

WKE

PROJECT ID:  
WITH:

1060-47-60

COUNTY:

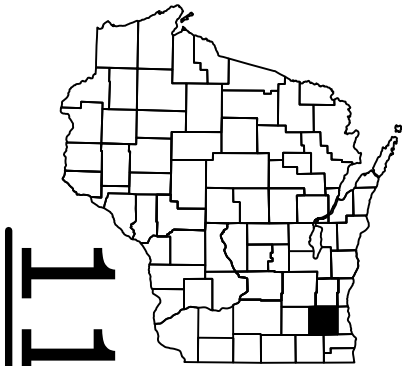
WAUKESHA

MAY 12, 2020

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           |
| <del>Section No.</del> | <del>4</del> | <del>Right of Way Plat</del>       |
| <del>Section No.</del> | <del>5</del> | <del>Plan and Profile</del>        |
| Section No.            | 6            | Standard Detail Drawings           |
| Section No.            | 7            | Sign Plates                        |
| <del>Section No.</del> | <del>8</del> | <del>Structure Plans</del>         |
| <del>Section No.</del> | <del>9</del> | <del>Computer Earthwork Data</del> |
| <del>Section No.</del> | <del>9</del> | <del>Cross Sections</del>          |

TOTAL SHEETS = 84



DESIGN DESIGNATION IH 94

|              |      |   |        |
|--------------|------|---|--------|
| A.A.D.T.     | 2019 | = | 81,100 |
| A.A.D.T.     | N/A  | = | N/A    |
| D.H.V.       |      | = | N/A    |
| D.D.         |      | = | N/A    |
| T.           |      | = | N/A    |
| DESIGN SPEED |      | = | 70     |
| ESALS        |      | = | N/A    |

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             |  |
| MARSH AREA                     |  |
| WOODED OR SHRUB AREA           |  |

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

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

## IH 94 EAST WEST FREEWAY

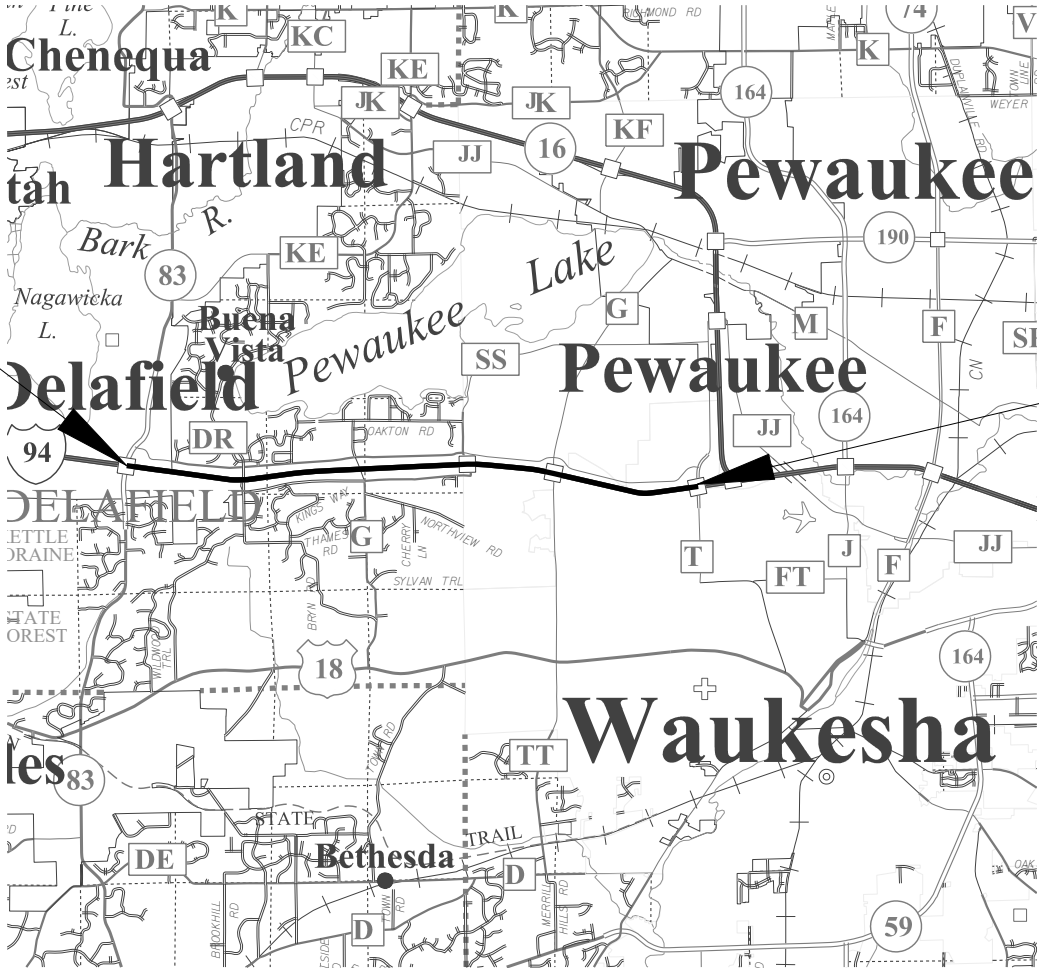
STH 83 TO CTH T

IH 94  
WAUKESHA

|                      |
|----------------------|
| STATE PROJECT NUMBER |
| 1060-47-60           |

BEGIN PROJECT  
STA 459+30.20  
X: 601014.21  
Y: 182747.90

END PROJECT  
STA 772+00



LAYOUT  
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 5.960

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA NAD83 ( 2011 ), 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 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

| STATE PROJECT | FEDERAL PROJECT |          |
|---------------|-----------------|----------|
|               | PROJECT         | CONTRACT |
| 1060-47-60    | WISC 2020244    | 1        |
|               |                 |          |
|               |                 |          |

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

|                     |                       |
|---------------------|-----------------------|
| PREPARED BY         |                       |
| Surveyor            | WISDOT                |
| Designer            | CHRIS ZACHARIAS, P.E. |
| Project Manager     |                       |
| Regional Examiner   |                       |
| Regional Supervisor | WILLIAM S. MOHR, P.E. |

APPROVED FOR THE DEPARTMENT  
DATE: 1/30/2020

E

STANDARD ABBREVIATIONS

|                      |                                         |
|----------------------|-----------------------------------------|
| AEW                  | APRON ENDWALL                           |
| AGG                  | AGGREGATE                               |
| ASPH                 | ASPHALTIC                               |
| BAD                  | BASE AGGREGATE DENSE                    |
| BM                   | BENCHMARK                               |
| C&G                  | CURB AND GUTTER                         |
| CL OR C <sub>L</sub> | CENTER LINE OR CONSTRUCTION LINE        |
| CMCP                 | CULVERT PIPE CORRUGATED METAL           |
| CONC                 | CONCRETE                                |
| CP                   | CULVERT PIPE                            |
| CPRC                 | CULVERT PIPE REINFORCED CONCRETE        |
| CPRCHE               | CULVERT PIPE REINFORCED CONCRETE        |
| CSD                  | CONCRETE SURFACE DRAIN                  |
| CY                   | CUBIC YARD                              |
| D                    | DEGREE OF CURVE                         |
| Δ                    | DELTA                                   |
| DISCH                | DISCHARGE                               |
| EB                   | EASTBOUND                               |
| FE                   | FIELD ENTRANCE                          |
| FL                   | FLOW LINE                               |
| HMA                  | HOT MIX ASPHALTIC                       |
| INV                  | INVERT                                  |
| L                    | LENGTH OF CURVE                         |
| LHF                  | LEFT HAND FORWARD                       |
| LP                   | LOW POINT                               |
| 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                   |
| PGL                  | PROFILE GRADE LINE                      |
| PLE                  | PERMANENT LIMITED EASEMENT              |
| PRC                  | POINT OF REVERSE CURVE                  |
| PT                   | POINT OF TANGENT                        |
| R                    | RADIUS OF CURVE                         |
| R/L                  | REFERENCE LINE                          |
| R/W                  | RIGHT OF WAY                            |
| RC                   | REVERSE CROWN                           |
| RCAEW                | APRON END WALL FOR CULVERT PIPE         |
| REQD                 | REQUIRED                                |
| RHF                  | RIGHT HAND FORWARD                      |
| RO                   | RUN OFF LENGTH                          |
| RRSP                 | RAILROAD SPIKE                          |
| RT                   | RIGHT                                   |
| SALV                 | SALVAGED                                |
| SAPBC                | SALVAGED ASPHALTIC PAVEMENT BASE COURSE |
| SB                   | SOUTHBOUND                              |
| SDD                  | STANDARD DETAIL DRAWING                 |
| SE                   | SUPER ELEVATION                         |
| SF                   | SQUARE FOOT                             |
| SI                   | SLOPE INTERCEPT                         |
| SSPRC                | STORM SEWER PIPE REINFORCED CONCRETE    |
| STA                  | STATION                                 |
| SY                   | SQUARE YARD                             |
| T                    | TANGENT LENGTH                          |
| TLE                  | TEMPORARY LIMITED EASEMENT              |
| VCL                  | VERTICAL CURVE LENGTH                   |
| VPC                  | POINT VERTICAL CURVE                    |
| VPI                  | POINT OF VERTICAL INTERSECTION          |
| VPT                  | POINT OF VERTICAL TANGENT               |
| WB                   | WESTBOUND                               |

ORDER OF SECTION 2 SHEETS

- GENERAL NOTES & UTILITY CONTACTS  
PROJECT OVERVIEW  
TYPICAL SECTIONS  
CONSTRUCTION DETAILS  
PAVEMENT MARKING  
TRAFFIC CONTROL

ALL TYPES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

A

| PAVEMENT TYPE | TOTAL LAYER PAVEMENT THICKNESS | LAYERS         |
|---------------|--------------------------------|----------------|
| 4 MT 58-28 H  | 2"                             | 2" UPPER LAYER |

STATE AGENCIES

WISCONSIN DNR  
Craig Webster  
DNR Service Center  
141 NW Barstow Rm 180  
Waukesha, WI 53188  
Phone: (262) 574-2141  
[craig.webster@wisconsin.gov](mailto:craig.webster@wisconsin.gov)

WISCONSIN DEPARTMENT OF TRANSPORTATION  
Brenda Ruenger, SE Region Environmental Coordinator  
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[brenda.ruenger@dot.wi.gov](mailto:brenda.ruenger@dot.wi.gov)

WISCONSIN DEPARTMENT OF TRANSPORTATION  
Chris Zacharias - Project Manager  
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WISCONSIN DEPARTMENT OF TRANSPORTATION  
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141 NW Barstow Street  
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(262) 548-5690  
[rabi.bista@dot.wi.gov](mailto:rabi.bista@dot.wi.gov)

GENERAL NOTES

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 IS RESPONSIBLE FOR COORDINATION WITH DIGGERS HOTLINE AND AFFECTED UTILITIES TO FIELD LOCATE UTILITIES PRIOR TO THE START OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE SEPARATELY.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING HMA PAVEMENT.

SQUEEGEE ALL SAWCUT SLURRY TO THE AGGREGATE SHOULDER AND/OR REMOVE INCIDENTAL TO SAWCUTTING.



UTILITY CONTACTS

Kenneth Colwell  
AT&T Legacy - Communication Line  
222 W Jackson  
Woodstock, IL 60098  
(312) 734-2223  
[kc1298@att.com](mailto:kc1298@att.com)

Chris Walter  
City of Waukesha - Water  
P.O. Box 1648  
Waukesha, WI 53187-1648  
(262) 521-5272  
[CWalter@waukesha-water.com](mailto:CWalter@waukesha-water.com)

Mike Olsen  
ATC Management, Inc. - Electricity-transmission  
801 O'keefe Rd  
P.O. Box 6113  
De Pere, WI 54115-6113  
(920) 338-6582  
[molsen@atcllc.com](mailto:molsen@atcllc.com)

Richard Trgovac  
Midwest Fiber Networks LLC - Communication Line  
6070 North Flint Rd  
Glendale, WI 53209  
(414) 459-3554  
[rtrgovac@midwestfibernetworks.com](mailto:rtrgovac@midwestfibernetworks.com)

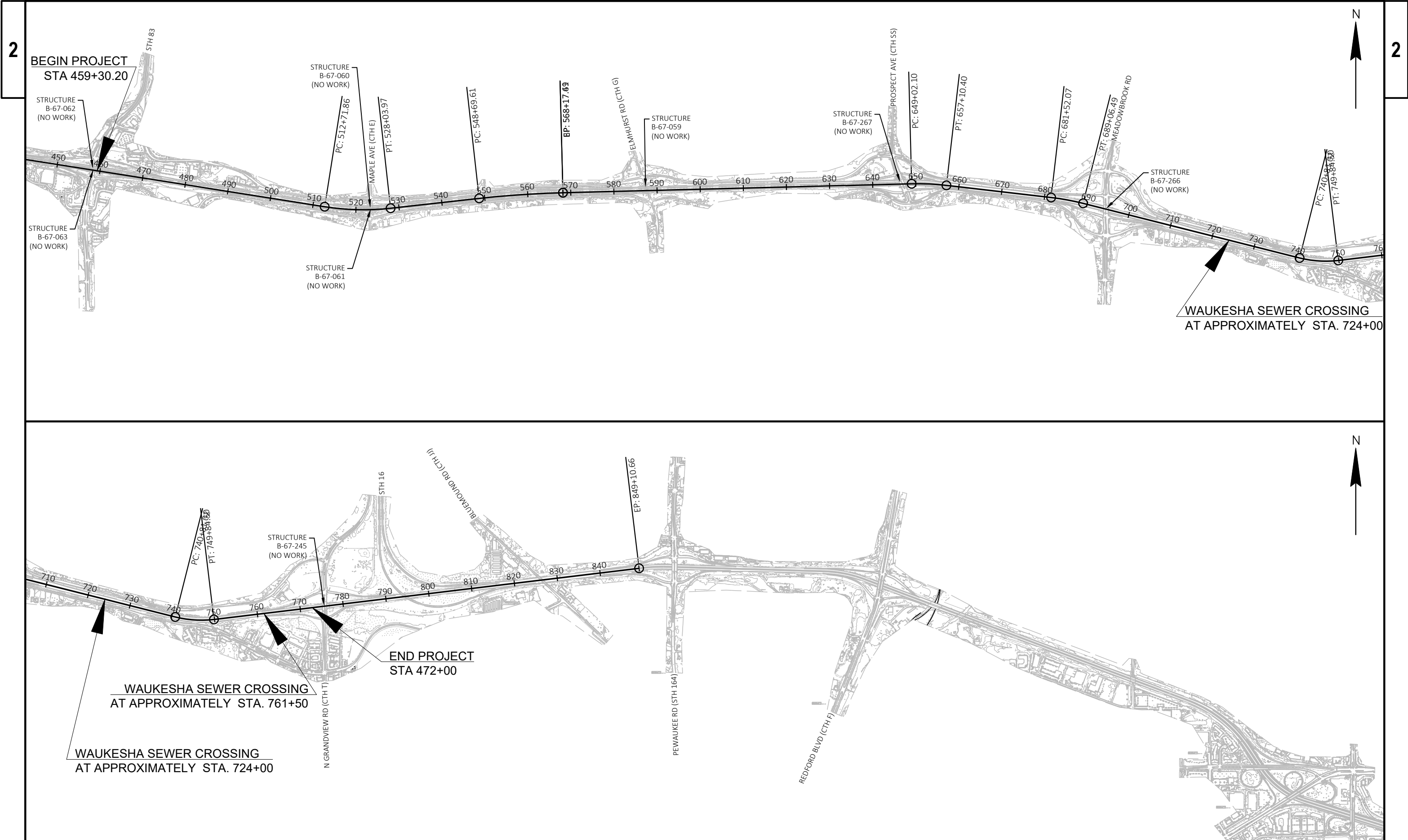
Kelly Jaeck  
We Energies - Gas  
S13 W33800 US-18  
Delafield, WI 53018  
(262) 968-5721  
[Kelly.jaeck@we-energies.com](mailto:Kelly.jaeck@we-energies.com)

Nicole Smullen  
We Energies - Electricity  
A299  
333 W Everett St  
Milwaukee, WI 53203  
(414) 221-5617  
[Nicole.Smullen@weenergygroup.com](mailto:Nicole.Smullen@weenergygroup.com)

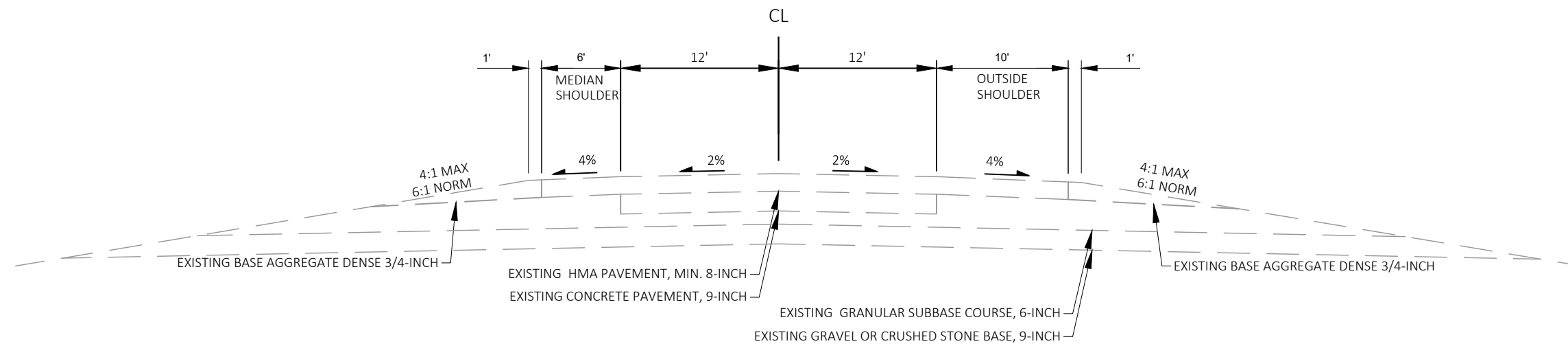
Network Relocations  
Level 3 Communications LLC - Communication Line  
1025 Eldorado Blvd  
Broomfield, CO 80021  
[NationalRelo@centurylink.com](mailto:NationalRelo@centurylink.com)

Paul Zellner  
City of Delafield Department of Public Works - Water  
500 Genessee St  
Delafield, WI 53018  
(262) 303-4627  
[pzellner@ci.delafield.wi.us](mailto:pzellner@ci.delafield.wi.us)

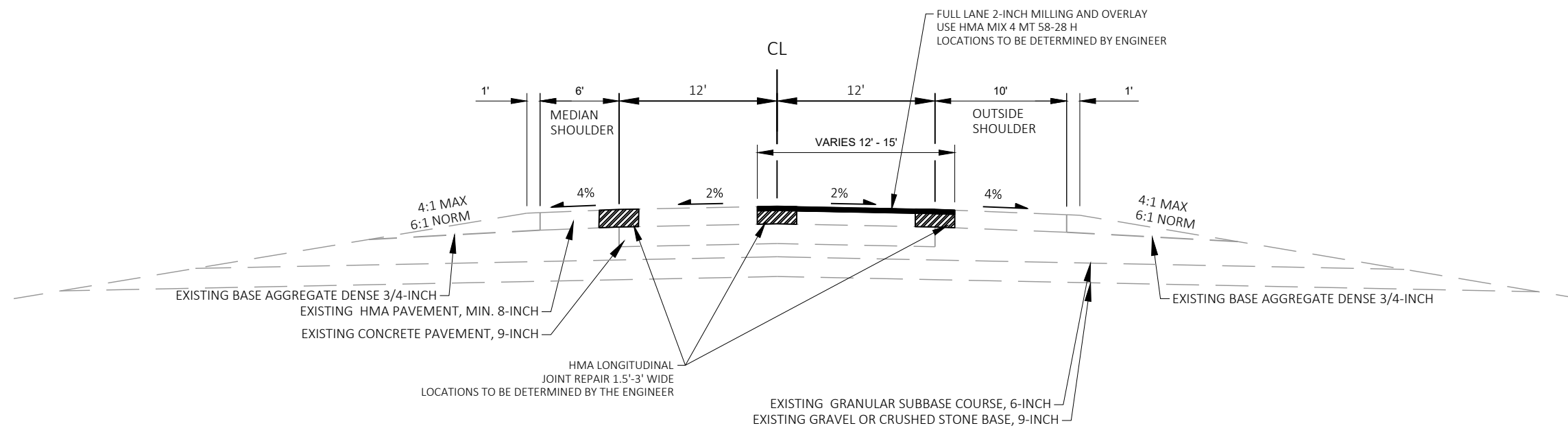
Chad Bigler  
WISDOT ATR Pull Boxes – Electricity  
Travel Survey Shop, 3633 Pierstorff St  
P.O. Box 2583  
Madison, WI 53704-2583  
(608) 535-7413  
[chad.bigler@dot.wi.gov](mailto:chad.bigler@dot.wi.gov)



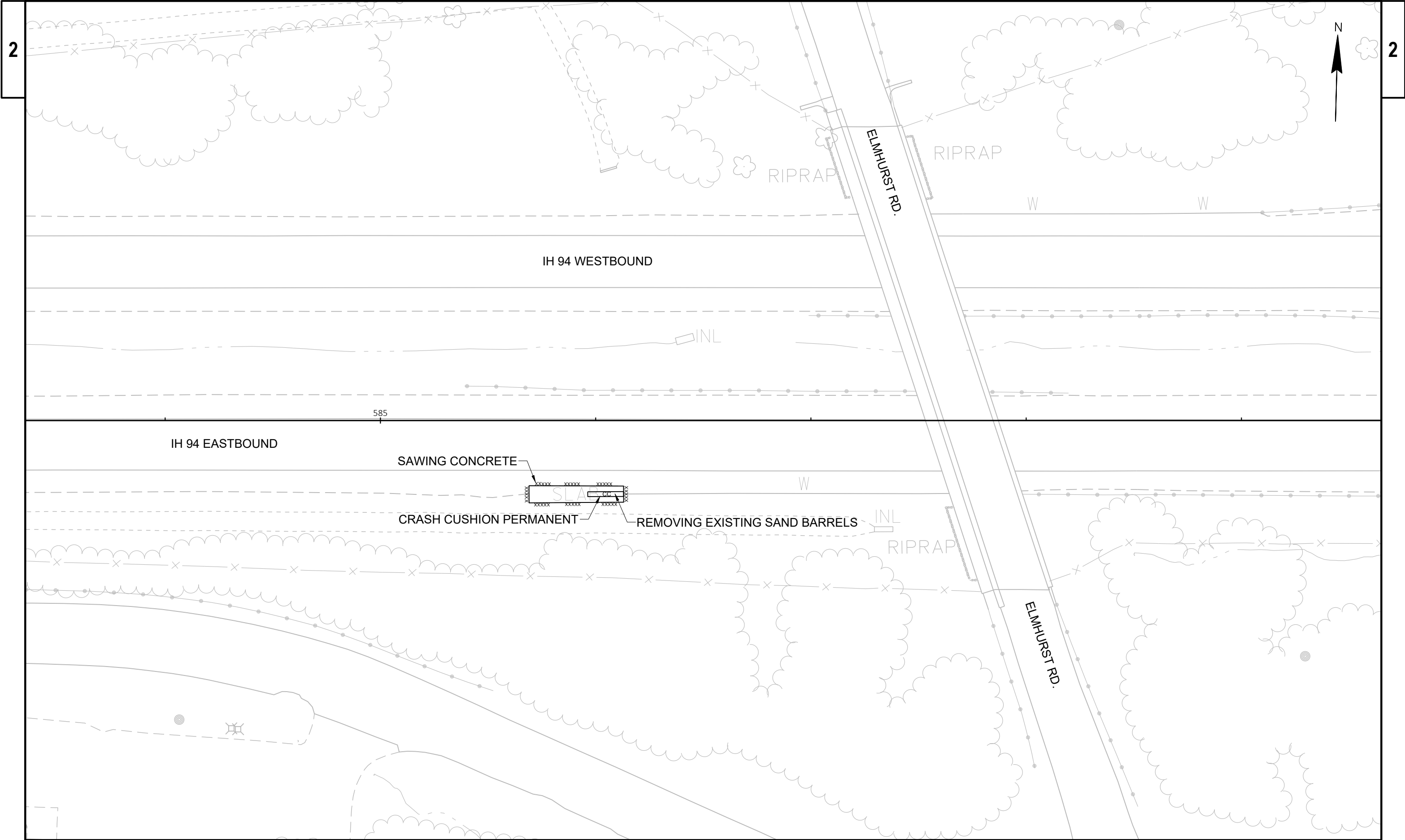


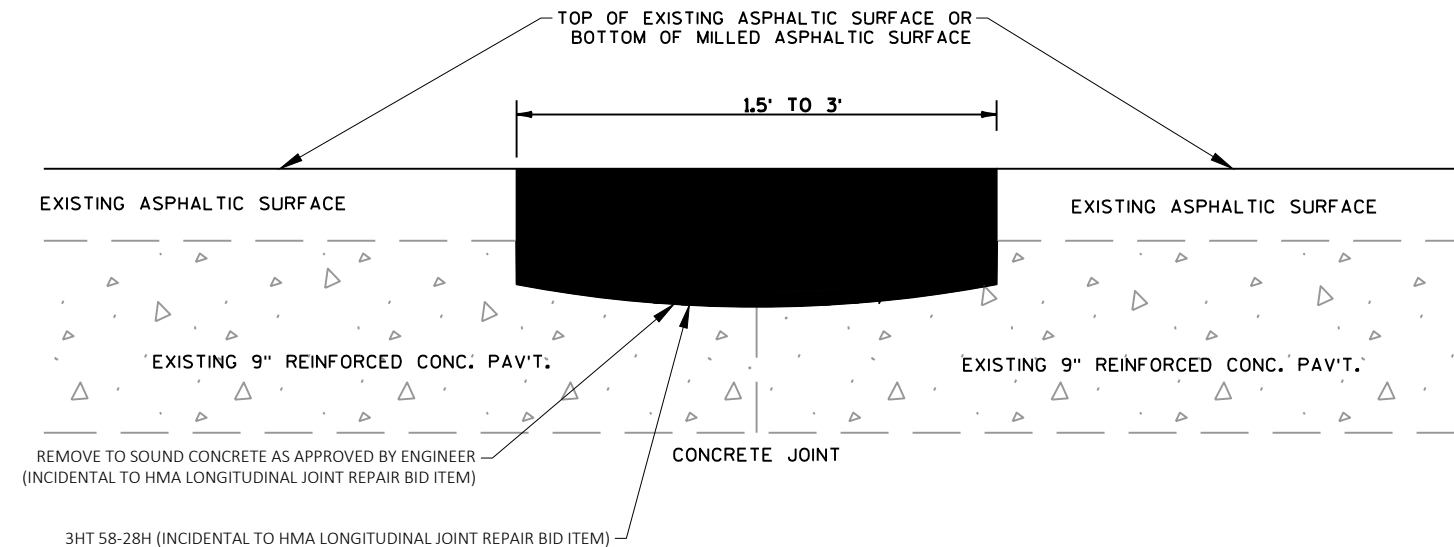


**EXISTING I-94 TYPICAL SECTION**  
NORMAL CROWN  
(EASTBOUND SHOWN, WESTBOUND SIMILAR)



**PROPOSED I-94 TYPICAL SECTION**  
NORMAL CROWN  
(EASTBOUND SHOWN, WESTBOUND SIMILAR)



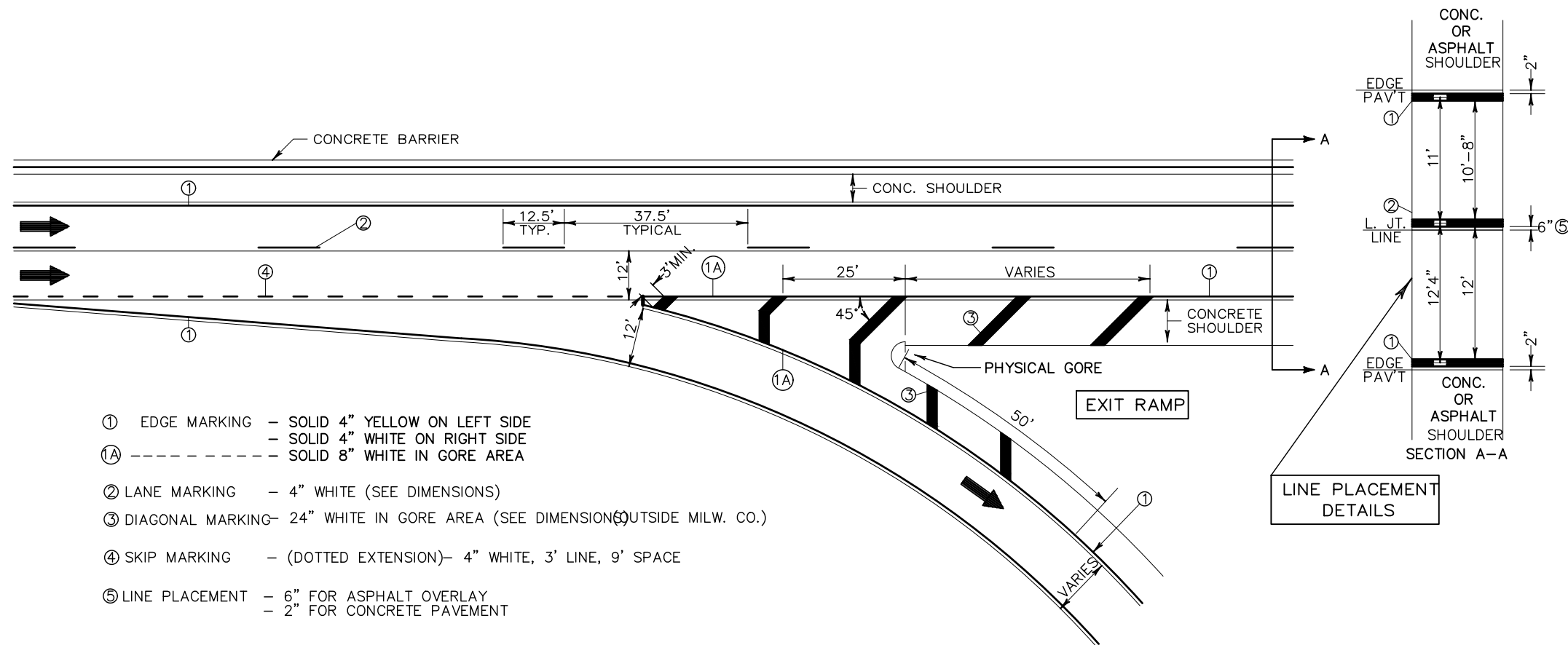


#### HMA LONGITUDINAL JOINT REPAIR DETAIL

**NOTE:**

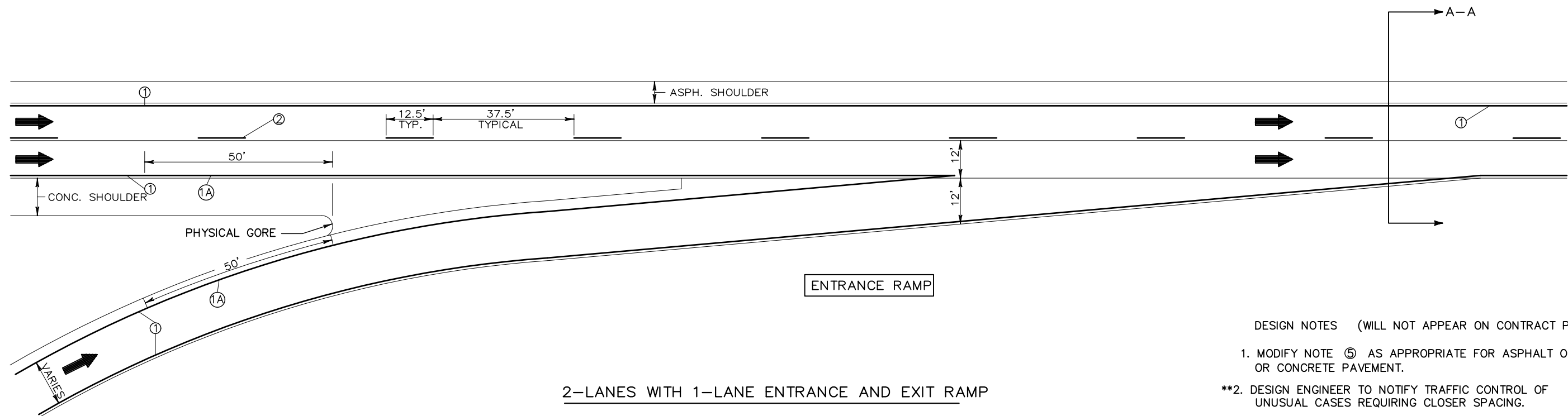
- 1) IN ALL AREAS OF JOINT REPAIR, REMOVE ASPHALTIC MATERIAL AND/OR LOOSE, DETERIORATED CONCRETE. CLEAN AND REPLACE WITH HMA PAVEMENT AS DIRECTED BY THE ENGINEER.
- 2) LOCATIONS FOR JOINT REPAIR TO BE APPROVED BY THE ENGINEER PRIOR TO THE START OF REPAIR WORK.

RACINE, KENOSHA, WALWORTH, WAUKESHA,  
FOND DU LAC, OZAUKEE & WASHINGTON  
COUNTIES



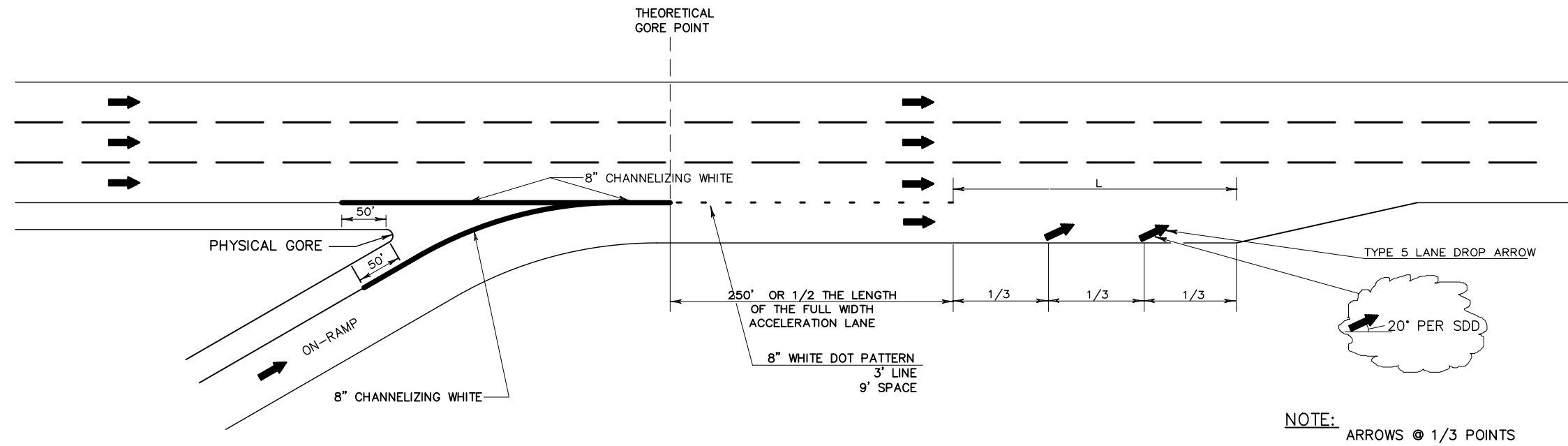
## NOTES:

- WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 9' SKIP.
- PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
- ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.

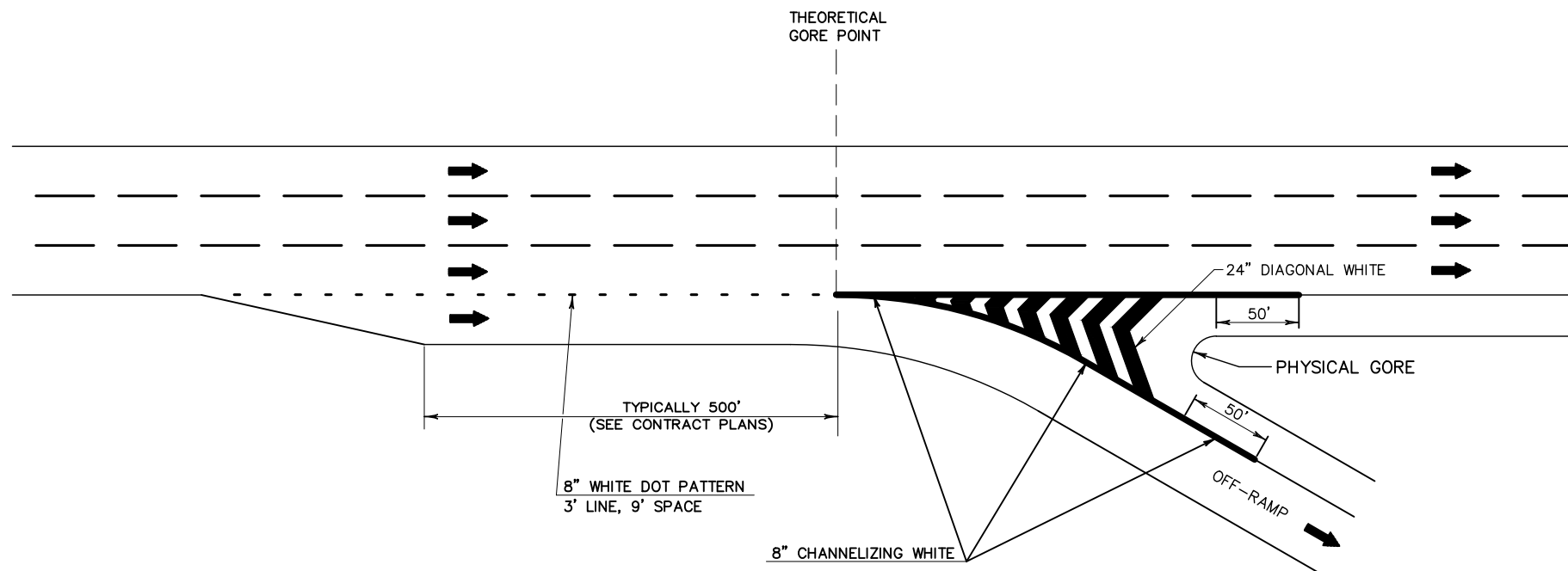


## DESIGN NOTES (WILL NOT APPEAR ON CONTRACT PLANS)

- MODIFY NOTE ⑤ AS APPROPRIATE FOR ASPHALT OVERLAY OR CONCRETE PAVEMENT.
- \*\*2. DESIGN ENGINEER TO NOTIFY TRAFFIC CONTROL OF UNUSUAL CASES REQUIRING CLOSER SPACING.

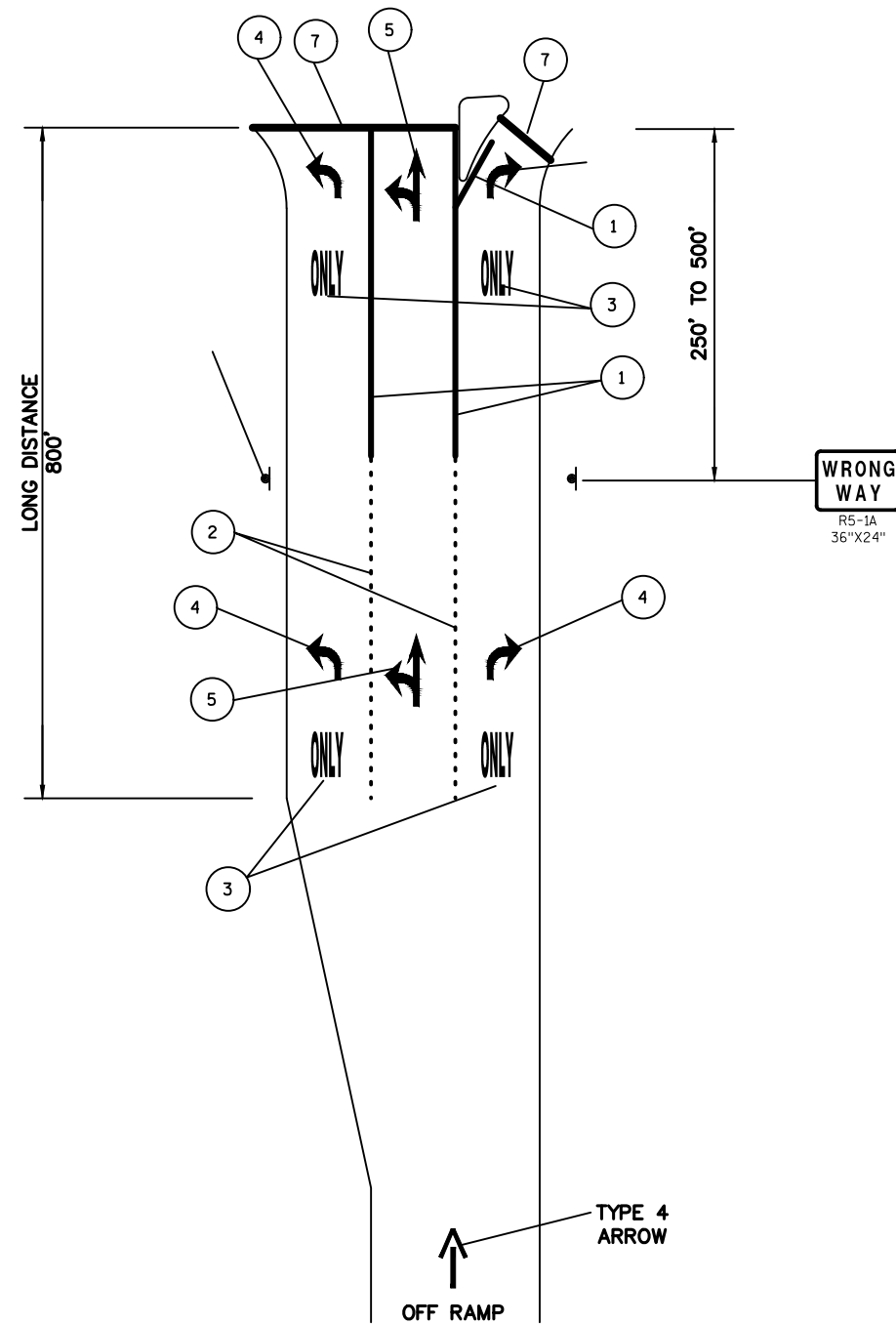


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ON-RAMP

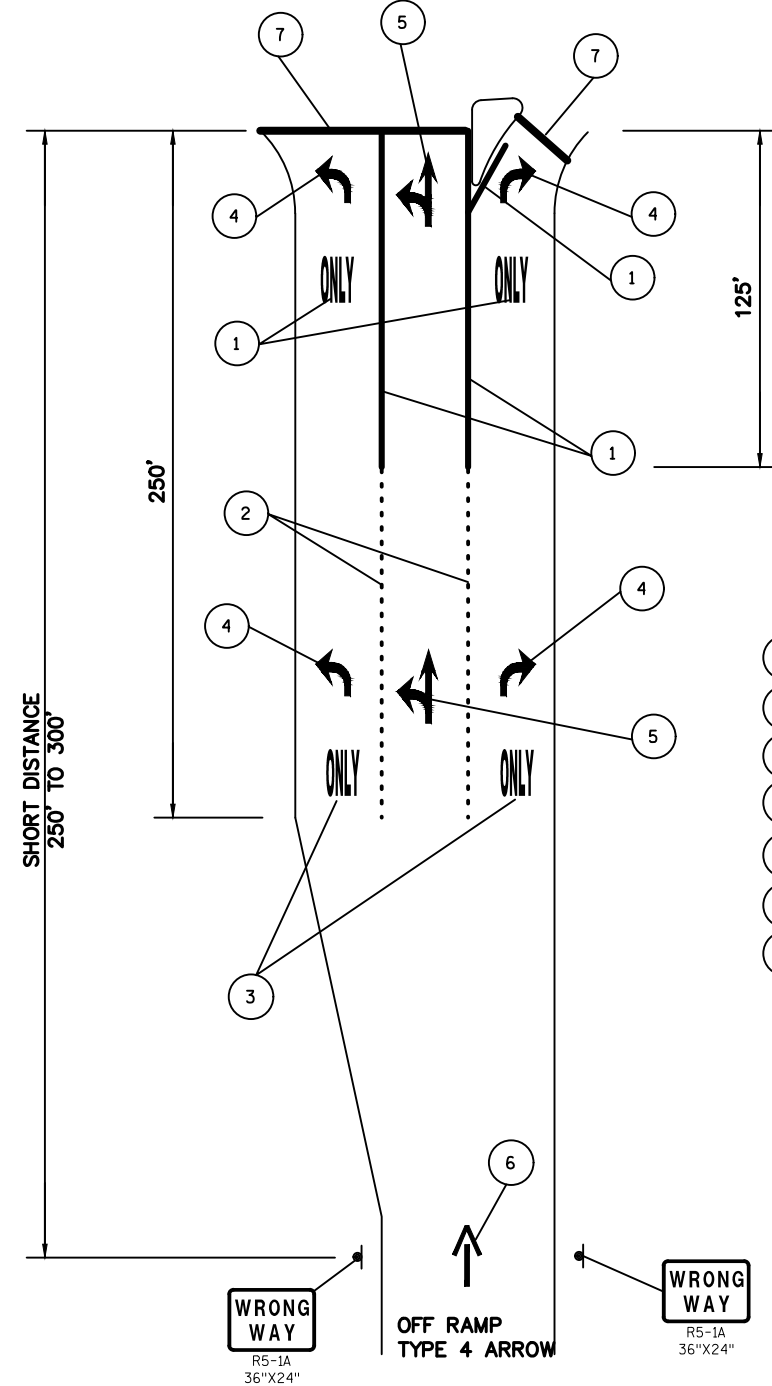


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL OFF-RAMP





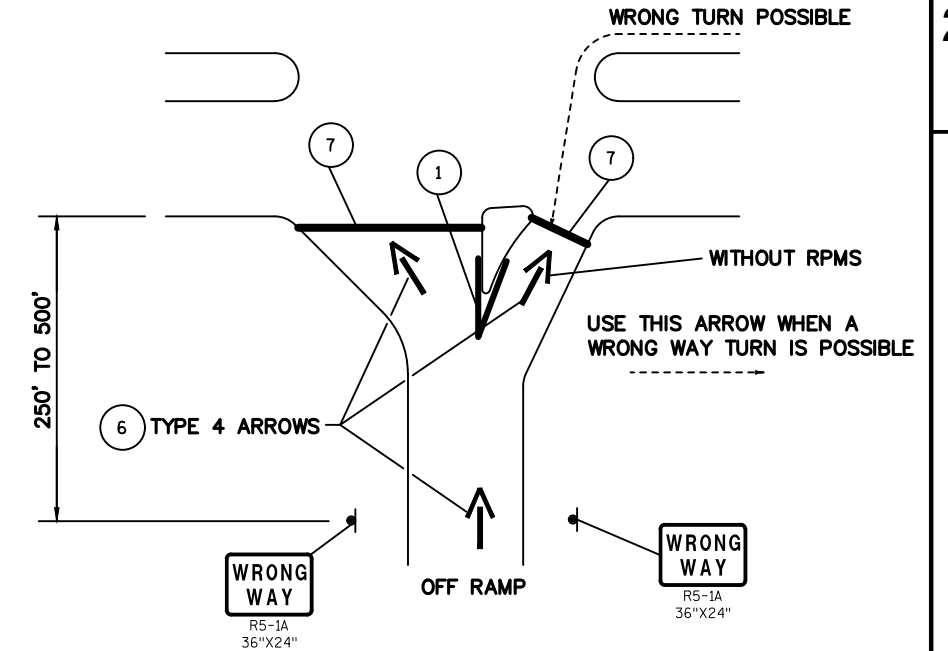
**EXIT RAMP  
LONG TURN LANES**



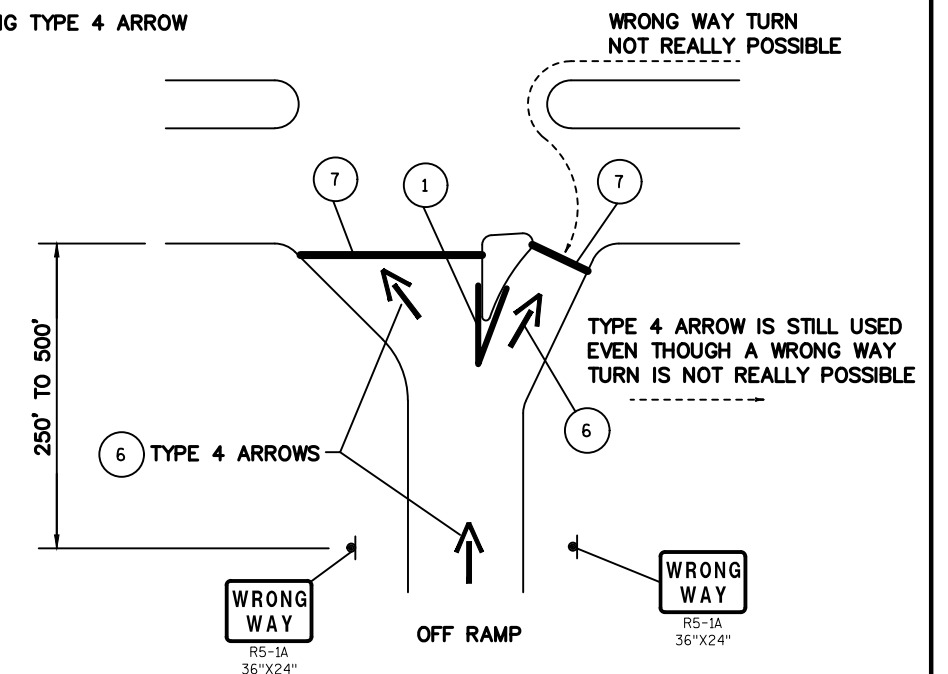
**EXIT RAMP  
250' OR SHORTER TURN LANES**

