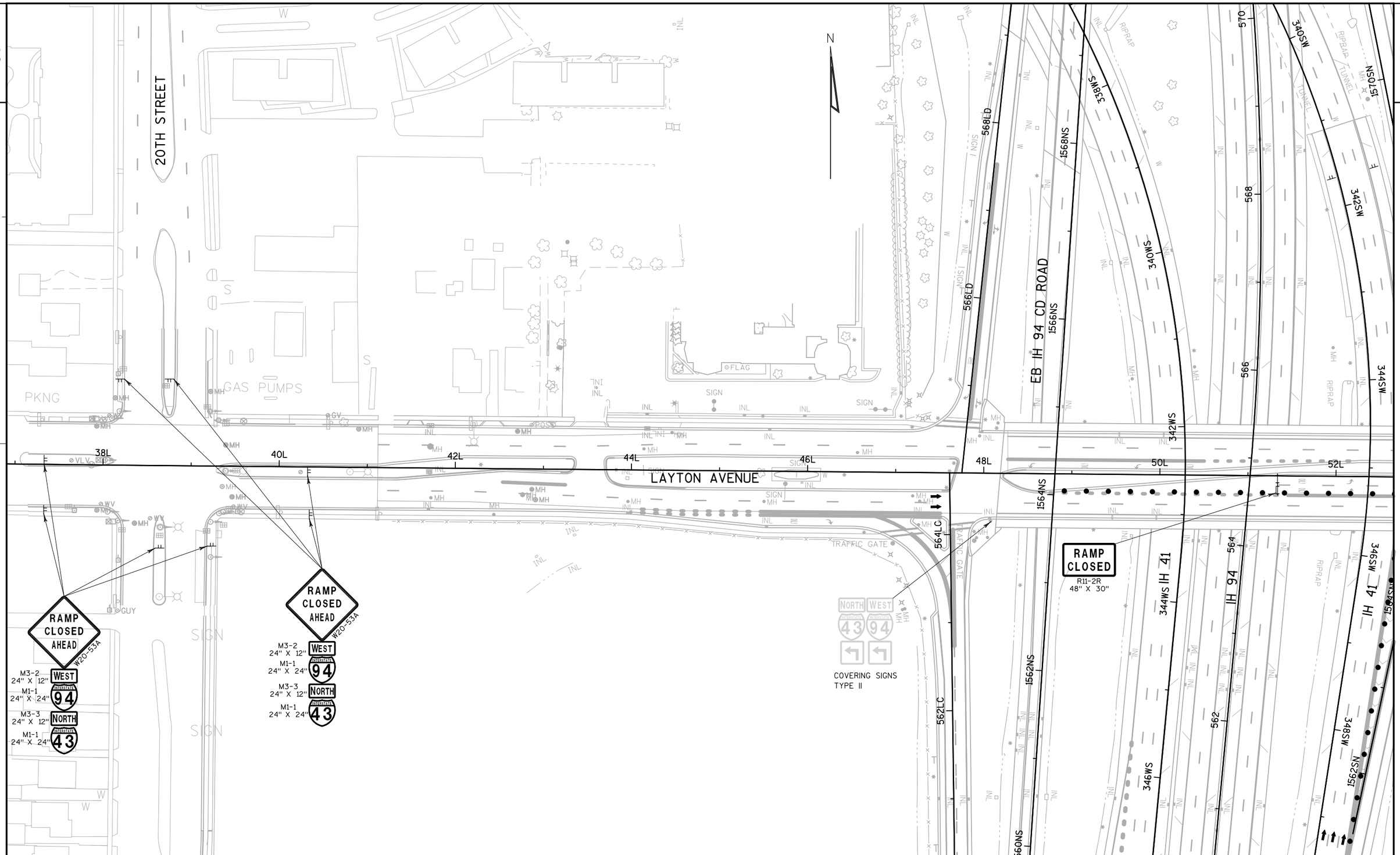
IH 94

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EB IH 94 CLOSURE DETAIL | SHEET 26 | E |
|---|---|---|---|---|---|

FILE NAME : 375_02_EB IH94 Closure.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 150:1



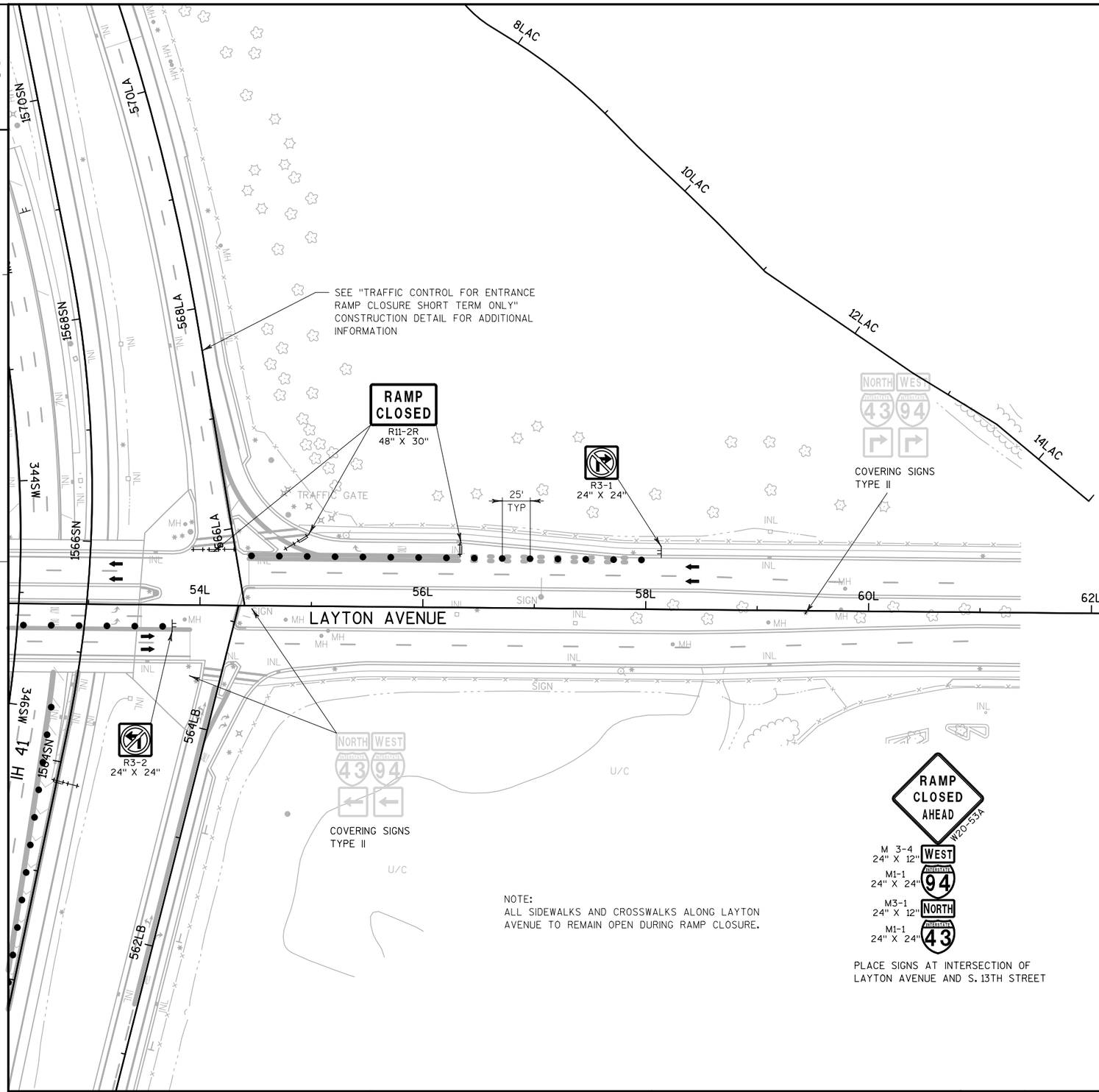

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | COLLEGE AVENUE NB ENTRANCE RAMP CLOSURE DETAIL | SHEET 27 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | LAYTON AVENUE NB ENTRANCE RAMP CLOSURE DETAIL | SHEET 28 E |
|---|---|---|---|---|

FILE NAME : 377_01_Layton NB On Ramp Closure.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42




2

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | LAYTON AVENUE NB ENTRANCE RAMP CLOSURE DETAIL | SHEET 29 | E |
|---|---|---|---|---|---|

2

RAMP CLOSED AHEAD
W20-53A

M3-2
24" X 12"
EAST
M1-1
24" X 24"
INTERSTATE 94
M3-3
24" X 12"
SOUTH
M1-1
24" X 24"
INTERSTATE 41

PLACE SIGNS AT INTERSECTION OF LAYTON AVE AND 13TH STREET

SOUTH 41

COVERING SIGNS TYPE II

S. 20TH ST

LAYTON AVE

EB IH 94 CD ROAD

IH 41

IH 94

PKNG

GAS PUMPS

FLAG

RIPRAP

TUNNEL

TRAFFIC GATE

SIGN

GUY

38L 40L 42L 44L 46L 48L 50L 52L

568LD 566LD 564LC 562LC 560LC

1568NS 1566NS 1564NS 1562NS 1560NS

339WS 340WS 342WS 344WS 346WS

342SW 344SW 346SW 348SW 350SW

568 566 564 562 560

1568SN 1564SN 1562SN

R3-2
24" X 24"

R3-1
24" X 24"

R11-2R
48" X 30"

SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | LAYTON AVENUE SB ENTRANCE RAMP CLOSURE DETAIL | SHEET 30 E |
|---|---|---|---|---|

FILE NAME : 377_03_Layton SB On Ramp Closure.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

NOTE:
SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)" FOR ADDITIONAL INFORMATION

27TH STREET

20TH STREET

IH 43/IH 41/IH 894

660' LANE DROP TAPER

660' LANE DROP TAPER

1320'

500'

W04-2L

ROAD WORK 2 MILES W20-1E

LEFT TWO LANES CLOSED 1 MILE W20-59F

LEFT TWO LANES CLOSED 1/2 MILE W20-59G

LEFT TWO LANES CLOSED 1500 FT W20-59E

W04-2L

5280' 2600' 1100' 500'

LANE CLOSED
R11-2L
48" X 30"
SPACED EVERY
1/4 MILE

LAYTON AVENUE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | EB IH 894 LANE CLOSURE DETAIL | SHEET 31 | E |
|---|---|---|---|---|---|

2

N

ALVINA COURT

W

S. 20TH

LOCATE SIGNS ON TYPE III BARRICADES ALONG EB COLLEGE AVENUE 500' WEST OF 27TH STREET

ROAD CLOSED AHEAD
W20-3A

COLLEGE AVE

ROAD CLOSED 0.7 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

ROAD CLOSED 1000 FT
W20-3C

END ROAD WORK
G20-2A
48" X 24"

ROAD CLOSED 500 FT
W20-3D

PCMS MESSAGE
COLLEGE AVENUE CLOSED
USE ALTERNATE ROUTE

PCMS PLACE ON IH 94 NORTH OF AIRPORT SPUR AND SOUTH OF RAWSON AVENUE EXITS, OR AS DIRECTED BY THE ENGINEER

IH 94/IH 41 EXIT RAMP CLOSED, SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" AND "TRAFFIC CONTROL, LANE CLOSURE" FOR TRAFFIC CONTROL REQUIRED

ROAD CLOSED
R11-2
48" X 30"

IH 94/IH 41

38C 40C 42C 44C 46C 48C 50C 52C

460CD 462CD 460 462 460CA 462CA

458CC 456CC 458 456 458CB 456CB

COLLEGE AVENUE/CTH ZZ

B-40-811

500' 500' 500'

PCMS

PCMS MESSAGE
PARKING
COLLEGE AVENUE TO CLOSE
<DAY>
<TIME>

RAMP CLOSED AHEAD
W20-53A

M1-1
24" X 24"
INTERSTATE 94

M1-1
24" X 24"
INTERSTATE 41

LOCATE SIGNS ON NB AND SB 20TH STREET AND 27TH STREET AT COLLEGE AVENUE AND ON EB COLLEGE AVENUE WEST OF 20TH STREET AS DIRECTED BY THE ENGINEER

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

LOCATE SIGN ON TYPE III BARRICADE ALONG EB COLLEGE AVENUE EAST OF 20TH STREET AS DIRECTED BY THE ENGINEER

NOTES:

1. SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION ON COLLEGE AVENUE CLOSURE TRAFFIC CONTROL

2. MAINTAIN SIDEWALK ALONG ONE SIDE OF COLLEGE AVENUE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-811 | SHEET 32 | E |
|---|---|---|---|---|---|

2

IH 94/IH 41

COLLEGE AVENUE/CTH ZZ

PCMS MESSAGE

COLLEGE AVENUE TO CLOSE

<DAY> <TIME>

LOCATE SIGNS ON TYPE III BARRICADES ALONG COLLEGE AVENUE 500' WEST OF HOWELL AVENUE

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED 1.1 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3
60" X 30"

ROAD CLOSED AHEAD
W20-3A

COLLEGE AVE

500'

PCMS

ROAD CLOSED
R11-2
48" X 30"

IH 94/IH 41 EXIT RAMP CLOSED, SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR REQUIRED TRAFFIC CONTROL

END ROAD WORK
G20-2A
48" X 24"

RAMP CLOSED AHEAD
W20-53A

M1-1
24" X 24"

M1-1
24" X 24"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

LOCATE SIGN ON TYPE III BARRICADE ALONG WB COLLEGE AVENUE WEST OF 13TH STREET

LOCATE SIGNS ON NB AND SB 13TH STREET AT COLLEGE AVENUE AND ON WB COLLEGE AVENUE EAST OF HOWELL AVENUE AS DIRECTED BY THE ENGINEER

NOTES

1. SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION ON COLLEGE AVENUE CLOSURE TRAFFIC CONTROL

2. MAINTAIN SIDEWALK ALONG ONE SIDE OF COLLEGE AVENUE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-811 | SHEET 33 | E |
|---|---|---|---|---|---|

PCMS MESSAGE

RAMP TO AIRPORT CLOSED

EXIT AT COLLEGE

PLACE PCMS ALONG EB IH 94
SOUTH OF NB COLLEGE AVENUE
EXIT AS DIRECTED BY THE ENGINEER

CLOSE RAMP TO WB IH 94 CD ROAD

PCMS

PCMS MESSAGE OR
AS DIRECTED BY
THE ENGINEER

EXIT RAMP TO CLOSE

<DAY>
<TIME>

TO BE PLACED 3 DAYS
PRIOR TO CLOSURE

NB ENTRANCE RAMP CLOSED AT COLLEGE AVENUE, SEE "COLLEGE AVENUE NB ENTRANCE RAMP CLOSURE DETAIL" FOR ADDITIONAL TRAFFIC CONTROL REQUIRED

ROAD WORK AHEAD
W20-1A

RAMP CLOSED AHEAD
W20-53A

RAMP CLOSED 1000 FT
W20-53C

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR SIGN PLACEMENT AND ADDITIONAL TRAFFIC CONTROL REQUIRED FOR WB IH 94 CD ROAD EXIT RAMP CLOSURE

RAMP CLOSED
R11-2R
48" X 30"

1500'

1500'

IH 94/IH 41

COLLEGE AVENUE/CTH ZZ

458CC 460CD 462CD 464CD 466CD 468CD 470CD

458CB 460CA 462CA 464CA 466CA 468CA 470CA

5466CS 5468CS 5470CS

5468CN 5470CN

458 460 462 464 466 468 470

46C 48C 50C 52C 54C

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-812 STAGE 1 | SHEET 34 | E |
|---|---|---|---|---|---|

2

2

N

EB IH 94 CD ROAD

472CD 474CD

5472CS 5474CS 5476CS 5478CS 5480CS 5482CS 5484CS 5486CS

472 474 476 478 480 482 484 486

IH 94/IH 41

18RM

20RM

5472CN 5474CN 5476CN 5478CN 5480CN 5482CN 5484CN 5486CN

472CA 474CA 476CA 484AB 486AB

WB IH 94 CD ROAD

B-40-812

RAMSEY AVE

22RM

WB IH 94 CD
ROAD CLOSED

RAMP
CLOSED
R11-2R
48" X 30"

ROAD
CLOSED
R11-2
48" X 30"

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-812 STAGE 1 | SHEET 35 | E |
|---|---|---|---|---|---|

2

2

N

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

18RM

20RM

22RM

474CD
5474CS
5476CS
5478CS
5480CS
EB IH 94 CD ROAD
5482CS
5484CS
5486CS
5488CS
488AC

474
476
478
480
IH 94/IH 41
482
484
486
488

5474CN
5476CN
5478CN
5480CN
5482CN
5484CN
5486CN
5488CN

474CA
476CA
WB IH 94 CD ROAD
484AB
486AB
488AB

B-40-812

EXISTING CONCRETE BARRIER
500'

RAMSEY AVE

BIKE PATH

NB EXIT RAMP TO STH 119/GENERAL MITCHELL AIRPORT OPEN, SEE SDD "TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

NB ENTRANCE RAMP FROM RAWSON AVENUE CLOSED, SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

TWO RIGHT LANES CLOSED, SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)" FOR REQUIRED TRAFFIC CONTROL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-812 STAGE 2 | SHEET 36 | E |
|---|---|---|---|---|---|

2

2

THREE LEFT LANES CLOSED, SEE "THREE LANE FULL FREEWAY CLOSURE" CONSTRUCTION DETAIL TO CLOSE THREE LANES. DO NOT INCLUDE PCMS MESSAGE FOR FREEWAY CLOSURE.

END ROAD WORK
G20-2A
48" X 24"

474CD
5474CS
5476CS
5478CS
5480CS
5482CS
5484CS
5486CS
488AC
5488CS

EB IH 94 CD ROAD

474
476
478
IH 94/IH 41
480
482
484
486
488

18RM
20RM
B-40-812

5474CN
5476CN
5478CN
5480CN
5482CN
5484CN
5486CN
5488CN

474CA
476CA
484AB
486AB
488AB

WB IH 94 CD ROAD

500'

RAMSEY AVE
22RM

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-812 STAGE 3 | SHEET 37 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_812_S3_1_.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

ROAD WORK 500 FT
W20-1D

ENTRANCE RAMP CLOSED, SEE TRAFFIC CONTROL B-40-815 FOR TRAFFIC CONTROL REQUIRED TO CLOSE RAMP

B-40-813

500'

IH 94/IH 41

EB IH 94 CD ROAD

STH 119/AIRPORT SPUR

RAMSEY AVE

18RM

20RM

22RM

80A

82A

84A

86A

88A

484 486 488 490 492 494 496 498

488AC 490AC 492AC 494AC 496AC 498AC

5484CS 5486CS 5488CS 5490CS 5492CS 5494CS 5496CS 5498CS

5484CN 5486CN 5488CN 5490CN 5492CN 5494CN 5496CN 5498CN

484AB 486AB 488AB 490AB 492AB 494AB

ROAD WORK 1000 FT
W20-1C

ROAD WORK AHEAD
W20-1A

1000'

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-813 STAGE 1 | SHEET 38 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_813_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

ENTRANCE RAMP CLOSED, SEE TRAFFIC CONTROL B-40-815 FOR TRAFFIC CONTROL REQUIRED TO CLOSE RAMP

B-40-813

18RM

20RM

22RM

RAMSEY AVE

STH 119/AIRPORT SPUR

804

824

84A

86A

88A

RIPRAP

488AC 490AC 492AC 494AC 496AC 498AC

5484CS 5486CS 5488CS 5490CS 5492CS 5494CS 5496CS 5498CS

500'

EXISTING CONCRETE BARRIER

805' LANE SHIFT

EB IH 94 CD ROAD

IH 94/IH 41

484 486 488 490 492 494 496 498

5484CN 5486CN 5488CN 5490CN 5492CN 5494CN 5496CN 5498CN

484AB 486AB 488AB 490AB 492AB 494AB

SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR ADVANCED SIGNING AND OTHER TRAFFIC CONTROL REQUIRED FOR LEFT LANE CLOSURE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-813 STAGE 2 | SHEET 39 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_813_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

CLOSE RIGHT LANES, SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

CLOSE TWO LANES OF SB IH 41, SEE "EB IH 894 LANE CLOSURE DETAIL" FOR REQUIRED TRAFFIC CONTROL

CONTINUE DRUMS NORTH ALONG LANE LINE TO EDGERTON AVENUE, SEE TRAFFIC CONTROL B-40-819 STAGE 3 FOR LANE SHIFT

B-40-813

18RM

20RM

22RM

82A

84A

86A

88A

90A

IH 94/IH 41

EB IH 94 CD ROAD

STH 119/AIRPORT SPUR

RAMSEY AVE

500'

660' LANE DROP

484 486 488 490 492 494 496 498

488AC 490AC 492AC 494AC 496AC 498AC

5484CS 5486CS 5488CS 5490CS 5492CS 5494CS 5496CS 5498CS

5484CN 5486CN 5488CN 5490CN 5492CN 5494CN 5496CN 5498CN

484AB 486AB 488AB 490AB 492AB 494AB 496AB

498AA

N

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-813 STAGE 3 | SHEET 40 | E |
|---|---|---|---|---|---|

2

EAST
94 41
SOUTH
Chicago

EXISTING SIGN

LANE CLOSED
R11-2L
48" X 30"

PLACE ADDITIONAL BARRICADES
AND R11-2L SIGNS EVERY 1/4 MILE
ALONG LANE CLOSURE

LANE CLOSED
R11-2L
48" X 30"

END OF EXISTING
IH 94/IH 41
RIGHT LANE DROP

END
ROAD WORK
G20-2A
48" X 24"

CONTINUE DRUMS NORTH
ALONG LANE LINE
TO MATCH LANE DROP
AT IH 94 STA 532+50

EB IH 94 CD ROAD

IH 94/IH 41

STH 119/AIRPORT SPUR

RAMSEY AVE

18RM
22RM
82A
84A
86A
88A
90A

484
486
488
490
492
494
496
498

488AC
490AC
492AC
494AC
496AC
498AC

5484CS
5486CS
5488CS
5490CS
5492CS
5494CS
5496CS
5498CS

5484CN
5486CN
5488CN
5490CN
5492CN
5494CN
5496CN
5498CN

484AB
486AB
488AB
490AB
492AB
494AB
496AB
496AA
498AA

500'

B-40-813

RIPRAP

N

2

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-813 STAGE 4 | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_813_S4_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

CLOSE LEFT LANE, SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

FULL CLOSURE OF EB IH 94 LANES, TRAFFIC DIVERTED TO CD ROAD SEE "EB IH 94 CLOSURE DETAIL" FOR ADDITIONAL TRAFFIC CONTROL REQUIRED

N

16ED

18ED

20ED

22ED

24ED

EB IH 94 CD ROAD

1536NS 1538NS 1540NS 1542NS 1544NS 1546NS 1548NS 550LC 1550NS

5536CS 5538CS 5540CS 5542CS 5544CS 5546CS 5548CS 5550CS

660' LANE DROP

366WS 364WS 362WS 360WS 358WS

536 538 540 542 544 546 548 IH 94 550

374SW 372SW 370SW 368SW 366SW 364SW 362SW 360SW 550LB

EDGERTON AVE

TENNIS COURT

BASKETBALL COURT

PLAYGROUND

POOL

FLAG

CANOPY

SIGN

POSTS

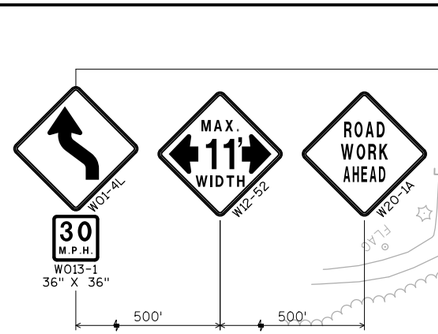
100HA

LANE CLOSED
R11-2L
48" X 30"

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-813 STAGE 4 | SHEET 42 | E |
|---|---|---|---|---|---|

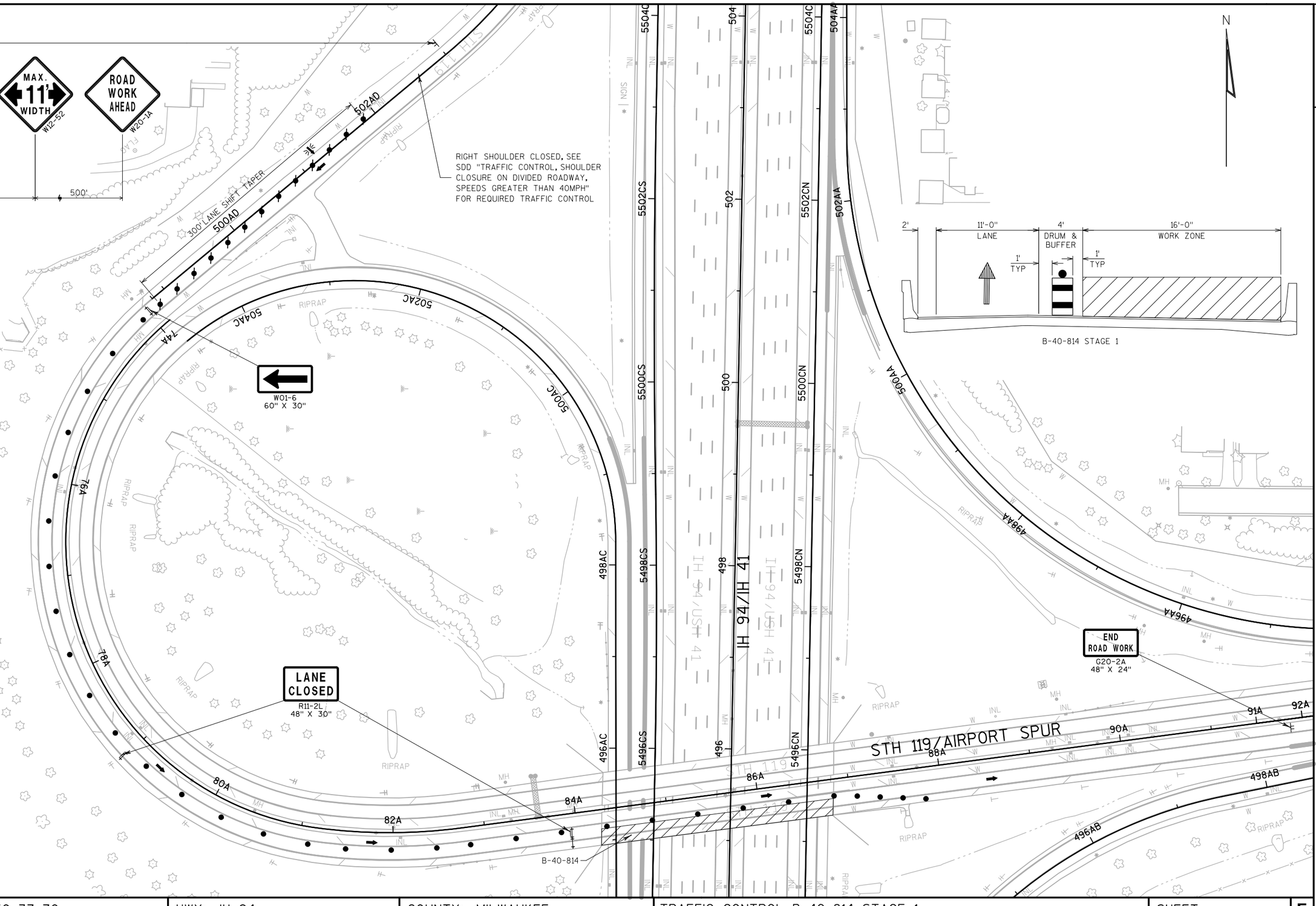
FILE NAME : 3700_813_S4_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42




RIGHT SHOULDER CLOSED, SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40MPH" FOR REQUIRED TRAFFIC CONTROL

300' LANE SHIFT TAPER





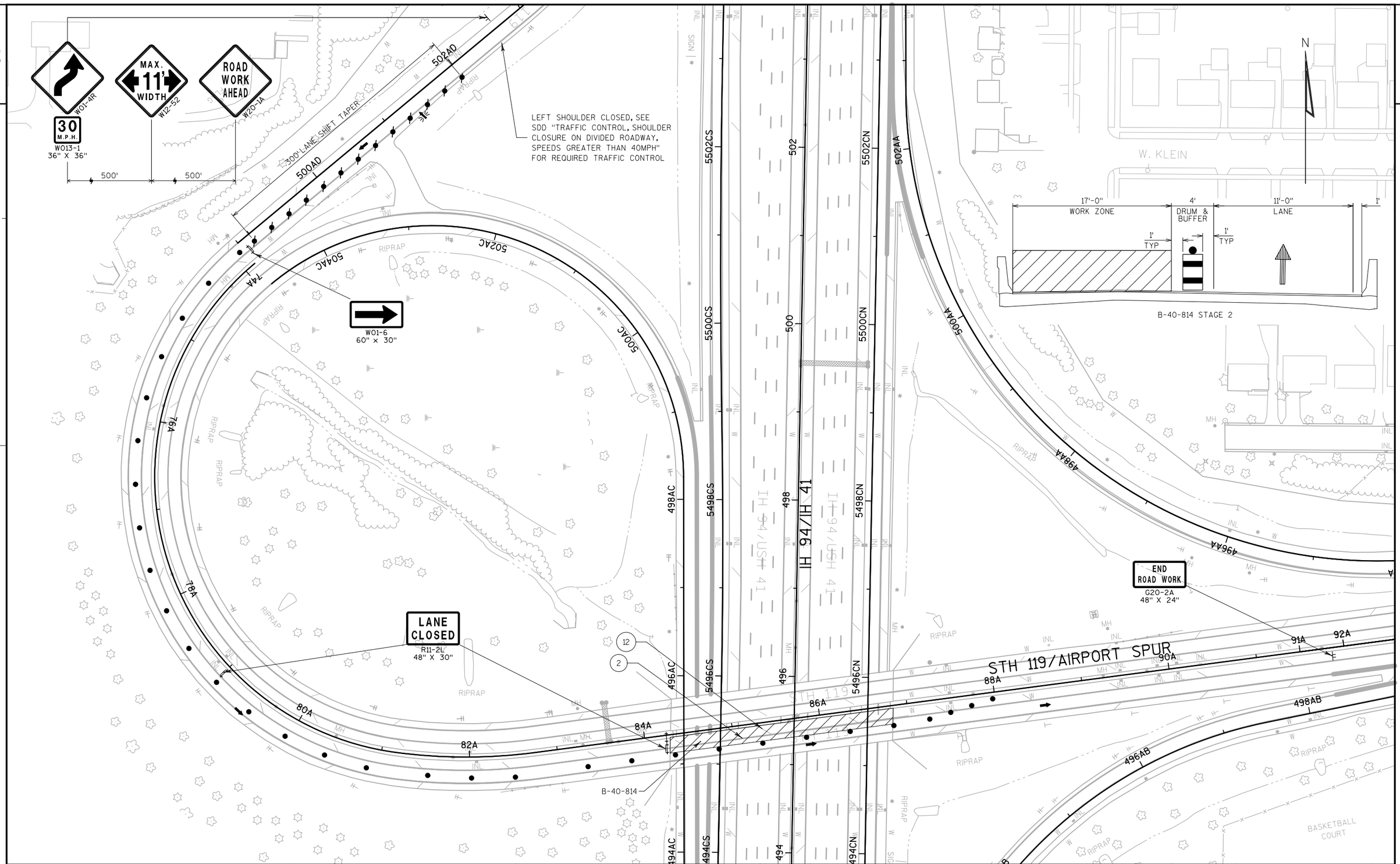


B-40-814 STAGE 1

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-814 STAGE 1 | SHEET 43 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_814_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-814 STAGE 2 | SHEET 44 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_814_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

W. KLEIN AVENUE

14TH ST

IH 94/IH 41

STH 119/AIRPORT SPUR

B-40-815

RAMP CLOSED
R11-2R
48" X 30"

RIPRAP

PLAYGROUND

BASKETBALL COURT

PKNG

GARLAND ELEMENTARY SCHOOL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-815 | SHEET 45 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_815_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

PARKING

PARKING

RIPRAP

RIPRAP

RIPRAP

CANADIAN PACIFIC RAILROAD

114A

112A

110A

108A

106A

104A

102A

100A

600' LANE DROP

13TH ST

STH 119/AIRPORT SPUR

488AA

488AA

506AB

RAMP CLOSED
R11-2R
48" X 30"

CLOSE LEFT LANE. SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

CLOSE WB AIRPORT SPUR/STH 119 ENTRANCE RAMPS AT S. HOWELL AVE, W. AIR CARGO WAY, AND GRANGE AVE. SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

PCMS MESSAGE OR AS PROVIDED BY THE ENGINEER

I-94 EB
RAMP
CLOSED
USE
LAYTON
AVE

PCMS

RAMP CLOSED 1000 FT
W20-53C

RAMP CLOSED AHEAD
W20-53A

ROAD WORK AHEAD
W20-1A

1500'

1500'

200'

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL INFORMATION

PILE

PILE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-815 | SHEET 46 | E |
|---|---|---|---|---|---|

2

N

W. MAPLEWOOD

S. 15TH

IH 94/IH 41

GRANGE AVE

B-40-817

B-40-816

LOCATE SIGN ON TYPE III BARRICADE ALONG EB GRANGE AVENUE 500' EAST OF 20TH STREET

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60" X 30"

ROAD CLOSED 1000 FT W20-3C

GRANGE AVE

ROAD CLOSED 500 FT W20-3D

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED R11-2 48" X 30"

500' 1500' 500' 500'

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED 1000 FT W20-3C

GRANGE AVE

LOCATE SIGN ON TYPE III BARRICADE ALONG WB GRANGE AVENUE 500' WEST OF 13TH STREET

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60" X 30"

ROAD CLOSED AHEAD W20-3A

500' 500' 1800' 500'

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

LOCATE SIGN ON TYPE III BARRICADE ALONG WB GRANGE AVENUE WEST OF 13TH STREET

ROAD CLOSED AHEAD W20-3A

R3-2 24" X 24"

LOCATE SIGN ON 14TH STREET AT GRANGE AVENUE

NOTES:

1. SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION ON GRANGE AVENUE CLOSURE TRAFFIC CONTROL

2. MAINTAIN SIDEWALK ALONG ONE SIDE OF GRANGE AVENUE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-816/B-40-817 | SHEET 47 | E |
|---|---|---|---|---|---|

2

N

PARKING

PARKING

RIPRAP

RIPRAP

RIPRAP

RIPRAP

RIPRAP

RIPRAP

CANADIAN PACIFIC RAILROAD

13TH ST

STH 119/AIRPORT SPUR

114A

112A

110A

108A

106A

104A

102A

100A

506AB

488AA

488AA

INL

W

SIGN

MH

PILE

PILE

RAMP CLOSED
R11-2R
48" X 30"

LOCATE AT RAMP GORE

RAMP CLOSED
R11-2R
48" X 30"

CLOSE RIGHT LANE. SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

CLOSE WB AIRPORT SPUR/STH 119 ENTRANCE RAMPS AT S. HOWELL AVE, W. AIR CARGO WAY, AND GRANGE AVE. SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

PCMS MESSAGE OR AS PROVIDED BY THE ENGINEER

RAMP CLOSED 1000 FT W20-53C

RAMP CLOSED AHEAD W20-53A

ROAD WORK AHEAD W20-1A

I-94 WB RAMP CLOSED
USE COLLEGE AVE

PCMS

1500'

1500'

200'

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL INFORMATION

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-818 STAGE 1 | SHEET 48 | E |
|---|---|---|---|---|---|

2

2

EB IH 94 CD ROAD

5526CS 5528CS 5530CS 5532CS 5534CS 5536CS 1536NS 5538CS 1538NS 1540NS 5540CS

526 528 530 532 534 536 538 540

IH 94/IH 41

366WS

18ED

20ED

22ED

24ED

B-40-818

500'

WB IH 94 CD ROAD

5526CN 5528CN 5530CN

380SW 378SW 376SW 374SW 372SW 370SW

N

EDGERTON AVE

RIGHT LANE CLOSED, SEE SDD
"TRAFFIC CONTROL, LANE CLOSURE"
FOR REQUIRED TRAFFIC CONTROL

RAMP CLOSED

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

PARKING

PKNG

TENNIS COURT

BASKETBALL COURT

PLAYGROUND

RECREATION AREA

CANOPY

FLAG

POOL

POSTS

SIGN

MH

INL

W

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-818 STAGE 1 | SHEET 49 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_818_S1_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

W01-4R

EB IH 94 CD ROAD

5526CS 5528CS 5530CS 5532CS 5534CS 5536CS 1536NS 5538CS 1538NS 1540NS 5540CS

LEFT LANE CLOSED, SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

526 528 530 532 534 536 538 540

IH 94/IH 41

360' LANE SHIFT

EXISTING CONCRETE BARRIER B-40-818

500'

5528CN 5530CN 5532CN

380SW 378SW 376SW 374SW 372SW 370SW

WB IH 94 CD ROAD

18ED

20ED

22ED

24ED

EDGERTON AVE

LEFT LANE CLOSED, SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

LANE CLOSED
R11-2L
48" X 30"

W04-3R

PKNG

PARKING

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

BASKETBALL COURT

TENNIS COURT

FLAG

CANOPY

POOL

POSTS

SIGN

MH

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-818 STAGE 2 | SHEET 50 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_818_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

GRANGE AVE

N

504AD
506AD
508AD
510AD
512AD
514AD
5506CS
5508CS
5510CS
5512CS
5514CS
5516CS
5518CS
506
508
IH 94/IH 41
510
512
514
516
518
5506CN
5508CN
5510CN
5512CN
5514CN
5516CN
5518CN
396SW
394SW
392SW
WB IH 94 CD ROAD

CLOSE TWO LEFT LANES, WB IH 94 TRAFFIC DIVERTED TO CD ROAD, SEE "TWO LANE FULL FREEWAY CLOSURE" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

POOL

FOOTBRIDGE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-818 STAGE 3 | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_818_S3_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

ROAD CLOSED
R11-2
48" X 30"

EB IH 94 CD ROAD

5526CS 5528CS 5530CS 5532CS 5534CS 5536CS 1536NS 5538CS 1538NS 5540CS

526 528 530 532 534 536 538 540

IH 94/IH 41

380SW 378SW 376SW 374SW 372SW 370SW

WB IH 94 CD ROAD

B-40-818
EXISTING CONCRETE BARRIER

WB IH 94 FULL CLOSURE
CLOSURE PAYMENT TO INCLUDE
"TRAFFIC CONTROL FULL
FREEWAY CLOSURE"

EDGERTON AVE

16ED 18ED 20ED 22ED 24ED

N

TENNIS COURT

PKNG PARKING PKNG

2

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-818 STAGE 3 | SHEET 52 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_818_S3_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

PCMS MESSAGE
TO AIRPORT
USE RAWSON

PCMS MESSAGE
TO AIRPORT
USE EXIT 9

PLACE PCMS ON OUTSIDE SHOULDER OF EB IH 894 AT 51ST STREET AND 1000' WEST OF 35TH STREET, OR AS DIRECTED BY THE ENGINEER

PCMS MESSAGE
TO AIRPORT
USE SOUTH 241

PLACE PCMS ALONG EB 27TH STREET EXIT RAMP AS DIRECTED BY THE ENGINEER

RAMP CLOSED. SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL TRAFFIC CONTROL REQUIRED

RAMP CLOSED
R11-2R
48" X 30"

RAMP CLOSED, SEE "LAYTON AVENUE SB ENTRANCE RAMP CLOSURE DETAIL" FOR REQUIRED TRAFFIC CONTROL

EB IH 94 CD ROAD CLOSED, SEE "EB IH 94 CD ROAD CLOSURE DETAIL" FOR REQUIRED TRAFFIC CONTROL

N

16ED
18ED
20ED
22ED
24ED

B-40-819

EB IH 94 CD ROAD
1536NS 1538NS 1540NS 1542NS 1544NS 1546NS 1548NS 550LC 1550NS
5538CS 5540CS 5542CS 5544CS 5546CS 5548CS 5550CS

IH 41
366WS 364WS 362WS 360WS 358WS 356WS

IH 94
538 540 542 544 546 548 550

WB IH 94 CD ROAD
372SW 370SW 368SW 366SW 364SW 362SW 360SW 550LB

EDGERTON AVE

TENNIS COURT
BASKETBALL COURT
PLAYGROUND
RECREATION AREA
PKNG
SIGN
POSTS
FLAG
POOL
CANOPY

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-819 STAGE 1 | SHEET 53 | E |
|---|---|---|---|---|---|

2

N

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

CLOSE TWO LEFT LANES OF SB USH 41.
SEE "EB IH 894 LANE CLOSURE DETAIL"
FOR REQUIRED TRAFFIC CONTROL

LANE CLOSED
R11-2L
48" X 30"

EB IH 94 CD ROAD

IH 41

IH 94

WB IH 94 CD ROAD

16ED

18ED

20ED

22ED

24ED

B-40-819

500'

EDGERTON AVE

S. 16TH STREET

S. 15TH PLACE

W. HOLMES

RECREATION AREA

TENNIS COURT

BASKETBALL COURT

PLAYGROUND

PKNG

HOLMES COURT

VOGEL COURT

STREET

FULL CLOSURE OF EB IH 94 LANES,
TRAFFIC DIVERTED TO CD ROAD
SEE "EB IH 94 CLOSURE DETAIL" FOR
REQUIRED TRAFFIC CONTROL
CLOSURE PAYMENT TO INCLUDE ITEM
"TRAFFIC CONTROL FULL FREEWAY CLOSURE"

100HA

102H

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-819 STAGE 2 | SHEET 54 | E |
|---|---|---|---|---|---|

2

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

W01-4L

LANE CLOSED
R11-2L
48" X 30"

EB IH 94 CD ROAD

660' LANE SHIFT TAPER

IH 41

IH 94

WB IH 94 CD ROAD

EDGERTON AVE

LANE CLOSED
R11-2L
48" X 30"

CLOSE TWO LEFT LANES OF SB IH 41.
SEE "EB IH 894 LANE CLOSURE DETAIL"
FOR REQUIRED TRAFFIC CONTROL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-819 STAGE 3 | SHEET 55 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_819_S3_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

20TH ST

ROAD WORK AHEAD
W20-1A

R3-2
36" X 36"

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

GAS PUMPS

LAYTON AVE

40L 42L 44L 46L 48L 50L 52L

25' TYP

350'

245' LANE DROP

TRAFFIC GATE

PLACE G20-1 SIGN ON EB LAYTON AVE WEST OF S. 20TH STREET

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-55A

ROAD WORK NEXT 0.3 MILES
G20-1
60" X 24"

W04-2L

700' 700'

WO1-6
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

50' TYP

B-40-820

SEE TRAFFIC CONTROL TYPICAL SECTIONS FOR DRUM PLACEMENT

EB IH 94 CD ROAD

IH 41

IH 94

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF LAYTON AVE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-820 STAGE 1 | SHEET 56 E |
|---|---|---|---|---|

2

2

N

PLACE G20-1 SIGN ON WB LAYTON AVE EAST OF S. 13TH STREET

W04-2L

ROAD WORK NEXT 0.3 MILES
G20-1
60" X 24"

LEFT LANE CLOSED AHEAD
W20-5A

ROAD WORK AHEAD
W20-1A

700'

700'

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

245' LANE DROP

350'

50' TYP

25' TYP

TRAFFIC GATE

LAYTON AVE

48L

50L

52L

54L

56L

58L

60L

62L

568LD

1568NS

338WS

1570SN

570LA

568

342SW

340WS

1568SN

568LA

1566NS

IH 41

IH 94

566

344SW

1566SN

566LA

342WS

1564NS

B-40-820

SEE TRAFFIC CONTROL TYPICAL SECTIONS FOR DRUM PLACEMENT

344WS

564

346SW

1564SN

564LB

W01-6
48" X 24"

U/C

END ROAD WORK
G20-2A
48" X 24"

U/C

1562NS

EB IH 94 CD ROAD

562

348SW

1562SN

562LB

346WS

ROAD WORK AHEAD
W20-1A

1560NS

PKNG

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF LAYTON AVE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-820 STAGE 1 | SHEET 57 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_820_S1_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

20TH ST

PKNG

GAS PUMPS

38L

40L

42L

44L

46L

48L

50L

LAYTON AVE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

568LD

566LD

1568NS

1566NS

336WS

340WS

342WS

IH 41

IH 94

568

566

564

562

564LC

562LC

1564NS

1562NS

1560NS

344WS

346WS

50' TYP

350'

245' LANE DROP

25' TYP

BEGIN RIGHT TURN LANE
R3-2OR
24" X 36"

SEE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL FOR RIGHT TURN

W12-1D
30" X 30"

LANE CLOSED
R11-2L
48" X 30"

W01-6
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

B-40-820

SEE TRAFFIC CONTROL - TYPICAL SECTIONS FOR DRUM PLACEMENT

PLACE SIGNS ON EB LAYTON AVE WEST OF S. 27TH ST

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5A

ROAD WORK NEXT 0.4 MILES
G20-1
60" X 24"

W04-2R

700'

700'

EB IH 94 CD ROAD

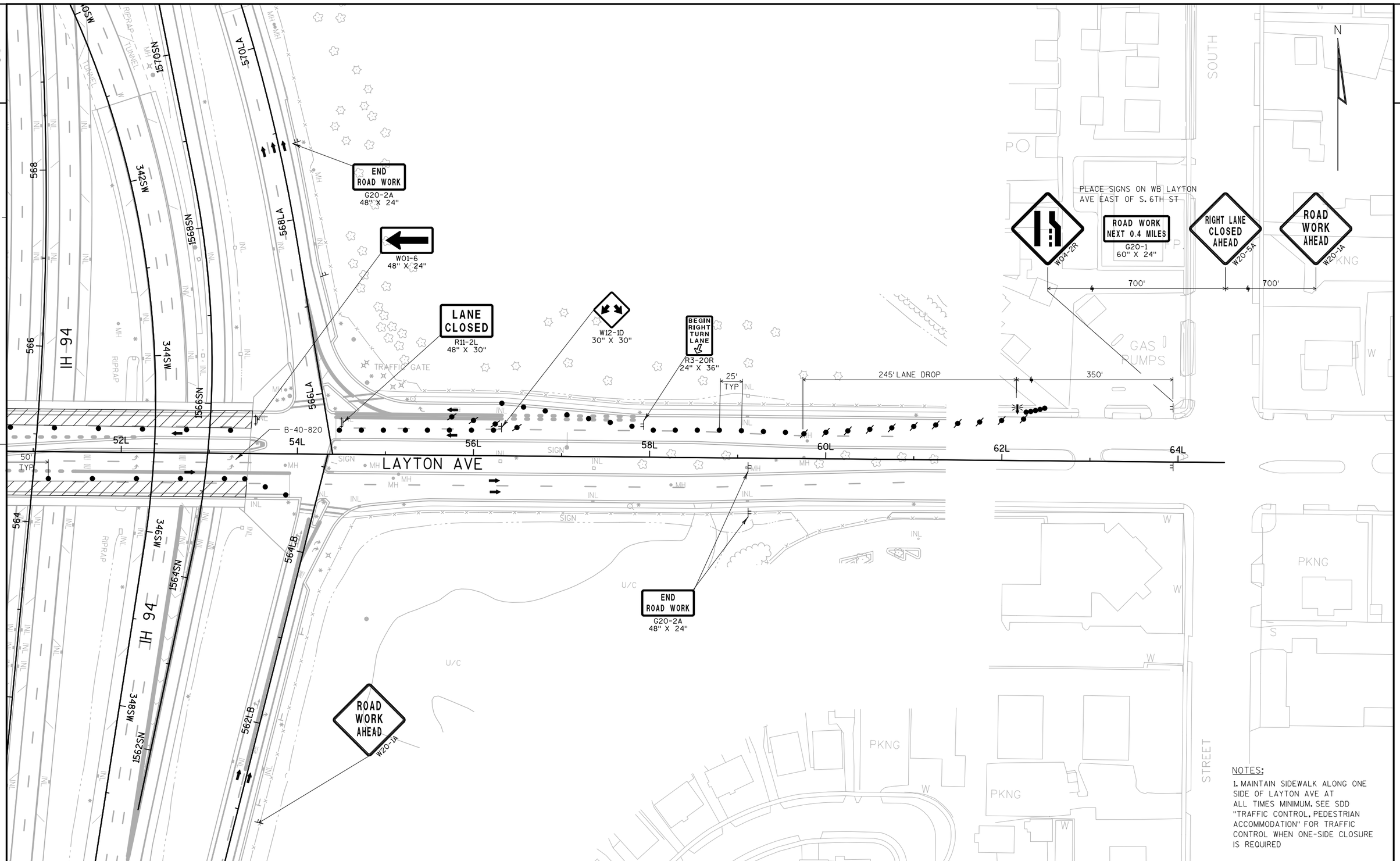
NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF LAYTON AVE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-820 STAGE 2 | SHEET 58 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_820_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

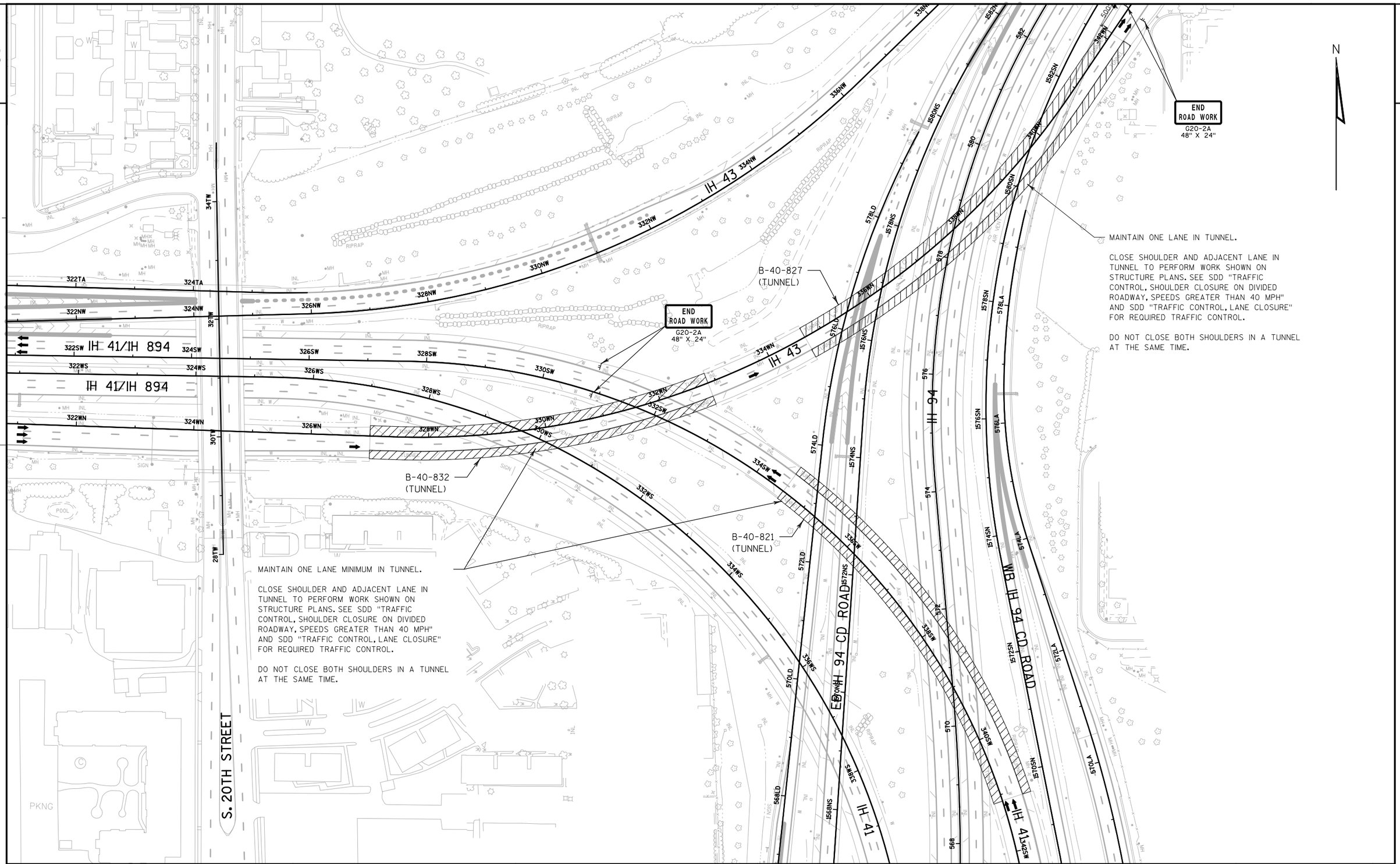
WISDOT/CADDS SHEET 42




NOTES:

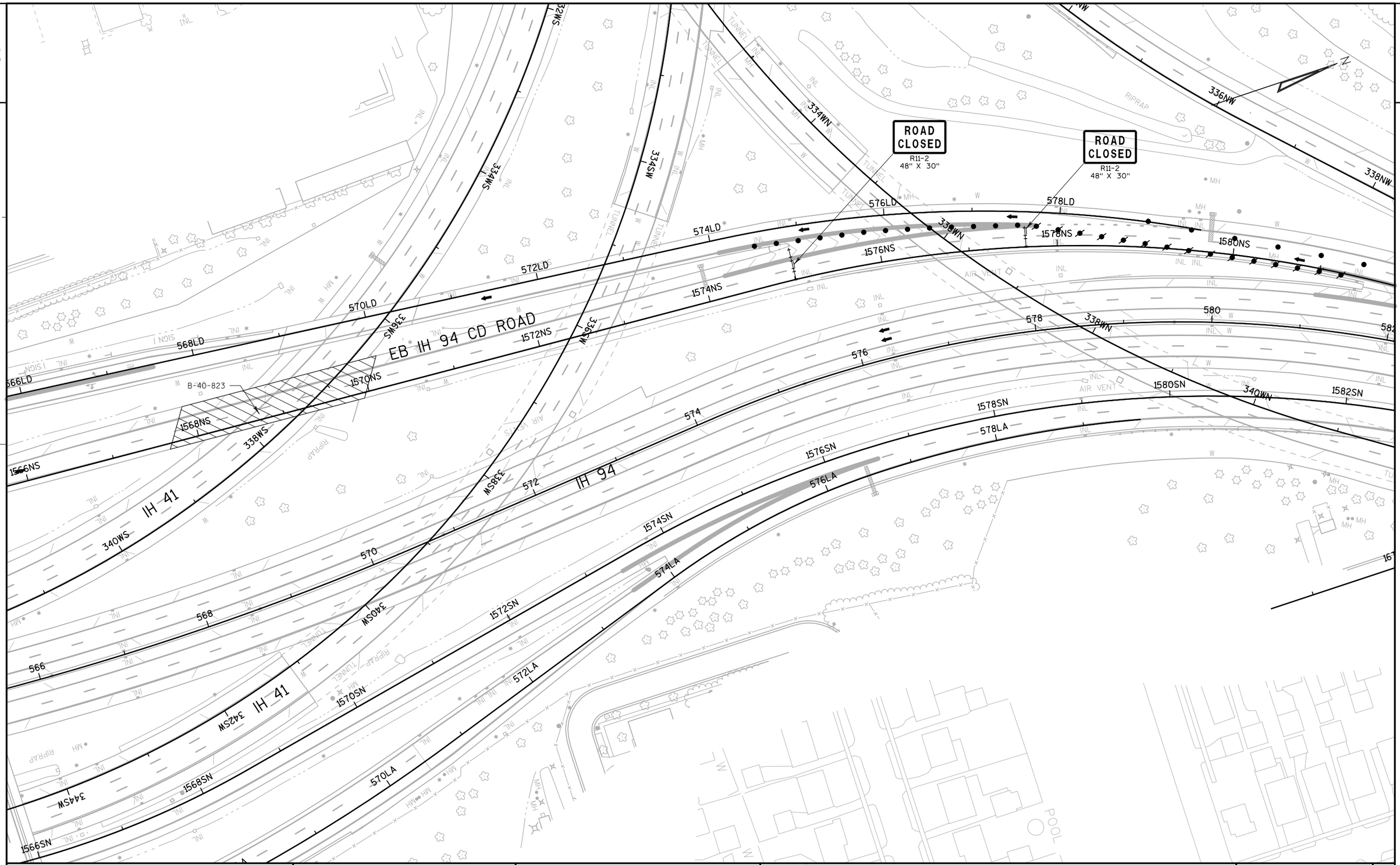
1. MAINTAIN SIDEWALK ALONG ONE SIDE OF LAYTON AVE AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-820 STAGE 2 | SHEET 59 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-821/827/832 TUNNELS | SHEET 60 | E |
|---|---|---|---|---|---|

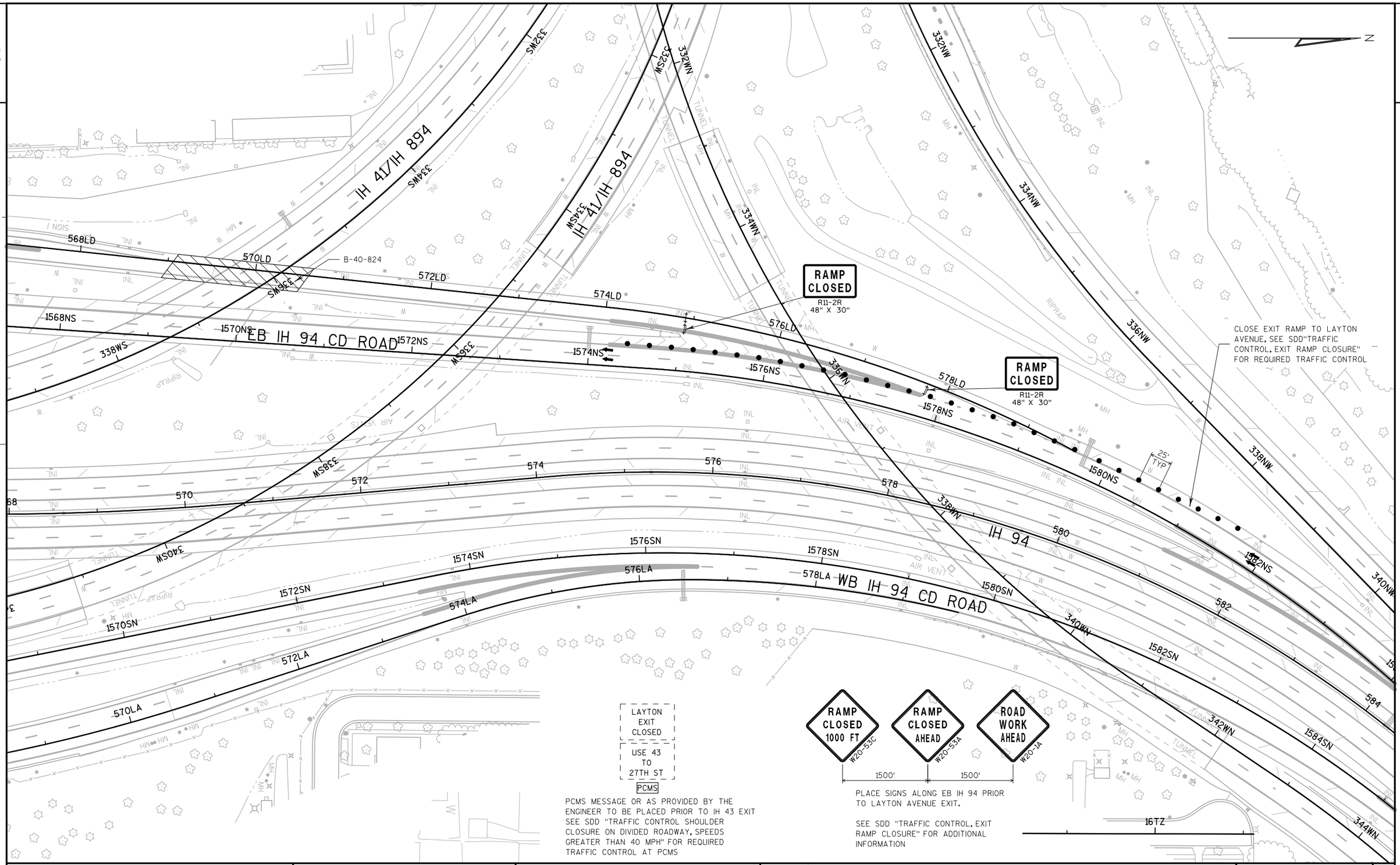
2




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-823 | SHEET 61 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_823_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2




2

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-824 | SHEET 62 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_824_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

GRANGE AVE

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

PCMS MESSAGE
I-94 WB
AHEAD

N

508AD
510AD
512AD
514AD
5508CS
5510CS
5512CS
5514CS
5516CS
5518CS
5520CS
5522CS

508
510
512
514
516
518
520
522

IH 94/IH 41

5508CN
5510CN
MS86E
5512CN
MS96E
5514CN
MS94E
5516CN
MS92E
5518CN
MS90E
5520CN
MS88E
5522CN

WB IH 94 CD ROAD

PCMS

WB IH 94 CLOSED SEE "TWO LANE FULL FREEWAY CLOSURE" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-828 STAGE 1 | SHEET 63 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_828_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

WB IH 94 LANES CLOSED
AT GRANGE AVENUE
CLOSURE PAYMENT TO
INCLUDE ITEM "TRAFFIC CONTROL
FULL FREEWAY CLOSURE"

NB IH 43 SYSTEM
RAMP OPEN

CLOSE NB ENTRANCE RAMP AT LAYTON
AVENUE, SEE "LAYTON AVENUE NB
ENTRANCE RAMP CLOSURE DETAIL"
FOR REQUIRED TRAFFIC CONTROL

NE ENTRANCE RAMP (CD ROAD) OPEN

B-40-828

10WW 12WW 14WW

338NW 340NW 342NW 344NW 346NW 348NW 350NW 352NW 354NW

342WN 344WN 346WN 348WN 350WN 352WN 354WN

52WE

582 584 586 588 590 592 594 596 598

1582NS 1584NS 1585SN 1588SN 1584SN

EB IH 94 WB IH 94 NE ENTRANCE RAMP NB IH 43

13TH ST

20TX 22TX 24TX 26TX

PKNG

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-828 STAGE 1 | SHEET 64 E |
|---|---|---|---|---|

2

2

N

SOO LINE (CP)

16CPA

14CPB

14CPA

12CPB

12CPA

10CPB

IH 94/IH 43

356NW

358NW

598

600

602

604

606

608

610

612

B-40-828

END
ROAD WORK
G20-2A
48" X 24"

SIGN

PARKING

PKNG

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-828 STAGE 1 | SHEET 65 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_828_S1_3.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

N

SB IH 43

NB IH 43

IH 94

EB IH 94

WB IH 94

NE ENTRANCE RAMP

13TH ST

12WW
14WW
346NW
348NW
350NW
352NW
354NW
356NW
358NW
590
592
594
596
598
600
350WN
352WN
354WN
344NW
342NW
588
586
1588SN
1585SN
348WN
346WN
52WE
1584NS
584
1584SN
344WN
20TX
22TX
24TX
26TX
B-40-828

CLOSE RIGHT LANE OF WB IH 94 SOUTH OF LAYTON AVENUE SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR REQUIRED TRAFFIC CONTROL

LANE CLOSED
R11-2L
48" X 30"

CLOSE NB IH 43 SYSTEM RAMP, SEE "TYPICAL SYSTEM RAMP CLOSURE" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL. CLOSURE PAYMENT TO INCLUDE ITEM "TRAFFIC CONTROL CLOSE-OPEN FREEWAY TO FREEWAY SYSTEM RAMP"

CLOSE NB 27TH STREET ENTRANCE RAMP, SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

CLOSE SB 27TH STREET ENTRANCE RAMP TO NB IH 43, SEE TRAFFIC CONTROL B-40-837 FOR REQUIRED TRAFFIC CONTROL

CLOSE NB ENTRANCE RAMP AT LAYTON AVENUE, SEE "LAYTON AVENUE NB ENTRANCE RAMP CLOSURE DETAIL" FOR REQUIRED TRAFFIC CONTROL

CLOSE NE ENTRANCE RAMP AT WB IH 94 CD ROAD, SEE "TYPICAL SYSTEM RAMP CLOSURE" CONSTRUCTION DETAIL FOR REQUIRED TRAFFIC CONTROL

LANE CLOSED
R11-2L
48" X 30"

PARKING
PARKING
PKNG

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-828 STAGE 2 | SHEET 66 E |
|---|---|---|---|---|

FILE NAME : 3700_828_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

RAILWAY

16CPA SOO LINE (CP)

14CPB

14CPA

12CPB

12CPA

10CPB

358NW

602 604 606 608 610 612 614 616

IH 94/IH 43

B-40-828

END
ROAD WORK
G20-2A
48" X 24"

INL W MH SIGN

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-828 STAGE 2 | SHEET 67 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_828_S2_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

N

SYSTEM RAMP TO
IH 43/IH 41/IH 894 CLOSED
SEE "TYPICAL SYSTEM RAMP CLOSURE"
CONSTRUCTION DETAIL FOR ADDITIONAL
SIGNING AND TRAFFIC CONTROL
CLOSURE PAYMENT TO INCLUDE ITEM
"TRAFFIC CONTROL CLOSE-OPEN FREEWAY
TO FREEWAY SYSTEM RAMP"

500'

352NW
354NW
356NW
358NW
354WN
352WN

B-40-829

16CPA SOO LINE (CP)
14CPB
14CPA
12CPB
12CPA
10CPB

IH 94

594
596
598
600
602
604
606
608

LANE CLOSURES CONTINUE
BETWEEN B-40-831 AND
B-40-829

RAMP
CLOSED
R11-2R
48" X 30"

LANE
CLOSED
R11-2L
48" X 30"

RAMP
CLOSED
R11-2R
48" X 30"

END
ROAD WORK
G20-2A
48" X 24"

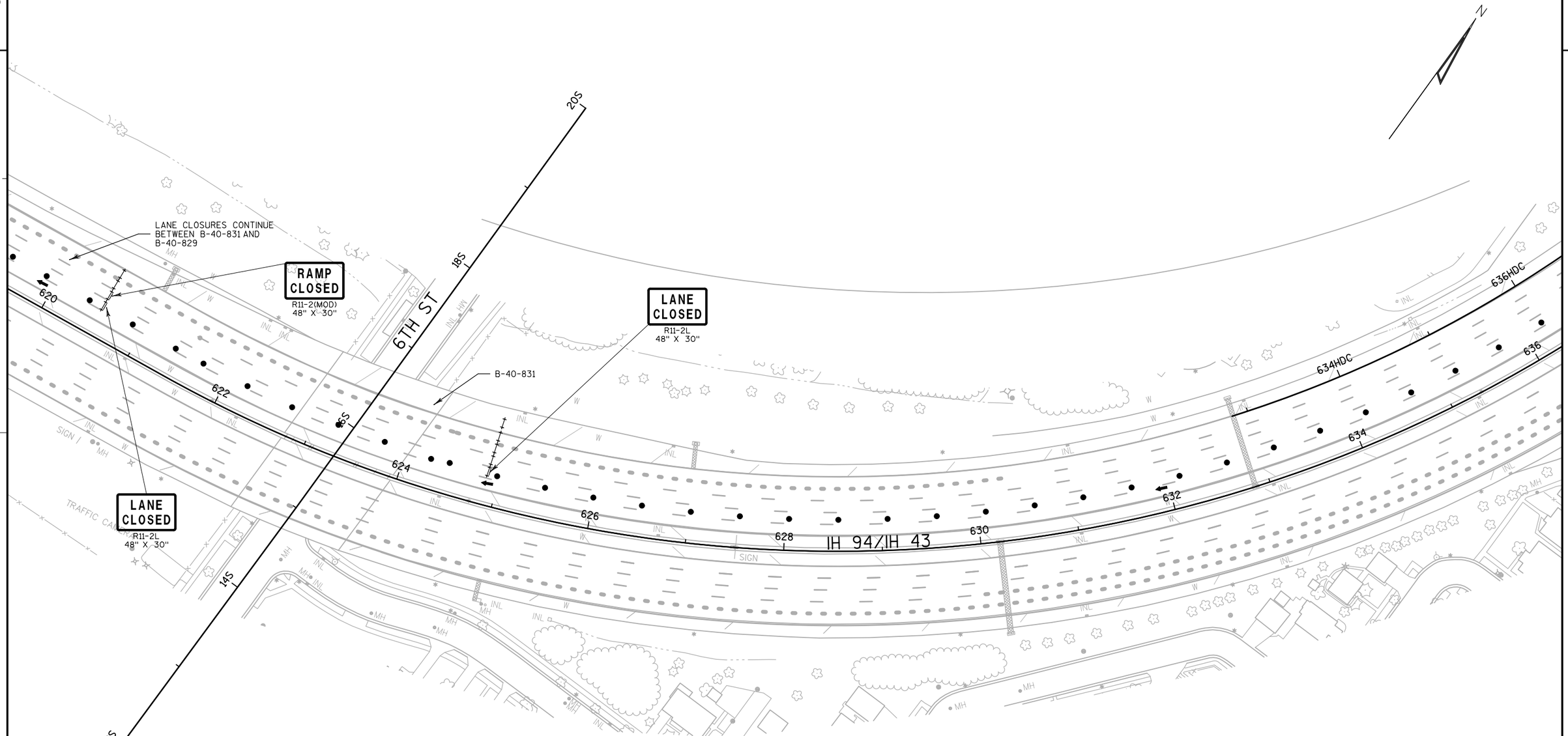
13TH ST

22TX
24TX
20TX

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-829 STAGE 1 | SHEET 68 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_829_S1_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-829 STAGE 1 | SHEET 69 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_829_S1_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

N

ENTRANCE RAMP AT HOWARD AVENUE CLOSED, SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR TRAFFIC CONTROL REQUIRED

EXIT RAMP TO REMAIN OPEN, SEE SDD "TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE" FOR TRAFFIC CONTROL REQUIRED

MAINTAIN TRAFFIC IN SINGLE, INSIDE LANE OF EB IH 94 ONLY.

CLOSE TWO RIGHT LANES OF EB IH 94, SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS" FOR TRAFFIC CONTROL REQUIRED

IH 94/IH 43

636HDC 638HDC 640HDC 642HDC 644HDC 646HDC 648HDC 650HDD

636HDB 638HDB 640HDB 642HDB 644HDB 646HDB 648HDB 650HDB

636 638 640 642 644 646 648 650

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-829 STAGE 1 | SHEET 70 | E |
|---|---|---|---|---|---|

2

2

N

SYSTEM RAMP TO
IH 43/41/894 OPEN

13TH ST

16CPA SOO LINE (CP)

14CPB

LANE
CLOSED
R11-2L
48" X 30"

500'

350NW

352NW

354NW

356NW

358NW

20TX

14CPA

12CPB

IH 43/94/USH 41

594

596

598

600

602

604

606

608

IH 94

SIGN

B-40-829

354WN

352WN

22TX

12CPA

10CPB

LANE CLOSURES CONTINUE BETWEEN
B-40-831 AND B-40-829

24TX

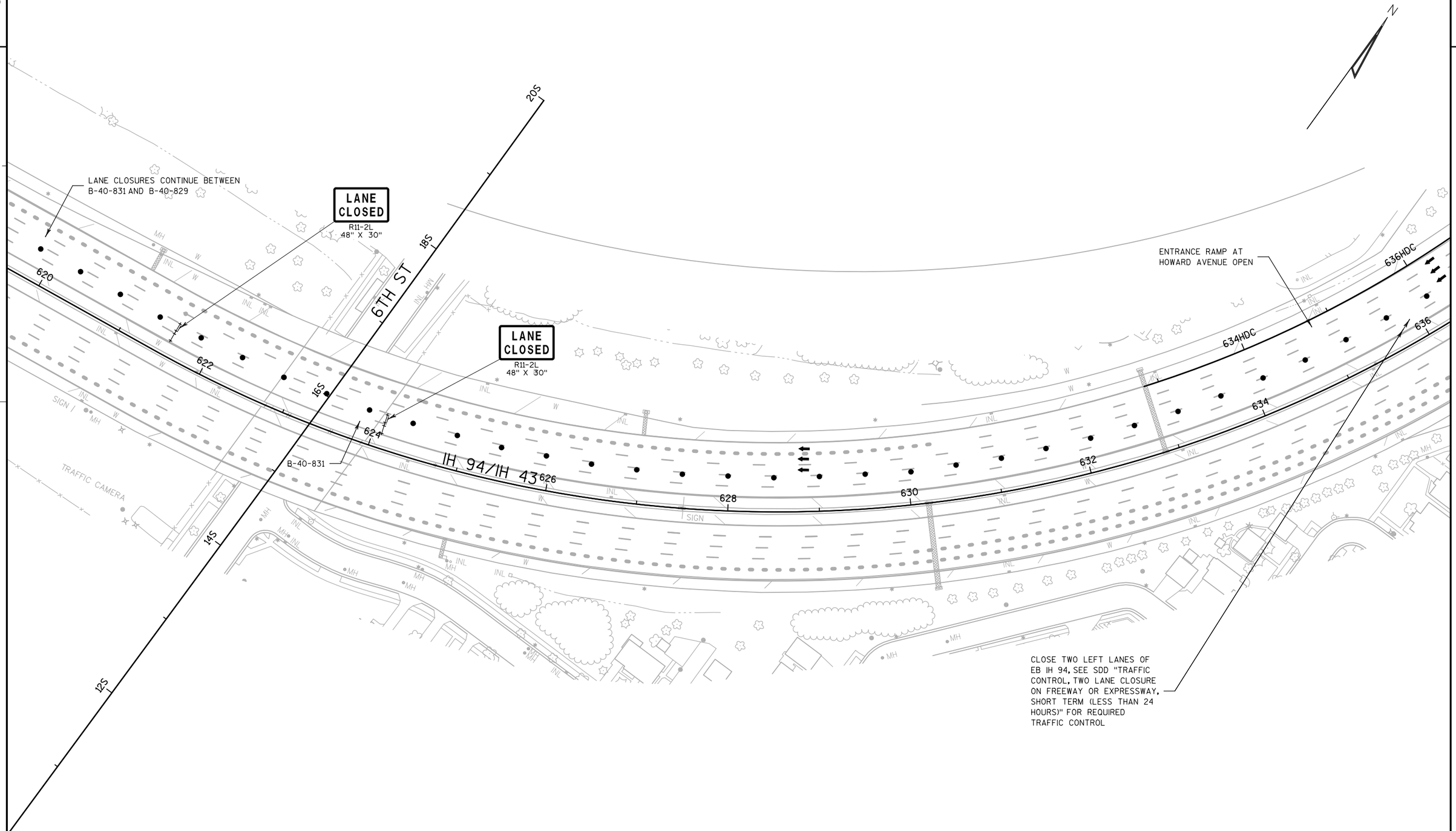
END
ROAD WORK
G20-2A
48" X 24"

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-829 STAGE 2 | SHEET 71 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_829_S2_1.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-829 STAGE 2 | SHEET 72 | E |
|---|---|---|---|---|---|

2

N

IH 894/IH 43

320TB 320WN 320WS 320SW 320NW 320TA
322WN 322WS 322SW 322NW 322TA
324WN 324WS 324SW 324NW 324TA
326WN 326WS 326SW 326NW
328WN 328WS 328SW 328NW

S. 20TH ST

28TW 30TW 32TW 34TW

500' 500' 500' 500'

LOCATE SIGNS ON TYPE III BARRICADES ALONG NB 20TH STREET 500' SOUTH OF LAYTON AVENUE

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60" X 30"

ROAD CLOSED 1000 FT W20-3C

ROAD CLOSED 500 FT W20-3D

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

LOCATE SIGNS ON TYPE III BARRICADES ALONG NB 20TH STREET NORTH OF LAYTON AVENUE

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

B-40-833

LOCATE SIGNS ON TYPE III BARRICADES ALONG SB 20TH STREET 500' NORTH OF W. BOLIVAR AVENUE

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED 1000 FT W20-3C

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60" X 30"

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

END ROAD WORK G20-2A 48" X 24"

TENNIS COURT

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

LOCATE SIGNS ON TYPE III BARRICADES ALONG EB 20TH STREET SOUTH OF BOLIVAR AVENUE

NOTES:

1. SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION ON 20TH STREET CLOSURE TRAFFIC CONTROL

2. MAINTAIN SIDEWALK ALONG ONE SIDE OF 20TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-833 | SHEET 73 | E |
|---|---|---|---|---|---|

2

2

294TD 296TD 284TH 300TE 302TE 304TE 306TA 308TA

294TF 296TF 298TF 300TF 302TF 304TF 306TF

294SW 296SW 298SW 300SW 302SW 304SW 306SW 308SW

294WS 296WS 298WS 300WS 302WS 304WS 306WS 308WS

298WN 300WN 302WN 304WN 306WN 308WN

294TH 296TH 298TH 300TH 302TH 304TH 306TH 308TH

294TG 296TG 298TG 300TG 302TG 304TG 306TG

294TC 296TC 298TC 300TC 302TC 304TC 306TC

298TB 300TB 302TB 304TB 306TB 308TB

114T 110T 108T 106T

B-40-834

IH 43/IH 41/IH 894

S. 27TH ST

25' TYP

RIPRAP

WALLS

PKNG

N

RAMP CLOSED AHEAD
W20-53A

M3-3 24" X 12" SOUTH
M1-1 24" X 24" INTERSTATE 43
M3-1 24" X 12" North
M1-1 24" X 24" INTERSTATE 41
M1-1A 30" X 24" INTERSTATE 894

LOCATE SIGNS ON 27TH STREET AT LAYTON AVENUE

SOUTH INTERSTATE 43 WEST INTERSTATE 894

COVERING SIGNS TYPE II

RAMP CLOSED AHEAD
W20-53A

M3-3 24" X 12" SOUTH
M1-1 24" X 24" INTERSTATE 43
M3-1 24" X 12" North
M1-1 24" X 24" INTERSTATE 41
M1-1A 30" X 24" INTERSTATE 894

RAMP CLOSED
R11-2R
48" X 30"

RAMP WILL BE CLOSED 12PM TO 10PM BEGINNING JAN 15
R11-51
48" X 48"

PLACE SIGN 3 DAYS PRIOR TO CLOSURE

SEE "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY" CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION

END ROAD WORK
G20-2A
48" X 24"

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-834 | SHEET 74 | E |
|---|---|---|---|---|---|

2

N

LANE CLOSED
R11-2L
48" X 30"

CLOSE DRIVEWAY ACCESS

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

S. 27TH ST

LAYTON AVE

104T

102T

100T

98T

96T

320' LANE DROP

6L 8L 10L 12L 14L 16L 18L 20L

CLOSE DRIVEWAY ACCESS

END ROAD WORK
G20-2A
48" X 24"

CLOSE TWO RIGHT LANES. SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

MAINTAIN ACCESS TO DRIVEWAY

ROAD WORK AHEAD
W20-1A

RIGHT TWO LANES CLOSED AHEAD
W20-5RA

W04-2R

700'

700'

PLACE SIGNS ALONG NB 27TH STREET INSIDE LANE PRIOR TO LANE DROP SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY EXPRESSWAY" FOR ADDITIONAL INFORMATION

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 1 | SHEET 75 | E |
|---|---|---|---|---|---|

2

B-40-835

B-40-836

SEE TRAFFIC CONTROL - TYPICAL SECTIONS FOR DRUM PLACEMENT

IH 43/IH 41/IH 894

288TH

290TH

292TH

294TH

296TH

298TH

300TF

298TF

296TF

294TF

292SW

294SW

296SW

298SW

300SW

302SW

304SW

290SW

292WS

294WS

296WS

298WS

300WS

302WS

304WS

290WS

298WN

300WN

302WN

304WN

300TH

302TH

304TH

290TG

292TC

294TG

296TG

294TC

296TC

298TC

298TG

300TB

302TB

304TB

310TB

114T

112T

110T

108T

106T

W10-4L

W01-6
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5A

600'

SEE SDD "TRAFFIC CONTROL, LANE CLOSRUE" FOR ADDITIONAL INFORMATION ON TRAFFIC CONTROL REQUIRED

END ROAD WORK
G20-2A
48" X 24"

27TH ST

298TB

LANE CLOSED
R11-2L
48" X 30"

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

LANE CLOSED
R11-2L
48" X 30"

MAINTAIN ACCESS TO DRIVEWAY

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 1 | SHEET 76 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_835_836_S1_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

2

2

W04-2L

ROAD WORK AHEAD
W20-1A

PARKING STRUCTURE

PKNG

WHITAKER AVE

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

LANE CLOSED
R11-2L
48" X 30"

W04-2L

END ROAD WORK
G20-2A
48" X 24"

122T

120T

118T

116T

114T

BOTTSFORD AVE

S. 27TH ST

320' LANE DROP

ROAD WORK AHEAD
W20-1A

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

298TA

300TA

302TA

304TA

304TE

300TE

302TE

306TA

298TD

294TD

296TD

284TH

W01-6
48" X 24"

B-40-835

B-40-836

298TF

300TF

302TF

304TF

PILE

RIPRAP

SEE SDD "TRAFFIC CONTROL, LANE CLOSRUE" FOR ADDITIONAL INFORMATION ON TRAFFIC CONTROL REQUIRED

LEFT LANE CLOSED AHEAD
W20-55A

ROAD WORK AHEAD
W20-1A

1000'

LANE CLOSED
R11-2L
48" X 30"

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 1 | SHEET 77 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_835_836_S1_3.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

ROAD WORK AHEAD
W20-1A

LEFT TWO LANES CLOSED AHEAD
W20-59A

W04-2L

700'

700'

500'

320' LANE DROP

S. 27TH ST

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

W. COLD SPRING RD

W. BOLIVAR AVE

126T

124T

ROAD WORK AHEAD
W20-1A

W01-6
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

PARKING

PKNG

SIGN

O/H STRUC.

N

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 1 | SHEET 78 | E |
|---|---|---|---|---|---|

2

N

S. 27TH ST

104T

102T

100T

98T

96T

LAYTON AVE

6L 8L 10L 12L 14L 16L 18L 20L

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5A

500'

W04-2L

W01-6L
48" X 24"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

320' LANE DROP

ROAD WORK AHEAD
W20-1A

LEFT TWO LANES CLOSED AHEAD
W20-59A

W04-2L

700' 700'

LOCATE SIGNS FOR NB 27TH STREET PRIOR TO LANE DROP SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY EXPRESSWAY" FOR ADDITIONAL INFORMATION

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 2 | SHEET 79 | E |
|---|---|---|---|---|---|

2

2

N

IH 43/IH 41/IH 894

SEE TRAFFIC CONTROL - TYPICAL SECTIONS FOR DRUM PLACEMENT

SEE TRAFFIC CONTROL - TYPICAL SECTIONS FOR DRUM PLACEMENT

B-40-836

B-40-835

290SW 290WS 290TH 292SW 292WS 292TH 294SW 294WS 294TH 294TF 296SW 296WS 296TH 296TF 298SW 298WS 298WN 298TH 298TF 300SW 300WS 300WN 300TH 300TF 302SW 302WS 302WN 302TH 302TF 304SW 304WS 304WN 304TH

290TC 292TC 294TC 294TG 296TC 296TG 298TC 298TG 298TB 300TB 302TB 304TB

114T 121T 110T 108T 106T 310T

W01-6
48" X 24"

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5A

600'

SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR ADDITIONAL INFORMATION ON REQUIRED TRAFFIC CONTROL.

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

S. 27TH ST

320' LANE DROP

RIPRAP

WALLS

SIGNS

NOTES:

1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 2 | SHEET 80 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_835_836_S2_2.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

PARKING

PKNG

PKNG

PKNG

PKNG

PKNG

ROAD WORK AHEAD
W20-1A

WHITAKER AVE

MAINTAIN ACCESS TO DRIVEWAY

CLOSE DRIVEWAY ACCESS

LANE CLOSED
R11-2L
48" X 30"

STOP
R1-1
30" X 30"

END ROAD WORK
G20-2A
48" X 24"

S. 26TH STREET

BOTTSFORD AVE

122T

320' LANE DROP

120T

118T

116T

114T

S. 27TH ST

ROAD WORK AHEAD
W20-1A

LANE CLOSED
R11-2L
48" X 30"

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

LANE CLOSED
R11-2L
48" X 30"

298TD

294TD

296TD

284TH

W01-6
48" X 24"

298TF

298TA

300TA

302TA

304TA

306TA

300TE

302TE

304TE

300TF

302TF

304TF

W01-4L

LANE CLOSED
R11-2L
48" X 30"

LANE CLOSED
R11-2L
48" X 30"

SEE SDD "TRAFFIC CONTROL, LANE CLOSURE" FOR ADDITIONAL INFORMATION ON REQUIRED TRAFFIC CONTROL.

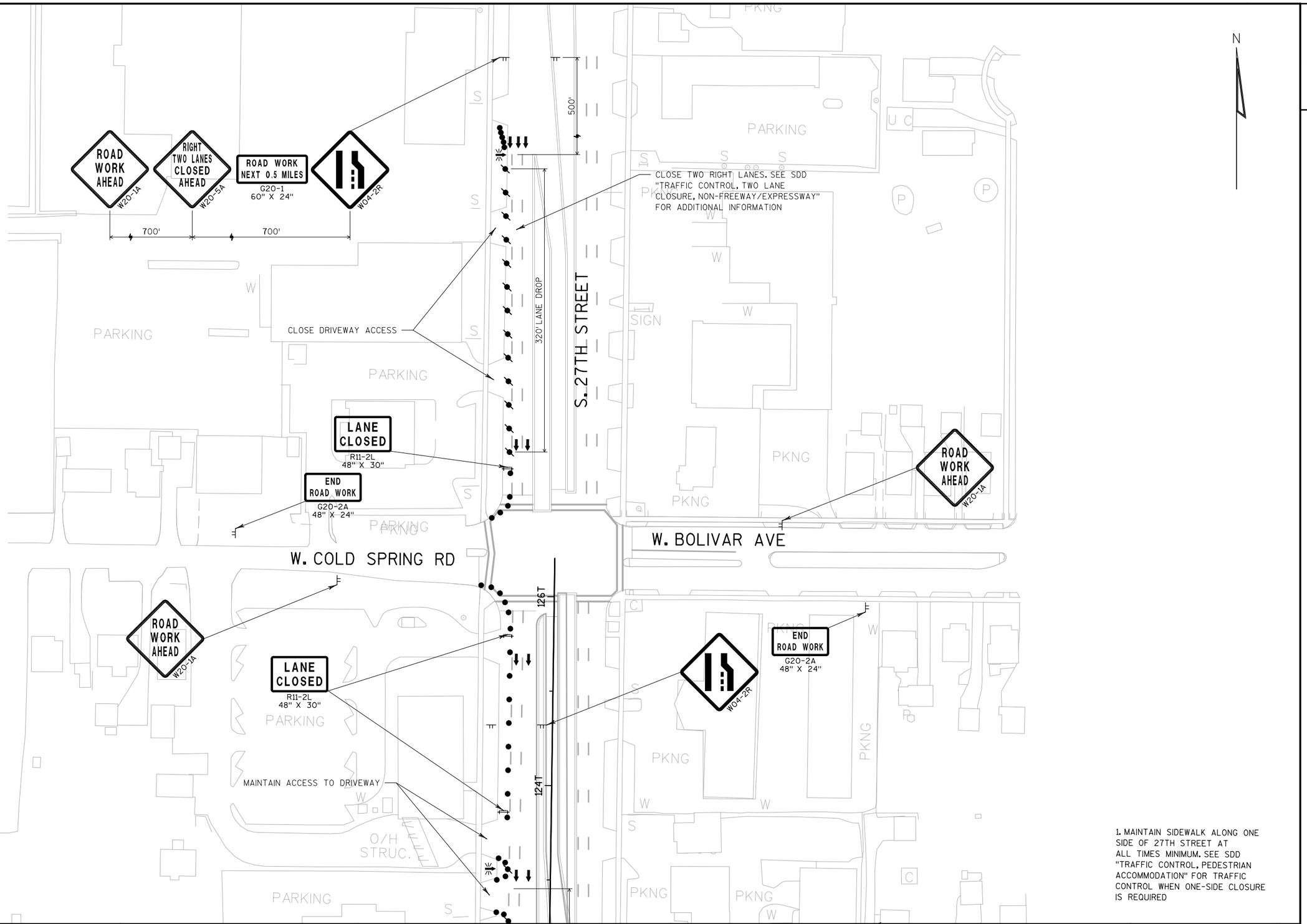
LEFT LANE CLOSED AHEAD
W20-5A

ROAD WORK AHEAD
W20-1A

1000'

NOTES:
1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 2 | SHEET 81 | E |
|---|---|---|---|---|---|




1. MAINTAIN SIDEWALK ALONG ONE SIDE OF 27TH STREET AT ALL TIMES MINIMUM. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR TRAFFIC CONTROL WHEN ONE-SIDE CLOSURE IS REQUIRED

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL B-40-835/836 STAGE 2 | SHEET 82 | E |
|---|---|---|---|---|---|

FILE NAME : 3700_835_836_S2_4.dgn PLOT DATE : 31-JAN-2019 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

BOTTSFORD AVE

PLACE SIGN 3 DAYS
PRIOR TO CLOSURE

RAMP WILL
BE CLOSED
12PM TO 10PM
BEGINNING
JAN 15
R11-5I
48" X 48"

END
ROAD WORK
G20-2A
48" X 24"

RAMP
CLOSED
AHEAD
W20-53A

M3-1
24" X 12"
NORTH

M1-1
24" X 24"
43

M 3-4
24" X 12"
WEST

M1-1
24" X 24"
94

COVERING SIGNS
TYPE II

RAMP
CLOSED
R11-2L
48" X 30"

NORTH
43
EAST
894

RAMP
CLOSED
AHEAD
W20-53A

M3-1
24" X 12"
NORTH

M1-1
24" X 24"
43

M 3-4
24" X 12"
WEST

M1-1
24" X 24"
94

LOCATE SIGNS ON SB 27TH STREET
AT THE COLDSPRING DRIVE INTERSECTION

S. 27TH ST

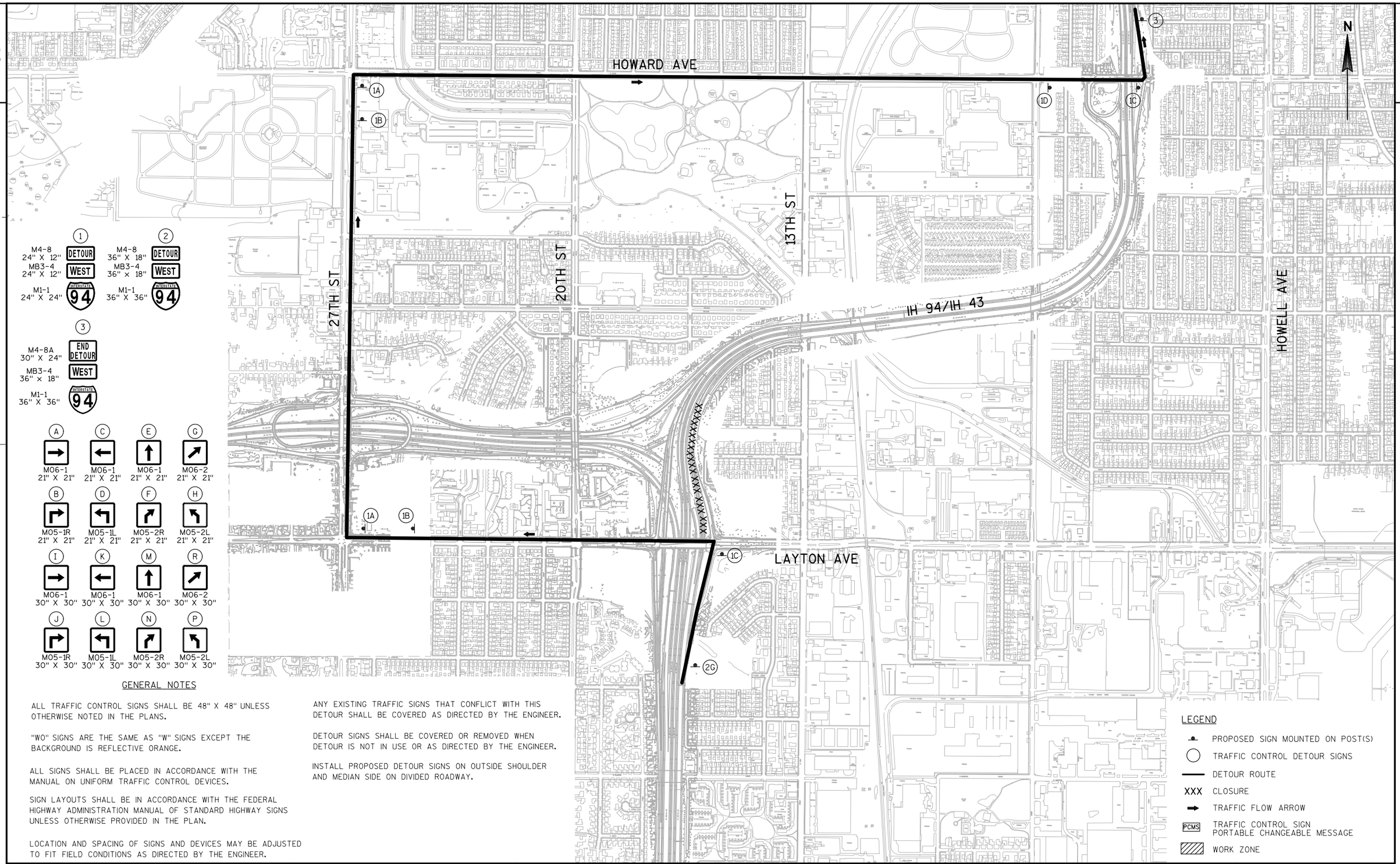
118T
116T
114T
112T
110T

IH 43/IH 41/IH 894

290TD 292TD 294TD 296TD 298TD
286TH 284TH 288TH 290TH
290TC 292TC
B-40-837
25' TYP

290SW 292SW 294SW 296SW 298SW 300SW 302SW 304SW
290WS 292WS 294WS 296WS 298WS 300WS 302WS 304WS
298WN 300WN 302WN 304WN
290TH 292TH 294TH 296TH 298TH 300TH 302TH 304TH
294TF 296TF 298TF 300TF 302TF 304TF
298TA 300TA 302TA 304TA
300TE 302TE 304TE
302TB 304TB
310TF

RIPRAP




1
M4-8 24" X 12"
MB3-4 24" X 12"
M1-1 24" X 24"
DETOUR
WEST
INTERSTATE 94

2
M4-8 36" X 18"
MB3-4 36" X 18"
M1-1 36" X 36"
DETOUR
WEST
INTERSTATE 94

3
M4-8A 30" X 24"
MB3-4 36" X 18"
M1-1 36" X 36"
END DETOUR
WEST
INTERSTATE 94

| A | C | E | G |
|---|---|---|---|
| M06-1 21" X 21" | M06-1 21" X 21" | M06-1 21" X 21" | M06-2 21" X 21" |
| B | D | F | H |
| M05-1R 21" X 21" | M05-1L 21" X 21" | M05-2R 21" X 21" | M05-2L 21" X 21" |
| I | K | M | R |
| M06-1 30" X 30" | M06-1 30" X 30" | M06-1 30" X 30" | M06-2 30" X 30" |
| J | L | N | P |
| M05-1R 30" X 30" | M05-1L 30" X 30" | M05-2R 30" X 30" | M05-2L 30" X 30" |

## GENERAL NOTES

ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

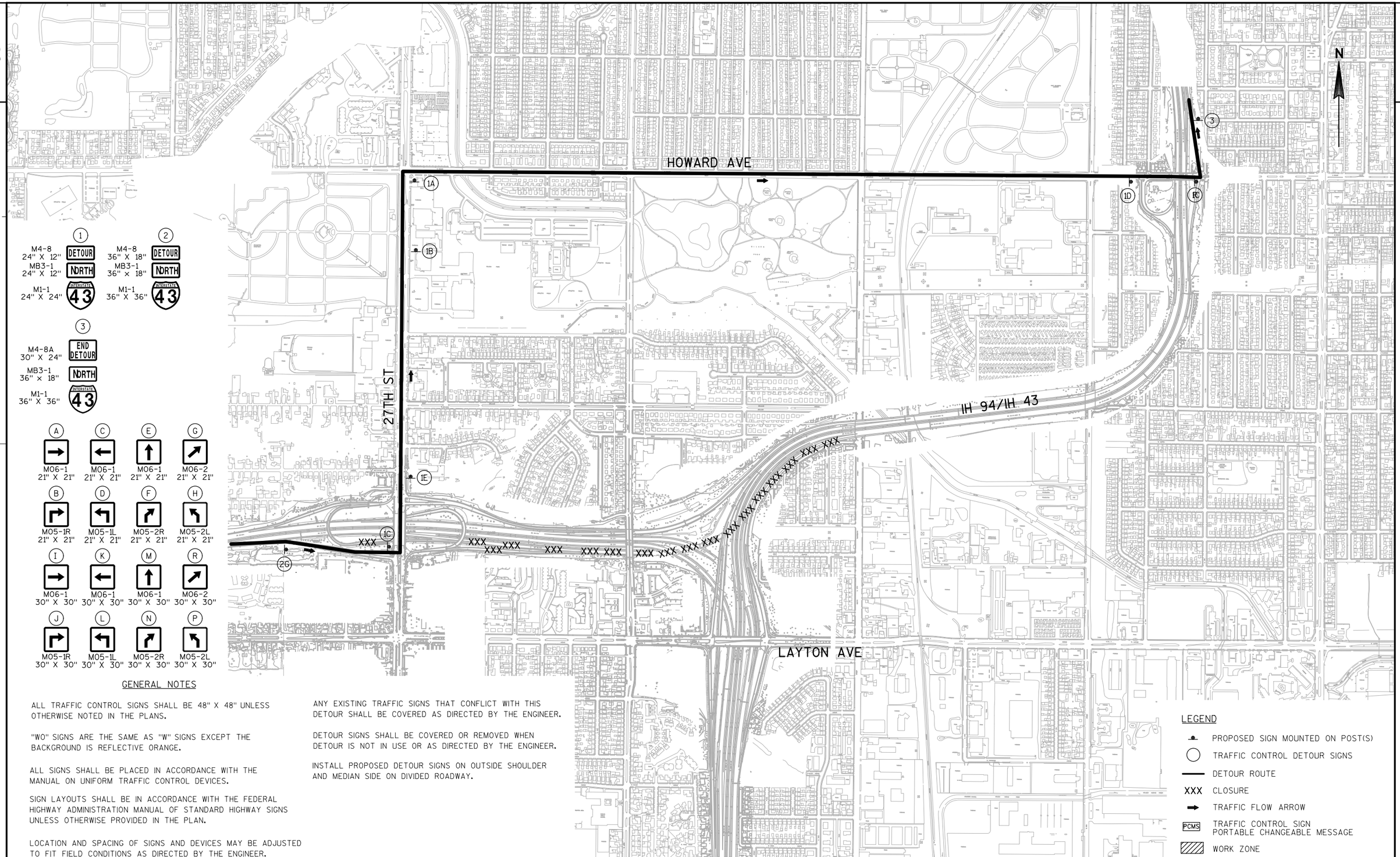
INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED ROADWAY.

## LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- TRAFFIC CONTROL DETOUR SIGNS
- DETOUR ROUTE
- XXX CLOSURE
- TRAFFIC FLOW ARROW
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- WORK ZONE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | DETOUR - WB IH 94 CD ROAD RAMP TO WB IH 94/NB IH 43 | SHEET 84 | E |
|---|---|---|---|---|---|

2




(1) M4-8 24" X 12" DETOUR; MB3-1 24" X 12" NORTH; M1-1 24" X 24" INTERSTATE 43

(2) M4-8 36" X 18" DETOUR; MB3-1 36" X 18" NORTH; M1-1 36" X 36" INTERSTATE 43

(3) M4-8A 30" X 24" END DETOUR; MB3-1 36" X 18" NORTH; M1-1 36" X 36" INTERSTATE 43

| (A) | (C) | (E) | (G) |
|---|---|---|---|
| M06-1 21" X 21" | M06-1 21" X 21" | M06-1 21" X 21" | M06-2 21" X 21" |
| (B) | (D) | (F) | (H) |
| M05-1R 21" X 21" | M05-1L 21" X 21" | M05-2R 21" X 21" | M05-2L 21" X 21" |
| (I) | (K) | (M) | (R) |
| M06-1 30" X 30" | M06-1 30" X 30" | M06-1 30" X 30" | M06-2 30" X 30" |
| (J) | (L) | (N) | (P) |
| M05-1R 30" X 30" | M05-1L 30" X 30" | M05-2R 30" X 30" | M05-2L 30" X 30" |

GENERAL NOTES

ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

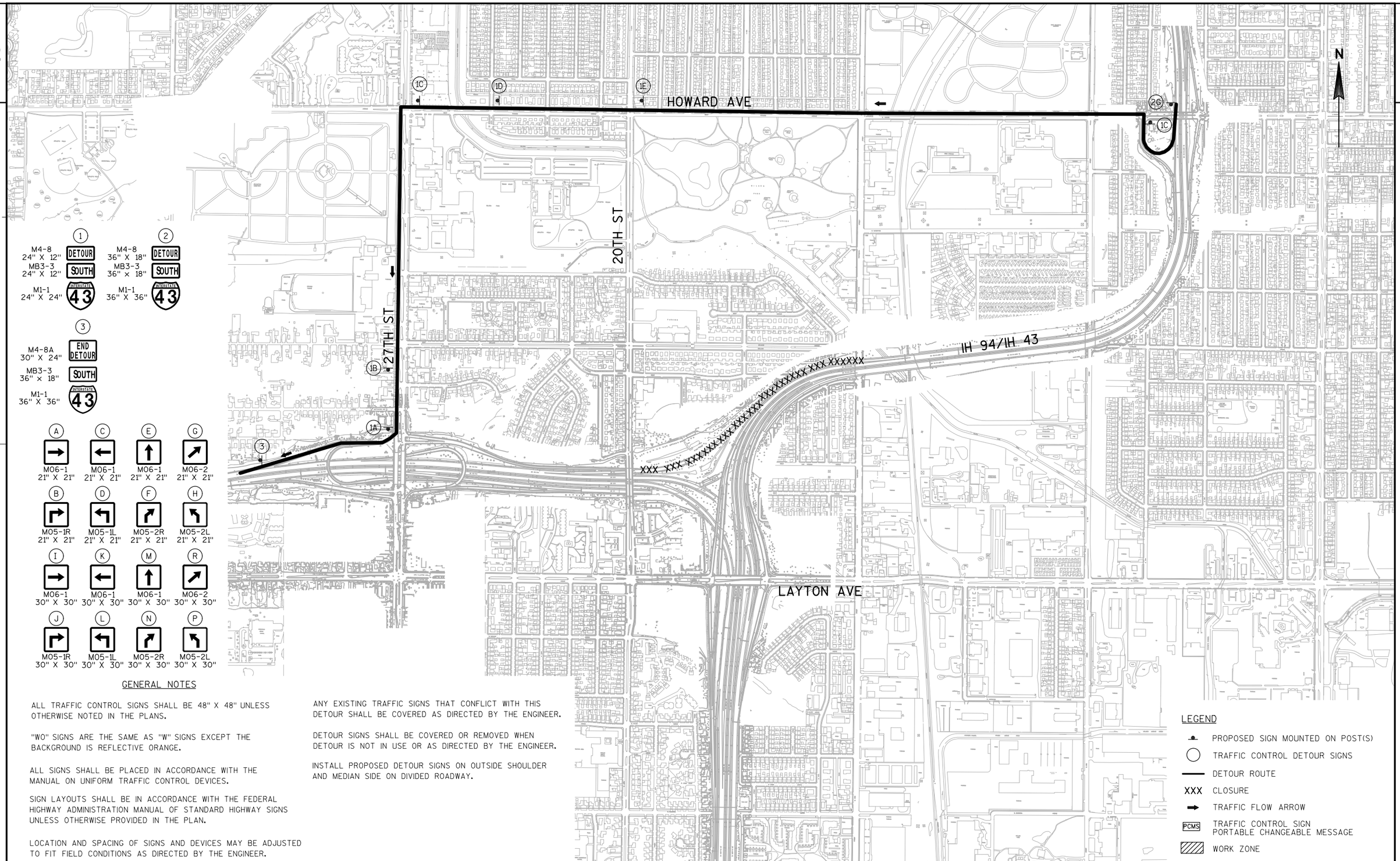
INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED ROADWAY.