**LEGEND**

- 1 PAVEMENT MARKING 8" CHANNELIZING WHITE
- 2 PAVEMENT MARKING 8" WHITE (3' LINE, 9' SPACE)
- 3 PAVEMENT MARKING WORDS
- 4 PAVEMENT MARKING TYPE 2 ARROW
- 5 PAVEMENT MARKING TYPE 3 ARROW
- 6 PAVEMENT MARKING TYPE 4 ARROW
- 7 18" STOP BAR



**EXIT RAMP  
(SIMPLE)**



**EXIT RAMP  
(SIMPLE)**

MAINLINE IH 94 PAVEMENT MARKING LEGEND

1

MARKING LINE EPOXY 4-INCH (WHITE)

2

MARKING LINE EPOXY 4-INCH (YELLOW)

3

MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE)  
(12.5 FT LINE 37.5 FT SKIP)

4

MARKING LINE CONTRAST EPOXY 8-INCH (DASHED WHITE)  
(3 FT LINE 9 FT SKIP)

5

MARKING LINE CONTRAST EPOXY 8-INCH

6

MARKING LINE EPOXY 4-INCH (DASHED WHITE)  
(12.5 FT LINE 37.5 FT SKIP)

7

MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

20

MARKING ARROW EPOXY TYPE 1

21

MARKING ARROW EPOXY TYPE 2

22

MARKING ARROW EPOXY TYPE 3

23

MARKING ARROW EPOXY TYPE 4

24

MARKING ARROW EPOXY TYPE 5

25

MARKING WORD EPOXY

27

MARKING STOP LINE EPOXY 18-INCH

28

MARKING DIAGONAL EPOXY 12-INCH

36

MARKING YIELD LINE EPOXY 18-INCH

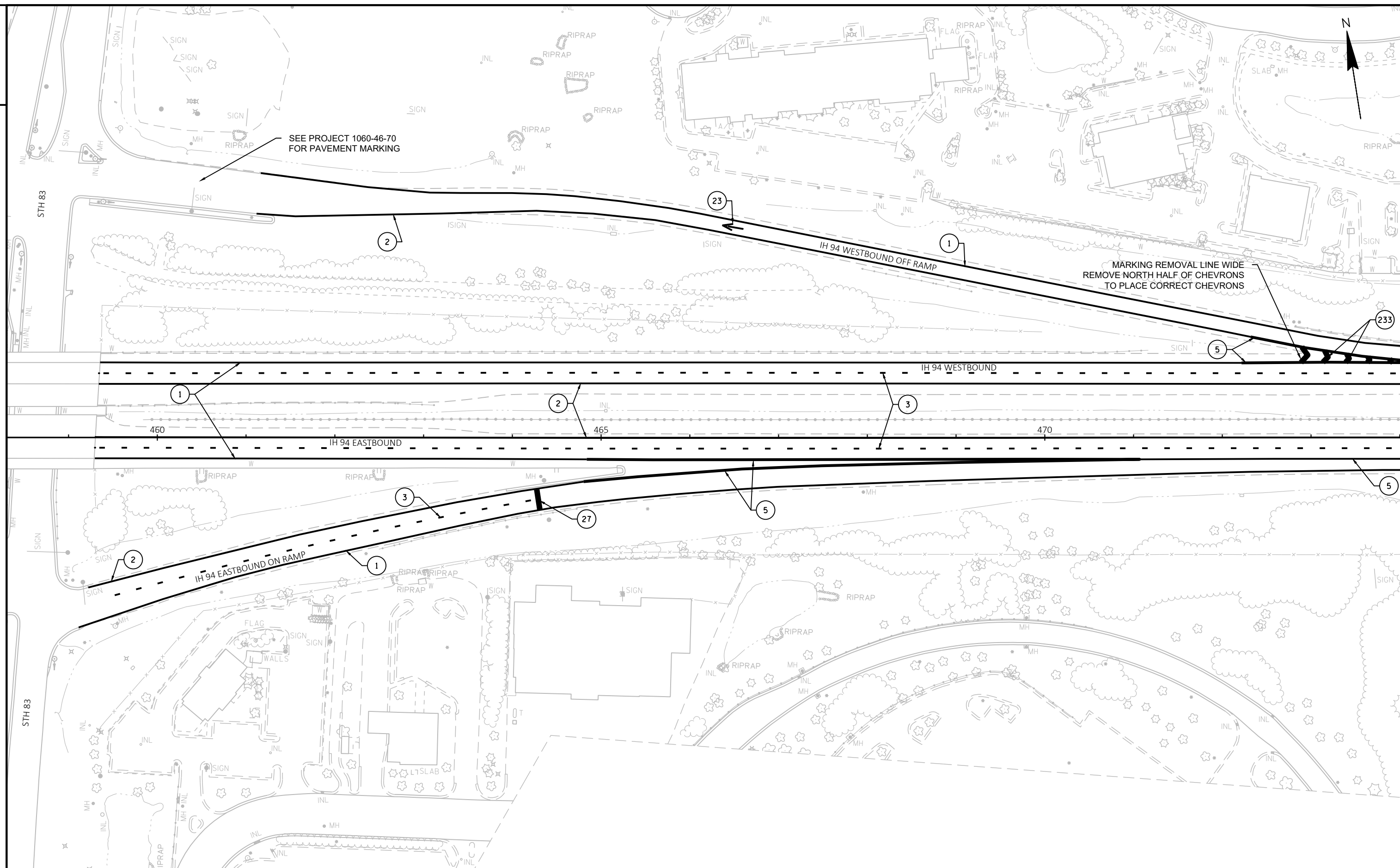
233

MARKING CHEVRON EPOXY 24-INCH (WHITE)

NOTE:  
SEE CONSTRUCTION DETAILS FOR ADDITIONAL PAVEMENT MARKING ON RAMPS

2

2



|             |            |
|-------------|------------|
| PROJECT NO: | 1060-47-60 |
|-------------|------------|

HWY: IH 94

COUNTY: WAUKESHA

PAVEMENT MARKING

SHEET

12

|  |  |
|--|--|
|  |  |
|--|--|

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LAYOUT NAME - (01)

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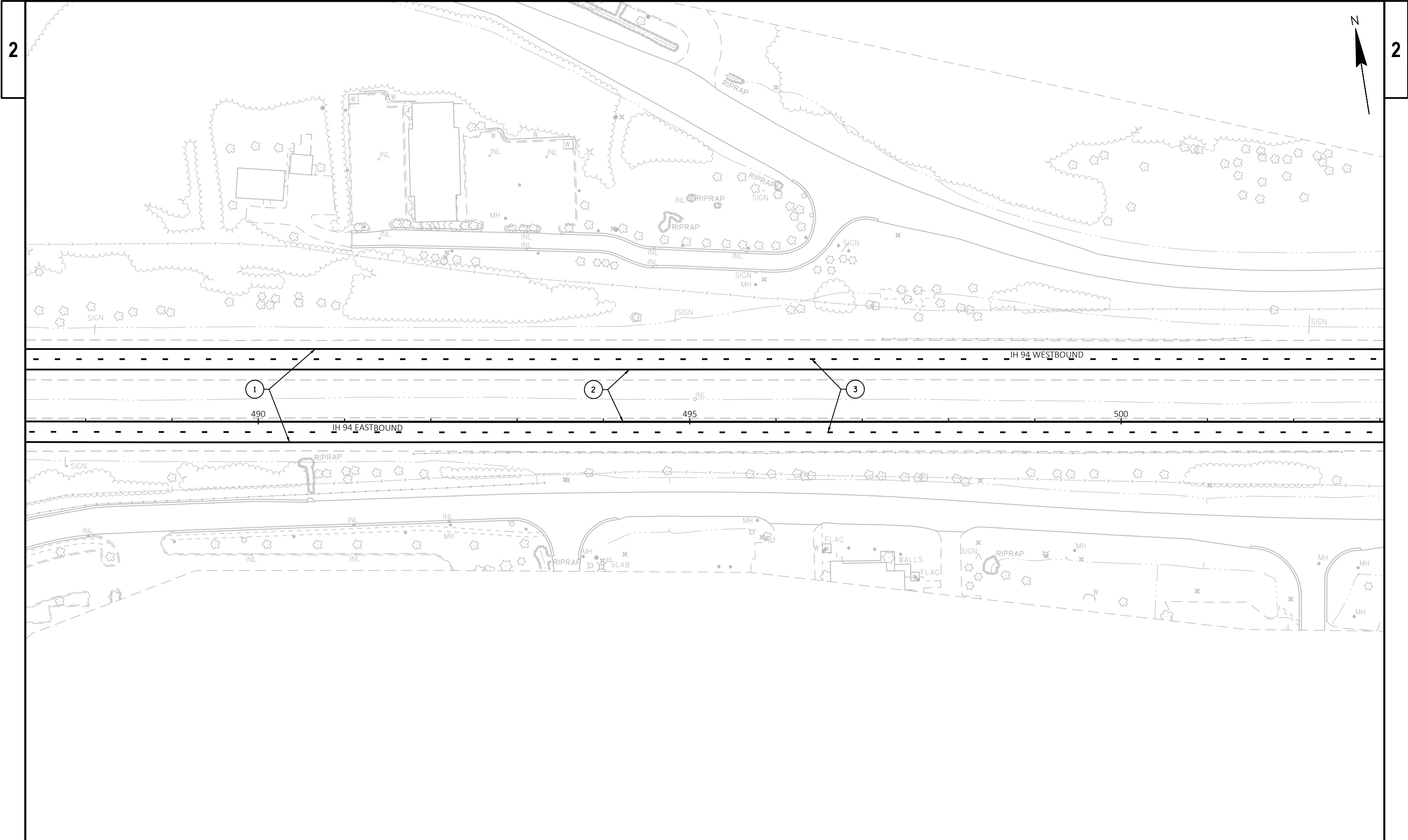
PLOT BY : LOPEZ, ABRAHAM N

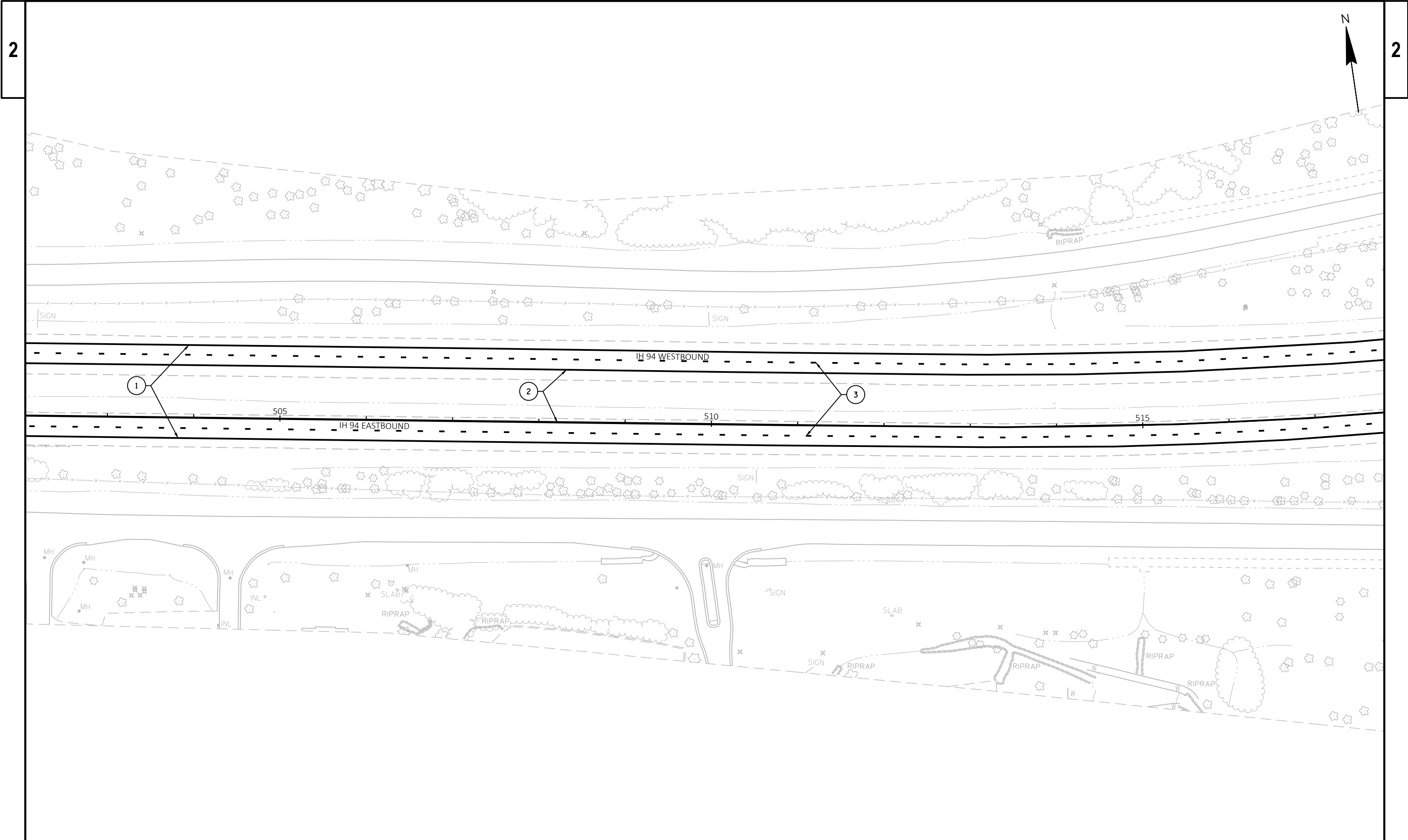
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PLOT SCALE : 1 IN:100 FT

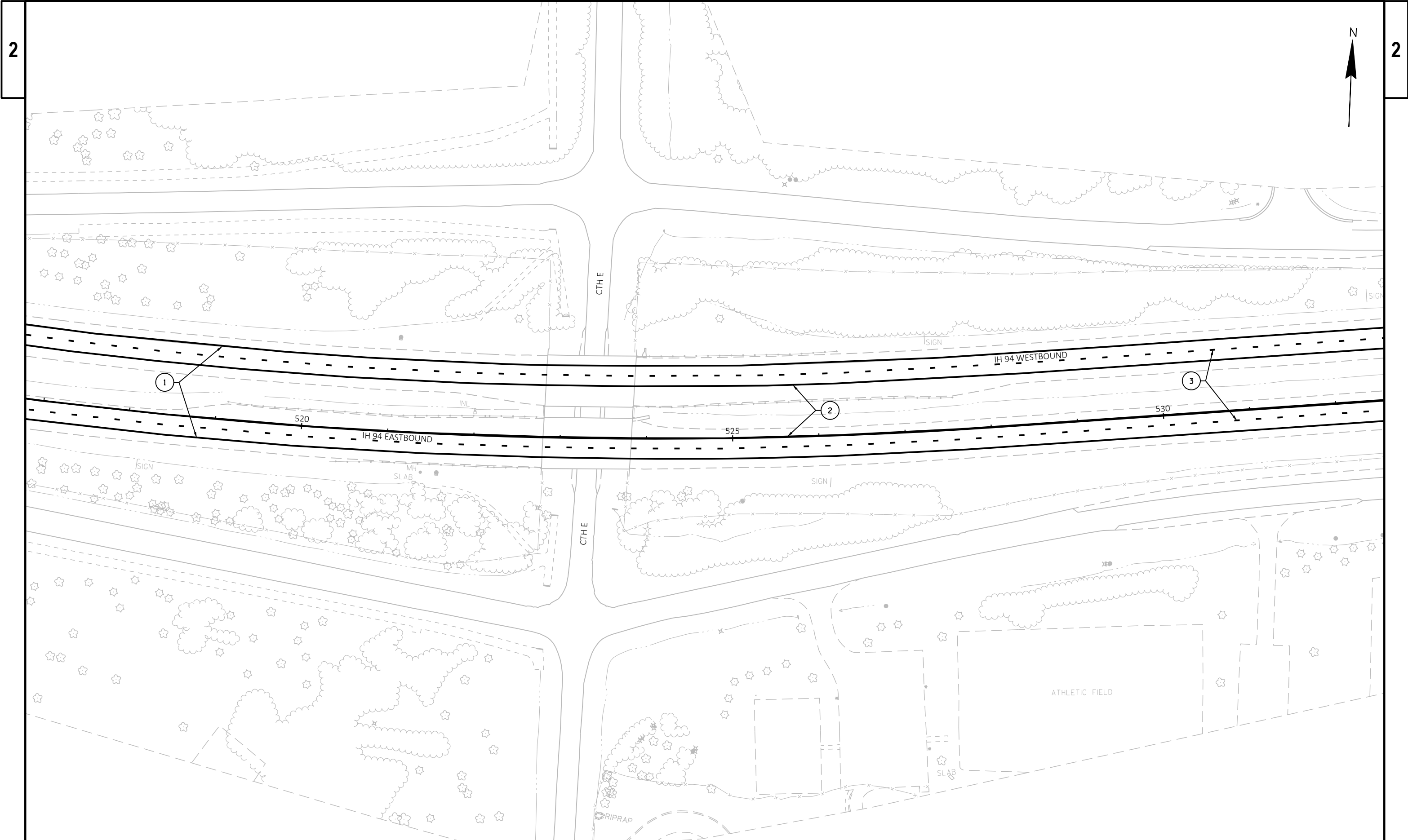
WISDOT/CADDS SHEET 42

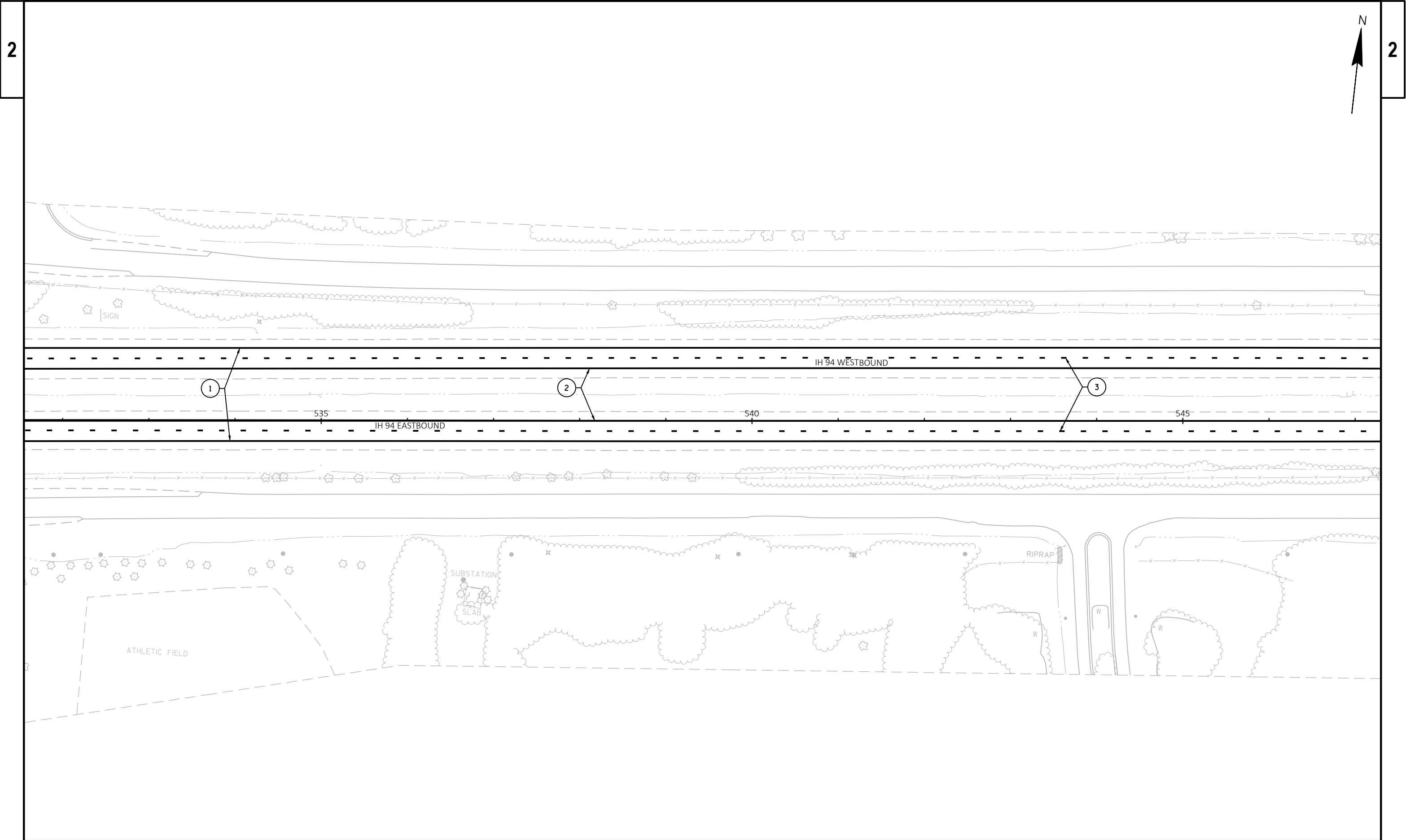




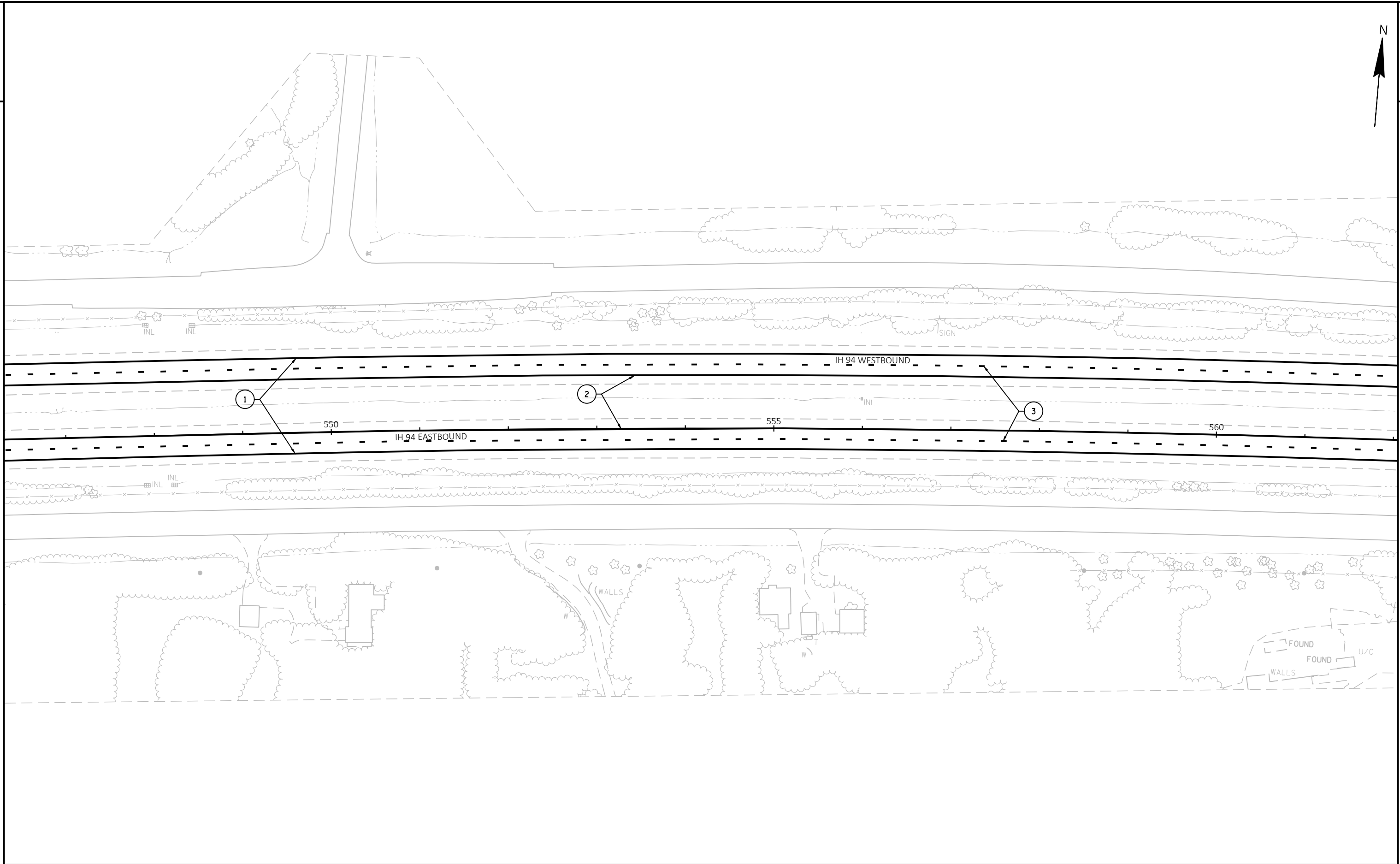








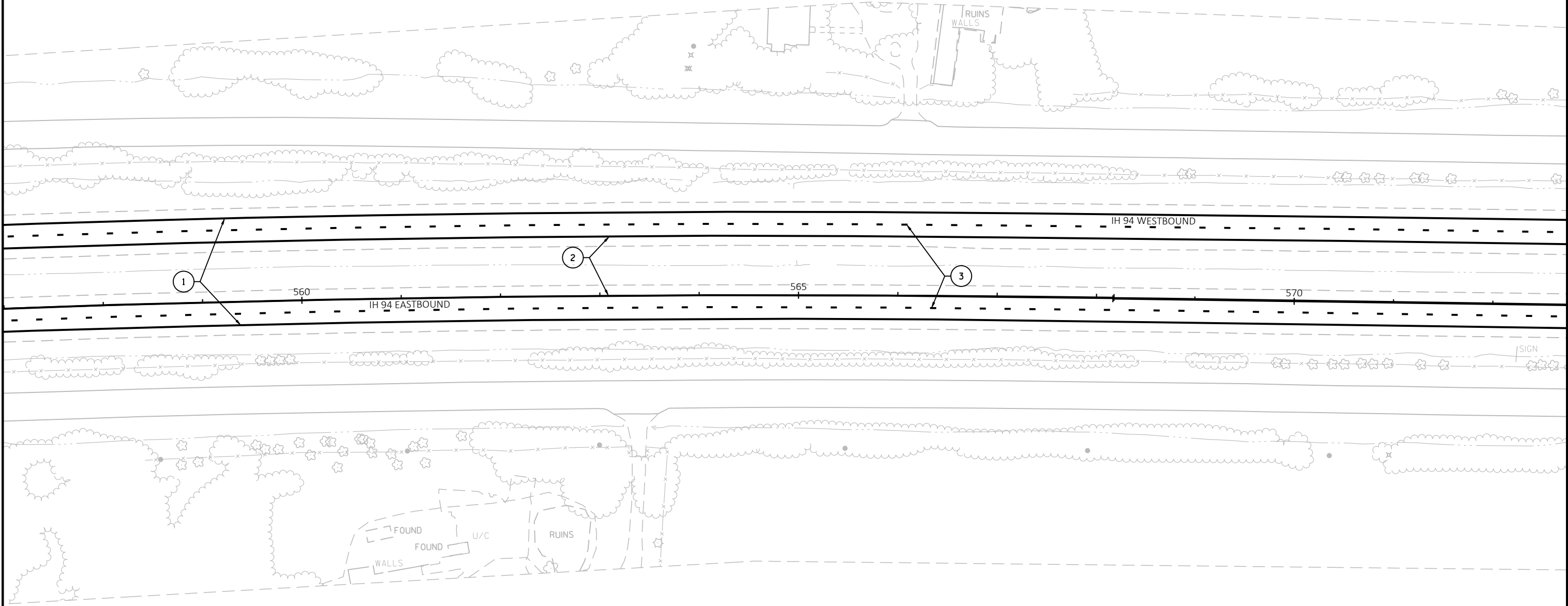




|                        |            |                  |                  |          |   |
|------------------------|------------|------------------|------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | PAVEMENT MARKING | SHEET 18 | E |
|------------------------|------------|------------------|------------------|----------|---|

2

2



|             |            |
|-------------|------------|
| PROJECT NO: | 1060-47-60 |
|-------------|------------|

HWY: IH 94

COUNTY: WAUKESHA

## PAVEMENT MARKING

SHEET 19

E

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LAYOUT NAME - (08)

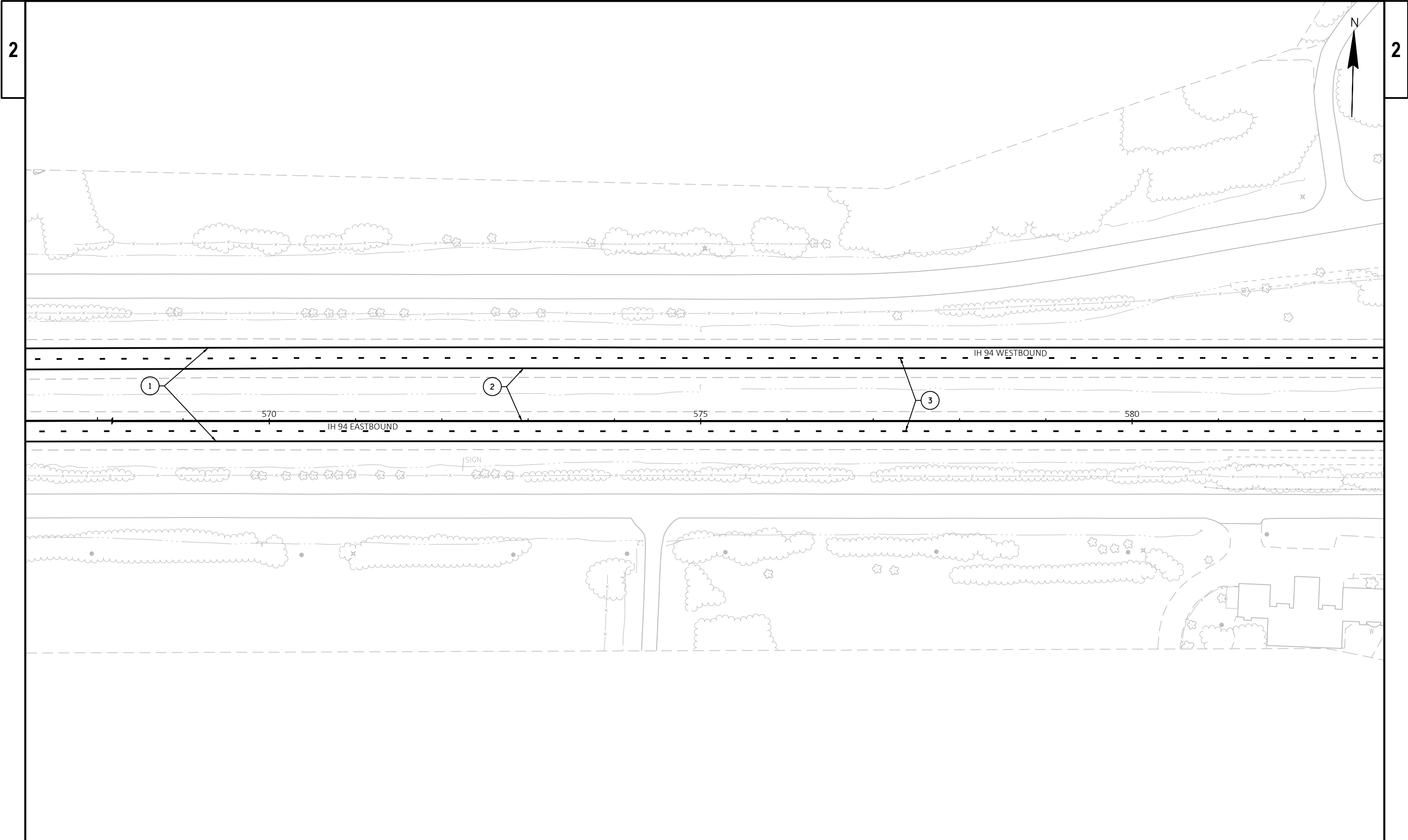
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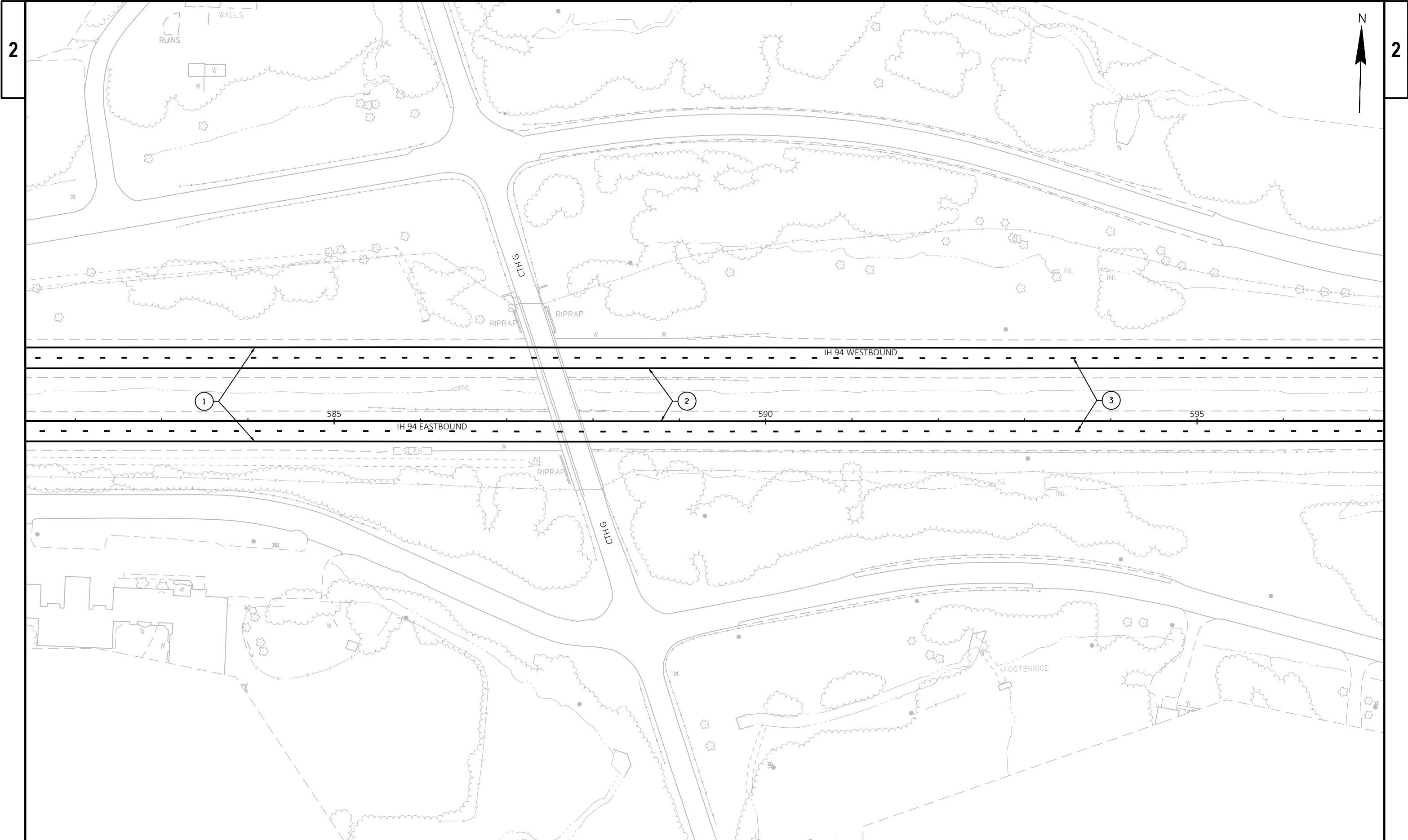
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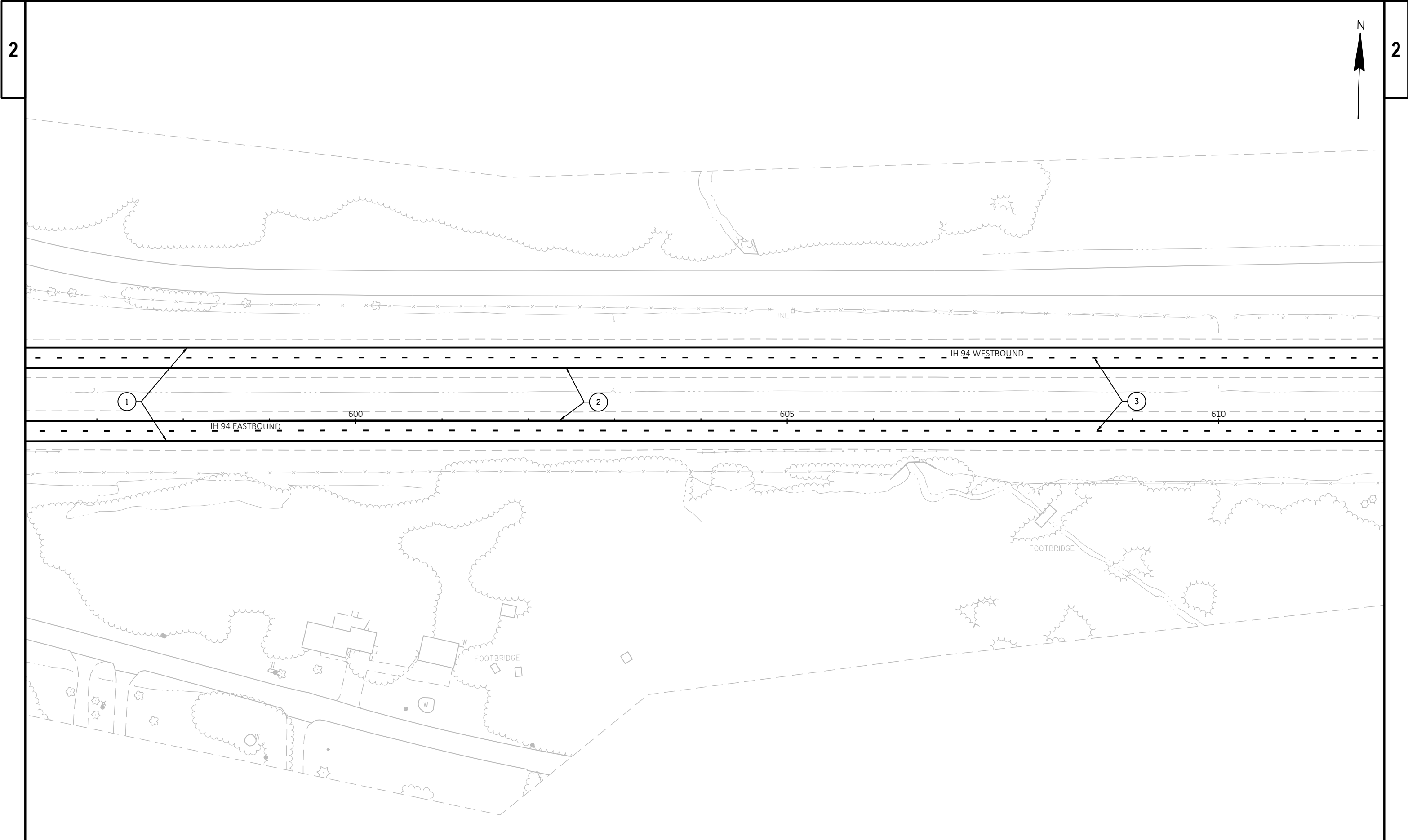
PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42





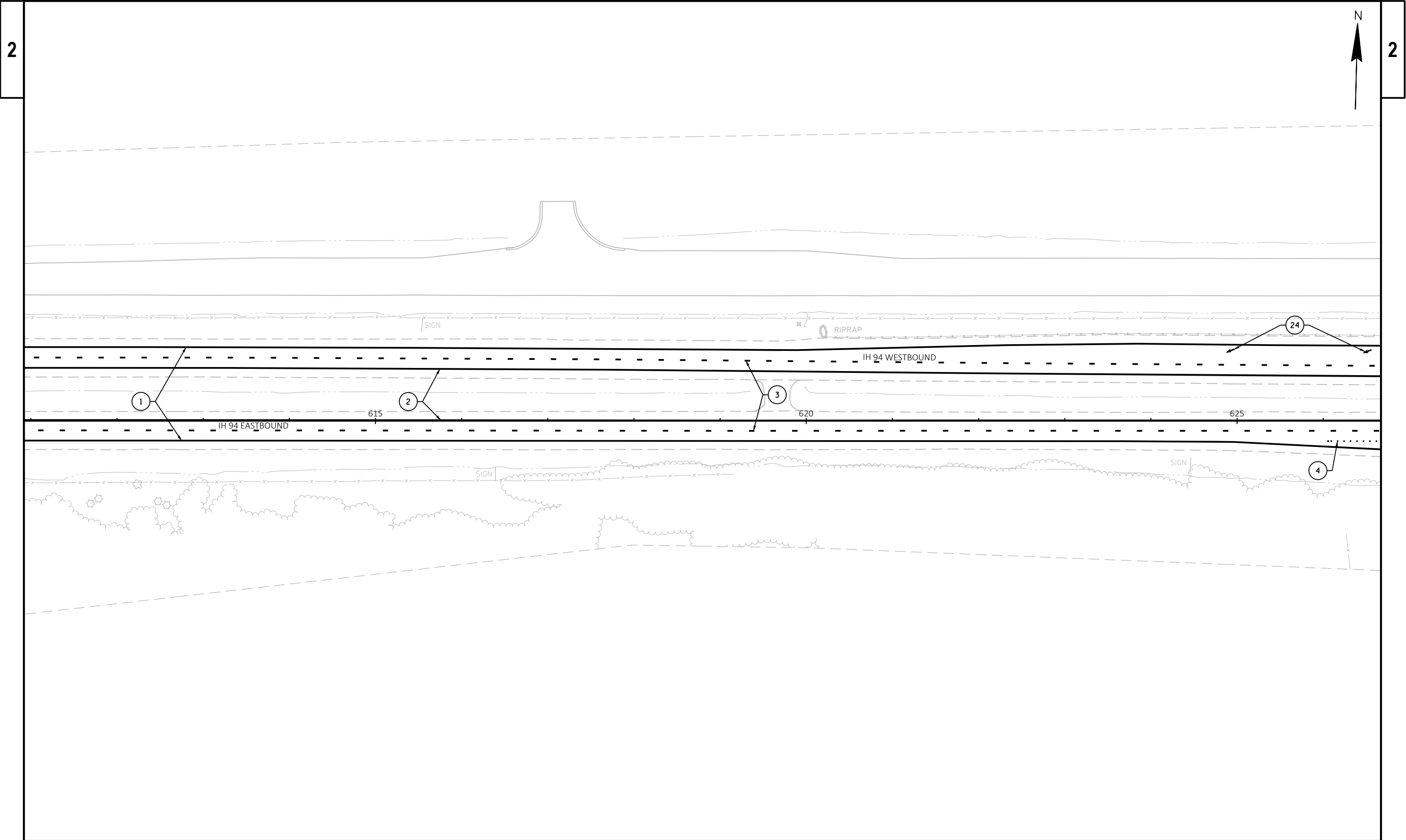


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|                        |            |                  |                  |          |   |
|------------------------|------------|------------------|------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | PAVEMENT MARKING | SHEET 22 | E |
|------------------------|------------|------------------|------------------|----------|---|