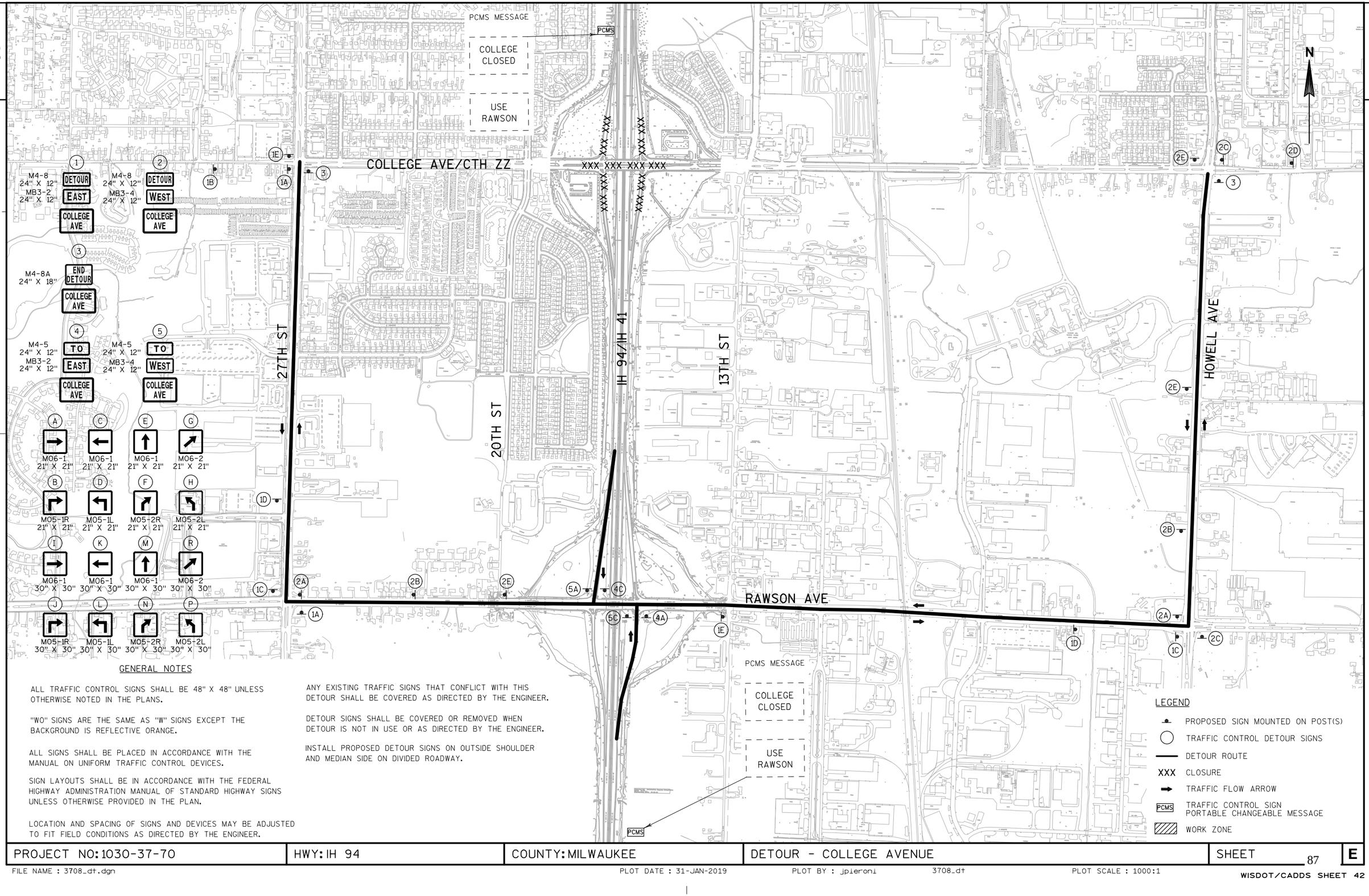
LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- TRAFFIC CONTROL DETOUR SIGNS
- DETOUR ROUTE
- XXX CLOSURE
- TRAFFIC FLOW ARROW
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- WORK ZONE

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | DETOUR - NB IH 43 SYSTEM RAMP | SHEET 85 | E |
|---|---|---|---|---|---|

2


HOWARD AVE
20TH ST
27TH ST
IH 94/IH 43
XXX XXX XXXX




## GENERAL NOTES

ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED ROADWAY.

| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | DETOUR - COLLEGE AVENUE | SHEET 87 | E |
|---|---|---|---|---|---|

1030-37-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0004 | 204.0150 | Removing Curb & Gutter | LF | 173.000 | 173.000 |
| 0006 | 204.0155 | Removing Concrete Sidewalk | SY | 166.000 | 166.000 |
| 0008 | 213.0100 | Finishing Roadway (project) 0001. 1030-37-70 | EACH | 1.000 | 1.000 |
| 0014 | 509.0301 | Preparation Decks Type 1 | SY | 832.000 | 832.000 |
| 0016 | 509.0302 | Preparation Decks Type 2 | SY | 418.000 | 418.000 |
| 0018 | 509.0310.S | Sawing Pavement Deck Preparation Areas | LF | 2,825.000 | 2,825.000 |
| 0020 | 509.5100.S | Polymer Overlay | SY | 41,341.000 | 41,341.000 |
| 0022 | 601.0331 | Concrete Curb & Gutter 31-Inch | LF | 173.000 | 173.000 |
| 0024 | 602.0410 | Concrete Sidewalk 5-Inch | SF | 1,493.000 | 1,493.000 |
| 0026 | 619.1000 | Mobilization | EACH | 0.900 | 0.900 |
| 0028 | 628.7010 | Inlet Protection Type B | EACH | 90.000 | 90.000 |
| 0030 | 628.7015 | Inlet Protection Type C | EACH | 13.000 | 13.000 |
| 0032 | 634.0622 | Posts Wood 4x6-Inch X 22-FT | EACH | 4.000 | 4.000 |
| 0034 | 638.2102 | Moving Signs Type II | EACH | 4.000 | 4.000 |
| 0036 | 638.2602 | Removing Signs Type II | EACH | 3.000 | 3.000 |
| 0038 | 638.3000 | Removing Small Sign Supports | EACH | 3.000 | 3.000 |
| 0040 | 643.0300 | Traffic Control Drums | DAY | 13,100.000 | 13,100.000 |
| 0044 | 643.0420 | Traffic Control Barricades Type III | DAY | 1,715.000 | 1,715.000 |
| 0046 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 3,430.000 | 3,430.000 |
| 0048 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 2,800.000 | 2,800.000 |
| 0050 | 643.0800 | Traffic Control Arrow Boards | DAY | 260.000 | 260.000 |
| 0052 | 643.0900 | Traffic Control Signs | DAY | 5,600.000 | 5,600.000 |
| 0054 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 100.000 | 100.000 |
| 0056 | 643.1000 | Traffic Control Signs Fixed Message | SF | 172.000 | 172.000 |
| 0058 | 643.1050 | Traffic Control Signs PCMS | DAY | 100.000 | 100.000 |
| 0060 | 643.1051 | Traffic Control Signs PCMS with Cellular Communications | DAY | 275.000 | 275.000 |
| 0062 | 643.4100.S | Traffic Control Interim Lane Closure | EACH | 75.000 | 75.000 |
| 0064 | 643.5000 | Traffic Control | EACH | 0.900 | 0.900 |
| 0066 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 20,020.000 | 20,020.000 |
| 0068 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 564.000 | 564.000 |
| 0070 | 646.5020 | Marking Arrow Epoxy | EACH | 10.000 | 10.000 |
| 0072 | 646.5120 | Marking Word Epoxy | EACH | 10.000 | 10.000 |
| 0074 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 227.000 | 227.000 |
| 0076 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 1,372.000 | 1,372.000 |
| 0078 | 646.7220 | Marking Chevron Epoxy 24-Inch | LF | 200.000 | 200.000 |
| 0080 | 649.0105 | Temporary Marking Line Paint 4-Inch | LF | 22,933.000 | 22,933.000 |
| 0082 | 649.0205 | Temporary Marking Line Paint 8-Inch | LF | 8,082.000 | 8,082.000 |
| 0084 | 690.0250 | Sawing Concrete | LF | 874.000 | 874.000 |
| 0086 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 1,800.000 | 1,800.000 |

1030-37-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0088 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 3,000.000 | 3,000.000 |
| 0090 | SPV.0025 | Special 4000. Concrete Pavement Repair Rapid Set | CF | 957.000 | 957.000 |
| 0092 | SPV.0035 | Special 4000. Rapid Set Deck Repair | CY | 131.000 | 131.000 |
| 0094 | SPV.0060 | Special 0001. Traffic Control Close-Open Freeway Entrance Ramp | EACH | 75.000 | 75.000 |
| 0096 | SPV.0060 | Special 0002. Traffic Control Full Freeway Closure | EACH | 12.000 | 12.000 |
| 0098 | SPV.0060 | Special 0003. Traffic Control Close-Open Freeway to Freeway System Ramp | EACH | 6.000 | 6.000 |
| 0100 | SPV.0060 | Special 0004. Field Facilities Office Space | EACH | 0.900 | 0.900 |
| 0102 | SPV.0090 | Special 0001. Marking Contrast Epoxy 4-Inch | LF | 2,913.000 | 2,913.000 |
| 0104 | SPV.0090 | Special 0002. Marking Contrast Epoxy 8-Inch | LF | 7,518.000 | 7,518.000 |
| 0106 | SPV.0105 | Special 6000. Chevron Solar Powered Sign System Assembly | LS | 1.000 | 1.000 |
| 0108 | SPV.0165 | Special 4000. Porcelain Ceramic Tile Facing Repair | SF | 1,250.000 | 1,250.000 |
| 0110 | SPV.0165 | Special 4002. Tunnel Wall Cleaning | SF | 28,165.000 | 28,165.000 |

3

## CONCRETE SIDEWALK

| CATEGORY | STRUCTURE | LOCATION | 204.0150 REMOVING CURB & GUTTER LF | 204.0155 REMOVING CONCRETE SIDEWALK SY | 601.0331 CONCRETE CURB & GUTTER 31-INCH LF | 602.0410 CONCRETE SIDEWALK 5-INCH SF |
|---|---|---|---|---|---|---|
| 1000 | | | | | | |
| | B-40-811 | | | | | |
| | | SW CORNER | -- | 8 | -- | 68 |
| | | SE CORNER | 15 | 13 | 15 | 119 |
| | | NE CORNER | 5 | 11 | 5 | 96 |
| | | NW CORNER | -- | 10 | -- | 93 |
| | | WEST MEDIAN | -- | 8 | -- | 68 |
| | | EAST MEDIAN | 15 | 8 | 15 | 68 |
| | B-40-816 | | | | | |
| | | SW CORNER | 16 | 9 | 16 | 84 |
| | | SE CORNER | 16 | 8 | 16 | 69 |
| | B-40-817 | | | | | |
| | | NE CORNER | -- | 4 | -- | 37 |
| | B-40-820 | | | | | |
| | | SW CORNER | -- | 10 | -- | 89 |
| | | SE CORNER | -- | 9 | -- | 81 |
| | | NE CORNER | 12 | 5 | 12 | 43 |
| | | NW CORNER | -- | 4 | -- | 33 |
| | B-40-833 | | | | | |
| | | SW CORNER | 16 | 9 | 16 | 81 |
| | | SE CORNER | -- | 6 | -- | 50 |
| | | NE CORNER | 16 | 9 | 16 | 77 |
| | | NW CORNER | -- | 7 | -- | 60 |
| | | NORTH MEDIAN | 30 | 2 | 30 | 21 |
| | | SOUTH MEDIAN | 32 | 2 | 32 | 16 |
| | B-40-835 | | -- | 21 | -- | 190 |
| | B-40-836 | | -- | 6 | -- | 50 |
| | | TOTALS | 173 | 166 | 173 | 1,493 |

## INLET PROTECTION

| CATEGORY | STRUCTURE | 628.7010 INLET PROTECTION TYPE B EACH | 628.7015 INLET PROTECTION TYPE C EACH |
|---|---|---|---|
| 1000 | | | |
| | B-40-811 | -- | 4 |
| | B-40-812 | 8 | -- |
| | B-40-813 | 8 | -- |
| | B-40-814 | 2 | -- |
| | B-40-815 | 3 | -- |
| | B-40-816 | -- | 4 |
| | B-40-817 | -- | 4 |
| | B-40-818 | 8 | -- |
| | B-40-819 | 8 | -- |
| | B-40-820 | 10 | -- |
| | B-40-821 | 2 | -- |
| | B-40-823 | 2 | -- |
| | B-40-824 | 3 | -- |
| | B-40-827 | 2 | -- |
| | B-40-828 | 8 | -- |
| | B-40-829 | 8 | -- |
| | B-40-832 | 2 | -- |
| | B-40-833 | 3 | 1 |
| | B-40-834 | 2 | -- |
| | B-40-835 | 4 | -- |
| | B-40-836 | 4 | -- |
| | B-40-837 | 3 | -- |
| | | 90 | 13 |

| **Chevron Solar powered system** | | | | Category Code 1000 | | | | 1030-37-70 Mitchell Interchange |
|---|---|---|---|---|---|---|---|---|
| | | | 634.0622 | | 638.2102 | 638.2602 | 638.3000 | Remarks |
| LOCATION | Sign # | Sign Message | Posts Wood | Chevron Solar Powered Sign | Moving Signs Type II | Removing Signs | Removing Small | |
| | | | 4" x 6" x 22' | System Assembly | | Type II | sign supports | |
| | | | each | SPV.0105.6000 | each | each | each | |
| | | | | L.S | | | | |
| Ramp S-W | | | | 1 | | | | 4 - Blinker Chevron signs incidental to System |
| | 1 | 50 MPH | 1 | | 1 | 1 | 1 | |
| | 2 | 50 MPH | 1 | | 1 | 1 | 1 | |
| | 3 | 50 MPH | 1 | | 1 | 1 | 1 | |
| | 4 | 50 MPH | 1 | | 1 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| TOTAL | | | 4 | 1 | 4 | 3 | 3 | |

SHEET: 1 OF 1

| PROJECT NO:1030-37-70 | HWY: IH 41 | COUNTY: MILWAUKEE | MISCELLANEOUS QUANTITIES – CHEVRON SOLAR POWERED SYSTEM | SHEET: | **E** |
|---|---|---|---|---|---|

FILE NAME : N:\SPO\Operations\Signing\Miscellaneous Quantities\1030-37-70\030501_mq_pptx PLOT DATE : 12-20-18 PLOT BY : dottah PLOT NAME : 030503_mq_.pdf PLOT SCALE : 1:1

## FINISHING

| CATEGORY | STAGE | PROJECT | 213.0100.0002 FINISHING ROADWAY EACH |
|---|---|---|---|
| 1000 | ALL | 1030-37-70 | 1.00 |
| | TOTAL | | 1.00 |

## MOBILIZATION

| CATEGORY | STAGE | PROJECT | 619.1000 MOBILIZATION EACH |
|---|---|---|---|
| 1000 | ALL | 1030-37-70 | 0.90 |
| | TOTAL | | 0.90 |

## TRAFFIC CONTROL

| CATEGORY | PROJECT | 643.5000 TRAFFIC CONTROL EACH |
|---|---|---|
| 1000 | 1030-37-70 | 0.90 |
| | TOTAL | 0.90 |

## TRAFFIC CONTROL CLOSURE ITEMS

| CATEGORY | STAGE | LOCATION | 643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH | SPV.0060.0001 TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH | SPV.0060.0002 TRAFFIC CONTROL FULL FREEWAY CLOSURE EACH | SPV.0060.0003 TRAFFIC CONTROL CLOSE-OPEN FREEWAY TO FREEWAY SYSTEM RAMP EACH |
|---|---|---|---|---|---|---|
| 1000 | ALL | 1030-37-70 | 75 | 75 | 12 | 6 |
| | TOTALS | | 75 | 75 | 12 | 6 |

## FIELD FACILITIES OFFICE SPACE

| CATEGORY | STAGE | PROJECT | SPV.0060.0004 FIELD FACILITIES OFFICE SPACE EACH |
|---|---|---|---|
| 1000 | ALL | 1030-37-70 | 0.90 |
| | TOTAL | | 0.90 |

## TRAFFIC CONTROL SIGNS FIXED MESSAGE

| CATEGORY | ROADWAY | NUMBER REQUIRED | SIGN SIZE W X H FT X FT | 643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF | SIGN MESSAGE |
|---|---|---|---|---|---|
| 1000 | COLLEGE AVE | 27 | 3.0 X 2.0 | 162.00 | COLLEGE AVE |
| | GRANGE AVE | 2 | 2.5 X 2.0 | 10.00 | GRANGE AVE |
| | TOTAL | | | 172.00 | |

## BRIDGE/TUNNEL CONCRETE SURFACE REPAIR

| CATEGORY | STRUCTURE LOCATION | 690.0250 SAWING CONCRETE LF | SPV.0025.4000 CONCRETE PAVEMENT REPAIR RAPID SET CF |
|---|---|---|---|
| 1000 | | | |
| | B-40-814 | 83 | 130 |
| | B-40-818CD | 115 | 160 |
| | B-40-819CD | 65 | 75 |
| | B-40-824 | 82 | 170 |
| | B-40-827 | 112 | 65 |
| | B-40-828 | 13 | 9 |
| | B-40-829 | 26 | 18 |
| | B-40-832 | 68 | 20 |
| | B-40-835 | 45 | 45 |
| | B-40-836 | 265 | 265 |
| | TOTALS | 874 | 957 |




FILE NAME : pw:\\projectwise.ch2m.com:DEN001\Documents\680388 - Mitchell IC Bridge Overlays\Work in Progress Area - Organized by Zone\Preliminary\1030-37-00\Deliverables\Staging Plans\370_020201_gn.ppt
PLOT DATE : 3/19/2019 3:54:05 PM PLOT BY : MSCDYB PLOT NAME : 030201_MQ2 PLOT SCALE : 1:1

## TRAFFIC CONTROL ITEMS

| CATEGORY | STRUCTURE | | STAGE DURATION DAYS | 643.0300 TRAFFIC CONTROL DRUMS EACH** | 643.0300 TRAFFIC CONTROL DRUMS DAYS | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH** | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH** | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH** | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS | 643.0800 TRAFFIC CONTROL ARROW BOARDS EACH* | 643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS | 643.0900 TRAFFIC CONTROL SIGNS EACH** | 643.0900 TRAFFIC CONTROL SIGNS DAYS | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLES ** | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS-** | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH | 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH* | 643.1050 TRAFFIC CONTROL SIGNS PCMS DAY | 643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS EACH* | 643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | | | | | | | | | | | | | | | | | | | | | | |
| | B-40-811 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | 131 | 262 | 30 | 60 | 60 | 120 | 13 | 26 | 2 | 4 | 101 | 202 | -- | -- | -- | 4 | 8 | 2 | 4 |
| | B-40-812 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 107 | 214 | 17 | 34 | 34 | 68 | -- | -- | -- | -- | 77 | 154 | 2 | 5 | 10 | 2 | 4 | 2 | 4 |
| | | STAGE 2 | | 144 | 288 | 15 | 30 | 30 | 60 | 34 | 68 | 3 | 6 | 86 | 172 | -- | -- | -- | -- | -- | 2 | 4 |
| | | STAGE 3 | | 158 | 316 | 10 | 20 | 20 | 40 | 51 | 102 | 4 | 8 | 19 | 38 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-813 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 85 | 170 | 25 | 50 | 50 | 100 | 7 | 14 | 1 | 2 | 28 | 56 | -- | -- | -- | 1 | 2 | 2 | 4 |
| | | STAGE 2 | | 88 | 176 | 24 | 48 | 48 | 96 | 23 | 46 | 3 | 6 | 33 | 66 | -- | -- | -- | 1 | 2 | 2 | 4 |
| | | STAGE 3 | | 274 | 548 | 17 | 34 | 34 | 68 | 53 | 106 | 3 | 6 | 23 | 46 | -- | -- | -- | 2 | 4 | 2 | 4 |
| | | STAGE 4 | | 196 | 392 | 29 | 58 | 58 | 116 | 26 | 52 | 3 | 6 | 33 | 66 | -- | -- | -- | 4 | 8 | 2 | 4 |
| | B-40-814 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 61 | 122 | 4 | 8 | 8 | 16 | 13 | 26 | 2 | 4 | 9 | 18 | -- | -- | -- | -- | -- | 2 | 4 |
| | | STAGE 2 | | 60 | 120 | 4 | 8 | 8 | 16 | 13 | 26 | 2 | 4 | 9 | 18 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-815 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | 56 | 112 | 14 | 28 | 28 | 56 | 12 | 24 | 1 | 2 | 28 | 56 | -- | -- | -- | 1 | 2 | 2 | 4 |
| | B-40-816 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | -- | -- | 8 | 16 | 16 | 32 | -- | -- | -- | -- | 13 | 26 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-817 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | -- | -- | 8 | 16 | 16 | 32 | -- | -- | -- | -- | 18 | 36 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-818 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 85 | 170 | 23 | 46 | 46 | 92 | 26 | 52 | 3 | 6 | 41 | 82 | -- | -- | -- | 1 | 2 | 2 | 4 |
| | | STAGE 2 | | 100 | 200 | 7 | 14 | 14 | 28 | 34 | 68 | 2 | 4 | 18 | 36 | -- | -- | -- | -- | -- | 2 | 4 |
| | | STAGE 3 | | 86 | 172 | 8 | 16 | 16 | 32 | 26 | 52 | 3 | 6 | 17 | 34 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-819 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 161 | 322 | 18 | 36 | 36 | 72 | 22 | 44 | 1 | 2 | 100 | 200 | 2 | 5 | 10 | 6 | 12 | 2 | 4 |
| | | STAGE 2 | | 207 | 414 | 29 | 58 | 58 | 116 | 39 | 78 | 5 | 10 | 31 | 62 | -- | -- | -- | 2 | 4 | 2 | 4 |
| | | STAGE 3 | | 168 | 336 | 16 | 32 | 32 | 64 | 39 | 78 | 5 | 10 | 22 | 44 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-820 | | 4 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 66 | 264 | 8 | 32 | 16 | 64 | 22 | 88 | 2 | 8 | 28 | 112 | -- | -- | -- | -- | -- | 2 | 8 |
| | | STAGE 2 | | 110 | 440 | 4 | 16 | 8 | 32 | 29 | 116 | 2 | 8 | 30 | 120 | -- | -- | -- | -- | -- | 2 | 8 |
| | B-40-821 | | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | 23 | 46 | -- | -- | -- | -- | -- | -- | 1 | 2 | 7 | 14 | -- | -- | -- | -- | -- | 2 | 4 |

(CONTINUED ON NEXT PAGE)

(CONTINUED FROM PREVIOUS PAGE)

## TRAFFIC CONTROL ITEMS

| CATEGORY | STRUCTURE | | STAGE DURATION DAYS | 643.0300 TRAFFIC CONTROL DRUMS EACH** | 643.0300 TRAFFIC CONTROL DRUMS DAYS | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH** | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH** | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH** | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS | 643.0800 TRAFFIC CONTROL ARROW BOARDS EACH* | 643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS | 643.0900 TRAFFIC CONTROL SIGNS EACH** | 643.0900 TRAFFIC CONTROL SIGNS DAYS | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLES ** | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS-** | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH | 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH* | 643.1050 TRAFFIC CONTROL SIGNS PCMS DAY | 643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS EACH* | 643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | | | | | | | | | | | | | | | | | | | | | | |
| | B-40-823 | | 2 | 74 | 148 | 7 | 14 | 14 | 28 | 22 | 44 | 1 | 2 | 5 | 10 | -- | -- | -- | 2 | 4 | 2 | 4 |
| | B-40-824 | | 2 | 30 | 60 | 4 | 8 | 8 | 16 | -- | -- | -- | -- | 9 | 18 | -- | -- | -- | 1 | 2 | 2 | 4 |
| | B-40-827 | | 2 | 24 | 48 | -- | -- | -- | -- | -- | -- | 1 | 2 | 6 | 12 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-828 | | 6 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 166 | 996 | 20 | 120 | 40 | 240 | 26 | 156 | 3 | 18 | 105 | 630 | 6 | 3 | 18 | 1 | 6 | 2 | 12 |
| | | STAGE 2 | | 229 | 1,374 | 30 | 180 | 60 | 360 | 70 | 420 | 6 | 36 | 164 | 984 | 6 | 3 | 18 | 3 | 18 | 2 | 12 |
| | B-40-829 | | 6 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 204 | 1,224 | 30 | 180 | 60 | 360 | 34 | 204 | 3 | 18 | 39 | 234 | -- | -- | -- | 1 | 6 | 2 | 12 |
| | | STAGE 2 | | 153 | 918 | 15 | 90 | 30 | 180 | 26 | 156 | 3 | 18 | 20 | 120 | -- | -- | -- | -- | -- | 2 | 12 |
| | B-40-832 | | 2 | 23 | 46 | -- | -- | -- | -- | -- | -- | 1 | 2 | 7 | 14 | -- | -- | -- | -- | -- | 2 | 4 |
| | B-40-833 | | 4 | -- | -- | 24 | 96 | 48 | 192 | -- | -- | -- | -- | 30 | 120 | -- | -- | -- | -- | -- | 2 | 8 |
| | B-40-834 | | 2 | 18 | 36 | 3 | 6 | 6 | 12 | -- | -- | -- | -- | 16 | 32 | 2 | 1 | 2 | -- | -- | 2 | 4 |
| | B-40-835 | | 4 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 101 | 404 | 9 | 36 | 18 | 72 | 26 | 104 | 2 | 8 | 30 | 120 | -- | -- | -- | -- | -- | 2 | 8 |
| | | STAGE 2 | | 118 | 472 | 11 | 44 | 22 | 88 | 33 | 132 | 2 | 8 | 34 | 136 | -- | -- | -- | -- | -- | 2 | 8 |
| | B-40-836 | | 4 | | | | | | | | | | | | | | | | | | | |
| | | STAGE 1 | | 102 | 408 | 15 | 60 | 30 | 120 | 34 | 136 | 2 | 8 | 26 | 104 | -- | -- | -- | -- | -- | 2 | 8 |
| | | STAGE 2 | | 117 | 468 | 11 | 44 | 22 | 88 | 26 | 104 | 2 | 8 | 30 | 120 | -- | -- | -- | -- | -- | 2 | 8 |
| | B-40-837 | | 2 | 16 | 32 | 3 | 6 | 6 | 12 | -- | -- | -- | -- | 14 | 28 | 2 | 1 | 2 | -- | -- | 2 | 4 |
| | DETOURS | | | | | | | | | | | | | | | | | | | | | |
| | WB IH 94 CD ROAD RAMP | | 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 35 | 210 | -- | -- | -- | -- | -- | 2 | 12 |
| | NB IH 43 SYSTEM RAMP | | 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 31 | 186 | -- | -- | -- | -- | -- | 2 | 12 |
| | SB IH 43 SYSTEM RAMP | | 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 31 | 186 | -- | -- | -- | -- | -- | 2 | 12 |
| | COLLEGE AVENUE | | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 96 | 192 | -- | -- | -- | 2 | 4 | 2 | 4 |
| | UNDISTRIBUTED | | | | 1,382 | | 171 | | 342 | | 278 | | 28 | | 486 | | | 40 | | 12 | | 27 |
| | TOTALS | | | | 13,100 | | 1,715 | | 3,430 | | 2,800 | | 260 | | 5,600 | | | 100 | | 100 | | 275 |

** FOR INFORMATION ONLY



FILE NAME : pw:\\projectwise.ch2m.com:DEN001\Documents\680388 - Mitchell IC Bridge Overlays\Work in Progress Area - Organized by Zone\Preliminary\1030-37-00\Deliverables\Staging Plans\370_020201_gn.ppt
PLOT DATE : 3/19/2019 3:54:06 PM PLOT BY : MSCDYB PLOT NAME : 030201_MQ4 PLOT SCALE : 1:1

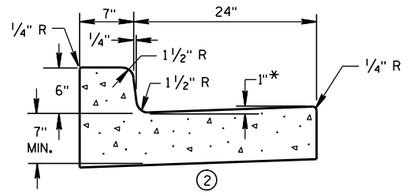
## PAVEMENT MARKING ITEMS

| CATEGORY | STRUCTURE | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH 12.5' LINE 37.5' SKIP YELLOW LF | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH 12.5' LINE 37.5' SKIP WHITE LF | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH 12.5' LINE 37.5' SKIP WHITE LF | 646.1020 MARKING LINE EPOXY 4-INCH 12.5' LINE 37.5' SKIP YELLOW LF | 646.1020 MARKING LINE EPOXY 4-INCH 12.5' LINE 37.5' SKIP WHITE LF | 646.1020 MARKING LINE EPOXY 4-INCH 12.5' LINE 37.5' SKIP WHITE LF | 649.0205 TEMPORARY MARKING LINE PAINT 8-INCH WHITE LF | 646.3020 MARKING LINE EPOXY 8-INCH WHITE LF | 646.5020 MARKING ARROW EPOXY TYPE 2 WHITE EACH | 646.5120 MARKING WORD EPOXY WHITE EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE EACH | 646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF | 646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF | SPV.0090.0001 MARKING CONTRAST EPOXY 4-INCH 12.5' LINE 37.5' SKIP WHITE LF | SPV.0090.0002 MARKING CONTRAST EPOXY 8-INCH 3' LINE 9' SKIP WHITE LF | SPV.0090.0002 MARKING CONTRAST EPOXY 8-INCH 3' LINE 9' SKIP WHITE LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | | | | | | | | | | | | | | | | | | | |
| | B-40-811 | -- | -- | 300 | -- | -- | 300 | 564 | 564 | 4 | 4 | 101 | -- | -- | -- | -- | -- | -- |
| | B-40-812 | 400 | 398 | 113 | 400 | 398 | -- | 1,115 | -- | -- | -- | -- | 28 | 14 | -- | 113 | 1,103 | 12 |
| | B-40-813 | 400 | 400 | 113 | 400 | 400 | -- | 360 | -- | -- | -- | -- | 28 | 28 | -- | 113 | -- | 360 |
| | B-40-814 | 300 | 300 | -- | 300 | 300 | -- | -- | -- | -- | -- | -- | 42 | 42 | -- | -- | -- | -- |
| | B-40-815 | 300 | 300 | -- | 300 | 300 | -- | -- | -- | -- | -- | -- | 42 | 42 | -- | -- | -- | -- |
| | B-40-816 | -- | -- | 75 | -- | -- | 75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | B-40-817 | -- | -- | 75 | -- | -- | 75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | B-40-818 | 400 | 400 | 150 | 400 | 400 | -- | 126 | -- | -- | -- | -- | 56 | 56 | -- | 150 | -- | 126 |
| | B-40-819 | 400 | 400 | 200 | 400 | 400 | -- | 1,950 | -- | -- | -- | -- | 28 | 14 | -- | 200 | 1,950 | -- |
| | B-40-820 | -- | 1,114 | 325 | -- | 1,114 | -- | 496 | -- | 6 | 6 | 102 | -- | -- | -- | 325 | 463 | 33 |
| | B-40-823 | 228 | 228 | 63 | 228 | 228 | -- | -- | -- | -- | -- | -- | 28 | -- | -- | 63 | -- | -- |
| | B-40-824 | 154 | 154 | -- | 154 | 154 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | B-40-828 | 752 | 760 | 663 | 752 | 760 | -- | 1,550 | -- | -- | -- | -- | 98 | 98 | -- | 663 | 1,550 | -- |
| | B-40-829 | 750 | 743 | 525 | 750 | 743 | -- | 1,922 | -- | -- | -- | -- | 98 | 98 | 200 | 525 | 1,922 | -- |
| | B-40-833 | -- | -- | 175 | -- | -- | 175 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | B-40-834 | 1,500 | 950 | 188 | 1,500 | 950 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 188 | -- | -- |
| | B-40-835 | -- | -- | 250 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 250 | -- | -- |
| | B-40-836 | -- | -- | 275 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 275 | -- | -- |
| | B-40-837 | 2,100 | 1,500 | 50 | 2,100 | 1,500 | -- | -- | -- | -- | -- | 24 | -- | -- | -- | 50 | -- | -- |
| | SUBTOTALS | 9,725 | 9,670 | 3,538 | 9,725 | 9,670 | 625 | 8,082 | 564 | 10 | 10 | 227 | 714 | 658 | 200 | 2,913 | 6,987 | 531 |
| | TOTALS | | 22,933 | | | 20,020 | | 8,082 | 564 | 10 | 10 | 227 | | 1,372 | 200 | 2,913 | | 7,518 |

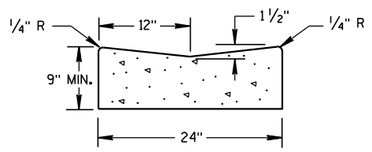
# Standard Detail Drawing List

| | |
|---|---|
| 08D16-10 | CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 09C02-08 | CONCRETE BASES, TYPES 1, 2, 5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09E07-06 | TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS |
| 15C02-07A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-07B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C02-07C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C02-07F | ADVANCED WIDTH RESTRICTION SIGNING |
| 15C04-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS |
| 15C07-14B | PAVEMENT MARKING WORDS |
| 15C07-14C | PAVEMENT MARKING ARROWS |
| 15C08-19A | LONGITUDINAL MARKING (MAINLINE) |
| 15C08-19B | PAVEMENT MARKING (TURN LANES) |
| 15C08-19C | PAVEMENT MARKING (TURN LANES) |
| 15C11-07B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C31-03A | PAVEMENT MARKING (RAMPS AND GORES) |
| 15C31-03B | PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY |
| 15C31-03C | PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP |
| 15C33-03 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D12-07A | TRAFFIC CONTROL, LANE CLOSURE |
| 15D14-03 | TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS) |
| 15D15-04E | TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE |
| 15D16-04 | TRAFFIC CONTROL, EXIT RAMP CLOSURE |
| 15D21-06 | TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE |
| 15D22-03 | TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D27-03 | TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH |
| 15D30-04A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |

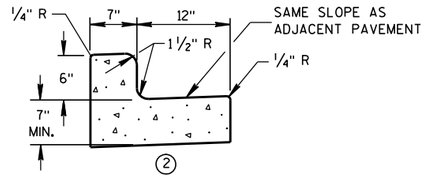

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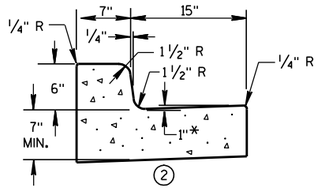

① CONCRETE CURB & GUTTER 31"




① CONCRETE GUTTER 24"

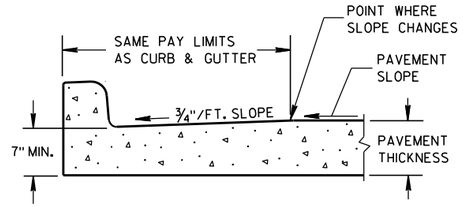



① CONCRETE CURB & GUTTER 19"




① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.




PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

## 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.

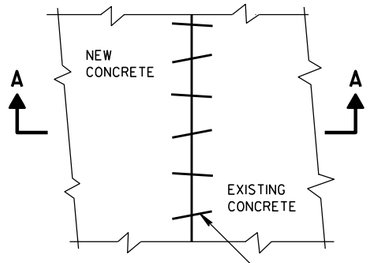
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

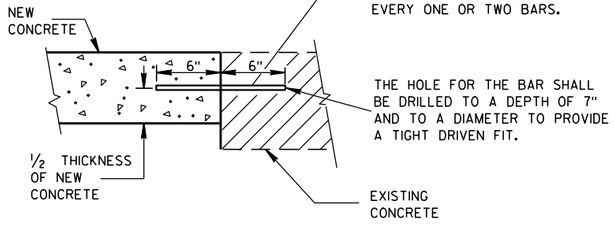
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.




PLAN VIEW

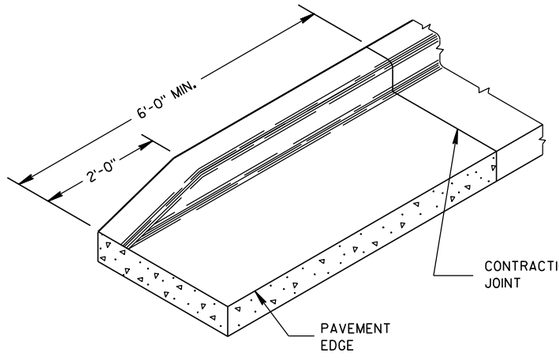
EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

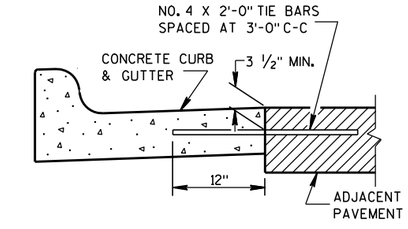



SECTION A-A

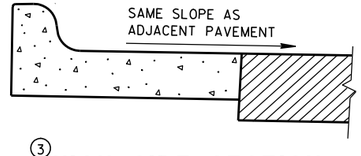
PAVEMENT TIES




END SECTION CURB & GUTTER




① TYPICAL TIE BAR LOCATION




③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

**CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES**

**(For Optional Use in Milwaukee Co. Only)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

/S/ Jerry Zogg — ROADWAY STANDARDS ENGINEER

97 — ENT

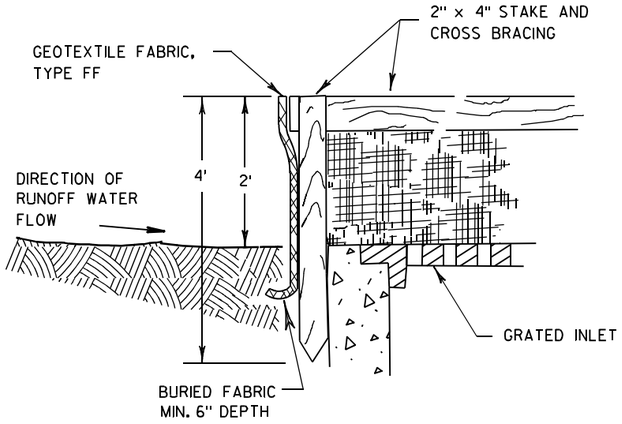
FHWA

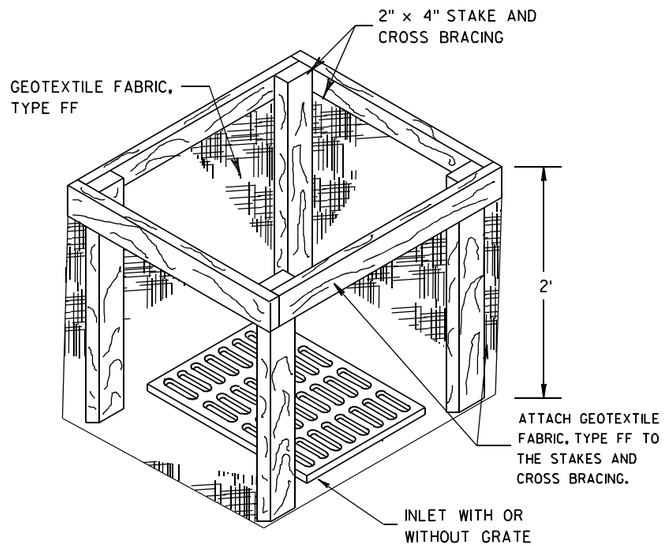
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S.D.D. 8 D 16-10

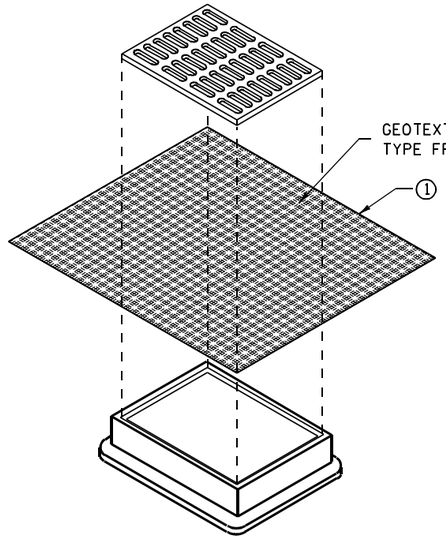
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S.D.D. 8 D 16-10



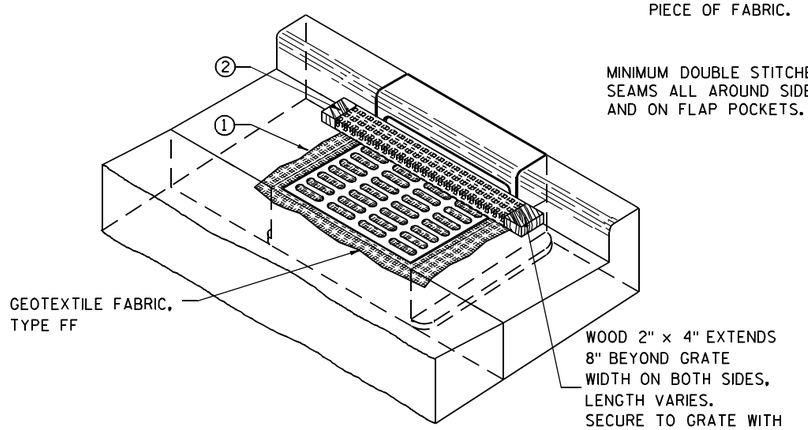




## INLET PROTECTION, TYPE A

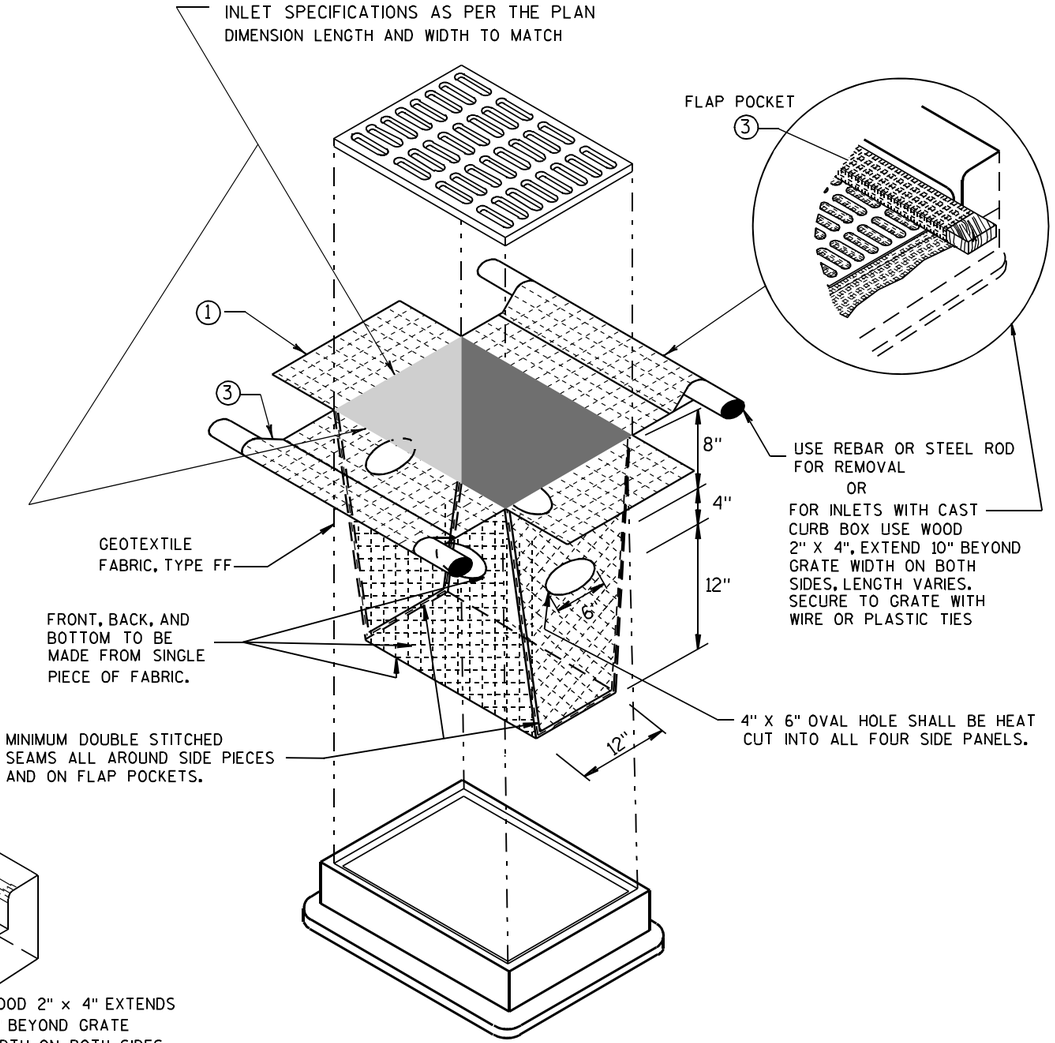



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)




## INLET PROTECTION, TYPE C (WITH CURB BOX)




## INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ② )

## GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

## INSTALLATION NOTES

### TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

### TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



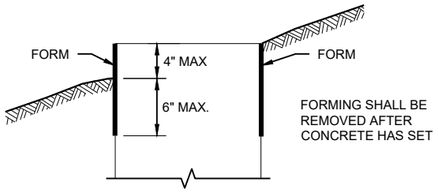
6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE




**FORMING DETAIL**

| QUANTITY REQUIREMENTS | CONCRETE BASE TYPE | | |
|---|---|---|---|
| | 1 | 2 | 5 & 6 |
| APPROX. CUBIC YARDS OF CONCRETE | 0.40 | 0.57 | 0.40 |
| LBS. OF HOOP BAR STEEL | NONE | 23 | 16 |
| LBS. OF VERTICAL BAR STEEL | NONE | 60 | 18 |

## GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL BENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

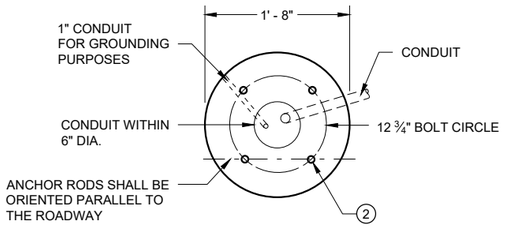
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

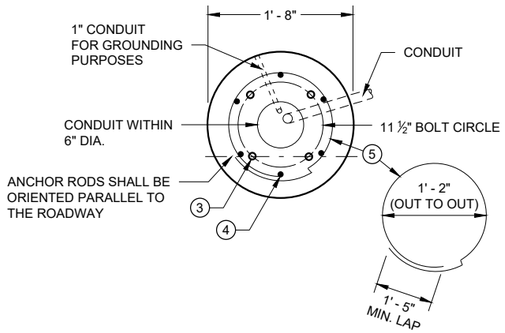
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

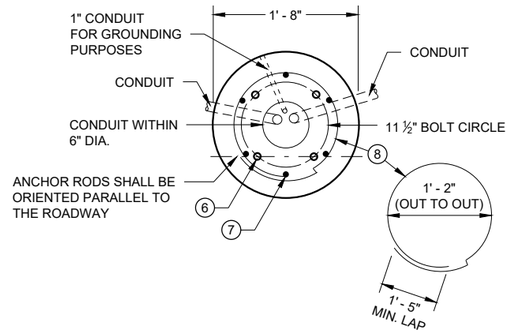
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

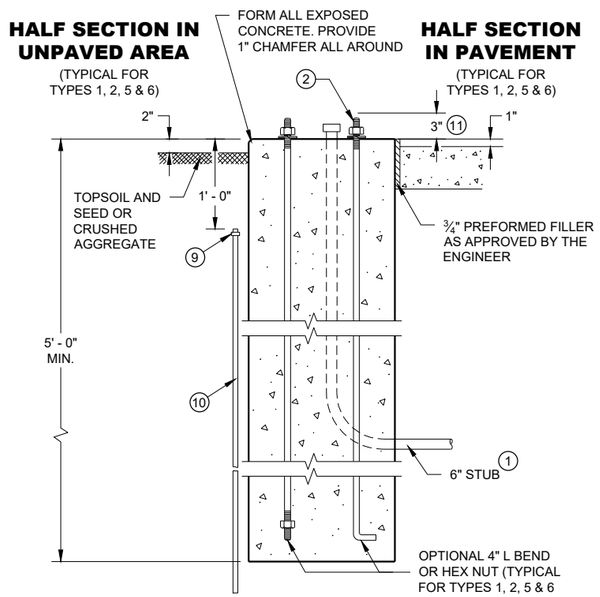
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

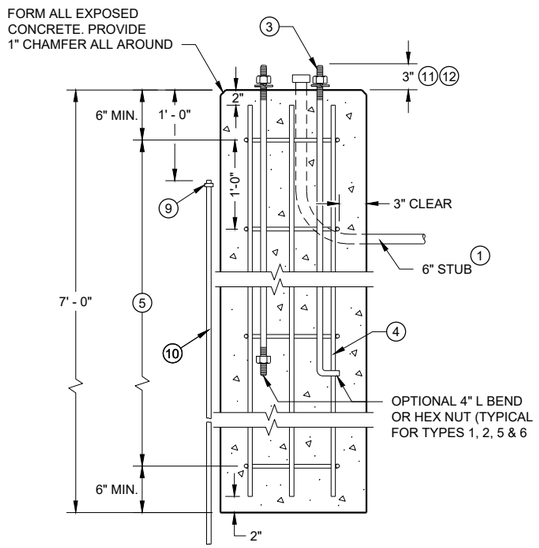


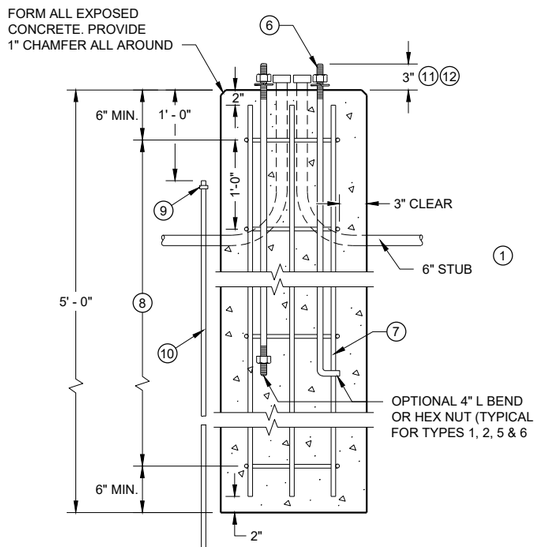




**TYPE 1**




**TYPE 2**




**TYPE 5 & 6**

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**CONCRETE BASES**

**CONCRETE BASES TYPES 1, 2, 5, & 6**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI
FHWA



6
SDD 09C02 - 08

## GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

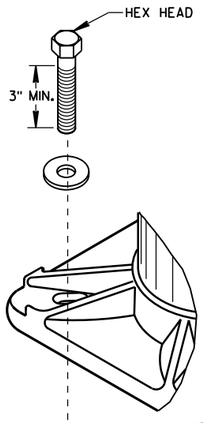
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

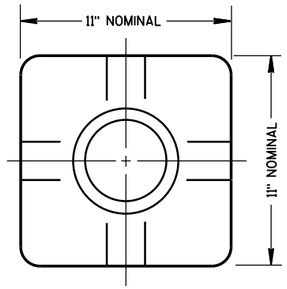
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

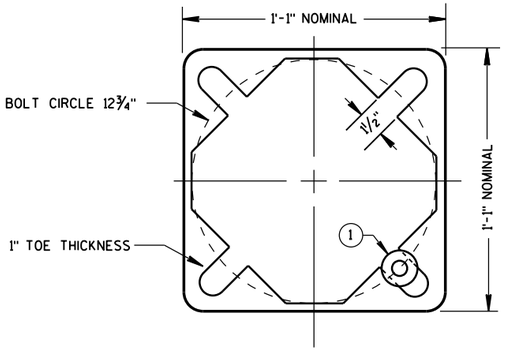
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

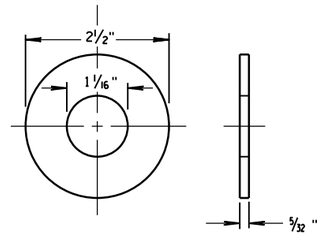



TOP VIEW
(PEDESTAL BASE)

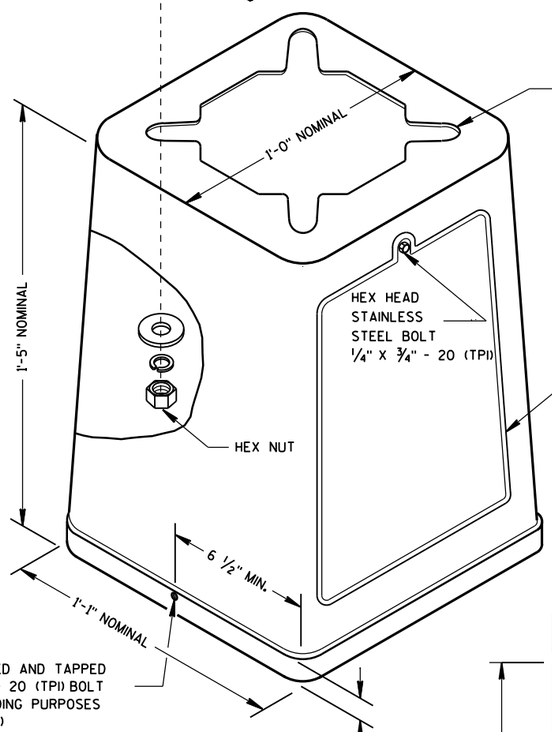



BOTTOM VIEW
(PEDESTAL BASE)

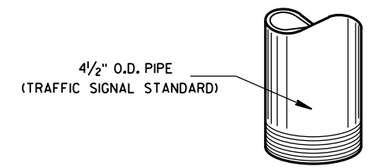


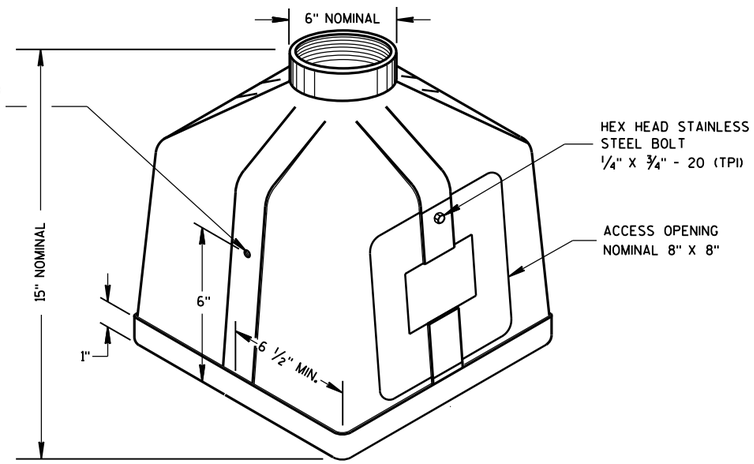

ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

**PEDESTAL BASE WASHER** (1)



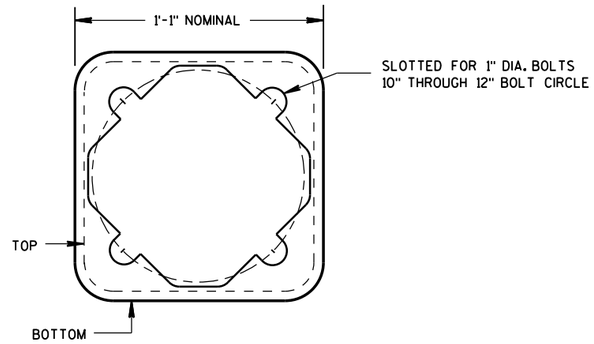

ISOMETRIC VIEW



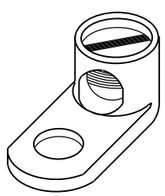




ISOMETRIC VIEW

**PEDESTAL BASE**




BOTTOM VIEW
(TRANSFORMER BASE)

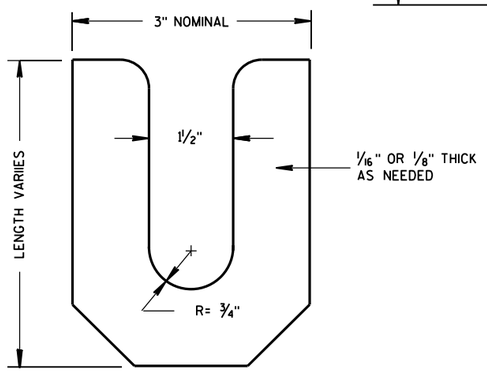


**TYPICAL MECHANICAL CONNECTOR LUG**

TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE**

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

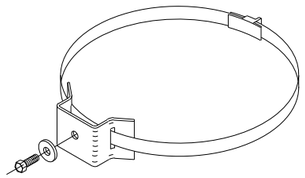


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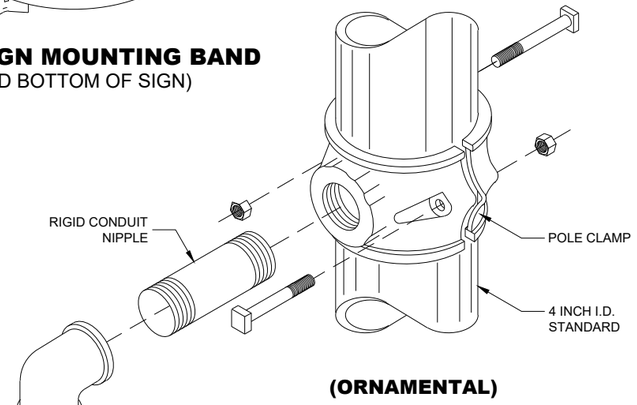
S.D.D. 9 C 3-4

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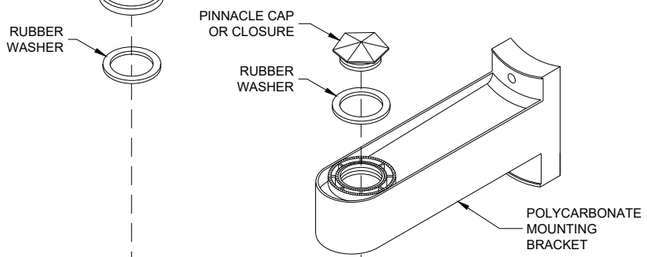
S.D.D. 9 C 3-4



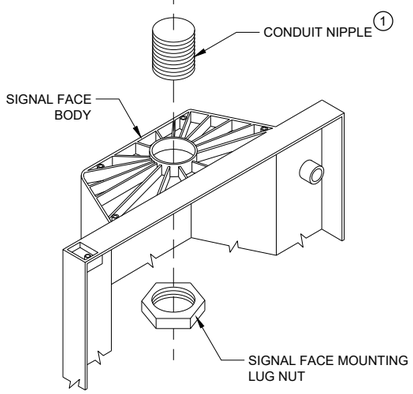
**TYPICAL SIGN MOUNTING BAND**
(TOP AND BOTTOM OF SIGN)



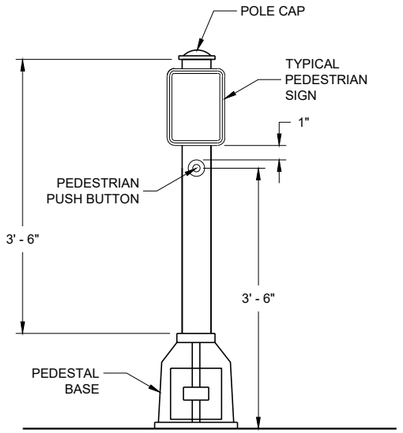

**(ORNAMENTAL)**




**(BANDED)**




**SIGNAL FACE MOUNTING DETAILS**




**PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING**

## GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

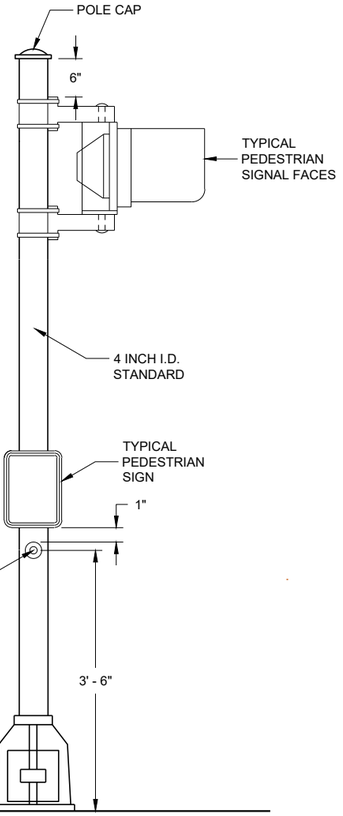
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

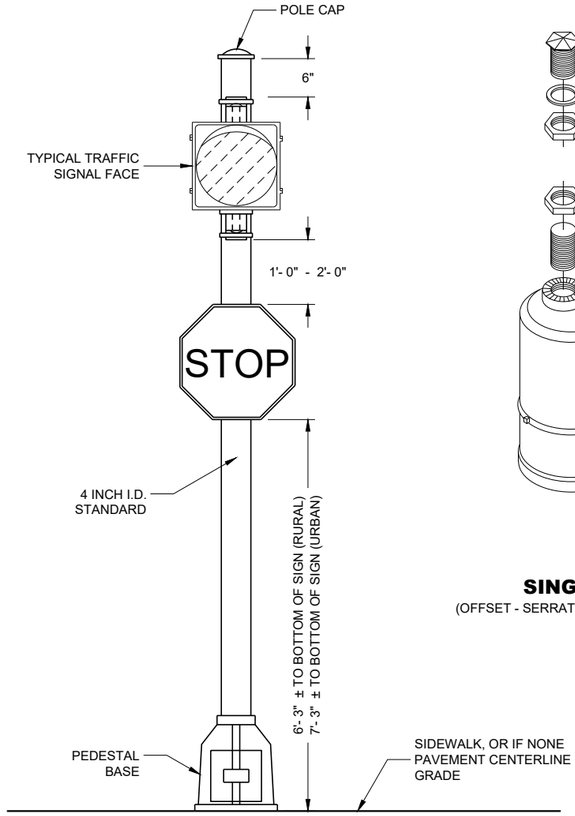
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

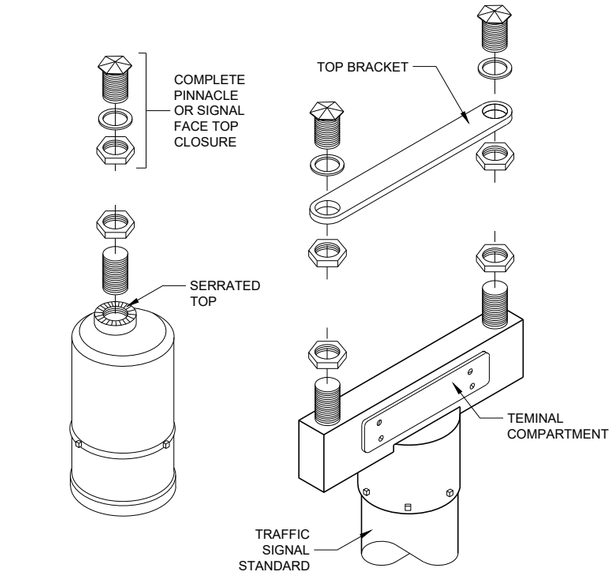
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.




**PEDESTRIAN FACE STANDARD - 10 FT.**
(WALK - DON'T WALK)




**STANDARD FLASHER**
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED




**SINGLE**
(OFFSET - SERRATED MOUNTING)

**DOUBLE**
(SERRATED MOUNTING)

**SLIPFITTERS**

**TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

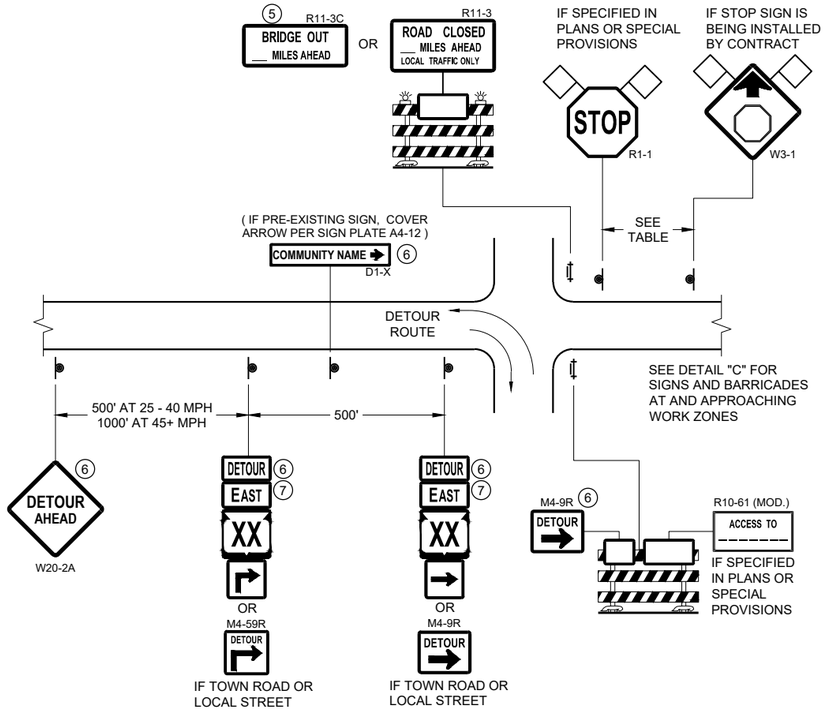
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 101

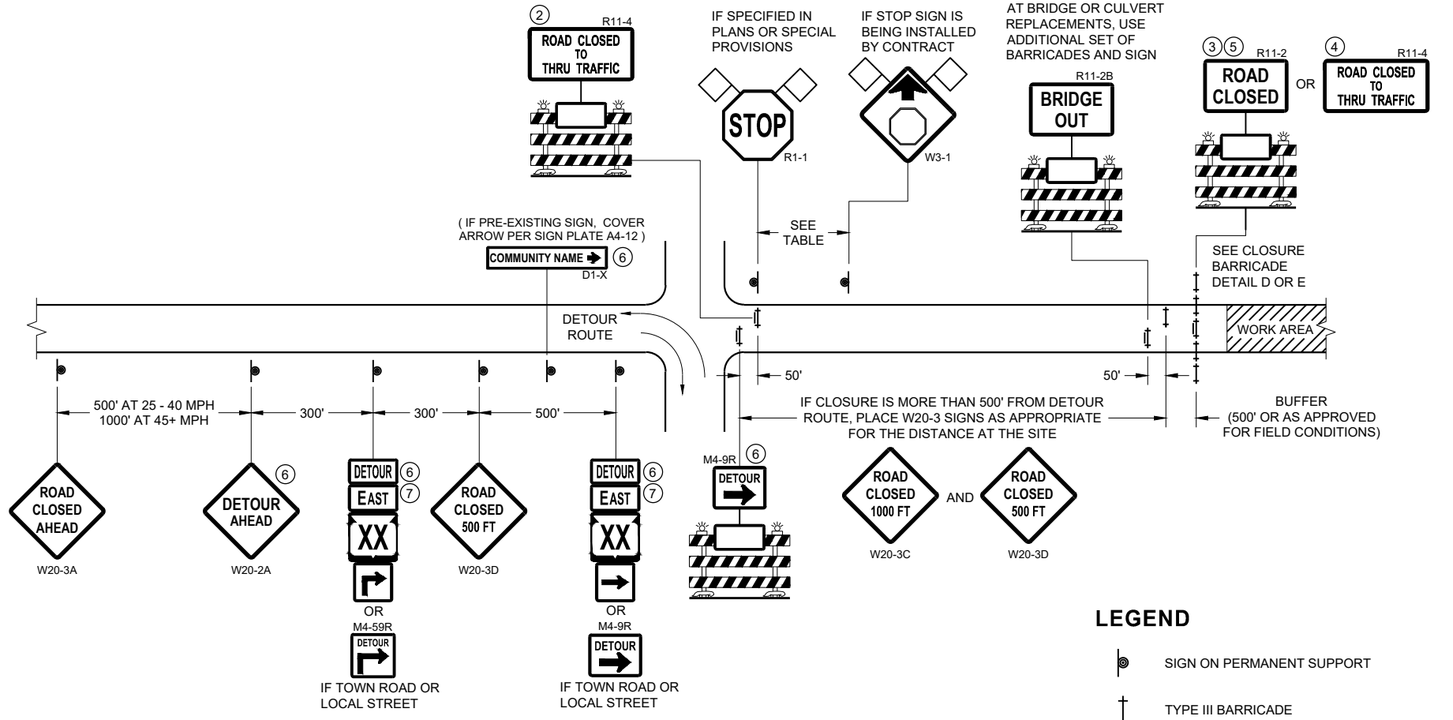
FHWA



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SDD 09E07 - 06



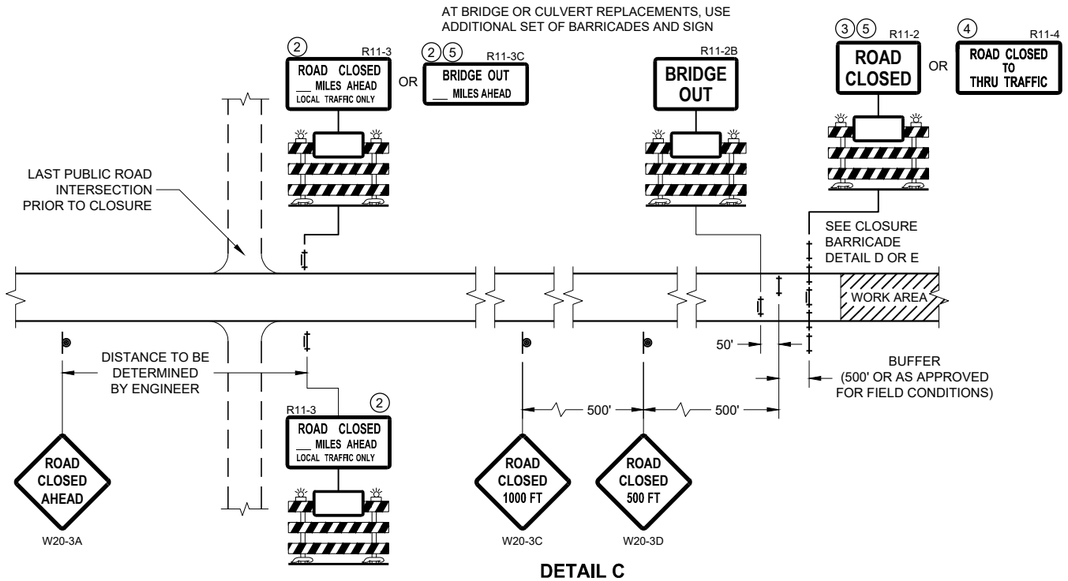




## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )

## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

| 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

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

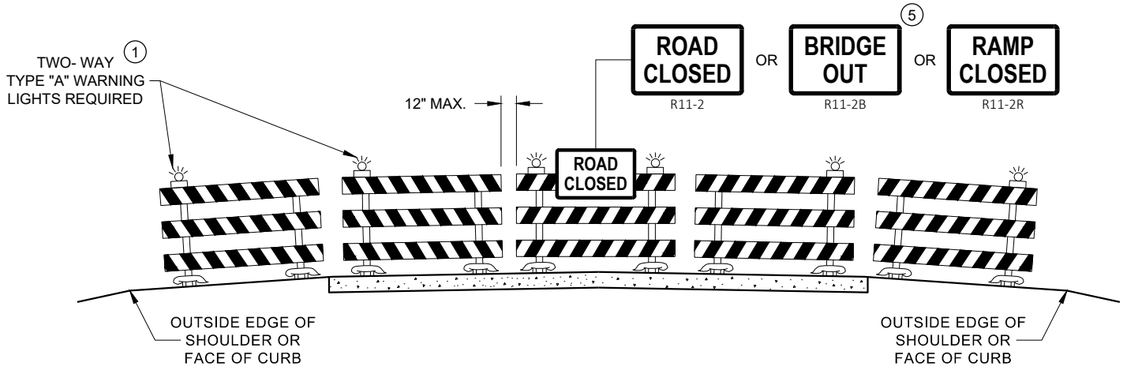
FHWA



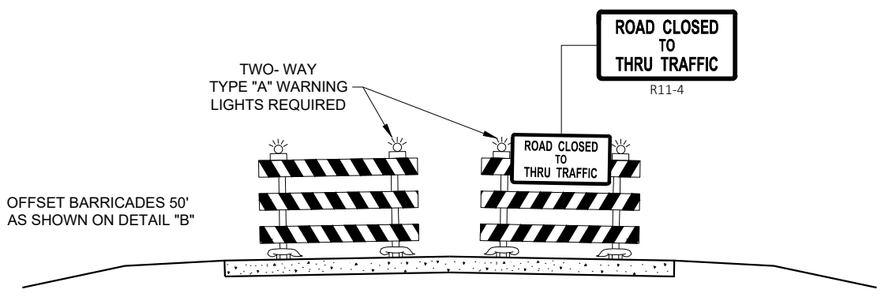
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SDD 15C02 - 07a

SDD 15C02 - 07a




**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 PORTABLBLE 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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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 CARDIANAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



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SDD 15C02 - 07b

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SDD 15C02 - 07b

**THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.**

## LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

## GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- 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" (30" X 30" 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)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2 SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX / WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

500'

M4-9L DETOUR ** OR DETOUR EAST XX IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX * D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

500'

DETOUR EAST XX

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX *

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

**DETAIL F**
**DETOUR SIGNING**

# DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

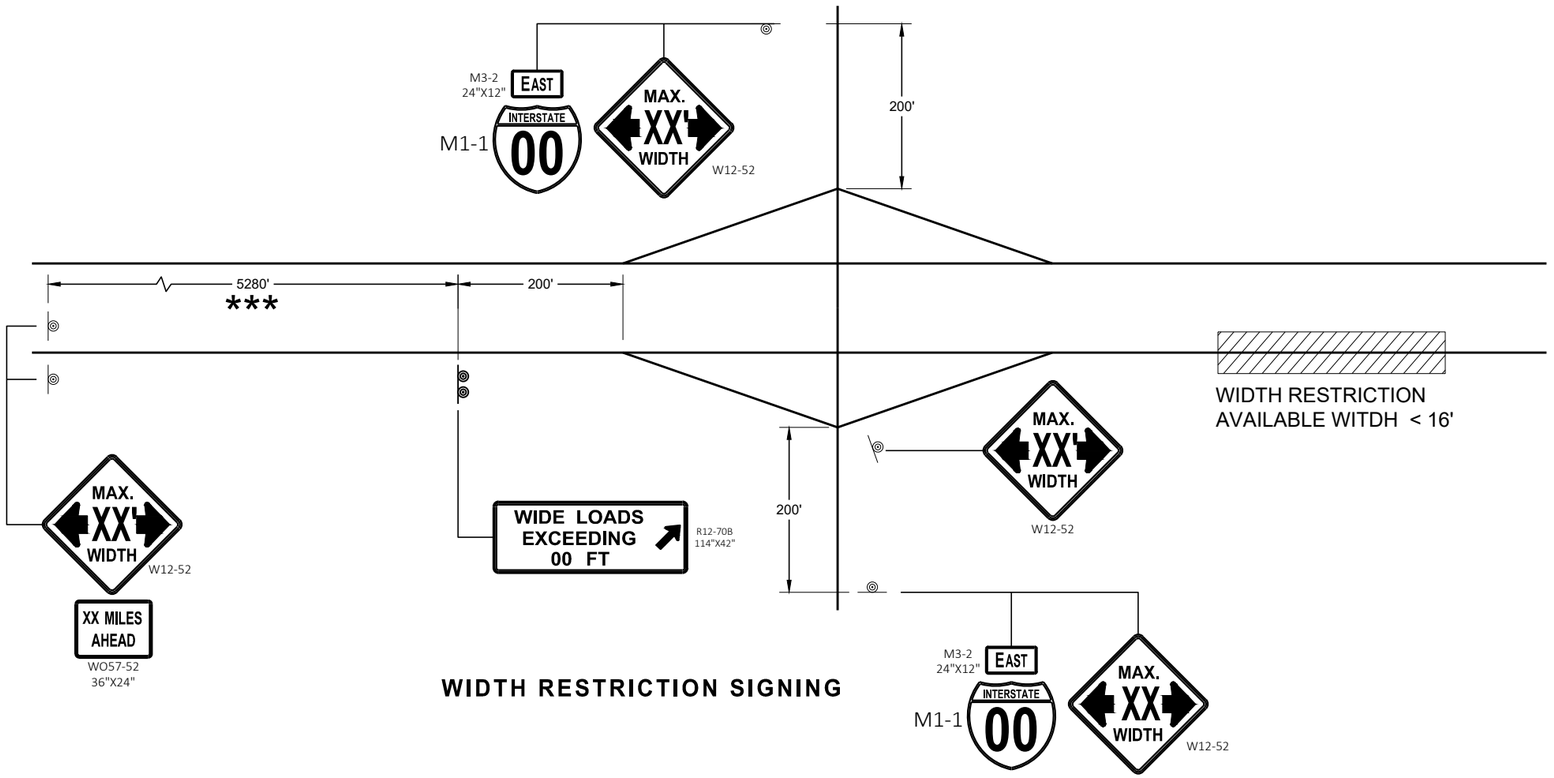
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA





SDD 15C02 - 07c




**WIDTH RESTRICTION SIGNING**

## LEGEND

SIGN ON PERMANENT SUPPORT

## GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS 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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

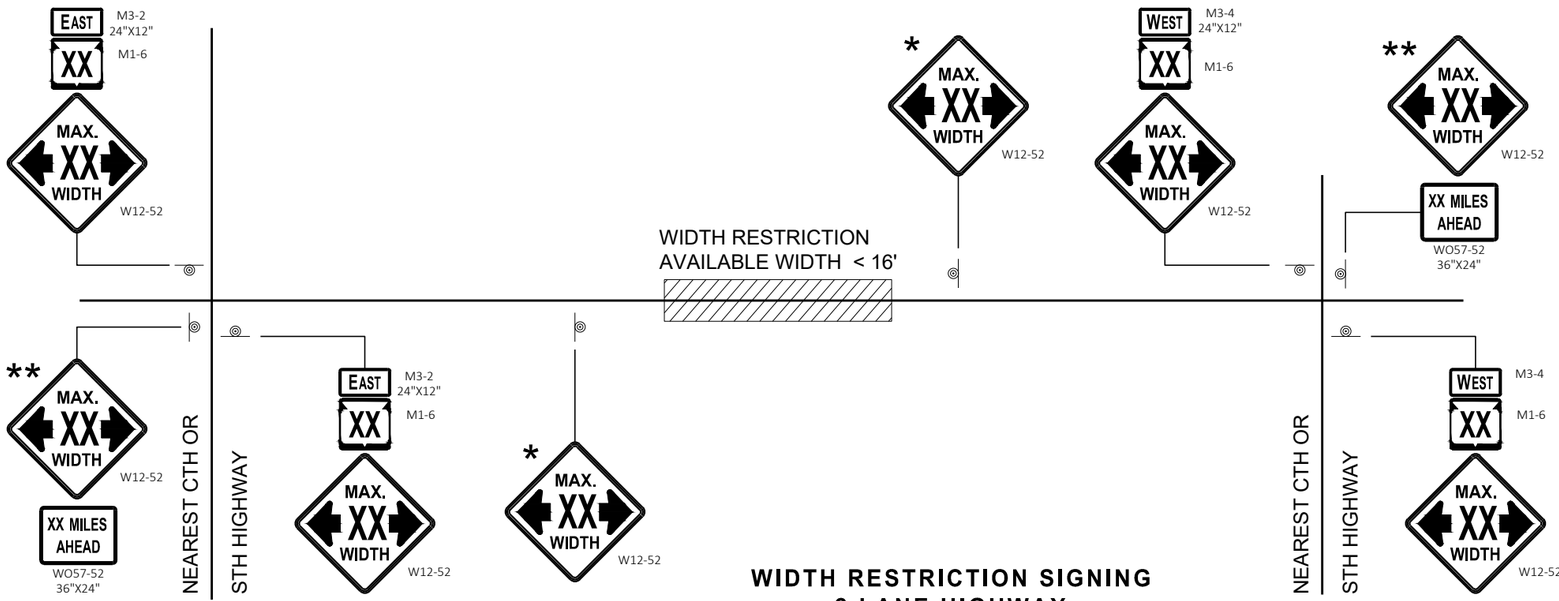
* PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.




WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH




**WIDTH RESTRICTION SIGNING**
**2 LANE HIGHWAY**

**ADVANCED WIDTH RESTRICTION SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

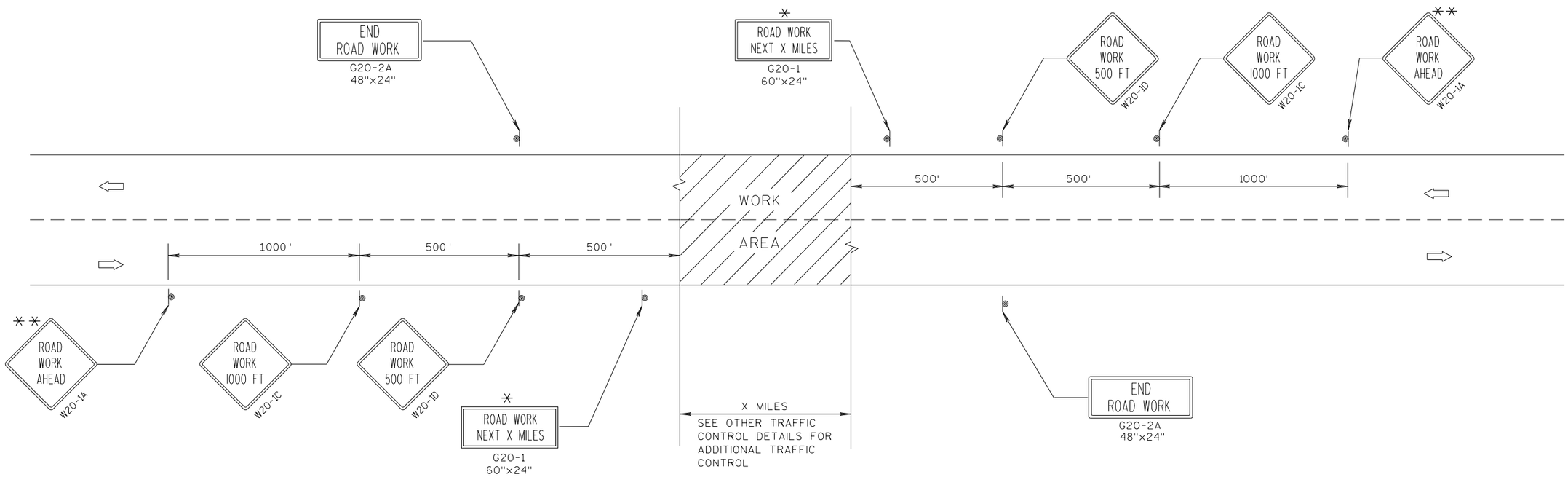




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SDD 15C02 - 07f

# TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL




## GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

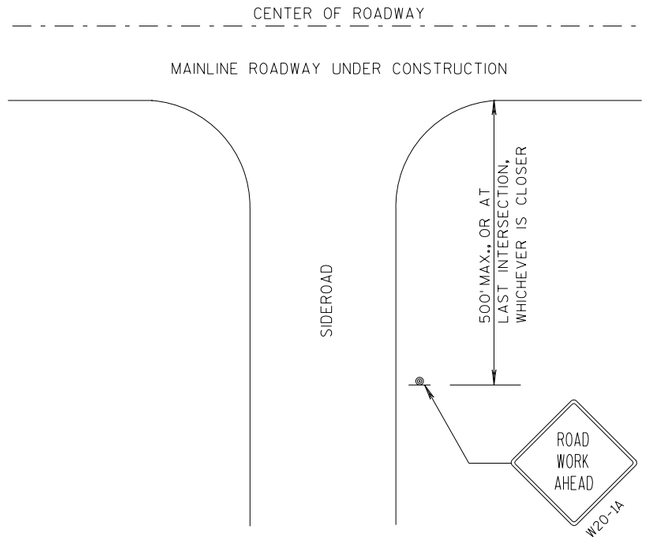
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

✳ OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

✳✳ PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.




## LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENGI

FHWA

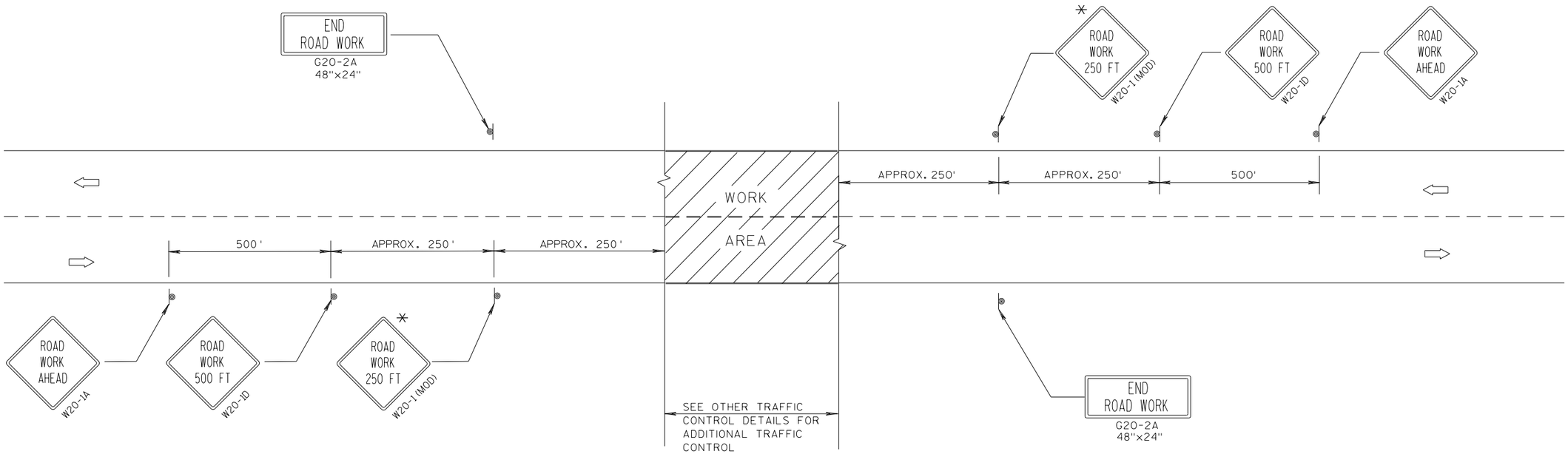




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S.D.D. 15 C 4-5

# TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL




## GENERAL NOTES

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

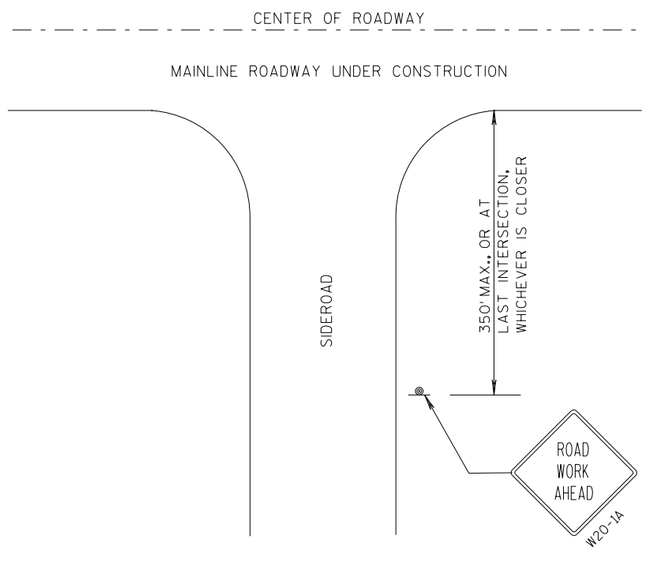
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.




### LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
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7/2018
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WORK ZONE ENGI

FHWA



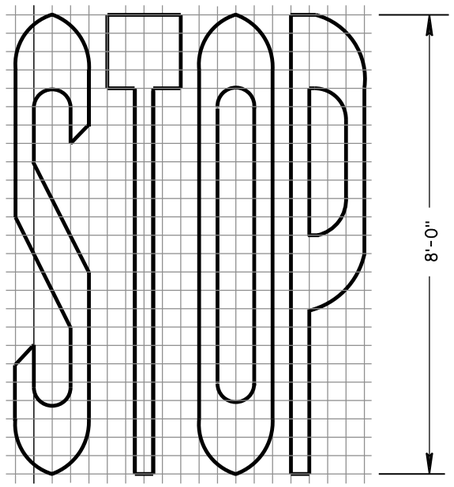
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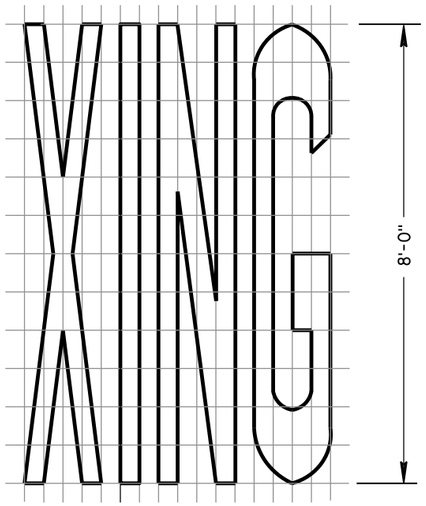


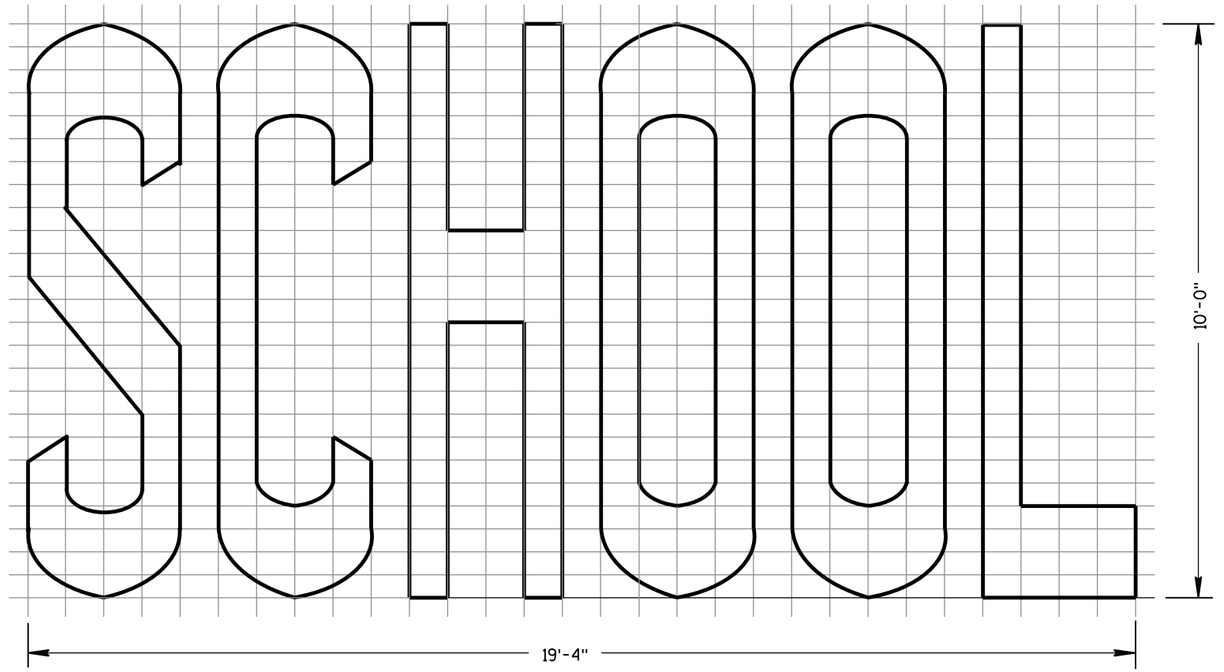
S.D.D. 15 C 5-5

## GENERAL NOTES

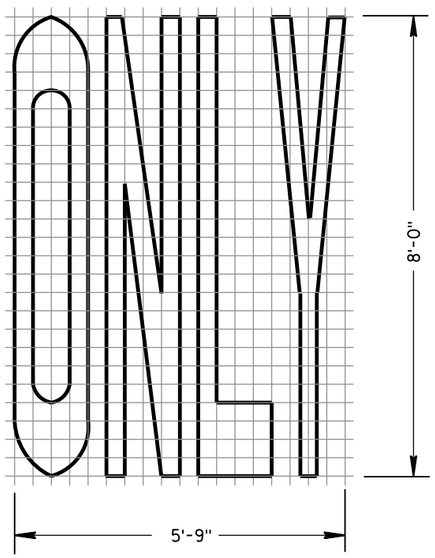
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

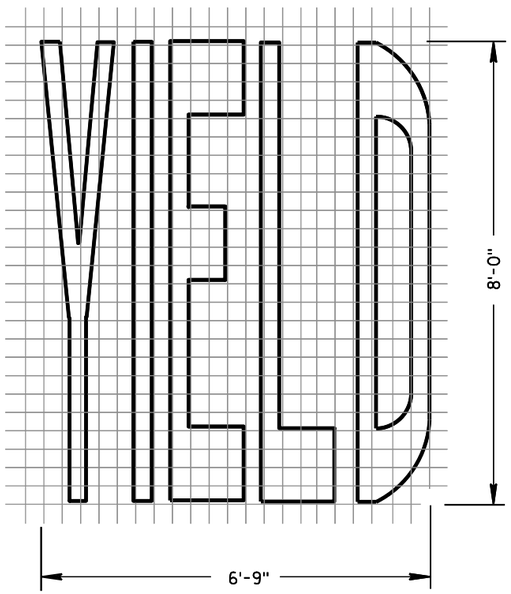


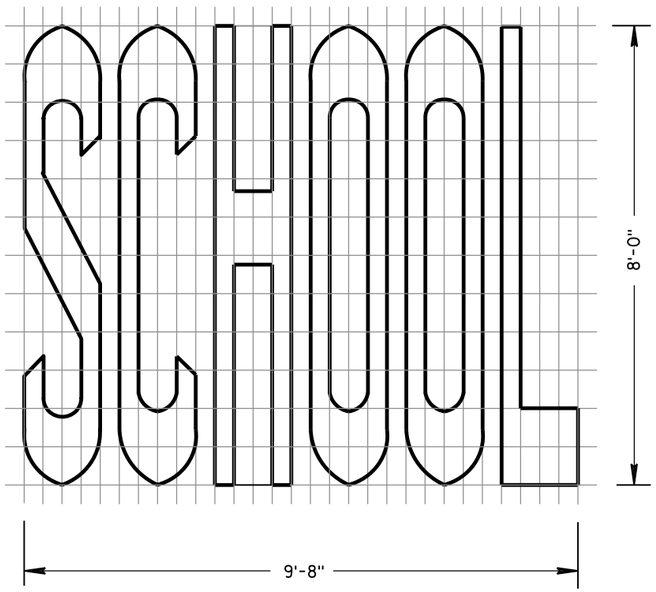




**TWO-LANE**




**SINGLE-LANE**

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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/S/ Matthew R. Rauch — STATE SIGNING AND MARK
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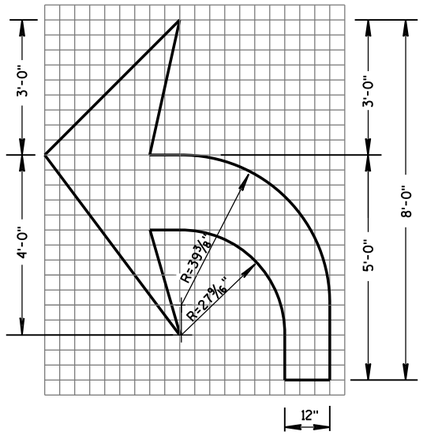
S.D.D. 15 C 7-14b

6

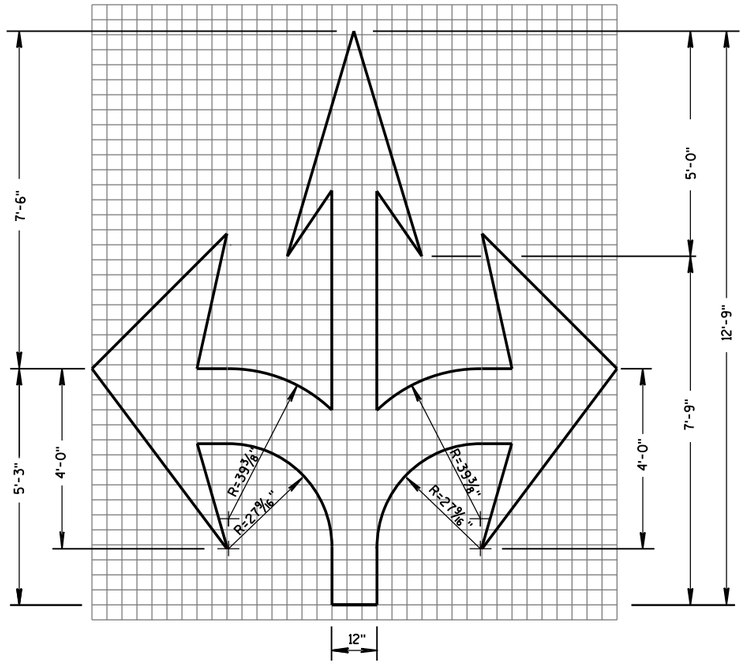
S.D.D. 15 C 7-14b

## GENERAL NOTES

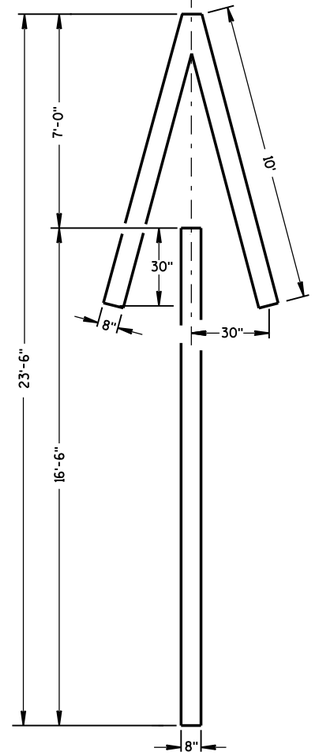
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



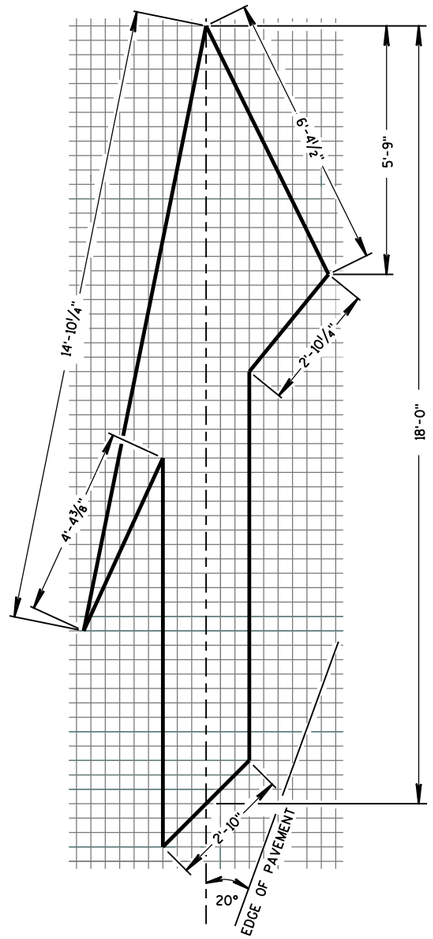

TYPE 2



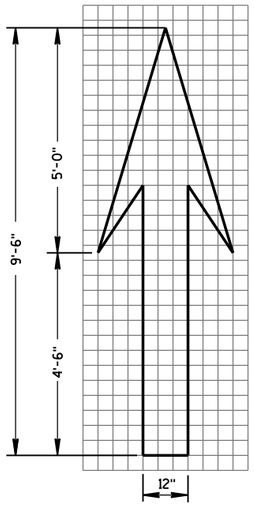

TYPE 6



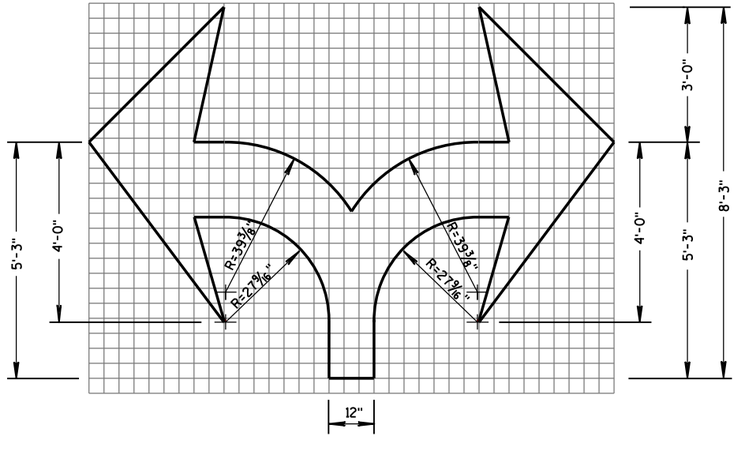

TYPE 4



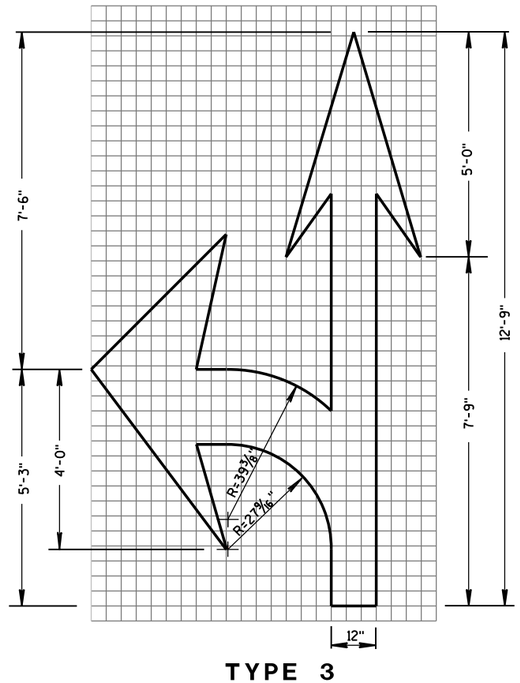

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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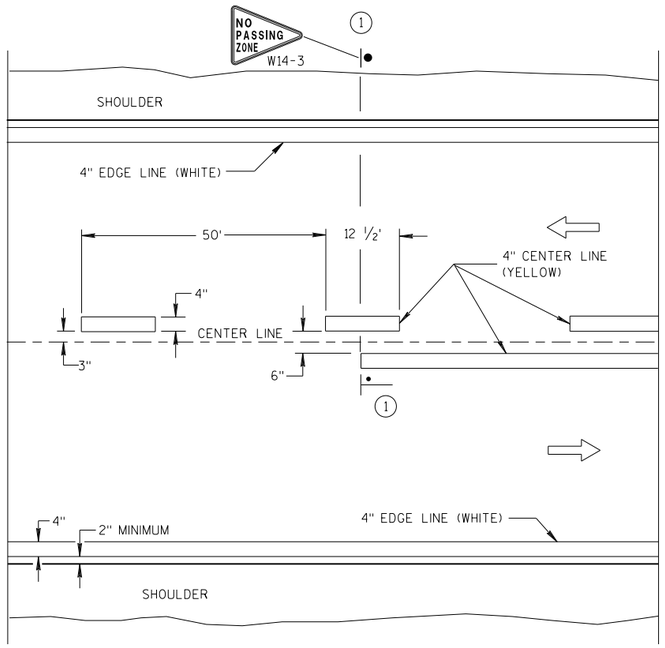