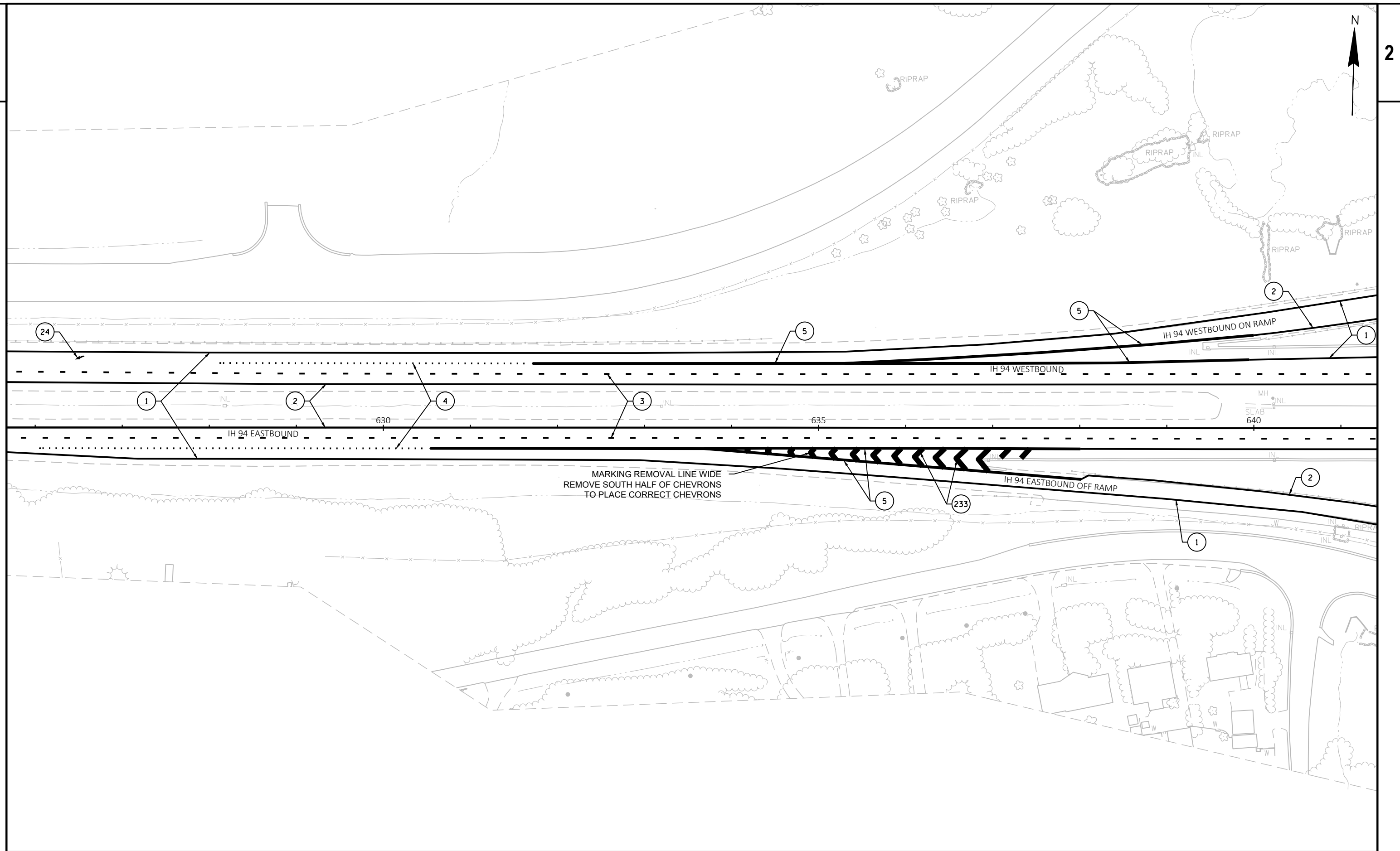


|                        |            |                  |                  |          |   |
|------------------------|------------|------------------|------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | PAVEMENT MARKING | SHEET 23 | E |
|------------------------|------------|------------------|------------------|----------|---|



2

2



|             |            |
|-------------|------------|
| PROJECT NO: | 1060-47-60 |
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HWY: IH 94

COUNTY: WAUKESHA

## PAVEMENT MARKING

SHEET 24

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LAYOUT NAME - (13)

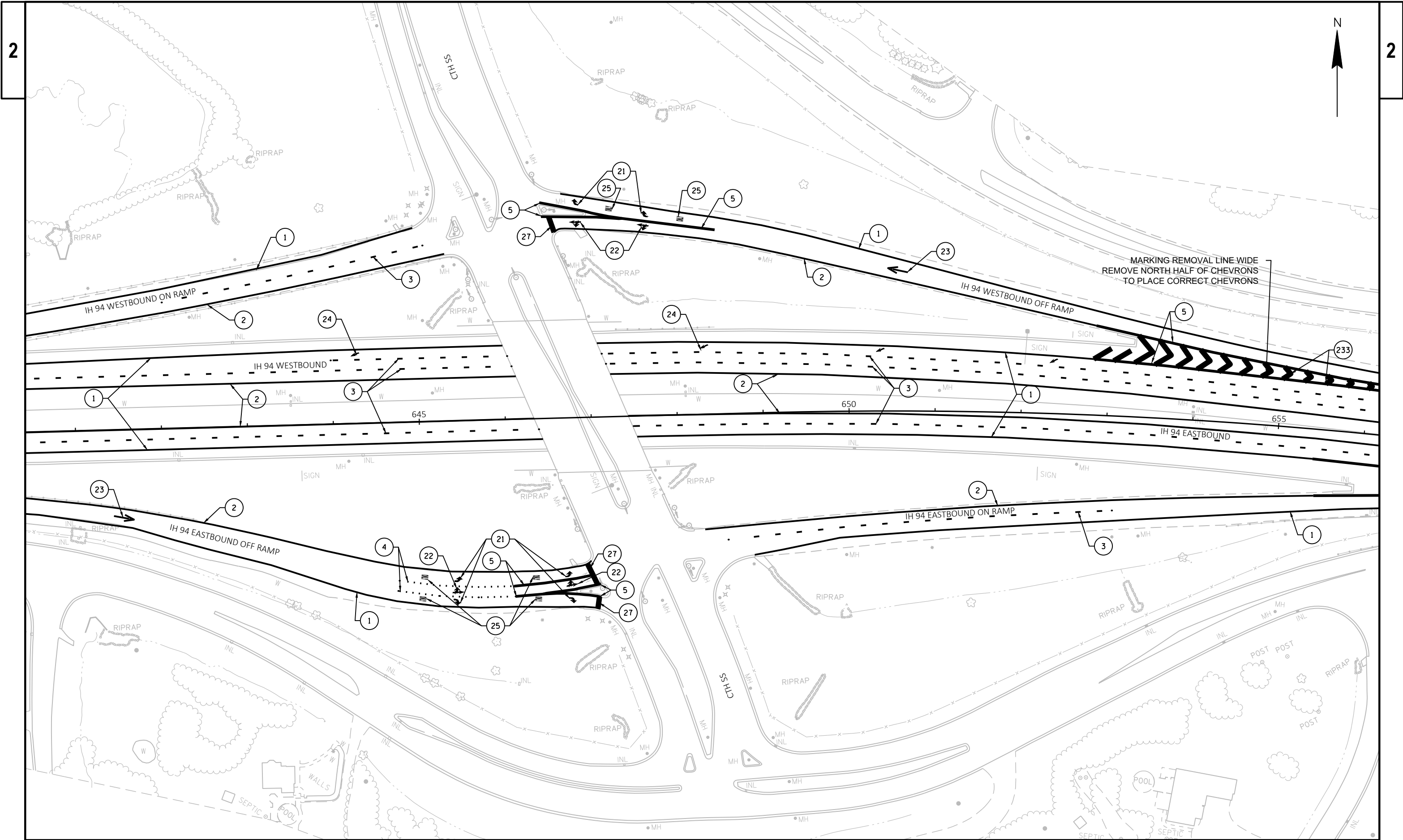
PLOT DATE : 1/23/2020 8:23 AM PLOT BY : LOPEZ, ABRAHAM N

PLOT BY : LOPEZ, ABRAHAM N PLOT NAME :

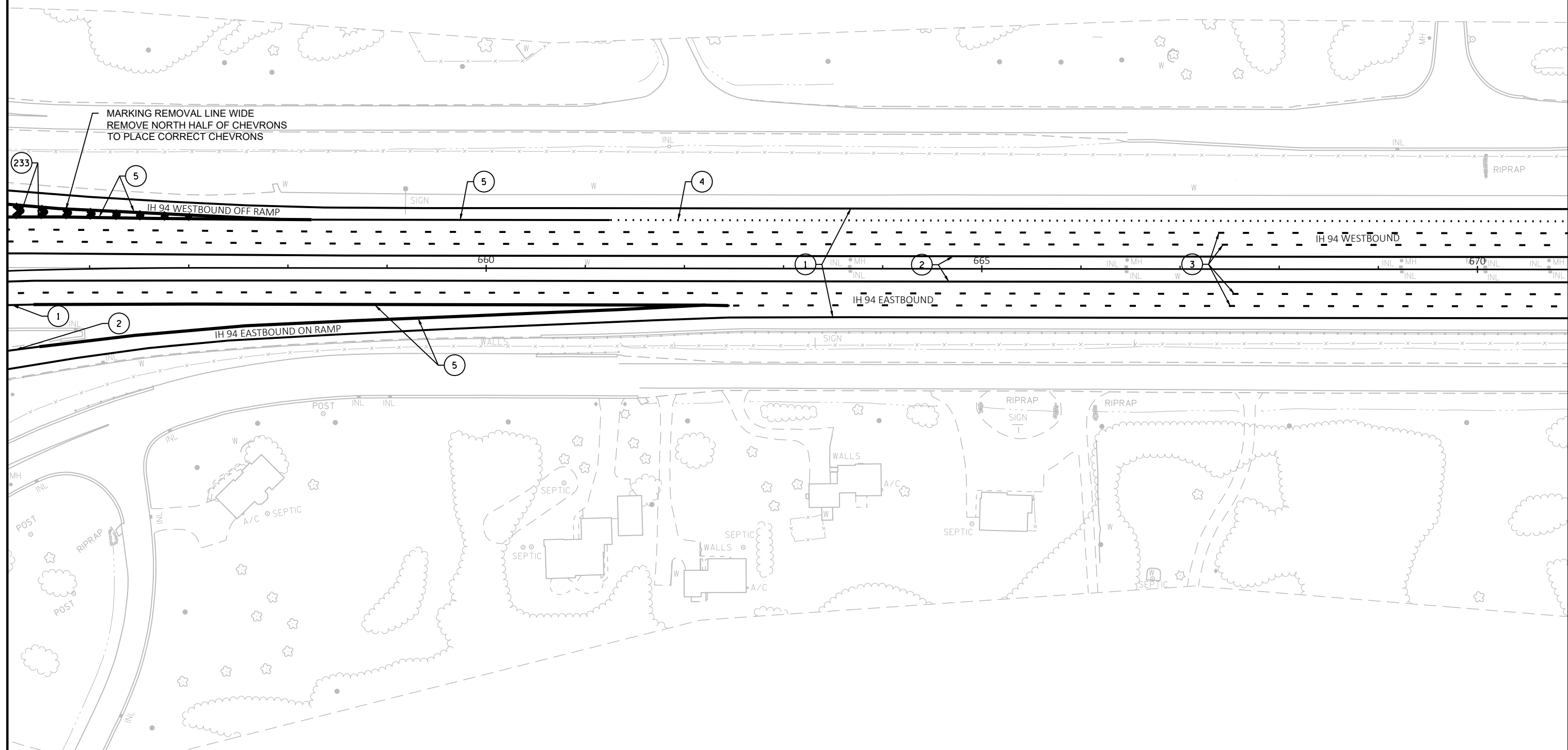
PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLOT SCALE : 1 IN:100 FT

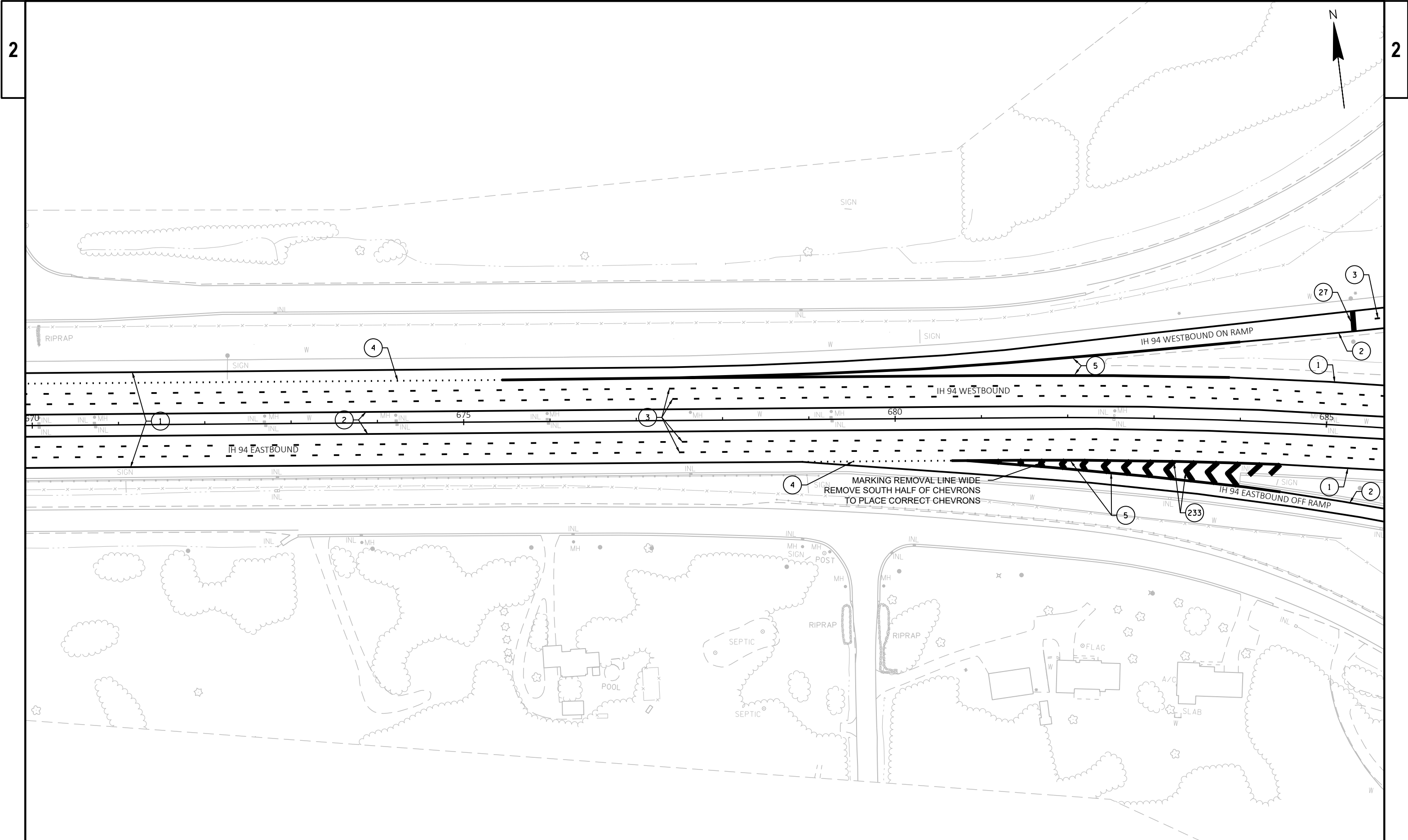
WISDOT/CADDS SHEET 42

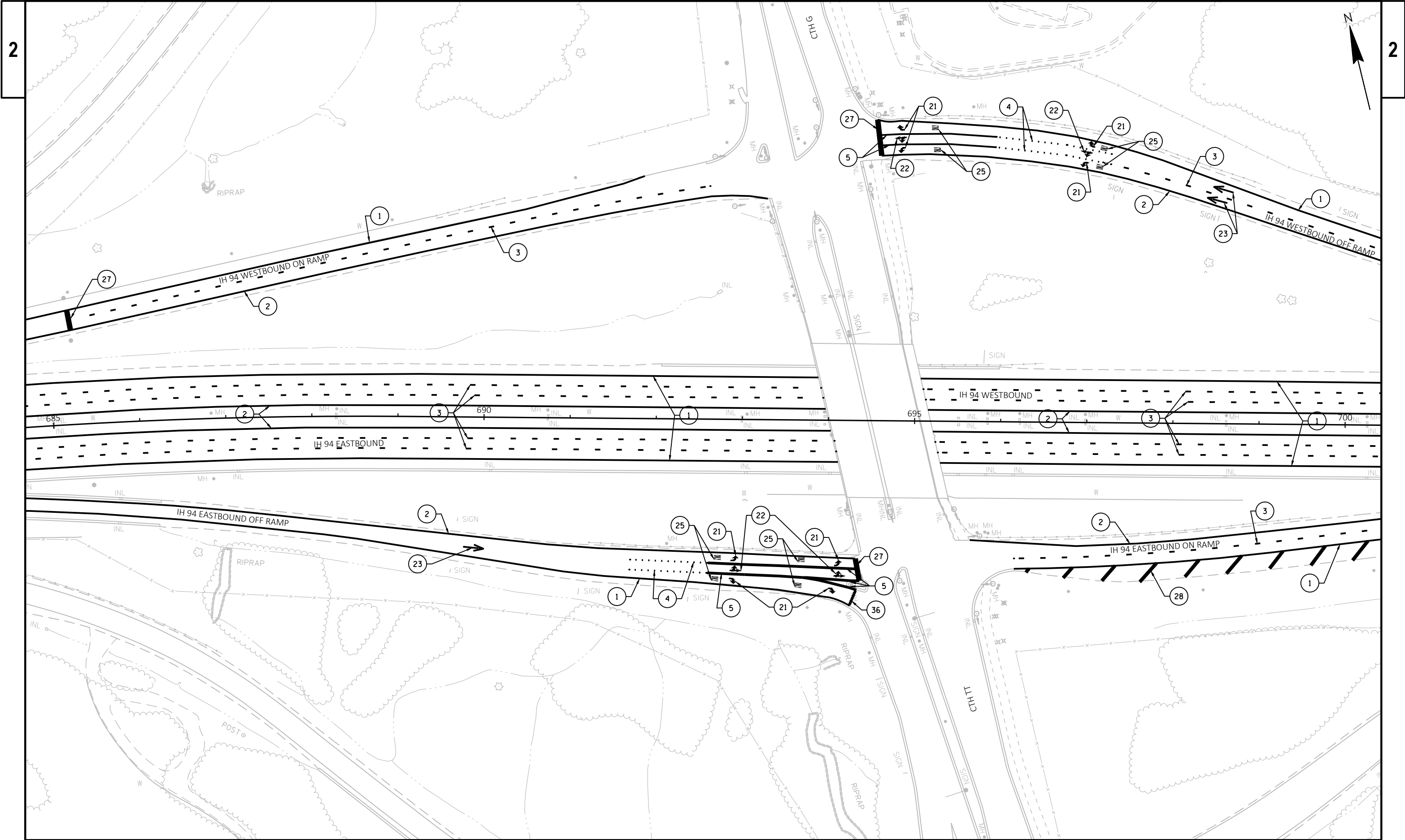






|                        |            |                  |                  |          |   |
|------------------------|------------|------------------|------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | PAVEMENT MARKING | SHEET 26 | E |
|------------------------|------------|------------------|------------------|----------|---|





2

2



|             |            |
|-------------|------------|
| PROJECT NO: | 1060-47-60 |
|-------------|------------|

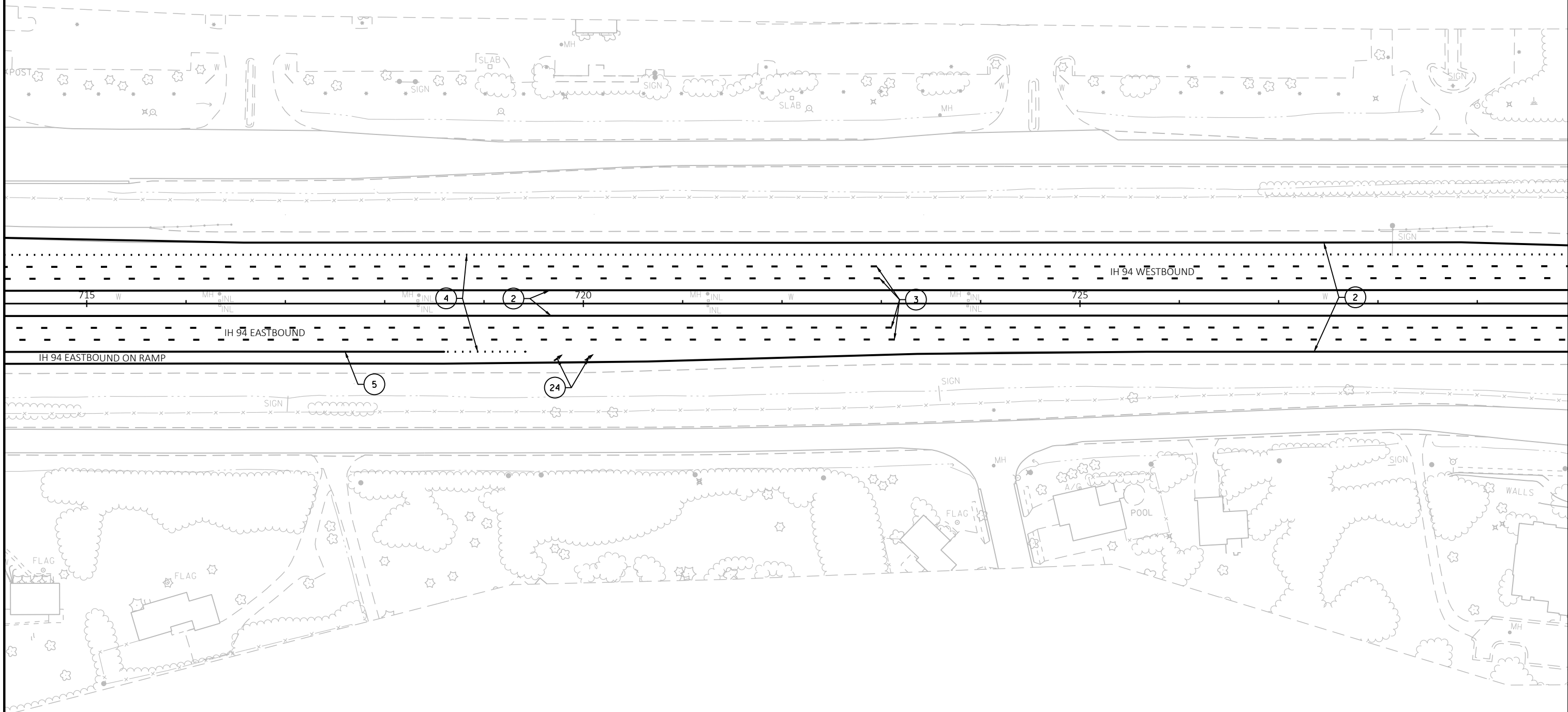
|            |
|------------|
| HWY: IH 94 |
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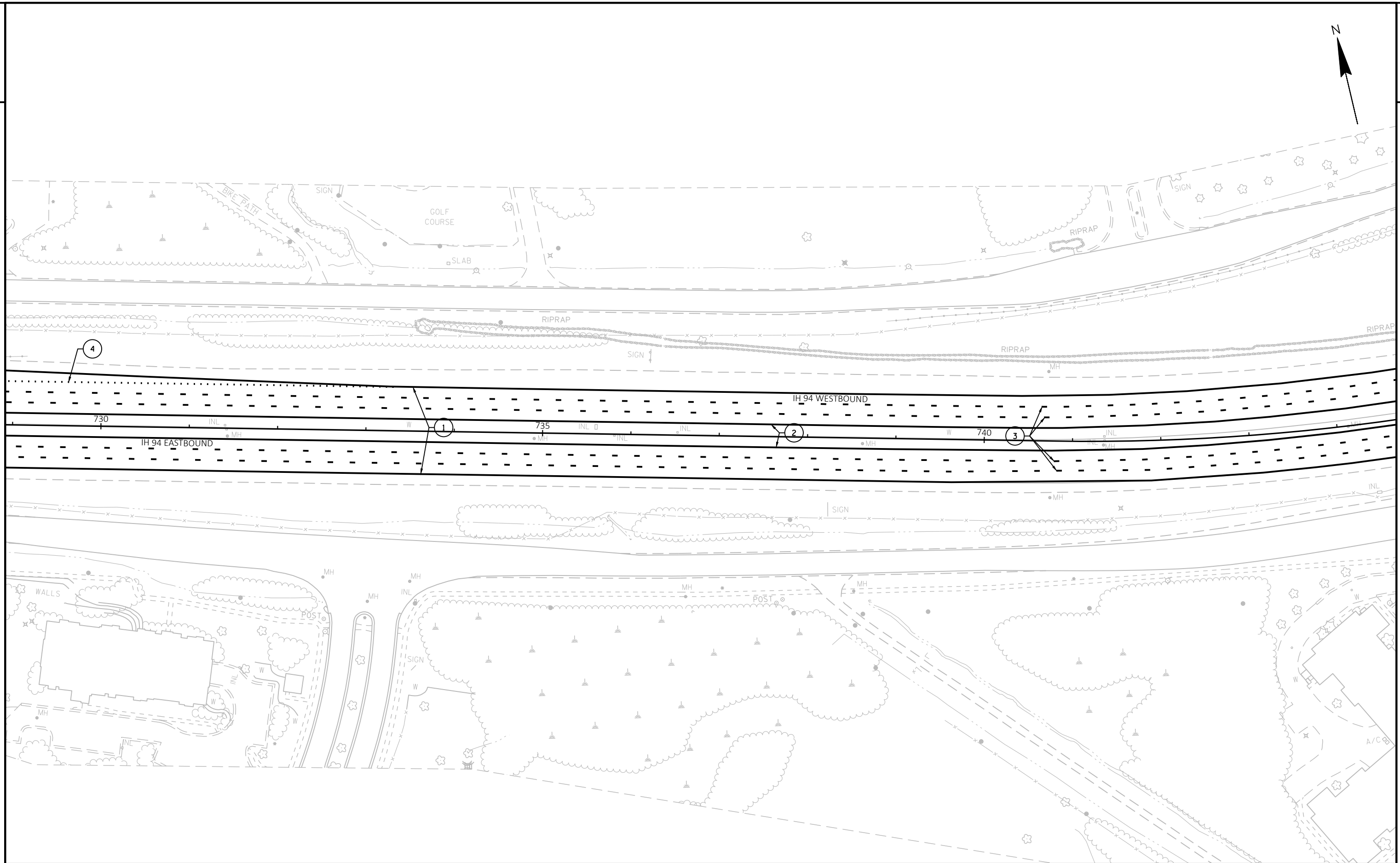
COUNTY: WAUKESHA

|                  |
|------------------|
| PAVEMENT MARKING |
|------------------|

|       |    |   |
|-------|----|---|
| SHEET | 29 | E |
|-------|----|---|

WISDOT/CADDs SHEET 42

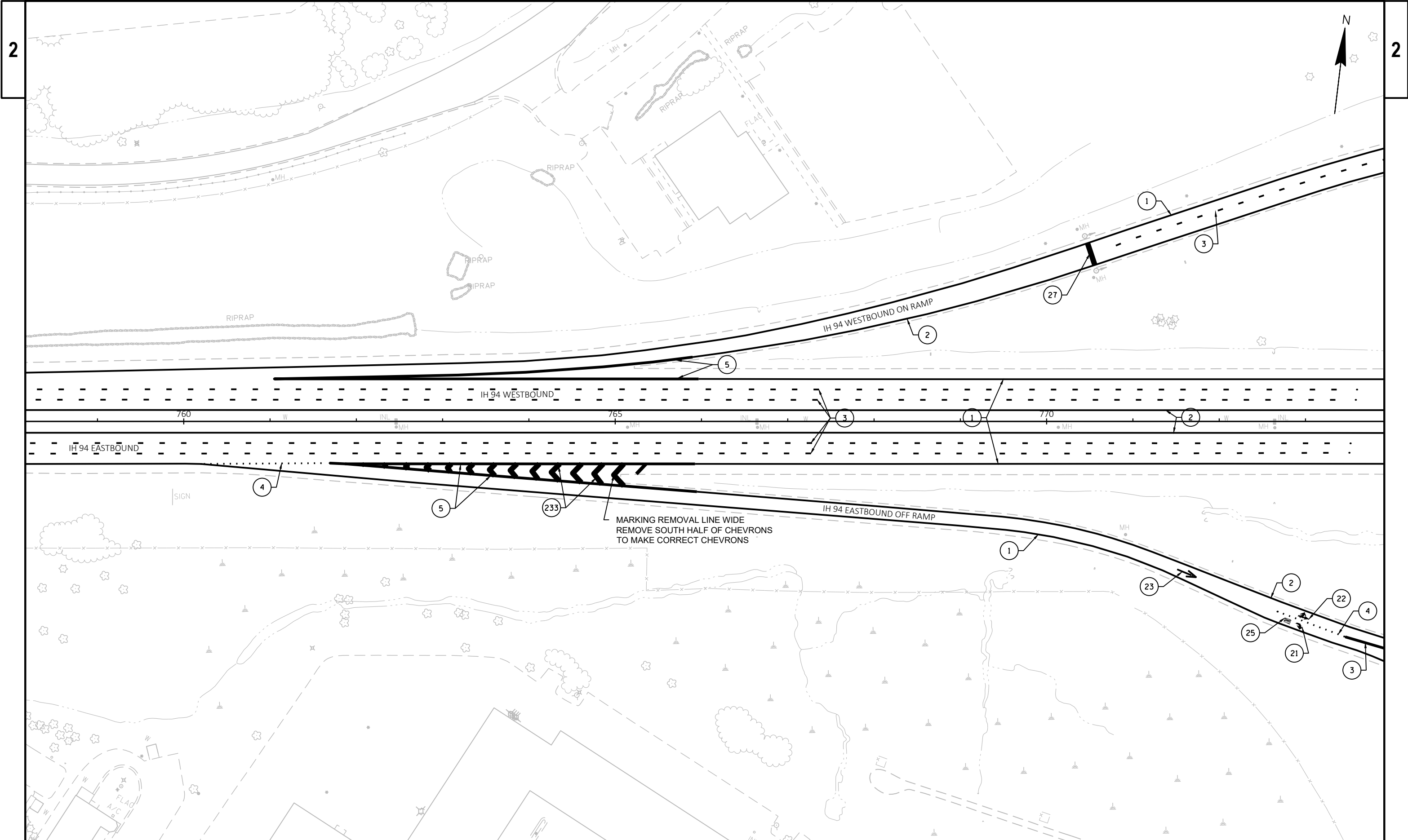




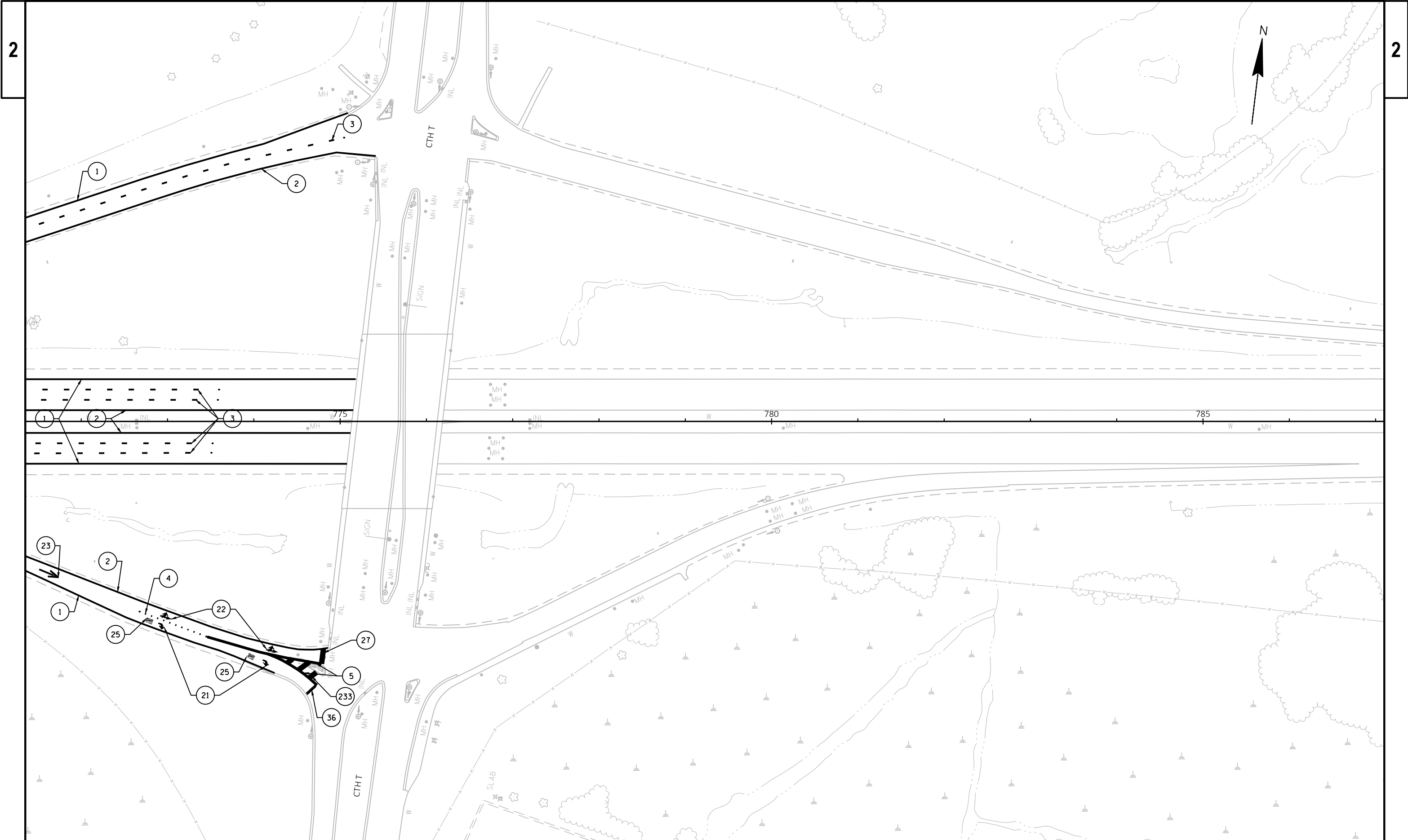
|                        |            |                  |                  |          |   |
|------------------------|------------|------------------|------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | PAVEMENT MARKING | SHEET 31 | E |
|------------------------|------------|------------------|------------------|----------|---|











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) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT.
- 8) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.
- 9) 16" X 16" ORANGE FLAGS SHALL BE INCIDENTAL TO TRAFFIC CONTROL SIGN BID ITEM.
- 10) INSTALL MAINLINE EASTBOUND AND WESTBOUND ADVANCE WARNING SIGNS ON BOTH INSIDE MEDIAN AND OUTSIDE SHOULDERS.
- 11) OSOW SIGNING SHALL BE IN PLACE WHEN THE AVAILABLE PAVED WIDTH IS LESS THAN 16' (SEE OSOW TRAFFIC CONTROL PLAN).

| LEGEND                                                                                |                                                          |
|---------------------------------------------------------------------------------------|----------------------------------------------------------|
|    | TYPE III BARRICADE WITH 2 TYPE A LIGHTS                  |
|    | TYPE III BARRICADE WTH 2 TYPE A LIGHTS AND ATTACHED SIGN |
|    | TRAFFIC CONTROL DRUM                                     |
|    | TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT       |
|    | FLASHING ARROW BOARD                                     |
|   | SIGN ON PERMANENT SUPPORT                                |
|  | WORK AREA                                                |
|  | TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)     |
|  | DIRECTION OF TRAFFIC                                     |
|  | PORTABLE CHANGEABLE MESSAGE BOARD                        |

## STAGE 1

## CONSTRUCTION:

-IH 94:

- REPAIR OF INSIDE AND CENTERLINE PAVEMENT JOINTS
- FULL LANE MILLING & OVERLAY AND CONCRETE PAVEMENT REPAIR OF THE INSIDE LANE

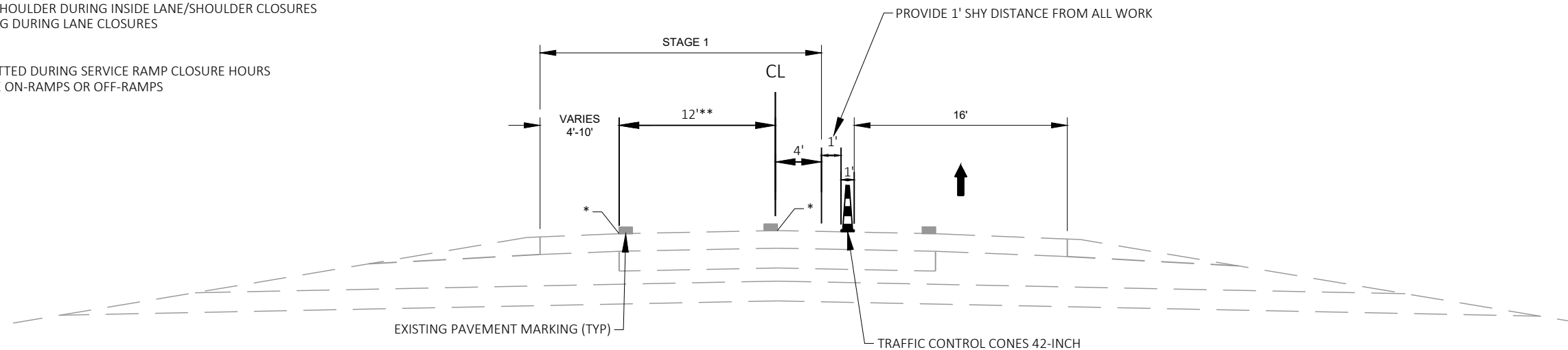
## TRAFFIC:

-IH 94

- ALL LANES OPEN DURING PEAK HOURS
- SHORT TERM LANE CLOSURES PERMITTED DURING OFF-PEAK AND NIGHTTIME HOURS ONLY IN ACTIVE WORK ZONE WHERE WORK IS OCCURRING
- SHIFT TRAFFIC TO OUTSIDE LANE/SHOULDER DURING INSIDE LANE/SHOULDER CLOSURES
- INSTALL SPEED REDUCTION SIGNING DURING LANE CLOSURES

## -IH 94 ENTRANCE/EXIT RAMP:

- RAMP CLOSURES ARE ONLY PERMITTED DURING SERVICE RAMP CLOSURE HOURS
- DO NOT CLOSE TWO CONSECUTIVE ON-RAMPS OR OFF-RAMPS



STAGE 1 TRAFFIC CONTROL PAVING DETAIL  
(EASTBOUND SHOWN, WESTBOUND SIMILAR)

## STAGE 2

## CONSTRUCTION:

-IH 94:

- REPAIR OF OUTSIDE LANE JOINT
- FULL LANE MILLING & OVERLAY AND CONCRETE PAVEMENT REPAIR OF THE OUTSIDE LANE

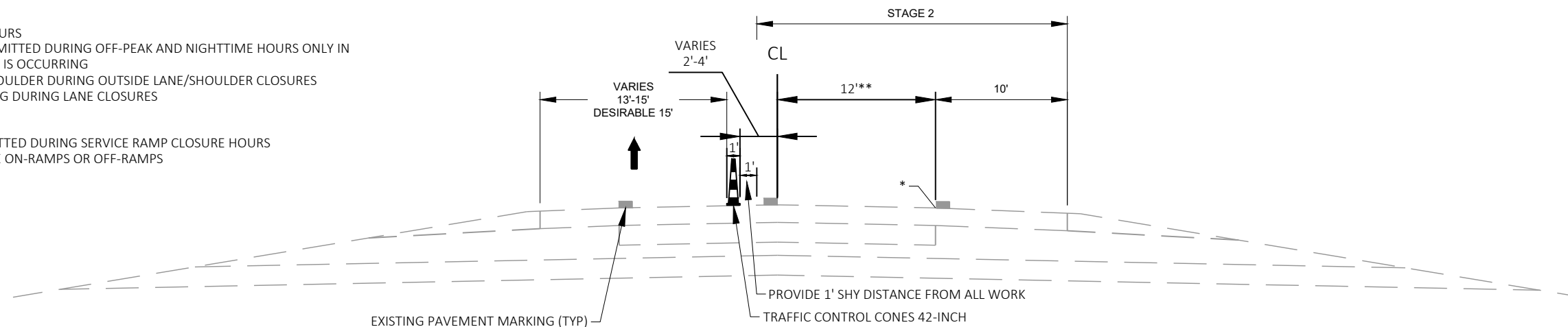
## TRAFFIC:

-IH 94:

- ALL LANES OPEN DURING PEAK HOURS
- SHORT TERM LANE CLOSURES PERMITTED DURING OFF-PEAK AND NIGHTTIME HOURS ONLY IN ACTIVE WORK ZONE WHERE WORK IS OCCURRING
- SHIFT TRAFFIC TO INSIDE LANE/SHOULDER DURING OUTSIDE LANE/SHOULDER CLOSURES
- INSTALL SPEED REDUCTION SIGNING DURING LANE CLOSURES

## -IH 94 ENTRANCE/EXIT RAMP:

- RAMP CLOSURES ARE ONLY PERMITTED DURING SERVICE RAMP CLOSURE HOURS
- DO NOT CLOSE TWO CONSECUTIVE ON-RAMPS OR OFF-RAMPS



STAGE 2 TRAFFIC CONTROL PAVING DETAIL  
(EASTBOUND SHOWN, WESTBOUND SIMILAR)

## NOTES:

- \* JOINT REPAIR
- \*\* FULL LANE MILLING AND OVERLAY AND CONCRETE PAVEMENT REPAIR

PROJECT NO: 1060-47-60

HWY: IH 94

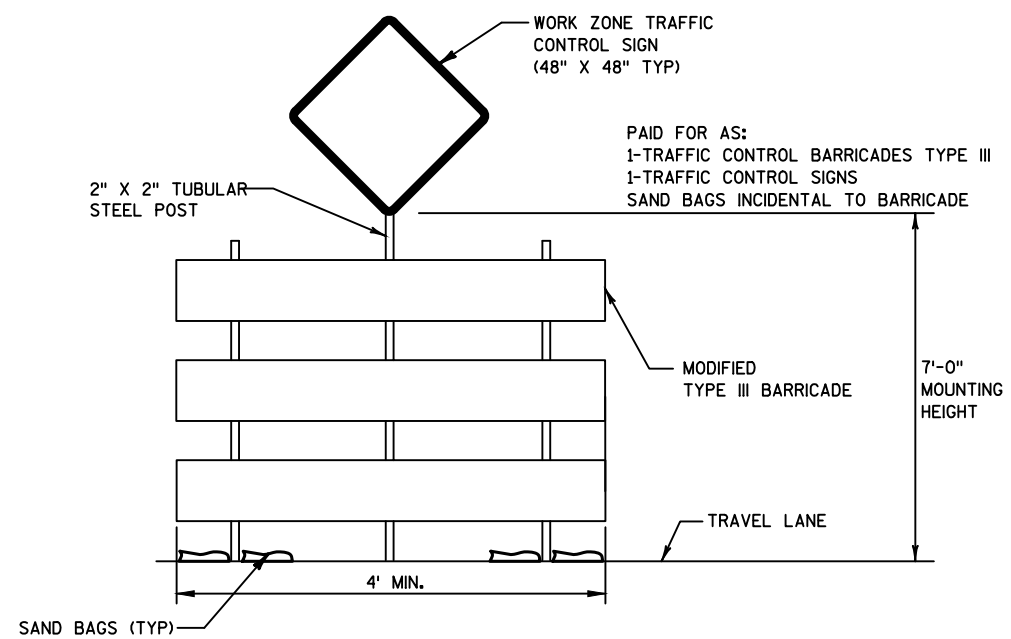
COUNTY: WAUKESHA

PLAN: TRAFFIC CONTROL

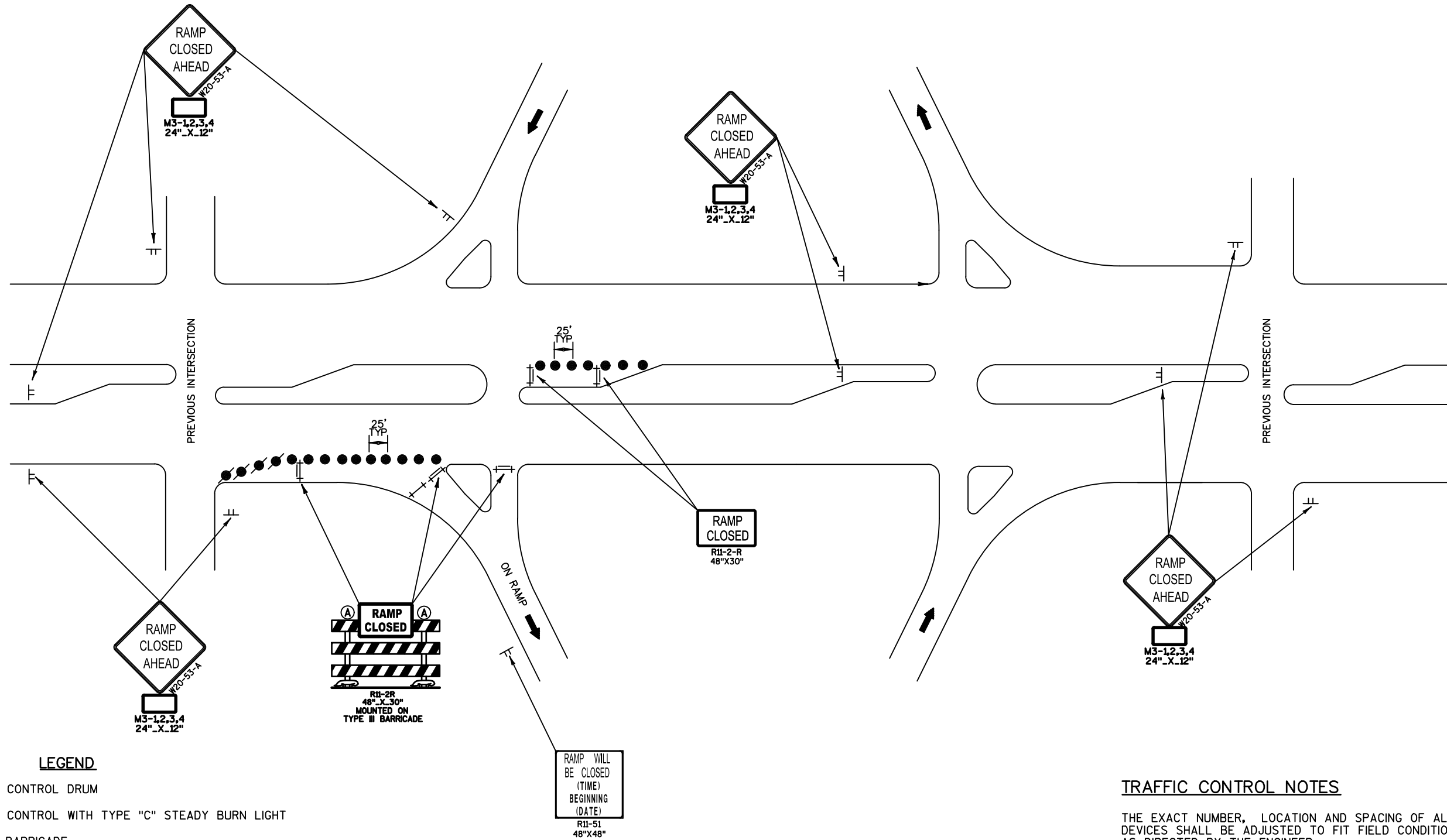
SHEET

36

E



TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL  
MOUNTING ON TEMPORARY SUPPORT



- NORTH**  
M3-1  
24" X 12"
- EAST**  
M3-2  
24" X 12"
- SOUTH**  
M3-3  
24" X 12"
- WEST**  
M3-4  
24" X 12"

**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**

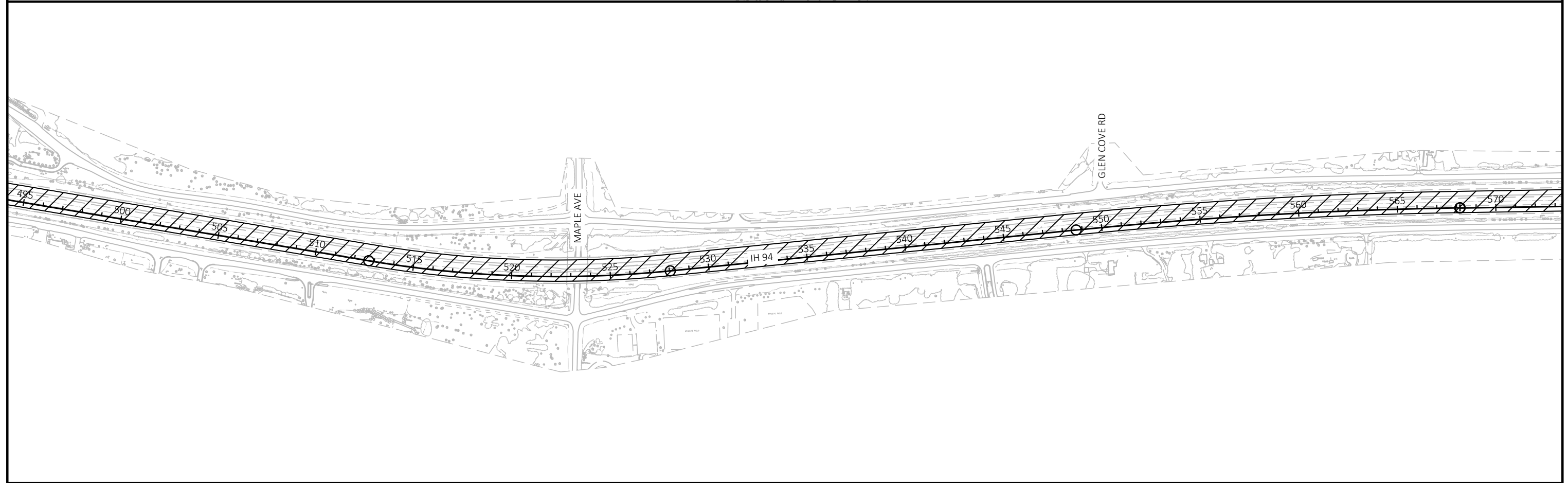
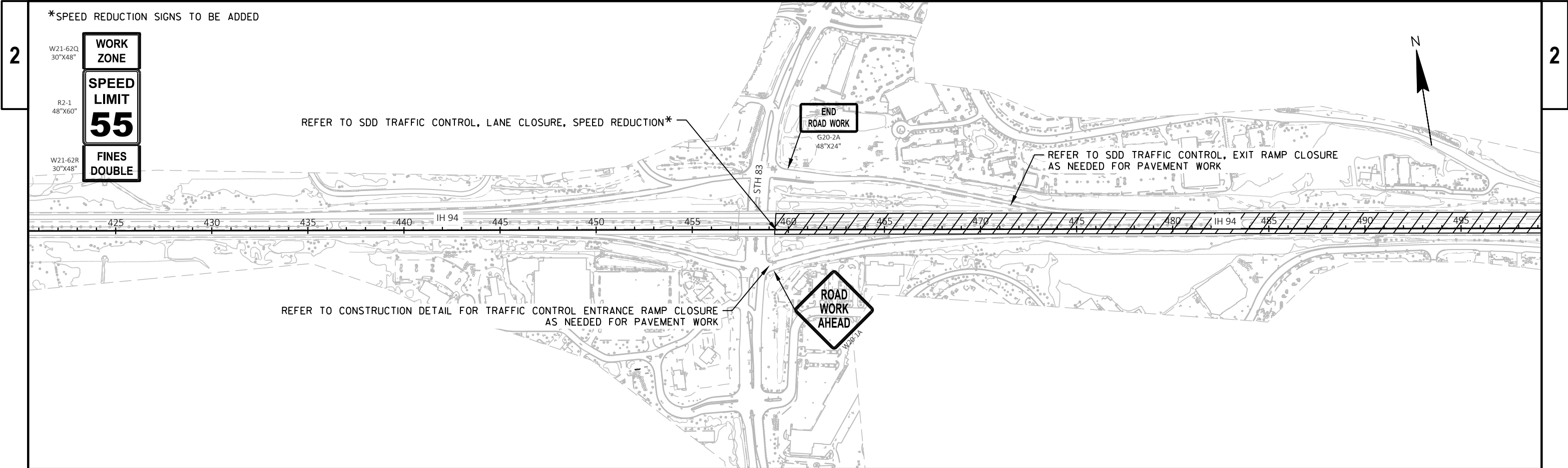
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

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

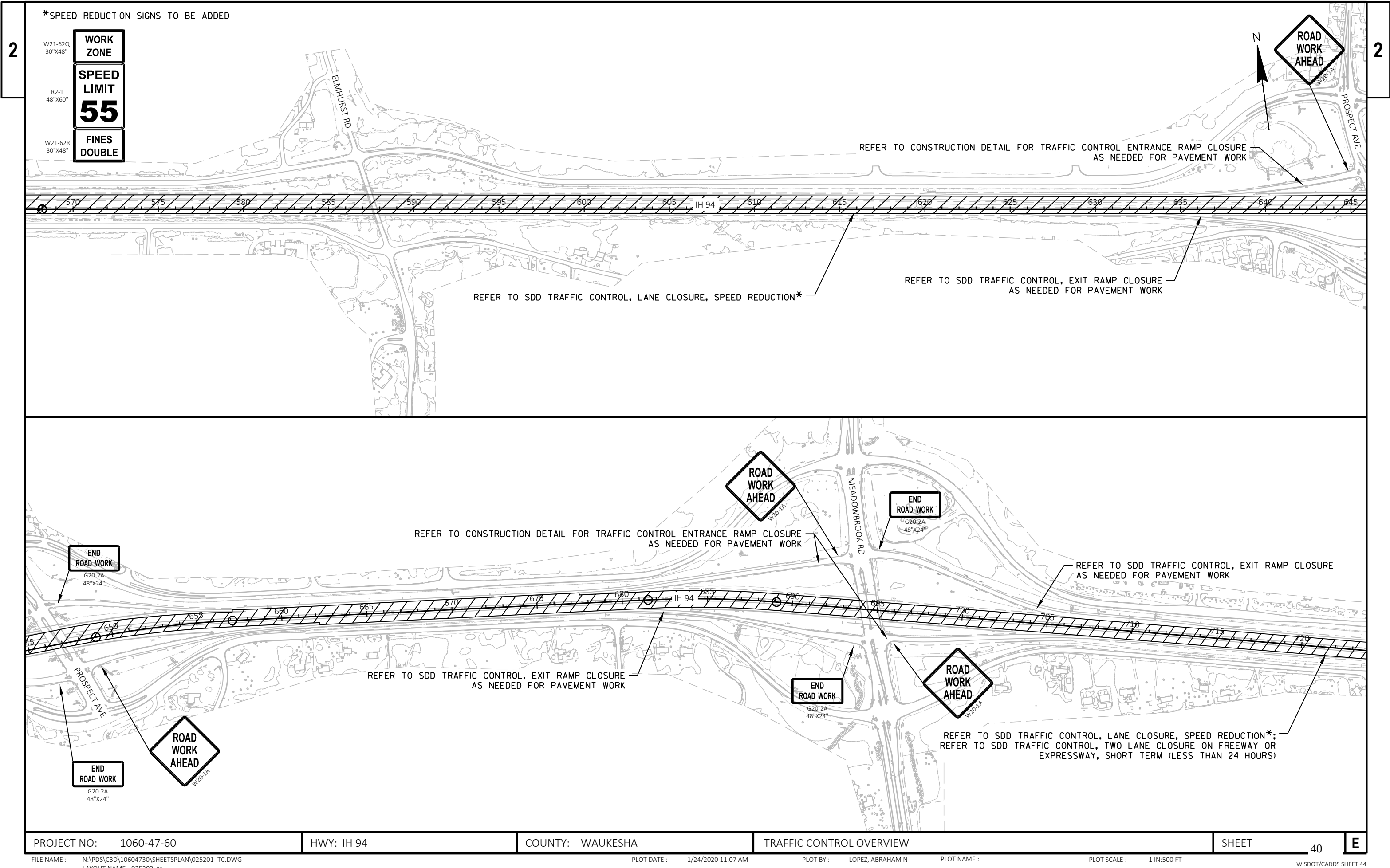
SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

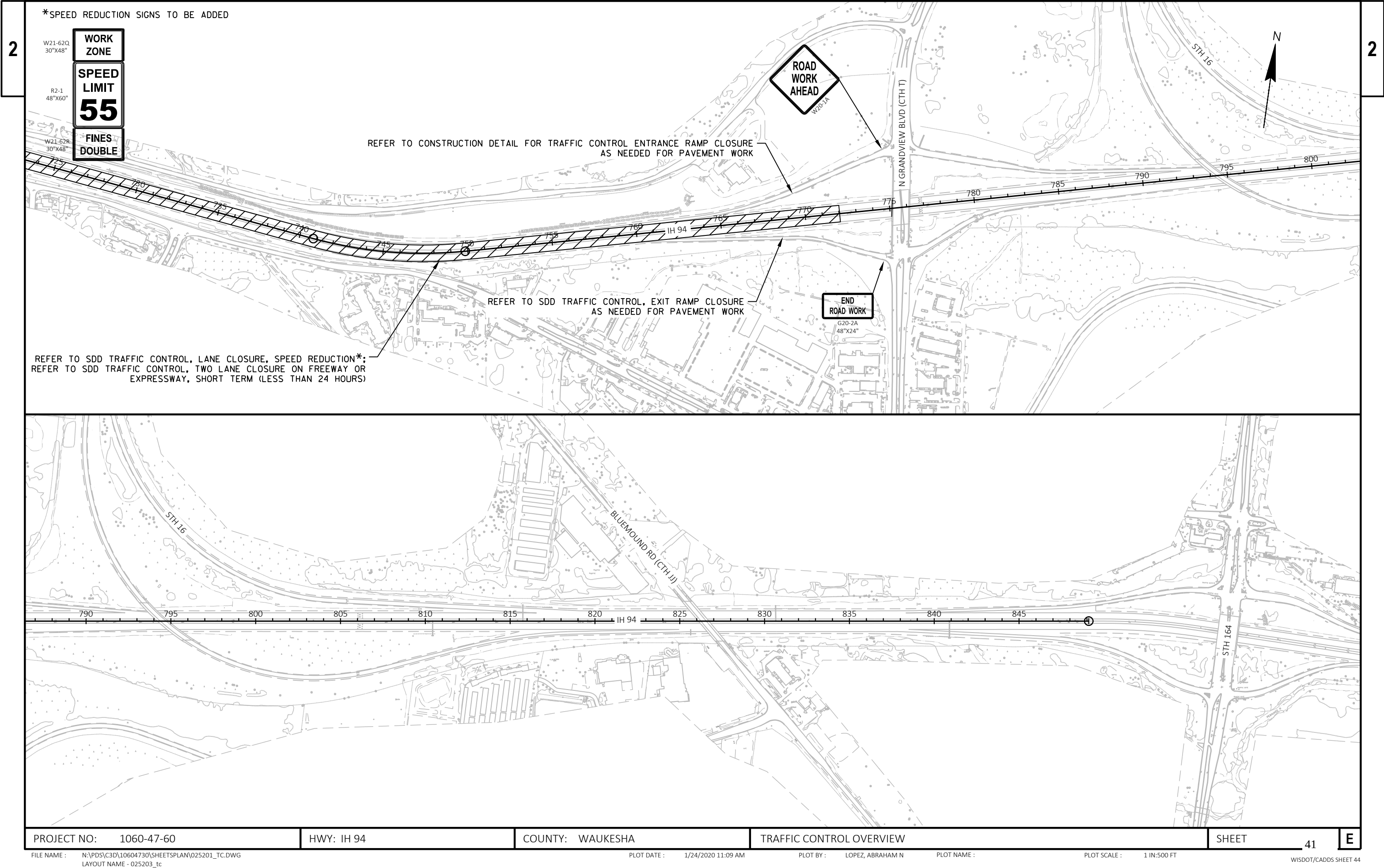
**TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE  
SHORT TERM ONLY**



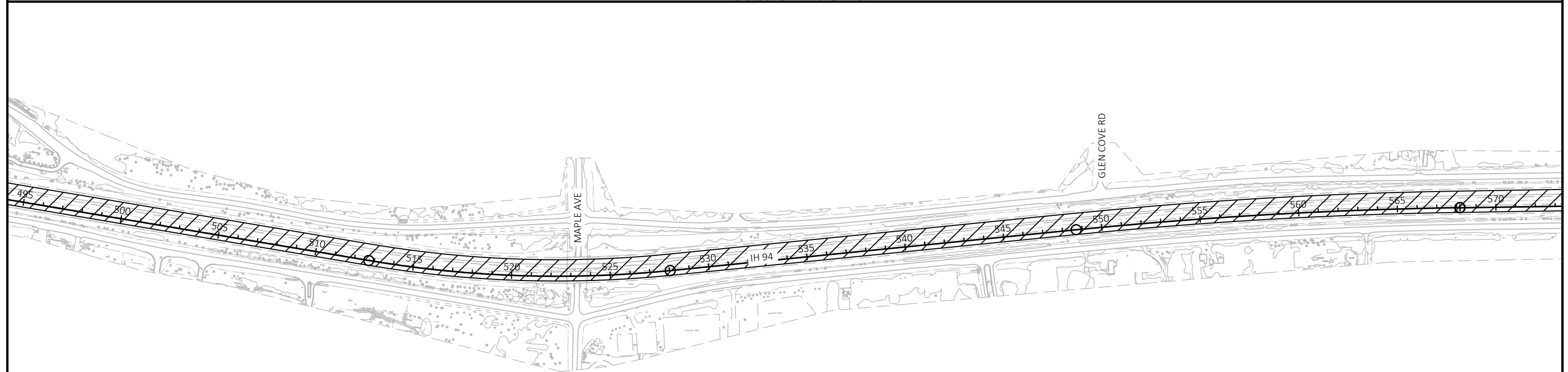
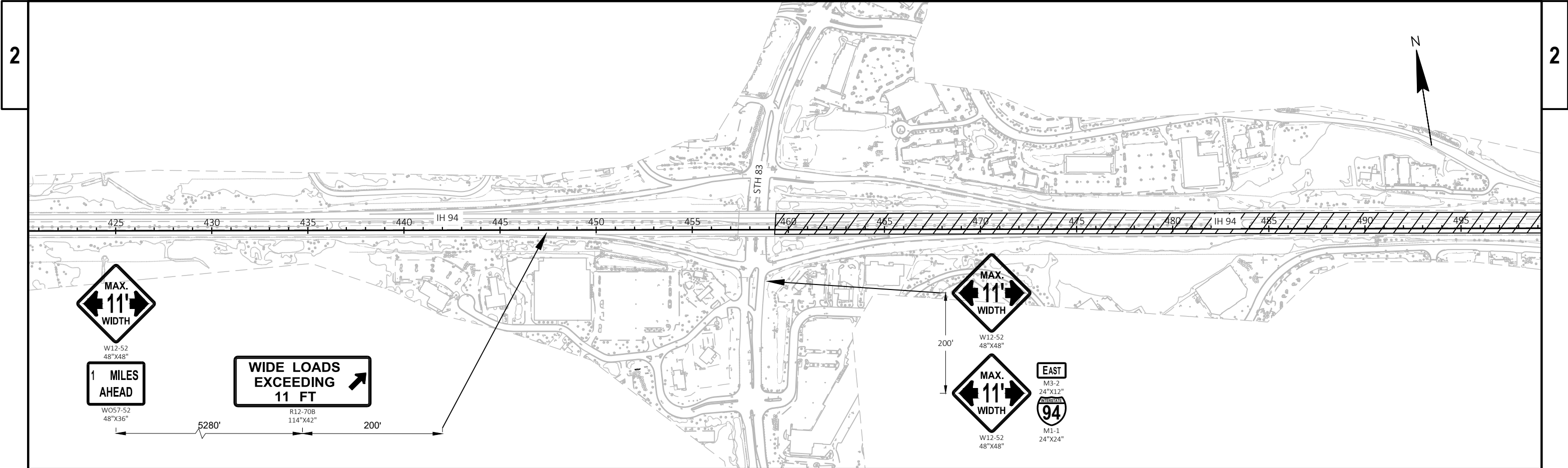
|                        |            |                  |                          |          |   |
|------------------------|------------|------------------|--------------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | TRAFFIC CONTROL OVERVIEW | SHEET 39 | E |
|------------------------|------------|------------------|--------------------------|----------|---|











NOTE:  
OSOW SIGNAGE ONLY NEEDED FOR IH 94 EASTBOUND  
TRAFFIC FROM STH 83 TO CTH SS DUE TO REDUCED  
INSIDE SHOULDER WIDTH FROM STH 83 TO MAPLE AVE.

|                        |            |                  |                                |          |   |
|------------------------|------------|------------------|--------------------------------|----------|---|
| PROJECT NO: 1060-47-60 | HWY: IH 94 | COUNTY: WAUKESHA | TRAFFIC CONTROL STAGE 2 - OSOW | SHEET 42 | E |
|------------------------|------------|------------------|--------------------------------|----------|---|

Estimate Of Quantities

| 1060-47-60 |            |                                                    |      |             |             |
|------------|------------|----------------------------------------------------|------|-------------|-------------|
| Line       | Item       | Item Description                                   | Unit | Total       | Qty         |
| 0002       | 204.0120   | Removing Asphaltic Surface Milling                 | SY   | 21,000.000  | 21,000.000  |
| 0004       | 204.0165   | Removing Guardrail                                 | LF   | 150.000     | 150.000     |
| 0006       | 204.9060.S | Removing (item description) 01. Sand Barrel Arrays | EACH | 1.000       | 1.000       |
| 0008       | 213.0100   | Finishing Roadway (project) 01. 1060-47-60         | EACH | 1.000       | 1.000       |
| 0010       | 416.0610   | Drilled Tie Bars                                   | EACH | 831.000     | 831.000     |
| 0012       | 416.0620   | Drilled Dowel Bars                                 | EACH | 2,031.000   | 2,031.000   |
| 0014       | 416.1715   | Concrete Pavement Repair SHES                      | SY   | 1,200.000   | 1,200.000   |
| 0016       | 455.0605   | Tack Coat                                          | GAL  | 500.000     | 500.000     |
| 0018       | 460.2000   | Incentive Density HMA Pavement                     | DOL  | 1,600.000   | 1,600.000   |
| 0020       | 460.6424   | HMA Pavement 4 MT 58-28 H                          | TON  | 2,400.000   | 2,400.000   |
| 0022       | 614.0805   | Crash Cushions Permanent Low Maintenance           | EACH | 1.000       | 1.000       |
| 0024       | 614.0950   | Replacing Guardrail Posts and Blocks               | EACH | 65.000      | 65.000      |
| 0026       | 614.0951   | Replacing Guardrail Rail and Hardware              | LF   | 150.000     | 150.000     |
| 0028       | 619.1000   | Mobilization                                       | EACH | 1.000       | 1.000       |
| 0030       | 642.5401   | Field Office Type D                                | EACH | 1.000       | 1.000       |
| 0032       | 643.0300   | Traffic Control Drums                              | DAY  | 2,072.000   | 2,072.000   |
| 0034       | 643.0420   | Traffic Control Barricades Type III                | DAY  | 296.000     | 296.000     |
| 0036       | 643.0705   | Traffic Control Warning Lights Type A              | DAY  | 592.000     | 592.000     |
| 0038       | 643.0715   | Traffic Control Warning Lights Type C              | DAY  | 763.000     | 763.000     |
| 0040       | 643.0800   | Traffic Control Arrow Boards                       | DAY  | 92.000      | 92.000      |
| 0042       | 643.0900   | Traffic Control Signs                              | DAY  | 1,398.000   | 1,398.000   |
| 0044       | 643.0910   | Traffic Control Covering Signs Type I              | EACH | 52.000      | 52.000      |
| 0046       | 643.1050   | Traffic Control Signs PCMS                         | DAY  | 63.000      | 63.000      |
| 0048       | 643.1070   | Traffic Control Cones 42-Inch                      | DAY  | 5,932.000   | 5,932.000   |
| 0050       | 643.4100.S | Traffic Control Interim Lane Closure               | EACH | 84.000      | 84.000      |
| 0052       | 643.5000   | Traffic Control                                    | EACH | 1.000       | 1.000       |
| 0054       | 646.1020   | Marking Line Epoxy 4-Inch                          | LF   | 147,327.000 | 147,327.000 |
| 0056       | 646.5020   | Marking Arrow Epoxy                                | EACH | 43.000      | 43.000      |
| 0058       | 646.5120   | Marking Word Epoxy                                 | EACH | 47.000      | 47.000      |
| 0060       | 646.6120   | Marking Stop Line Epoxy 18-Inch                    | LF   | 219.000     | 219.000     |
| 0062       | 646.6220   | Marking Yield Line Epoxy 18-Inch                   | EACH | 16.000      | 16.000      |
| 0064       | 646.7120   | Marking Diagonal Epoxy 12-Inch                     | LF   | 514.000     | 514.000     |
| 0066       | 646.7220   | Marking Chevron Epoxy 24-Inch                      | LF   | 1,442.000   | 1,442.000   |
| 0068       | 646.9200   | Marking Removal Line Wide                          | LF   | 895.000     | 895.000     |
| 0070       | 649.0105   | Temporary Marking Line Paint 4-Inch                | LF   | 20,000.000  | 20,000.000  |
| 0072       | 649.0205   | Temporary Marking Line Paint 8-Inch                | LF   | 1,000.000   | 1,000.000   |
| 0074       | 690.0150   | Sawing Asphalt                                     | LF   | 1,200.000   | 1,200.000   |
| 0076       | 690.0250   | Sawing Concrete                                    | LF   | 4,154.000   | 4,154.000   |
| 0078       | SPV.0045   | Special 01. Portable Speed Trailer                 | DAY  | 84.000      | 84.000      |
| 0080       | SPV.0060   | Special 01. Traffic Control Close-Open Freeway     | EACH | 100.000     | 100.000     |

| Estimate Of Quantities |          |                                                    |      |            |            |
|------------------------|----------|----------------------------------------------------|------|------------|------------|
| 1060-47-60             |          |                                                    |      |            |            |
| Line                   | Item     | Item Description                                   | Unit | Total      | Qty        |
|                        |          | Entrance Ramp                                      |      |            |            |
| 0082                   | SPV.0060 | Special 03. Mobilization Emergency Pavement Repair | EACH | 4.000      | 4.000      |
| 0084                   | SPV.0090 | Special 01. Marking Contrast Epoxy 4-Inch          | LF   | 22,594.000 | 22,594.000 |
| 0086                   | SPV.0090 | Special 02. Marking Contrast Epoxy 8-Inch          | LF   | 15,401.000 | 15,401.000 |
| 0088                   | SPV.0195 | Special 01. HMA Longitudinal Joint Repair          | TON  | 4,700.000  | 4,700.000  |

CRASH CUSHION ITEM

|                                                           |          |      |
|-----------------------------------------------------------|----------|------|
| 614.0805<br>CRASH CUSHION<br>PERMANENT<br>LOW MAINTENANCE |          |      |
| CATEGORY                                                  | LOCATION | EACH |
| 1000                                                      | PROJECT  | 1    |
| TOTAL:                                                    |          | 1    |

HMA PAVEMENT ITEMS

|               |          |        |        |                                                            |                                 |                                                    |                                     |                                                                     |                                                           |
|---------------|----------|--------|--------|------------------------------------------------------------|---------------------------------|----------------------------------------------------|-------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------|
|               |          |        |        | 204.0120<br>REMOVING<br>ASPHALTIC SURFACE<br>MILLING<br>SY | 455.0605<br>TACK<br>COAT<br>GAL | 460.6424<br>HMA<br>PAVEMENT<br>4 MT 58-28 H<br>TON | 690.0150<br>SAWING<br>ASPHALT<br>LF | SPV.0060.03<br>MOBILIZATION<br>EMERGENCY<br>PAVEMENT REPAIR<br>EACH | SPV.0195.01<br>HMA<br>LONGITUDINAL<br>JOINT REPAIR<br>TON |
| 1000          | IH 94 EB | STH 83 | CTH G  | --                                                         | --                              | --                                                 | --                                  | --                                                                  | 840                                                       |
|               | IH 94 WB | STH 83 | CTH G  | --                                                         | --                              | --                                                 | --                                  | --                                                                  | 900                                                       |
|               | IH 94 EB | CTH G  | CTH SS | 4,854                                                      | 116                             | 560                                                | --                                  | --                                                                  | 300                                                       |
|               | IH 94 WB | CTH G  | CTH SS | 1,621                                                      | 39                              | 180                                                | --                                  | --                                                                  | 360                                                       |
|               | IH 94 EB | CTH SS | CTH TT | 3,233                                                      | 77                              | 370                                                | --                                  | --                                                                  | 360                                                       |
|               | IH 94 WB | CTH SS | CTH TT | 1,612                                                      | 38                              | 180                                                | --                                  | --                                                                  | 420                                                       |
|               | IH 94 EB | CTH TT | CTH T  | 6,447                                                      | 153                             | 740                                                | --                                  | --                                                                  | 780                                                       |
|               | IH 94 WB | CTH TT | CTH T  | 3,233                                                      | 77                              | 370                                                | --                                  | --                                                                  | 740                                                       |
| UNDISTRIBUTED |          |        |        | --                                                         | --                              | --                                                 | 1,200                               | 4                                                                   | --                                                        |
| TOTAL         |          |        |        | 21,000                                                     | 500                             | 2,400                                              | 1,200                               | 4                                                                   | 4,700                                                     |

MOBILIZATION

|                                  |          |      |
|----------------------------------|----------|------|
| 619.1000<br>MOBILIZATION<br>EACH |          |      |
| CATEGORY                         | LOCATION | EACH |
| 1000                             | PROJECT  | 1    |
| TOTAL:                           |          | 1    |

CONCRETE PAVEMENT REPAIR ITEMS

|       |          |        |        |                                            |                                              |                                                          |                                      |
|-------|----------|--------|--------|--------------------------------------------|----------------------------------------------|----------------------------------------------------------|--------------------------------------|
|       |          |        |        | 416.0610<br>DRILLED<br>TIE<br>BARS<br>EACH | 416.0620<br>DRILLED<br>DOWEL<br>BARS<br>EACH | 416.1715<br>CONCRETE<br>PAVEMENT<br>REPAIR<br>SHES<br>SY | 690.0250<br>SAWING<br>CONCRETE<br>LF |
| 1000  | IH 94 EB | STH 83 | CTH G  | 192                                        | 469                                          | 277                                                      | 959                                  |
|       | IH 94 WB | STH 83 | CTH G  | 160                                        | 391                                          | 231                                                      | 799                                  |
|       | IH 94 EB | CTH G  | CTH SS | 153                                        | 375                                          | 222                                                      | 767                                  |
|       | IH 94 WB | CTH G  | CTH SS | 83                                         | 203                                          | 120                                                      | 415                                  |
|       | IH 94 EB | CTH SS | CTH TT | 38                                         | 94                                           | 55                                                       | 192                                  |
|       | IH 94 WB | CTH SS | CTH TT | 32                                         | 78                                           | 46                                                       | 160                                  |
|       | IH 94 EB | CTH TT | CTH T  | 128                                        | 312                                          | 185                                                      | 639                                  |
|       | IH 94 WB | CTH TT | CTH T  | 45                                         | 109                                          | 65                                                       | 224                                  |
| TOTAL |          |        |        | 831                                        | 2,031                                        | 1,200                                                    | 4,154                                |

FIELD OFFICE

|                                            |          |      |
|--------------------------------------------|----------|------|
| 642.5401<br>FIELD OFFICE<br>TYPE D<br>EACH |          |      |
| CATEGORY                                   | LOCATION | EACH |
| 1000                                       | PROJECT  | 1    |
| TOTAL:                                     |          | 1    |

3

| PAVEMENT MARKING ITEMS |          |        |        |              |        |              |       |           |       |           |       |            |       |          |        |
|------------------------|----------|--------|--------|--------------|--------|--------------|-------|-----------|-------|-----------|-------|------------|-------|----------|--------|
|                        |          |        |        | 646.1020     |        | 646.5020     |       | 646.5120  |       | 646.6120  |       | 646.6220   |       | 646.7120 |        |
|                        |          |        |        |              |        |              |       |           |       |           |       |            |       |          |        |
|                        |          |        |        | MARKING LINE |        | MARKING      |       | MARKING   |       | MARKING   |       | MARKING    |       | MARKING  |        |
|                        |          |        |        | EPOXY        |        | ARROW        |       | WORD      |       | STOP LINE |       | YIELD LINE |       | DIAGONAL |        |
|                        |          |        |        | 4-INCH       |        | EPOXY        |       | EPOXY     |       | 18-INCH   |       | EPOXY      |       | 24-INCH  |        |
|                        |          |        |        | 12.5 FT LINE |        | 37.5 FT SKIP |       | 3 FT LINE |       | 9 FT SKIP |       |            |       |          |        |
|                        |          |        |        | WHITE        |        | WHITE        |       | WHITE     |       | WHITE     |       | WHITE      |       | WHITE    |        |
|                        |          |        |        | LF           |        | LF           |       | EACH      |       | EACH      |       | LF         |       | LF       |        |
| CATEGORY               | LOCATION | MARKER | MARKER | WHITE        | YELLOW | WHITE        | WHITE | WHITE     | WHITE | WHITE     | WHITE | WHITE      | WHITE | WHITE    | WHITE  |
|                        |          |        |        | LF           | LF     | LF           | LF    | LF        | LF    | LF        | LF    | LF         | LF    | LF       | LF     |
| 1000                   | IH 94 EB | STH 83 | CTH G  | 13,914       | 13,939 | 2            | --    | 0         | --    | --        | --    | 64         | 33    | 3,200    | 409    |
|                        | IH 94 WB | STH 83 | CTH G  | 14,341       | 13,412 | 1            | --    | 24        | --    | --        | --    | --         | 32    | 3,341    | 869    |
|                        | IH 94 EB | CTH G  | CTH SS | 6,370        | 6,404  | 7            | 11    | 0         | --    | --        | --    | --         | 207   | 1,549    | 1,294  |
|                        | IH 94 WB | CTH G  | CTH SS | 6,787        | 6,771  | 3            | --    | 41        | --    | --        | --    | 238        | 120   | 1,466    | 1,442  |
|                        | IH 94 EB | CTH SS | CTH TT | 6,175        | 6,282  | 7            | 10    | 22        | 9     | --        | --    | 410        | 120   | 2,065    | 3,160  |
|                        | IH 94 WB | CTH SS | CTH TT | 6,270        | 6,343  | 8            | 7     | 46        | --    | --        | --    | 278        | 179   | 2,534    | 2,490  |
|                        | IH 94 EB | CTH TT | CTH T  | 10,182       | 9,944  | 7            | 7     | 69        | 7     | --        | --    | 158        | 141   | 4,388    | 2,001  |
|                        | IH 94 WB | CTH TT | CTH T  | 10,571       | 9,621  | 8            | 12    | 18        | --    | 514       | 514   | 294        | 62    | 4,052    | 2,130  |
| SUBTOTALS              |          |        |        | 74,611       | 72,716 | 43           | 47    | 219       | 16    | 514       | 514   | 1,442      | 895   | 22,594   | 13,795 |
| TOTAL:                 |          |        |        | 147,327      |        | 43           | 47    | 219       | 16    | 514       | 514   | 1,442      | 895   | 22,594   | 15,401 |

3

| TEMPORARY PAVEMENT MARKING ITEMS |                              |              |              |
|----------------------------------|------------------------------|--------------|--------------|
|                                  |                              | 649.0105     | 649.0205     |
|                                  |                              | TEMPORARY    | TEMPORARY    |
|                                  |                              | MARKING LINE | MARKING LINE |
|                                  |                              | PAINT        | PAINT        |
|                                  |                              | 4-INCH       | 8-INCH       |
| CATEGORY                         | ROADWAY                      | LF           | LF           |
| 1000                             | <b>PROJECT ID 1060-47-60</b> |              |              |
|                                  | IH 94                        | 20,000       | 1,000        |
|                                  | <b>CONTRACT TOTAL:</b>       | 20,000       | 1,000        |

| TRAFFIC CONTROL ITEMS |       |                              |          |          |            |          |          |          |          |                 |          |      |          |          |
|-----------------------|-------|------------------------------|----------|----------|------------|----------|----------|----------|----------|-----------------|----------|------|----------|----------|
| CATEGORY              | STAGE | LOCATION                     |          | 643.0300 | 643.0420   | 643.0705 | 643.0715 | 643.0800 | 643.0900 | 643.0910        |          |      | 643.1050 | 643.1070 |
|                       |       |                              |          | TRAFFIC  | TRAFFIC    | TRAFFIC  | TRAFFIC  | TRAFFIC  | TRAFFIC  | TRAFFIC CONTROL |          |      | TRAFFIC  | TRAFFIC  |
|                       |       |                              | STAGE    | CONTROL  | BARRICADES | WARNING  | WARNING  | CONTROL  | CONTROL  | COVERING SIGNS  |          |      | CONTROL  | CONTROL  |
|                       |       |                              | DURATION | DRUMS    | TYPE III   | LIGHTS   | LIGHTS   | ARROW    | SIGNS    | TYPE I          |          |      | PCMS     | CONES    |
|                       |       |                              | DAYS     | DAY      | DAY        | DAY      | DAY      | DAY      | DAY      | # SIGNS         | # CYCLES | EACH | DAY      | 42-INCH  |
|                       |       |                              |          |          |            |          |          |          |          |                 |          |      |          | DAY      |
| 1000                  | 1     | <b>PROJECT ID 1060-47-60</b> |          |          |            |          |          |          |          |                 |          |      |          |          |
|                       |       | IH 94 EB                     | 9        | 288      | 36         | 72       | 144      | 18       | 214      | --              | --       | --   | 12       | 1,098    |
|                       |       | IH 94 WB                     | 9        | 288      | 36         | 72       | 144      | 18       | 214      | --              | --       | --   | 12       | 1,098    |
|                       | 2     | <b>PROJECT ID 1060-47-60</b> |          |          |            |          |          |          |          |                 |          |      |          |          |
|                       |       | IH 94 EB                     | 9        | 478      | 82         | 164      | 160      | 18       | 345      | 5               | 4        | 20   | 12       | 1,098    |
|                       |       | IH 94 WB                     | 9        | 478      | 82         | 164      | 160      | 18       | 345      | 5               | 4        | 20   | 12       | 1,098    |
|                       |       | <b>SUBTOTAL:</b>             |          | 1532     | 236        | 472      | 608      | 72       | 1118     | 10              | 8        | 40   | 48       | 4,392    |
|                       |       | <b>UNDISTRIBUTED</b>         |          | 540      | 60         | 120      | 155      | 20       | 280      | 4               | 3        | 12   | 15       | 1,540    |
|                       |       | <b>TOTAL:</b>                |          | 2,072    | 296        | 592      | 763      | 92       | 1,398    | 14              | 11       | 52   | 63       | 5,932    |
|                       |       |                              |          |          |            |          |          |          |          |                 |          |      |          |          |



TRAFFIC CONTROL

| CATEGORY | STAGE | LOCATION | 643.5000<br>TRAFFIC CONTROL<br>EACH |
|----------|-------|----------|-------------------------------------|
| 1000     | ALL   | PROJECT  | 1                                   |
| TOTAL:   |       |          | 1                                   |

TRAFFIC CONTROL CLOSURES

|          |       | 643.4100.S                                         | SPV.0045.01                         | SPV.0060.01                                                       |     |
|----------|-------|----------------------------------------------------|-------------------------------------|-------------------------------------------------------------------|-----|
|          |       | TRAFFIC CONTROL<br>INTERIM<br>LANE CLOSURE<br>EACH | PORTABLE<br>SPEED<br>TRAILER<br>DAY | TRAFFIC CONTROL<br>CLOSE-OPEN<br>FREEWAY<br>ENTRANCE RAMP<br>EACH |     |
| CATEGORY | STAGE | LOCATION                                           |                                     |                                                                   |     |
| 1000     | ALL   | <u>PROJECT</u>                                     | 84                                  | 84                                                                | 100 |
| TOTAL:   |       |                                                    | 84                                  | 84                                                                | 100 |

SAND BARREL ARRAYS

| CATEGORY | LOCATION | 204.9060.S.01<br>REMOVING SAND<br>BARREL<br>ARRAYS<br>EACH |
|----------|----------|------------------------------------------------------------|
| 1000     | PROJECT  | 1                                                          |
| TOTAL:   |          | 1                                                          |

GUARDRAIL ITEMS

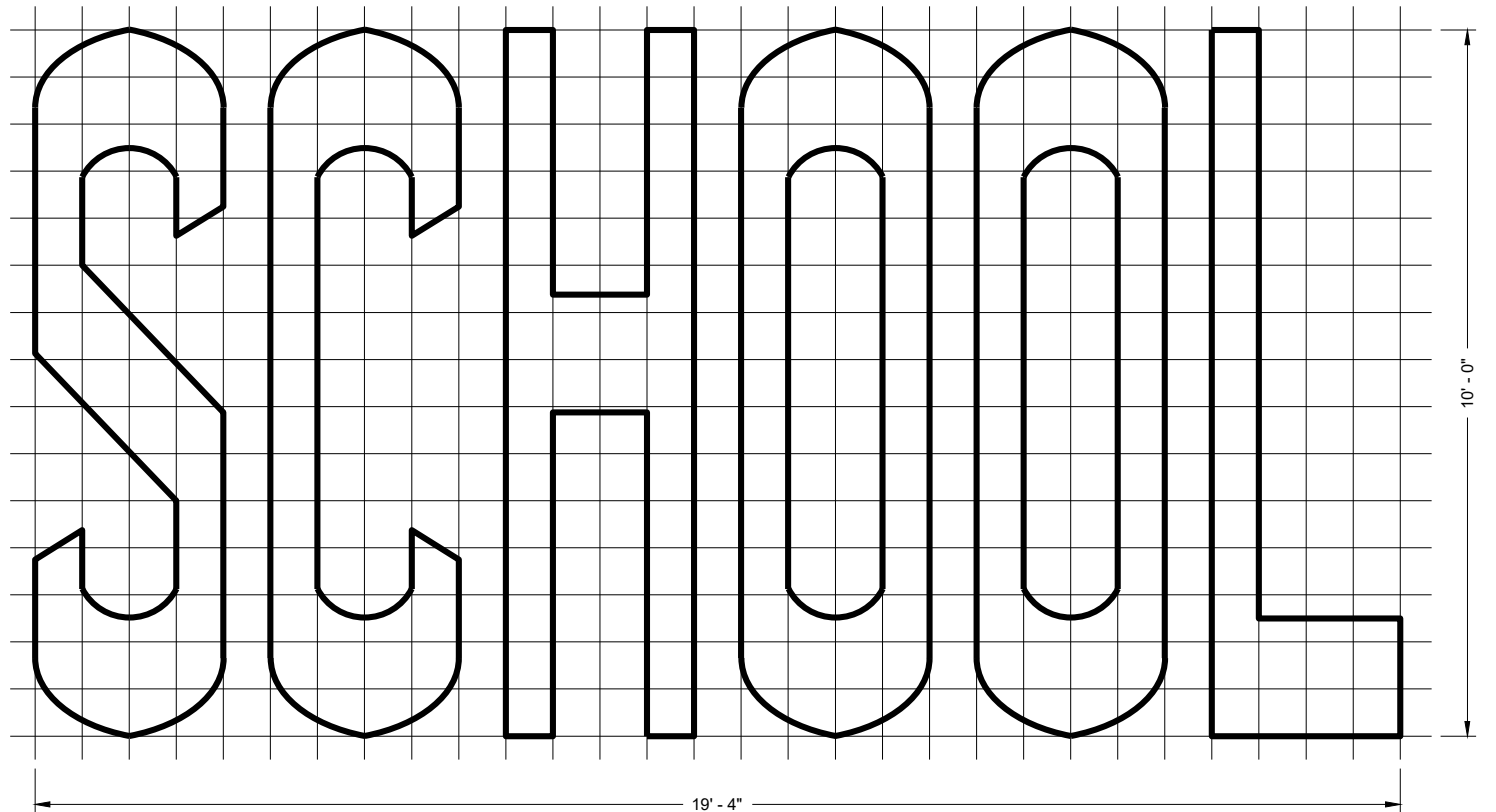
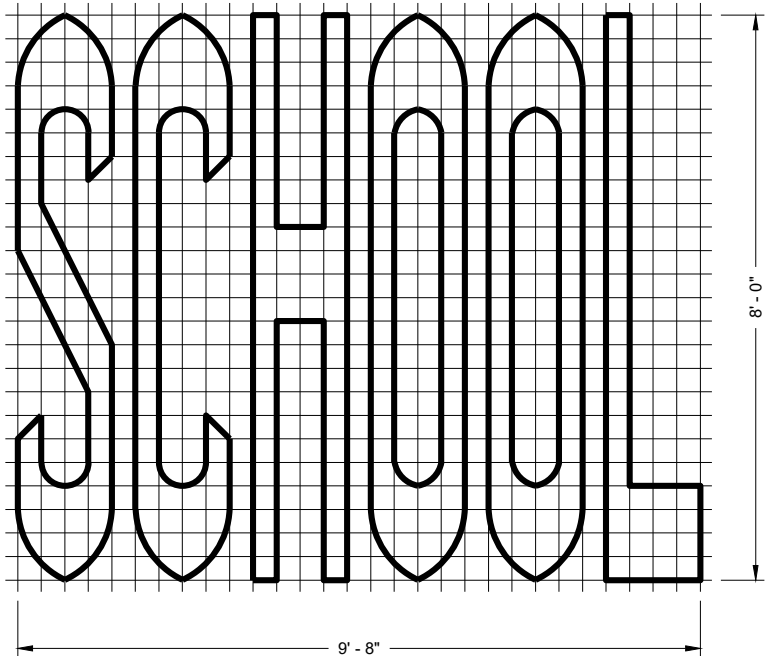
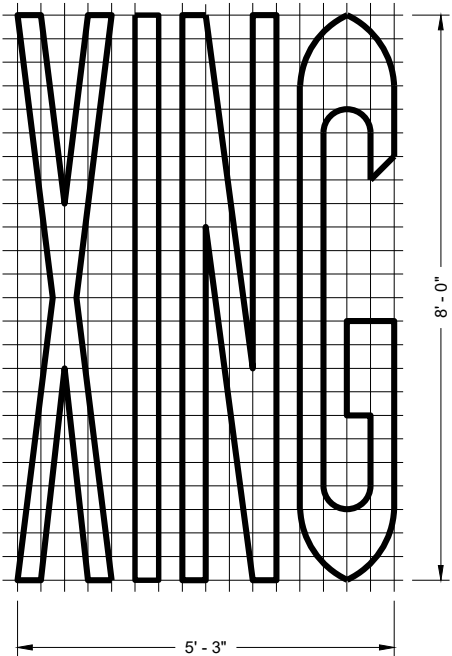
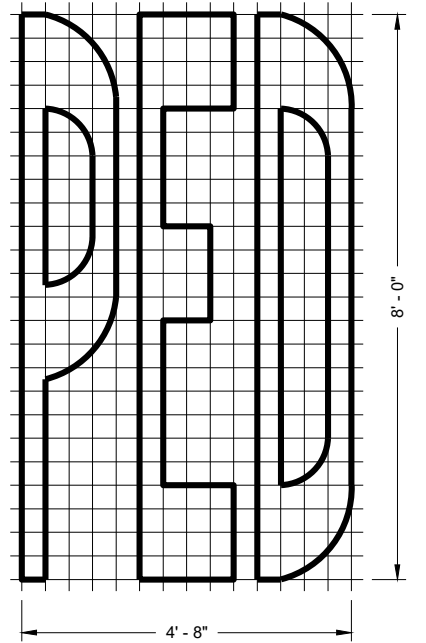
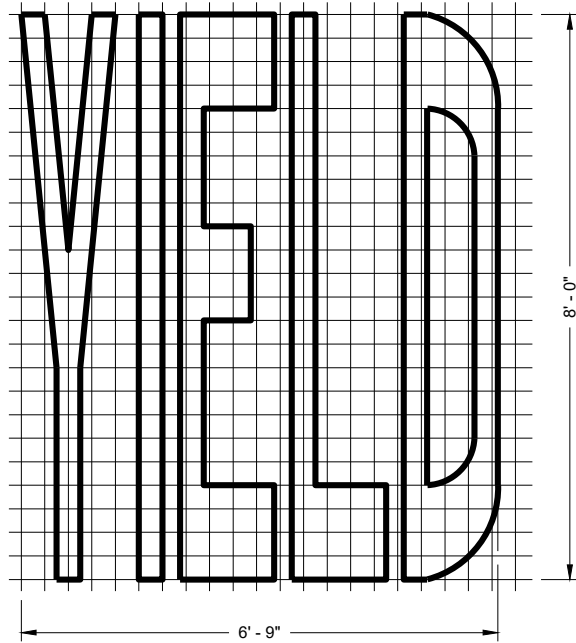
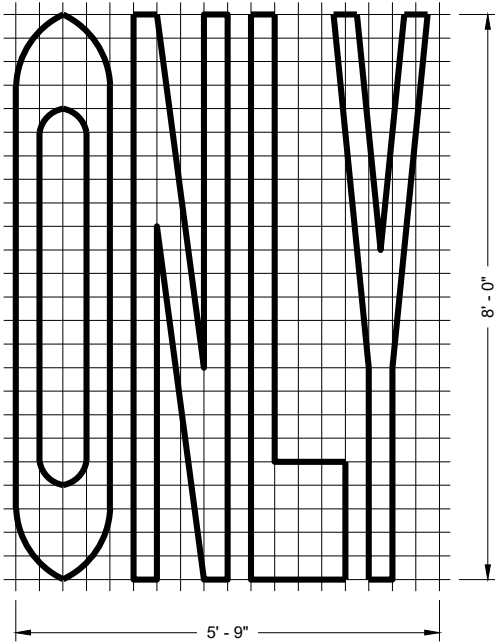
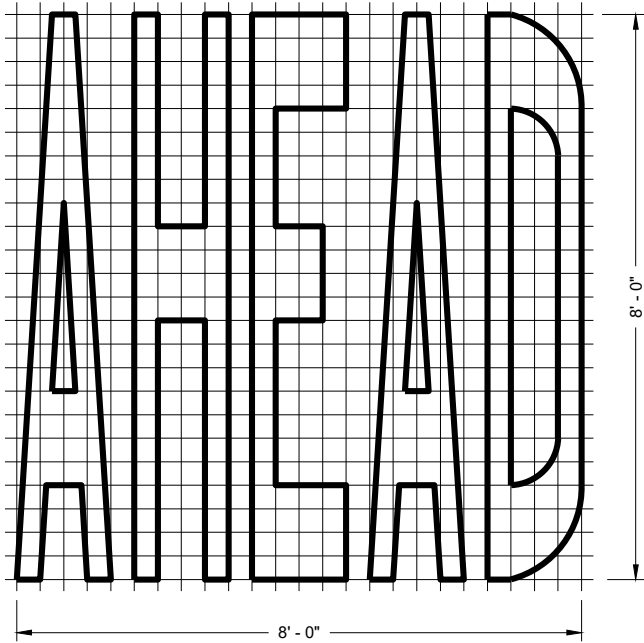
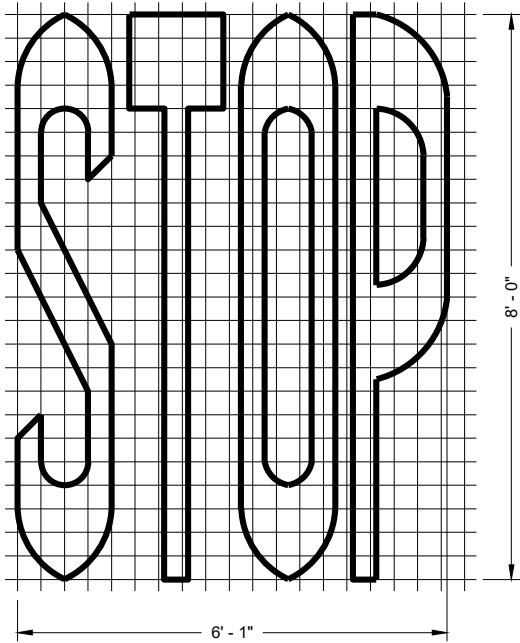
|          |             |        |        | 204.0165               | 614.0950                                   | 614.0951                                    |
|----------|-------------|--------|--------|------------------------|--------------------------------------------|---------------------------------------------|
|          |             |        |        | *REMOVINGG<br>UARDRAIL | *REPLACING<br>GUARDRAIL POST<br>AND BLOCKS | *REPLACING<br>GUARDRAILRAIL AND<br>HARDWARE |
| CATEGORY | ROADWAY     | MARKER | MARKER | LF                     | EACH                                       | LF                                          |
| 1000     | IH 94 EB/WB | STH 83 | CTH T  | 150                    | 65                                         | 150                                         |
| TOTAL    |             |        |        | 150                    | 65                                         | 150                                         |