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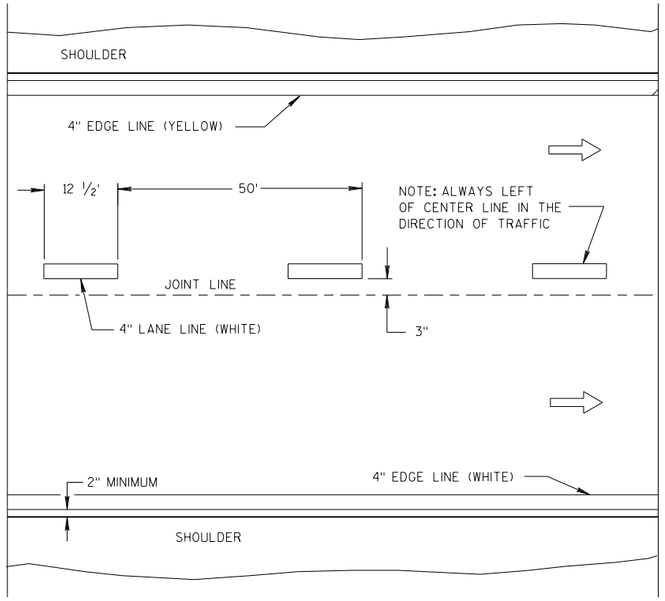
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING

## GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

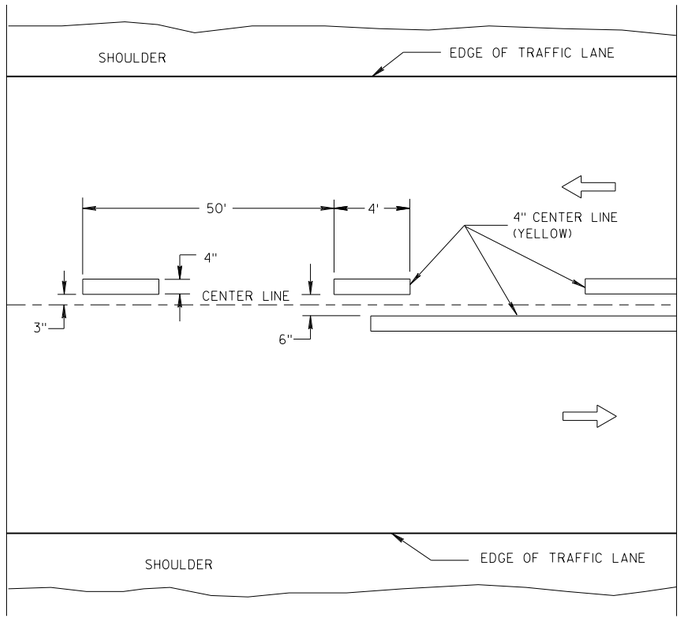
## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

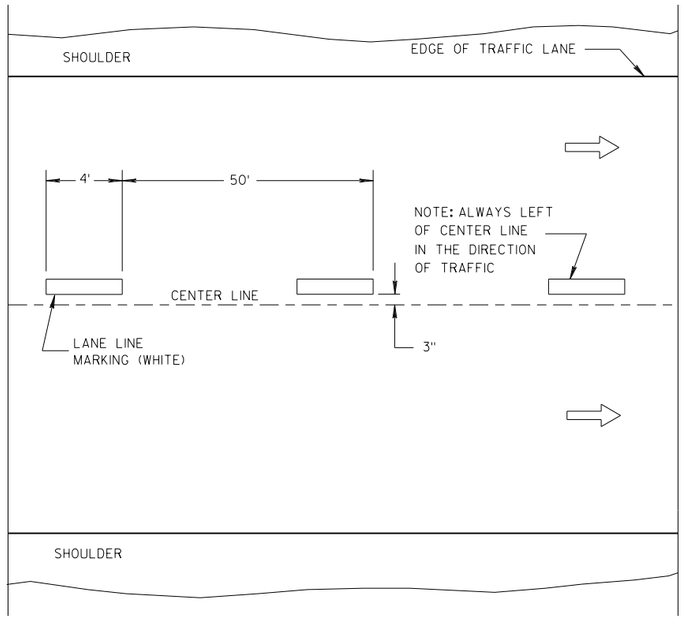
## LEGEND

"T" MARKING

POST MOUNTED SIGN




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY PAVEMENT MARKING

**LONGITUDINAL MARKING (MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

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STATE SIGNING AND MARKING ENGINEER

FHWA



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S.D.D. 15 C 8-19a

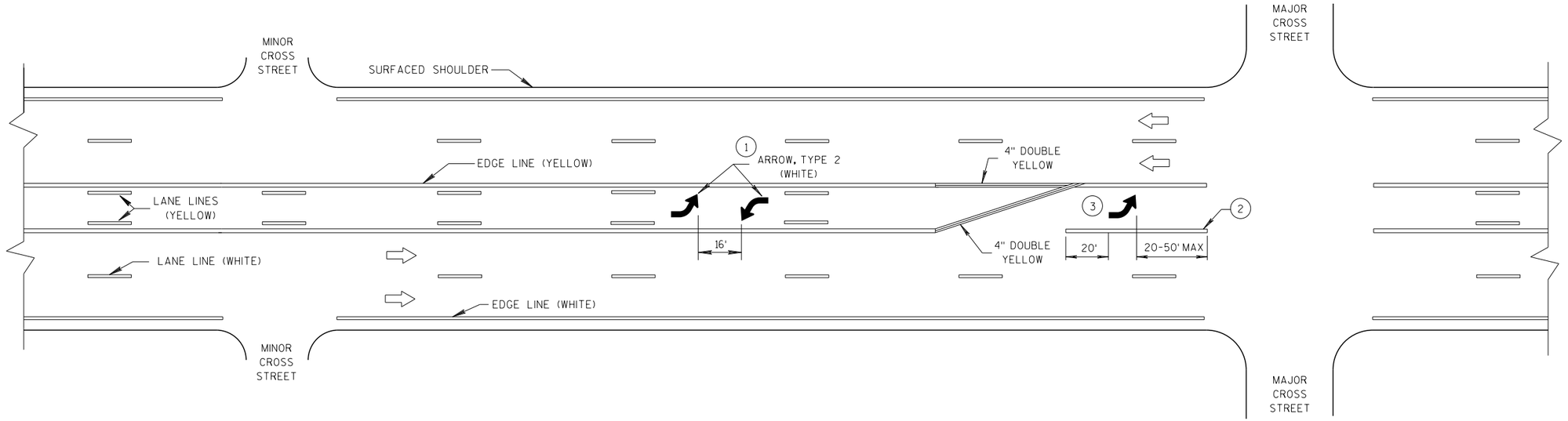
6

S.D.D. 15 C 8-19a

## GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC




## TWO WAY LEFT TURN LANE

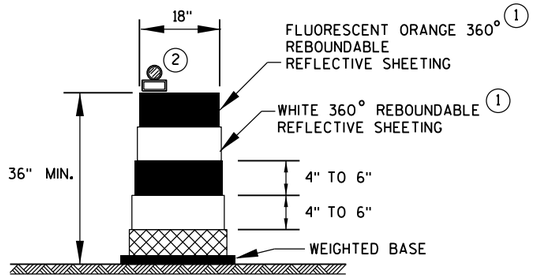
**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

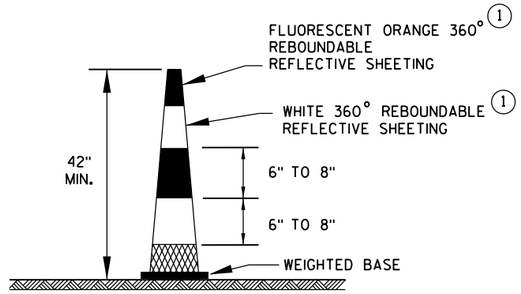



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S.D.D. 15 C 8-19b




## DRUM

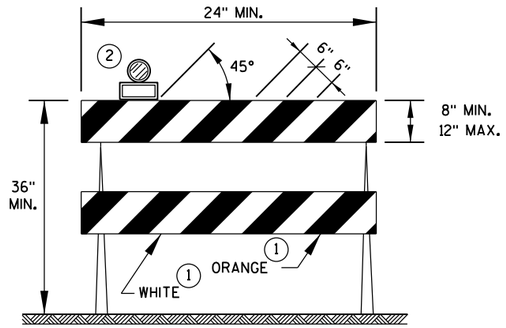



## 42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

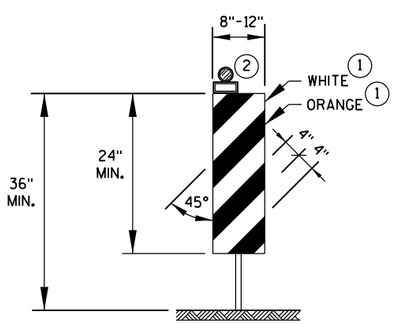
## GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



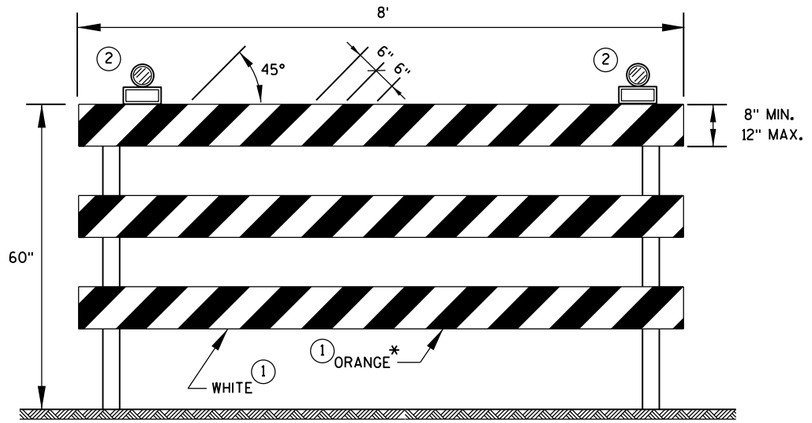

## TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

**CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS**

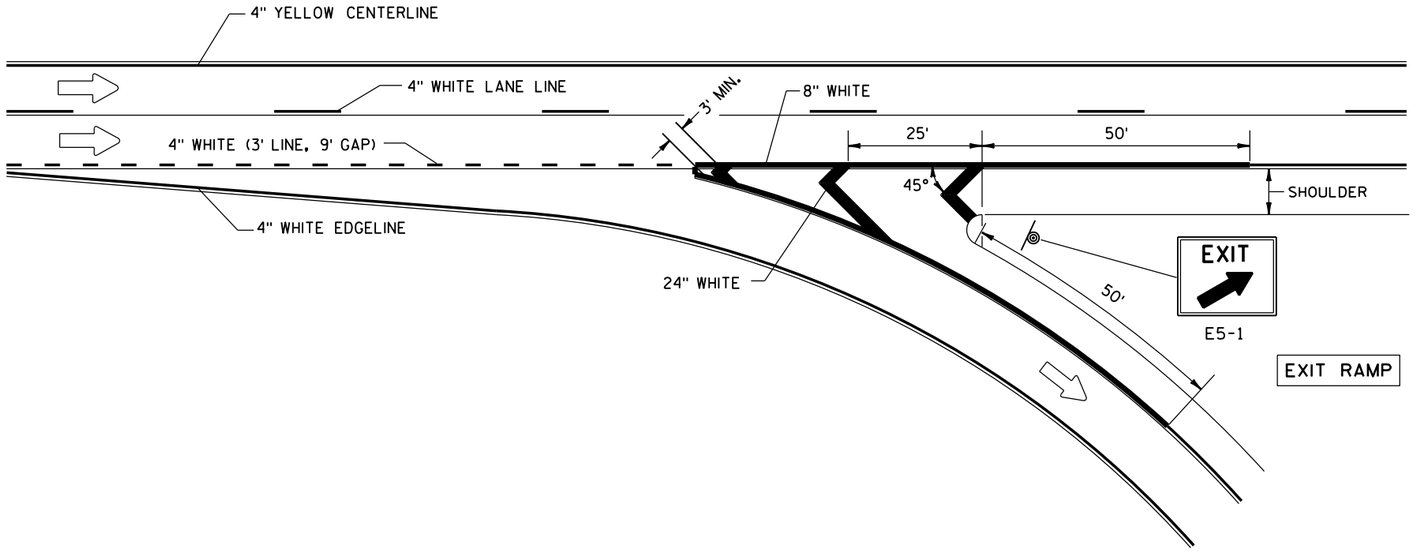
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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/S/ Andrew Heidtke — WORK ZONE ENG
FHWA




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S.D.D. 15 C 11-7b




**PAVEMENT MARKING FOR EXIT RAMP**

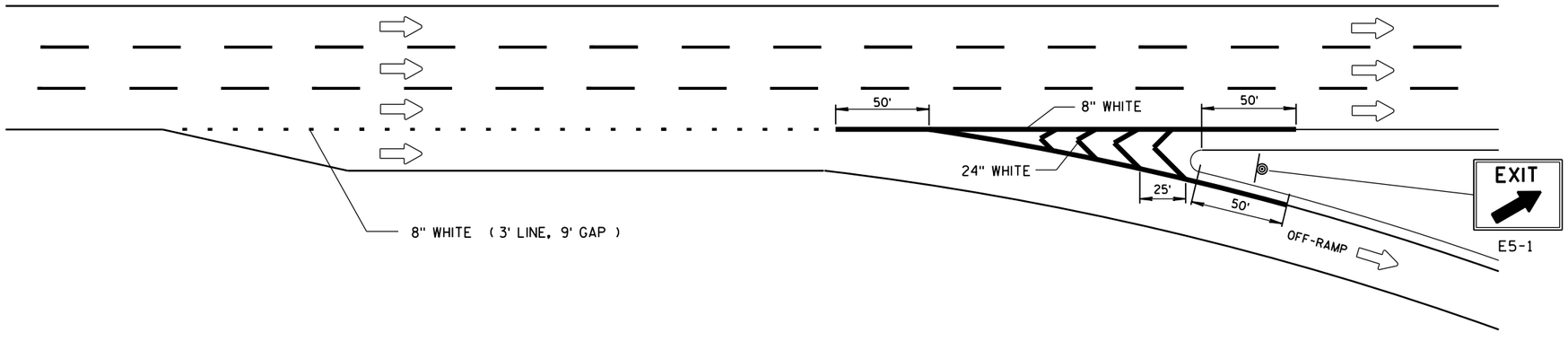
## GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

**LEGEND**

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT




**SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP**

6

6

S.D.D. 15 C 31-3a

S.D.D. 15 C 31-3a

**PAVEMENT MARKING (RAMPS AND GORES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

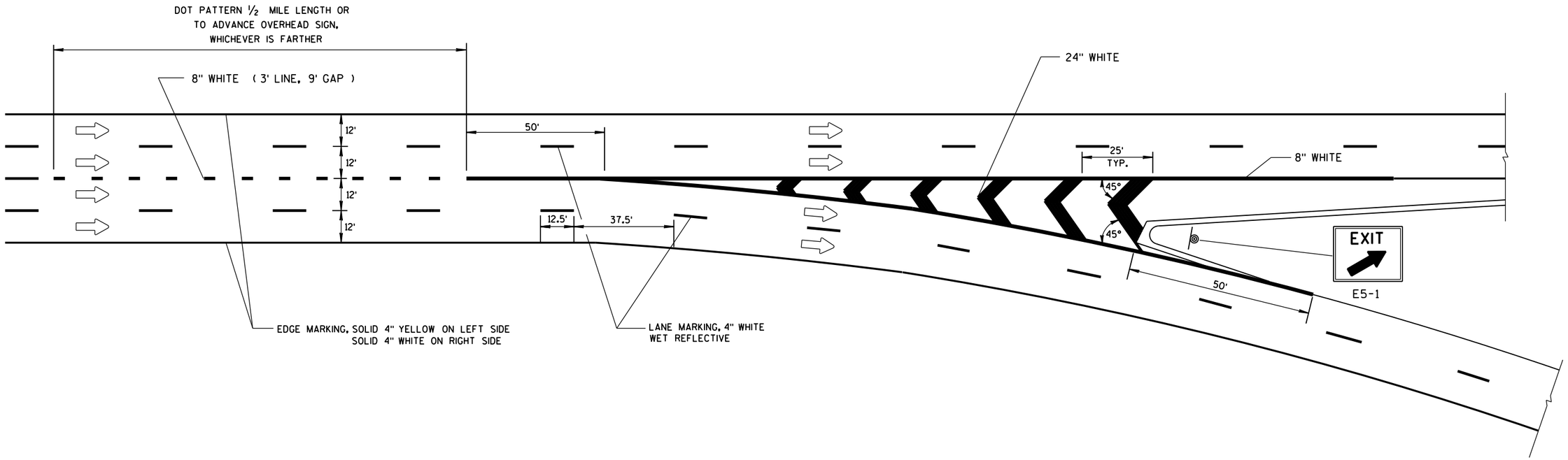
## GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

**LEGEND**

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT




6

S.D.D. 15 C 31-3b

**PAVEMENT MARKING**
**MAJOR SPLIT**
**FREEWAY TO FREEWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



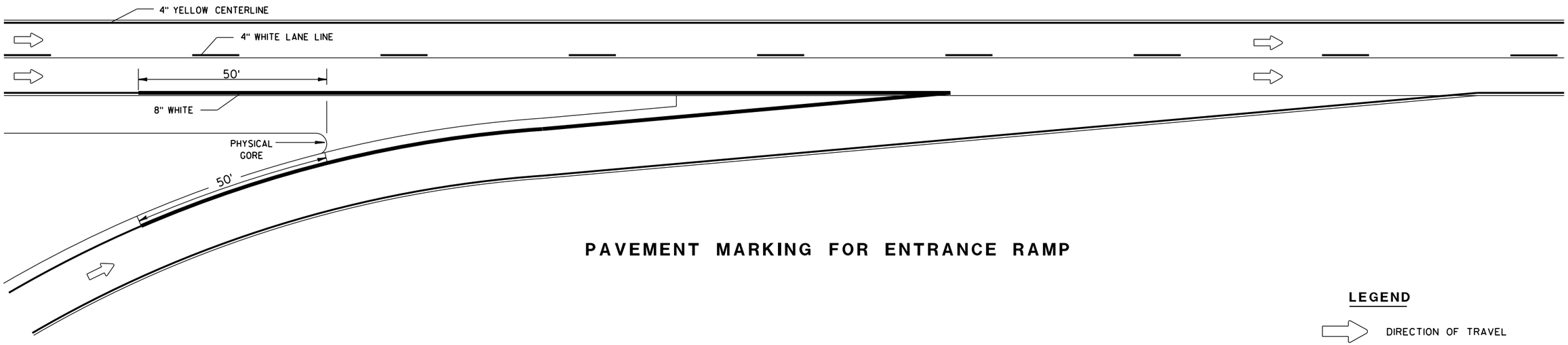
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S.D.D. 15 C 31-3b

## GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

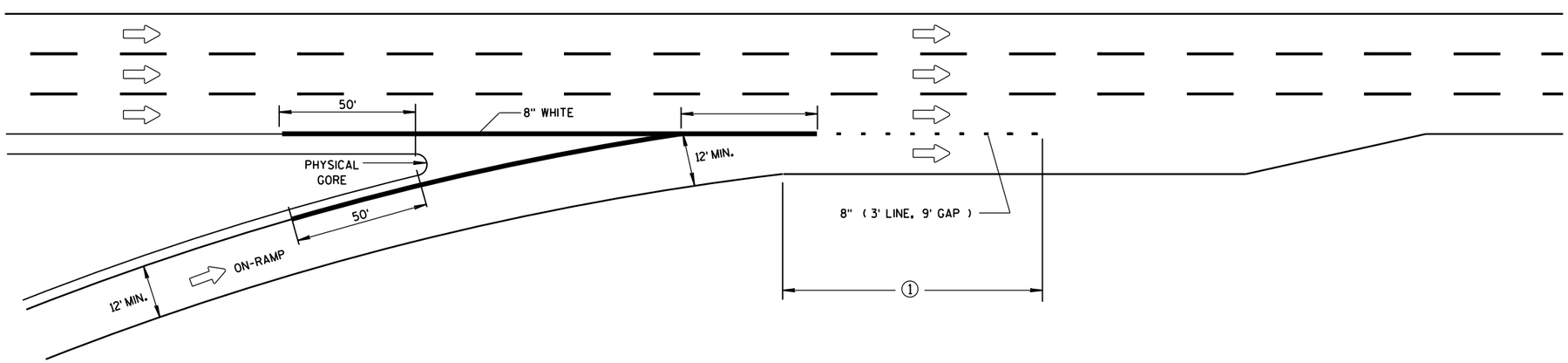
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.




**PAVEMENT MARKING FOR ENTRANCE RAMP**

**LEGEND**

DIRECTION OF TRAVEL




**SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP**

**PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

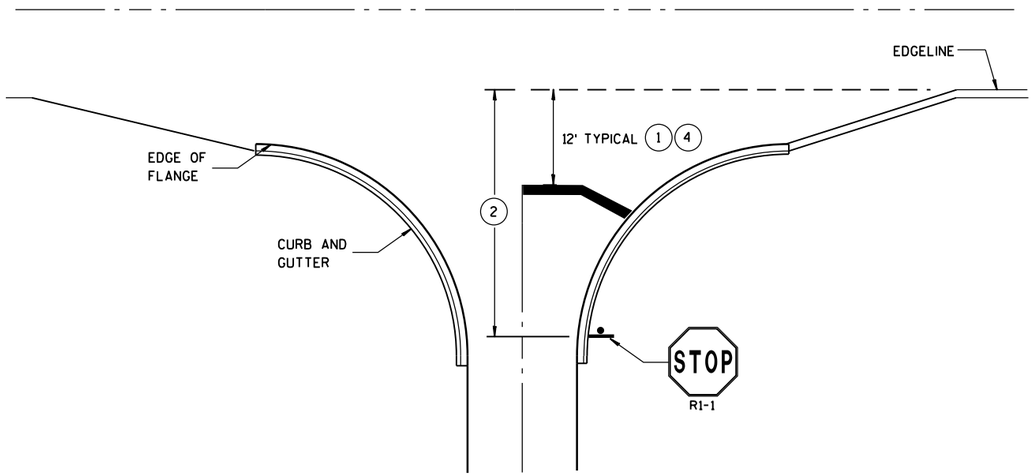


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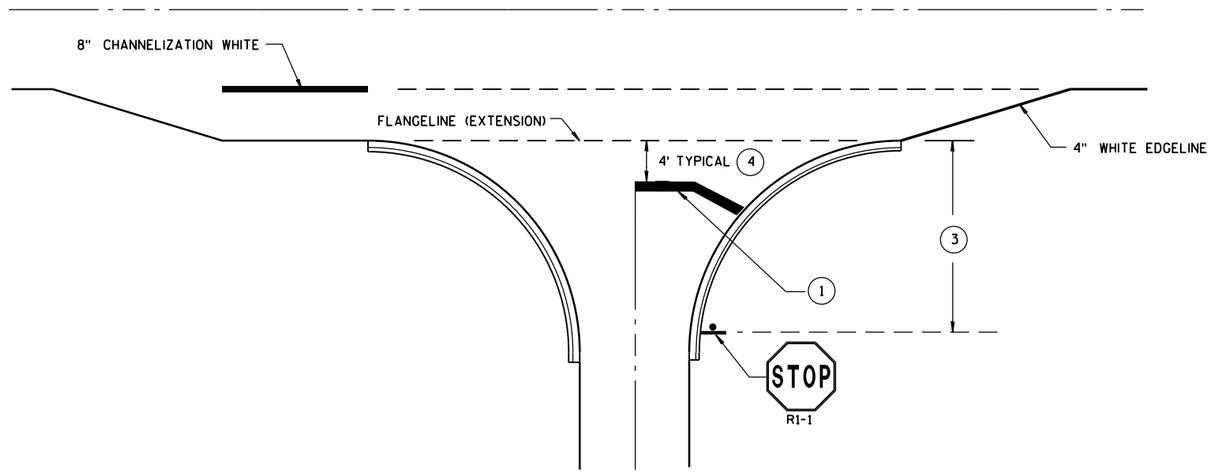
S.D.D. 15 C 31-3c

6

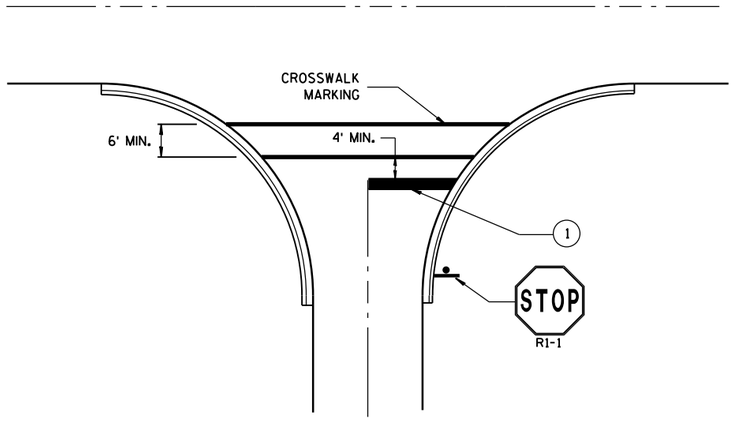
S.D.D. 15 C 31-3c



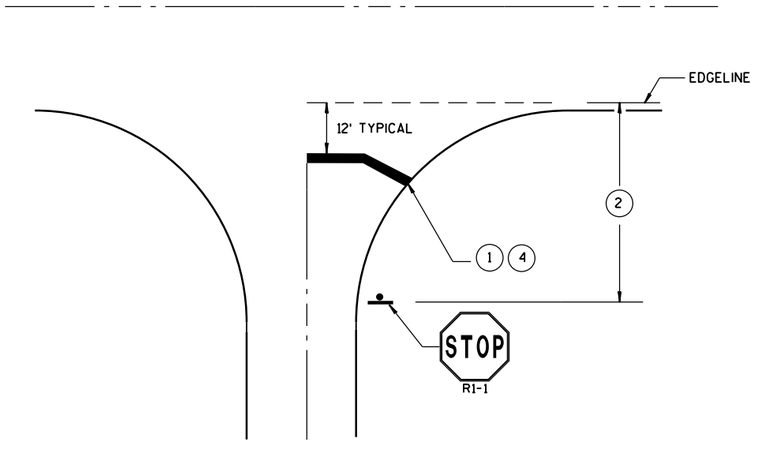

## TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER




## 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

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(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 EDGELINE 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. (NO CLOSER THAN 4 FEET).

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA



6



S.D.D. 15 C 33-3

## 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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48" x 48" 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.

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 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.

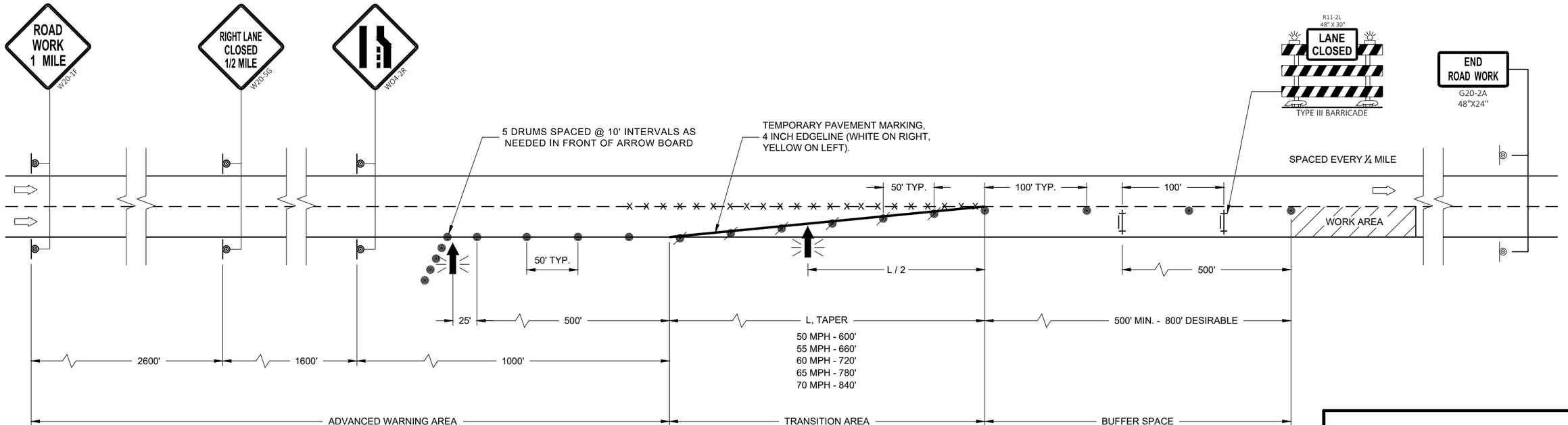
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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 ONE HALF 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

## LEGEND

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




**TRAFFIC CONTROL LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

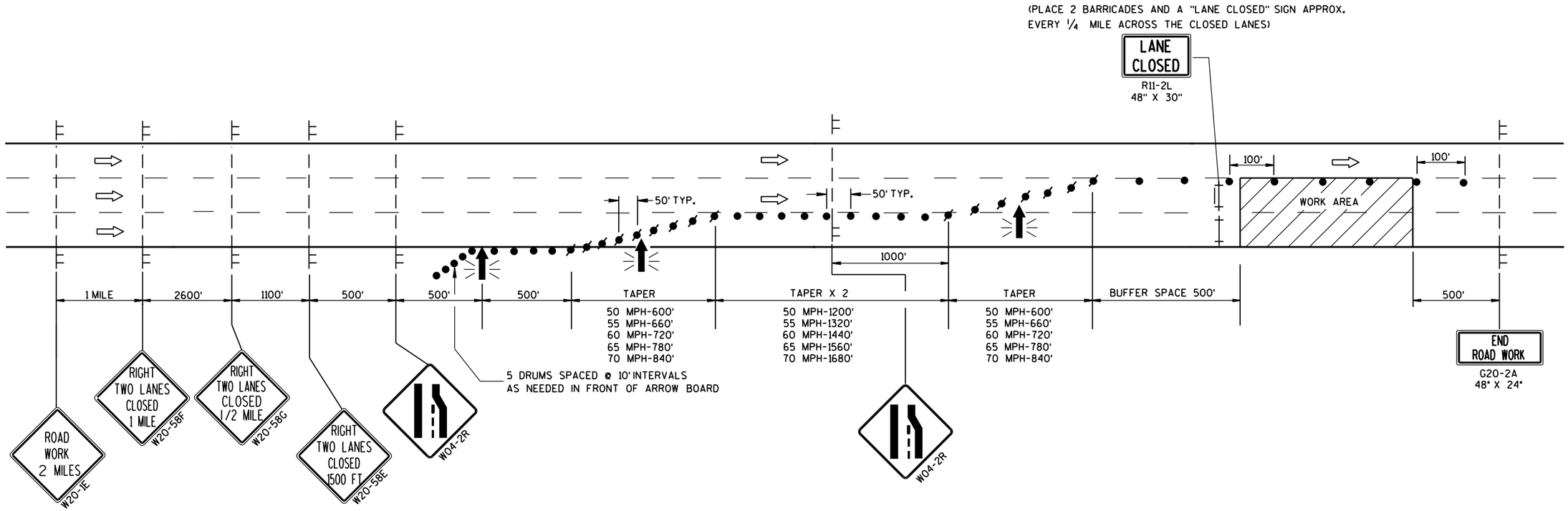


6

SDD 15D12 - 07a

6

SDD 15D12 - 07a




## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

## GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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.

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

**TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

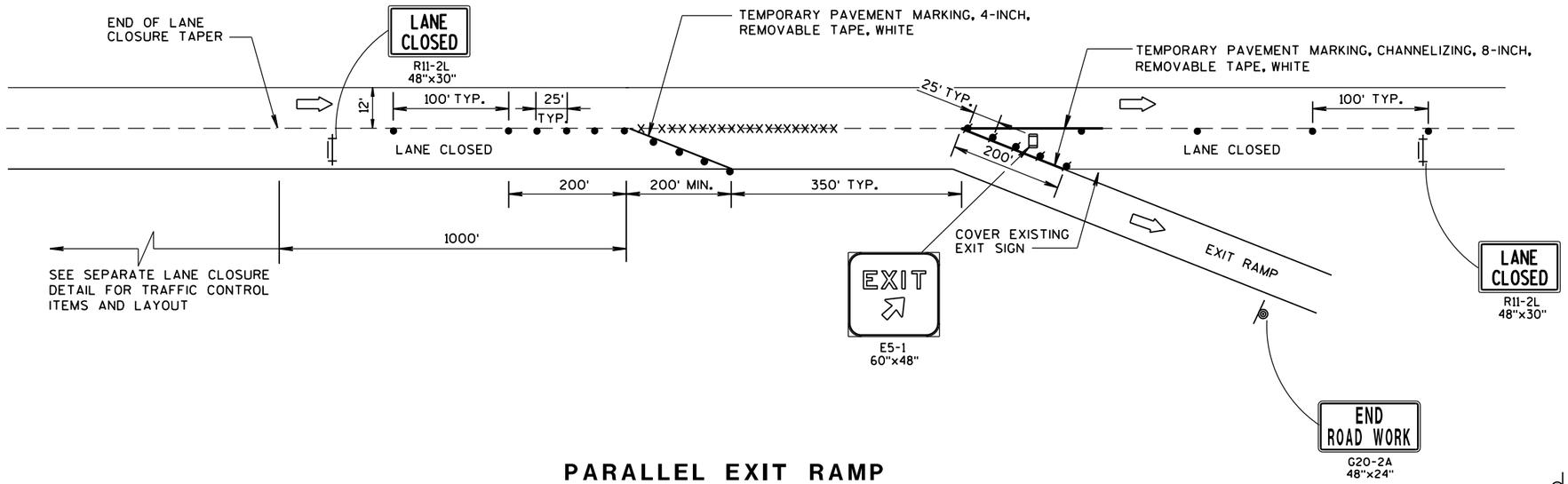
APPROVED
July 14, 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA





6

S.D.D. 15 D 14-3




# PARALLEL EXIT RAMP

## GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA




6

S.D.D. 15 D 15-4e

## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

## GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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.

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

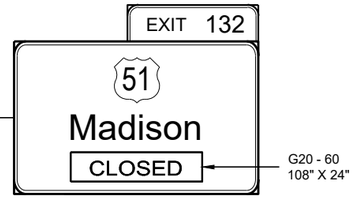
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.




OR

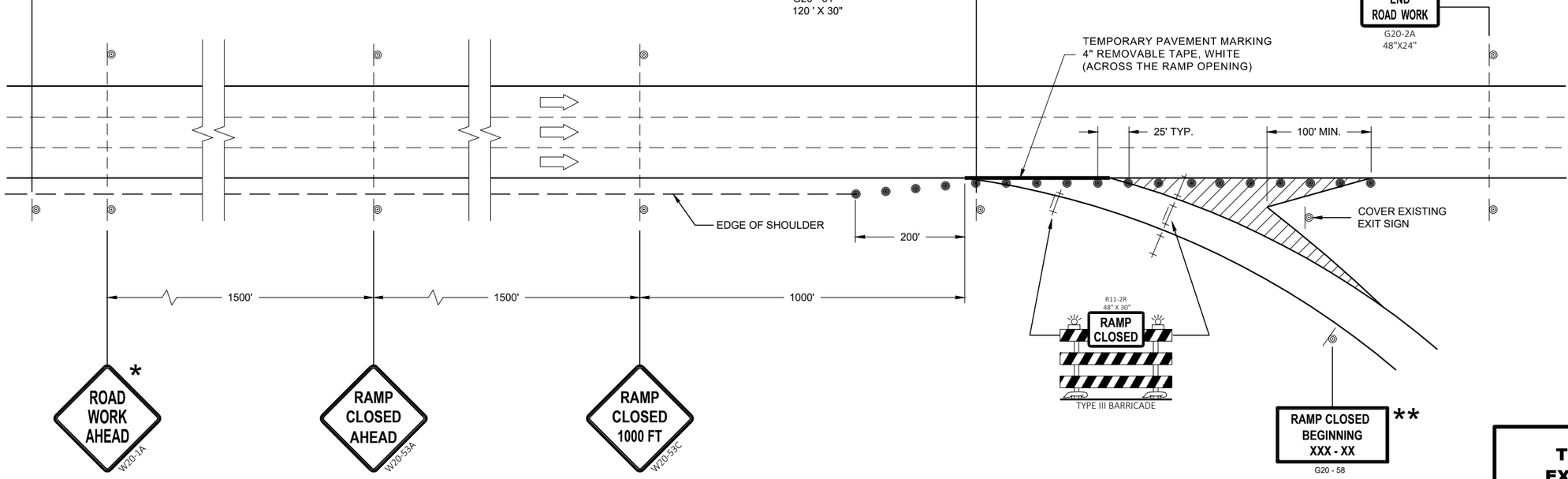



PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN




COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"




OR

PCMS MESSAGING

| FRAME 1 | FRAME 2 |
|---|---|
| RAMP TO CLOSE | XXXDAY XX XX XX |

# TRAFFIC CONTROL EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

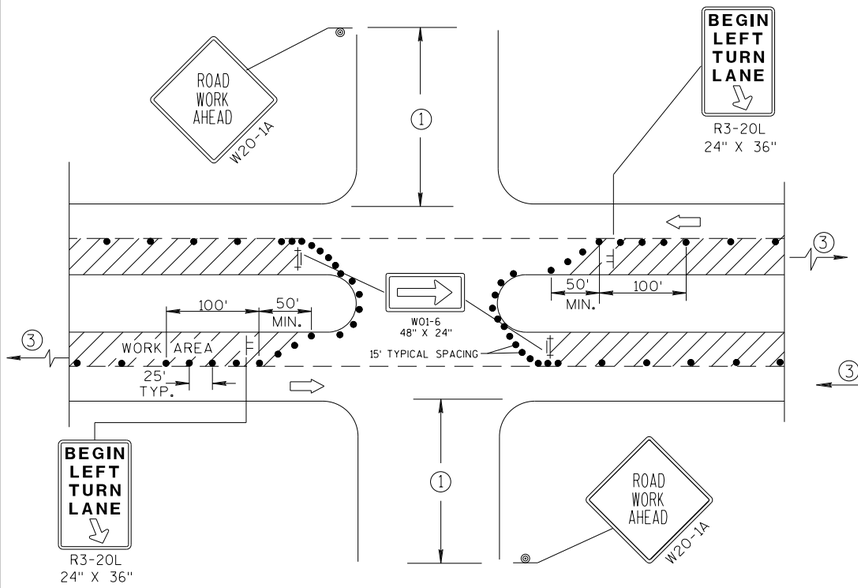
FHWA



SDD 15D16 - 04

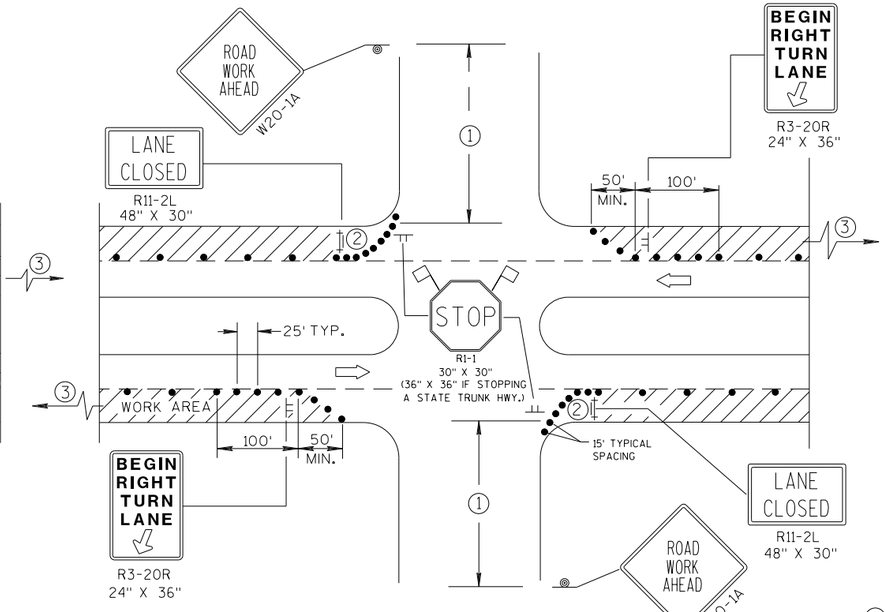
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SDD 15D16 - 04




**DETAIL A**

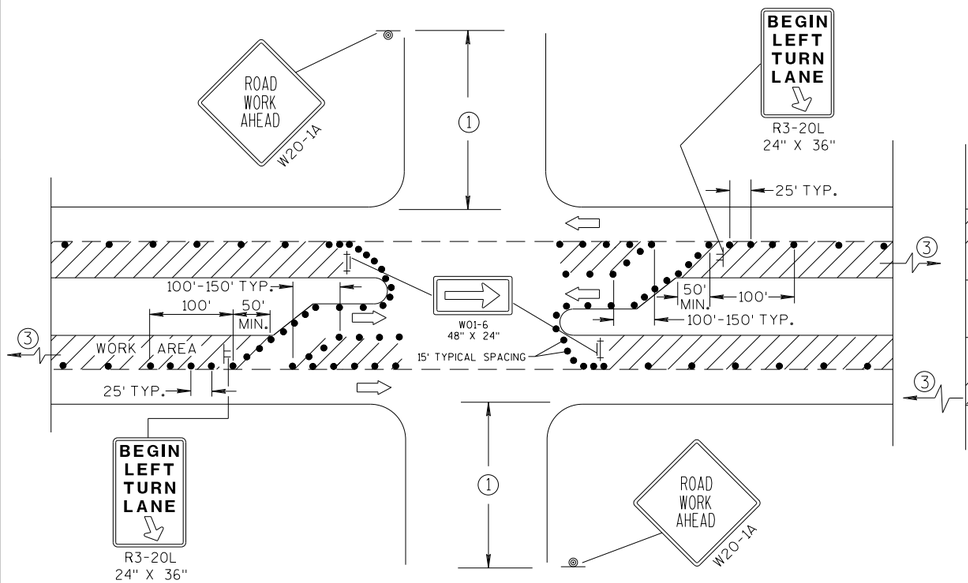
## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING




**DETAIL B**

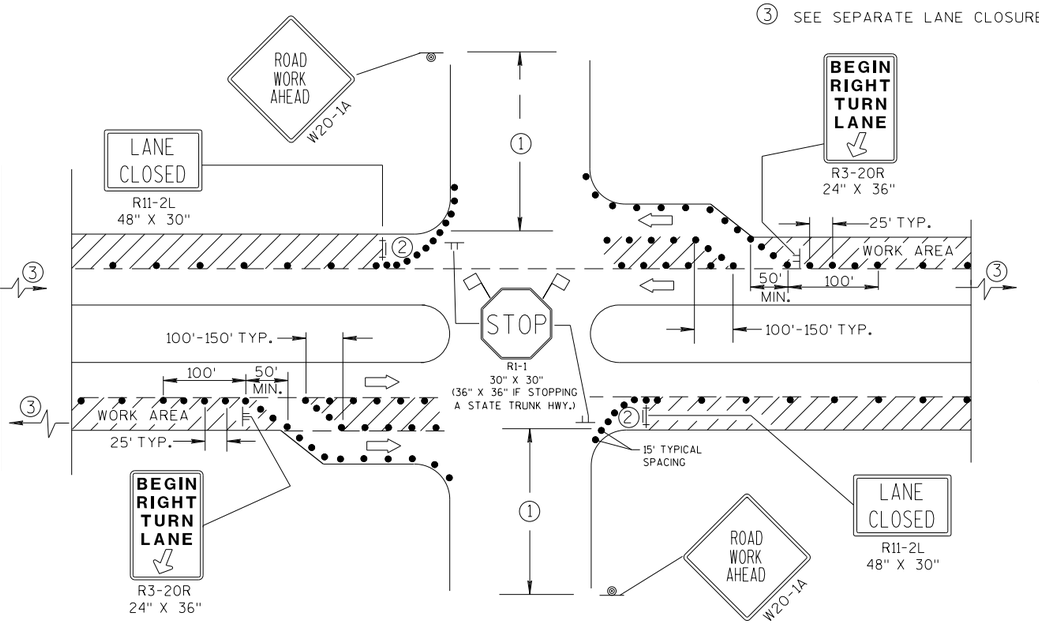
## FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.




**DETAIL C**

## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)




**DETAIL D**

## FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

## 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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

# TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA




6


S.D.D. 15 D 21-6

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

| S | L | BUFFER SPACE |
|---|---|---|
| 25 | 125' | 55' |
| 30 | 180' | 85' |
| 35 | 245' | 120' |
| 40 | 320' | 170' |
| 45 | 540' | 220' |
| 50 | 600' | 280' |
| 55 | 660' | 335' |

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

## LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

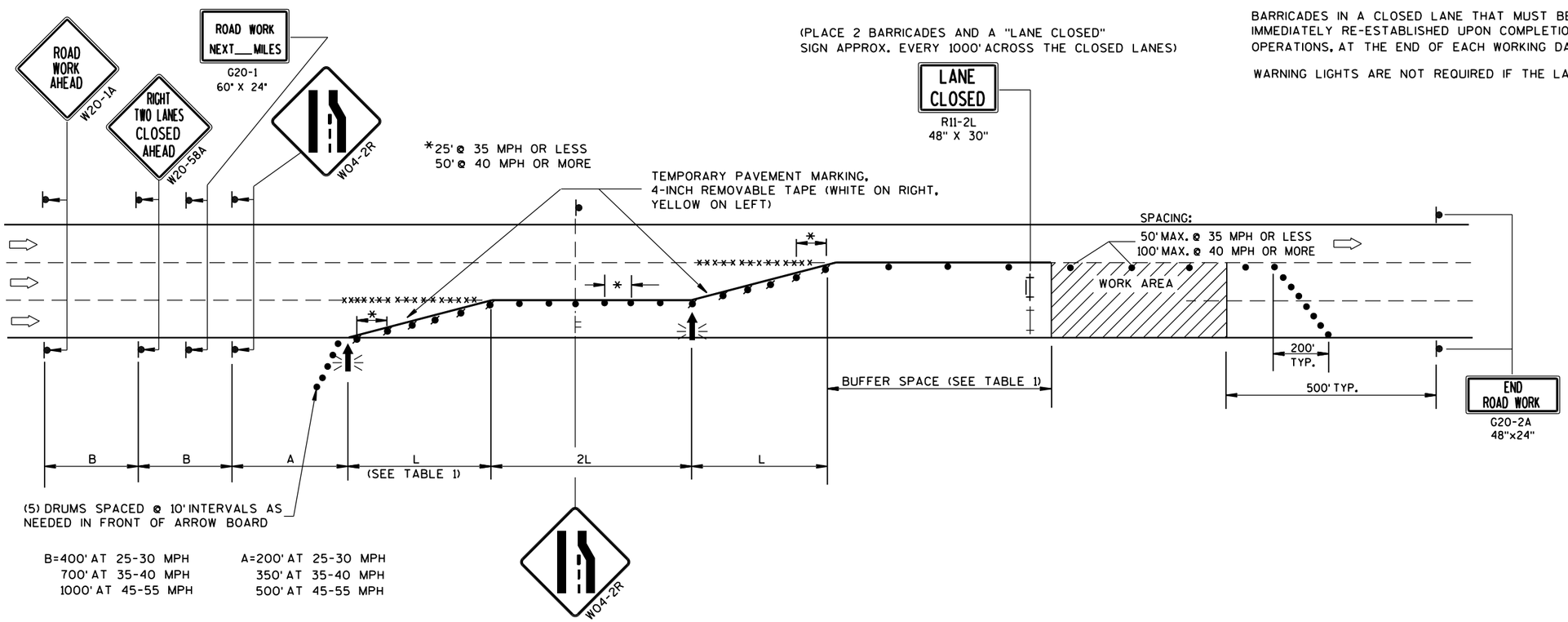
TRAFFIC CONTROL DRUM

FLASHING ARROW BOARD

DIRECTION OF TRAFFIC

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

WORK AREA




B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

## GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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

# TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA




6


S.D.D. 15 D 22-3

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

## GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

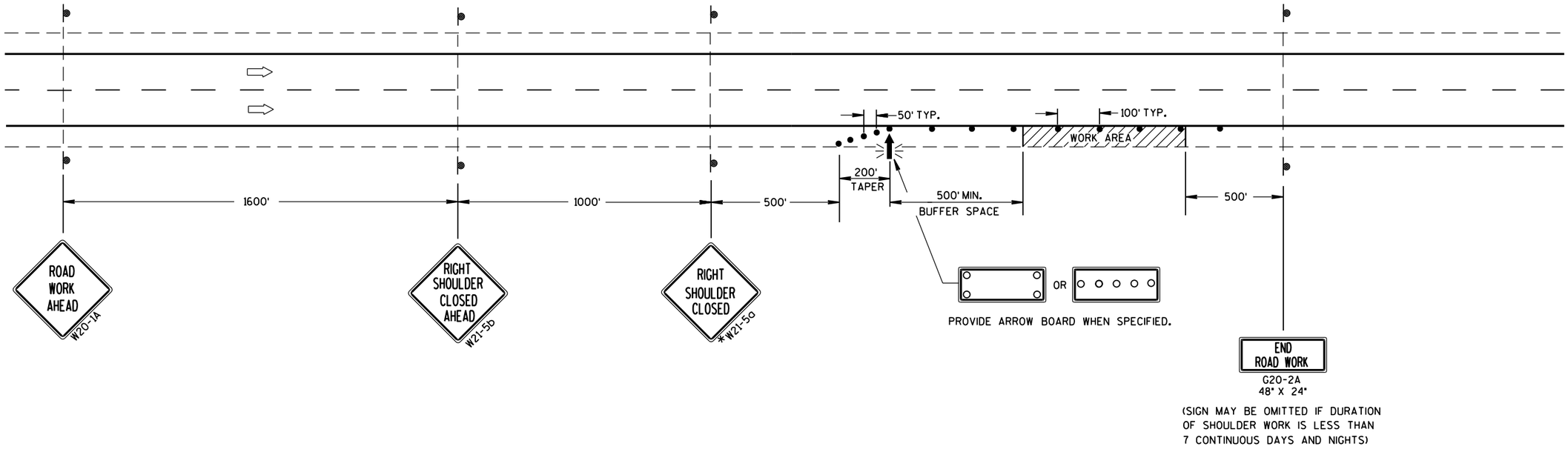
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.




# TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

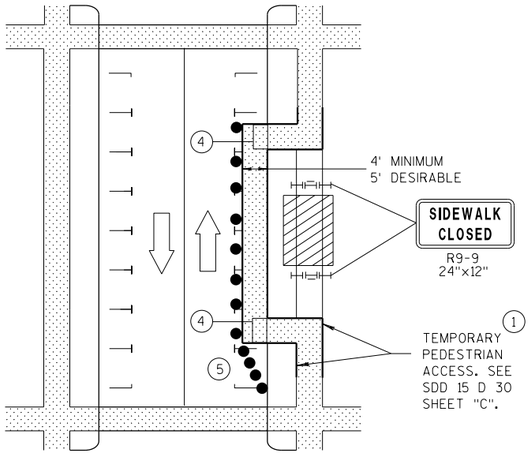
FHWA




6

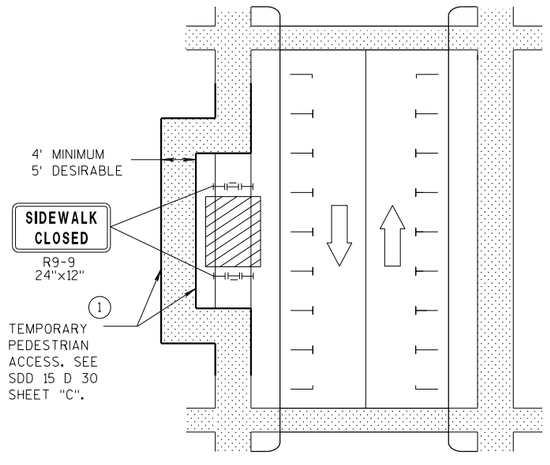

S.D.D. 15 D 27-3

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

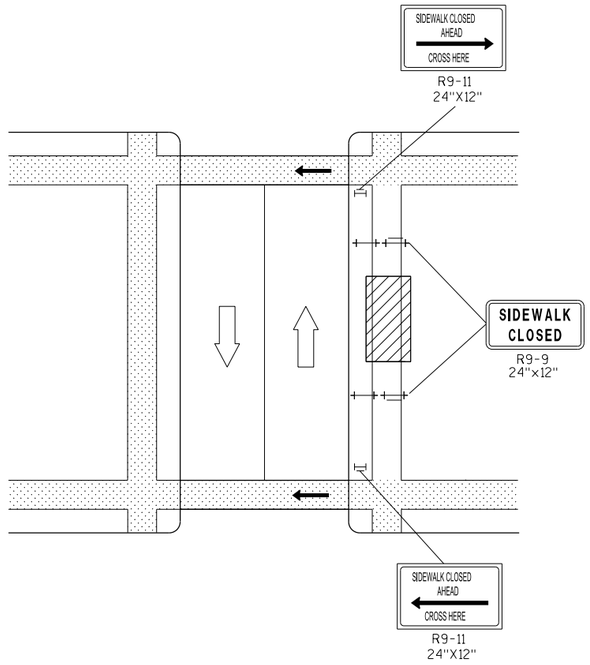



## MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

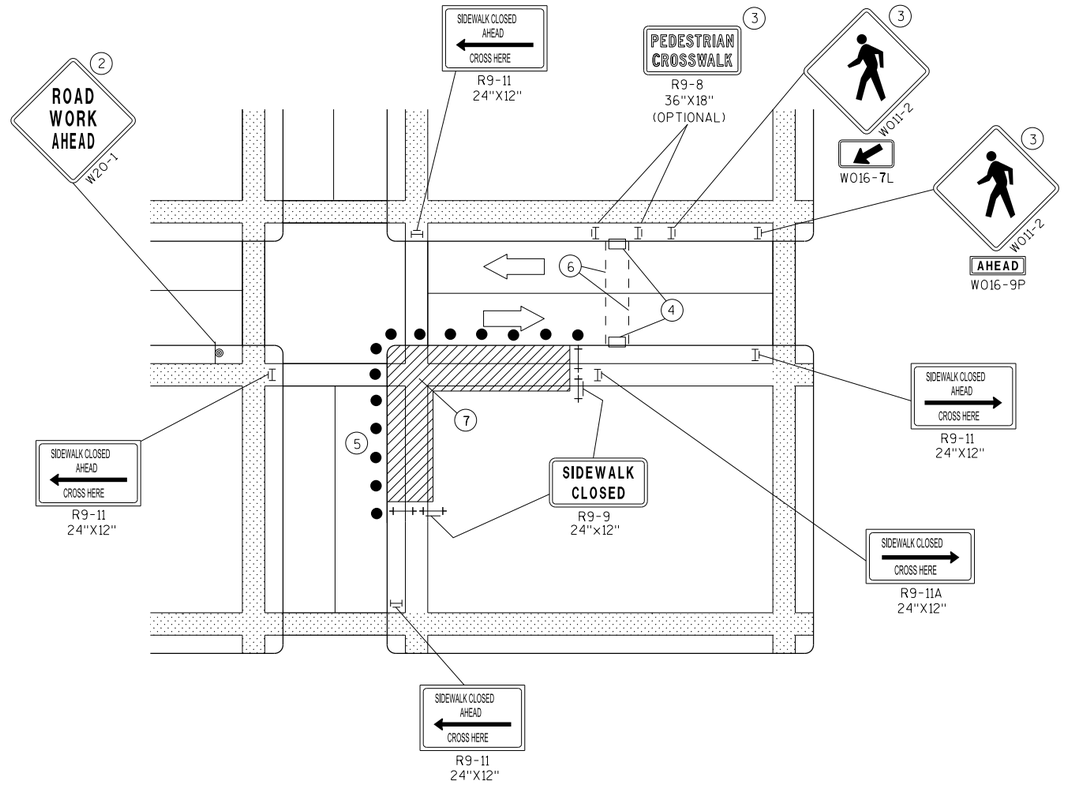
NOTE: LAYOUT SAME AS ABOVE.




## SIDEWALK DIVERSION




## MID-BLOCK SIDEWALK CLOSURE




## CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

## GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

### LEGEND

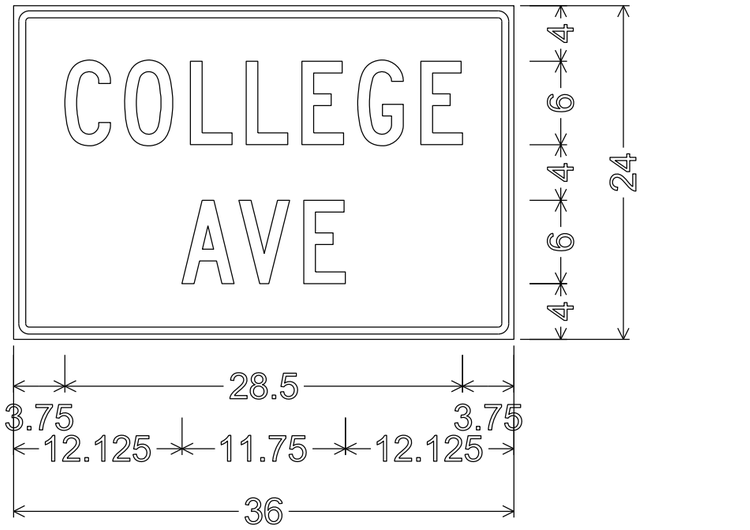
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

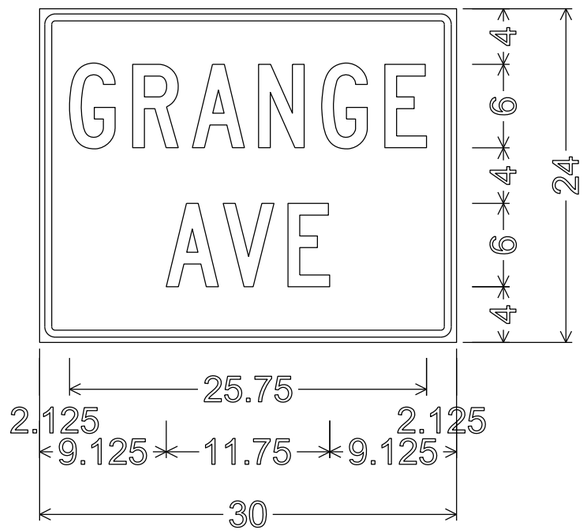



6

S.D.D. 15 D 30-4a




1.125" Radius, 0.500" Border, 0.375" Indent




1.125" Radius, 0.500" Border, 0.375" Indent

NOTES

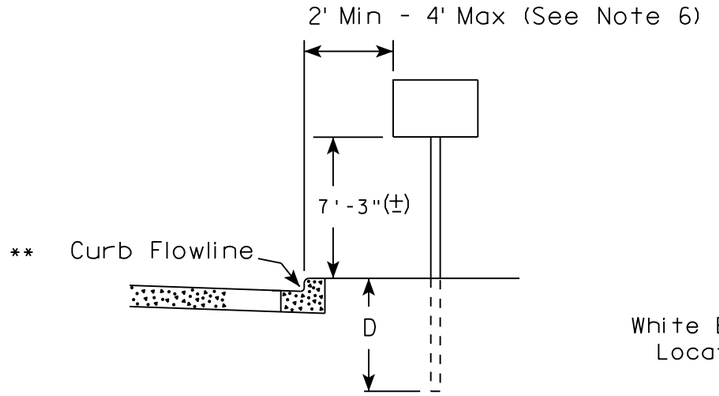
1. All Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C

7

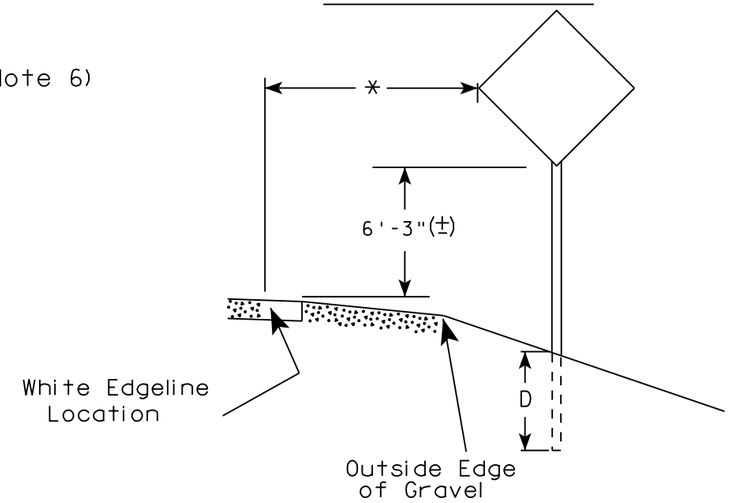
7

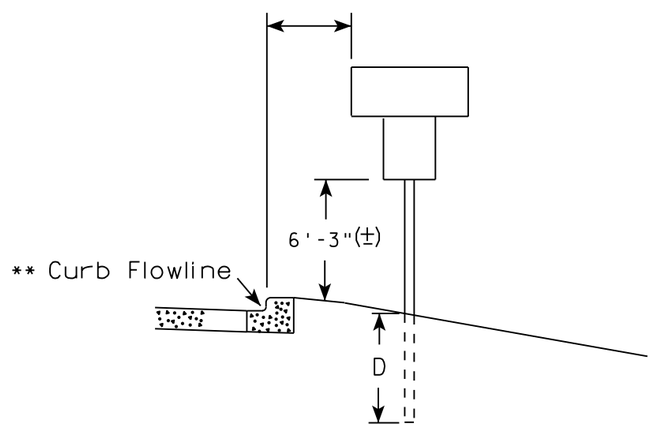
| PROJECT NO: 1030-37-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TEMPORARY SIGNING | SHEET NO: 125 | E |
|---|---|---|---|---|---|

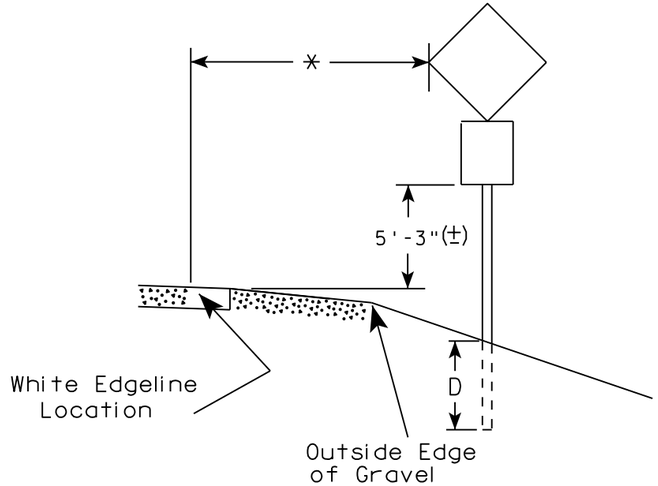
## URBAN AREA




## RURAL AREA (See Note 2)




** 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.

* 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.

POST EMBEDMENT DEPTH

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

## GENERAL NOTES

1. Signs wider than 4 feet or 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. J-Assemblies are considered to be one sign for mounting height.
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 signs shall be mounted at a height of 5'-3" (±) or as directd 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

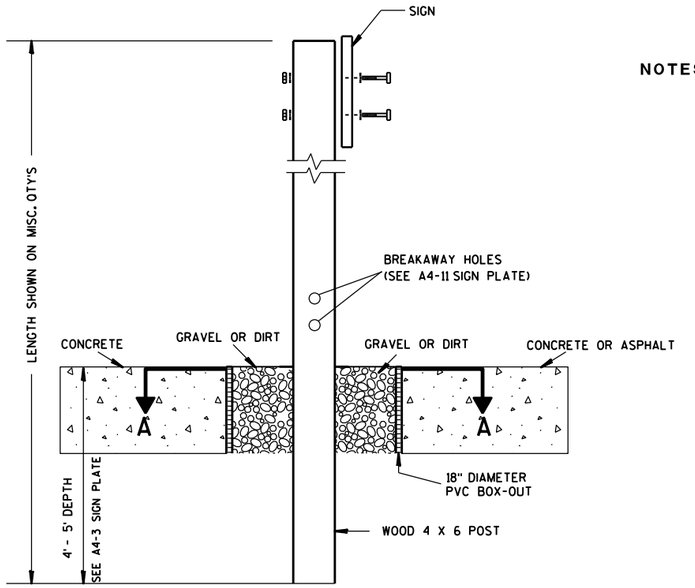
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7 7

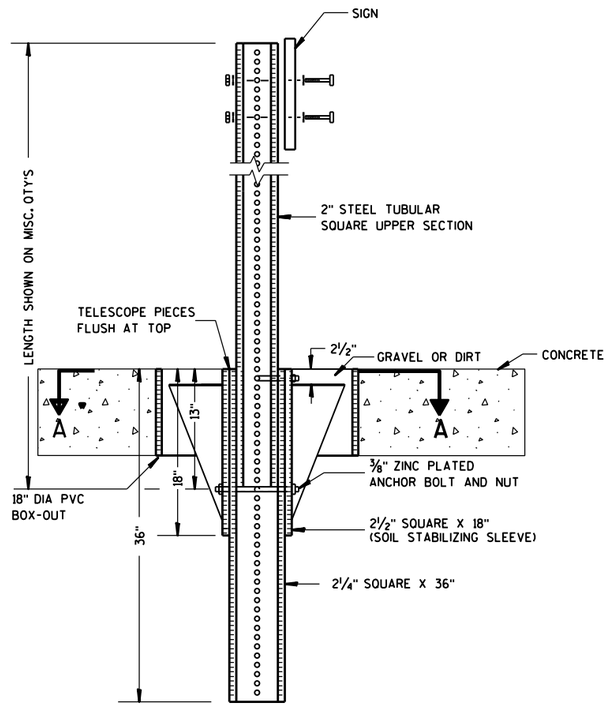
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 126 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

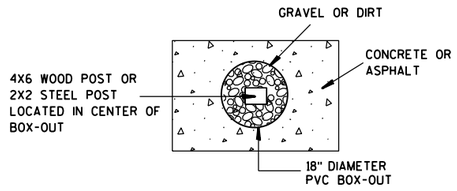
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

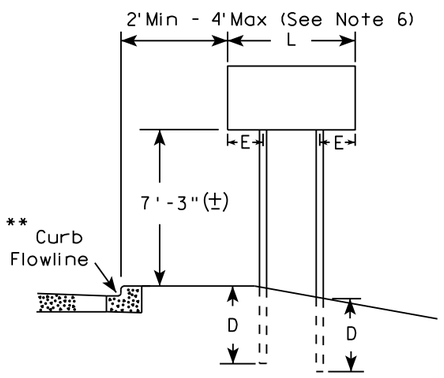
DATE 1/27/14 PLATE NO. A4-3B.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

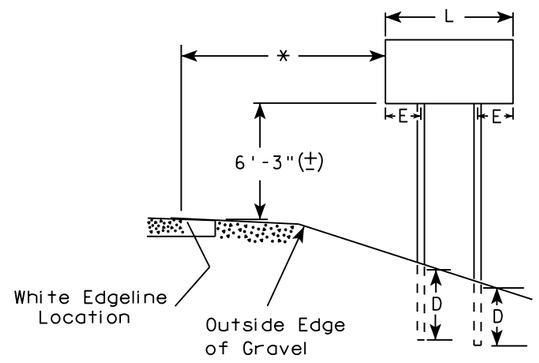


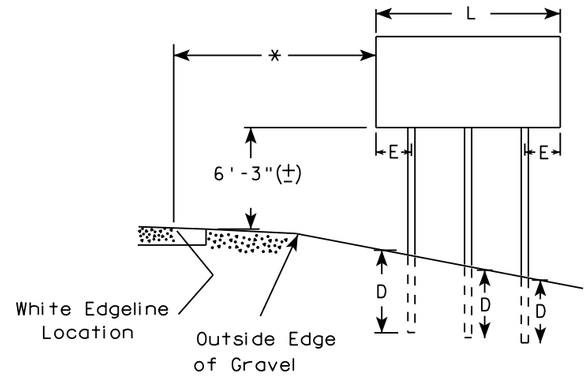
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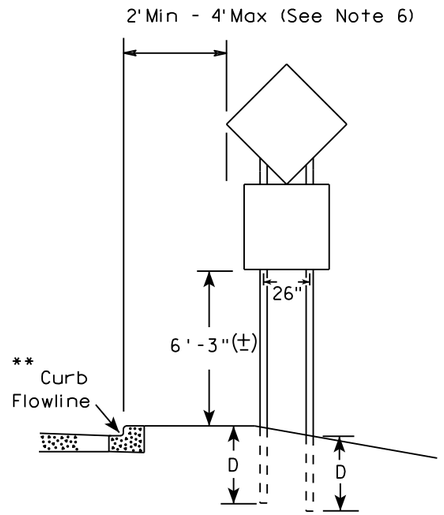
## URBAN AREA



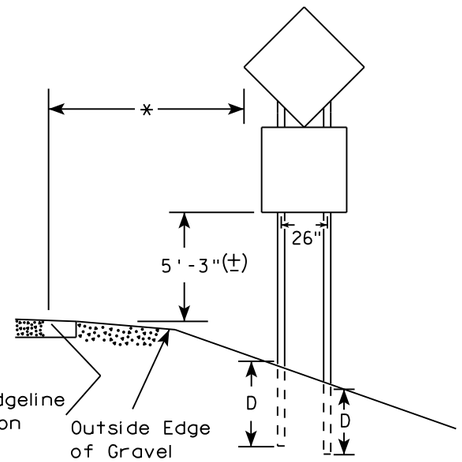

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | | |
|---|---|---|
| | L | E |
| *** | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

### GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. 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), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

### POST EMBEDMENT DEPTH

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

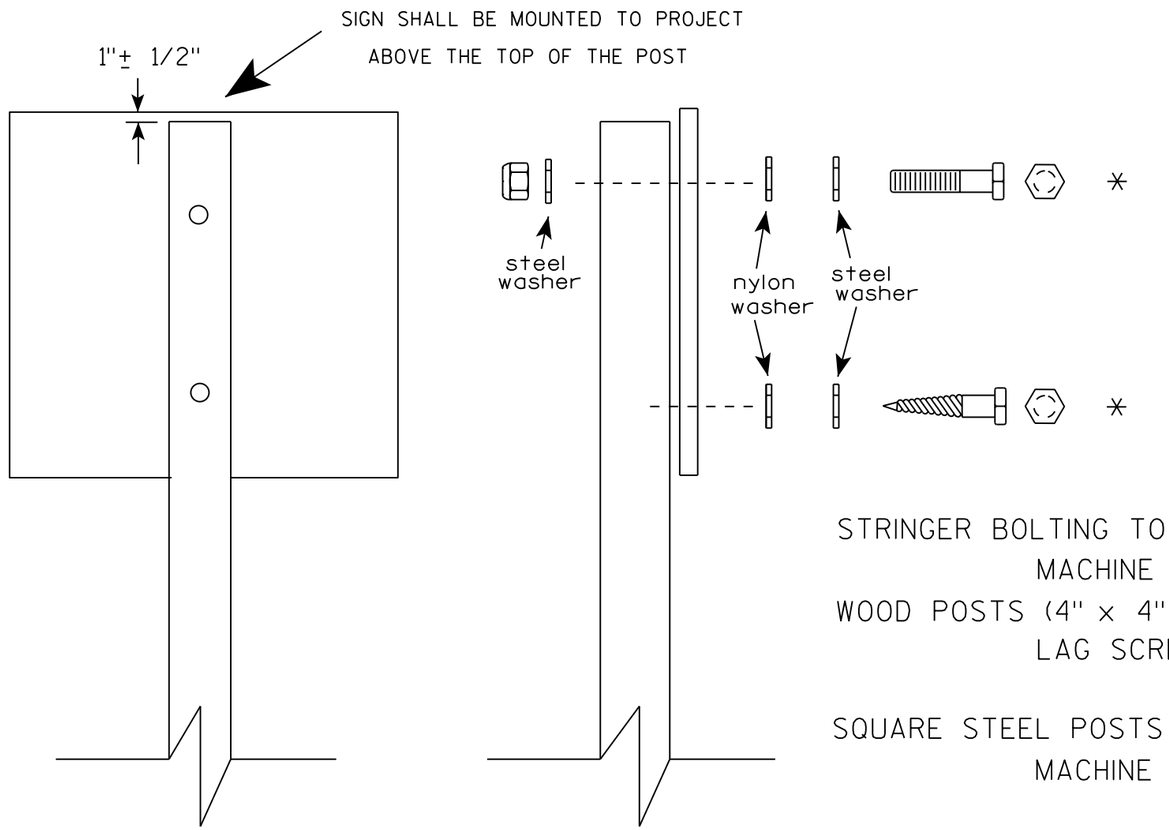
**TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS**

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 128 | E |
|---|---|---|---|---|---|




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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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 Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8



7

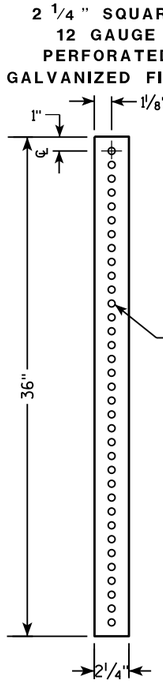
PROJECT NO:

SHEET NO: E

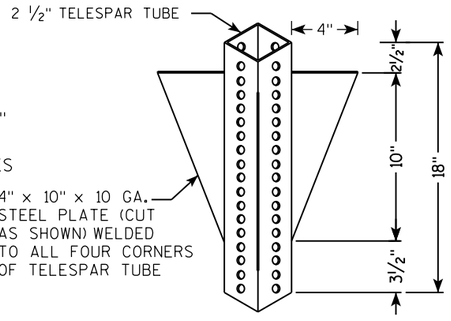
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

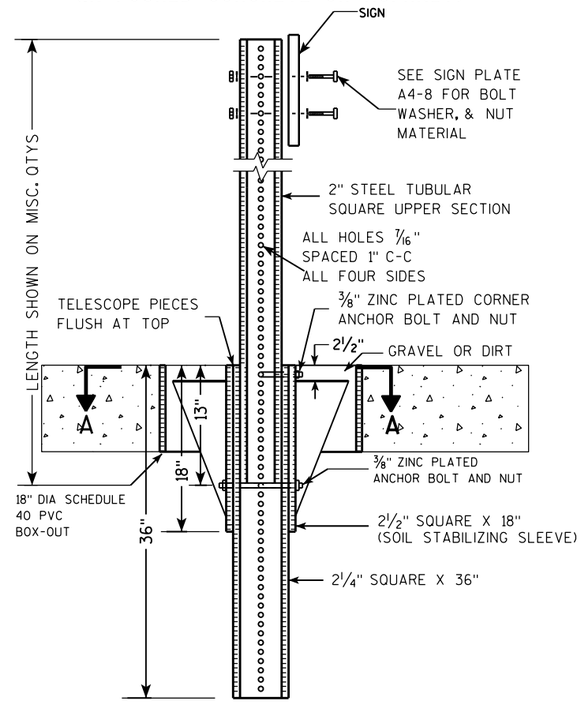
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



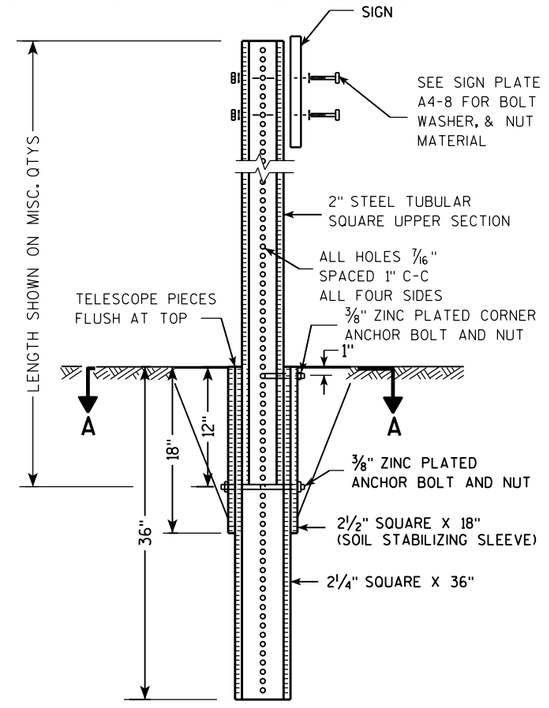

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

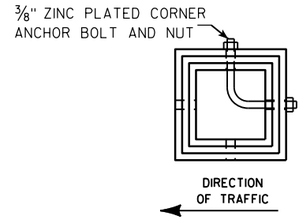



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

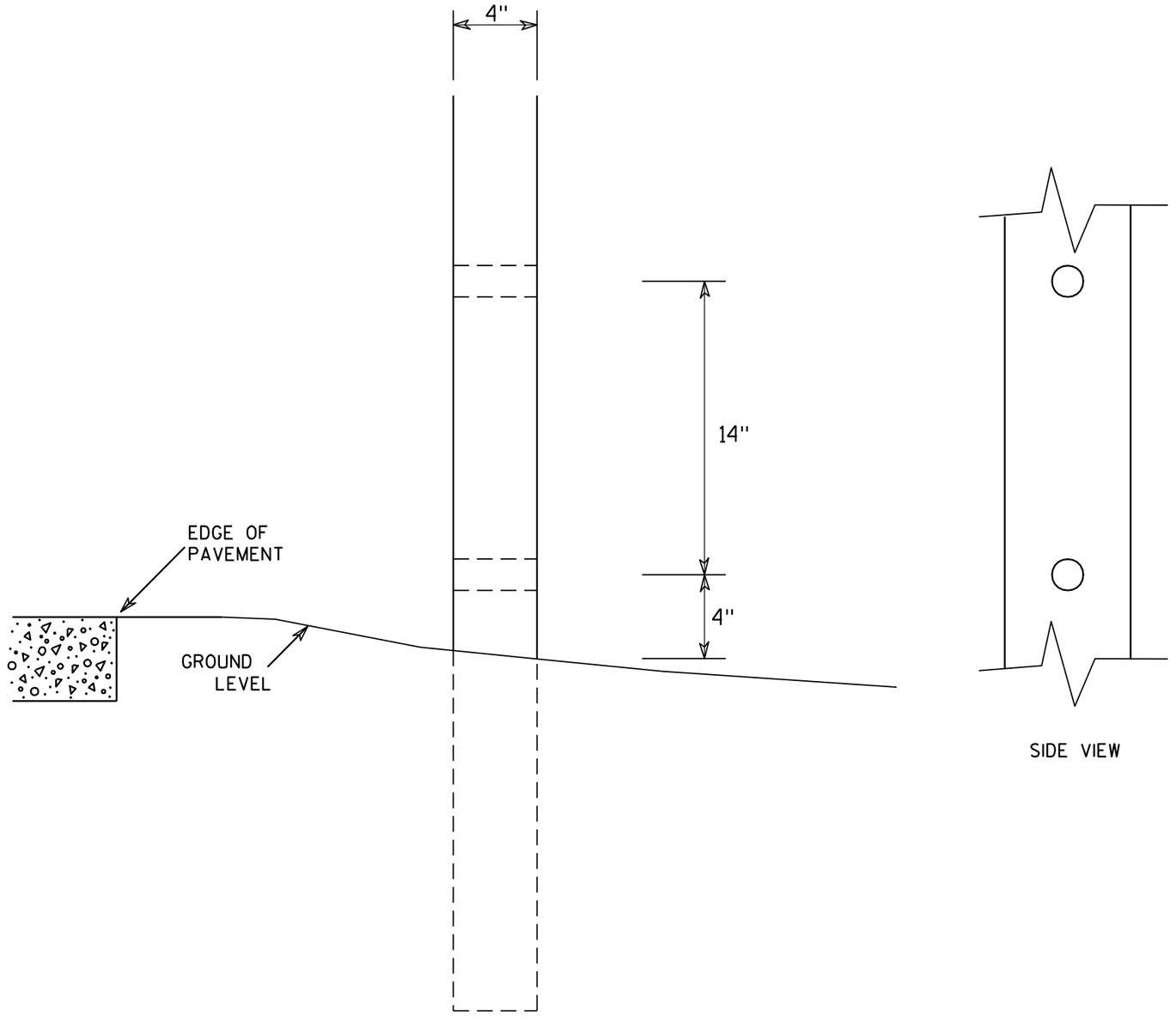
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42






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.

7

7

# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

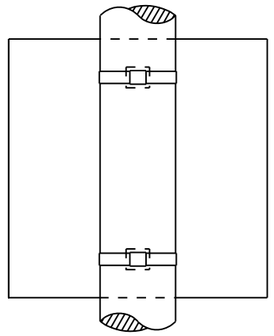
APPROVED Chester J Spang for State Traffic Engineer

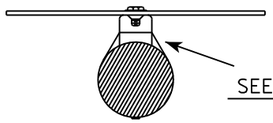
DATE 3/27/97 PLATE NO. A4-11.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 131 | E |
|---|---|---|---|---|---|

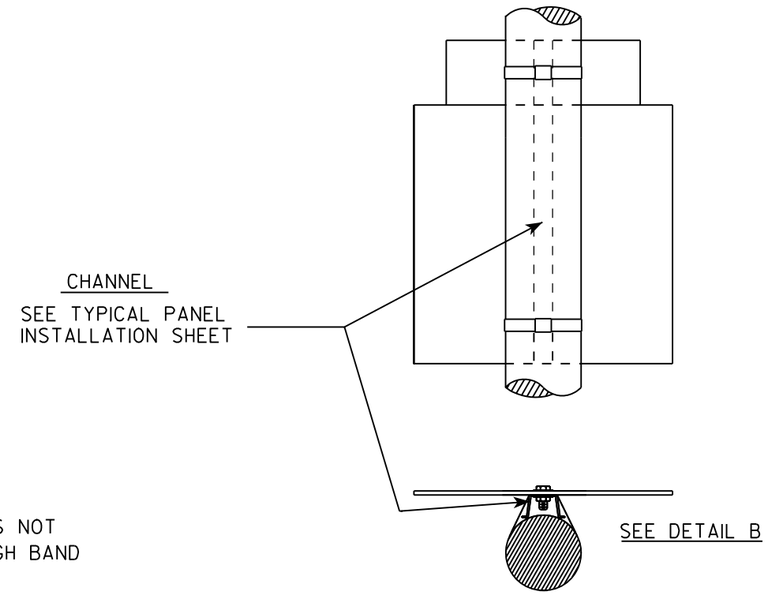
# BANDING

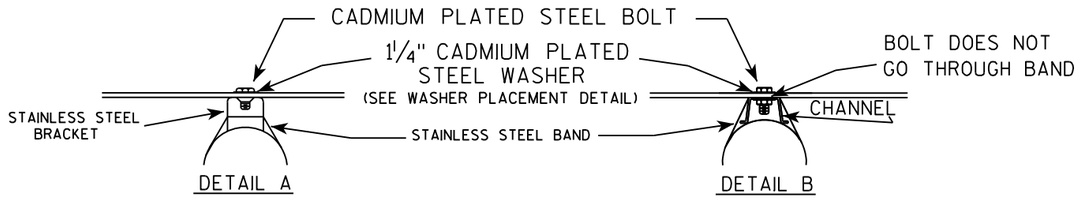
SINGLE SIGN



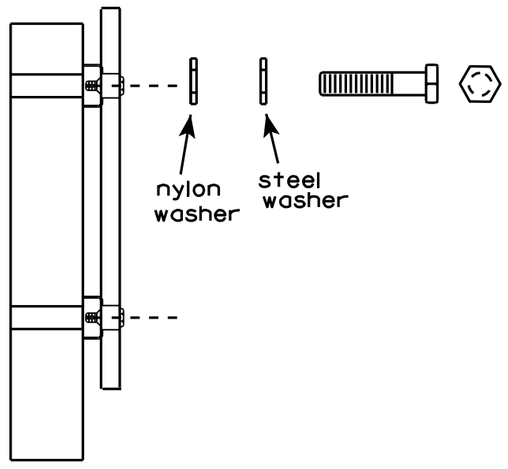



"J" ASSEMBLY




WASHER PLACEMENT




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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

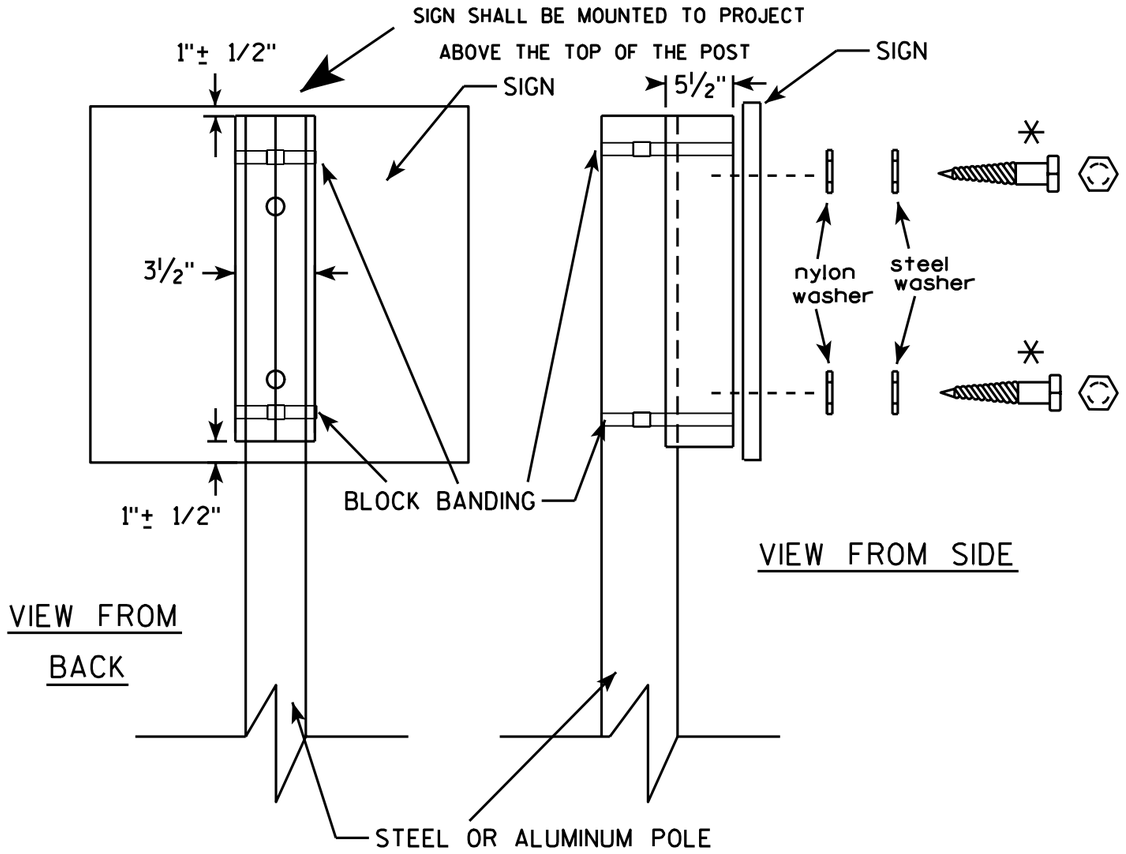
STANDARD SIGN
SIGN BANDING DETAILS

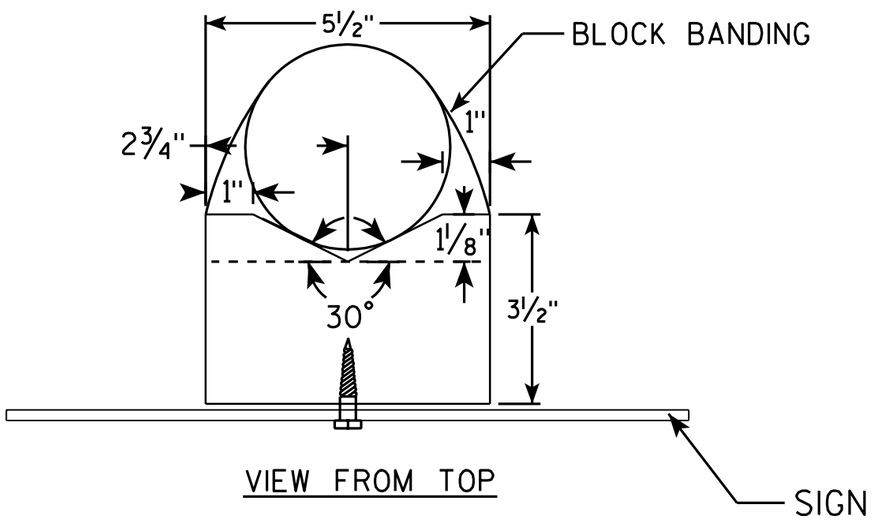
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 132 | E |
|---|---|---|---|---|---|




## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

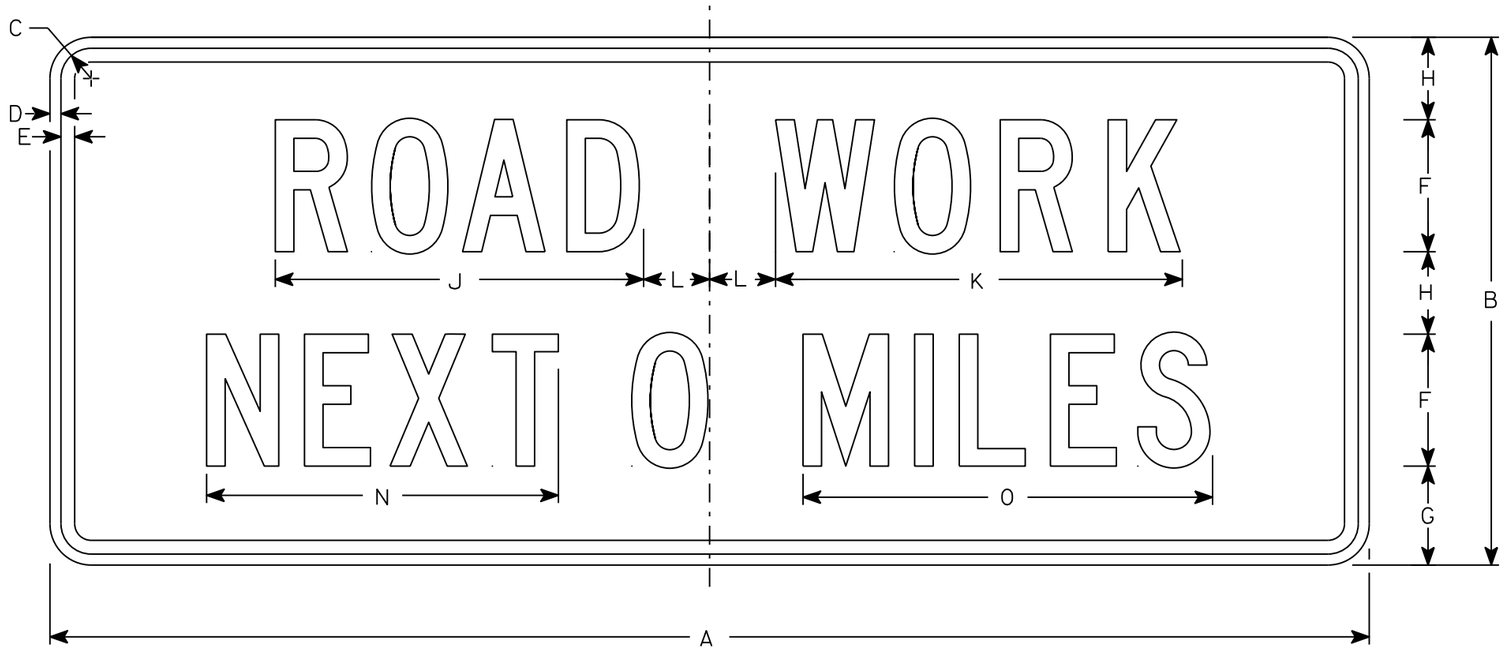
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 133 E




G20-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | | 16 3/4 | 18 1/2 | 3 | | 16 | 18 5/8 | | | | | | | | | | | | 10 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | | 16 3/4 | 18 1/2 | 3 | | 16 | 18 5/8 | | | | | | | | | | | | 10 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

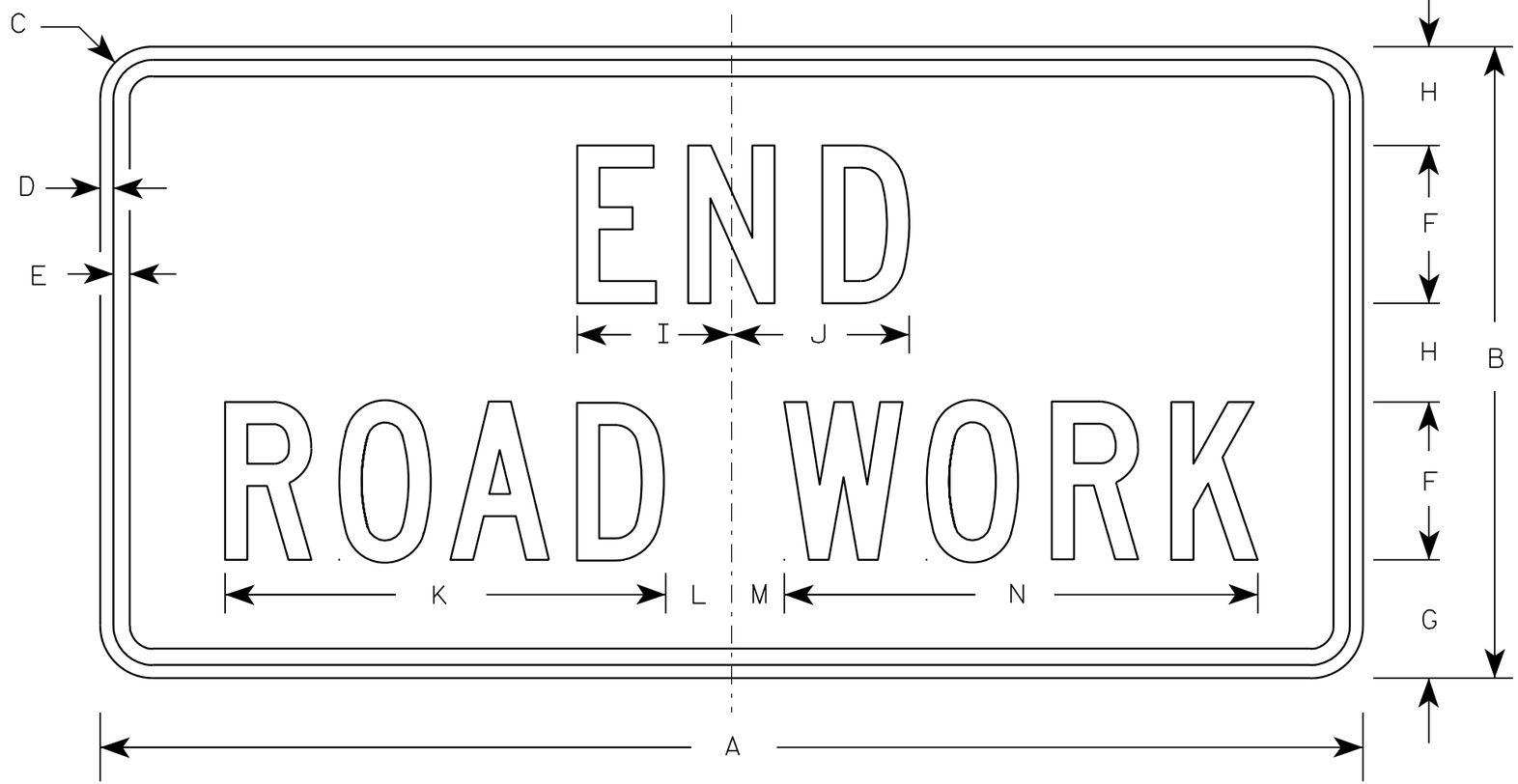
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 134 | E




G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| 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. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

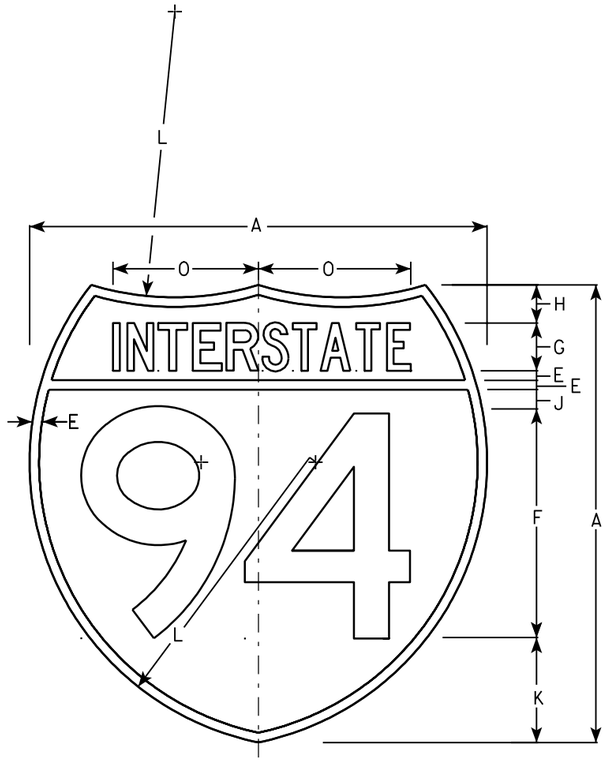
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

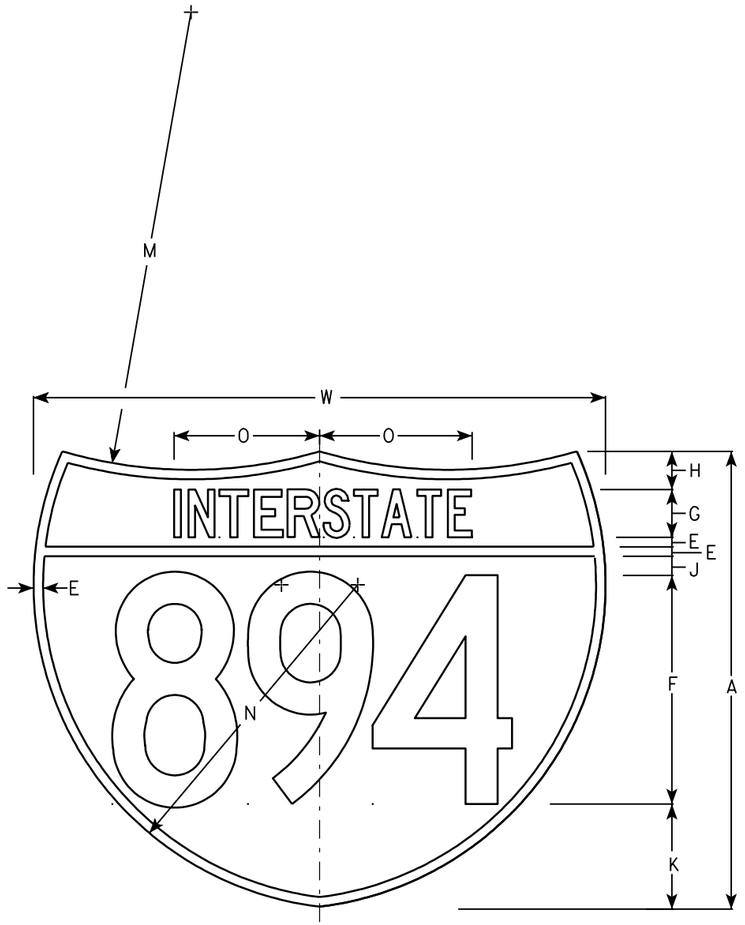
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 135 | E |
|---|---|---|---|---|---|




M1-1




M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

| SIZE | M1-1 | SIZE | M1-1A |
|---|---|---|---|
| 1 | | | |
| 2 | 600 mm X 600 mm | 2 | 600 mm X 750 mm |
| 3 | 900 mm X 900 mm | 3 | 900 mm X 1125 mm |
| 4 | 900 mm X 900 mm | 4 | 900 mm X 1125 mm |
| 5 | 900 mm X 900 mm | 5 | 900 mm X 1125 mm |

| 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 | M1-1 Area sq. ft. | M1-1A Area sq. ft. | M1-1 Area m2 | M1-1A Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 | .36 | .46 |
| 3 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 4 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 5 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |

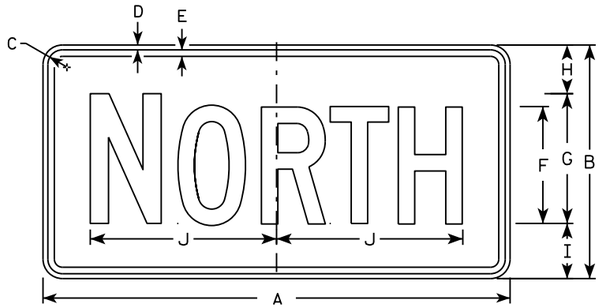
# INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

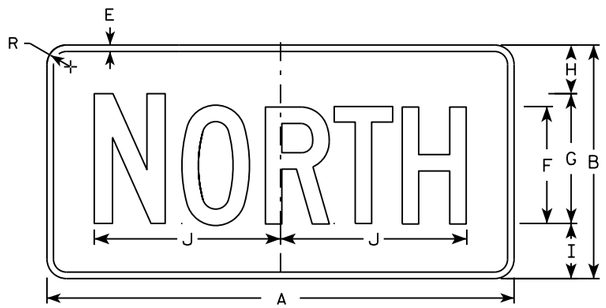
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 136 | E |
|---|---|---|---|---|---|




M3-1
MM3-1
MP3-1



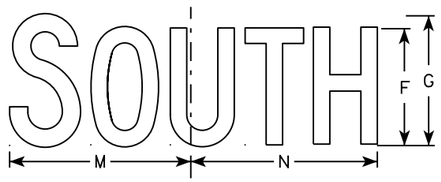

MB3-1
MK3-1
MN3-1



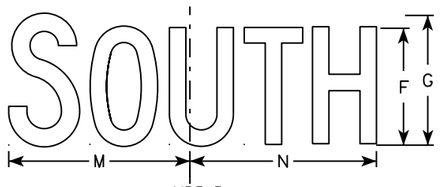

M3-2
MM3-2
MP3-2



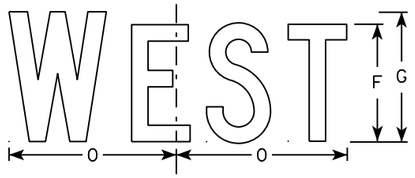

MB3-2
MK3-2
MN3-2



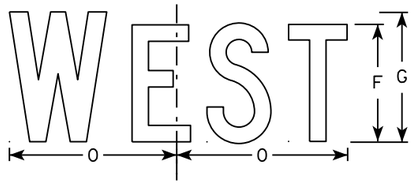

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

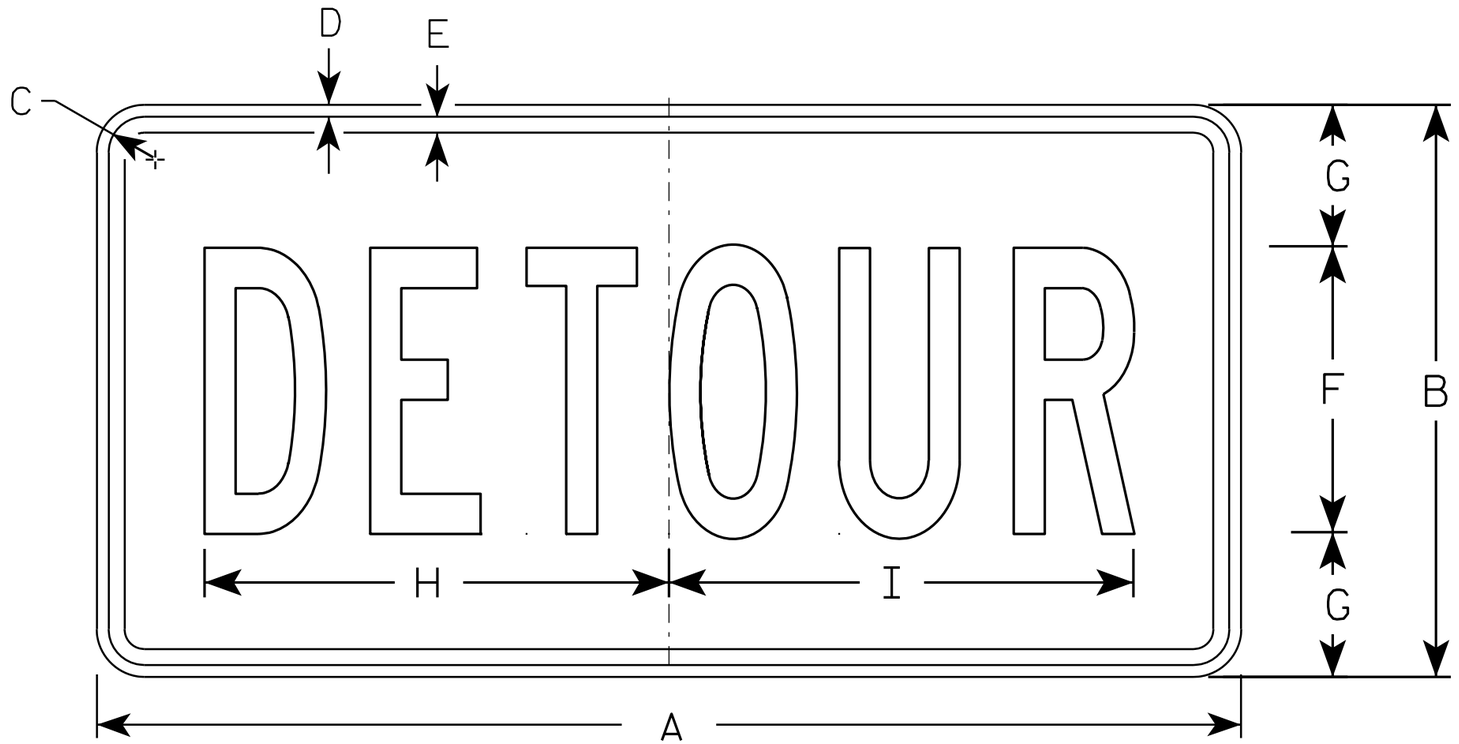
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