NOTE:  
\*REMOVE AND REPLACE DAMAGED AND DETERIORATED  
SPOT GUARDRAIL AS DETERMINED BY THE ENGINEER

Standard Detail Drawing List

|           |                                                                   |
|-----------|-------------------------------------------------------------------|
| 15C07-15B | PAVEMENT MARKING WORDS                                            |
| 15C07-15C | PAVEMENT MARKING ARROWS                                           |
| 15C08-19A | LONGITUDINAL MARKING (MAINLINE)                                   |
| 15C11-07A | CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST                 |
| 15C11-07B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15D12-07A | TRAFFIC CONTROL, LANE CLOSURE                                     |
| 15D12-07B | TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION                    |
| 15D15-05B | TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE                |
| 15D15-05C | TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE        |
| 15D15-05D | TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE        |
| 15D16-04  | TRAFFIC CONTROL, EXIT RAMP CLOSURE                                |





SINGLE LANE

TWO - LANE

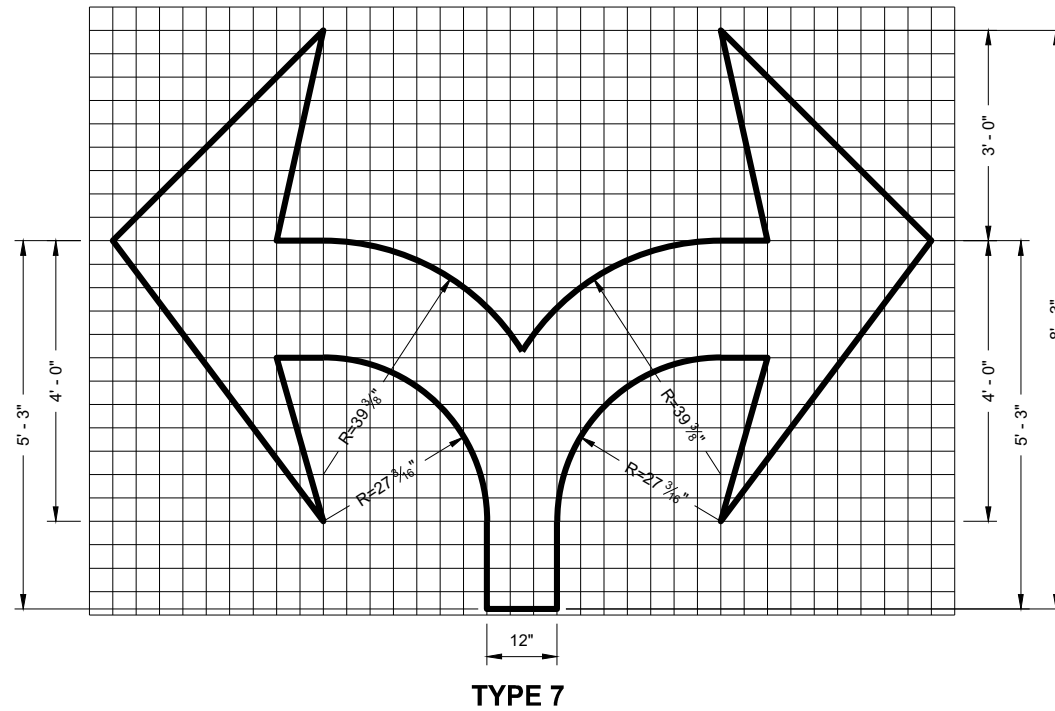
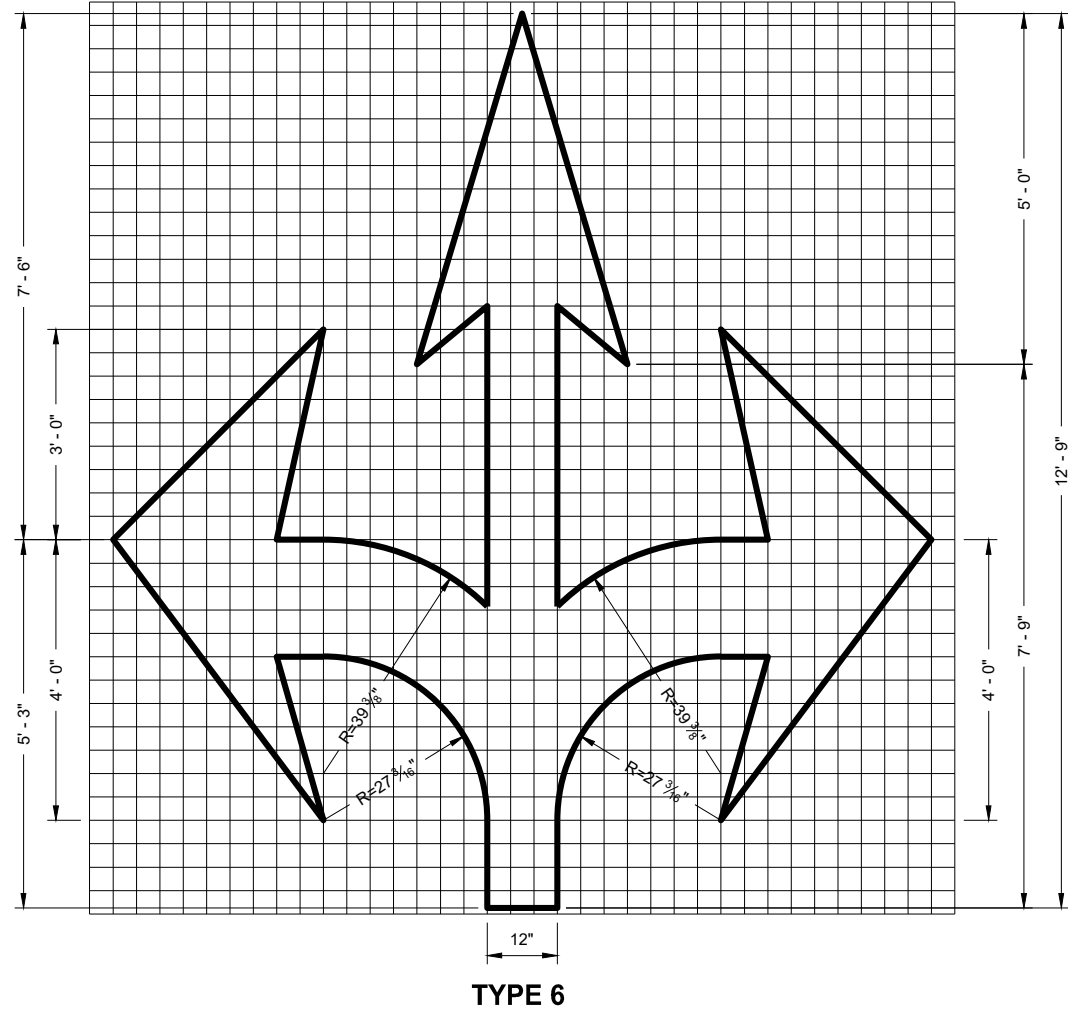
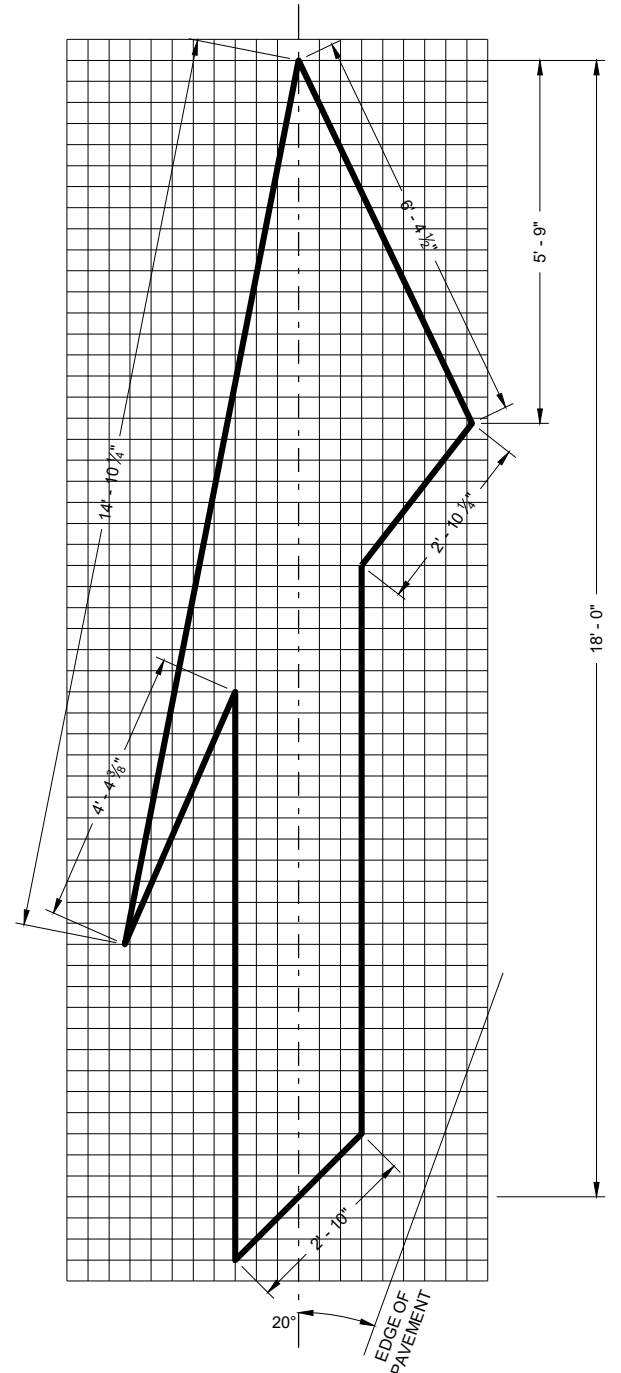
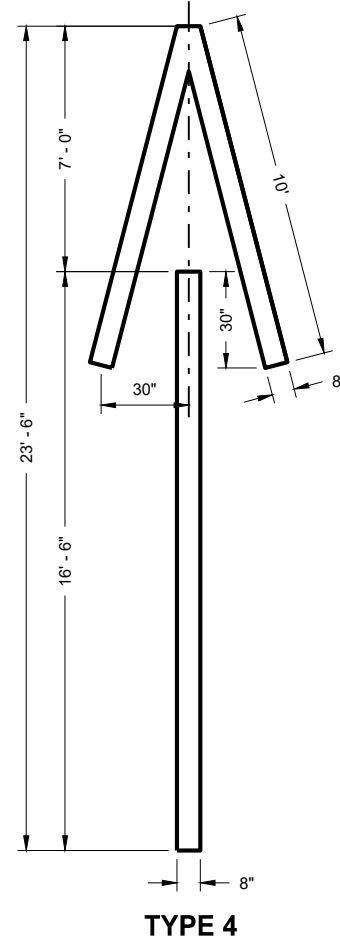
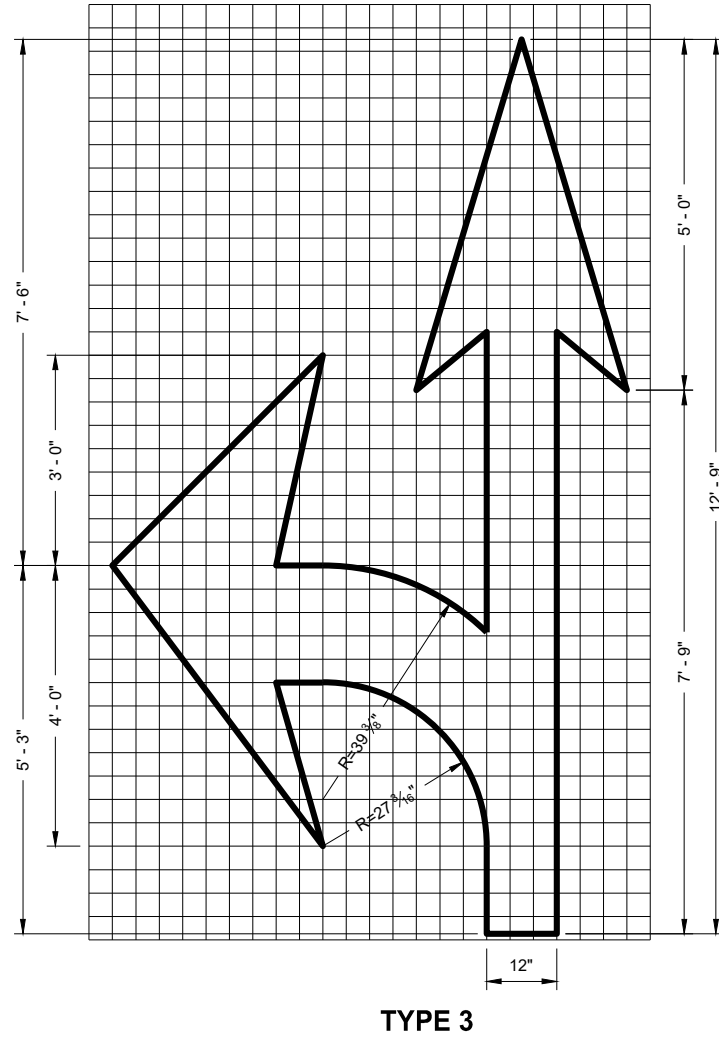
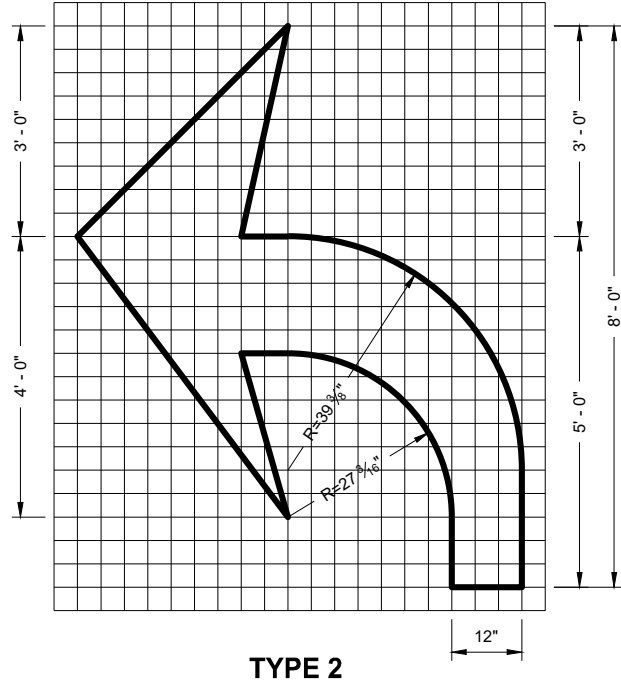
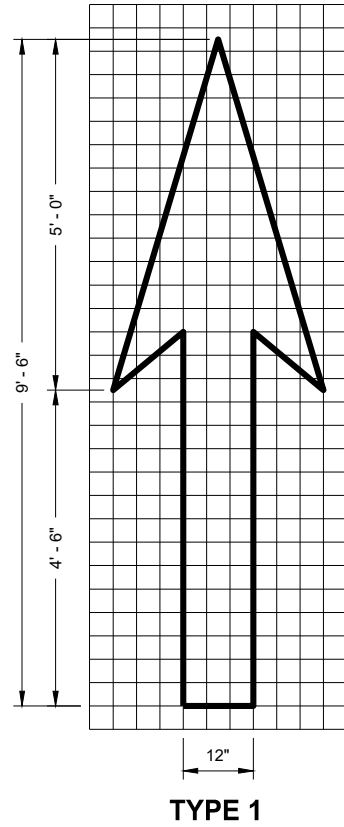
#### GENERAL NOTES

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.

#### PAVEMENT MARKING WORDS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
November 2019 /S/ Matthew Rauch  
DATE STATE SIGNING AND MAP ENGINEER 50  
FHWA



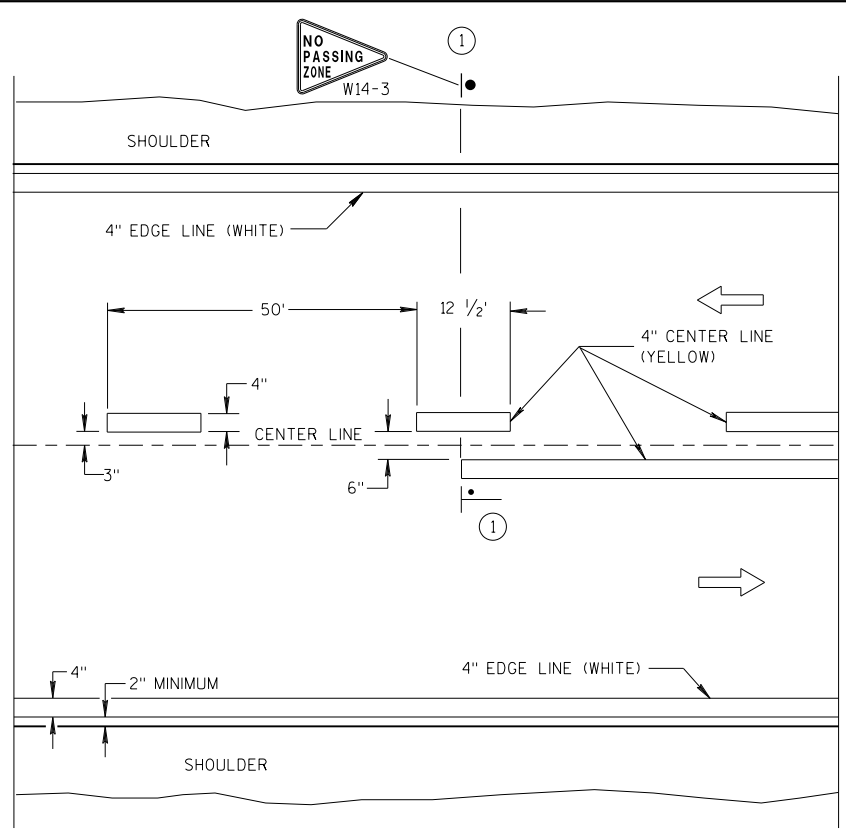
GENERAL NOTES

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.

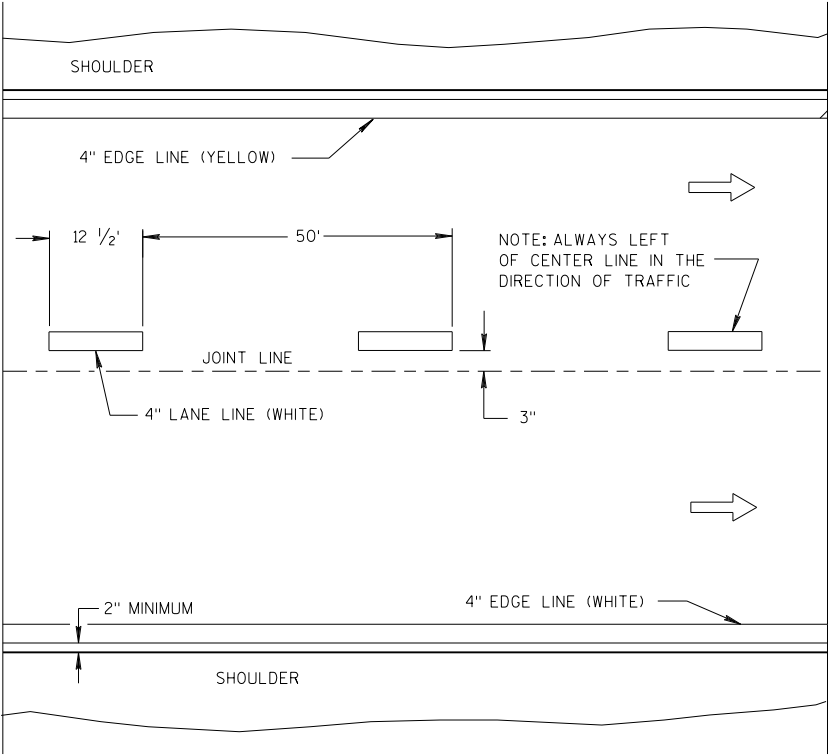
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
November 2019 /S/ Matthew Rauch  
DATE STATE SIGNING AND MAP ENGINEER 51  
FHWA

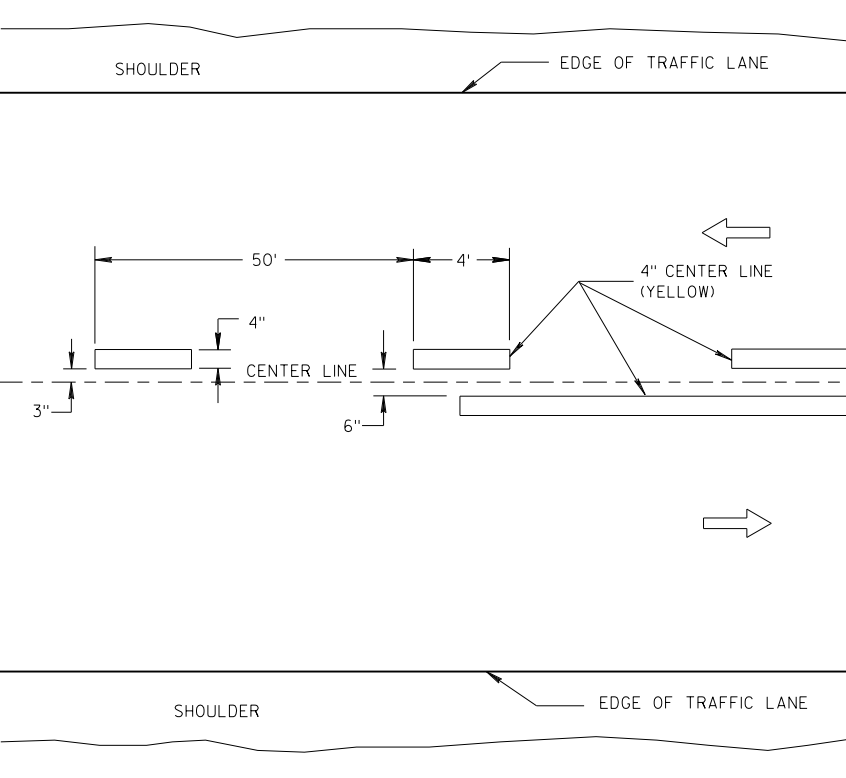


TWO WAY TRAFFIC

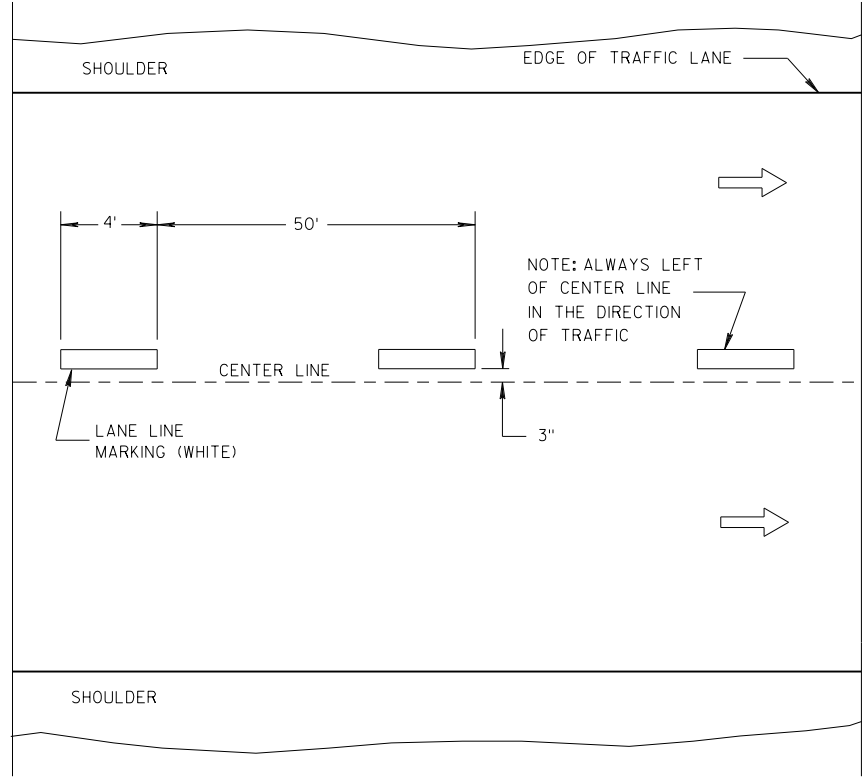


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY 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

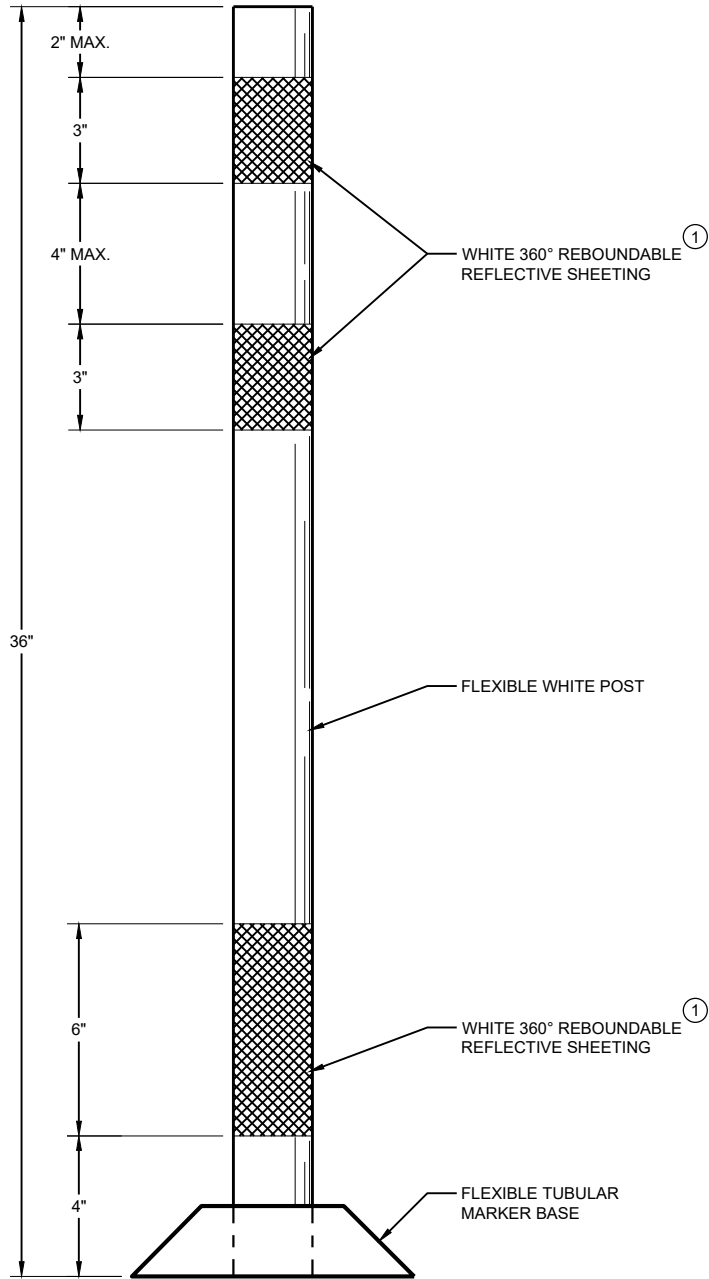
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

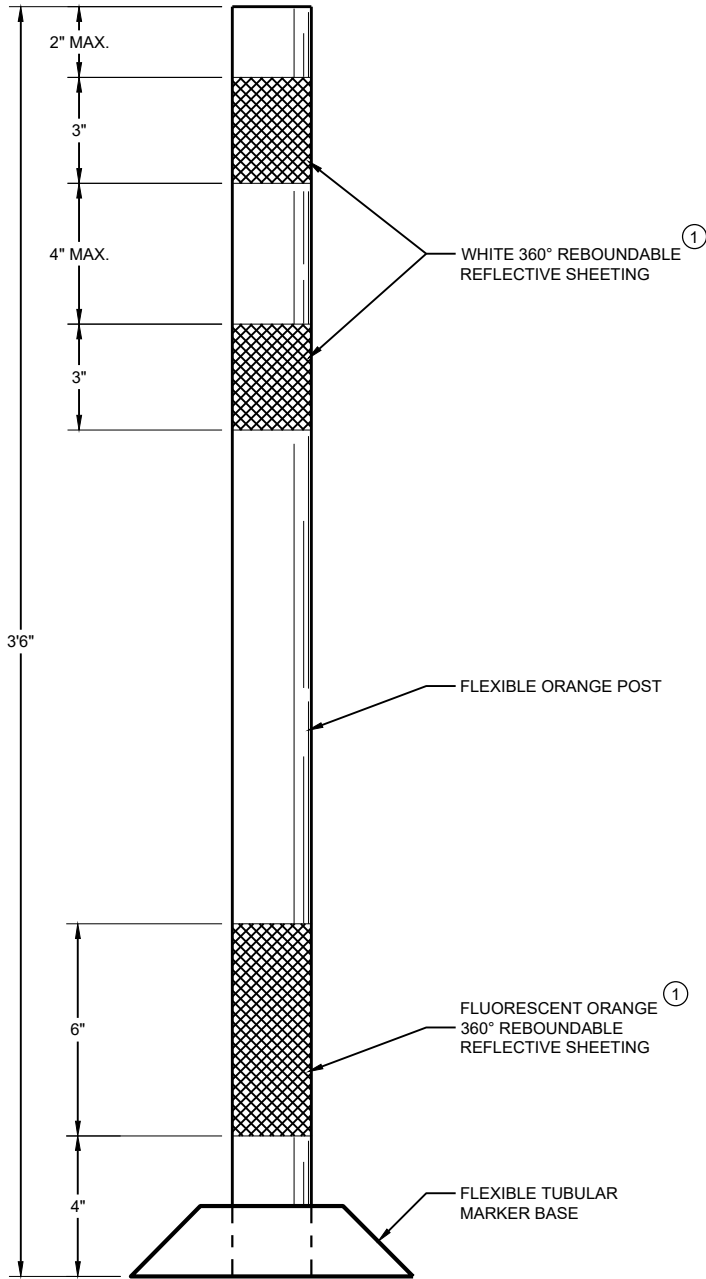
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
7/2018 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MAR 52 INEER  
FHWA



FLEXIBLE TUBULAR  
MARKER POST  
PERMANENT CROSSOVER



FLEXIBLE TUBULAR  
MARKER POST  
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

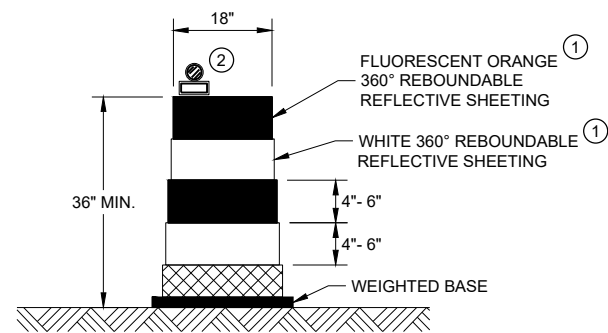
① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CONNELLY ENGINEERING  
FLEXIBLE TUBULAR  
MARKER POST

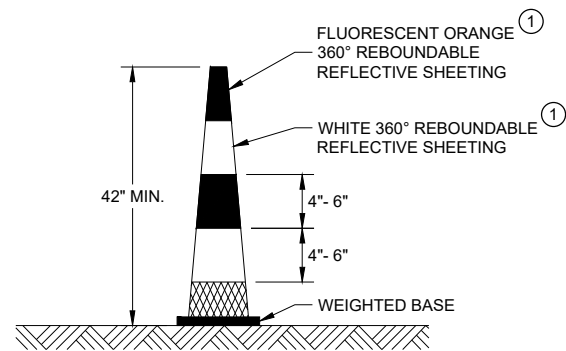
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 53

FHWA

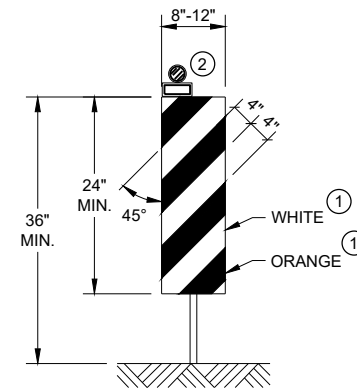


DRUM



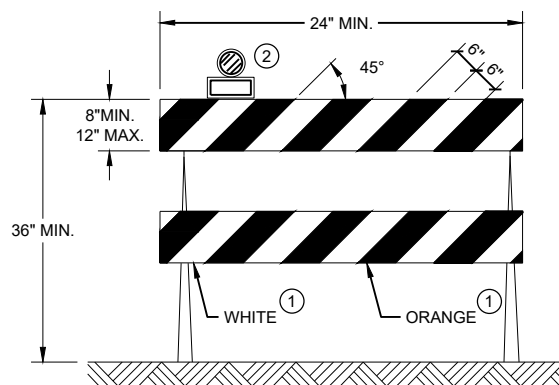
42" CONE

DO NOT USE IN TAPERS  
½ SPACING OF DRUMS



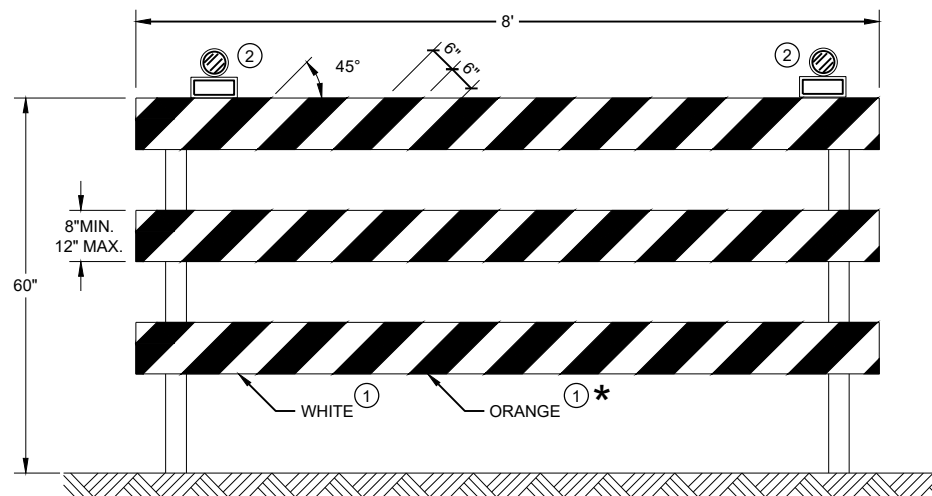
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III 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.

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.

|                                                                     |                                             |
|---------------------------------------------------------------------|---------------------------------------------|
| CHANNELING DEVICES<br>DRUMS CONES BARRICADES<br>AND VERTICAL PANELS |                                             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION                  |                                             |
| APPROVED<br>June 2017<br>DATE                                       | /S/ Andrew Heidtke<br>WORK ZONE ENGINEER 54 |
| FHWA                                                                |                                             |

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.

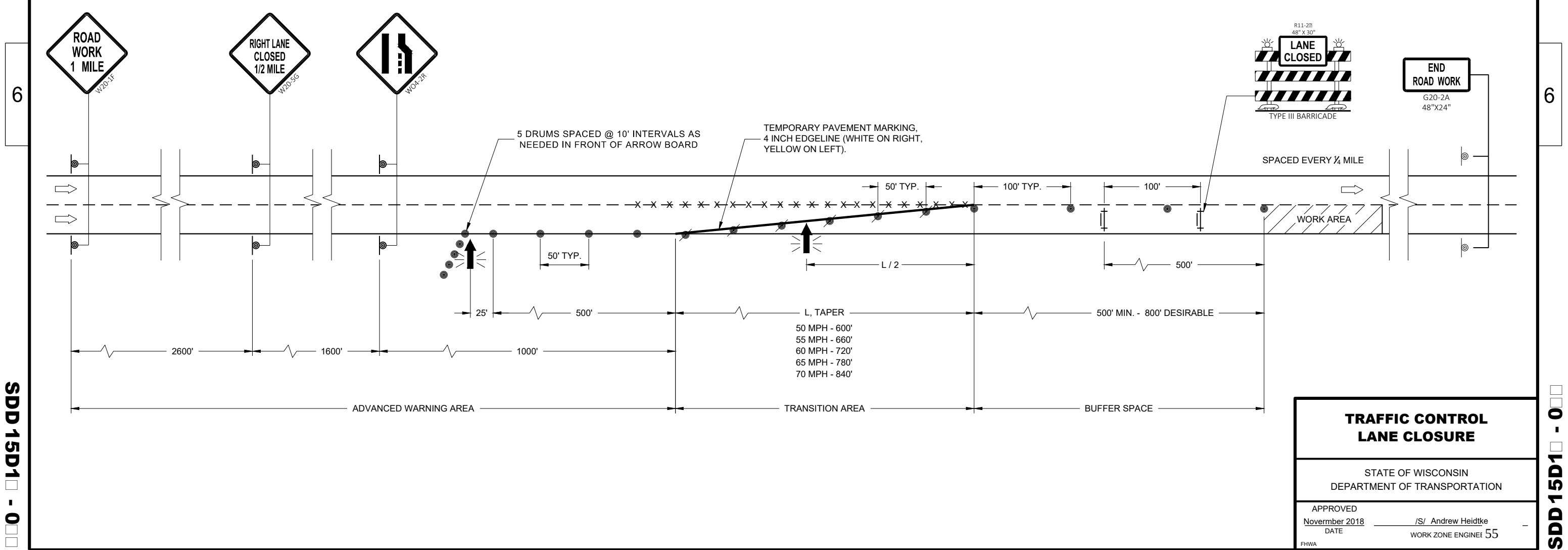
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

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



SDD 15D1 - 0

SDD 15D1 - 0

|                                                    |                                             |
|----------------------------------------------------|---------------------------------------------|
| TRAFFIC CONTROL<br>LANE CLOSURE                    |                                             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |                                             |
| APPROVED<br>November 2018<br>DATE                  | /S/ Andrew Heidtke<br>WORK ZONE ENGINEER 55 |
| FHWA                                               |                                             |



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" □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.

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

FOR A 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.

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

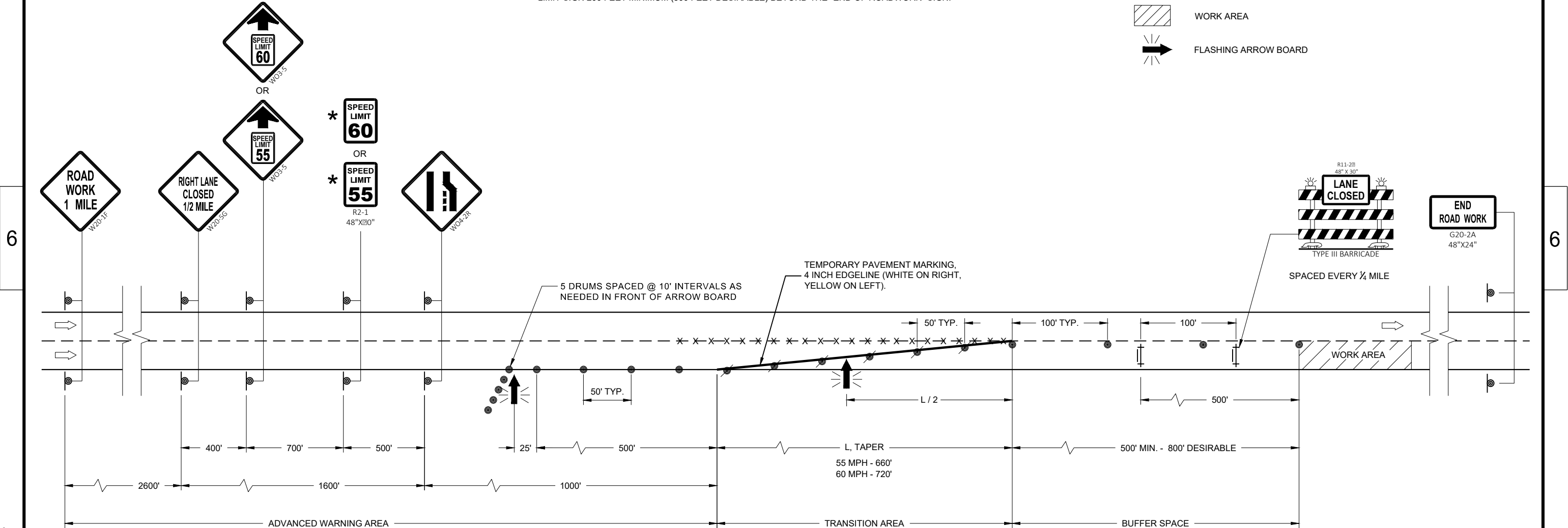
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP 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.

\* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

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                                       |                                             |
| SPEED REDUCTION                                    |                                             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |                                             |
| APPROVED<br>November 2018<br>DATE                  | /S/ Andrew Heidtke<br>WORK ZONE ENGINEER 56 |
| FHWA                                               |                                             |

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
- DIRECTION OF TRAFFIC

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" X 48" 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE 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 /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

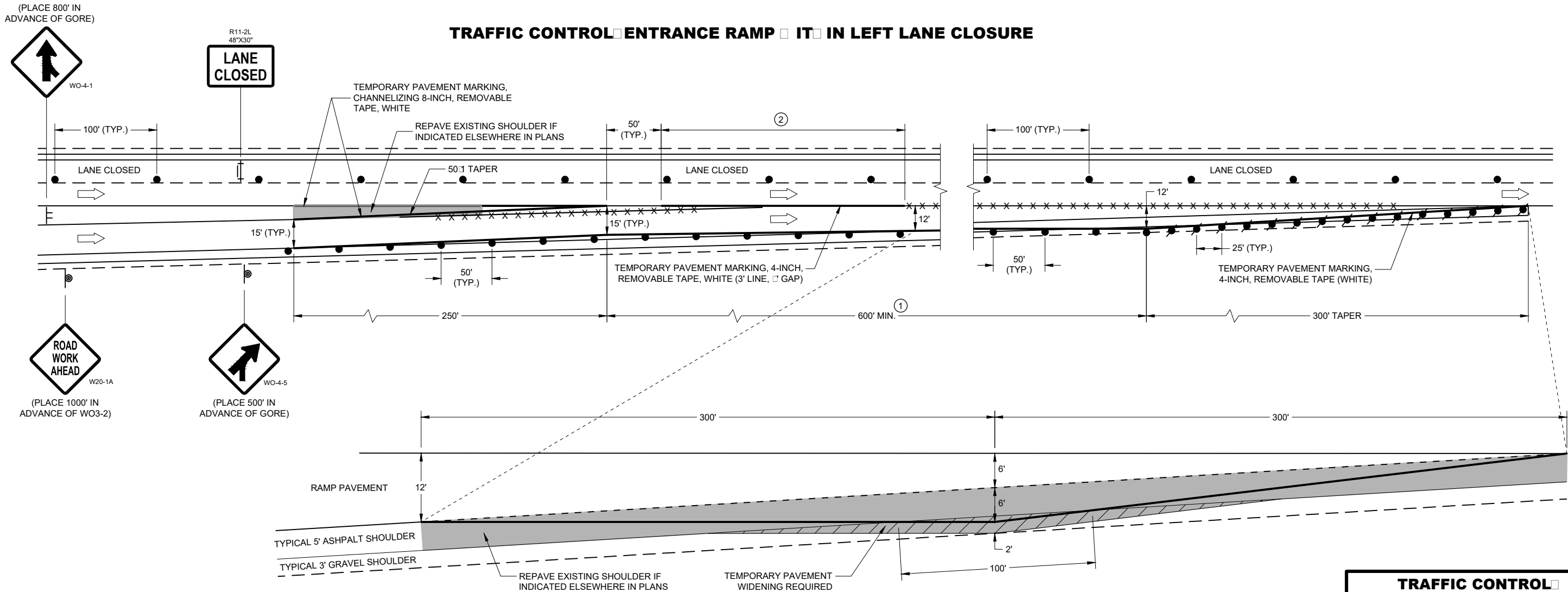
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.

- ① EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.
- ② END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL ENTRANCE RAMP IT IN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL ENTRANCE RAMP IT IN LANE CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Ma 201 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 57

FHWA



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

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" X 48" 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 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

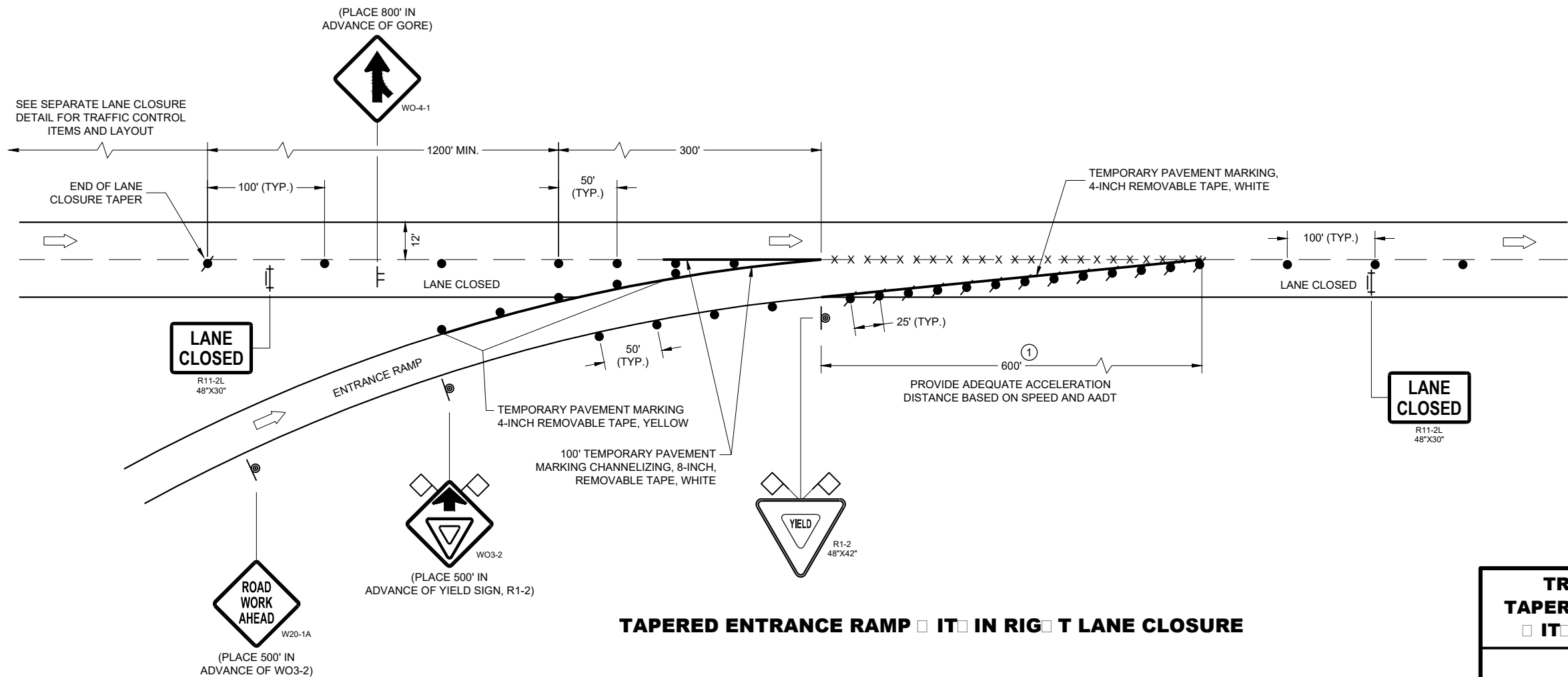
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

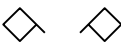
① CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP IN RIGHT LANE CLOSURE

|                                                    |                                             |
|----------------------------------------------------|---------------------------------------------|
| TRAFFIC CONTROL                                    |                                             |
| TAPERED ENTRANCE RAMP                              |                                             |
| IN LANE CLOSURE                                    |                                             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |                                             |
| APPROVED<br>Ma 201<br>DATE                         | /S/ Andrew Heidtke<br>WORK ZONE ENGINEER 58 |
| FHWA                                               |                                             |

## LEGEND

- |                                                                                   |                                                      |
|-----------------------------------------------------------------------------------|------------------------------------------------------|
|  | SIGN ON PERMANENT SUPPORT                            |
|  | SIGN ON TEMPORARY SUPPORT                            |
|  | TRAFFIC CONTROL DRUM                                 |
|  | TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT |
|  | TYPE III BARRICADE WITH ATTACHED SIGN                |
|  | FLAGS, 16" X 16" MIN., ORANGE                        |
|  | DIRECTION OF TRAFFIC                                 |

## 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" X 48" 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 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

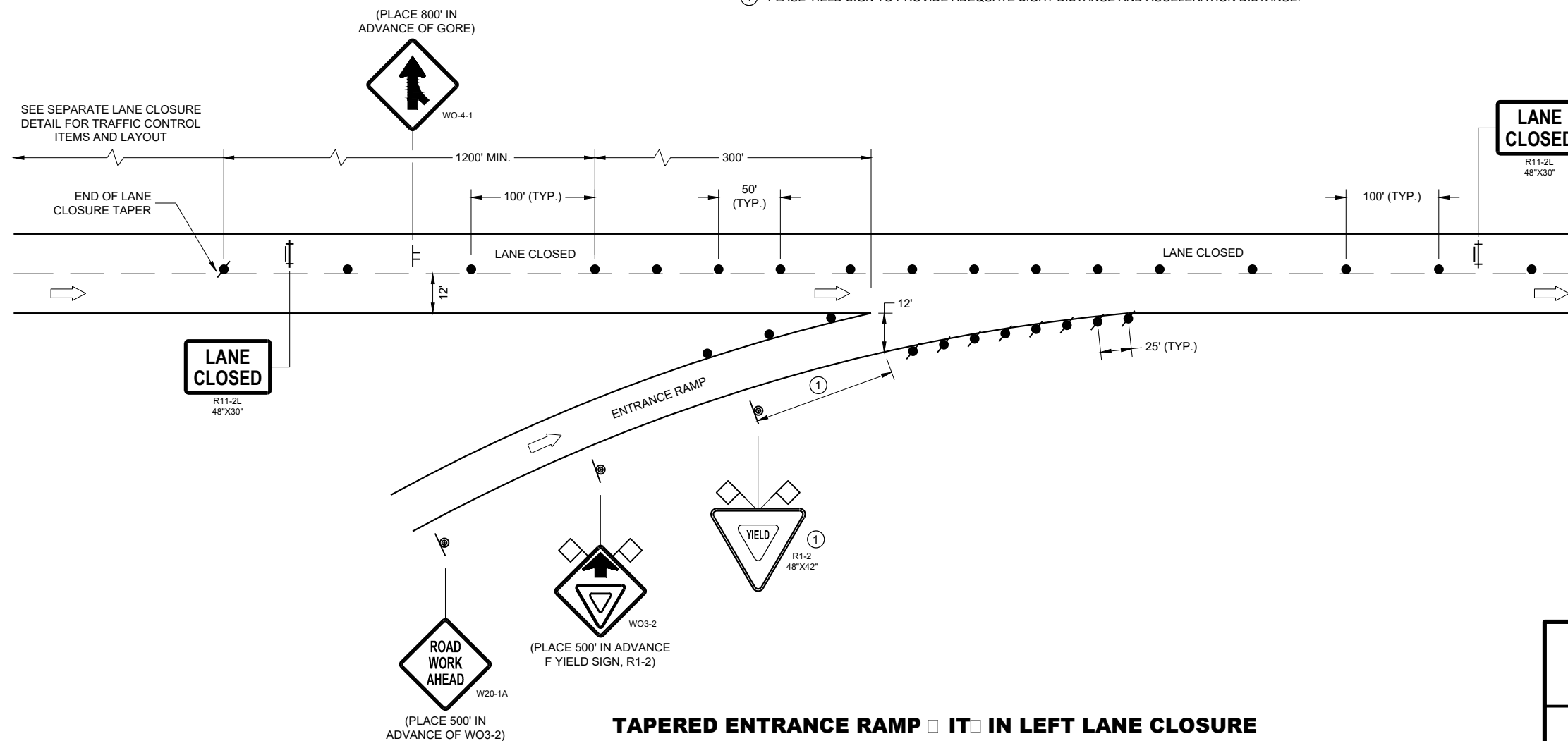
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

- ① PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



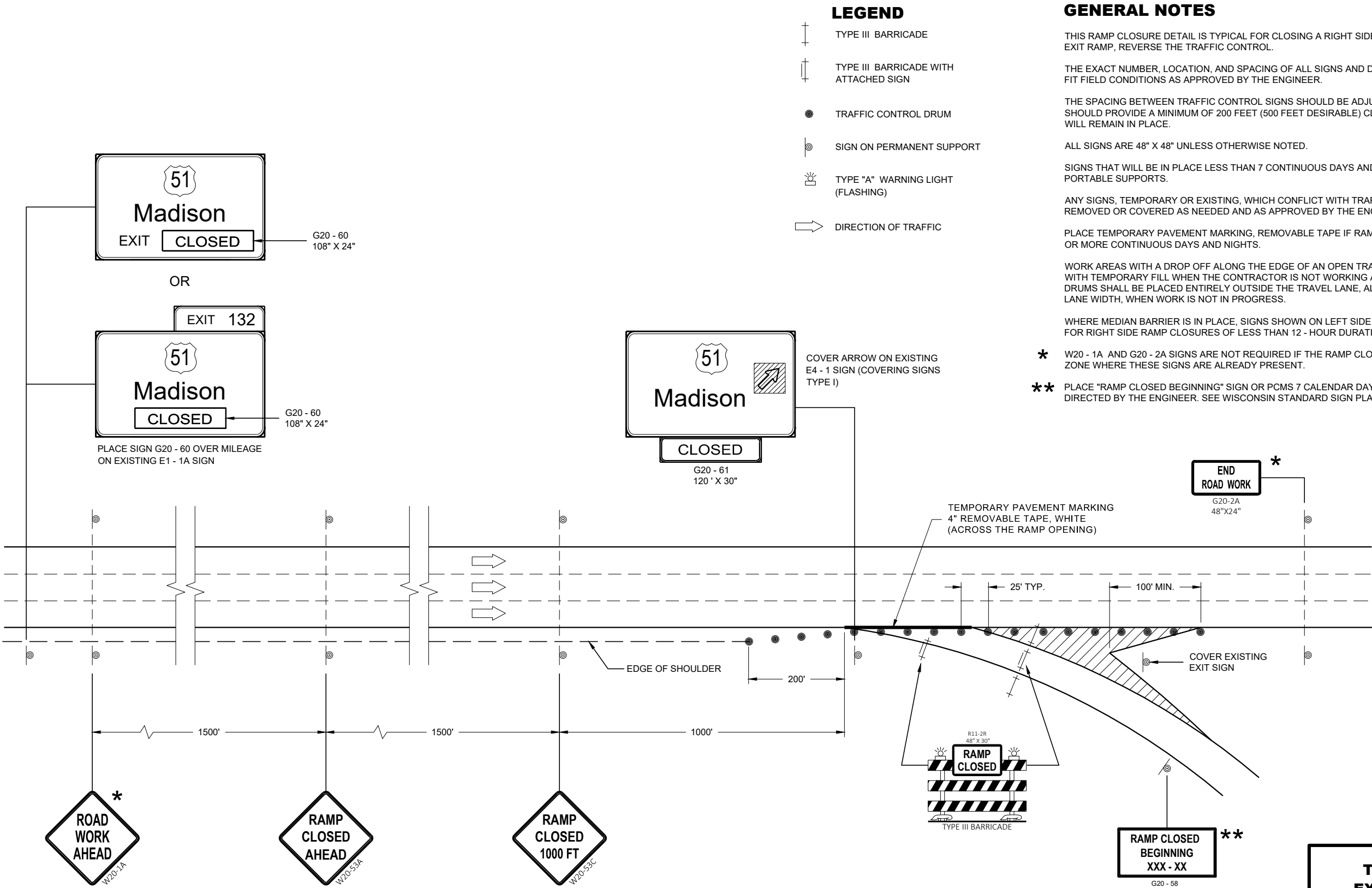
**TRAFFIC CONTROL**  
**TAPERED ENTRANCE RAMP**  
**IT IN LANE CLOSURE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Ma 201  
DATE

/S/ Andrew Heidtke  
WORK ZONE ENGINEER

59



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.

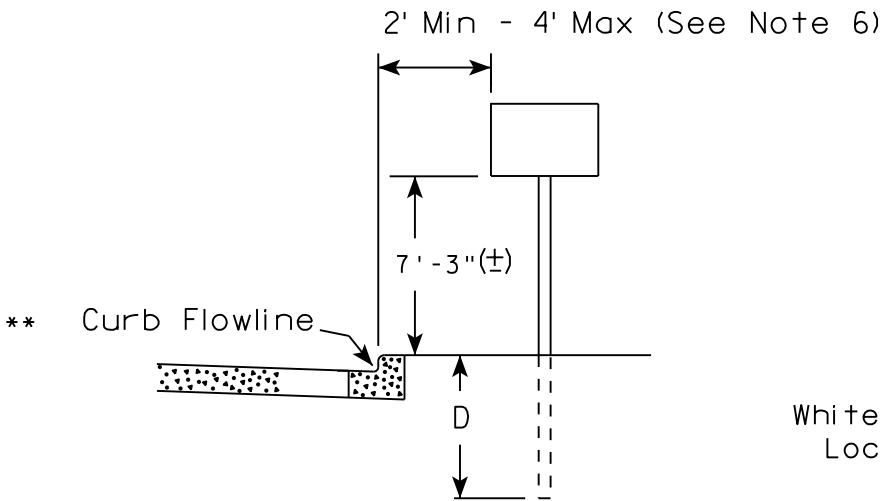
TRAFFIC CONTROL  
EXIT RAMP CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

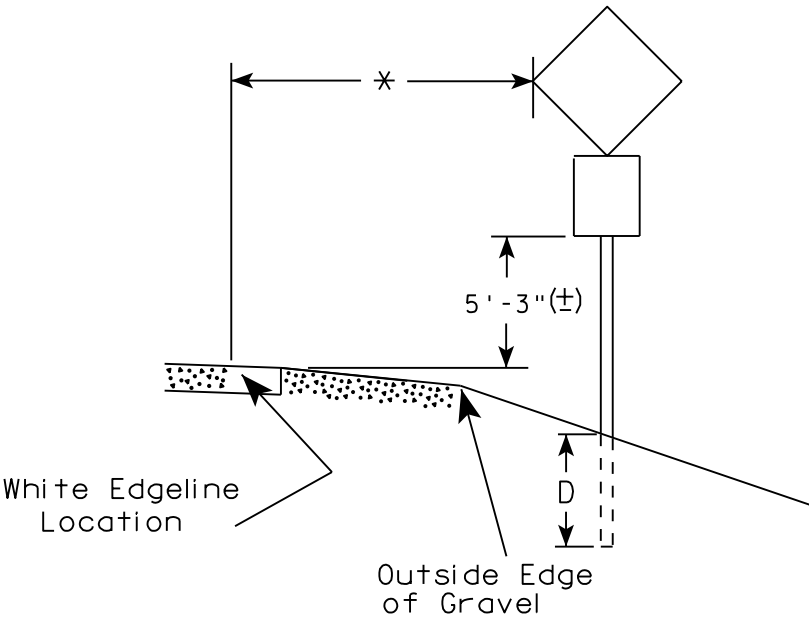
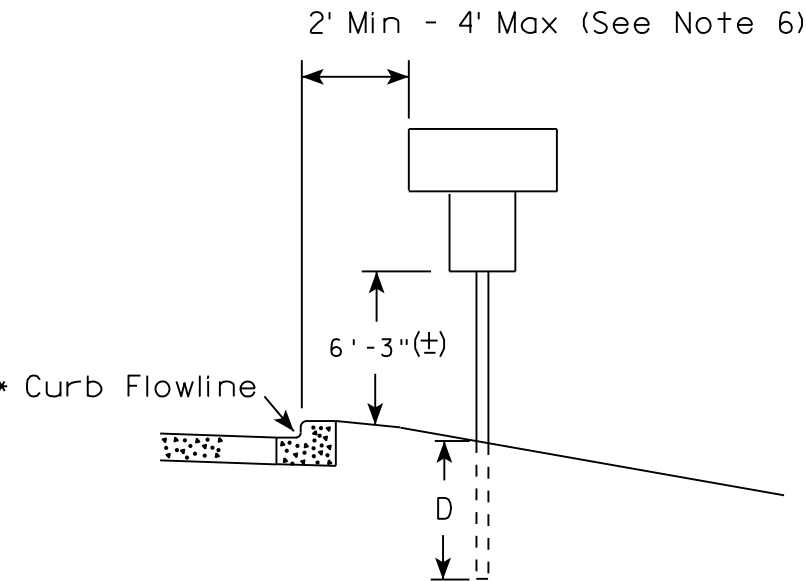
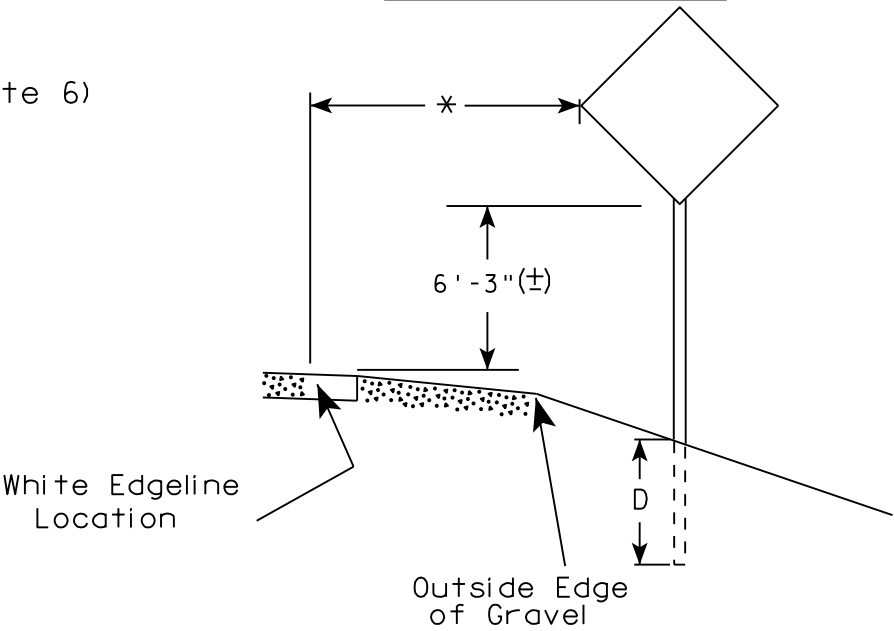
APPROVED  
November 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 60

FHWA

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

✖✖ 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.

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 directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), 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

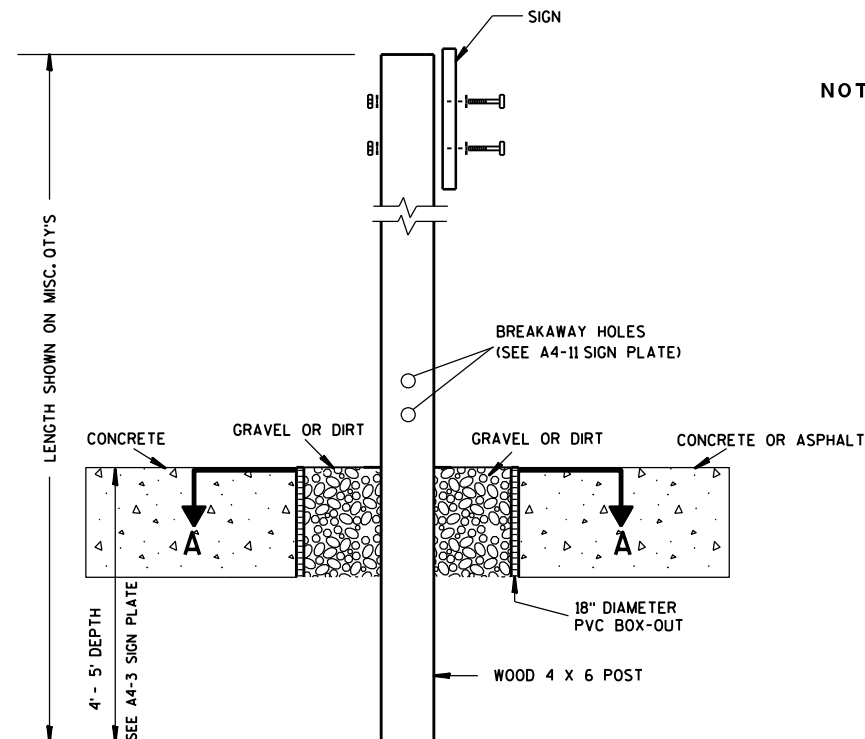
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 61

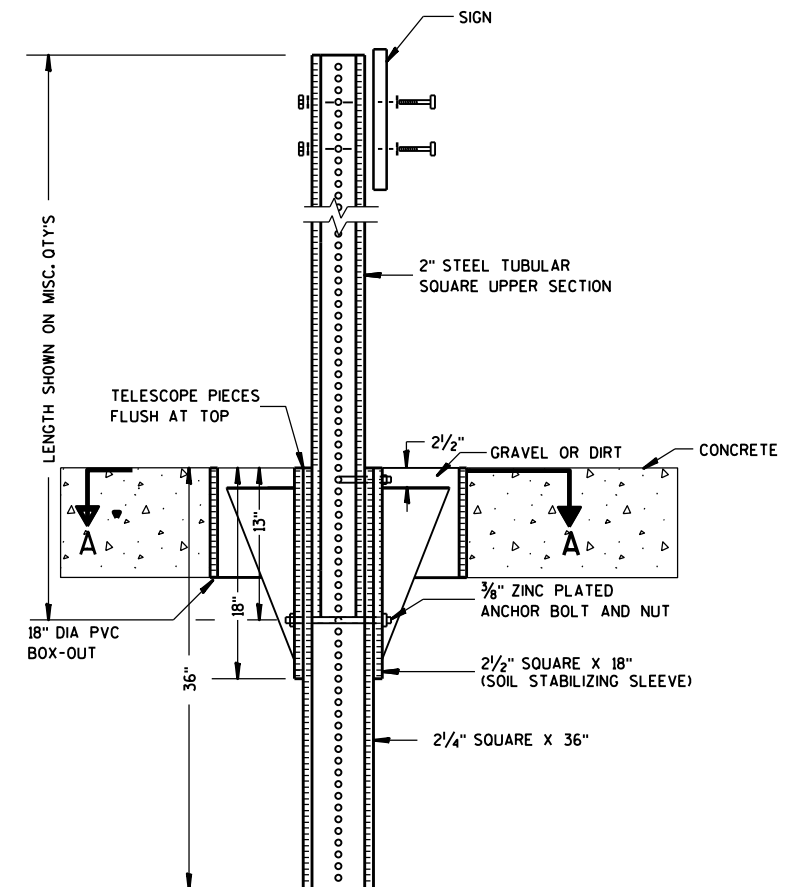
E



**ELEVATION VIEW**

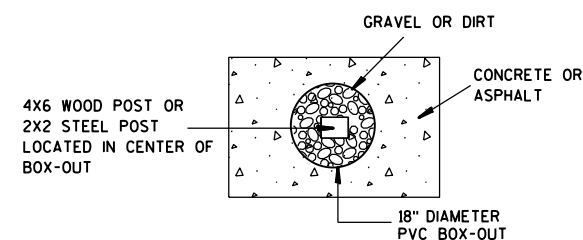
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

- 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 PLAT 62 A4-3B.1

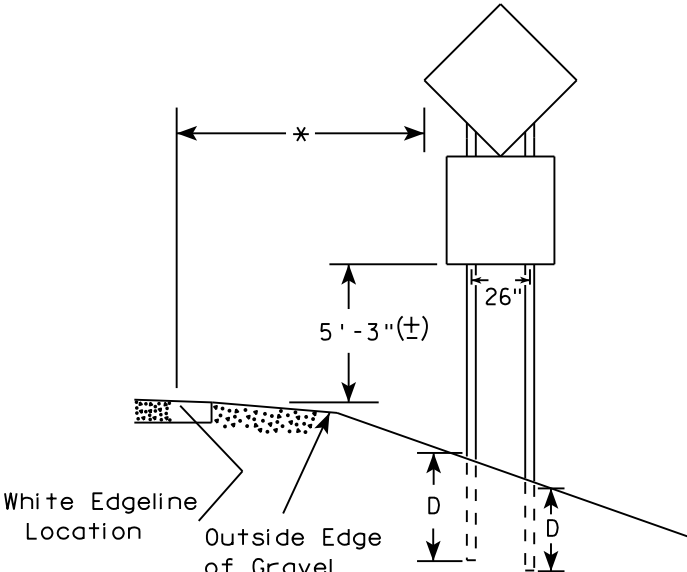
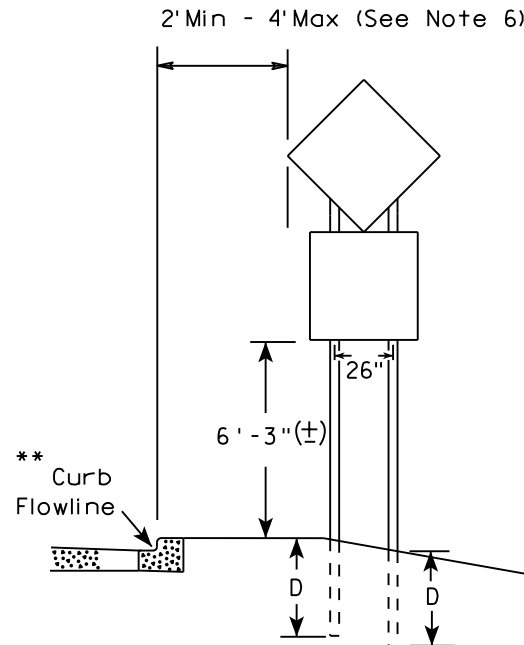
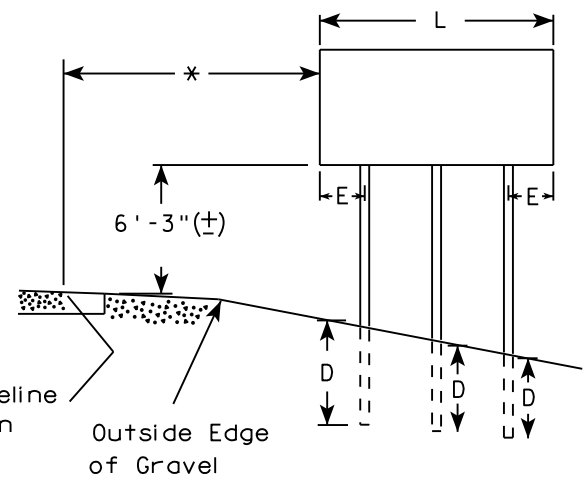
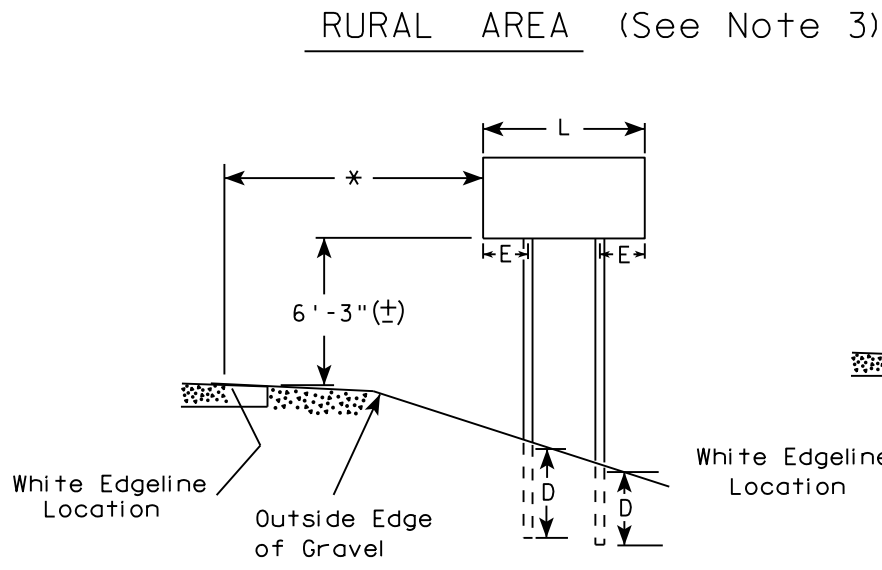
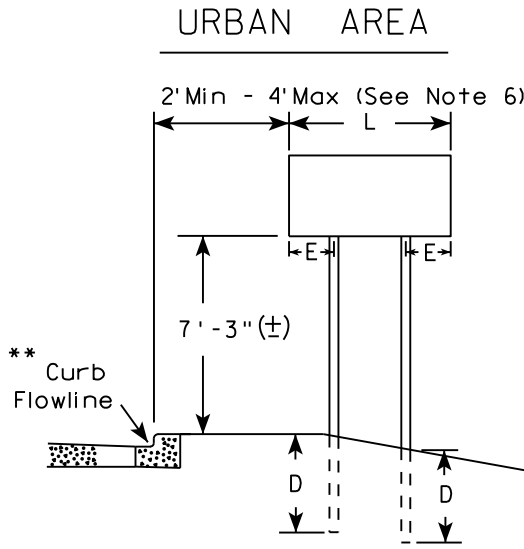
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

\*\*\*

| SIGN SHAPE OTHER THAN DIAMOND<br>(TWO POSTS REQUIRED) |     |
|-------------------------------------------------------|-----|
| L                                                     | E   |
| Greater than 48"<br>Less than 60"                     | 12" |
| 60" to 108"                                           | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND<br>(THREE POSTS REQUIRED) |     |
|---------------------------------------------------------|-----|
| L                                                       | E   |
| Greater than 108"<br>to 144"                            | 12" |

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION  
OF TYPE II SIGNS  
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

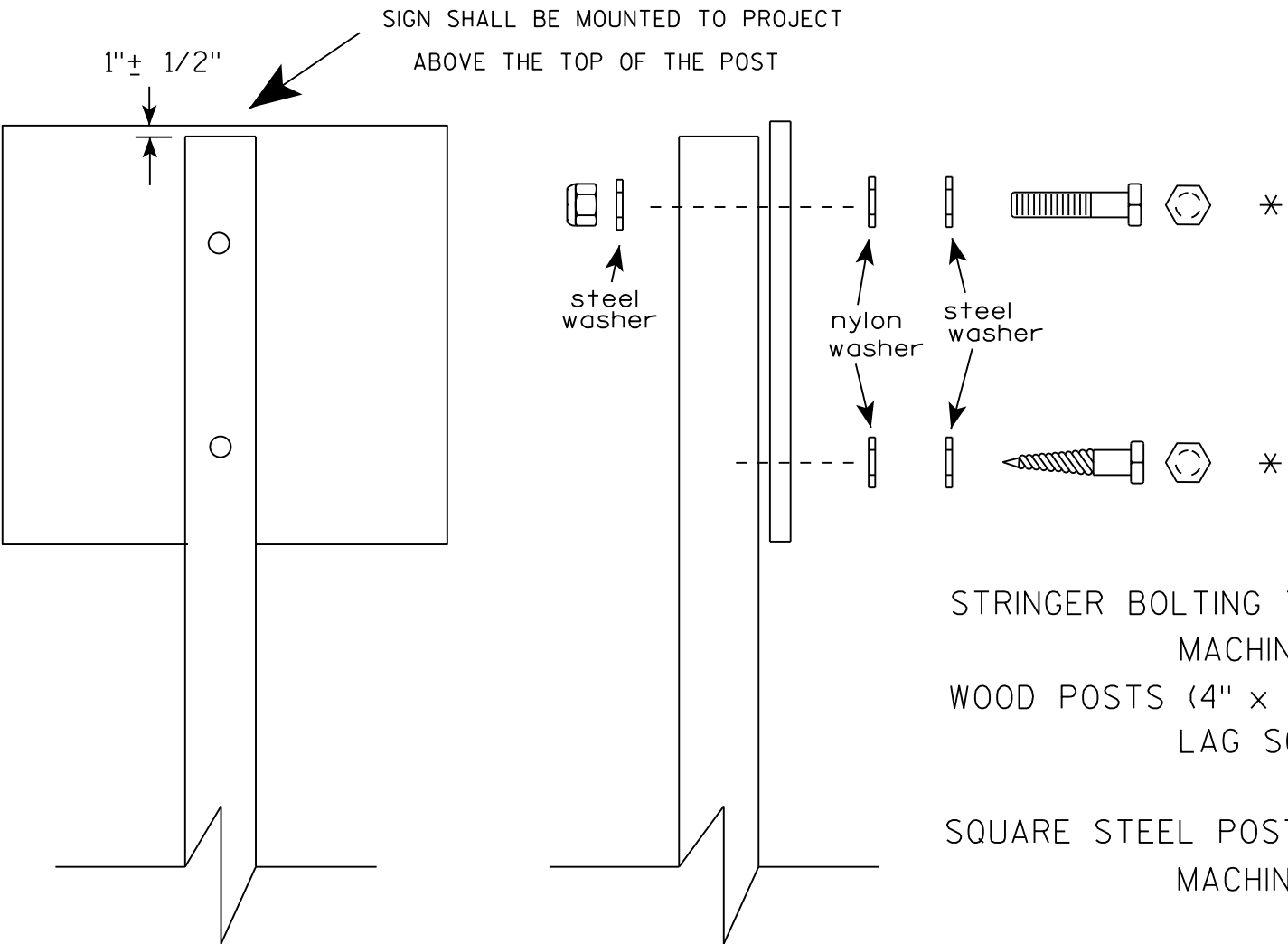
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

- 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.





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.

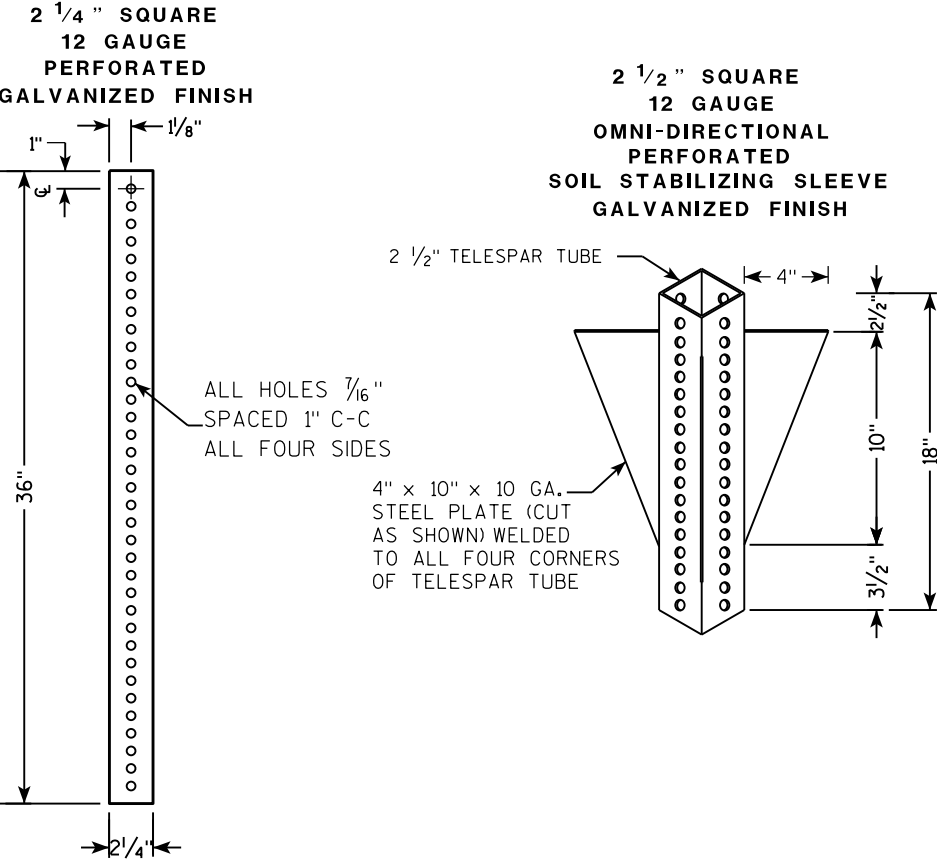
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

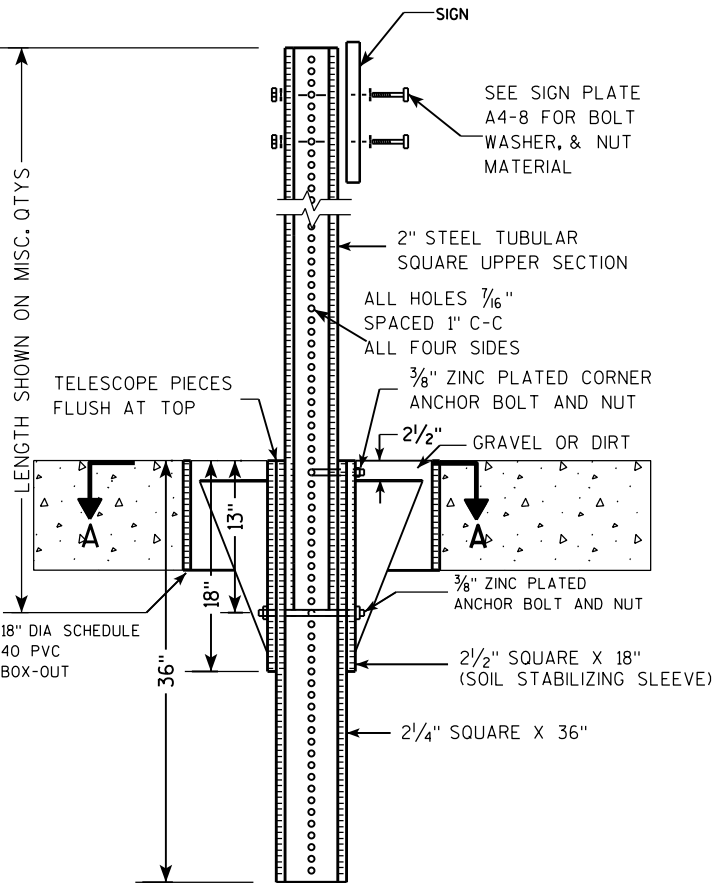
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| ATTACHMENT OF SIGNS<br>TO POSTS  |                                                       |
| WISCONSIN DEPT OF TRANSPORTATION |                                                       |
| APPROVED                         | <i>Matthew R. Rauch</i><br>For State Traffic Engineer |
| DATE 8/11/16                     | PLATE NO. A4-8.8<br>64                                |

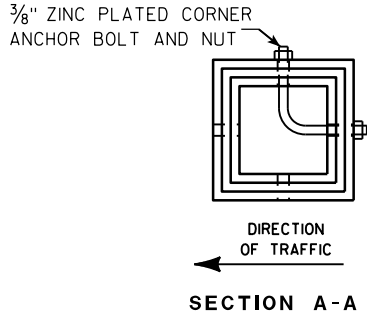
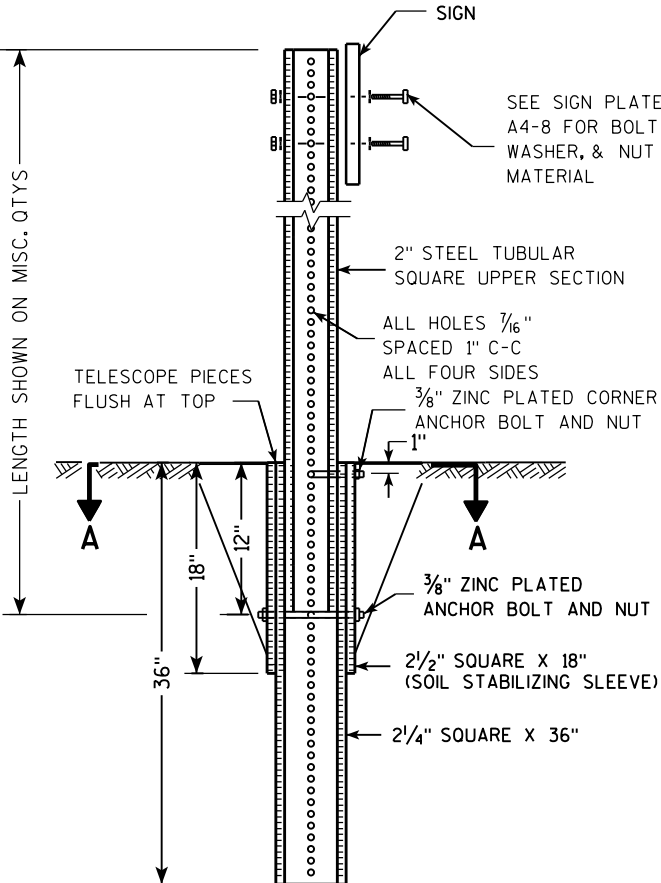
TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM



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)



| 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).