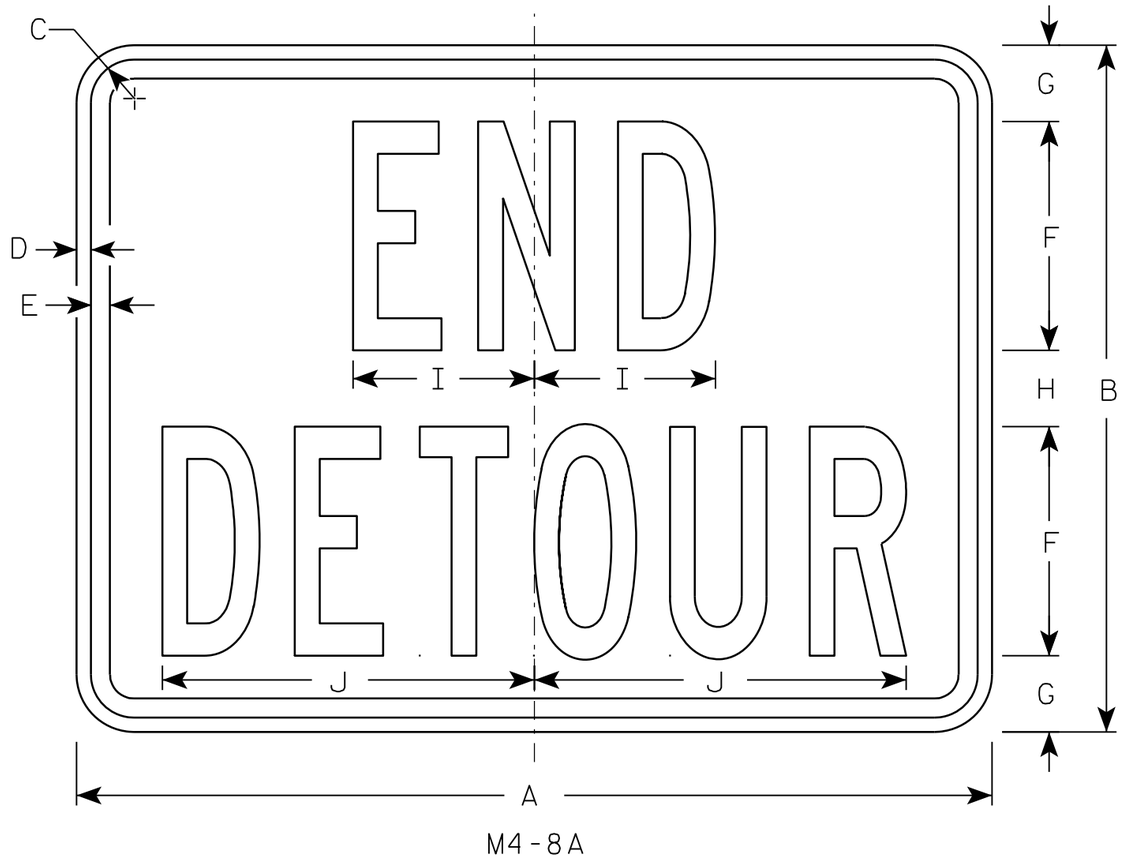
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 138 | E |
|---|---|---|---|---|---|




M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/8 | 3/8 | 1/2 | 6 | 2 | 2 | 4 3/4 | 9 3/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 8 | 2 1/2 | 3 | 6 3/4 | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

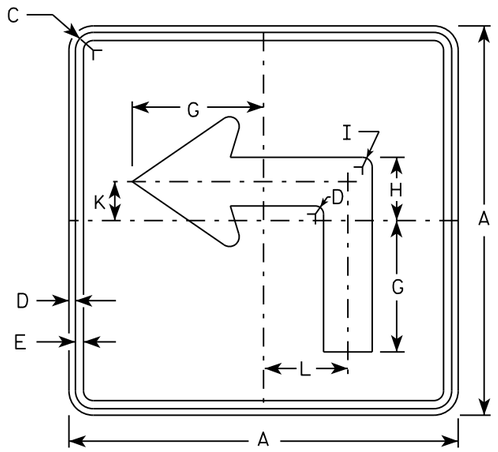
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

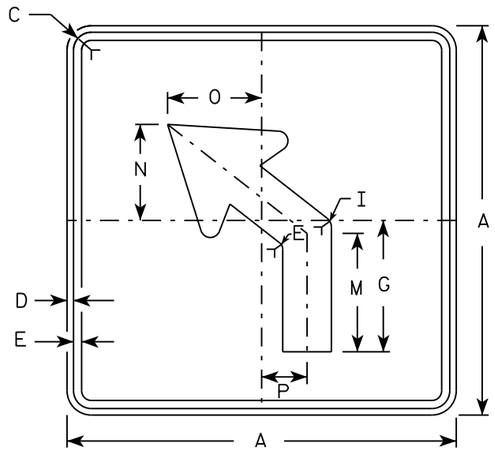
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

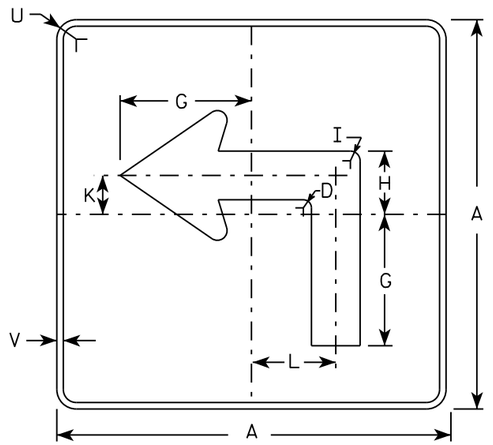
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 139 | E |
|---|---|---|---|---|---|



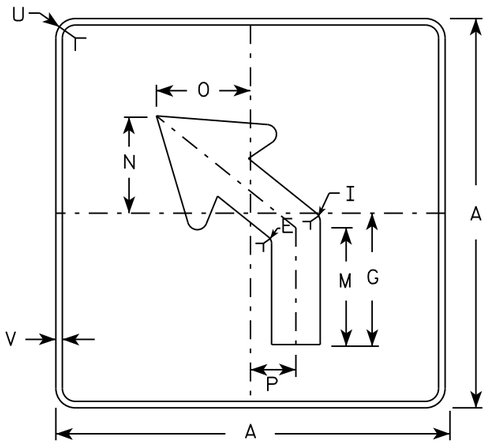

M5-1L
MM5-1L
MO5-1L
MP5-1L



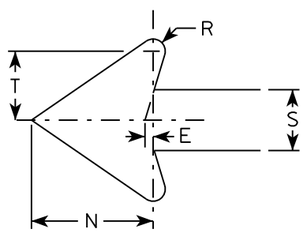

M5-2L
MM5-2L
MO5-2L
MP5-2L




MB5-1L
MK5-1L
MN5-1L
MR5-1L




MB5-2L
MK5-2L
MN5-2L
MR5-2L




NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

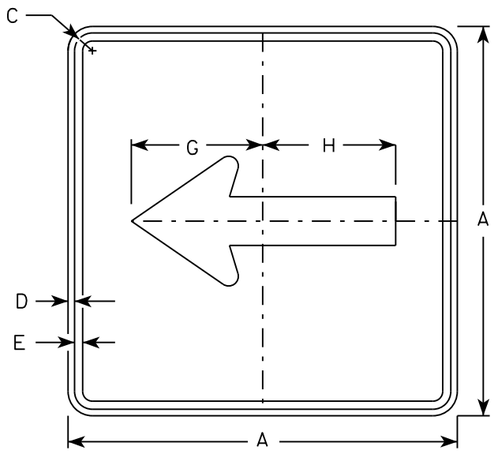
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

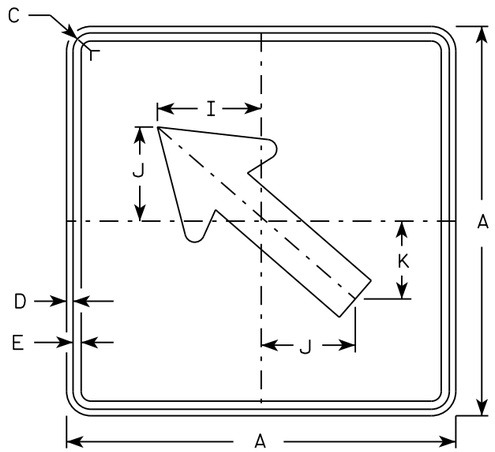


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



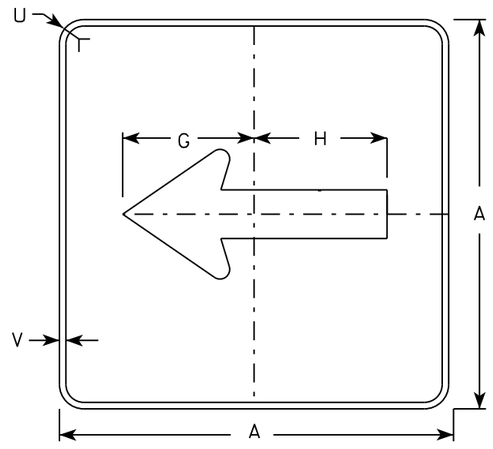

M6-1
MM6-1
MO6-1
MP6-1



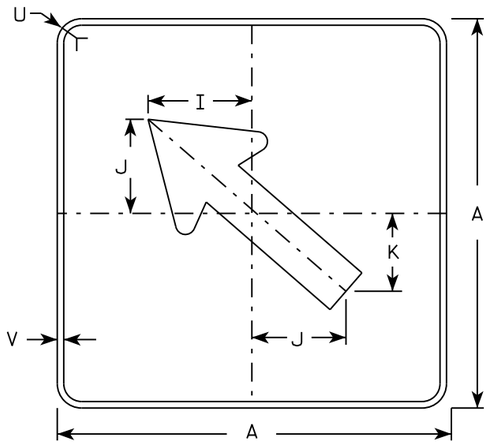

M6-2
MM6-2
MO6-2
MP6-2

NOTES

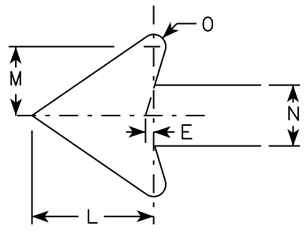
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow




MB6-1
MK6-1
MN6-1
MR6-1




MB6-2
MK6-2
MN6-2
MR6-2




| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |

STANDARD SIGN
M6-1 & M6-2
SERIES

*WISCONSIN DEPT OF TRANSPORTATION*

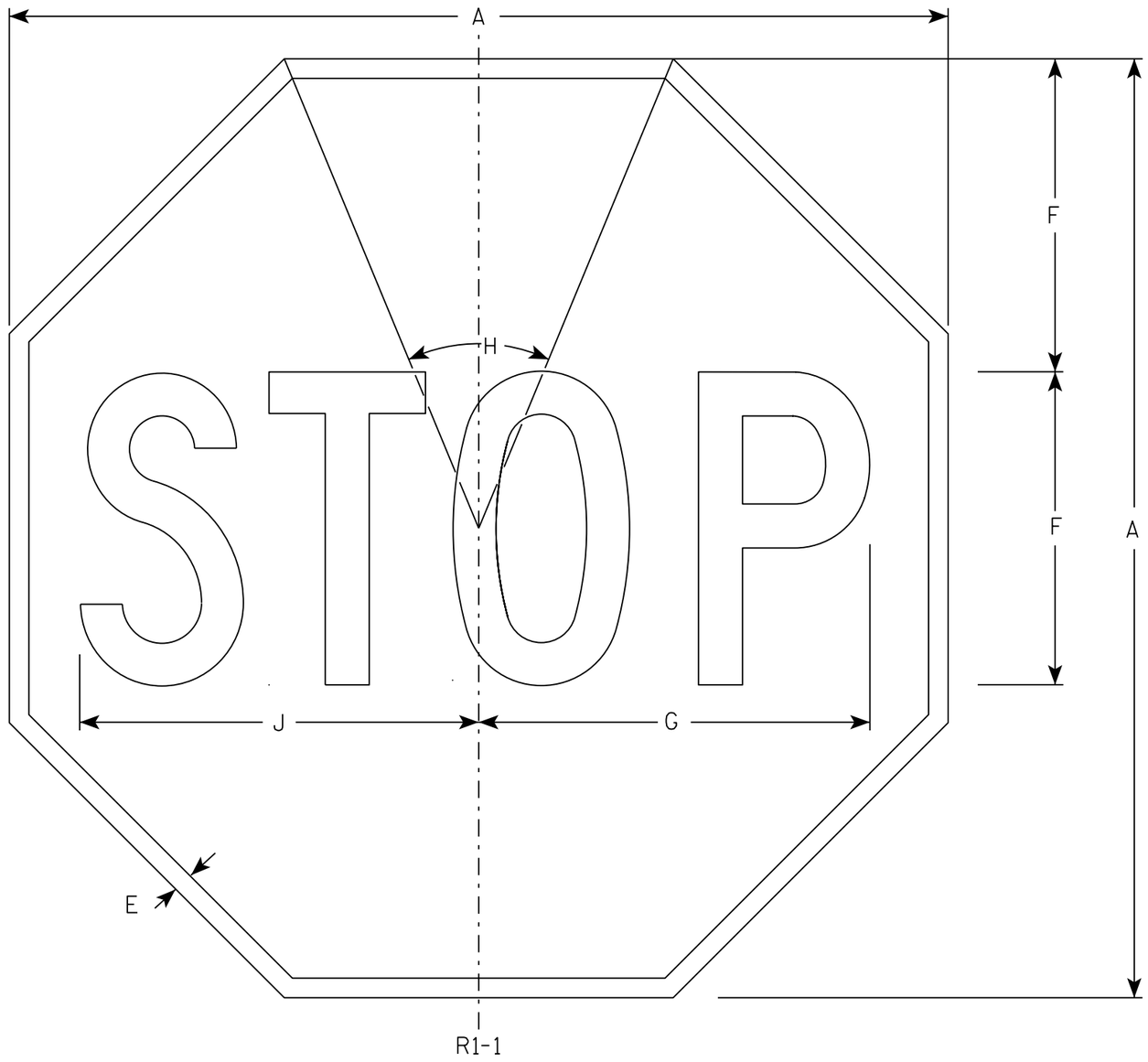
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 10/15/15 PLATE 141 M6-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




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 - C

| 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 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 4 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 5 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 6 | 18 | | | | 3/8 | 6 | 7 3/4 | 45° | | 7 3/4 | | | | | | | | | | | | | | | | | 1.86 |
| 7 | 12 | | | | 1/4 | 4 | 5 | 45° | | 5 1/8 | | | | | | | | | | | | | | | | | 0.78 |

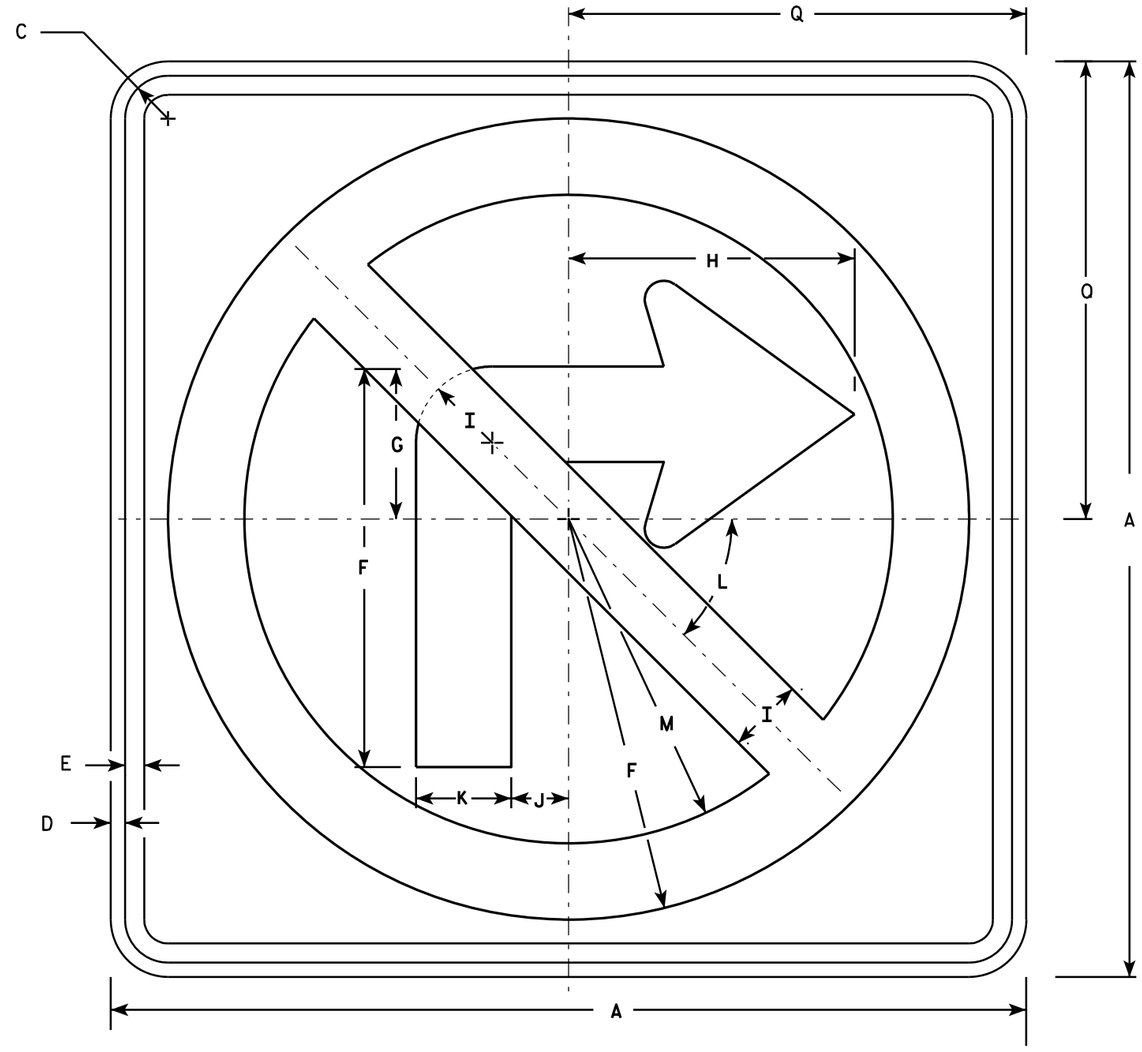
# STANDARD SIGN
# R1-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

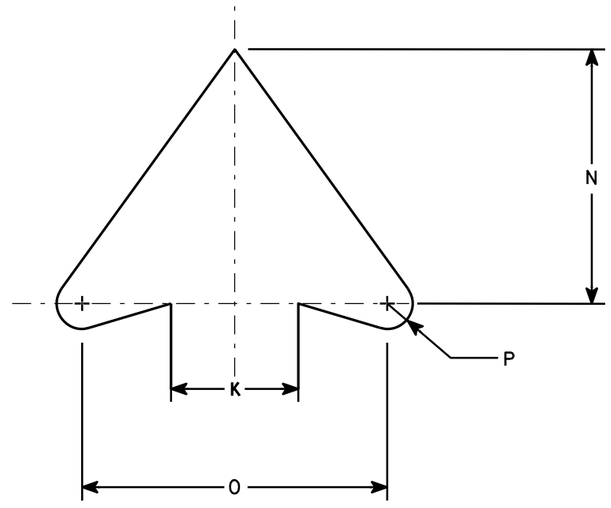
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 142 | E |
|---|---|---|---|---|---|




R3-1

## 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 |

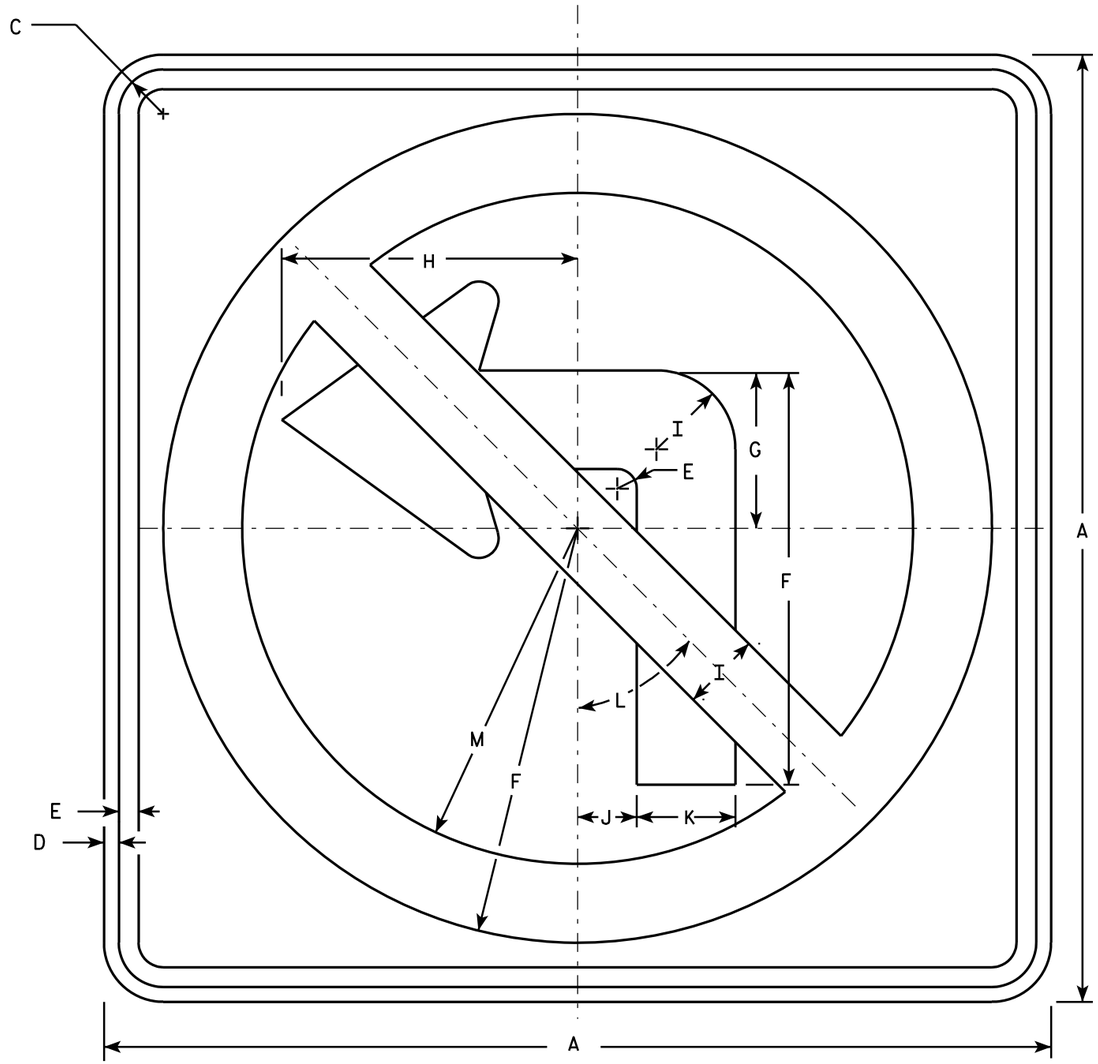
# STANDARD SIGN
# R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

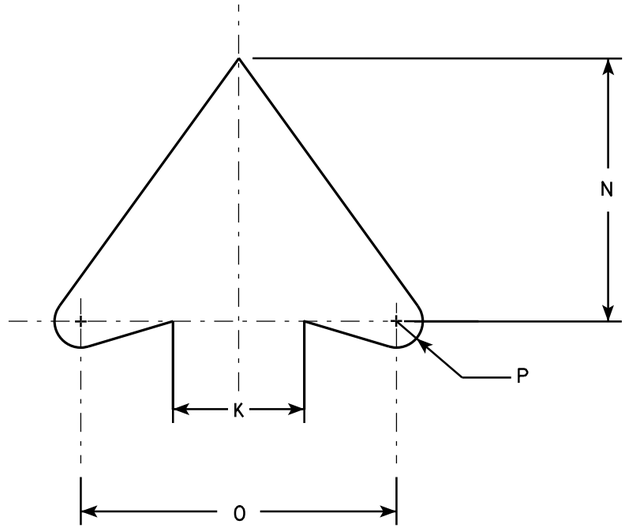
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 143 | E |
|---|---|---|---|---|---|




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 |

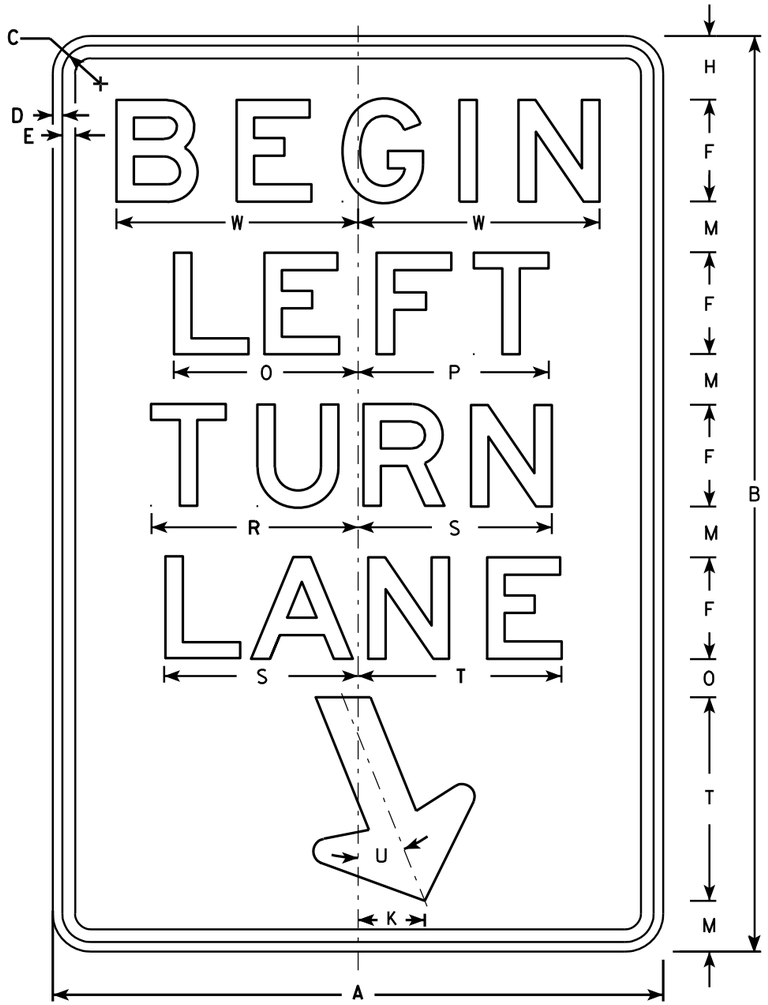
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

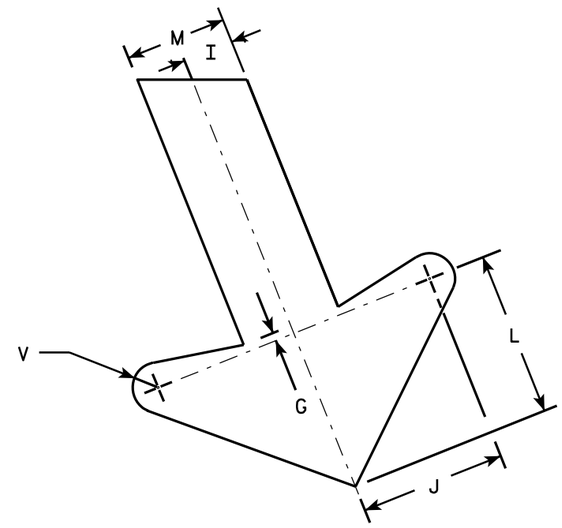
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 144 | E




R3-20L

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 - E
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.




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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 3/4 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 10 7/8 | 11 1/4 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

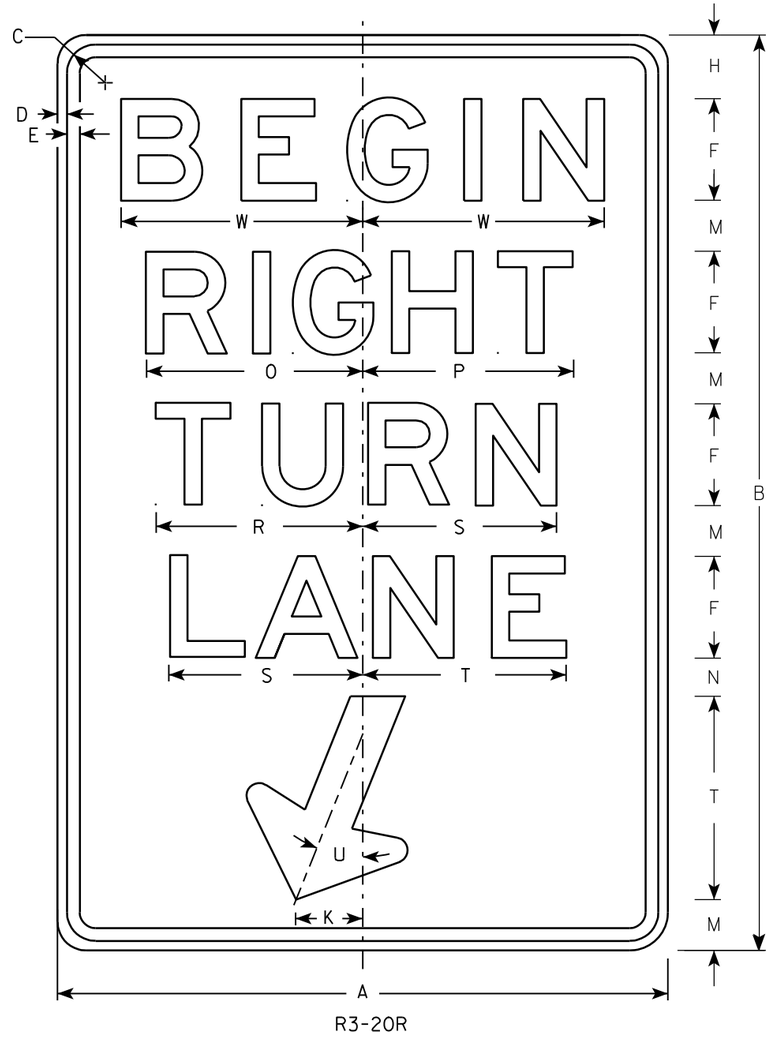
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

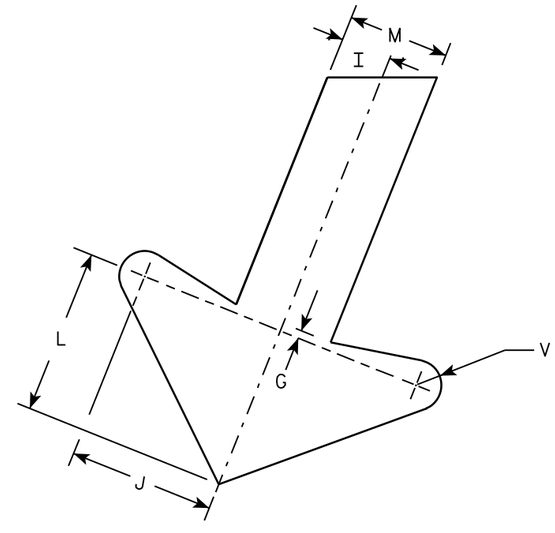
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 145 | E




R3-20R

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 - E
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.




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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 3/4 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 12 3/4 | 12 1/2 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

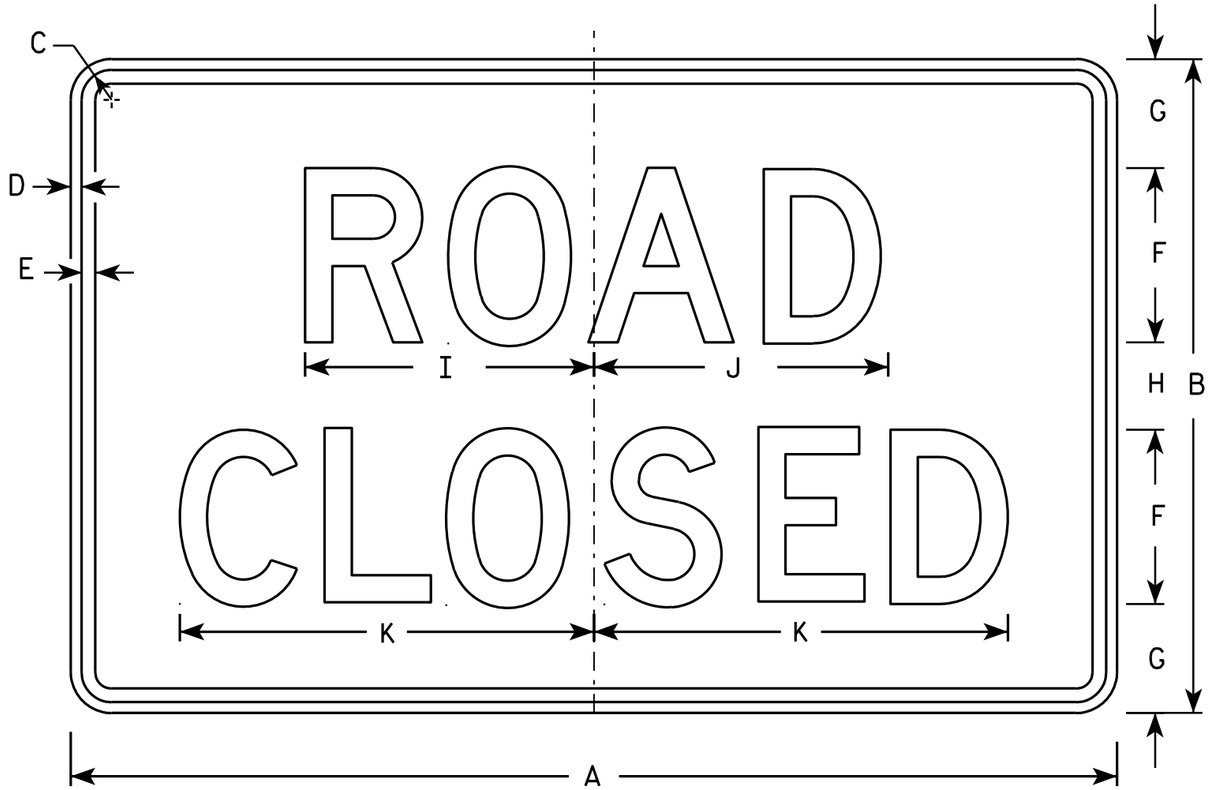
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

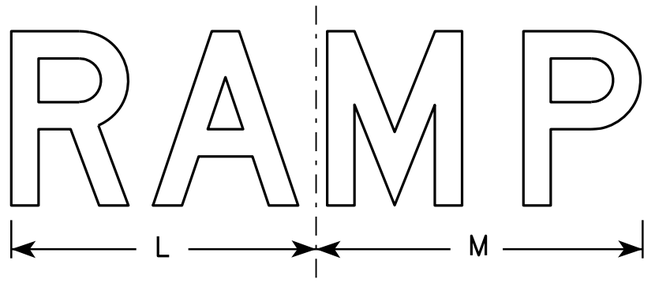
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 146 | E



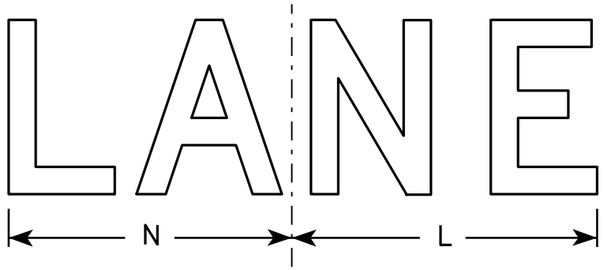

R11-2

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 - 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.
5. Modify the message as required.




R11-2R




R11-2L

| 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 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

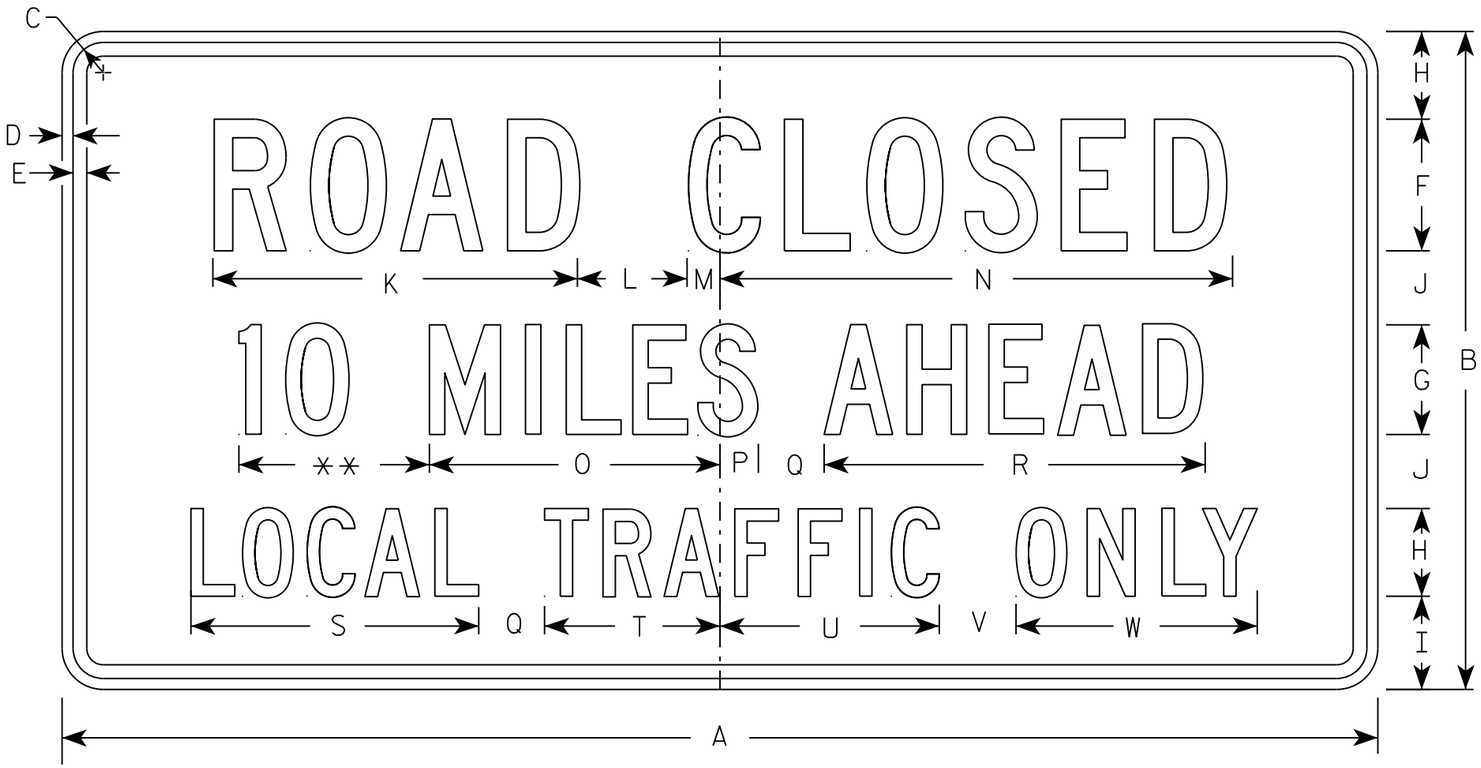
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 147 | E |
|---|---|---|---|---|---|

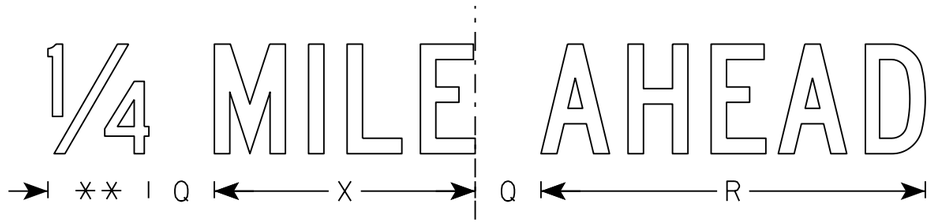
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3

** See Note 5



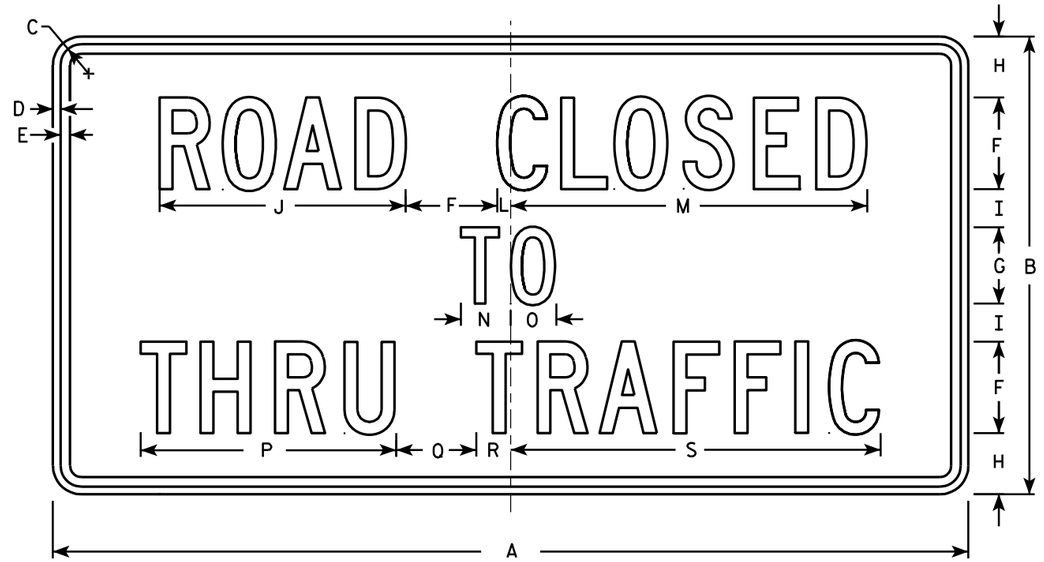

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 2 | 2 | 11 1/8 | 3 | 1 1/8 | 15 1/4 | 8 | 1 1/2 | 2 | 10 3/4 | 8 3/8 | 4 3/4 | 6 1/2 | 2 | 6 3/4 | 7 1/8 | | | 4.5 |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/15/17 PLATE NO. R11-3.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 148 | E |
|---|---|---|---|---|---|




R11-4

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 - 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 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

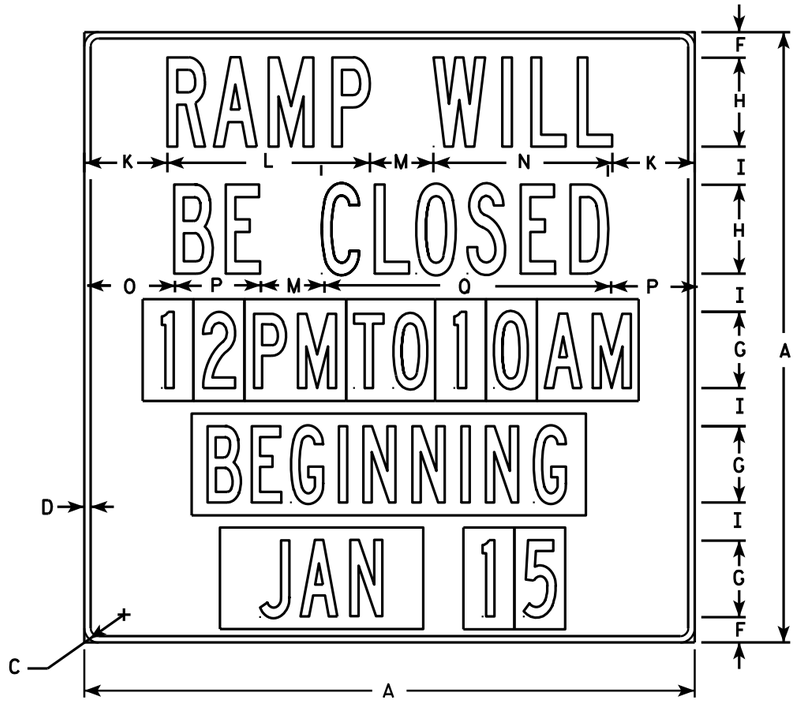
STANDARD SIGN
R11 - 4

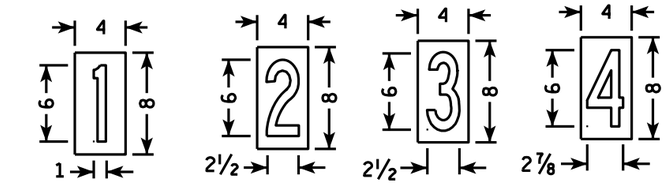
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

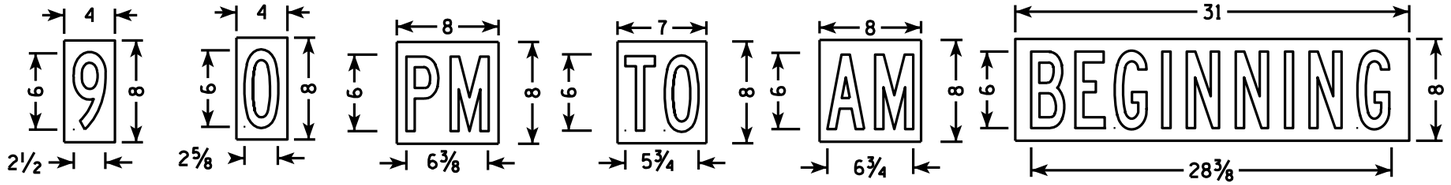
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 149 | E

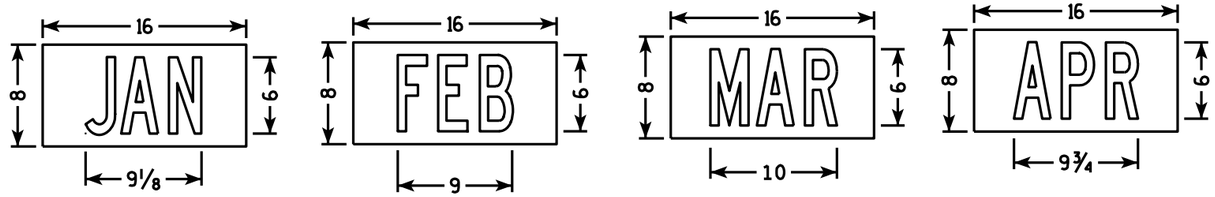


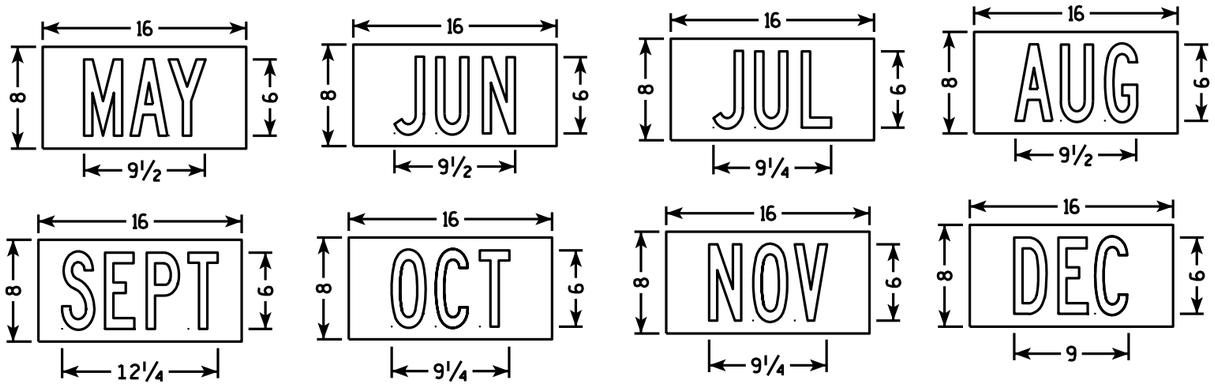




NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.







| 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 | 48 | | 2 1/4 | 1/2 | | 2 | 6 | 7 | 3 | | 6 1/2 | 15 7/8 | 5 | 14 1/8 | 6 7/8 | 6 3/4 | 22 1/2 | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 1/2 | | 2 | 6 | 7 | 3 | | 6 1/2 | 15 7/8 | 5 | 14 1/8 | 6 7/8 | 6 3/4 | 22 1/2 | | | | | | | | | | 16.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

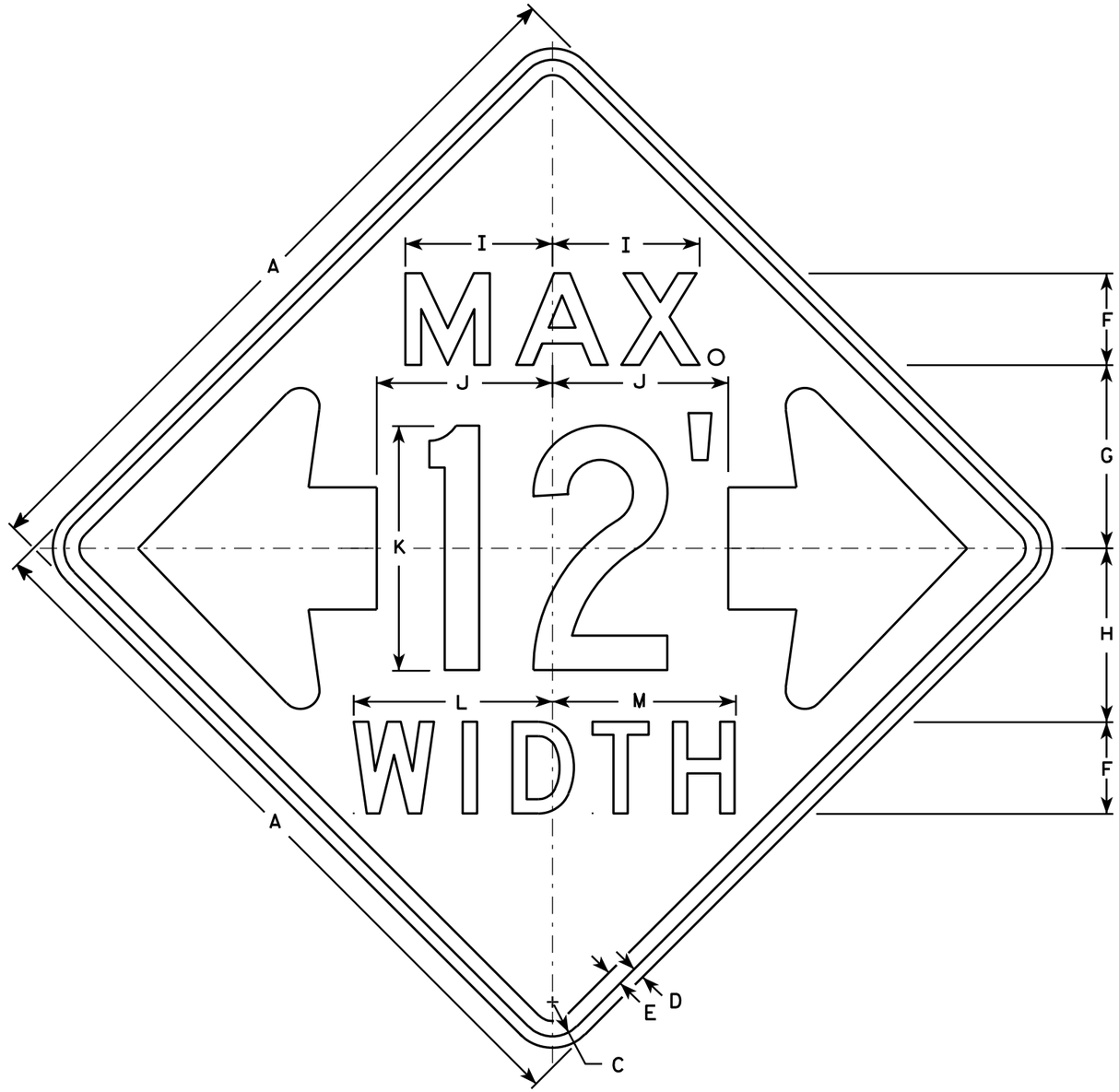
STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

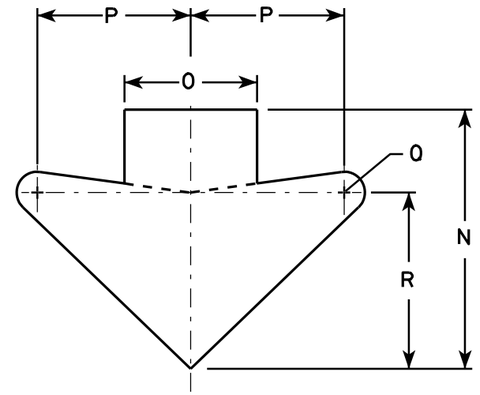
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 150 | E |
|---|---|---|---|---|---|




W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
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.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.




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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

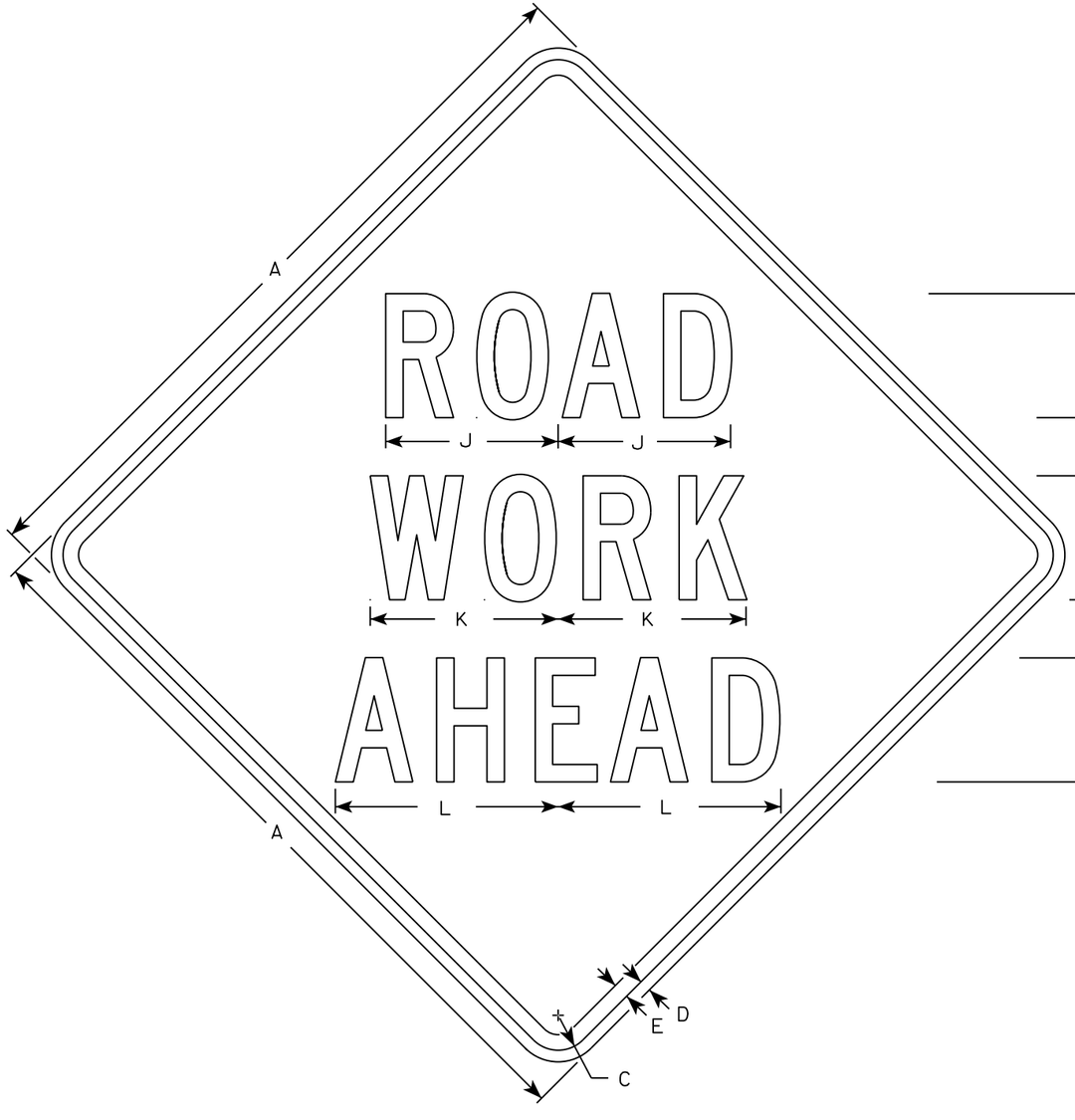
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

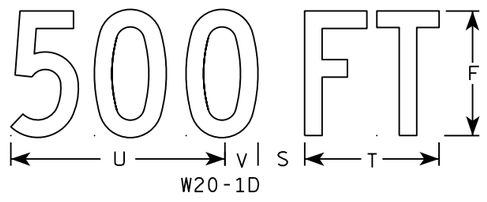
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 151 | E



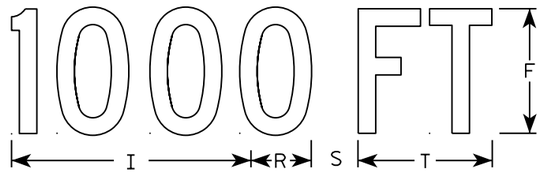
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



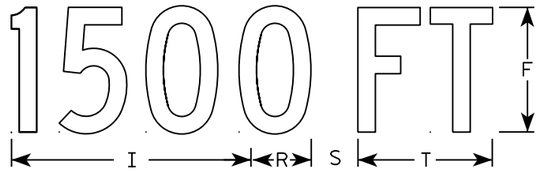

W20-1A




W20-1D



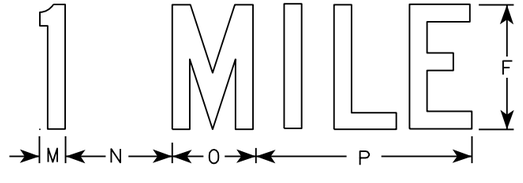

W20-1C



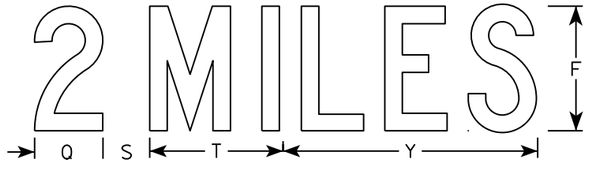

W20-1B




W20-1G




W20-1F




W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

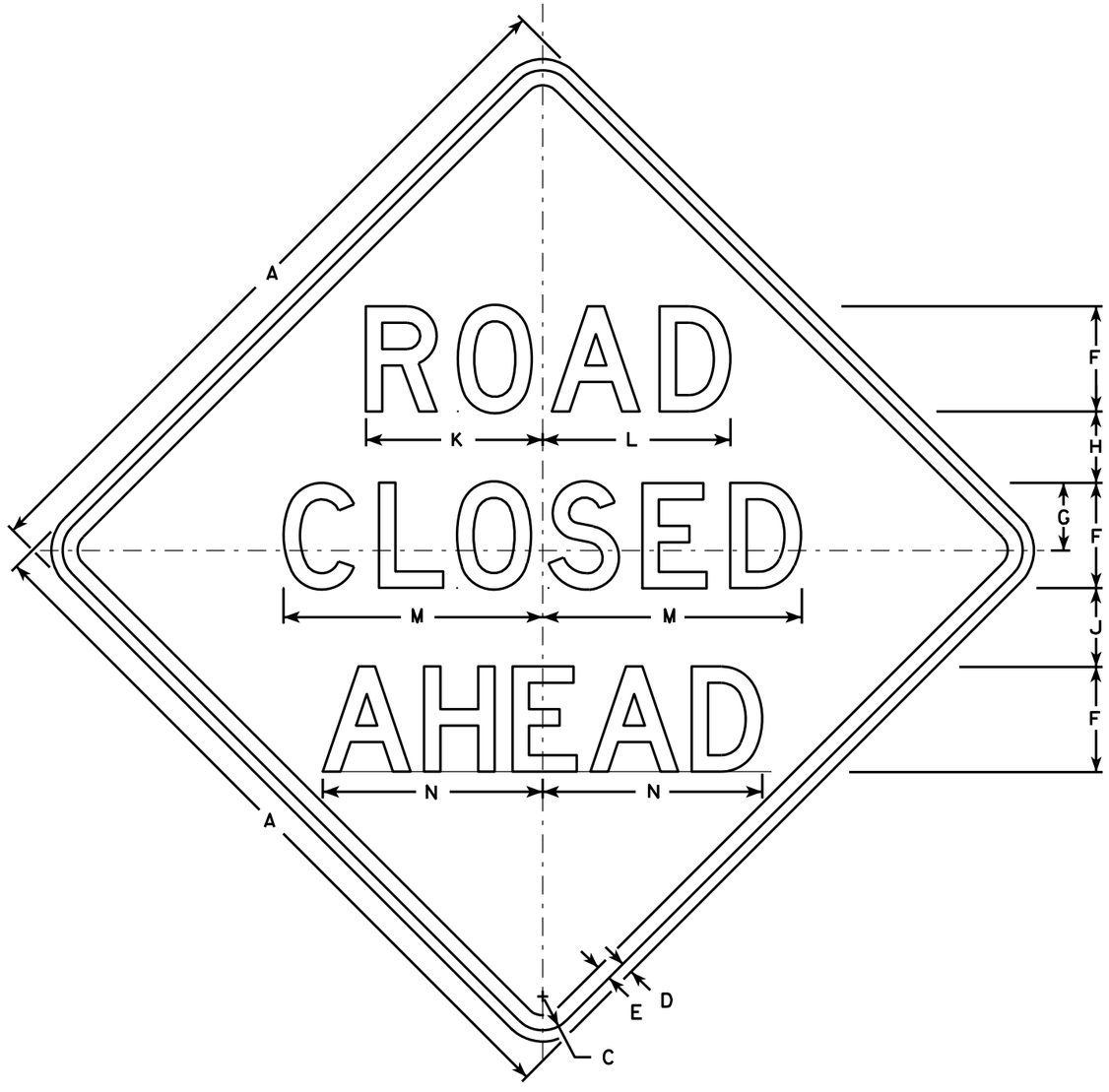


PROJECT NO:

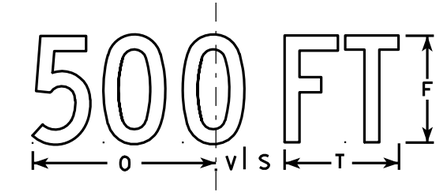
SHEET NO: E



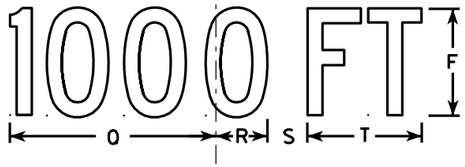
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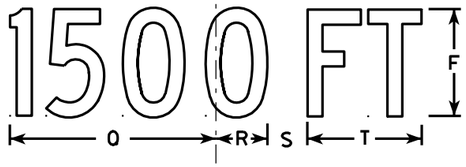

W20-3A



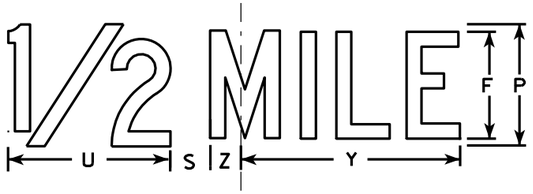

W20-3D



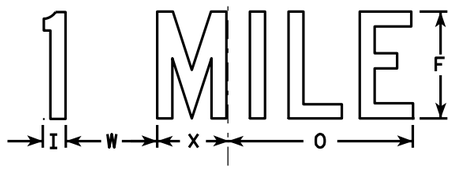

W20-3C




W20-3B




W20-3G




W20-3F

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 8 3/8 | 8 7/8 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-3A, B, C, D, F & G

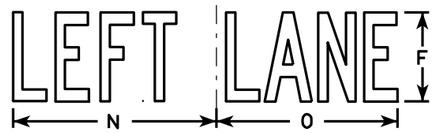
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

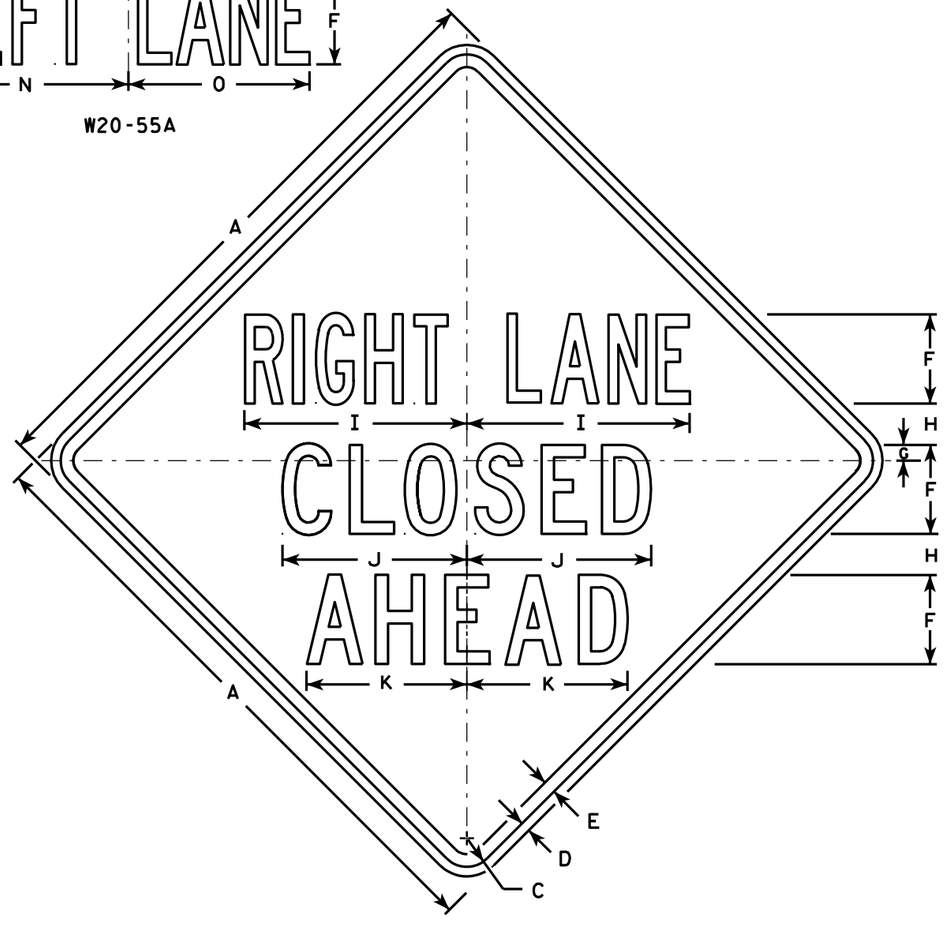
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 153 | E



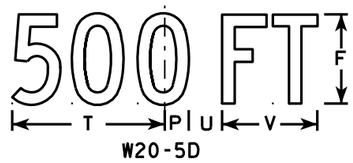

W20-56A



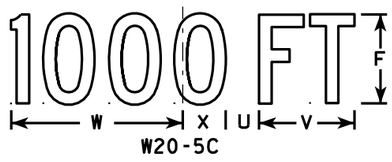

W20-55A



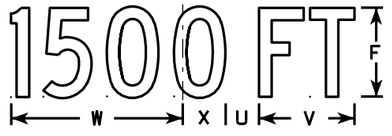

W20-5A




W20-5D




W20-5C




W20-5B




W20-5G




W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
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.
5. " _____ LANE" is Series B.
   All other copy is Series C.

| 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 | 36 | 6 | 1 5/8 | 5/8 | 3/4 | 5 | 1/8 | 2 1/2 | 13 1/8 | 10 3/4 | 9 1/2 | 14 1/4 | 13 5/8 | 12 | 12 | 1 3/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 1 1/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 3/4 | 8 | 9.0 |
| 2S | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 2M | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 3 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 4 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 5 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

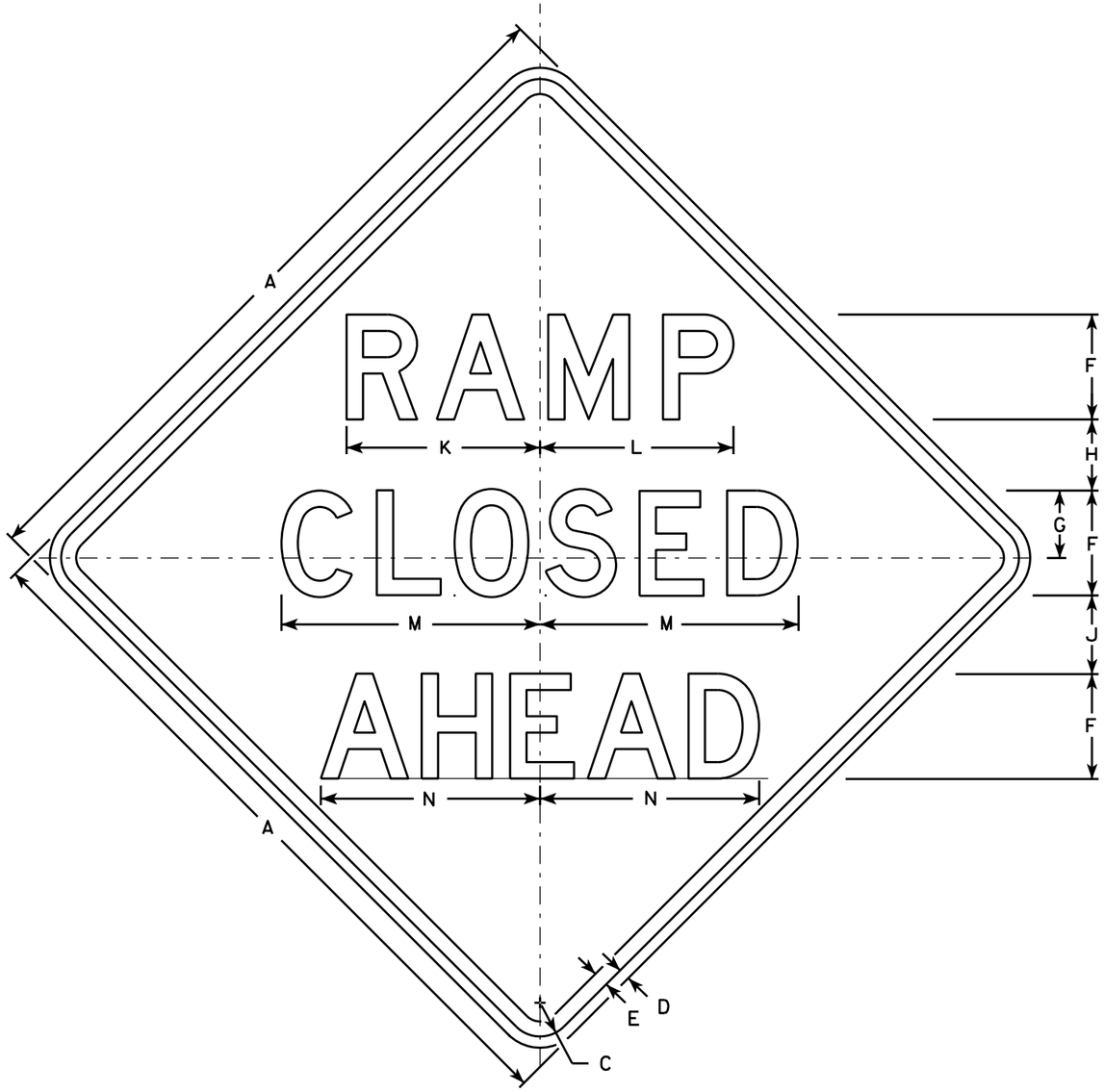
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

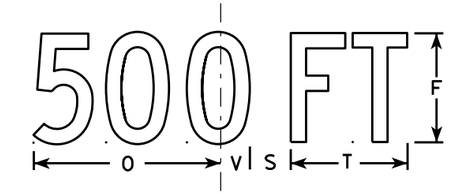
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 154 | E |
|---|---|---|---|---|---|


7

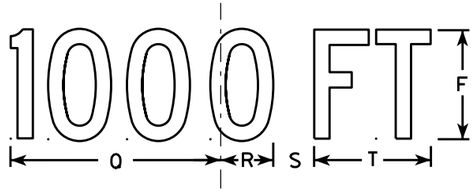
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



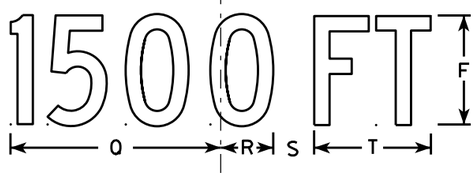

W20-53A



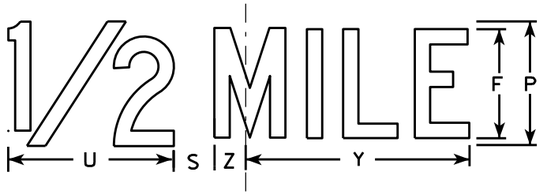

W20-53D




W20-53C




W20-53B




W20-53G




W20-53F

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 9 1/4 | 9 1/4 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

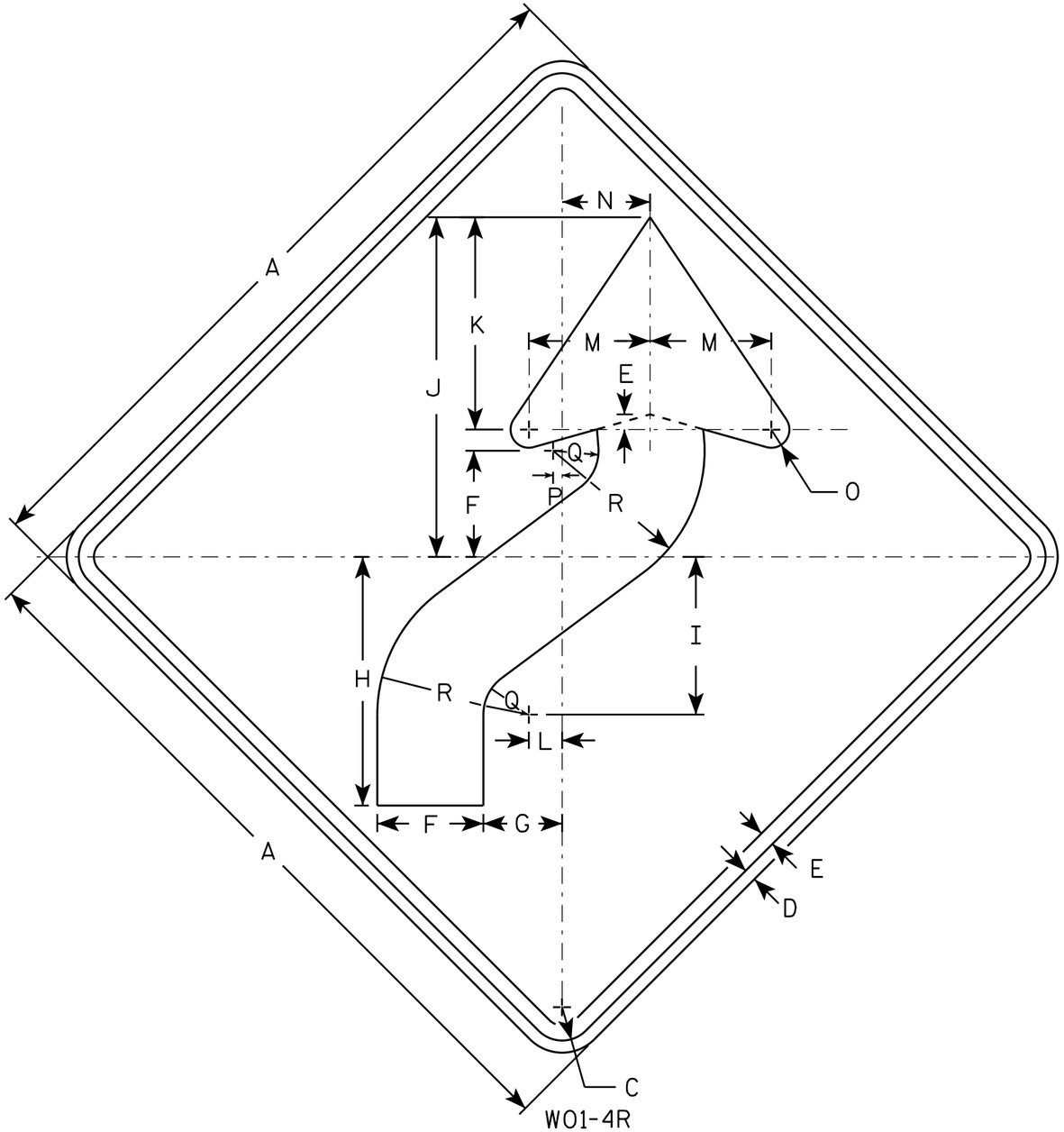
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42




W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4

WISCONSIN DEPT OF TRANSPORTATION

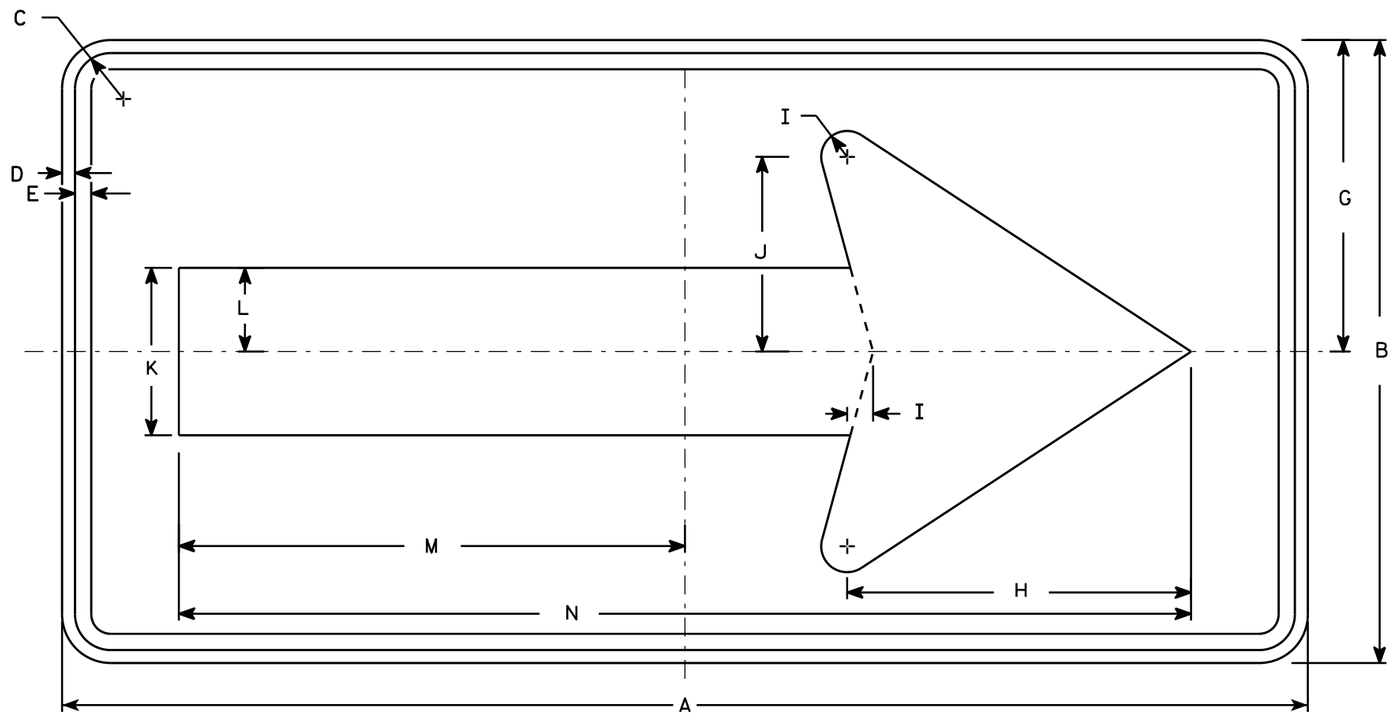
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42




W01-6

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.

| 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 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

# STANDARD SIGN
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

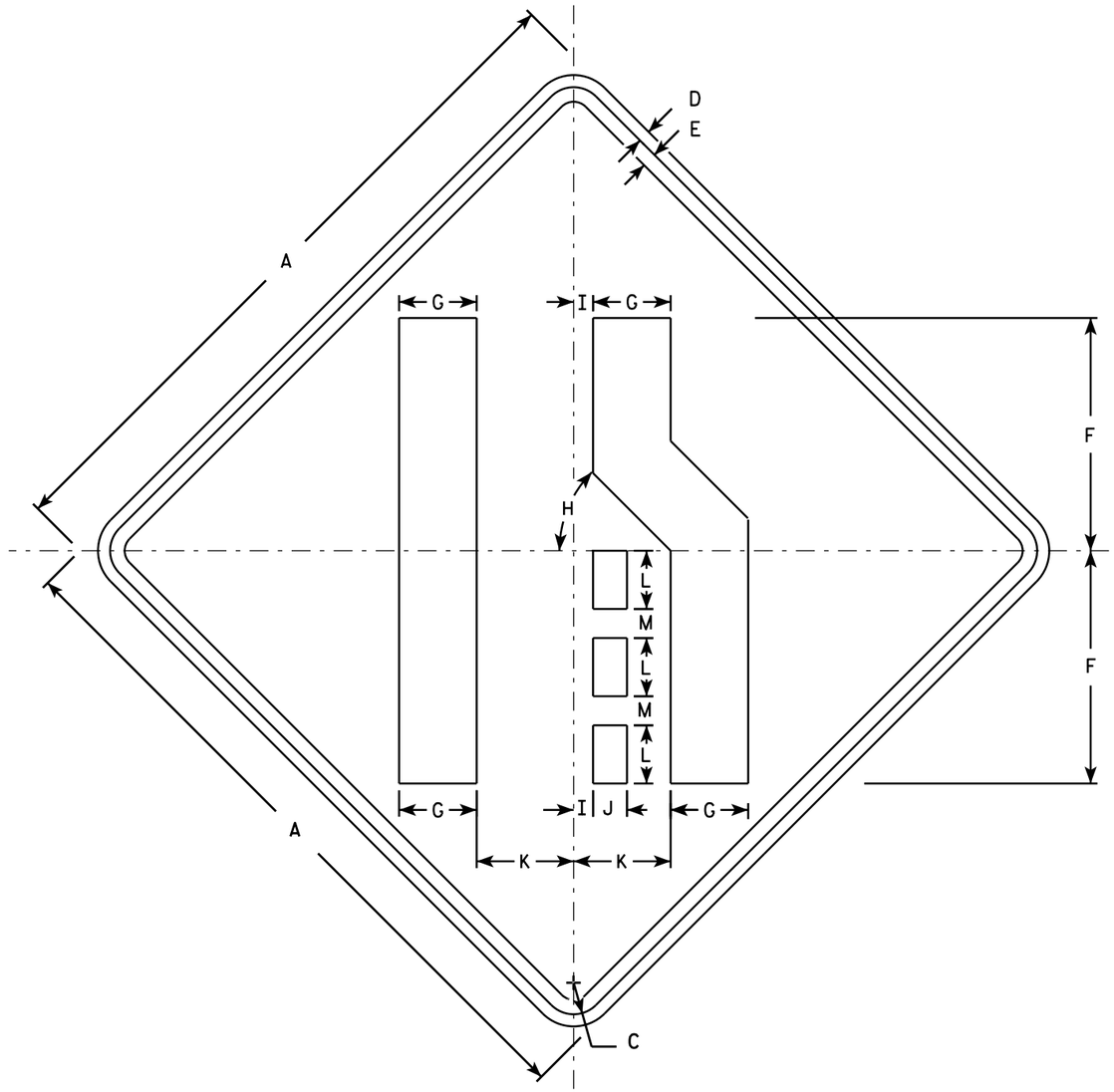
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

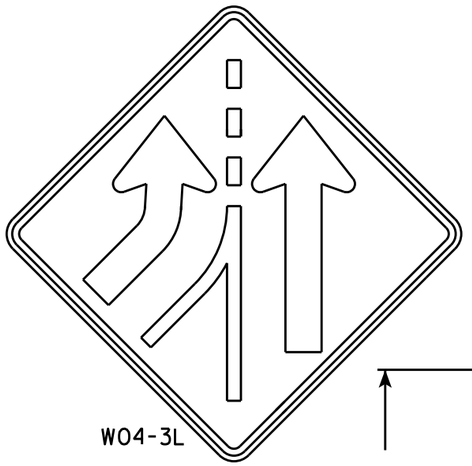
STANDARD SIGN
W04-2

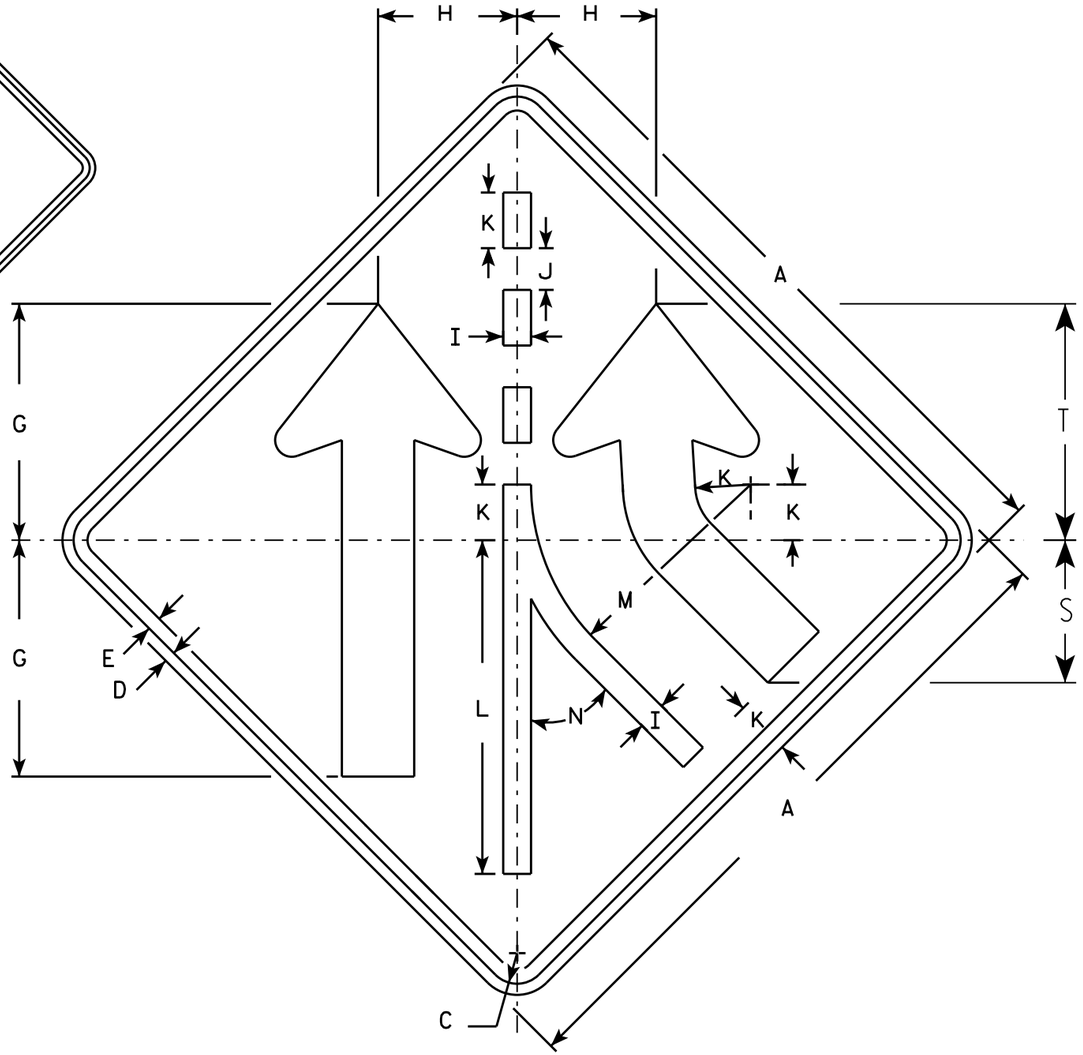
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 158 W04-2.1

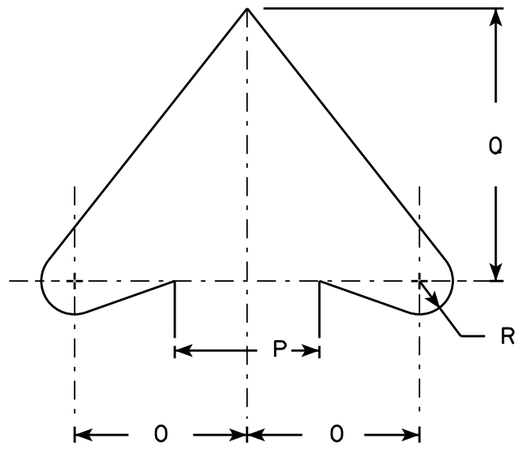
PROJECT NO: | SHEET NO: E




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.
4. W04-3 L is the same as W04-3 R except the arrow is reversed along the vertical centerline.




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 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/4 | 7 1/2 | 1 1/2 | 2 1/4 | 3 | 18 | 11 7/8 | 45° | 4 5/8 | 4 | 7 3/8 | 7/8 | 7 3/4 | 12 3/4 | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | | 17 | 10 | 2 | 3 | 4 | 24 | 15 3/4 | 45° | 6 1/4 | 5 1/2 | 9 7/8 | 1 1/4 | 10 1/4 | 17 | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | | 17 | 10 | 2 | 3 | 4 | 24 | 15 3/4 | 45° | 6 1/4 | 5 1/2 | 9 7/8 | 1 1/4 | 10 1/4 | 17 | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | | 17 | 10 | 2 | 3 | 4 | 24 | 15 3/4 | 45° | 6 1/4 | 5 1/2 | 9 7/8 | 1 1/4 | 10 1/4 | 17 | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 17 | 10 | 2 | 3 | 4 | 24 | 15 3/4 | 45° | 6 1/4 | 5 1/2 | 9 7/8 | 1 1/4 | 10 1/4 | 17 | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 17 | 10 | 2 | 3 | 4 | 24 | 15 3/4 | 45° | 6 1/4 | 5 1/2 | 9 7/8 | 1 1/4 | 10 1/4 | 17 | | | | | | | 16.0 |

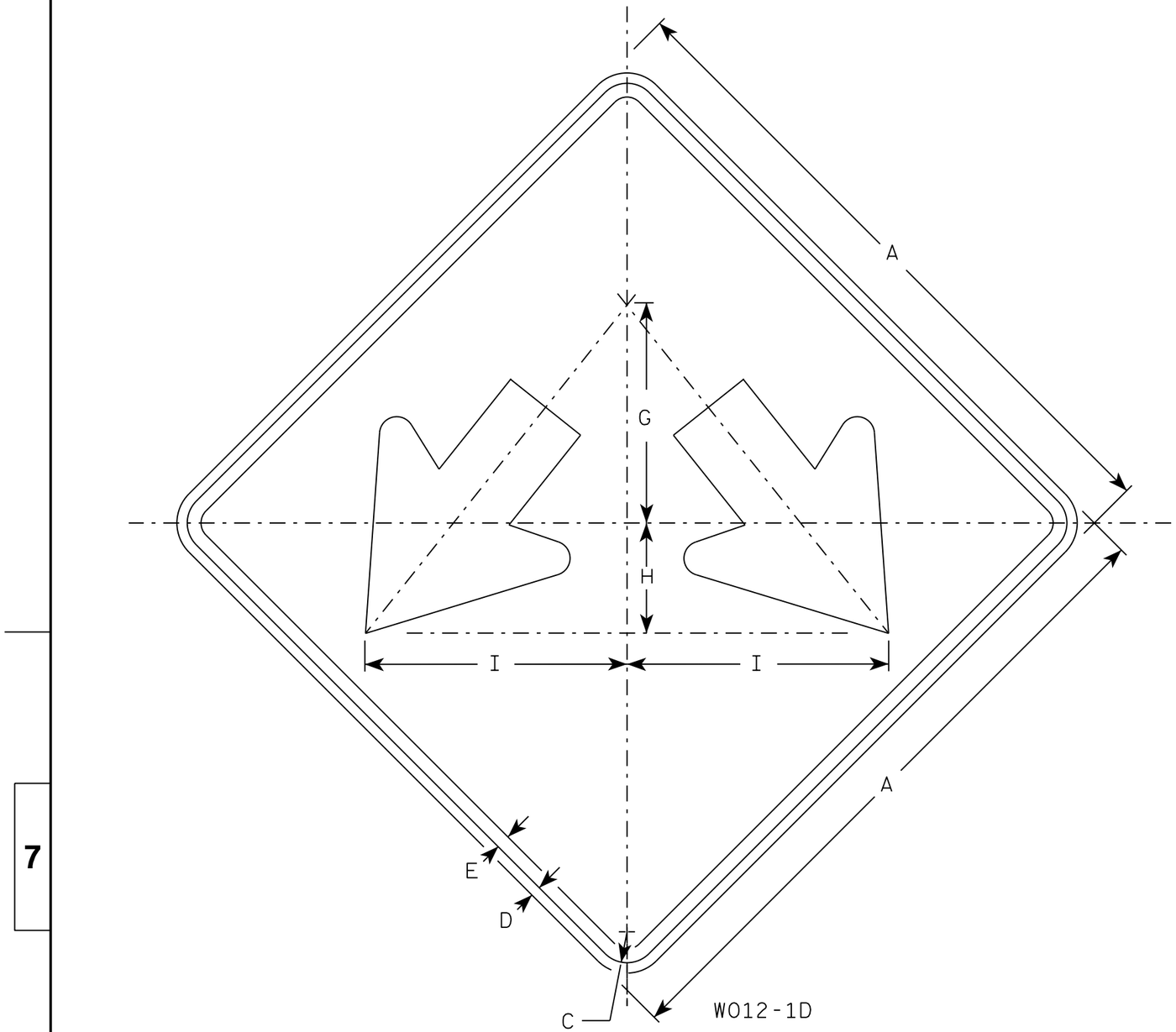
# STANDARD SIGN
## W0433

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W04-3.1

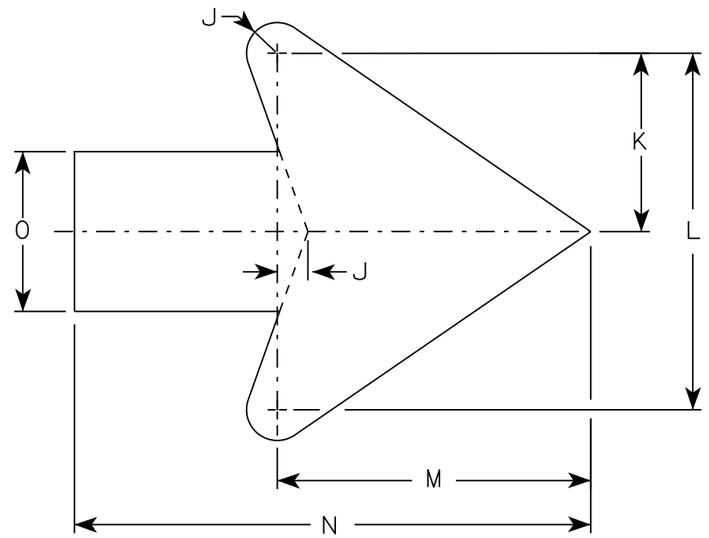
PROJECT NO: | SHEET NO: E




W012-1D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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

| 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 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 | 5 | 11 7/8 | 3/4 | 4 1/2 | 9 | 7 7/8 | 13 | 4 | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 1 3/8 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 36 | | 1 3/8 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |

STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

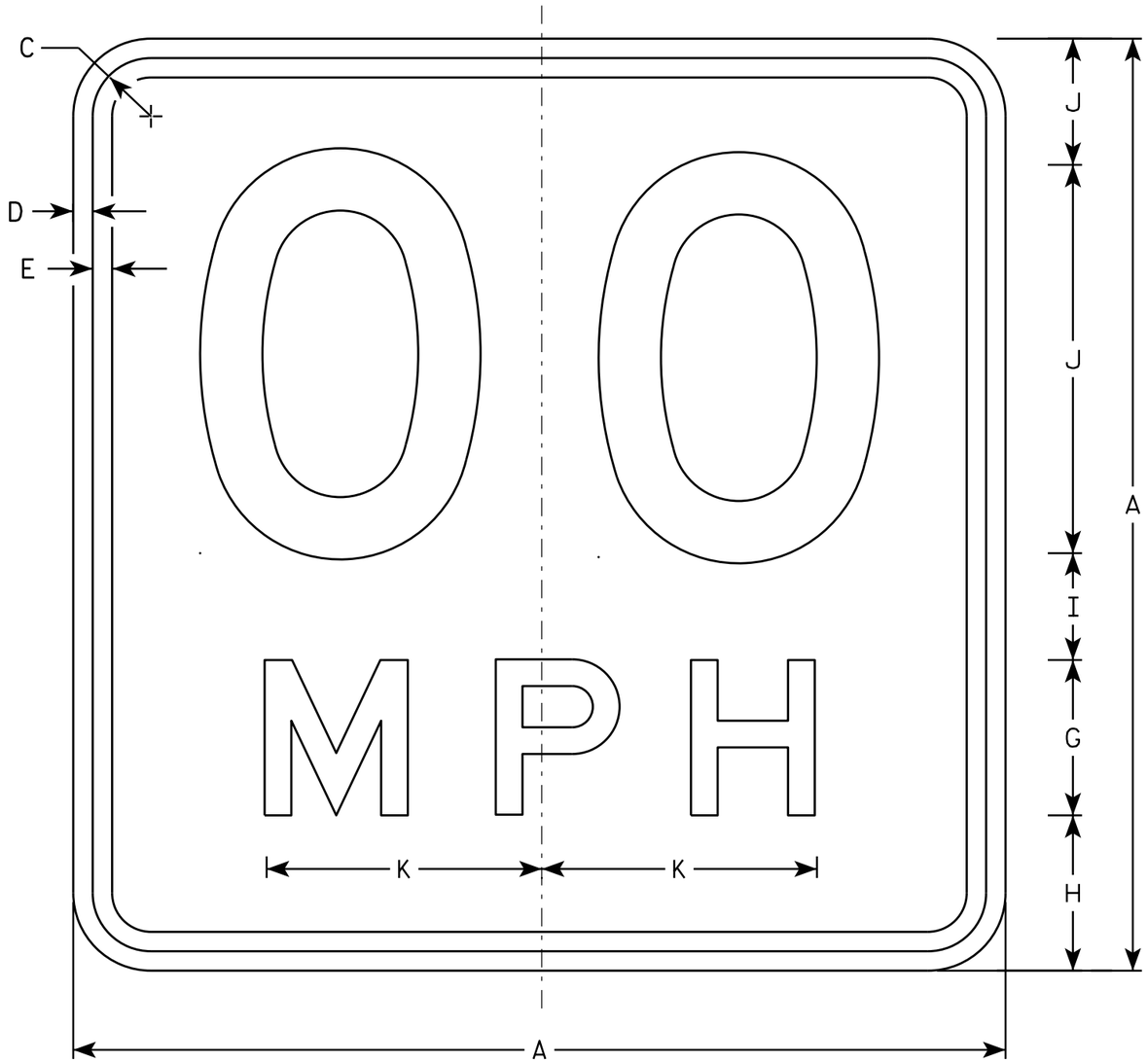
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2



| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

FILE NAME : C:\CADfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000




W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
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.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

| 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 | 4 | 4 | 2 3/4 | 3 1/4 | 7 1/8 | | | | | | | | | | | | | | | | 4.00 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 5 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |

STANDARD SIGN
W013-1

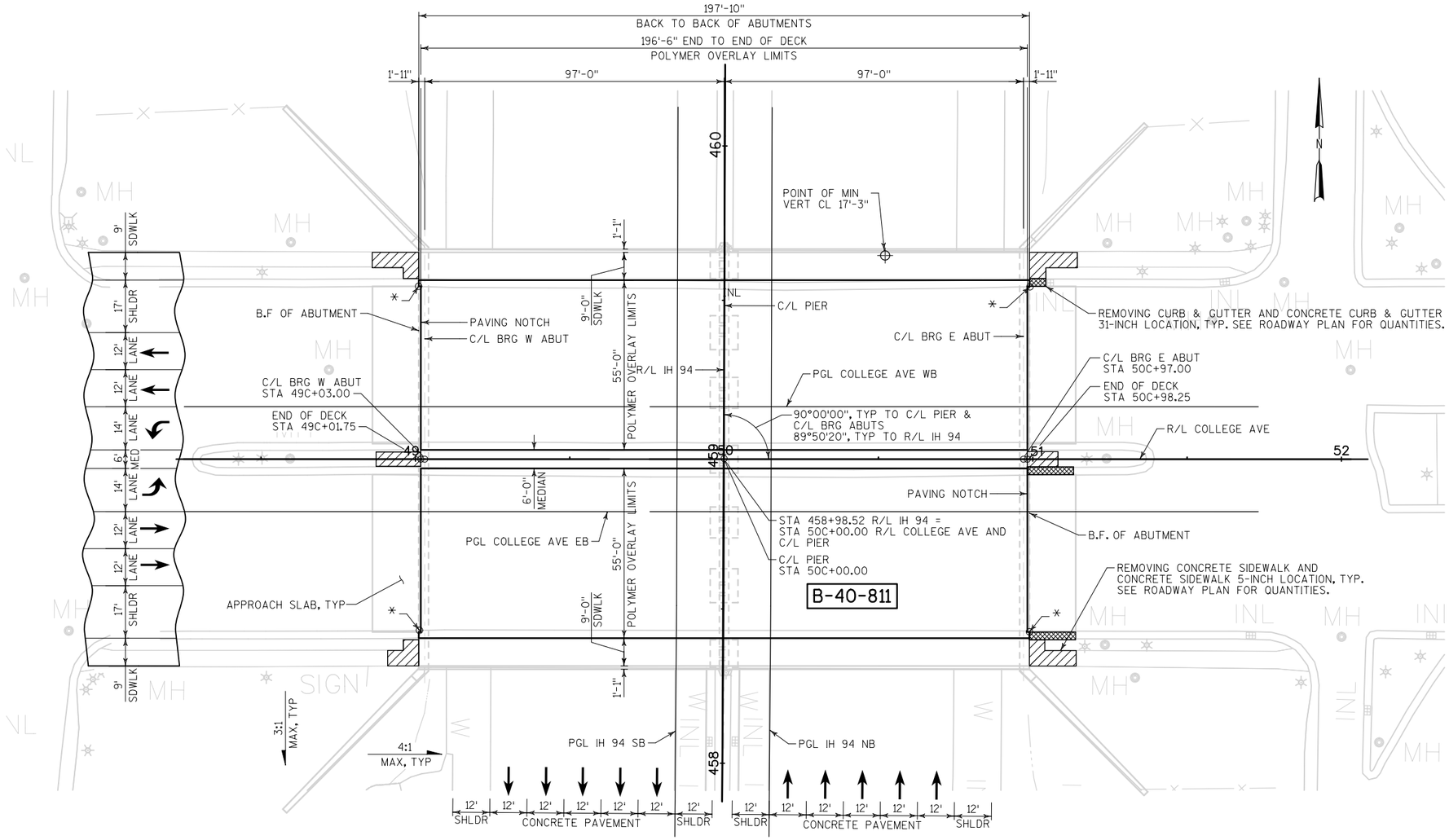
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 161 W013-1.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 2-SPAN
45W" PRESTRESSED GIRDERS

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.04
OPERATING RATING FACTOR: RF = 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| COLLEGE AVE | IH 94 |
|---|---|
| A.A.D.T. = 25,700 (2015) | A.A.D.T. = 129,700 (2015) |
| A.A.D.T. = 29,700 (2041) | A.A.D.T. = 146,700 (2041) |
| R.D.S. = 40 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 48 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 24 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 170 |
| 509.5100.S | POLYMER OVERLAY | SY | 2,402 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 7 |

ALL ITEMS ARE CATEGORY 2000




STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-811

COLLEGE AVE OVER I.H. 94

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

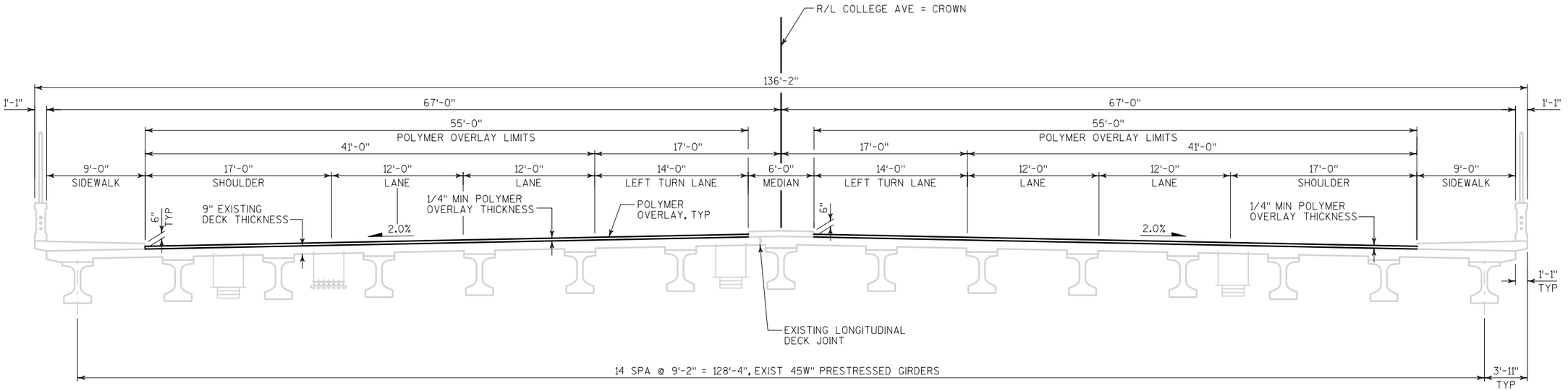
GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

8

8

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU COLLEGE AVE

45W" PRESTRESSED CONCRETE GIRDERS
(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-811

| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

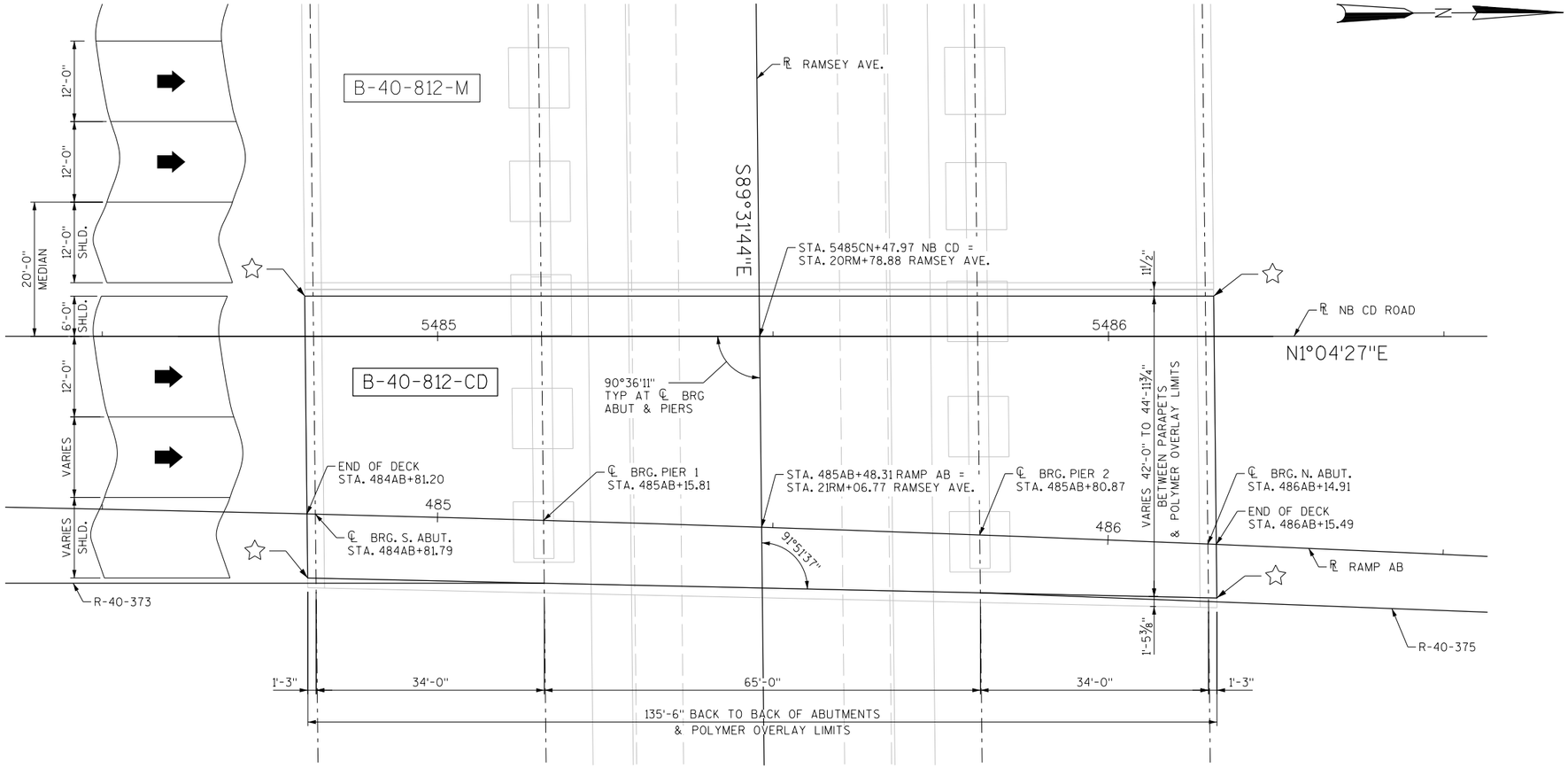
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40811_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40811_Sht_02 PLOT SCALE : 10:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 14 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 7 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 45 |
| 509.5100.S | POLYMER OVERLAY | SY | 655 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2015

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.03
OPERATING RATING FACTOR: 1.33
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMSEY AVE. | I.H. 94 |
|---|---|
| A.D.T. = 1,900 (2014) | A.D.T. = 67,000 (2014) |
| A.D.T. = 3,620 (2035) | A.D.T. = 180,200 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## HORIZONTAL CURVE DATA

RAMP AB

PI STA. 484AB+82.22
DELTA = 2°51'45" RT
D = 0°42'58"
T = 199.87'
L = 399.67'
R = 8000.00'
PC STA 482AB+82.34
PT STA 486AB+82.01

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/21/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-812-CD

N.B. I.H. 94 OVER RAMSEY AVE.

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

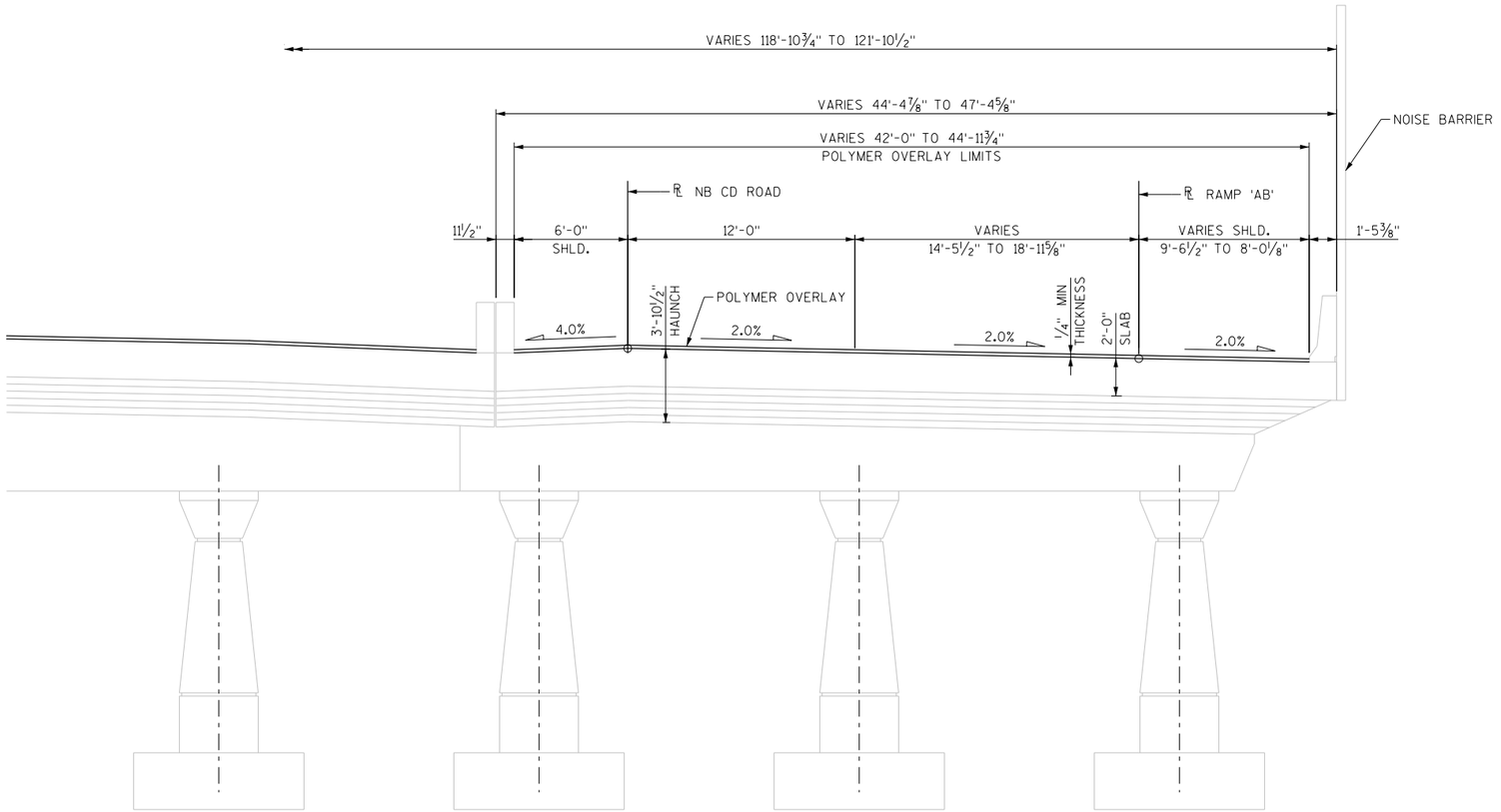
GENERAL PLAN

SHEET 1 OF 2



WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
3/21/2019

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




TYPICAL SECTION THRU NB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-812-CD

DRAWN BY SWS | PLANS CK'D. VJD

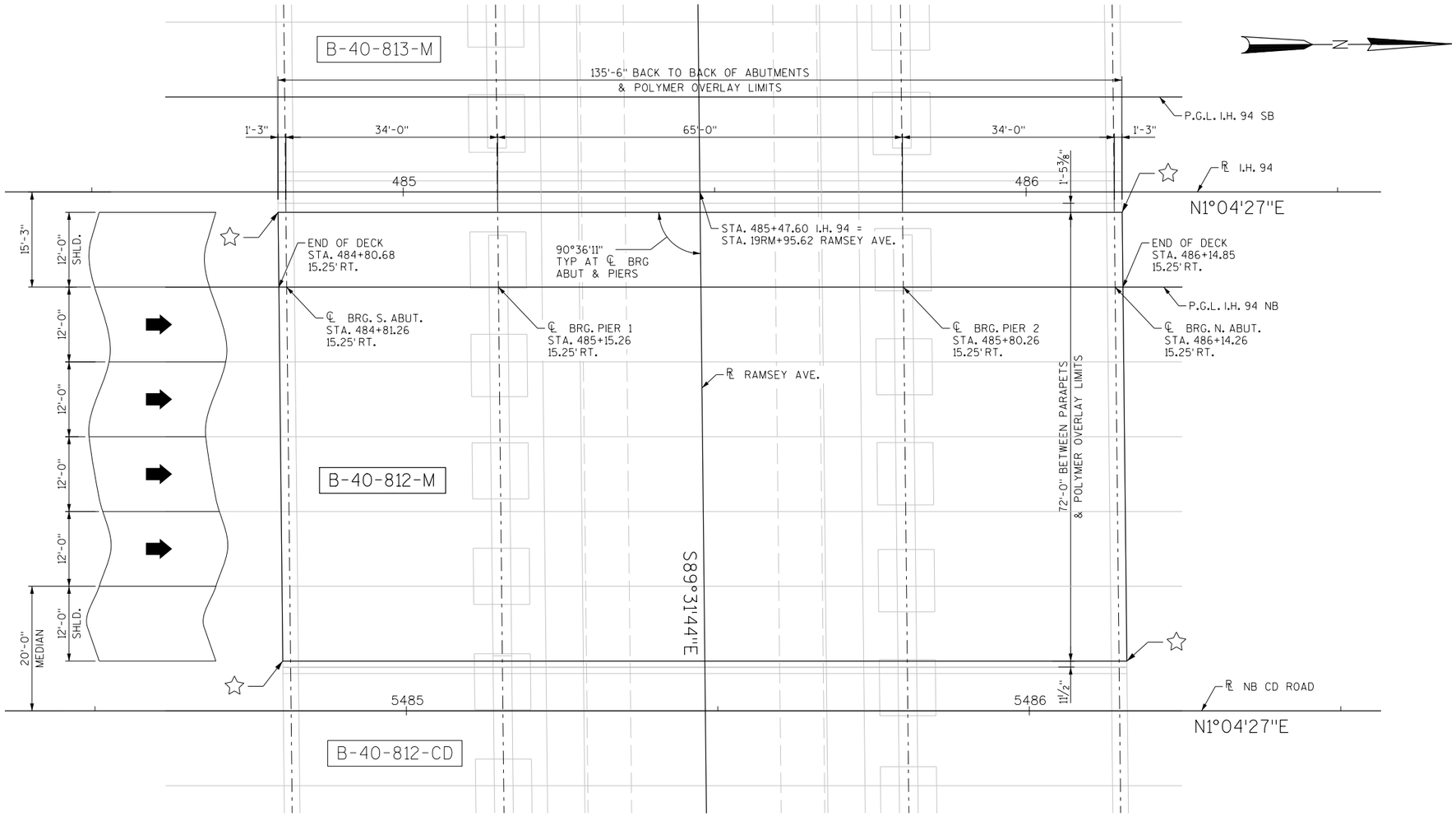
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-812CD\080102_ts.dgn
PLOT DATE : 3/21/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.01
OPERATING RATING FACTOR: 1.31
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMSEY AVE. | I.H. 94 |
|---|---|
| A.D.T. = 1,900 (2014) | A.D.T. = 67,000 (2014) |
| A.D.T. = 3,620 (2035) | A.D.T. = 180,200 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS


1. GENERAL PLAN
2. TYPICAL SECTION


## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 22 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 11 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 80 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,084 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2010

WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
1/31/2019

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh | Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/18/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-812-M

N.B. I.H. 94 OVER RAMSEY AVE.

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

GENERAL PLAN

SHEET 1 OF 2

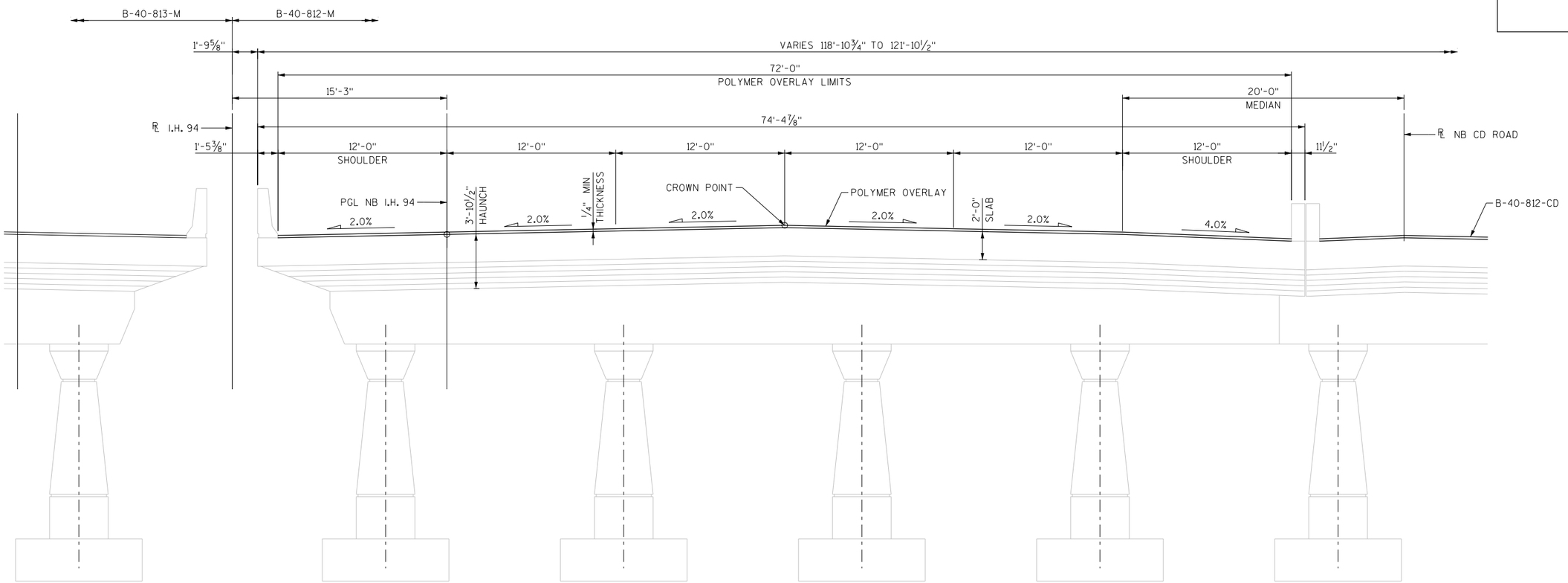


8

8

STATE PROJECT NUMBER

1030-37-70




TYPICAL SECTION THRU NB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-812-M

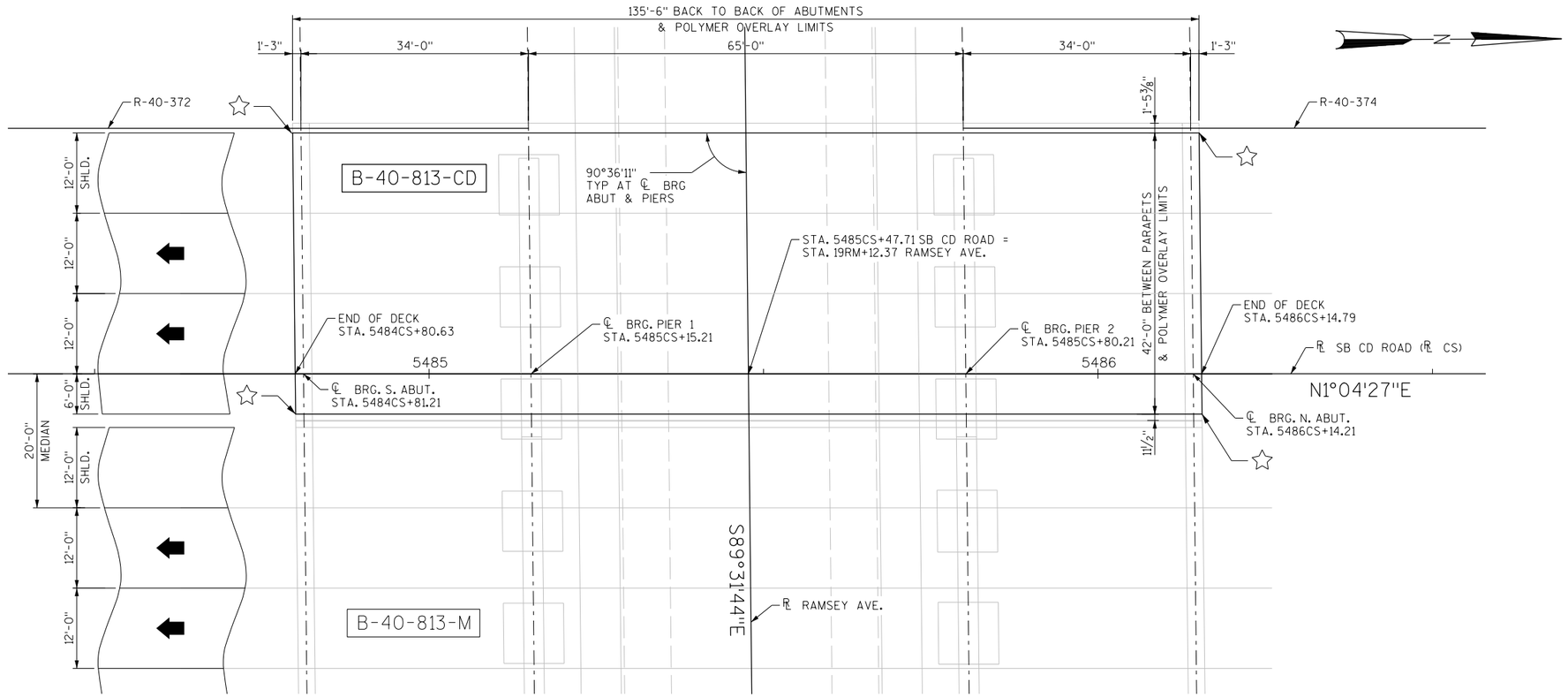
DRAWN BY SWS | PLANS CK'D. VJD

TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-812\080102_ts.dgn
PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.




PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 13 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 7 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 45 |
| 509.5100.S | POLYMER OVERLAY | SY | 633 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2025

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.01
OPERATING RATING FACTOR: 1.31
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMSEY AVE. | I.H. 94 |
|---|---|
| A.D.T. = 1,900 (2008) | A.D.T. = 75,500 (2017) |
| A.D.T. = 3,620 (2035) | A.D.T. = 180,200 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

STATE PROJECT NUMBER

1030-37-70

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/21/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-813-CD

S.B. I.H. 94 OVER RAMSEY AVE.

| COUNTY | TOWN/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

GENERAL PLAN

SHEET 1 OF 2

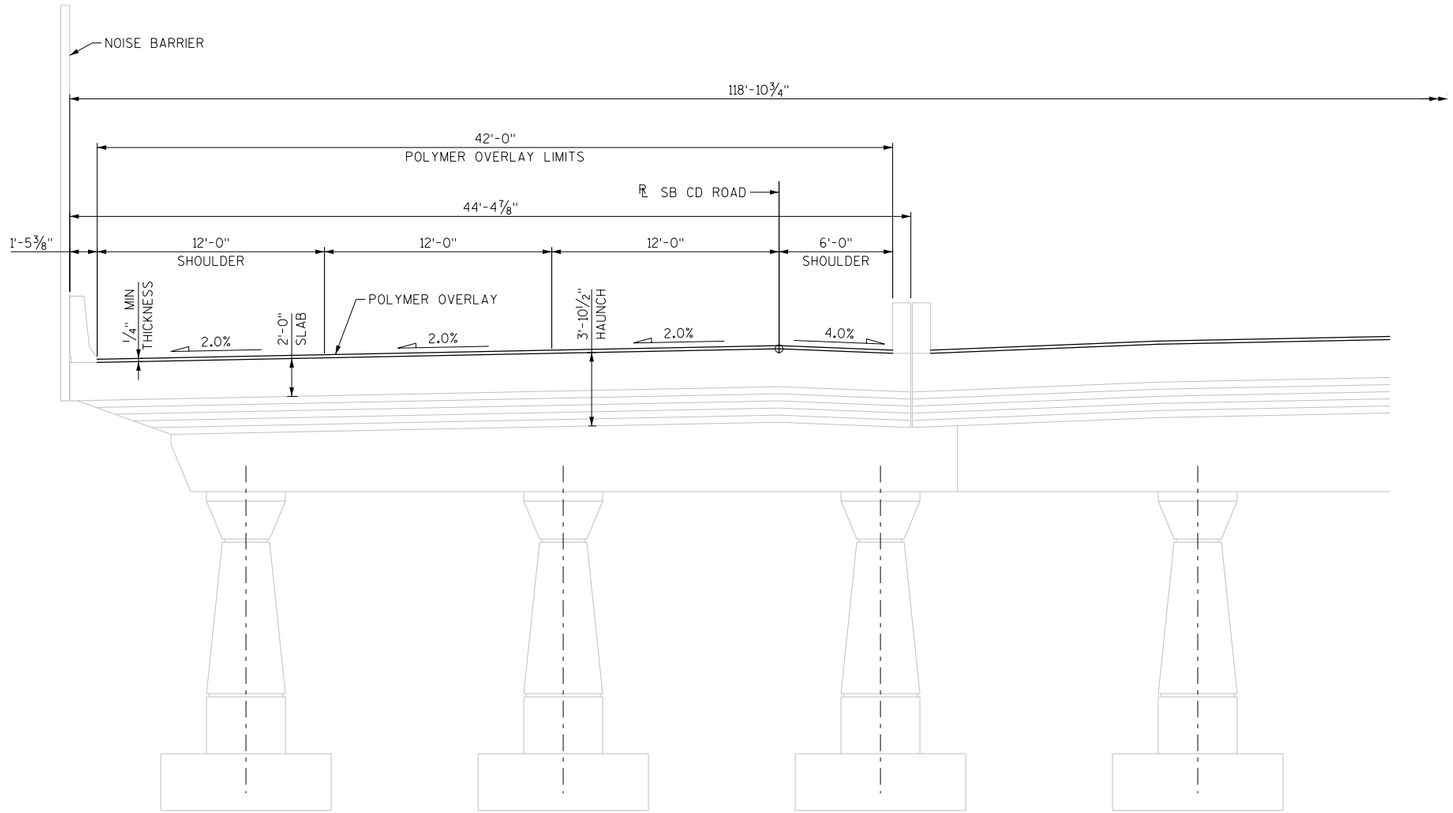
168

WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
3/21/2019

8

8

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




TYPICAL SECTION THRU SB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-813-CD

DRAWN BY SWS | PLANS CK'D. VJD

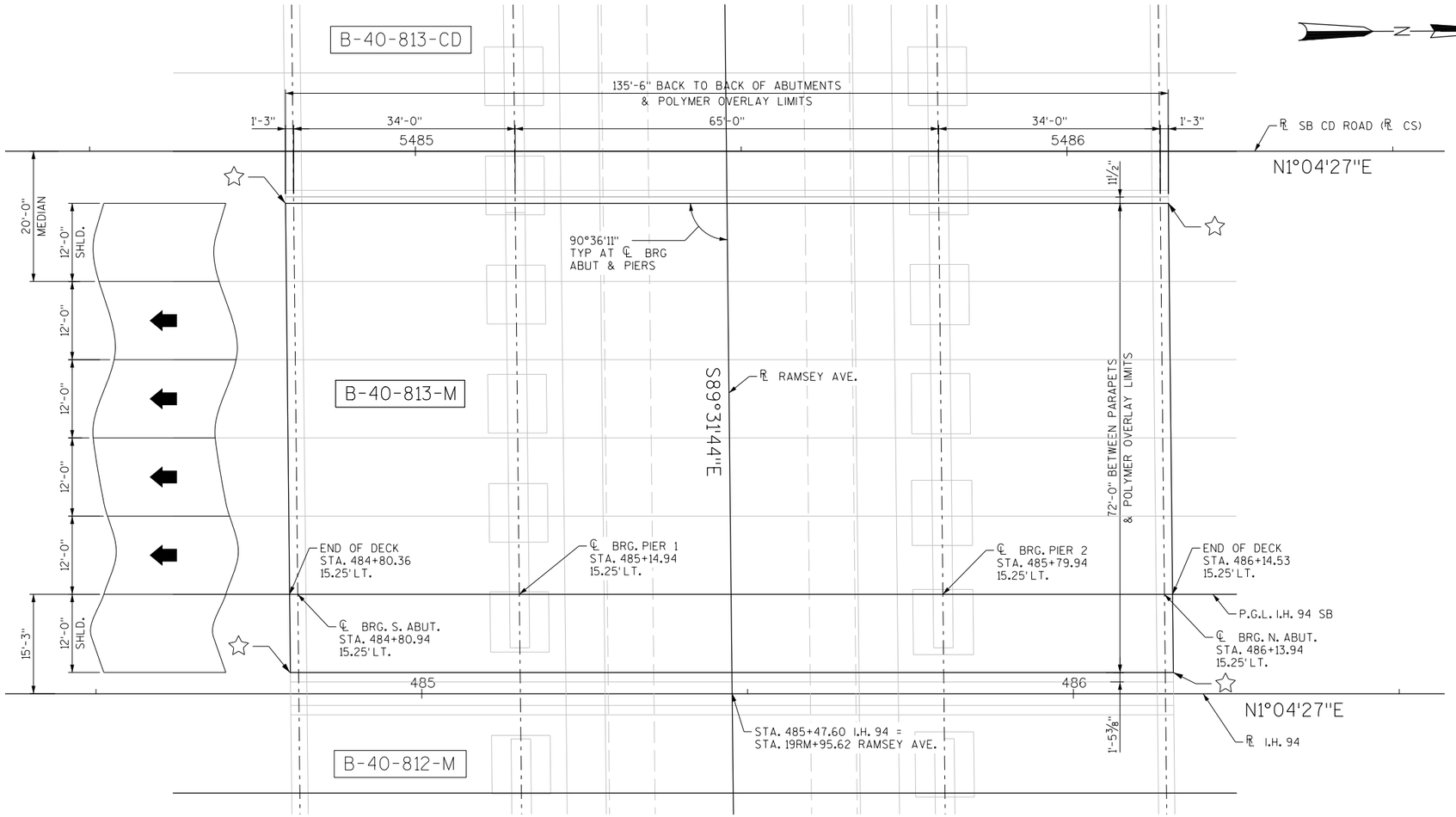
TYPICAL SECTION

SHEET 2 OF 2



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PLOT DATE : 3/21/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.01
OPERATING RATING FACTOR: 1.31
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMSEY AVE. | I.H. 94 |
|---|---|
| A.D.T. = 1,900 (2008) | A.D.T. = 75,500 (2017) |
| A.D.T. = 3,620 (2035) | A.D.T. = 180,200 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

- (X) INDICATES WINGWALL NUMBER
- * MEASURED TANGENT TO ℄ AT INTERSECTION POINT
- ☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 22 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 11 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 80 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,084 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2020

WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
1/31/2019

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/18/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-813-M

S.B. I.H. 94 OVER RAMSEY AVE.

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

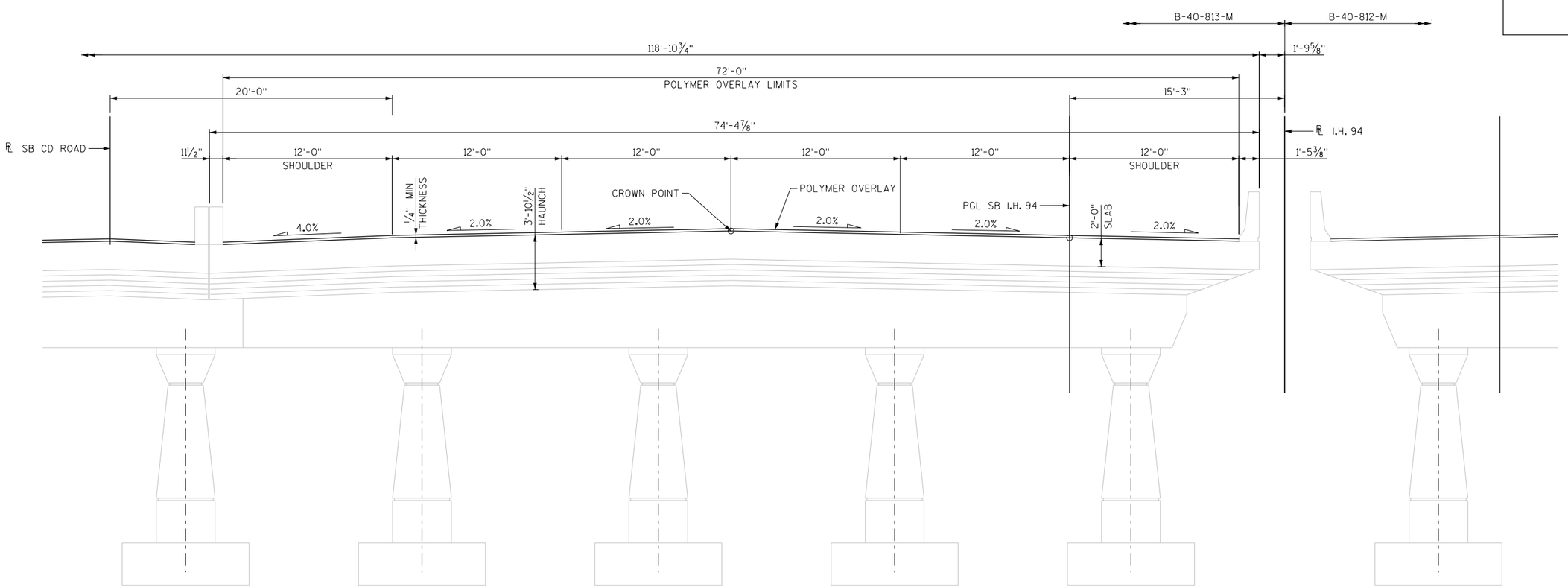
| DESIGNED BY | DESIGN CK'D. | DRAWN BY | SWS | PLANS CK'D. | VJD |
|---|---|---|---|---|---|

GENERAL PLAN

SHEET 1 OF 2

STATE PROJECT NUMBER

1030-37-70




TYPICAL SECTION THRU SB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-813-M

DRAWN BY SWS | PLANS CK'D. VJD

TYPICAL SECTION

SHEET 2 OF 2



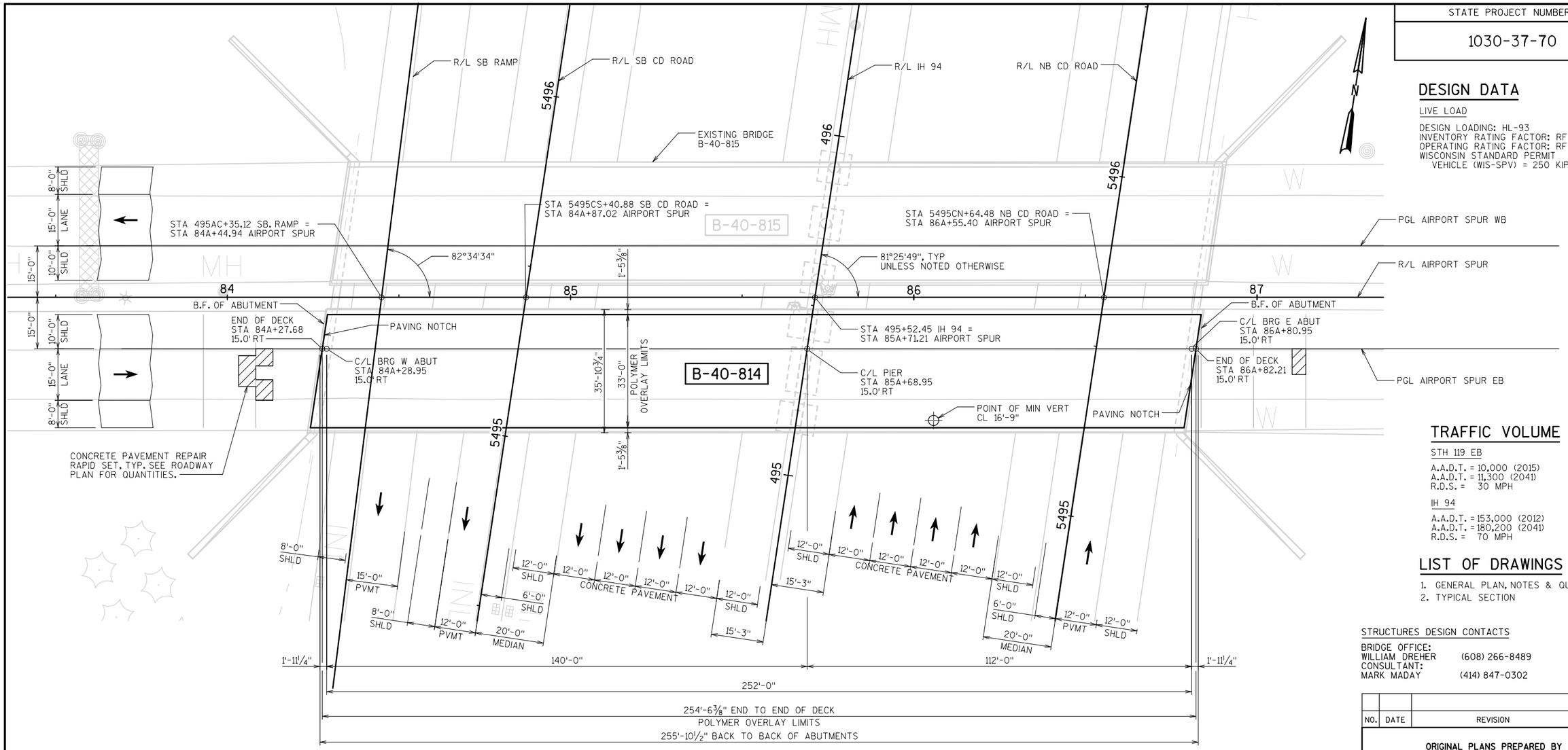
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PLOT DATE : 1/17/2019

PLOT BY : sschmitt

PLOT NAME : $FILE$

PLOT SCALE : 8.00 ' / in.




## PLAN

POLYMER OVERLAY FOR 2-SPAN
54W" PRESTRESSED GIRDERS

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

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PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 19 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 9 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 75 |
| 509.5100.S | POLYMER OVERLAY | SY | 934 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |

ALL ITEMS ARE CATEGORY 2030

WISCONSIN
STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

STATE PROJECT NUMBER
1030-37-70

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 0.99
OPERATING RATING FACTOR: RF = 1.52
WISCONSIN STANDARD PERMIT
VEHICLE (WIS-SPV) = 250 KIPS

## TRAFFIC VOLUME

STH 119 EB

A.A.D.T. = 10,000 (2015)
A.A.D.T. = 11,300 (2041)
R.D.S. = 30 MPH

IH 94

A.A.D.T. = 153,000 (2012)
A.A.D.T. = 180,200 (2041)
R.D.S. = 70 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-814

S.T.H. 119 / AIRPORT SPUR EB OVER I.H. 94

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

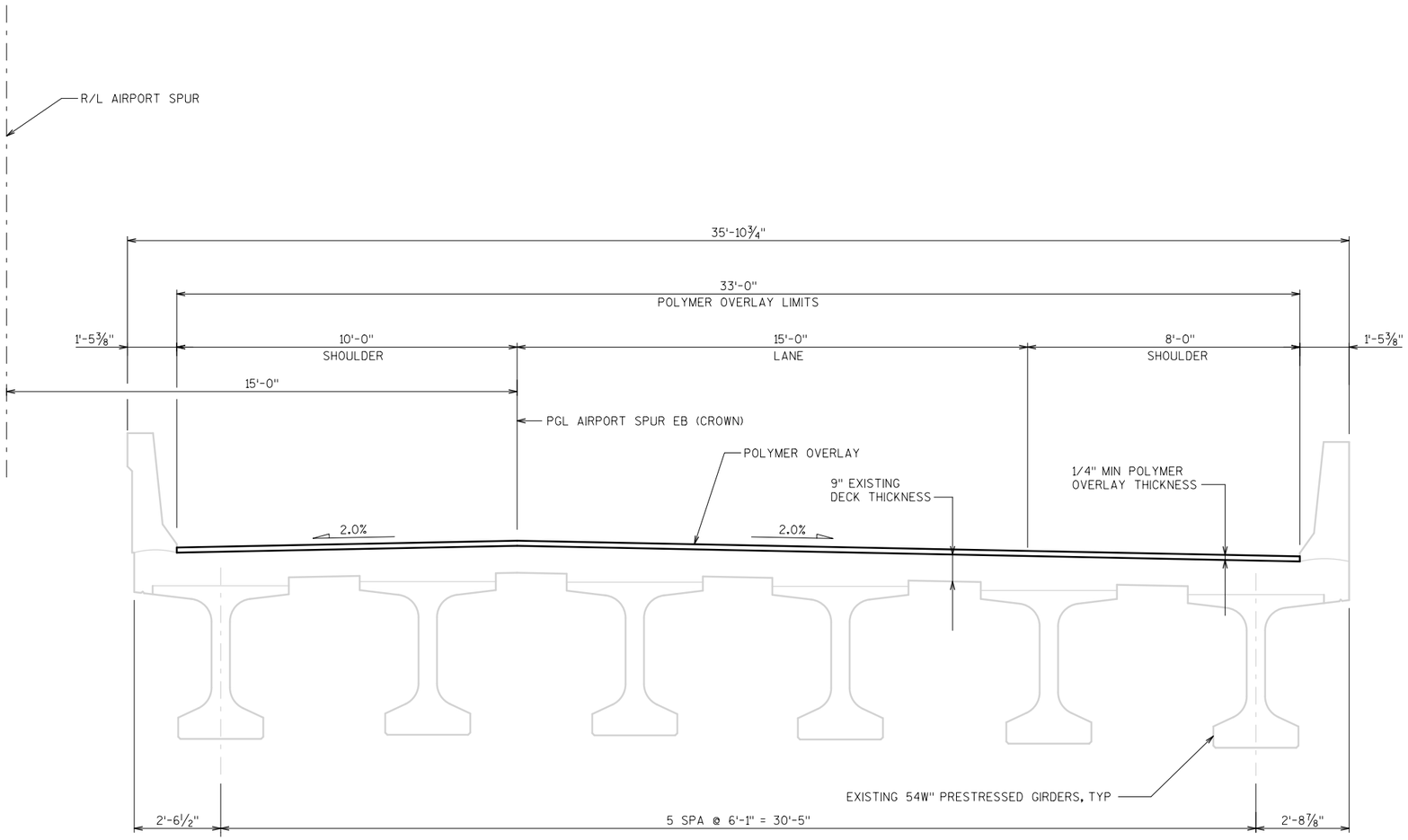
DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU STH 119 EB

54W" PRESTRESSED CONCRETE GIRDERS
(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-814

| | DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- | --- |

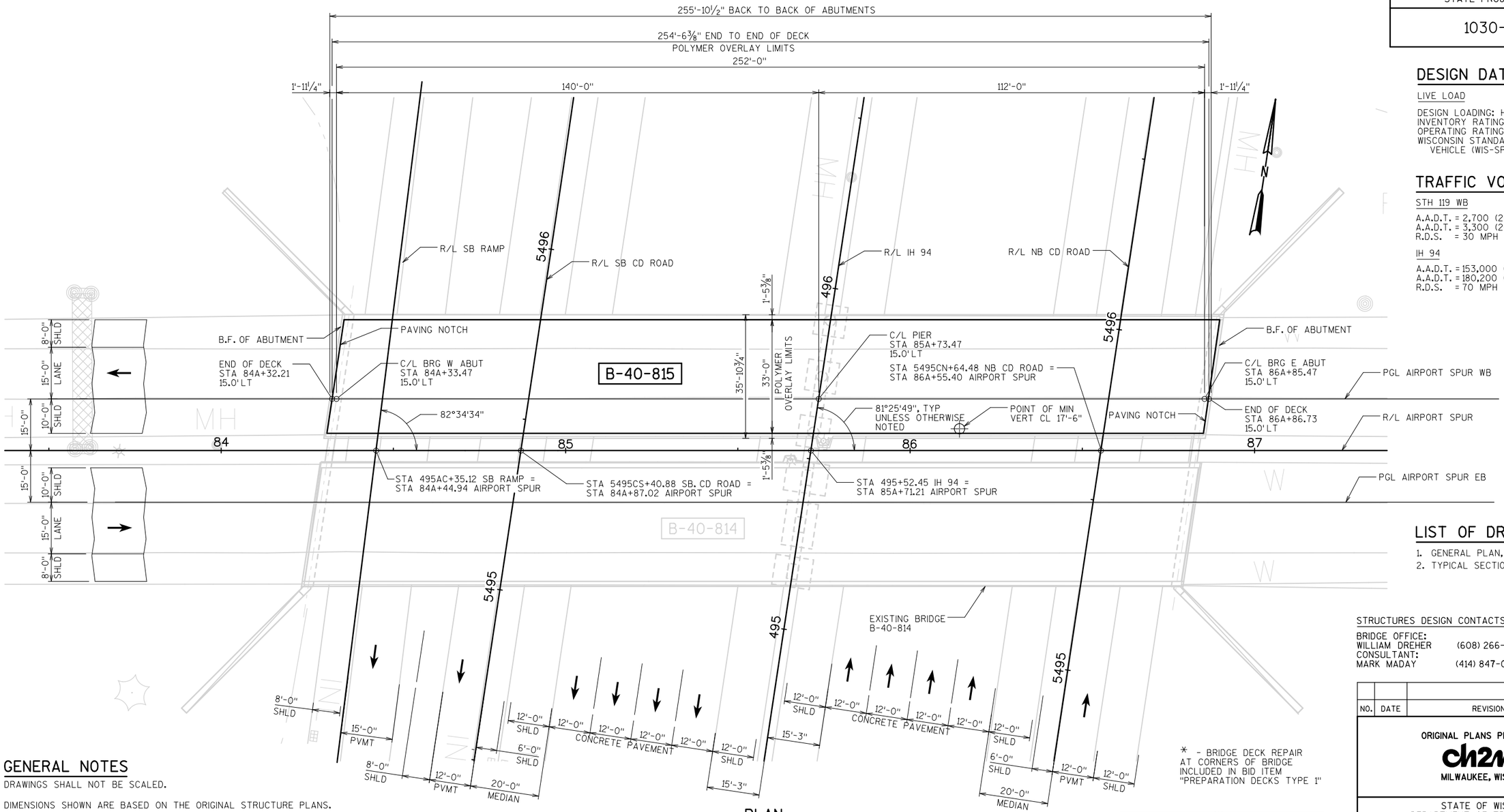
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B814_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B814_080102_Sht_02 PLOT SCALE : 4:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 2-SPAN
54W" PRESTRESSED GIRDERS

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 0.99
OPERATING RATING FACTOR: RF = 1.52
WISCONSIN STANDARD PERMIT
VEHICLE (WIS-SPV) = 250 KIPS

## TRAFFIC VOLUME

STH 119 WB

A.A.D.T. = 2,700 (2015)
A.A.D.T. = 3,300 (2041)
R.D.S. = 30 MPH

IH 94

A.A.D.T. = 153,000 (2012)
A.A.D.T. = 180,200 (2041)
R.D.S. = 70 MPH

## LIST OF DRAWINGS


1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION


## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

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PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 19 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 9 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 75 |
| 509.5100.S | POLYMER OVERLAY | SY | 934 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |

ALL ITEMS ARE CATEGORY 2040

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-815

S.T.H. 119 / AIRPORT SPUR WB OVER I.H. 94

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

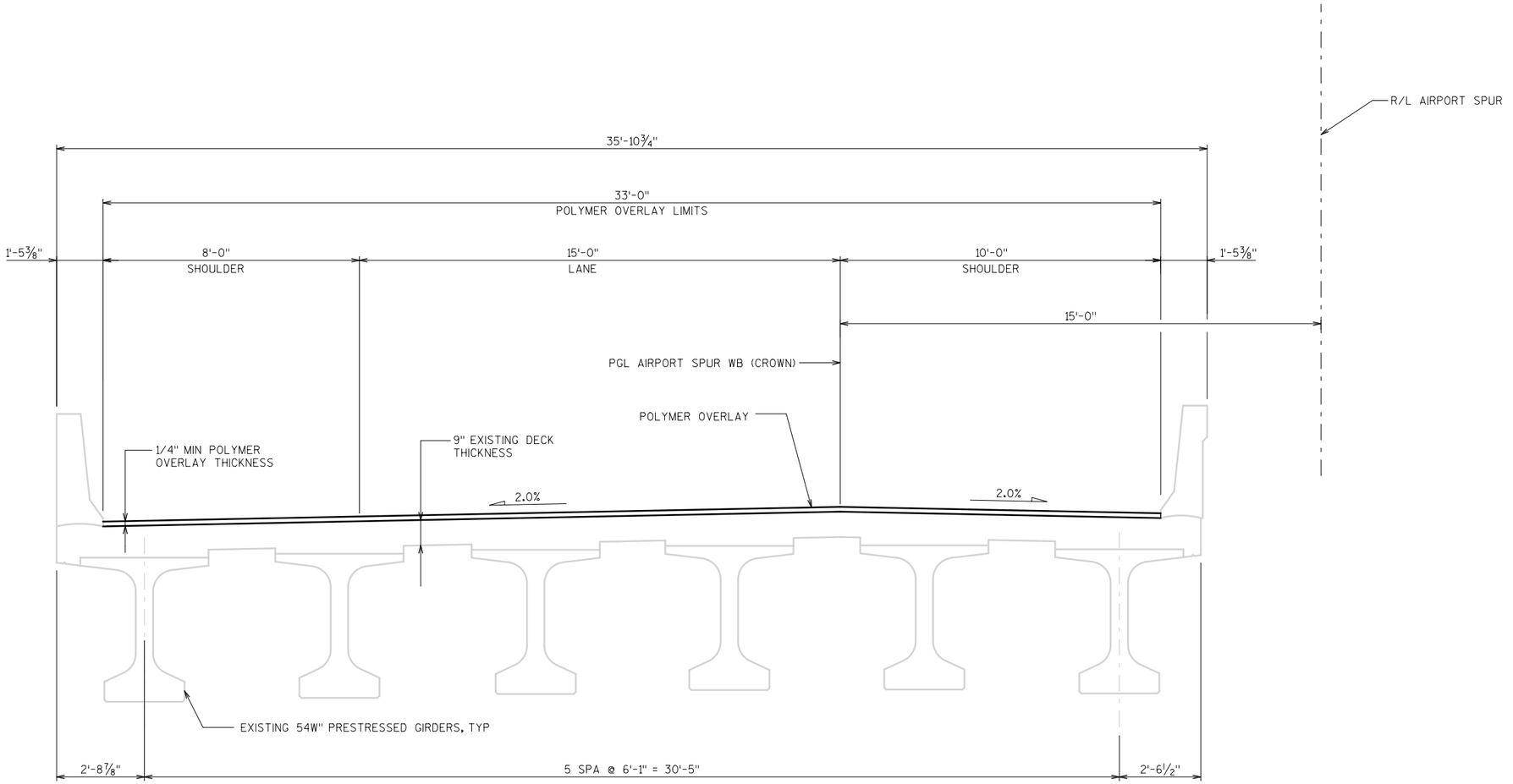
GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2



STEVEN G. MILLER E-29710 MILWAUKEE, WI 2/1/2019 PROFESSIONAL ENGINEER WISCONSIN

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU STH 119 WB

54W" PRESTRESSED CONCRETE GIRDERS
(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-815

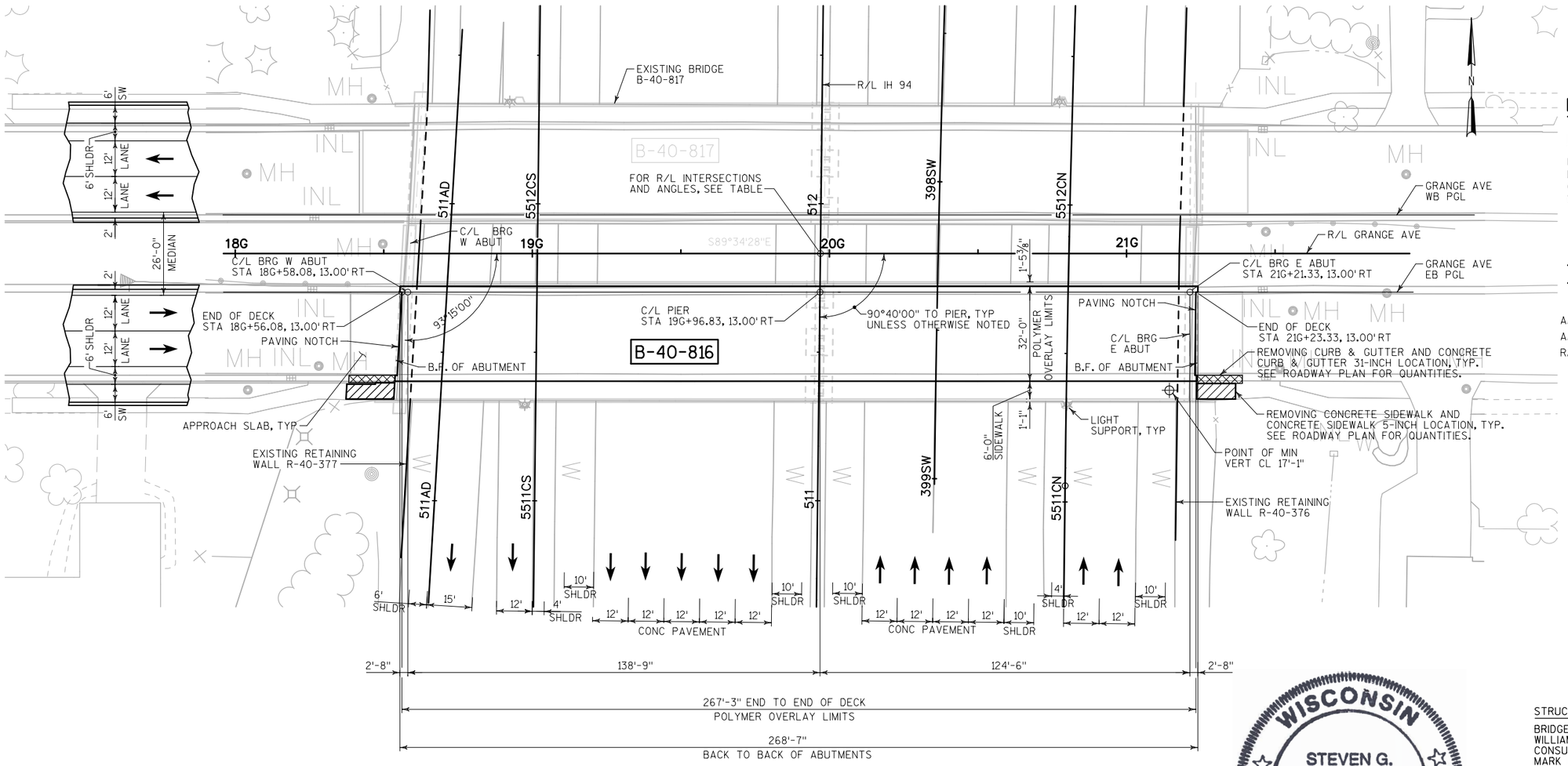
| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B815_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B815_080102_Sht_02 PLOT SCALE : 4:1




## PLAN

POLYMER OVERLAY FOR 2-SPAN
STEEL PLATE GIRDER, 45" WEB

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 19 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 10 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 75 |
| 509.5100.S | POLYMER OVERLAY | SY | 953 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |

ALL ITEMS ARE CATEGORY 2050

## R/L INTERSECTION TABLE

| R/L G STA | INTERSECTING R/L | STATION | DEFLECTION ANGLE |
|---|---|---|---|
| 18G+71.39 | AD | 511AD+82.83 | 86°43'09" LT |
| 19G+01.72 | CS | 5511CS+83.27 | 89°21'05" LT |
| 19G+96.98 | IH 94 | 511+83.23 | 89°21'05" LT |
| 20G+36.61 | SW | 398SW+14.59 | 91°12'18" RT |
| 20G+80.62 | CN | 5511CN+83.66 | 88°47'18" LT |
| 18G+62.05 | W RET WALLS | 511+82.30 | 86°29'21" LT |
| 21G+18.00 | E RET WALLS | 511+92.12 | 88°46'57" LT |

STATE PROJECT NUMBER
1030-37-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.05
OPERATING RATING FACTOR: RF = 1.36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| GRANGE AVE | IH 94 |
|---|---|
| A.A.D.T. = 6,600 (2014) | A.A.D.T. = 153,400 (2014) |
| A.A.D.T. = 7,500 (2041) | A.A.D.T. = 174,100 (2041) |
| R.D.S. = 30 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STEVEN G. MILLER
E-26710
MILWAUKEE, WI
2/1/2019
WISCONSIN PROFESSIONAL ENGINEER

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-816

GRANGE AVE. EB OVER I.H. 94

COUNTY MILWAUKEE
~~TOWN~~/CITY/~~VILLAGE~~ MILWAUKEE

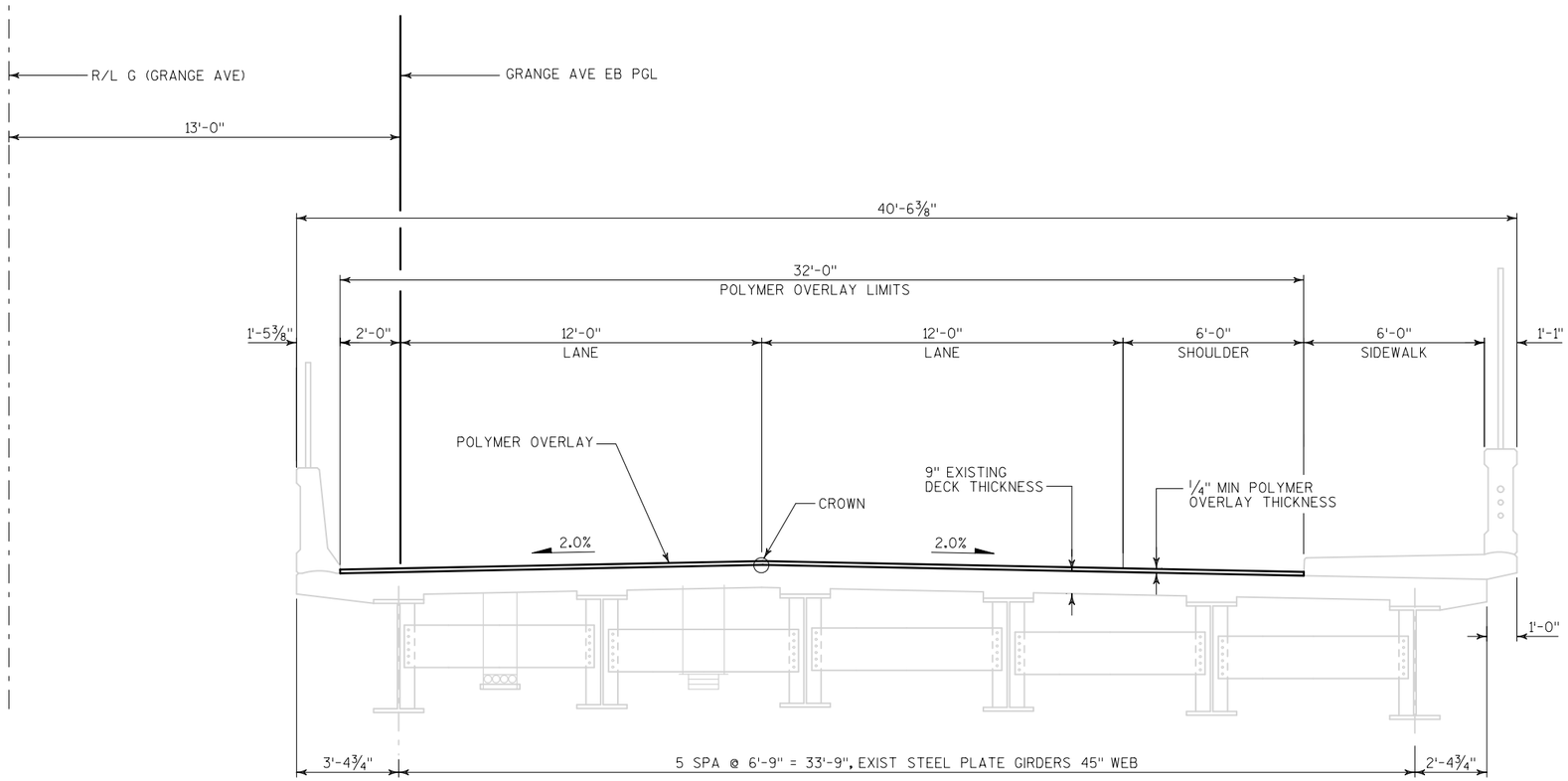
DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU GRANGE AVE EB

(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-816

| | DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- | --- |

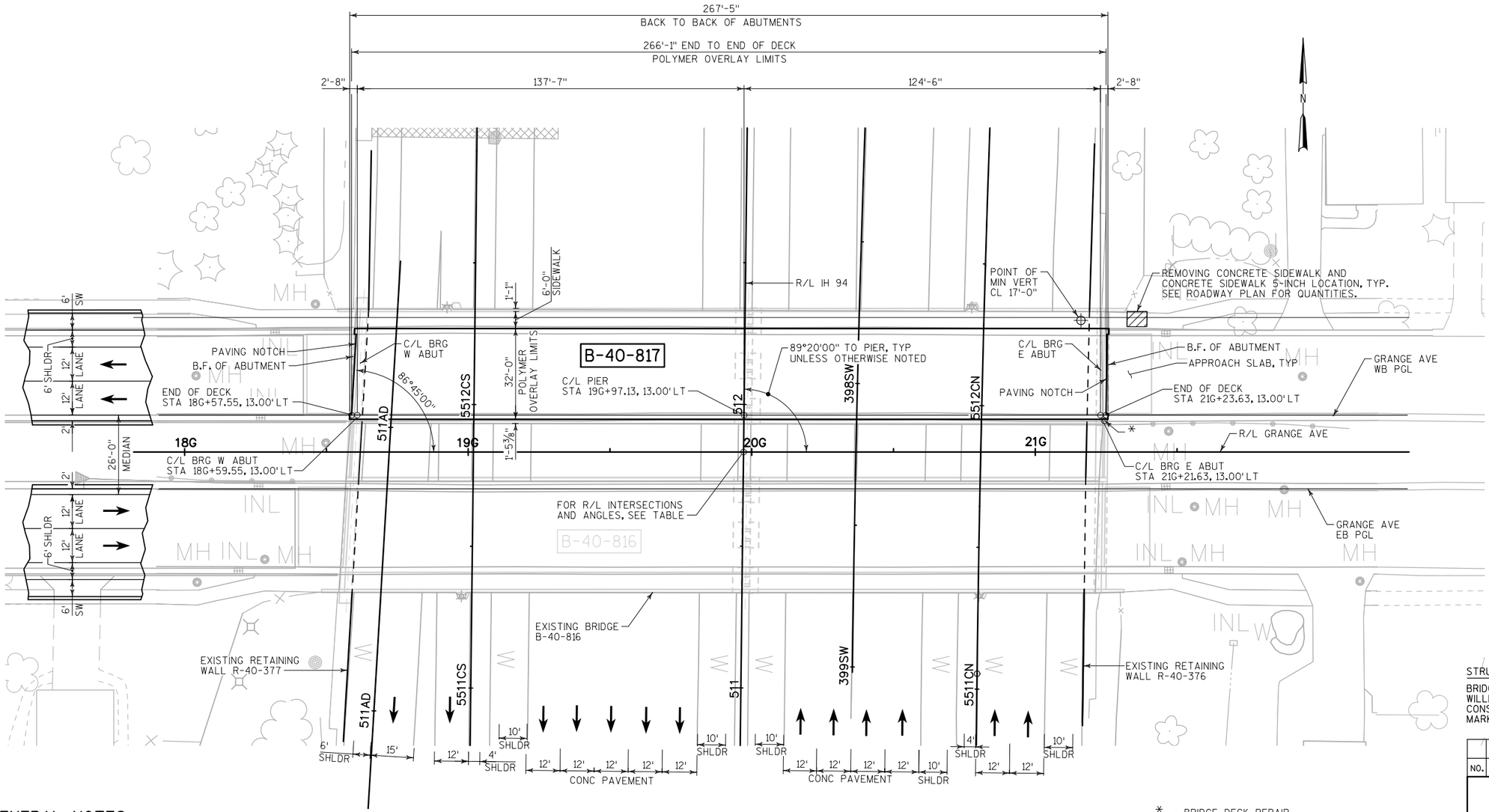
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40816_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40816_Sht_02 PLOT SCALE : 10:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 2-SPAN
STEEL PLATE GIRDER, 45" WEB

* - BRIDGE DECK REPAIR
AT CORNERS OF BRIDGE
INCLUDED IN BID ITEM
"PREPARATION DECKS TYPE 1"

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.09
OPERATING RATING FACTOR: RF = 1.42
WISCONSIN STANDARD PERMIT VEHICLE
(WIS-SPV): 250 KIPS

## TRAFFIC DATA

| GRANGE AVE | IH 94 |
|---|---|
| A.A.D.T. = 6,600 (2014) | A.A.D.T. = 153,400 (2014) |
| A.A.D.T. = 7,500 (2041) | A.A.D.T. = 174,100 (2041) |
| R.D.S. = 30 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER
WISCONSIN

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 19 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 10 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 75 |
| 509.5100.S | POLYMER OVERLAY | SY | 944 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |

ALL ITEMS ARE CATEGORY 2060

## R/L INTERSECTION TABLE

| R/L G STA | INTERSECTING R/L | STATION | DEFLECTION ANGLE |
|---|---|---|---|
| 18G+71.39 | AD | 511AD+82.83 | 86°43'09" LT |
| 19G+01.72 | CS | 5511CS+83.27 | 89°21'05" LT |
| 19G+96.98 | IH 94 | 511+83.23 | 89°21'05" LT |
| 20G+36.61 | SW | 398SW+14.59 | 91°12'18" RT |
| 20G+80.62 | CN | 5511CN+83.66 | 88°47'18" LT |
| 18G+62.05 | W RET WALLS | 511+82.30 | 86°29'21" LT |
| 21G+18.00 | E RET WALLS | 511+92.12 | 88°46'57" LT |

STRUCTURE B-40-817

GRANGE AVE. WB OVER I.H. 94

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

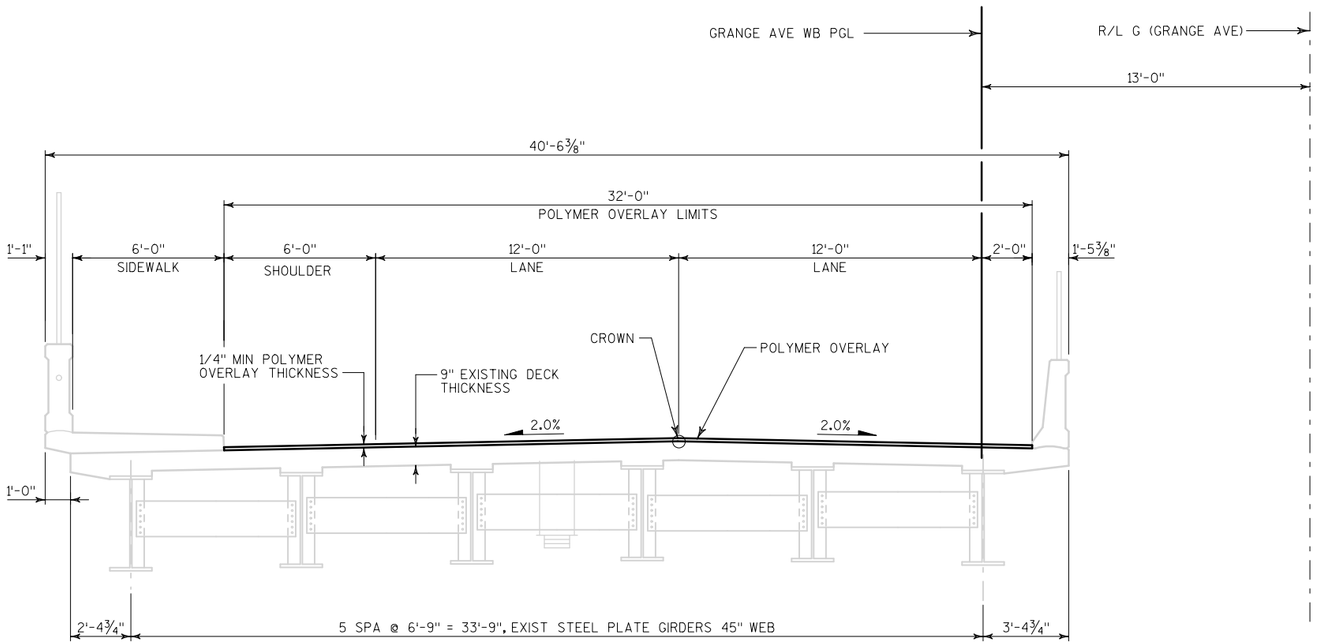
DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU GRANGE AVE WB

(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-817

| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

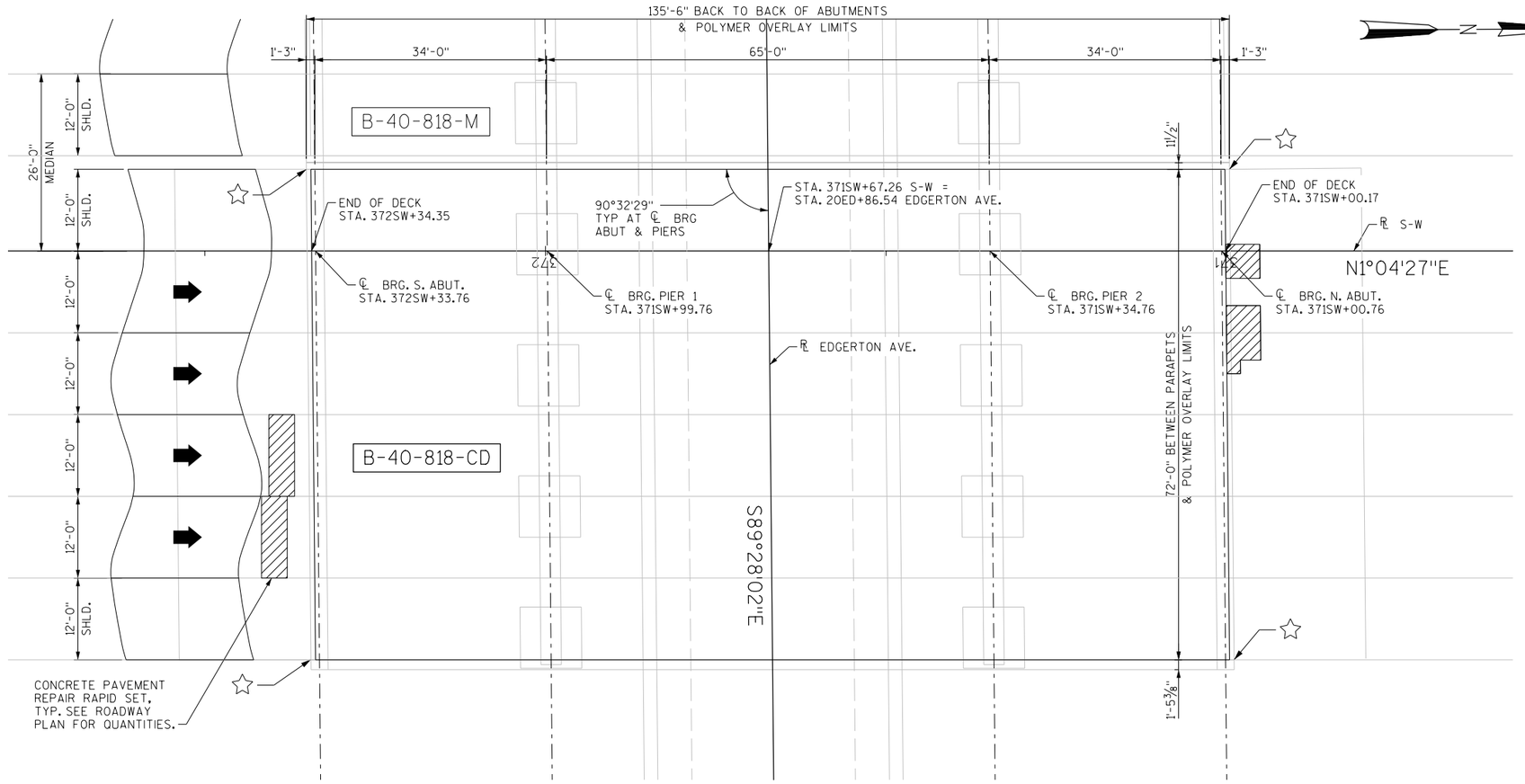
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40817_Sht_02.dgn
PLOT DATE : 19-OCT-2018
PLOT BY : emccrigh
B40817_Sht_02
PLOT SCALE : 12:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.04
OPERATING RATING FACTOR: 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| EDGERTON AVE. | I.H. 94 |
|---|---|
| A.D.T. = 3,200 (2011) | A.D.T. = 153,381 (2014) |
| A.D.T. = 3,406 (2035) | A.D.T. = 174,100 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℞ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 22 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 11 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 80 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,084 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2075

WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
3/21/2019

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/21/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-818-CD

N.B. S-W OVER EDGERTON AVE.

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

GENERAL PLAN

SHEET 1 OF 2

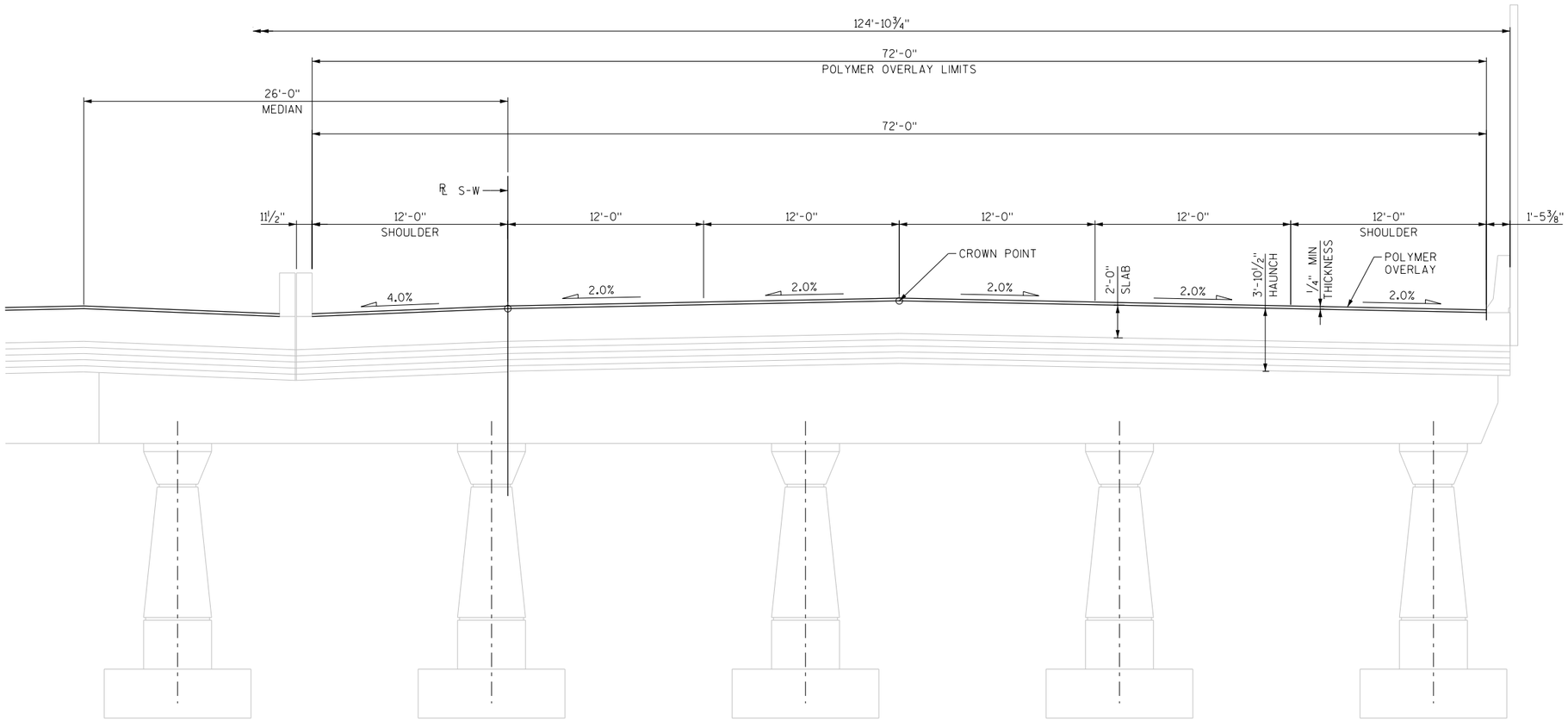


8

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PLOT DATE : 3/21/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 20.0000 sf / in.

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




TYPICAL SECTION THRU S-W

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-818-CD

| | DRAWN BY SWS | PLANS CK'D. VJD |
| --- | --- | --- |

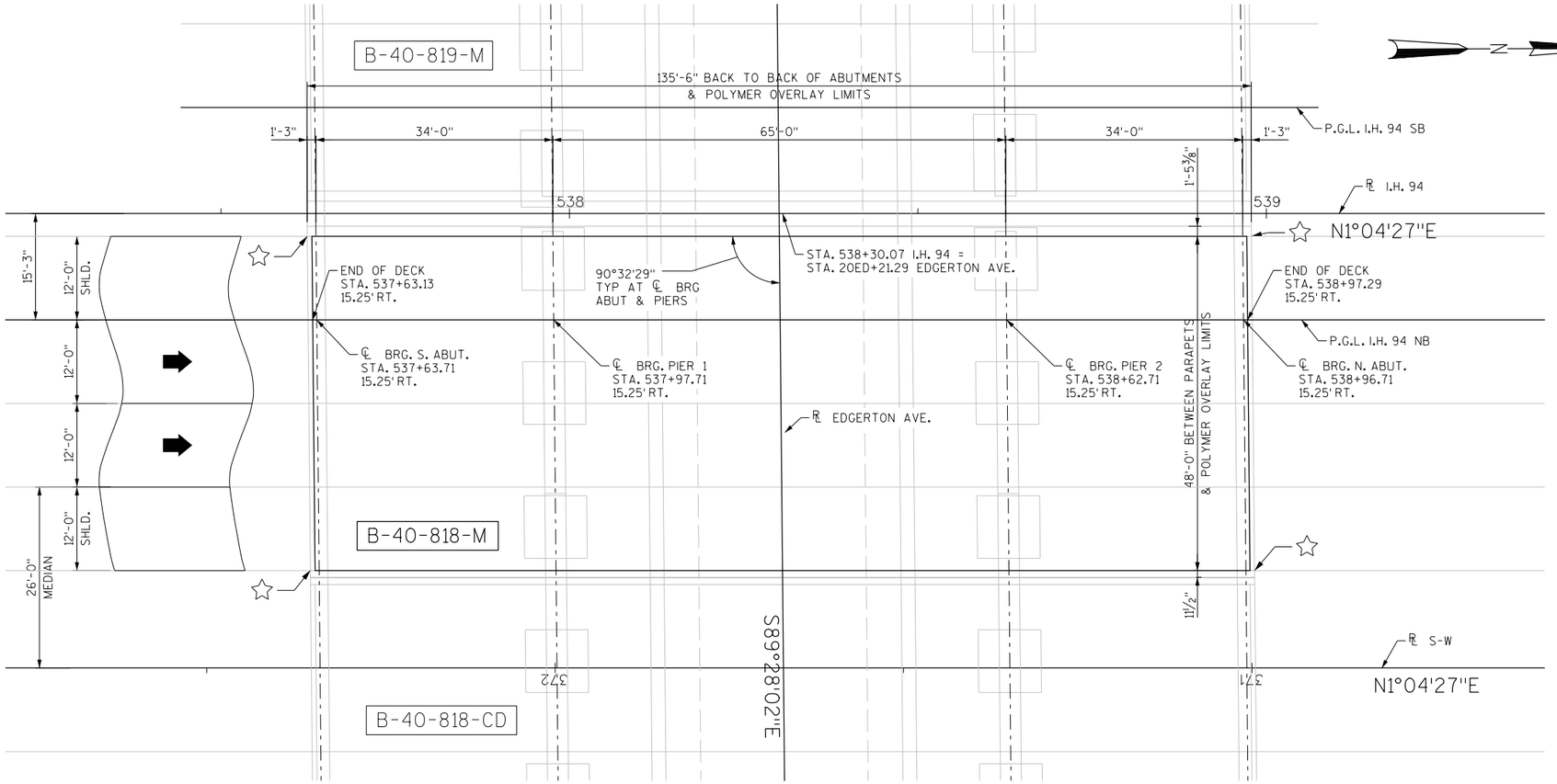
TYPICAL SECTION

SHEET 2 OF 2



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PLOT DATE : 3/21/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 15 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 8 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 50 |
| 509.5100.S | POLYMER OVERLAY | SY | 723 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2070

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.04
OPERATING RATING FACTOR: 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| EDGERTON AVE. | I.H. 94 |
|---|---|
| A.D.T. = 3,200 (2011) | A.D.T. = 153,381 (2014) |
| A.D.T. = 3,406 (2035) | A.D.T. = 174,100 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/18/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN STEVEN W. SCHMITT E-37333 FRANKLIN, WI PROFESSIONAL ENGINEER 1/31/2019

# STRUCTURE B-40-818-M

N.B. I.H. 94 OVER EDGERTON AVE.

| COUNTY | TOWN/CITY/VILLAGE |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

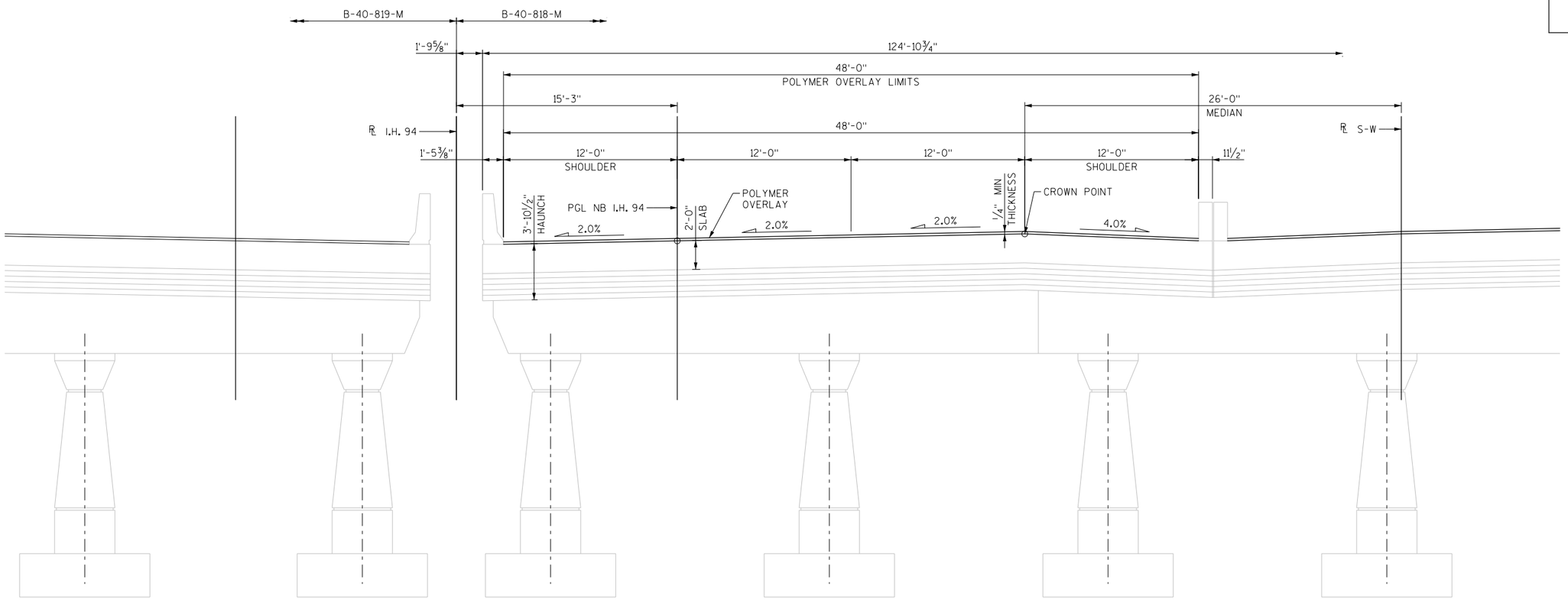
GENERAL PLAN

SHEET 1 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-818\080101_gp.dgn PLOT DATE : 1/17/2019 PLOT BY : sschmitt PLOT NAME : $FILE$ PLOT SCALE : 20.0000 sf / in.

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU NB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-818-M

DRAWN BY SWS | PLANS CK'D. VJD

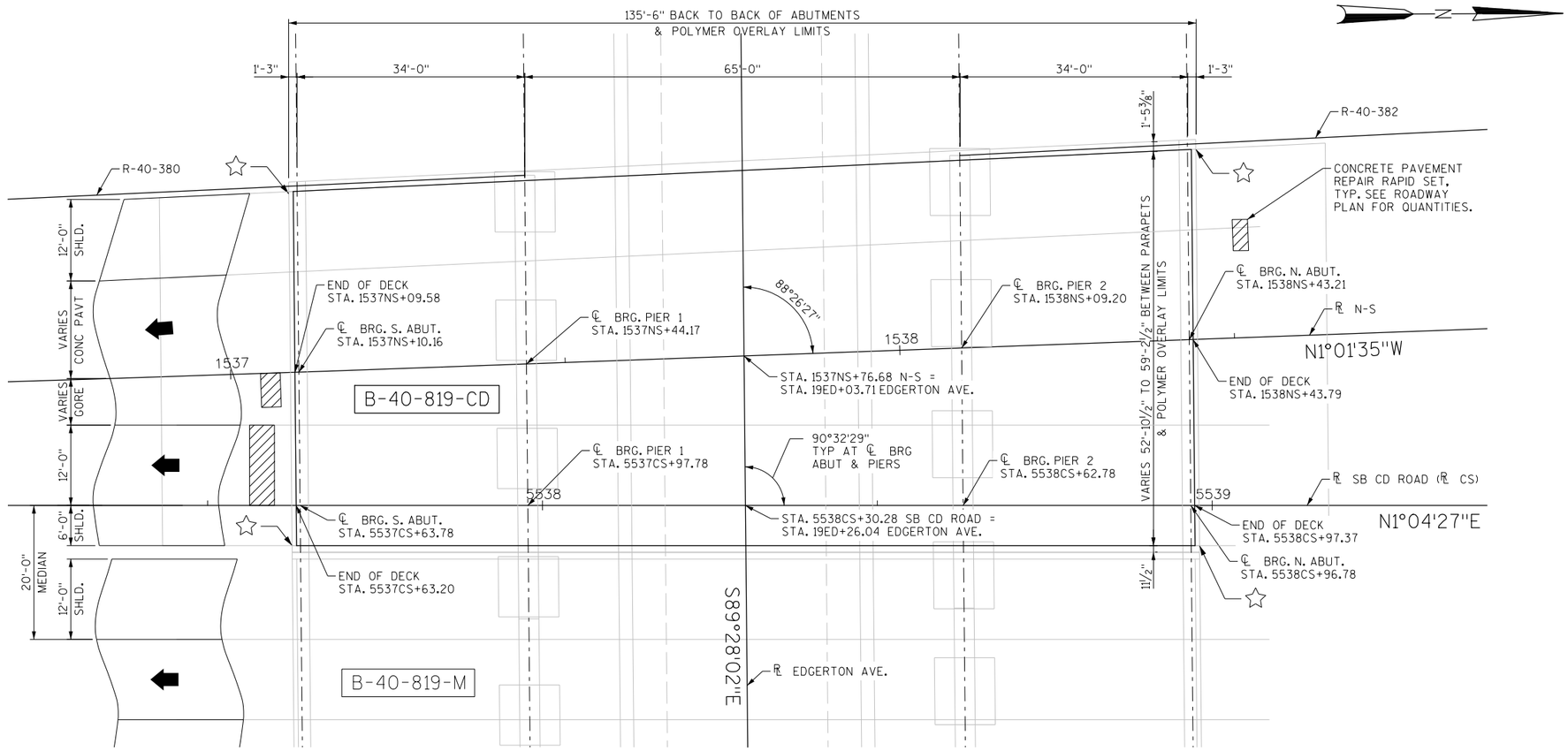
TYPICAL SECTION

SHEET 2 OF 2



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PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.02
OPERATING RATING FACTOR: 1.33
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| EDGERTON AVE. | I.H. 94 |
|---|---|
| A.D.T. = 3,200 (2011) | A.D.T. = 153,381 (2014) |
| A.D.T. = 3,406 (2035) | A.D.T. = 174,100 (2041) |
| R.D.S. = 35 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

- (X) INDICATES WINGWALL NUMBER
- * MEASURED TANGENT TO ℞ AT INTERSECTION POINT
- ☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

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AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 17 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 9 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 70 |
| 509.5100.S | POLYMER OVERLAY | SY | 844 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 3 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2085

WISCONSIN STEVEN W. SCHMITT E-37333 FRANKLIN, WI PROFESSIONAL ENGINEER 3/21/2019

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh | Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/21/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-819-CD

S.B. CD ROAD OVER EDGERTON AVE.

| COUNTY | TOWN/CITY/VILLAGE |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| | | SWS | VJD |

GENERAL PLAN

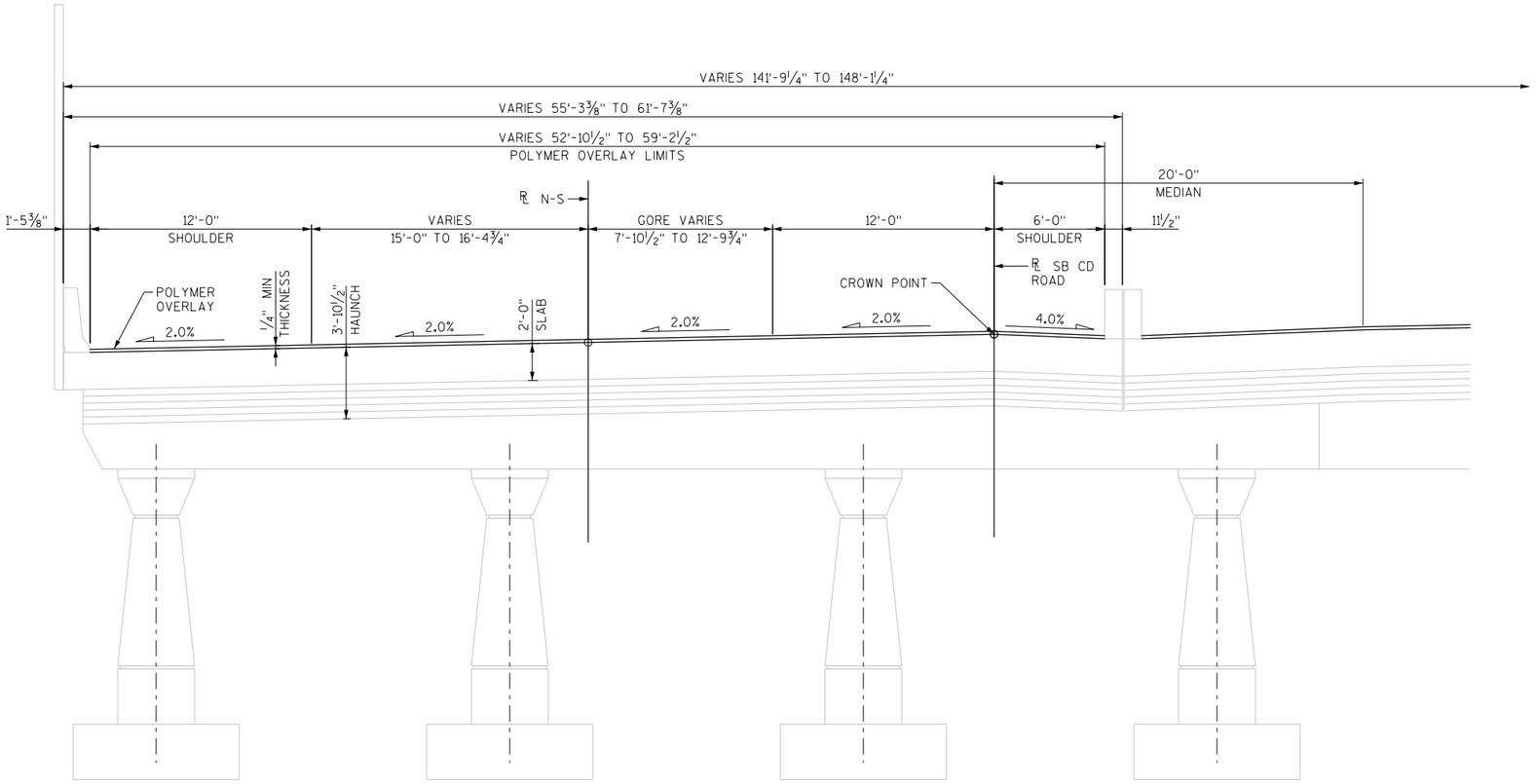
SHEET 1 OF 2



8

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| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




TYPICAL SECTION THRU SB CD ROAD

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-819-CD

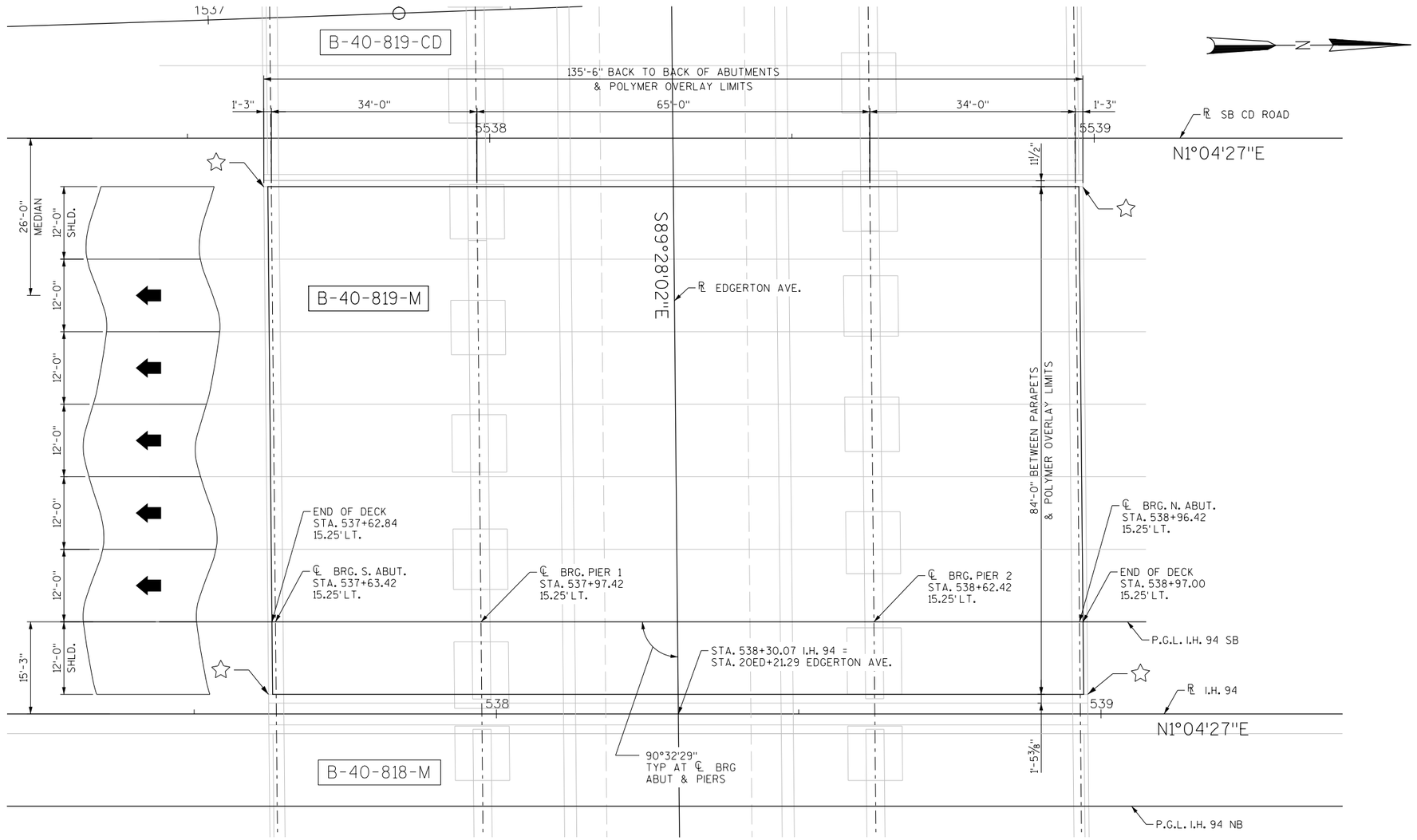
DRAWN BY SWS | PLANS CK'D. VJD

TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-819CD\080102_ts.dgn
PLOT DATE : 3/21/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 8.00 ' / in.




## PLAN

POLYMER OVERLAY FOR 3-SPAN HAUNCHED CONCRETE SLAB

## TRAFFIC DATA

EDGERTON AVE.
A.D.T. = 3,200 (2011)
A.D.T. = 3,406 (2035)
R.D.S. = 35 M.P.H.

I.H. 94
A.D.T. = 153,381 (2014)
A.D.T. = 174,100 (2041)
R.D.S. = 70 M.P.H.

## LEGEND

- (X) INDICATES WINGWALL NUMBER
- * MEASURED TANGENT TO ℄ AT INTERSECTION POINT
- ☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 26 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 13 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 90 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,265 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2080

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.01
OPERATING RATING FACTOR: 1.31
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.


STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh | Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/18/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
STEVEN W. SCHMITT
E-37333
FRANKLIN, WI
PROFESSIONAL ENGINEER
1/31/2019

STATE PROJECT NUMBER
1030-37-70

# STRUCTURE B-40-819-M

S.B. I.H. 94 OVER EDGERTON AVE.

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | SWS | PLANS CK'D. | VJD |
|---|---|---|---|---|---|

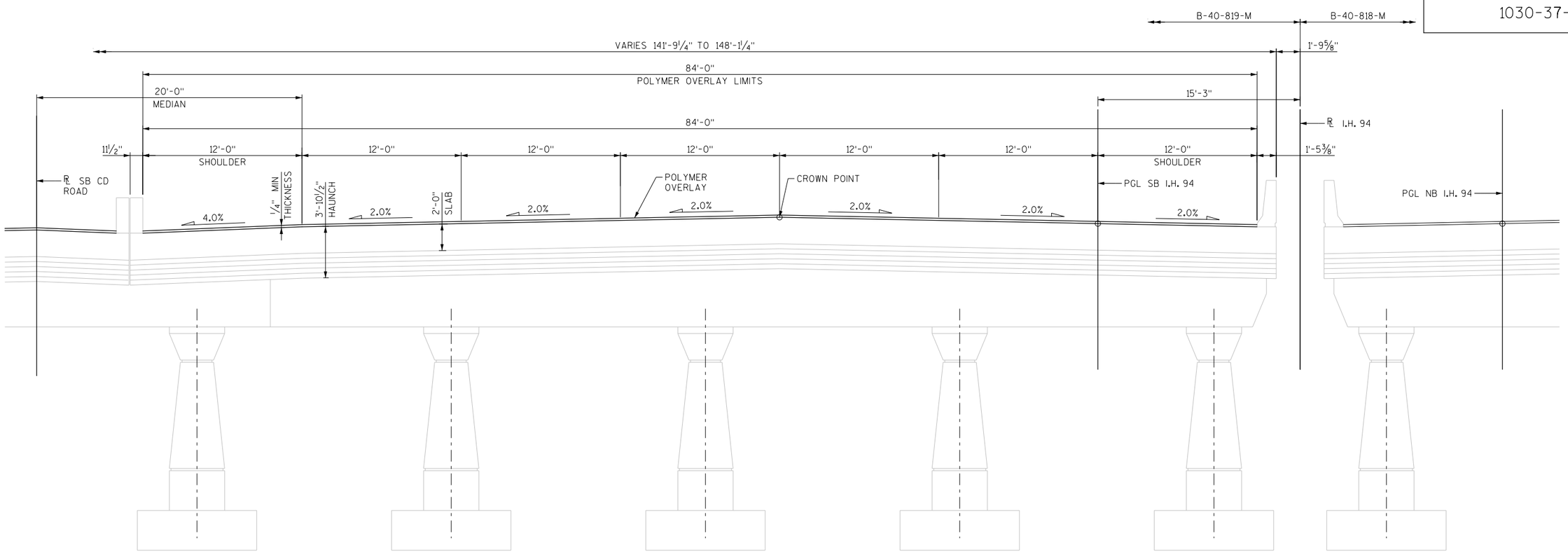
GENERAL PLAN

SHEET 1 OF 2




FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-819\080101_gp.dgn
PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 20.0000 sf / in.