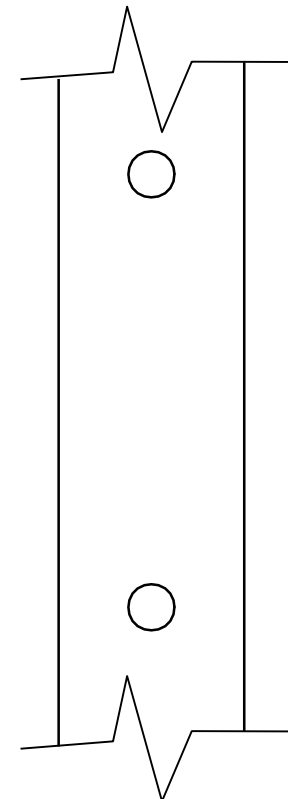
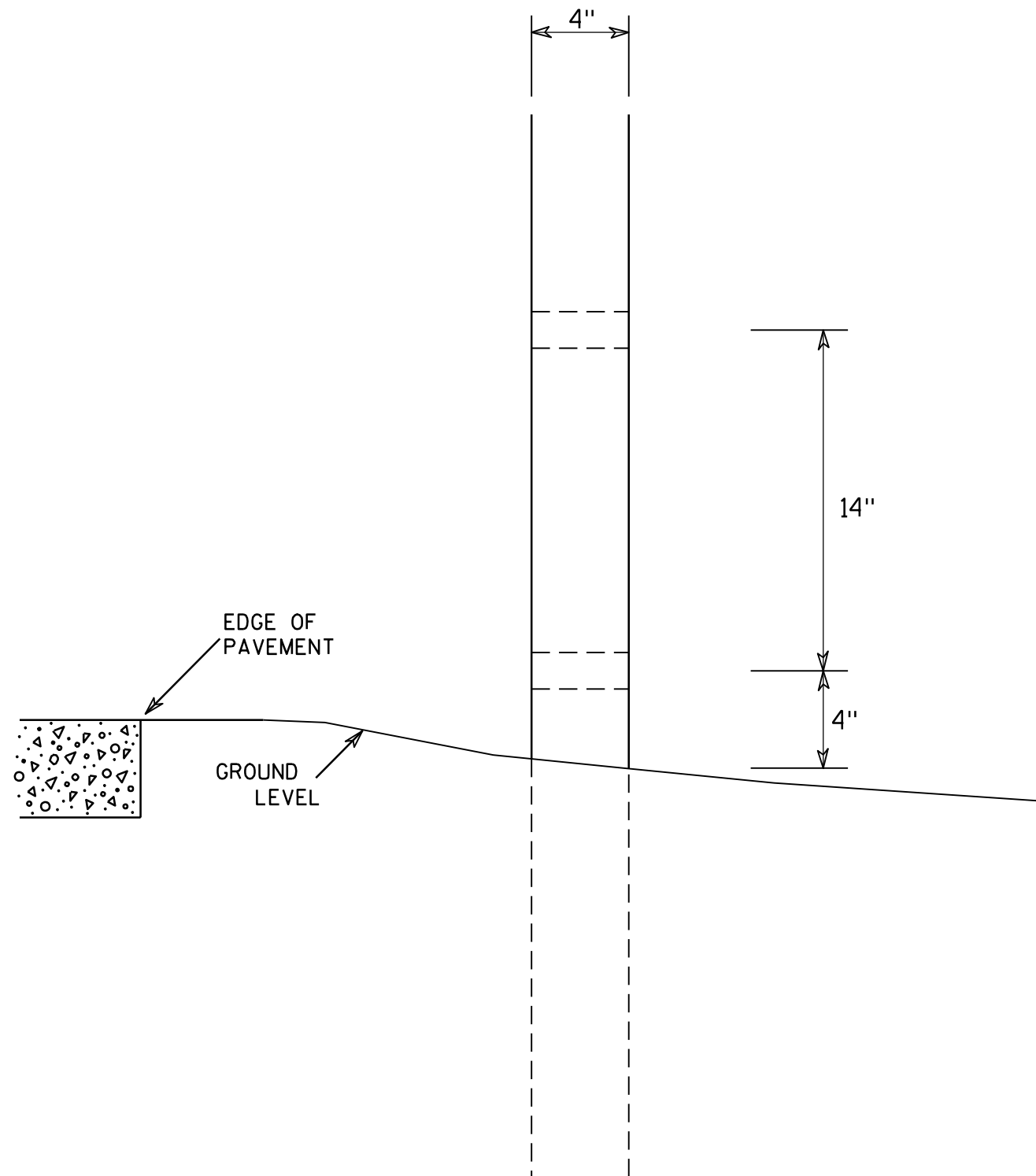
TUBULAR STEEL  
SIGN POST  
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 2/05/15 PLAT 65 14-9.9





SIDE VIEW

# GENERAL NOTES

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

## 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

*Chester J. Spang*  
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

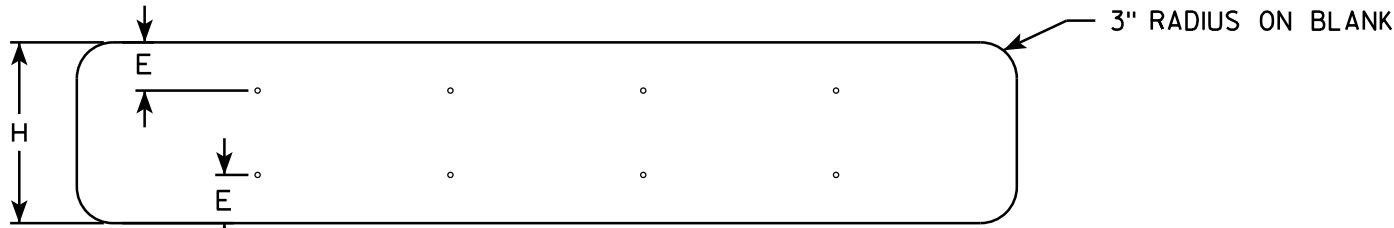
PROJECT NO:

HWY:

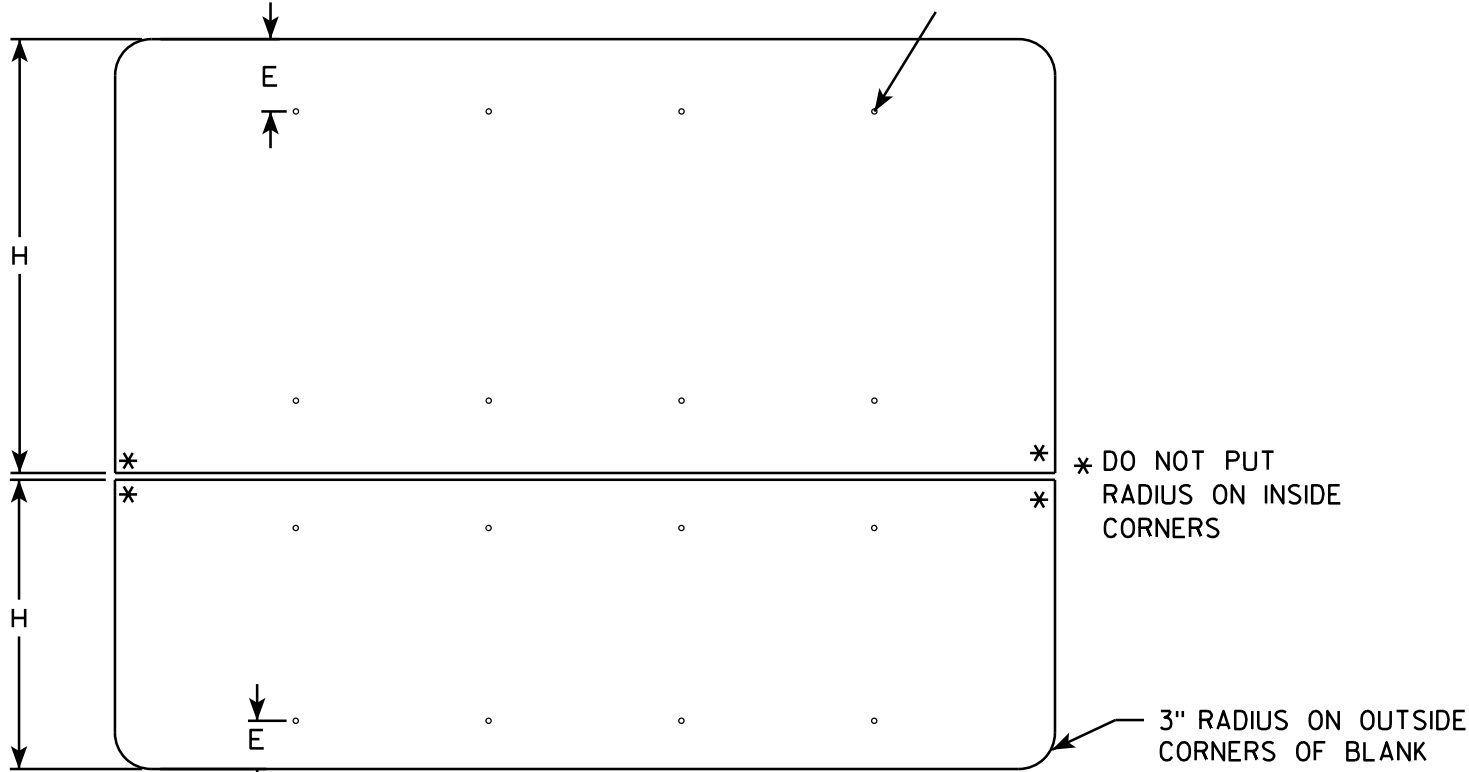
COUNTY:

SHEET NO: 66

E



SINGLE PIECE ALUMINUM SIGN 1/16" MOUNTING HOLES



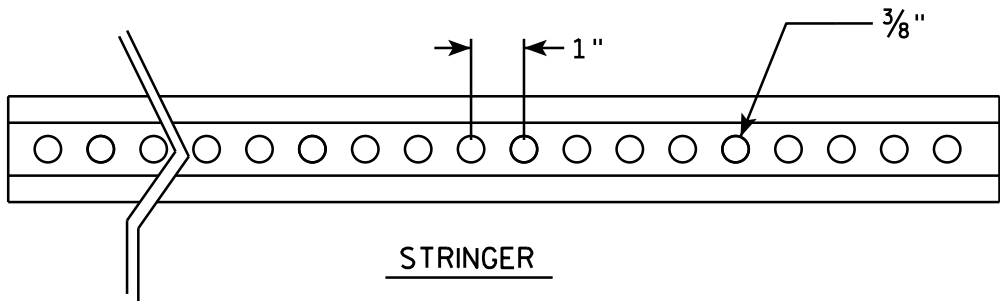
MULTI-PIECE ALUMINUM SIGN

\* DO NOT PUT RADIUS ON INSIDE CORNERS

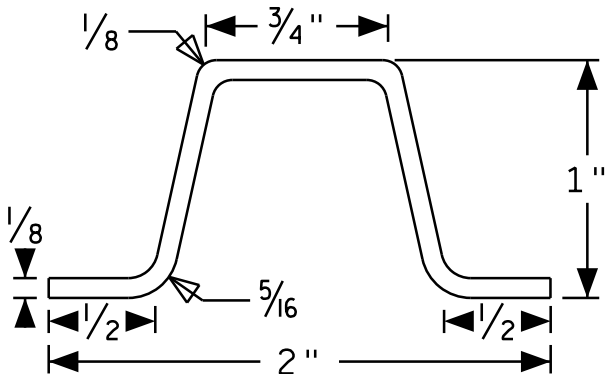
### GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

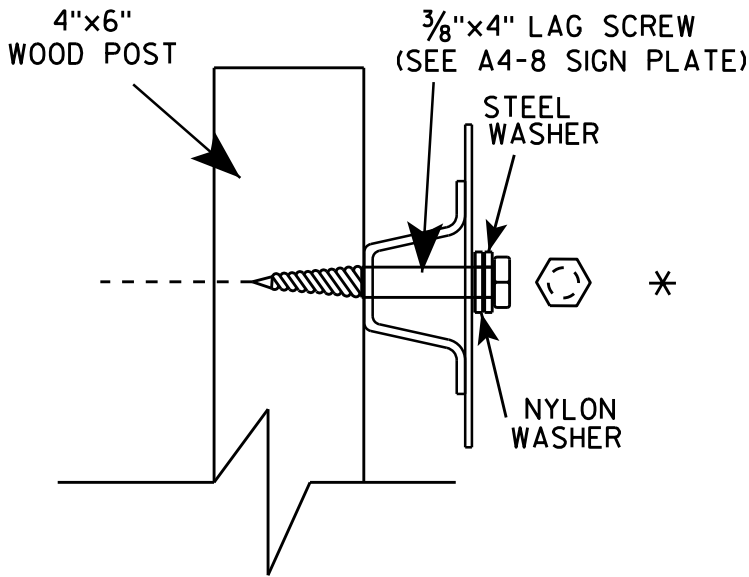
| SIGN WIDTH | STRINGER WIDTH | POSTS | HOLE SPACING | MOUNTING HOLES |         |         |                   |
|------------|----------------|-------|--------------|----------------|---------|---------|-------------------|
| 78"        | 72"            | 2     | 16"          | 15"            | 31"     | 47"     | 63"               |
| 84"        | 72"            | 2     | 17"          | 16 1/2"        | 33 1/2" | 50 1/2" | 67 1/2"           |
| 90"        | 72"            | 2     | 18"          | 18"            | 36"     | 54"     | 72"               |
| 96"        | 90"            | 2     | 19"          | 19 1/2"        | 38 1/2" | 57 1/2" | 76 1/2"           |
| 102"       | 90"            | 2     | 20"          | 21"            | 41"     | 61"     | 81"               |
| 108"       | 90"            | 2     | 21"          | 22 1/2"        | 43 1/2" | 64 1/2" | 85 1/2"           |
| 114"       | 108"           | 3     | 15"          | 12"            | 27"     | 42"     | 57" 72" 87" 102"  |
| 120"       | 108"           | 3     | 16"          | 12"            | 28"     | 44"     | 60" 76" 92" 108"  |
| 126"       | 108"           | 3     | 17"          | 12"            | 29"     | 46"     | 63" 80" 97" 114"  |
| 132"       | 126"           | 3     | 18"          | 12"            | 30"     | 48"     | 66" 84" 102" 120" |
| 138"       | 126"           | 3     | 19"          | 12"            | 31"     | 50"     | 69" 88" 107" 126" |
| 144"       | 126"           | 3     | 20"          | 12"            | 32"     | 52"     | 72" 92" 112" 132" |



CROSS SECTION VIEW OF CHANNEL



### POST MOUNTING



SIGN STRINGER  
MOUNTING REQUIREMENTS

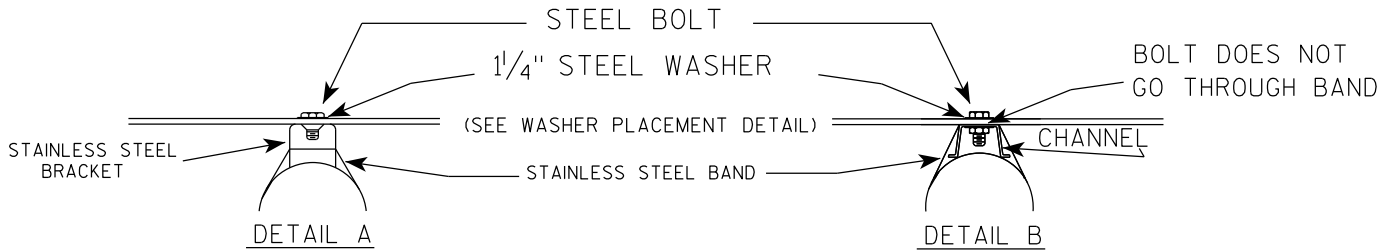
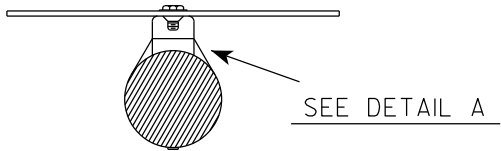
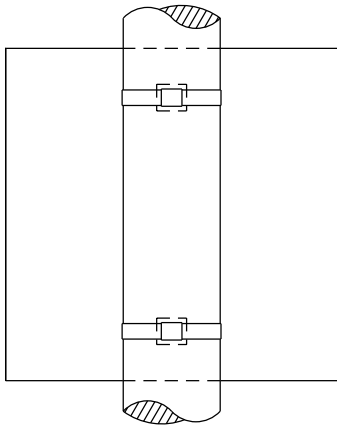
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

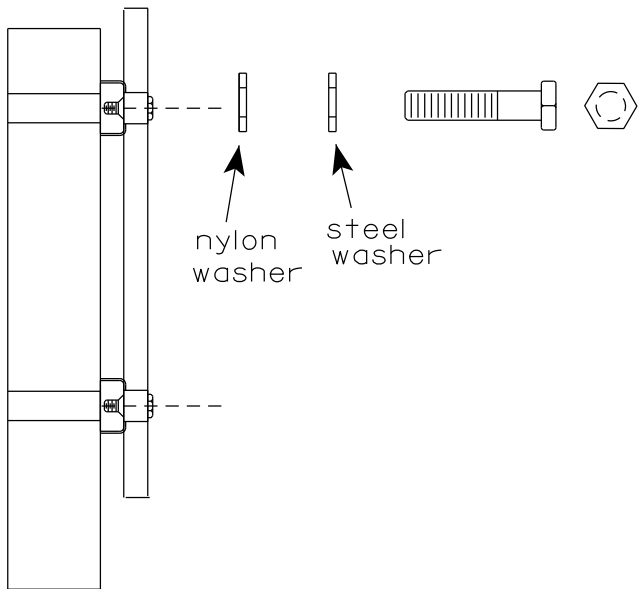
DATE 4/26/16 PLATE No. A4-18.1  
67

BANDING

SINGLE SIGN



WASHER PLACEMENT

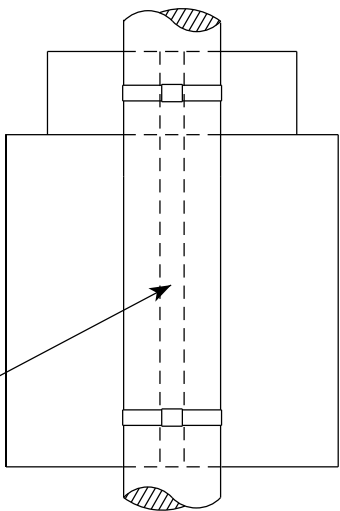


WASHERS (ALL POSTS) -  
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL  
1-1/4" O.D. X 3/8" I.D. X .080 NYLON  
FOR ALL TYPE H SIGNS

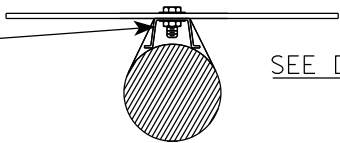
GENERAL NOTES

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.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
  - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
  - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



CHANNEL  
SEE TYPICAL PANEL  
INSTALLATION SHEET

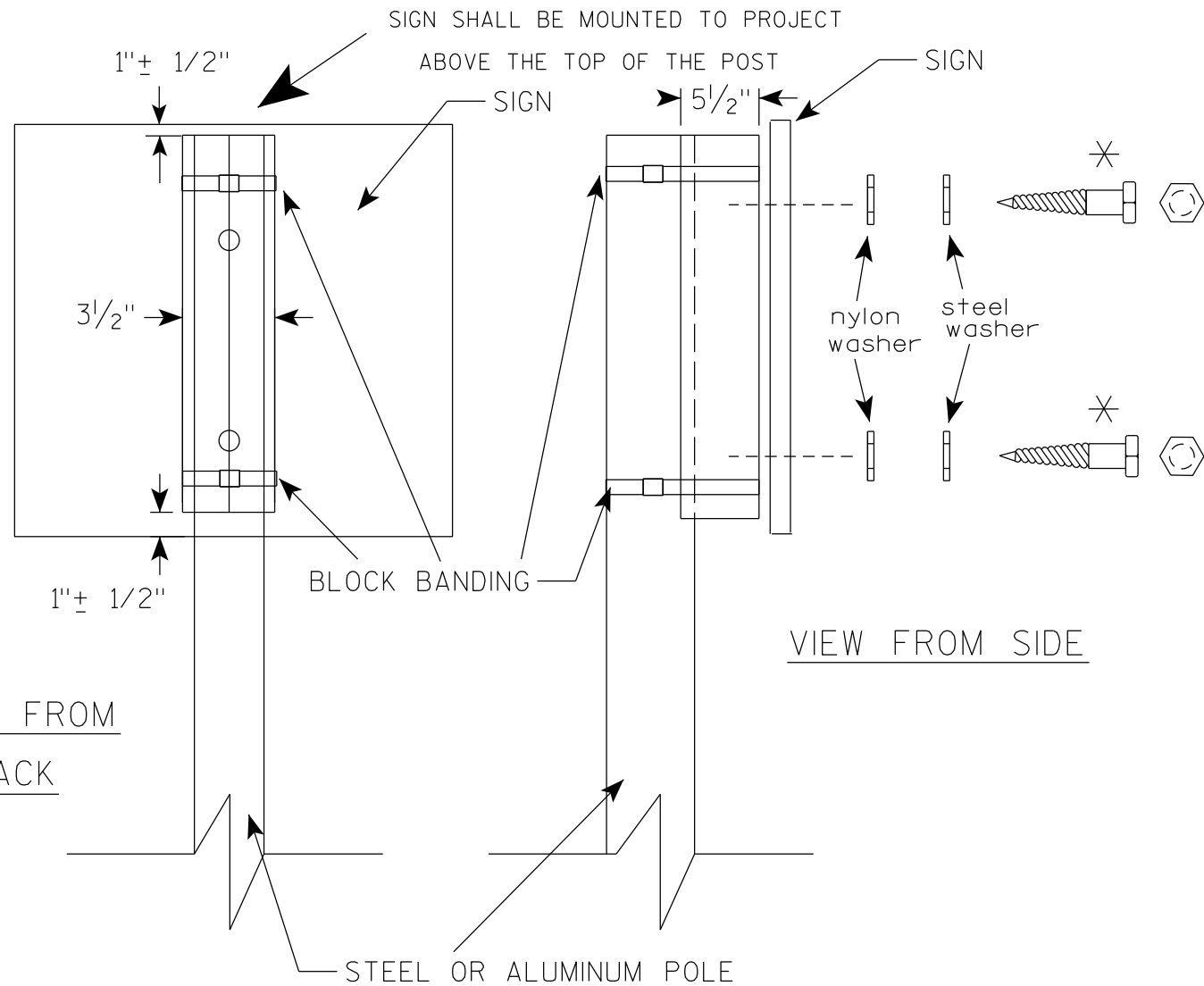


STANDARD SIGN  
SIGN BANDING DETAILS

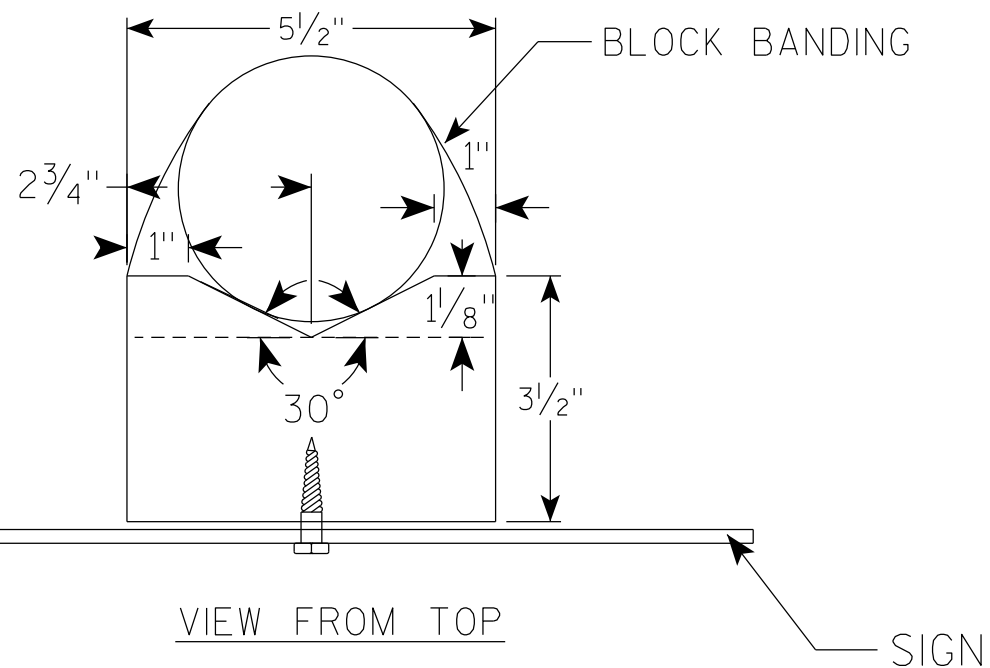
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM  
BACK



VIEW FROM SIDE



## 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,  $\frac{3}{4}$ " 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 NORMALLY 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
  - b. 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  $1\frac{1}{4}$ " O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE  $1\frac{1}{4}$ " O.D. X  $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE  $\frac{3}{8}$ " X  $2\frac{1}{2}$ "

BLOCK BANDING DETAIL  
( V-BLOCK OPTION )

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

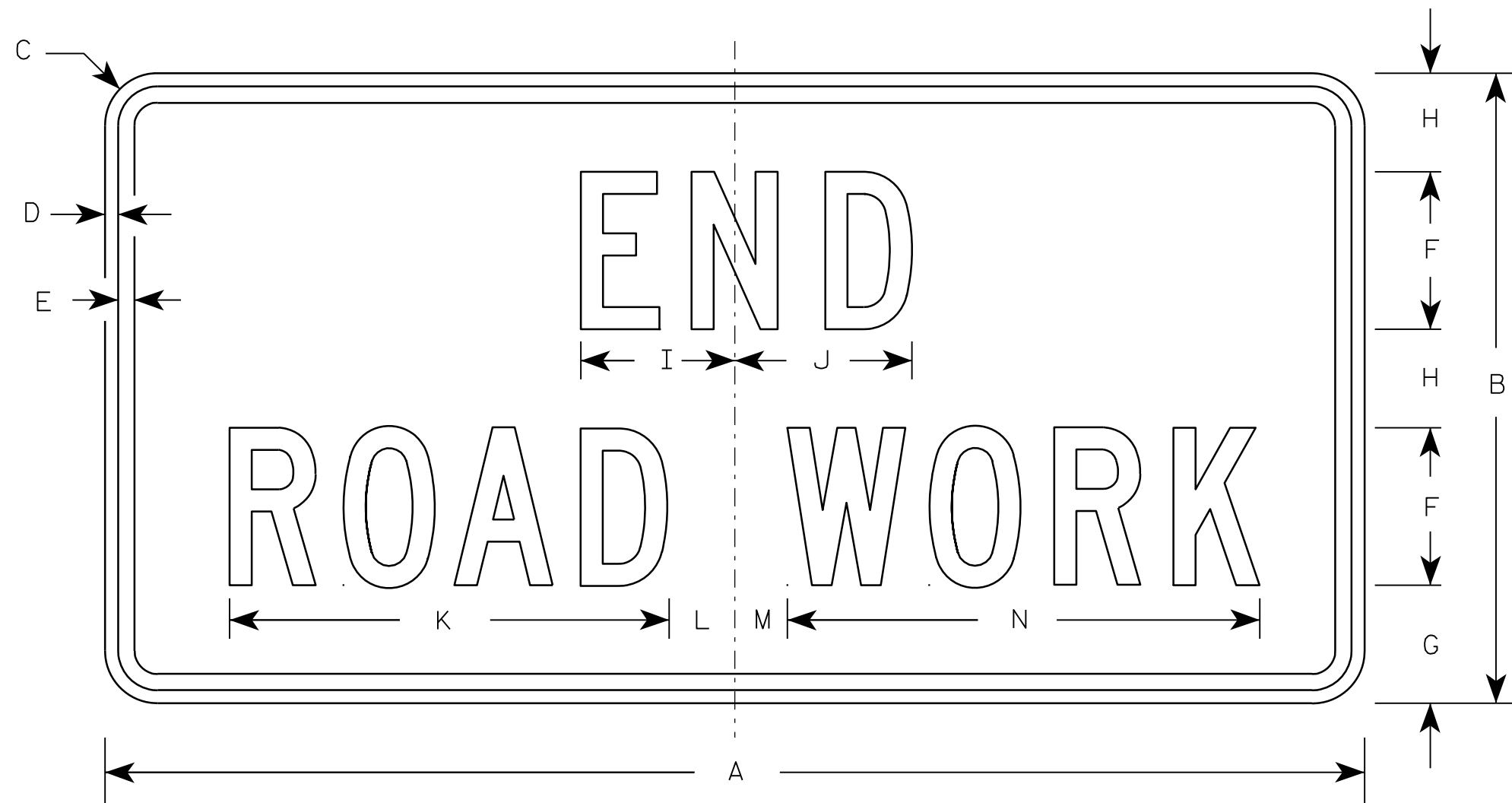
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO: 69

E

7



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<br>sq. ft. | Area<br>m <sup>2</sup> |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-------|--------|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 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

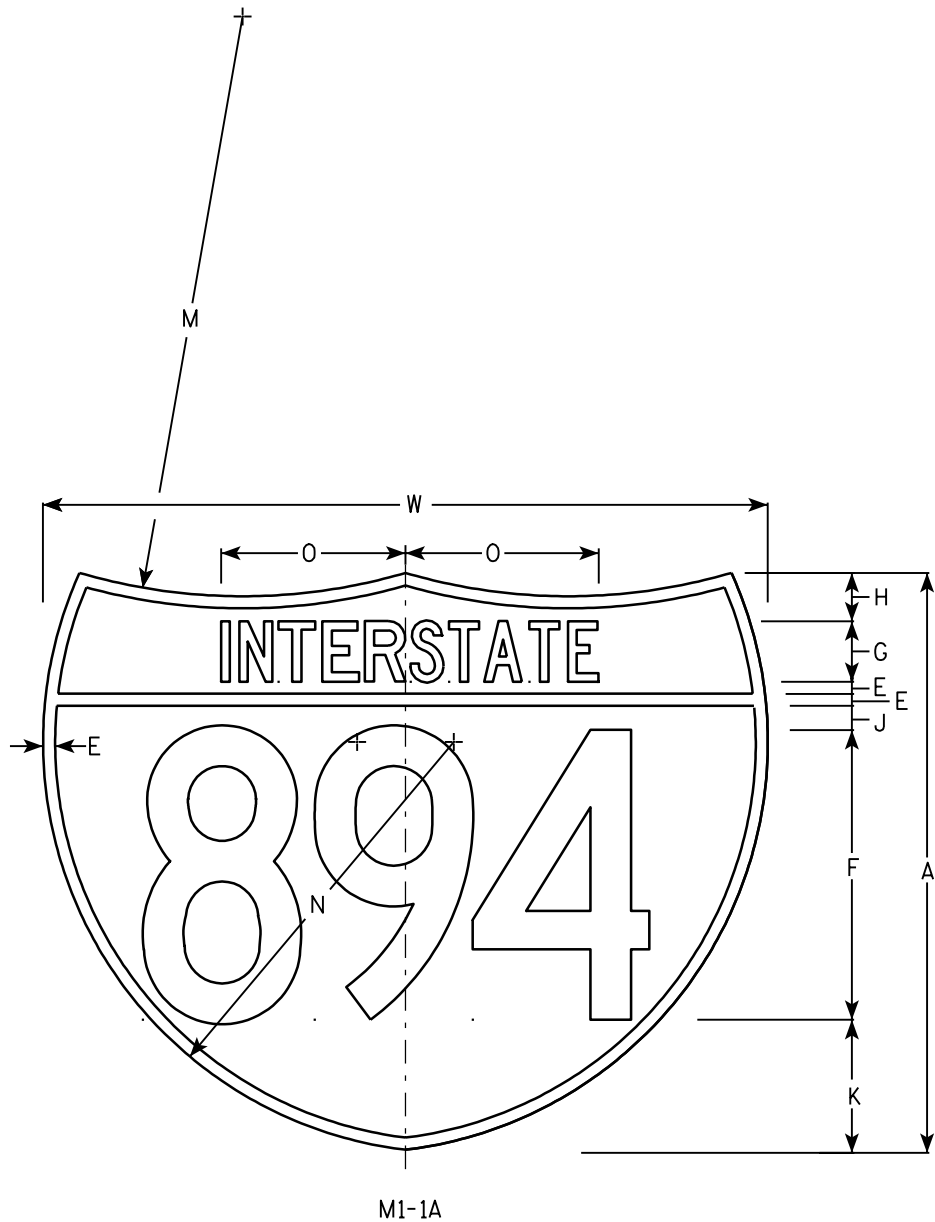
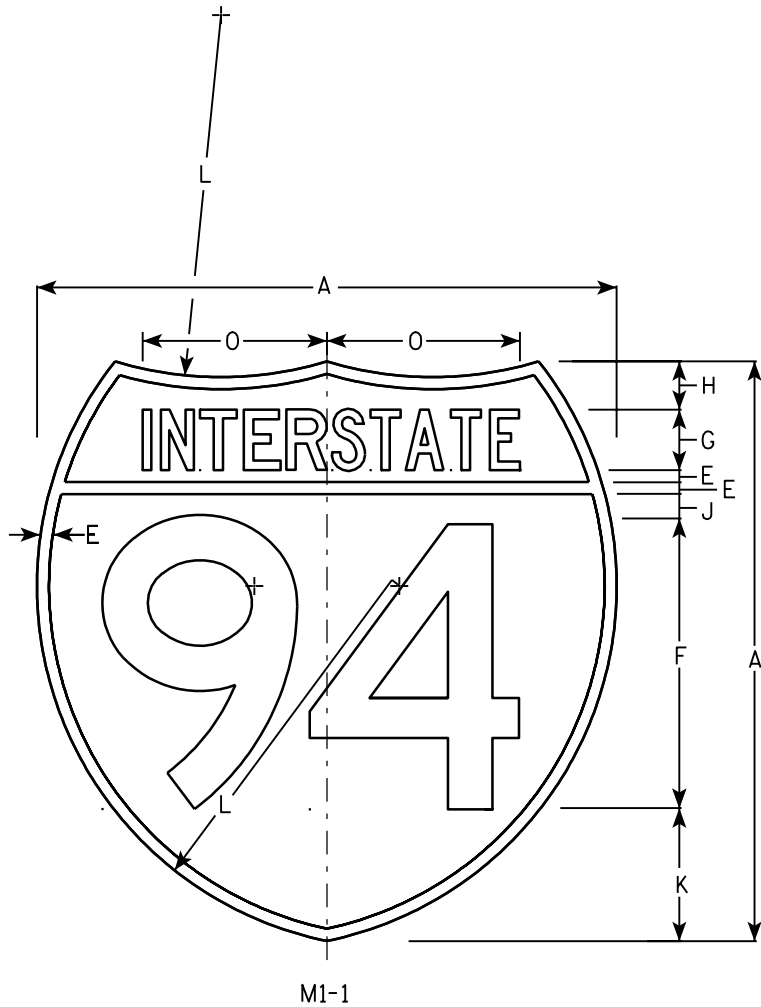
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

7



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 & adjust 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 | Area<br>sq. ft. | Area<br>sq. ft. | Area<br>m <sup>2</sup> | Area<br>m <sup>2</sup> |
|------|----|---|---|---|-----|----|-------|---|---|-------|-------|--------|----|--------|--------|---|---|---|---|---|---|---|----|---|---|-----------------|-----------------|------------------------|------------------------|
| 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                   |

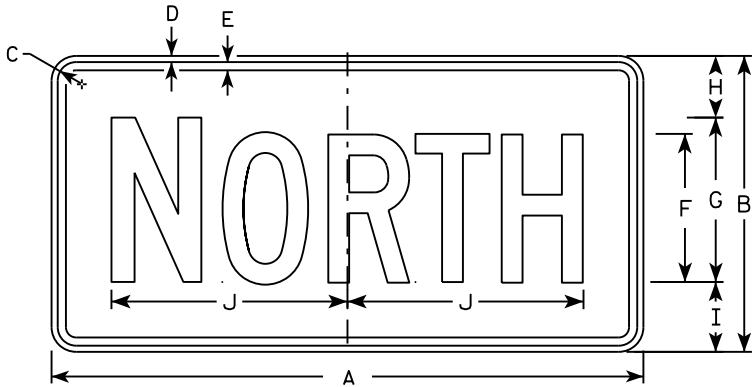
INTERSTATE ROUTE MARKER  
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

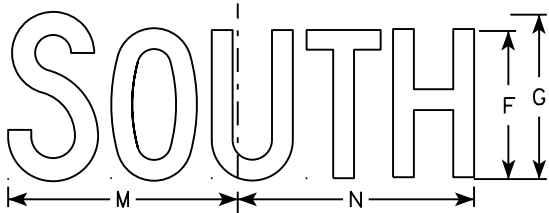




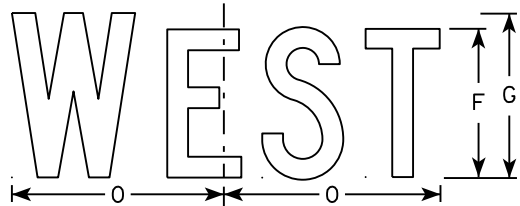
M3-1  
MM3-1  
MP3-1



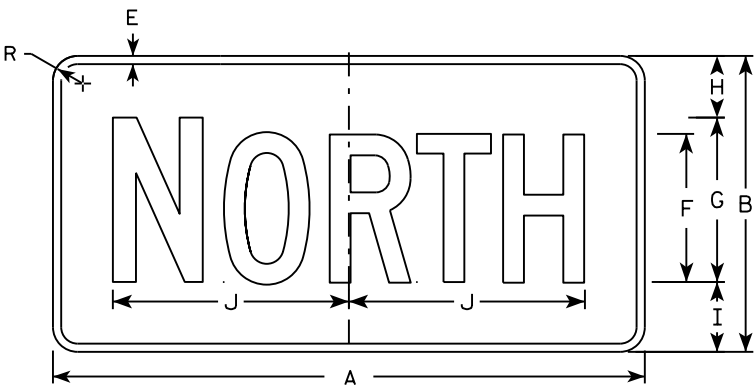
M3-2  
MM3-2  
MP3-2



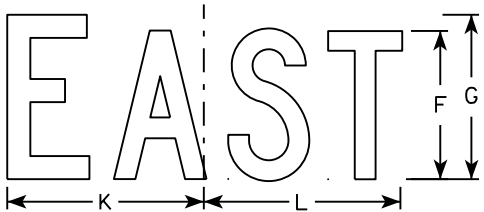
M3-3  
MM3-3  
MP3-3



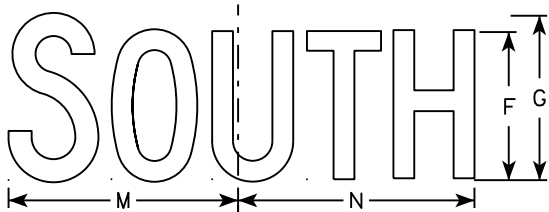
M3-4  
MM3-4  
MP3-4



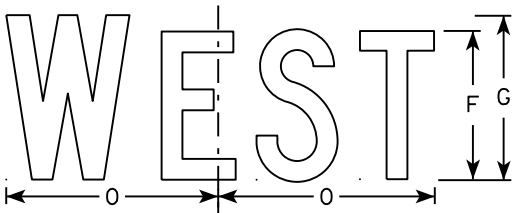
MB3-1  
MK3-1  
MN3-1



MB3-2  
MK3-2  
MN3-2



MB3-3  
MK3-3  
MN3-3



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.

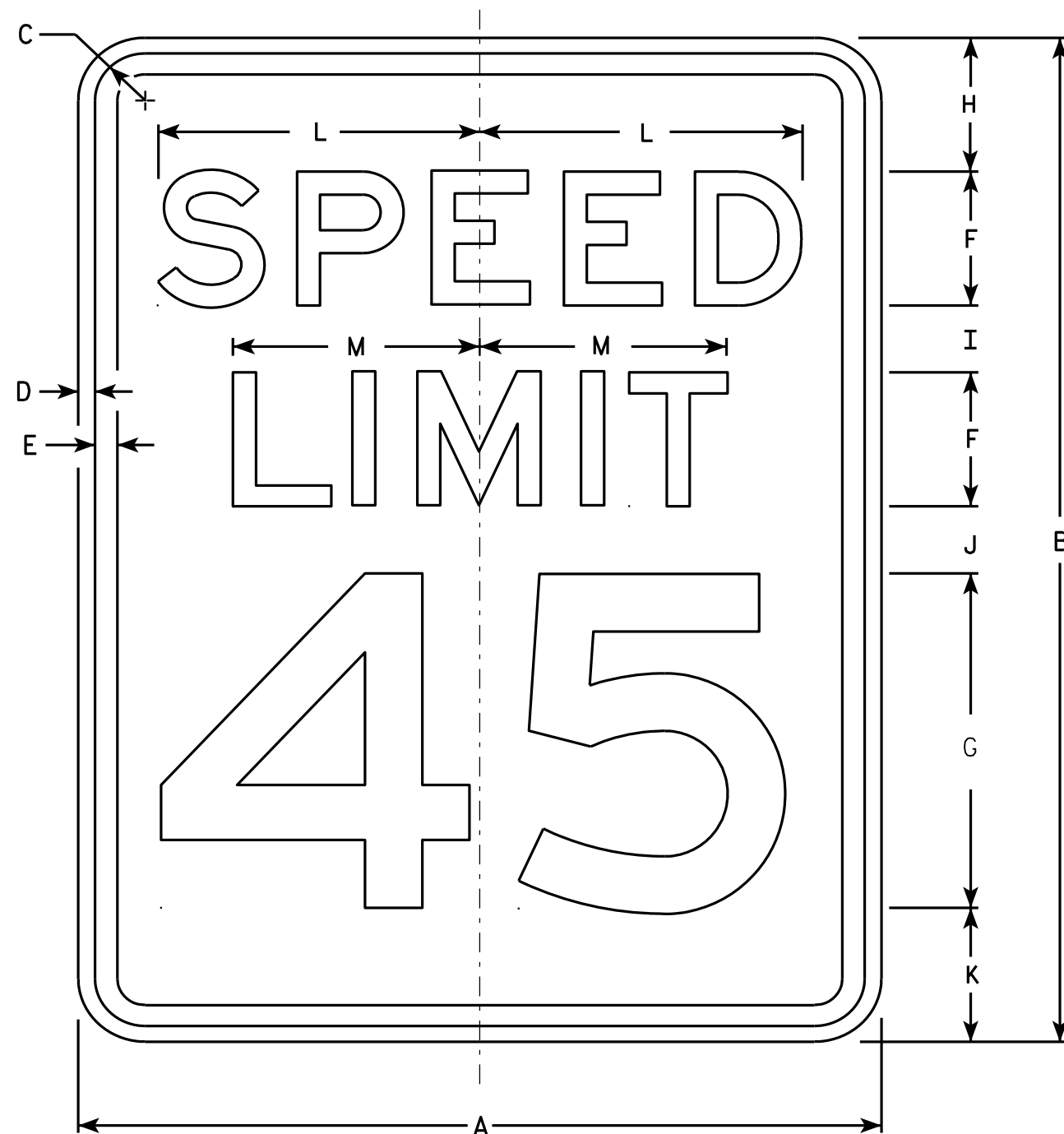
| SIZE | A  | B  | C     | D   | E   | F | G  | H     | I     | J      | K     | L      | M      | N      | O     | P | Q | R     | S | T | U | V | W | X | Y | Z | Area<br>sq. ft. |
|------|----|----|-------|-----|-----|---|----|-------|-------|--------|-------|--------|--------|--------|-------|---|---|-------|---|---|---|---|---|---|---|---|-----------------|
| 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 thru M3-4  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. 72 M3-1.14



R2-1

### 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 - 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.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

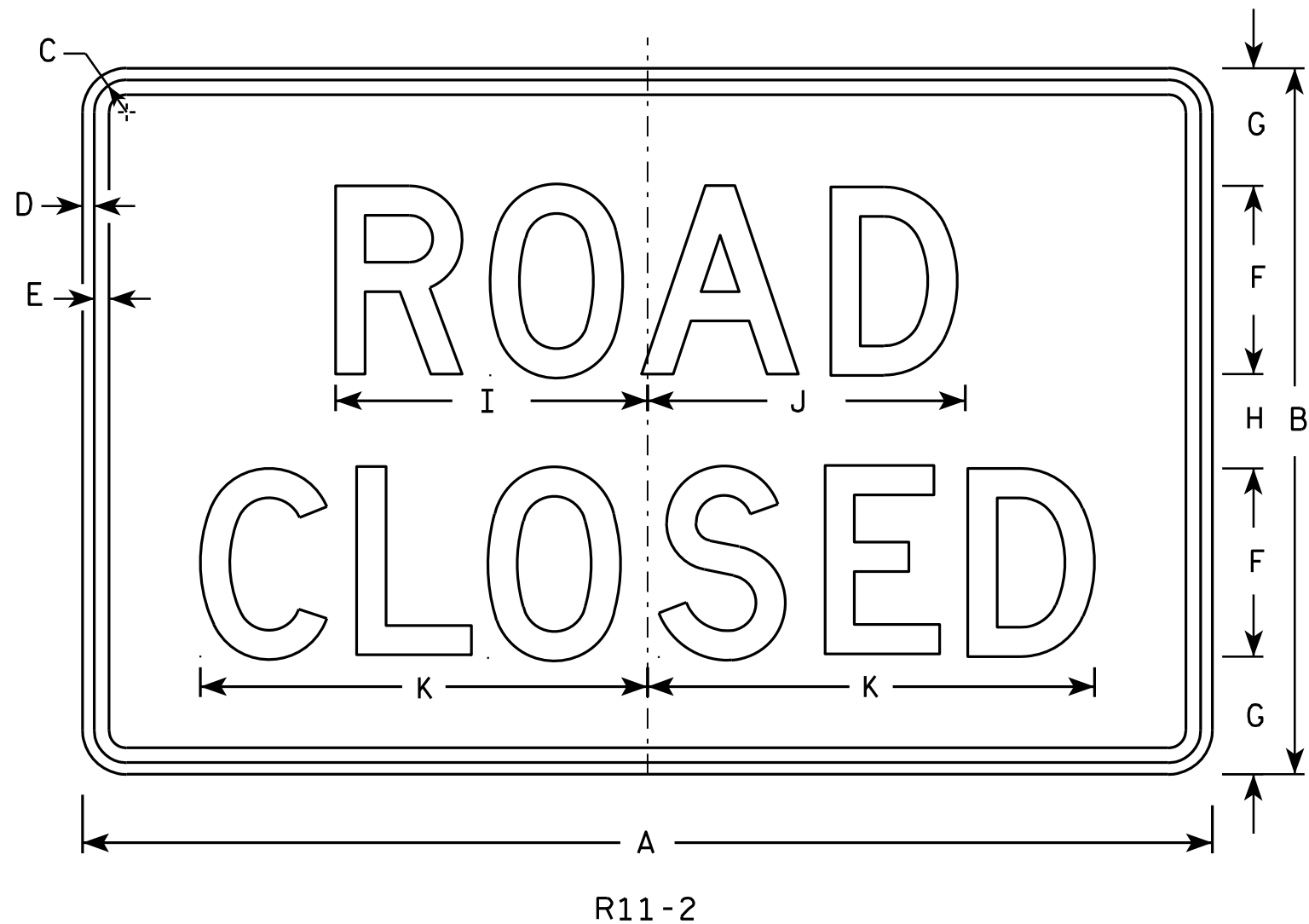
| SIZE | A  | B  | C     | D   | E   | F | G  | H | I     | J     | K     | L      | M      | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area<br>sq. ft. |
|------|----|----|-------|-----|-----|---|----|---|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 | 8  | 3 | 2     | 2     | 3     | 7 1/4  | 5 1/2  |   |   |   |   |   |   |   |   |   |   |   |   |   | 3.0             |
| 2S   | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 | 10 | 3 | 2 1/4 | 3 3/8 | 3 3/8 | 9 5/8  | 7 3/8  |   |   |   |   |   |   |   |   |   |   |   |   |   | 5.0             |
| 2M   | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 5 | 12 | 5 | 2 1/2 | 2 1/2 | 4     | 12     | 9 1/4  |   |   |   |   |   |   |   |   |   |   |   |   |   | 7.5             |
| 3    | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5     | 5     | 6     | 14 3/8 | 11     |   |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 4    | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5     | 5     | 6     | 14 3/8 | 11     |   |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 5    | 48 | 60 | 2 1/4 | 3/4 | 1   | 8 | 20 | 6 | 4 1/2 | 6 3/4 | 6 3/4 | 19 1/4 | 14 5/8 |   |   |   |   |   |   |   |   |   |   |   |   |   | 20.0            |

### STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION  
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer  
DATE 5/26/10 PLATE NO. R2-1.13

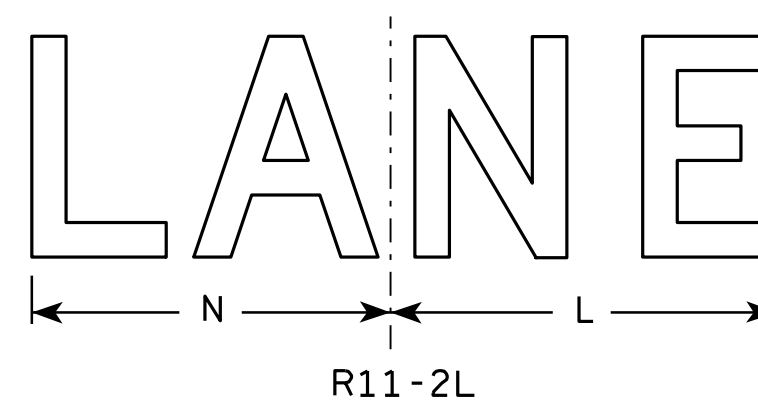
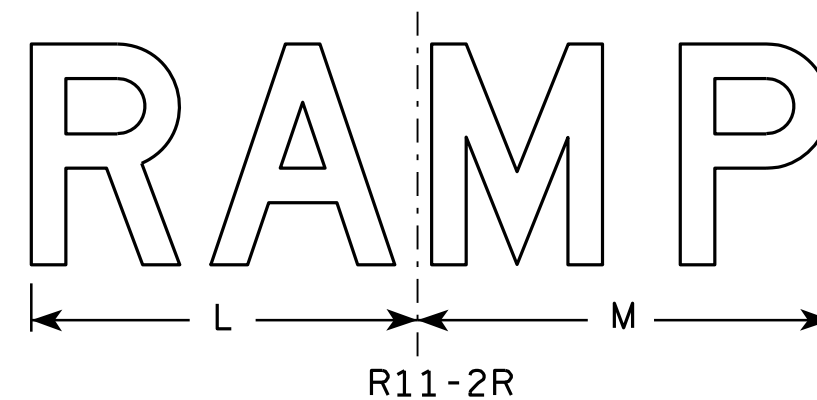
PROJECT NO: HWY: COUNTY: SHEET NO: 73 E