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU SB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-819-M

DRAWN BY SWS | PLANS CK'D. VJD

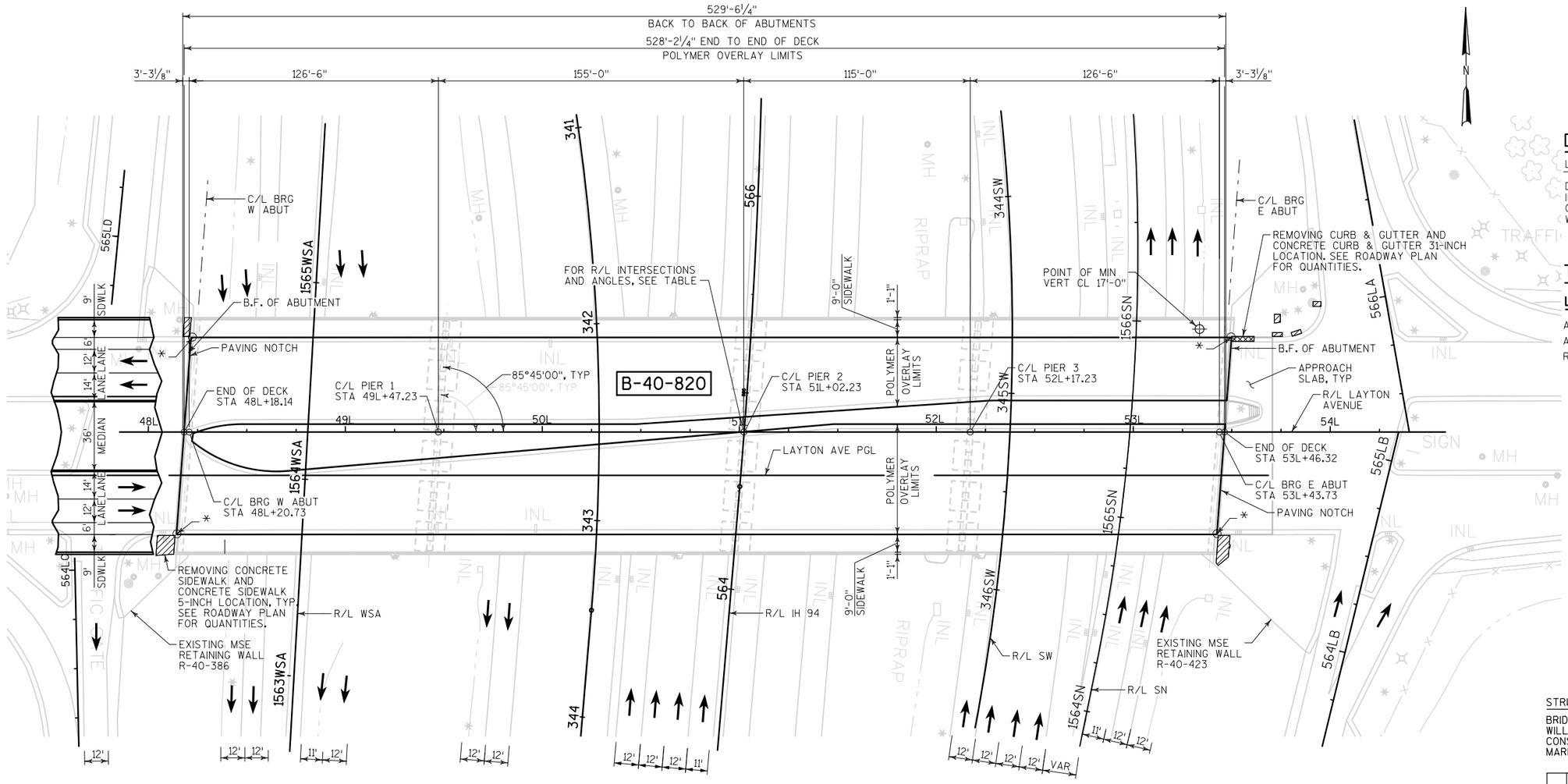
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-819\080102_ts.dgn PLOT DATE : 1/17/2019 PLOT BY : sschmitt PLOT NAME : $FILE$ PLOT SCALE : 8.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 4-SPAN
45" WEB, STEEL BOX GIRDERS

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 0.97
OPERATING RATING FACTOR: RF = 1.26
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| LAYTON AVENUE | IH 94 |
|---|---|
| A.A.D.T. = 26,700 (2008) | A.A.D.T. = 153,400 (2014) |
| A.A.D.T. = 34,400 (2041) | A.A.D.T. = 174,100 (2041) |
| R.D.S. = 40 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 102 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 51 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 325 |
| 509.5100.S | POLYMER OVERLAY | SY | 5,122 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 16 |

ALL ITEMS ARE CATEGORY 2090

## R/L INTERSECTION TABLE

| R/L LAYTON AVENUE | INTERSECTING R/L | STATION | DEFLECTION ANGLE |
|---|---|---|---|
| 48L+80.93 | NS | 1564NS+24.02 | 86°45'57.4" |
| 50L+28.85 | WS | 342WS+55.00 | 89°53'19.9" |
| 51L02.47 | IH 94 | 564+80.07 | 85°38'21.0" |
| 52L+37.41 | SW | 345SW+10.05 | 87°17'8.7" |
| 52L+98.28 | SN | 1565SN+43.55 | 85°0'46.9" |

STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER
WISCONSIN

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-820

LAYTON AVE OVER I.H. 94

| COUNTY | TOWN/CITY/VILLAGE |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY TMH | DESIGN CK'D. SGM | DRAWN BY EJB | PLANS CK'D. SGM |
|---|---|---|---|

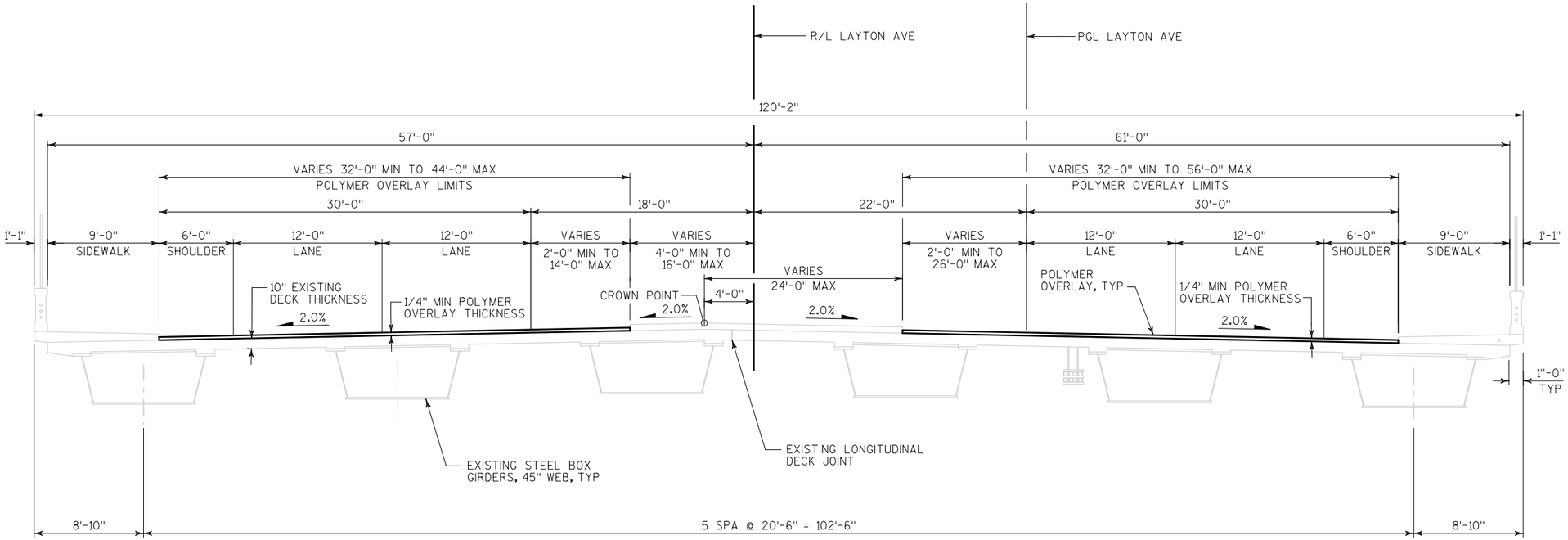
GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2



FILE NAME : B40820_080101_Sht_01.dgn PLOT DATE : 10-JAN-2019 PLOT BY : emccrigh B40820_080101_Sht_01 PLOT SCALE : 60:1

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU LAYTON AVE

(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-820

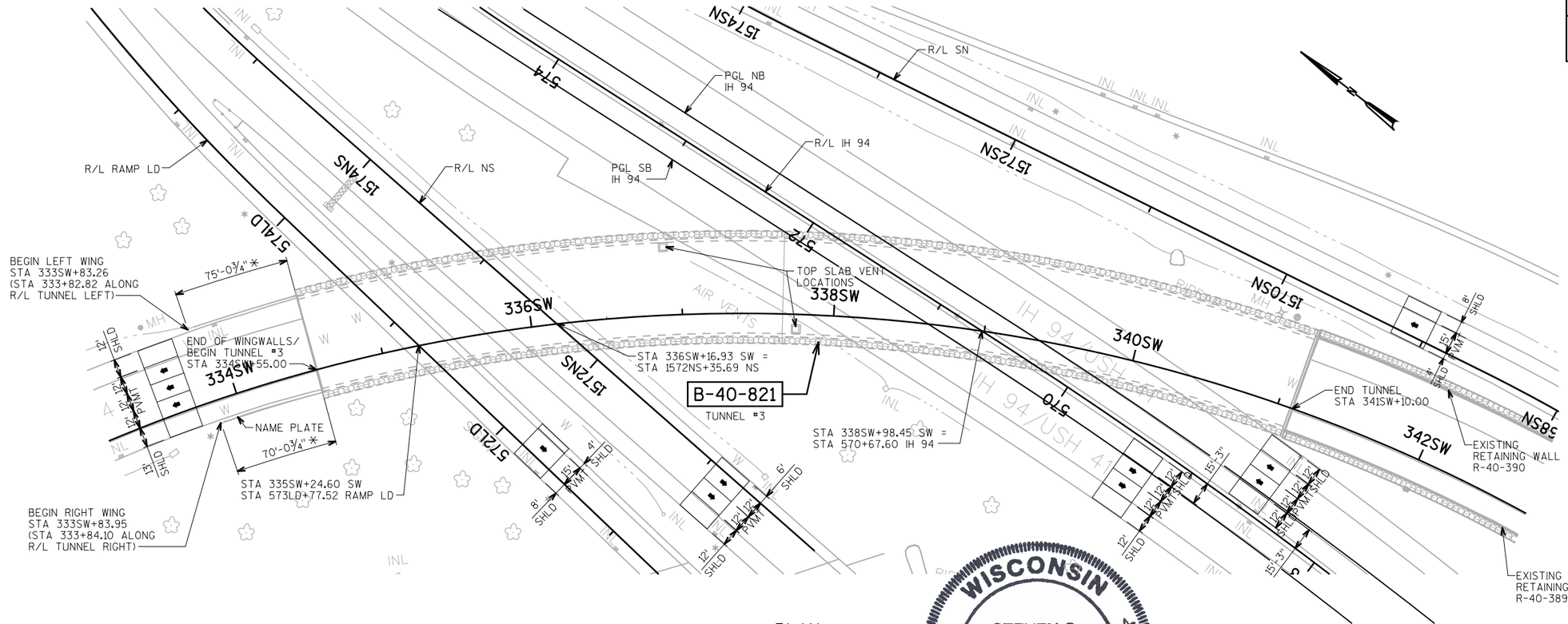
DRAWN BY EJB | PLANS CK'D. SGM

TYPICAL SECTION

SHEET 2 OF 2

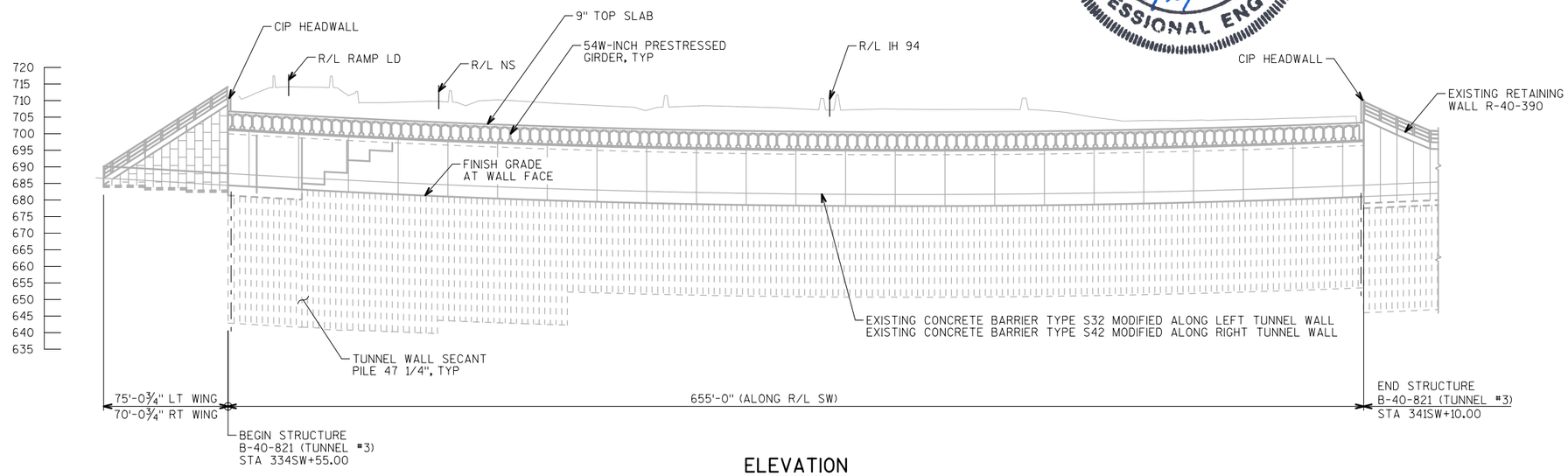


FILE NAME : B40820_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40820_080102_Sht_02 PLOT SCALE : 10:1




## PLAN

TUNNEL ENDS ARE RADIAL TO R/L SW
DIMENSIONS SHOWN ARE ALONG R/L SW




## ELEVATION

(LOOKING NORTHEAST AT LEFT TUNNEL WALL FACE)

STATE PROJECT NUMBER

1030-37-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS25
INVENTORY RATING: N/A
OPERATING RATING: N/A
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): N/A

## TRAFFIC DATA

### IH 94

A.A.D.T. = 125,000 (2014)
A.A.D.T. = 141,000 (2041)
R.D.S. = 60 MPH

### RAMP SW

A.A.D.T. = 50,900 (2014)
A.A.D.T. = 57,800 (2041)
R.D.S. = 55 MPH

### RAMP LD

A.A.D.T. = 3,500 (2015)
A.A.D.T. = 3,900 (2041)
R.D.S. = 40 MPH

### RAMP NS

A.A.D.T. = 11,200 (2015)
A.A.D.T. = 12,700 (2041)
R.D.S. = 55 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, NOTES & QUANTITIES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
11/30/2018
PROFESSIONAL ENGINEER

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER — DATE

# STRUCTURE B-40-821

IH 94 OVER RAMP SW TUNNEL NO. 3

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

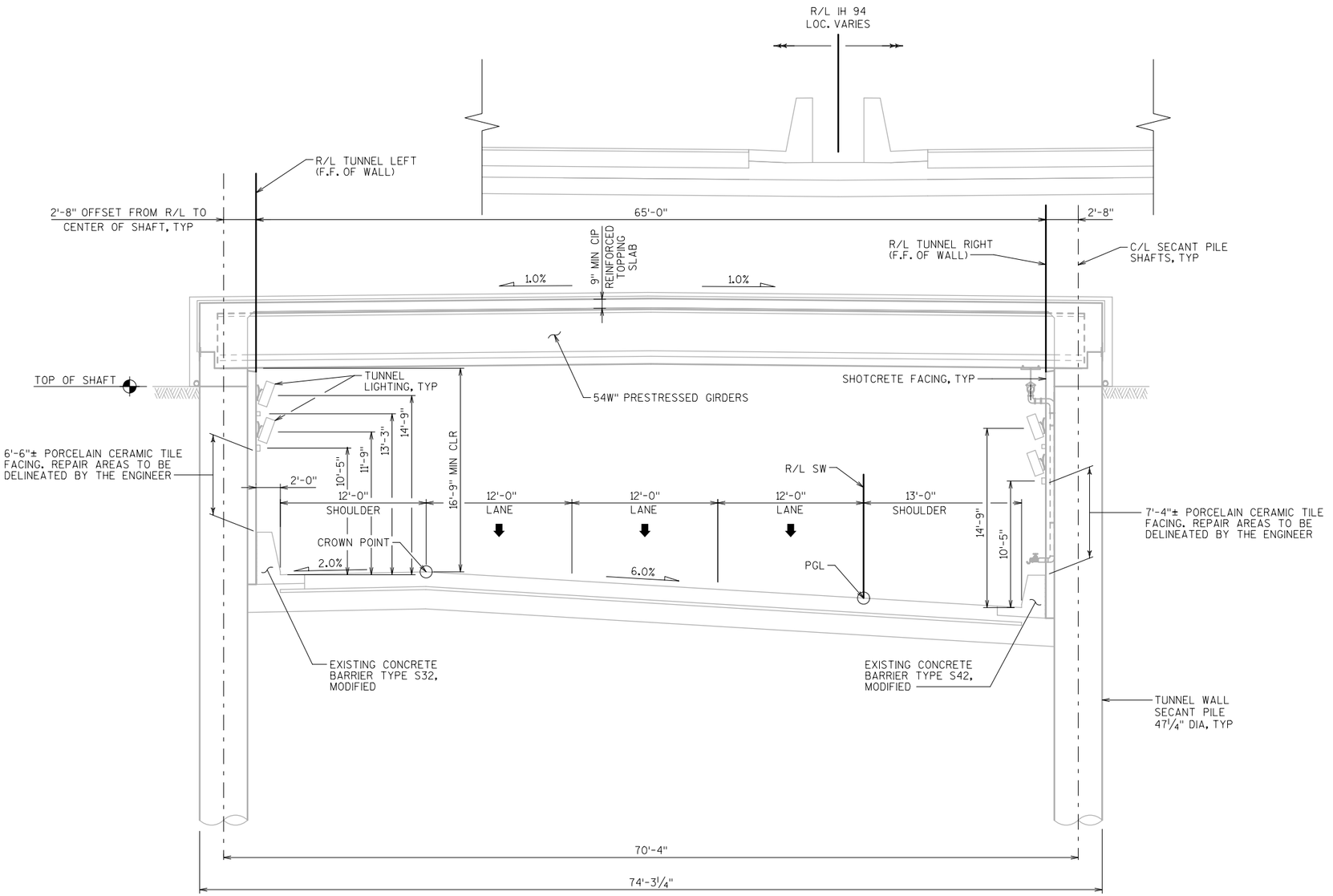
GENERAL PLAN & ELEVATION

SHEET 1 OF 2



FILE NAME : B821_080101_Sht1.dgn
PLOT DATE : 29-OCT-2018
PLOT BY : emccrigh
B821_080101_Sht1
PLOT SCALE : 79.99984:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| SPV.0165.4000 | PORCELAIN CERAMIC TILE FACING REPAIR | SF | 410 |
| SPV.0165.4002 | TUNNEL WALL CLEANING | SF | 9,305 |

ALL ITEMS ARE CATEGORY 2100

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

THE CONTRACTOR SHALL ACCOMPLISH ALL WORK DURING OVER NIGHT LOW TRAFFIC VOLUME PERIODS WHILE MAINTAINING 3 LANES OF TRAFFIC ON RAMP SW THROUGH THE STRUCTURE. FULL SHOULDER CLOSURES ARE PERMITTED. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE SHOULDER CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

AT THE LOCATIONS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER, REMOVE EXISTING DAMAGED, CRACKED AND LOOSE PORCELAIN CERAMIC TILE; CLEAN AND PREPARE SUBSTRATE SURFACE AND APPLY NEW REPLACEMENT TILE UNDER THE ITEM "PORCELAIN CERAMIC TILE FACING REPAIR". SEE SPECIAL PROVISIONS.

TUNNEL WALL LEFT

TYPICAL SECTION
(LOOKING UP STATION)

TUNNEL WALL RIGHT

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-821

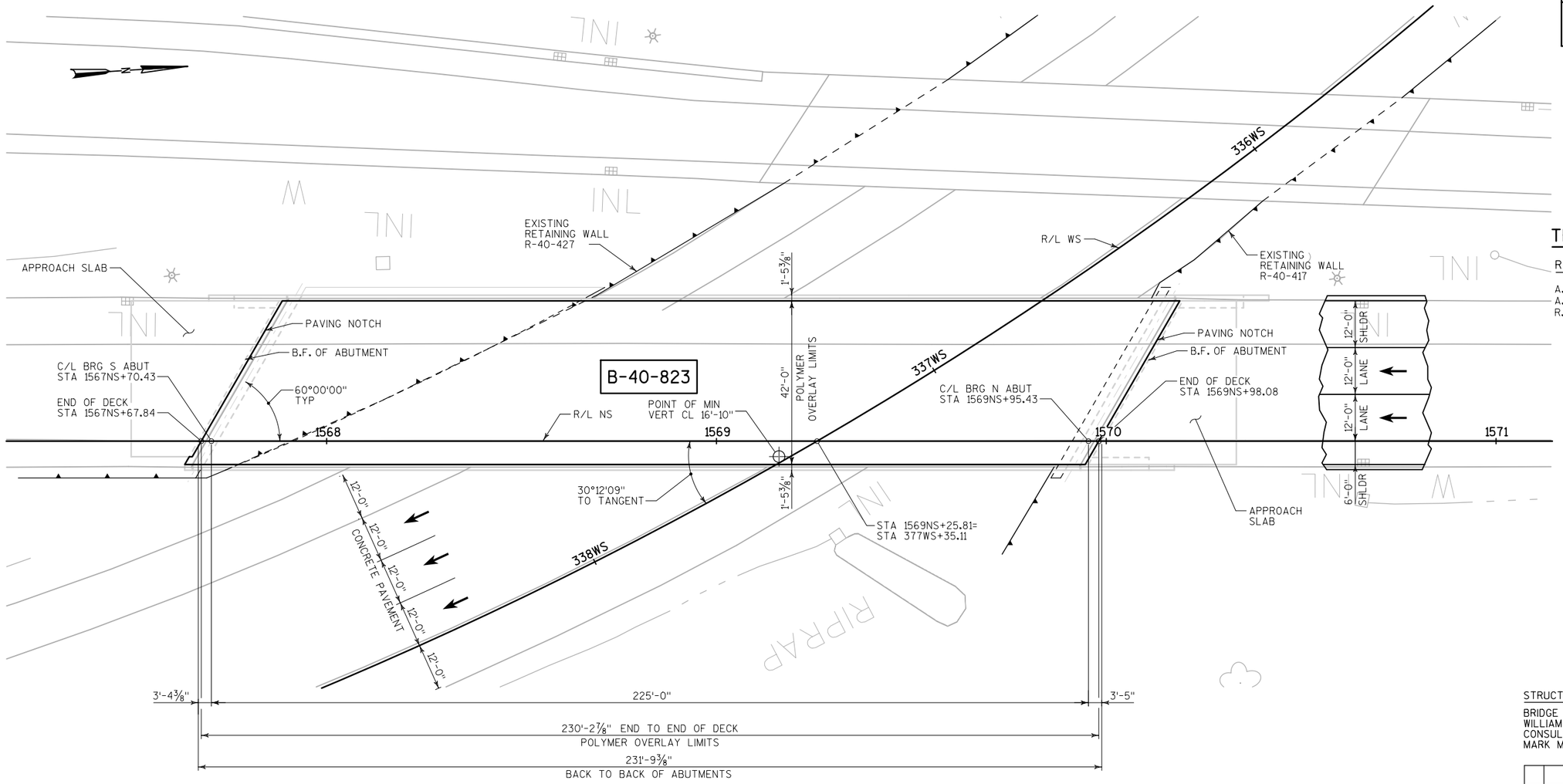
DRAWN BY EJB | PLANS CK'D. SGM

TYPICAL SECTION, NOTES, & QUANTITIES

SHEET 2 OF 2



FILE NAME : B821_080102_Sht2.dgn
PLOT DATE : 30-OCT-2018
PLOT BY : emccrigh
B821_080102_Sht2
PLOT SCALE : 20:1




## PLAN

POLYMER OVERLAY OF SINGLE SPAN
STEEL PLATE GIRDER, 90° WEB

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 22 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 11 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 80 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,075 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |

ALL ITEMS ARE CATEGORY 2110

STATE PROJECT NUMBER

1030-37-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.18
OPERATING RATING FACTOR: RF = 1.53
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMP NS | RAMP WS |
|---|---|
| A.A.D.T. = 7,300 (2015) | A.A.D.T. = 35,500 (2010) |
| A.A.D.T. = 8,200 (2041) | A.A.D.T. = 51,800 (2035) |
| R.D.S. = 60 M.P.H. | R.D.S. = 55 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-823

I.H. 94 EB RAMP N-S OVER RAMP W-S

| COUNTY | TOWN/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

WISCONSIN
STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

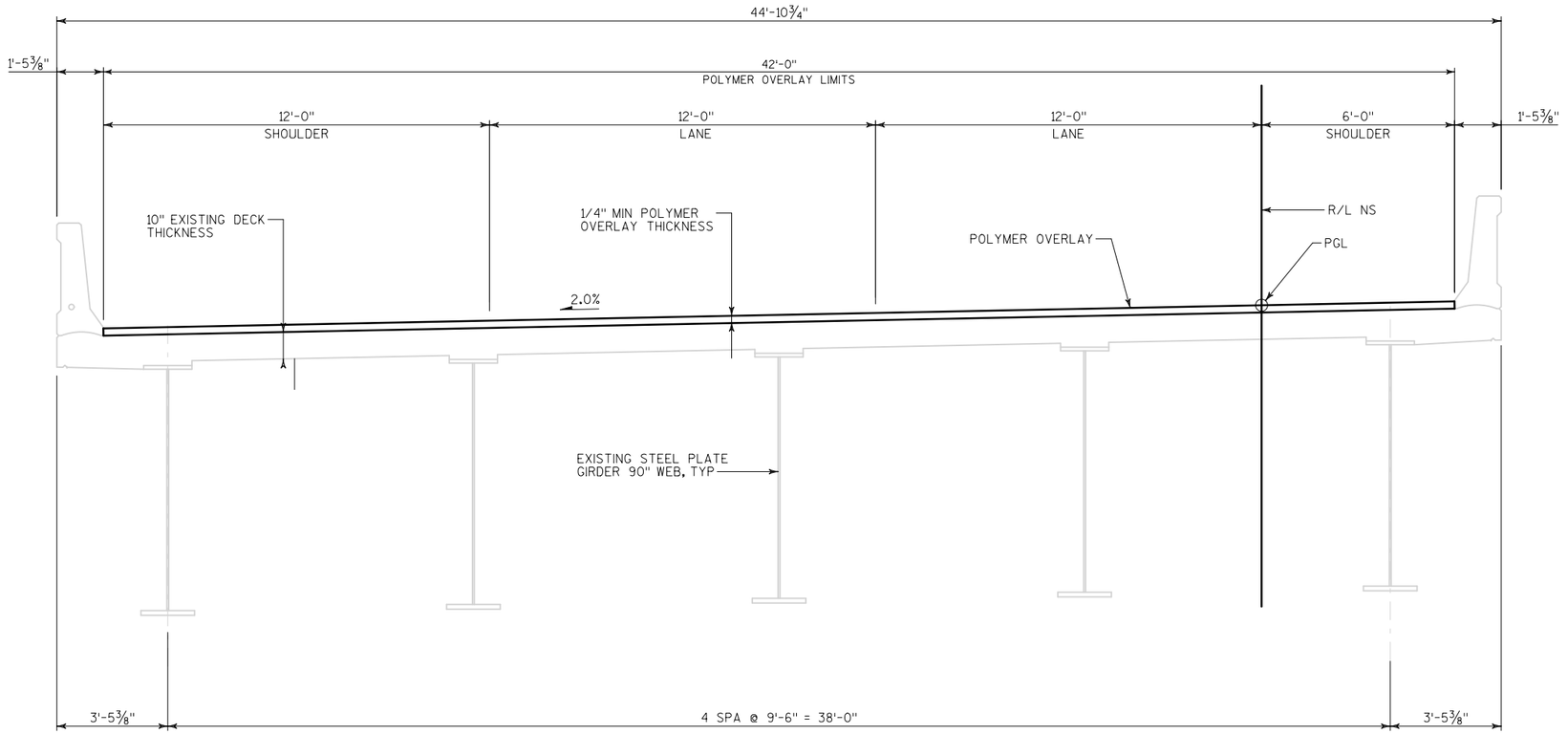
8

8



FILE NAME : B40823_080101_Sht_01.dgn PLOT DATE : 10-JAN-2019 PLOT BY : emccrigh B40823_080101_Sht_01 PLOT SCALE : 30:1

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




TITLE NOTE 1
NOTE 2

## TYPICAL SECTION THRU RAMP NS

(LOOKING NORTH)

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-823

| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

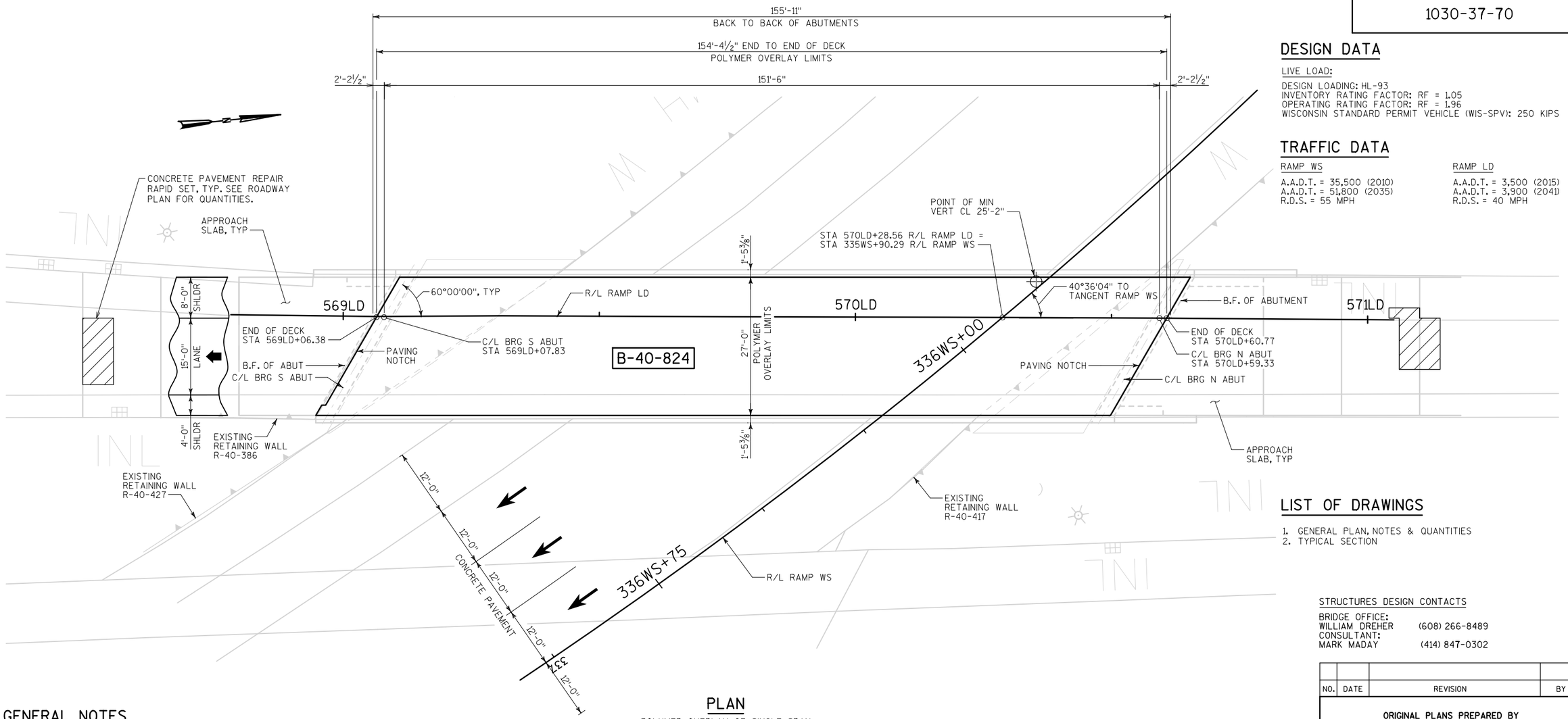
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40823_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40823_080102_Sht_02 PLOT SCALE : 3:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY OF SINGLE SPAN
72W" PRESTRESSED GIRDERS

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.05
OPERATING RATING FACTOR: RF = 1.96
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

RAMP WS

A.A.D.T. = 35,500 (2010)
A.A.D.T. = 51,800 (2035)
R.D.S. = 55 MPH

RAMP LD

A.A.D.T. = 3,500 (2015)
A.A.D.T. = 3,900 (2041)
R.D.S. = 40 MPH

## LIST OF DRAWINGS


1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION


## STRUCTURES DESIGN CONTACTS


BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 9 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 5 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 40 |
| 509.5100.S | POLYMER OVERLAY | SY | 464 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 2 |

ALL ITEMS ARE CATEGORY 2120

WISCONSIN
STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

# STRUCTURE B-40-824

I-94EB RAMP TO W LAYTON AVE OVER I-41SB TO I-94EB RAMP

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY | TMH | DESIGN CK'D. | SGM | DRAWN BY | EJB | PLANS CK'D. | SGM |
|---|---|---|---|---|---|---|---|

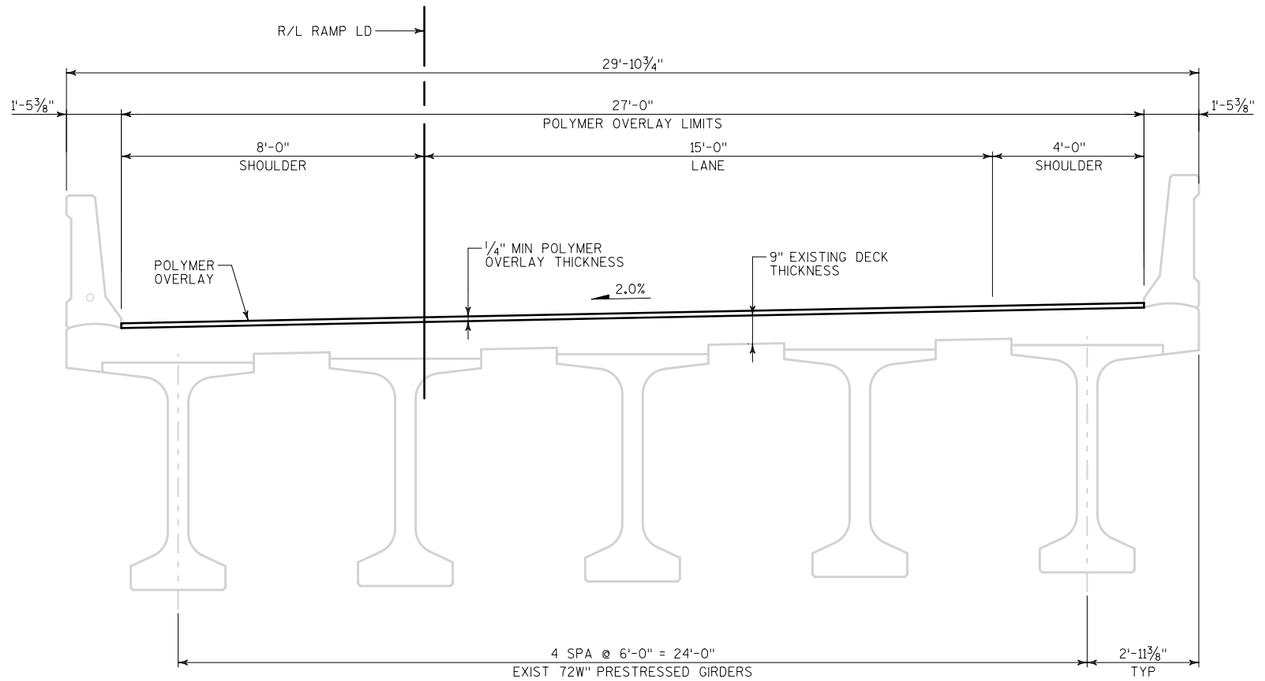
GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2



FILE NAME : B824_080101_gp.dgn PLOT DATE : 15-JAN-2019 PLOT BY : emccrigh B824_080101_gp PLOT SCALE : 20:1

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU RAMP LD

(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-824

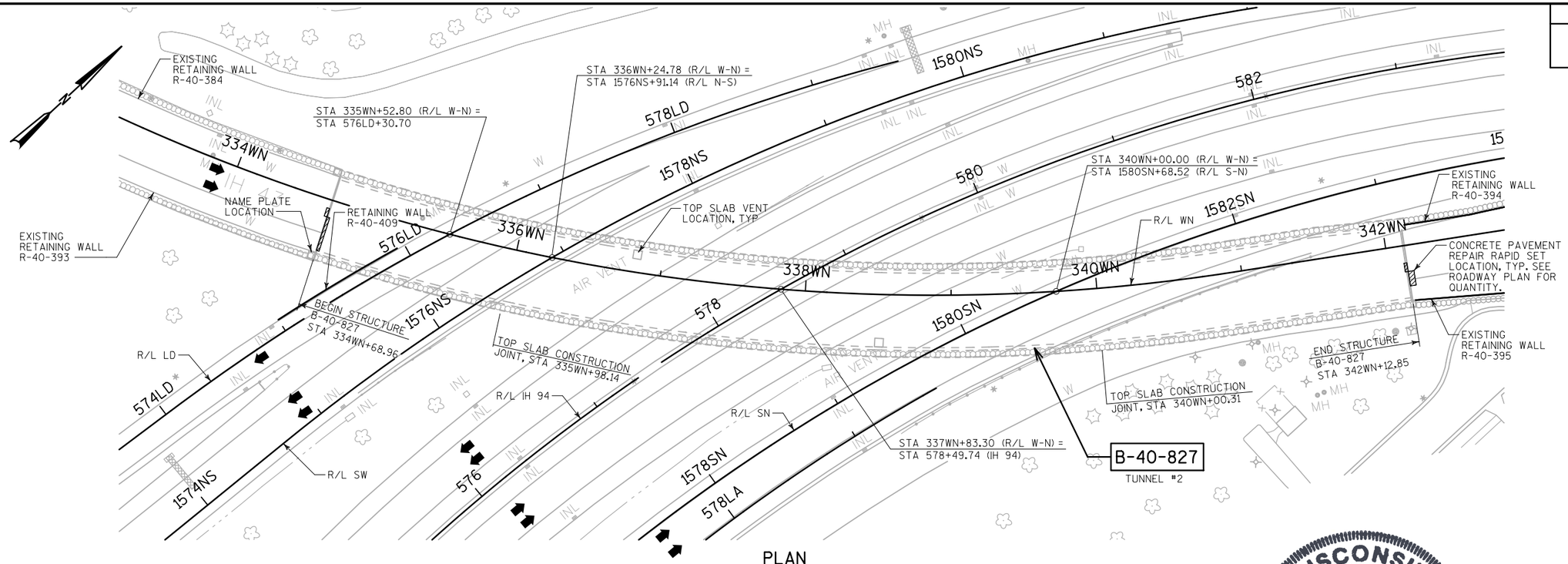
| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

TYPICAL SECTION

SHEET 2 OF 2

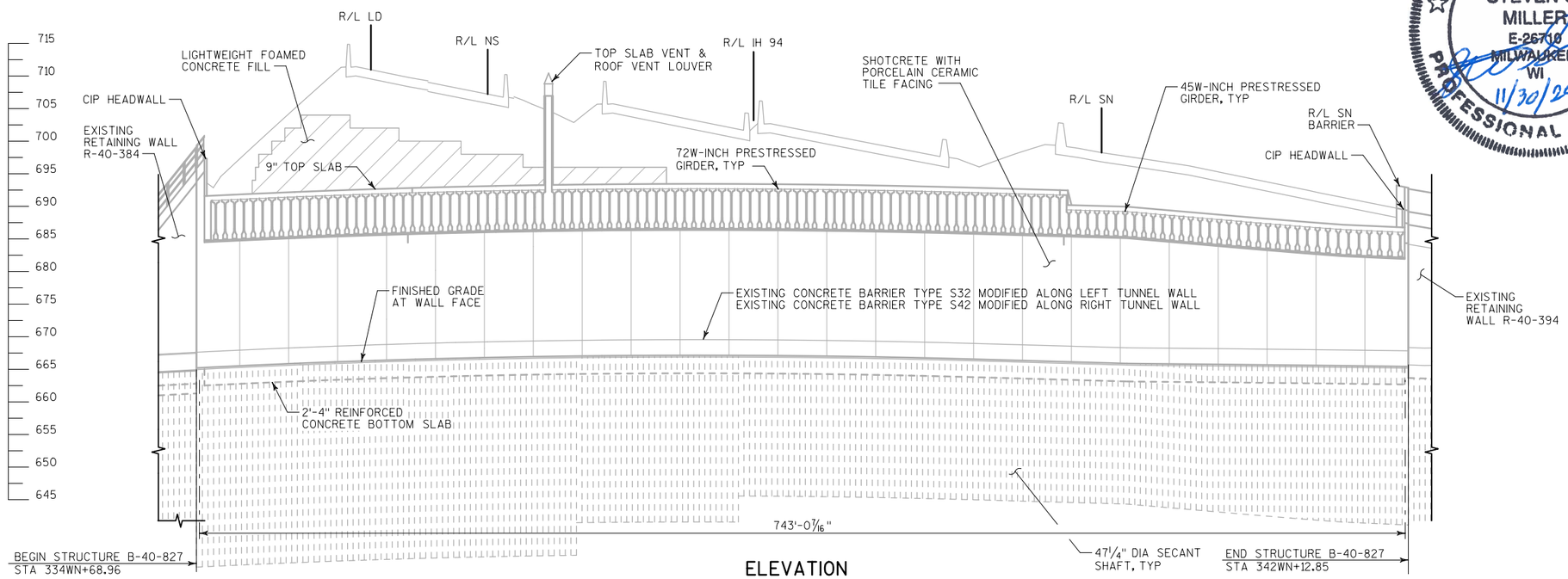


FILE NAME : B824_080102_ts.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B824_080102_ts PLOT SCALE : 8:1




## PLAN

TUNNEL 2
TUNNEL ENDS ARE RADIAL TO R/L W-N
STATIONS GIVEN ARE ALONG R/L W-N




## ELEVATION

(LOOKING NORTH AT LEFT TUNNEL WALL FACE)

STATE PROJECT NUMBER

1030-37-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS25
INVENTORY RATING: N/A
OPERATING RATING: N/A
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): N/A

## TRAFFIC DATA

IH 94

A.A.D.T. = 125,000 (2014)
A.A.D.T. = 141,900 (2041)
R.D.S. = 60 MPH

RAMP WN

A.A.D.T. = 21,200 (2014)
A.A.D.T. = 24,000 (2041)
R.D.S. = 60 MPH

RAMP NS

A.A.D.T. = 11,200 (2015)
A.A.D.T. = 12,700 (2041)
R.D.S. = 55 MPH

RAMP SN

A.A.D.T. = 33,100 (2004)
A.A.D.T. = 26,700 (2035)
R.D.S. = 55 MPH

RAMP LD

A.A.D.T. = 3,500 (2015)
A.A.D.T. = 3,900 (2041)
R.D.S. = 40 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, NOTES & QUANTITIES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

STEVEN G. MILLER E-26710 MILWAUKEE, WI 11/30/2018 PROFESSIONAL ENGINEER

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-827

IH94 EB/WB OVER IH43 NB TUNNEL NO. 2

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

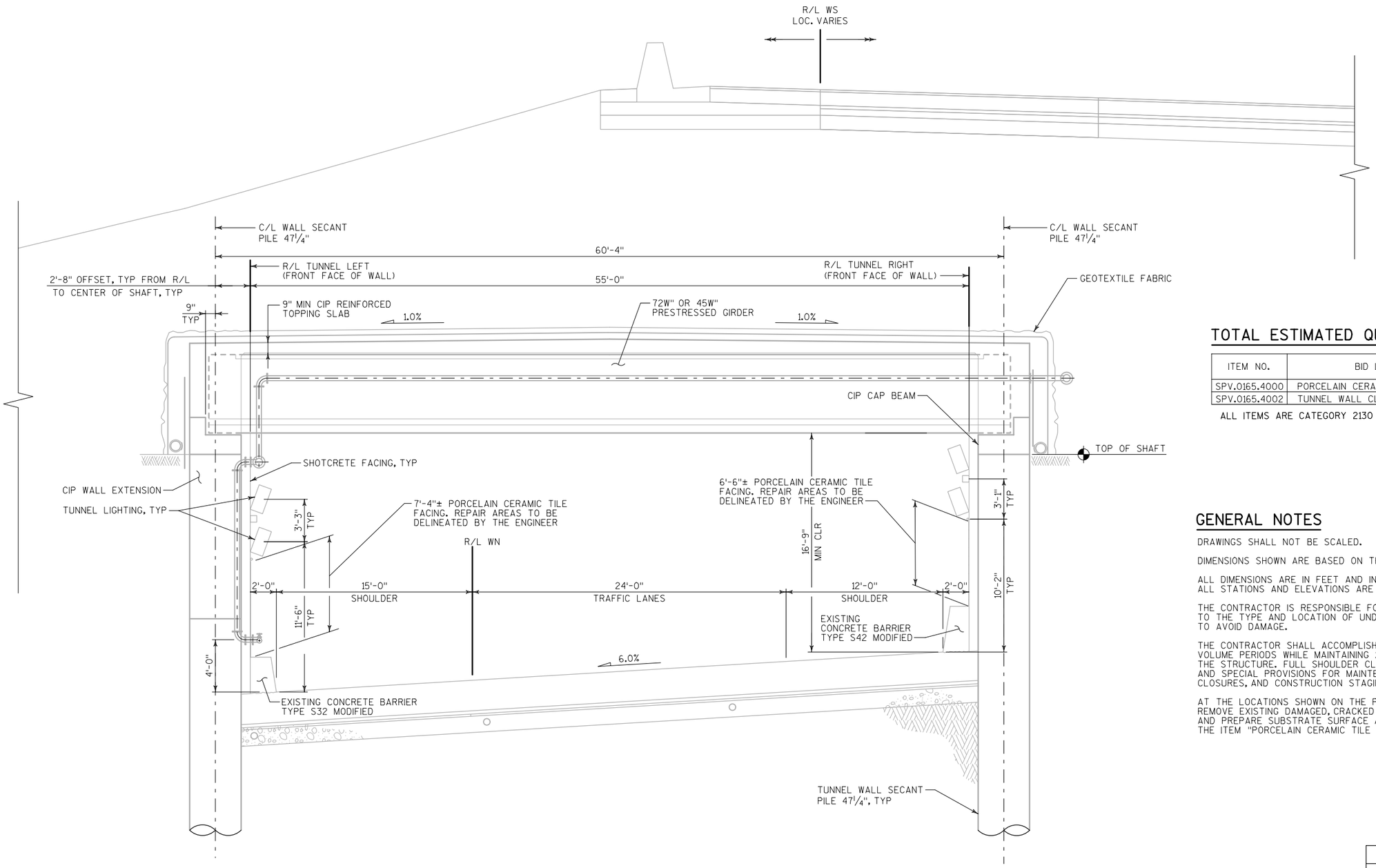
GENERAL PLAN & ELEVATION

SHEET 1 OF 2



FILE NAME : B827_080101_Sht1.dgn PLOT DATE : 29-OCT-2018 PLOT BY : emccrigh B827_080101_Sht1 PLOT SCALE : 79.99984:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| SPV.0165.4000 | PORCELAIN CERAMIC TILE FACING REPAIR | SF | 470 |
| SPV.0165.4002 | TUNNEL WALL CLEANING | SF | 10,580 |

ALL ITEMS ARE CATEGORY 2130

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

THE CONTRACTOR SHALL ACCOMPLISH ALL WORK DURING OVER NIGHT LOW TRAFFIC VOLUME PERIODS WHILE MAINTAINING 2 LANES OF TRAFFIC ON RAMP WN THROUGH THE STRUCTURE. FULL SHOULDER CLOSURES ARE PERMITTED. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE SHOULDER CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

AT THE LOCATIONS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER, REMOVE EXISTING DAMAGED, CRACKED AND LOOSE PORCELAIN CERAMIC TILE; CLEAN AND PREPARE SUBSTRATE SURFACE AND APPLY NEW REPLACEMENT TILE UNDER THE ITEM "PORCELAIN CERAMIC TILE FACING REPAIR". SEE SPECIAL PROVISIONS.

TUNNEL WALL LEFT

TYPICAL SECTION

(LOOKING UP STATION)

TUNNEL WALL RIGHT

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-827

DRAWN BY EJB | PLANS CK'D. SGM

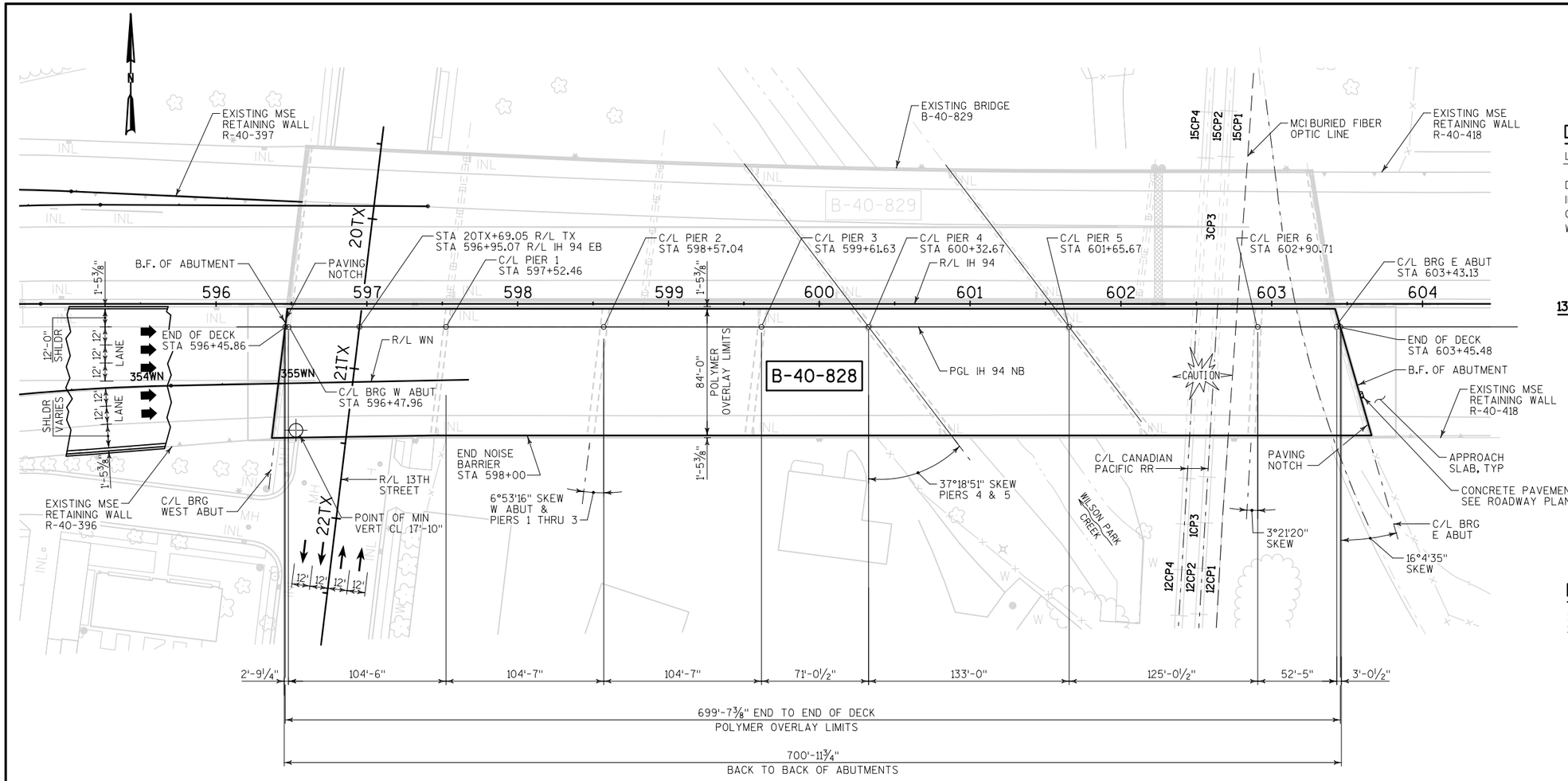
TYPICAL SECTION, NOTES, & QUANTITIES

SHEET 2 OF 2



FILE NAME : B827_080102_Sht2.dgn PLOT DATE : 30-OCT-2018 PLOT BY : emccrigh B827_080102_Sht2 PLOT SCALE : 8:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 7-SPAN 54W" PRESTRESSED GIRDERS
ALL STATIONS GIVEN ARE ALONG IH 94 NB PGL
15.25'RT OFFSET FROM R/L IH 94

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.03
OPERATING RATING FACTOR: RF = 1.34
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| 13TH STREET | IH 94 |
|---|---|
| A.A.D.T. = 10,200 (2014) | A.A.D.T. = 125,000 (2014) |
| A.A.D.T. = 12,100 (2035) | A.A.D.T. = 141,900 (2041) |
| R.D.S. = 30 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTIONS

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 133 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 67 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 420 |
| 509.5100.S | POLYMER OVERLAY | SY | 6,655 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 19 |

ALL ITEMS ARE CATEGORY 2140

WISCONSIN
STEVEN G. MILLER
E-29710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-828

I.H. 94 WB OVER 13TH ST

| COUNTY | ~~TOWN/CITY/VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC. REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

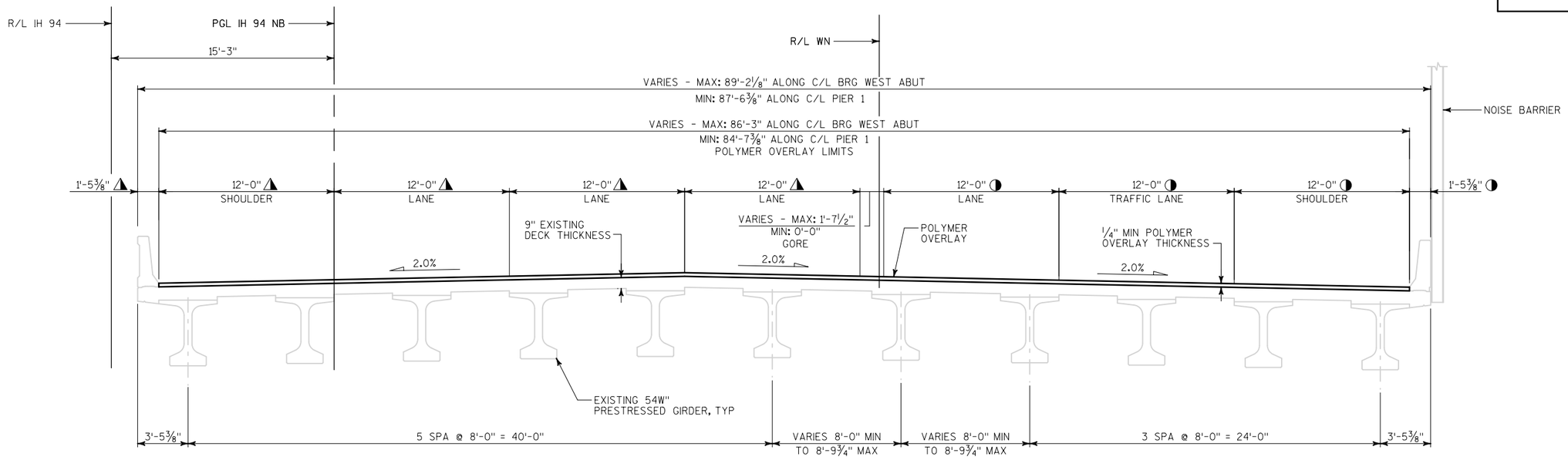


8

8

STATE PROJECT NUMBER

1030-37-70

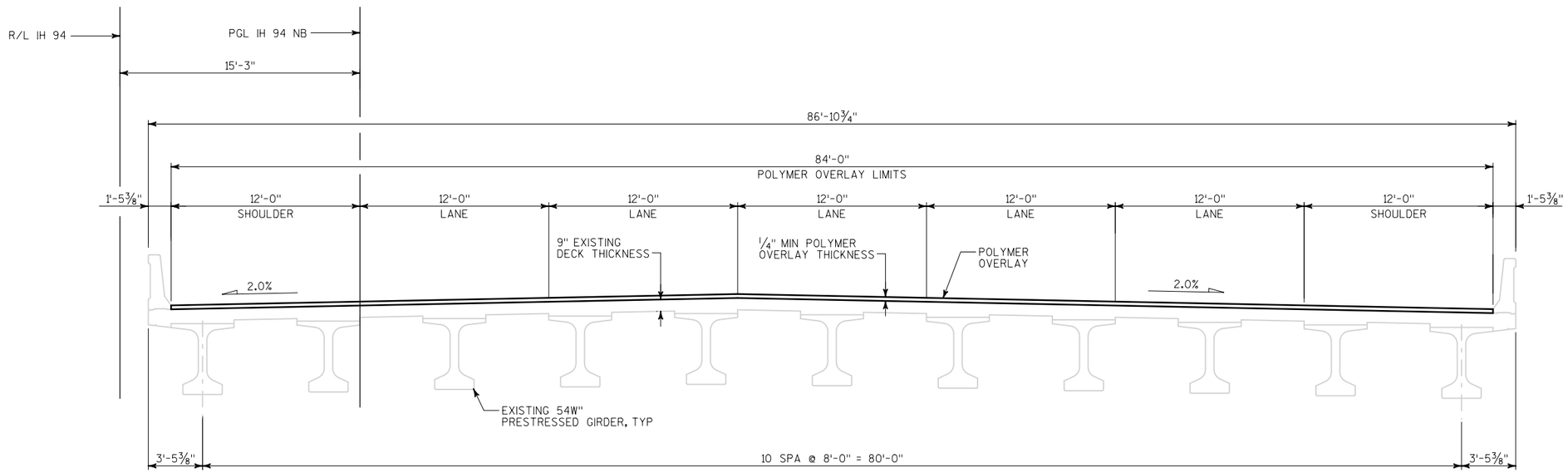



## TYPICAL SECTION THRU IH 94 WB

SPAN 1 - LOOKING EAST

◑ DIMENSION RADIAL TO R/L WN

◭ DIMENSION AT RIGHT ANGLES TO PGL IH 94 EB




## TYPICAL SECTION THRU IH 94 WB

SPANS 2 THRU 7 - LOOKING EAST

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-828

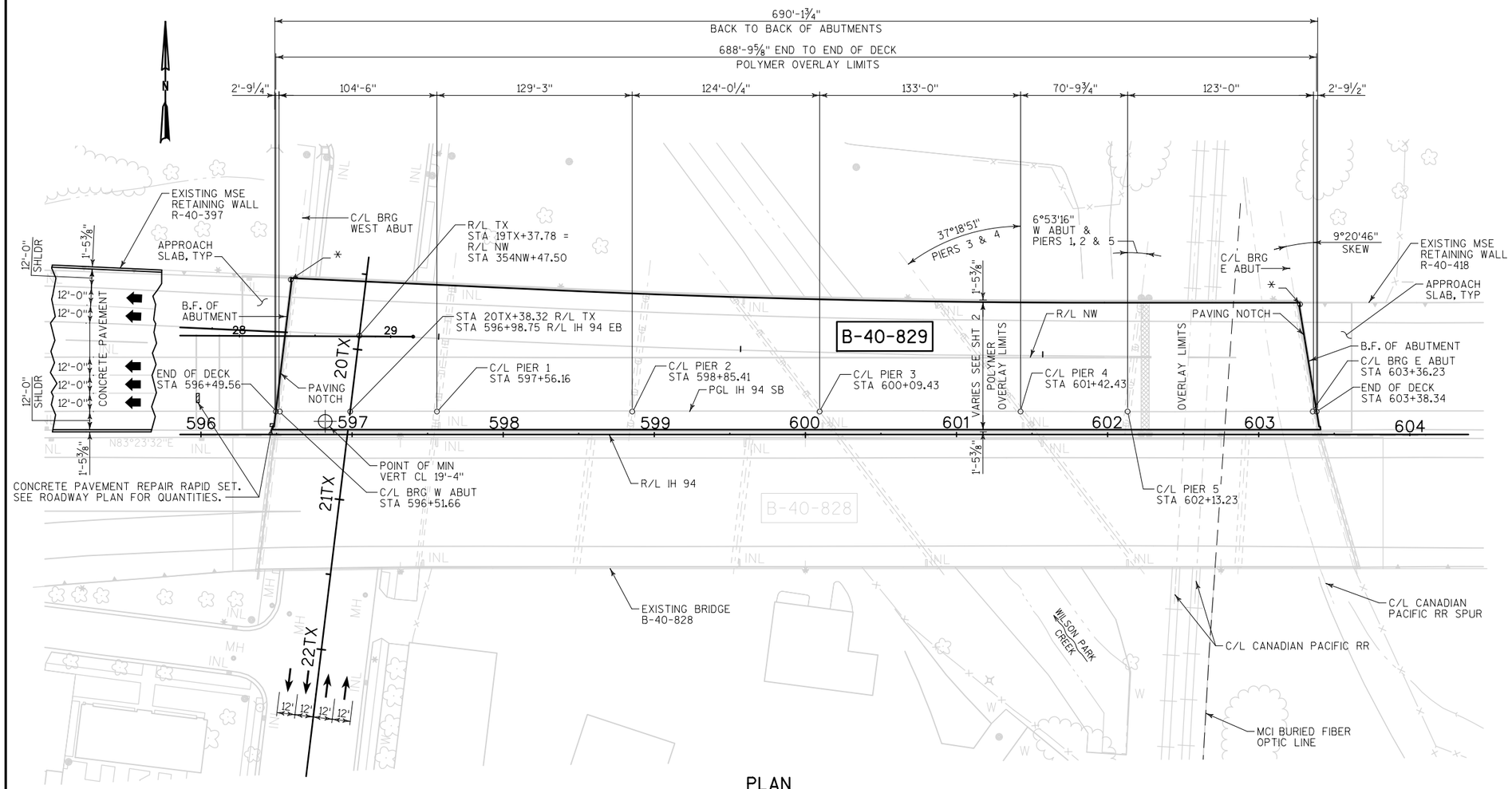
DRAWN BY EJB | PLANS CK'D. SGM

TYPICAL SECTIONS

SHEET 2 OF 2



FILE NAME : B40828_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40828_080102_Sht_02 PLOT SCALE : 8:1




## PLAN

POLYMER OVERLAY FOR 6-SPAN 54W" PRESTRESSED GIRDERS
ALL STATIONS GIVEN ARE ALONG IH 94 SB PGL
15.25'LT OFFSET FROM R/L IH 94

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR". REPLACE CONCRETE UNDER THE ITEM "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 134 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 67 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 420 |
| 509.5100.S | POLYMER OVERLAY | SY | 6,701 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 19 |

ALL ITEMS ARE CATEGORY 2150

STATE PROJECT NUMBER

1030-37-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 0.99
OPERATING RATING FACTOR: RF = 1.52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| 13TH STREET | IH 94 |
|---|---|
| A.A.D.T. = 10,200 (2014) | A.A.D.T. = 125,000 (2014) |
| A.A.D.T. = 12,100 (2035) | A.A.D.T. = 141,900 (2041) |
| R.D.S. = 30 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTIONS

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
STEVEN G. MILLER
E-28710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

# STRUCTURE B-40-829

I.H. 94 EB OVER 13TH ST

| COUNTY | ~~TOWN/CITY/VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

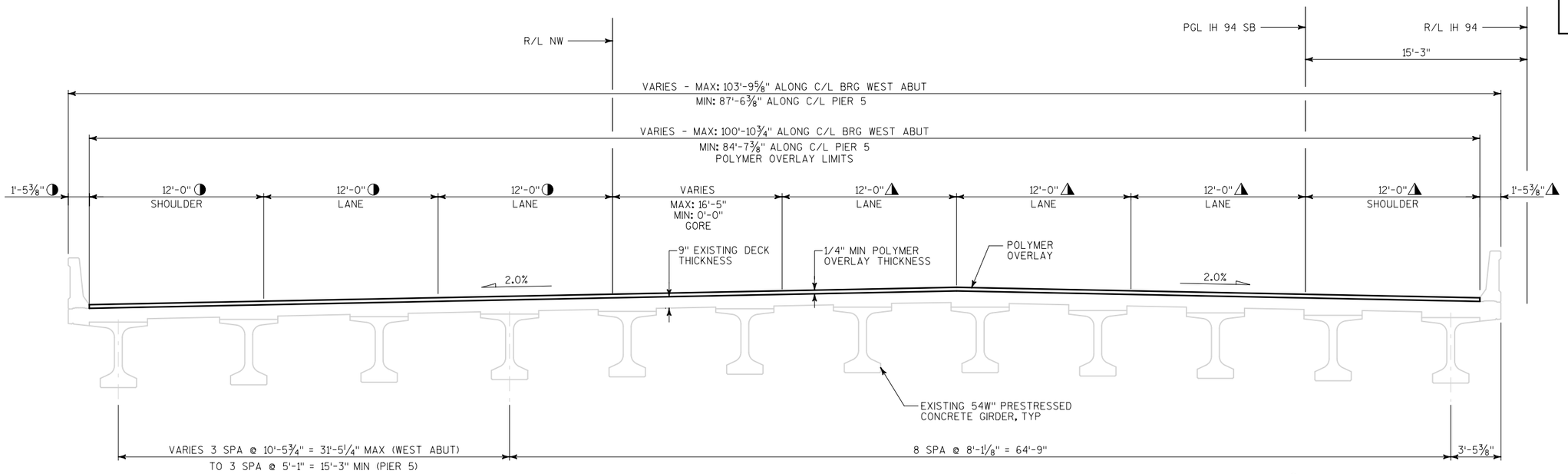
DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | KES | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |

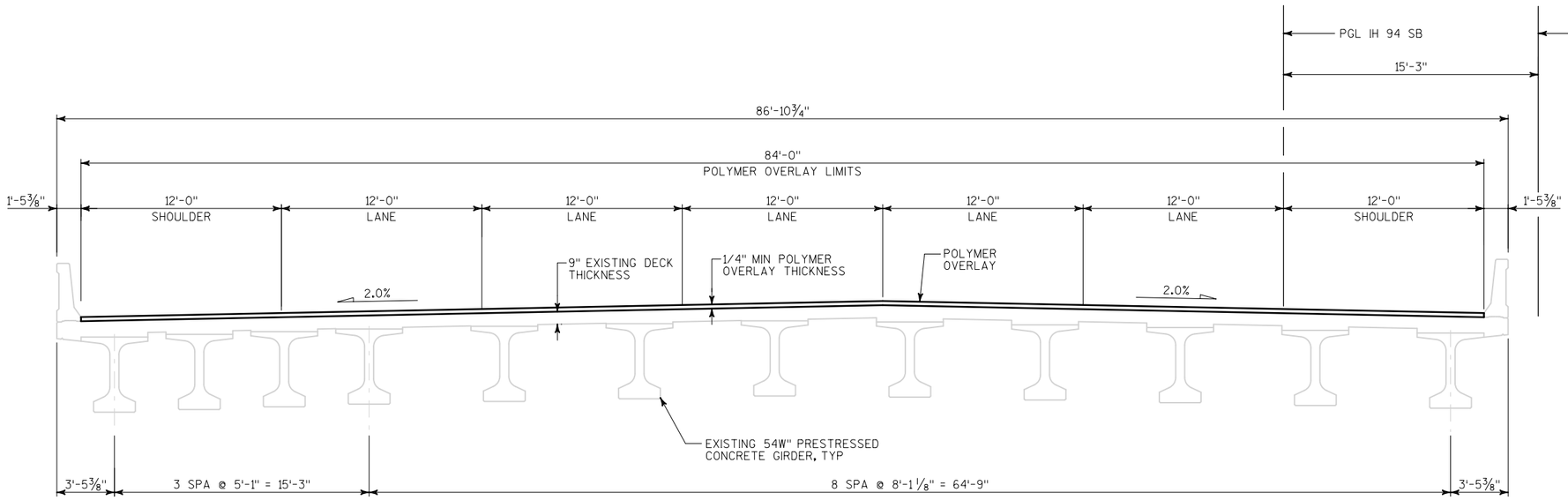



◑ DIMENSION RADIAL TO R/L NW

◭ DIMENSION AT RIGHT ANGLES TO PGL IH 94 SB

## TYPICAL SECTION THRU IH 94 SB

SPANS 1 THRU 5- LOOKING EAST




## TYPICAL SECTION THRU IH 94 SB

SPAN 6 - LOOKING EAST

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-829

DRAWN BY EJB | PLANS CK'D. SGM

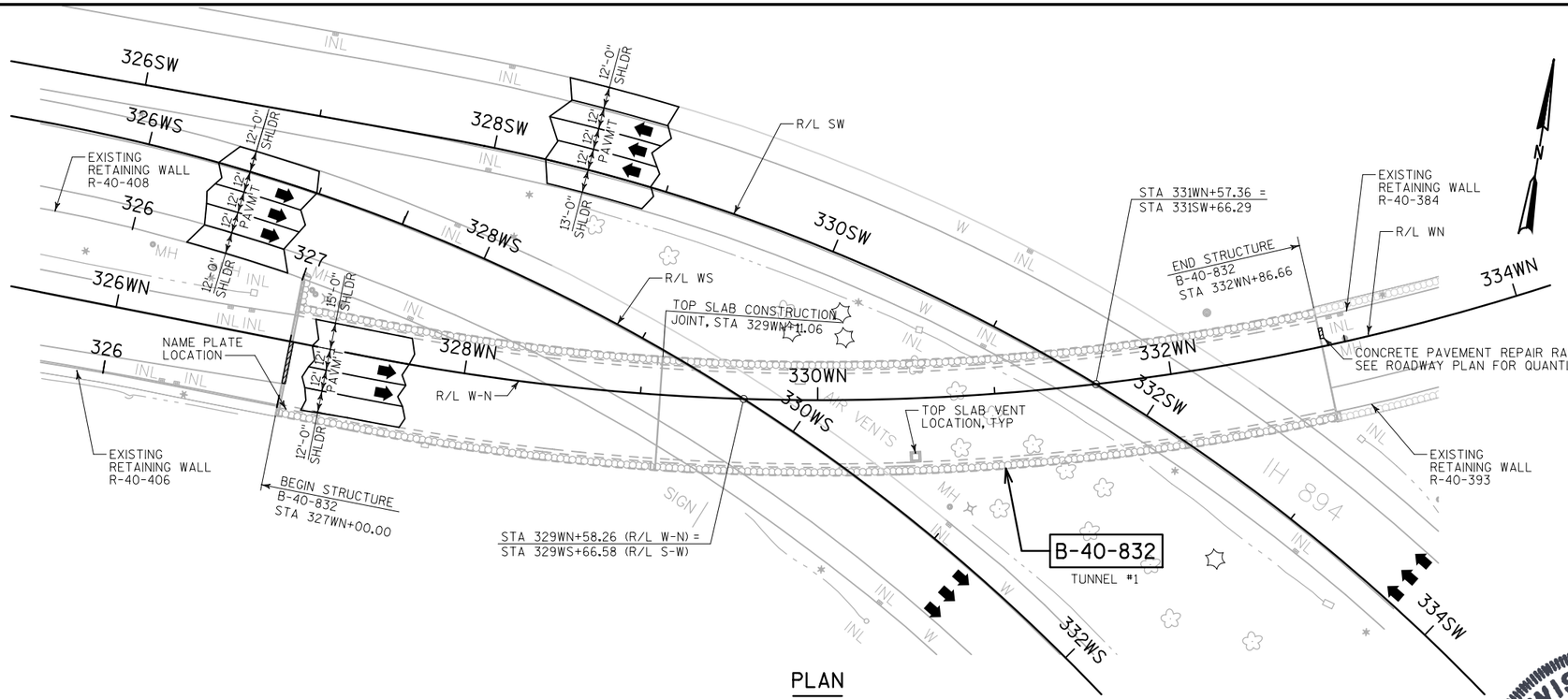
TYPICAL SECTIONS

SHEET 2 OF 2



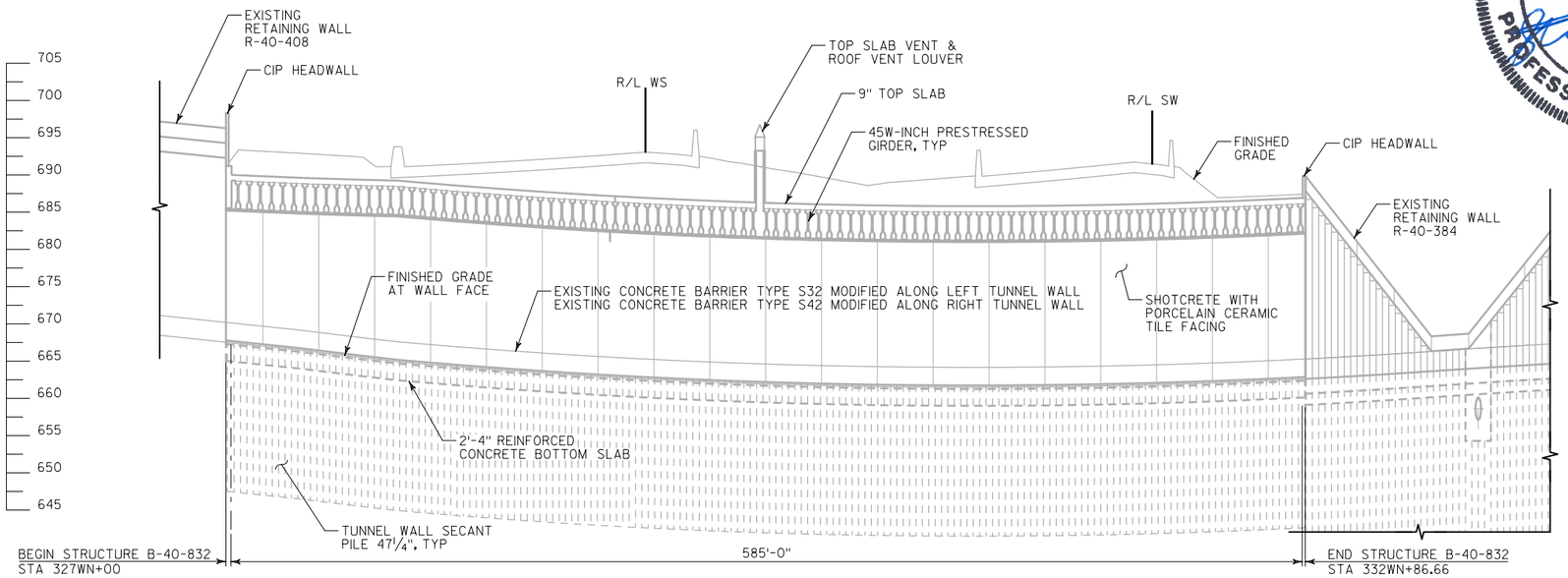
FILE NAME : B40829_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40829_080102_Sht_02 PLOT SCALE : 8:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

TUNNEL 1
TUNNEL ENDS ARE RADIAL TO R/L W-N
STATIONS GIVEN ARE ALONG R/L W-N




## ELEVATION

(LOOKING NORTH AT LEFT TUNNEL WALL FACE)

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS25
INVENTORY RATING: N/A
OPERATING RATING: N/A
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): N/A

## TRAFFIC DATA

### RAMP WN

A.A.D.T. = 21,200 (2014)
A.A.D.T. = 24,000 (2041)
R.D.S. = 60 MPH

### RAMP SW

A.A.D.T. = 50,900 (2014)
A.A.D.T. = 57,800 (2041)
R.D.S. = 55 MPH

### RAMP WS

A.A.D.T. = 40,600 (2004)
A.A.D.T. = 51,800 (2035)
R.D.S. = 55 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, NOTES & QUANTITIES

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
11/30/2018
PROFESSIONAL ENGINEER

STRUCTURES DESIGN CONTACTS
BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-832

W-N RAMP TUNNEL NO. 1

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN & ELEVATION

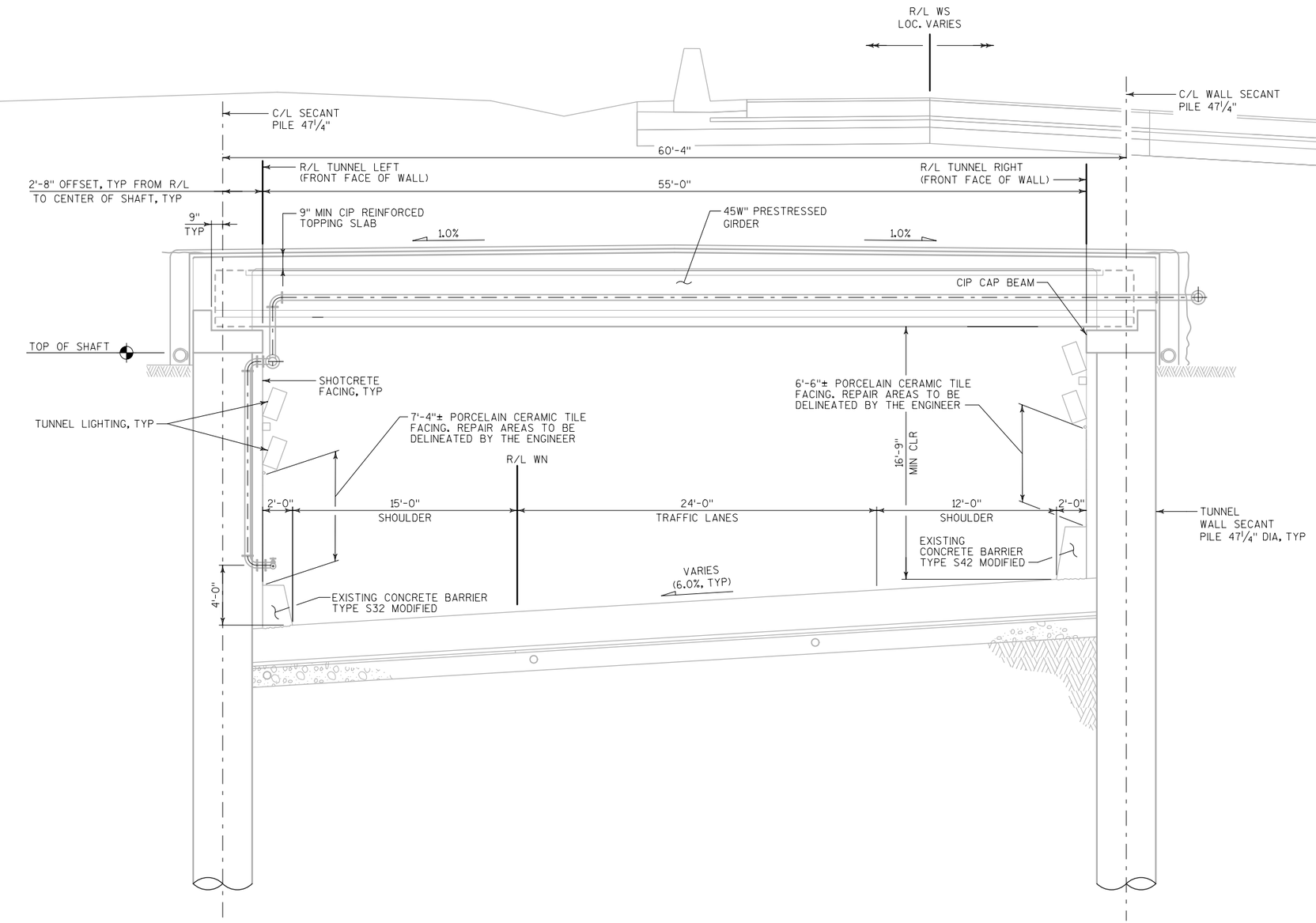
SHEET 1 OF 2



8

8

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| SPV.0165.4000 | PORCELAIN CERAMIC TILE FACING REPAIR | SF | 370 |
| SPV.0165.4002 | TUNNEL WALL CLEANING | SF | 8,280 |

ALL ITEMS ARE CATEGORY 2160

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

THE CONTRACTOR SHALL ACCOMPLISH ALL WORK DURING OVER NIGHT LOW TRAFFIC VOLUME PERIODS WHILE MAINTAINING 2 LANES OF TRAFFIC ON RAMP WN THROUGH THE STRUCTURE. FULL SHOULDER CLOSURES ARE PERMITTED. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE SHOULDER CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

AT THE LOCATIONS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER, REMOVE EXISTING DAMAGED, CRACKED AND LOOSE PORCELAIN CERAMIC TILE; CLEAN AND PREPARE SUBSTRATE SURFACE AND APPLY NEW REPLACEMENT TILE UNDER THE ITEM "PORCELAIN CERAMIC TILE FACING REPAIR". SEE SPECIAL PROVISIONS.

TUNNEL WALL LEFT

TYPICAL SECTION
(LOOKING UP STATION)

TUNNEL WALL RIGHT

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-832

DRAWN BY EJB | PLANS CK'D. SGM

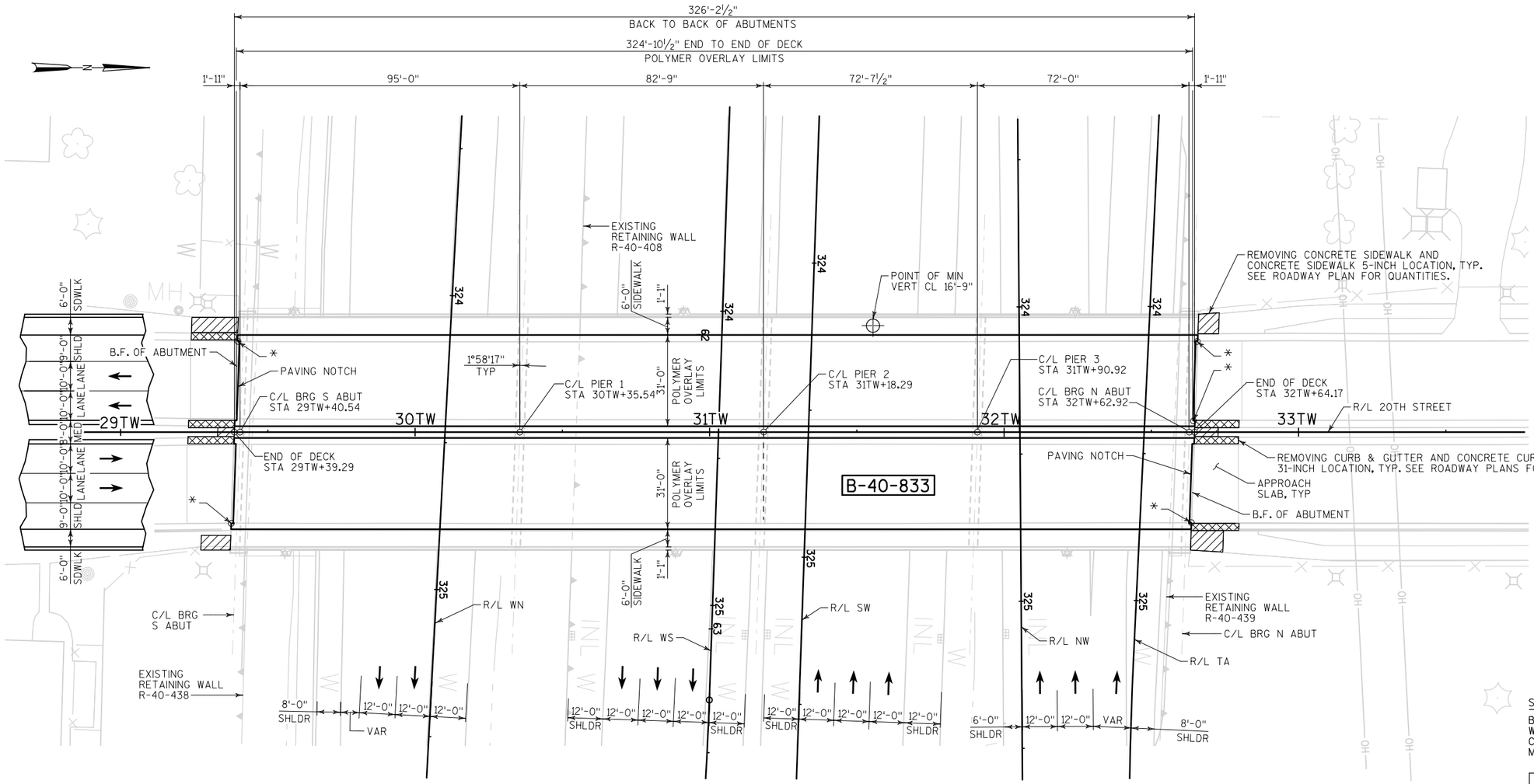
TYPICAL SECTION, NOTES, & QUANTITIES

SHEET 2 OF 2



FILE NAME : B832_080102_Sht2.dgn PLOT DATE : 30-OCT-2018 PLOT BY : emccrigh B832_080102_Sht2 PLOT SCALE : 8:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 4-SPAN
45W" PRESTRESSED GIRDERS

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 0.99
OPERATING RATING FACTOR: RF = 1.36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| 20TH STREET | IH 43 |
|---|---|
| A.A.D.T. = 9,700 (2014) | A.A.D.T. = 111,300 (2013) |
| A.A.D.T. = 11,000 (2041) | A.A.D.T. = 126,800 (2041) |
| R.D.S. = 35 MPH | R.D.S. = 60 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 45 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 22 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 140 |
| 509.5100.S | POLYMER OVERLAY | SY | 2,238 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 7 |

ALL ITEMS ARE CATEGORY 2170

## R/L INTERSECTION TABLE

| INTERSECTING R/L | STATION | R/L 20TH ST. | DEFLECTION ANGLE |
|---|---|---|---|
| WN | 324WN+46.44 | 30TW+10.16 | 86°57'14.2" |
| WS | 324WS+41.07 | 31TW+03.03 | 88°1'42.2" |
| SW | 324SW+47.88 | 31TW+33.55 | 88°1'42.2" |
| NW | 324NW+42.55 | 32TW+05.38 | 90°24'52.3" |
| TA | 324TA+42.71 | 32TW+47.57 | 87°18'22.8" |

# STRUCTURE B-40-833

S. 20TH ST OVER I.H. 43/I.H. 894

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

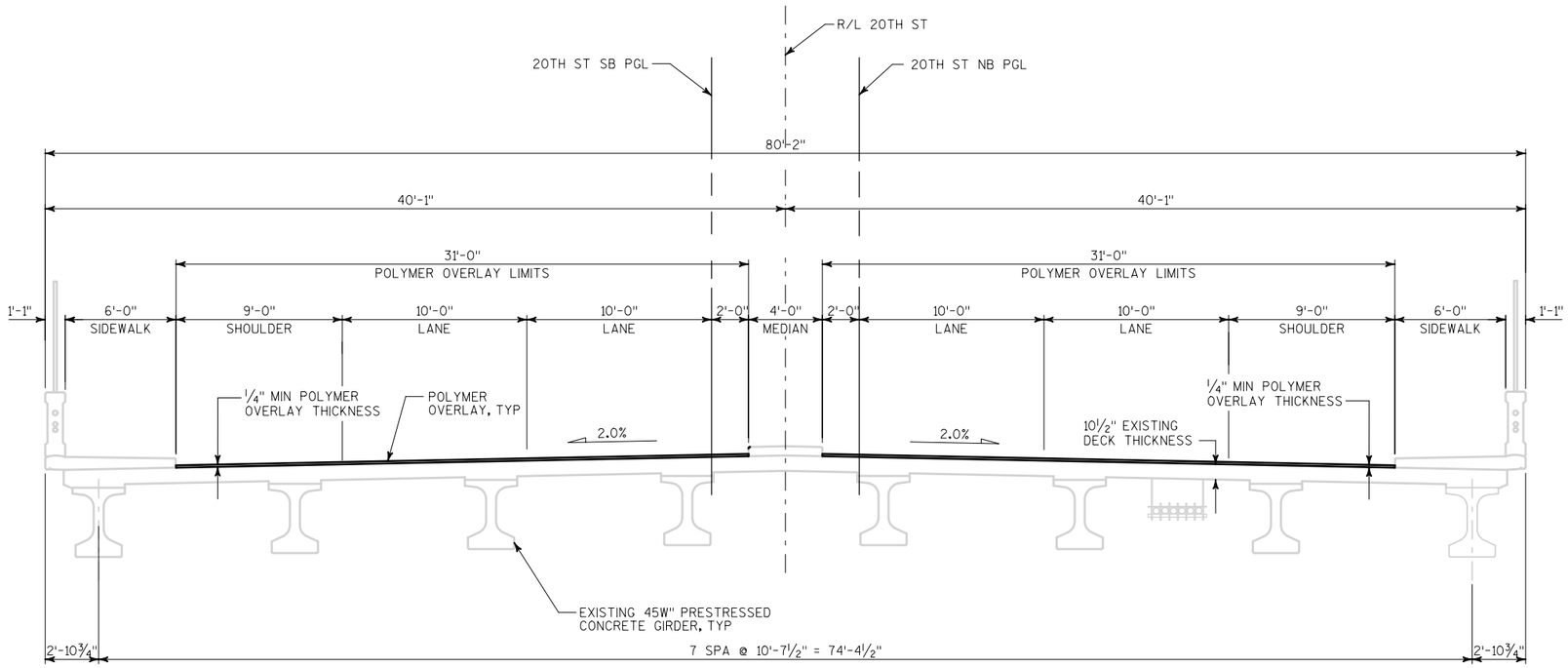
GENERAL PLAN, NOTES & QUANITITES

SHEET 1 OF 2



FILE NAME : B40833_080101_Sht_01.dgn PLOT DATE : 10-JAN-2019 PLOT BY : emccrigh B40833_080101_Sht_01 PLOT SCALE : 40:1

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU 20TH ST

45W" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-833

DRAWN BY EJB | PLANS CK'D. SGM

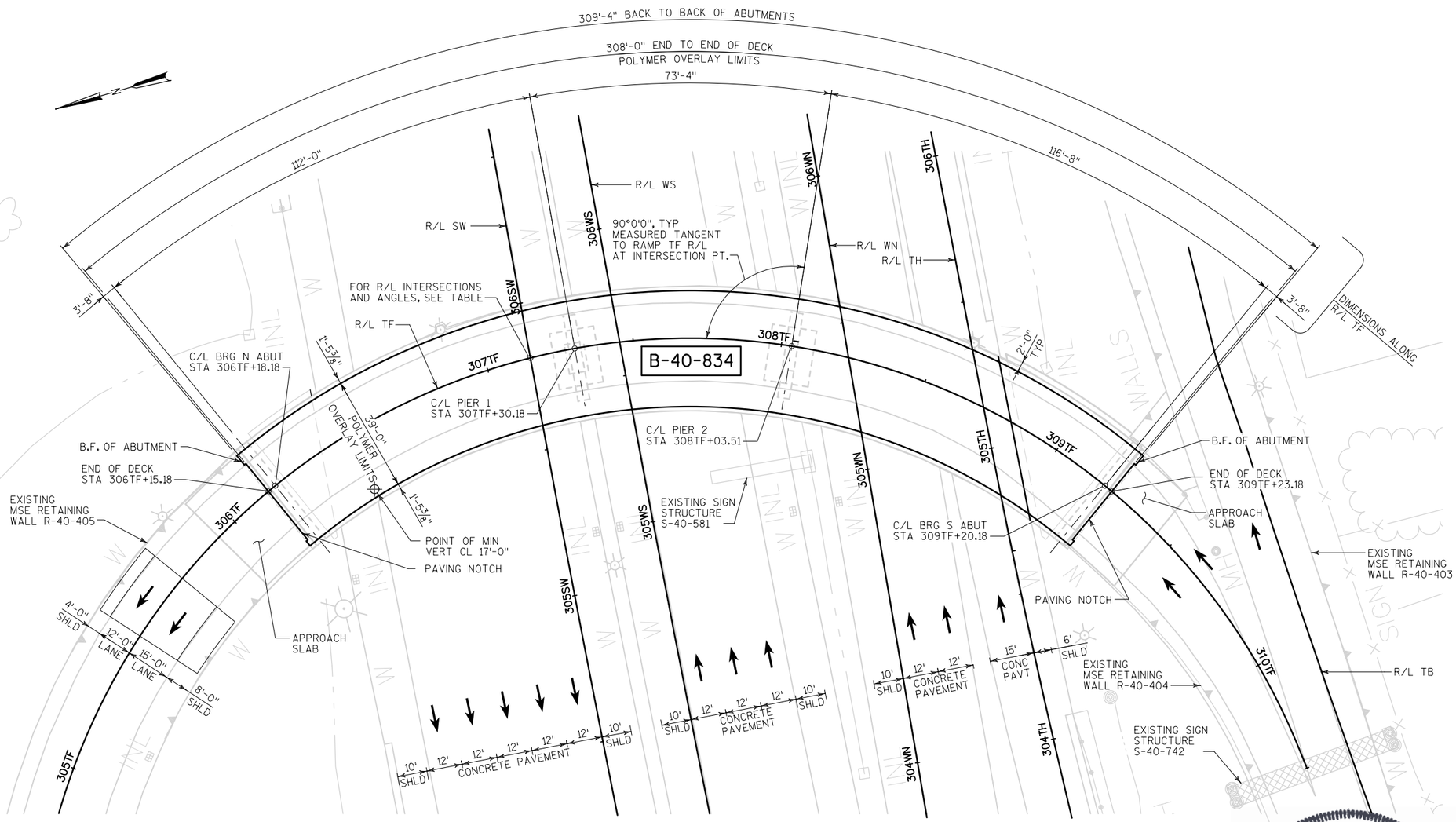
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40833_080102_Sht_02.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40833_080102_Sht_02 PLOT SCALE : 16:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## PLAN

POLYMER OVERLAY FOR 3-SPAN CURVED STEEL TRAPEZOIDAL BOX GIRDER, 5 FOOT WEB DEPTH
ABUTMENT AND PIERS ARE RADIAL TO R/L TF
DIMENSIONS SHOWN ARE ALONG R/L TF

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.02
OPERATING RATING FACTOR: RF = 1.32
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMP TF | IH 43 |
|---|---|
| A.A.D.T. = 5,700 (2015) | A.A.D.T. = 132,800 (2014) |
| A.A.D.T. = 6,500 (2041) | A.A.D.T. = 150,700 (2041) |
| R.D.S. = 25 MPH | R.D.S. = 70 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

## HORIZONTAL CURVE DATA

R/L TF - CURVE TF2

C.C. = CENTER OF CURVE
N: 271935.71
E: 596002.52
Δ = 183°27'30"
D = 25°55'32"
T = N/A
L = 707.63'
R = 221.00'
P.C. = 303TH+23.49
P.T. = 310TH+31.13

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 26 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 13 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 90 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,315 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 5 |
| | | | |

ALL ITEMS ARE CATEGORY 2180

## R/L INTERSECTION TABLE

| R/L TF STA | INTERSECTING R/L | STATION | DEFLECTION ANGLE |
|---|---|---|---|
| 307TF+14.90 | SW | 305SW+71.73 | 86°16'14" LT |
| 307TF+45.43 | WS | 305WS+61.45 | 85°51'42" LT |
| 308TF+23.01 | WN | 305WN+38.15 | 113°37'35" LT |
| 308TF+71.54 | TH | 305TH+13.94 | 127°21'12" LT |

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-834

RAMP TO I.H. 43 SB/I.H. 894 WB OVER I.H. 43/I.H. 894

| COUNTY | TOWN/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

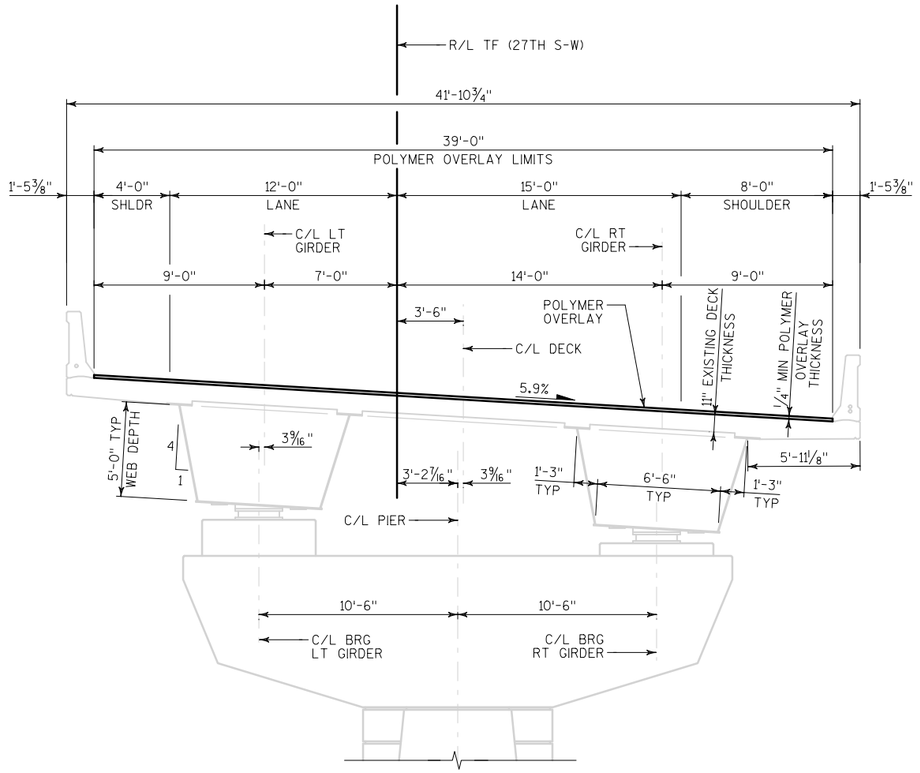
206

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

8

8

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU RAMP TF

EXIST TRAPEZOIDAL STEEL BOX GIRDERS, 5'-0" NOMINAL DEPTH
SHOWN AT PIER 1, LOOKING UPSTATION (SOUTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-834

DRAWN BY EJB | PLANS CK'D. SGM

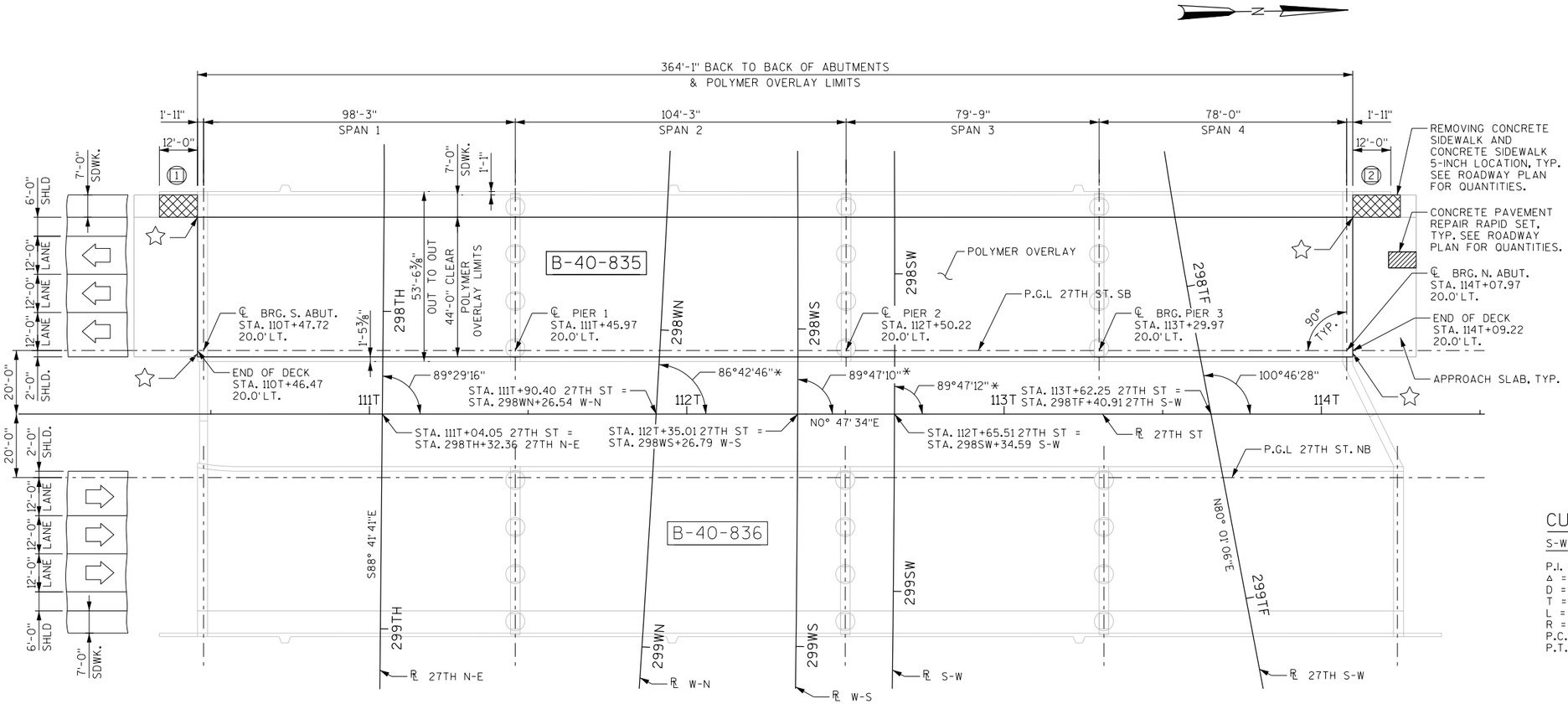
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B834_080103_Sht_02.dgn PLOT DATE : 26-OCT-2018 PLOT BY : emccrigh B834_080103_Sht_02 PLOT SCALE : 8:1

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY
(4 SPAN 36W" PRESTRESSED GIRDER STRUCTURE)

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.15
OPERATING RATING FACTOR: 1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| 27TH STREET | I.H. 894 |
|---|---|
| A.D.T. = 13,900 (2008) | A.D.T. = 133,000 (2014) |
| A.D.T. = 41,800 (2041) | A.D.T. = 150,700 (2041) |
| R.D.S = 45 M.P.H. | R.D.S = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## CURVE DATA

| S-W | W-S | W-N |
|---|---|---|
| P.I. = 289SW+21.01 | P.I. = 289WS+15.88 | P.I. = 299WN+05.10 |
| Δ = 19°06'06"RT. | Δ = 19°06'06"RT. | Δ = 2°43'55"RT. |
| D = 0°34'20" | D = 0°34'26" | D = 0°34'18" |
| T = 1685.11' | T = 1679.98' | T = 239.02' |
| L = 3338.95' | L = 3328.78' | L = 477.95' |
| R = 10015.25' | R = 9984.75' | R = 10024.00' |
| P.C. = 272SW+35.90 | P.C. = 272WS+35.90 | P.C. = 296WN+66.08 |
| P.T. = 305SW+74.85 | P.T. = 305WS+64.68 | P.T. = 301WN+44.03 |

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 36 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 18 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 125 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,780 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 4 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2190


STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh | Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN STEVEN W. SCHMITT E-37333 FRANKLIN, WI PROFESSIONAL ENGINEER 1/31/2019

# STRUCTURE B-40-835

S.T.H. 241 / 27TH. STREET SB OVER IH 43 / 894

| COUNTY | ~~TOWN/CITY/VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| VJD | SWS | VJD | SWS |

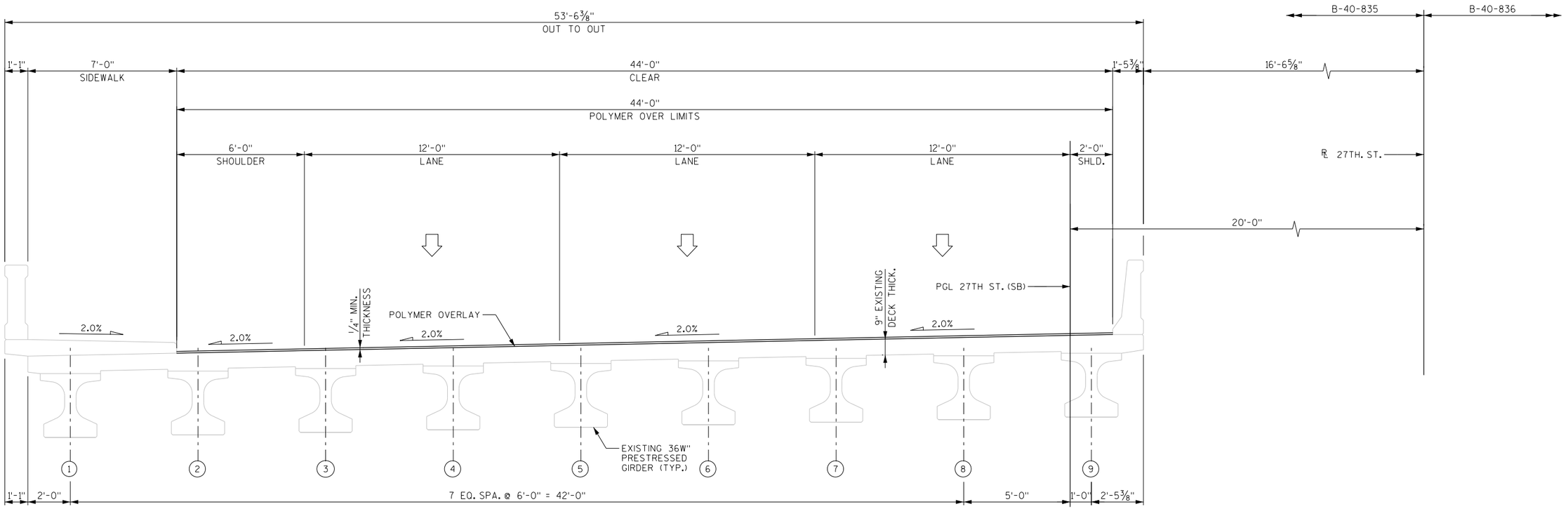
GENERAL PLAN

SHEET 1 OF 2




FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-835\835_080101_gp.dgn
PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 40.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## TYPICAL SECTION THRU 27TH STREET

36W" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-835

DRAWN BY VJD | PLANS CK'D. NLD

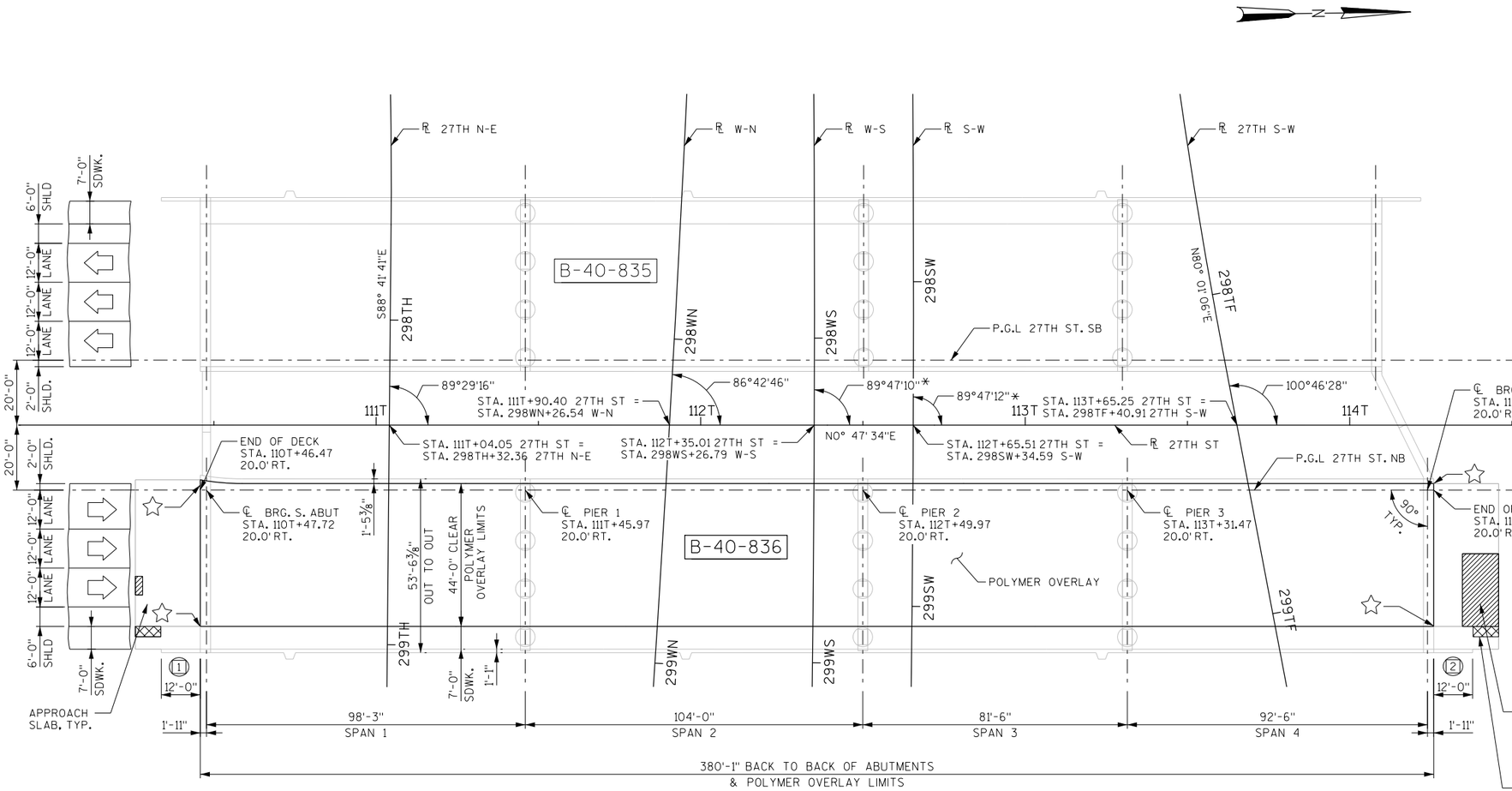
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-835\835_080102_ts.dgn PLOT DATE : 1/17/2019 PLOT BY : sschmitt PLOT NAME : $FILE$ PLOT SCALE : 5.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




PLAN

POLYMER OVERLAY
(4 SPAN 36W" PRESTRESSED GIRDER STRUCTURE)

## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.08
OPERATING RATING FACTOR: 1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 230 KIPS

## TRAFFIC DATA

| 27TH STREET | I.H. 894 |
|---|---|
| A.D.T. = 30,700 (2011) | A.D.T. = 107,000 (2013) |
| A.D.T. = 41,800 (2041) | A.D.T. = 150,700 (2041) |
| R.D.S = 45 M.P.H. | R.D.S = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

## LEGEND

(X) INDICATES WINGWALL NUMBER

* MEASURED TANGENT TO ℄ AT INTERSECTION POINT

☆ BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## CURVE DATA

| S-W | W-S | W-N |
|---|---|---|
| P.I. = 289SW+21.01 | P.I. = 289WS+15.88 | P.I. = 299WN+05.10 |
| Δ = 19°06'06"RT. | Δ = 19°06'06"RT. | Δ = 2°43'55"RT. |
| D = 0°34'20" | D = 0°34'26" | D = 0°34'18" |
| T = 1685.11' | T = 1679.98' | T = 239.02' |
| L = 3338.95' | L = 3328.78' | L = 477.95' |
| R = 10015.25' | R = 9984.75' | R = 10024.00' |
| P.C. = 272SW+35.90 | P.C. = 272WS+35.90 | P.C. = 296WN+66.08 |
| P.T. = 305SW+74.85 | P.T. = 305WS+64.68 | P.T. = 301WN+44.03 |

## STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVEN SCHMITT (262) 821-1171

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 38 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 19 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 130 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,858 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 6 |
| | | | |
| | | | |

ALL ITEMS ARE CATEGORY 2200

WISCONSIN STEVEN W. SCHMITT E-37333 FRANKLIN, WI PROFESSIONAL ENGINEER 1/31/2019

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

KSingh | Engineers Scientists Consultants

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-836

S.T.H. 241 / 27TH. STREET NB OVER IH 43 / 894

| COUNTY | TOWN/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| VJD | SWS | VJD | SWS |

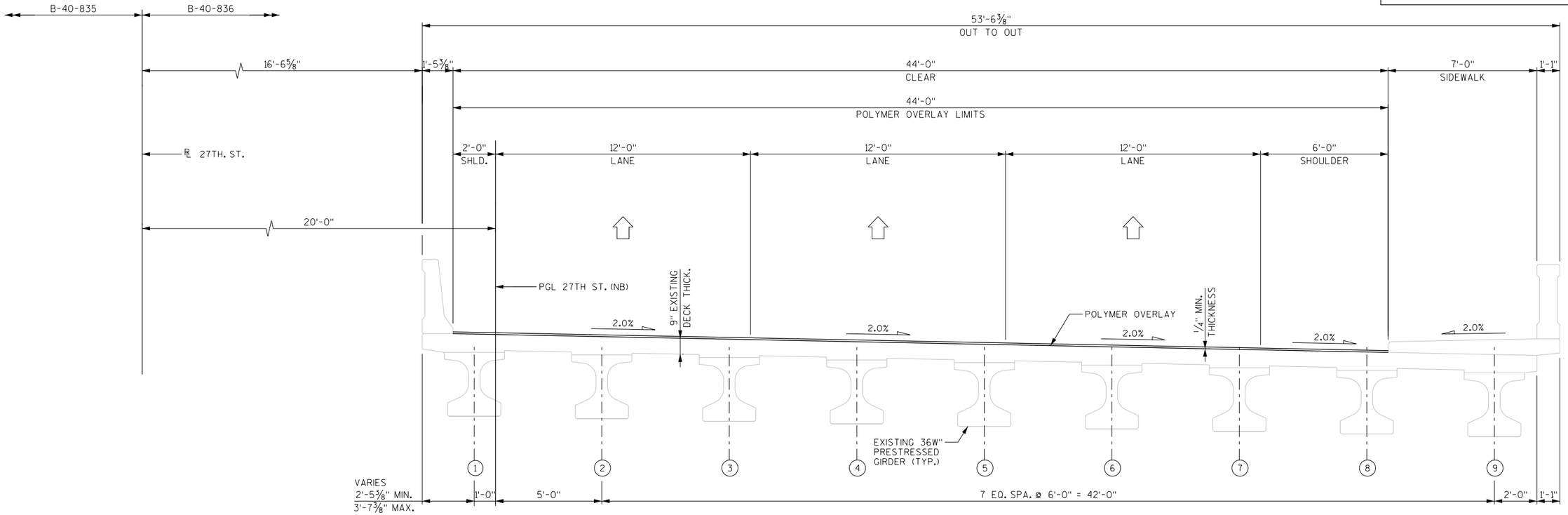
GENERAL PLAN

SHEET 1 OF 2



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PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 40.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## TYPICAL SECTION THRU 27TH STREET

36W" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-836

| DRAWN BY | VJD | PLANS CK'D. | SWS |
|---|---|---|---|

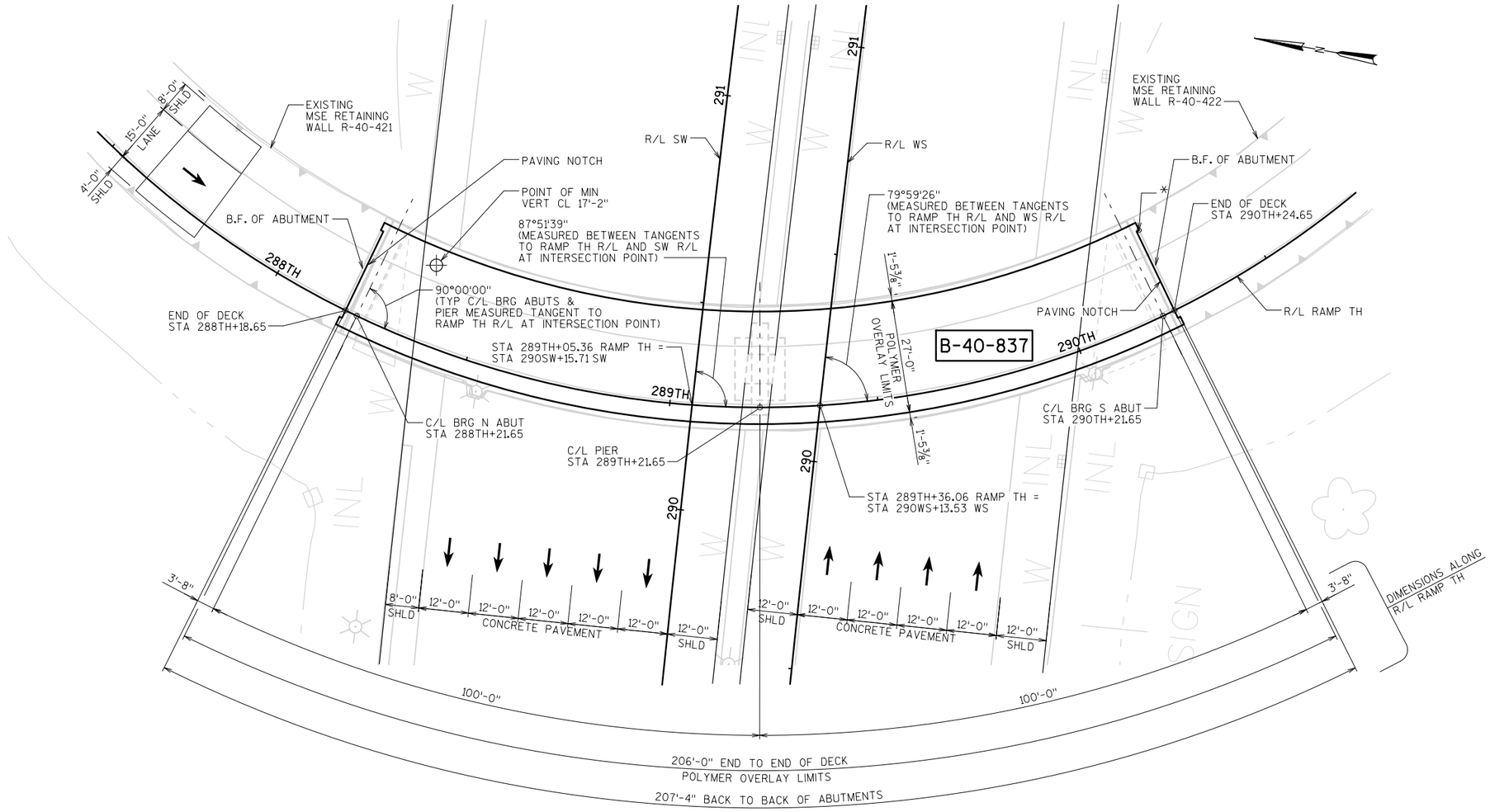
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : P:\8522 Mitchell Interchange\Structural\CADD\1030-37-00\B-40-836\836_080102_ts.dgn
PLOT DATE : 1/17/2019
PLOT BY : sschmitt
PLOT NAME : $FILE$
PLOT SCALE : 5.00 ' / in.

| STATE PROJECT NUMBER |
|---|
| 1030-37-70 |




## DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.10
OPERATING RATING FACTOR: RF = 1.42
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAMP TH | IH 43 |
|---|---|
| A.A.D.T. = 590 (2015) | A.A.D.T. = 132,800 (2014) |
| A.A.D.T. = 660 (2041) | A.A.D.T. = 150,700 (2041) |
| R.D.S. = 25 MPH | R.D.S. = 70 MPH |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

## HORIZONTAL CURVE DATA

RAMP TH

C.C. = CENTER OF CURVE
N: 271973.60
E: 594891.97
Δ = 185°18'41" LEFT
D = 25°34'43"
T = N/A
L = 724.48'
R = 224.00'
P.C. = 285TH+48.66
P.T. = 292TH+73.14

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR". REPLACE CONCRETE UNDER THE ITEM "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

## PLAN

POLYMER OVERLAY FOR RAMP TH: 2-SPAN
CURVED STEEL BOX GIRDER, 5 FOOT NOMINAL DEPTH
ABUTMENTS AND PIER ARE NORMAL OR RADIAL TO ℄ TH
DIMENSIONS SHOWN ARE ALONG ℄ TH

* - BRIDGE DECK REPAIR AT CORNERS OF BRIDGE INCLUDED IN BID ITEM "PREPARATION DECKS TYPE 1"

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 12 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 6 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 45 |
| 509.5100.S | POLYMER OVERLAY | SY | 594 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 2 |

ALL ITEMS ARE CATEGORY 2210

WISCONSIN STEVEN G. MILLER E-28710 MILWAUKEE, WI 2/1/2019 PROFESSIONAL ENGINEER

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 02/07/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-837

RAMP TO I.H. 43 NB/I.H. 894 EB OVER I.H. 43/I.H. 894

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

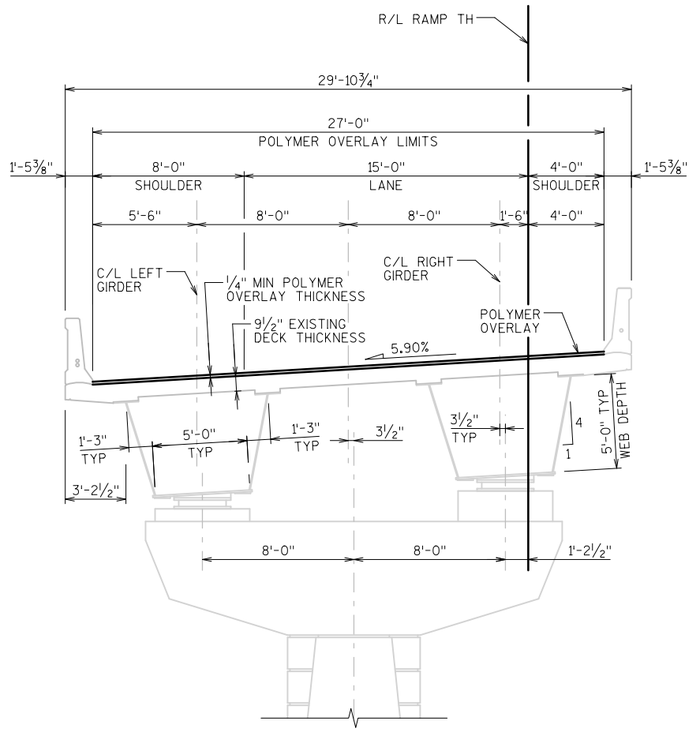
DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | EJB | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
| --- |
| 1030-37-70 |




## TYPICAL SECTION THRU RAMP TH

EXIST TRAPEZOIDAL STEEL BOX GIRDERS, 5'-0" NOMINAL DEPTH
SHOWN AT PIER 1 LOOKING UPSTATION (LOOKING SOUTH)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-837

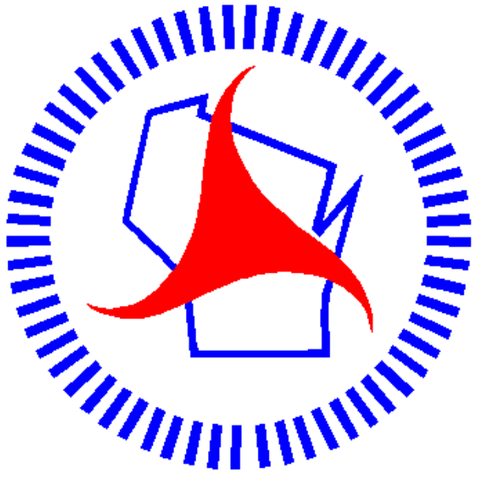
| DRAWN BY | EJB | PLANS CK'D. | SGM |
| --- | --- | --- | --- |

TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B837_080102_Sht2.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B837_080102_Sht2 PLOT SCALE : 8:1



**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WKE

MAY 2019

PROJECT ID: 1030-38-70

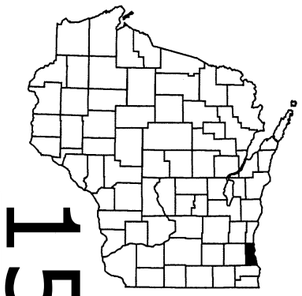
WITH: 1030-37-70

COUNTY: MILWAUKEE

ORDER OF SHEETS


| | | |
|---|---|---|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| 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 = 58



15

N

| DESIGN DESIGNATION | | CTH BB (RAWSON AVE) | DREXEL AVE | IH 94 (CTH BB -DREXEL AVE) |
|---|---|---|---|---|
| A.A.D.T. | 2021 | = 37600 | = 25290 | = 129100 |
| A.A.D.T. | 2041 | = 42900 | = 25300 | = 144700 |
| D.H.V. | | = 10.6% | = 10.6% | = 8.3% |
| D.D. | | = 59/41 | = 59/41 | = 56/44 |
| T. | | = 5.3% | = 4.5% | = 17.5% |
| DESIGN SPEED | | = 40 | = 40 | = 60 |
| ESALS | | = | = | = |

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# NORTH SOUTH FREEWAY

PUETZ RD TO CTH BB/RAWSON AVE

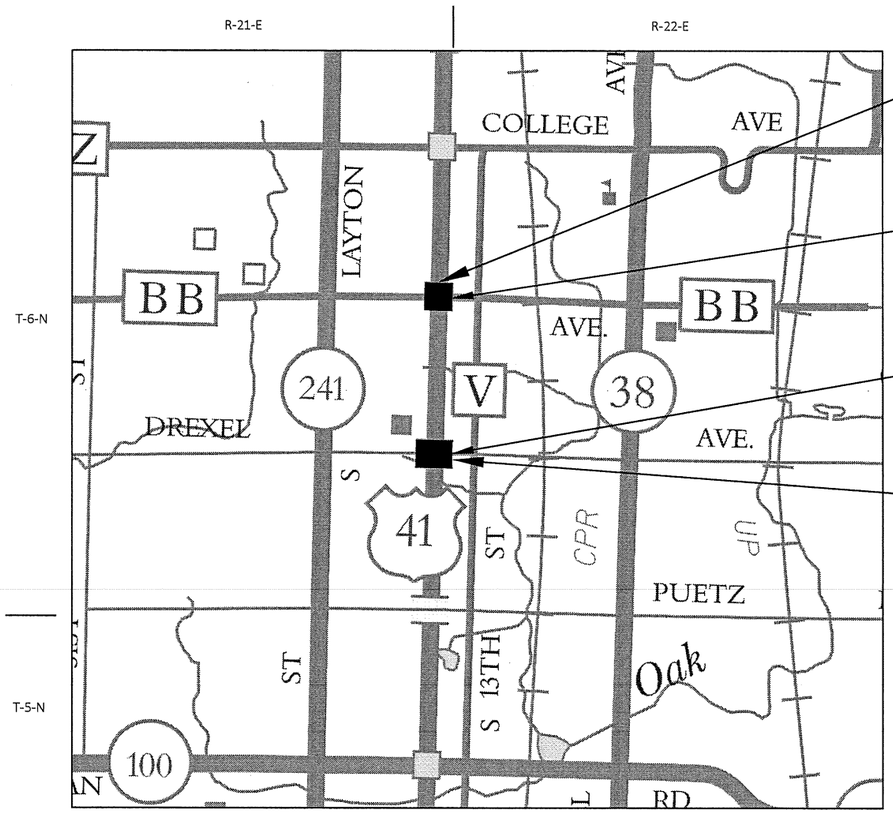
## IH 94

## MILWAUKEE COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1030-38-70 | WISC 2019287 | 1 |
| | | |
| | | |
| | | |

STATE PROJECT NUMBER

**1030-38-70**




LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | WISDOT |
| Designer | WISDOT |
| Project Manager | DEAN FILTZ |
| Regional Examiner | |
| Regional Supervisor | WAFA ELQAQ |

APPROVED FOR THE DEPARTMENT

DATE: 1/24/19 Dean Filtz (Signature)

E

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\010101_TI.DWG

PLOT DATE : 1/24/2019 9:54 AM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

## GENERAL NOTES

1. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS 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.
2. EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.
3. INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

## ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
PLAN DETAILS/EROSION CONTROL/PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT LAYOUT

## OTHER CONTACTS

**WISDOT DESIGN**
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**WISCONSIN COACH LINES, INC.**
MR. TOM DIECKELMAN
1520 ARCADIAN AVENUE
WAUKESHA, WI 53186
PHONE: (262) 542-8861 EXT. 140
TOM.DIECKELMAN@COACHUSA.COM

## UTILITY CONTACTS

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**AT&T WISCONSIN**
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**CHARTER COMMUNICATIONS**
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GLENDALE, WI 53209
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pgraham@midwestfibernetworks.com

**OAK CREEEK SEWER AND WATER**
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170 WEST DREXEL AVE
OAK CREEK, WI 53154
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rpritzlaff@water.oak-creek.wi.us

**PAETEC BUSINESS SERVICES**
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333 W. EVERETTY ST - A299
MILWAUKEE, WI 53203
nicole.smullen@wecenergygroup.com

**WE ENERGIES - GAS**
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333 W. EVERETTY ST - A299
MILWAUKEE, WI 53203
nicole.smullen@wecenergygroup.com

**WISDOT LIGHTING**
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935 S 60TH ST
WEST ALLIS, WI 53214
PHONE: (414) 750-0935
eric.perea@dot.wi.gov

**WISDOT SIGNALS**
DERRIN WOLFORD
141 NW BARSTOW PO BOX 798
WAUKESHA, WI 53187-0798
PHONE: (262) 521-4409
derrin.wolford@dot.wi.gov

**WISDOT STOC**
JEFFERY MADSON
433 W ST. PAULE AVE, STE 300
MILWAUKEE, WI 53203-3007
PHONE: (414) 225-3723
jeffrey.madson@dot.wi.gov

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

2

2

N

CITY OF OAK CREEK

30"RAW"

40"DRE"

40"RAW"

B-40-0763
DREXEL AVE
THIN POLYMER OVERLAY
SIDEWALK APPROACH MAINTENANCE

BEGIN CONSTRUCTION
STA 49+10.32 "DRE"

B-40-0810
RAWSON AVE
THIN POLYMER OVERLAY

BEGIN CONSTRUCTION
STA 48+99.58 "RAW"

IH 94

350"IH94" 360"IH94" 370"IH94" 380"IH94" 390"IH94" 400"IH94" 410"IH94" 420"IH94"

50"DRE"

50"RAW"

END CONSTRUCTION
STA 50+90.07 "DRE"

BEGIN PROJECT 1030-38-70
STA 354+77.58 "IH94"
X= 598809.71
Y= 249671.75

END PROJECT
STA 408+68.12 "IH94"

END CONSTRUCTION
STA 50+87.60 "RAW"

60"DRE"

60"RAW"

DREXEL AVE

RAWSON AVE

CITY OF OAK CREEK

70"DRE"

70"RAW"

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

2

N

IH 94 EB EXIT RAMP

IH 94 EB

IH 94 WB

IH 94 WB ENTRANCE RAMP

356"IH94"

355"IH94"

354"IH94"

353"IH94"

PV10 SIDEWALK APPROACH REGRADING
STA 50+91 TO STA 50+96

DREXEL AVENUE

47"DRE" 48"DRE" 49"DRE" 50"DRE" 51"DRE" 52"DRE" 53"DRE

BEGIN CONSTRUCTION
STA 49+10.32 "DRE"

END CONSTRUCTION
STA 50+90.07 "DRE"

B-40-0763 POLYMER OVERLAY
(SEE STRUCTURE PLANS FOR MORE INFORMATION)

IH 94 WB EXIT RAMP

LEGEND

| | |
|---|---|
| PV10 | ASPHALTIC SURFACE, 3-INCH |
| | INLET PROTECTION TYPE B |
| 1 | MARKING LINE EPOXY 4-INCH (YELLOW) |
| 2 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 3 | MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP) |
| 4 | MARKING LINE CONTRAST EPOXY 8-INCH (WHITE) |
| 5 | MARKING WORDS EPOXY (WHITE) |
| 6 | MARKING ARROWS EPOXY (TYPE 2) (WHITE) |
| 7 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | PLAN DETAILS/EROSION CONTROL/PAVEMENT MARKING - DREXEL AVENUE | SHEET 4 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202

PLOT DATE : 12/10/2018 1:35 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

IH 94 EB EXIT RAMP

IH 94 EB

IH 94 WB

IH 94 WB ENTRANCE RAMP

N

RAWSON AVENUE

409"IH94"

408"IH94"

407"IH94"

47"RAW"

48"RAW"

49"RAW"

50"RAW"

51"RAW"

52"RAW"

53"RAW"

ONLY

BEGIN CONSTRUCTION
STA 48+99.58 "RAW"

END CONSTRUCTION
STA 50+87.60 "RAW"

B-40-0810 POLYMER OVERLAY
(SEE STRUCTURE PLANS FOR MORE INFORMATION)

IH 94 WB EXIT RAMP

LEGEND

- INLET PROTECTION TYPE B
- (1) MARKING LINE EPOXY 4-INCH (YELLOW)
- (2) MARKING LINE EPOXY 4-INCH (WHITE)
- (3) MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (4) MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)
- (5) MARKING WORDS EPOXY (WHITE)
- (6) MARKING ARROWS EPOXY (TYPE 2) (WHITE)
- (7) MARKING STOP LINE EPOXY 18-INCH (WHITE)

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | PLAN DETAILS/EROSION CONTROL/PAVEMENT MARKING - RAWSON AVENUE | SHEET 5 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203

PLOT DATE : 12/10/2018 1:44 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- WORK AREA
- DIRECTION OF TRAFFIC

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.

ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.

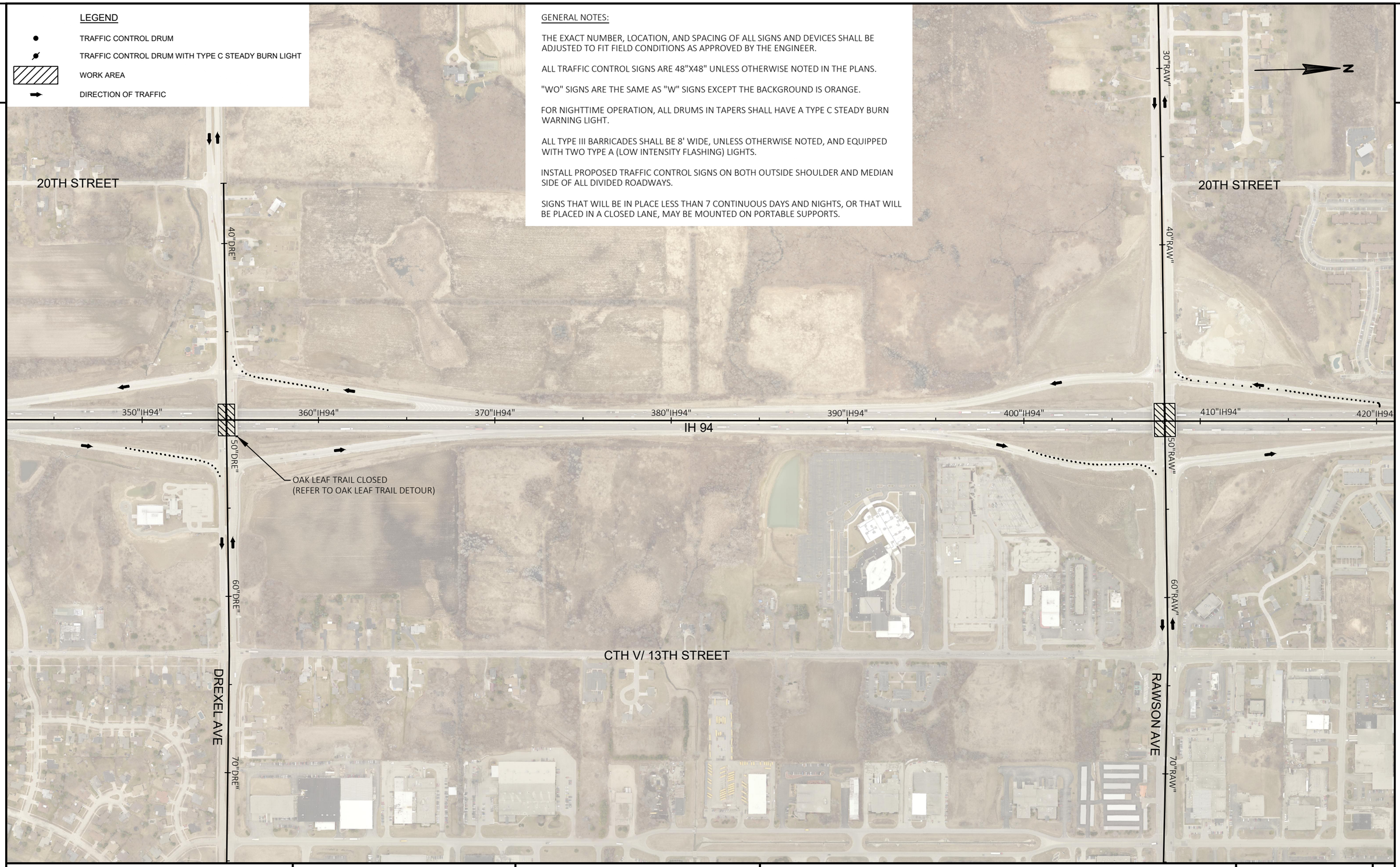
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME OPERATION, ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE A (LOW INTENSITY FLASHING) LIGHTS.

INSTALL PROPOSED TRAFFIC CONTROL SIGNS ON BOTH OUTSIDE SHOULDER AND MEDIAN SIDE OF ALL DIVIDED ROADWAYS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.




2

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - OVERVIEW | SHEET 6 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025001_TC - OVERVIEW.DWG
LAYOUT NAME - 025001

PLOT DATE : 3/18/2019 7:46 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

STH 241 / 27TH STREET

DREXEL AVENUE

S 20TH STREET

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

ROAD CLOSED AHEAD
W20-3A

500'

PCMS

DREXEL AVENUE TO CLOSE

<DAY>
<TIME>

R11-3
60"X30"
ROAD CLOSED
0.7 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-2
48"X30"
ROAD CLOSED

38"DRE"

40"DRE"

42"DRE"

44"DRE"

END ROAD WORK
G20-2A
48"X24"

500'

500'

500'

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED 500 FT
W20-3D

MATCHLINE 45+00 "DRE"

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - DREXEL AVENUE | SHEET 7 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025002_TC - DREXEL.DWG
LAYOUT NAME - 025001

PLOT DATE : 12/11/2018 9:14 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

MATCHLINE 359+00 "IH94"

N

R11-2L 48"X30" — LANE CLOSED

IH 94 EB EXIT RAMP

25' TYP

337.5' SHIFT

IH 94 EB

IH 94 WB

358"IH94"

356"IH94"

R11-2 48"X30" — ROAD CLOSED

IH 94 WB ENTRANCE RAMP

ROAD CLOSED 500 FT — W20-3D

500'

500'

500'

MATCHLINE 45+00 "DRE"

MATCHLINE 60+00 "DRE"

46"DRE"

48"DRE"

50"DRE"

52"DRE"

54"DRE"

56"DRE"

58"DRE"

60"DRE"

DREXEL AVENUE

500'

R11-2 48"X30" — ROAD CLOSED

IH 94 EB ENTRANCE RAMP

354"IH94"

352"IH94"

25' TYP

500'

END ROAD WORK — G20-2A 48"X24"

R11-2L 48"X30" — LANE CLOSED

IH 94 WB EXIT RAMP

337.5' SHIFT

MATCHLINE 351+00 "IH94"

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - DREXEL AVENUE | SHEET 8 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025002_TC - DREXEL.DWG
LAYOUT NAME - 025002

PLOT DATE : 12/11/2018 11:02 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

13TH STREET

CTH V / 10TH STREET

N

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD
W20-3A

500'

500'

PCMS

62"DRE"

64"DRE"

66"DRE"

68"DRE"

70"DRE"

72"DRE"

74"DRE"

MATCHLINE 60+00 "DRE"

DREXEL AVENUE

DREXEL AVENUE TO CLOSE

<DAY>
<TIME>

R11-3
60"X30"

ROAD CLOSED
0.2 MILES AHEAD
LOCAL TRAFFIC ONLY

WAYLAND DRIVE

WILDWOOD DRIVE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - DREXEL AVENUE | SHEET 9 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025002_TC - DREXEL.DWG
LAYOUT NAME - 025003

PLOT DATE : 12/11/2018 1:37 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

IH 94 EB ENTRANCE RAMP

IH 94 EB

IH 94 WB

IH 94 WB EXIT RAMP

336"IH94" 338"IH94" 340"IH94" 342"IH94" 344"IH94" 346"IH94" 348"IH94" 350"IH94"

MATCHLINE 351+00 "IH94"

350' 350' 350'

337.5' SHIFT

25' TYP

ROAD WORK AHEAD W20-1A

LEFT LANE CLOSED AHEAD W20-5A

WO1-4R

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - DREXEL AVENUE | SHEET 10 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025002_TC - DREXEL.DWG
LAYOUT NAME - 025004

PLOT DATE : 12/18/2018 3:06 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

337.5' SHIFT

25' TYP

350'

350'

350'

WO1-4R

LEFT TWO LANES CLOSED AHEAD

W20-5SA

ROAD WORK AHEAD

W20-1A

IH 94 EB EXIT RAMP

IH 94 EB

IH 94 WB

IH 94 WB ENTRANCE RAMP

MATCHLINE 359+00 "IH94"

360"IH94"

362"IH94"

364"IH94"

366"IH94"

368"IH94"

370"IH94"

372"IH94"

374"IH9

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - DREXEL AVENUE | SHEET 11 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025002_TC - DREXEL.DWG
LAYOUT NAME - 025005

PLOT DATE : 12/18/2018 3:07 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

STH 241 / 27TH STREET

S 20TH STREET

RAWSON AVENUE

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

ROAD CLOSED AHEAD
W20-3A

500'

PCMS

RAWSON AVENUE TO CLOSE

<DAY>
<TIME>

R11-3
60"X30"

ROAD CLOSED
0.7 MILES AHEAD
LOCAL TRAFFIC ONLY

38"RAW"

40"RAW"

42"RAW"

MATCHLINE 43+00 "RAW"

500'

ROAD CLOSED 1000 FT
W20-3C

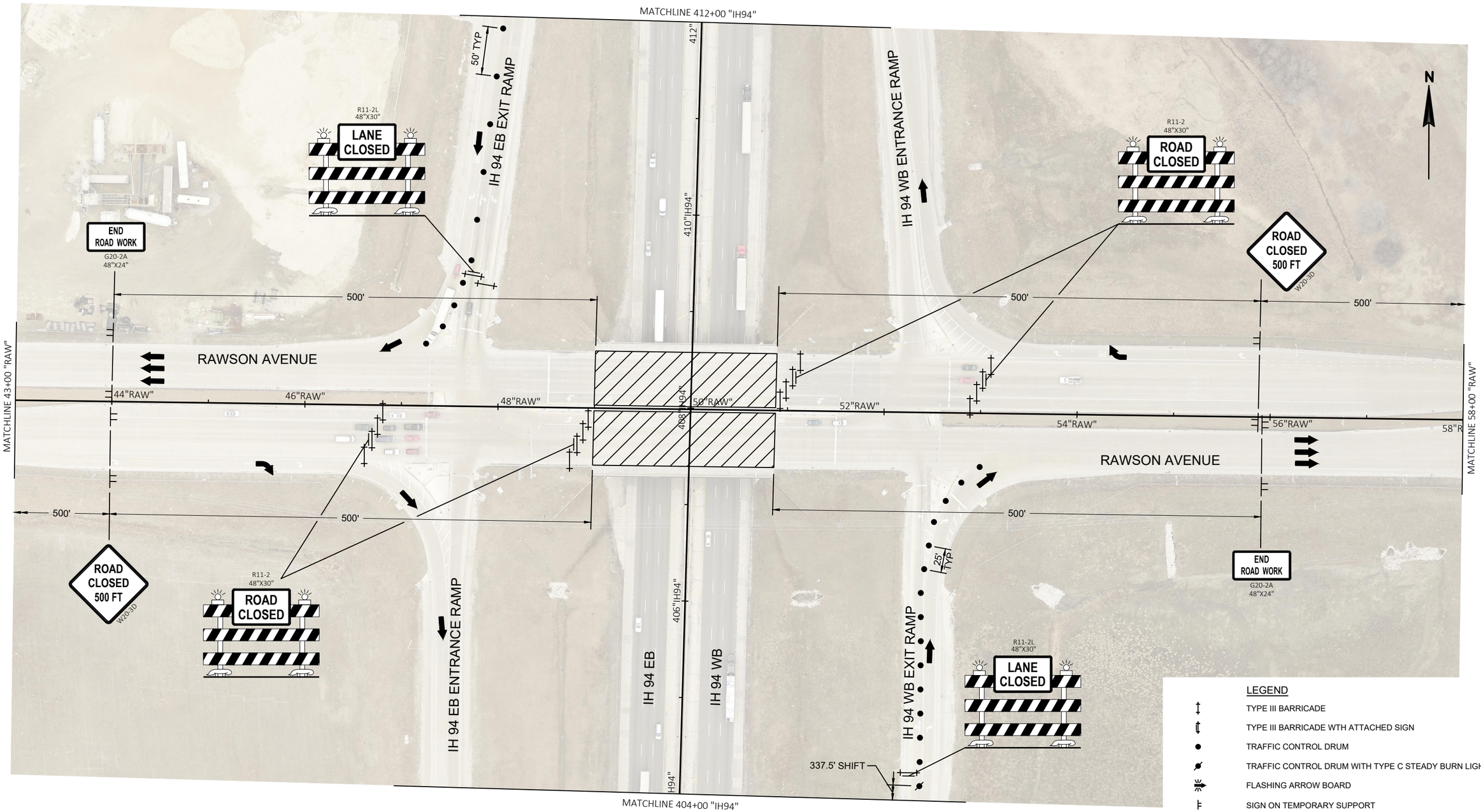
| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - RAWSON AVENUE | SHEET 12 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025003_TC - RAWSON.DWG
LAYOUT NAME - 025001

PLOT DATE : 12/11/2018 1:01 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - RAWSON AVENUE | SHEET 13 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025003_TC - RAWSON.DWG
LAYOUT NAME - 025002

PLOT DATE : 12/11/2018 1:30 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

CTH V / S 13TH STREET

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD
W20-3A

500'

500'

PCMS

RAWSON AVENUE TO CLOSE

<DAY>
<TIME>

MATCHLINE 58+00 "RAW"

AW"

60"RAW"

62"RAW"

64"RAW"

66"RAW"

68"RAW"

70"RAW"

72"RAW"

RAWSON AVENUE

R11-3
60"X30"

ROAD CLOSED
0.2 MILES AHEAD
LOCAL TRAFFIC ONLY

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - RAWSON AVENUE | SHEET 14 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025003_TC - RAWSON.DWG
LAYOUT NAME - 025003

PLOT DATE : 12/11/2018 1:50 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

N

IH 94 EB ENTRANCE RAMP

IH 94 EB

390"IH94" 392"IH94" 394"IH94" 396"IH94" 398"IH94" 400"IH94" 402"IH94" 404"

MATCHLINE 404+00 "IH94"

IH 94 WB

350' 350'

RAMP WORK AHEAD W20-1A

LEFT LANE CLOSED AHEAD W20-5A

IH 94 WB EXIT RAMP

350'

WO1-4R

25' TYP

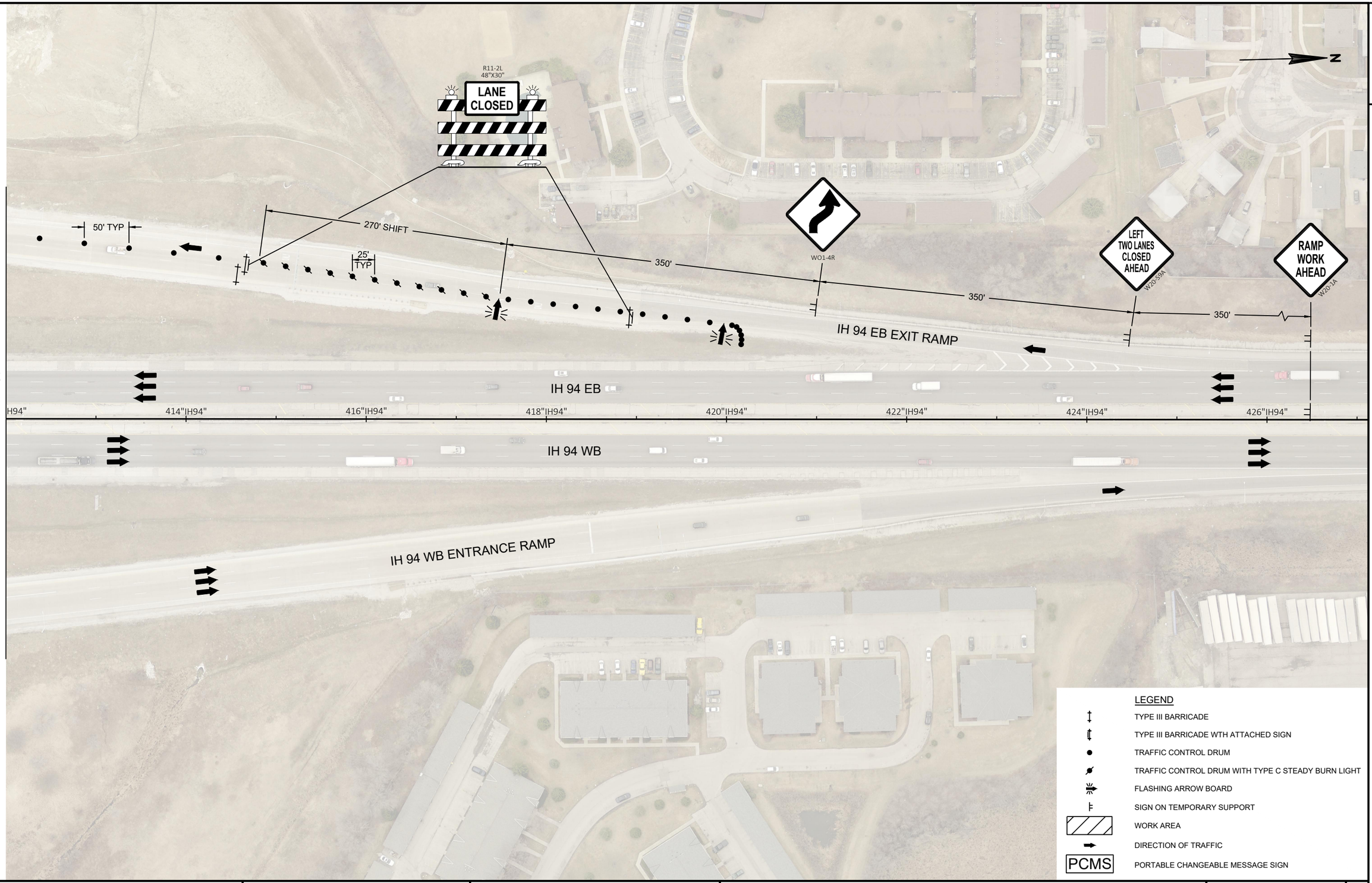
337.5' SHIFT

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - RAWSON AVENUE | SHEET 15 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025003_TC - RAWSON.DWG
LAYOUT NAME - 025004

PLOT DATE : 12/18/2018 3:10 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2




| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - RAWSON AVENUE | SHEET 16 | E |
|---|---|---|---|---|---|

2

END ROAD WORK
G20-2A
48"X24"

46"DRE"

500'

10' TYP

48"DRE"

R11-2L
48"X30"
LANE CLOSED

R9-9
30" X 18"
SIDEWALK CLOSED

TYPE II BARRICADE

25' TYP

1000'

LEFT LANE CLOSED AHEAD
W20-5A

1000'

ROAD WORK AHEAD
W20-1A

IH 94 EB EXIT RAMP

N

OUTSIDE LANE CLOSED FOR
OAK LEAF TRAIL DETOUR

IH 94 EB

354"IH94" 356"IH94" 358"IH94" 360"IH94" 362"IH94" 364"IH94" 366"IH94" 368"IH94"

50"DRE"

IH 94 WB

R9-9
30" X 18"
SIDEWALK CLOSED

TYPE II BARRICADE

52"DRE"

IH 94 WB ENTRANCE RAMP

500'

END ROAD WORK
G20-2A
48"X24"

R11-2L
48"X30"
LANE CLOSED

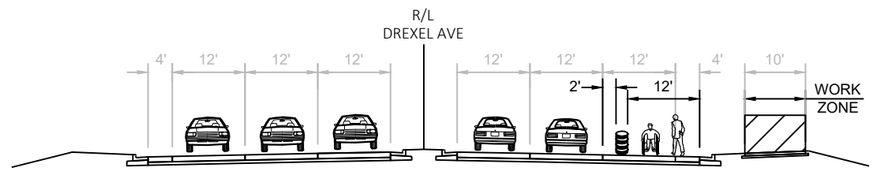
54"DRE"

MATCHLINE 55+00 "DRE"

2

LEGEND

- TYPE II BARRICADE
- TYPE II BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC




TYPICAL SECTION
OAK LEAF TRAIL DETOUR

NOTE: ALL WORK PREFORMED ON OAK LEAF TRAIL SHALL BE COMPLETED INDEPENDENTLY OF THE THIN POLYMER OVERLAY ON DREXEL AVENUE.

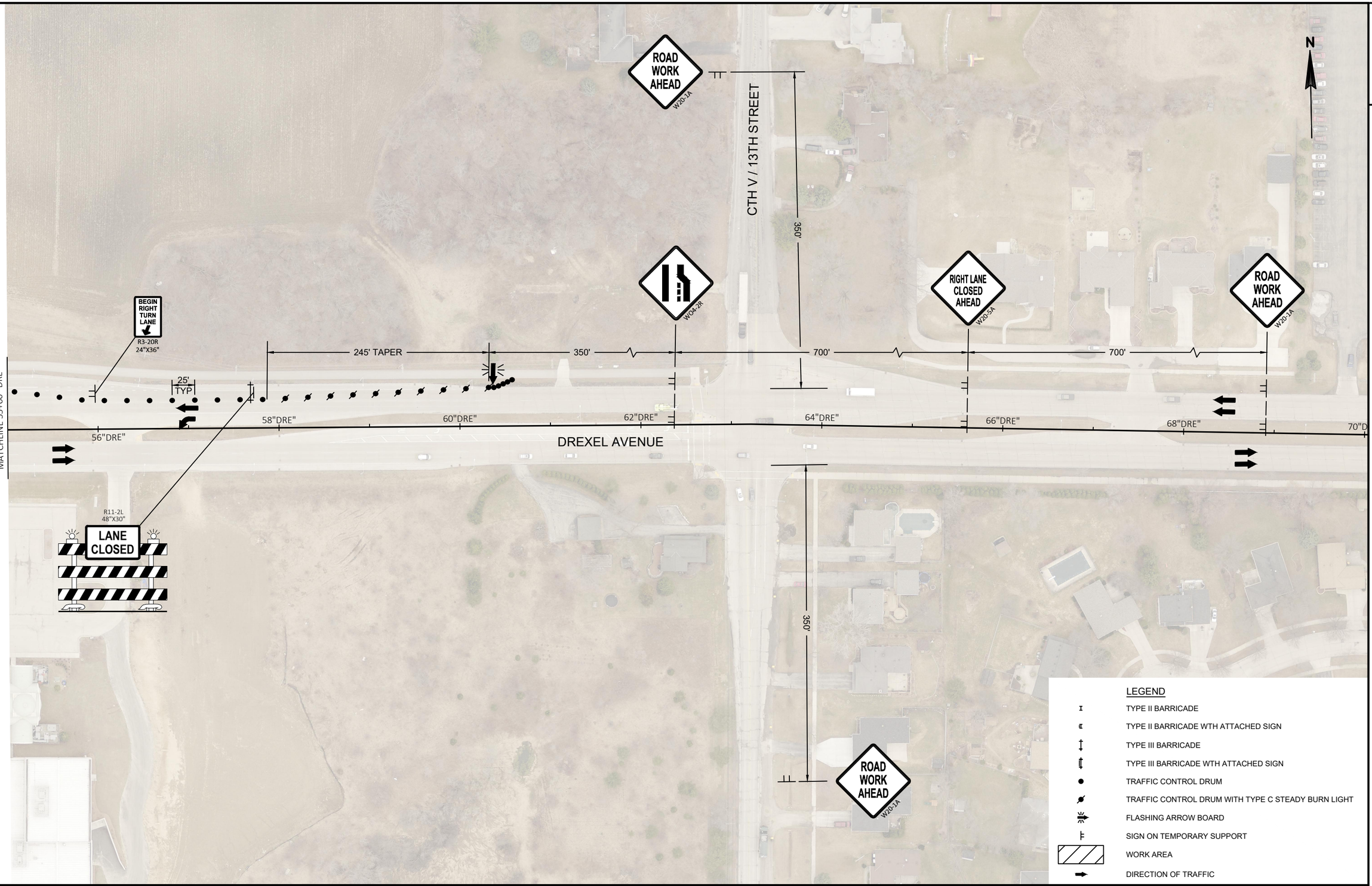
| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - OAK LEAF TRAIL DETOUR | SHEET 17 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025004_TC - OAK LEAF TRAIL DETOUR.DWG
LAYOUT NAME - 025001

PLOT DATE : 12/18/2018 3:27 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2




| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | TRAFFIC CONTROL - OAK LEAF TRAIL DETOUR | SHEET 18 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\025004_TC - OAK LEAF TRAIL DETOUR.DWG
LAYOUT NAME - 025002

PLOT DATE : 12/12/2018 9:06 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

365"

360"IH94"

N1° 30' 37"E

23359.12'

355"IH94"

50"DRE"

40"DRE"

S89° 15' 10"E

1341.61'

45"DRE"

STA 36+58.39 "DRE"

55"DRE"

S89° 15' 10"E

1321.95'

60"DRE"

65"DRE"

STA 63+21.95 "DRE"

STA 50+00.00 "DRE" (DREXEL AVENUE)=
STA 354+77.58 "IH94" (IH 94)
Y=249,671.746
X=598,809.711

350"IH94"

N1° 30' 37"E

23359.12'

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | ALIGNMENT PLAN - DREXEL AVENUE | SHEET 19 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\10303800\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027202

PLOT DATE : 4/18/2018 2:47 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

N

420

415"IH94"

N1° 30' 37"E
23359.12'

410"IH94"

35"RAW"

40"RAW"

S89° 21' 55"E
2658.88'

45"RAW"

50"RAW"

55"RAW"

S89° 21' 55"E
2658.88'

60"RAW"

65"RAW

STA 36+65.48 "RAW"

STA 49+99.62 "RAW" (RAWSON AVENUE)=
STA 407+98.69 "IH94" (IH 94)
Y=254,991.013
X=598,949.962

STA 63+24.37 "RAW"

405"IH94"

N1° 30' 37"E
23359.12'

| PROJECT NO: 1030-38-70 | HWY: IH 94 | COUNTY: MILWAUKEE | ALIGNMENT PLAN - RAWSON AVENUE | SHEET 20 | E |
|---|---|---|---|---|---|

1030-38-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 204.0110 | Removing Asphaltic Surface | SY | 6.000 | 6.000 |
| 0010 | 213.0100 | Finishing Roadway (project) 0002. 1030-38-70 | EACH | 1.000 | 1.000 |
| 0012 | 465.0105 | Asphaltic Surface | TON | 1.000 | 1.000 |
| 0014 | 509.0301 | Preparation Decks Type 1 | SY | 82.000 | 82.000 |
| 0016 | 509.0302 | Preparation Decks Type 2 | SY | 41.000 | 41.000 |
| 0018 | 509.0310.S | Sawing Pavement Deck Preparation Areas | LF | 290.000 | 290.000 |
| 0020 | 509.5100.S | Polymer Overlay | SY | 4,091.000 | 4,091.000 |
| 0026 | 619.1000 | Mobilization | EACH | 0.100 | 0.100 |
| 0028 | 628.7010 | Inlet Protection Type B | EACH | 18.000 | 18.000 |
| 0040 | 643.0300 | Traffic Control Drums | DAY | 591.000 | 591.000 |
| 0042 | 643.0410 | Traffic Control Barricades Type II | DAY | 8.000 | 8.000 |
| 0044 | 643.0420 | Traffic Control Barricades Type III | DAY | 154.000 | 154.000 |
| 0046 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 308.000 | 308.000 |
| 0048 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 211.000 | 211.000 |
| 0050 | 643.0800 | Traffic Control Arrow Boards | DAY | 21.000 | 21.000 |
| 0052 | 643.0900 | Traffic Control Signs | DAY | 268.000 | 268.000 |
| 0058 | 643.1050 | Traffic Control Signs PCMS | DAY | 23.000 | 23.000 |
| 0064 | 643.5000 | Traffic Control | EACH | 0.100 | 0.100 |
| 0066 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 2,576.000 | 2,576.000 |
| 0070 | 646.5020 | Marking Arrow Epoxy | EACH | 10.000 | 10.000 |
| 0072 | 646.5120 | Marking Word Epoxy | EACH | 8.000 | 8.000 |
| 0074 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 183.000 | 183.000 |
| 0080 | 649.0105 | Temporary Marking Line Paint 4-Inch | LF | 283.000 | 283.000 |
| 0082 | 649.0205 | Temporary Marking Line Paint 8-Inch | LF | 736.000 | 736.000 |
| 0092 | SPV.0035 | Special 4000. Rapid Set Deck Repair | CY | 14.000 | 14.000 |
| 0100 | SPV.0060 | Special 0004. Field Facilities Office Space | EACH | 0.100 | 0.100 |
| 0102 | SPV.0090 | Special 0001. Marking Contrast Epoxy 4-Inch | LF | 500.000 | 500.000 |
| 0104 | SPV.0090 | Special 0002. Marking Contrast Epoxy 8-Inch | LF | 1,260.000 | 1,260.000 |

3

## REMOVALS

| CATEGORY | LOCATION | STATION | TO STATION | 204.0110 REMOVING ASPHALTIC SURFACE SY |
|---|---|---|---|---|
| 1000 | DREXEL AVE | 50+91 | 50+96 | 6 |

## INLET PROTECTION

| CATEGORY | LOCATION | STATION | OFFSET | 628.7010 INLET PROTECTION TYPE B EACH |
|---|---|---|---|---|
| 1000 | DREXEL AVE | 48+00 | RT/LT | 2 |
| | | 48+23 | RT/LT | 2 |
| | | 48+90 | RT/LT | 2 |
| | | 51+72 | RT/LT | 2 |
| | | 52+00 | RT/LT | 2 |
| | RAWSON AVE | 51+25 | RT/LT | 2 |
| | | 52+00 | RT/LT | 2 |
| | UNDISTRIBUTED | | | 4 |
| | TOTALS | | | 18 |

## ASPHALTIC ITEMS

| CATEGORY | LOCATION | STATION | TO STATION | OFFSET | 465.0105 ASPHALTIC SURFACE TONS | COMMENT |
|---|---|---|---|---|---|---|
| 1000 | DREXEL AVENUE | 50+91 | 50+96 | LT | 1 | OAK LEAF TRAIL REGRADING |

FOR INFORMATION ONLY:

| MATERIAL UNIT WEIGHTS USED: | |
|---|---|
| HMA PAVEMENT | 110 LB/(SY*IN) |

3

## PAVEMENT MARKING

| CATEGORY | LOCATION | STATION | TO STATION | 646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF | 646.1020 MARKING LINE EPOXY 4-INCH WHITE LF | 646.5020 MARKING ARROW EPOXY (TYPE 2) EACH | 646.5120 MARKING WORD EPOXY EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF | 649.0205 TEMPORARY MARKING LINE PAINT 8-INCH LF | SPV.0090.0001 PAVEMENT MARKING CONTRAST EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP DASHED WHITE LF | SPV.0090.0002 PAVEMENT MARKING CONTRAST EPOXY 8-INCH WHITE LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | DREXEL AVE | 48+25 | 51+75 | 674 | 659 | 4 | 4 | 80 | -- | -- | 175 | 659 |
| | RAWSON AVE | 48+25 | 51+75 | 625 | 618 | 6 | 4 | 103 | -- | -- | 325 | 601 |
| | SUBTOTAL | | | 1300 | 1277 | 10 | 8 | 183 | -- | -- | 500 | 1260 |
| | UNDISTRIBUTED | | | -- | -- | -- | -- | -- | 283 | 736 | -- | -- |
| | TOTAL | | | 2576 | | 10 | 8 | 183 | 283 | 736 | 500 | 1260 |

## TRAFFIC CONTROL

| CATEGORY | LOCATION | LOCATION | DAYS | 643.0300 TRAFFIC CONTROL DRUMS *EACH | 643.0300 TRAFFIC CONTROL DRUMS DAY | 643.0410 TRAFFIC CONTROL BARRICADES TYPE II *EACH | 643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III *EACH | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A *EACH | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C *EACH | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY | 643.0800 TRAFFIC CONTROL ARROW BOARDS *EACH | 643.0800 TRAFFIC CONTROL ARROW BOARDS DAY | 643.0900 TRAFFIC CONTROL SIGNS *EACH | 643.0900 TRAFFIC CONTROL SIGNS DAY | 643.1050 TRAFFIC CONTROL SIGNS PCMS *EACH | 643.1050 TRAFFIC CONTROL SIGNS PCMS DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | DREXEL AVE | DREXEL AVENUE | 3 | -- | -- | -- | -- | 13 | 39 | 26 | 78 | -- | -- | -- | -- | 23 | 69 | 2 | 9 |
| | | WB EXIT RAMP | 3 | 26 | 78 | -- | -- | 1 | 3 | 2 | 6 | 14 | 42 | 1 | 3 | 4 | 12 | -- | -- |
| | | EB EXIT RAMP | 3 | 26 | 78 | -- | -- | 2 | 6 | 4 | 12 | 14 | 42 | 1 | 3 | 4 | 12 | -- | -- |
| | | SUBTOTAL | | | 156 | | 0 | | 48 | | 96 | | 84 | | 6 | | 93 | | 9 |
| | RAWSON AVE | RAWSON AVENUE | 3 | -- | -- | -- | -- | 18 | 54 | 36 | 108 | -- | -- | -- | -- | 22 | 66 | 2 | 9 |
| | | WB EXIT RAMP | 3 | 33 | 99 | -- | -- | 1 | 3 | 2 | 6 | 14 | 42 | 1 | 3 | 5 | 15 | -- | -- |
| | | EB EXIT RAMP | 3 | 42 | 126 | -- | -- | 5 | 15 | 10 | 30 | 11 | 33 | 2 | 6 | 7 | 21 | -- | -- |
| | | SUBTOTAL | | | 225 | | 0 | | 72 | | 144 | | 75 | | 9 | | 102 | | 9 |
| | OAK LEAF TRAIL DETOUR | DREXEL AVENUE | 1 | 74 | 74 | 6 | 6 | 2 | 2 | 4 | 4 | 10 | 10 | 1 | 1 | 13 | 13 | -- | -- |
| | | EB EXIT RAMP | 1 | 18 | 18 | -- | -- | 1 | 1 | 2 | 2 | -- | -- | 1 | 1 | 3 | 3 | -- | -- |
| | | WB ENTRANCE RAMP | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| | | 13TH STREET | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 2 | -- | -- |
| | | SUBTOTAL | | | 92 | | 6 | | 3 | | 6 | | 10 | | 2 | | 19 | | -- |
| | | UNDISTRIBUTED | | | 118 | | 2 | | 31 | | 62 | | 42 | | 4 | | 54 | | 5 |
| | | TOTAL | | | 591 | | 8 | | 154 | | 308 | | 211 | | 21 | | 268 | | 23 |

## TRAFFIC CONTROL

| CATEGORY | PROJECT | 643.5000 TRAFFIC CONTROL EACH |
|---|---|---|
| 1000 | 1030-38-70 | 0.10 |

## MOBILIZATION

| CATEGORY | PROJECT | 619.1000 MOBILIZATION EACH |
|---|---|---|
| 1000 | 1030-38-70 | 0.10 |

## FINISHING ROADWAY

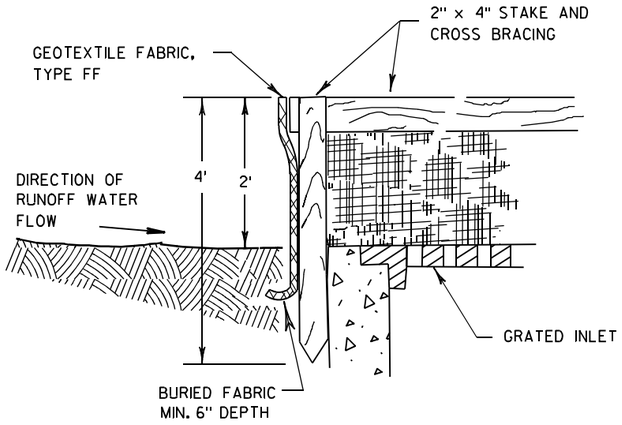
| CATEGORY | PROJECT | 213.0100.0003 FINISHING ROADWAY EACH |
|---|---|---|
| 1000 | 1030-38-70 | 1 |

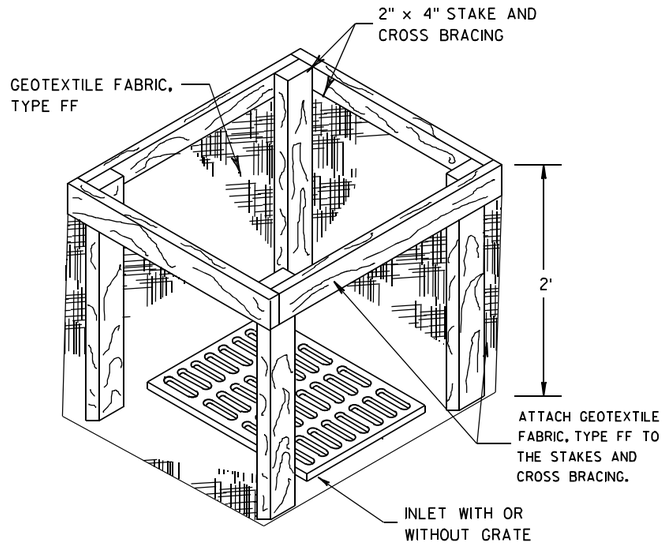
## FIELD FACILITIES OFFICE SPACE

| CATEGORY | PROJECT | SPV.0060.0004 FIELD FACILITIES OFFICE SPACE EACH |
|---|---|---|
| 1000 | 1030-38-70 | 0.10 |

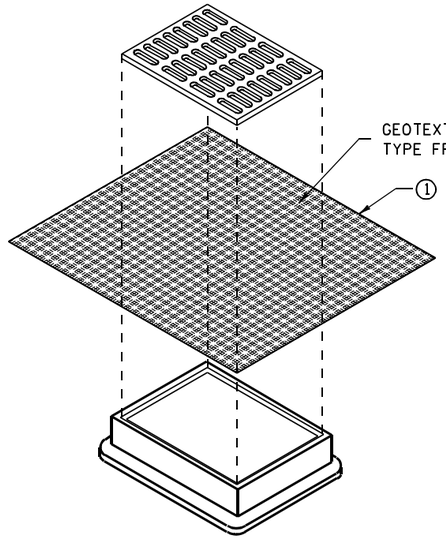
# Standard Detail Drawing List

| | |
|---|---|
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 15C02-07A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-07B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C07-14B | PAVEMENT MARKING WORDS |
| 15C07-14C | PAVEMENT MARKING ARROWS |
| 15C08-19A | LONGITUDINAL MARKING (MAINLINE) |
| 15C11-07B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C33-03 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D20-04 | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D30-04A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |



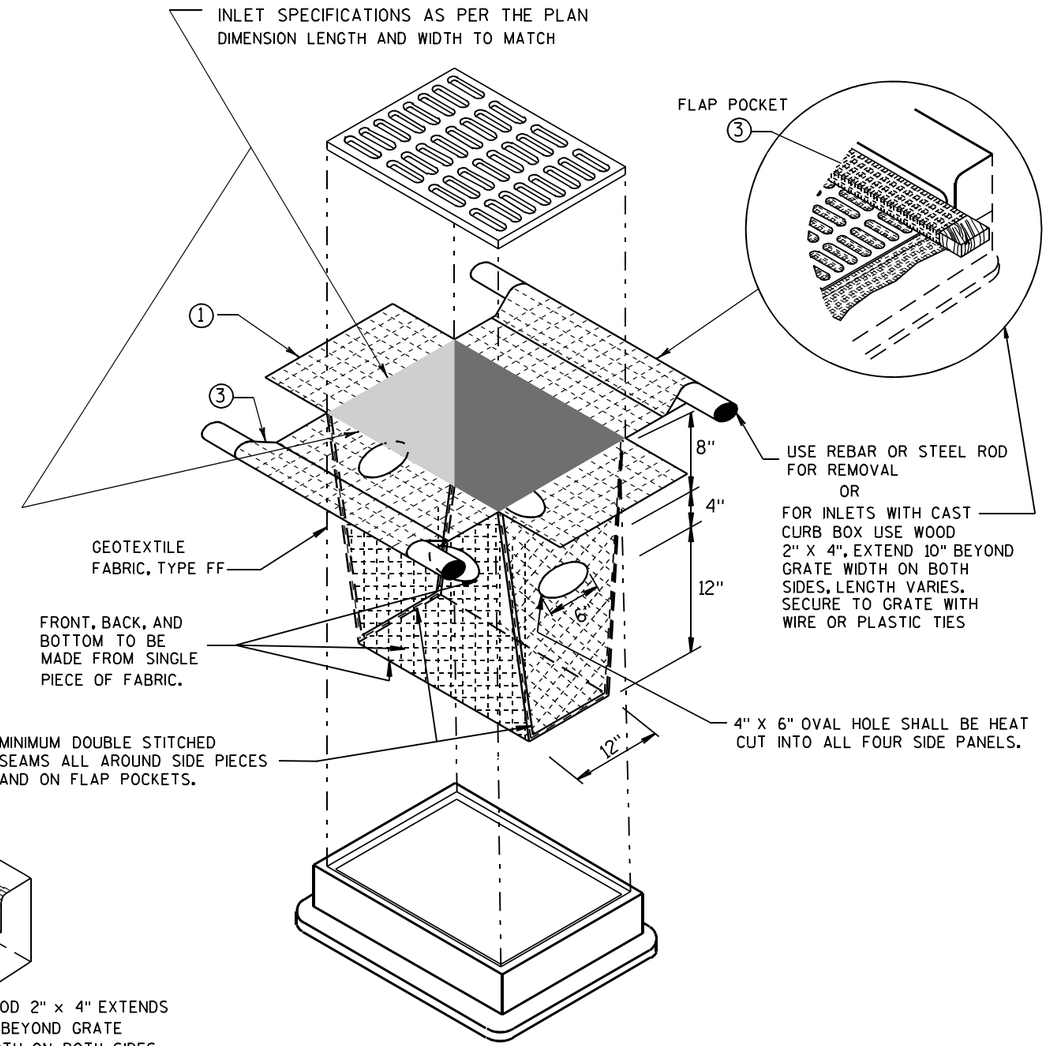




## INLET PROTECTION, TYPE A



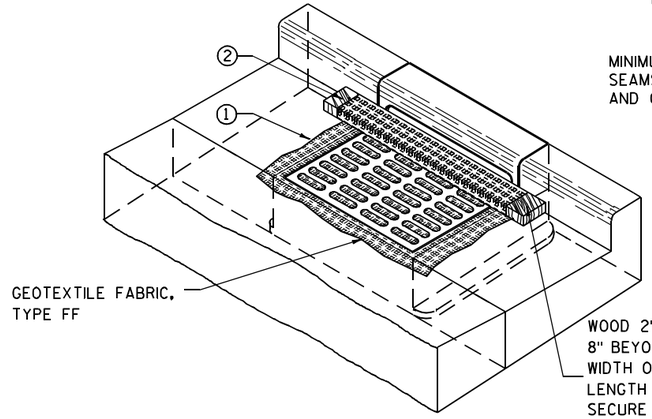

## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)




## INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ② )




## INLET PROTECTION, TYPE C (WITH CURB BOX)

## GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

## INSTALLATION NOTES

### TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

### TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

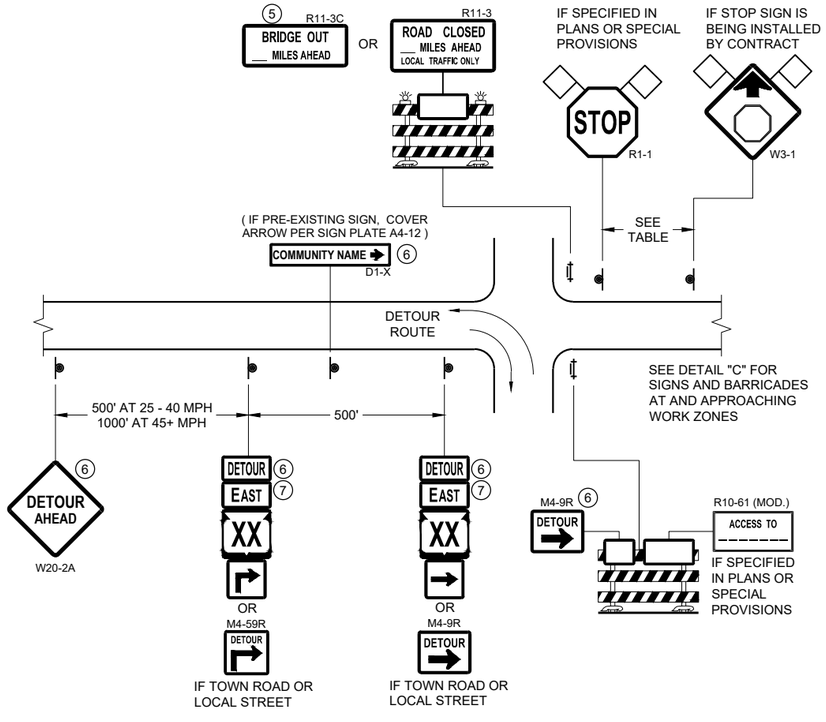


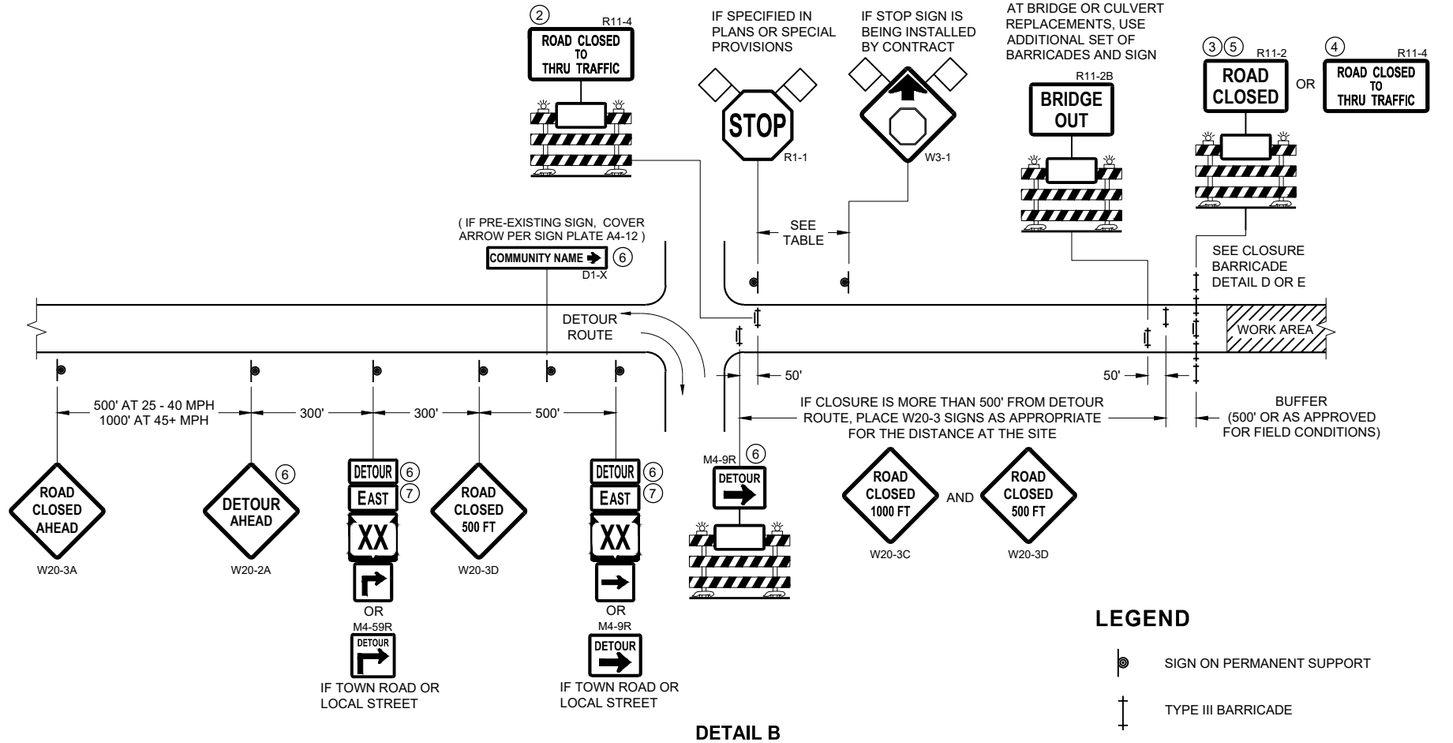
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S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



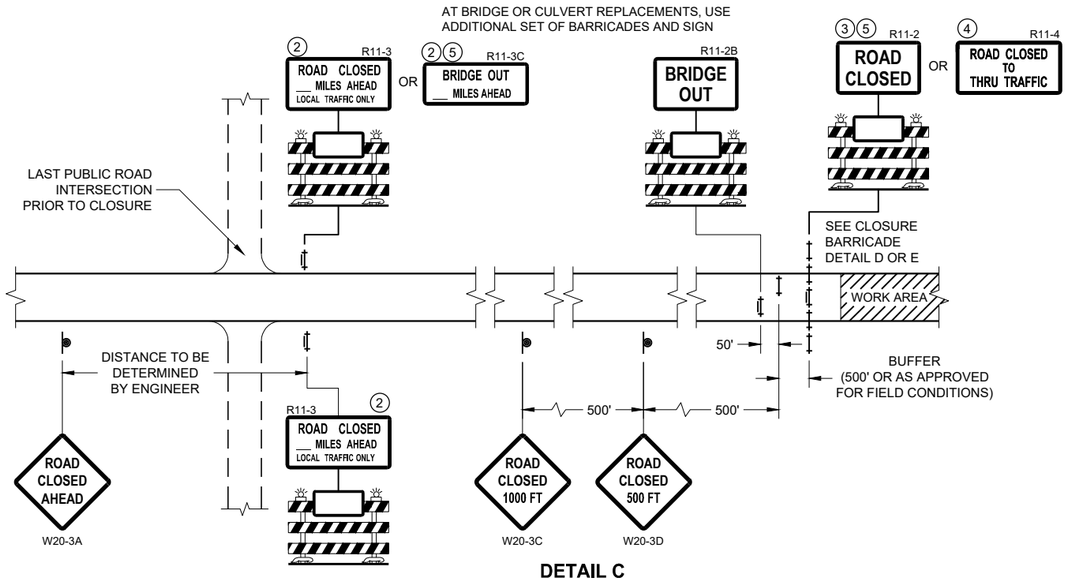




## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )

## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

| 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

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

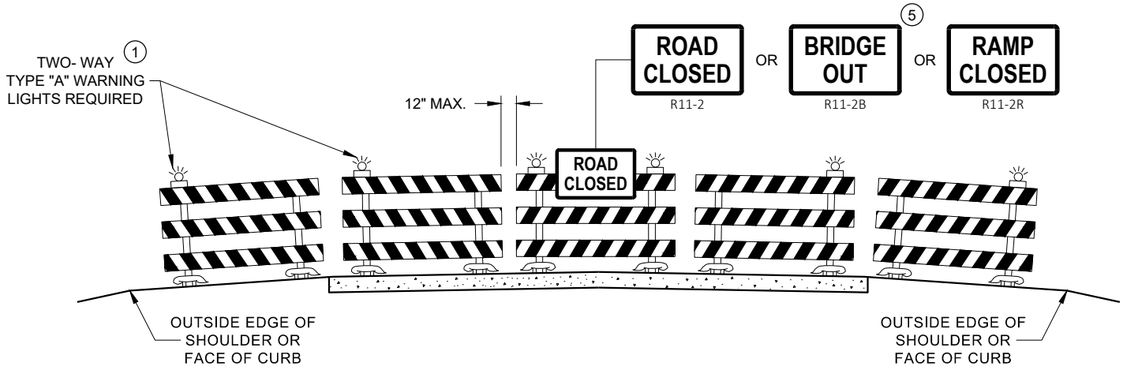
FHWA



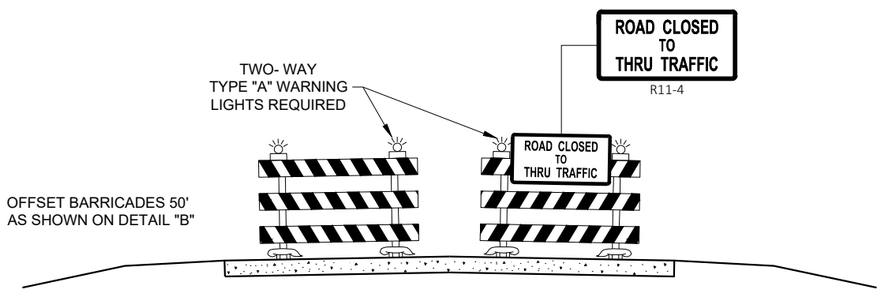
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SDD 15C02 - 07a

SDD 15C02 - 07a




**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 PORTABLBLE 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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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 CARDIANAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

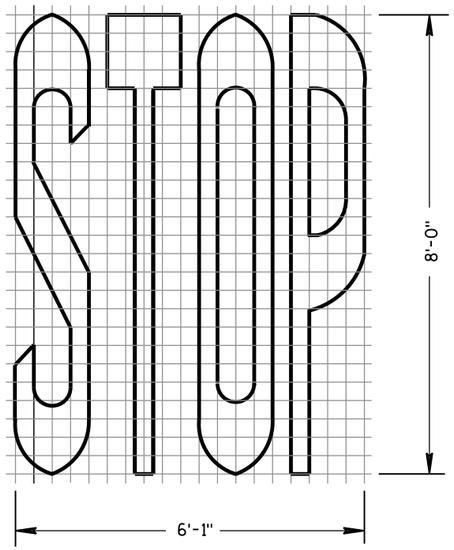


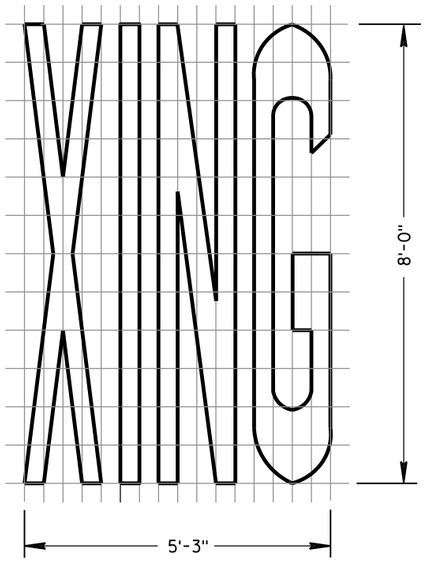

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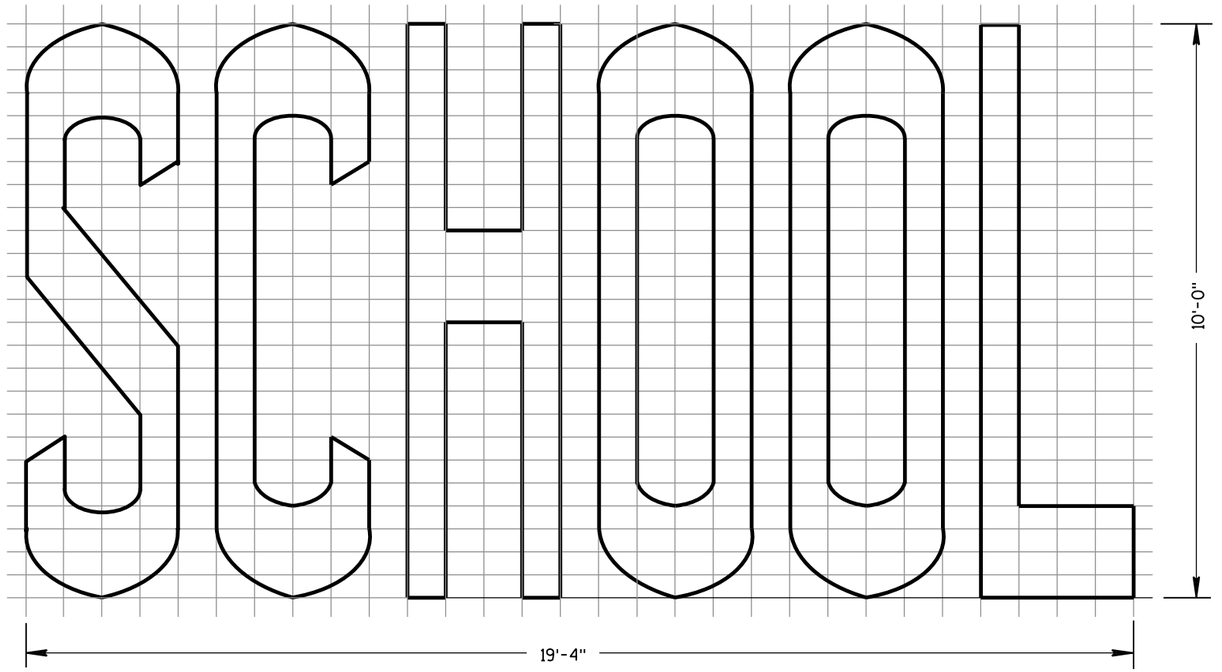

SDD 15C02 - 07b

## GENERAL NOTES

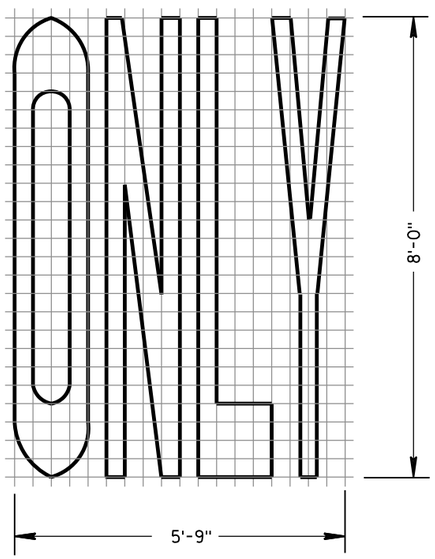
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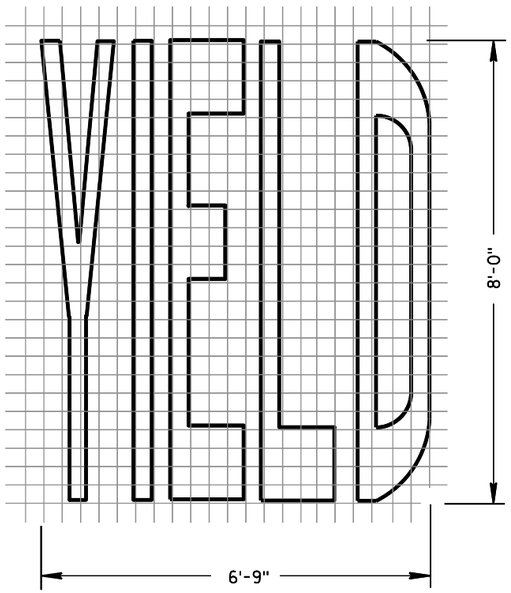


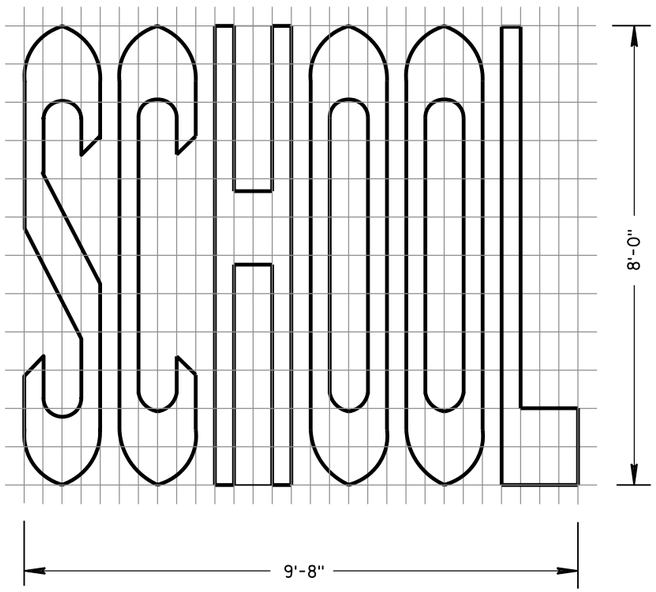




**TWO-LANE**




**SINGLE-LANE**

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
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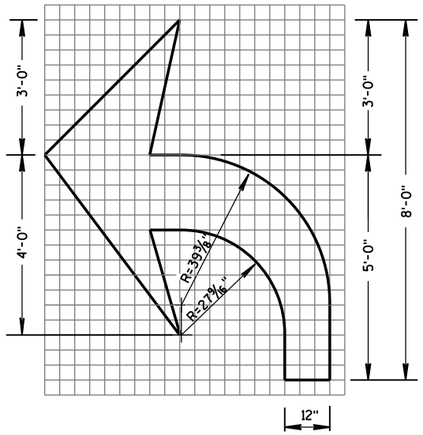
S.D.D. 15 C 7-14b

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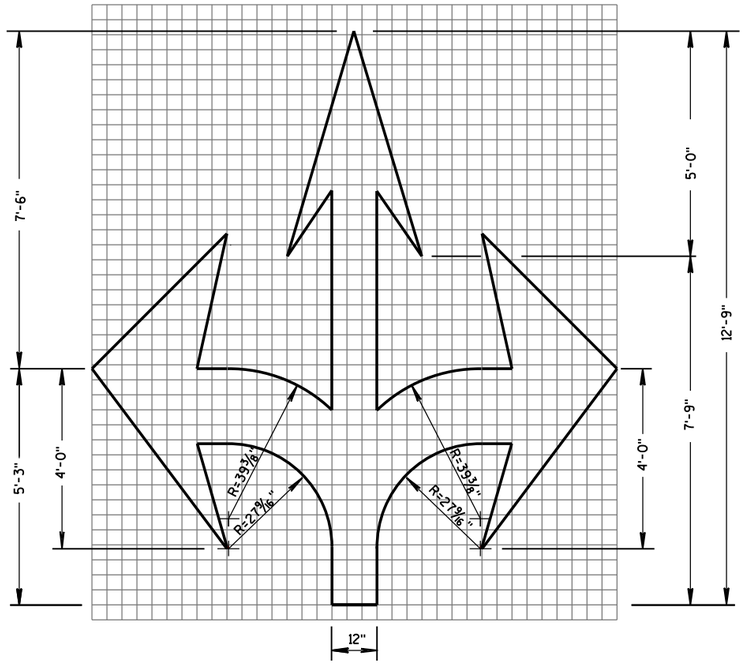
S.D.D. 15 C 7-14b

## GENERAL NOTES

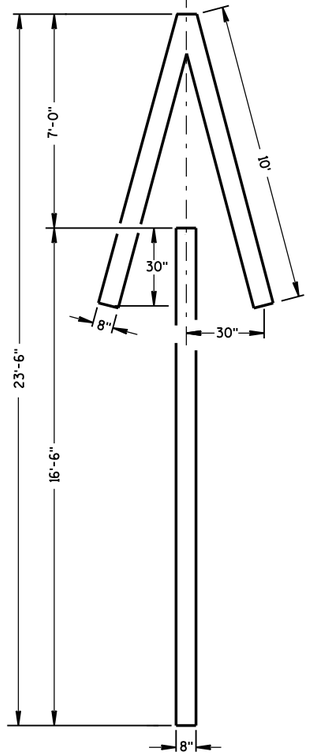
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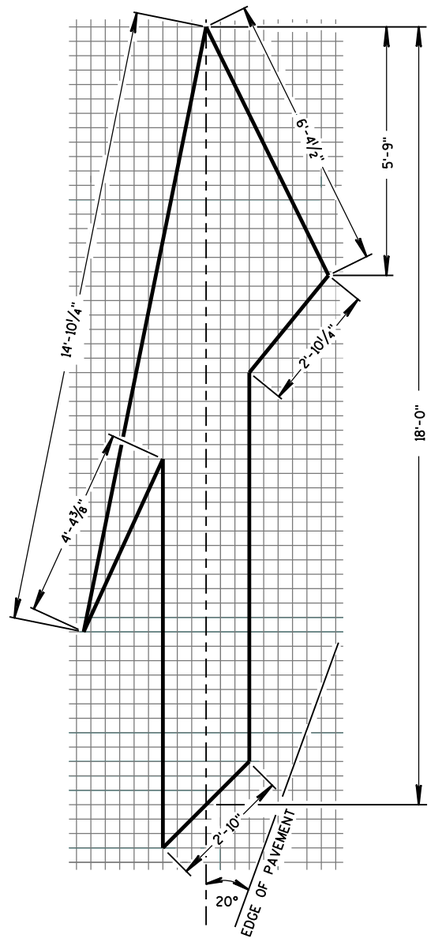

TYPE 2



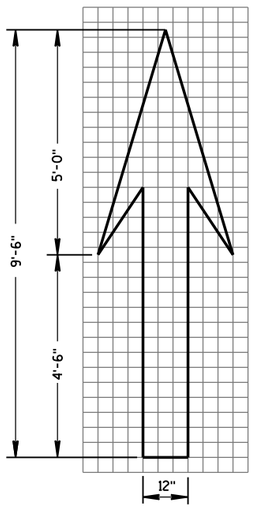

TYPE 6



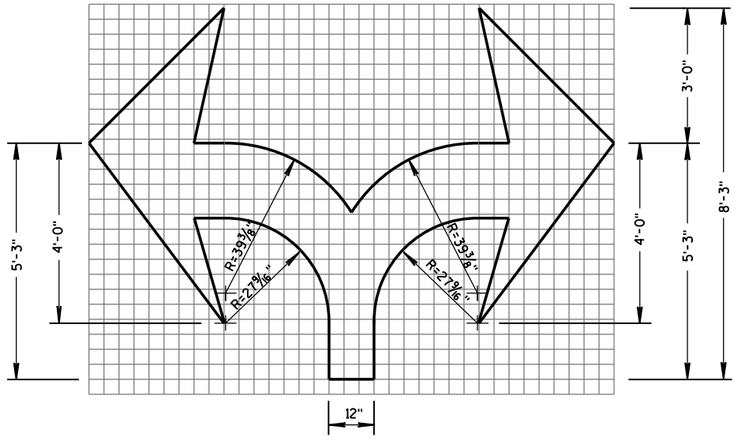

TYPE 4



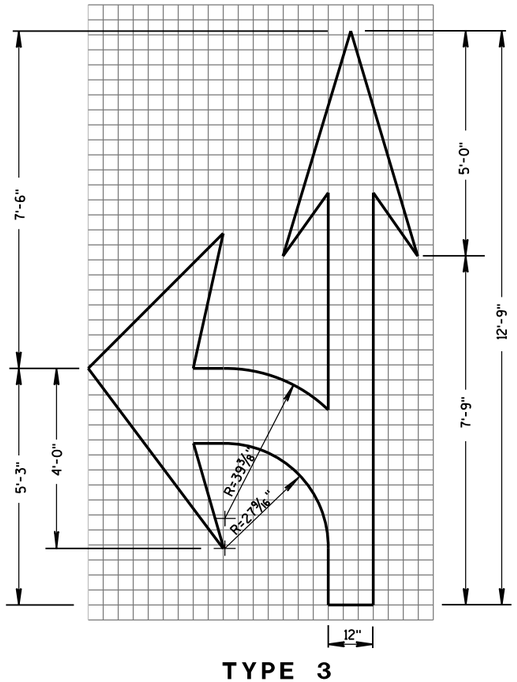

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

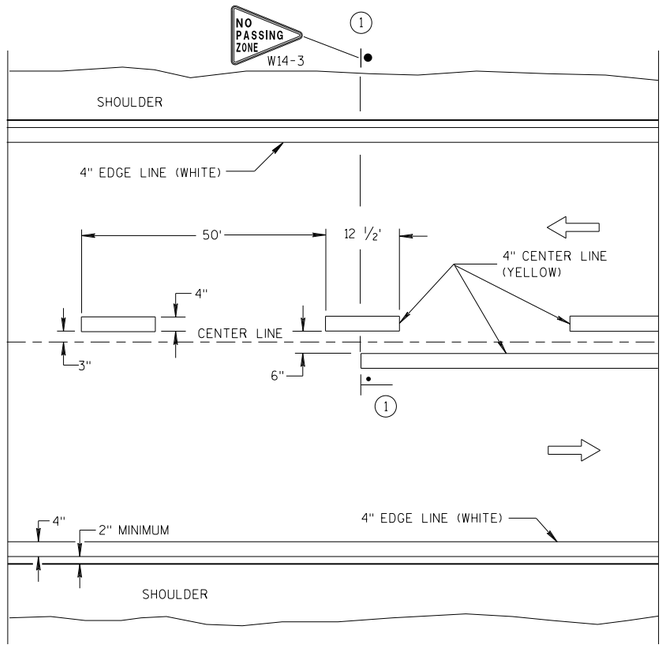
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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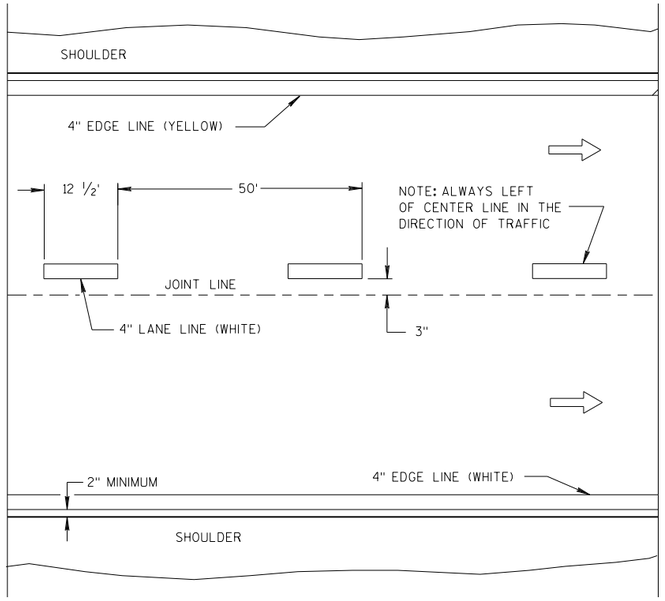
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S.D.D. 15 C 7-14c

S.D.D. 15 C 7-14c




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING

## GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

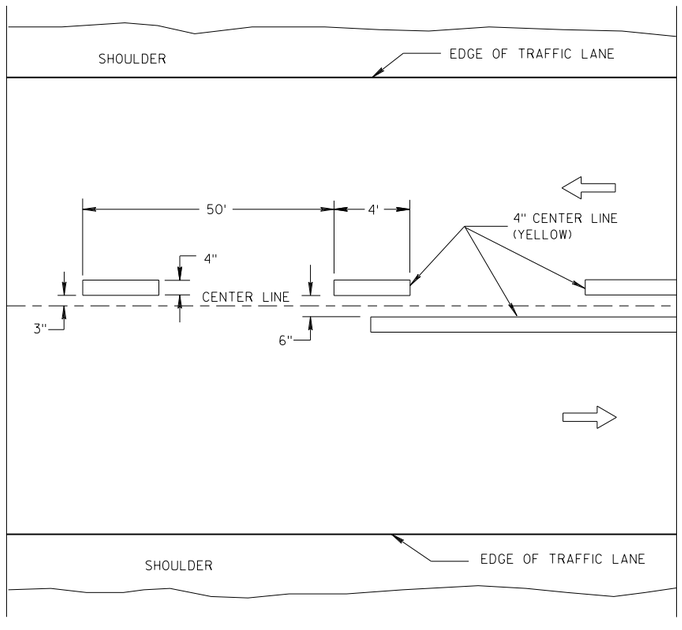
## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

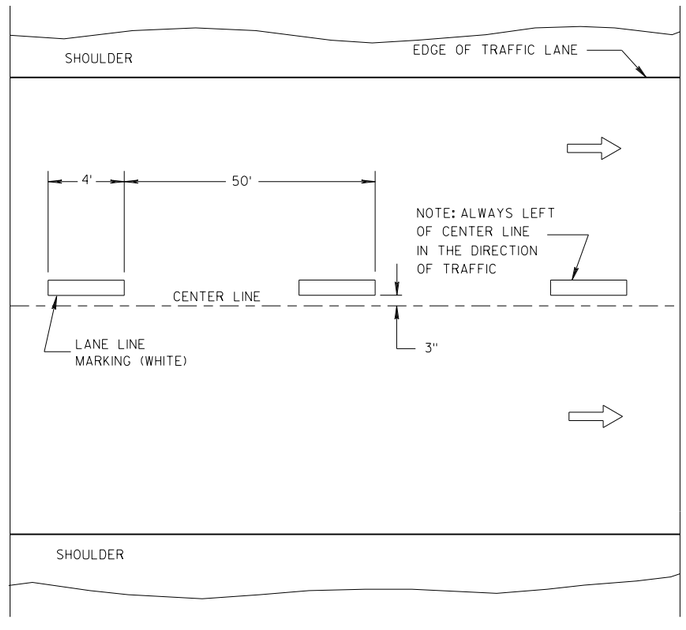
## LEGEND

"T" MARKING

POST MOUNTED SIGN




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY PAVEMENT MARKING

**LONGITUDINAL MARKING (MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

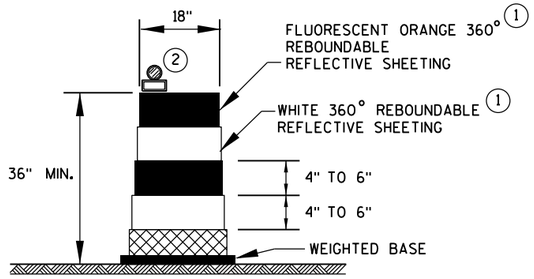




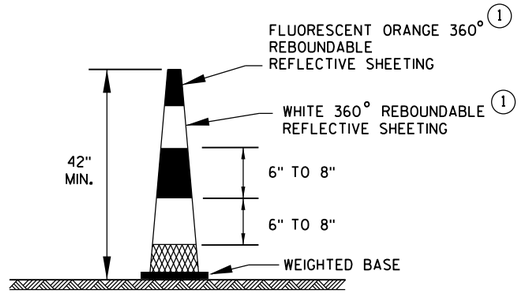
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S.D.D. 15 C 8-19a




## DRUM

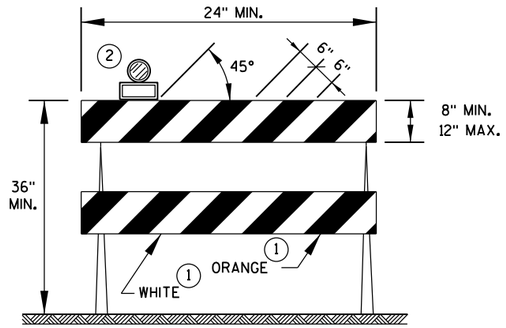



## 42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

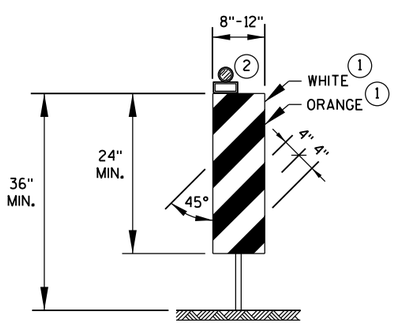
## GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



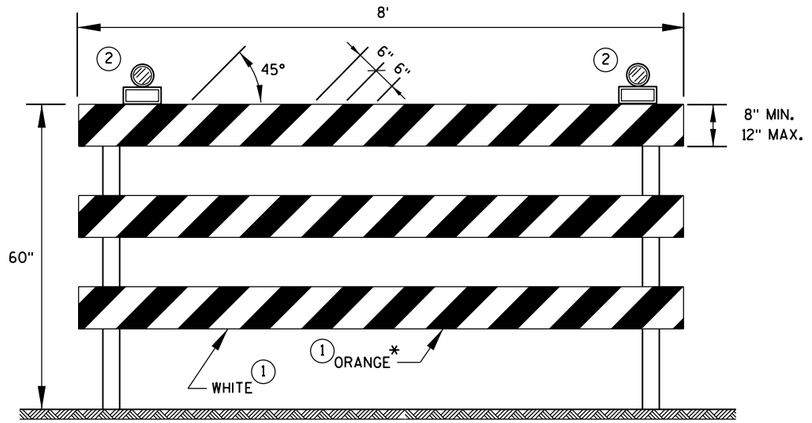

## TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

**CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

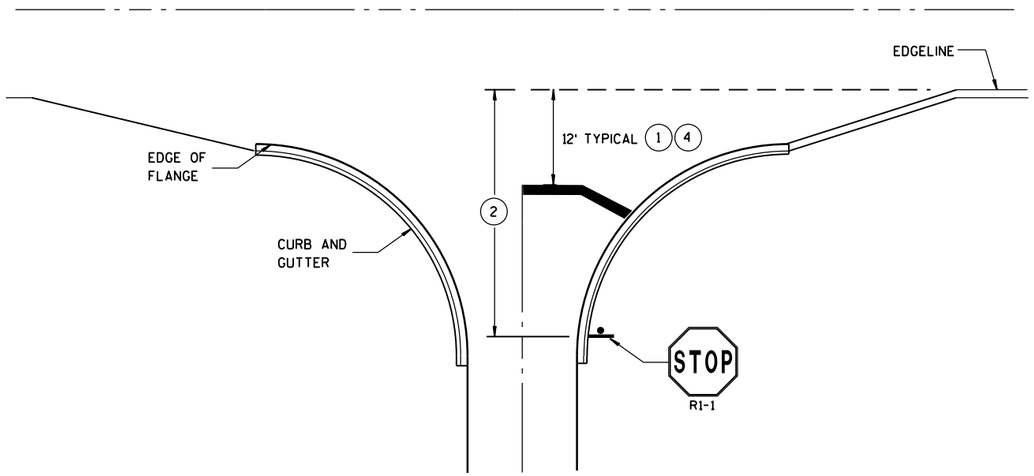
/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

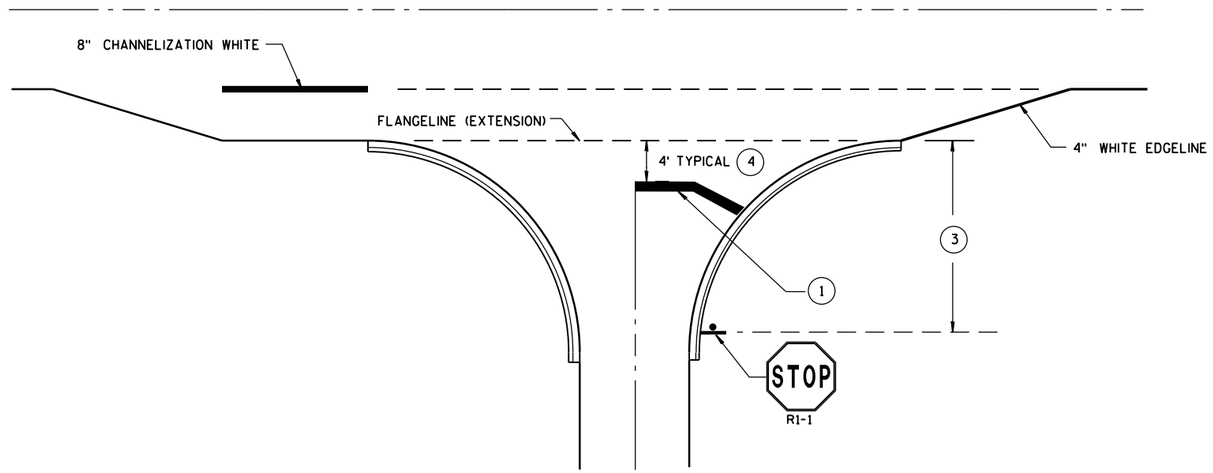



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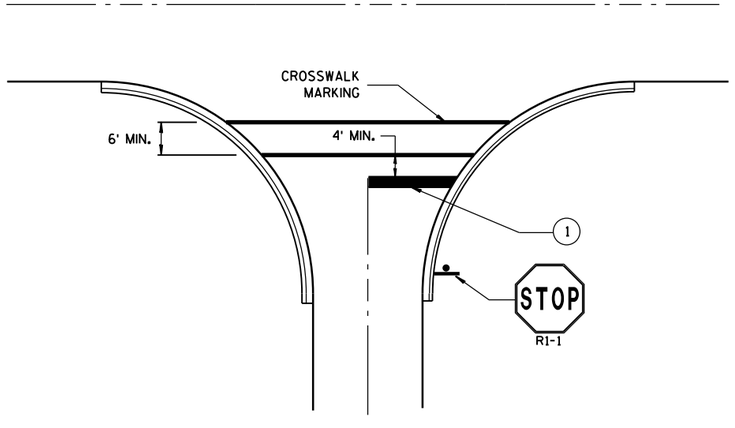

S.D.D. 15 C 11-7b



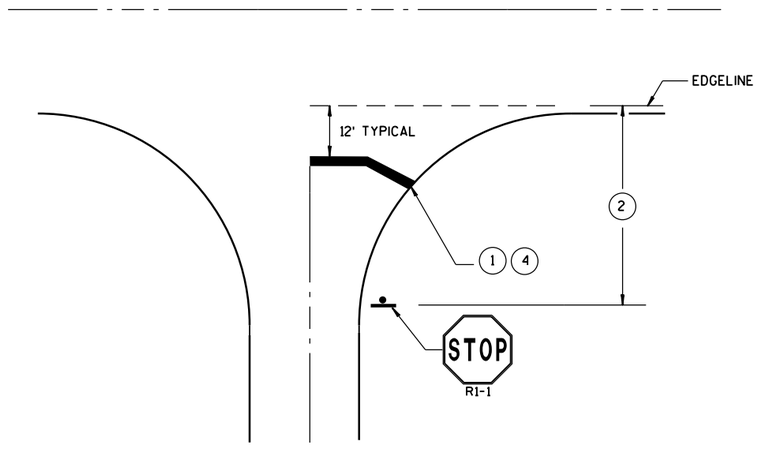

**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**




**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

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(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 EDGELINE 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. (NO CLOSER THAN 4 FEET).