### 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 - 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.

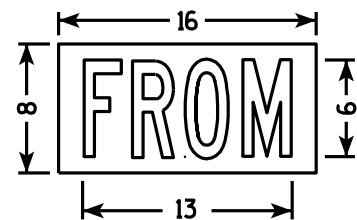
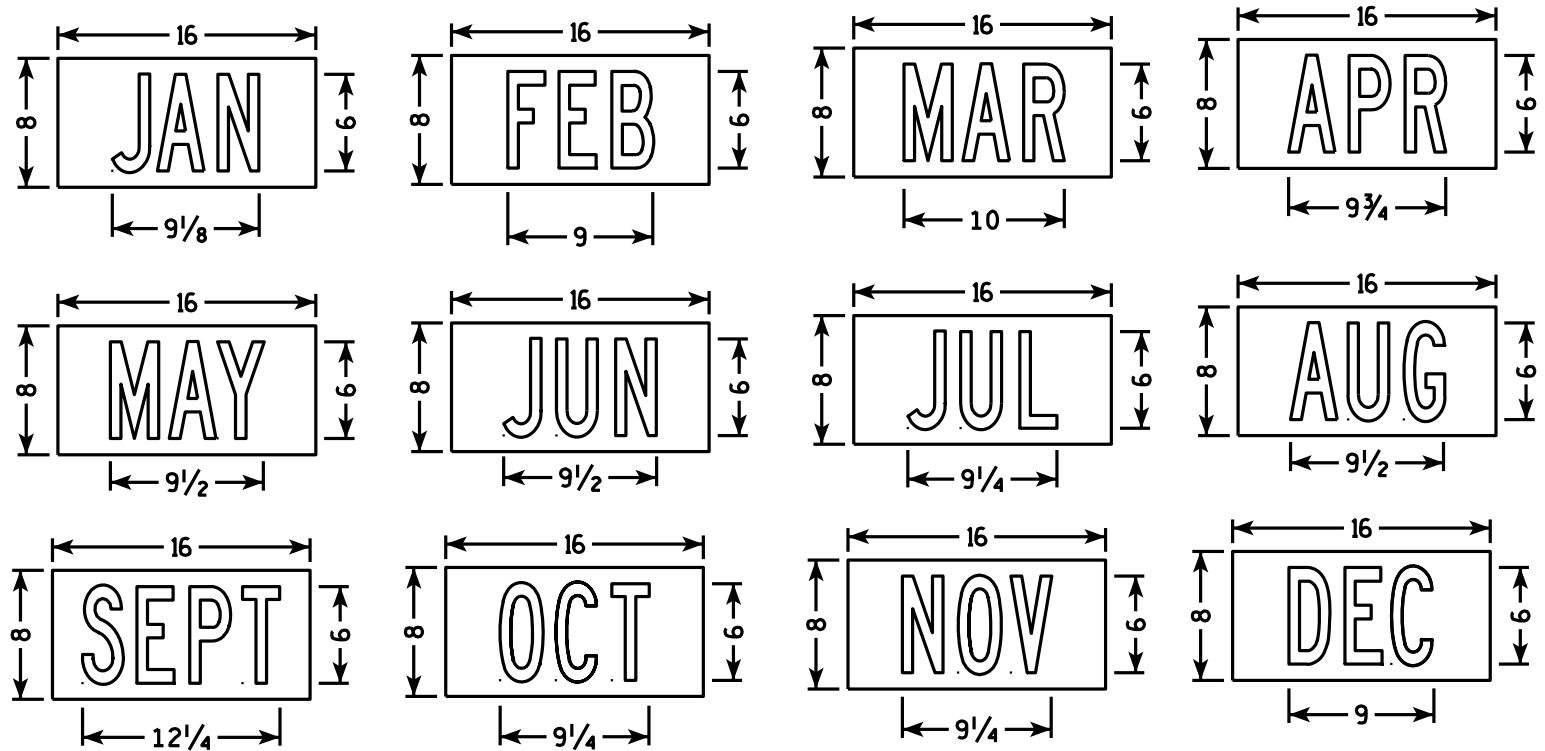
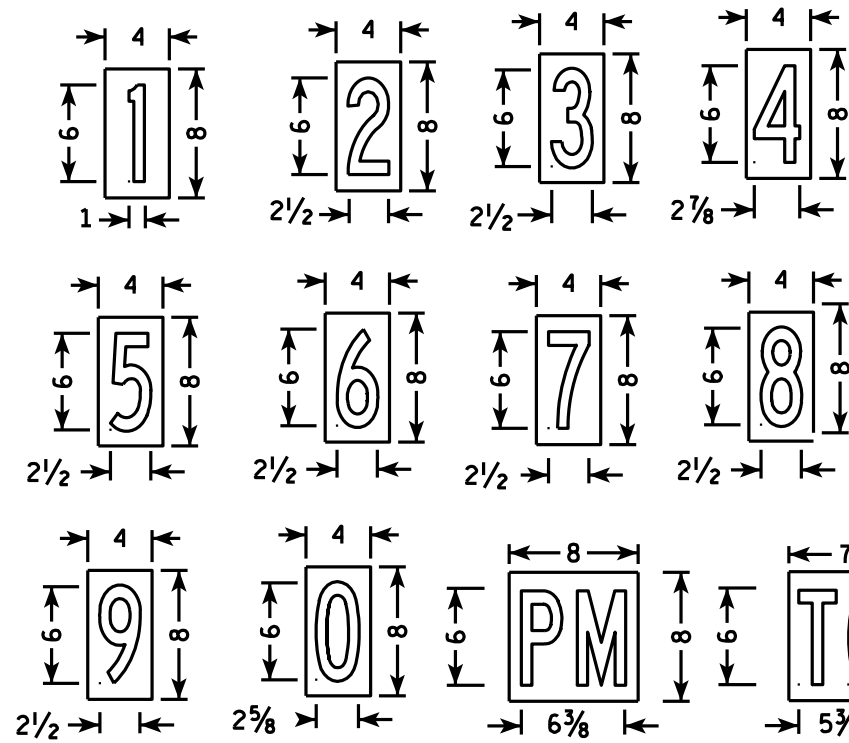
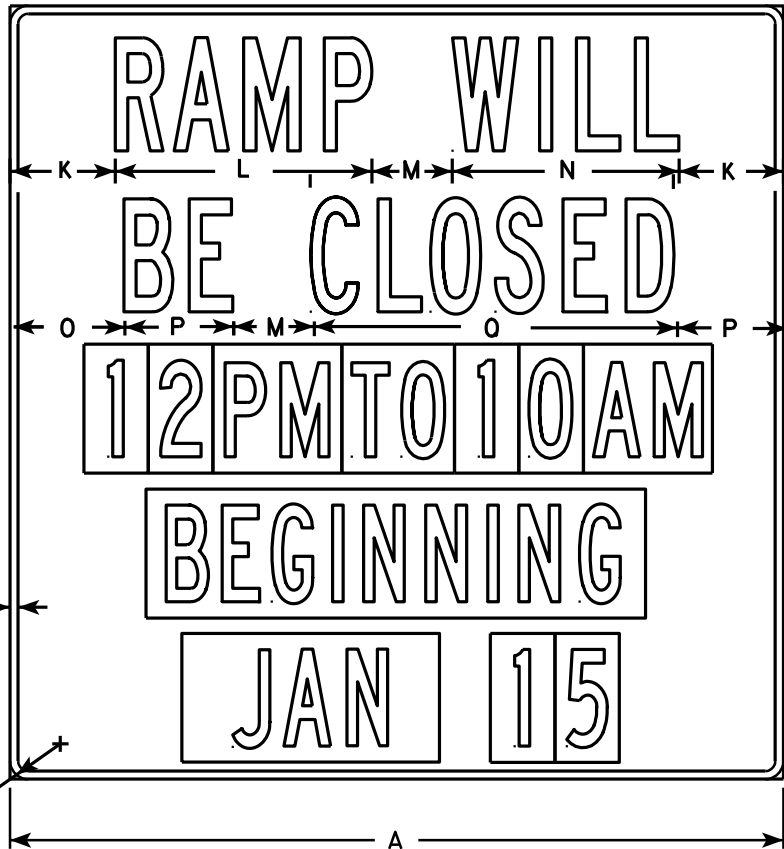


| SIZE | A  | B  | C     | D   | E   | F | G | H | I      | J      | K  | L  | M  | N  | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area<br>sq. ft. |
|------|----|----|-------|-----|-----|---|---|---|--------|--------|----|----|----|----|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 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: 74 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<br>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:

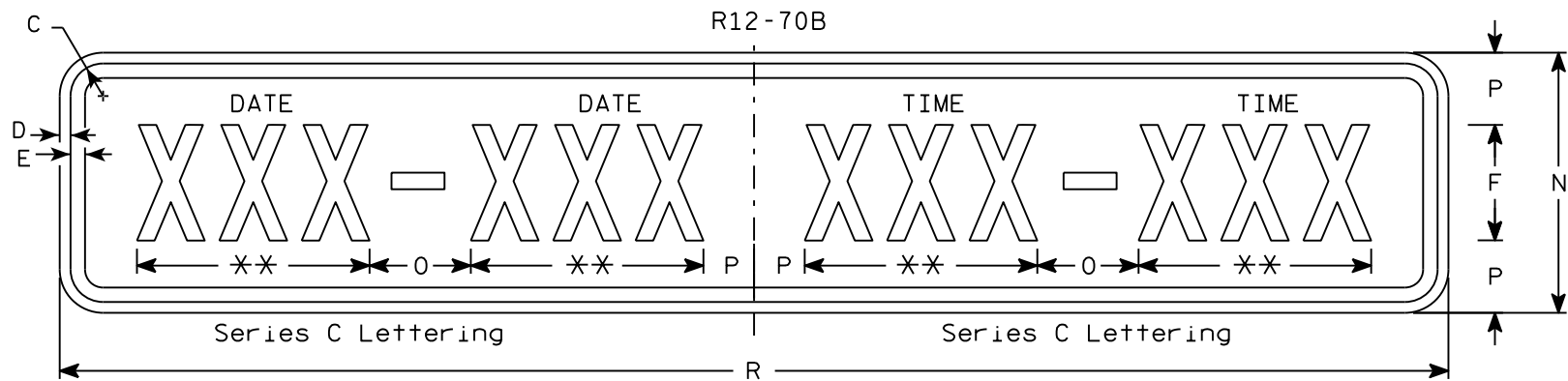
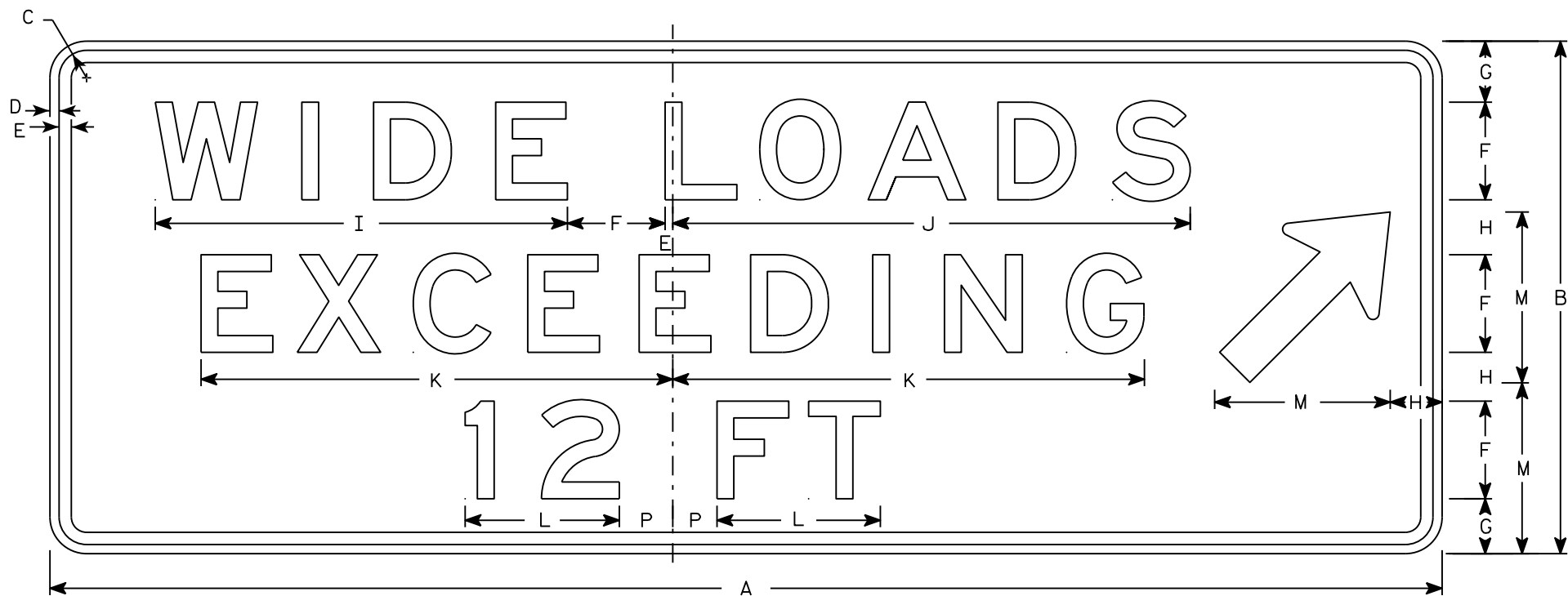
COUNTY:

SHEET NO: 75

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 - E except as noted
  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.
- \*\* Substitute appropriate message, optically center message



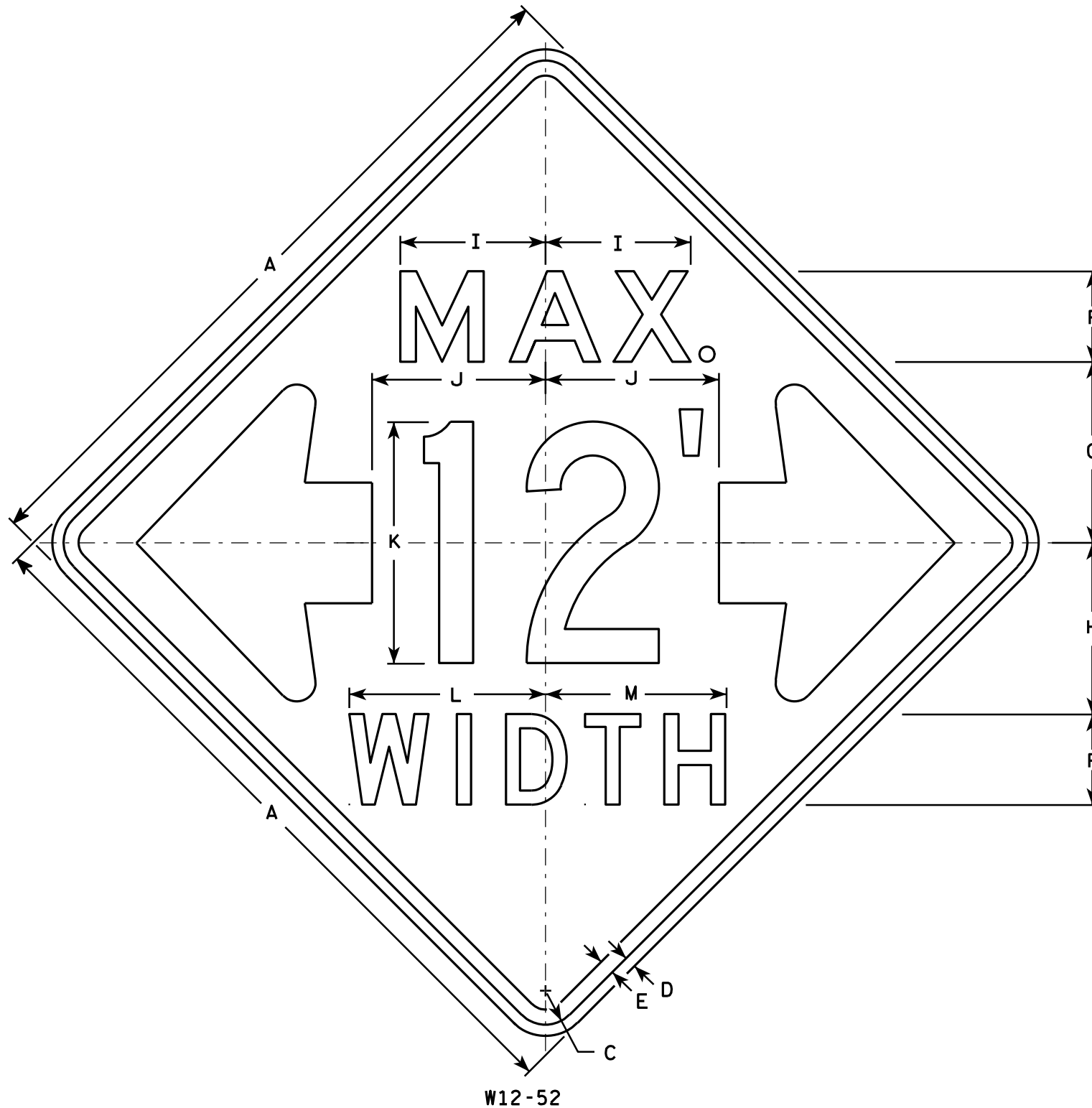
| R12-70C |     |    |       |     |     |   |   |   |        |        |        |       |    |    |   |       |   |    |   |   |   |   |   |   |   |   |                 | R12-70          | R12-70C |
|---------|-----|----|-------|-----|-----|---|---|---|--------|--------|--------|-------|----|----|---|-------|---|----|---|---|---|---|---|---|---|---|-----------------|-----------------|---------|
| 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<br>sq. ft. | Area<br>sq. ft. |         |
| 1       |     |    |       |     |     |   |   |   |        |        |        |       |    |    |   |       |   |    |   |   |   |   |   |   |   |   |                 |                 |         |
| 2S      | 90  | 36 | 2 1/4 | 1/2 | 5/8 | 6 | 4 | 5 | 20 7/8 | 28 3/8 | 24 5/8 | 8 1/8 | 12 | 12 | 6 | 3     |   | 66 |   |   |   |   |   |   |   |   | 22.5            | 5.5             |         |
| 2M      | 90  | 36 | 2 1/4 | 1/2 | 5/8 | 6 | 4 | 5 | 20 7/8 | 28 3/8 | 24 5/8 | 8 1/8 | 12 | 12 | 6 | 3     |   | 66 |   |   |   |   |   |   |   |   | 22.5            | 5.5             |         |
| 3       |     |    |       |     |     |   |   |   |        |        |        |       |    |    |   |       |   |    |   |   |   |   |   |   |   |   |                 |                 |         |
| 4       | 114 | 42 | 2 1/4 | 3/4 | 1   | 8 | 5 | 4 | 34     | 42     | 39     | 13    | 14 | 18 | 7 | 3 1/2 |   | 96 |   |   |   |   |   |   |   |   | 36.75           | 12.0            |         |
| 5       | 114 | 42 | 2 1/4 | 3/4 | 1   | 8 | 5 | 4 | 34     | 42     | 39     | 13    | 14 | 18 | 7 | 3 1/2 |   | 96 |   |   |   |   |   |   |   |   | 36.75           | 12.0            |         |

TYPICAL SIGN  
R12-70B

WISCONSIN DEPT OF TRANSPORTATION

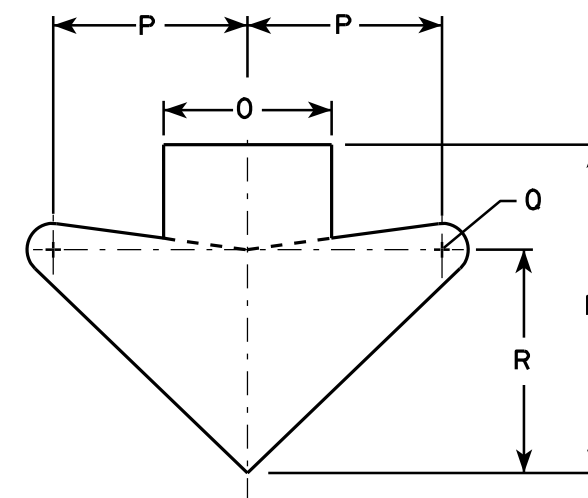
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/10/15 PLATE NO. R12-70B.3



# NOTES

- Sign Is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - Orange  
Message - Black
- Message Series - See note 5
- 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.
- The top line is series E, the numerals are series C, and the bottom line is series D.
- 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<br>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

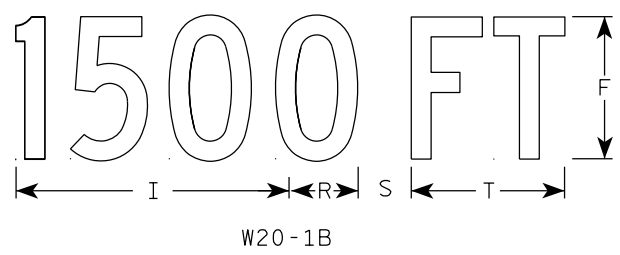
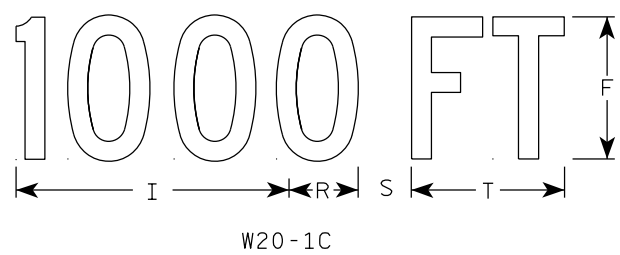
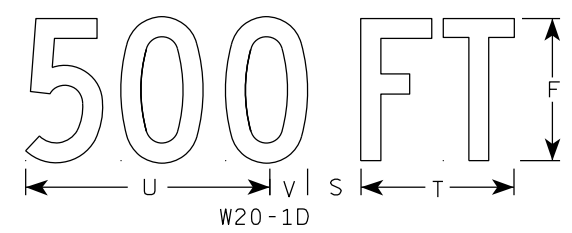
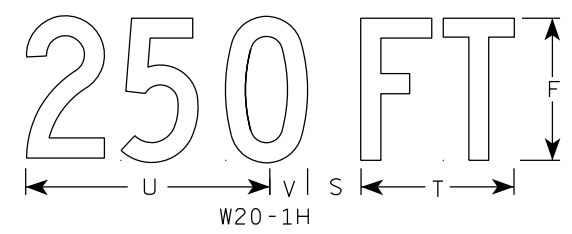
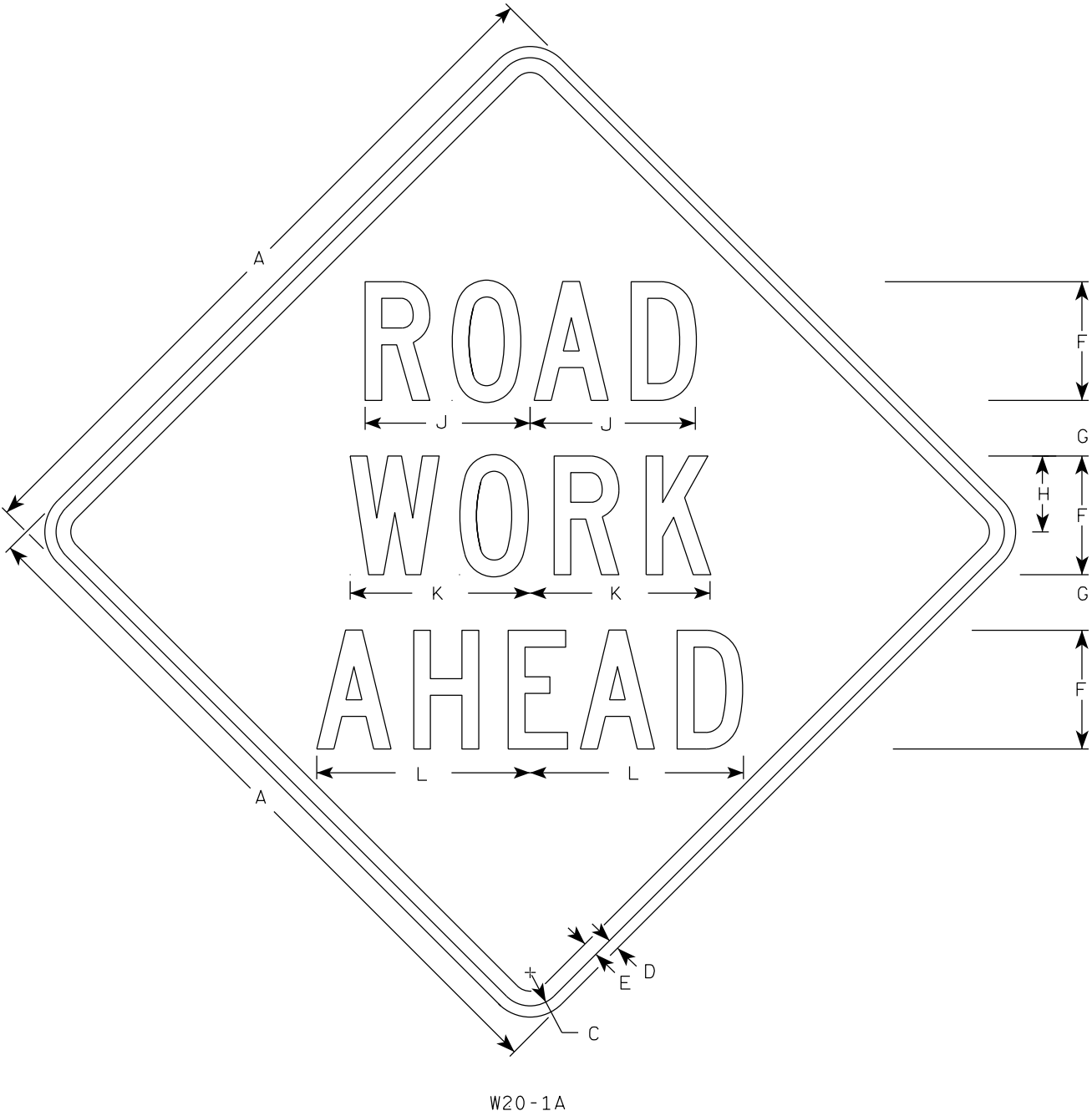
PROJECT NO:

HWY:

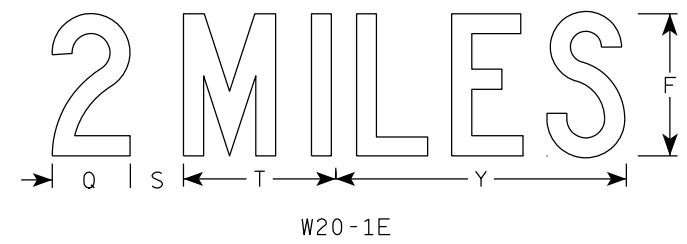
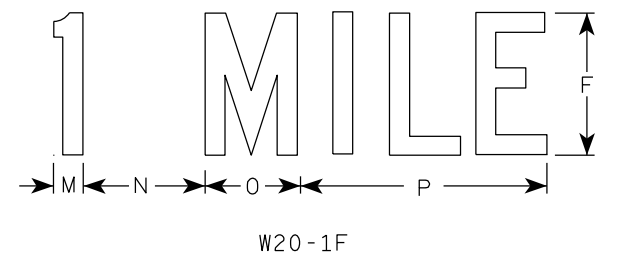
COUNTY:

SHEET NO: 77

E



- 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.



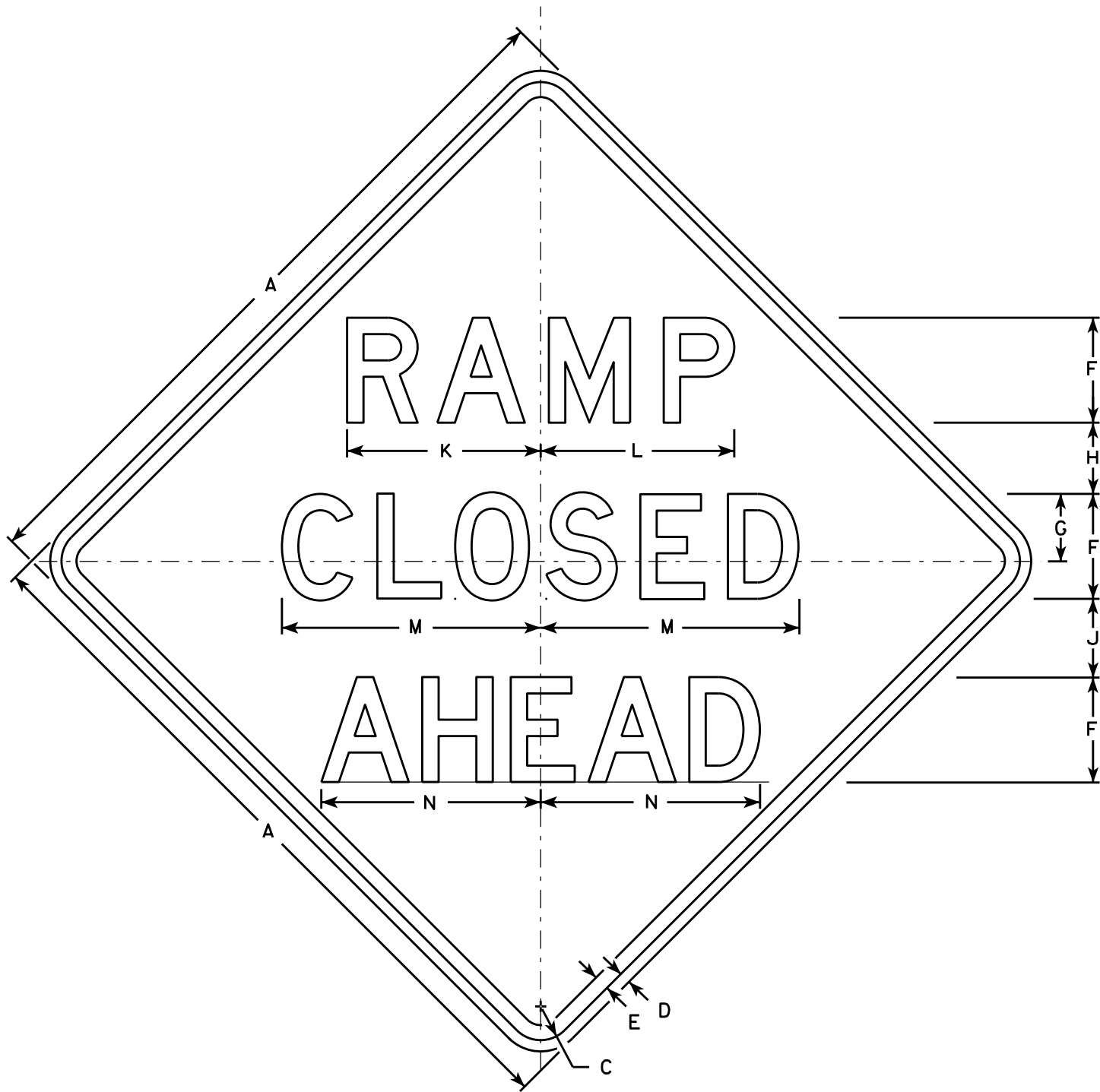
| SIZE | A  | B | C     | D   | E   | F | G     | H     | I      | J      | K      | L      | M     | N     | O     | P      | Q     | R     | S     | T     | U      | v     | W      | X     | Y      | Z | Area<br>sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|-------|-------|-------|-------|--------|-------|--------|-------|--------|---|-----------------|
| 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

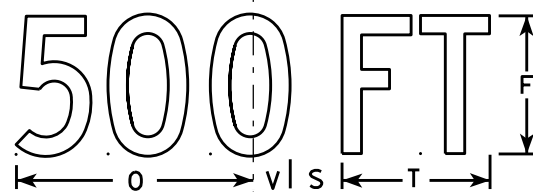
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

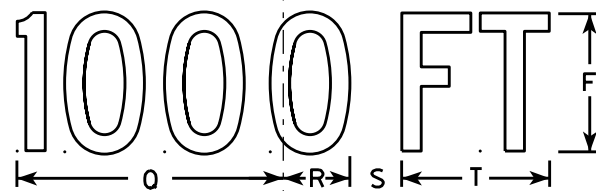
DATE 9/25/19 PLATE NO. W20-1.11



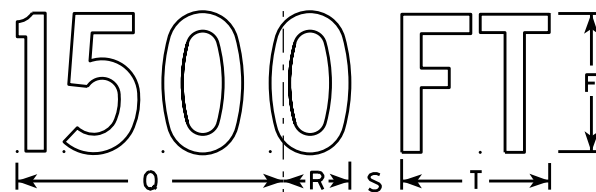
W20-53A



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<br>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:

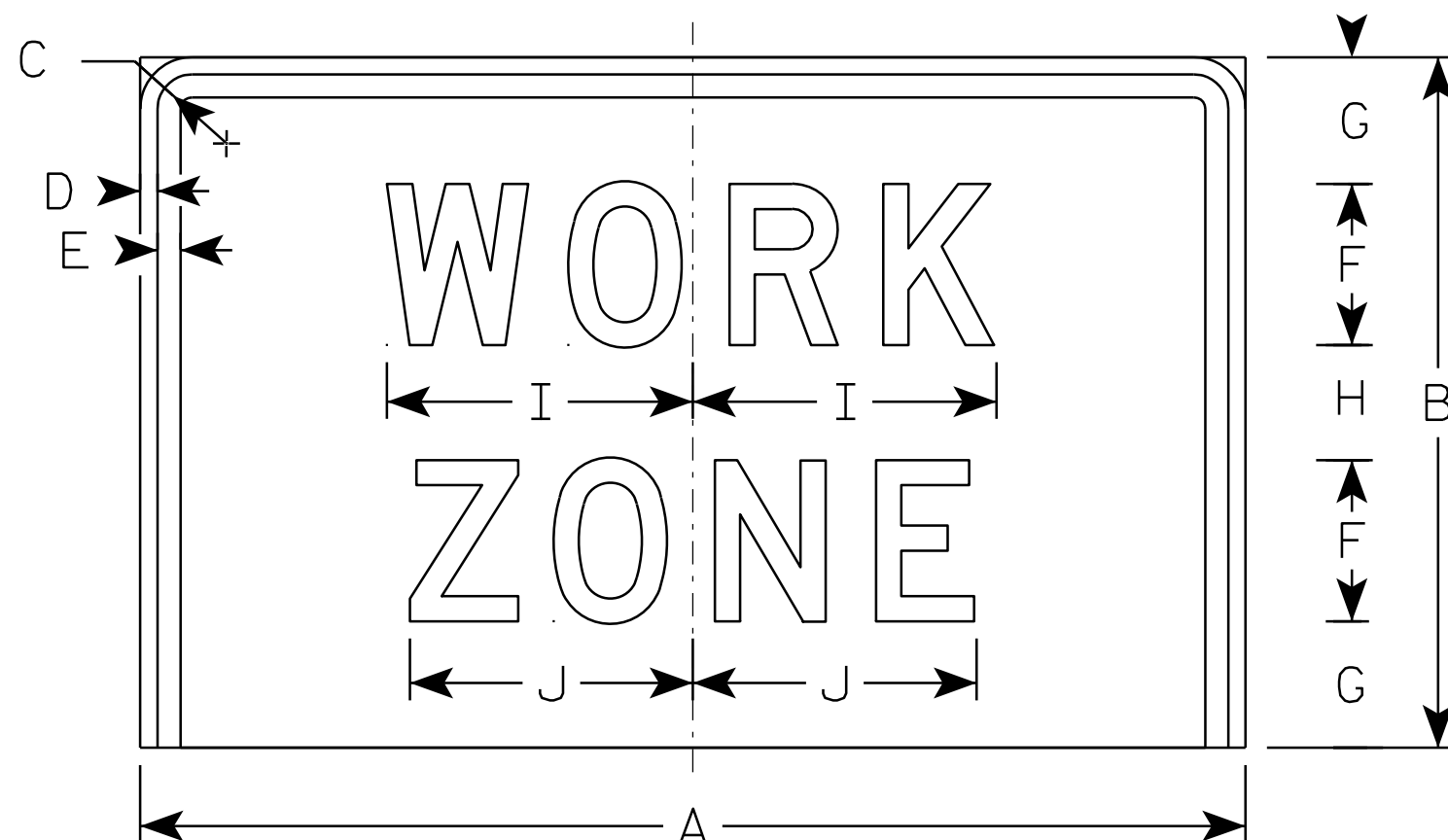
SHEET NO:

E



NOTES

1. Sign is Type II - Type F - reference  
WIS DOT Standard Specification for HIGHWAY  
and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Orange  
Message - Black
3. Message Series - D



W21-620

| 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<br>sq. ft. |
|------|----|----|-------|-----|---|---|-------|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 2S   | 48 | 30 | 2 1/4 | 3/4 | 1 | 7 | 5 1/2 | 5 | 13 1/4 | 12 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10.0            |
| 2M   | 48 | 30 | 2 1/4 | 3/4 | 1 | 7 | 5 1/2 | 5 | 13 1/4 | 12 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10.0            |
| 3    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 4    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 5    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |

STANDARD SIGN  
W21-620

WISCONSIN DEPT OF TRANSPORTATION

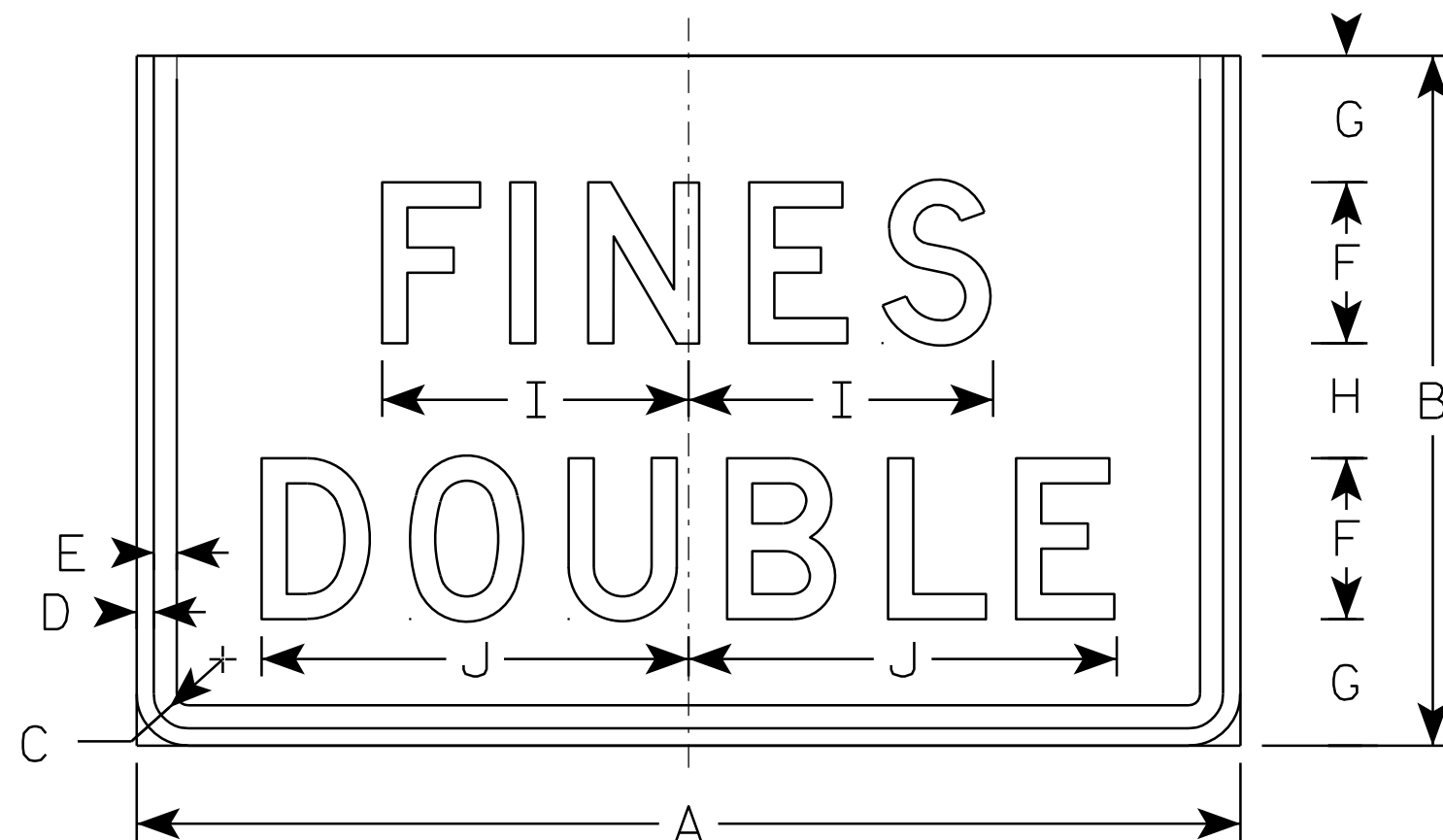
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-620.2

PROJECT NO: HWY: COUNTY: SHEET NO: 80 E

NOTES

1. Sign is Type II - Reflective - reference  
WIS DOT Standard Specification for HIGHWAY  
and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D



W21-62R

| 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<br>sq. ft. |
|------|----|----|-------|-----|---|---|-------|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 2S   | 48 | 30 | 2 1/4 | 3/4 | 1 | 7 | 5 1/2 | 5 | 13 1/4 | 18 5/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10.0            |
| 2M   | 48 | 30 | 2 1/4 | 3/4 | 1 | 7 | 5 1/2 | 5 | 13 1/4 | 18 5/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10.0            |
| 3    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 4    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| 5    |    |    |       |     |   |   |       |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |

STANDARD SIGN  
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

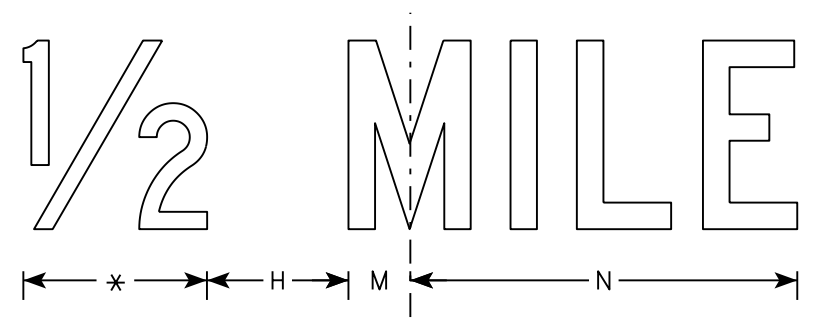
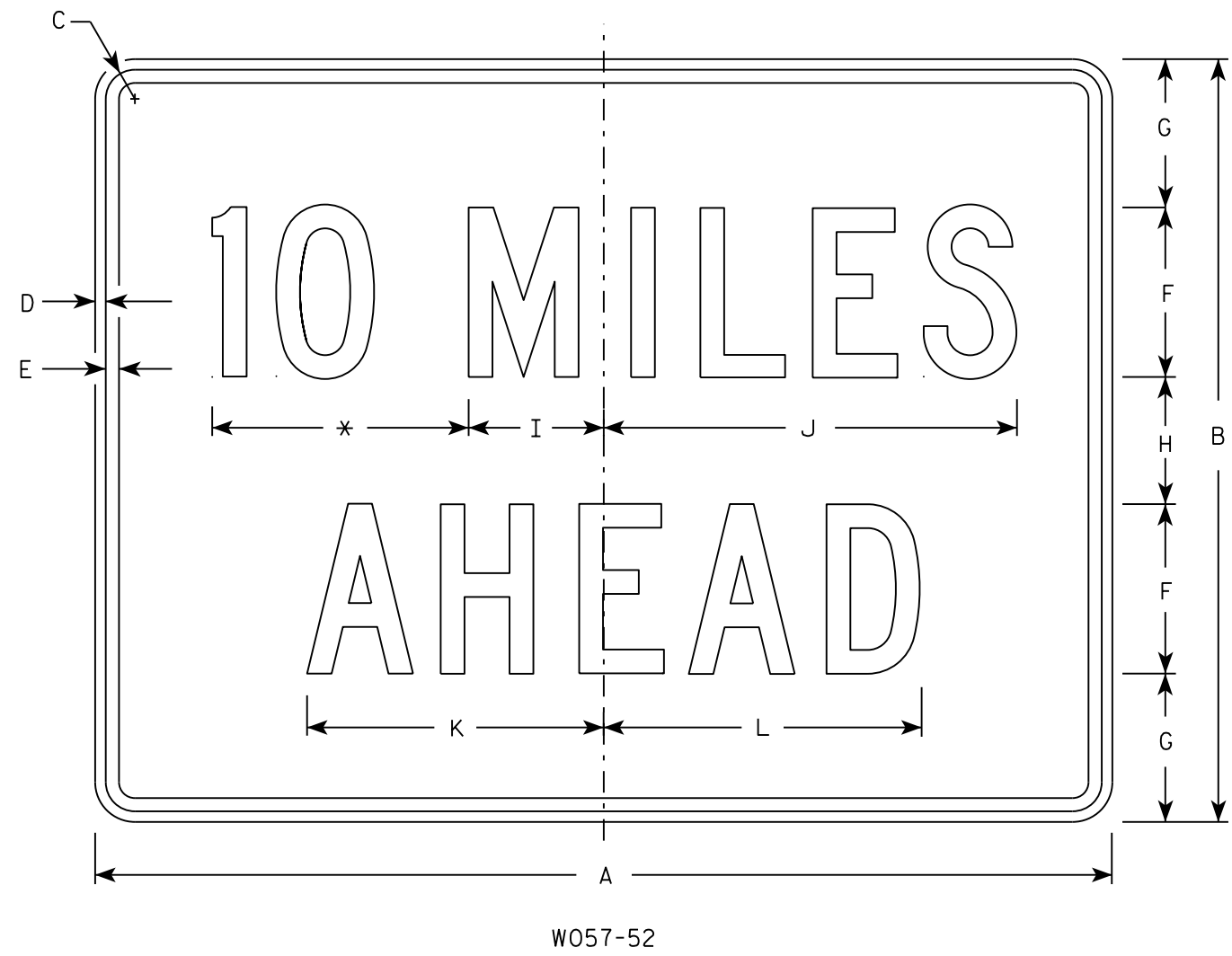
DATE 3/21/11 PLATE NO. W21-62R.2

PROJECT NO: HWY: COUNTY: SHEET NO: 81 E



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. Substitute appropriate numerals to the nearest quarter mile 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<br>sq. ft. |
|------|----|----|-------|-----|-----|---|-------|---|-------|--------|--------|--------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/2 | 3 | 4 3/4 | 14 5/8 | 10 5/8 | 11 3/8 | 2     | 12     |   |   |   |   |   |   |   |   |   |   |   |   | 6.0             |
| 2S   | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7     | 6 | 6 3/8 | 19 1/2 | 14     | 15     | 2 3/4 | 16 3/8 |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 2M   | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7     | 6 | 6 3/8 | 19 1/2 | 14     | 15     | 2 3/4 | 16 3/8 |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 3    | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7     | 6 | 6 3/8 | 19 1/2 | 14     | 15     | 2 3/4 | 16 3/8 |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 4    | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7     | 6 | 6 3/8 | 19 1/2 | 14     | 15     | 2 3/4 | 16 3/8 |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |
| 5    | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7     | 6 | 6 3/8 | 19 1/2 | 14     | 15     | 2 3/4 | 16 3/8 |   |   |   |   |   |   |   |   |   |   |   |   | 12.0            |

STANDARD SIGN  
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:

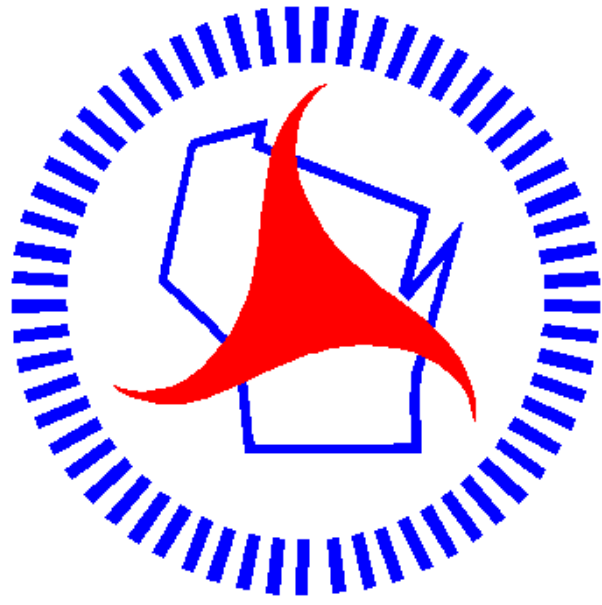
HWY:

COUNTY:

SHEET NO: 82

E

## Notes



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

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