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

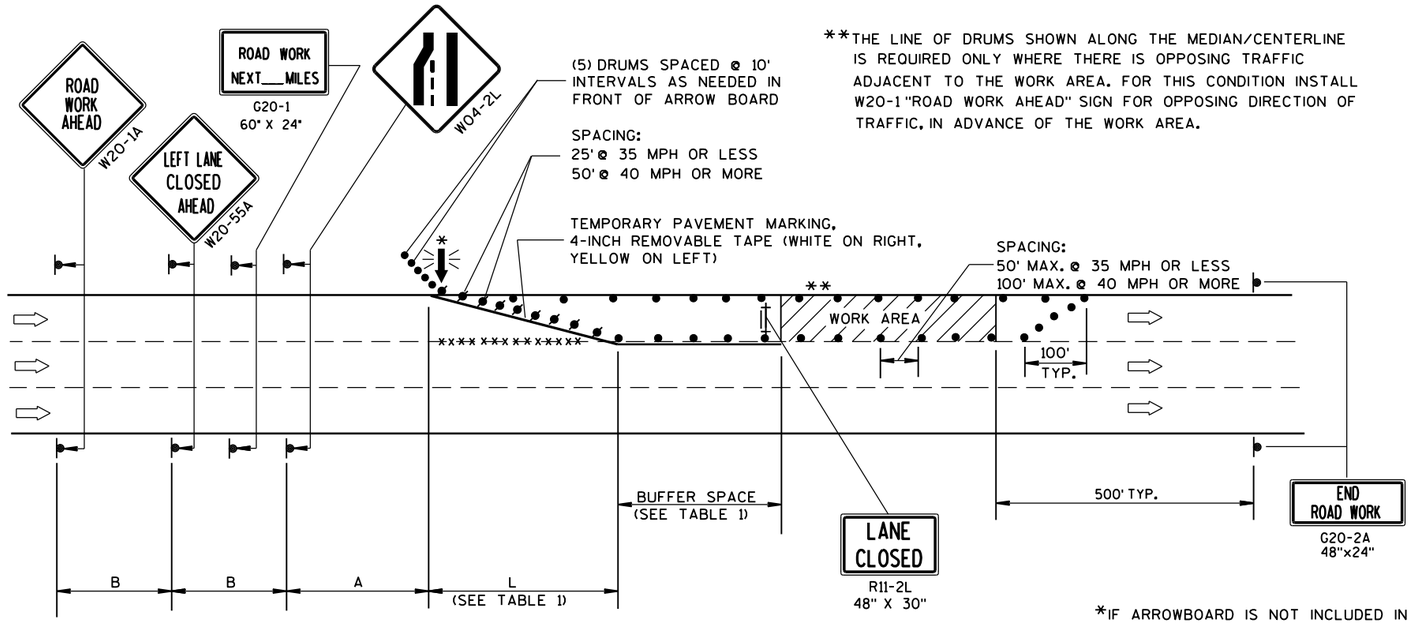
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ENGINEER

FHWA




6


S.D.D. 15 C 33-3




**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

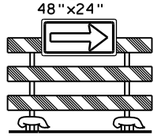


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

| S | L | BUFFER SPACE |
|---|---|---|
| 25 | 125' | 55' |
| 30 | 180' | 85' |
| 35 | 245' | 120' |
| 40 | 320' | 170' |
| 45 | 540' | 220' |
| 50 | 600' | 280' |
| 55 | 660' | 335' |

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

## LEGEND

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

## GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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

# TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
FHWA

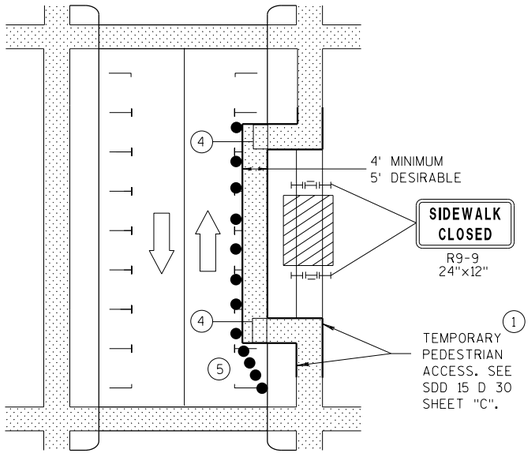
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER — IC




6

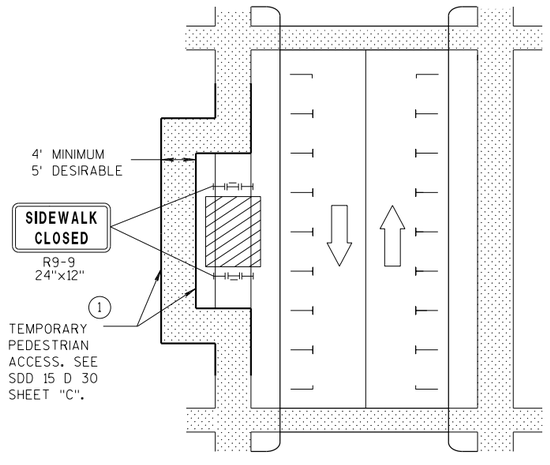

S.D.D. 15 D 20-4

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

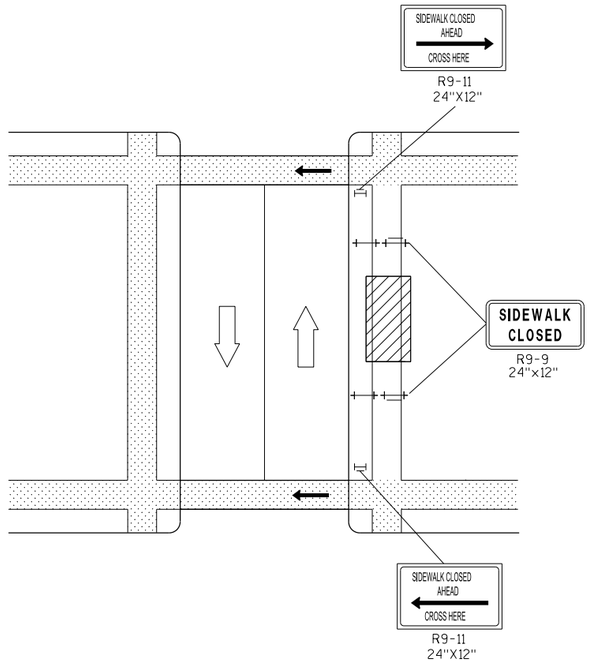



## MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

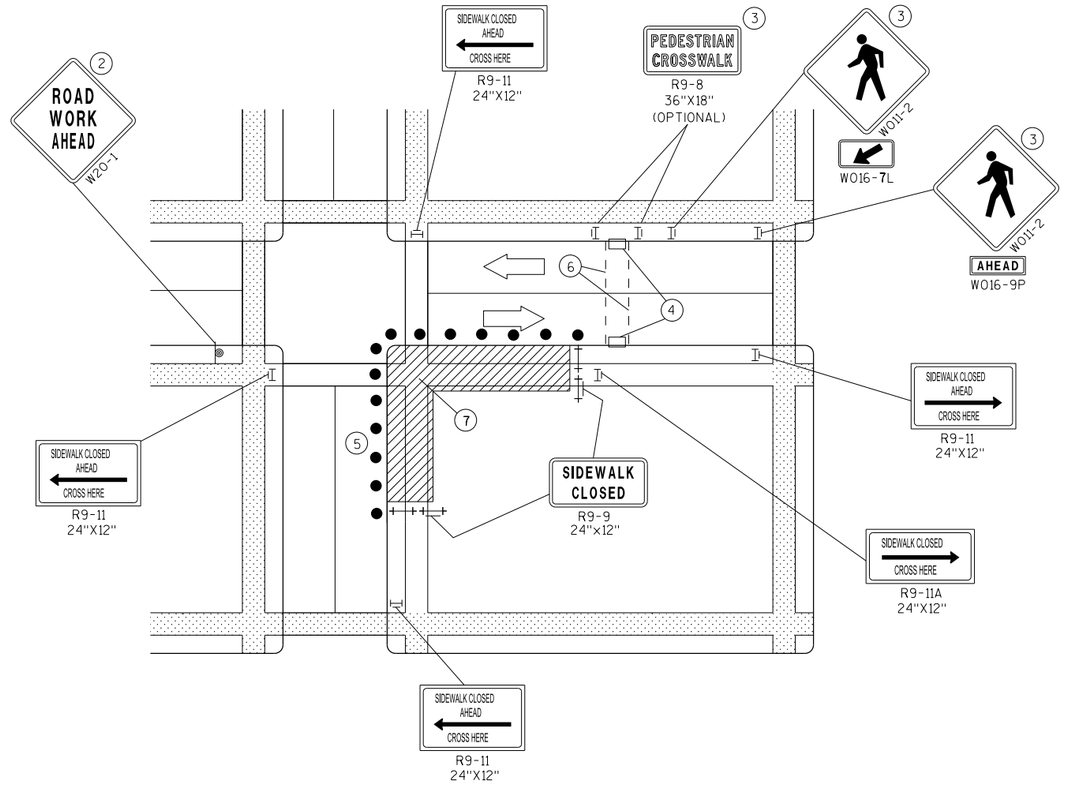
NOTE: LAYOUT SAME AS ABOVE.




## SIDEWALK DIVERSION




## MID-BLOCK SIDEWALK CLOSURE




## CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

## GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

### LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

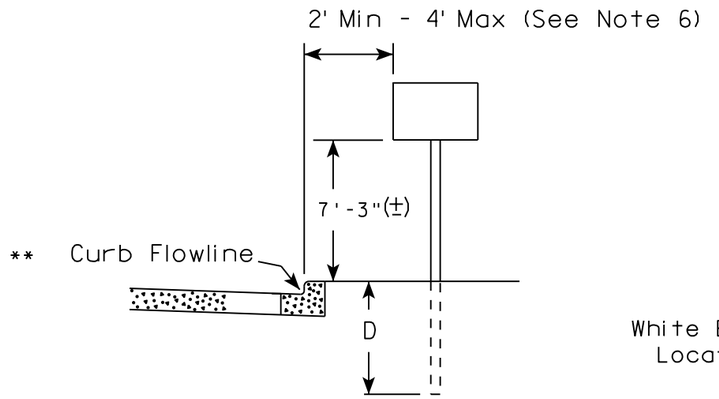
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



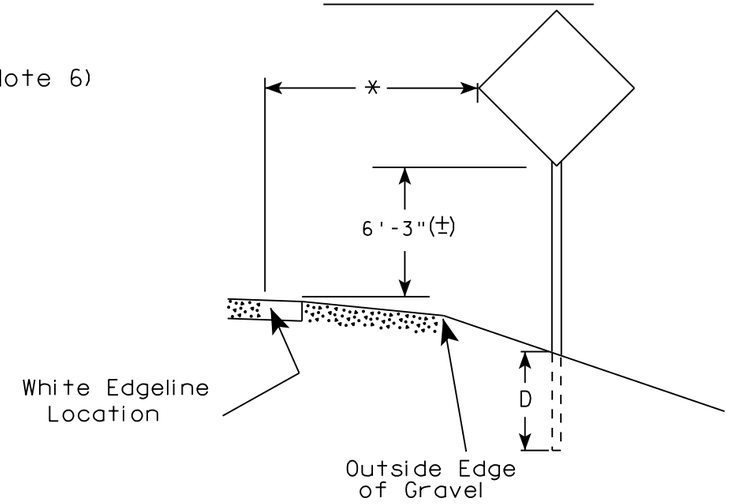

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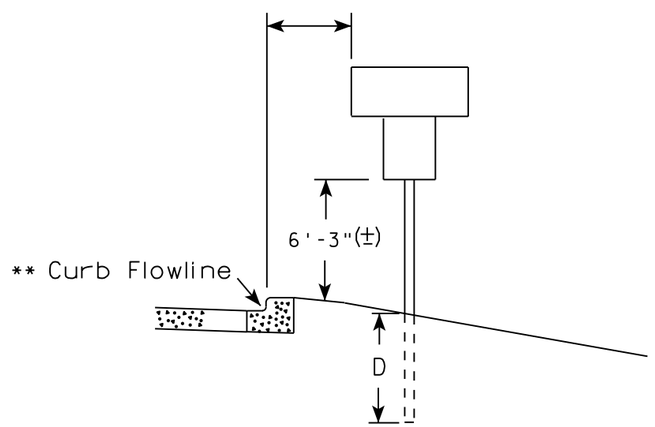
S.D.D. 15 D 30-4a

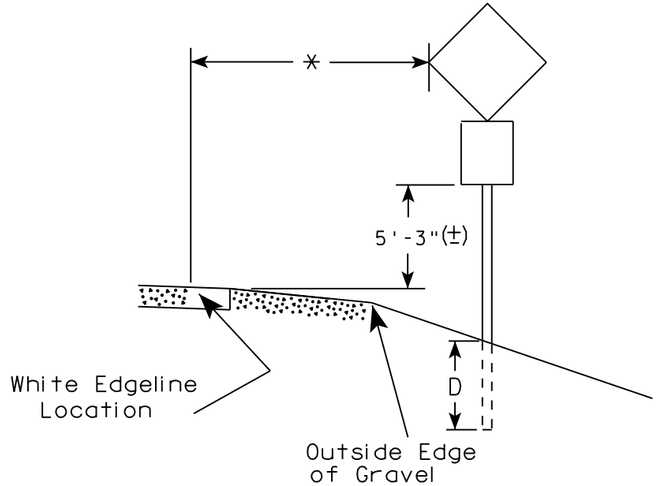
## URBAN AREA




## RURAL AREA (See Note 2)




** 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.

* 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.

POST EMBEDMENT DEPTH

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

## GENERAL NOTES

1. Signs wider than 4 feet or 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. J-Assemblies are considered to be one sign for mounting height.
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 signs shall be mounted at a height of 5'-3" (±) or as directd 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

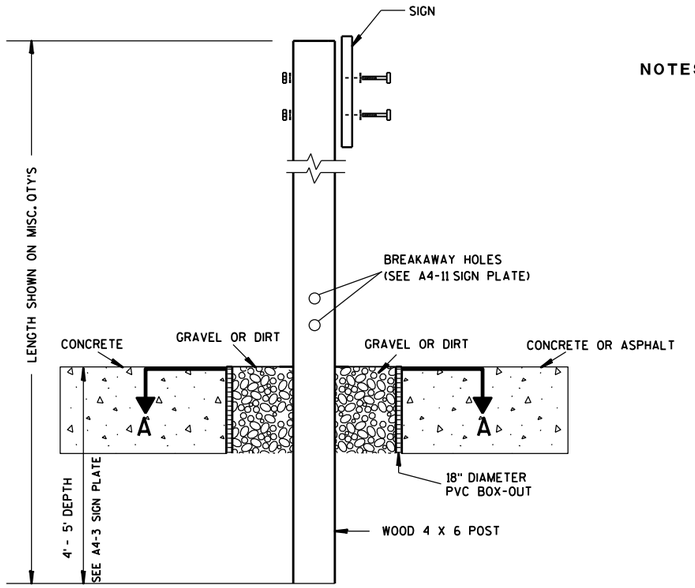
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7

7

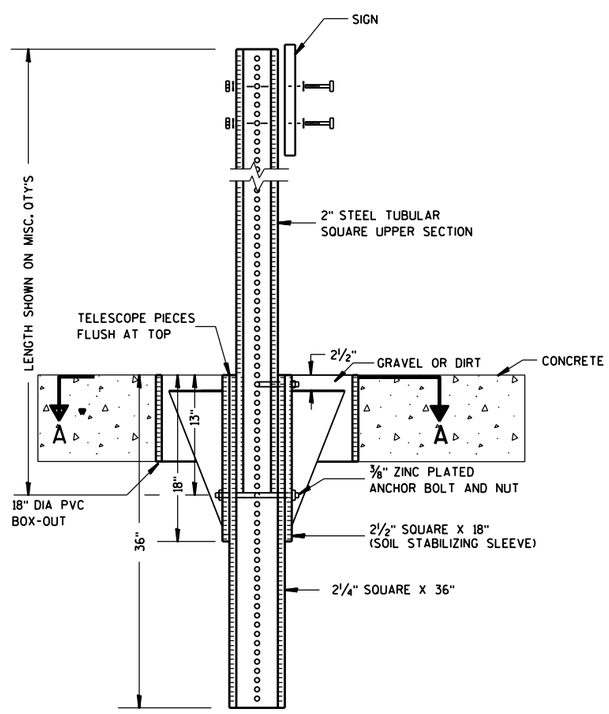
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 35 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

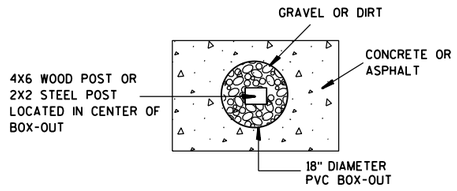
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

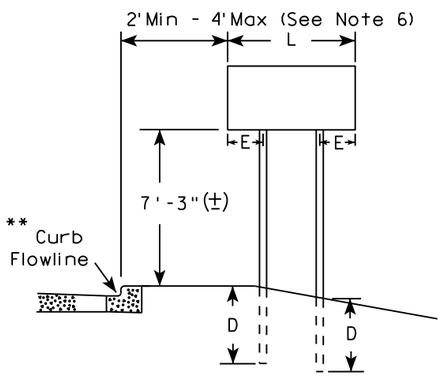
DATE 1/27/14 PLATE NO. A4-3B.1



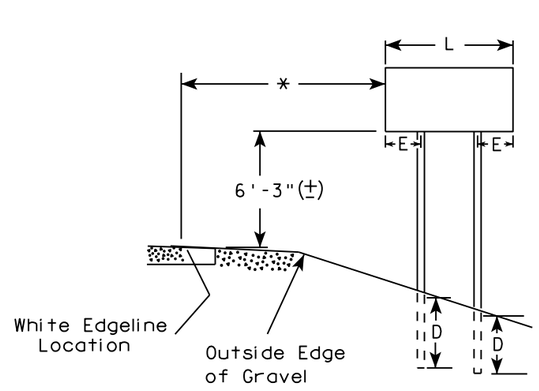
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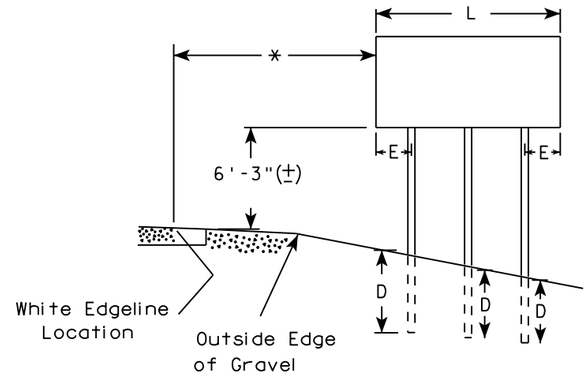
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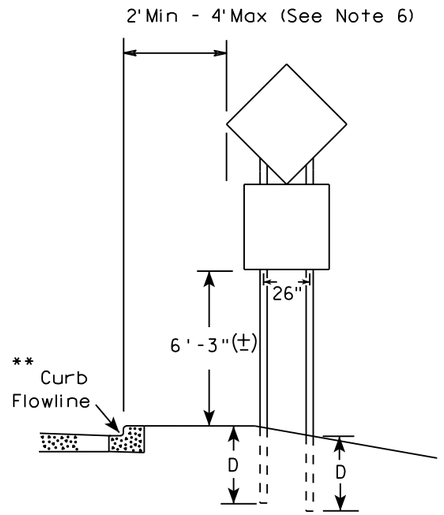
## URBAN AREA



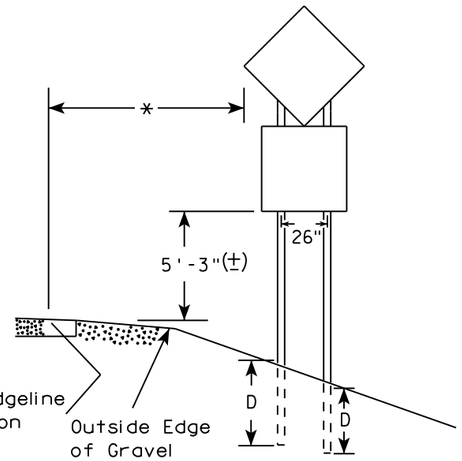

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | | |
|---|---|---|
| | L | E |
| *** | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

### GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. 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), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

### POST EMBEDMENT DEPTH

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

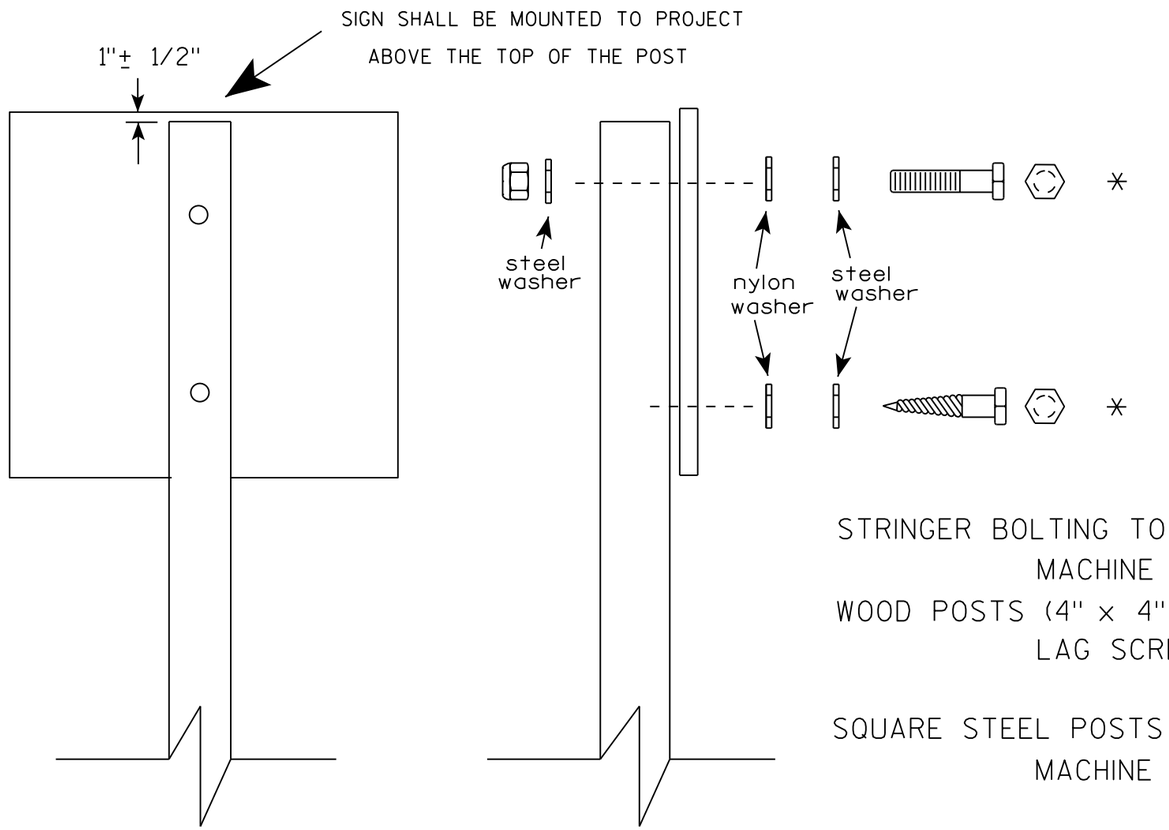
**TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS**

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 37 | E |
|---|---|---|---|---|---|




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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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 Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8



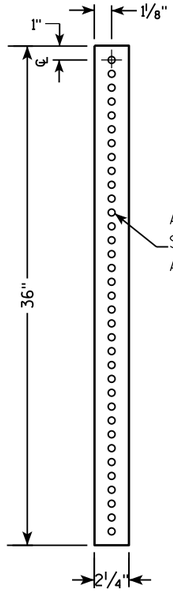
PROJECT NO: SHEET NO: E



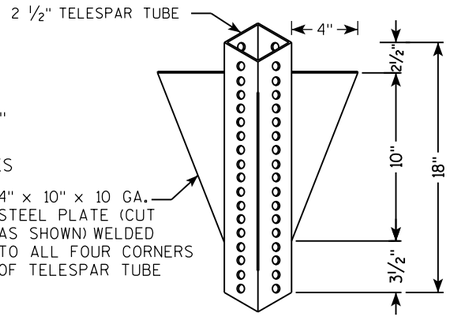
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

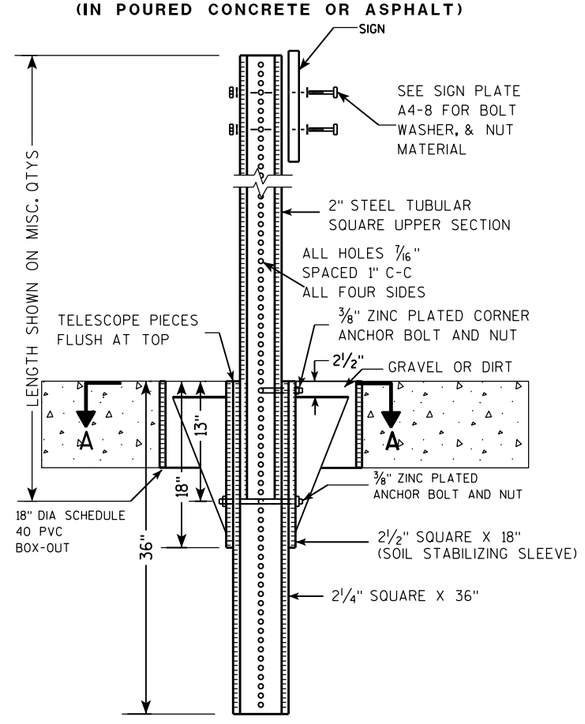
**2 ¼ " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



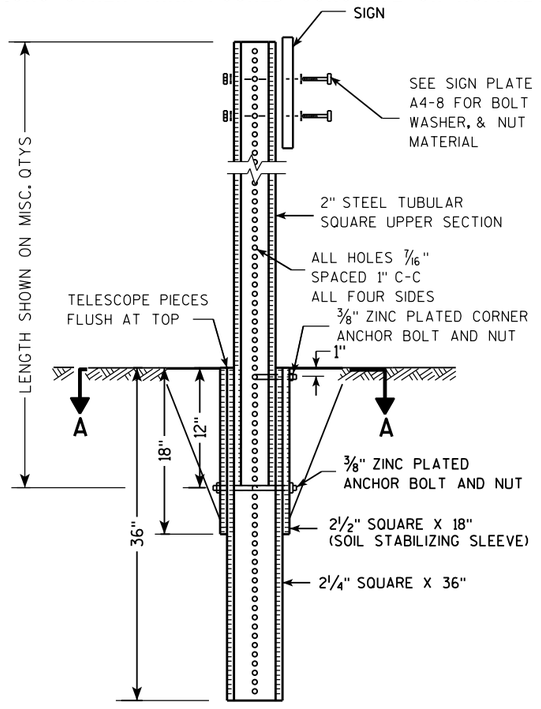

**2 ½ " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

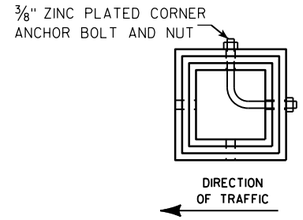



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

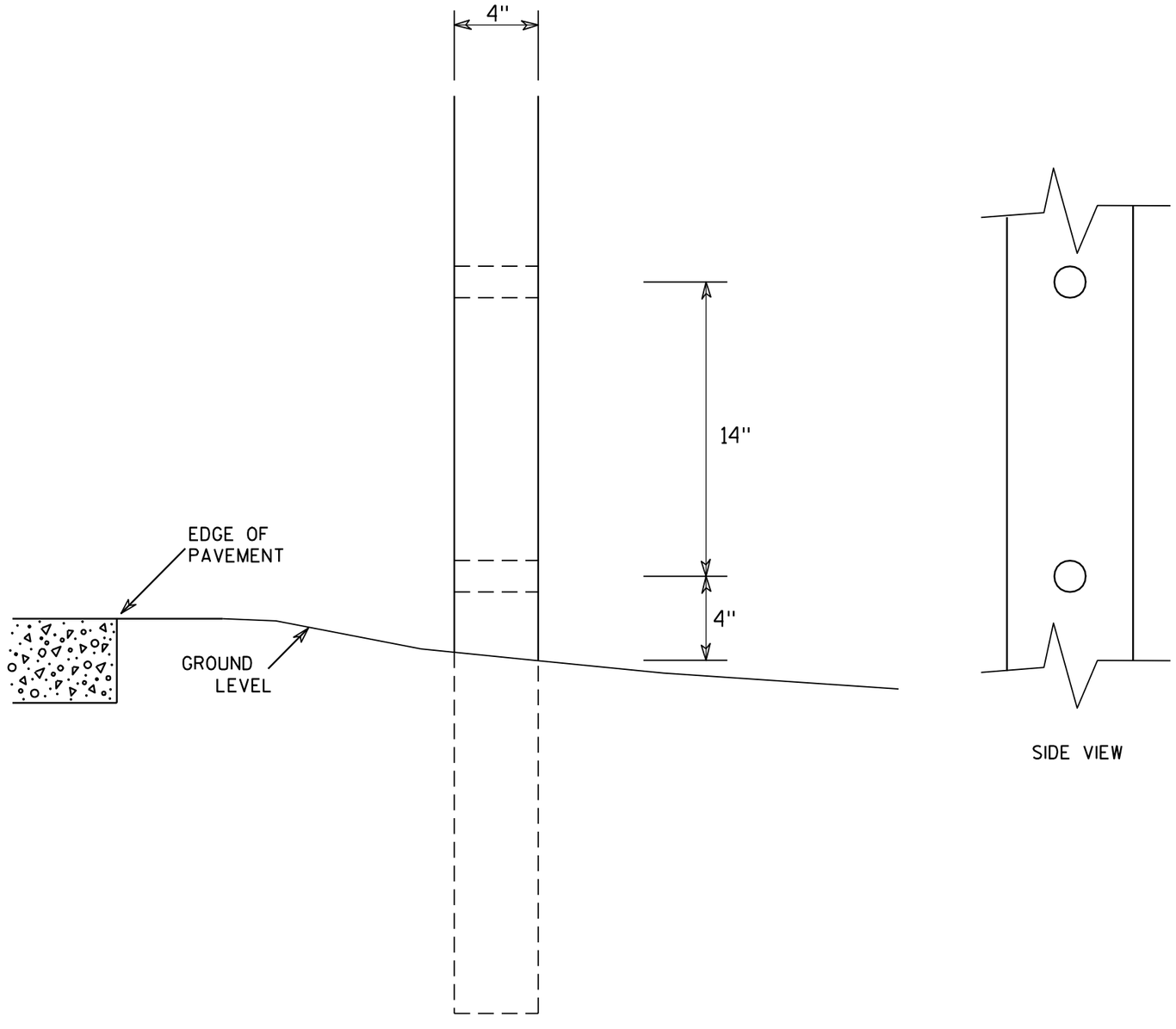
TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 39 A4-9.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|






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.

7

7

# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

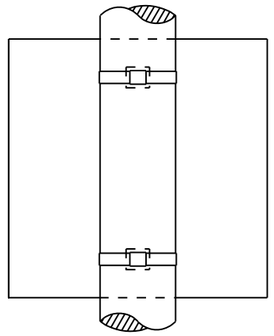
APPROVED Chester J Spang
for State Traffic Engineer

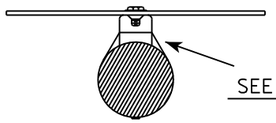
DATE 3/27/97 PLATE NO. A4-11.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 40 | E |
|---|---|---|---|---|---|

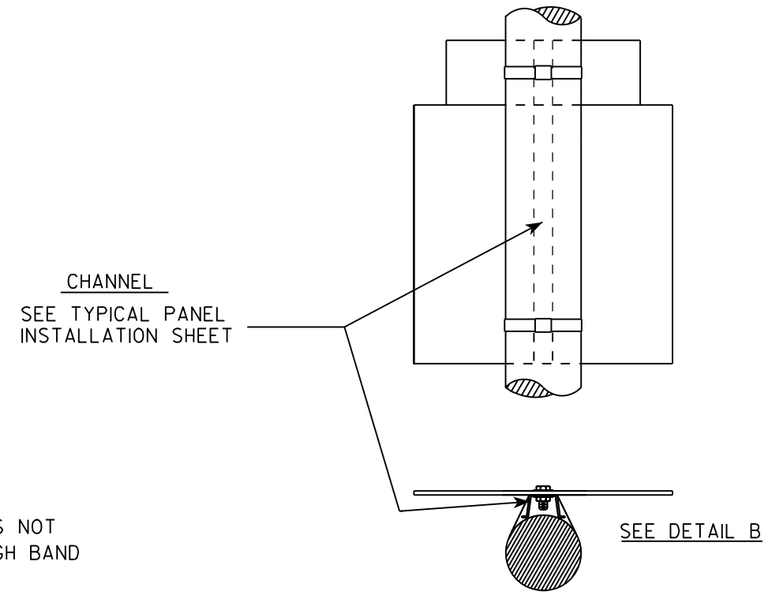
# BANDING

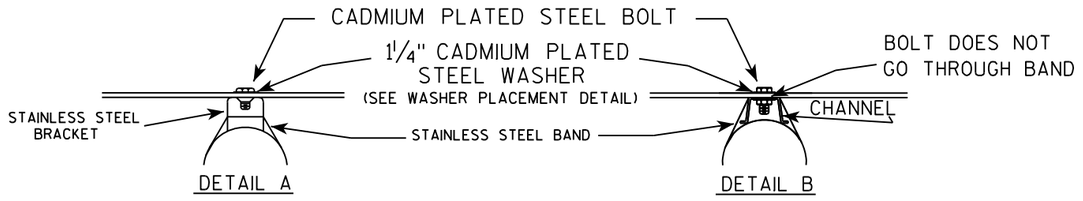
SINGLE SIGN



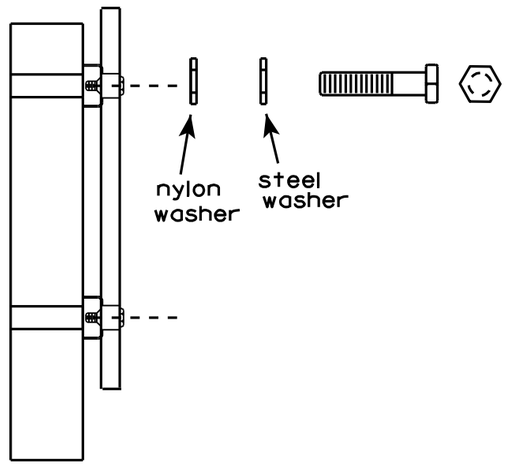



"J" ASSEMBLY




WASHER PLACEMENT




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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

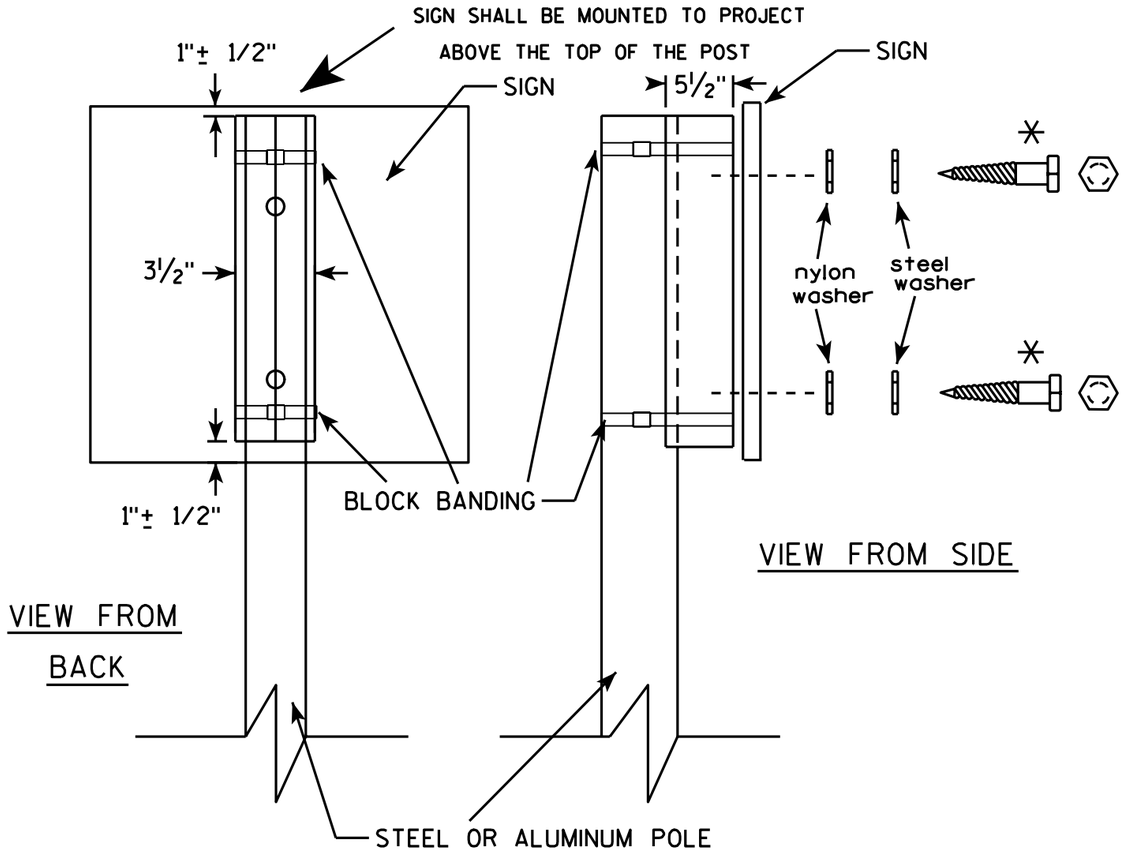
STANDARD SIGN
SIGN BANDING DETAILS

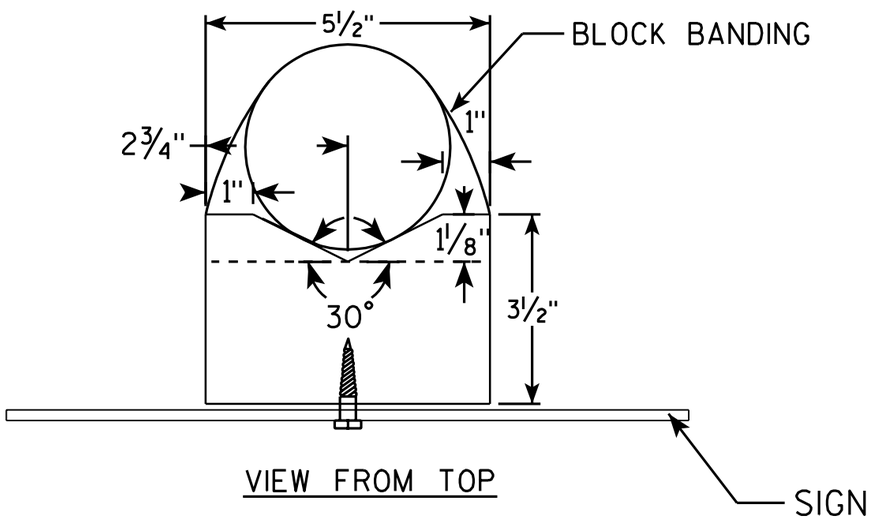
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 41 | E |
|---|---|---|---|---|---|




## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

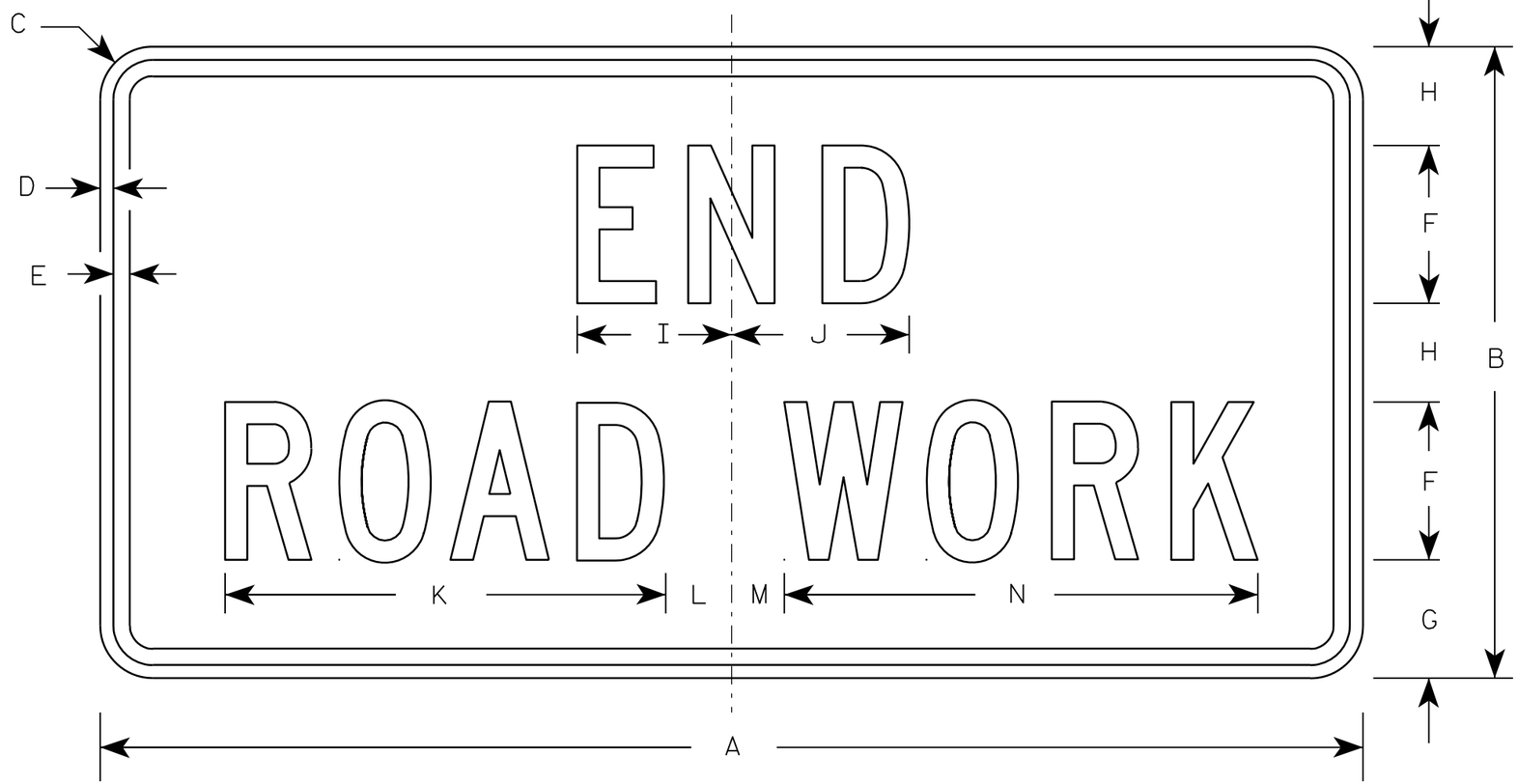
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 42 E




G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| 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. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

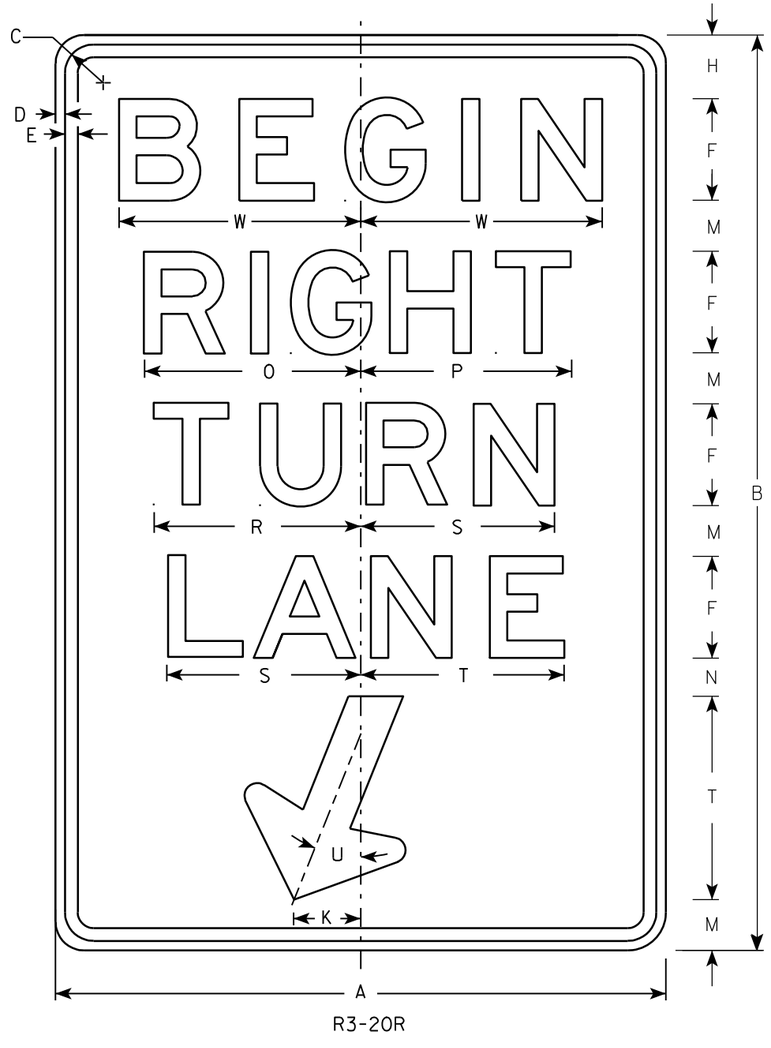
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

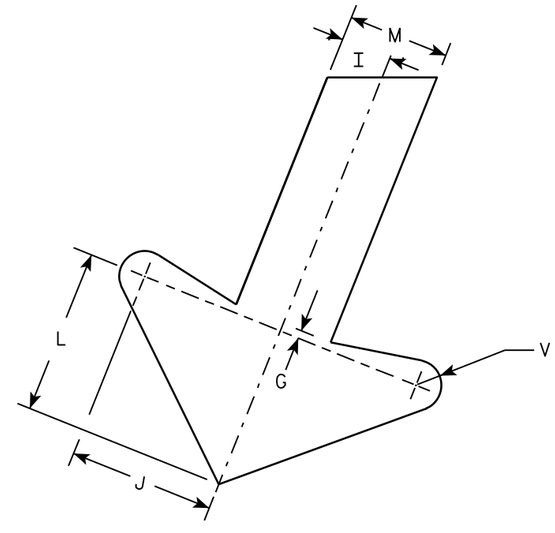
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 43 | E |
|---|---|---|---|---|---|




R3-20R

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 - E
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.




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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 3/4 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 12 3/4 | 12 1/2 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

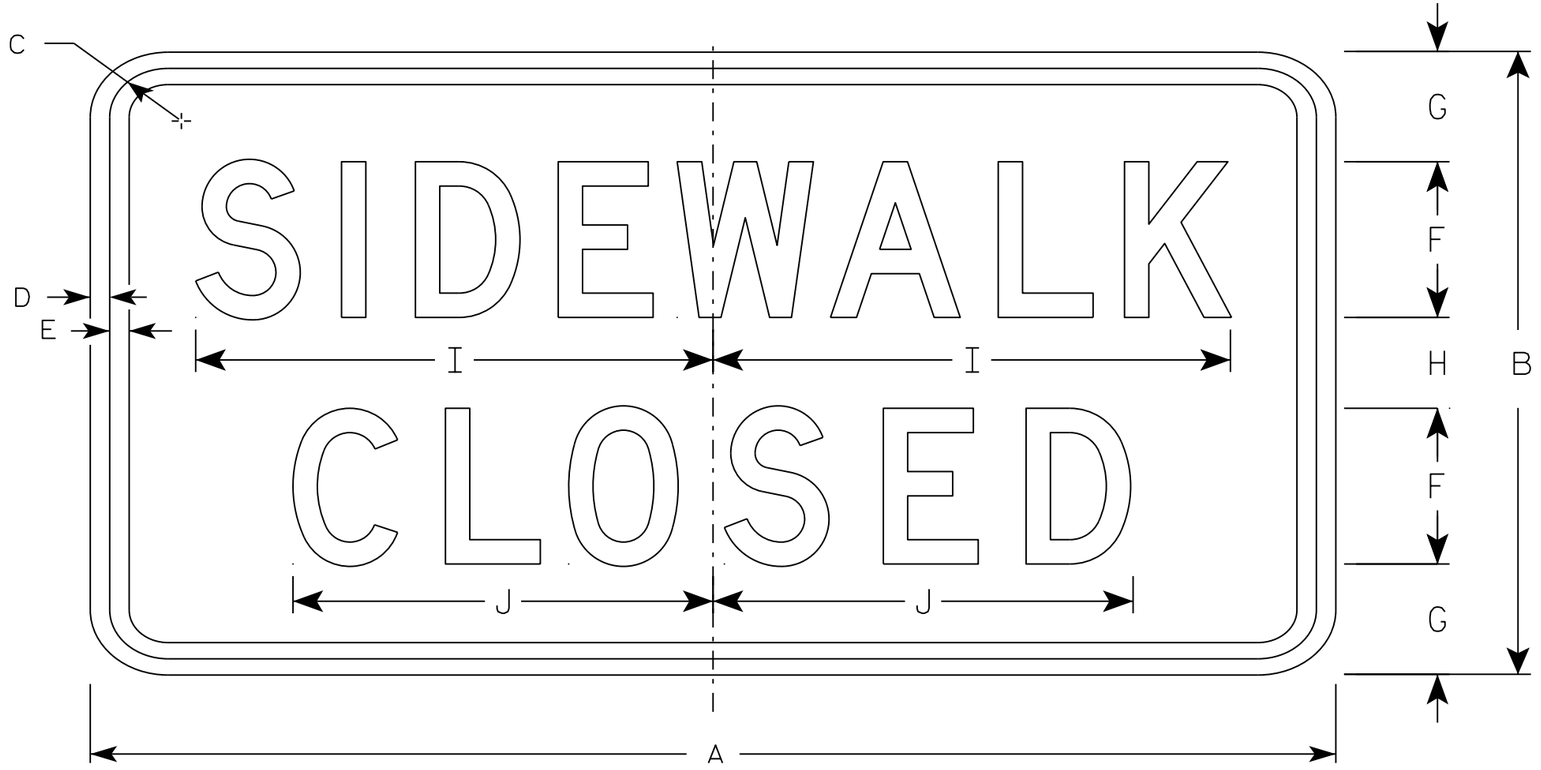
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 44 | E




R9-9

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 - 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.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

| 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 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 3/4 | 1/2 | 1/2 | 4 | 3 1/2 | 3 | 12 1/2 | 10 1/4 | | | | | | | | | | | | | | | | | 3.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

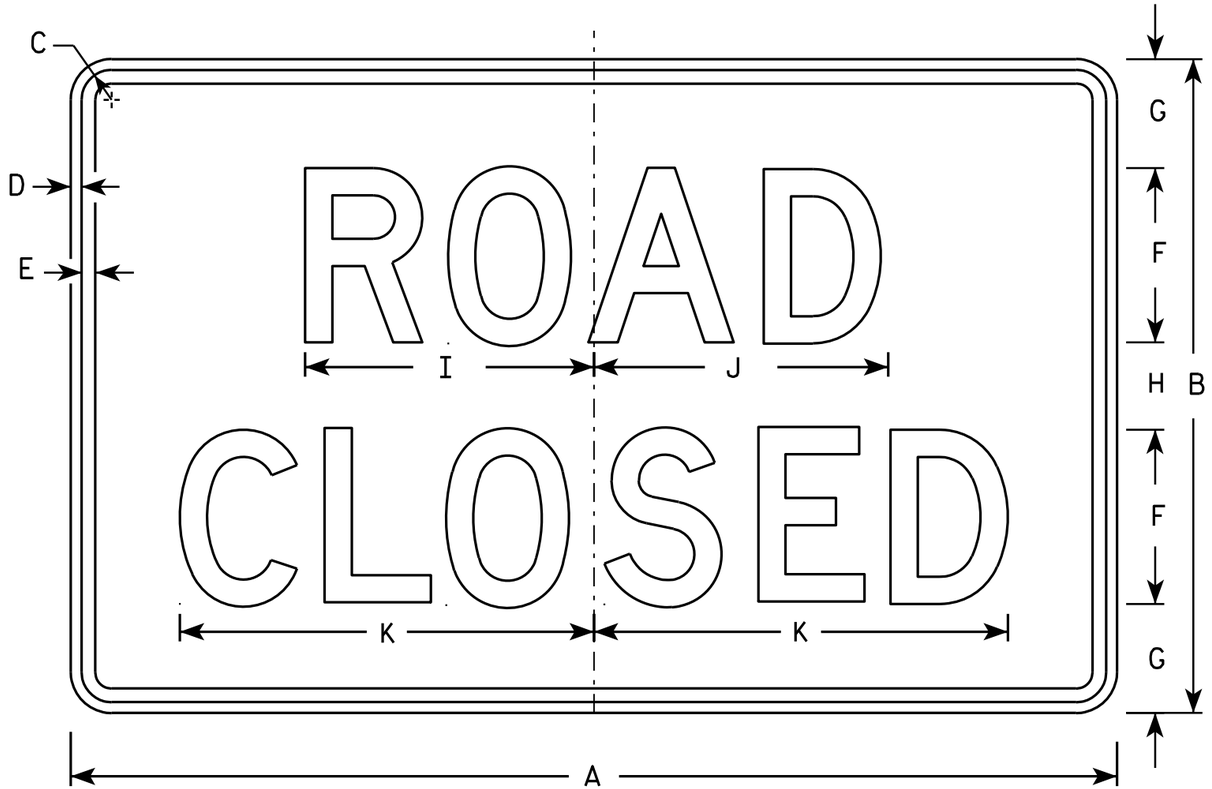
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 45 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



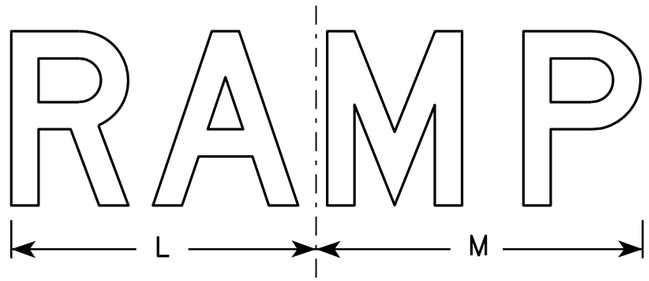
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



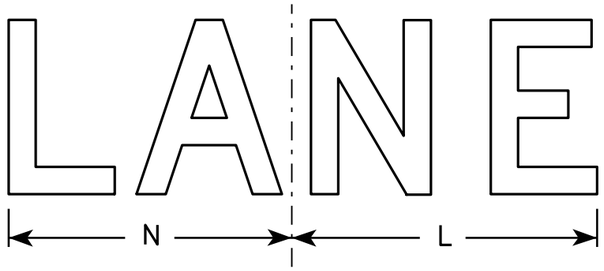

R11-2

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 - 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.
5. Modify the message as required.




R11-2R




R11-2L

| 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 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

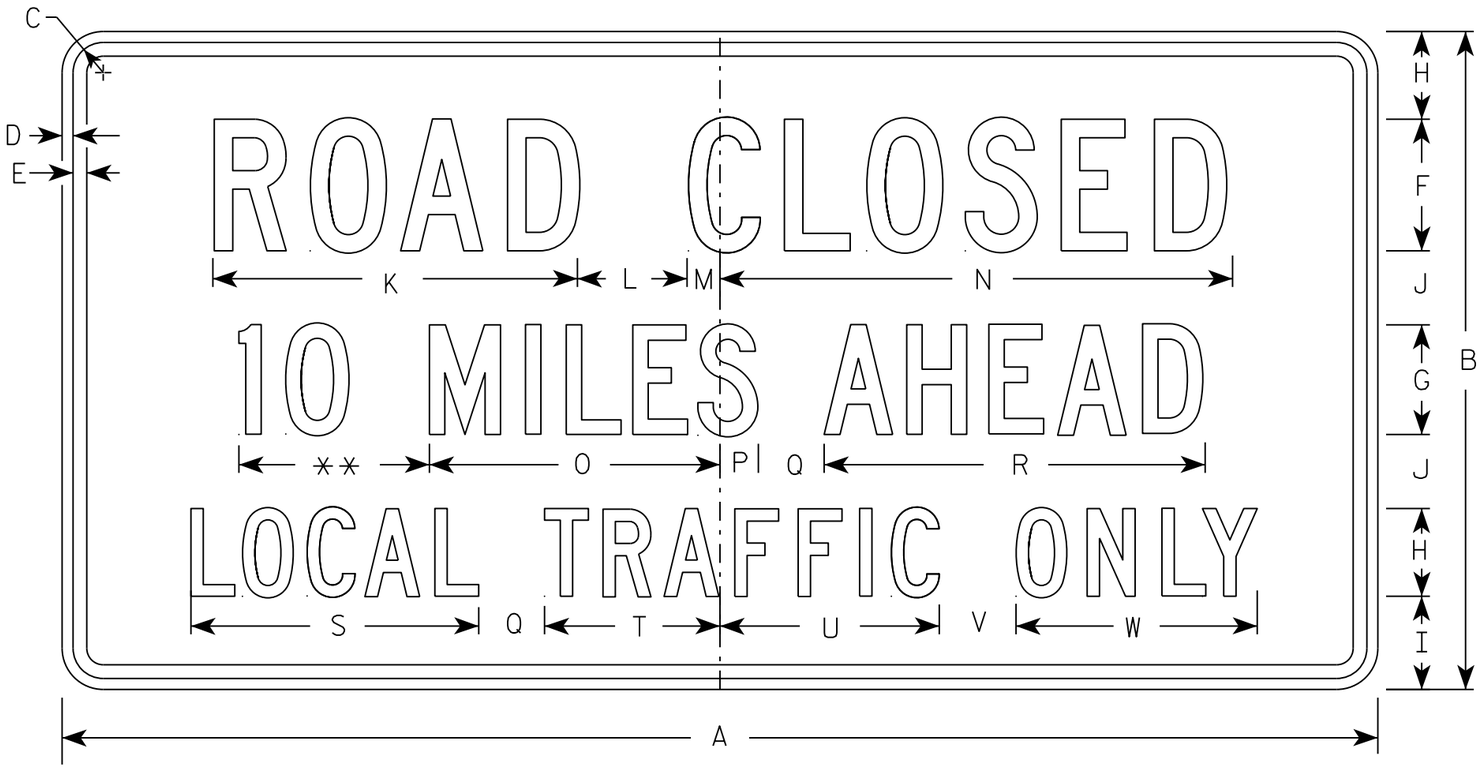
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 46 | E

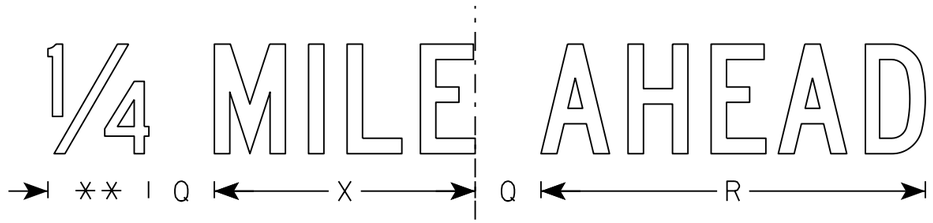
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3

** See Note 5




| 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 | 36 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 2 | 2 | 11 1/8 | 3 | 1 1/8 | 15 1/4 | 8 | 1 1/2 | 2 | 10 3/4 | 8 3/8 | 4 3/4 | 6 1/2 | 2 | 6 3/4 | 7 1/8 | | | 4.5 |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

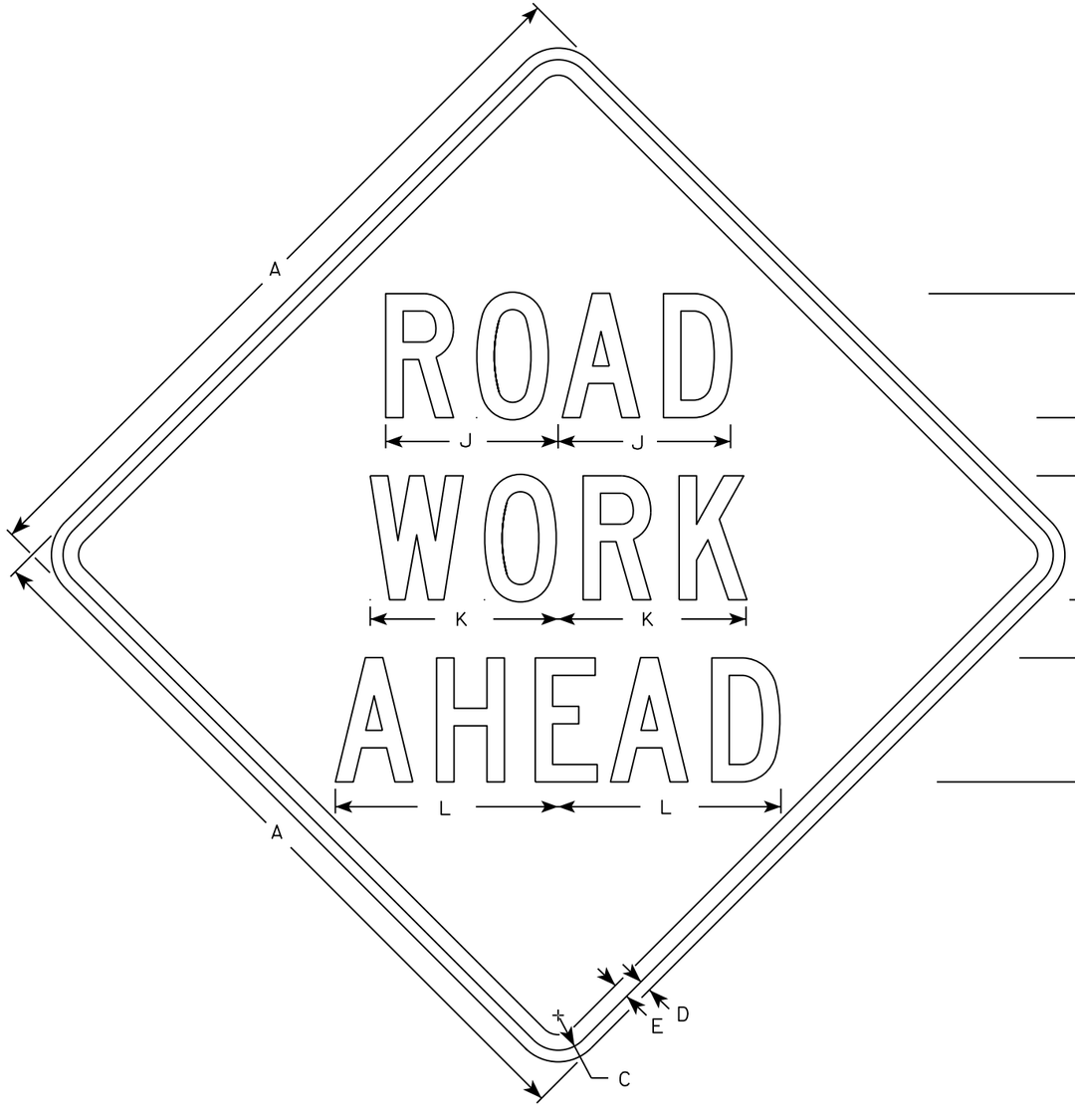
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

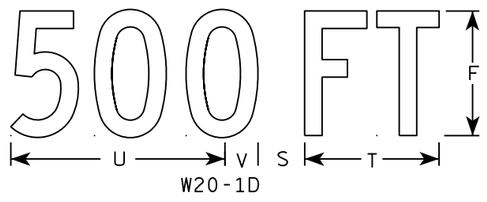
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

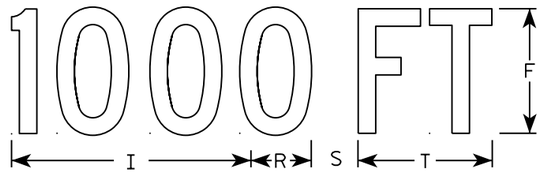
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 47 | E |
|---|---|---|---|---|---|



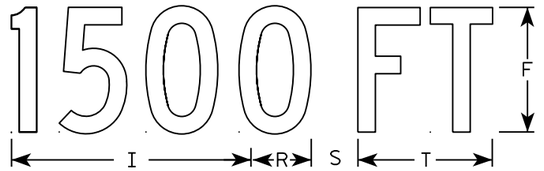

W20-1A




W20-1D



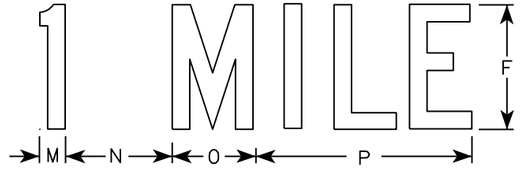

W20-1C



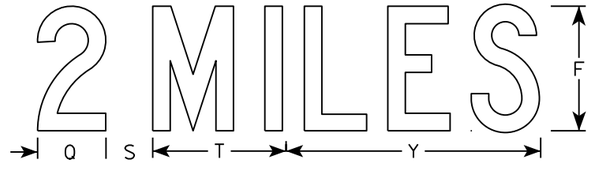

W20-1B




W20-1G




W20-1F




W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

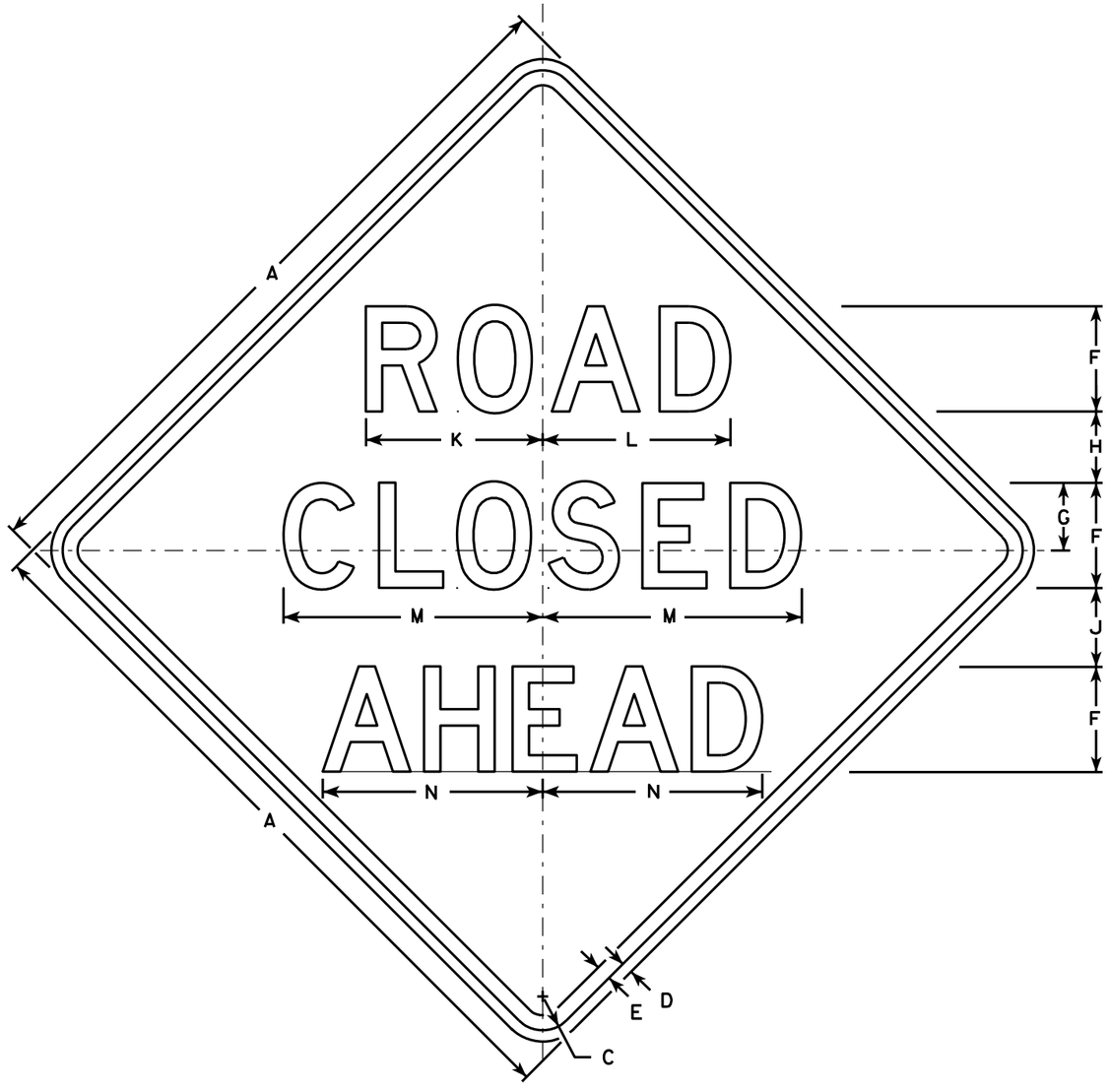


PROJECT NO:

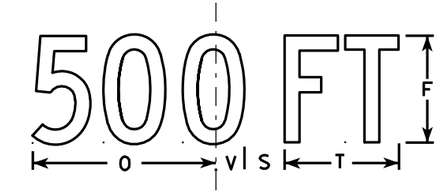
SHEET NO: E



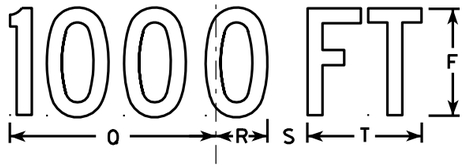
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



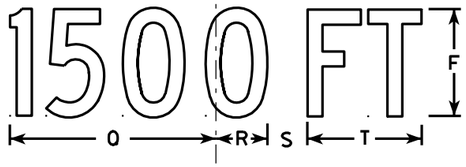

W20-3A



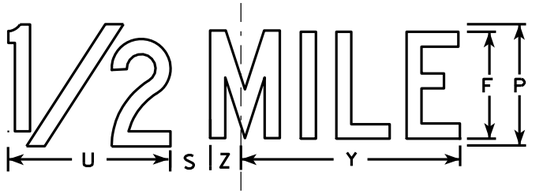

W20-3D



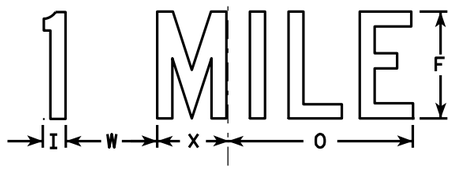

W20-3C




W20-3B




W20-3G




W20-3F

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 8 3/8 | 8 7/8 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 49 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

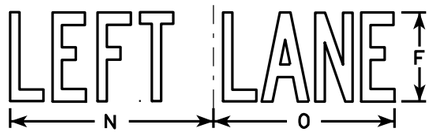
WISDOT/CADDS SHEET 42

7

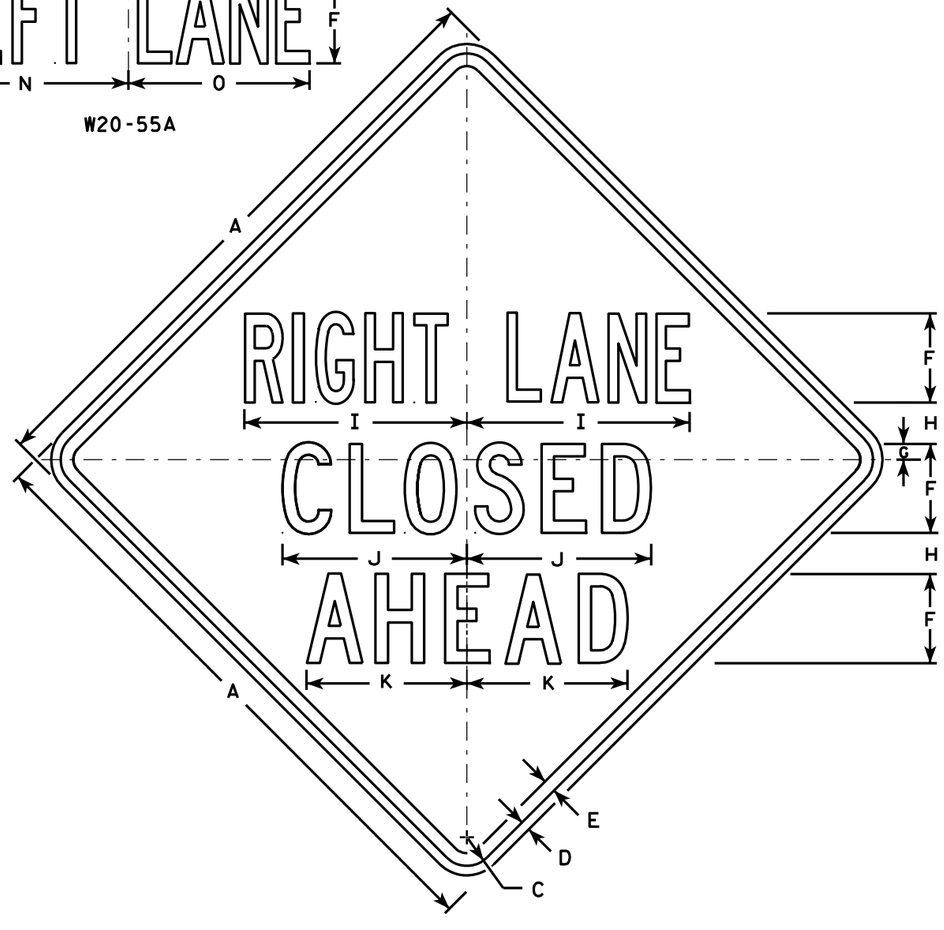
7



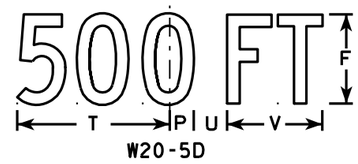

W20-56A



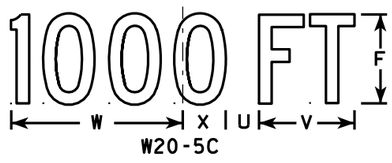

W20-55A



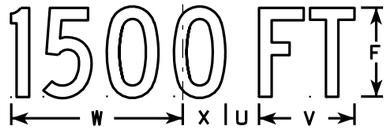

W20-5A




W20-5D




W20-5C




W20-5B




W20-5G




W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
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.
5. " _____ LANE" is Series B.
   All other copy is Series C.

| 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 | 36 | 6 | 1 5/8 | 5/8 | 3/4 | 5 | 1/8 | 2 1/2 | 13 1/8 | 10 3/4 | 9 1/2 | 14 1/4 | 13 5/8 | 12 | 12 | 1 3/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 1 1/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 3/4 | 8 | 9.0 |
| 2S | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 2M | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 3 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 4 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 5 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

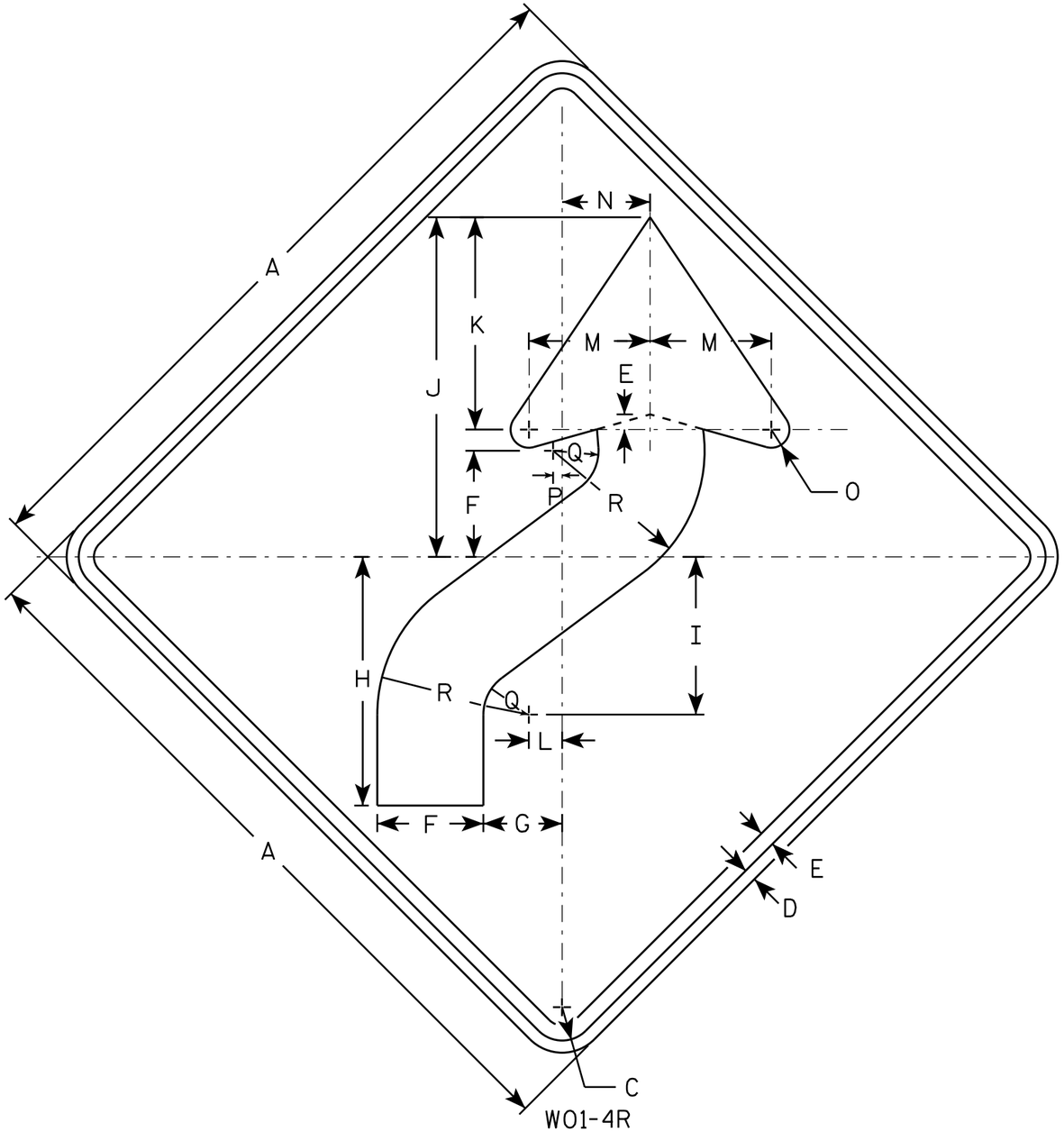
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 50 | E |
|---|---|---|---|---|---|


7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42




W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4

WISCONSIN DEPT OF TRANSPORTATION

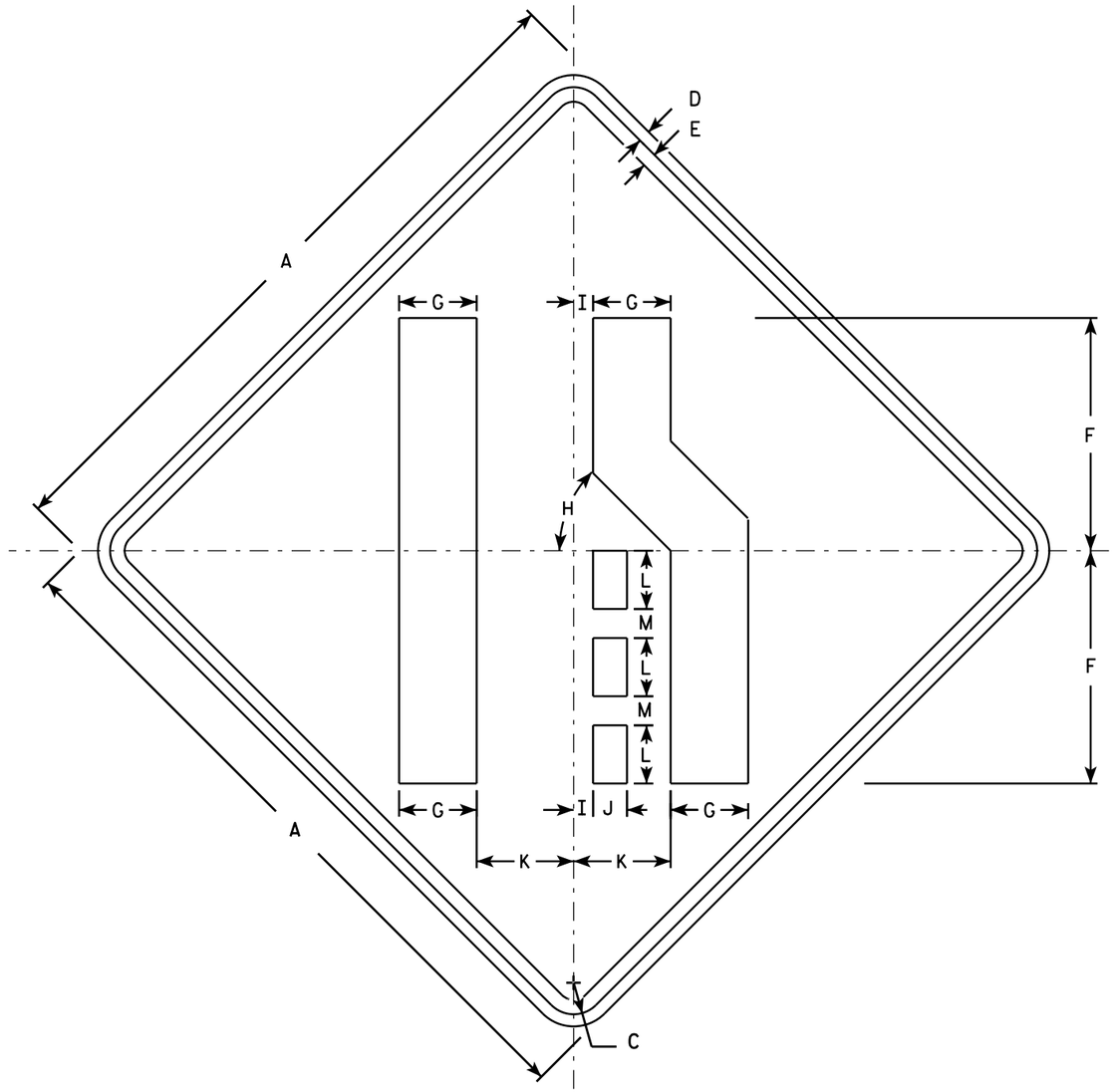
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42




W04-2R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

| 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 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W04-2

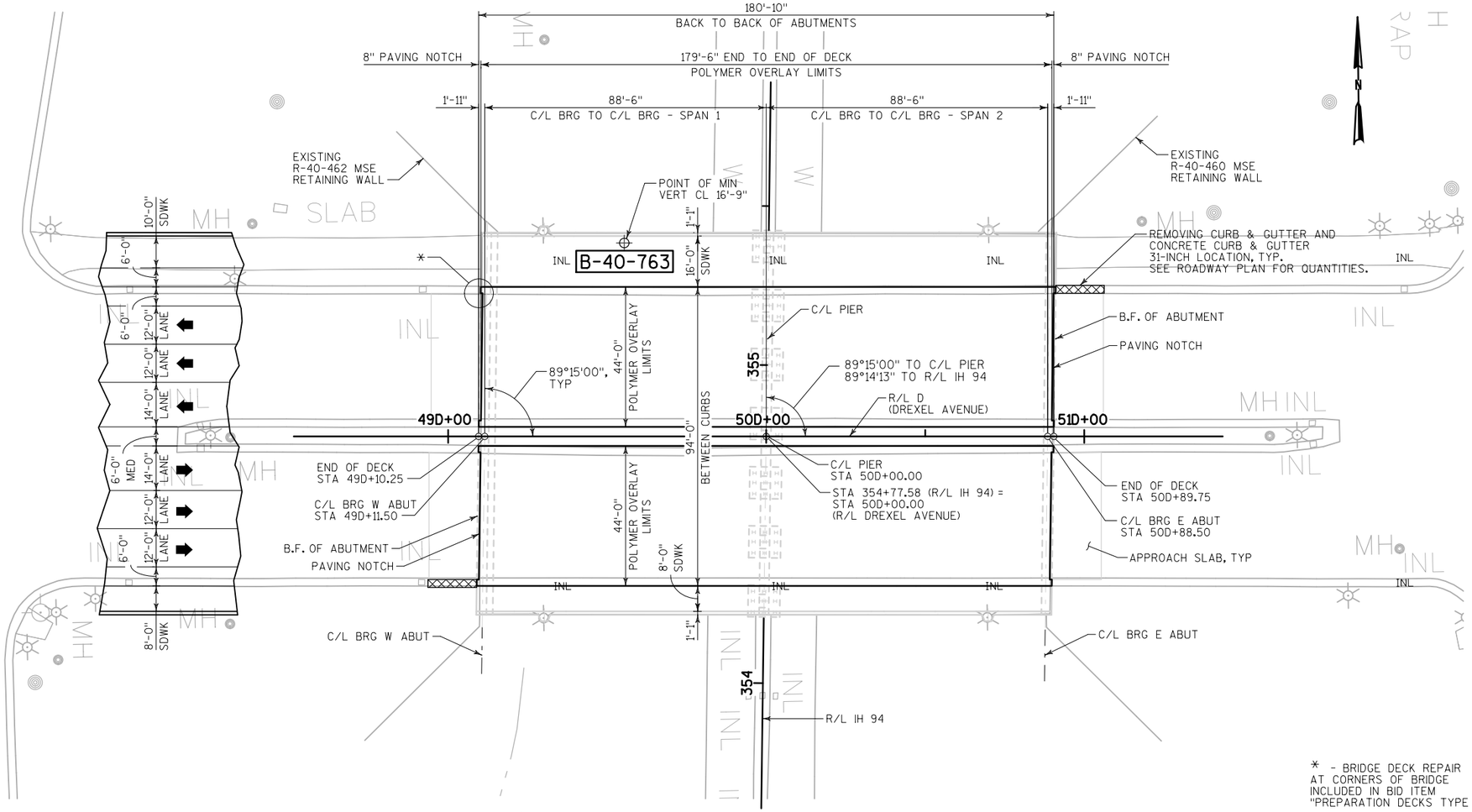
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 52 W04-2.1

PROJECT NO:

SHEET NO: E




PLAN

POLYMER OVERLAY FOR 2-SPAN
45W" PRESTRESSED GIRDERS

* - BRIDGE DECK REPAIR
AT CORNERS OF BRIDGE
INCLUDED IN BID ITEM
"PREPARATION DECKS TYPE 1"

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY. INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 35 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 18 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 125 |
| 509.5100.S | POLYMER OVERLAY | SY | 1,757 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 6 |

ALL ITEMS ARE CATEGORY 2220

STATE PROJECT NUMBER

1030-38-70

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.04
OPERATING RATING FACTOR: RF = 1.50
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY:
SUPERSTRUCTURE (HPC) ..... f'c = 4,000 psi
SUBSTRUCTURE ..... f'c = 4,000 psi
45W-INCH PRESTRESSED GIRDERS ..... f'c = 8,000 psi
BAR STEEL REINFORCEMENT ..... fy = 60,000 psi
STEEL PILING ..... fy = 50,000 psi
PRESTRESSING STRANDS .... ULTIMATE TENSILE STRENGTH = 270,000 psi

## TRAFFIC DATA

| DREXEL AVENUE | IH 94 |
|---|---|
| A.D.T. = 21,200 (2015) | A.D.T. = 124,400 (2015) |
| A.D.T. = 25,300 (2041) | A.D.T. = 144,700 (2041) |
| R.D.S. = 40 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STEVEN G. MILLER E-28718 MILWAUKEE, WI 2/1/2019 WISCONSIN PROFESSIONAL ENGINEER

# STRUCTURE B-40-763

DREXEL AVE OVER I.H. 94

| COUNTY | ~~TOWN/CITY/VILLAGE~~ |
|---|---|
| MILWAUKEE | OAK CREEK |

DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | TEK | SGM |

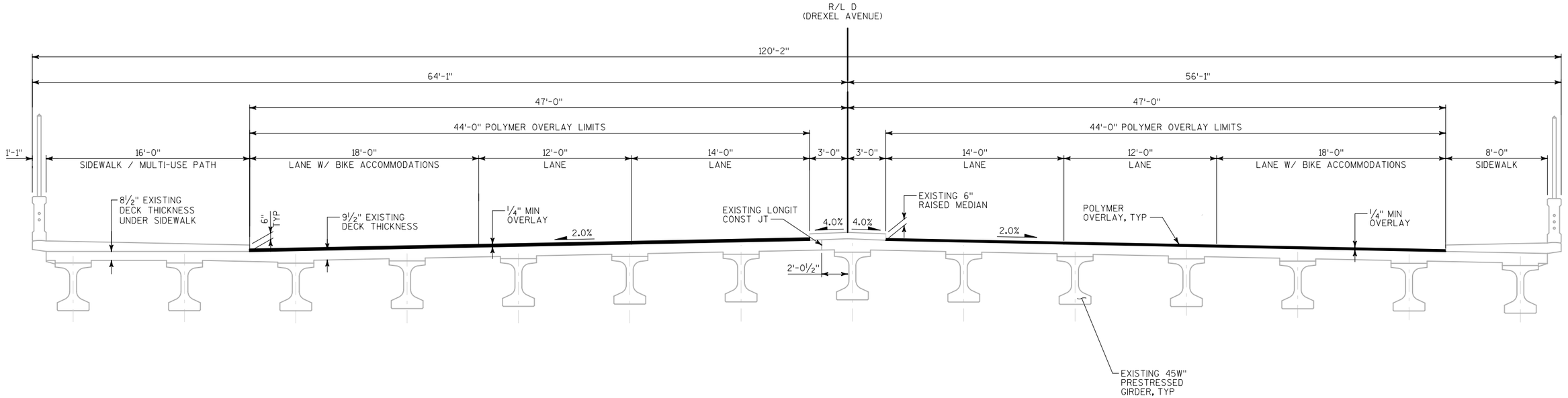
GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2



FILE NAME : B40763_080101_gp.dgn PLOT DATE : 10-JAN-2019 PLOT BY : emccrigh B40763_080101_gp PLOT SCALE : 40:1

| STATE PROJECT NUMBER |
| --- |
| 1030-38-70 |




## TYPICAL SECTION THRU DREXEL AVE

(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-763

DRAWN BY TEK | PLANS CK'D. SGM

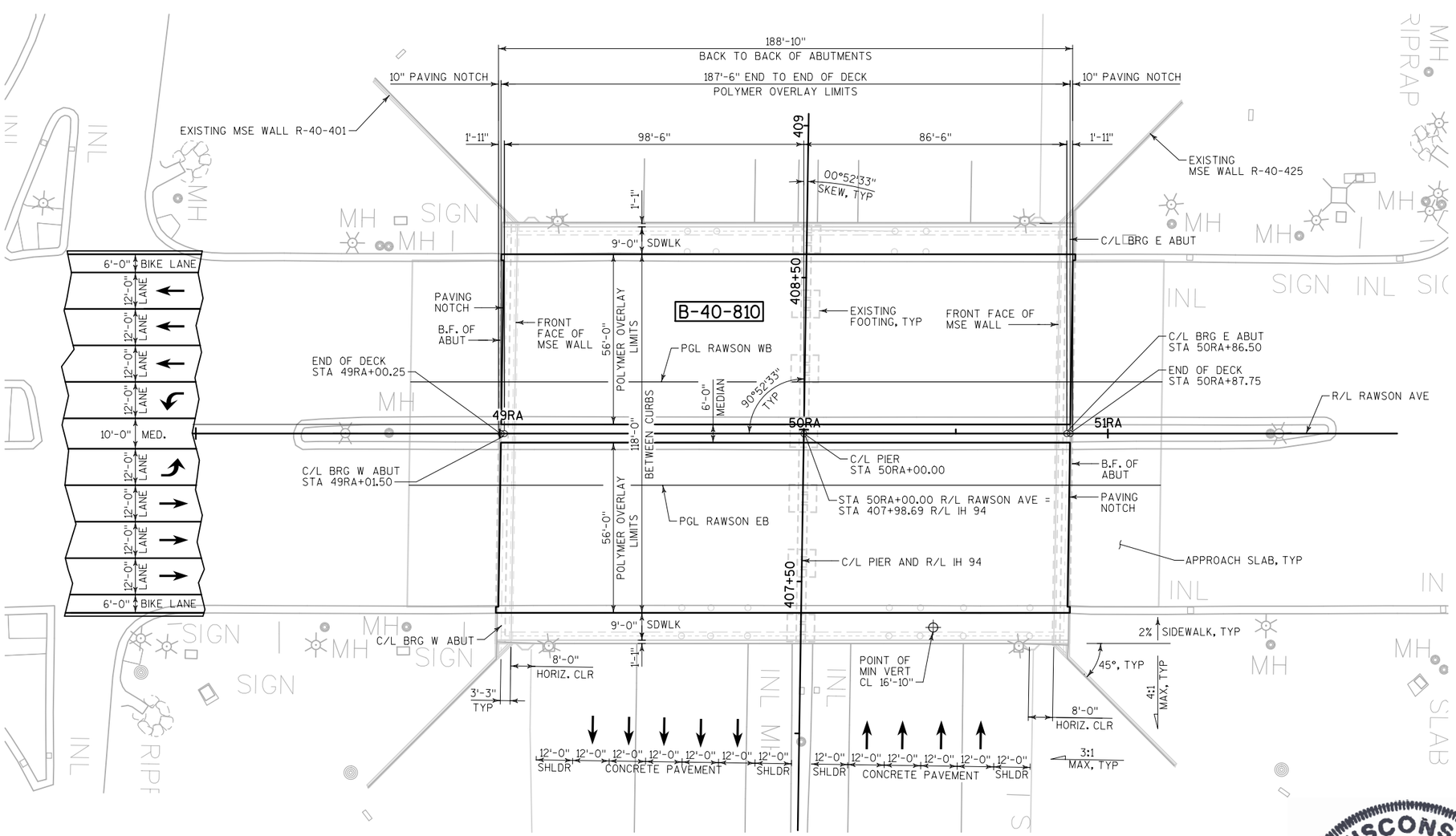
TYPICAL SECTION

SHEET 2 OF 2



FILE NAME : B40763_080102_ts.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40763_080102_ts PLOT SCALE : 8:1

| STATE PROJECT NUMBER |
|---|
| 1030-38-70 |




## PLAN

POLYMER OVERLAY FOR 2-SPAN
45W" PRESTRESSED GIRDERS

## DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: RF = 1.02
OPERATING RATING FACTOR: RF = 1.53
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

## TRAFFIC DATA

| RAWSON AVE | IH 94 |
|---|---|
| A.D.T. = 35,200 (2015) | A.D.T. = 129,700 (2015) |
| A.D.T. = 42,900 (2041) | A.D.T. = 146,700 (2041) |
| R.D.S. = 45 M.P.H. | R.D.S. = 70 M.P.H. |

## LIST OF DRAWINGS

1. GENERAL PLAN, NOTES & QUANTITIES
2. TYPICAL SECTION

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPERATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

THE CONTRACTOR SHALL DETERMINE REQUIRED CONSTRUCTION STAGING ON THE STRUCTURE TO ACCOMPLISH APPLICATION OF THE POLYMER OVERLAY. INCLUDING LOCATION OF POLYMER OVERLAY CONSTRUCTION JOINTS BETWEEN STAGES AS PERMITTED BY THE CONTRACT AND AS APPROVED BY THE ENGINEER. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

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## TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | UNITS | TOTAL |
|---|---|---|---|
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 47 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 23 |
| 509.0310.S | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 165 |
| 509.5100.S | POLYMER OVERLAY | SY | 2,334 |
| SPV.0035.4000 | RAPID SET DECK REPAIR | CY | 8 |

ALL ITEMS ARE CATEGORY 2230

WISCONSIN
STEVEN G. MILLER
E-20710
MILWAUKEE, WI
2/1/2019
PROFESSIONAL ENGINEER

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
MARK MADAY (414) 847-0302

| NO. | DATE | REVISION | BY |
|---|---|---|---|

ORIGINAL PLANS PREPARED BY
ch2m
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

# STRUCTURE B-40-810

RAWSON AVE (CTH BB) OVER I.H. 94

| COUNTY | ~~TOWN/CITY/VILLAGE~~ |
|---|---|
| MILWAUKEE | MILWAUKEE |

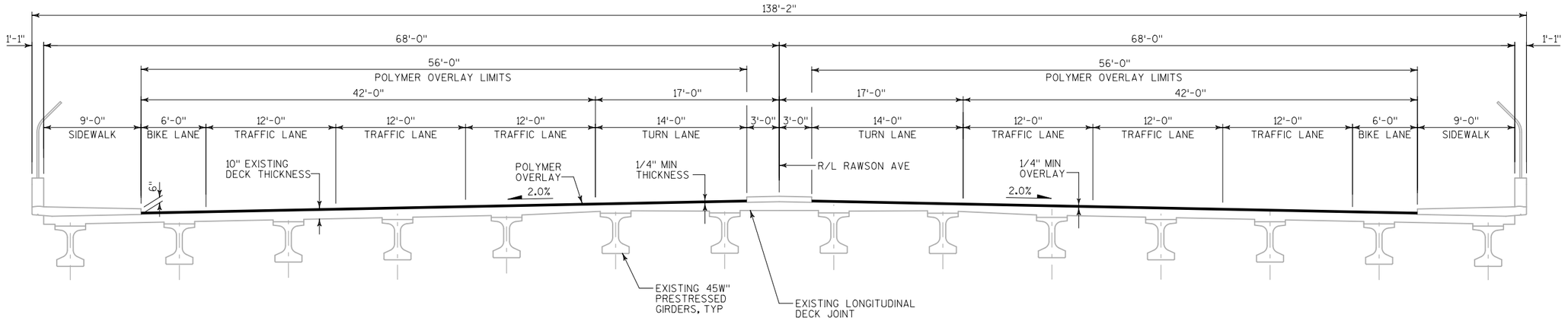
DESIGN SPEC.
REHABILITATION N/A

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TMH | SGM | TEK | SGM |

GENERAL PLAN, NOTES & QUANTITIES

SHEET 1 OF 2

| STATE PROJECT NUMBER |
| --- |
| 1030-38-70 |




## TYPICAL SECTION THRU RAWSON AVE

(LOOKING EAST)

8

8

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-810

| | DRAWN BY EJB | PLANS CK'D. SGM |
| --- | --- | --- |
| TYPICAL SECTION | SHEET 2 OF 2 | |



FILE NAME : B40810_080102_ts.dgn PLOT DATE : 19-OCT-2018 PLOT BY : emccrigh B40810_080102_ts PLOT SCALE : 10.666667:1

Notes

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov