MAD NOVEMBER 2023

PROJECT ID: 5845-01-70

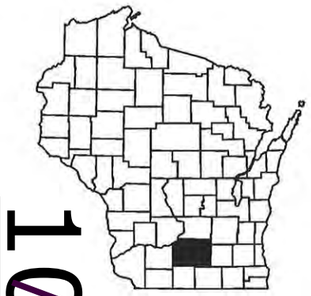
WITH: NA

COUNTY: DANE

ORDER OF SHEETS


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


TOTAL SHEETS = 400



10

N

DESIGN DESIGNATION 5845-01-00

| | | | |
|---|---|---|---|
| A.A.D.T. | 2024 | = | 11,600 |
| A.A.D.T. | 2044 | = | 13,000 |
| D.H.V. | | = | 10.2% |
| D.D. | | = | 67/33 |
| T. | | = | 5.4% |
| DESIGN SPEED | | = | 60 MPH |
| ESALS | | = | 2,500,000 |

CONVENTIONAL SYMBOLS

| PLAN | | PROFILE | |
|---|---|---|---|
| CORPORATE LIMITS | | GRADE LINE | |
| PROPERTY LINE | | ORIGINAL GROUND | |
| LOT LINE | | MARSH OR ROCK PROFILE (To be noted as such) | ROCK |
| LIMITED HIGHWAY EASEMENT | | SPECIAL DITCH | LABEL |
| EXISTING RIGHT OF WAY | | GRADE ELEVATION | 95.36 |
| PROPOSED OR NEW R/W LINE | | | |
| SLOPE INTERCEPT | | CULVERT (Profile View) | |
| REFERENCE LINE | 300'ES' | UTILITIES | |
| EXISTING CULVERT | | ELECTRIC | E |
| PROPOSED CULVERT (Box or Pipe) | | FIBER OPTIC | FO |
| COMBUSTIBLE FLUIDS | CAUTION | GAS | G |
| | | SANITARY SEWER | SAN |
| MARSH AREA | | STORM SEWER | SS |
| | | TELEPHONE | T |
| WOODED OR SHRUB AREA | | WATER | W |
| | | UTILITY PEDESTAL | |
| | | POWER POLE | |
| | | TELEPHONE POLE | |

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# STOUGHTON-MADISON

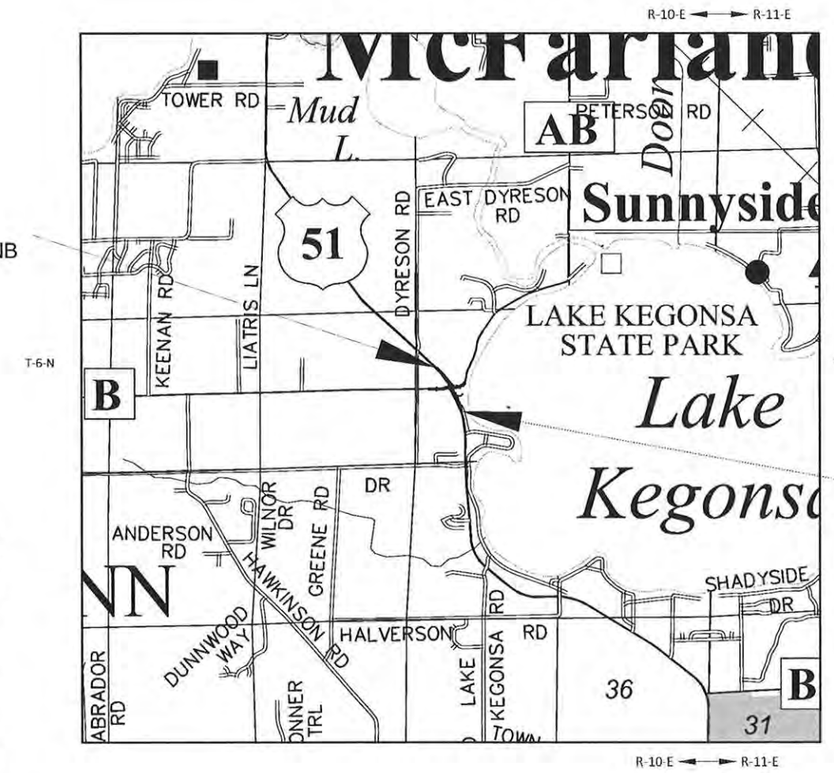
CTH B/CTH AB INTERSECTION

## USH 51

## DANE COUNTY

| STATE PROJECT NUMBER |
|---|
| 5845-01-70 |

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 5845-01-70 | WISC 2024023 | 1 |
| | | |
| | | |
| | | |




END PROJECT
STA 133+44.09 NB

BEGIN PROJECT
STA 115+50.00
X:848465.71
Y:443474.72

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.340 MILES

HORIZONTAL POSITIONS SHOWN ON THE PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCORS) DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARIE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. ELEVATIONS SHOWN ON THIS PLAN REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY:

STRAND ASSOCIATES

WISCONSIN
KYLE R. HENDERSON
E-42361
MADISON
WI
PROFESSIONAL ENGINEER
7/25/23

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | STRAND ASSOCIATES |
| Designer | STRAND ASSOCIATES |
| Project Manager | CHAD WAGNER |
| Regional Examiner | SW REGION |
| Regional Supervisor | JENNIFER KOBRYN |

APPROVED FOR THE DEPARTMENT

DATE: 7/27/23 Jennifer Kobryn (Signature)

E

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\010100_TI.DWG PLOT DATE : 7/25/2023 9:33 AM PLOT BY : HENDERSON, KYLE R. PLOT NAME :

## GENERAL NOTES

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OPERATIONS REQUIRE THEIR REMOVAL OR UNLESS THE ENGINEER APPROVES THEIR REMOVAL.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

THE LOCATION AND WIDTH OF DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

STORM SEWER PIPE ELEVATIONS, LENGTH, AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS IF APPROVED BY THE ENGINEER.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR BIKE LANE.

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

## HMA PAVEMENT SUMMARY TABLE

| USH 51 | | |
|---|---|---|
| LAYER | THICKNESS | HMA TYPE |
| UPPER LAYER | 2.5 | HMA 4 MT 58-28 S |
| LOWER LAYER | 3 | HMA 4 MT 58-28 S |

| SHOULDERS (ADJACENT TO CONCRETE PAVEMENT) | | |
|---|---|---|
| LAYER | THICKNESS | HMA TYPE |
| SINGLE LIFT | 3.5 | HMA 4 MT 58-28 S |

| CTH AB AND CTH B | | |
|---|---|---|
| LAYER | THICKNESS | HMA TYPE |
| UPPER LAYER | 2 | HMA 4 MT 58-28 S |
| LOWER LAYER | 2.5 | HMA 4 MT 58-28 S |

## SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
INTERSECTION DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
LIGHTING PLAN
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT DATA

## UTILITIES

### * COMMUNICATION LINE

MICHAEL VANBOVEN
AT&T WISCONSIN
411 7TH STREET
RACINE, WI 53403
PH: (262) 636-0514
mv3658@att.com

### * COMMUNICATION LINE

KYLE SMITH
CHARTER/SPECTRUM COMMUNICATIONS
2701 DANIELS STREET
MADISON, WI 53718
PH: (608) 575-1937
kyle.smith@charter.com

### * COMMUNICATION LINE

RJ CICATELLO JR
MCI COMMUNICATIONS
15725 WEST RYERSON ROAD
NEW BERLIN, WI 53151
PH: (262) 782-9836
randy.cicatello@verizon.com

### * ELECTRICITY

TESS SCHOBER
ALLIANT ENERGY
4902 NORTH BILTMORE LANE
MADISON, WI 53718
PH: (608) 458-3162
tessschober@alliantenergy.com

### * COMMUNICATION LINE

RUSS RYAN
FRONTIER COMMUNICATIONS OF WI LLC
118 DIVISION STREET
PLYMOUTH, WI 53073
PH: (920) 583-3275
russell.w.ryan@ftr.com

### * COMMUNICATION LINE

DAVID O'BRIEN
TDS METROCOM LLC
535 JUNCTION ROAD
MADISON, WI 53717
PH: (608) 664-0766
david.obrien@tdstelecom.com

### * GAS

TESS SCHOBER
ALLIANT ENERGY
4902 NORTH BILTMORE LANE
MADISON, WI 53718
PH: (608) 458-3162
tessschober@alliantenergy.com

### * SANITARY SEWER

CINDY LEHR
KEGONSA SANITARY DISTRICT
2240 US HIGHWAY 51
PO BOX 486
STOUGHTON, WI 53589
PH: (608) 873-0230
info@kegonsasanitarydistrict.com

## OTHER CONTACTS

### WISDOT REGION CONTACT

JENNIFER KOBRYN, P.E.
WISDOT SOUTHWEST REGION
MADISON OFFICE
2101 WRIGHT STREET
MADISON, WI 53704
PH: (608) 977-1467
jennifer.kobryn@dot.wi.gov

### WISDNR CONTACT

ERIC HEGGELUND
DNR - SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
PH: (608) 228-7927
eric.heggelund@wisconsin.gov

### DESIGN CONSULTANT

KYLE HENDERSON, P.E.
STRAND ASSOCIATES, INC.
910 WEST WINGRA DRIVE
MADISON, WI 53715
PH: (608) 251-4843
kyle.henderson@strand.com

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

*DENOTES DIGGERS HOTLINE MEMBERS

2

N

END PROJECT
STA 133+44.09 NB
MATCH EXISTING
SAWCUT REQUIRED

USH 51

135 NB

130 NB

ENVIRONMENTALLY SENSITIVE AREA

CTH AB

END CONSTRUCTION
STA 39+50.51 EB
MATCH EXISTING
SAWCUT REQUIRED

40 EB

S-13-0599

BEGIN CONSTRUCTION
STA 26+00.00 EB
MATCH EXISTING
SAWCUT REQUIRED

CTH B

25 EB

30 EB

125 NB

35 EB

S-13-0598

DYRESON RD

LAKE KEGONSA

TOWN OF
DUNN

120 NB

ENVIRONMENTALLY SENSITIVE AREA

USH 51

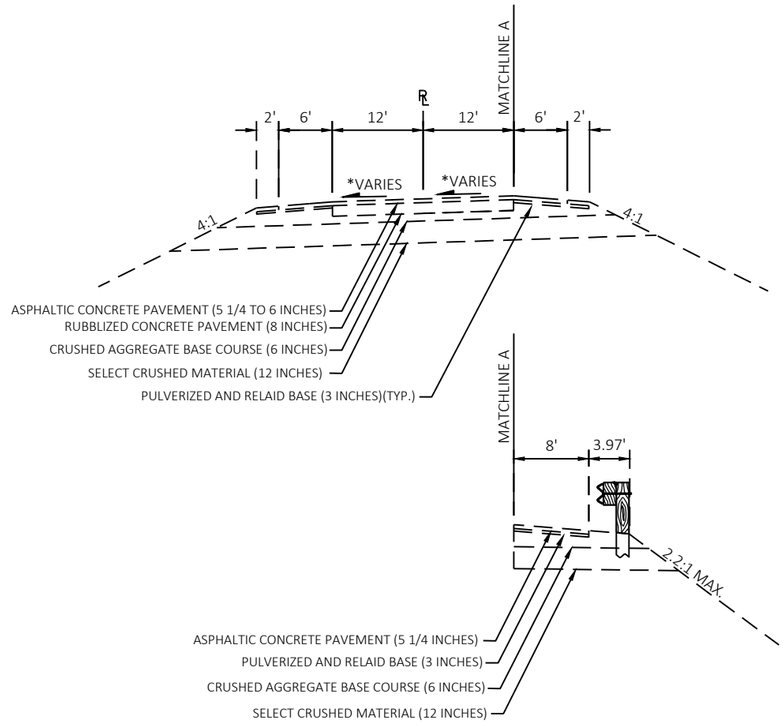
115 NB

USH 51 FRONTAGE ROAD

BEGIN PROJECT
STA 115+50.00 NB
X:848465.71
Y:443474.72
MATCH EXISTING
SAWCUT REQUIRED

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 020201_po
PLOT DATE : 8/1/2023 9:07 AM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

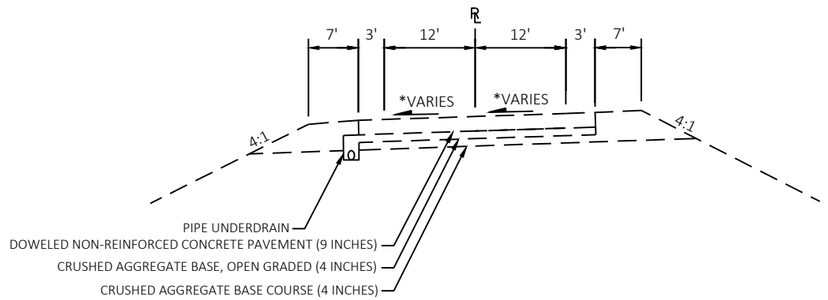



* SUPERELEVATION VARIES
2.2% TO 4.6%

STA. 115+50.00 NB - STA. 116+37.39 NB

## TYPICAL EXISTING SECTION - USH 51

STA. 115+50.00 NB - STA. 118+10.00 NB




* SUPERELEVATION VARIES
0.8% TO 5.2%

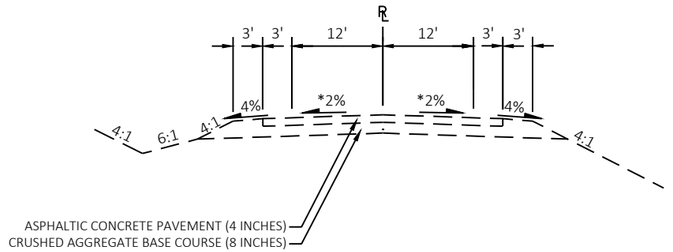
## TYPICAL EXISTING SECTION - USH 51

STA. 118+10.00 NB - STA. 133+44.09 NB

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EXISTING TYPICAL SECTIONS | SHEET 4 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020301_ts
PLOT DATE : 8/1/2023 9:20 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########

2

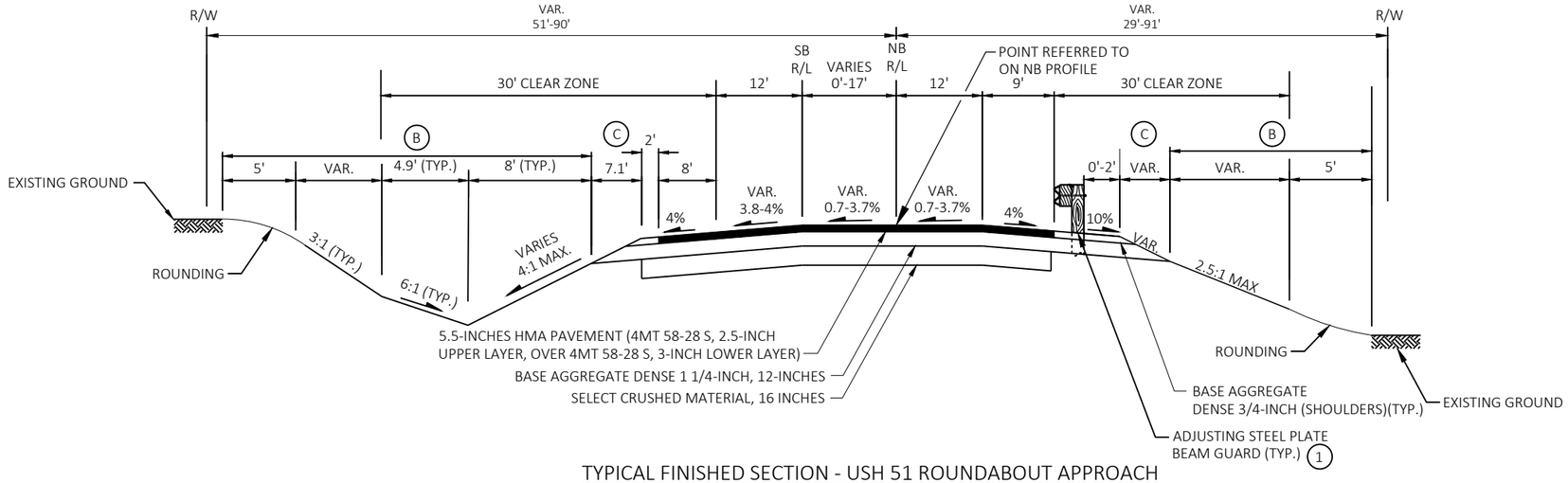



* SLOPE VARIES IN SUPERELEVATION

## TYPICAL EXISTING SECTION - CTH B/CTH AB

STA. 26+00.00 EB - STA. 39+50.51 EB

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EXISTING TYPICAL SECTIONS | SHEET 5 | E |
|---|---|---|---|---|---|




TYPICAL FINISHED SECTION - USH 51 ROUNDABOUT APPROACH

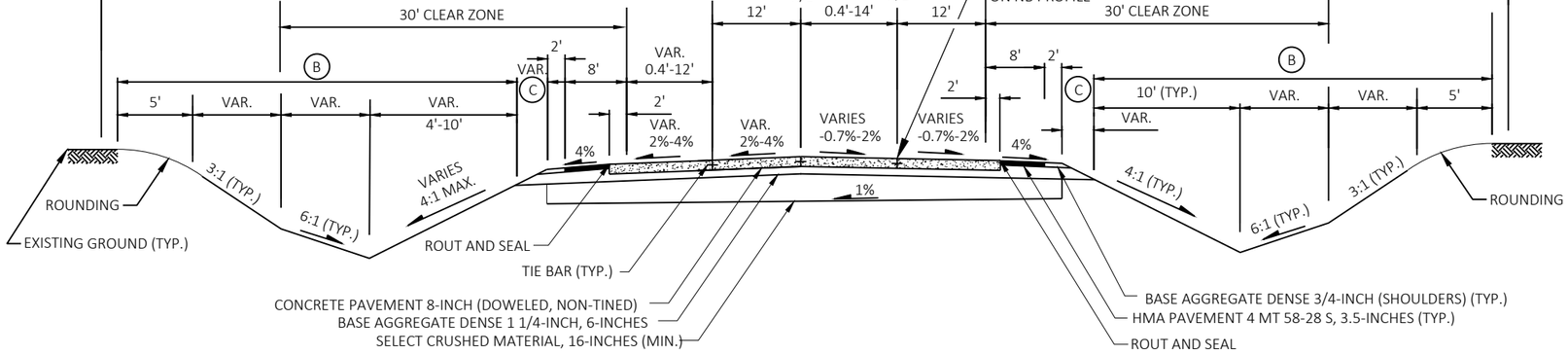
STA. 115+50.00 NB - STA. 116+85.00 NB

(1) STA. 115+50 NB RT - STA. 117+01 NB RT

(A) SALVAGED TOPSOIL, FERTILIZER TYPE B: SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE A

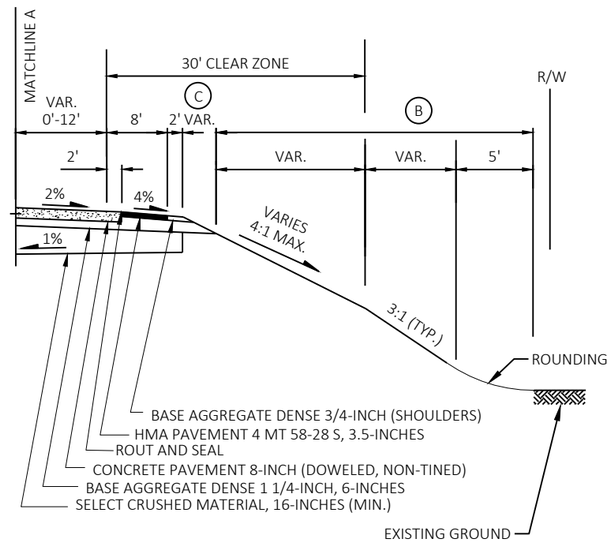
(B) SALVAGED TOPSOIL, FERTILIZER TYPE B: SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE B

(C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B




TYPICAL FINISHED SECTION - USH 51 ROUNDABOUT APPROACH

STA. 116+85.00 NB - STA. 120+32.13 NB

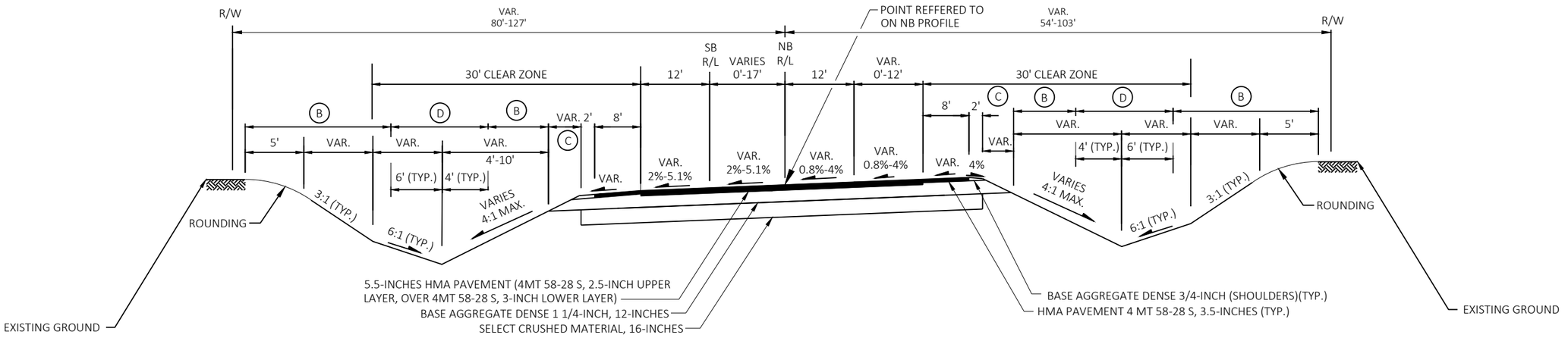



STA. 118+69.31 NB - STA. 120+32.13 NB

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TYPICAL FINISHED SECTION | SHEET 6 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\020303_TS.DWG
LAYOUT NAME - 020303_ts

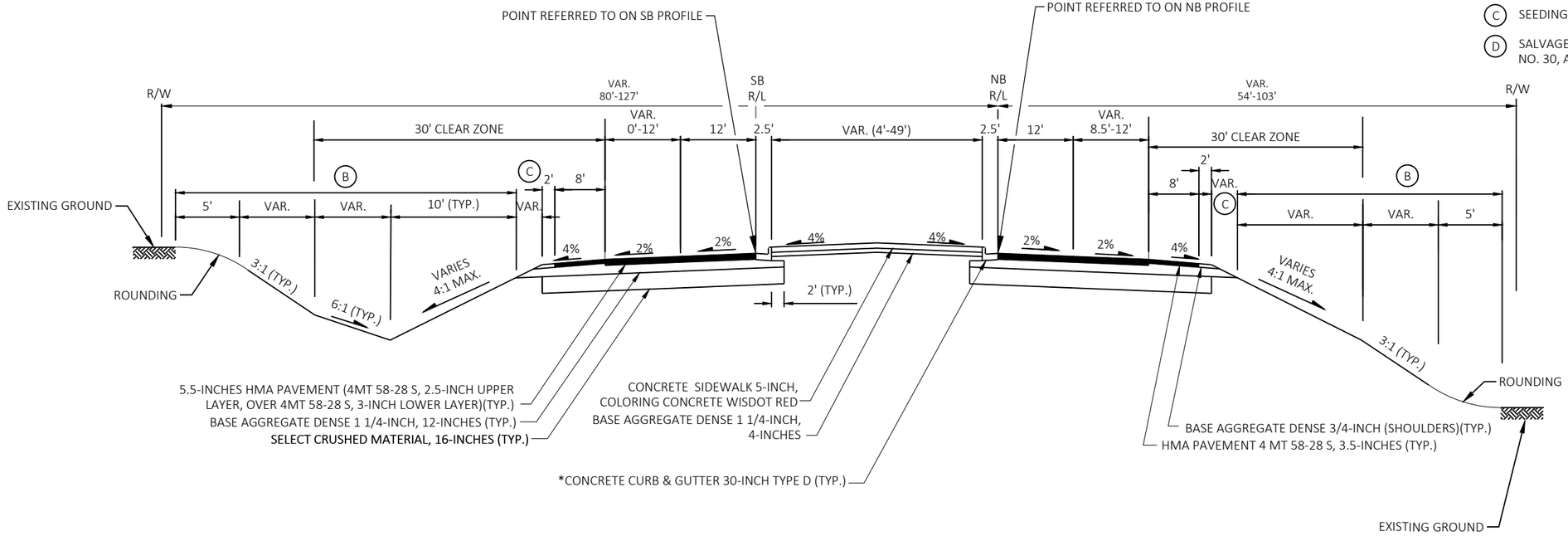
PLOT DATE : 8/1/2023 8:36 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT




## TYPICAL FINISHED SECTION - USH 51 ROUNDABOUT APPROACH

STA. 128+93.06 NB - STA. 133+44.09 NB

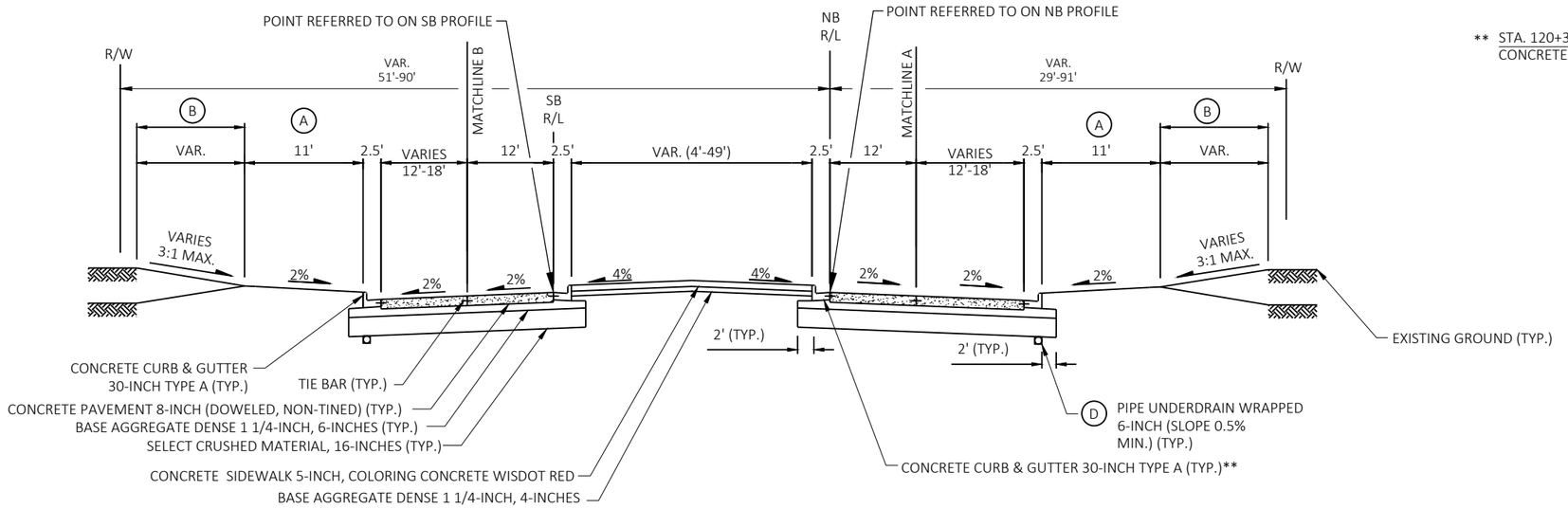
- (A) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE A
- (B) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE B
- (C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- (D) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT CLASS 2 TYPE B




## TYPICAL FINISHED SECTION - USH 51 ROUNDABOUT APPROACH

STA. 126+33.48 NB RT - STA. 128+93.06 NB RT
STA. 127+03.74 SB LT - STA. 128+93.06 NB LT

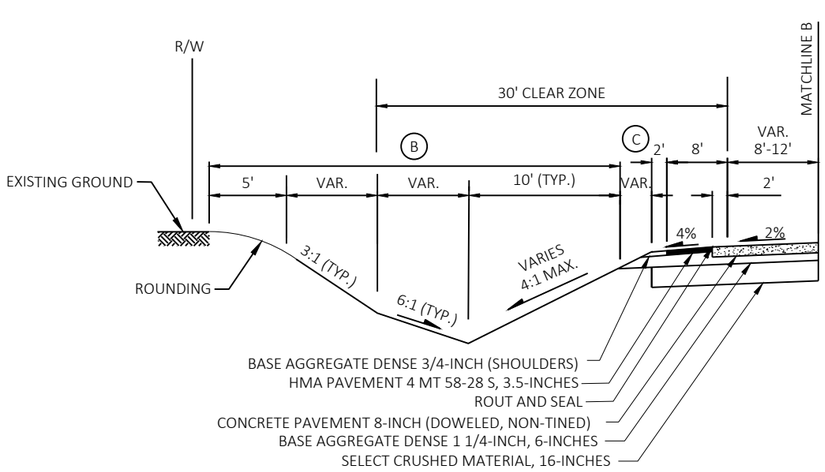
* STA. 127+70.14 NB - STA. 128+93.06 NB (MEDIAN)
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D



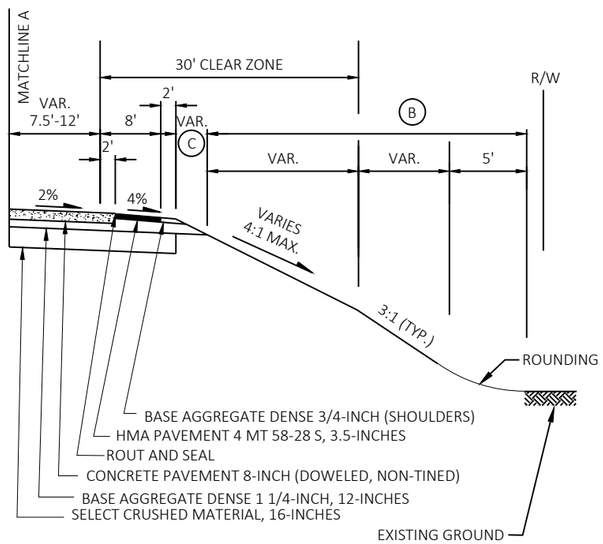

** STA. 120+32.13 NB - STA. 121+94.44 NB (MEDIAN)
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A

## TYPICAL FINISHED SECTION - USH 51 ROUNDABOUT APPROACH

STA. 120+32.13 NB - STA. 123+75.49 NB
STA. 125+19.03 NB RT - STA. 126+33.48 NB RT
STA. 125+21.63 SB LT - STA. 127+03.74 SB LT




STA. 120+32.13 NB - STA. 122+70.37 NB



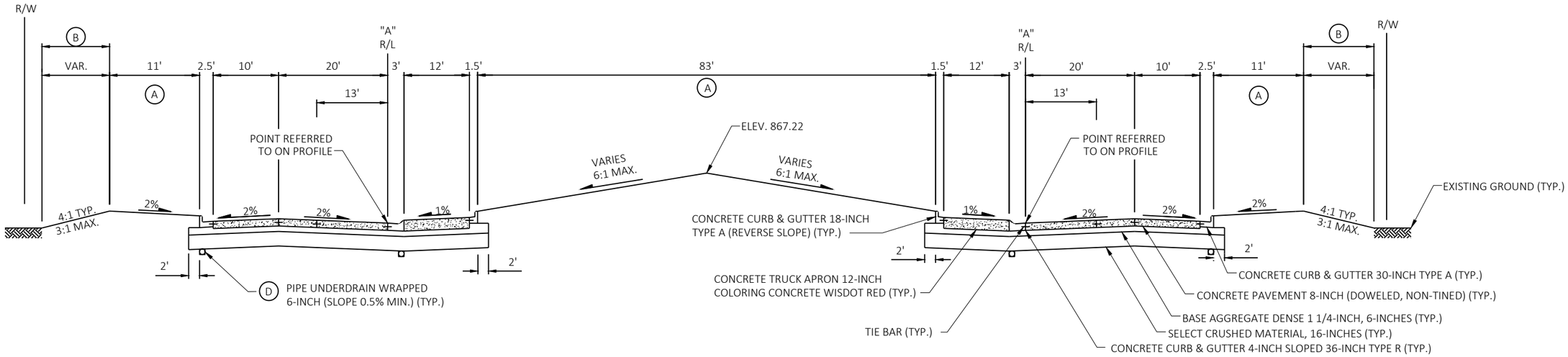

STA. 120+32.13 NB - STA. 121+98.15 NB

(A) SALVAGED TOPSOIL, FERTILIZER TYPE B: SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE A

(B) SALVAGED TOPSOIL, FERTILIZER TYPE B: SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE B

(C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B

(D) INSTALL PIPE UNDERDRAIN AT PROPOSED LOW POINTS. SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS



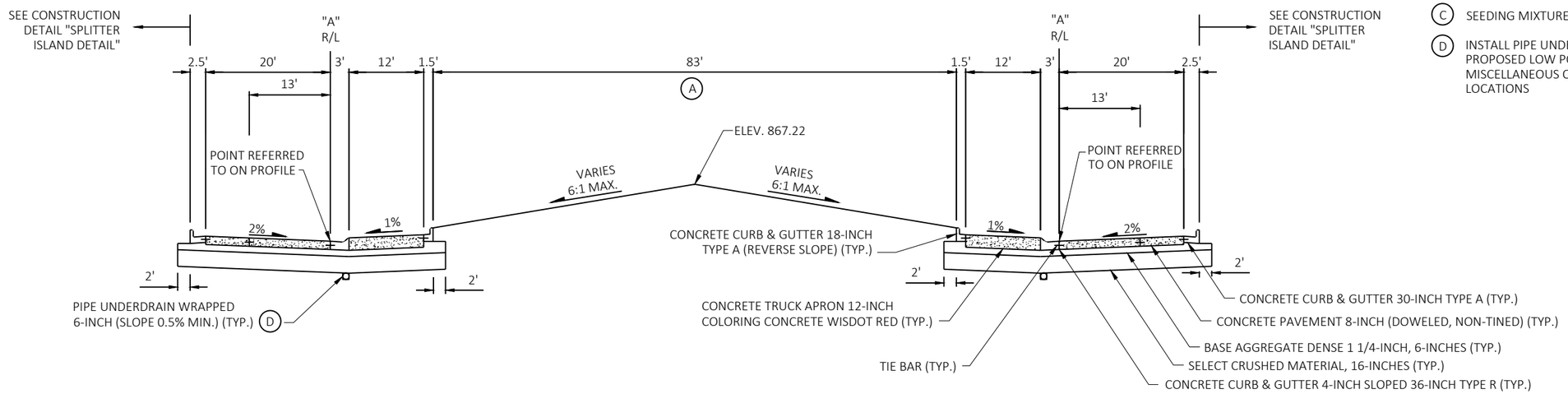

TYPICAL FINISHED SECTION THROUGH ROUNDABOUT

(A) SALVAGED TOPSOIL, FERTILIZER TYPE B:
SEEDING MIXTURE NO. 30, AND
EROSION MAT URBAN CLASS 1
TYPE A

(B) SALVAGED TOPSOIL, FERTILIZER TYPE B:
SEEDING MIXTURE NO. 30, AND
EROSION MAT URBAN CLASS 1
TYPE B

(C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B

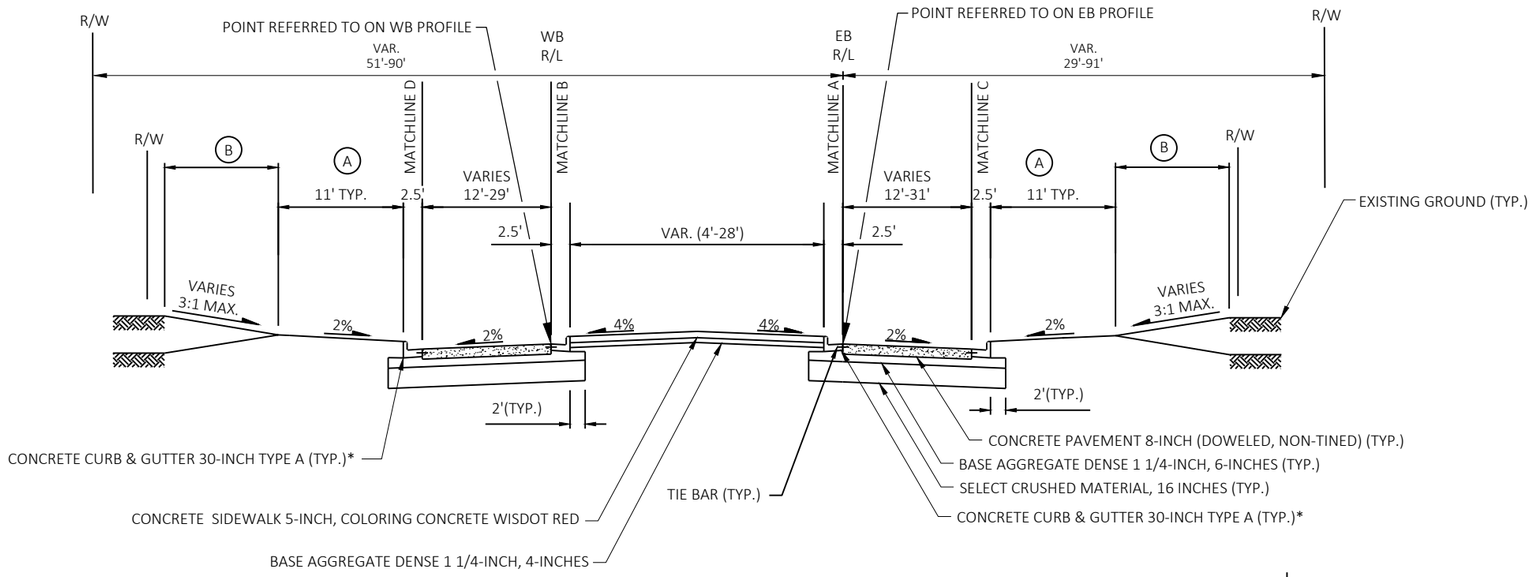
(D) INSTALL PIPE UNDERDRAIN AT
PROPOSED LOW POINTS. SEE
MISCELLANEOUS QUANTITIES FOR
LOCATIONS




TYPICAL FINISHED SECTION THROUGH ROUNDABOUT

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TYPICAL FINISHED SECTION | SHEET 9 | E |
|---|---|---|---|---|---|

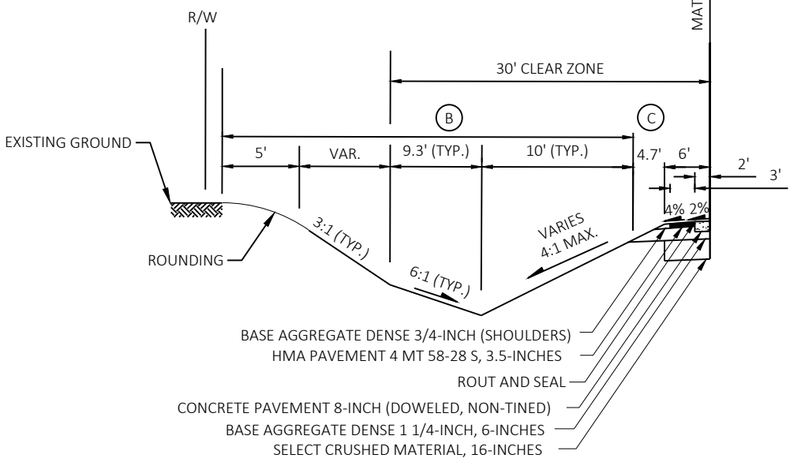
2



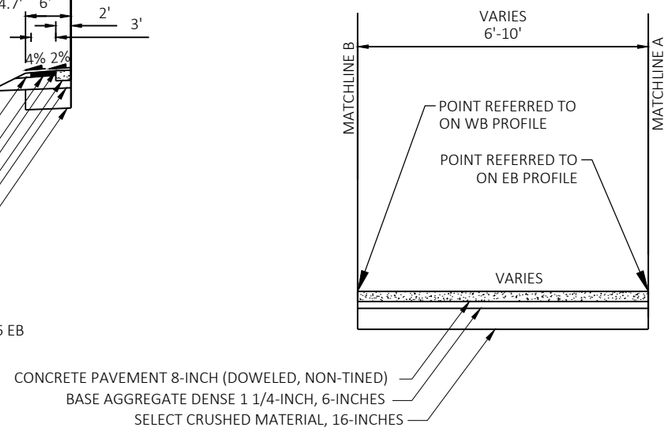

* CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
STA. 29+75.96 EB - STA. 31+18.60 EB

## TYPICAL FINISHED SECTION - CTH B/CTH AB ROUNDABOUT APPROACH

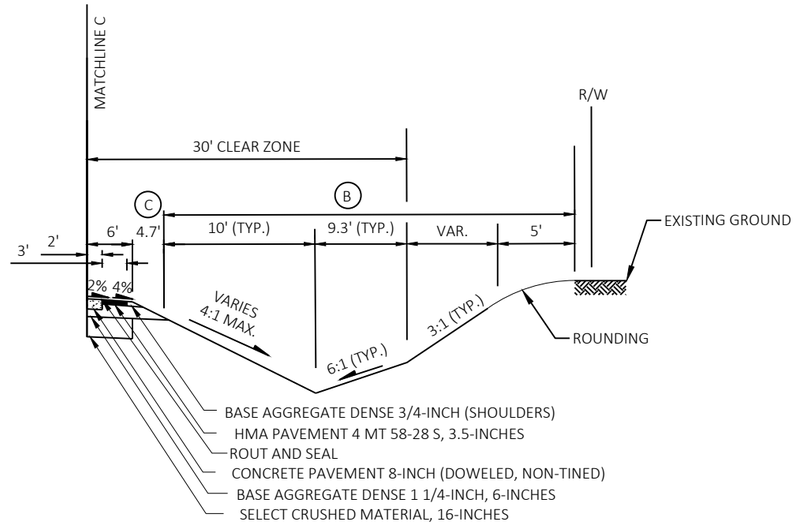
STA. 29+75.96 EB - STA. 33+34.94 EB
STA. 35+07.62 EB - STA. 36+05.06 EB




STA. 29+75.96 EB - STA. 32+15.86 EB




STA. 35+67.01 EB - STA. 36+05.06 EB



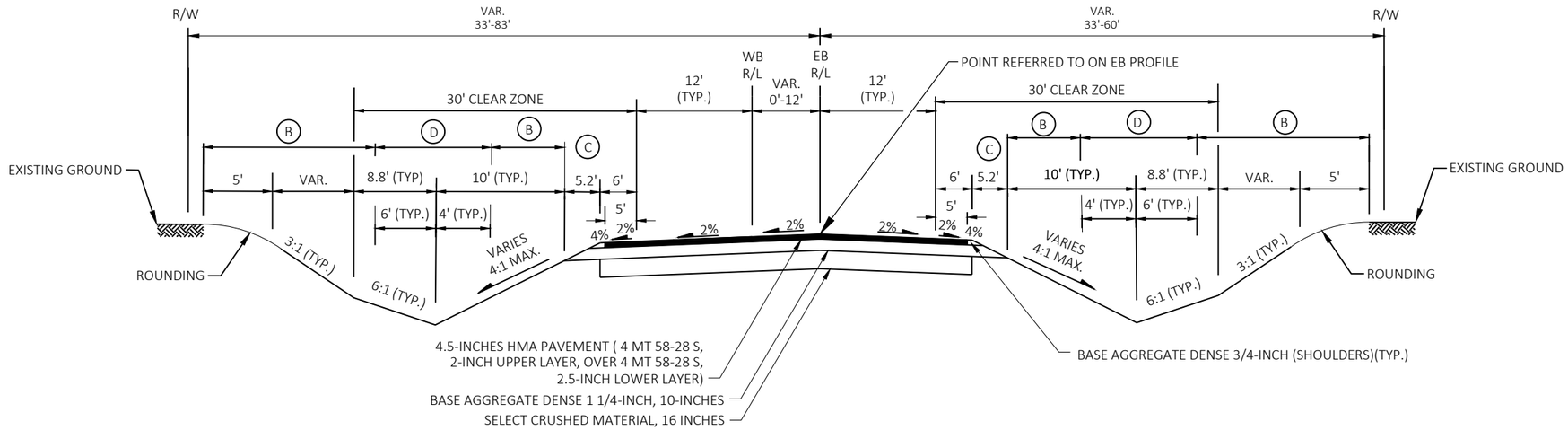

STA. 29+75.96 EB - STA. 32+14.97 EB

(A) SALVAGED TOPSOIL, FERTILIZER TYPE B:
SEEDING MIXTURE NO. 30, AND
EROSION MAT URBAN CLASS 1
TYPE A

(B) SALVAGED TOPSOIL, FERTILIZER TYPE B:
SEEDING MIXTURE NO. 30, AND
EROSION MAT URBAN CLASS 1
TYPE B

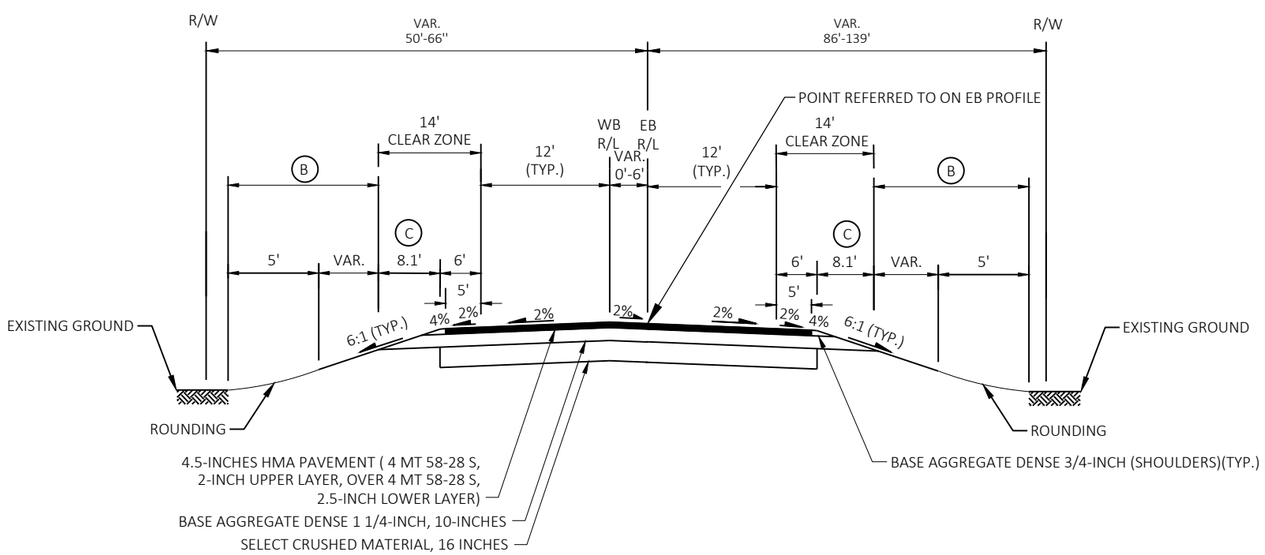
(C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TYPICAL FINISHED SECTION | SHEET 10 | E |
|---|---|---|---|---|---|




## TYPICAL FINISHED SECTION - CTH B ROUNDABOUT APPROACH

STA. 26+00.00 EB - STA. 29+75.96 EB




## TYPICAL FINISHED SECTION - CTH AB ROUNDABOUT APPROACH

STA. 36+05.06 EB - STA. 39+50.51 EB

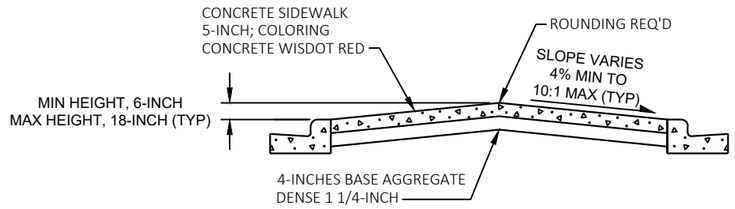
(A) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE A

(B) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT URBAN CLASS 1 TYPE B

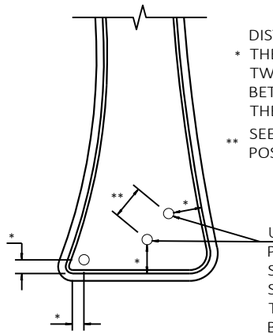
(C) SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B

(D) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 30, AND EROSION MAT CLASS 2 TYPE B

2




SECTION A-A

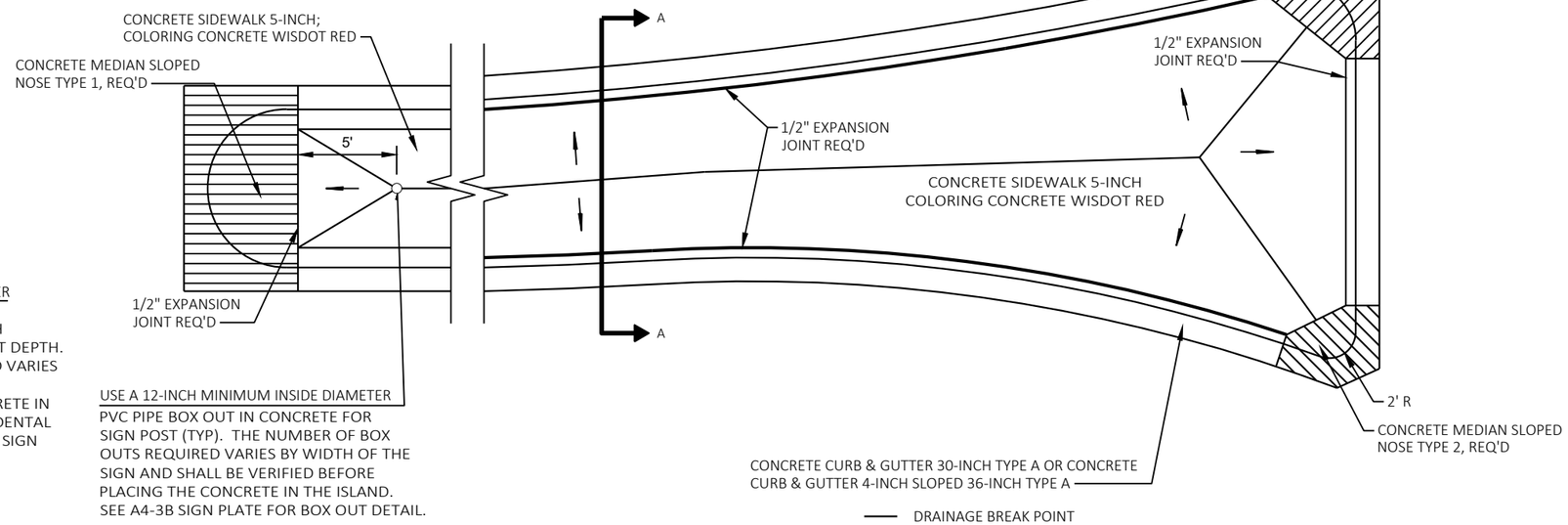


* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

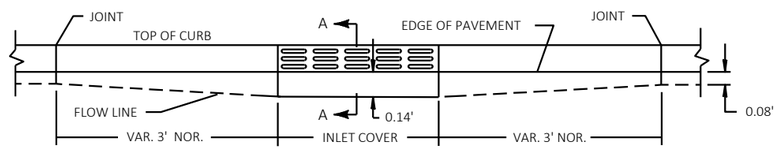
USE A 12-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). PVC BOX OUT DEPTH SHOULD MATCH ADJACENT PAVEMENT DEPTH. THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. GRAVEL BACKFILL IS INCIDENTAL TO POSTS WOOD BID ITEM. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)

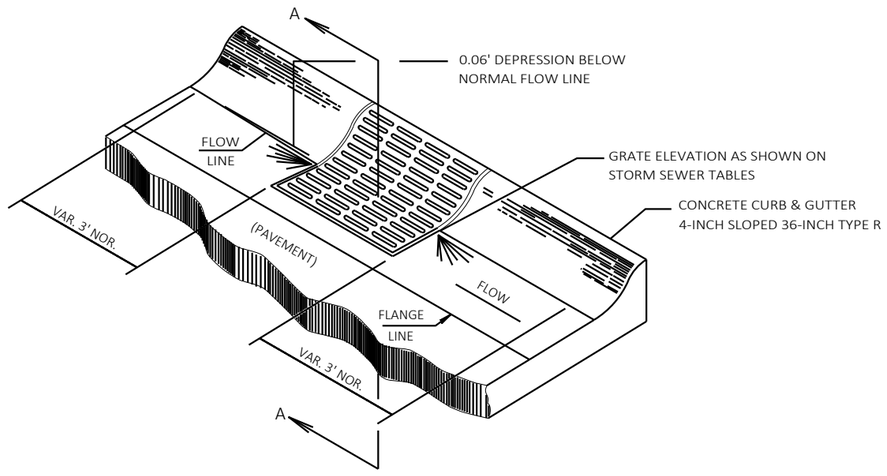


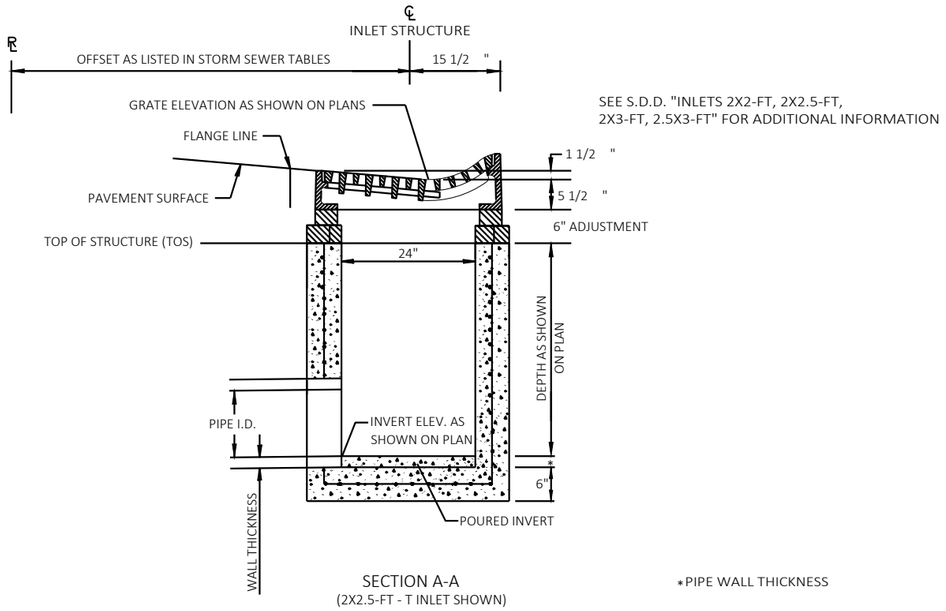

USE A 12-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

SPLITTER ISLAND DETAIL




ELEVATION



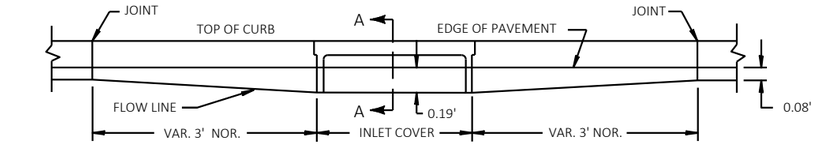




SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

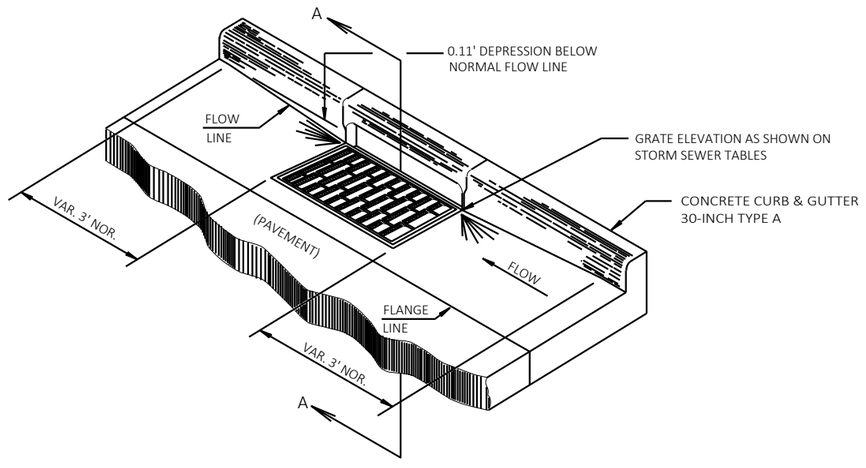
SECTION A-A
(2X2.5-FT - T INLET SHOWN)

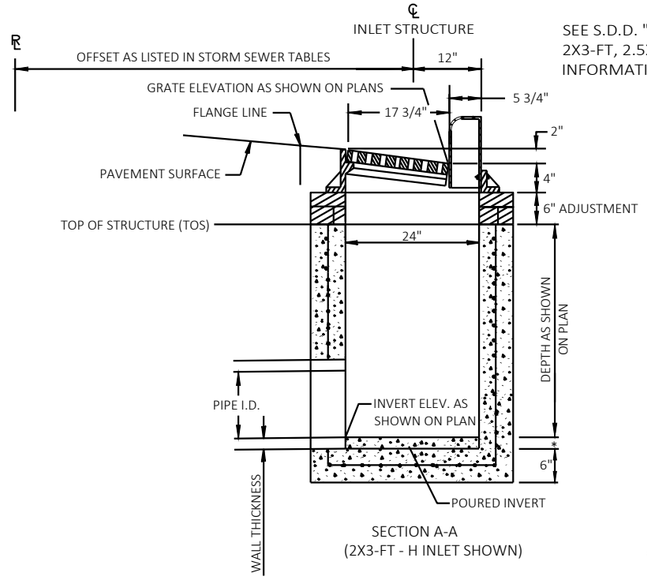
*PIPE WALL THICKNESS

## DETAIL OF CONCRETE CURB & GUTTER 36-INCH TYPE R AT INLETS




ELEVATION



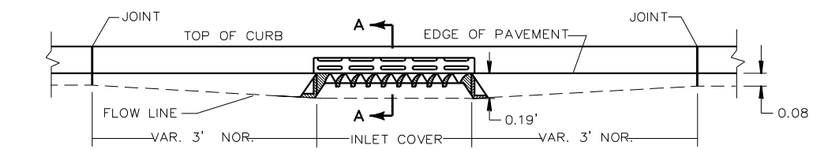



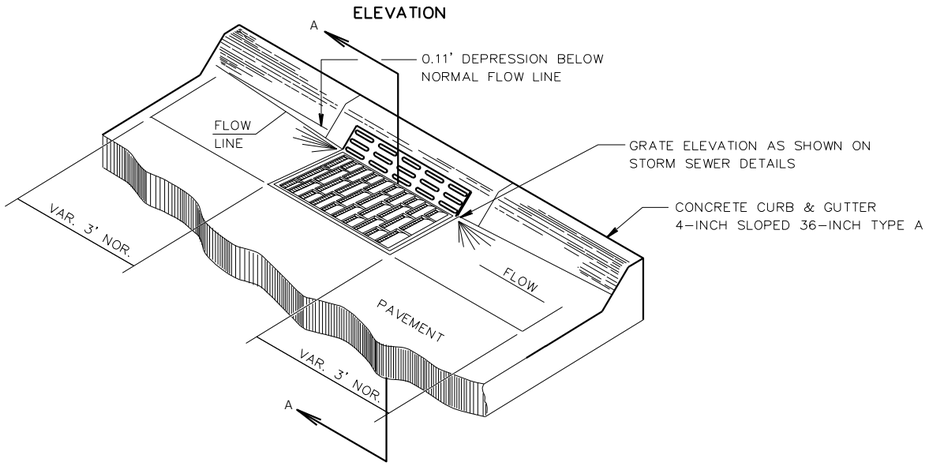

SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

SECTION A-A
(2X3-FT - H INLET SHOWN)

*PIPE WALL THICKNESS

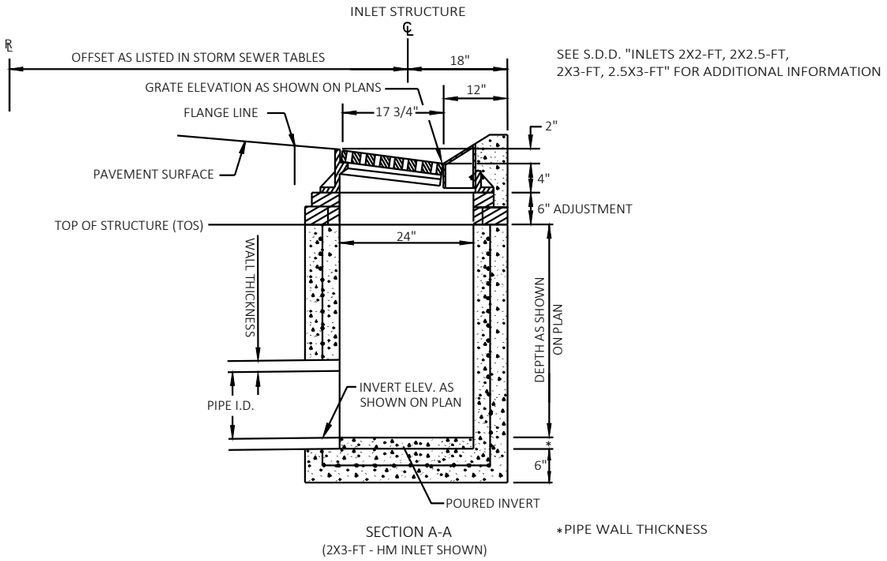
## DETAIL OF CONCRETE CURB & GUTTER 30-INCH TYPE A AT INLETS



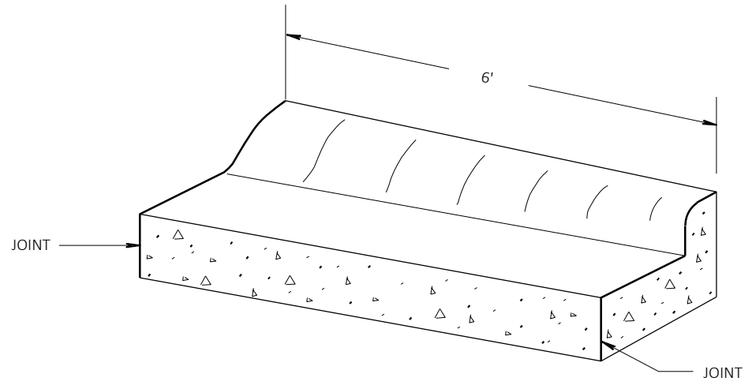




DETAIL OF CURB AND GUTTER AT INLETS

(2X3-FT - HM INLET SHOWN)

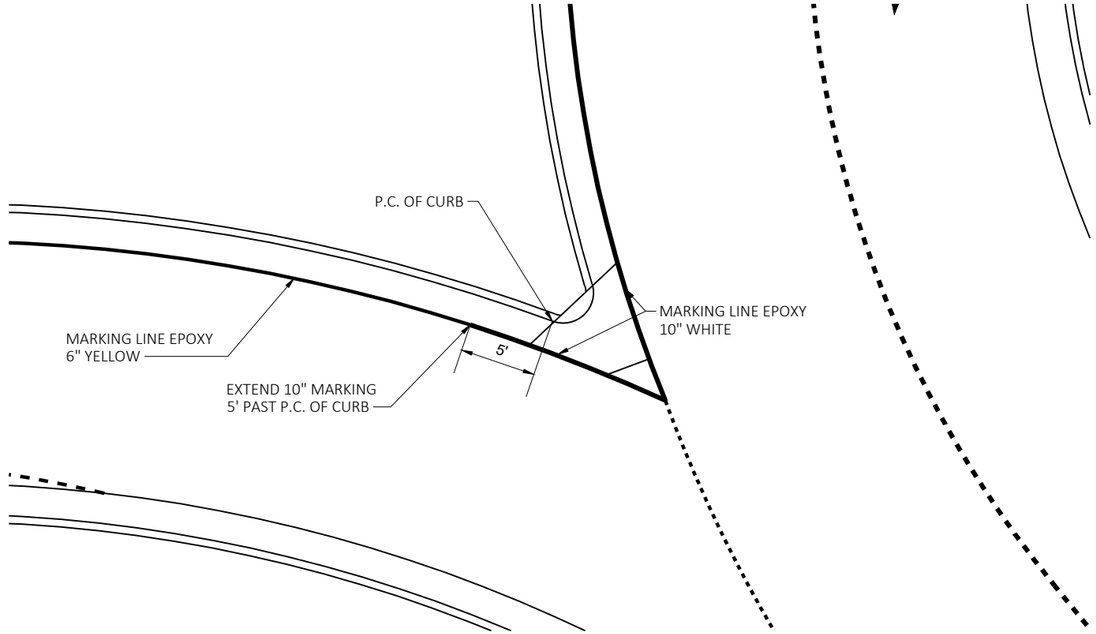



DETAIL OF CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A AT INLETS



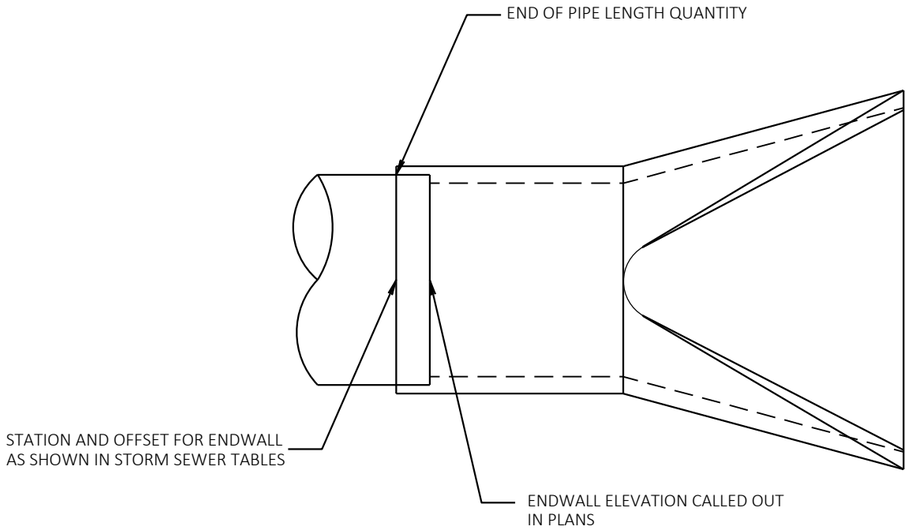

TRANSITION DETAIL

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A TO CONCRETE CURB AND GUTTER 30-INCH TYPE A CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A)

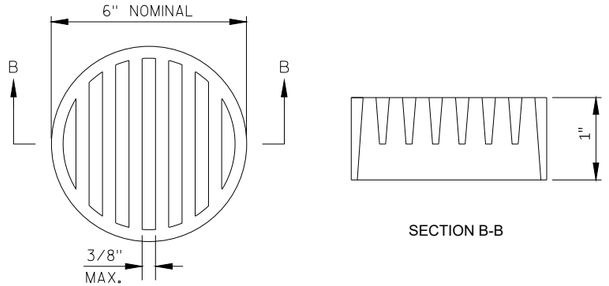



ROUNDABOUT MARKING DETAILS

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CONSTRUCTION DETAILS | SHEET 14 | E |
|---|---|---|---|---|---|




ENDWALL DETAIL




SECTION B-B

NOTES:

DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.
ORIENT SHIELD SO SLOTS ARE VERTICAL.

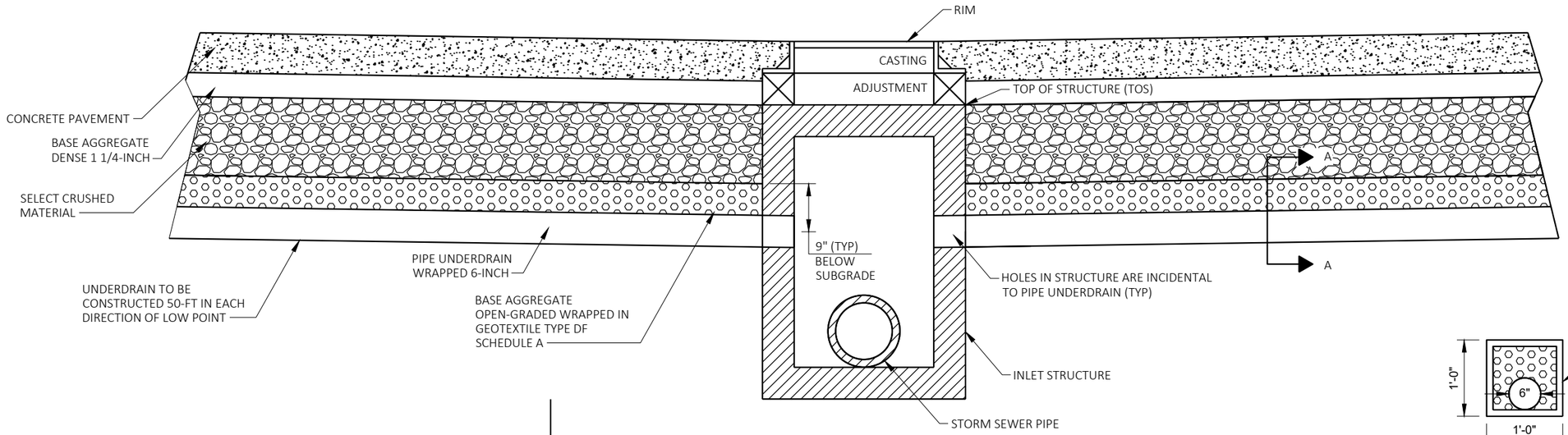
THE RODENT SHIELD, PIPE COUPLING AND ATTACHMENT SCREWS SHALL BE INCLUDED
WITH BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS
COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR
THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN.
THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH
STAINLESS STEEL SHEET METAL SCREWS.

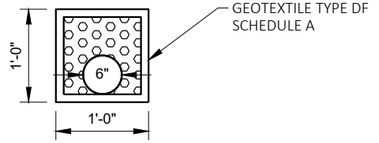
RODENT SHIELD DETAIL

2

2



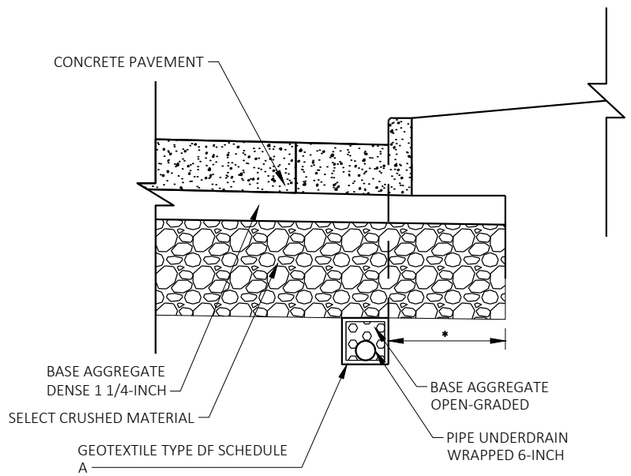

PIPE UNDERDRAIN WRAPPED 6-INCH WITH GEOTEXTILE FABRIC AND AGGREGATE PROFILE VIEW




SECTION A-A

PIPE UNDERDRAIN WRAPPED 6-INCH ENCLOSED IN A 1'-0" x 1'-0" AREA OF BASE AGGREGATE OPEN-GRADED WRAPPED IN GEOTEXTILE, TYPE DF SCHDULE A.

GRADE UNDERDRAIN TO DRAIN @ 0.5% (TYP.)

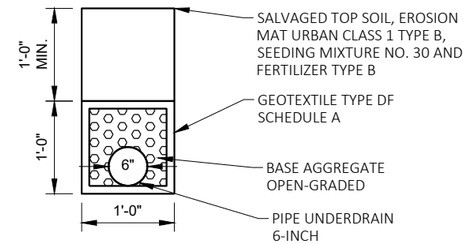



PIPE UNDERDRAIN WRAPPED 6-INCH WITH GEOTEXTILE FABRIC AND AGGREGATE CROSS SECTION

* SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS.

PIPE UNDERDRAIN WRAPPED 6-INCH WITH GEOTEXTILE FABRIC AND AGGREGATE DETAIL

NOTES:
ROADWAY PIPE UNDERDRAIN IS TO BE DISCHARGED INTO A STORM SEWER STRUCTURE.




PIPE UNDERDRAIN WRAPPED 6-INCH ENCLOSED IN A 1'-0" x 1'-0" AREA OF BASE AGGREGATE OPEN-GRADED WRAPPED IN GEOTEXTILE, TYPE DF SCHEDULE A.

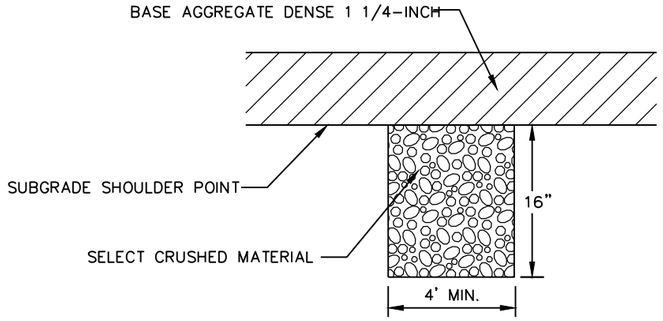
PIPE UNDERDRAIN IN DITCHLINE TO BE BURIED MIN. APPROX. 2-FT TO PIPE INVERT.

GRADE UNDERDRAIN TO DRAIN @ 0.5% (TYP.)

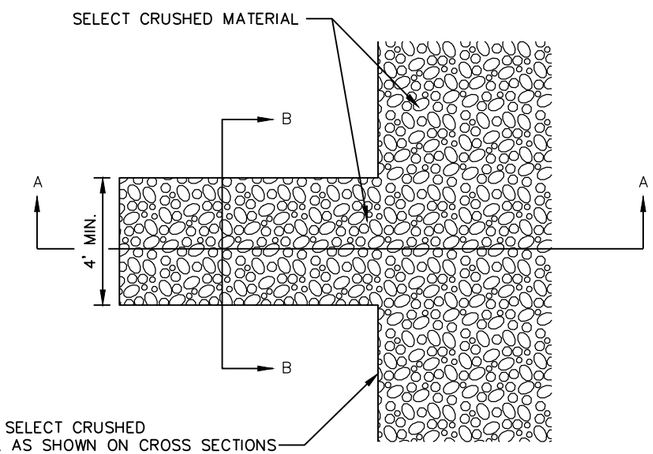
PIPE UNDERDRAIN IN DITCHLINE TO BE DISCHARGED/DAYLIGHTED INTO EXISTING ROCK BASIN.

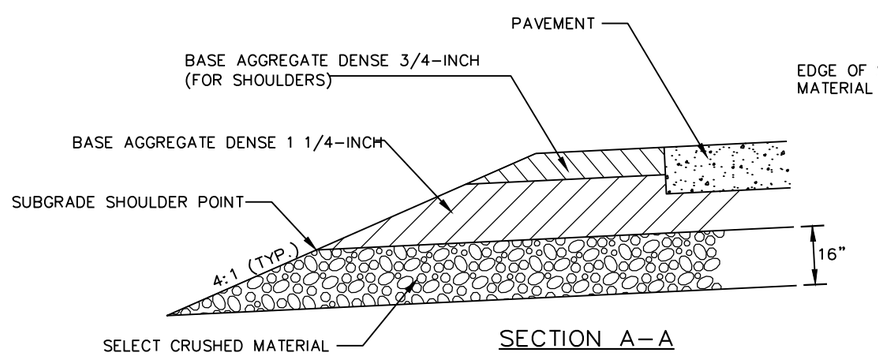
PIPE UNDERDRAIN WRAPPED 6-INCH IN DITCH DETAIL

2




SECTION B–B




SECTION A–A

CONSTRUCT RELIEF TRENCHES AT LEAST EVERY 250'
AND AT EACH SAG VERTICAL CURVE IN THE PROFILE.

(LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER)

EXCAVATION REQUIRED TO CONSTRUCT RELIEF TRENCH
IS INCLUDED IN BID ITEM SELECT CRUSHED MATERIAL.

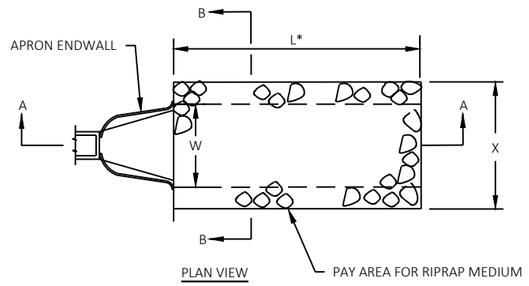
# RELIEF TRENCH DETAIL

2

## RUNOFF COEFFICIENT TABLE

| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | B | | | C | | | D | | |
| | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | |
| LAND USE: | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER |
| ROW CROPS | .08<br>.22 | .16<br>.30 | .22<br>.38 | .12<br>.26 | .20<br>.34 | .27<br>.44 | .15<br>.30 | .24<br>.37 | .33<br>.50 | .19<br>.34 | .28<br>.41 | .38<br>.56 |
| MEDIAN STRIP-<br>TURF | .19<br>.24 | .20<br>.26 | .24<br>.30 | .19<br>.25 | .22<br>.28 | .26<br>.33 | .20<br>.26 | .23<br>.30 | .30<br>.37 | .20<br>.27 | .25<br>.32 | .30<br>.40 |
| SIDE SLOPE-<br>TURF | | | .25<br>.32 | | | .27<br>.34 | | | .28<br>.36 | | | .30<br>.38 |
| PAVEMENT: | | | | | | | | | | | | |
| ASPHALT | .70 - .95 | | | | | | | | | | | |
| CONCRETE | .80 - .95 | | | | | | | | | | | |
| BRICK | .70 - .80 | | | | | | | | | | | |
| DRIVES, WALKS | .75 - .85 | | | | | | | | | | | |
| ROOFS | .75 - .95 | | | | | | | | | | | |
| GRAVEL ROADS, SHOULDERS | .40 - .60 | | | | | | | | | | | |

TOTAL PROJECT AREA = 10.67 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 7.81 ACRES

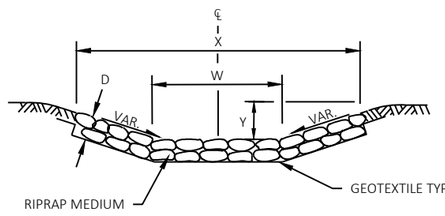



L* = 3 x W (NOR.) OR 10' MIN. OR
AS INDICATED IN THE PLANS OR
AS DIRECTED BY THE ENGINEER.

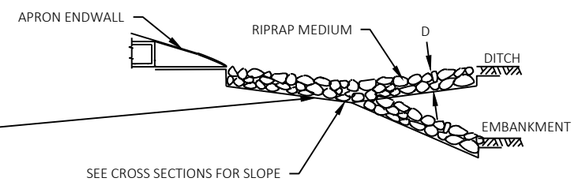
D = 18" FOR RIPRAP MEDIUM

X = W+2' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
W+4' FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE




SECTION B-B

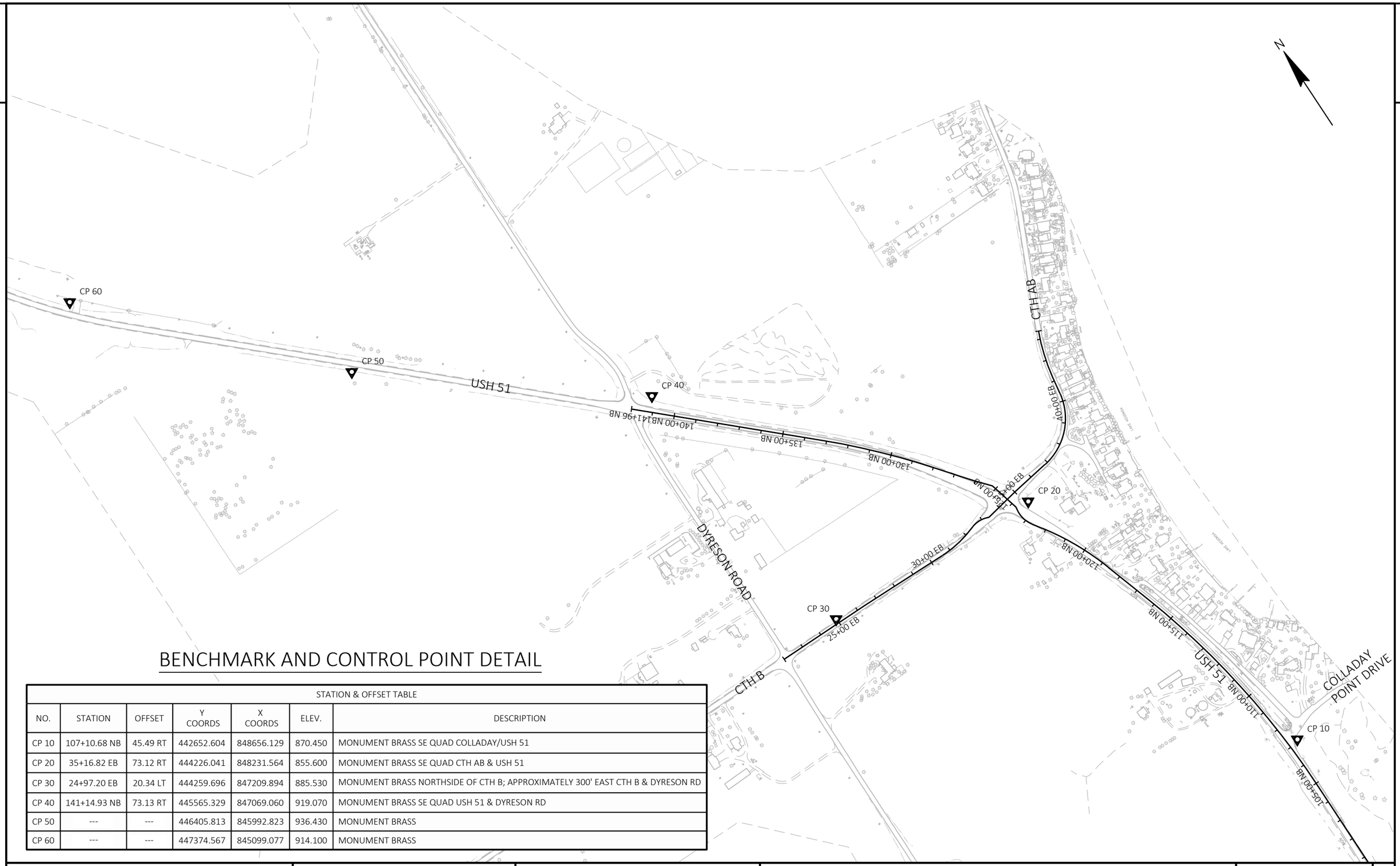



SECTION A-A

CONSTRUCTION NOTES:

1. EXTEND GEOTEXTILE FABRIC BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION. INSTALL ON GRADE PRIOR TO ENDWALL INSTALLATION.
2. COMPLETE GEOTEXTILE FABRIC AND RIPRAP MEDIUM SECTION INSTALLATION PRIOR TO STORM WATER FLOW.
3. RIPRAP MEDIUM LOCATIONS IN QUANTITIES

## RIPRAP AND GEOTEXTILE DETAIL AT APRON ENDWALLS

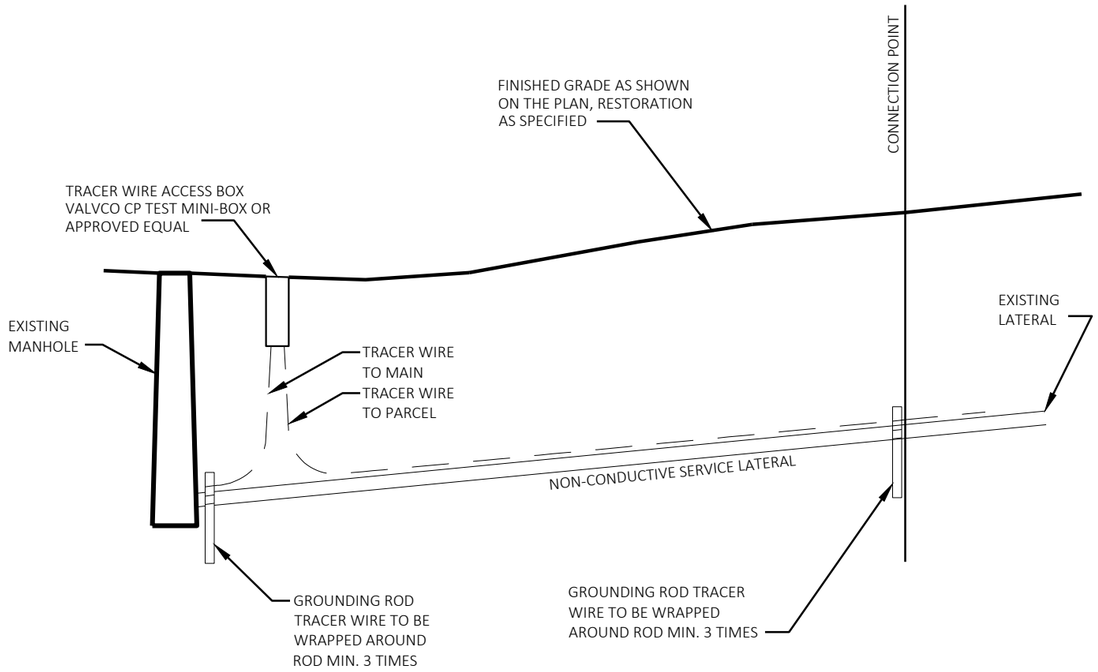



## BENCHMARK AND CONTROL POINT DETAIL

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | Y COORDS | X COORDS | ELEV. | DESCRIPTION |
| CP 10 | 107+10.68 NB | 45.49 RT | 442652.604 | 848656.129 | 870.450 | MONUMENT BRASS SE QUAD COLLADAY/USH 51 |
| CP 20 | 35+16.82 EB | 73.12 RT | 444226.041 | 848231.564 | 855.600 | MONUMENT BRASS SE QUAD CTH AB & USH 51 |
| CP 30 | 24+97.20 EB | 20.34 LT | 444259.696 | 847209.894 | 885.530 | MONUMENT BRASS NORTHSIDE OF CTH B; APPROXIMATELY 300' EAST CTH B & DYRESON RD |
| CP 40 | 141+14.93 NB | 73.13 RT | 445565.329 | 847069.060 | 919.070 | MONUMENT BRASS SE QUAD USH 51 & DYRESON RD |
| CP 50 | --- | --- | 446405.813 | 845992.823 | 936.430 | MONUMENT BRASS |
| CP 60 | --- | --- | 447374.567 | 845099.077 | 914.100 | MONUMENT BRASS |

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CONSTRUCTION DETAILS | SHEET 19 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021002_CD.DWG
LAYOUT NAME - 021009_cd
PLOT DATE : 8/1/2023 8:34 AM PLOT BY : HENDERSON, KYLE R. PLOT NAME : PLOT SCALE : 1 IN:400 FT




TRACER WIRE INSTALLATION
FOR NON-CONDUCTIVE SANITARY SERVICE
LATERALS

NOTES:

1. TRACER WIRE ACCESS BOX TO INSTALLED IN THE TERRACE. EXACT LOCTATION TO BE DETERMINED IN THE FIELD BY OWNER.

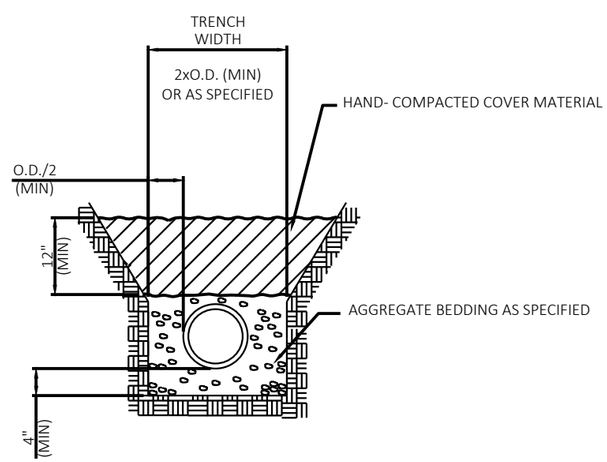
2. TRACER WIRE ACCESS BOX COVER TO BE PERMANENTLY ENGRAVED WITH "SEWER" BY THE MANUFACTURER.

3. MINIMUM 18-IN OF WIRE TO BE COILED WITHIN THE ACCESS BOX.

4. GROUNDING ROD TO BE A 2-FT LONG, 5/8-IN DIAMETER STEEL GROUNDING ROD.

5. TRACER WIRE TO BE 10 GAUGE SOLID WIRE

6. TRACER WIRE IS INCIDENTAL TO ITEM SPV.0090.02

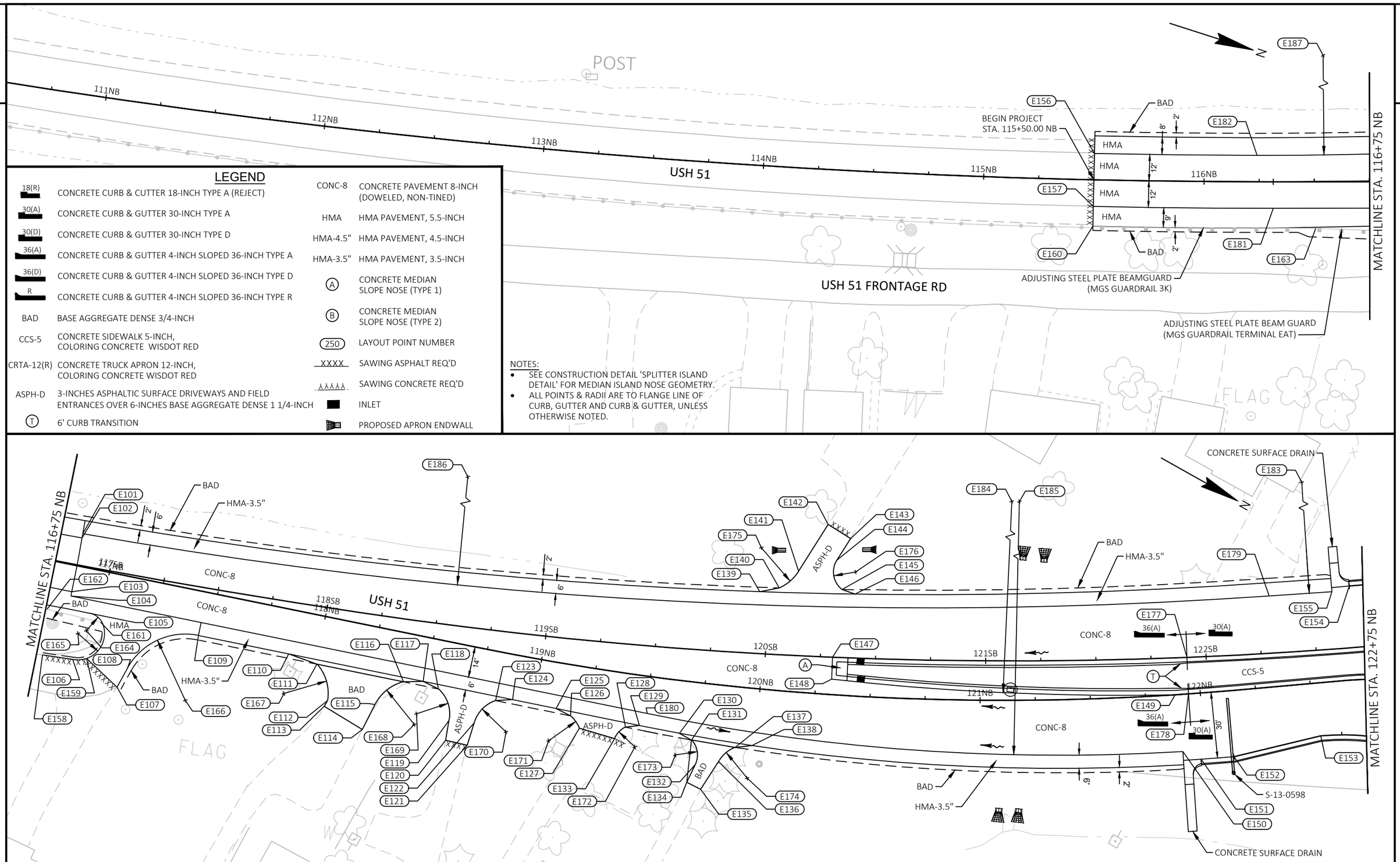



THERMOPLASTIC PIPE
BEDDING DETAIL

## LEGEND

| | |
|---|---|
| 18(R) | CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT) |
| 30(A) | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| 30(D) | CONCRETE CURB & GUTTER 30-INCH TYPE D |
| 36(A) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| 36(D) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D |
| R | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CCS-5 | CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED |
| CRTA-12(R) | CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED |
| ASPH-D | 3-INCHES ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES BASE AGGREGATE DENSE 1 1/4-INCH |
| (T) | 6' CURB TRANSITION |
| CONC-8 | CONCRETE PAVEMENT 8-INCH (DOWELED, NON-TINED) |
| HMA | HMA PAVEMENT, 5.5-INCH |
| HMA-4.5" | HMA PAVEMENT, 4.5-INCH |
| HMA-3.5" | HMA PAVEMENT, 3.5-INCH |
| (A) | CONCRETE MEDIAN SLOPE NOSE (TYPE 1) |
| (B) | CONCRETE MEDIAN SLOPE NOSE (TYPE 2) |
| (250) | LAYOUT POINT NUMBER |
| XXXX | SAWING ASPHALT REQ'D |
| XXXXX | SAWING CONCRETE REQ'D |
| | INLET |
| | PROPOSED APRON ENDWALL |

NOTES:
- SEE CONSTRUCTION DETAIL 'SPLITTER ISLAND DETAIL' FOR MEDIAN ISLAND NOSE GEOMETRY.
- ALL POINTS & RADII ARE TO FLANGE LINE OF CURB, GUTTER AND CURB & GUTTER, UNLESS OTHERWISE NOTED.




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN DETAILS | SHEET 21 | E |
|---|---|---|---|---|---|

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| E101 | 116+84.62 NB | 14.77 LT | 443598.68 | 848411.44 | 859.78' | BEGIN RADIUS; END HMA; BEGIN CONC-8 |
| E102 | 116+84.68 NB | 12.77 LT | 443599.34 | 848413.33 | 859.85' | END RADIUS; END HMA; BEGIN CONC-8 |
| E103 | 116+84.81 SB | 12.41 RT | 443607.22 | 848436.82 | 860.44' | END HMA; BEGIN CONC-8 |
| E104 | 116+84.78 SB | 14.41 RT | 443607.84 | 848438.72 | 860.45' | EDGE OF CONC. |
| E105 | 116+94.59 SB | 20.58 RT | 443619.16 | 848441.39 | 860.00' | EOP; BEGIN RADIUS |
| E106 | 116+90.77 SB | 42.52 RT | 443622.58 | 848463.39 | --- | SAWCUT; END RADIUS; MATCH EXIST. |
| E107 | 117+12.53 SB | 51.29 RT | 443646.30 | 848464.51 | --- | EOP; SAWCUT; MATCH EXIST. |
| E108 | 117+15.62 SB | 42.16 RT | 443646.25 | 848454.87 | 856.45' | EOP; BEGIN RADIUS |
| E109 | 117+44.59 SB | 21.86 RT | 443667.08 | 848426.00 | 859.01' | EOP; END RADIUS; BEGIN HMA-3.5" |
| E110 | 117+86.06 SB | 23.48 RT | 443706.84 | 848413.22 | 858.43' | EOP; BEGIN TAPER |
| E111 | 117+99.32 SB | 26.10 RT | 443720.28 | 848411.01 | 858.20' | EOP; END TAPER; BEGIN RADIUS |
| E112 | 118+06.48 SB | 41.71 RT | 443732.54 | 848423.07 | 858.68' | END RADIUS |
| E113 | 118+05.45 SB | 44.50 RT | 443732.55 | 848426.05 | --- | MATCH EXIST. |
| E114 | 118+23.74 SB | 52.35 RT | 443752.76 | 848426.75 | --- | MATCH EXIST. |
| E115 | 118+27.70 SB | 40.36 RT | 443752.21 | 848414.10 | 858.31' | BEGIN RADIUS |
| E116 | 118+38.85 SB | 28.33 RT | 443758.39 | 848398.77 | 857.81' | EOP; END RADIUS; BEGIN TAPER |
| E117 | 118+47.57 SB | 26.92 RT | 443766.09 | 848394.20 | 857.81' | EOP; END TAPER; BEGIN TAPER |
| E118 | 118+54.79 SB | 29.44 RT | 443773.82 | 848393.81 | 857.67' | END TAPER; BEGIN RADIUS |
| E119 | 118+61.19 SB | 43.15 RT | 443785.01 | 848404.07 | 856.96' | END RADIUS |
| E120 | 118+60.89 SB | 52.10 RT | 443788.10 | 848412.47 | --- | SAWCUT; MATCH EXIST. |
| E121 | 118+70.59 SB | 53.17 RT | 443797.73 | 848409.69 | --- | SAWCUT; MATCH EXIST. |
| E122 | 118+72.51 SB | 42.68 RT | 443795.53 | 848399.24 | 856.90' | BEGIN RADIUS |
| E123 | 118+80.78 SB | 31.54 RT | 443799.03 | 848385.72 | 857.46' | END RADIUS; BEGIN TAPER |
| E124 | 118+88.30 SB | 30.20 RT | 443805.54 | 848381.53 | 857.49' | EOP; END TAPER |
| E125 | 119+08.08 SB | 32.11 RT | 443824.76 | 848375.36 | 857.38' | EOP; BEGIN TAPER |
| E126 | 119+14.80 SB | 34.81 RT | 443832.10 | 848375.10 | 857.23' | END TAPER; BEGIN RADIUS |
| E127 | 119+19.20 SB | 40.00 RT | 443838.29 | 848378.03 | --- | END RADIUS; SAWCUT; MATCH EXIST. |
| E128 | 119+39.62 SB | 37.58 RT | 443856.30 | 848367.32 | 857.06' | END RADIUS; BEGIN TAPER |
| E129 | 119+45.72 SB | 36.29 RT | 443861.42 | 848363.58 | 857.13' | EOP; END TAPER |
| E130 | 119+63.76 SB | 38.42 RT | 443879.00 | 848357.79 | 857.04' | EOP; BEGIN TAPER |

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| E131 | 119+69.36 SB | 41.07 RT | 443885.29 | 848357.75 | 856.93' | END TAPER; BEGIN RADIUS |
| E132 | 119+71.76 SB | 51.99 RT | 443892.18 | 848366.58 | 856.24' | END RADIUS |
| E133 | 119+35.23 SB | 43.19 RT | 443854.53 | 848374.28 | --- | BEGIN RADIUS; SAWCUT; MATCH EXIST. |
| E134 | 119+68.58 SB | 60.34 RT | 443892.79 | 848375.53 | --- | MATCH EXIST. |
| E135 | 119+74.85 SB | 63.07 RT | 443899.80 | 848375.23 | --- | MATCH EXIST. |
| E136 | 119+81.98 SB | 49.94 RT | 443900.75 | 848360.23 | 856.43' | BEGIN RADIUS |
| E137 | 119+88.92 SB | 43.08 RT | 443904.17 | 848350.96 | 856.86' | BEGIN TAPER; END RADIUS |
| E138 | 119+96.34 SB | 41.78 RT | 443910.42 | 848346.48 | 856.92' | EOP; END TAPER |
| E139 | 119+95.65 NB | 43.97 LT | 443879.31 | 848283.93 | 857.02' | EOP; BEGIN TAPER |
| E140 | 120+04.62 NB | 46.48 LT | 443886.16 | 848278.11 | 856.97' | END TAPER; BEGIN RADIUS |
| E141 | 120+13.07 NB | 54.78 LT | 443890.09 | 848267.21 | 856.94' | END RADIUS |
| E142 | 120+25.55 NB | 76.99 LT | 443891.41 | 848242.10 | --- | SAWCUT; MATCH EXIST. |
| E143 | 120+36.79 NB | 71.25 LT | 443903.40 | 848242.73 | --- | SAWCUT; MATCH EXIST. |
| E144 | 120+30.87 NB | 61.03 LT | 443902.78 | 848254.37 | 856.77' | BEGIN RADIUS |
| E145 | 120+34.20 NB | 47.96 LT | 443911.30 | 848264.78 | 857.03' | END RADIUS; BEGIN TAPER |
| E146 | 120+40.54 NB | 46.23 LT | 443917.54 | 848263.68 | 857.08' | EOP; END TAPER |
| E147 | 120+31.91 NB | 16.99 LT | 443922.68 | 848293.67 | 857.86' | EOP; BEGIN MEDIAN NOSE |
| E148 | 120+30.50 SB | 9.95 RT | 443927.17 | 848302.55 | 857.66' | EOP; BEGIN CONCRETE MEDIAN NOSE; BEGIN RADIUS |
| E149 | 121+85.30 SB | 16.75 RT | 444066.45 | 848232.41 | 858.04' | EOP; END RADIUS |
| E150 | 121+87.88 SB | 42.60 RT | 444082.18 | 848253.09 | 857.53' | END HMA-3.5" |
| E151 | 121+95.78 SB | 46.41 RT | 444091.05 | 848252.10 | 857.50' | EOP; BEGIN CONCRETE CURB AND GUTTER |
| E152 | 122+10.43 SB | 45.95 RT | 444103.53 | 848243.77 | 857.62' | EOP; BEGIN TAPER |
| E153 | 122+52.72 NB | 24.00 RT | 444133.20 | 848216.24 | 858.09' | EOP; END TAPER |
| E154 | 122+70.35 NB | 42.63 LT | 444111.14 | 848150.68 | 858.71' | END HMA-3.5"; END RADIUS |
| E155 | 122+63.48 NB | 40.66 LT | 444105.60 | 848156.78 | 857.63' | EOP; END CONCRETE CURB AND GUTTER |
| E156 | 115+50.00 NB | 11.95 LT | 443471.34 | 848454.25 | --- | SAWCUT; MATCH EXIST. |
| E157 | 115+50.00 NB | 12.05 RT | 443478.14 | 848477.27 | --- | SAWCUT; MATCH EXIST. |
| E158 | 116+77.16 SB | 43.08 RT | 443609.72 | 848468.34 | --- | SAWCUT; MATCH EXIST. |
| E159 | 116+96.85 SB | 40.95 RT | 443627.90 | 848459.92 | --- | SAWCUT; MATCH EXIST. |
| E160 | 115+50.00 NB | 21.05 RT | 443480.69 | 848485.90 | --- | EOP; SAWCUT; MATCH EXIST. |

2

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| E161 | 117+00.15 SB | 23.69 RT | 443625.46 | 848442.51 | 859.76' | POST #1; EOP |
| E162 | 116+75.35 SB | 22.34 RT | 443601.38 | 848449.26 | 860.27' | POST #5 |
| E163 | 116+50.53 SB | 21.17 RT | 443577.31 | 848456.00 | 860.97' | POST #9 |
| E164 | 116+94.44 SB | 28.58 RT | 443621.60 | 848449.00 | --- | R=8' |
| E165 | 116+90.97 SB | 30.52 RT | 443618.91 | 848451.97 | --- | R=12' |
| E166 | 117+43.63 SB | 51.85 RT | 443676.25 | 848454.56 | --- | R=30' |
| E167 | 117+86.71 SB | 41.53 RT | 443713.74 | 848429.91 | --- | R=20' |
| E168 | 118+46.21 SB | 46.87 RT | 443772.19 | 848413.24 | --- | R=20' |
| E169 | 118+46.55 SB | 41.88 RT | 443770.67 | 848408.48 | --- | R=15' |
| E170 | 118+86.98 SB | 45.15 RT | 443810.13 | 848395.81 | --- | R=15' |
| E171 | 119+06.21 SB | 46.99 RT | 443828.94 | 848389.76 | --- | R=15' |
| E172 | 119+44.55 SB | 46.22 RT | 443864.46 | 848373.10 | --- | R=10' |
| E173 | 119+62.67 SB | 48.36 RT | 443882.20 | 848367.26 | --- | R=10' |
| E174 | 119+95.01 SB | 56.72 RT | 443915.75 | 848360.50 | --- | R=15' |
| E175 | 119+94.36 NB | 63.93 LT | 443870.12 | 848266.16 | --- | R=20' |
| E176 | 120+40.09 NB | 56.22 LT | 443912.77 | 848254.89 | --- | R=10' |
| E177 | 121+95.08 NB | 16.57 LT | 444062.86 | 848214.96 | 858.38' | CURB TRANSITION |
| E178 | 121+91.38 SB | 16.57 RT | 444071.58 | 848229.05 | 858.08' | CURB TRANSITION |
| E179 | 122+34.92 NB | 41.26 LT | 444081.68 | 848172.40 | 858.27' | EDGE OF CONC.; END RADIUS |
| E180 | 119+48.82 SB | 30.63 RT | 443861.93 | 848357.12 | 857.36' | END RADIUS |
| E181 | 116+31.37 SB | 12.00 RT | 443556.17 | 848453.21 | 861.87' | END RADIUS; BEGIN RADIUS |
| E182 | 116+24.03 NB | 11.99 LT | 443541.87 | 848432.59 | 861.28' | END RADIUS; BEGIN RADIUS |
| E183 | 117+09.15 NB | 2002.07 LT | 443014.36 | 846511.83 | --- | R=1974' |
| E184 | 122+32.21 SB | 1167.86 LT | 443464.99 | 847211.39 | --- | R=1185' |
| E185 | 121+51.29 SB | 892.99 LT | 443575.72 | 847465.95 | --- | R=936' |
| E186 | 116+12.20 NB | 2218.98 LT | 442869.46 | 846330.51 | --- | R=2205' |
| E187 | 122+79.77 NB | 3455.73 LT | 442493.58 | 845144.66 | --- | R=2207' |

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NOTES:
- SEE CONSTRUCTION DETAIL 'SPLITTER ISLAND DETAIL' FOR MEDIAN ISLAND NOSE GEOMETRY.
- ALL POINTS & RADII ARE TO FLANGE LINE OF CURB, GUTTER AND CURB & GUTTER, UNLESS OTHERWISE NOTED.

N

MATCHLINE STA. 126+25 NB

MATCHLINE STA. 37+25 EB

MATCHLINE STA. 31+75 EB

MATCHLINE STA. 122+75 NB

CTH B

CTH AB

USH 51

CRTA-12(R)

CURVE A-1

NB CHAIN

SB CHAIN

C CHAIN

D CHAIN

WB CHAIN

EB CHAIN

A CHAIN

B CHAIN

E CHAIN

CONCRETE SURFACE DRAIN

CONCRETE SURFACE DRAIN

RIPRAP

## LEGEND

| | | | |
|---|---|---|---|
| 18(R) | CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT) | CONC-8 | CONCRETE PAVEMENT 8-INCH (DOWELED, NON-TINED) |
| 30(A) | CONCRETE CURB & GUTTER 30-INCH TYPE A | HMA | HMA PAVEMENT, 5.5-INCH |
| 30(D) | CONCRETE CURB & GUTTER 30-INCH TYPE D | HMA-4.5" | HMA PAVEMENT, 4.5-INCH |
| 36(A) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A | HMA-3.5" | HMA PAVEMENT, 3.5-INCH |
| 36(D) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D | (A) | CONCRETE MEDIAN SLOPE NOSE (TYPE 1) |
| R | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R | (B) | CONCRETE MEDIAN SLOPE NOSE (TYPE 2) |
| BAD | BASE AGGREGATE DENSE 3/4-INCH | 250 | LAYOUT POINT NUMBER |
| CCS-5 | CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED | XXXX | SAWING ASPHALT REQ'D |
| CRTA-12(R) | CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED | ΔΔΔΔΔ | SAWING CONCRETE REQ'D |
| ASPH-D | 3-INCHES ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES BASE AGGREGATE DENSE 1 1/4-INCH | | INLET |
| (T) | 6' CURB TRANSITION | | PROPOSED APRON ENDWALL |

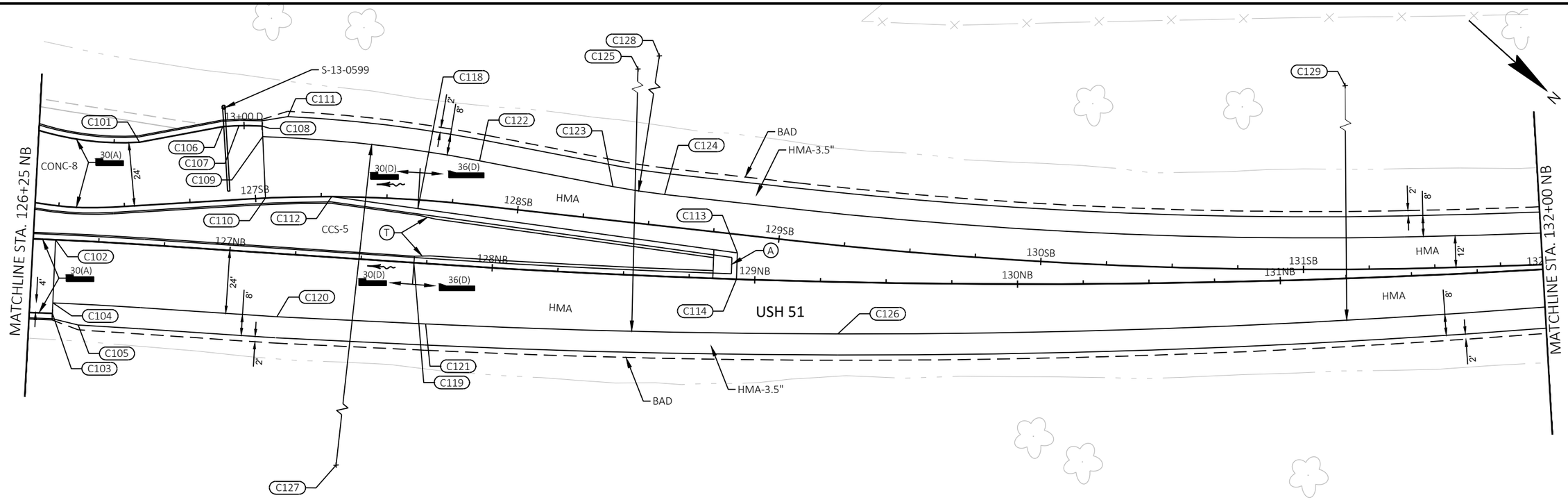
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN DETAILS | SHEET 24 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 8/1/2023 10:13 AM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

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| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| A101 | 32+00.75 WB | 19.64 LT | 444286.27 | 847907.21 | 862.05' | EOP; BEGIN TAPER |
| A102 | 32+11.14 WB | 18.80 LT | 444288.02 | 847917.11 | 862.00' | EOP; BEGIN CONCRETE CURB AND GUTTER |
| A103 | 32+02.86 WB | 18.61 LT | 444285.78 | 847909.43 | 862.08' | END HMA SHOULDER |
| A104 | 32+26.68 WB | 19.02 LT | 444292.42 | 847931.45 | 862.03' | EOP; BEGIN TAPER |
| A105 | 32+58.75 WB | 16.30 LT | 444299.29 | 847962.84 | 862.13' | EOP; END TAPER |
| A106 | 32+05.30 EB | 17.00 RT | 444239.17 | 847920.96 | 862.78' | EOP; BEGIN TAPER |
| A107 | 32+14.97 EB | 14.00 RT | 444244.92 | 847929.64 | 862.82' | END HMA SHOULDER |
| A108 | 32+14.97 EB | 16.00 RT | 444243.02 | 847930.24 | 862.78' | EOP; BEGIN CONCRETE CURB AND GUTTER |
| A109 | 33+22.69 WB | 5.00 RT | 444297.85 | 848030.22 | --- | R=2.5' (FOC) |
| A110 | 33+26.60 WB | 0.00 RT | 444303.79 | 848032.48 | 862.90' | EOP; END CONCRETE CURB AND GUTTER |
| A111 | 1+21.29 A | 30.00 RT | 444303.56 | 848035.47 | 862.92' | EOP; END CONCRETE CURB AND GUTTER |
| A112 | 33+26.15 EB | 4.00 LT | 444270.62 | 848035.05 | --- | R=1.5' (FOC) |
| A113 | 33+30.71 EB | 0.00 RT | 444265.20 | 848037.91 | 862.43' | EOP; END CONCRETE CURB AND GUTTER |
| A114 | 1+46.32 A | 30.00 RT | 444266.25 | 848040.73 | 862.42' | EOP; END CONCRETE CURB AND GUTTER |
| A115 | 33+83.19 EB | 88.50 LT | 444359.67 | 848072.03 | 863.31' | EOP; BEGIN CONCRETE CURB AND GUTTER |
| A116 | 0+74.26 A | 20.00 RT | 444357.34 | 848073.93 | 863.24' | EOP; END CONCRETE CURB AND GUTTER |
| A117 | 33+88.73 EB | 92.28 LT | 444364.44 | 848076.74 | --- | R=1.5' (FOC) |
| A118 | 125+46.49 SB | 49.35 RT | 444379.89 | 848123.01 | --- | R=2.5' (FOC) |
| A119 | 0+28.49 A | 20.00 RT | 444374.46 | 848131.40 | 862.24' | EOP; END CONCRETE CURB AND GUTTER |
| A120 | 125+44.82 SB | 58.07 RT | 444377.44 | 848131.72 | 862.31' | EOP; BEGIN CONCRETE CURB AND GUTTER |
| A121 | 125+91.62 SB | 46.72 RT | 444440.54 | 848109.28 | 863.62' | EOP; BEGIN TAPER |
| A122 | 126+15.18 SB | 42.37 RT | 444467.29 | 848091.36 | 864.47' | EOP; END TAPER |
| A123 | 1+22.42 A | 58.00 LT | 444296.89 | 848123.22 | 867.22' | CENTER ISLAND |
| A124 | 33+97.38 EB | 125.77 RT | 444152.18 | 848127.36 | 859.54' | EOP; END TAPER |
| A125 | 34+06.51 EB | 156.72 RT | 444123.58 | 848142.29 | 858.93' | EOP; BEGIN TAPER |
| A126 | 2+07.30 A | 20.00 RT | 444219.93 | 848110.50 | 861.10' | EOP; END CONCRETE CURB AND GUTTER |
| A127 | 33+92.88 EB | 58.84 RT | 444216.97 | 848110.01 | 861.08' | EOP; END CONCRETE CURB AND GUTTER |
| A128 | 34+00.53 EB | 63.35 RT | 444214.03 | 848118.38 | --- | R=2.5' (FOC) |
| A129 | 123+52.91 SB | 49.69 RT | 444226.26 | 848164.87 | --- | R=1.5' (FOC) |

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| A130 | 2+52.43 A | 20.00 RT | 444233.15 | 848168.17 | 860.06' | EOP; END CONCRETE CURB AND GUTTER |
| A131 | 123+53.50 SB | 56.37 RT | 444230.70 | 848169.90 | 859.97' | EOP; END CONCRETE CURB AND GUTTER |
| A132 | 3+25.36 A | 30.00 RT | 444322.97 | 848207.26 | 860.35' | EOP; END CONCRETE CURB AND GUTTER |
| A133 | 35+06.10 WB | 0.00 RT | 444323.86 | 848210.13 | 860.34' | EOP; END CONCRETE CURB AND GUTTER |
| A134 | 35+10.53 WB | 4.00 RT | 444318.39 | 848212.67 | --- | R=1.5' (FOC) |
| A135 | 3+08.20 A | 30.00 RT | 444297.33 | 848211.22 | 859.96' | EOP; END CONCRETE CURB AND GUTTER |
| A136 | 35+10.65 EB | 0.00 RT | 444297.35 | 848214.22 | 859.91' | EOP; END CONCRETE CURB AND GUTTER |
| A137 | 35+13.28 EB | 5.00 LT | 444302.69 | 848216.04 | --- | R=2.5' (FOC) |
| A138 | 35+66.42 WB | 0.00 LT | 444315.43 | 848269.07 | 859.50' | EOP; END MEDIAN NOSE |
| A139 | 35+67.01 EB | 0.00 RT | 444306.02 | 848269.90 | 859.32' | EOP; END MEDIAN NOSE |
| A140 | 36+11.99 WB | 16.00 LT | 444334.40 | 848313.48 | 858.60' | BEGIN CONCRETE SURFACE DRAIN |
| A141 | 36+11.99 WB | 18.00 LT | 444336.39 | 848313.35 | 858.53' | EOP; END TAPER |
| A142 | 36+03.99 WB | 16.00 LT | 444333.87 | 848305.50 | 858.72' | EOP; END CONC-8; BEGIN CONCRETE CURB AND GUTTER |
| A143 | 36+03.99 WB | 12.00 LT | 444329.88 | 848305.76 | 858.80' | BEGIN HMA-4.5"; END CONC-8 |
| A144 | 36+21.99 WB | 17.00 LT | 444336.06 | 848323.39 | 858.45' | EOP; BEGIN TAPER |
| A145 | 36+05.06 EB | 12.10 RT | 444299.92 | 848309.36 | 858.67' | END CONC-8; BEGIN HMA 4.5" |
| A146 | 35+90.08 EB | 16.87 RT | 444292.90 | 848295.29 | 858.74' | EOP; END TAPER |
| A147 | 36+05.06 EB | 16.10 RT | 444295.97 | 848309.97 | 858.59' | END CONC-8; END CONCRETE CURB AND GUTTER |
| A148 | 36+13.05 EB | 15.89 RT | 444297.41 | 848317.84 | 858.51' | BEGIN CONCRETE SURFACE DRAIN |
| A149 | 36+13.11 EB | 18.00 RT | 444295.33 | 848318.22 | 858.47' | EOP; BEGIN TAPER |
| A150 | 36+23.08 EB | 17.00 RT | 444297.86 | 848327.92 | 858.41' | EOP; END TAPER |
| A151 | 36+73.12 EB | 17.00 RT | 444305.56 | 848377.36 | 858.31' | EOP; BEGIN ASPH-D; BEGIN RADIUS |
| A152 | 37+00.64 EB | 48.00 RT | 444279.98 | 848411.70 | 857.09' | END RADIUS |
| A153 | 37+19.27 EB | 41.56 RT | 444291.35 | 848431.16 | 856.90' | BEGIN RADIUS |
| A154 | 36+99.71 EB | 64.37 RT | 444263.72 | 848413.93 | --- | EOP; END ASPH-D; SAWCUT; MATCH EXIST. |
| A155 | 37+16.50 EB | 66.39 RT | 444266.54 | 848434.55 | --- | EOP; END ASPH-D; SAWCUT; MATCH EXIST. |
| A156 | 35+57.52 EB | 17.13 RT | 444287.64 | 848263.16 | 859.08' | EOP; BEGIN TAPER |
| A157 | 36+73.12 EB | 47.00 RT | 444275.92 | 848381.98 | --- | R=30' |
| A158 | 36+12.75 EB | 12.00 RT | 444301.21 | 848316.95 | 858.59' | END TAPER |




NOTES:

- SEE CONSTRUCTION DETAIL 'SPLITTER ISLAND DETAIL' FOR MEDIAN ISLAND NOSE GEOMETRY.
- ALL POINTS & RADII ARE TO FLANGE LINE OF CURB, GUTTER AND CURB & GUTTER, UNLESS OTHERWISE NOTED.

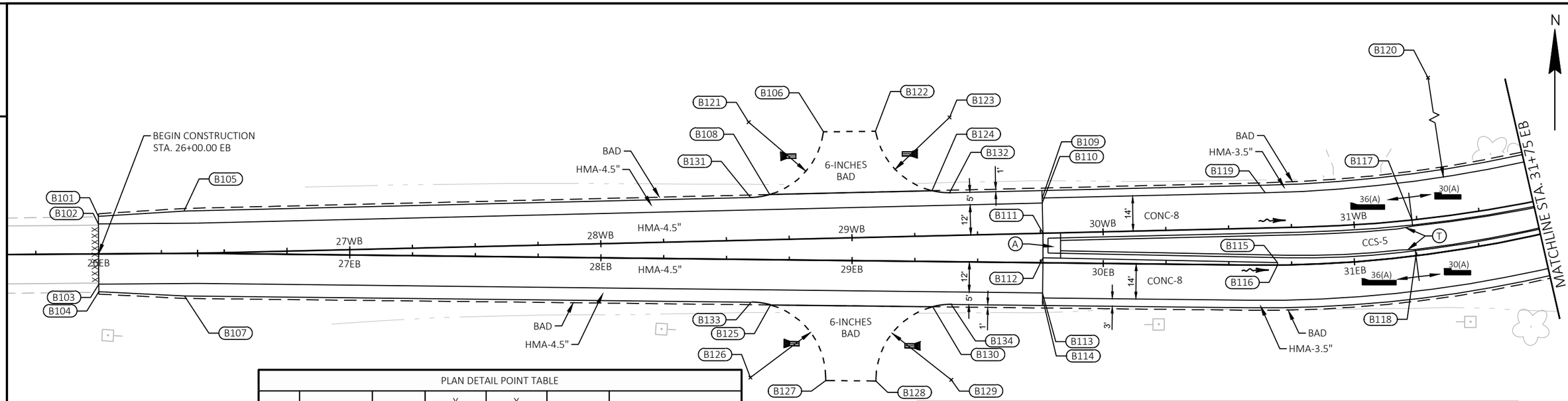
## LEGEND

| | |
|---|---|
| 18(R) | CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT) |
| 30(A) | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| 30(D) | CONCRETE CURB & GUTTER 30-INCH TYPE D |
| 36(A) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| 36(D) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D |
| R | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CCS-5 | CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED |
| CRTA-12(R) | CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED |
| ASPH-D | 3-INCHES ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES BASE AGGREGATE DENSE 1 1/4-INCH |
| (T) | 6' CURB TRANSITION |
| CONC-8 | CONCRETE PAVEMENT 8-INCH (DOWELED, NON-TINED) |
| HMA | HMA PAVEMENT, 5.5-INCH |
| HMA-4.5" | HMA PAVEMENT, 4.5-INCH |
| HMA-3.5" | HMA PAVEMENT, 3.5-INCH |
| (A) | CONCRETE MEDIAN SLOPE NOSE (TYPE 1) |
| (B) | CONCRETE MEDIAN SLOPE NOSE (TYPE 2) |
| 250 | LAYOUT POINT NUMBER |
| XXXX | SAWING ASPHALT REQ'D |
| | SAWING CONCRETE REQ'D |
| | INLET |
| | PROPOSED APRON ENDWALL |

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN DETAILS | SHEET 26 | E |
|---|---|---|---|---|---|

2

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| C101 | 126+62.99 NB | 38.67 LT | 444459.91 | 848011.27 | 865.60' | EOP; END TAPER; END RADIUS |
| C102 | 126+25.07 SB | 12.89 RT | 444460.95 | 848060.16 | 865.47' | EOP; END CONC-8; BEGIN HMA |
| C103 | 126+26.38 SB | 40.84 RT | 444478.79 | 848081.73 | 864.91' | EOP; END CONC-8; BEGIN HMA; END CONCRETE CURB AND GUTTER |
| C104 | 126+26.22 SB | 36.85 RT | 444476.24 | 848078.65 | 864.99' | END CONC-8; BEGIN HMA |
| C105 | 126+33.90 SB | 44.66 RT | 444489.07 | 848078.47 | 864.97' | EOP; END TAPER |
| C106 | 126+94.08 NB | 46.72 LT | 444479.50 | 847985.65 | 866.38' | EOP; BEGIN TAPER |
| C107 | 127+00.25 NB | 47.51 LT | 444483.86 | 847981.21 | 866.55' | EOP;END RADIUS |
| C108 | 127+09.05 NB | 47.93 LT | 444490.52 | 847975.45 | 866.80' | EOP; END CONC-8; BEGIN HMA; END CONCRETE CURB AND GUTTER; END RADIUS |
| C109 | 127+09.50 NB | 43.95 LT | 444493.34 | 847978.31 | 866.88' | END CONC-8; BEGIN HMA; BEGIN TAPER |
| C110 | 127+12.11 NB | 20.75 LT | 444509.72 | 847994.95 | 867.35' | EOP; END CONC-8; BEGIN HMA |
| C111 | 127+18.59 NB | 52.19 LT | 444495.40 | 847966.21 | 866.85' | EOP; END TAPER |
| C112 | 127+37.22 NB | 22.95 LT | 444528.11 | 847977.71 | 868.10' | EOP; BEGIN TAPER |
| C113 | 128+93.06 NB | 10.00 LT | 444657.16 | 847890.32 | 873.97' | EOP; END CONCRETE MEDIAN NOSE |
| C114 | 128+85.64 SB | 16.97 RT | 444663.60 | 847897.97 | 874.00' | EOP; END CONCRETE MEDIAN NOSE |
| C115 | 133+08.72 SB | 12.13 RT | 444979.26 | 847613.11 | 891.20' | END RADIUS; END TAPER |
| C116 | 133+35.09 SB | 12.12 LT | 444979.52 | 847577.29 | --- | SAWCUT; MATCH EXIST. |
| C117 | 133+44.09 NB | 12.00 RT | 444997.24 | 847593.66 | --- | SAWCUT; MATCH EXIST. |
| C118 | 127+70.27 NB | 20.62 LT | 444555.54 | 847959.14 | 869.21' | CURB TRANSITION |
| C119 | 127+61.94 SB | 23.96 RT | 444568.17 | 847975.43 | 869.55' | CURB TRANSITION |
| C120 | 127+06.31 SB | 45.29 RT | 444543.17 | 848025.57 | 867.48' | BEGIN TAPER; EDGE TRAVEL LANE |
| C121 | 127+68.59 SB | 46.77 RT | 444587.02 | 847989.72 | 869.35' | EDGE TRAVEL LANE |
| C122 | 127+92.67 NB | 40.31 LT | 444560.83 | 847929.91 | 869.53' | BEGIN TAPER |
| C123 | 128+44.45 NB | 33.29 LT | 444605.12 | 847903.25 | 871.46' | BEGIN RADIUS; END TAPER |
| C124 | 128+64.41 NB | 31.17 LT | 444621.73 | 847892.32 | 872.24' | END RADIUS |
| C125 | 123+82.25 SB | 3295.44 LT | 442423.40 | 845345.10 | --- | R=3417' |
| C126 | 129+25.84 SB | 33.49 RT | 444706.16 | 847887.65 | 876.35' | BEGIN RADIUS; EDGE TRAVEL LANE |
| C127 | 127+28.13 NB | 484.60 RT | 444834.35 | 848382.56 | --- | R=528.88' |
| C128 | 128+83.48 NB | 280.51 LT | 444476.18 | 847689.06 | --- | R=250' |
| C129 | 129+03.64 SB | 1800.00 LT | 443620.38 | 846410.22 | --- | R=1819' |




| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B124 | 29+32.32 WB | 18.00 LT | 444265.20 | 847644.63 | 867.71' | END TAPER; BEGIN RADIUS |
| B125 | 28+67.68 EB | 18.00 RT | 444219.71 | 847580.29 | 869.89' | END TAPER; BEGIN RADIUS |
| B126 | 28+60.00 EB | 47.00 RT | 444190.79 | 847572.28 | --- | R=30' |
| B127 | 28+90.00 EB | 47.82 RT | 444189.64 | 847602.27 | --- | MATCH EXIST. |
| B128 | 29+10.00 EB | 47.82 RT | 444189.42 | 847622.27 | --- | MATCH EXIST. |
| B129 | 29+40.00 EB | 47.00 RT | 444189.90 | 847652.28 | --- | R=30' |
| B130 | 29+32.32 EB | 18.00 RT | 444218.99 | 847644.92 | 867.89' | END TAPER; BEGIN RADIUS |
| B131 | 28+60.00 WB | 17.00 LT | 444262.49 | 847572.36 | 870.06' | EOP; BEGIN TAPER |
| B132 | 29+39.29 WB | 17.01 LT | 444264.38 | 847651.62 | 867.54' | EOP; BEGIN TAPER |
| B133 | 28+60.00 EB | 17.00 RT | 444220.79 | 847572.62 | 870.19' | EOP; BEGIN TAPER |
| B134 | 29+39.67 EB | 17.00 RT | 444219.90 | 847652.28 | 867.72' | EOP; BEGIN TAPER |

NOTES:
- SEE CONSTRUCTION DETAIL 'SPLITTER ISLAND DETAIL' FOR MEDIAN ISLAND NOSE GEOMETRY.
- ALL POINTS & RADII ARE TO FLANGE LINE OF CURB, GUTTER AND CURB & GUTTER, UNLESS OTHERWISE NOTED.

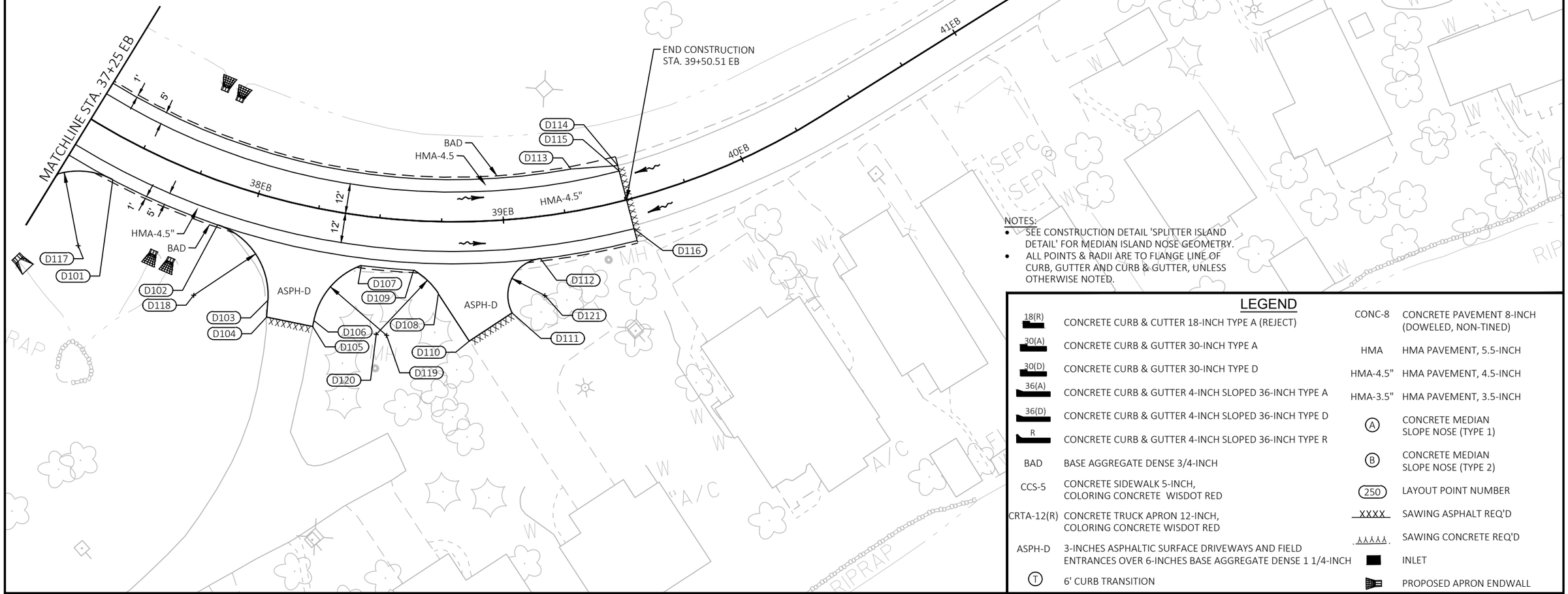
## LEGEND

| | | | |
|---|---|---|---|
| 18(R) | CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT) | CONC-8 | CONCRETE PAVEMENT 8-INCH (DOWELED, NON-TINED) |
| 30(A) | CONCRETE CURB & GUTTER 30-INCH TYPE A | HMA | HMA PAVEMENT, 5.5-INCH |
| 30(D) | CONCRETE CURB & GUTTER 30-INCH TYPE D | HMA-4.5" | HMA PAVEMENT, 4.5-INCH |
| 36(A) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A | HMA-3.5" | HMA PAVEMENT, 3.5-INCH |
| 36(D) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D | (A) | CONCRETE MEDIAN SLOPE NOSE (TYPE 1) |
| R | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R | (B) | CONCRETE MEDIAN SLOPE NOSE (TYPE 2) |
| BAD | BASE AGGREGATE DENSE 3/4-INCH | 250 | LAYOUT POINT NUMBER |
| CCS-5 | CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED | XXXX | SAWING ASPHALT REQ'D |
| CRTA-12(R) | CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED | | SAWING CONCRETE REQ'D |
| ASPH-D | 3-INCHES ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES BASE AGGREGATE DENSE 1 1/4-INCH | | INLET |
| (T) | 6' CURB TRANSITION | | PROPOSED APRON ENDWALL |

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B101 | 26+00.00 EB | 15.00 LT | 444255.01 | 847312.73 | --- | EOP; BEGIN TAPER; SAWCUT; MATCH EXIST. |
| B102 | 26+00.00 EB | 12.00 LT | 444252.01 | 847312.75 | --- | EDGE OF LANE; SAWCUT; MATCH EXIST. |
| B103 | 26+00.00 EB | 12.00 RT | 444228.01 | 847312.90 | --- | EDGE OF LANE; SAWCUT; MATCH EXIST. |
| B104 | 26+00.00 EB | 15.00 RT | 444225.01 | 847312.92 | --- | EOP; BEGIN TAPER; SAWCUT; MATCH EXIST. |
| B105 | 26+34.07 EB | 16.91 LT | 444257.13 | 847346.78 | 879.72' | EOP; END TAPER |
| B106 | 28+89.65 WB | 42.46 LT | 444288.64 | 847601.40 | --- | MATCH EXIST. |
| B107 | 26+34.07 EB | 16.91 RT | 444223.31 | 847347.00 | 879.72' | EOP; END TAPER |
| B108 | 28+67.68 WB | 18.00 LT | 444263.67 | 847580.01 | 869.75' | END TAPER; BEGIN RADIUS |
| B109 | 29+76.04 WB | 14.00 LT | 444262.24 | 847688.43 | 866.58' | END HMA-4.5"; BEGIN CONC-8; EOC |
| B110 | 29+76.04 WB | 12.00 LT | 444260.24 | 847688.48 | 866.63' | END HMA-4.5"; BEGIN CONC-8 |
| B111 | 29+76.04 WB | 0.00 RT | 444248.24 | 847688.76 | 866.86' | EOP; BEGIN CONCRETE MEDIAN NOSE |
| B112 | 29+75.96 EB | 1.96 LT | 444238.46 | 847688.78 | 867.13' | EOP; BEGIN CONCRETE MEDIAN NOSE; BEGIN TAPER |
| B113 | 29+75.96 EB | 12.00 RT | 444224.50 | 847688.63 | 866.85' | END HMA-4.5"; BEGIN CONC-8 |
| B114 | 29+75.96 EB | 14.00 RT | 444222.50 | 847688.60 | 866.81' | END HMA-4.5"; BEGIN CONC-8; EOC |
| B115 | 30+69.41 EB | 1.00 LT | 444236.58 | 847782.20 | 865.05' | EOP; END TAPER |
| B116 | 30+69.38 EB | 0.00 RT | 444235.58 | 847782.18 | 865.03' | EOP |
| B117 | 31+23.08 WB | 0.00 RT | 444253.54 | 847835.68 | 863.35' | CURB TRANSITION |
| B118 | 31+24.63 EB | 0.00 RT | 444239.27 | 847837.28 | 864.11' | CURB TRANSITION |
| B119 | 30+64.91 WB | 14.00 LT | 444264.35 | 847777.28 | 864.26' | END RADIUS |
| B120 | 30+64.91 WB | 562.00 LT | 444812.20 | 847764.27 | --- | R=548' |
| B121 | 28+60.00 WB | 47.00 LT | 444292.48 | 847571.65 | --- | R=30' |
| B122 | 29+10.39 WB | 42.17 LT | 444288.85 | 847622.14 | --- | MATCH EXIST. |
| B123 | 29+40.00 WB | 47.00 LT | 444294.38 | 847651.62 | --- | R=30' |

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| D101 | 37+44.75 EB | 17.00 RT | 444323.46 | 848450.21 | 857.78' | EOP; BEGIN ASPH-D; END RADIUS |
| D102 | 37+88.28 EB | 17.00 RT | 444343.16 | 848491.92 | 857.32' | EOP; BEGIN ASPH-D; BEGIN RADIUS |
| D103 | 38+13.65 EB | 40.66 RT | 444338.15 | 848528.19 | 856.24' | END RADIUS |
| D104 | 38+14.61 EB | 47.31 RT | 444333.34 | 848532.92 | --- | END ASPH-D; SAWCUT; MATCH EXIST. |
| D105 | 38+30.87 EB | 47.26 RT | 444344.78 | 848548.11 | --- | END ASPH-D; SAWCUT; MATCH EXIST. |
| D106 | 38+30.93 EB | 44.83 RT | 444346.72 | 848546.65 | 856.25' | BEGIN RADIUS |
| D107 | 38+44.95 EB | 20.00 RT | 444375.80 | 848542.73 | 856.79' | EOP; BEGIN ASPH-D; END RADIUS |
| D108 | 38+74.25 EB | 29.13 RT | 444391.54 | 848571.88 | 855.99' | END RADIUS |
| D109 | 38+64.71 EB | 20.00 RT | 444390.33 | 848558.12 | 859.65' | EOP; BEGIN ASPH-D; END RADIUS |
| D110 | 38+85.24 EB | 48.22 RT | 444388.24 | 848594.46 | --- | END ASPH-D; SAWCUT; MATCH EXIST. |
| D111 | 39+00.68 EB | 37.71 RT | 444408.71 | 848597.44 | --- | END ASPH-D; SAWCUT; MATCH EXIST.; END RADIUS |
| D112 | 39+13.02 EB | 17.00 RT | 444431.83 | 848588.65 | 856.43' | EOP; BEGIN ASPH-D; END RADIUS |

| PLAN DETAIL POINT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| D113 | 39+30.55 EB | 17.00 LT | 444465.01 | 848569.66 | 855.32' | EOP; BEGIN TAPER |
| D114 | 39+50.51 EB | 14.27 LT | 444480.15 | 848581.21 | --- | EOP; END TAPER; SAWCUT; MATCH EXIST. |
| D115 | 39+50.51 EB | 12.00 LT | 444479.12 | 848583.23 | --- | MATCH EXIST. |
| D116 | 39+50.51 EB | 12.00 RT | 444468.20 | 848604.60 | --- | EOP; SAWCUT; MATCH EXIST. |
| D117 | 37+44.75 EB | 47.00 RT | 444295.42 | 848460.88 | --- | R=30' |
| D118 | 37+88.28 EB | 47.00 RT | 444317.12 | 848506.80 | --- | R=30' |
| D119 | 38+56.64 EB | 47.00 RT | 444364.75 | 848570.62 | --- | R=30' |
| D120 | 38+53.02 EB | 47.00 RT | 444361.85 | 848567.55 | --- | R=30' |
| D121 | 39+13.02 EB | 32.00 RT | 444423.28 | 848600.98 | --- | R=15' |



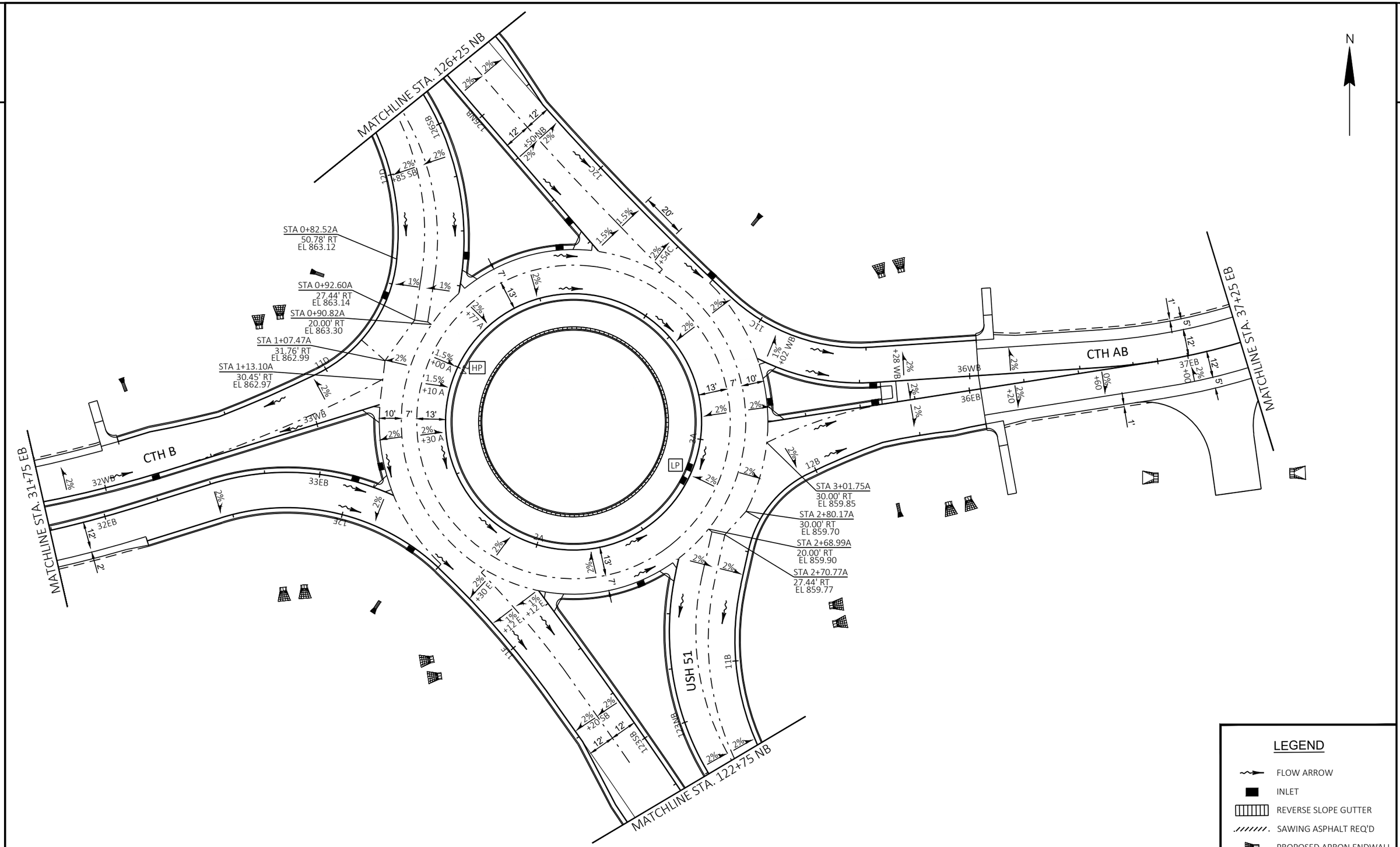

NOTES:

- SEE CONSTRUCTION DETAIL 'SPLITTER ISLAND DETAIL' FOR MEDIAN ISLAND NOSE GEOMETRY.
- ALL POINTS & RADII ARE TO FLANGE LINE OF CURB, GUTTER AND CURB & GUTTER, UNLESS OTHERWISE NOTED.

## LEGEND

| | | | |
|---|---|---|---|
| 18(R) | CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT) | CONC-8 | CONCRETE PAVEMENT 8-INCH (DOWELED, NON-TINED) |
| 30(A) | CONCRETE CURB & GUTTER 30-INCH TYPE A | HMA | HMA PAVEMENT, 5.5-INCH |
| 30(D) | CONCRETE CURB & GUTTER 30-INCH TYPE D | HMA-4.5" | HMA PAVEMENT, 4.5-INCH |
| 36(A) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A | HMA-3.5" | HMA PAVEMENT, 3.5-INCH |
| 36(D) | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D | (A) | CONCRETE MEDIAN SLOPE NOSE (TYPE 1) |
| R | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R | (B) | CONCRETE MEDIAN SLOPE NOSE (TYPE 2) |
| BAD | BASE AGGREGATE DENSE 3/4-INCH | 250 | LAYOUT POINT NUMBER |
| CCS-5 | CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED | XXXX | SAWING ASPHALT REQ'D |
| CRTA-12(R) | CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED | AAAAA | SAWING CONCRETE REQ'D |
| ASPH-D | 3-INCHES ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES BASE AGGREGATE DENSE 1 1/4-INCH | | INLET |
| (T) | 6' CURB TRANSITION | | PROPOSED APRON ENDWALL |

2



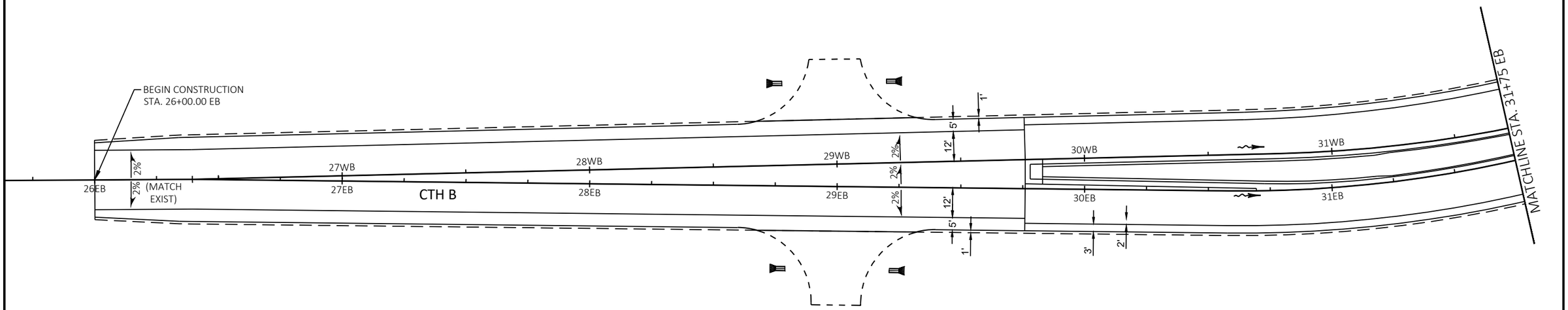

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | INTERSECTION DETAILS | SHEET 30 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021101_id

PLOT DATE : 8/1/2023 11:30 AM PLOT BY : BECKER, ELISA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N



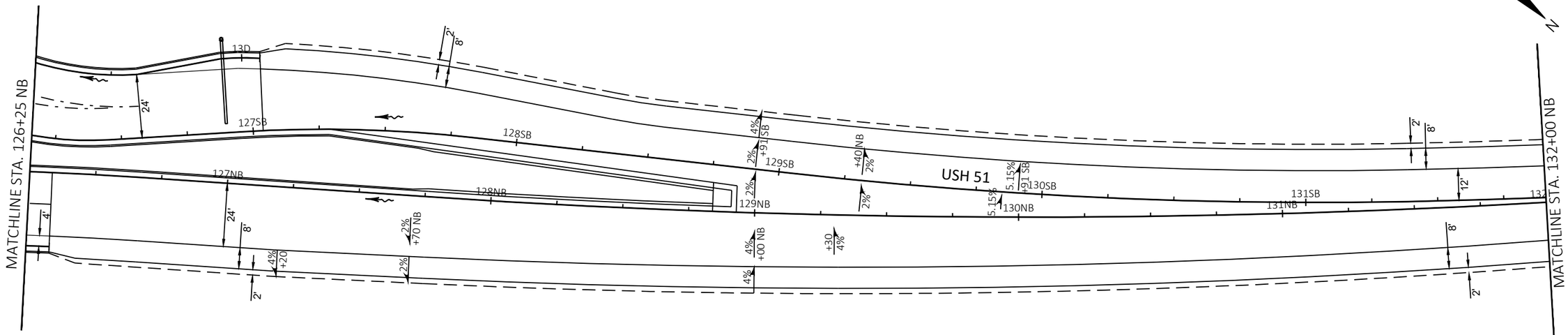

## LEGEND

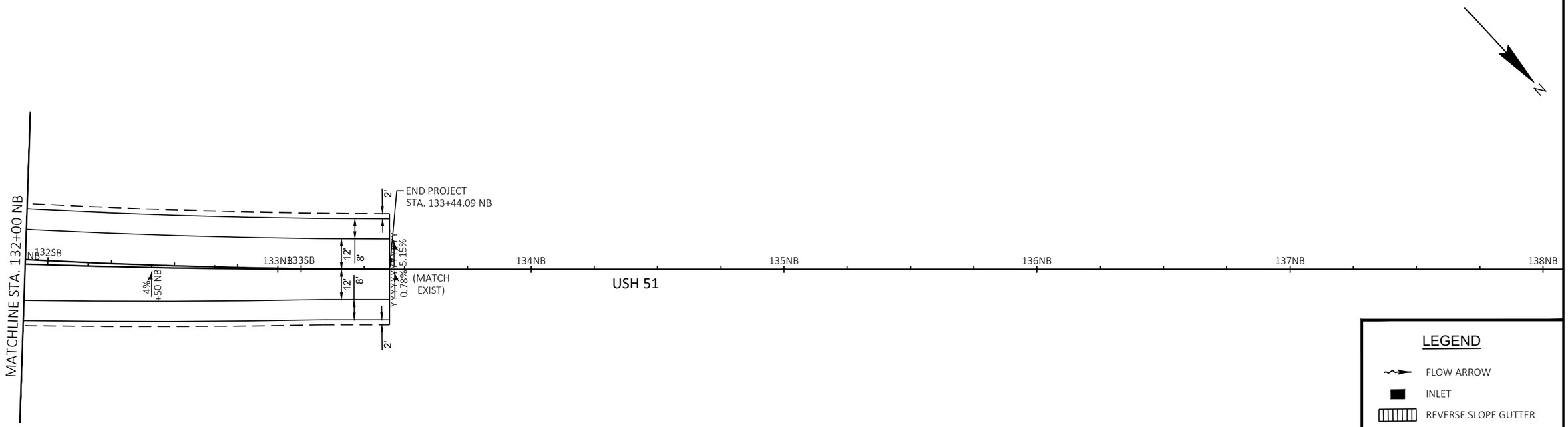
- FLOW ARROW
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D
- PROPOSED APRON ENDWALL

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | INTERSECTION DETAILS | SHEET 31 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021102_id
PLOT DATE : 8/1/2023 11:31 AM PLOT BY : BECKER, ELISA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

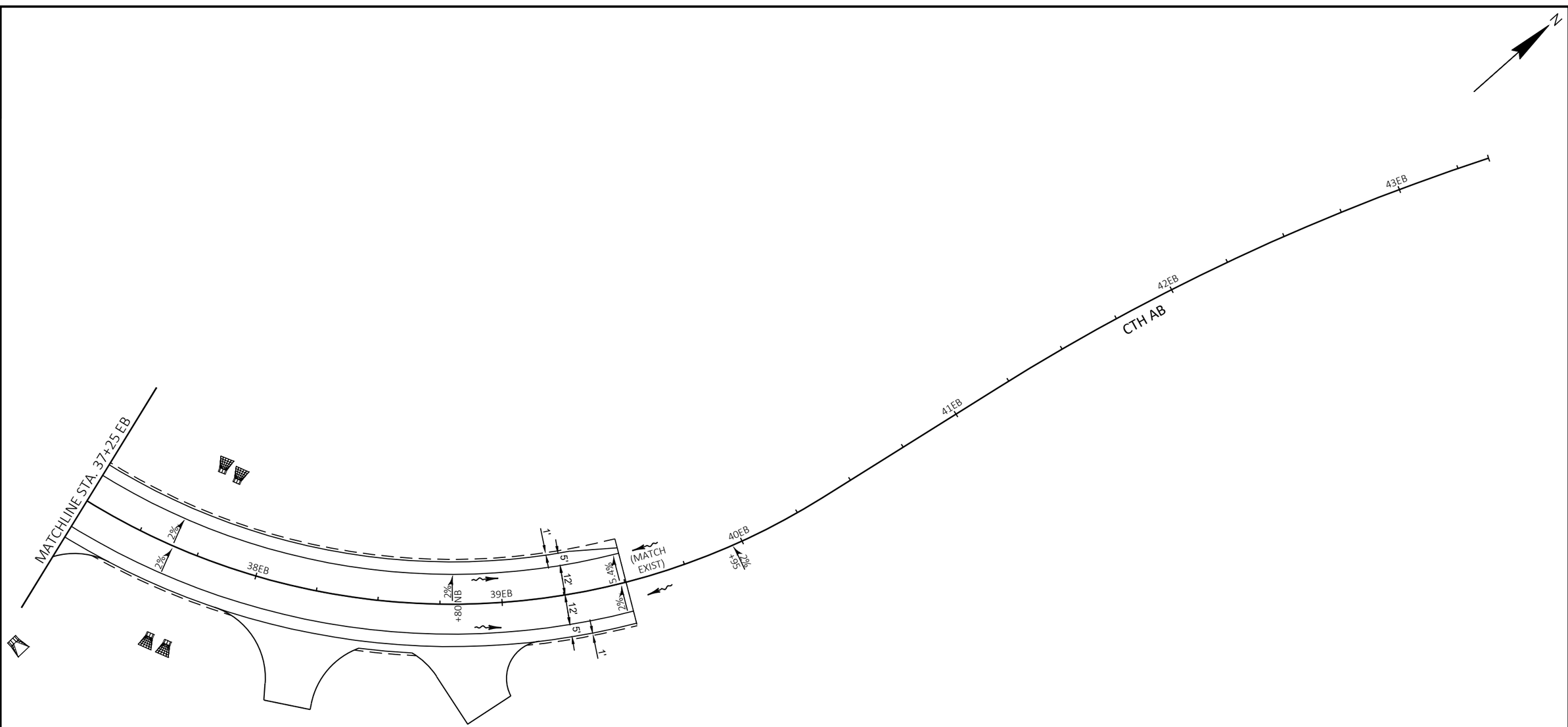



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | INTERSECTION DETAILS | SHEET 32 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021103_id
PLOT DATE : 8/1/2023 11:31 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



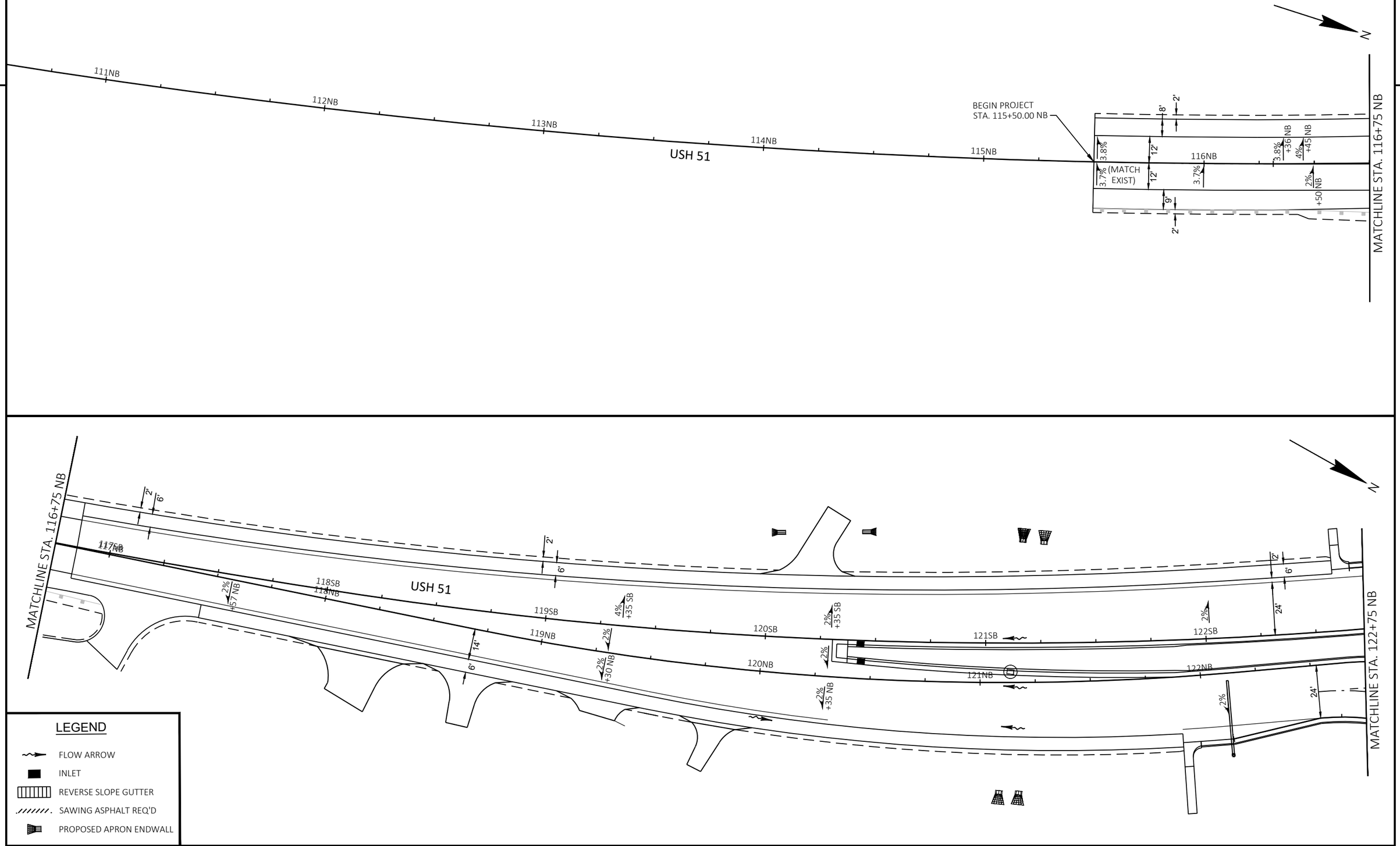

## LEGEND

- FLOW ARROW
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D
- PROPOSED APRON ENDWALL

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | INTERSECTION DETAILS | SHEET 33 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021104_id

PLOT DATE : 8/1/2023 11:32 AM PLOT BY : BECKER, ELISA PLOT NAME : PLOT SCALE : 1 IN:40 FT




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | INTERSECTION DETAILS | SHEET 34 | E |
|---|---|---|---|---|---|

2

2

MATCHLINE STA. 116+75 NB

117+00

USH 51

118+00

119+00

120+00

A/D

121+00

A/C

122+00

MATCHLINE STA. 122+75 NB

N

MH

INL

## LEGEND

- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE A, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT CLASS 2 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C.
- A/D — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE D.

N

BEGIN PROJECT
STA. 115+50.00 NB

115+00

116+00

USH 51

USH 51 FRONTAGE RD

MATCHLINE STA. 116+75 NB

MH

WATER

MH

RIPRAP MEDIUM

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EROSION CONTROL | SHEET 35 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022001_ec

PLOT DATE : 8/1/2023 11:46 AM PLOT BY : SCHAUB, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE A, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT CLASS 2 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C.
- A/D — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE D.

N

MATCHLINE STA. 126+25 NB

USH 51

CTH AB

CTH B

MATCHLINE STA. 37+25 EB

MATCHLINE STA. 31+75 EB

MATCHLINE STA. 122+75 NB

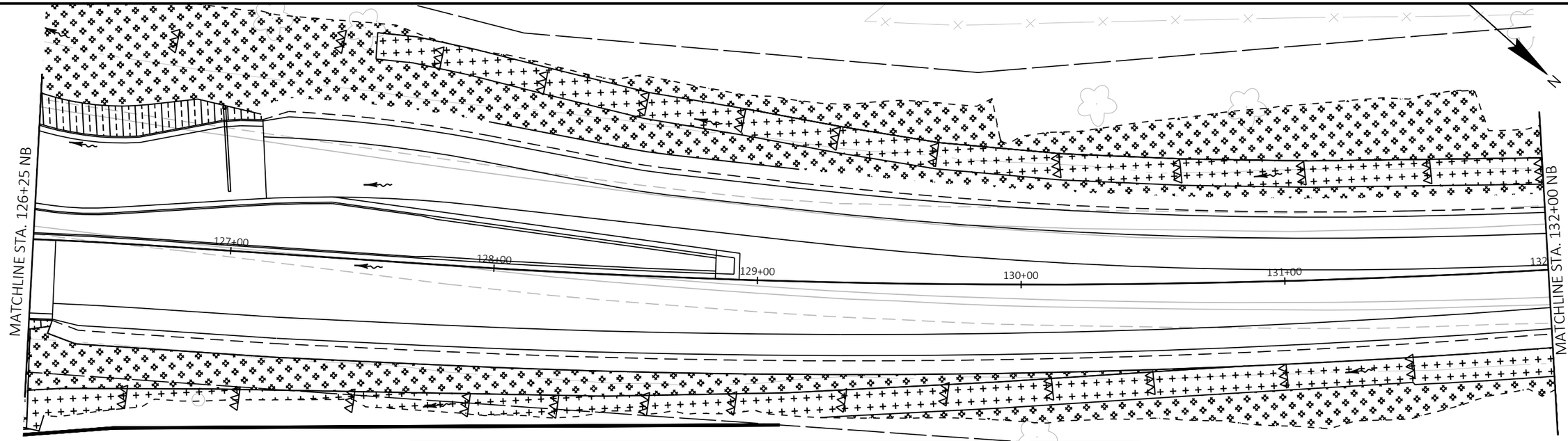
RIPRAP

MH

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EROSION CONTROL | SHEET 36 | E |
|---|---|---|---|---|---|

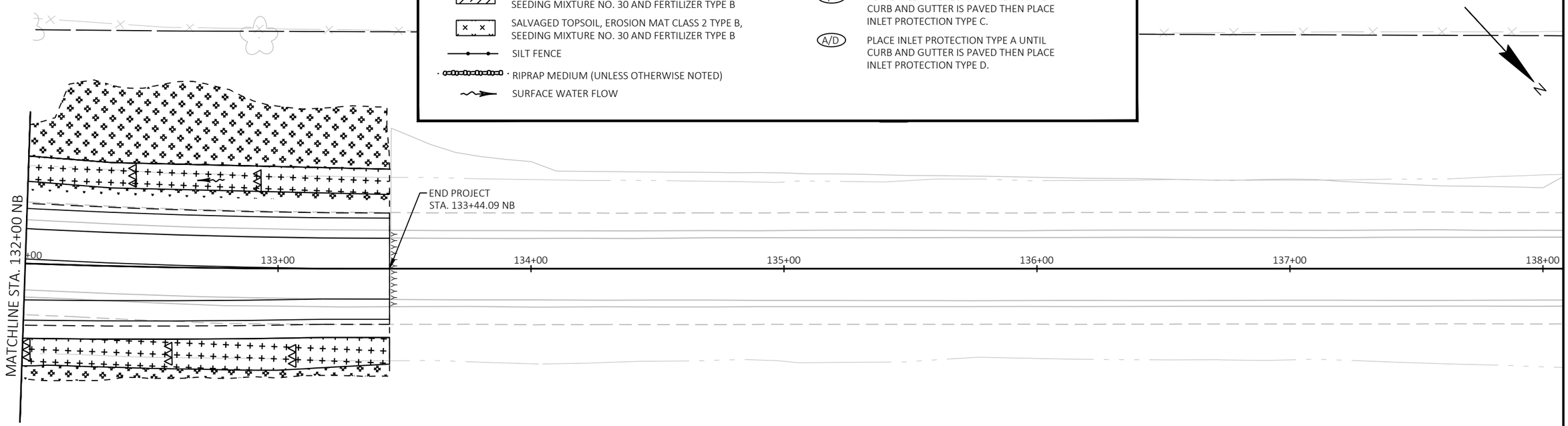
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022002_ec
PLOT DATE : 8/1/2023 11:46 AM
PLOT BY : SCHAUB, ALEX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




## LEGEND

- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE A, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT CLASS 2 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C.
- A/D — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE D.



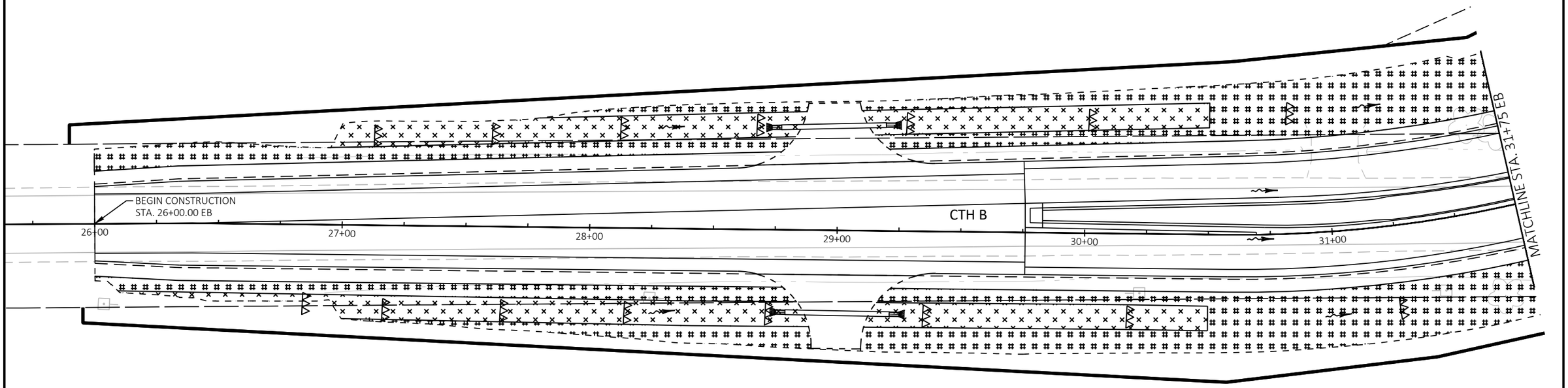

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EROSION CONTROL | SHEET 37 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022003_ec

PLOT DATE : 8/1/2023 11:47 AM PLOT BY : SCHAUB, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N




## LEGEND

- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE A, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT CLASS 2 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C.
- A/D — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE D.

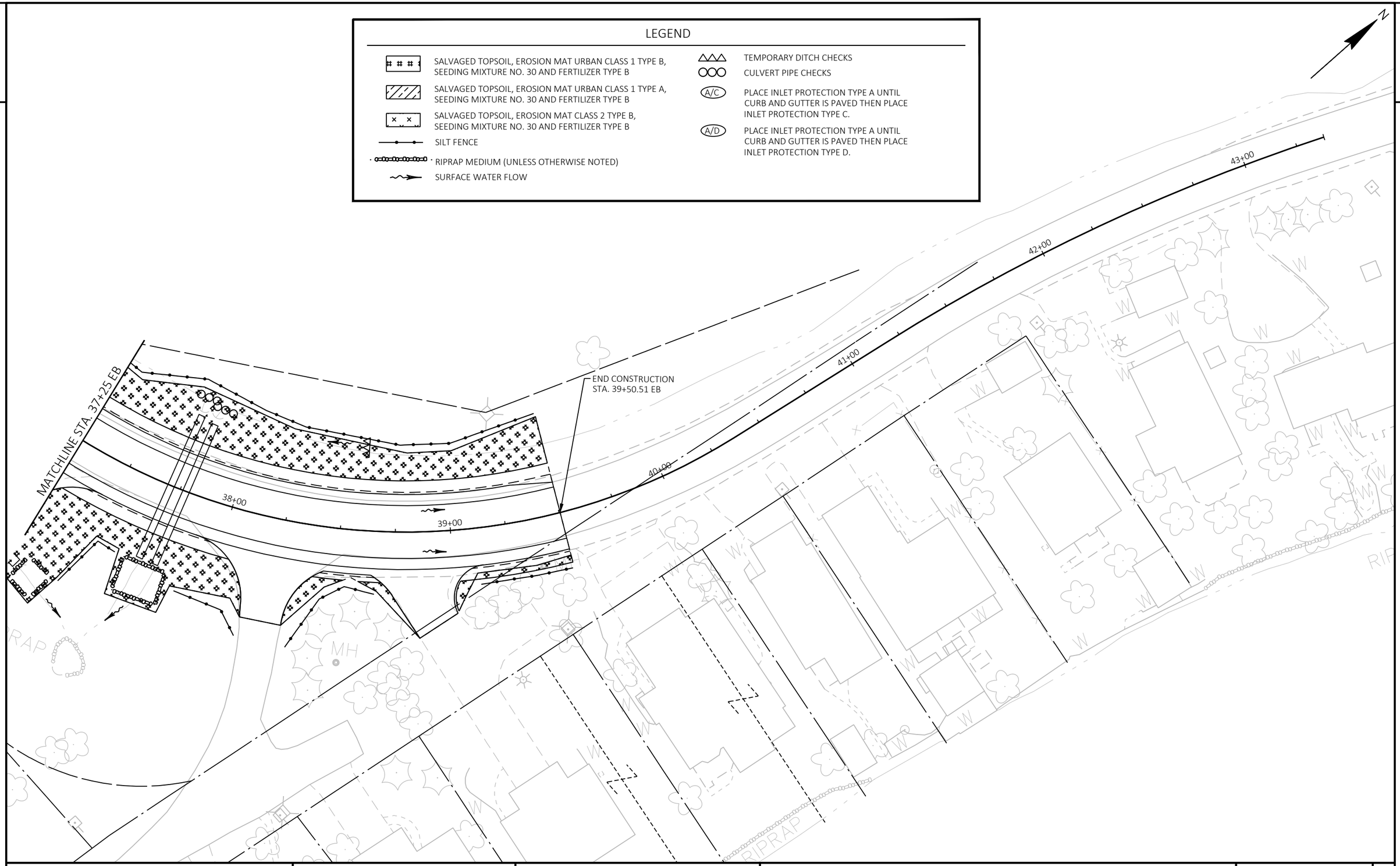
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EROSION CONTROL | SHEET 38 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022004_ec
PLOT DATE : 8/1/2023 11:47 AM
PLOT BY : SCHAUB, ALEX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

## LEGEND

- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT URBAN CLASS 1 TYPE A, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SALVAGED TOPSOIL, EROSION MAT CLASS 2 TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C.
- A/D — PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE D.




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EROSION CONTROL | SHEET 39 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022005_ec

PLOT DATE : 8/1/2023 8:12 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

USH 51

117NB

118NB

119NB

120NB

121NB

122NB

R/W

TLE

385

390

340

330

350

355

360

345

335

A

B

C

D

MATCHLINE STA. 122+50 NB

CAP UNDERDRAIN; INCIDENTAL TO PIPE UNDERDRAIN WRAPPED 6-INCH

PIPE UNDERDRAIN WRAPPED 6-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR MORE INFORMATION

CONSTRUCT UNDERDRAIN UNDERNEATH
EXISTING DITCHLINE @ APPROX. 0.5%

OUTLET UNDERDRAIN INTO EXISTING RIP RAP BASIN;
INVERT APPROX. 847.00
ADJUSTING EXISTING RIPRAP IS INCIDENTAL TO UNDERDRAIN WRAPPED 6-INCH
INSTALL RODENT SHIELD; INCIDENTAL TO UNDERDRAIN WRAPPED 6-INCH

LEGEND

- A REMOVING SMALL PIPE CULVERTS REQ'D
- B REMOVING INLETS REQ'D
- C REMOVING ENDWALLS REQ'D
- D REMOVING STORM SEWER 24-INCH REQ'D

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | STORM SEWER | SHEET 40 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_ss

PLOT DATE : 8/1/2023 9:29 AM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

## LEGEND

- (A) REMOVING SMALL PIPE CULVERTS REQ'D
- (B) REMOVING INLETS REQ'D
- (C) REMOVING ENDWALLS REQ'D
- (D) REMOVING STORM SEWER 24-INCH REQ'D

2

2

N

USH 51

CTH AB

CTH B

MATCHLINE STA. 30+50 EB

MATCHLINE STA. 36+50 EB

MATCHLINE STA. 122+50 NB

R/W

TLE

FO

FM

OH

G

12"NB

18"NB

24"NB

11+00 B

11+00 C

12+00 C

12+00 E

12+00 F

31+00 A

34EB

35EB

36EB

33EB

32EB

31EB

30EB

29EB

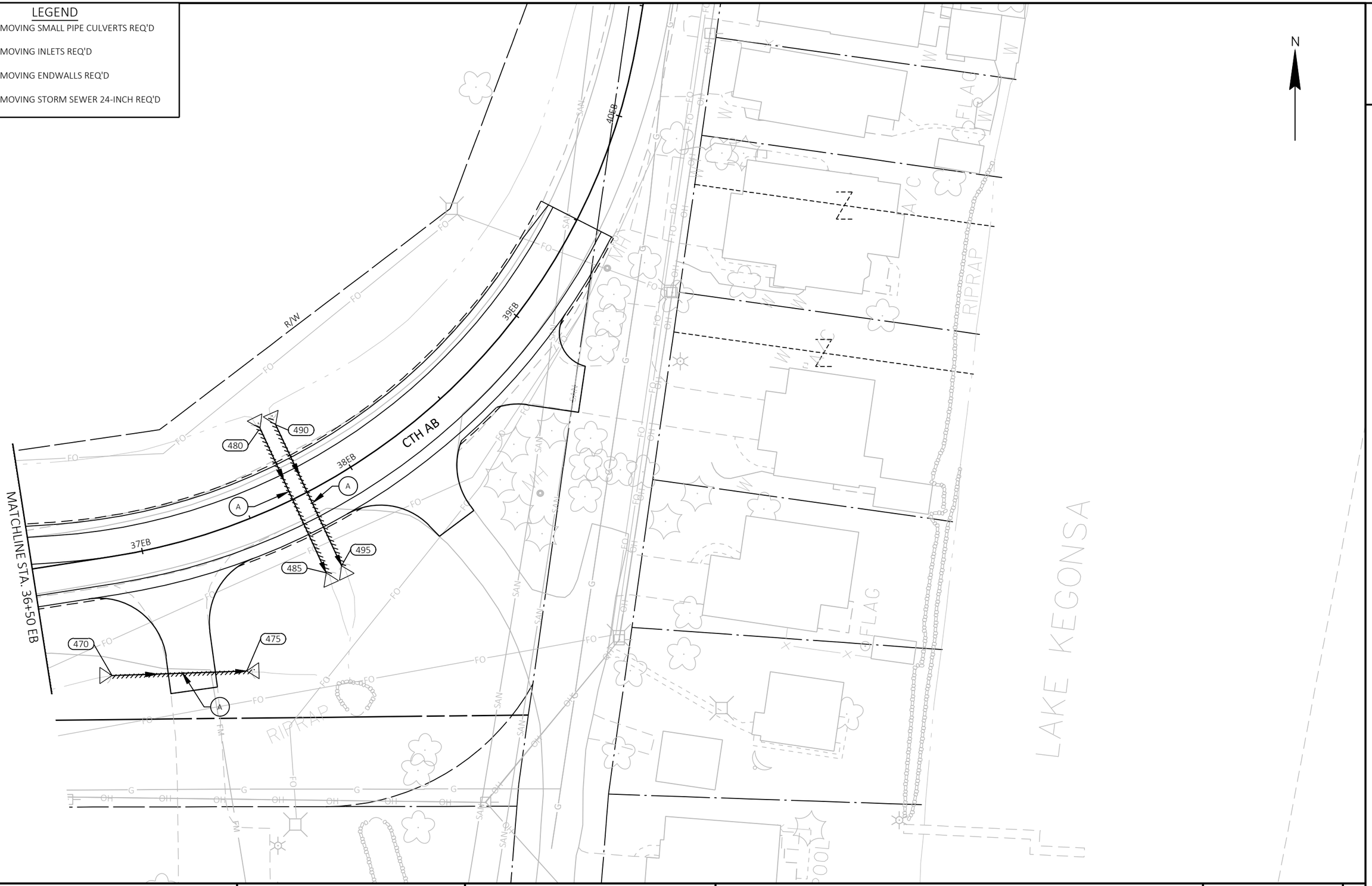
200 205 210 215 216 217 220 222 223 225 230 235 237 240 245 250 300 305 310 315 400 405 410 415 420 425 430 435 440 445 450 455 460 465 466 467

PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | STORM SEWER | SHEET 41 | E

2

## LEGEND

- (A) REMOVING SMALL PIPE CULVERTS REQ'D
- (B) REMOVING INLETS REQ'D
- (C) REMOVING ENDWALLS REQ'D
- (D) REMOVING STORM SEWER 24-INCH REQ'D

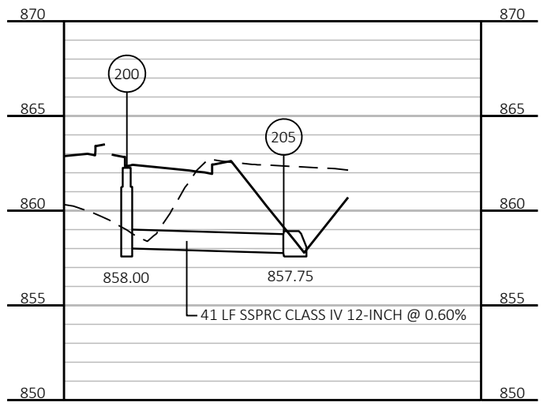


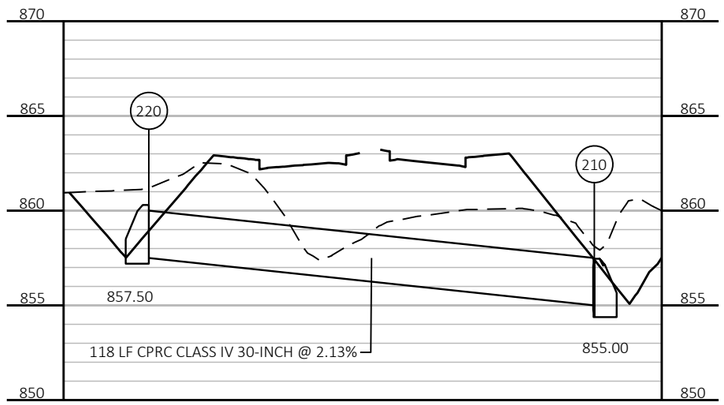

2

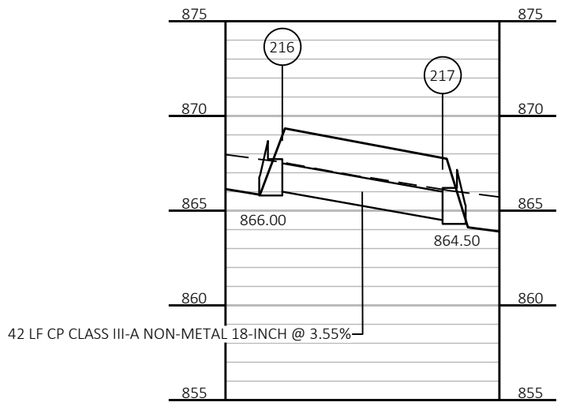
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | STORM SEWER | SHEET 42 | E |
|---|---|---|---|---|---|

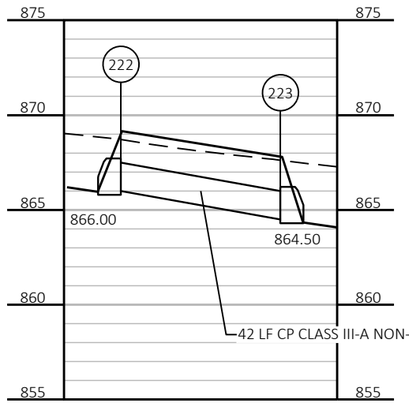
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LAYOUT NAME - 022503_ss

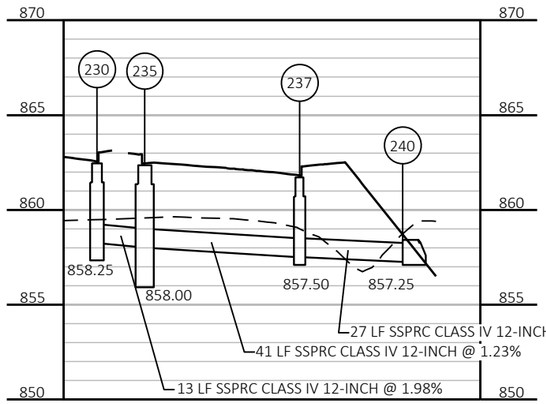
PLOT DATE : 8/1/2023 9:32 AM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

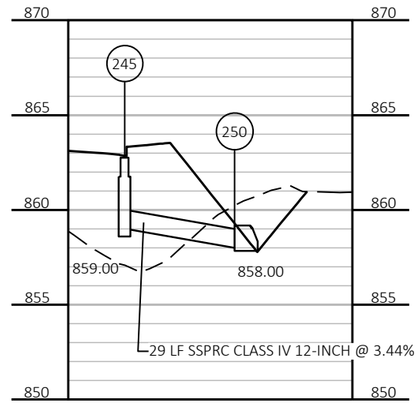


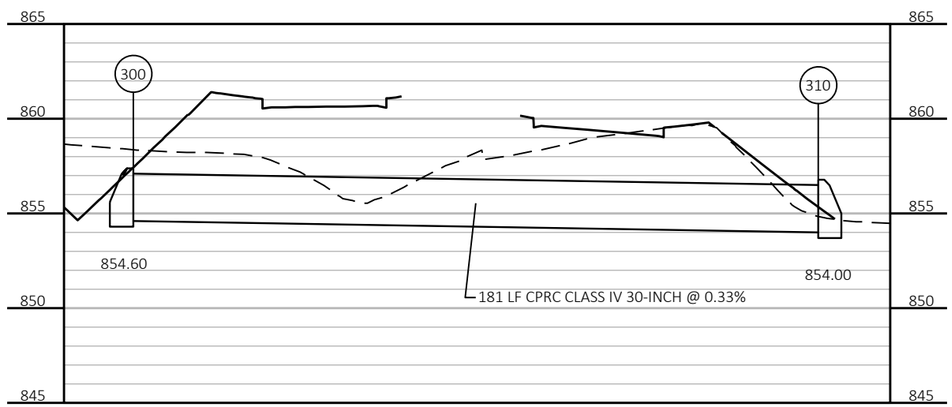



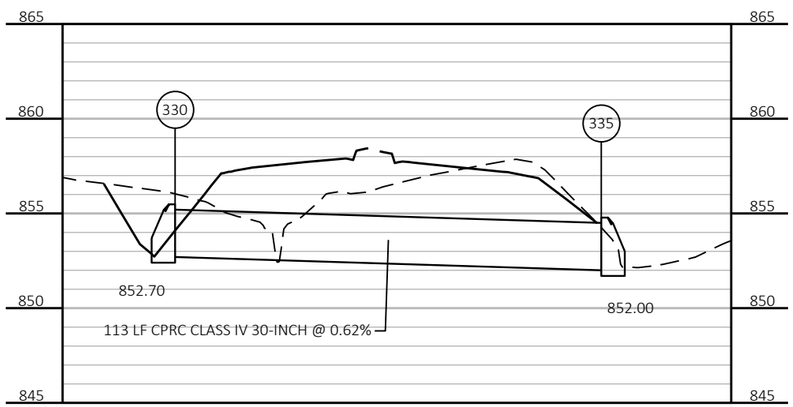



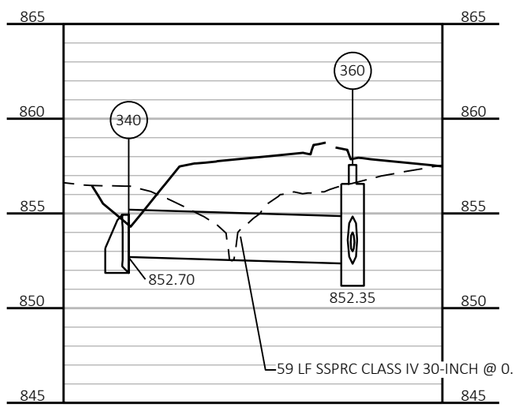



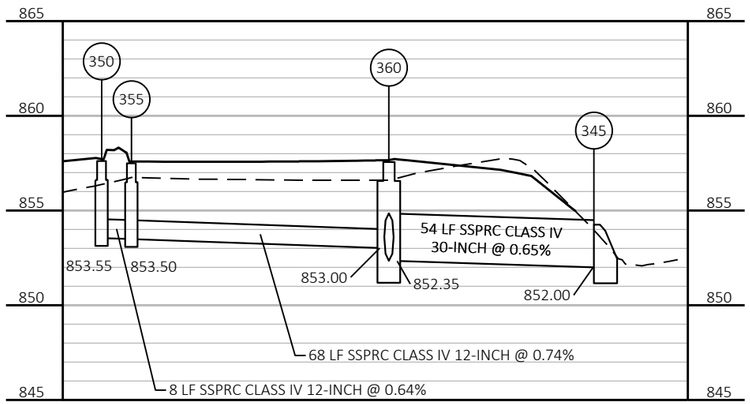



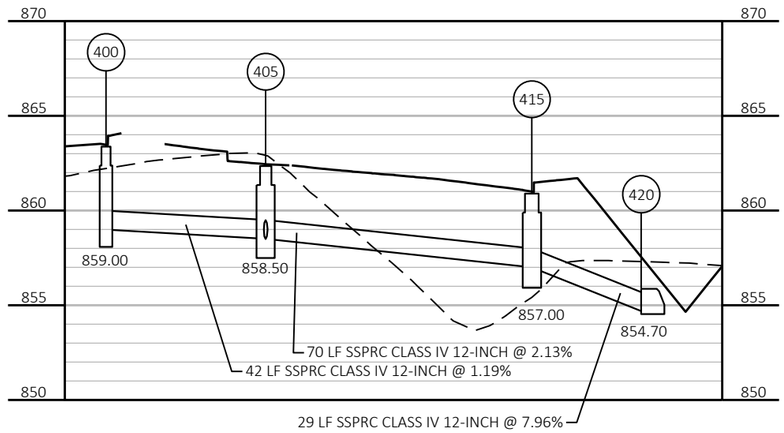



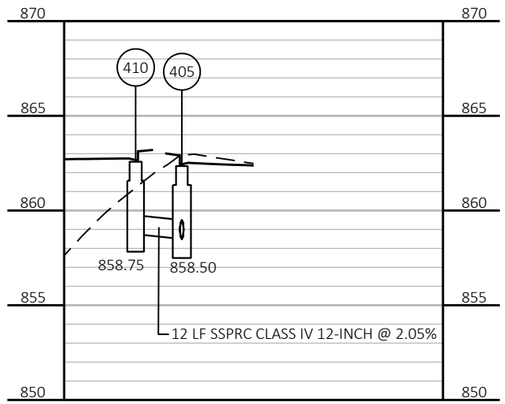



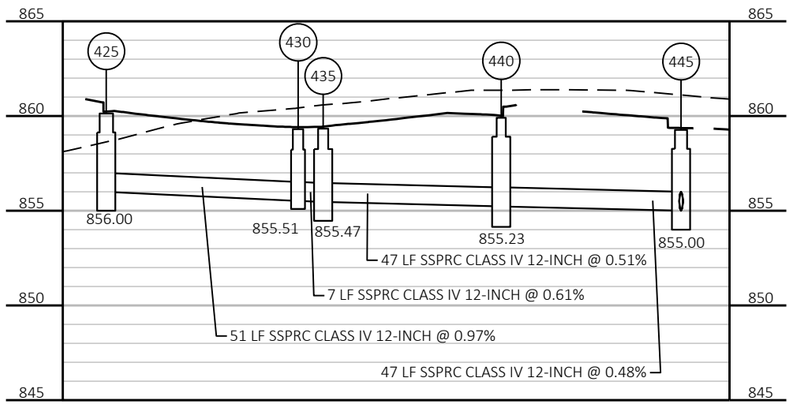



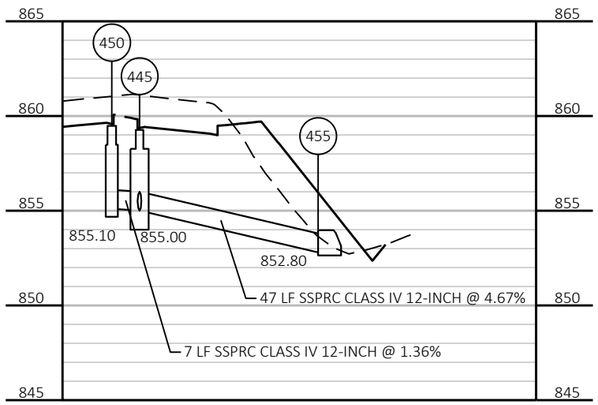

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | STORM SEWER PROFILES | SHEET 43 | E |
|---|---|---|---|---|---|

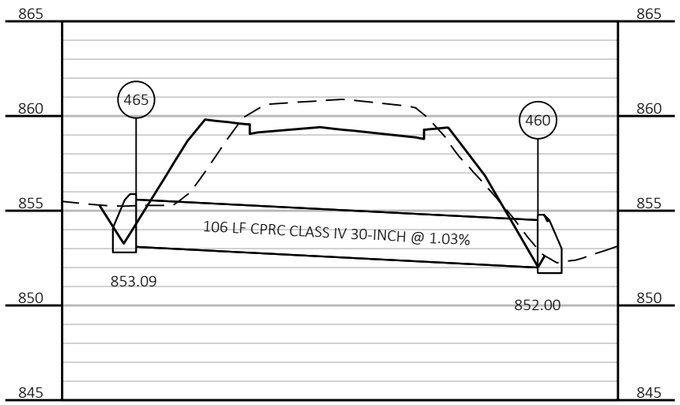

865
860
855
850
845
350
355
360
345
853.55
853.50
853.00
852.35
852.00
54 LF SSPRC CLASS IV
30-INCH @ 0.65%
68 LF SSPRC CLASS IV 12-INCH @ 0.74%
8 LF SSPRC CLASS IV 12-INCH @ 0.64%

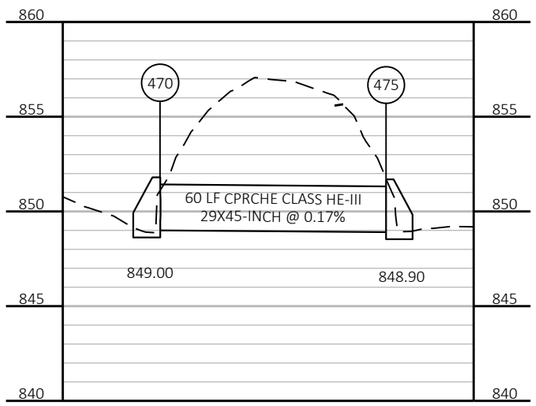

870
865
860
855
850
400
405
415
420
859.00
858.50
857.00
854.70
70 LF SSPRC CLASS IV 12-INCH @ 2.13%
42 LF SSPRC CLASS IV 12-INCH @ 1.19%
29 LF SSPRC CLASS IV 12-INCH @ 7.96%

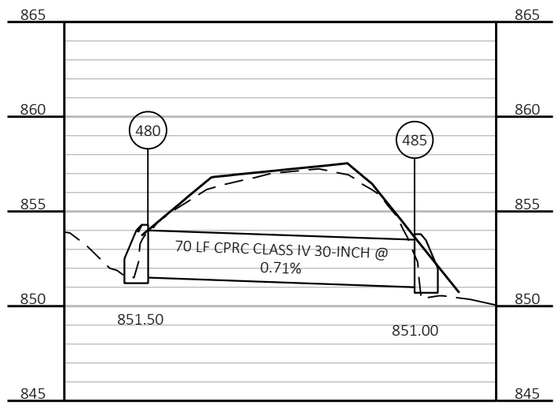

870
865
860
855
850
410
405
858.75
858.50
12 LF SSPRC CLASS IV 12-INCH @ 2.05%

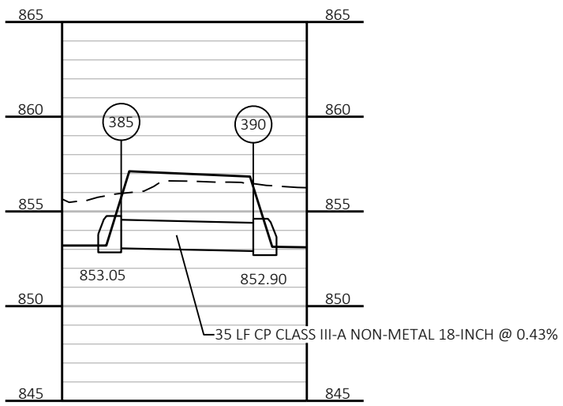

865
860
855
850
845
425
430
435
440
445
856.00
855.51
855.47
855.23
855.00
47 LF SSPRC CLASS IV 12-INCH @ 0.51%
7 LF SSPRC CLASS IV 12-INCH @ 0.61%
51 LF SSPRC CLASS IV 12-INCH @ 0.97%
47 LF SSPRC CLASS IV 12-INCH @ 0.48%


865
860
855
850
845
450
445
455
855.10
855.00
852.80
47 LF SSPRC CLASS IV 12-INCH @ 4.67%
7 LF SSPRC CLASS IV 12-INCH @ 1.36%

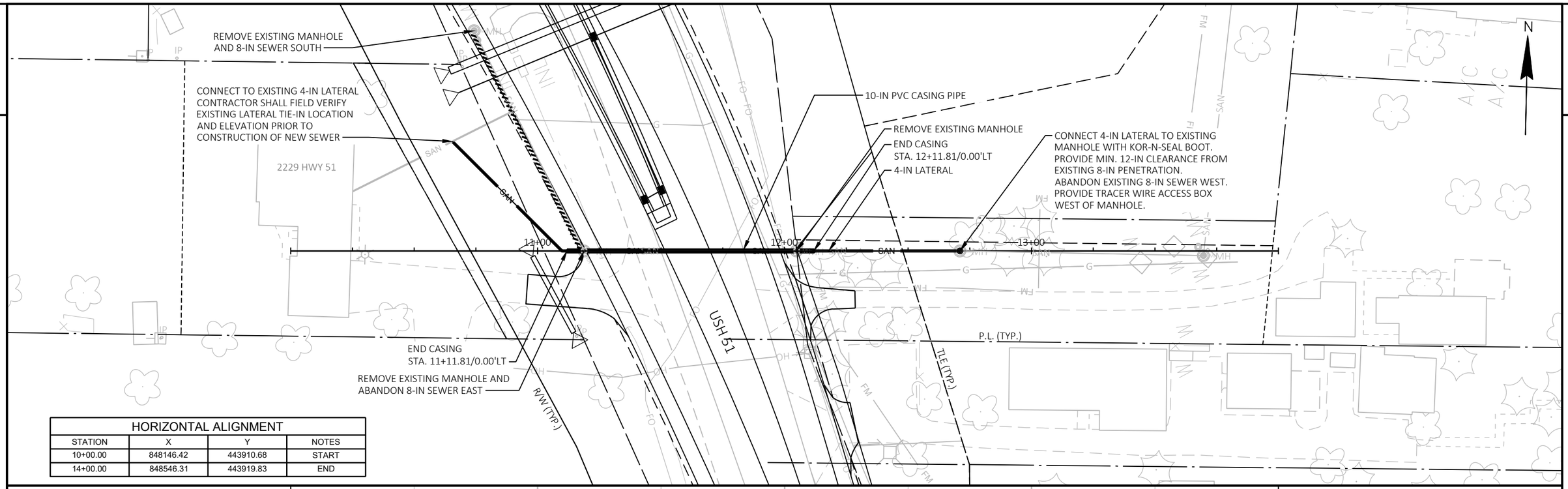

865
860
855
850
845
465
460
106 LF CPRC CLASS IV 30-INCH @ 1.03%
853.09
852.00


860
855
850
845
840
470
475
60 LF CPRCHE CLASS HE-III
29X45-INCH @ 0.17%
849.00
848.90

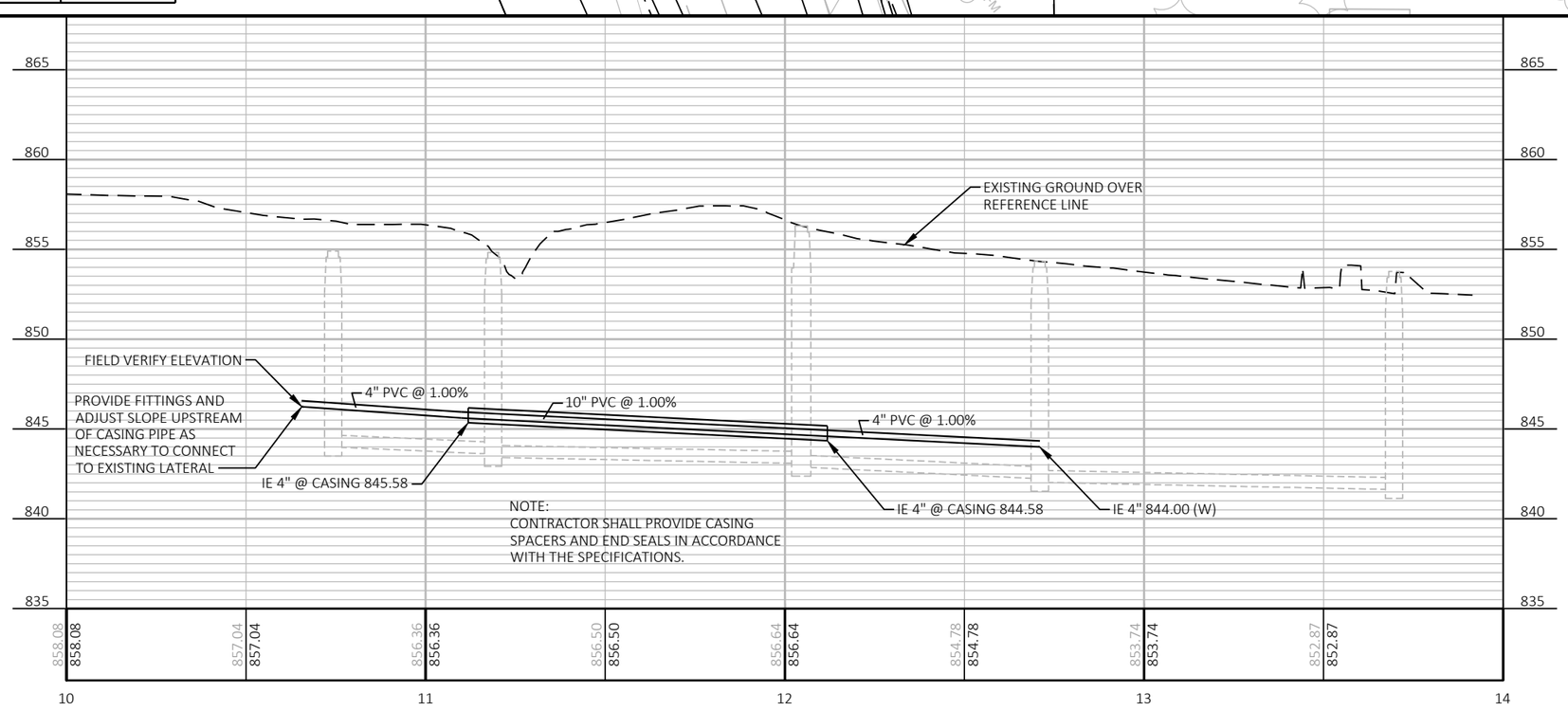

865
860
855
850
845
480
485
70 LF CPRC CLASS IV 30-INCH @
0.71%
851.50
851.00


865
860
855
850
845
385
390
853.05
852.90
35 LF CP CLASS III-A NON-METAL 18-INCH @ 0.43%

| STRUCT NO. | STATION | | OFFSET | C-C (FT) | TO STRUCT | INLET TYPE | COVER | MH TYPE | RIM/ GRATE ELEV. | T.O.S. ELEV. | DEPTH (FT) | DISCHARGE PIPE | | | | | PIPE TABLE REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | SIZE (IN) | INLET ELEV. | DISCHARGE ELEV. | LENGTH (FT) | SLOPE (%) | |
| 200 | 32+27.40 | EB | 10.3 'LT | 41.4 | 205 | 2X3-FT | H-S | - | 862.25 | 861.42 | 3.42 | 12 | 858.00 | 857.75 | 41 | 0.60% | |
| 205 | 32+26.01 | EB | 51.7 'LT | - | - | - | - | - | - | - | - | - | 857.75 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 210 | 32+81.83 | EB | 52.0 'RT | - | - | - | - | - | - | - | - | - | 855.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 215 | 32+98.80 | EB | 50.4 'RT | - | - | - | - | - | - | - | - | - | 855.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 216 | 28+77.15 | EB | 41.4 'LT | 42.3 | 217 | - | - | - | - | - | - | 18 | 866.00 | 864.50 | 42 | 3.55% | APRON ENDWALLS FOR CULVERT PIPE 18-INCH; CULVERT PIPE CLASS III-A NON METAL REQ'D |
| 217 | 29+19.43 | EB | 42.7 'LT | - | - | - | - | - | - | - | - | - | 864.50 | - | - | - | APRON ENDWALLS FOR CULVERT PIPE 18-INCH |
| 220 | 32+77.18 | EB | 65.5 'LT | 117.6 | 210 | - | - | - | - | - | - | 30 | 857.50 | 855.00 | 118 | 2.13% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 222 | 28+79.30 | EB | 33.3 'RT | 42.1 | 223 | - | - | - | - | - | - | 18 | 866.00 | 864.50 | 42 | 3.56% | APRON ENDWALLS FOR CULVERT PIPE 18-INCH; CULVERT PIPE CLASS III-A NON METAL REQ'D |
| 223 | 29+21.39 | EB | 33.6 'RT | - | - | - | - | - | - | - | - | - | 864.50 | - | - | - | APRON ENDWALLS FOR CULVERT PIPE 18-INCH |
| 225 | 32+83.27 | EB | 69.5 'LT | 120.8 | 215 | - | - | - | - | - | - | 30 | 857.50 | 855.00 | 121 | 2.07% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 230 | 1+38.88 | A | 31.5 'RT | 12.6 | 235 | 2X3-FT | H-S | - | 862.44 | 861.61 | 3.36 | 12 | 858.25 | 858.00 | 13 | 1.98% | |
| 235 | 33+16.19 | EB | 1.5 'LT | 40.7 | 237 | 4-FT | H | - | 862.35 | 861.52 | 3.52 | 12 | 858.00 | 857.50 | 41 | 1.23% | |
| 237 | 11+64.90 | E | 1.5 'LT | 27.2 | 240 | 2X3-FT | H | - | 861.72 | 860.89 | 3.39 | 12 | 857.50 | 857.25 | 27 | 0.92% | |
| 240 | 11+62.30 | E | 28.6 'LT | - | - | - | - | - | - | - | - | - | 857.25 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 245 | 11+44.13 | D | 1.5 'LT | 29.1 | 250 | 2X3-FT | H | - | 862.75 | 861.92 | 2.91 | 12 | 859.00 | 858.00 | 29 | 3.44% | |
| 250 | 11+40.96 | D | 30.5 'LT | - | - | - | - | - | - | - | - | - | 858.00 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 300 | 11+20.67 | E | 30.5 'LT | 180.8 | 310 | - | - | - | - | - | - | 30 | 854.60 | 854.00 | 181 | 0.33% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 305 | 11+11.97 | E | 33.0 'LT | 178.9 | 315 | - | - | - | - | - | - | 30 | 854.60 | 854.00 | 179 | 0.34% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 310 | 11+33.89 | B | 41.2 'RT | - | - | - | - | - | - | - | - | - | 854.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 315 | 11+21.16 | B | 44.2 'RT | - | - | - | - | - | - | - | - | - | 854.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 330 | 121+29.94 | NB | 62.5 'LT | 112.5 | 335 | - | - | - | - | - | - | 30 | 852.70 | 852.00 | 113 | 0.62% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 335 | 121+17.25 | NB | 49.3 'RT | - | - | - | - | - | - | - | - | - | 852.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 340 | 121+19.85 | NB | 63.6 'LT | 59.1 | 360 | - | - | - | - | - | - | 30 | 852.70 | 852.35 | 59 | 0.59% | APRON ENDWALLS FOR CPRC 30-INCH |
| 345 | 121+08.60 | NB | 49.0 'RT | - | - | - | - | - | - | - | - | - | 852.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 350 | 120+44.83 | NB | 15.8 'LT | 7.9 | 355 | 2X3-FT | HM | - | 857.62 | 856.79 | 3.24 | 12 | 853.55 | 853.50 | 8 | 0.64% | |
| 355 | 120+45.46 | NB | 7.9 'LT | 68.0 | 360 | 2X3-FT | HM | - | 857.49 | 856.66 | 3.16 | 12 | 853.50 | 853.00 | 68 | 0.74% | |
| 360 | 121+13.72 | NB | 4.8 'LT | 54.1 | 345 | - | HM | 5-FT | 857.56 | 856.73 | 4.38 | 30 | 852.35 | 852.00 | 54 | 0.65% | FLAT TOP SLAB REQ'D |
| 385 | 120+06.11 | NB | 63.8 'LT | 34.9 | 390 | - | - | - | - | - | - | 18 | 853.05 | 852.90 | 35 | 0.43% | APRON ENDWALLS FOR CULVERT PIPE 18-INCH; CULVERT PIPE CLASS III-A NON METAL REQ'D |
| 390 | 120+42.90 | NB | 66.5 'LT | - | - | - | - | - | - | - | - | - | 852.90 | - | - | - | APRON ENDWALLS FOR CULVERT PIPE 18-INCH |
| 400 | 125+56.56 | NB | 46.5 'LT | 42.1 | 405 | 2X3-FT | H | - | 863.37 | 862.54 | 3.54 | 12 | 859.00 | 858.50 | 42 | 1.19% | |
| 405 | 0+39.21 | A | 21.5 'RT | 70.3 | 415 | 4-FT | H-S | - | 862.35 | 861.52 | 3.01 | 12 | 858.50 | 857.00 | 70 | 2.13% | |
| 410 | 125+38.21 | NB | 1.5 'LT | 12.2 | 405 | 2X3-FT | H | - | 862.57 | 861.74 | 2.99 | 12 | 858.75 | 858.50 | 12 | 2.05% | |
| 415 | 11+30.01 | C | 1.5 'RT | 28.9 | 420 | 4-FT | H | - | 860.90 | 860.07 | 3.07 | 12 | 857.00 | 854.70 | 29 | 7.96% | |
| 420 | 11+32.43 | C | 30.3 'RT | - | - | - | - | - | - | - | - | - | 854.70 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 425 | 2+39.75 | A | 21.5 'RT | 50.6 | 430 | 4-FT | H-S | - | 860.13 | 859.30 | 3.30 | 12 | 856.00 | 855.51 | 51 | 0.97% | |
| 430 | 2+79.55 | A | 1.7 'LT | 6.6 | 435 | 2X2.5-FT | T | - | 859.31 | 858.39 | 2.88 | 12 | 855.51 | 855.47 | 7 | 0.61% | |
| 435 | 2+86.37 | A | 1.7 'LT | 47.0 | 440 | 4-FT | T | - | 859.33 | 858.41 | 2.94 | 12 | 855.47 | 855.23 | 47 | 0.51% | |
| 440 | 3+13.80 | A | 31.5 'RT | 47.5 | 445 | 4-FT | H-S | - | 859.91 | 859.08 | 3.85 | 12 | 855.23 | 855.00 | 47 | 0.48% | |
| 445 | 35+56.96 | EB | 1.5 'LT | 47.1 | 455 | 4-FT | H | - | 859.26 | 858.43 | 3.43 | 12 | 855.00 | 852.80 | 47 | 4.67% | |
| 450 | 35+57.25 | EB | 8.8 'LT | 7.3 | 445 | 2X3-FT | H | - | 859.48 | 858.65 | 3.55 | 12 | 855.10 | 855.00 | 7 | 1.36% | |
| 455 | 35+59.95 | EB | 45.5 'RT | - | - | - | - | - | - | - | - | - | 852.80 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 460 | 35+82.70 | EB | 48.4 'RT | - | - | - | - | - | - | - | - | - | 852.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 465 | 35+68.78 | EB | 56.8 'LT | 106.1 | 460 | - | - | - | - | - | - | 30 | 853.09 | 852.00 | 106 | 1.03% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 466 | 35+91.74 | EB | 47.4 'RT | - | - | - | - | - | - | - | - | - | 852.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 467 | 35+77.87 | EB | 57.7 'LT | 106.0 | 466 | - | - | - | - | - | - | 30 | 853.09 | 852.00 | 106 | 1.03% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 470 | 36+78.28 | EB | 52.1 'RT | 59.7 | 475 | - | - | - | - | - | - | 29x45 | 849.00 | 848.90 | 60 | 0.17% | APRON ENDWALLS FOR CPRCHE 29X45-INCH; CULVERT PIPE REQ'D |
| 475 | 37+28.22 | EB | 63.2 'RT | - | - | - | - | - | - | - | - | - | 848.90 | - | - | - | APRON ENDWALLS FOR CPRCHE 29X45-INCH |
| 480 | 37+71.60 | EB | 34.6 'LT | 70.4 | 485 | - | - | - | - | - | - | 30 | 851.50 | 851.00 | 70 | 0.71% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 485 | 37+69.71 | EB | 35.7 'RT | - | - | - | - | - | - | - | - | - | 851.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 490 | 37+79.49 | EB | 33.0 'LT | 69.0 | 495 | - | - | - | - | - | - | 30 | 851.50 | 851.00 | 69 | 0.72% | APRON ENDWALLS FOR CPRC 30-INCH; CULVERT PIPE REQ'D |
| 495 | 37+76.40 | EB | 35.9 'RT | - | - | - | - | - | - | - | - | - | 851.00 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |




| HORIZONTAL ALIGNMENT | | | |
|---|---|---|---|
| STATION | X | Y | NOTES |
| 10+00.00 | 848146.42 | 443910.68 | START |
| 14+00.00 | 848546.31 | 443919.83 | END |




NOTE:
CONTRACTOR SHALL STAGE SEWER CONSTRUCTION IN ACCORDANCE WITH STAGING AND TRAFFIC CONTROL REQUIREMENTS FOR STAGE 4. CONTRACTOR SHALL MAINTAIN EXISTING SANITARY SEWER LATERAL UNTIL NEW CONNECTION IS COMPLETED. PROVIDE TEMPORARY PIPE THROUGH EXISTING MANHOLE BASE AS NECESSARY PRIOR TO ABANDONMENT. TEMPORARY PIPE IS INCIDENTAL TO THE SANITARY SEWER LATERAL, 4-INCH BID ITEM.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | SANITARY SEWER | SHEET 46 | E |
|---|---|---|---|---|---|

NOTE:
- ALL EXISTING SIGNS SHOWN SHALL BE REMOVED UNLESS NOTED OTHERWISE.

N

111NB 112NB 113NB 114NB 115NB 116NB

USH 51

USH 51 FRONTAGE RD

MATCHLINE STA. 116+75 NB

5-11 JCT COUNTY AB J1-1 24"X39"

5-10 W6-1 36"X36"

COUNTY B

E5-04

5-12 W2-6 30"X30"

5-13 20 MPH W13-1 18"X18"

SPEED LIMIT 25 E5-05

SPEED LIMIT 25 5-14 R2-1 24"X30"

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- EXISTING SIGN MOUNTED ON NEW POST
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- X-XX DENOTES SIGN NUMBER
- EX-XX DENOTES EXISTING SIGN NUMBER
- PROPOSED LIGHT POLE

5-01 W6-3 36"X36"

MATCHLINE STA. 116+75 NB

E5-03 MOVE

DO NOT ENTER 5-03 R5-1 30"X30"

5-04 SPEED LIMIT 55 R2-1 24"X30"

SOUTH 51 COUNTY B 5-07 J4-2 48"X36"

117NB 118NB 119NB 120NB 121NB 122NB

USH 51

5-02 STOP R1-1 30"X30"

E5-01 STOP

5-15 WO1-6 48"X24"

E5-02

5-16 51 NORTH B AB D1-62 102"X66"

5-05 R4-7 24"X30"

5-06 W5-54 18"X18"

R3-6R 42"X48" 5-09

S-13-598

5-08 R3-6X 42"X48"

MATCHLINE STA. 122+75 NB

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PERMANENT SIGNING | SHEET 47 | E |
|---|---|---|---|---|---|

NOTES:

- ALL EXISTING SIGNS SHOWN SHALL BE REMOVED UNLESS NOTED OTHERWISE.
- 7'3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGNS

N

MATCHLINE STA. 126+25 NB

USH 51

1-19 W4-2R 36"X36"

1-18 NORTH 51 D1-1 42"X30"

1-20 R1-2 36"X31"

1-22 R1-2 36"X31"

E1-08 COUNTY AB COUNTY B

1-24 WEST B D1-1 42"X30"

E1-09 COUNTY B

1-25 COUNTY B M1-5A 24"X24"

CTH B

MATCHLINE STA. 31+75 EB

33EB

32EB

STOP E1-10

E1-11

1-01 R1-2 36"X31"

1-03 R1-2 36"X31"

E1-01 51 COUNTY B

1-05 SOUTH EAST 51 B D1-1 66"X30"

SOUTH 51 COUNTY B E1-02

1-06 W4-2R 36"X36"

MATCHLINE STA. 122+75 NB

USH 51

E1-12 DO NOT ENTER

E1-14 DO NOT ENTER

E1-07 51

1-16 R1-2 36"X31"

1-15 R1-2 36"X31"

1-13 R4-7 24"X30"

E1-15 STOP

E1-16

1-32

1-33

1-31

1-30

R6-1R 36"X12"

ONE WAY

R6-4B 60"X24"

1-26

1-27

1-29

1-28

34EB

E1-13

35EB

36EB

CTH AB

37EB

MATCHLINE STA. 37+25 EB

1-11 AB D1-1 36"X18"

E1-04 COUNTY AB

E1-05 MOVE TO 37+80 EB RT

E1-06

1-12 W1-4L 36"X36"

1-10 R1-2 36"X31"

E1-03 COUNTY B COUNTY AB

1-08 R1-2 36"X31"

SIGNING LEGEND

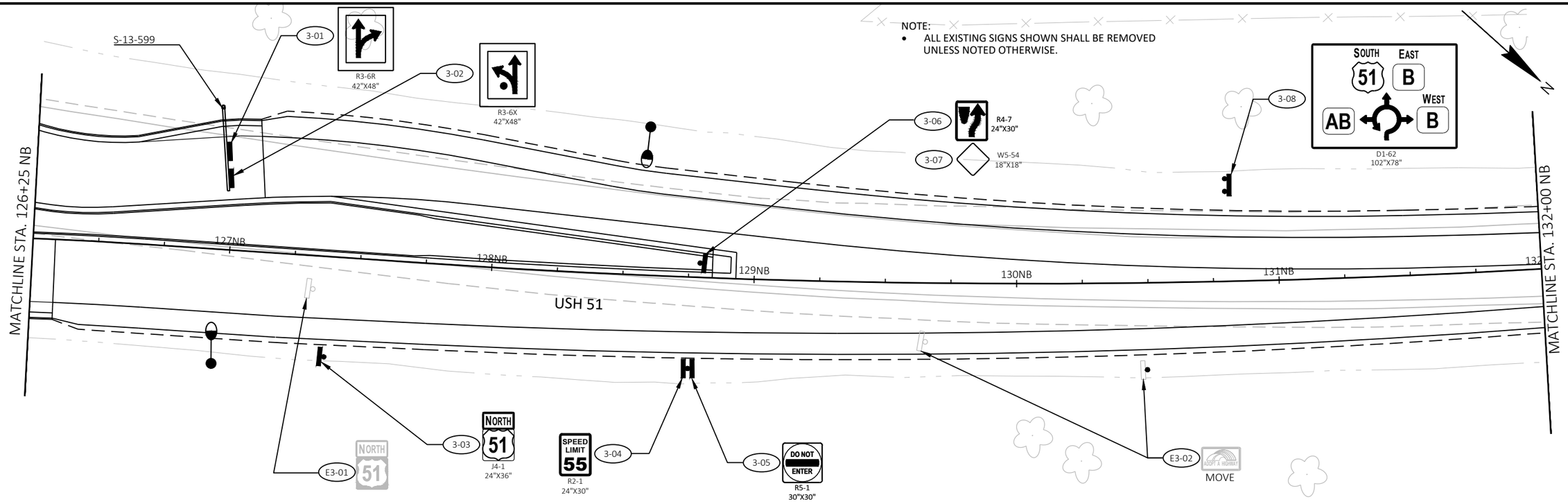
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- EXISTING SIGN MOUNTED ON NEW POST
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- X-XX DENOTES SIGN NUMBER
- EX-XX DENOTES EXISTING SIGN NUMBER
- PROPOSED LIGHT POLE

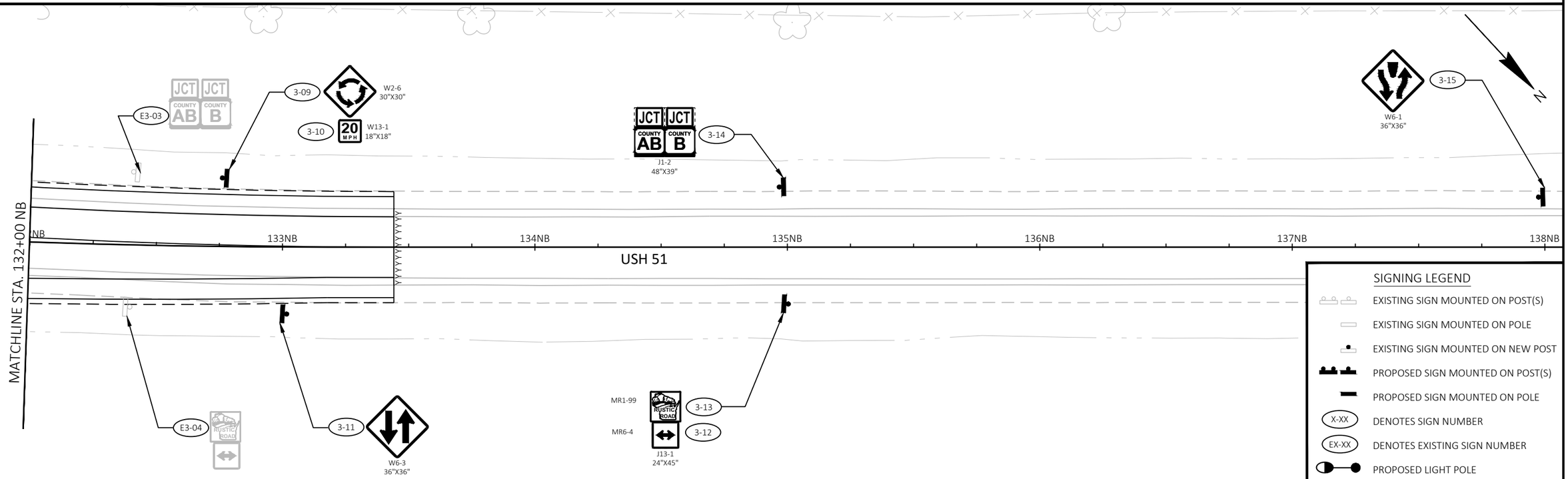
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PERMANENT SIGNING | SHEET 48 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023202_ps

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- EXISTING SIGN MOUNTED ON NEW POST
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- X-XX DENOTES SIGN NUMBER
- EX-XX DENOTES EXISTING SIGN NUMBER
- PROPOSED LIGHT POLE

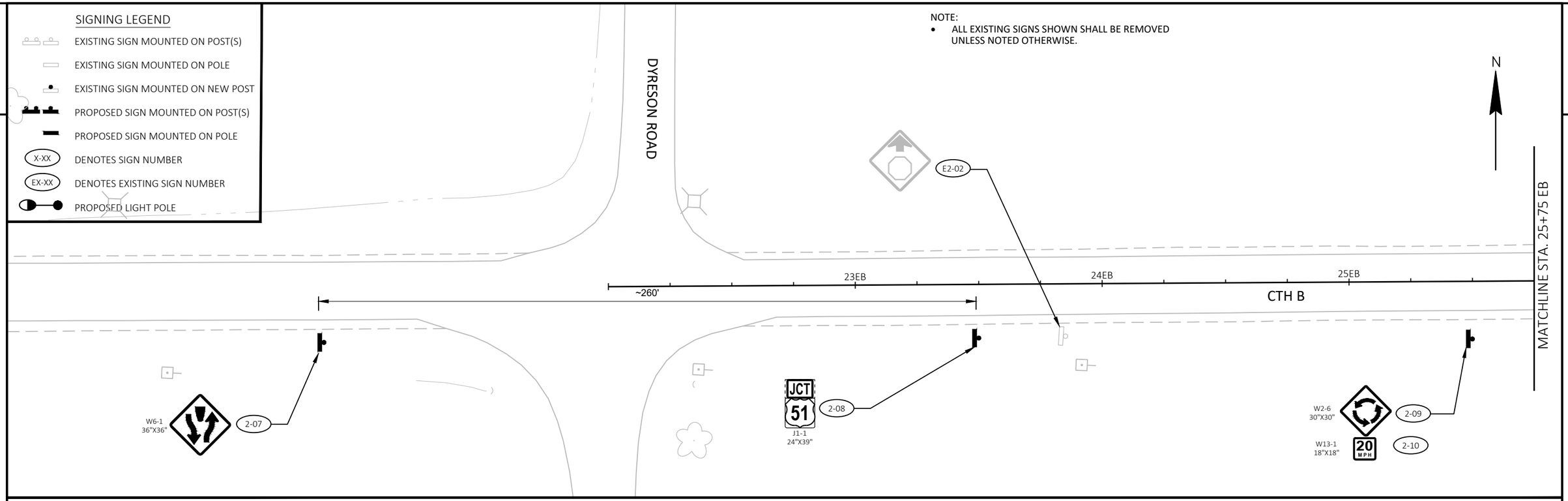
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PERMANENT SIGNING | SHEET 49 | E |
|---|---|---|---|---|---|

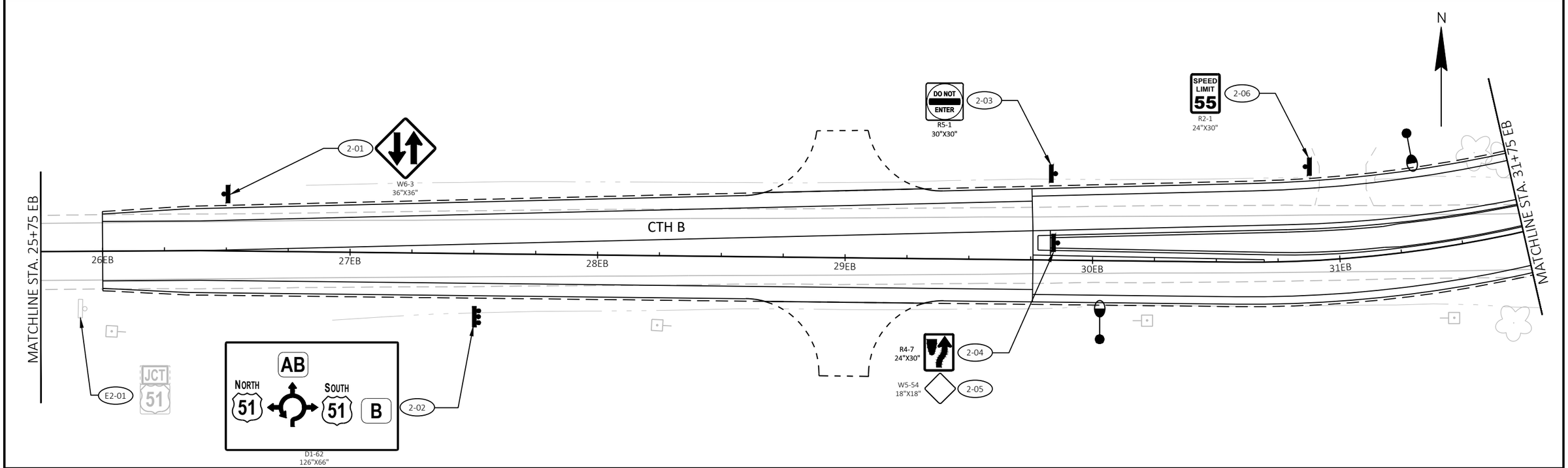
2

## SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- EXISTING SIGN MOUNTED ON NEW POST
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- X-XX — DENOTES SIGN NUMBER
- EX-XX — DENOTES EXISTING SIGN NUMBER
- PROPOSED LIGHT POLE

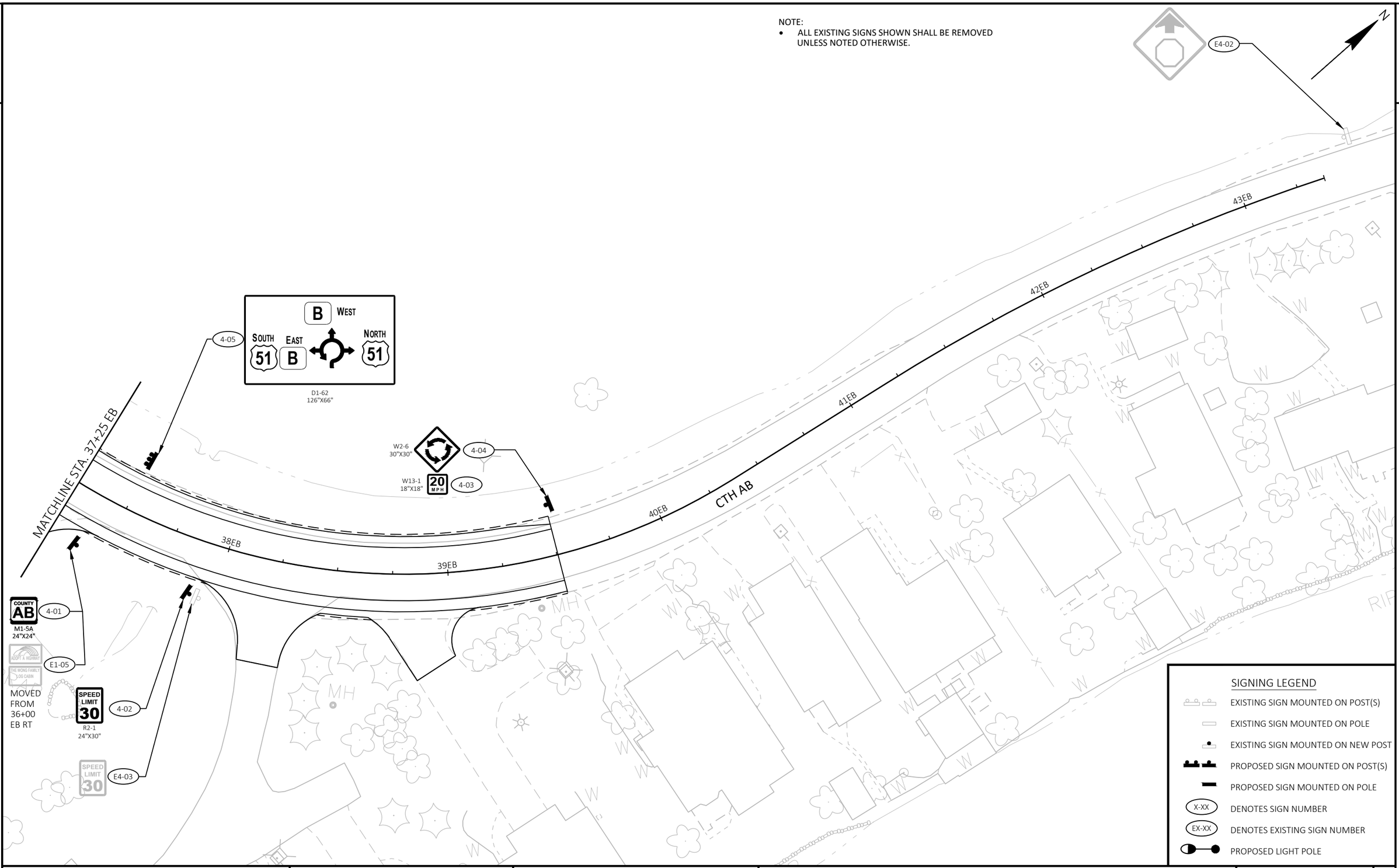
NOTE:
- ALL EXISTING SIGNS SHOWN SHALL BE REMOVED UNLESS NOTED OTHERWISE.




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PERMANENT SIGNING | SHEET 50 | E |
|---|---|---|---|---|---|

NOTE:
- ALL EXISTING SIGNS SHOWN SHALL BE REMOVED UNLESS NOTED OTHERWISE.

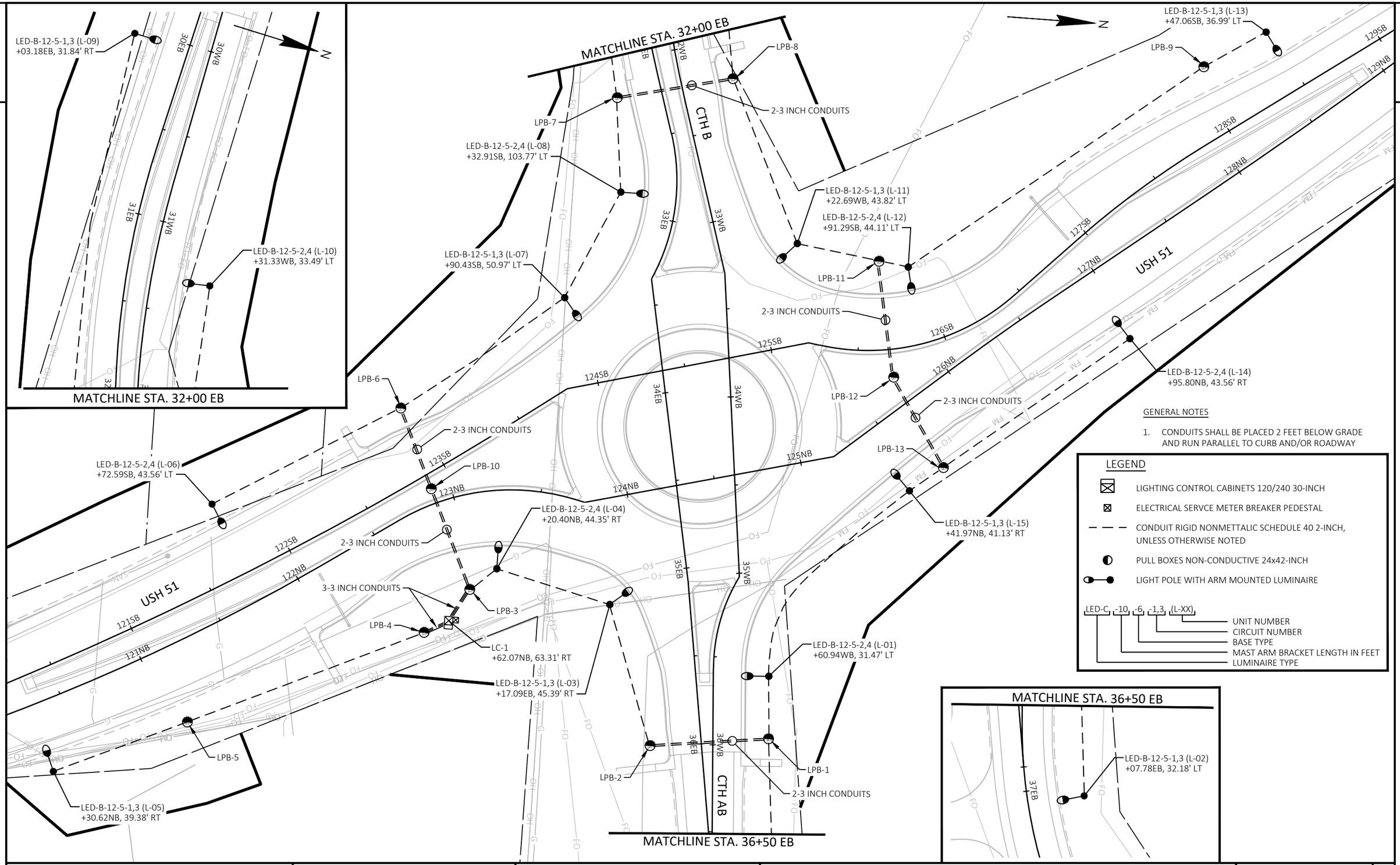



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PERMANENT SIGNING | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023205_ps

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




GENERAL NOTES

1. CONDUITS SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY

LEGEND

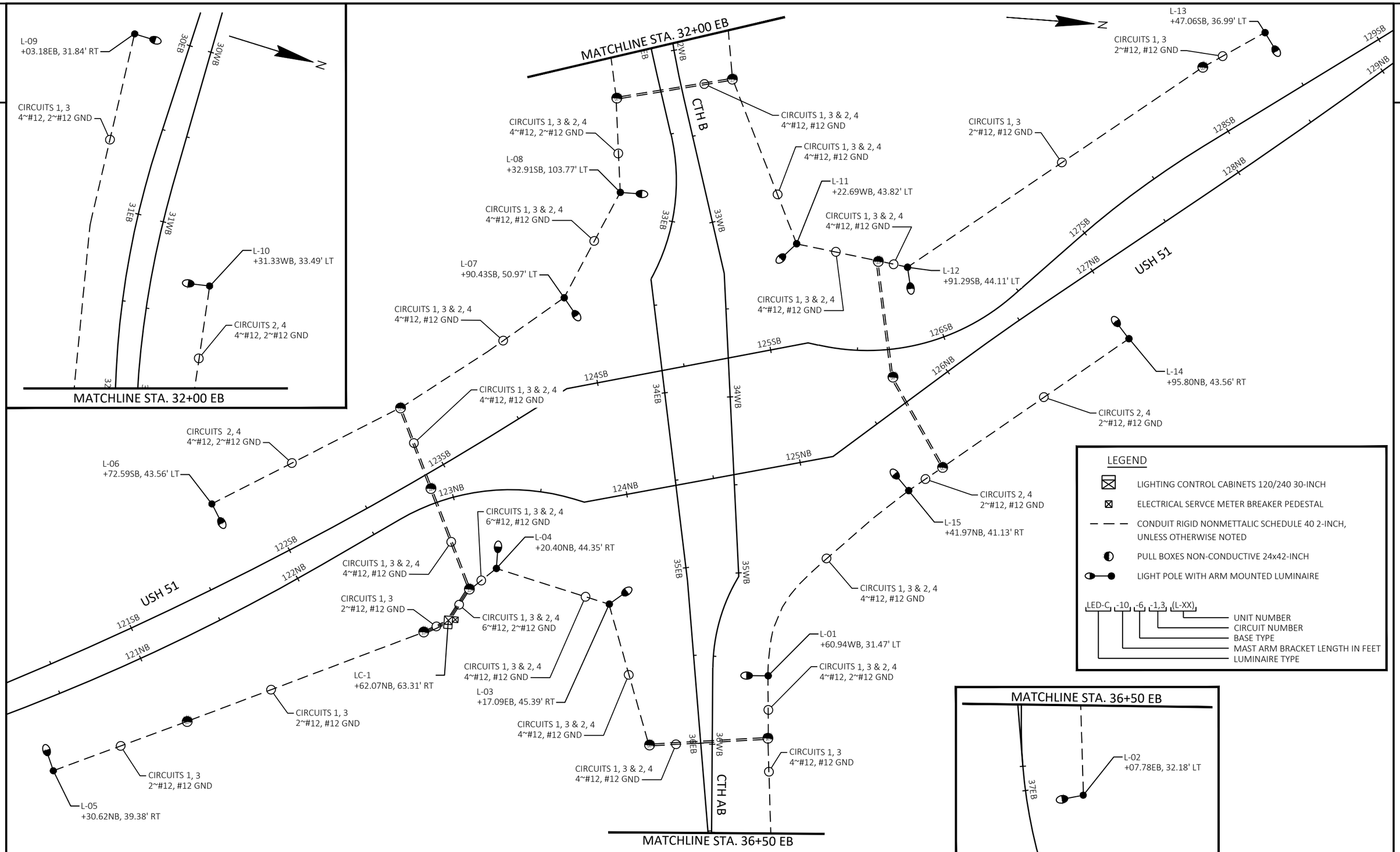
- LIGHTING CONTROL CABINETS 120/240 30-INCH
- ELECTRICAL SERVCE METER BREAKER PEDESTAL
- CONDUIT RIGID NONMETTALIC SCHEDULE 40 2-INCH, UNLESS OTHERWISE NOTED
- PULL BOXES NON-CONDUCTIVE 24x42-INCH
- LIGHT POLE WITH ARM MOUNTED LUMINAIRE

LED-C -10 -6 -1,3 (L-XX)

- LED-C — LUMINAIRE TYPE
- -10 — MAST ARM BRACKET LENGTH IN FEET
- -6 — BASE TYPE
- -1,3 — CIRCUIT NUMBER
- (L-XX) — UNIT NUMBER




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | LIGHTING PLAN | SHEET 52 | E |
|---|---|---|---|---|---|

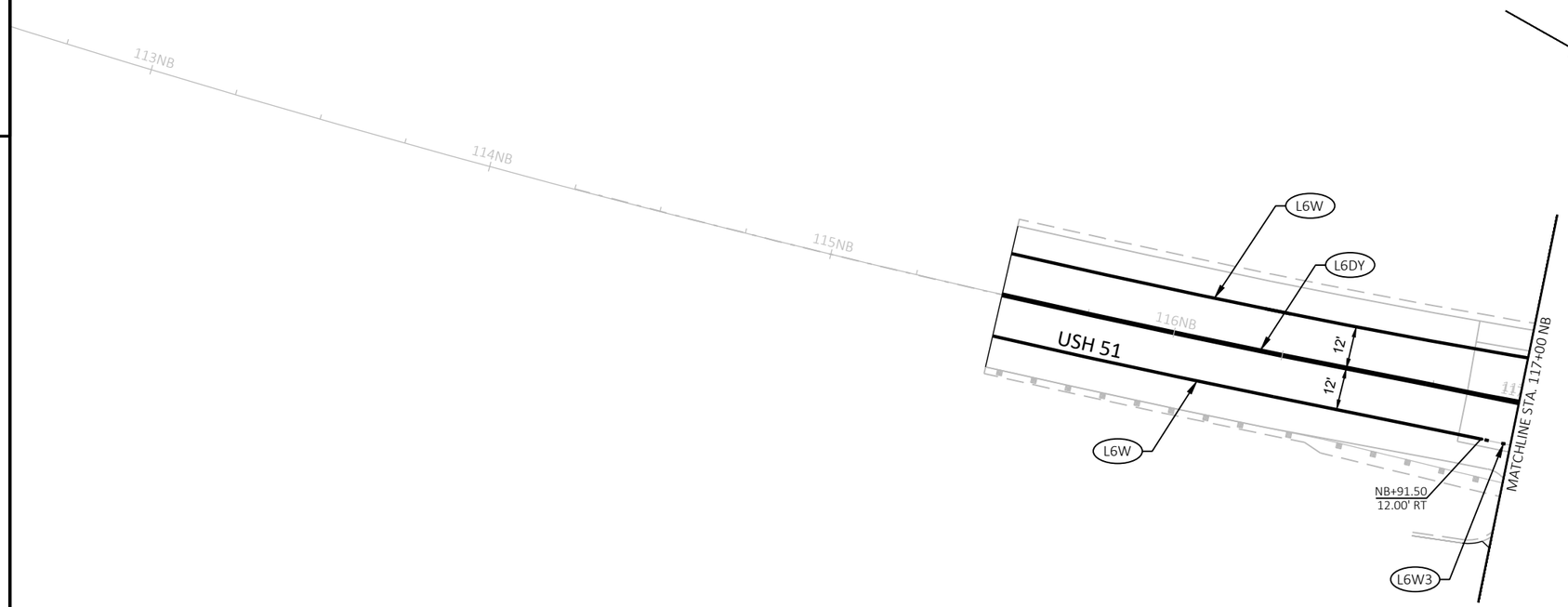



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | LIGHTING PLAN - WIRING DIAGRAM | SHEET 53 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023502_LP.DWG
LAYOUT NAME - 023502_lp

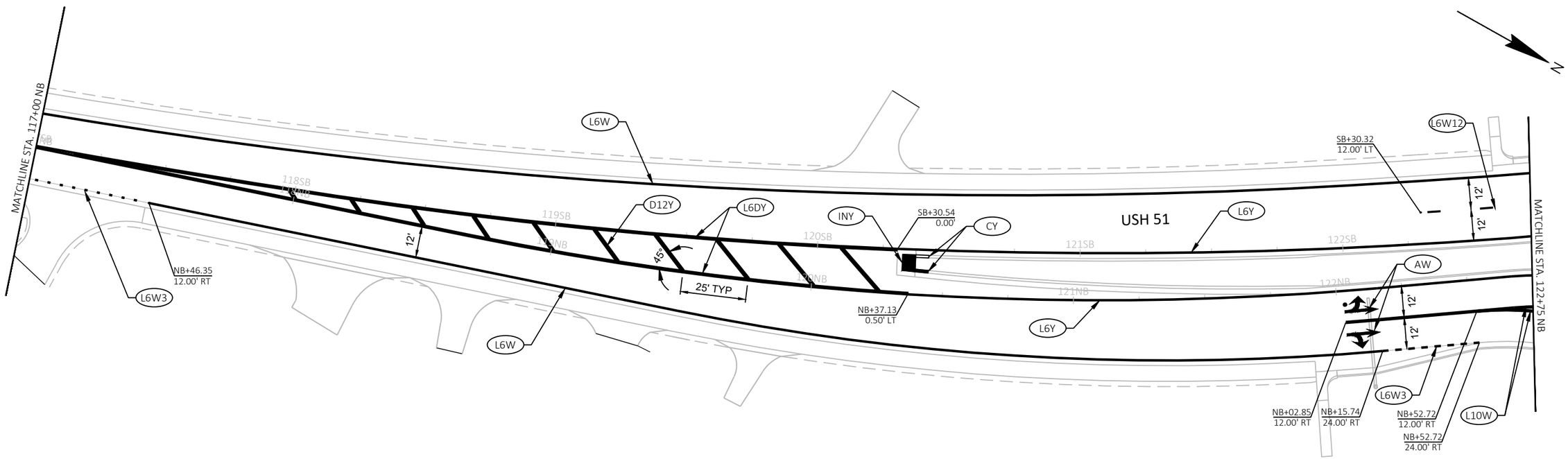
PLOT DATE : 8/1/2023 11:30 AM PLOT BY : SCHAUB, ALEX PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

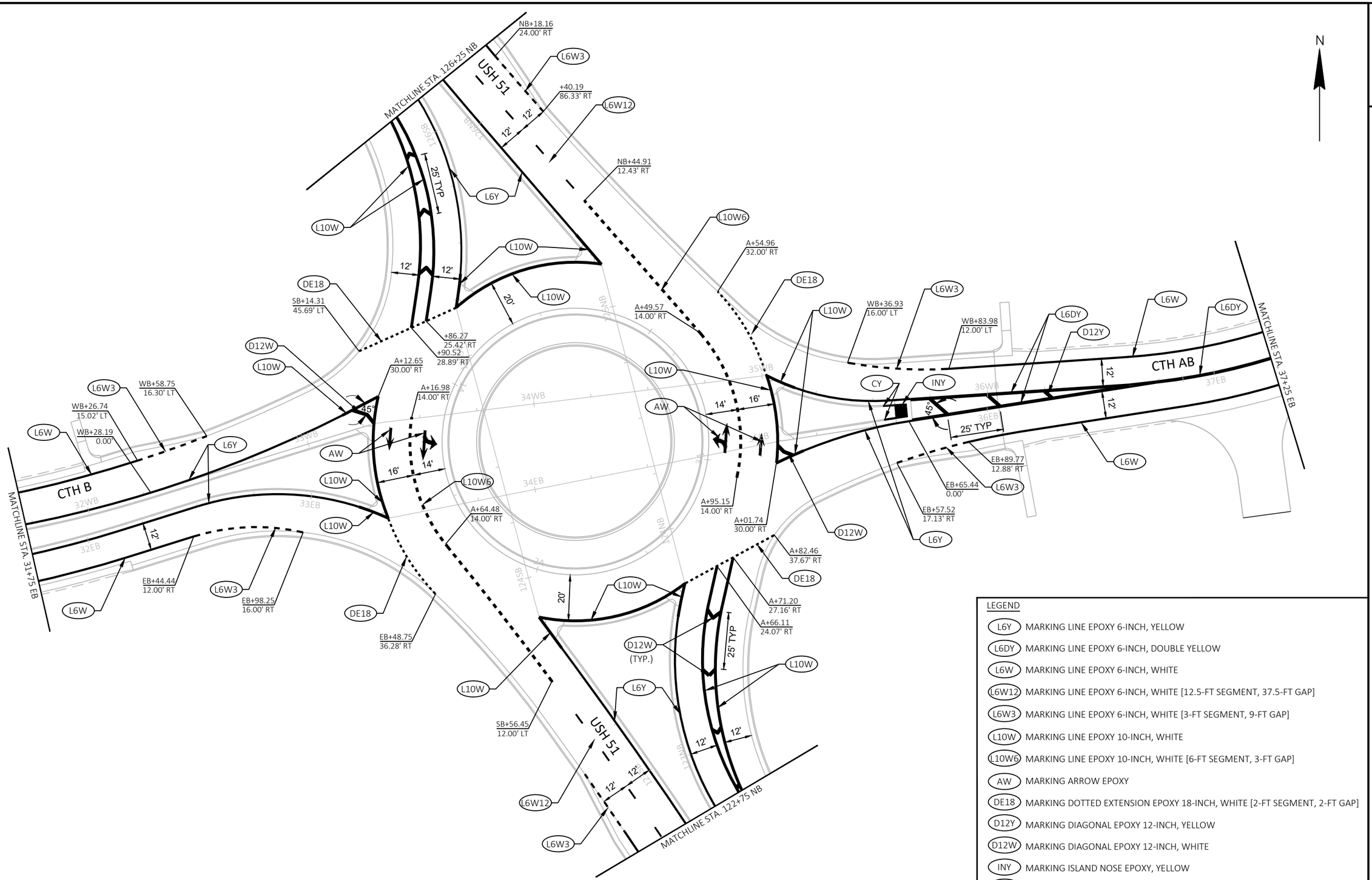



LEGEND

| | |
|---|---|
| L6Y | MARKING LINE EPOXY 6-INCH, YELLOW |
| L6DY | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| L6W | MARKING LINE EPOXY 6-INCH, WHITE |
| L6W12 | MARKING LINE EPOXY 6-INCH, WHITE [12.5-FT SEGMENT, 37.5-FT GAP] |
| L6W3 | MARKING LINE EPOXY 6-INCH, WHITE [3-FT SEGMENT, 9-FT GAP] |
| L10W | MARKING LINE EPOXY 10-INCH, WHITE |
| L10W6 | MARKING LINE EPOXY 10-INCH, WHITE [6-FT SEGMENT, 3-FT GAP] |
| AW | MARKING ARROW EPOXY |
| DE18 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| D12W | MARKING DIAGONAL EPOXY 12-INCH, WHITE |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |

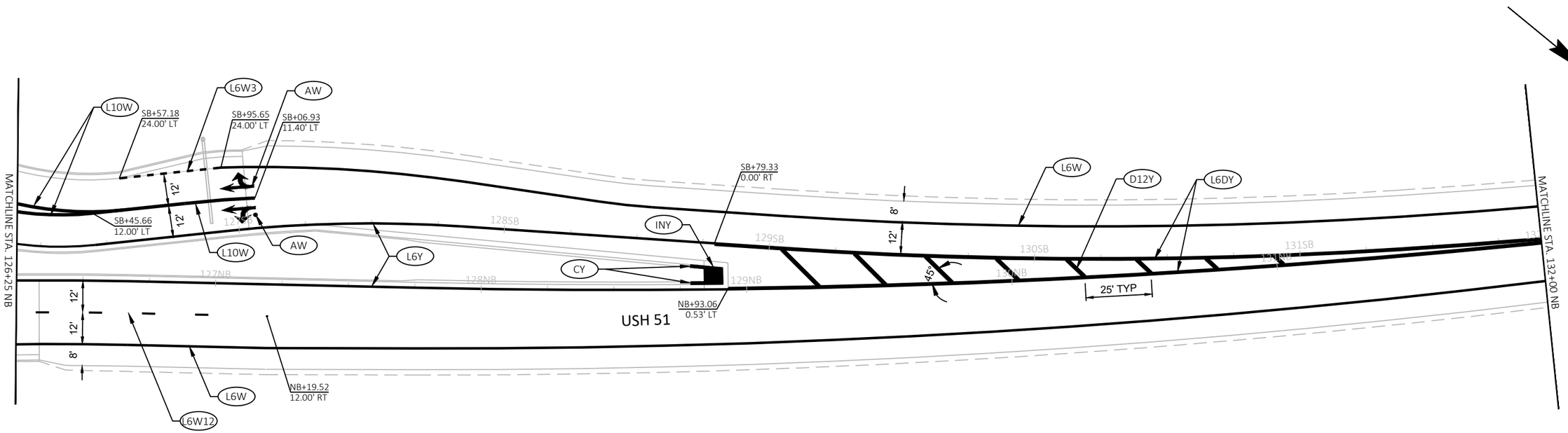


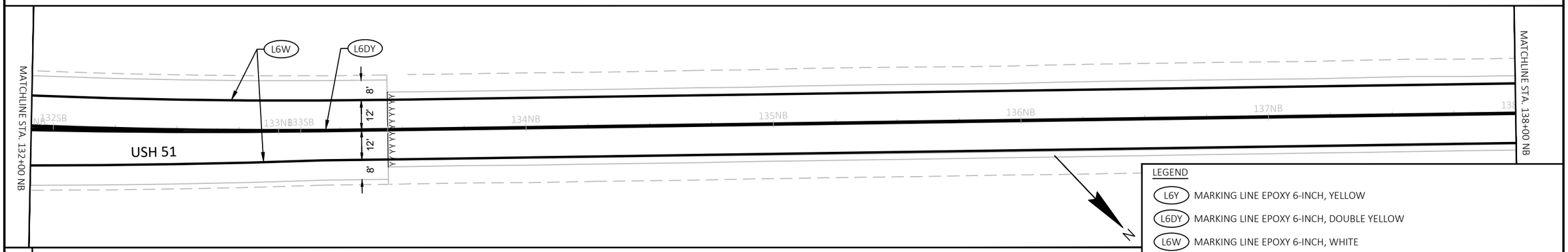

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PAVEMENT MARKING | SHEET 54 | E |
|---|---|---|---|---|---|

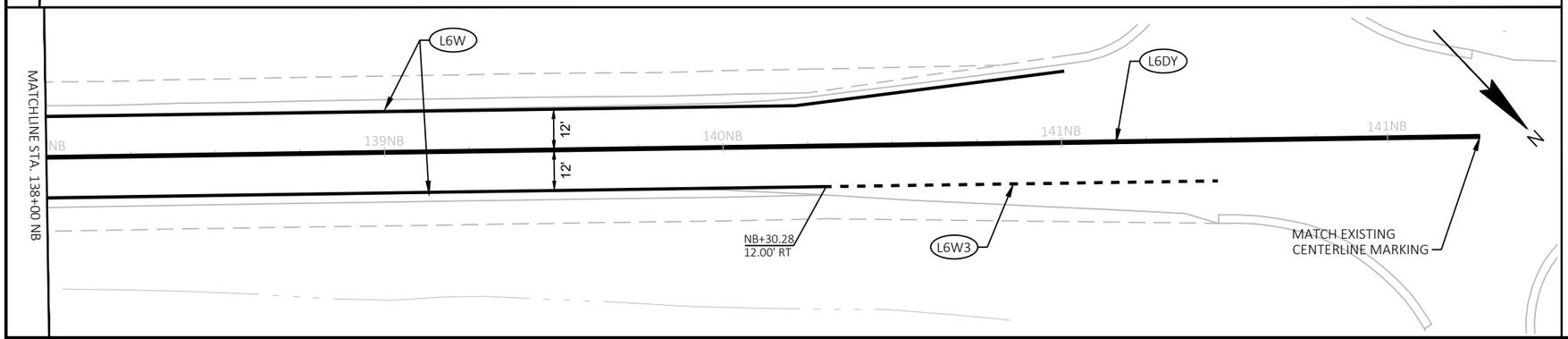



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PAVEMENT MARKING | SHEET 55 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024502_pm
PLOT DATE : 8/1/2023 11:30 AM PLOT BY : SCHAUB, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT




LEGEND

| | |
|---|---|
| L6Y | MARKING LINE EPOXY 6-INCH, YELLOW |
| L6DY | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| L6W | MARKING LINE EPOXY 6-INCH, WHITE |
| L6W12 | MARKING LINE EPOXY 6-INCH, WHITE [12.5-FT SEGMENT, 37.5-FT GAP] |
| L6W3 | MARKING LINE EPOXY 6-INCH, WHITE [3-FT SEGMENT, 9-FT GAP] |
| L10W | MARKING LINE EPOXY 10-INCH, WHITE |
| L10W6 | MARKING LINE EPOXY 10-INCH, WHITE [6-FT SEGMENT, 3-FT GAP] |
| AW | MARKING ARROW EPOXY |
| DE18 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| D12W | MARKING DIAGONAL EPOXY 12-INCH, WHITE |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |

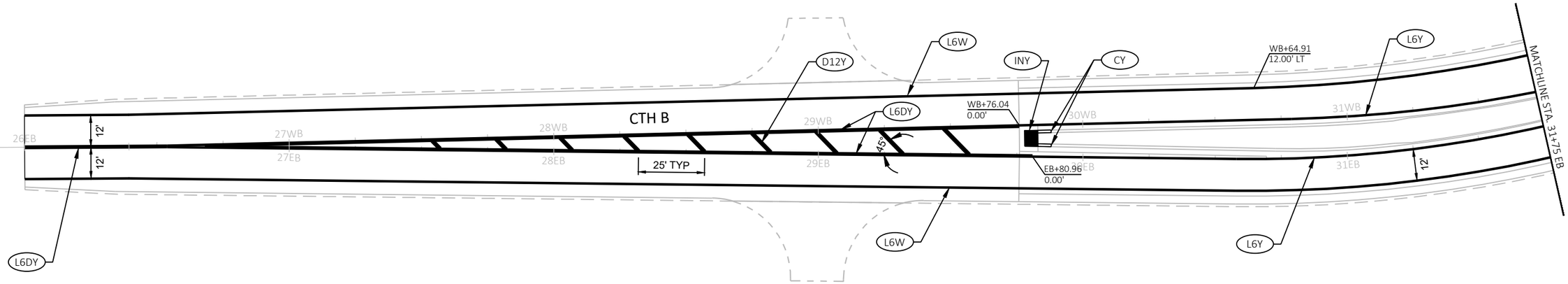
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PAVEMENT MARKING | SHEET 56 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024503_pm
PLOT DATE : 8/1/2023 11:32 AM
PLOT BY : SCHAUB, ALEX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- L6Y MARKING LINE EPOXY 6-INCH, YELLOW
- L6DY MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW
- L6W MARKING LINE EPOXY 6-INCH, WHITE
- L6W12 MARKING LINE EPOXY 6-INCH, WHITE [12.5-FT SEGMENT, 37.5-FT GAP]
- L6W3 MARKING LINE EPOXY 6-INCH, WHITE [3-FT SEGMENT, 9-FT GAP]
- L10W MARKING LINE EPOXY 10-INCH, WHITE
- L10W6 MARKING LINE EPOXY 10-INCH, WHITE [6-FT SEGMENT, 3-FT GAP]
- AW MARKING ARROW EPOXY
- DE18 MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP]
- D12Y MARKING DIAGONAL EPOXY 12-INCH, YELLOW
- D12W MARKING DIAGONAL EPOXY 12-INCH, WHITE
- INY MARKING ISLAND NOSE EPOXY, YELLOW
- CY MARKING CURB EPOXY, YELLOW




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PAVEMENT MARKING | SHEET 57 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024504_pm

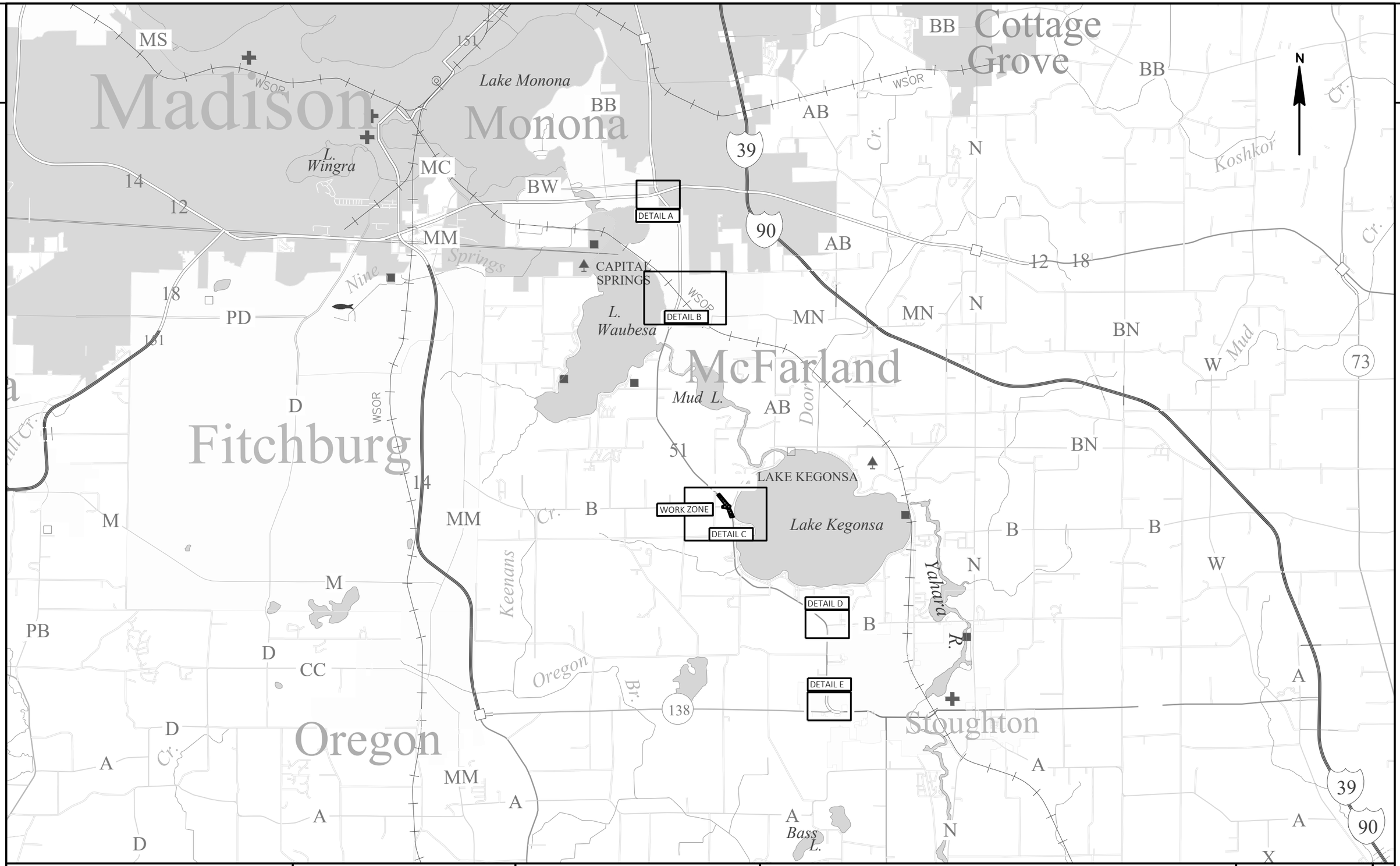
PLOT DATE : 8/1/2023 11:33 AM PLOT BY : SCHAUB, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




LEGEND

| | |
|---|---|
| L6Y | MARKING LINE EPOXY 6-INCH, YELLOW |
| L6DY | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| L6W | MARKING LINE EPOXY 6-INCH, WHITE |
| L6W12 | MARKING LINE EPOXY 6-INCH, WHITE [12.5-FT SEGMENT, 37.5-FT GAP] |
| L6W3 | MARKING LINE EPOXY 6-INCH, WHITE [3-FT SEGMENT, 9-FT GAP] |
| L10W | MARKING LINE EPOXY 10-INCH, WHITE |
| L10W6 | MARKING LINE EPOXY 10-INCH, WHITE [6-FT SEGMENT, 3-FT GAP] |
| AW | MARKING ARROW EPOXY |
| DE18 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| D12W | MARKING DIAGONAL EPOXY 12-INCH, WHITE |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING OVERVIEW | SHEET 59 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\025000_AW_OV.DWG
LAYOUT NAME - Max Width Signing Overview

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN: 1.5 MI

WISDOT/CADDS SHEET 42

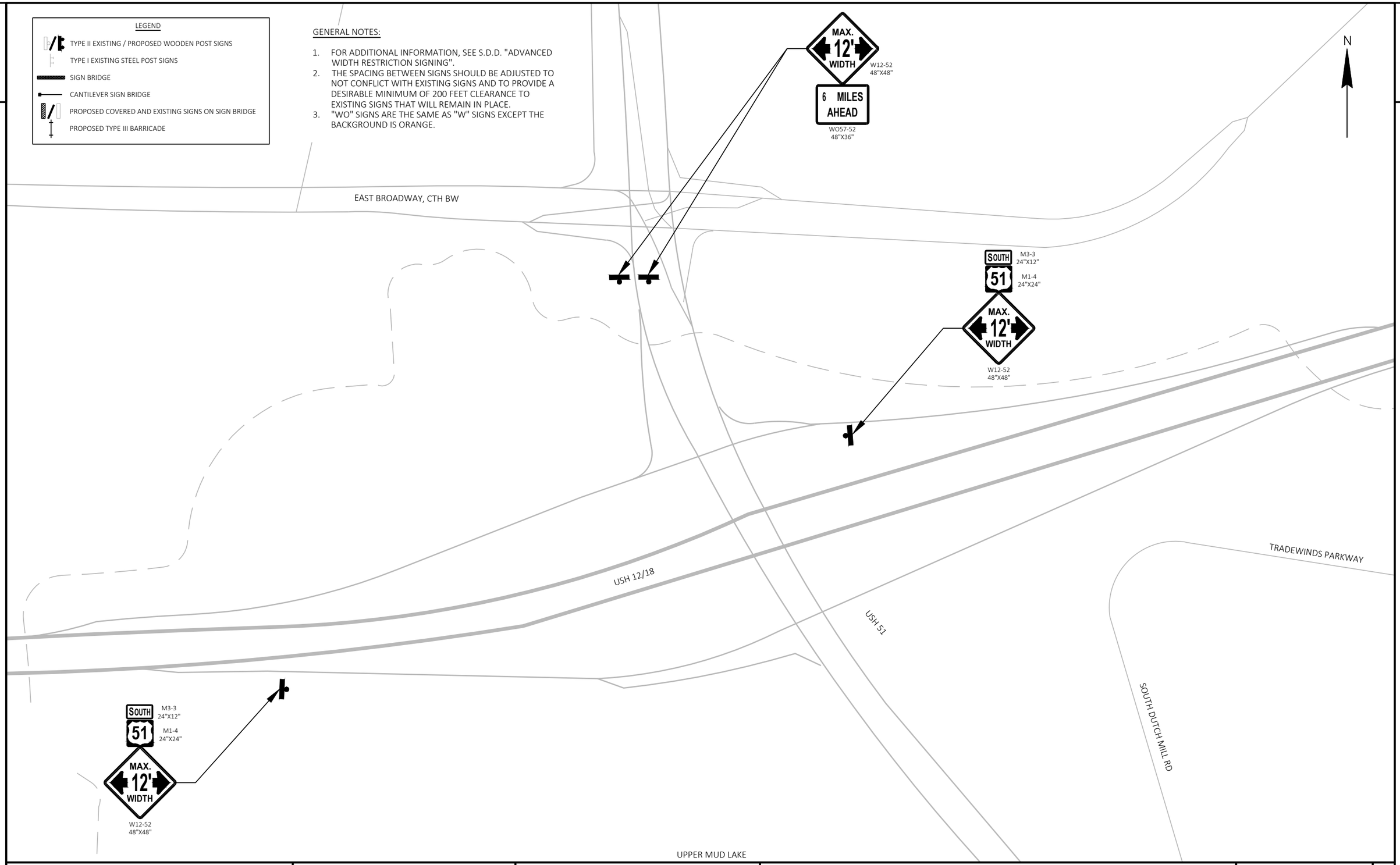
2

LEGEND

- TYPE II EXISTING / PROPOSED WOODEN POST SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- PROPOSED COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- PROPOSED TYPE III BARRICADE

GENERAL NOTES:

1. FOR ADDITIONAL INFORMATION, SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING".
2. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH EXISTING SIGNS AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.




2

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING - DETAIL A | SHEET 60 | E |
|---|---|---|---|---|---|

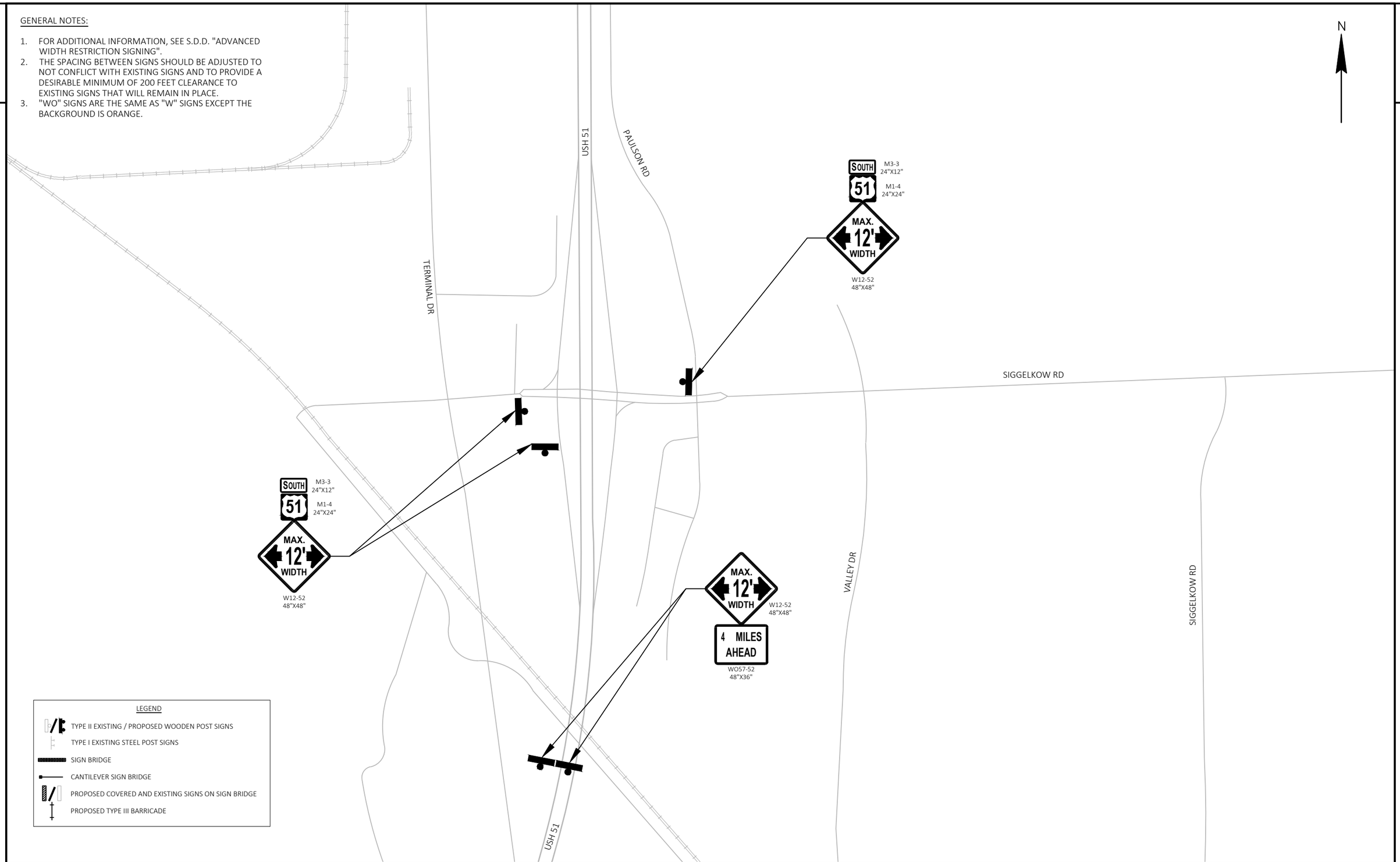
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\025000_AW.DWG
LAYOUT NAME - DETAIL A

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

GENERAL NOTES:

1. FOR ADDITIONAL INFORMATION, SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING".
2. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH EXISTING SIGNS AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.



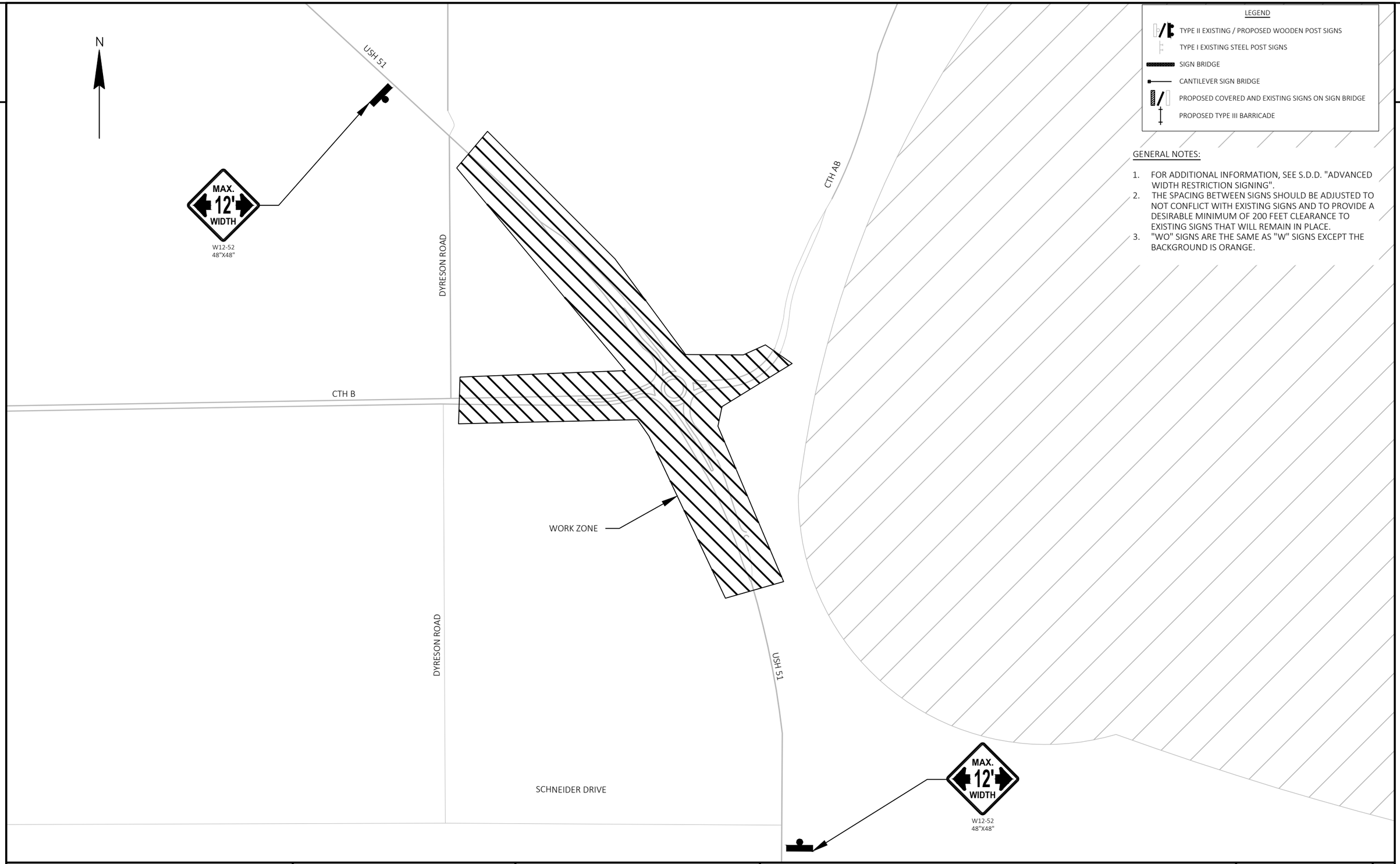

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING - DETAIL B | SHEET 61 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\025000_AW.DWG
LAYOUT NAME - DETAIL B

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2




2

GENERAL NOTES:

1. FOR ADDITIONAL INFORMATION, SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING".
2. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH EXISTING SIGNS AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING - DETAIL C | SHEET 62 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\025000_AW.DWG
LAYOUT NAME - DETAIL C

PLOT DATE : 8/1/2023 8:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:400 FT

2

2

N

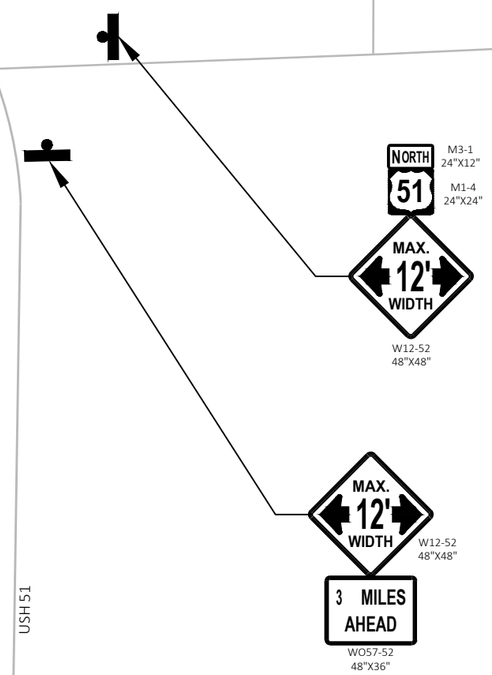
S BROOKLYN DR

GIEHLER DR

COUNTRY CLUB RD

USH 51

CTH B




USH 51

LEGEND

- TYPE II EXISTING / PROPOSED WOODEN POST SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- PROPOSED COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- PROPOSED TYPE III BARRICADE

GENERAL NOTES:

1. FOR ADDITIONAL INFORMATION, SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING".
2. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH EXISTING SIGNS AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING - DETAIL D | SHEET 63 | E |
|---|---|---|---|---|---|

2

N

LEGEND

- TYPE II EXISTING / PROPOSED WOODEN POST SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- PROPOSED COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- PROPOSED TYPE III BARRICADE

GENERAL NOTES:

1. FOR ADDITIONAL INFORMATION, SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING".
2. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH EXISTING SIGNS AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.




W12-52
48"X48"




WO57-52
48"X36"




M3-1
24"X12"

M1-4
24"X24"




W12-52
48"X48"

USH 51

STH 138

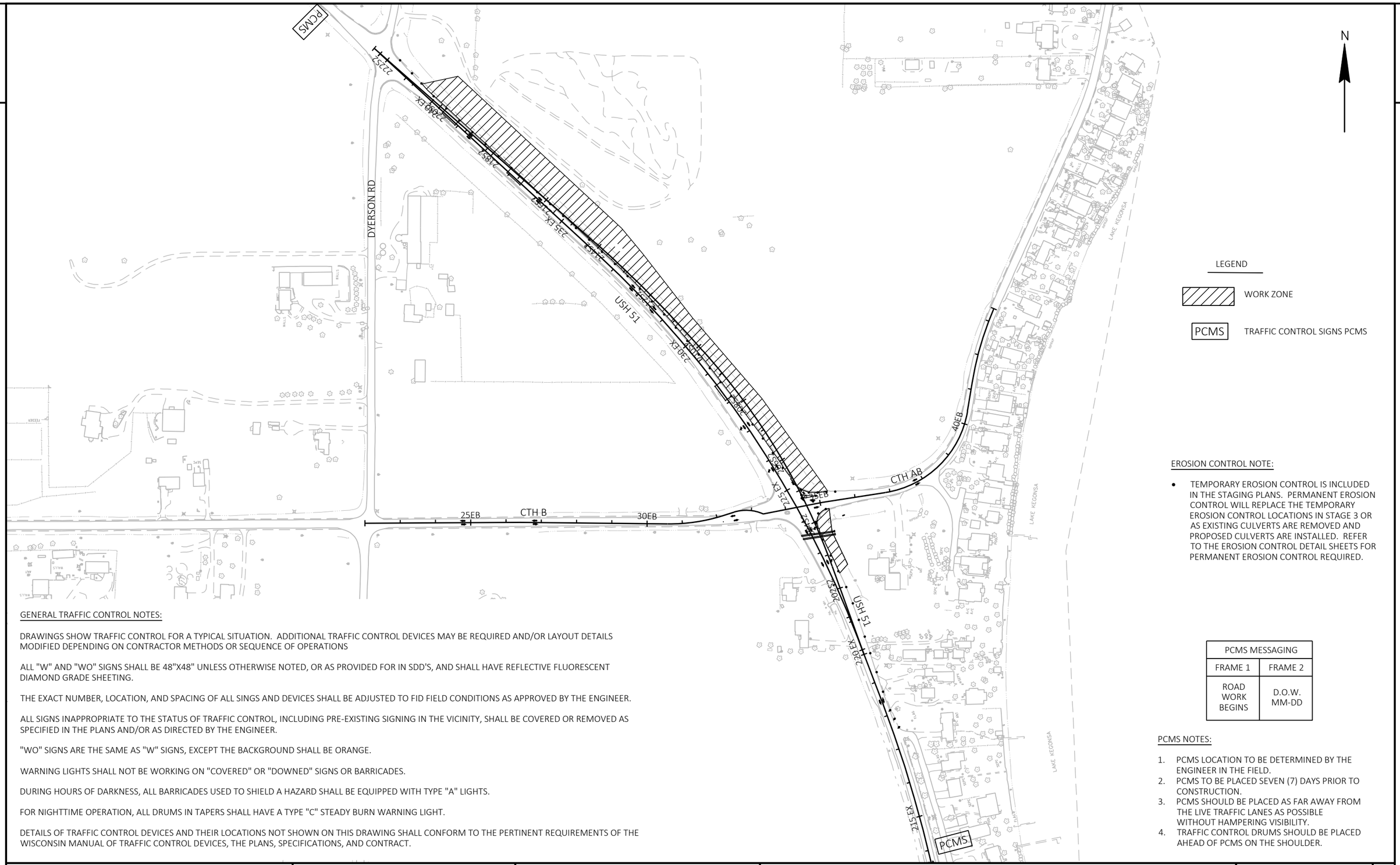
SILVERADO DR

HOEL AVE

USH 51/STH 138

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | MAX WIDTH RESTRICTION SIGNING - DETAIL E | SHEET 64 | E |
|---|---|---|---|---|---|

2




LEGEND

WORK ZONE

PCMS TRAFFIC CONTROL SIGNS PCMS

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 3 OR AS EXISTING CULVERTS ARE REMOVED AND PROPOSED CULVERTS ARE INSTALLED. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED.

GENERAL TRAFFIC CONTROL NOTES:

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED, OR AS PROVIDED FOR IN SDD'S, AND SHALL HAVE REFLECTIVE FLUORESCENT DIAMOND GRADE SHEETING.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF TRAFFIC CONTROL, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND SHALL BE ORANGE.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

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

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS, AND CONTRACT.

| PCMS MESSAGING | |
|---|---|
| FRAME 1 | FRAME 2 |
| ROAD WORK BEGINS | D.O.W. MM-DD |

PCMS NOTES:

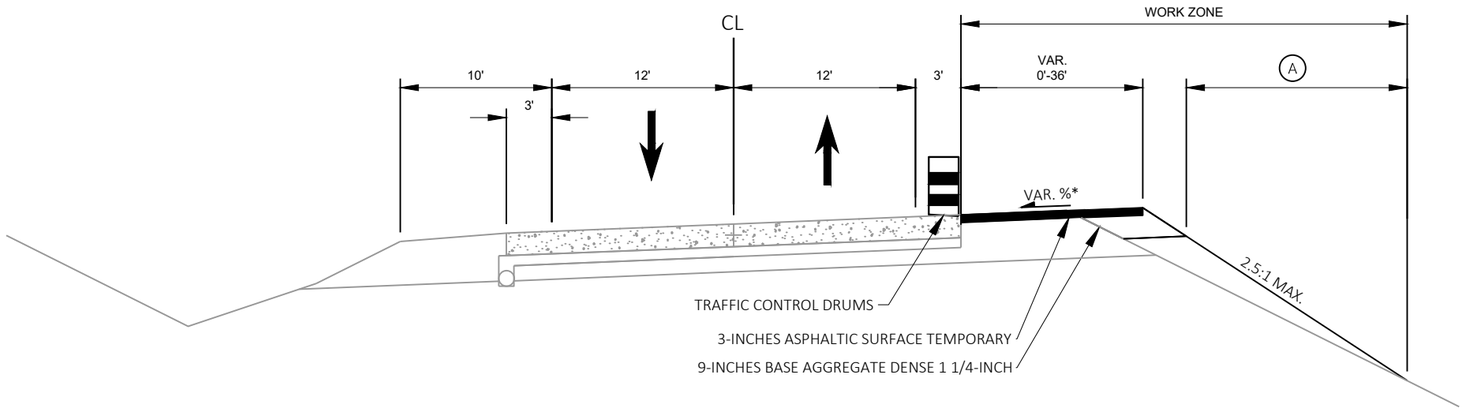
1. PCMS LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. PCMS TO BE PLACED SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
3. PCMS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY.
4. TRAFFIC CONTROL DRUMS SHOULD BE PLACED AHEAD OF PCMS ON THE SHOULDER.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 OVERVIEW | SHEET 65 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - 026001_s1

PLOT DATE : 8/29/2023 9:52 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1in:250 ft

2




(A) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING

* MATCH ADJACENT PAVEMENT CROSS SLOPE

STAGE 1 TYPICAL SECTION

2

2

N

POST

USH 51

215 EX

MATCHLINE STA.217+00 EX 51

ADVANCE WARNING IN ACCORDANCE WITH S.D.D. "TRAFFIC CONTROL WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".

USH 51 FRONTAGE RD

MH

W

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 3 OR AS EXISTING CULVERTS ARE REMOVED AND PROPOSED CULVERTS ARE INSTALLED. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED.

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- XXXXX SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

N

MATCHLINE STA. 217+00 EX 51

USH 51

220 EX

25' (TYP.)

50' (TYP.)

FLAG

INLET PROTECTION TYPE D

INL

MH

STA 202S2+40.49
14.00' RT

STA 202S2+65.42
14.00' RT

202S2

MATCHLINE STA. 222+75 EX 51

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 | SHEET 67 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - 026002_s1

PLOT DATE : 8/29/2023 9:53 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

MATCHLINE STA. 226+25 EX 51

USH 51

STA 205S2+04.53
17.00' RT

STA 204S2+82.05
30.67' RT

STA 204S2+79.85
29.54' RT

50' (TYP.)

STOP
R1-1
36"X36"

225' EX

25' (TYP.)

CTH AB

MATCHLINE STA. 37+25 EB

35EB

MATCHLINE STA. 31+75 EB

CTH B

STAGE CONSTRUCTION OPERATIONS TO MAINTAIN
11' MIN. WIDTH OF CTH AB RIGHT TURN LANE

RIPRAP

STA 204S2+08.85
14.00' RT

CAP ENDS TO CONTINUE WORK IN STAGE 2
(INCIDENTAL TO WORK)

INSTALL UNDER NIGHTLY LANE
CLOSURE, SEE SPECIAL PROVISIONS

R1876'

USH 51

MATCHLINE STA. 222+75 EX 51

EROSION CONTROL NOTE:

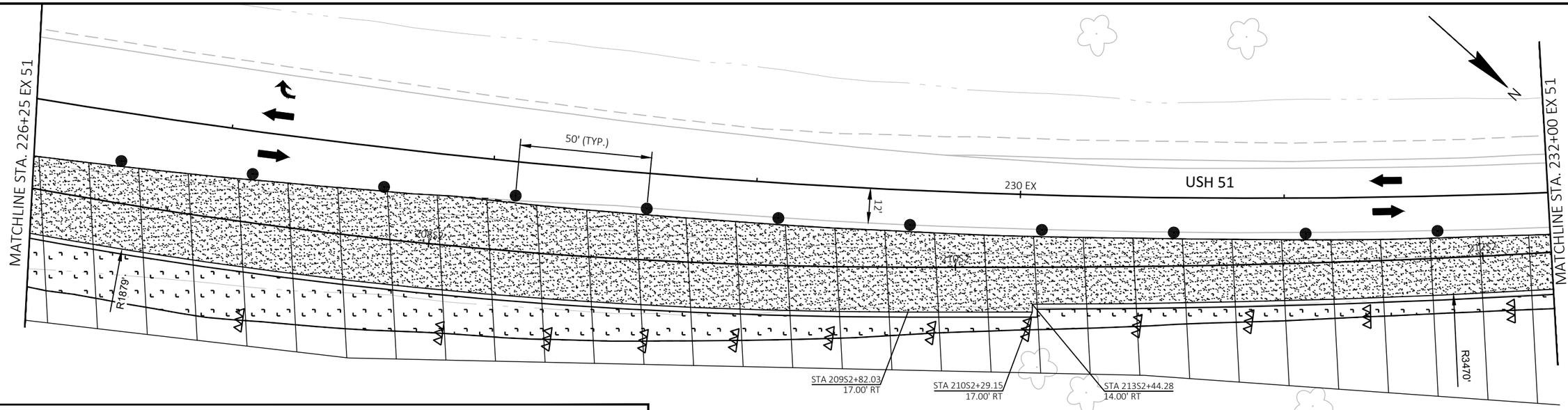
- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 3 OR AS EXISTING CULVERTS ARE REMOVED AND PROPOSED CULVERTS ARE INSTALLED. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 | SHEET 68 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - 026003_s1

PLOT DATE : 8/29/2023 9:54 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



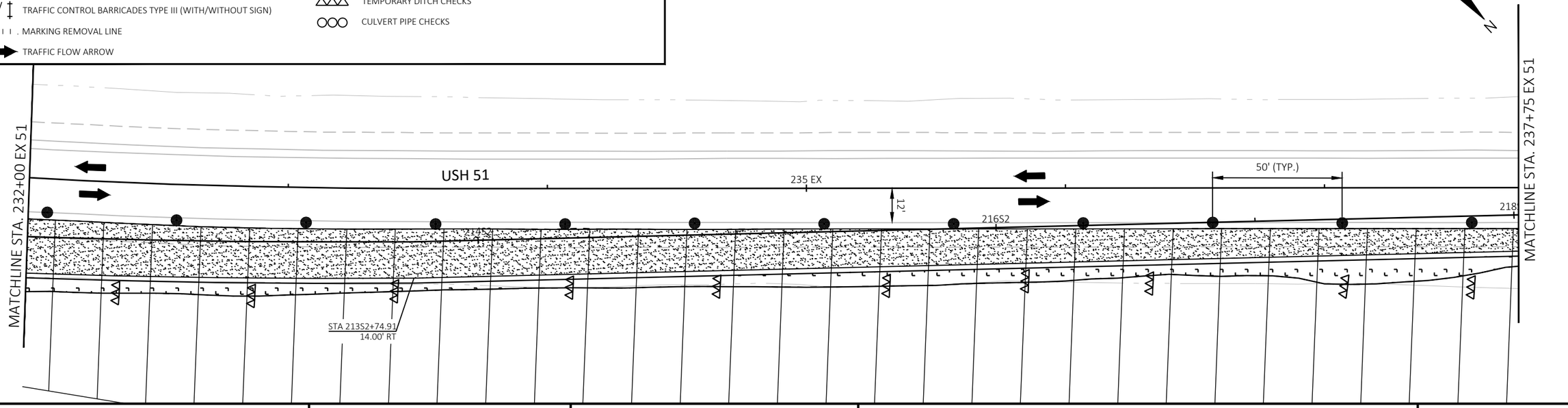

## LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

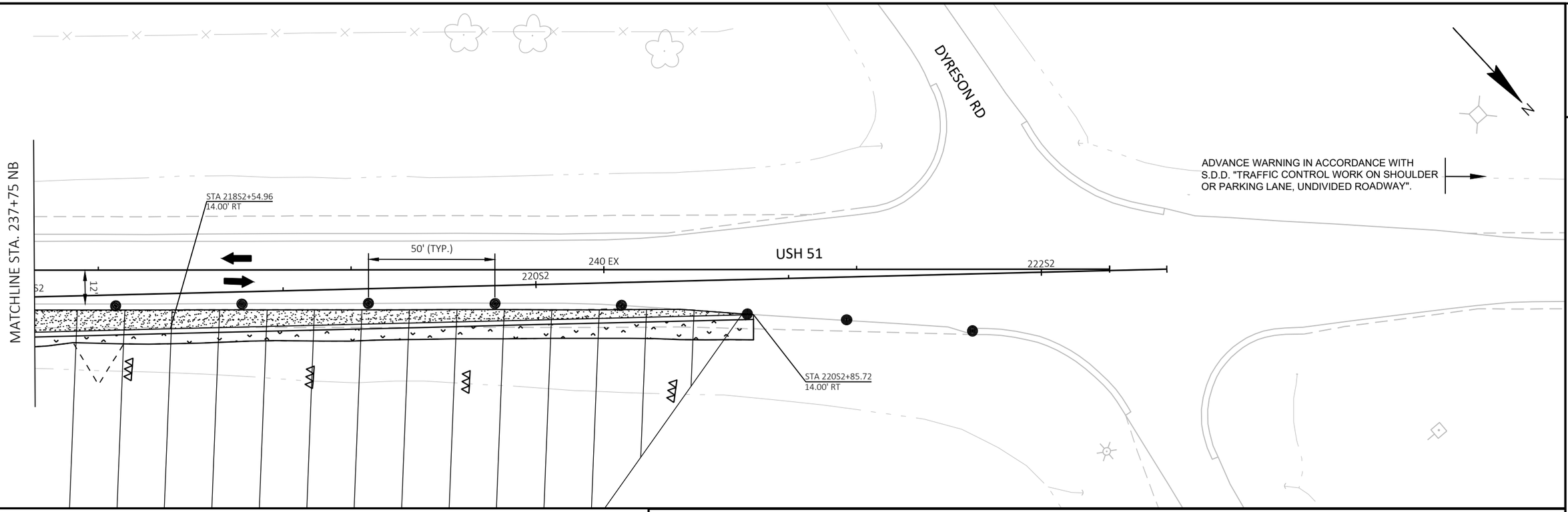
EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 3 OR AS EXISTING CULVERTS ARE REMOVED AND PROPOSED CULVERTS ARE INSTALLED. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED.




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 | SHEET 69 | E |
|---|---|---|---|---|---|

2



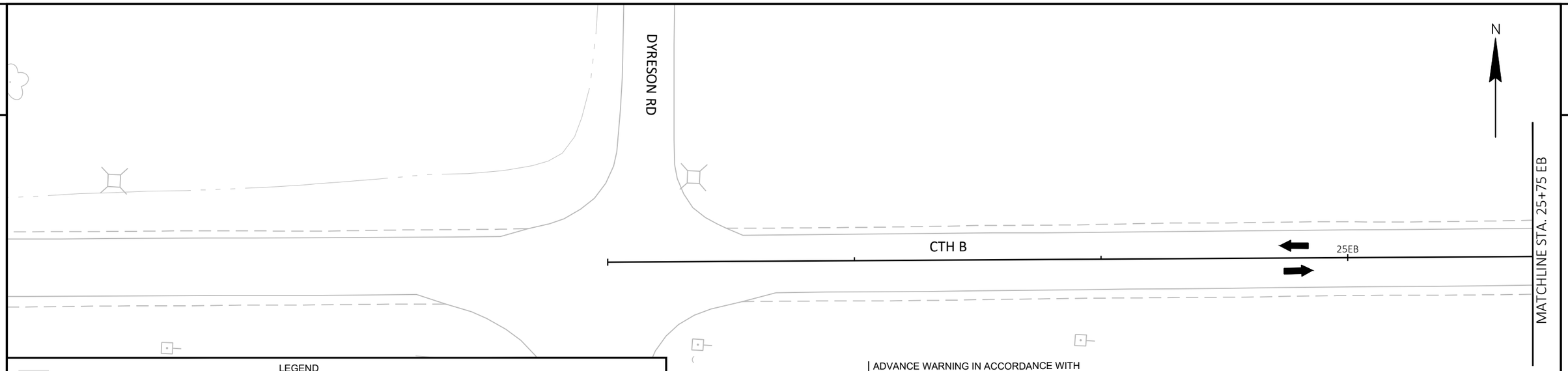

## LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 3 OR AS EXISTING CULVERTS ARE REMOVED AND PROPOSED CULVERTS ARE INSTALLED. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED.




2

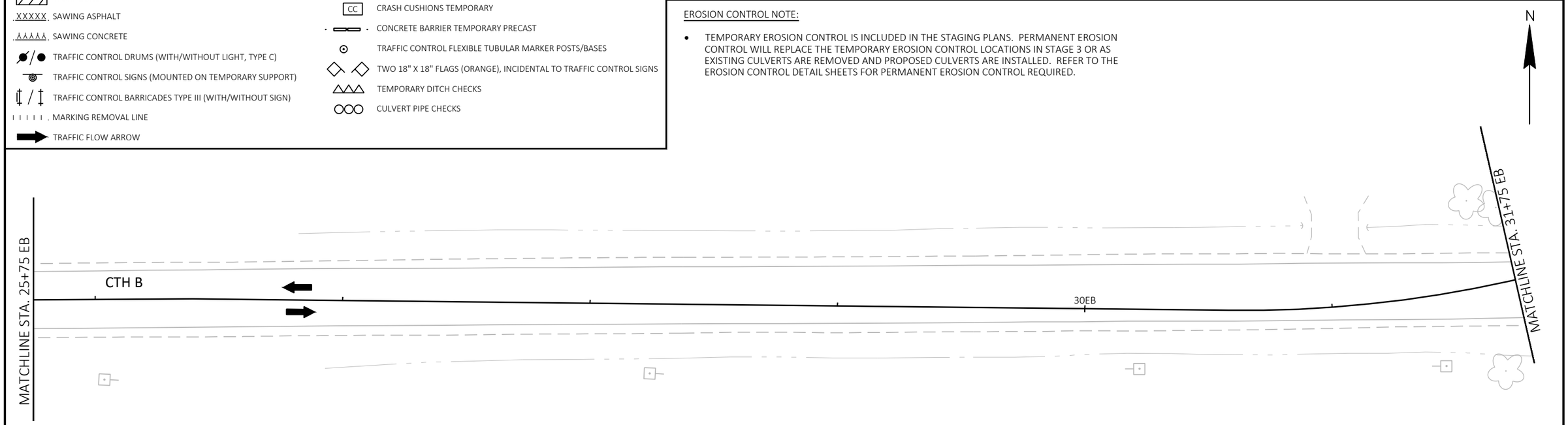
LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
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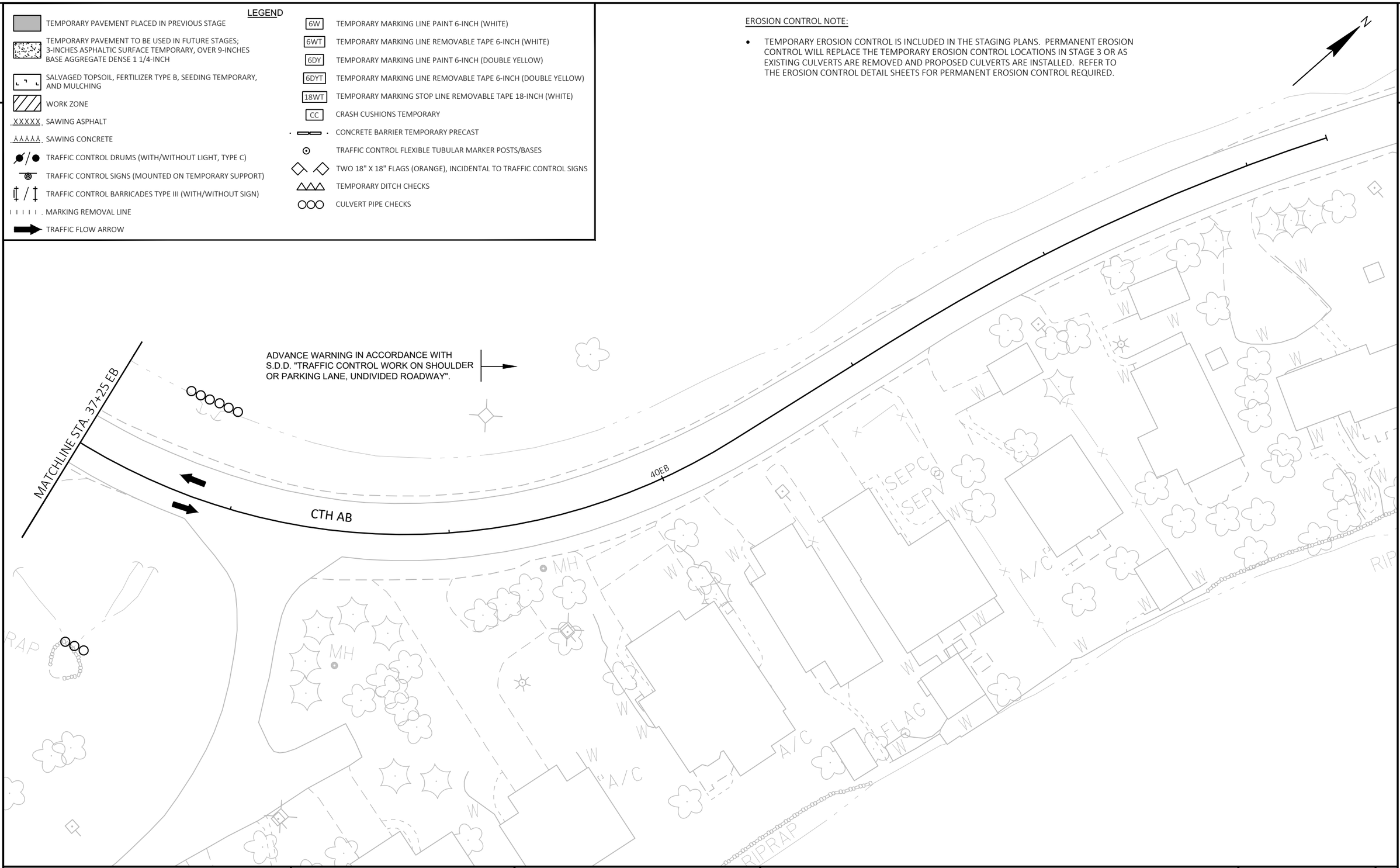

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 | SHEET 71 | E |
|---|---|---|---|---|---|

## LEGEND

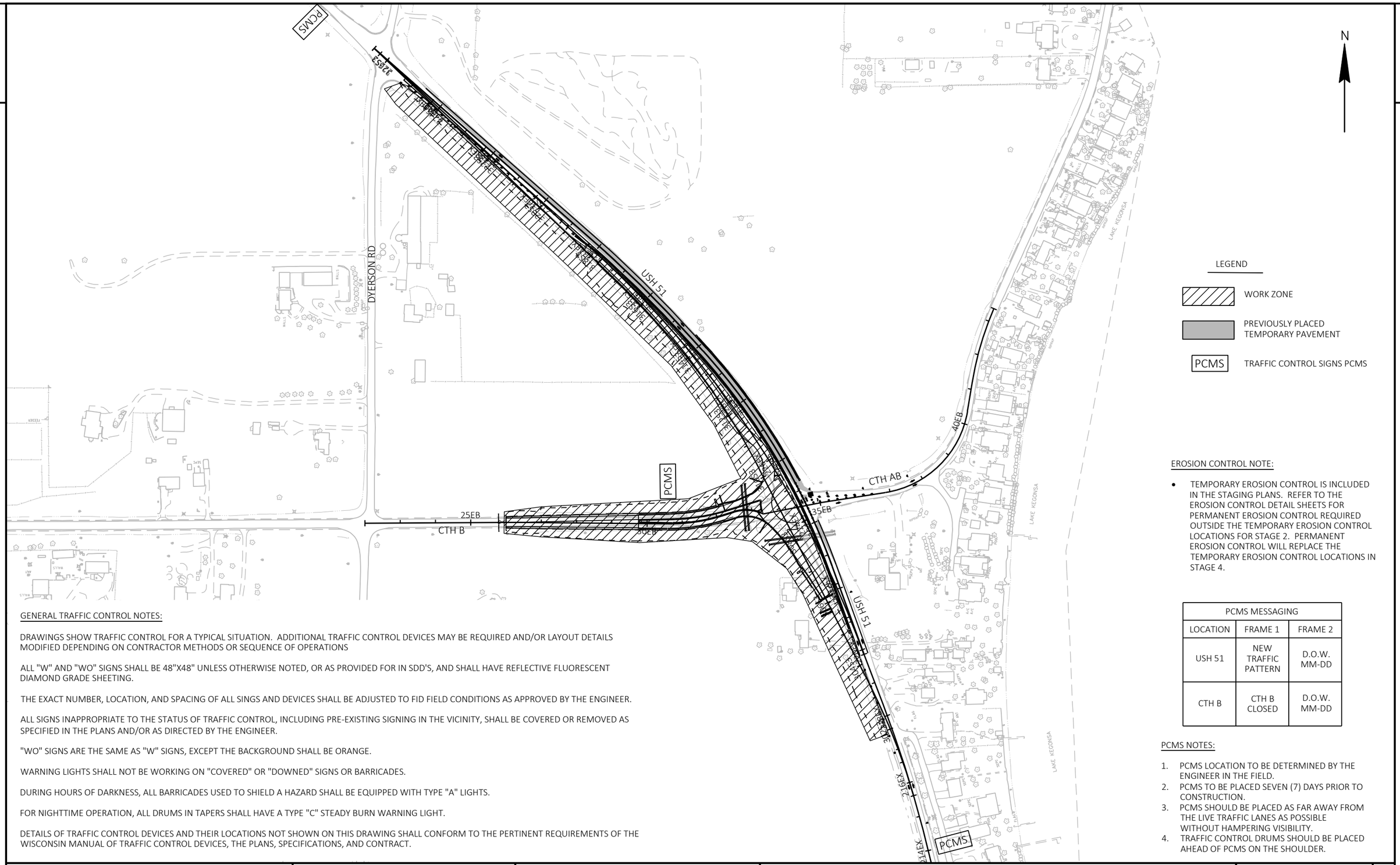
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 1 | SHEET 72 | E |
|---|---|---|---|---|---|




GENERAL TRAFFIC CONTROL NOTES:

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED, OR AS PROVIDED FOR IN SDD'S, AND SHALL HAVE REFLECTIVE FLUORESCENT DIAMOND GRADE SHEETING.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF TRAFFIC CONTROL, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND SHALL BE ORANGE.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

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

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS, AND CONTRACT.

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED OUTSIDE THE TEMPORARY EROSION CONTROL LOCATIONS FOR STAGE 2. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 4.

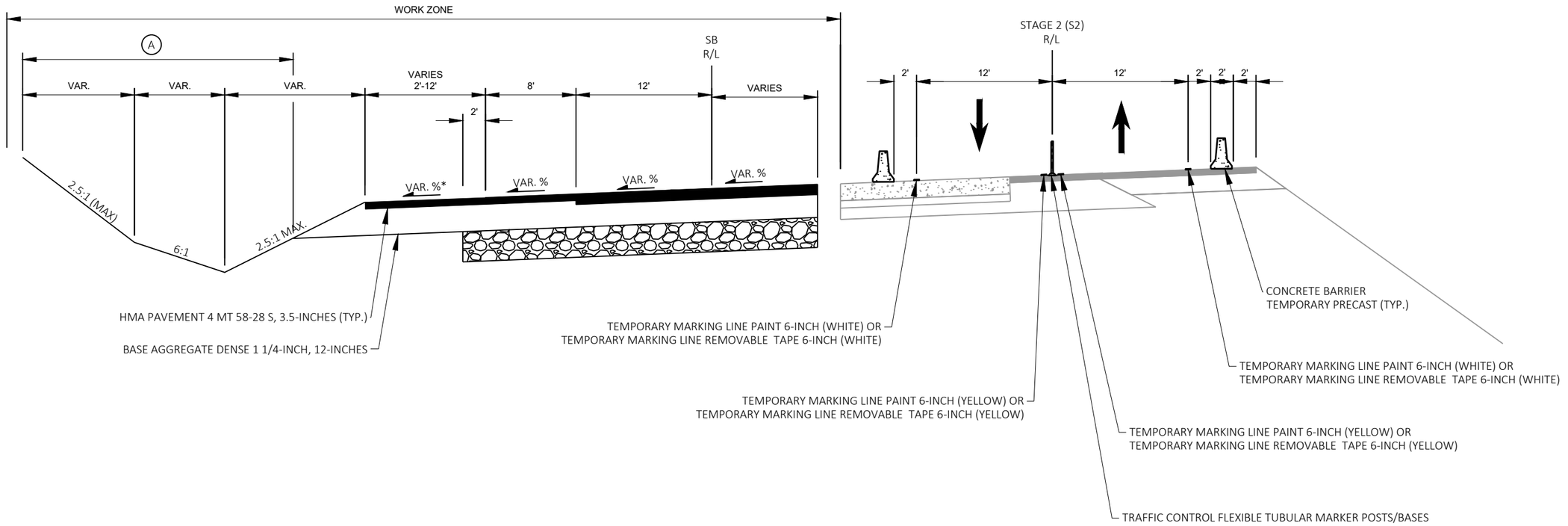
| PCMS MESSAGING | | |
|---|---|---|
| LOCATION | FRAME 1 | FRAME 2 |
| USH 51 | NEW TRAFFIC PATTERN | D.O.W. MM-DD |
| CTH B | CTH B CLOSED | D.O.W. MM-DD |

PCMS NOTES:

1. PCMS LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. PCMS TO BE PLACED SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
3. PCMS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY.
4. TRAFFIC CONTROL DRUMS SHOULD BE PLACED AHEAD OF PCMS ON THE SHOULDER.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 OVERVIEW | SHEET 73 | E |
|---|---|---|---|---|---|

2




## STAGE 2 TYPICAL SECTION

(A) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING

* MATCH ADJACENT PAVEMENT CROSS SLOPE

2

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED OUTSIDE THE TEMPORARY EROSION CONTROL LOCATIONS FOR STAGE 2. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 4.

N

POST

212EX

USH 51

214EX

216EX

MATCHLINE B

USH 51 FRONTAGE RD

USE S.D.D. 15C04 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

W01-2L

45 MPH

W013-1 36"X36"

FLAG

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
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- CULVERT PIPE CHECKS

N

MATCHLINE B

886'

302S3

STA 301S3+90.26
-16.00' LT

STA 301S3+90.15
-14.00' LT

218EX

USH 51

50' (TYP.)

500'

STA 303S3+50.10
-14.00' LT

STA 304S3+64.49
14.00' RT

STA 305S3+12.03
14.00' RT

STA 305S3+58.49
16.08' RT

STA 305S3+73.73
-14.00' LT

STA 305S3+73.85, 33.4' LT

STA 305S3+83.33, 32.8' LT

PIPE A

PIPE B

STA 306S3+12.58, 32.5' LT

PIPE C

STA 306S3+16.65
-16.89' LT

STA 306S3+18.29
16.20' RT

STA 306S3+49.66
14.00' RT

STA 306S3+15.52, 22.6' RT

306S3

STA 200S2+00
-12.00' LT

STA 200S2+00
0.00'

STA 200S2+00
12.00' RT

220EX

222EX

202S2

CC

STA 200S2+76.94
-15.00' LT

6W

6DY

W5-52L
12"X36"

R3-2
24"X24"

12'

12'

MATCHLINE STA. 203+15 S2

PIPE A DETAILS:
28-FT OF CULVERT PIPE TEMPORARY 24-INCH (FIELD VERIFY EXISTING PIPE SIZE)
UPSTREAM INVERT = 852.70'
DOWNSTREAM INVERT APPROXIMATELY = 852.42' (FIELD VERIFY ELEVATION)
CONCRETE COLLARS FOR PIPE REQ'D
APRON ENDWALLS FOR CULVERT PIPE 24-INCH REQ'D

PIPE B DETAILS:
28-FT OF CULVERT PIPE TEMPORARY 24-INCH (FIELD VERIFY EXISTING PIPE SIZE)
UPSTREAM INVERT = 852.70'
DOWNSTREAM INVERT APPROXIMATELY = 852.40' (FIELD VERIFY ELEVATION)
CONCRETE COLLARS FOR PIPE REQ'D
APRON ENDWALLS FOR CULVERT PIPE 24-INCH REQ'D

PIPE C DETAILS:
55-FT OF CULVERT PIPE TEMPORARY 12-INCH
UPSTREAM INVERT = 853.67'
DOWNSTREAM INVERT APPROXIMATELY = 853.39' (FIELD VERIFY ELEVATION)
INLETS 2X2-FT REQ'D
INLET COVERS TYPE B REQ'D
RIM ELEVATION = 856.48' (FIELD VERIFY ELEVATION)

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 75 | E |
|---|---|---|---|---|---|

2

N

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
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- TEMPORARY DITCH CHECKS
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3.5-INCHES HMA PAVEMENT 4MT 58-28S OVER 10.5-INCHES BASE AGGREGATE DENSE 1 1/4-INCH (MATCH DEPTH OF ADJACENT BASE AGG. DENSE)

STA 310S3+26.52 -14.00' LT

STA 310S3+12.34 -14.00' LT

COVER PLATES TEMPORARY REQ'D

STA 309S3+83.47 -20.79' LT

STA 309S3+81.33 -19.50' LT

MATCHLINE STA. 206+50 S2

ANCHORING CONCRETE BARRIER TEMPORARY PRECAST

CAP END TO CONTINUE WORK IN STAGE 3 (INCIDENTAL TO WORK)

226EX

206S2

W5-52R 12"X36"

CC

STA 205S2+32.10 15.00' RT

STOP R1-1 36"X36"

12'

25' (TYP.)

CTH AB

MATCHLINE STA. 37+25 EB

STA 309S3+51.51 14.00' RT

35EB

18WT

LANE CLOSED R11-2L 48"X30"

R3-2 24"X24"

CTH B

MATCHLINE STA. 31+75 EB

10' (TYP.)

STA 308S3+47.41 14.00' RT

224EX

204S2

6DY

STA 308S3+25.83 14.00' RT

6W

USH 51

MATCHLINE STA. 203+15 S2

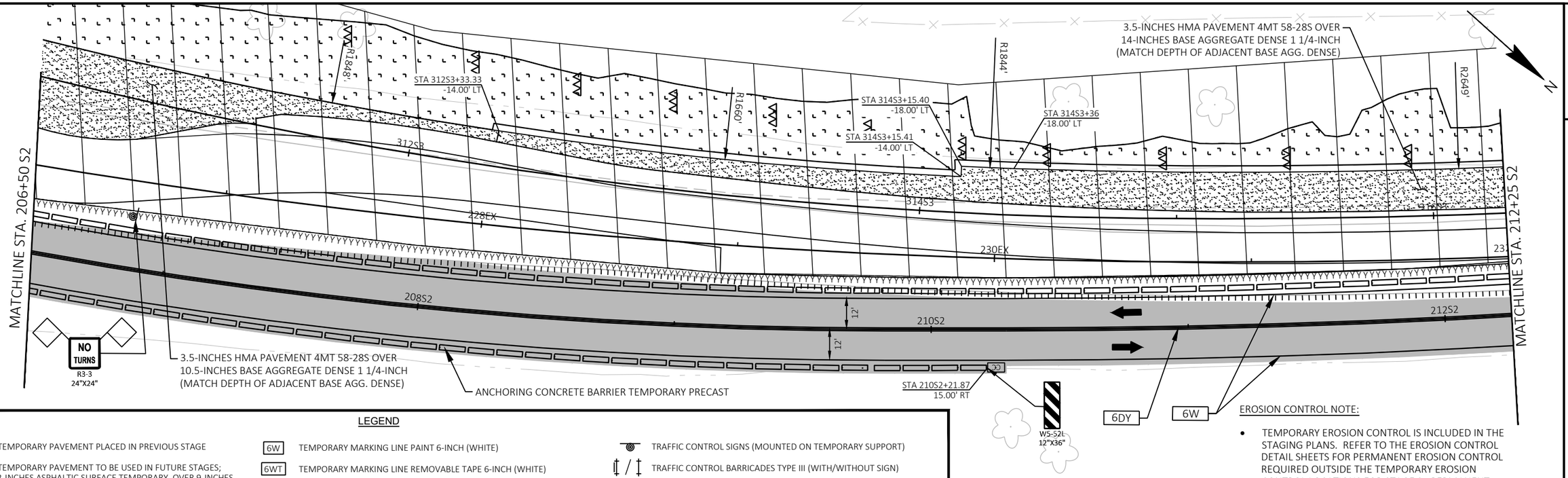
RIPRAP

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 76 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S2.DWG
LAYOUT NAME - 026003_s2
PLOT DATE : 8/29/2023 9:58 AM
PLOT BY : SCHMIDT, BRAD
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




2

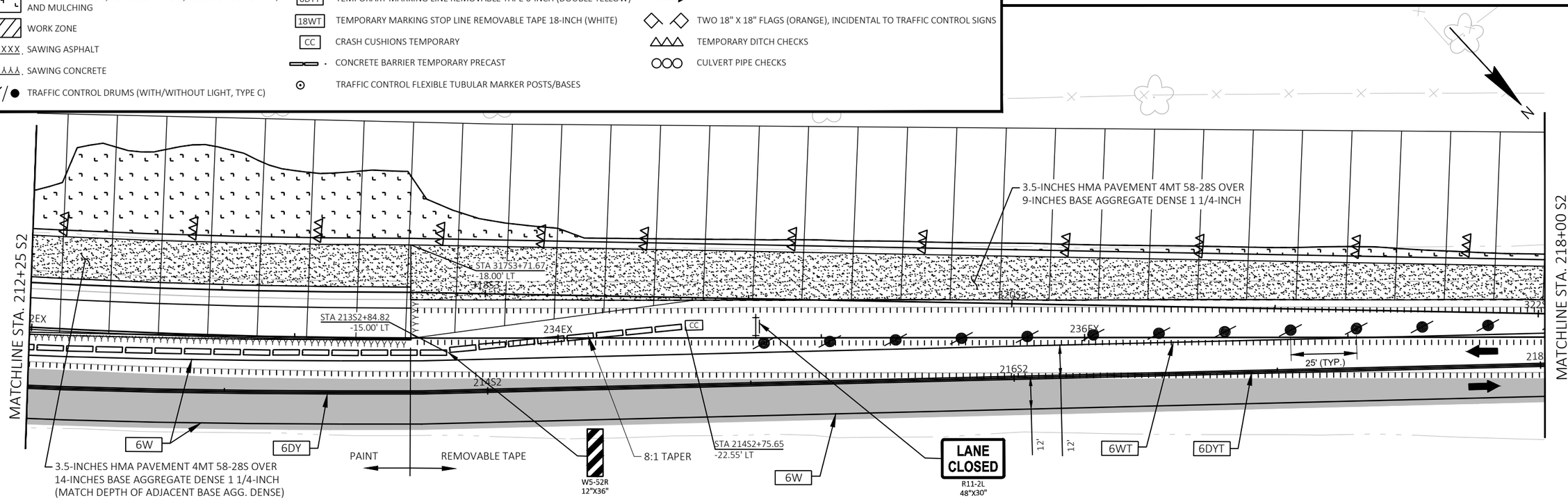
2

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- XXXXX SAWING ASPHALT
- AAAAA SAWING CONCRETE
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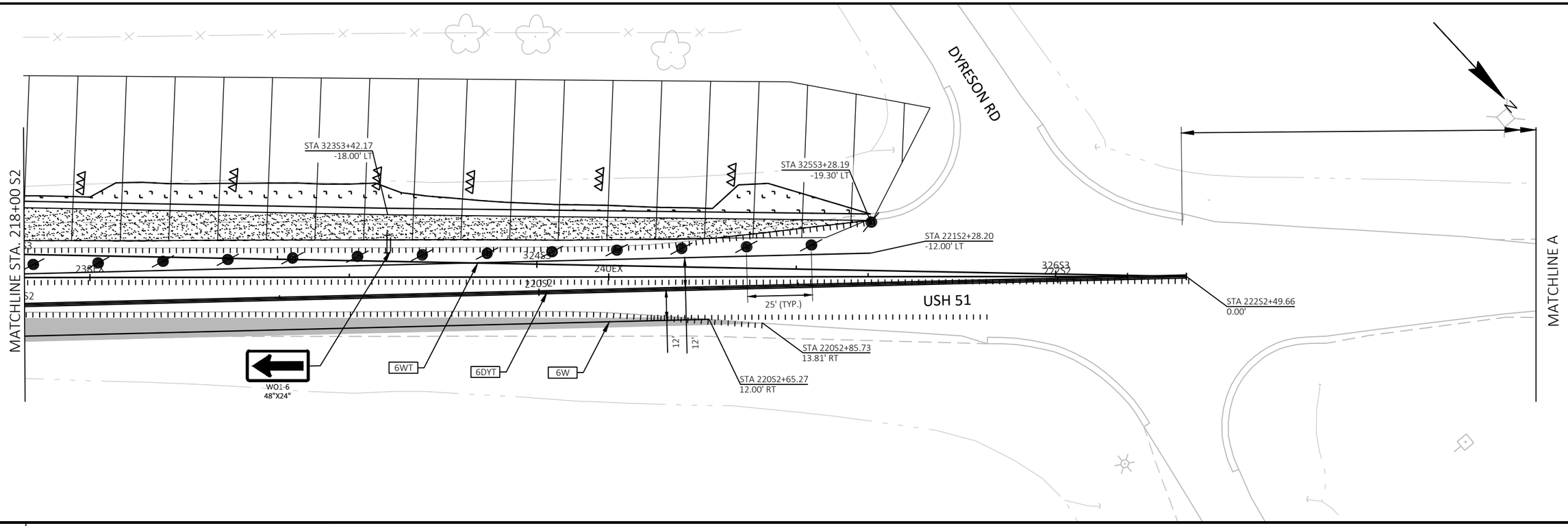
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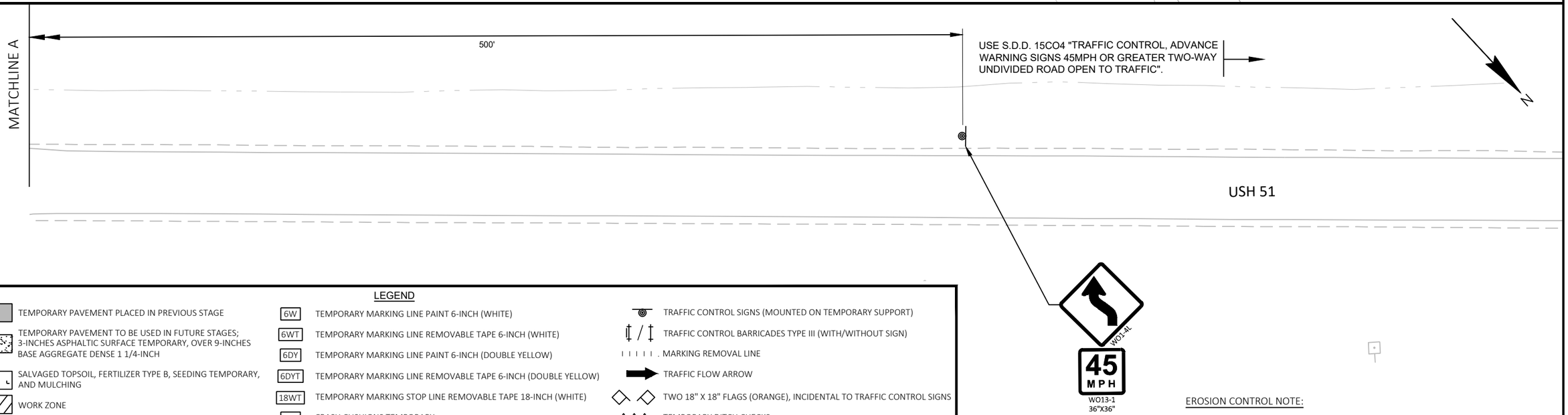
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 77 | E |
|---|---|---|---|---|---|

2




LEGEND

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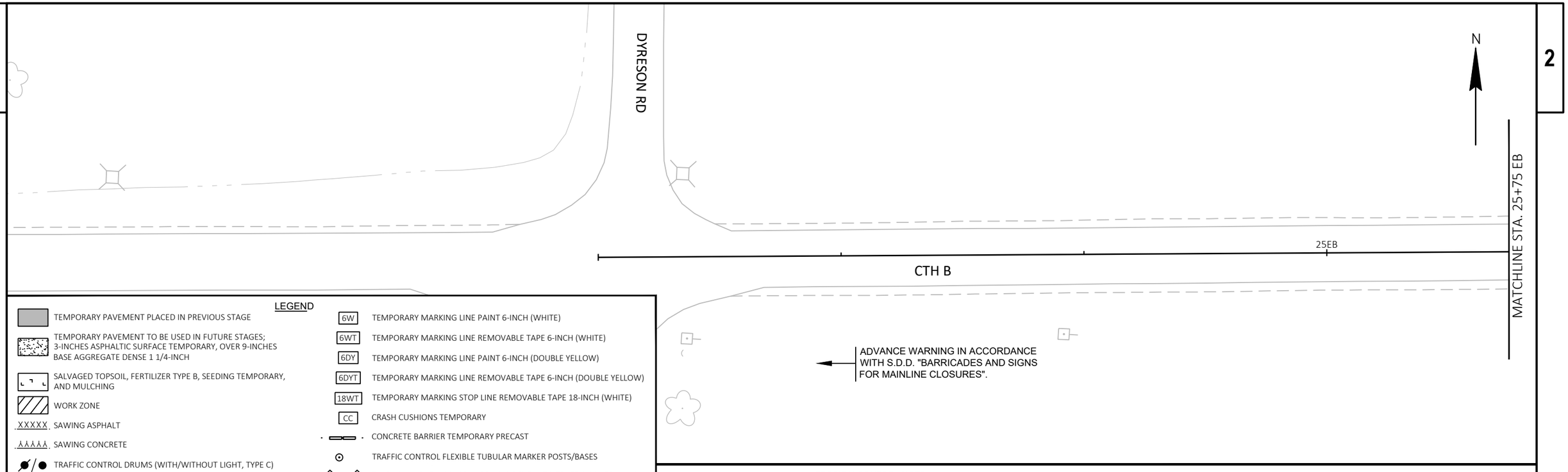
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 78 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S2.DWG
LAYOUT NAME - 026005_s2
PLOT DATE : 8/29/2023 9:59 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



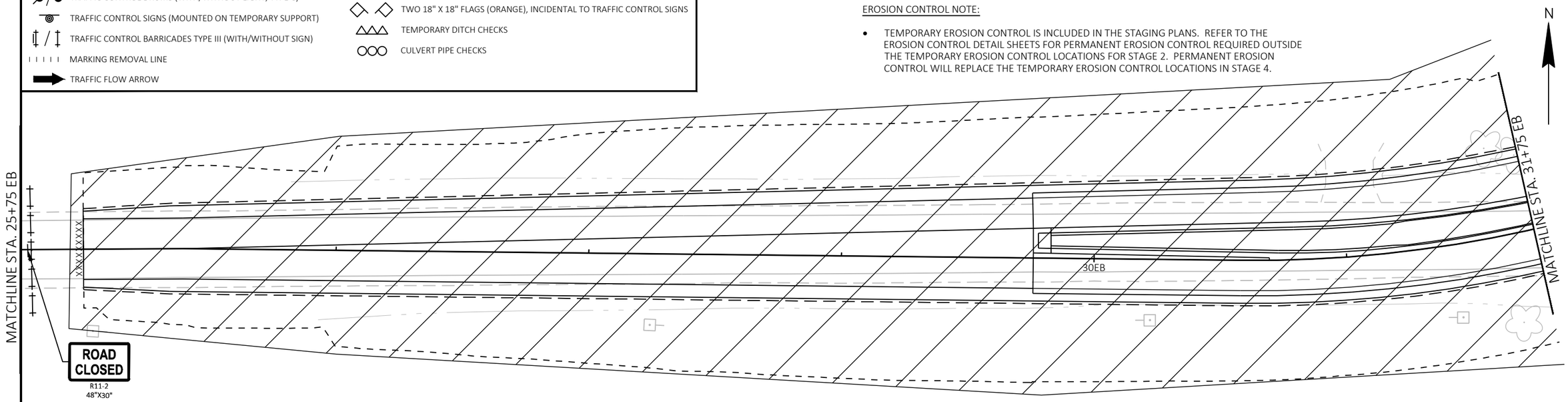

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- CULVERT PIPE CHECKS

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED OUTSIDE THE TEMPORARY EROSION CONTROL LOCATIONS FOR STAGE 2. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 4.




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 79 | E |
|---|---|---|---|---|---|

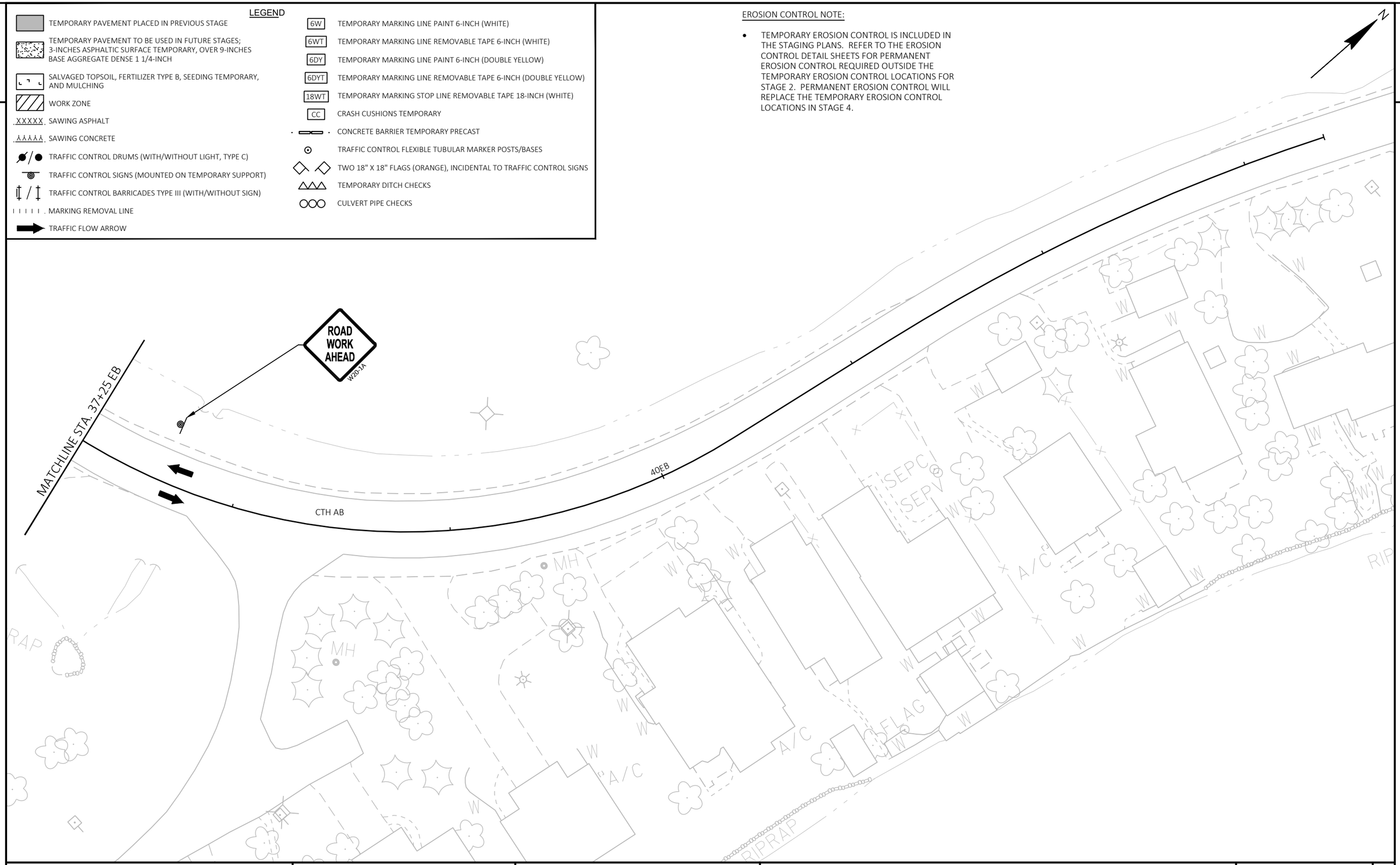
2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

EROSION CONTROL NOTE:

- TEMPORARY EROSION CONTROL IS INCLUDED IN THE STAGING PLANS. REFER TO THE EROSION CONTROL DETAIL SHEETS FOR PERMANENT EROSION CONTROL REQUIRED OUTSIDE THE TEMPORARY EROSION CONTROL LOCATIONS FOR STAGE 2. PERMANENT EROSION CONTROL WILL REPLACE THE TEMPORARY EROSION CONTROL LOCATIONS IN STAGE 4.

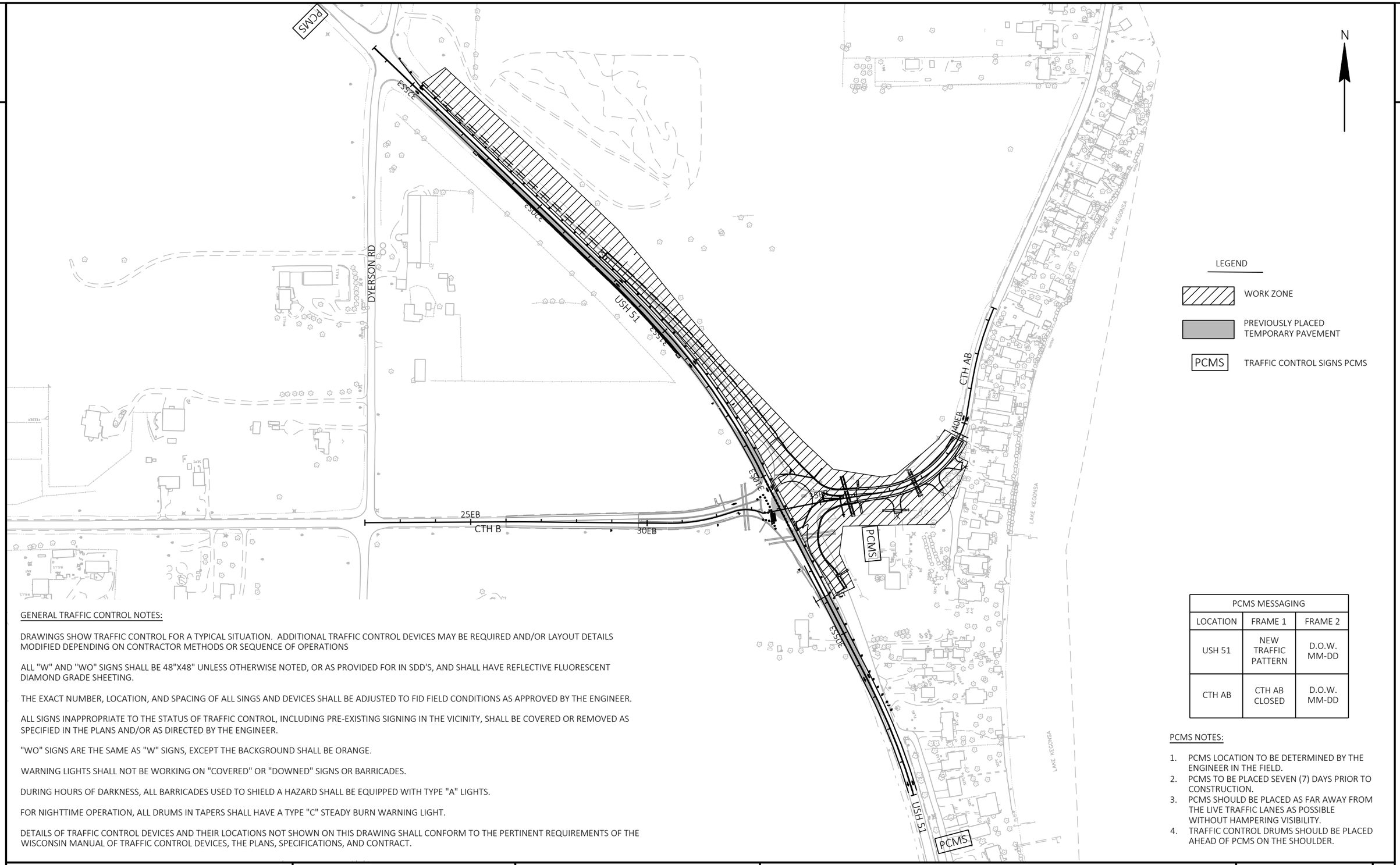



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 2 | SHEET 80 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S2.DWG
LAYOUT NAME - 026007_s2

PLOT DATE : 8/29/2023 10:01 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




GENERAL TRAFFIC CONTROL NOTES:

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED, OR AS PROVIDED FOR IN SDD'S, AND SHALL HAVE REFLECTIVE FLUORESCENT DIAMOND GRADE SHEETING.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF TRAFFIC CONTROL, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND SHALL BE ORANGE.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

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

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS, AND CONTRACT.

| PCMS MESSAGING | | |
|---|---|---|
| LOCATION | FRAME 1 | FRAME 2 |
| USH 51 | NEW TRAFFIC PATTERN | D.O.W. MM-DD |
| CTH AB | CTH AB CLOSED | D.O.W. MM-DD |

PCMS NOTES:

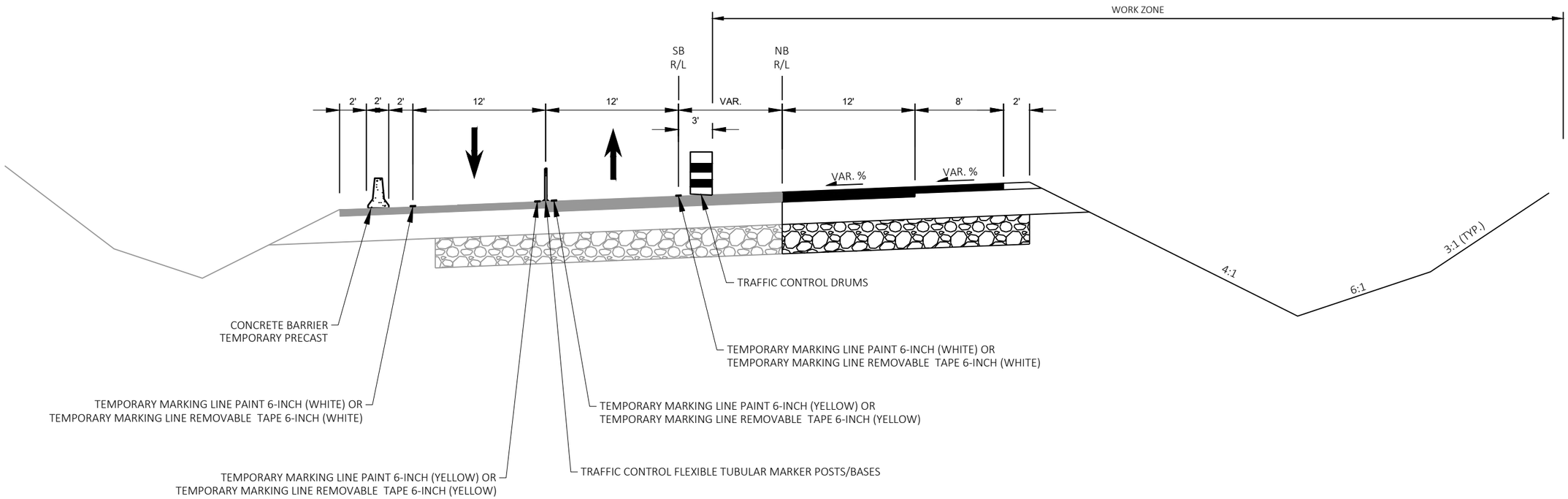
1. PCMS LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. PCMS TO BE PLACED SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
3. PCMS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY.
4. TRAFFIC CONTROL DRUMS SHOULD BE PLACED AHEAD OF PCMS ON THE SHOULDER.

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 OVERVIEW | SHEET 81 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S3.DWG
LAYOUT NAME - 026001_s3

PLOT DATE : 8/29/2023 10:01 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1in:250 ft

2




STAGE 3 TYPICAL SECTION

2

USE S.D.D 15C04 "TRAFFIC CONTROL, ADVANCE WARNING 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

WO1-4L

45 MPH

WO13-1
36"X36"

POST

USH 51

500'

STA 300S3+09.90
-12.00' LT

STA 300S3+09.87
0.00'

STA 300S3+09.84
11.87' RT

MATCHLINE STA.301+25 S3

USH 51 FRONTAGE RD

MH

FLAG

N

2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- AAAAA SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

MATCHLINE STA. 301+25 S3

USH 51

25' (TYP.)

50' (TYP.)

WO1-6
48"X24"

12'

12'

6W

6DY

305S3

PAINT

REMOVABLE TAPE

6WT

WO1-4L

45 MPH

WO13-1
36"X36"

NO TURNS

R3-3
24"X24"

LANE CLOSED

R11-2L
48"X30"

MATCHLINE STA. 307+30 S3

FLAG

N

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 83 | E |
|---|---|---|---|---|---|

2

N

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

MATCHLINE STA. 310+50 S3

ROAD CLOSED
R11-2
48"X30"

50' (TYP.)

310S3

10' (TYP)

10' (TYP.)

CTH AB

35 EB

MATCHLINE STA. 37+25 EB

MATCHLINE

CTH B

MATCHLINE STA. 31+75 EB

18WT

R3-2
24"X24"

STOP
R1-1
36"X36"

ROAD CLOSED
R11-2
48"X30"

6DYT

6WT

USH 51

MATCHLINE STA. 307+30 S3

XXXXXXXX

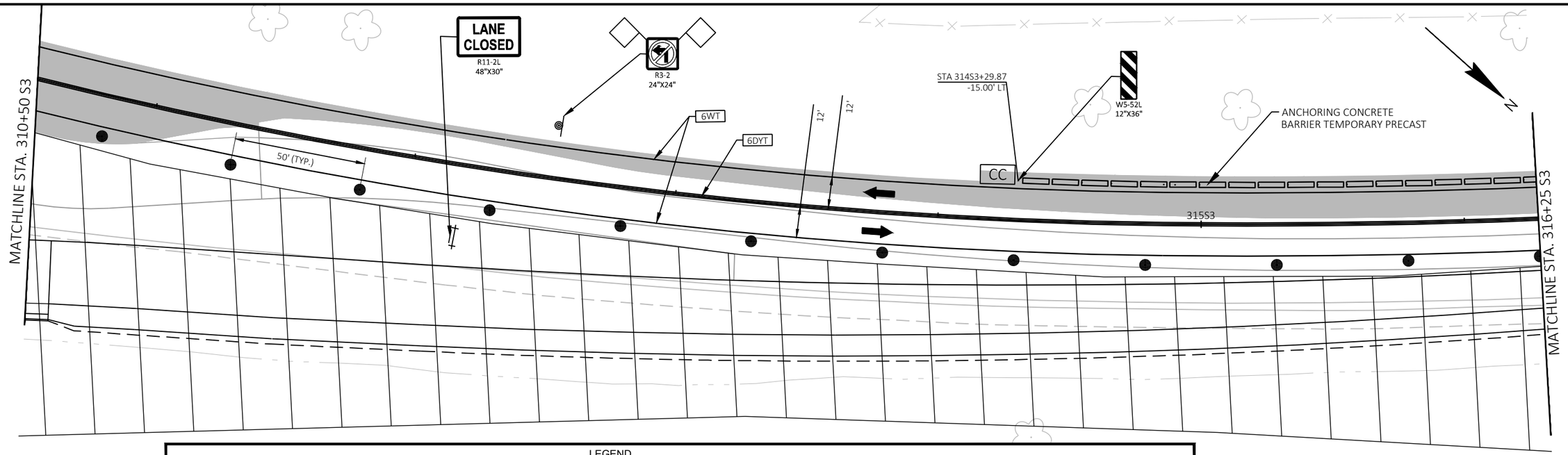
MH

MH

MH

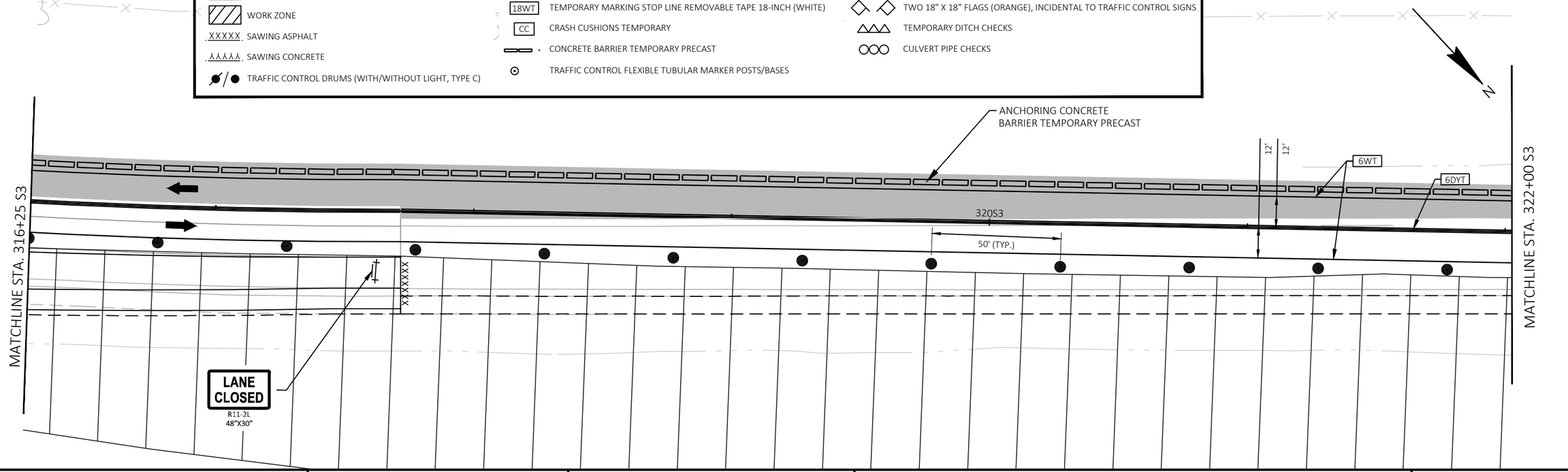
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 84 | E |
|---|---|---|---|---|---|

2




LEGEND

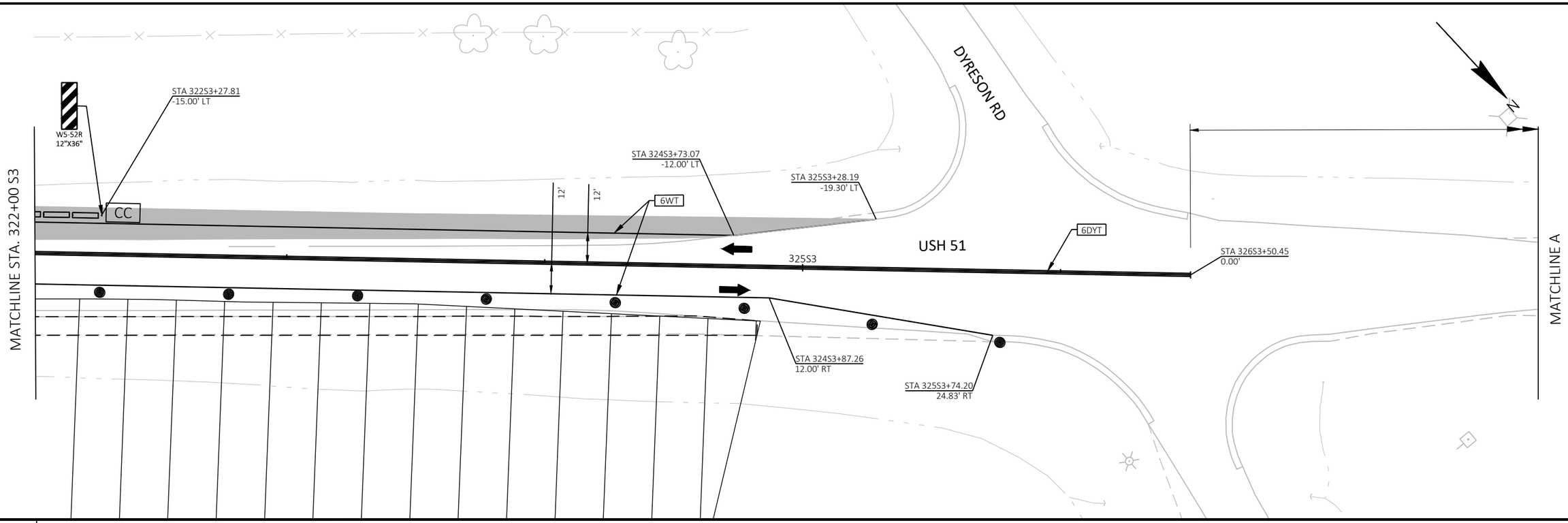
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
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- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

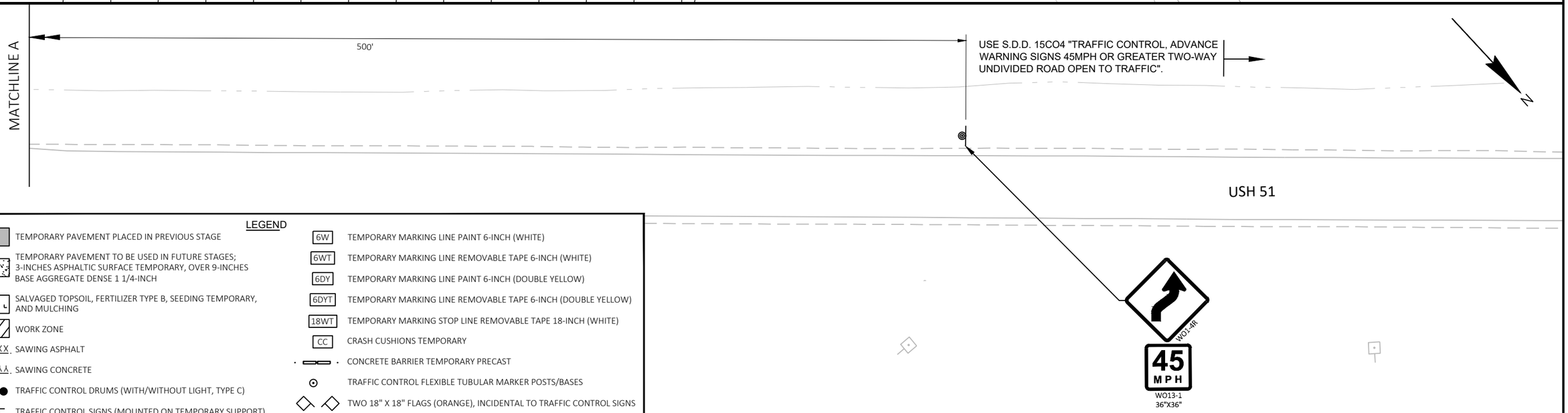



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 85 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S3.DWG
LAYOUT NAME - 026004_s3
PLOT DATE : 8/29/2023 10:04 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



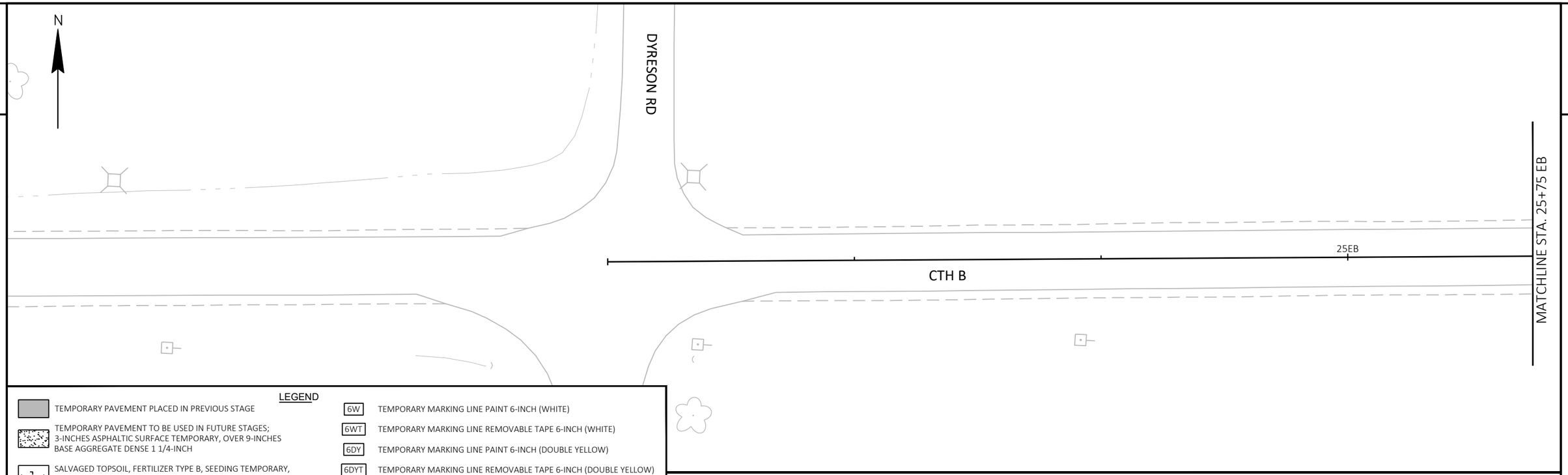

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 86 | E |
|---|---|---|---|---|---|

2

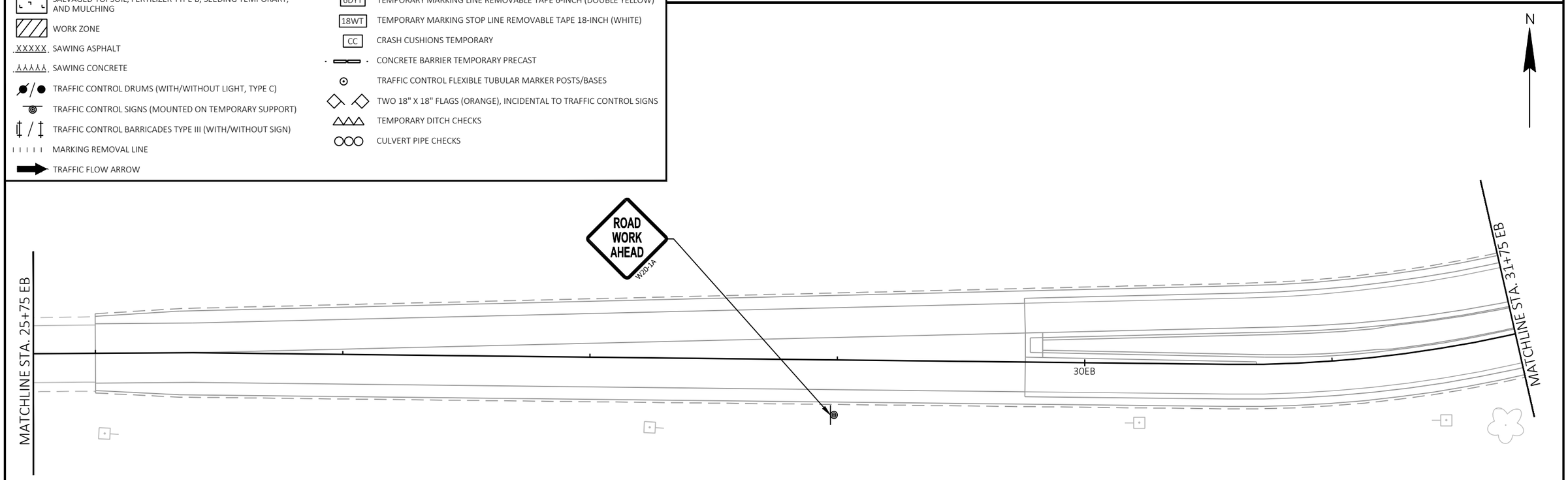



2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
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- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS



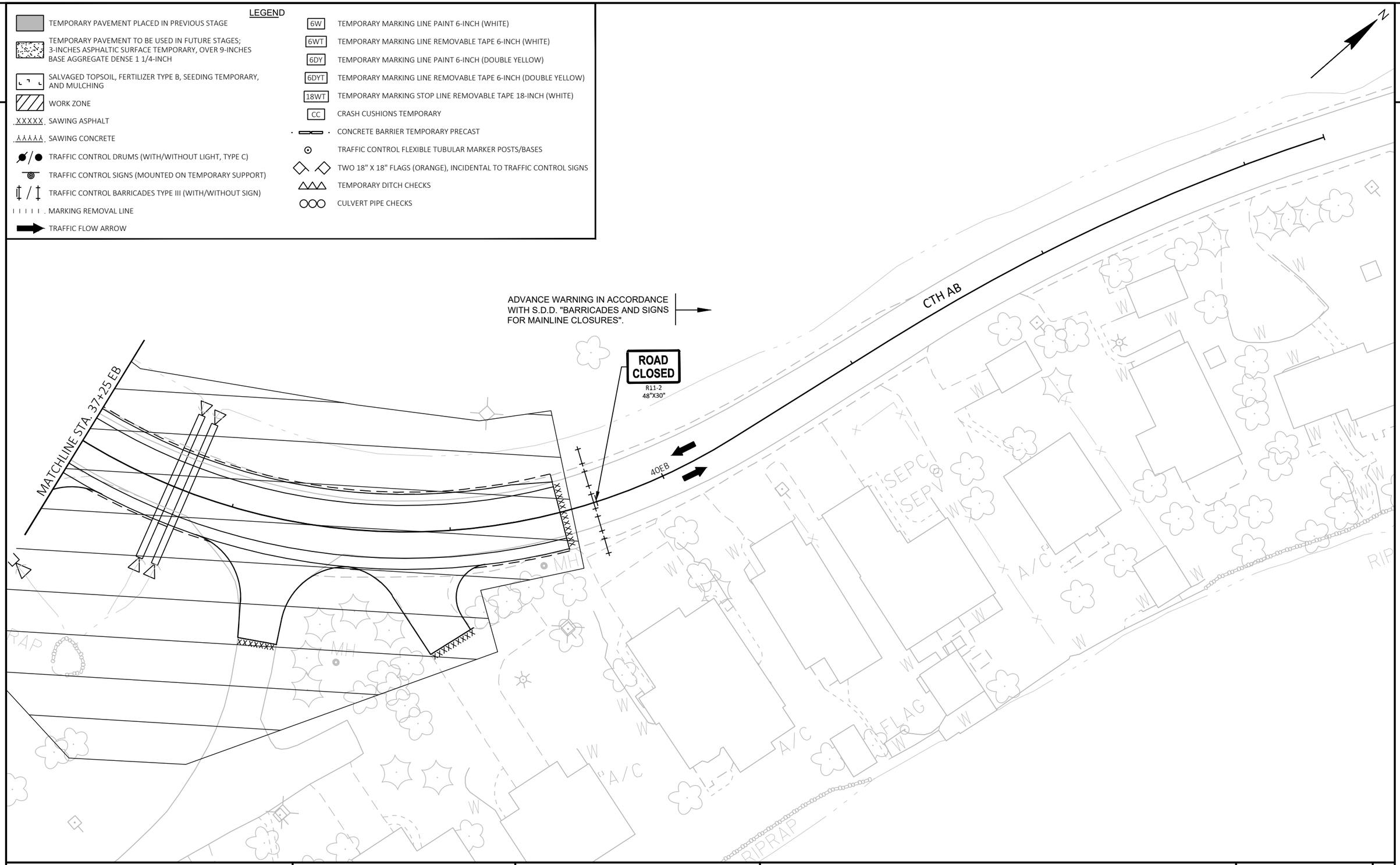

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 87 | E |
|---|---|---|---|---|---|


FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S3.DWG
LAYOUT NAME - 026006_s3
PLOT DATE : 8/29/2023 10:06 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

## LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
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- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

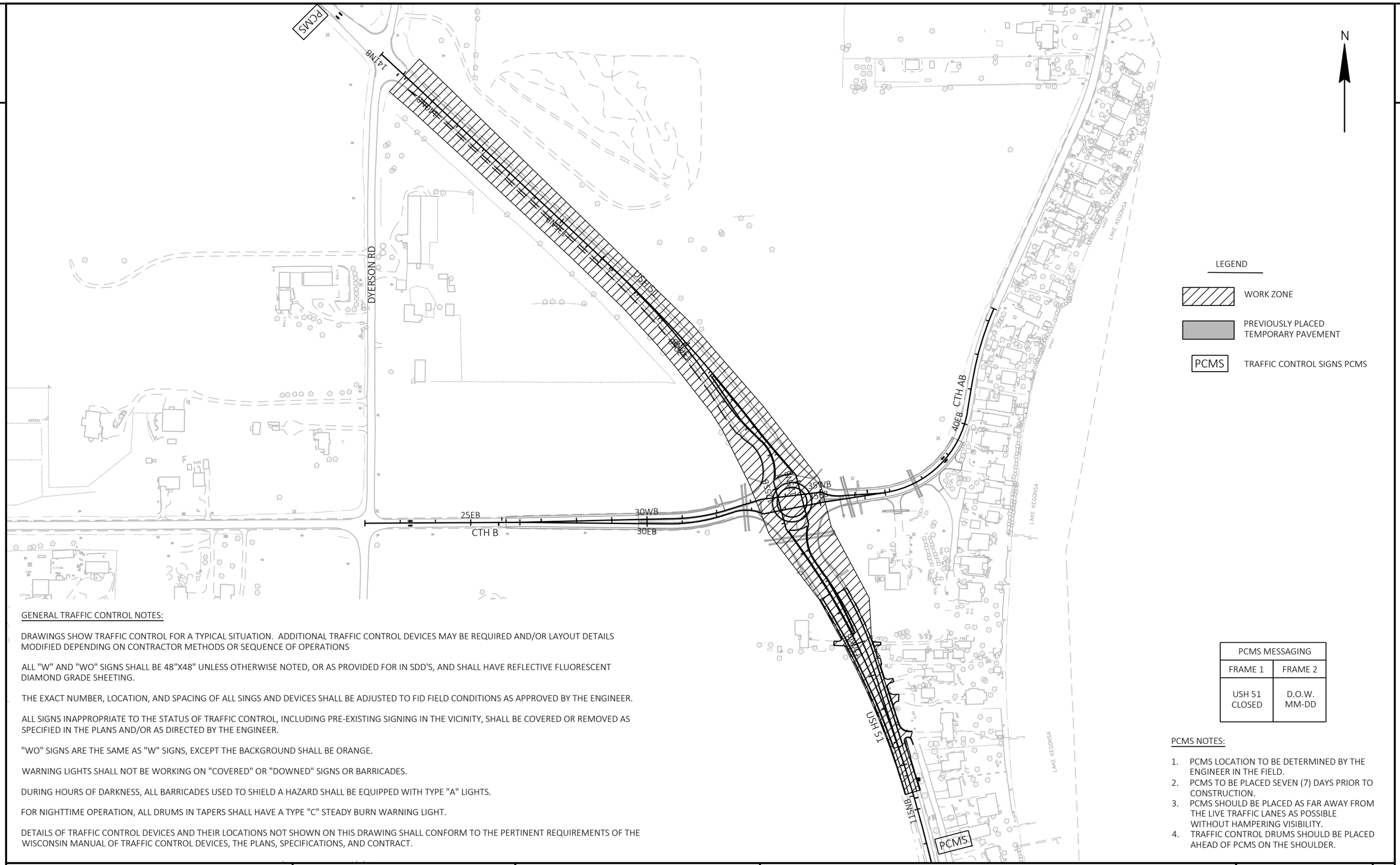



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 3 | SHEET 88 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S3.DWG
LAYOUT NAME - 026007_s3

PLOT DATE : 8/29/2023 10:06 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




GENERAL TRAFFIC CONTROL NOTES:

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED, OR AS PROVIDED FOR IN SDD'S, AND SHALL HAVE REFLECTIVE FLUORESCENT DIAMOND GRADE SHEETING.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF TRAFFIC CONTROL, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND SHALL BE ORANGE.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

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

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS, AND CONTRACT.

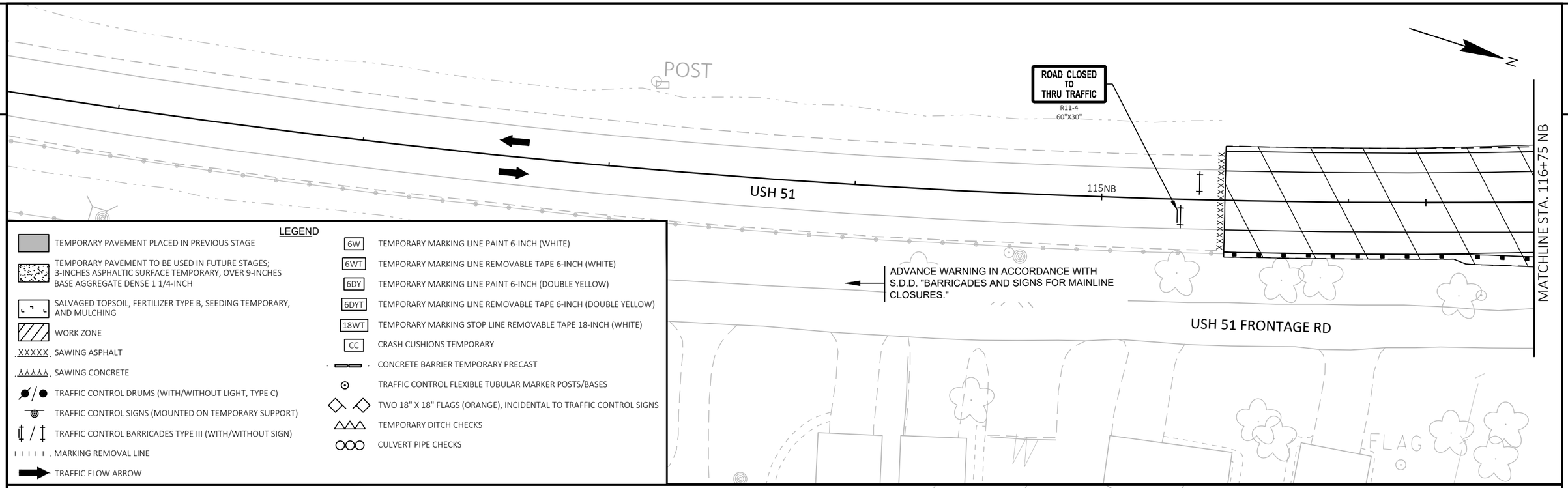
| PCMS MESSAGING | |
|---|---|
| FRAME 1 | FRAME 2 |
| USH 51 CLOSED | D.O.W. MM-DD |

PCMS NOTES:

1. PCMS LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. PCMS TO BE PLACED SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
3. PCMS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY.
4. TRAFFIC CONTROL DRUMS SHOULD BE PLACED AHEAD OF PCMS ON THE SHOULDER.

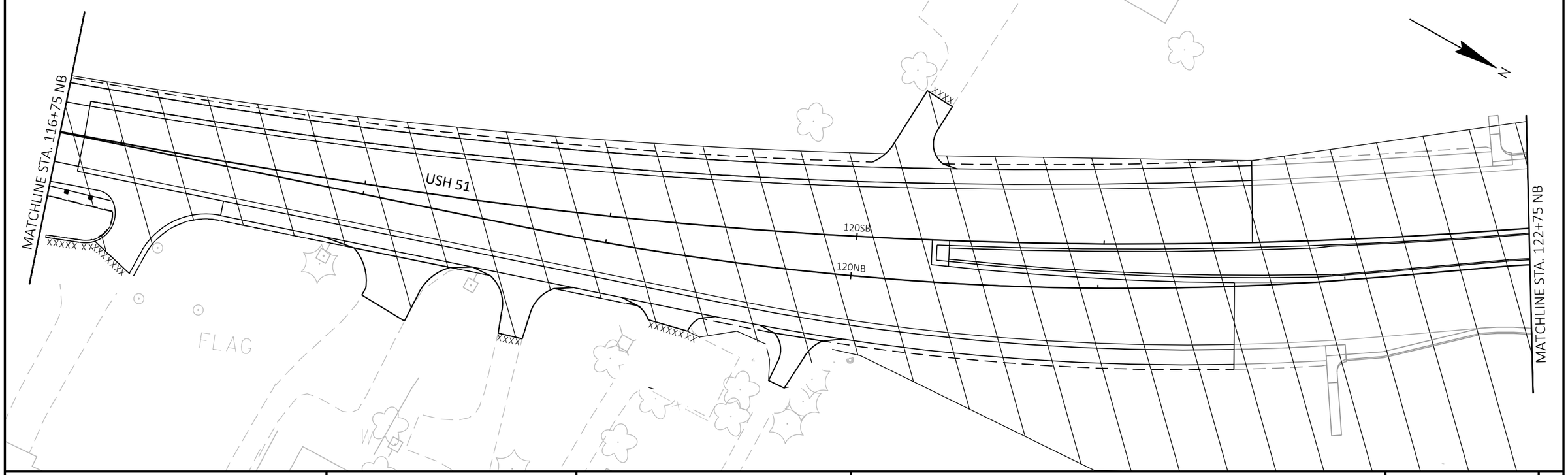
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 89 | E |
|---|---|---|---|---|---|

2




LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 90 | E |
|---|---|---|---|---|---|

2

2

N

MATCHLINE STA. 126+25 NB

USH 51

125NB

127NB

35WB

35EB

CTH AB

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

MATCHLINE STA. 37+25 EB

CTH B

MATCHLINE STA. 31+75 EB

MATCHLINE STA. 122+75 NB

RIPRAP

MH

MH

MH

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

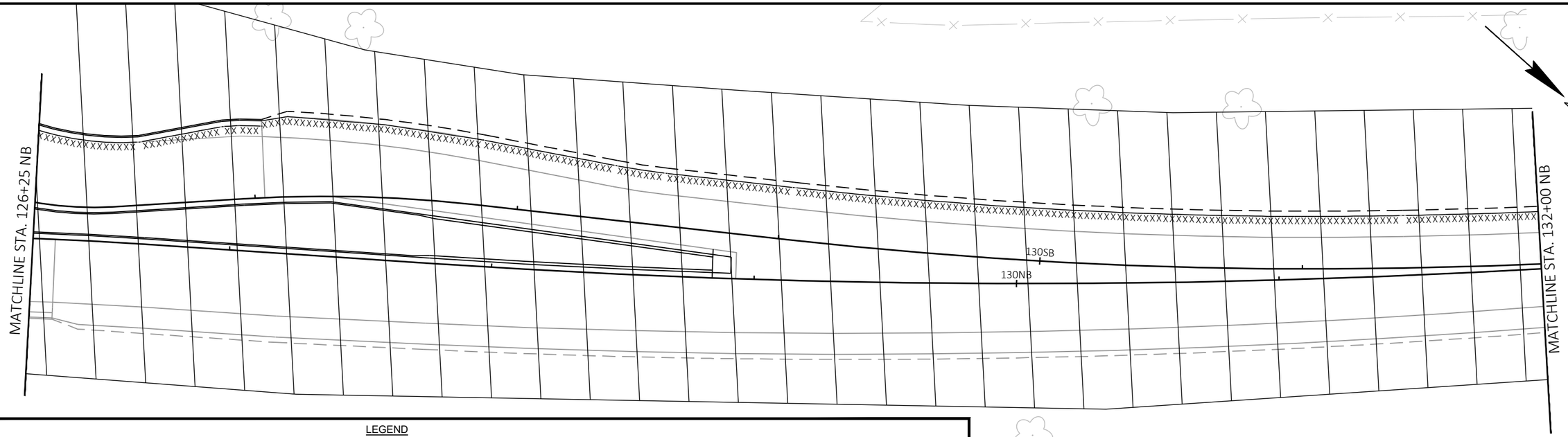
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 91 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S4.DWG
LAYOUT NAME - 026003_s4

PLOT DATE : 8/29/2023 10:09 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

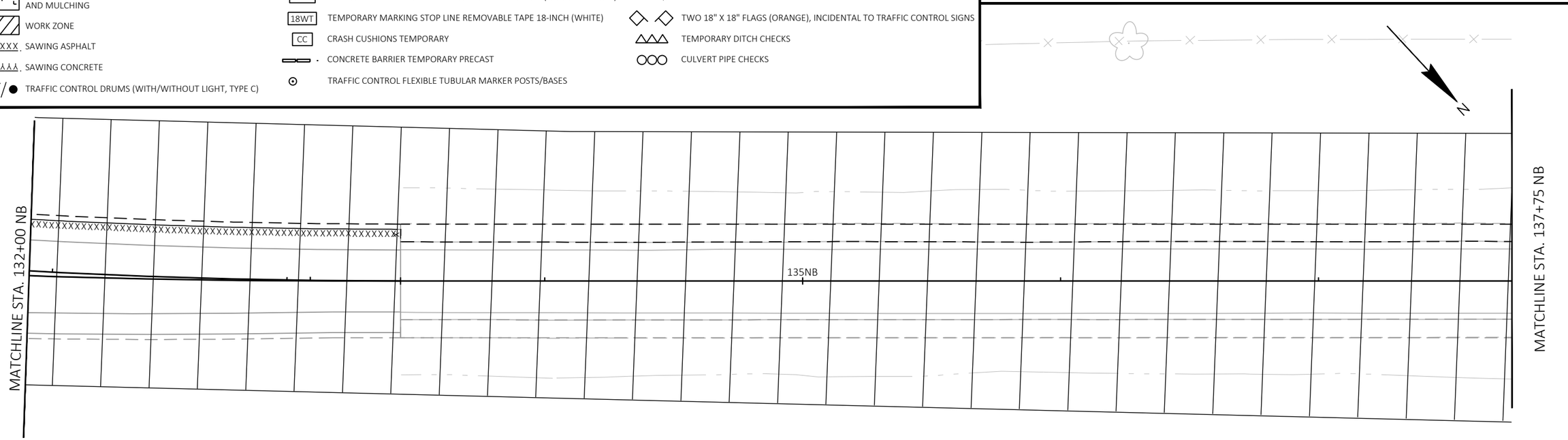
2




2

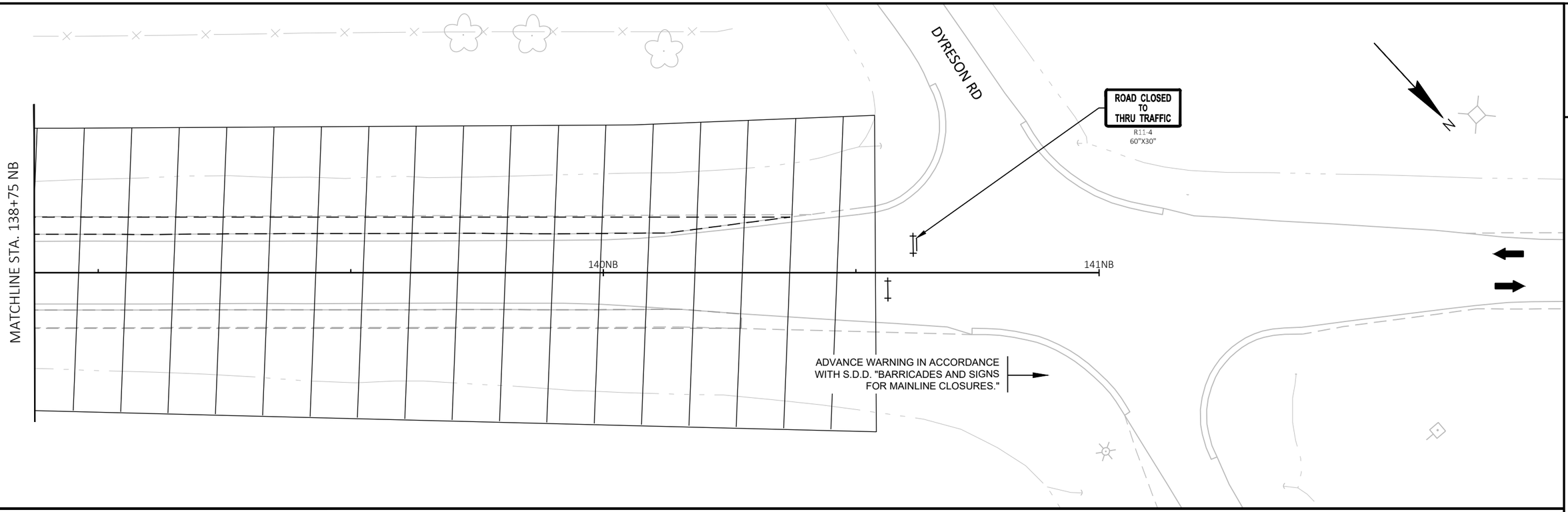
LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 92 | E |
|---|---|---|---|---|---|

2




LEGEND

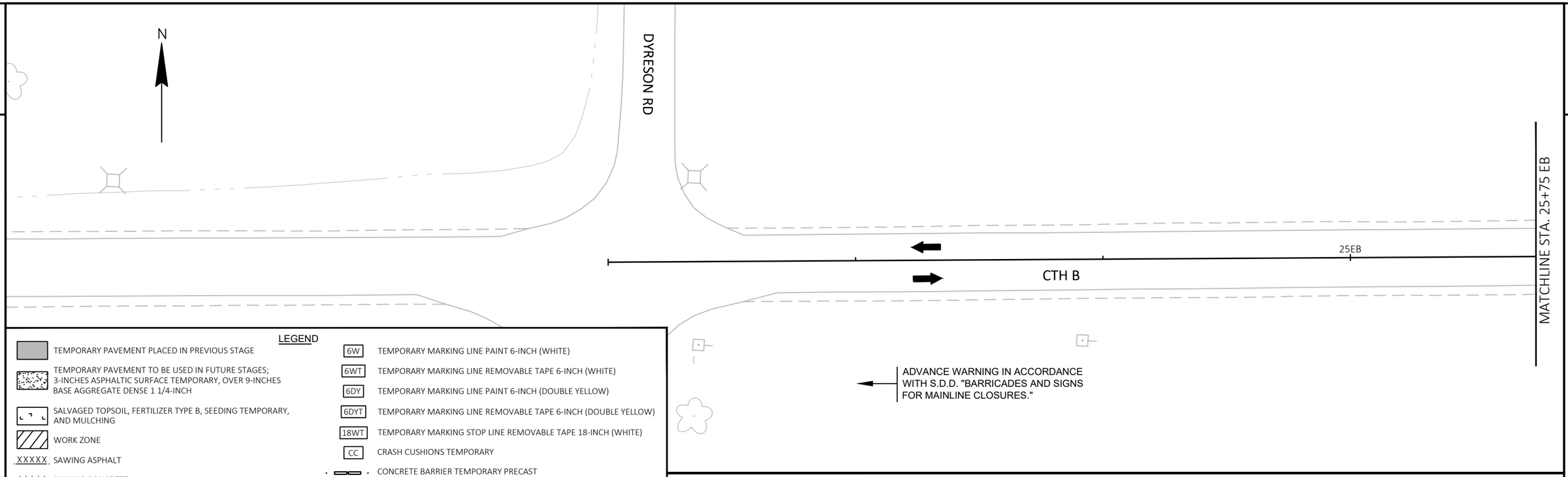
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
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- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 93 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S4.DWG
LAYOUT NAME - 026005_s4
PLOT DATE : 8/29/2023 10:10 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

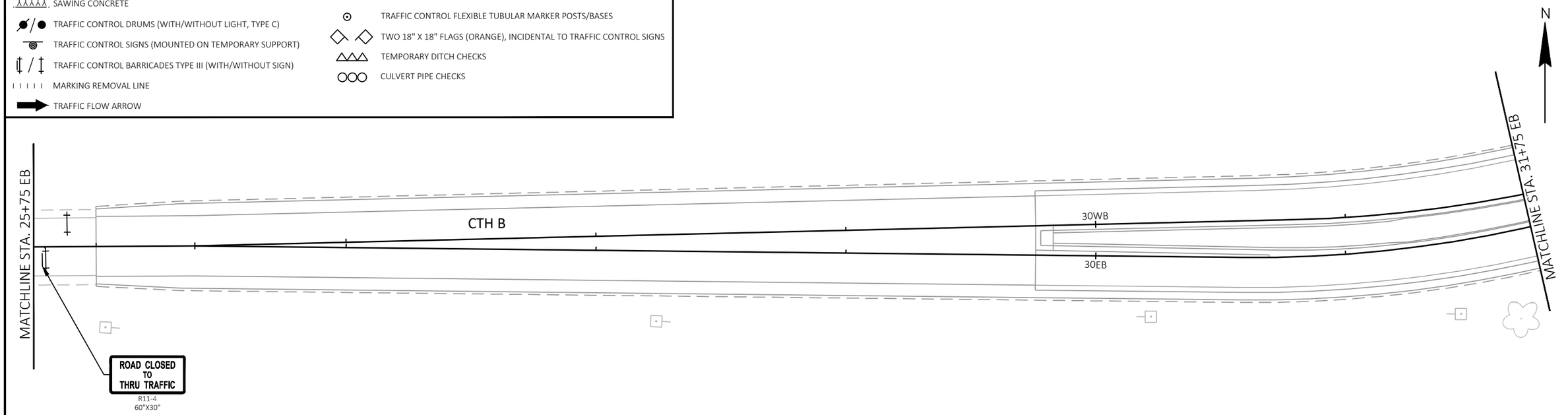



2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- XXXXX SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW

- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS



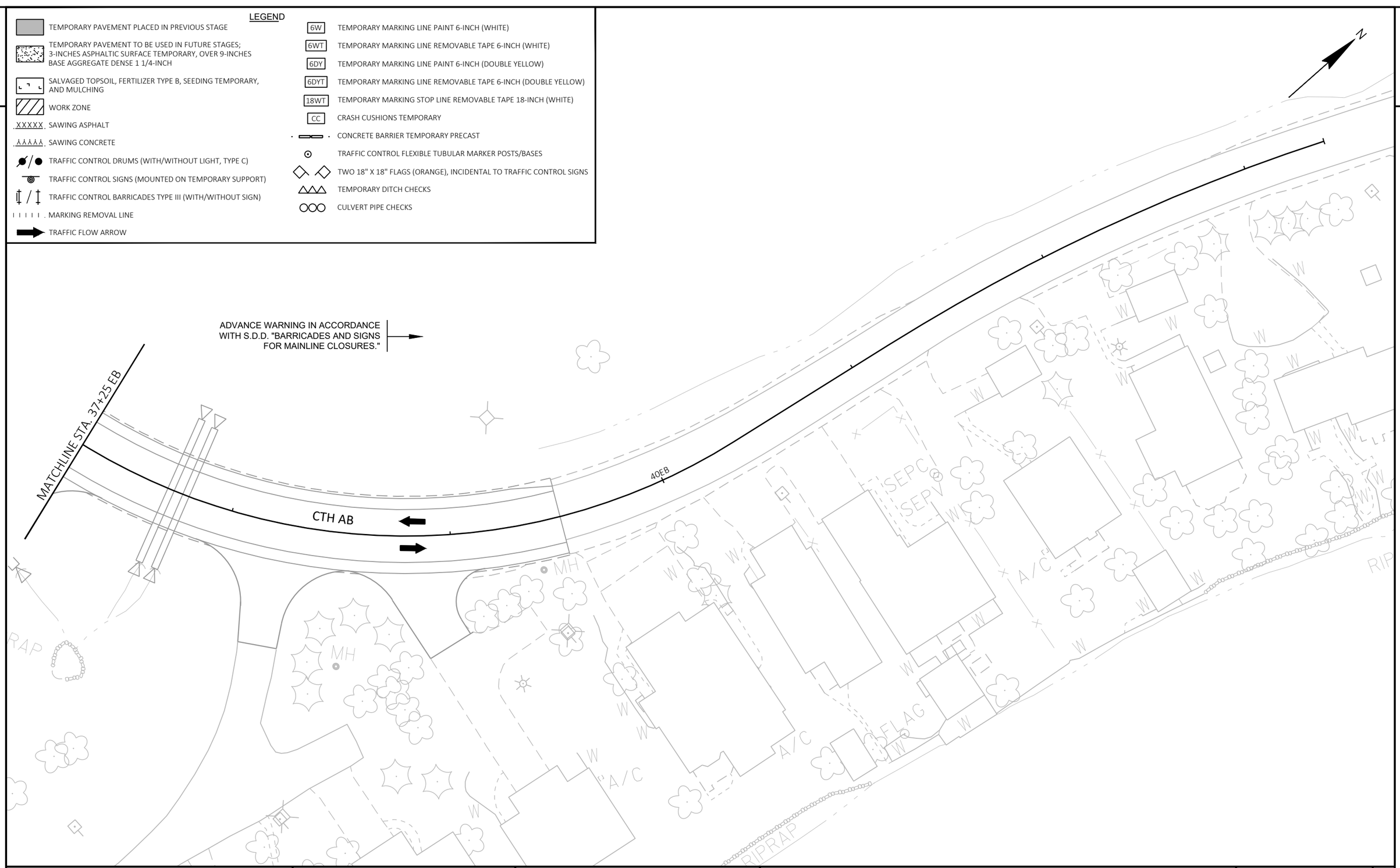

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 94 | E |
|---|---|---|---|---|---|


FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S4.DWG
LAYOUT NAME - 026006_s4
PLOT DATE : 8/29/2023 10:11 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

## LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
- SALVAGED TOPSOIL, FERTILIZER TYPE B, SEEDING TEMPORARY, AND MULCHING
- WORK ZONE
- XXXXX SAWING ASPHALT
- SAWING CONCRETE
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE
- TRAFFIC FLOW ARROW
- 6W TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6WT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 6DY TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW)
- 6DYT TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- 18WT TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
- CC CRASH CUSHIONS TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TWO 18" X 18" FLAGS (ORANGE), INCIDENTAL TO TRAFFIC CONTROL SIGNS
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS




2

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | TRAFFIC CONTROL - STAGE 4 | SHEET 95 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001-S4.DWG
LAYOUT NAME - 026007_s4

PLOT DATE : 8/29/2023 10:11 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

LEGEND

PROPOSED WOODEN POST SIGNS

DETOUR ROUTE

A — DETOUR NORTH 51 — M4-8 36"X18" / M3-1 36"X18" / M1-4 36"X36"

B — DETOUR NORTH 51 — M4-8 24"X12" / M3-1 24"X12" / M1-4 24"X24"

C — DETOUR SOUTH 51 — M4-8 36"X18" / M3-3 36"X18" / M1-4 36"X36"

D — DETOUR SOUTH 51 — M4-8 24"X12" / M3-3 24"X12" / M1-4 24"X24"

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.

ANY SIGN TEMPORARY OR EXISTING, WHICH CONFLICTS WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND SHALL BE ORANGE.

ALL M3 SERIES SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

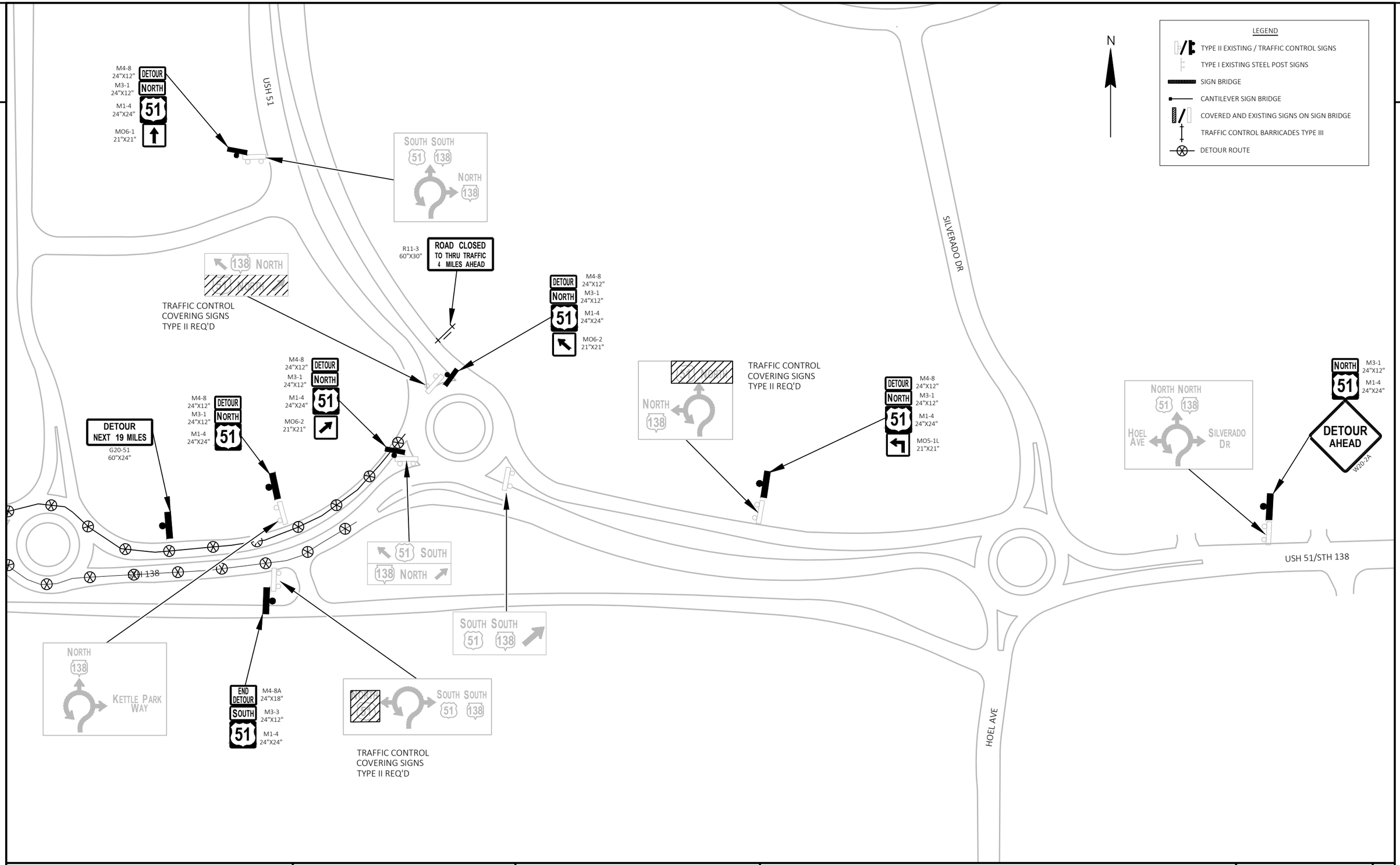
FOR ADDITIONAL INFORMATION, SEE S.D.D. "DETOUR SIGNING FOR MAINLINE CLOSURES" (DETAIL F), "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL A), AND "BARRICADES FOR VARIOUS CLOSURES" (DETAILS D AND E).

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN STAGE 4 OVERVIEW | SHEET 96 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT_OV.DWG
LAYOUT NAME - STAGE 4 OVERVIEW

PLOT DATE : 8/29/2023 9:35 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN: 1.5 MI

WISDOT/CADDS SHEET 42




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL A | SHEET 97 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL A

PLOT DATE : 8/1/2023 8:17 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:150 FT

2

N

LEGEND

- TYPE II EXISTING / TRAFFIC CONTROL SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- TRAFFIC CONTROL BARRICADES TYPE III
- DETOUR ROUTE

M4-8 36"X18" DETOUR
M3-3 36"X18" SOUTH
M1-4 36"X36" 51
MO6-2 30"X30"

DETOUR NEXT 12 MILES
G20-51 60"X24"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-4 36"X36" 51

EXIT 140
138 OREGON STOUGHTON

700'

USH 14

WEST 14

M4-8 36"X18" DETOUR
M3-3 36"X18" SOUTH
M1-4 36"X36" 51
MO6-2 30"X30"

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 51
MO5-1L 21"X21"

SOUTH 138

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO6-2 21"X21"

14 WEST
138 SOUTH

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO6-2 21"X21"

ONLY

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO5-2R 21"X21"

JCT END 14 138

JANESVILLE ST

STH 138

M3-1 24"X12" NORTH
M1-4 24"X24" 51
DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO6-1 21"X21"

PARK ST

CTH MM / WOLFE ST

SOUTH 138 WEST 14

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 51
MO6-2 21"X21"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO6-1 21"X21"

EXIT

75'

200'

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 51

DETOUR NEXT 6 MILES
G20-51 60"X24"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 51
MO6-1 21"X21"

SOUTH 138

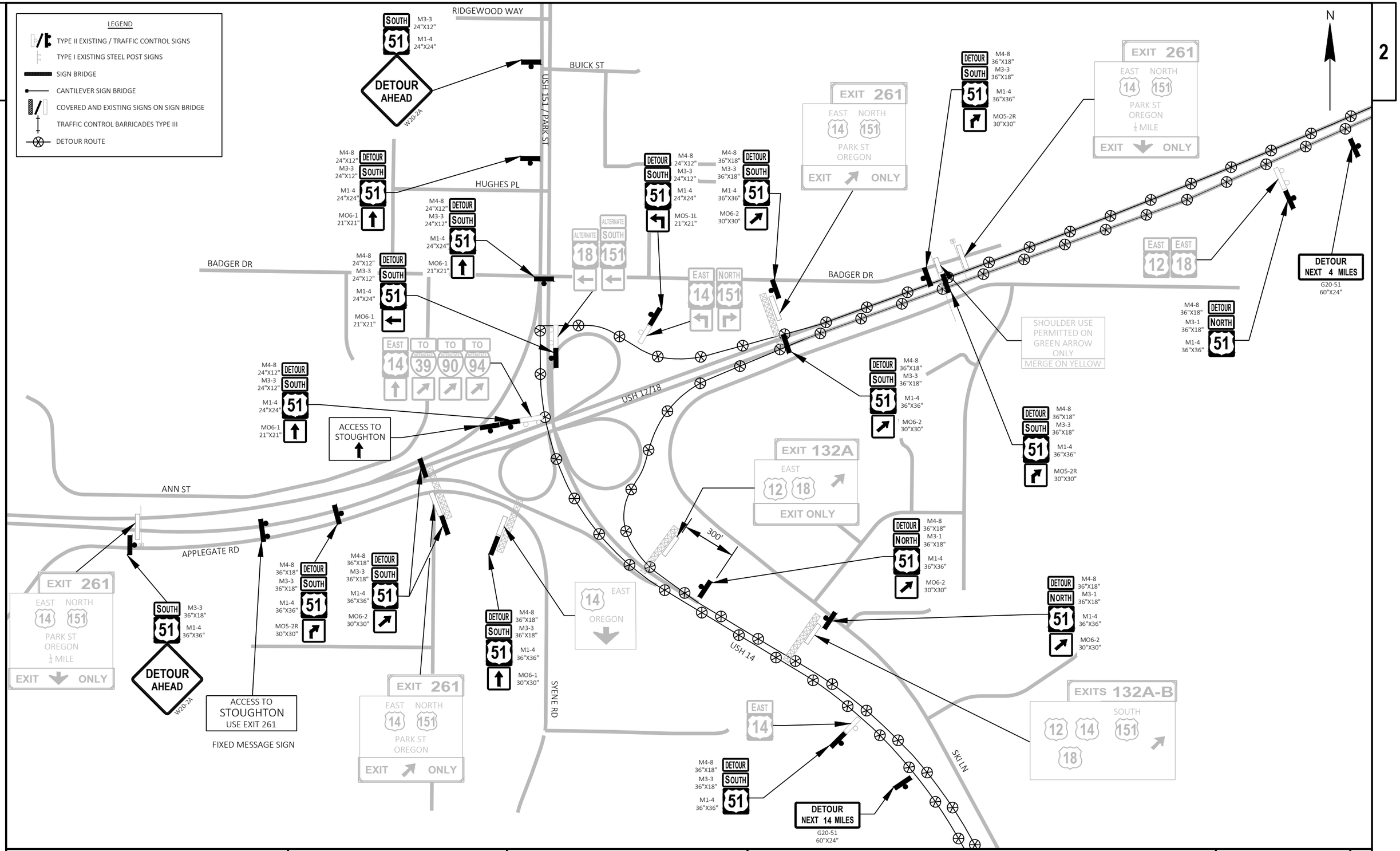
M3-1 24"X12" NORTH
M1-4 24"X24" 51
DETOUR AHEAD W20-2A

USH 14

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL B | SHEET 98 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL B

PLOT DATE : 8/1/2023 8:17 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:500 FT




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL C | SHEET 99 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL C

PLOT DATE : 8/1/2023 8:17 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

N

DETOUR AHEAD W20-2A

SOUTH 51 M3-3 36"X18" M1-4 36"X36"

DETOUR SOUTH 51 M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" MO6-1 30"X30"

EAST 12 18

FIXED MESSAGE SIGN

ACCESS TO MCFARLAND

COVER WITH

TRAFFIC CONTROL COVERING SIGNS TYPE I REQ'D

BROADWAY

ACCESS TO STOUGHTON

WEST 12 18

DETOUR SOUTH 51 USE RIGHT LANE ALTERNATE 39 USE LEFT LANE M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" M4-20R 36"X36"

DETOUR SOUTH 51 M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" MO6-1 30"X30"

EAST BROADWAY / CTH BW

TRAFFIC CONTROL COVERING SIGNS TYPE II REQ'D

DUTCH MILL RD

ONLY

FEMRITE DR

AGRICULTURE DR

EXIT 266 51 STOUGHTON RD EXIT ONLY

EXIT 266 51 STOUGHTON RD ½ MILE EXIT ONLY

USH 12/18

ACCESS TO STOUGHTON USE EXIT 261

FIXED MESSAGE SIGN

ACCESS TO STOUGHTON

WEST 12 18

DETOUR SOUTH 51 M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" MO6-1 30"X30"

DETOUR NEXT 19 MILES G20-51 60"X24"

END DETOUR M4-8A 30"X24" NORTH M3-1 36"X18" 51 M1-4 36"X36"

ONLY

TRAFFIC CONTROL COVERING SIGNS TYPE II REQ'D

NO VEHICLES OVER 5 TONS OR TRAILERS

TRADEWINDS PKWY

USH 51

12 18 WEST EXIT ONLY

EXIT 266 EAST 12 EAST 18 51 STOUGHTON RD EXIT ONLY

TRAFFIC CONTROL COVERING SIGNS TYPE II REQ'D

TRAFFIC CONTROL COVERING SIGNS TYPE II REQ'D

TRAFFIC CONTROL COVERING SIGNS TYPE II REQ'D

DETOUR SOUTH 51 M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" MO6-2 30"X30"

DETOUR SOUTH 51 M4-8 36"X18" M3-3 36"X18" M1-4 36"X36" MO5-2L 30"X30"

WEST 12 18

JCT 12 JCT 18

VOGES RD

ROAD CLOSED TO THRU TRAFFIC 5 MILES AHEAD R11-3 60"X30"

UPPER MUD LAKE

SOUTH 51 M3-3 36"X18" M1-4 36"X36"

DETOUR AHEAD W20-2A

LEGEND

- TYPE II EXISTING / TRAFFIC CONTROL SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- TRAFFIC CONTROL BARRICADES TYPE III
- DETOUR ROUTE

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL D | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL D

PLOT DATE : 8/1/2023 8:17 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

N

DETOUR
NEXT 21 MILES
G20-51
60"X24"

M4-8
36"X18"
M3-3
36"X18"
DETOUR
SOUTH
51
M1-4
36"X36"

USH 51

PAULSON RD

ACCESS TO
STOUGHTON

TRAFFIC CONTROL
COVERING SIGNS
TYPE II REQ'D

TERMINAL DR

SOUTH
51
M3-3
24"X12"
M1-4
24"X24"
DETOUR
AHEAD
W20-2A

DETOUR
SOUTH
51
M4-8
24"X12"
M3-3
24"X12"
M1-4
24"X24"
MO6-1
21"X21"

DETOUR
SOUTH
51
M4-8
24"X12"
M3-3
24"X12"
M1-4
24"X24"
MO5-1R
21"X21"

SOUTH
51
M3-3
24"X12"
M1-4
24"X24"
DETOUR
AHEAD
W20-2A

SIGGELKOW RD

JCT
51

ACCESS TO
STOUGHTON

DETOUR
SOUTH
51
M4-8
24"X12"
M3-3
24"X12"
M1-4
24"X24"
MO6-1
21"X21"

DETOUR
SOUTH
51
M4-8
24"X12"
MO5-1L
21"X21"

VALLEY DR

SIGGELKOW RD

NORTH
51

DETOUR
SOUTH
51
M4-8
36"X18"
M3-3
36"X18"
M1-4
36"X36"

USH 51

LEGEND

- TYPE II EXISTING / TRAFFIC CONTROL SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- TRAFFIC CONTROL BARRICADES TYPE III
- DETOUR ROUTE

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL E | SHEET 101 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL E

PLOT DATE : 8/1/2023 8:17 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

N

S BROOKLYN DR

GIEHLER DR

COUNTRY CLUB RD

USH 51

ROAD CLOSED
TO THRU TRAFFIC
3 MILES AHEAD

R11-3
60"X30"

51

MO6-1
21"X21"

TRAFFIC CONTROL
COVERING SIGNS
TYPE II REQ'D

JCT
51

NORTH
51

M3-1
24"X12"

M1-4
24"X24"

DETOUR
AHEAD

W20-2A

CTH B

500'

SOUTH
51

DETOUR
NORTH
51

M4-8
24"X12"

M3-1
24"X12"

M1-4
24"X24"

DETOUR
NEXT 21 MILES

G20-51
60"X24"

USH 51

LEGEND

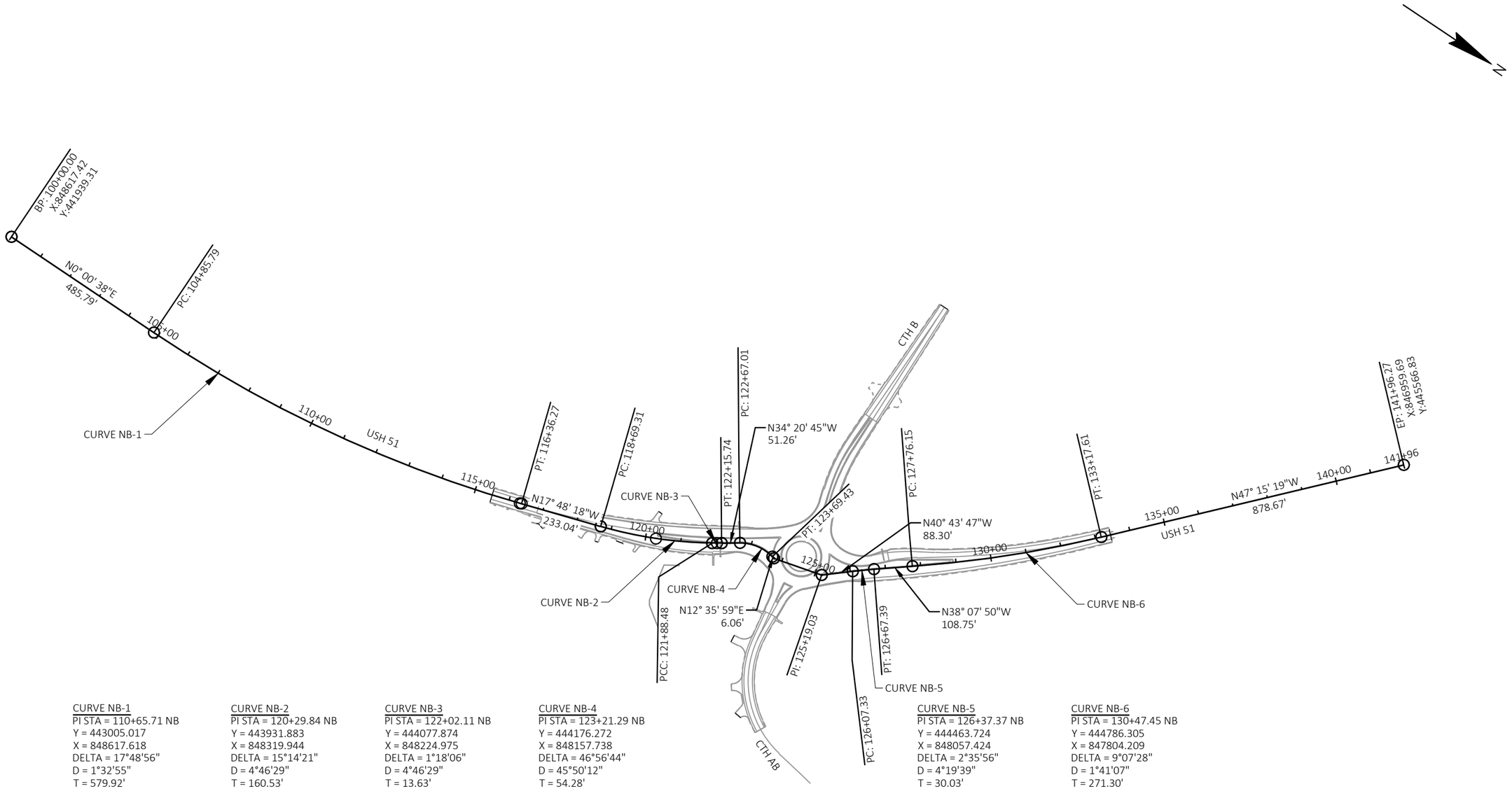
- TYPE II EXISTING / TRAFFIC CONTROL SIGNS
- TYPE I EXISTING STEEL POST SIGNS
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- COVERED AND EXISTING SIGNS ON SIGN BRIDGE
- TRAFFIC CONTROL BARRICADES TYPE III
- DETOUR ROUTE

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | DETOUR PLAN - DETAIL F | SHEET 102 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - DETAIL F

PLOT DATE : 8/29/2023 9:37 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:500 FT

2




CURVE NB-1
PI STA = 110+65.71 NB
Y = 443005.017
X = 848617.618
DELTA = 17°48'56"
D = 1°32'55"
T = 579.92'
L = 1150.48'
R = 3700.00'
PC STA = 104+85.79 NB
Y = 442425.10
X = 848617.51
PT STA = 116+36.27 NB
Y = 443557.16
X = 848440.29

CURVE NB-2
PI STA = 120+29.84 NB
Y = 443931.883
X = 848319.944
DELTA = 15°14'21"
D = 4°46'29"
T = 160.53'
L = 319.17'
R = 1200.00'
PC STA = 118+69.31 NB
Y = 443779.04
X = 848369.03
PCC STA = 121+88.48 NB
Y = 444066.45
X = 848232.41

CURVE NB-3
PI STA = 122+02.11 NB
Y = 444077.874
X = 848224.975
DELTA = 1°18'06"
D = 4°46'29"
T = 13.63'
L = 27.26'
R = 1200.00'
PCC STA = 121+88.48 NB
Y = 444066.45
X = 848232.41
PT STA = 122+15.74 NB
Y = 444089.13
X = 848217.29

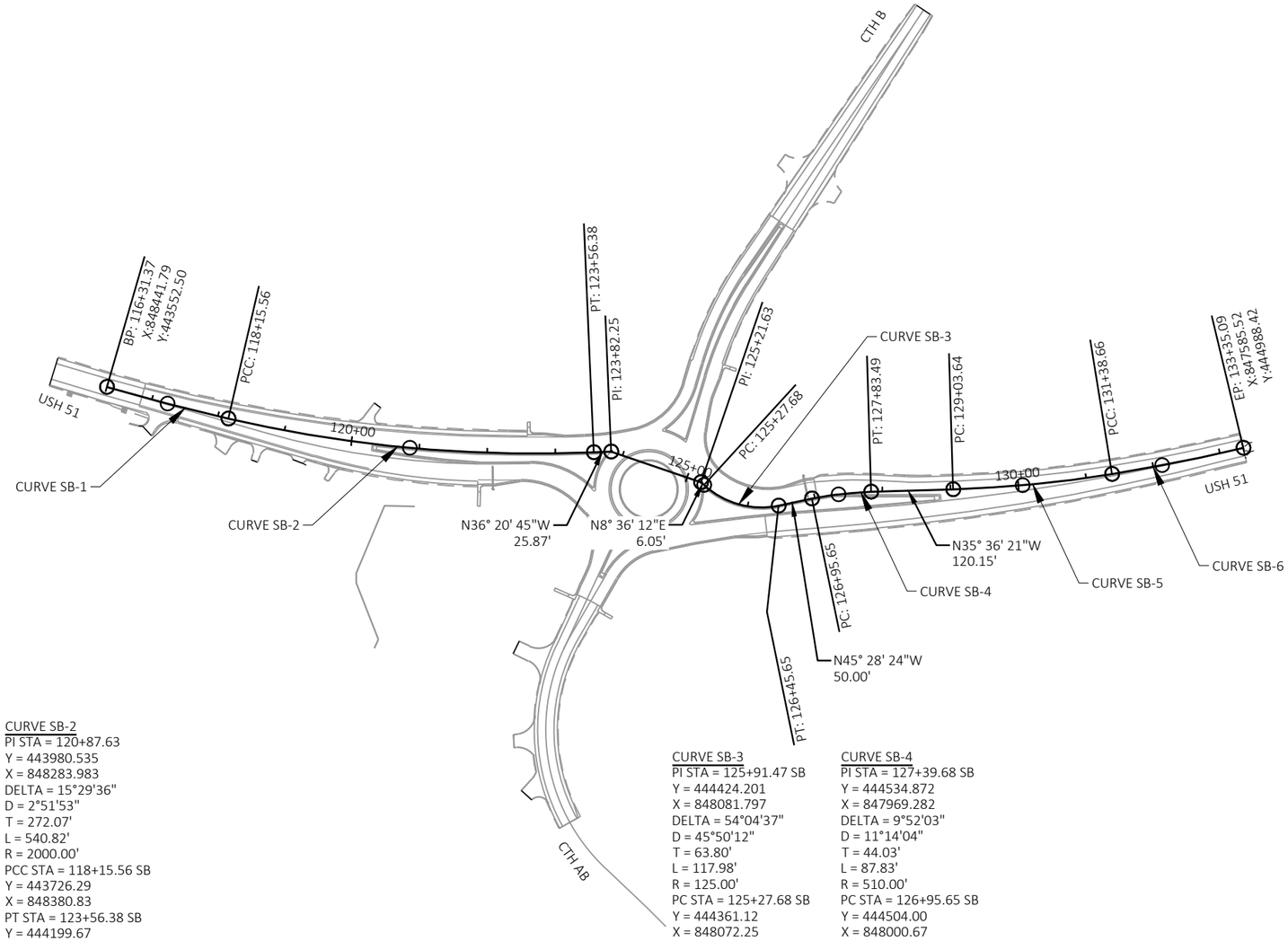
CURVE NB-4
PI STA = 123+21.29 NB
Y = 444176.272
X = 848157.738
DELTA = 46°56'44"
D = 45°50'12"
T = 54.28'
L = 102.42'
R = 125.00'
PC STA = 122+67.01 NB
Y = 444131.45
X = 848188.36
PT STA = 123+69.43 NB
Y = 444229.25
X = 848169.58

CURVE NB-5
PI STA = 126+37.37 NB
Y = 444463.724
X = 848057.424
DELTA = 2°35'56"
D = 4°19'39"
T = 30.03'
L = 60.06'
R = 1324.00'
PC STA = 126+07.33 NB
Y = 444440.96
X = 848077.02
PT STA = 126+67.39 NB
Y = 444487.35
X = 848038.88

CURVE NB-6
PI STA = 130+47.45 NB
Y = 444786.305
X = 847804.209
DELTA = 9°07'28"
D = 1°41'07"
T = 271.30'
L = 541.46'
R = 3400.00'
PC STA = 127+76.15 NB
Y = 444572.90
X = 847971.73
PT STA = 133+17.61 NB
Y = 444970.45
X = 847604.97

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - NB CHAIN | SHEET 103 | E |
|---|---|---|---|---|---|

2




CURVE SB-1
PI STA = 117+23.49 SB
Y = 443640.203
X = 848413.620
DELTA = 3°02'51"
D = 1°39'16"
T = 92.12'
L = 184.19'
R = 3463.00'
PC STA = 116+31.37 SB
Y = 443552.50
X = 848441.79
PCC STA = 118+15.56 SB
Y = 443726.29
X = 848380.83

CURVE SB-2
PI STA = 120+87.63
Y = 443980.535
X = 848283.983
DELTA = 15°29'36"
D = 2°51'53"
T = 272.07'
L = 540.82'
R = 2000.00'
PCC STA = 118+15.56 SB
Y = 443726.29
X = 848380.83
PT STA = 123+56.38 SB
Y = 444199.67
X = 848122.74

CURVE SB-3
PI STA = 125+91.47 SB
Y = 444424.201
X = 848081.797
DELTA = 54°04'37"
D = 45°50'12"
T = 63.80'
L = 117.98'
R = 125.00'
PC STA = 125+27.68 SB
Y = 444361.12
X = 848072.25
PT STA = 126+45.65 SB
Y = 444468.94
X = 848036.31

CURVE SB-4
PI STA = 127+39.68 SB
Y = 444534.872
X = 847969.282
DELTA = 9°52'03"
D = 11°14'04"
T = 44.03'
L = 87.83'
R = 510.00'
PC STA = 126+95.65 SB
Y = 444504.00
X = 848000.67
PCC STA = 127+83.49 SB
Y = 444570.67
X = 847943.65

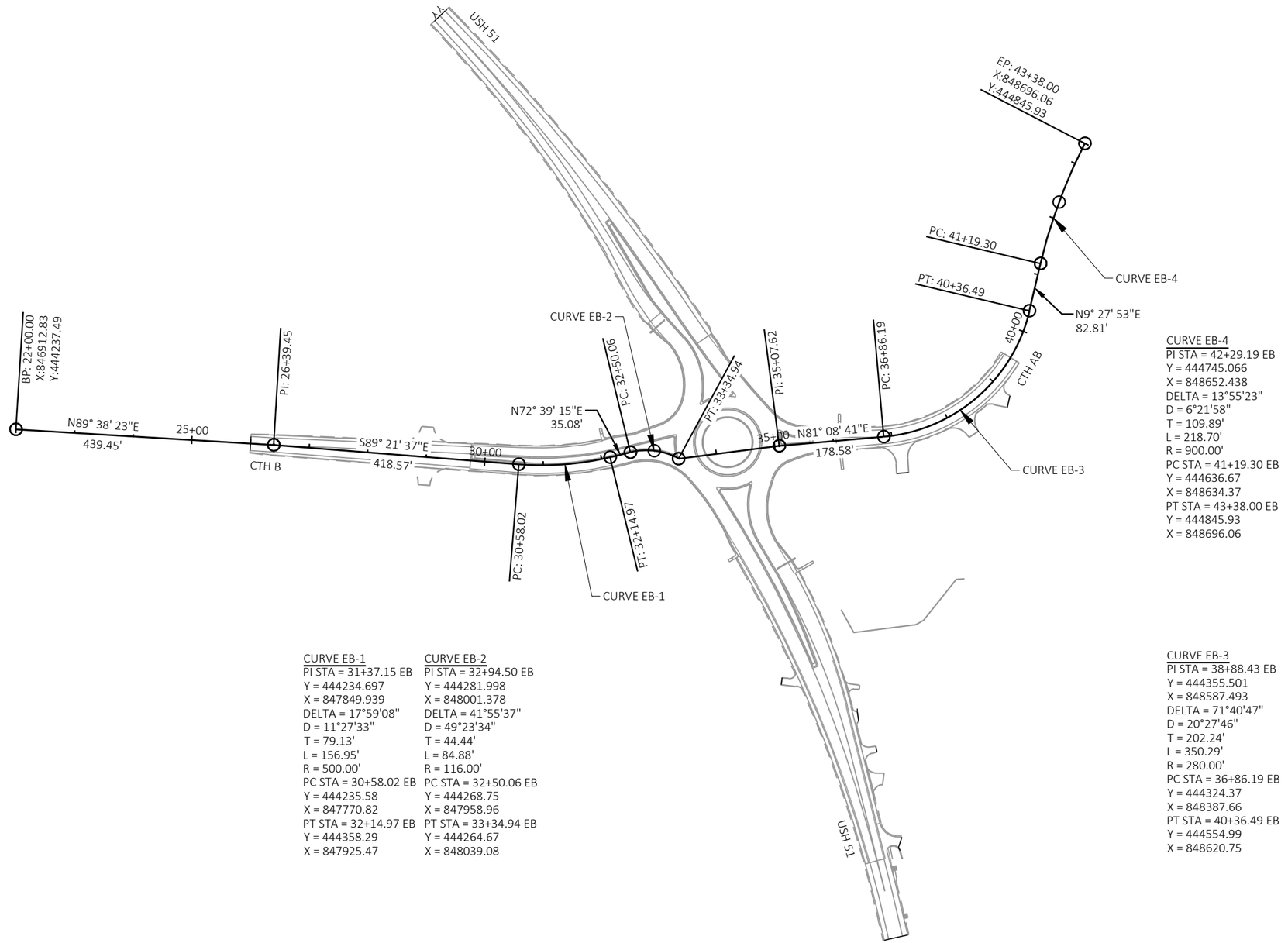
CURVE SB-5
PI STA = 130+21.31 SB
Y = 444764.031
X = 847805.184
DELTA = 7°28'51"
D = 3°10'59"
T = 117.68'
L = 235.02'
R = 1800.00'
PCC STA = 129+03.64 SB
Y = 444668.35
X = 847873.70
PCC STA = 131+38.66 SB
Y = 444849.97
X = 847724.80

CURVE SB-6
PI STA = 132+36.92 SB
Y = 444921.733
X = 847657.678
DELTA = 4°10'06"
D = 2°07'19"
T = 98.26'
L = 196.43'
R = 2700.00'
PCC STA = 131+38.66 SB
Y = 444849.97
X = 847724.80
PT STA = 133+35.09 SB
Y = 444988.42
X = 847585.52

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - SB CHAIN | SHEET 104 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027202_AD.DWG
LAYOUT NAME - 027202_ad
PLOT DATE : 8/1/2023 8:50 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2




CURVE EB-1
PI STA = 31+37.15 EB
Y = 444234.697
X = 847849.939
DELTA = 17°59'08"
D = 11°27'33"
T = 79.13'
L = 156.95'
R = 500.00'
PC STA = 30+58.02 EB
Y = 444235.58
X = 847770.82
PT STA = 32+14.97 EB
Y = 444358.29
X = 847925.47

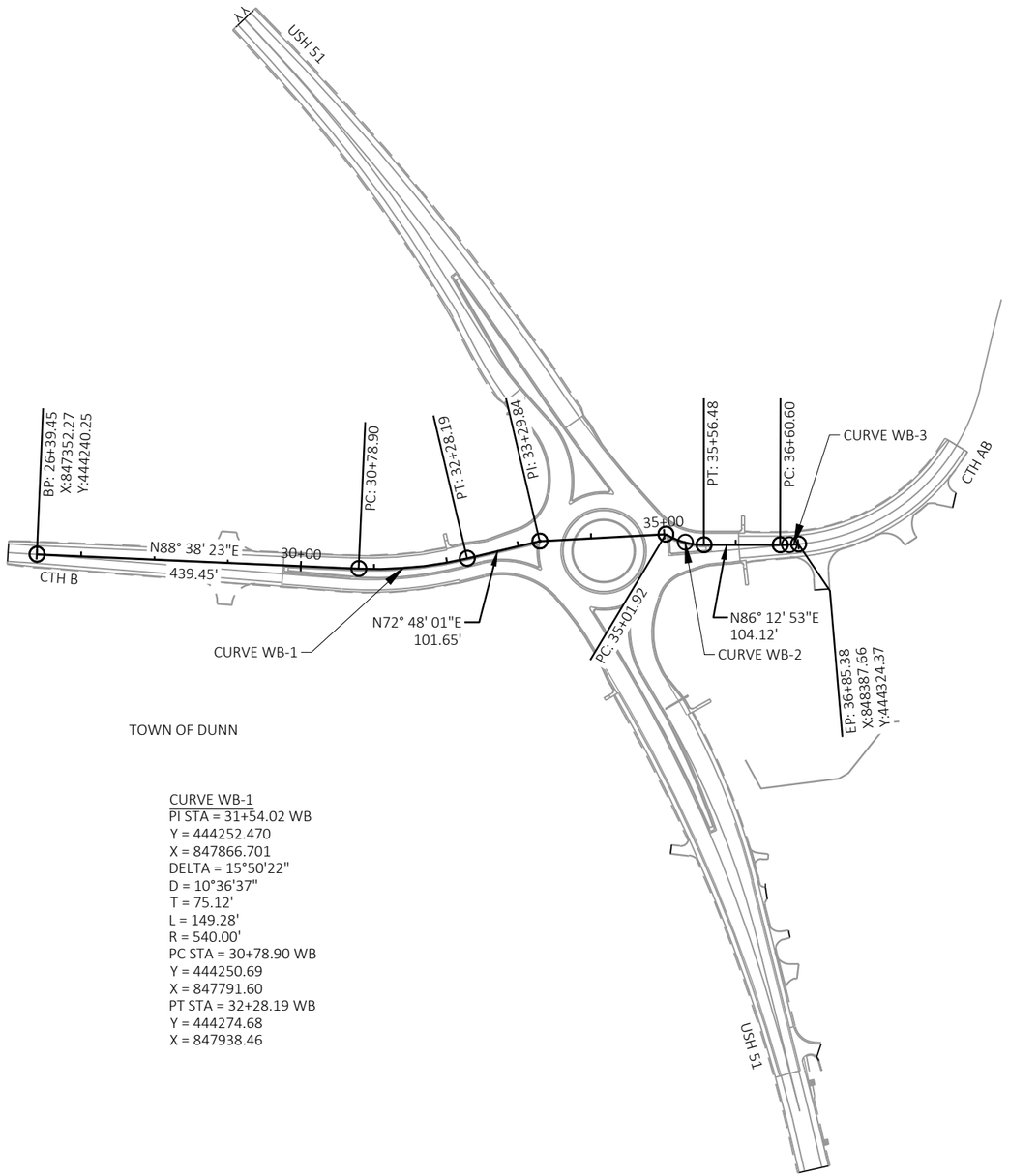
CURVE EB-2
PI STA = 32+94.50 EB
Y = 444281.998
X = 848001.378
DELTA = 41°55'37"
D = 49°23'34"
T = 44.44'
L = 84.88'
R = 116.00'
PC STA = 32+50.06 EB
Y = 444268.75
X = 847958.96
PT STA = 33+34.94 EB
Y = 444264.67
X = 848039.08

CURVE EB-4
PI STA = 42+29.19 EB
Y = 444745.066
X = 848652.438
DELTA = 13°55'23"
D = 6°21'58"
T = 109.89'
L = 218.70'
R = 900.00'
PC STA = 41+19.30 EB
Y = 444636.67
X = 848634.37
PT STA = 43+38.00 EB
Y = 444845.93
X = 848696.06

CURVE EB-3
PI STA = 38+88.43 EB
Y = 444355.501
X = 848587.493
DELTA = 71°40'47"
D = 20°27'46"
T = 202.24'
L = 350.29'
R = 280.00'
PC STA = 36+86.19 EB
Y = 444324.37
X = 848387.66
PT STA = 40+36.49 EB
Y = 444554.99
X = 848620.75

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - EB CHAIN | SHEET 105 | E |
|---|---|---|---|---|---|

2




CURVE WB-1
PI STA = 31+54.02 WB
Y = 444252.470
X = 847866.701
DELTA = 15°50'22"
D = 10°36'37"
T = 75.12'
L = 149.28'
R = 540.00'
PC STA = 30+78.90 WB
Y = 444250.69
X = 847791.60
PT STA = 32+28.19 WB
Y = 444274.68
X = 847938.46

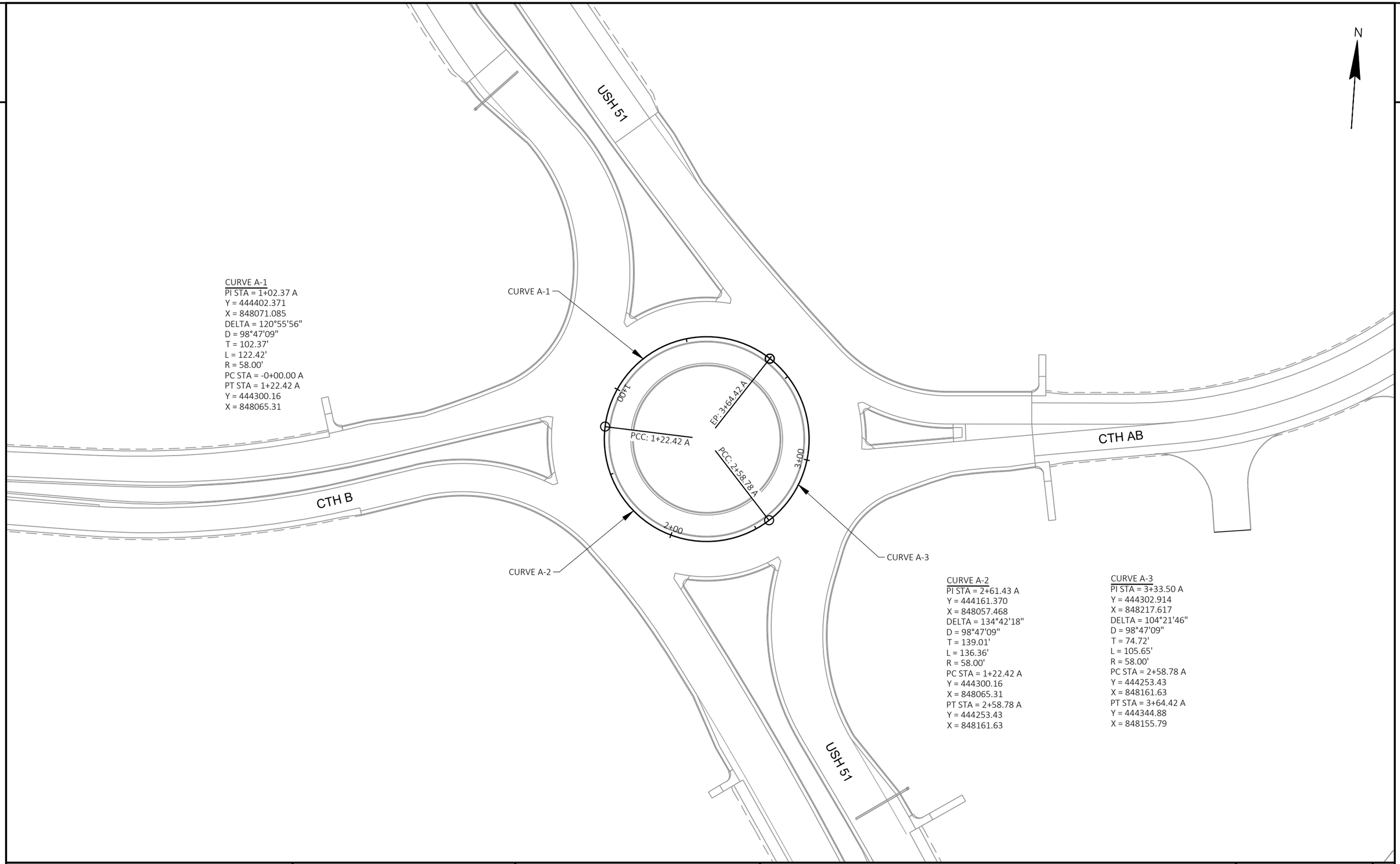
CURVE WB-3
PI STA = 36+73.00 WB
Y = 444322.460
X = 848375.416
DELTA = 5°04'12"
D = 20°27'46"
T = 12.40'
L = 24.78'
R = 280.00'
PC STA = 36+60.60 WB
Y = 444321.64
X = 848363.05
PT STA = 36+85.38 WB
Y = 444324.37
X = 848387.66

CURVE WB-2
PI STA = 35+29.88 WB
Y = 444312.922
X = 848231.251
DELTA = 30°57'12"
D = 56°43'43"
T = 27.97'
L = 54.56'
R = 101.00'
PC STA = 35+01.92 WB
Y = 444324.44
X = 848208.90
PT STA = 35+56.48 WB
Y = 444314.77
X = 848259.15

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - WB CHAIN | SHEET 106 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027204_AD.DWG
LAYOUT NAME - 027204_ad
PLOT DATE : 8/1/2023 8:50 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2




CURVE A-1
PI STA = 1+02.37 A
Y = 444402.371
X = 848071.085
DELTA = 120°55'56"
D = 98°47'09"
T = 102.37'
L = 122.42'
R = 58.00'
PC STA = -0+00.00 A
PT STA = 1+22.42 A
Y = 444300.16
X = 848065.31

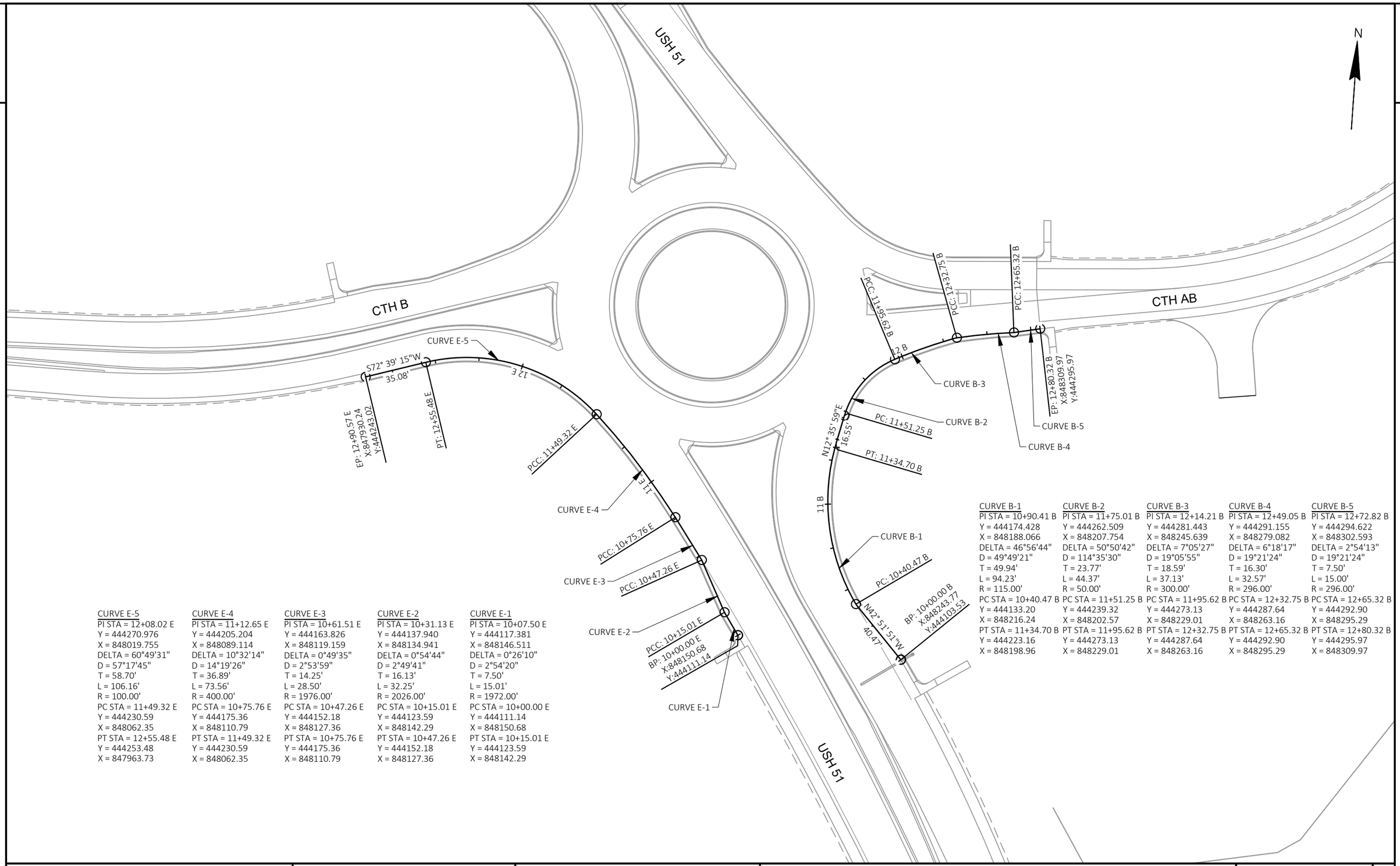
CURVE A-2
PI STA = 2+61.43 A
Y = 444161.370
X = 848057.468
DELTA = 134°42'18"
D = 98°47'09"
T = 139.01'
L = 136.36'
R = 58.00'
PC STA = 1+22.42 A
Y = 444300.16
X = 848065.31
PT STA = 2+58.78 A
Y = 444253.43
X = 848161.63

CURVE A-3
PI STA = 3+33.50 A
Y = 444302.914
X = 848217.617
DELTA = 104°21'46"
D = 98°47'09"
T = 74.72'
L = 105.65'
R = 58.00'
PC STA = 2+58.78 A
Y = 444253.43
X = 848161.63
PT STA = 3+64.42 A
Y = 444344.88
X = 848155.79

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - A CHAIN (ROUNDABOUT) | SHEET 107 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027205_AD.DWG
LAYOUT NAME - 027205_ad
PLOT DATE : 8/1/2023 8:51 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2




| CURVE E-5 | CURVE E-4 | CURVE E-3 | CURVE E-2 | CURVE E-1 |
|---|---|---|---|---|
| PI STA = 12+08.02 E | PI STA = 11+12.65 E | PI STA = 10+61.51 E | PI STA = 10+31.13 E | PI STA = 10+07.50 E |
| Y = 444270.976 | Y = 444205.204 | Y = 444163.826 | Y = 444137.940 | Y = 444117.381 |
| X = 848019.755 | X = 848089.114 | X = 848119.159 | X = 848134.941 | X = 848146.511 |
| DELTA = 60°49'31" | DELTA = 10°32'14" | DELTA = 0°49'35" | DELTA = 0°54'44" | DELTA = 0°26'10" |
| D = 57°17'45" | D = 14°19'26" | D = 2°53'59" | D = 2°49'41" | D = 2°54'20" |
| T = 58.70' | T = 36.89' | T = 14.25' | T = 16.13' | T = 7.50' |
| L = 106.16' | L = 73.56' | L = 28.50' | L = 32.25' | L = 15.01' |
| R = 100.00' | R = 400.00' | R = 1976.00' | R = 2026.00' | R = 1972.00' |
| PC STA = 11+49.32 E | PC STA = 10+75.76 E | PC STA = 10+47.26 E | PC STA = 10+15.01 E | PC STA = 10+00.00 E |
| Y = 444230.59 | Y = 444175.36 | Y = 444152.18 | Y = 444123.59 | Y = 444111.14 |
| X = 848062.35 | X = 848110.79 | X = 848127.36 | X = 848142.29 | X = 848150.68 |
| PT STA = 12+55.48 E | PT STA = 11+49.32 E | PT STA = 10+75.76 E | PT STA = 10+47.26 E | PT STA = 10+15.01 E |
| Y = 444253.48 | Y = 444230.59 | Y = 444175.36 | Y = 444152.18 | Y = 444123.59 |
| X = 847963.73 | X = 848062.35 | X = 848110.79 | X = 848127.36 | X = 848142.29 |

| CURVE B-1 | CURVE B-2 | CURVE B-3 | CURVE B-4 | CURVE B-5 |
|---|---|---|---|---|
| PI STA = 10+90.41 B | PI STA = 11+75.01 B | PI STA = 12+14.21 B | PI STA = 12+49.05 B | PI STA = 12+72.82 B |
| Y = 444174.428 | Y = 444262.509 | Y = 444281.443 | Y = 444291.155 | Y = 444294.622 |
| X = 848188.066 | X = 848207.754 | X = 848245.639 | X = 848279.082 | X = 848302.593 |
| DELTA = 46°56'44" | DELTA = 50°50'42" | DELTA = 7°05'27" | DELTA = 6°18'17" | DELTA = 2°54'13" |
| D = 49°49'21" | D = 114°35'30" | D = 19°05'55" | D = 19°21'24" | D = 19°21'24" |
| T = 49.94' | T = 23.77' | T = 18.59' | T = 16.30' | T = 7.50' |
| L = 94.23' | L = 44.37' | L = 37.13' | L = 32.57' | L = 15.00' |
| R = 115.00' | R = 50.00' | R = 300.00' | R = 296.00' | R = 296.00' |
| PC STA = 10+40.47 B | PC STA = 11+51.25 B | PC STA = 11+95.62 B | PC STA = 12+32.75 B | PC STA = 12+65.32 B |
| Y = 444133.20 | Y = 444239.32 | Y = 444273.13 | Y = 444287.64 | Y = 444292.90 |
| X = 848216.24 | X = 848202.57 | X = 848229.01 | X = 848263.16 | X = 848295.29 |
| PT STA = 11+34.70 B | PT STA = 11+95.62 B | PT STA = 12+32.75 B | PT STA = 12+65.32 B | PT STA = 12+80.32 B |
| Y = 444223.16 | Y = 444273.13 | Y = 444287.64 | Y = 444292.90 | Y = 444295.97 |
| X = 848198.96 | X = 848229.01 | X = 848263.16 | X = 848295.29 | X = 848309.97 |

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - B & E CHAINS | SHEET 108 | E |
|---|---|---|---|---|---|

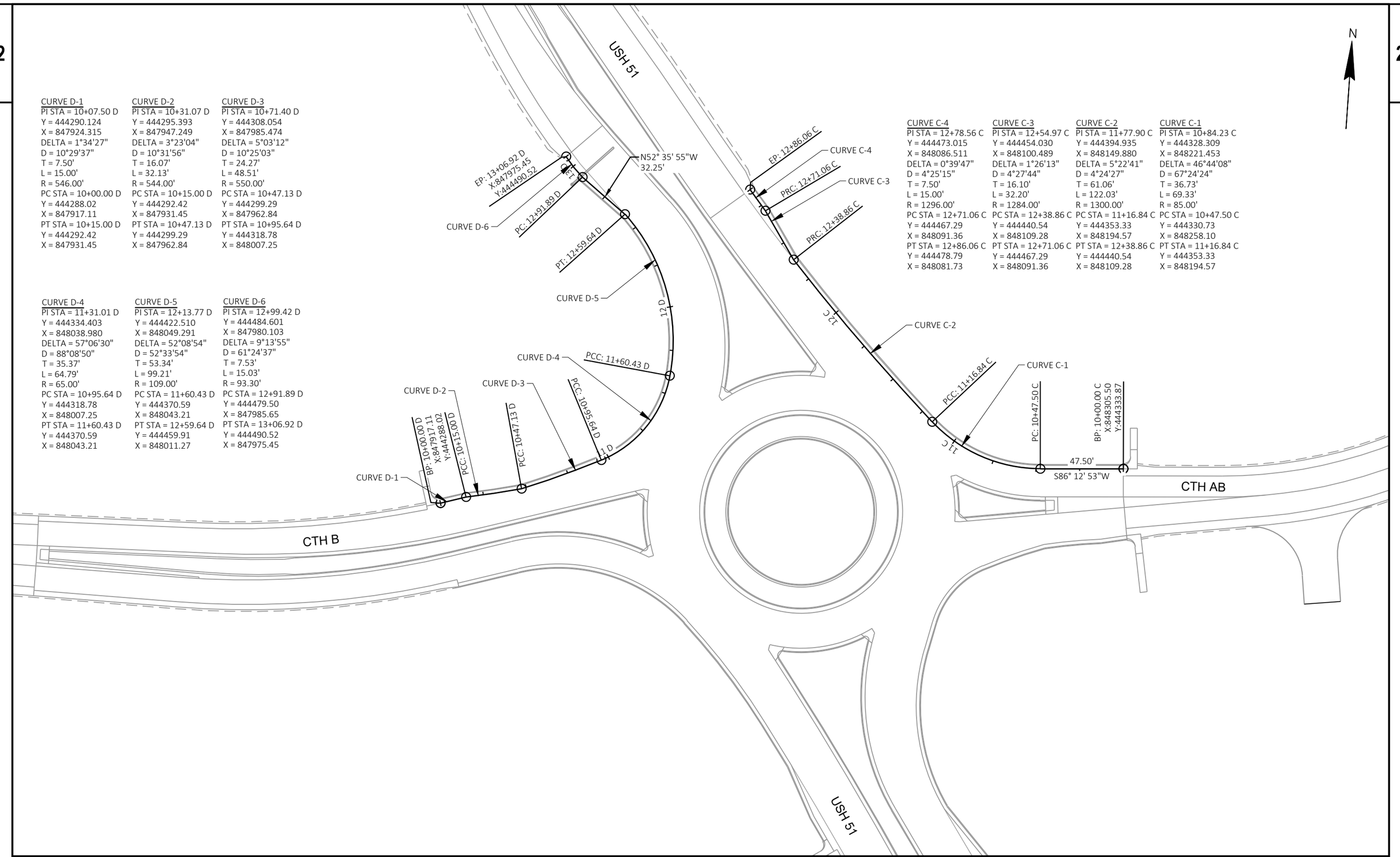
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027205_AD.DWG
LAYOUT NAME - 027206_ad
PLOT DATE : 8/1/2023 8:51 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

| CURVE D-1 | CURVE D-2 | CURVE D-3 |
|---|---|---|
| PI STA = 10+07.50 D | PI STA = 10+31.07 D | PI STA = 10+71.40 D |
| Y = 444290.124 | Y = 444295.393 | Y = 444308.054 |
| X = 847924.315 | X = 847947.249 | X = 847985.474 |
| DELTA = 1°34'27" | DELTA = 3°23'04" | DELTA = 5°03'12" |
| D = 10°29'37" | D = 10°31'56" | D = 10°25'03" |
| T = 7.50' | T = 16.07' | T = 24.27' |
| L = 15.00' | L = 32.13' | L = 48.51' |
| R = 546.00' | R = 544.00' | R = 550.00' |
| PC STA = 10+00.00 D | PC STA = 10+15.00 D | PC STA = 10+47.13 D |
| Y = 444288.02 | Y = 444292.42 | Y = 444299.29 |
| X = 847917.11 | X = 847931.45 | X = 847962.84 |
| PT STA = 10+15.00 D | PT STA = 10+47.13 D | PT STA = 10+95.64 D |
| Y = 444292.42 | Y = 444299.29 | Y = 444318.78 |
| X = 847931.45 | X = 847962.84 | X = 848007.25 |

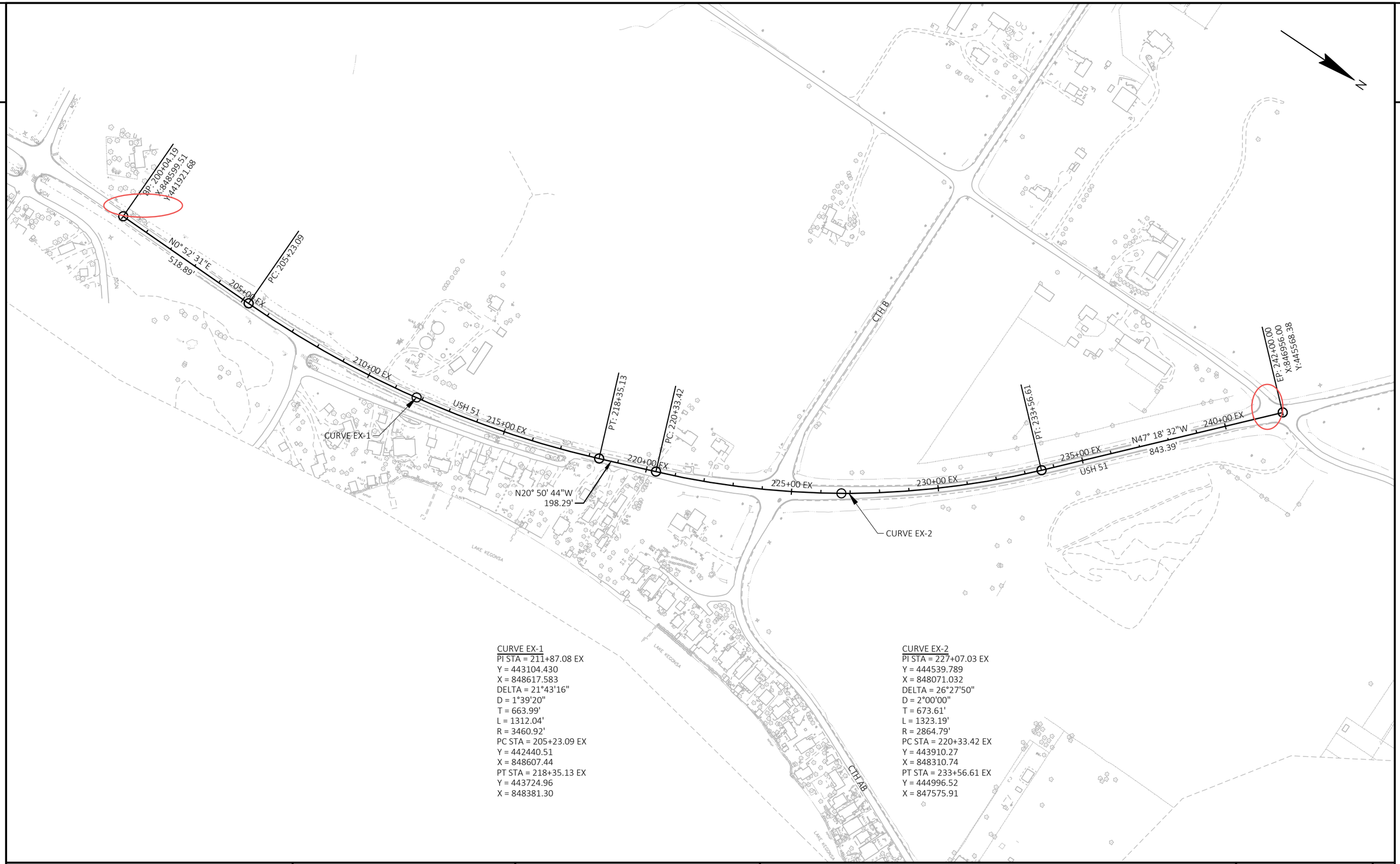
| CURVE D-4 | CURVE D-5 | CURVE D-6 |
|---|---|---|
| PI STA = 11+31.01 D | PI STA = 12+13.77 D | PI STA = 12+99.42 D |
| Y = 444334.403 | Y = 444422.510 | Y = 444484.601 |
| X = 848038.980 | X = 848049.291 | X = 847980.103 |
| DELTA = 57°06'30" | DELTA = 52°08'54" | DELTA = 9°13'55" |
| D = 88°08'50" | D = 52°33'54" | D = 61°24'37" |
| T = 35.37' | T = 53.34' | T = 7.53' |
| L = 64.79' | L = 99.21' | L = 15.03' |
| R = 65.00' | R = 109.00' | R = 93.30' |
| PC STA = 10+95.64 D | PC STA = 11+60.43 D | PC STA = 12+91.89 D |
| Y = 444318.78 | Y = 444370.59 | Y = 444479.50 |
| X = 848007.25 | X = 848043.21 | X = 847985.65 |
| PT STA = 11+60.43 D | PT STA = 12+59.64 D | PT STA = 13+06.92 D |
| Y = 444370.59 | Y = 444459.91 | Y = 444490.52 |
| X = 848043.21 | X = 848011.27 | X = 847975.45 |

| CURVE C-4 | CURVE C-3 | CURVE C-2 | CURVE C-1 |
|---|---|---|---|
| PI STA = 12+78.56 C | PI STA = 12+54.97 C | PI STA = 11+77.90 C | PI STA = 10+84.23 C |
| Y = 444473.015 | Y = 444454.030 | Y = 444394.935 | Y = 444328.309 |
| X = 848086.511 | X = 848100.489 | X = 848149.880 | X = 848221.453 |
| DELTA = 0°39'47" | DELTA = 1°26'13" | DELTA = 5°22'41" | DELTA = 46°44'08" |
| D = 4°25'15" | D = 4°27'44" | D = 4°24'27" | D = 67°24'24" |
| T = 7.50' | T = 16.10' | T = 61.06' | T = 36.73' |
| L = 15.00' | L = 32.20' | L = 122.03' | L = 69.33' |
| R = 1296.00' | R = 1284.00' | R = 1300.00' | R = 85.00' |
| PC STA = 12+71.06 C | PC STA = 12+38.86 C | PC STA = 11+16.84 C | PC STA = 10+47.50 C |
| Y = 444467.29 | Y = 444440.54 | Y = 444353.33 | Y = 444330.73 |
| X = 848091.36 | X = 848109.28 | X = 848194.57 | X = 848258.10 |
| PT STA = 12+86.06 C | PT STA = 12+71.06 C | PT STA = 12+38.86 C | PT STA = 11+16.84 C |
| Y = 444478.79 | Y = 444467.29 | Y = 444440.54 | Y = 444353.33 |
| X = 848081.73 | X = 848091.36 | X = 848109.28 | X = 848194.57 |




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - C & D CHAINS | SHEET 109 | E |
|---|---|---|---|---|---|

2



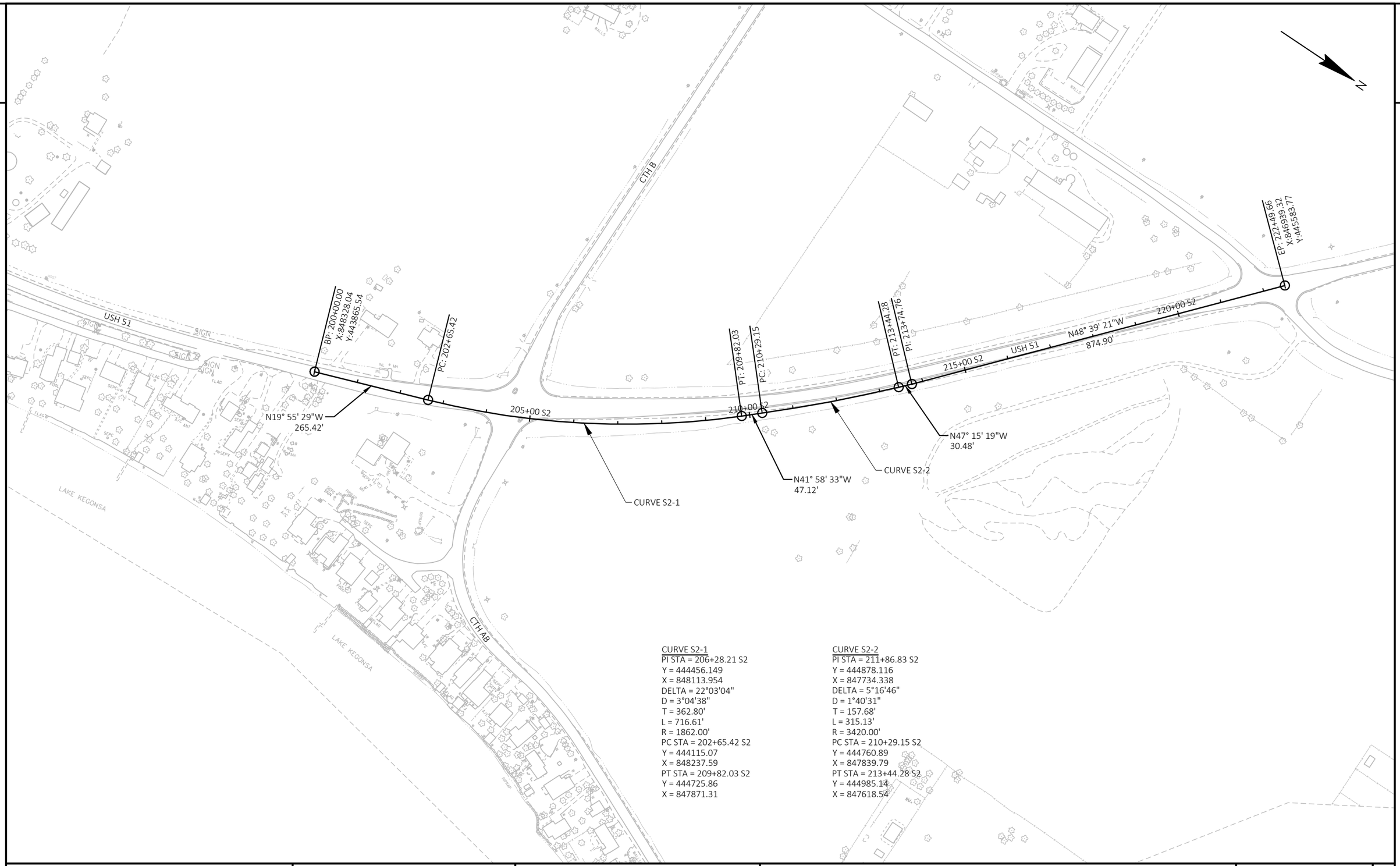

CURVE EX-1
PI STA = 211+87.08 EX
Y = 443104.430
X = 848617.583
DELTA = 21°43'16"
D = 1°39'20"
T = 663.99'
L = 1312.04'
R = 3460.92'
PC STA = 205+23.09 EX
Y = 442440.51
X = 848607.44
PT STA = 218+35.13 EX
Y = 443724.96
X = 848381.30

CURVE EX-2
PI STA = 227+07.03 EX
Y = 444539.789
X = 848071.032
DELTA = 26°27'50"
D = 2°00'00"
T = 673.61'
L = 1323.19'
R = 2864.79'
PC STA = 220+33.42 EX
Y = 443910.27
X = 848310.74
PT STA = 233+56.61 EX
Y = 444996.52
X = 847575.91

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - EXISTING USH 51 CENTERLINE | SHEET 110 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027208_AD.DWG
LAYOUT NAME - 027208_ad
PLOT DATE : 8/1/2023 8:52 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1:300
WISDOT/CADDS SHEET 42

2

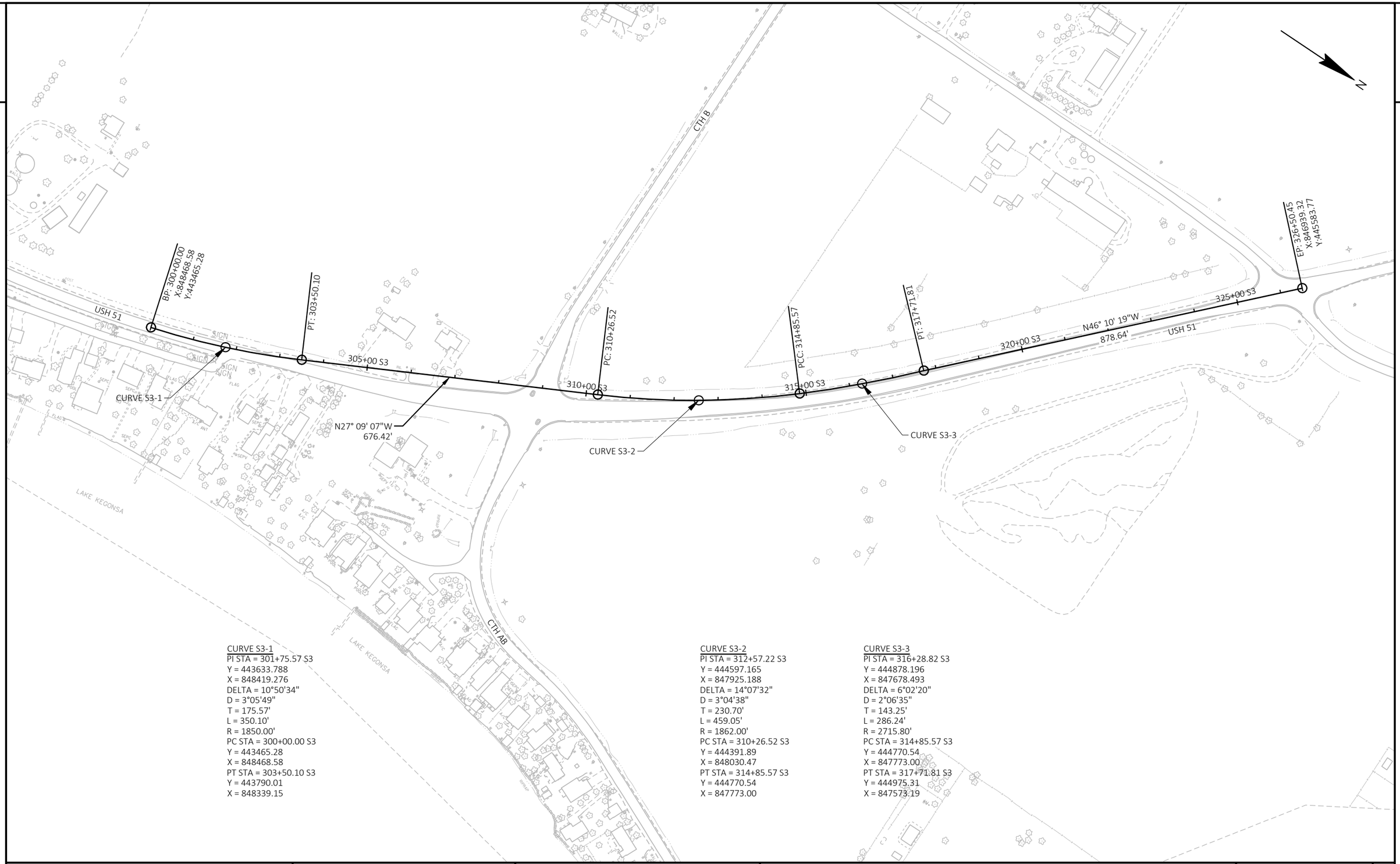



CURVE S2-1
PI STA = 206+28.21 S2
Y = 444456.149
X = 848113.954
DELTA = 22°03'04"
D = 3°04'38"
T = 362.80'
L = 716.61'
R = 1862.00'
PC STA = 202+65.42 S2
Y = 444115.07
X = 848237.59
PT STA = 209+82.03 S2
Y = 444725.86
X = 847871.31

CURVE S2-2
PI STA = 211+86.83 S2
Y = 444878.116
X = 847734.338
DELTA = 5°16'46"
D = 1°40'31"
T = 157.68'
L = 315.13'
R = 3420.00'
PC STA = 210+29.15 S2
Y = 444760.89
X = 847839.79
PT STA = 213+44.28 S2
Y = 444985.14
X = 847618.54

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - STAGE 2 | SHEET 111 | E |
|---|---|---|---|---|---|

2




CURVE S3-1
PI STA = 301+75.57 S3
Y = 443633.788
X = 848419.276
DELTA = 10°50'34"
D = 3°05'49"
T = 175.57'
L = 350.10'
R = 1850.00'
PC STA = 300+00.00 S3
Y = 443465.28
X = 848468.58
PT STA = 303+50.10 S3
Y = 443790.01
X = 848339.15

CURVE S3-2
PI STA = 312+57.22 S3
Y = 444597.165
X = 847925.188
DELTA = 14°07'32"
D = 3°04'38"
T = 230.70'
L = 459.05'
R = 1862.00'
PC STA = 310+26.52 S3
Y = 444391.89
X = 848030.47
PT STA = 314+85.57 S3
Y = 444770.54
X = 847773.00

CURVE S3-3
PI STA = 316+28.82 S3
Y = 444878.196
X = 847678.493
DELTA = 6°02'20"
D = 2°06'35"
T = 143.25'
L = 286.24'
R = 2715.80'
PC STA = 314+85.57 S3
Y = 444770.54
X = 847773.00
PT STA = 317+71.81 S3
Y = 444975.31
X = 847573.19

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | ALIGNMENT DETAIL - STAGE 3 | SHEET 112 | E |
|---|---|---|---|---|---|

5845-01-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0205 | Grubbing | STA | 7.000 | 7.000 |
| 0004 | 203.0100 | Removing Small Pipe Culverts | EACH | 11.000 | 11.000 |
| 0006 | 204.0100 | Removing Concrete Pavement | SY | 7,310.000 | 7,310.000 |
| 0008 | 204.0150 | Removing Curb & Gutter | LF | 233.000 | 233.000 |
| 0010 | 204.0220 | Removing Inlets | EACH | 3.000 | 3.000 |
| 0012 | 204.0245 | Removing Storm Sewer (size) 01. 24-Inch | LF | 180.000 | 180.000 |
| 0014 | 204.9060.S | Removing (item description) 01. Removing Apron Endwalls | EACH | 4.000 | 4.000 |
| 0016 | 205.0100 | Excavation Common | CY | 21,500.000 | 21,500.000 |
| 0018 | 208.0100 | Borrow | CY | 2,440.000 | 2,440.000 |
| 0020 | 213.0100 | Finishing Roadway (project) 01. 5845-01-70 | EACH | 1.000 | 1.000 |
| 0022 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 696.000 | 696.000 |
| 0024 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 14,820.000 | 14,820.000 |
| 0026 | 310.0110 | Base Aggregate Open-Graded | TON | 21.000 | 21.000 |
| 0028 | 312.0110 | Select Crushed Material | TON | 17,804.000 | 17,804.000 |
| 0030 | 405.0100 | Coloring Concrete WisDOT Red | CY | 350.000 | 350.000 |
| 0032 | 415.0080 | Concrete Pavement 8-Inch | SY | 7,720.000 | 7,720.000 |
| 0034 | 415.2010 | Concrete Truck Apron 12-inch | SY | 411.000 | 411.000 |
| 0036 | 415.4100 | Concrete Pavement Joint Filling | SY | 8,840.000 | 8,840.000 |
| 0038 | 415.6000.S | Rout and Seal | LF | 1,571.000 | 1,571.000 |
| 0040 | 450.4000 | HMA Cold Weather Paving | TON | 359.000 | 359.000 |
| 0042 | 455.0605 | Tack Coat | GAL | 323.000 | 323.000 |
| 0044 | 460.2000 | Incentive Density HMA Pavement | DOL | 1,720.000 | 1,720.000 |
| 0046 | 460.6224 | HMA Pavement 4 MT 58-28 S | TON | 2,682.000 | 2,682.000 |
| 0048 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 76.000 | 76.000 |
| 0050 | 465.0125 | Asphaltic Surface Temporary | TON | 835.000 | 835.000 |
| 0052 | 520.1018 | Apron Endwalls for Culvert Pipe 18-Inch | EACH | 6.000 | 6.000 |
| 0054 | 520.1024 | Apron Endwalls for Culvert Pipe 24-Inch | EACH | 2.000 | 2.000 |
| 0056 | 520.2012 | Culvert Pipe Temporary 12-Inch | LF | 55.000 | 55.000 |
| 0058 | 520.2024 | Culvert Pipe Temporary 24-Inch | LF | 56.000 | 56.000 |
| 0060 | 520.3418 | Culvert Pipe Class III-A Non-metal 18-Inch | LF | 119.000 | 119.000 |
| 0062 | 520.8000 | Concrete Collars for Pipe | EACH | 2.000 | 2.000 |
| 0064 | 522.0430 | Culvert Pipe Reinforced Concrete Class IV 30-Inch | LF | 1,063.000 | 1,063.000 |
| 0066 | 522.1012 | Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | EACH | 5.000 | 5.000 |
| 0068 | 522.1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 20.000 | 20.000 |
| 0070 | 522.2329 | Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45-Inch | LF | 60.000 | 60.000 |
| 0072 | 522.2629 | Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch | EACH | 2.000 | 2.000 |
| 0074 | 531.2042 | Drilling Shaft 42-Inch | LF | 36.000 | 36.000 |
| 0076 | 531.5130 | Foundation Single-Shaft Type MC-III (structure) 01. S-13-0598 | EACH | 1.000 | 1.000 |
| 0078 | 531.5130 | Foundation Single-Shaft Type MC-III (structure) 02. S-13-0599 | EACH | 1.000 | 1.000 |
| 0080 | 532.5130 | Monotube Cantilever Type III (structure) 01. S-13-0598 | EACH | 1.000 | 1.000 |
| 0082 | 532.5130 | Monotube Cantilever Type III (structure) 02. S-13-0599 | EACH | 1.000 | 1.000 |
| 0084 | 601.0405 | Concrete Curb & Gutter 18-Inch Type A | LF | 264.000 | 264.000 |
| 0086 | 601.0409 | Concrete Curb & Gutter 30-Inch Type A | LF | 2,270.000 | 2,270.000 |
| 0088 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 200.000 | 200.000 |
| 0090 | 601.0551 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A | LF | 590.000 | 590.000 |
| 0092 | 601.0553 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D | LF | 230.000 | 230.000 |
| 0094 | 601.0580 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R | LF | 350.000 | 350.000 |
| 0096 | 602.0410 | Concrete Sidewalk 5-Inch | SF | 13,380.000 | 13,380.000 |
| 0098 | 602.3010 | Concrete Surface Drains | CY | 9.200 | 9.200 |

5845-01-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0100 | 603.8000 | Concrete Barrier Temporary Precast Delivered | LF | 2,635.000 | 2,635.000 |
| 0102 | 603.8125 | Concrete Barrier Temporary Precast Installed | LF | 2,635.000 | 2,635.000 |
| 0104 | 603.8500 | Anchoring Concrete Barrier Temporary Precast | LF | 1,240.000 | 1,240.000 |
| 0106 | 606.0200 | Riprap Medium | CY | 72.000 | 72.000 |
| 0108 | 608.0412 | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF | 586.000 | 586.000 |
| 0110 | 608.0430 | Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch | LF | 113.000 | 113.000 |
| 0112 | 611.0606 | Inlet Covers Type B | EACH | 1.000 | 1.000 |
| 0114 | 611.0624 | Inlet Covers Type H | EACH | 8.000 | 8.000 |
| 0116 | 611.0627 | Inlet Covers Type HM | EACH | 3.000 | 3.000 |
| 0118 | 611.0639 | Inlet Covers Type H-S | EACH | 5.000 | 5.000 |
| 0120 | 611.0652 | Inlet Covers Type T | EACH | 2.000 | 2.000 |
| 0122 | 611.2005 | Manholes 5-FT Diameter | EACH | 1.000 | 1.000 |
| 0124 | 611.3004 | Inlets 4-FT Diameter | EACH | 7.000 | 7.000 |
| 0126 | 611.3220 | Inlets 2x2-FT | EACH | 1.000 | 1.000 |
| 0128 | 611.3225 | Inlets 2x2.5-FT | EACH | 1.000 | 1.000 |
| 0130 | 611.3230 | Inlets 2x3-FT | EACH | 9.000 | 9.000 |
| 0132 | 611.8120.S | Cover Plates Temporary | EACH | 1.000 | 1.000 |
| 0134 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 350.000 | 350.000 |
| 0136 | 614.0400 | Adjusting Steel Plate Beam Guard | LF | 151.000 | 151.000 |
| 0138 | 614.0905 | Crash Cushions Temporary | EACH | 6.000 | 6.000 |
| 0140 | 614.0950 | Replacing Guardrail Posts and Blocks | EACH | 26.000 | 26.000 |
| 0142 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 5845-01-70 | EACH | 1.000 | 1.000 |
| 0144 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0146 | 620.0300 | Concrete Median Sloped Nose | SF | 570.000 | 570.000 |
| 0148 | 624.0100 | Water | MGAL | 293.000 | 293.000 |
| 0150 | 625.0500 | Salvaged Topsoil | SY | 25,760.000 | 25,760.000 |
| 0152 | 627.0200 | Mulching | SY | 12,110.000 | 12,110.000 |
| 0154 | 628.1504 | Silt Fence | LF | 2,181.000 | 2,181.000 |
| 0156 | 628.1520 | Silt Fence Maintenance | LF | 4,362.000 | 4,362.000 |
| 0158 | 628.1905 | Mobilizations Erosion Control | EACH | 12.000 | 12.000 |
| 0160 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 12.000 | 12.000 |
| 0162 | 628.2006 | Erosion Mat Urban Class I Type A | SY | 2,300.000 | 2,300.000 |
| 0164 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 14,430.000 | 14,430.000 |
| 0166 | 628.2023 | Erosion Mat Class II Type B | SY | 2,650.000 | 2,650.000 |
| 0168 | 628.7005 | Inlet Protection Type A | EACH | 20.000 | 20.000 |
| 0170 | 628.7015 | Inlet Protection Type C | EACH | 14.000 | 14.000 |
| 0172 | 628.7020 | Inlet Protection Type D | EACH | 8.000 | 8.000 |
| 0174 | 628.7504 | Temporary Ditch Checks | LF | 1,400.000 | 1,400.000 |
| 0176 | 628.7555 | Culvert Pipe Checks | EACH | 118.000 | 118.000 |
| 0178 | 628.7560 | Tracking Pads | EACH | 13.000 | 13.000 |
| 0180 | 629.0210 | Fertilizer Type B | CWT | 21.700 | 21.700 |
| 0182 | 630.0130 | Seeding Mixture No. 30 | LB | 406.000 | 406.000 |
| 0184 | 630.0200 | Seeding Temporary | LB | 171.000 | 171.000 |
| 0186 | 630.0300 | Seeding Borrow Pit | LB | 156.000 | 156.000 |
| 0188 | 630.0500 | Seed Water | MGAL | 1,011.000 | 1,011.000 |
| 0190 | 633.5200 | Markers Culvert End | EACH | 27.000 | 27.000 |
| 0192 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 29.000 | 29.000 |
| 0194 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 14.000 | 14.000 |
| 0196 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 13.000 | 13.000 |

5845-01-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0198 | 634.0620 | Posts Wood 4x6-Inch X 20-FT | EACH | 7.000 | 7.000 |
| 0200 | 634.0622 | Posts Wood 4x6-Inch X 22-FT | EACH | 2.000 | 2.000 |
| 0202 | 637.2210 | Signs Type II Reflective H | SF | 528.180 | 528.180 |
| 0204 | 637.2230 | Signs Type II Reflective F | SF | 127.000 | 127.000 |
| 0206 | 638.2102 | Moving Signs Type II | EACH | 3.000 | 3.000 |
| 0208 | 638.2602 | Removing Signs Type II | EACH | 26.000 | 26.000 |
| 0210 | 638.3000 | Removing Small Sign Supports | EACH | 27.000 | 27.000 |
| 0212 | 642.5201 | Field Office Type C | EACH | 1.000 | 1.000 |
| 0214 | 643.0300 | Traffic Control Drums | DAY | 7,676.000 | 7,676.000 |
| 0216 | 643.0420 | Traffic Control Barricades Type III | DAY | 2,683.000 | 2,683.000 |
| 0218 | 643.0500 | Traffic Control Flexible Tubular Marker Posts | EACH | 29.000 | 29.000 |
| 0220 | 643.0600 | Traffic Control Flexible Tubular Marker Bases | EACH | 29.000 | 29.000 |
| 0222 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 4,925.000 | 4,925.000 |
| 0224 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 2,801.000 | 2,801.000 |
| 0226 | 643.0900 | Traffic Control Signs | DAY | 20,938.000 | 20,938.000 |
| 0228 | 643.0910 | Traffic Control Covering Signs Type I | EACH | 2.000 | 2.000 |
| 0230 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 10.000 | 10.000 |
| 0232 | 643.1000 | Traffic Control Signs Fixed Message | SF | 66.000 | 66.000 |
| 0234 | 643.1050 | Traffic Control Signs PCMS | DAY | 74.000 | 74.000 |
| 0236 | 643.3165 | Temporary Marking Line Paint 6-Inch | LF | 7,215.000 | 7,215.000 |
| 0238 | 643.3180 | Temporary Marking Line Removable Tape 6-Inch | LF | 11,820.000 | 11,820.000 |
| 0240 | 643.3850 | Temporary Marking Stop Line Removable Tape 18-Inch | LF | 40.000 | 40.000 |
| 0242 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0244 | 645.0111 | Geotextile Type DF Schedule A | SY | 195.000 | 195.000 |
| 0246 | 645.0120 | Geotextile Type HR | SY | 216.000 | 216.000 |
| 0248 | 645.0130 | Geotextile Type R | SY | 90.000 | 90.000 |
| 0250 | 646.2020 | Marking Line Epoxy 6-Inch | LF | 15,820.000 | 15,820.000 |
| 0252 | 646.4020 | Marking Line Epoxy 10-Inch | LF | 1,155.000 | 1,155.000 |
| 0254 | 646.5020 | Marking Arrow Epoxy | EACH | 8.000 | 8.000 |
| 0256 | 646.6320 | Marking Dotted Extension Epoxy 18-Inch | LF | 90.000 | 90.000 |
| 0258 | 646.6466 | Cold Weather Marking Epoxy 6-Inch | LF | 1,070.000 | 1,070.000 |
| 0260 | 646.6470 | Cold Weather Marking Epoxy 10-Inch | LF | 110.000 | 110.000 |
| 0262 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 393.000 | 393.000 |
| 0264 | 646.8120 | Marking Curb Epoxy | LF | 40.000 | 40.000 |
| 0266 | 646.8220 | Marking Island Nose Epoxy | EACH | 4.000 | 4.000 |
| 0268 | 646.9000 | Marking Removal Line 4-Inch | LF | 3,173.000 | 3,173.000 |
| 0270 | 646.9010 | Marking Removal Line Water Blasting 4-Inch | LF | 2,634.000 | 2,634.000 |
| 0272 | 646.9100 | Marking Removal Line 8-Inch | LF | 30.000 | 30.000 |
| 0274 | 650.4000 | Construction Staking Storm Sewer | EACH | 51.000 | 51.000 |
| 0276 | 650.4500 | Construction Staking Subgrade | LF | 2,974.000 | 2,974.000 |
| 0278 | 650.5000 | Construction Staking Base | LF | 4,513.000 | 4,513.000 |
| 0280 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 430.000 | 430.000 |
| 0282 | 650.6501 | Construction Staking Structure Layout (structure) 01. S-13-0598 | EACH | 1.000 | 1.000 |
| 0284 | 650.6501 | Construction Staking Structure Layout (structure) 02. S-13-0599 | EACH | 1.000 | 1.000 |
| 0286 | 650.7000 | Construction Staking Concrete Pavement | LF | 1,487.000 | 1,487.000 |
| 0288 | 650.8501 | Construction Staking Electrical Installations (project) 01. 5845-01-70 | EACH | 1.000 | 1.000 |
| 0290 | 650.9911 | Construction Staking Supplemental Control (project) 01. 5845-01-70 | EACH | 1.000 | 1.000 |
| 0292 | 650.9920 | Construction Staking Slope Stakes | LF | 7,089.000 | 7,089.000 |
| 0294 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 1,902.000 | 1,902.000 |

5845-01-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0296 | 652.0235 | Conduit Rigid Nonmetallic Schedule 40 3-Inch | LF | 844.000 | 844.000 |
| 0298 | 653.0164 | Pull Boxes Non-Conductive 24x42-Inch | EACH | 13.000 | 13.000 |
| 0300 | 654.0105 | Concrete Bases Type 5 | EACH | 15.000 | 15.000 |
| 0302 | 654.0230 | Concrete Control Cabinet Bases Type L30 | EACH | 1.000 | 1.000 |
| 0304 | 655.0610 | Electrical Wire Lighting 12 AWG | LF | 13,696.000 | 13,696.000 |
| 0306 | 656.0201 | Electrical Service Meter Breaker Pedestal (location) 01. CTH B AND CTH AB | EACH | 1.000 | 1.000 |
| 0308 | 657.0255 | Transformer Bases Breakaway 11 1/2-Inch Bolt Circle | EACH | 15.000 | 15.000 |
| 0310 | 657.0322 | Poles Type 5-Aluminum | EACH | 15.000 | 15.000 |
| 0312 | 657.0710 | Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT | EACH | 15.000 | 15.000 |
| 0314 | 659.1120 | Luminaires Utility LED B | EACH | 15.000 | 15.000 |
| 0316 | 659.2130 | Lighting Control Cabinets 120/240 30-Inch | EACH | 1.000 | 1.000 |
| 0318 | 690.0150 | Sawing Asphalt | LF | 1,097.000 | 1,097.000 |
| 0320 | 690.0250 | Sawing Concrete | LF | 1,407.000 | 1,407.000 |
| 0322 | 715.0720 | Incentive Compressive Strength Concrete Pavement | DOL | 2,316.000 | 2,316.000 |
| 0324 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 900.000 | 900.000 |
| 0326 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 600.000 | 600.000 |
| 0328 | SPV.0060 | Special 01. Connect to Existing Sanitary Sewer Manhole | EACH | 1.000 | 1.000 |
| 0330 | SPV.0060 | Special 02. Connect to Existing Sanitary Sewer Lateral | EACH | 1.000 | 1.000 |
| 0332 | SPV.0060 | Special 03. Remove Existing Sanitary Sewer Manhole | EACH | 3.000 | 3.000 |
| 0334 | SPV.0060 | Special 04. Construction Staking Sanitary Sewer | EACH | 2.000 | 2.000 |
| 0336 | SPV.0090 | Special 01. Casing Pipe, Polyvinyl Chloride (PVC), SDR 35, 10-Inch | LF | 100.000 | 100.000 |
| 0338 | SPV.0090 | Special 02. Sanitary Sewer Lateral, 4-Inch | LF | 225.000 | 225.000 |
| 0340 | SPV.0090 | Special 03. Abandon Existing Sanitary Sewer | LF | 264.000 | 264.000 |

| DIVISION | FROM/TO STATION | LOCATION | 205.0100 EXCAVATION COMMON (1) CUT (2) | 205.0100 EXCAVATION COMMON (1) EBS EXCAVATION (3) | SALVAGED/UNUSABLE PAVEMENT MATERIAL | AVAILABLE MATERIAL (4) | EXPANDED EBS BACKFILL (5) FACTOR 1.25 | UNEXPANDED FILL | EXPANDED FILL (6) FACTOR 1.25 | MASS ORDINATE +/- (7) | WASTE | 208.0100 BORROW | *312.0110 SELECT CRUSHED MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIVISION 1 (STAGE 1) | | | | | | | | | | | | | |
| STAGE 1 - TEMPORARY WIDENING (51-EX CHAIN) | 222+40.00/240+50.00 | RT | 499 | 30 | 0 | 499 | 38 | 2,351 | 2,939 | -2,440 | 0 | 2,440 | 57 |
| DIVISION 1 SUBTOTAL | | | 499 | 30 | 0 | 499 | 38 | 2,351 | 2,939 | -2,440 | 0 | 2,440 | 57 |
| DIVISION 2 (STAGE 2) | | | | | | | | | | | | | |
| STAGE 2 - USH 51 (SB CHAIN) | 121+60.00/123+82.25 | LT | 413 | 21 | 0 | 413 | 26 | 287 | 359 | 54 | 54 | 0 | 39 |
| STAGE 2 - CTH B (EB CHAIN) | 26+00.00/33+34.94 | LT/RT | 2,653 | 133 | 0 | 2,653 | 166 | 395 | 494 | 2,159 | 2,159 | 0 | 252 |
| STAGE 2 - CTH B (WB CHAIN) | 30+00.00/33+29.84 | LT/RT | 1,085 | 54 | 0 | 1,085 | 68 | 242 | 303 | 783 | 783 | 0 | 103 |
| STAGE 2 - ROUNDABOUT (A CHAIN) | 0+64.39/2+28.80 | RT | 141 | 7 | 162 | -21 | 9 | 391 | 489 | -348 | 0 | 0 | 13 |
| STAGE 2 - USH 51 (51-EX CHAIN) | 217+51.00/240+50.00 | LT | 3,007 | 150 | 434 | 2,573 | 188 | 1,058 | 1,323 | 1,685 | 1,685 | 0 | 286 |
| DIVISION 2 SUBTOTAL | | | 7,299 | 365 | 596 | 6,703 | 456 | 2,373 | 2,966 | 4,333 | 4,681 | 0 | 693 |
| DIVISION 3 (STAGE 3) | | | | | | | | | | | | | |
| STAGE 3 - USH 51 (NB CHAIN) | 121+55.21/133+44.00 | RT | 4,242 | 212 | 539 | 3,704 | 265 | 547 | 684 | 3,558 | 3,558 | 0 | 403 |
| STAGE 3 - CTH AB (EB CHAIN) | 35+07.62/39+50.00 | LT/RT | 2,094 | 105 | 0 | 2,094 | 131 | 312 | 390 | 1,704 | 1,704 | 0 | 199 |
| STAGE 3 - CTH AB (WB CHAIN) | 35+05.30/35+50.00 | LT/RT | 179 | 9 | 0 | 179 | 11 | 81 | 101 | 78 | 78 | 0 | 17 |
| STAGE 3 - ROUNDABOUT (A CHAIN) | 0+00.00/3+50.00 | RT | 613 | 31 | 305 | 308 | 38 | 190 | 238 | 376 | 376 | 0 | 58 |
| STAGE 3 - USH 51 (51-EX CHAIN) | 233+50.00/240+50.00 | RT | 168 | 8 | 0 | 168 | 11 | 6 | 8 | 161 | 161 | 0 | 16 |
| DIVISION 3 SUBTOTAL | | | 7,296 | 365 | 844 | 6,452 | 456 | 1,136 | 1,420 | 5,876 | 5,876 | 0 | 693 |
| DIVISION 4 (STAGE 4) | | | | | | | | | | | | | |
| STAGE 4 - ROUNDABOUT (A CHAIN) | 0+00.00/3+50.00 | LT | 366 | 18 | 0 | 366 | 23 | 659 | 824 | -458 | 0 | 0 | 35 |
| STAGE 4 - USH 51- NORTH LEG (SB CHAIN) | 125+23.00/128+83.00 | LT | 386 | 19 | 0 | 386 | 24 | 77 | 96 | 290 | 290 | 0 | 37 |
| STAGE 4 - USH 51- SOUTH LEG (SB CHAIN) | 120+50.00/121+50.00 | LT/RT | 239 | 12 | 0 | 239 | 15 | 7 | 9 | 230 | 230 | 0 | 23 |
| STAGE 4 - USH 51- SOUTH LEG (NB CHAIN) | 115+50.00/121+50.00 | LT/RT | 3,565 | 178 | 297 | 3,268 | 223 | 42 | 53 | 3,513 | 3,513 | 0 | 339 |
| STAGE 4 - USH 51- NORTH LEG (NB CHAIN) | 129+00.00/133+44.00 | LT | 565 | 28 | 0 | 565 | 35 | 13 | 16 | 549 | 549 | 0 | 54 |
| STAGE 4 - USH 51 (51-EX CHAIN) | 233+50.00/240+50.00 | LT | 256 | 13 | 0 | 256 | 16 | 0 | 0 | 256 | 256 | 0 | 24 |
| DIVISION 4 SUBTOTAL | | | 5,377 | 269 | 297 | 5,080 | 336 | 798 | 998 | 4,380 | 4,837 | 0 | 511 |
| GRAND TOTAL | | | 20,471 | 1,029 | 1,737 | 18,734 | 1,286 | 6,658 | 8,323 | 12,149 | 15,394 | 2,440 | 1,954 |
| TOTAL EXCAVATION COMMON | | | 21,500 | | | | | | | | | | |

NOTES:

(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT CRUSHED MATERIAL. EBS BACKFILL FACTOR = 1.25. ITEM NUMBER 312.0110
(6) EXPANDED FILL = (UNEXPANDED FILL)* EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25.
(7) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL
THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(8) WASTE = MASS ORDINATE + EXPANDED EBS BACKFILL
(9) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

## GRUBBING ITEMS

| CATEGORY | STATION | - | STATION | LOCATION | 201.0205 GRUBBING STA |
|---|---|---|---|---|---|
| 0010 | 115+00 NB | - | 119+00 NB | LT | 4 |
| | 114+00 NB | - | 117+00 NB | RT | 3 |
| | | | TOTAL | | 7 |

## REMOVING SMALL PIPE CULVERTS

| CATEGORY | STATION | - | STATION | LOCATION | 203.0100 EACH | SIZE |
|---|---|---|---|---|---|---|
| 0010 | 124+00 SB | - | 124+87 SB | LT | 1 | 30" X 90' CMCP |
| | 124+00 SB | - | 124+87 SB | LT | 1 | 30" X 90' CMCP |
| | 123+76 NB | - | 124+84 NB | RT | 1 | 24" X 105' CMCP |
| | 30+90 EB | - | 31+20 EB | LT | 1 | 18" X 30' CMCP |
| | 33+00 EB | - | 33+27 EB | RT | 1 | 18" X 20' CMCP |
| | 37+70 EB | | | LT/RT | 1 | 32"x40" X 75' CMCP |
| | 37+78 EB | | | LT/RT | 1 | 32"x40" X 75' CMCP |
| | 36+80 EB | - | 37+30 EB | RT | 1 | 28"x42" X 65' CMCP |
| | 120+00 SB | - | 120+30 SB | LT | 1 | 18" X 30' CMCP |
| | 33+85 EB | - | 35+15 EB | RT | 1 | 30" X 125' RCP |
| | 33+85 EB | - | 35+15 EB | RT | 1 | 30" X 125' RCP |
| | TOTAL | | | | 11 | |

## REMOVING CONCRETE PAVEMENT

| CATEGORY | STAGE | STATION - STATION | LOCATION | 204.0100 SY |
|---|---|---|---|---|
| 0010 | 2 | 221+35 EX - 226+25 EX | RT/LT | 1,700 |
| | | 226+25 EX - 233+44 EX | RT/LT | 1,900 |
| | | | SUBTOTAL | 3,600 |
| | 3 | 221+75 EX - 226+25 EX | RT/LT | 1,800 |
| | | 226+25 EX - 233+44 EX | RT/LT | 760 |
| | | | SUBTOTAL | 2,560 |
| | 4 | 218+30 EX - 221+75 EX | RT/LT | 1,150 |
| | | | SUBTOTAL | 1,150 |
| | | | TOTAL | 7,310 |

## REMOVING CURB & GUTTER

| CATEGORY | STAGE | STATION - STATION | LOCATION | 204.0150 LF |
|---|---|---|---|---|
| 0010 | 1 | 120+32 NB - 124+47 NB | RT | 77 |
| | | 124+47 NB - 128+93 NB | RT | 156 |
| | | TOTAL | | 233 |

## REMOVING INLETS

| CATEGORY | STATION | OFFSET | 204.0220 EACH |
|---|---|---|---|
| 0010 | 121+15 | 17.0 'LT | 1 |
| | 121+25 | 17.0 'LT | 1 |
| | TOTAL | | 2 |

## BASE AGGREGATE DENSE

| CATEGORY | STAGE | STATION - STATION | LOCATION | 305.0110 3/4-INCH TON | 305.0120 1 1/4-INCH TON |
|---|---|---|---|---|---|
| 0010 | 1 | 115+50 NB - 124+25 NB | RT | --- | 80 |
| | | 124+25 NB - 140+59 NB | RT/LT | --- | 1,950 |
| | | | SUBTOTALS | --- | 2,030 |
| | 2 | 26+00 EB - 32+25 EB | RT/LT | 140 | 1,700 |
| | | 115+50 NB - 126+25 NB | RT/LT | 7 | 1,900 |
| | | 126+25 NB - 133+44 NB | RT/LT | --- | 2,400 |
| | | 133+44 NB - 141+00 NB | LT | --- | 690 |
| | | | SUBTOTALS | 147 | 6,690 |
| | 3 | 36+04 EB - 39+50 EB | RT/LT | 40 | 1,100 |
| | | 115+50 NB - 126+25 NB | RT/LT | 4 | 1,050 |
| | | 126+25 NB - 133+44 NB | RT/LT | 40 | 1,850 |
| | | 133+44 NB - 141+00 NB | RT | 130 | --- |
| | | | SUBTOTALS | 214 | 4,000 |
| | 4 | 115+50 NB - 126+25 NB | RT/LT | 120 | 2,100 |
| | | 126+25 NB - 133+44 NB | RT/LT | 45 | --- |
| | | 133+44 NB - 141+00 NB | LT | 170 | --- |
| | | | SUBTOTALS | 335 | 2,100 |
| | | | TOTALS | 696 | 14,820 |

## REMOVING STORM SEWER

| CATEGORY | STATION - STATION | LOCATION | 204.0245.01 24-INCH LF |
|---|---|---|---|
| 0010 | 121+10 NB | LT/RT | 90 |
| | 121+20 NB | LT/RT | 90 |
| | TOTAL | | 180 |

## REMOVING APRON ENDWALLS

| CATEGORY | STATION | OFFSET | * 204.9060.S.01 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 121+10 NB | 52.0 'RT | 1 | 24-INCH CONCRETE |
| | 121+17 NB | 52.0 'RT | 1 | 24-INCH CONCRETE |
| | TOTAL | | 2 | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

SELECT CRUSHED MATERIAL

| CATEGORY | STAGE | STATION - STATION | LOCATION | 312.0110* TON |
|---|---|---|---|---|
| 0010 | 2 | 26+00 EB - 32+25 EB | RT/LT | 2,350 |
| | | 121+64 NB - 126+25 NB | RT/LT | 2,300 |
| | | 126+25 NB - 133+44 NB | RT/LT | 1,900 |
| | | | SUBTOTAL | 6,550 |
| | 3 | 36+25 EB - 39+51 EB | RT/LT | 1,050 |
| | | 121+54 NB - 126+25 NB | RT/LT | 2,450 |
| | | 126+25 NB - 133+44 NB | RT/LT | 1,900 |
| | | | SUBTOTAL | 5,400 |
| | 4 | 115+50 NB - 126+25 NB | RT/LT | 3,900 |
| | | | SUBTOTAL | 3,900 |
| | | | TOTAL | 15,850 |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE PAVEMENT

| CATEGORY | STAGE | STATION - STATION | LOCATION | 415.0080 8-INCH SY | 415.4100 JOINT FILLING SY | 415.6000.S ROUT AND SEAL LF |
|---|---|---|---|---|---|---|
| 0010 | 2 | 121+64 NB - 124+56 NB | LT | 1,250 | 1,350 | 106 |
| | | 124+56 NB - 127+12 NB | LT | 1,100 | 1,200 | --- |
| | | 29+76 EB - 32+16 EB | RT/LT | 780 | 1,050 | 475 |
| | | | SUBTOTALS | 3,130 | 3,600 | 581 |
| | 3 | 121+55 NB - 124+38 NB | RT | 1,250 | 1,350 | 45 |
| | | 124+38 NB - 126+33 NB | RT | 990 | 1,100 | --- |
| | | | SUBTOTALS | 2,240 | 2,450 | 45 |
| | 4 | 116+85 NB - 125+19 NB | RT/LT | 2,350 | 2,700 | 945 |
| | | 125+19 NB - 128+91 NB | MEDIAN | --- | 90 | --- |
| | | | SUBTOTALS | 2,350 | 2,790 | 945 |
| | | | TOTALS | 7,720 | 8,840 | 1,571 |

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CONCRETE ITEMS

| CATEGORY | STAGE | STATION - STATION | LOCATION | 602.0410 CONCRETE SIDEWALK 5-INCH SF | 415.2010 CONCRETE TRUCK APRON 12-INCH SY | 405.0100 COLORING CONCRETE WISDOT RED CY | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 2 | 29+75.7 EB - 34+21.3 EB | LT | 3,150 | --- | 50 | MEDIAN |
| | | | SUBTOTALS | 3,150 | -- | 50 | |
| | 3 | 34+21.3 EB - 36+05.1 EB | LT | 530 | --- | 10 | MEDIAN |
| | | | SUBTOTALS | 530 | -- | 10 | |
| | 4 | 120+32.0 NB - 123+89.3 NB | LT | 4,400 | --- | 70 | MEDIAN |
| | | 123+89.3 NB - 125+05.2 NB | RT/LT | --- | 411 | 140 | RAB TRUCK APRON |
| | | 125+05.2 NB - 128+93.1 NB | LT | 5,300 | --- | 80 | MEDIAN |
| | | | SUBTOTALS | 9,700 | 411 | 290 | |
| | | | TOTALS | 13,380 | 411 | 350 | |

ASPHALTIC ITEMS SUMMARY

| CATEGORY | STAGE | STATION - STATION | LOCATION | 450.4000 HMA COLD WEATHER PAVING TON | 455.0605 TACK COAT GAL | 460.6224 HMA PAVEMENT 4 MT 58-28 S TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON | 465.0125 ASPHALTIC SURFACE TEMPORARY TON |
|---|---|---|---|---|---|---|---|---|
| 0010 | 1 | 121+98 NB - 124+25 NB | RT/LT | --- | --- | --- | --- | 20 |
| | | 124+25 NB - 140+59 NB | RT/LT | --- | --- | --- | --- | 585 |
| | | | SUBTOTALS | 0 | 0 | 0 | 0 | 605 |
| | 2 | 26+00 EB - 29+76 EB | RT/LT | --- | 82 | 442 | --- | --- |
| | | 117+29 NB - 127+12 NB | LT | --- | --- | 14 | --- | 230 |
| | | 127+12 NB - 141+01 NB | LT | --- | 64 | 968 | --- | --- |
| | | | SUBTOTALS | 0 | 146 | 1,424 | 0 | 230 |
| | 3 | 36+04 EB - 39+51 EB | RT/LT | --- | 66 | 334 | 57 | --- |
| | | 115+50 NB - 121+98 NB | RT/LT | --- | 2 | 9 | --- | --- |
| | | 126+33 NB - 133+44 NB | RT/LT | --- | 73 | 575 | --- | --- |
| | | | SUBTOTALS | 0 | 141 | 918 | 57 | 0 |
| | 4 | 115+50 NB - 121+98 NB | RT/LT | 359 | 36 | 340 | 19 | --- |
| | | | SUBTOTALS | 359 | 36 | 340 | 19 | 0 |
| | | | TOTALS | 359 | 323 | 2,682 | 76 | 835 |

## APRON ENDWALLS AND RIPRAP SUMMARY

| CATEGORY | STRUCT. NO. | STATION | | OFFSET | 522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH | 522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH | 522.2629 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH | 520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH | 633.5200 MARKERS CULVERT END EACH | *650.4000 CONSTRUCTION STAKING STORM SEWER EACH | *606.0200 RIPRAP MEDIUM CY | 645.0120 GEOTEXTILE TYPE HR SY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 205 | 32+26.01 | EB | 51.7 'LT | 1 | - | - | - | 1 | 1 | 3 | 10 |
| | 210 | 32+81.83 | EB | 52.0 'RT | - | 1 | - | - | 1 | 1 | - | - |
| | 215 | 32+98.80 | EB | 50.4 'RT | - | 1 | - | - | 1 | 1 | - | - |
| | 216 | 28+77.15 | EB | 41.4 'LT | - | - | - | 1 | - | 1 | - | - |
| | 217 | 29+19.43 | EB | 42.7 'LT | - | - | - | 1 | - | 1 | - | - |
| | 220 | 32+77.18 | EB | 65.5 'LT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 222 | 28+79.30 | EB | 33.3 'RT | - | - | - | 1 | - | 1 | - | - |
| | 223 | 29+21.39 | EB | 33.6 'RT | - | - | - | 1 | - | 1 | - | - |
| | 225 | 32+83.27 | EB | 69.5 'LT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 240 | 11+62.30 | E | 28.6 'LT | 1 | - | - | - | 1 | 1 | 3 | 10 |
| | 250 | 11+40.96 | D | 30.5 'LT | 1 | - | - | - | 1 | 1 | 3 | 10 |
| | 300 | 11+20.67 | E | 30.5 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 305 | 11+11.97 | E | 33.0 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 310 | 11+33.89 | B | 41.2 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 315 | 11+21.16 | B | 44.2 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 330 | 121+29.94 | NB | 62.5 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 335 | 121+17.25 | NB | 49.3 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 340 | 121+19.85 | NB | 63.6 'LT | - | 1 | - | - | 1 | 1 | 2 | 7 |
| | 345 | 121+08.60 | NB | 49.0 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 385 | 120+06.11 | NB | 63.8 'LT | - | - | - | 1 | - | 1 | - | - |
| | 390 | 120+42.90 | NB | 66.5 'LT | - | - | - | 1 | - | 1 | - | - |
| | 420 | 11+32.43 | C | 30.3 'RT | 1 | - | - | - | 1 | 1 | 3 | 10 |
| | 455 | 35+59.95 | EB | 45.5 'RT | 1 | - | - | - | 1 | 1 | 3 | 10 |
| | 460 | 35+82.70 | EB | 48.4 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 465 | 35+68.78 | EB | 56.8 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 466 | 35+91.74 | EB | 47.4 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 467 | 35+77.87 | EB | 57.7 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 470 | 36+78.28 | EB | 52.1 'RT | - | - | 1 | - | 1 | 1 | - | - |
| | 475 | 37+28.22 | EB | 63.2 'RT | - | - | 1 | - | 1 | 1 | 6 | 19 |
| | 480 | 37+71.60 | EB | 34.6 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 485 | 37+69.71 | EB | 35.7 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | 490 | 37+79.49 | EB | 33.0 'LT | - | 1 | - | - | 1 | 1 | - | - |
| | 495 | 37+76.40 | EB | 35.9 'RT | - | 1 | - | - | 1 | 1 | 4 | 14 |
| | TOTALS | | | | 5 | 20 | 2 | 6 | 27 | 33 | 63 | 216 |

*ADDITIONAL QUANTITY LISTED ELSEWHERE

| CATEGORY | FROM STRUCTURE | TO STRUCTURE | CULVERT PIPE REINFORCED CONCRETE CLASS IV 522.0430 30-INCH LF | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 522.2329 29X45-INCH LF | CULVERT PIPE CLASS III-A NON-METAL 520.3418 18-INCH LF |
|---|---|---|---|---|---|
| 0010 | 216 | 217 | - | - | 42 |
| | 220 | 210 | 118 | - | - |
| | 222 | 223 | - | - | 42 |
| | 225 | 215 | 121 | - | - |
| | 300 | 310 | 181 | - | - |
| | 305 | 315 | 179 | - | - |
| | 330 | 335 | 113 | - | - |
| | 385 | 390 | - | - | 35 |
| | 465 | 460 | 106 | - | - |
| | 467 | 466 | 106 | - | - |
| | 470 | 475 | - | 60 | - |
| | 480 | 485 | 70 | - | - |
| | 490 | 495 | 69 | - | - |
| | TOTALS | | 1063 | 60 | 119 |

| CATEGORY | STAGE | STATION | - | STATION | LOCATION | CONCRETE CURB & GUTTER 601.0405 18-INCH TYPE A LF | 601.0409 30-INCH TYPE A LF | 601.0411 30-INCH TYPE D LF | 601.0551 4-INCH SLOPED 36-INCH TYPE A LF | 601.0553 4-INCH SLOPED 36-INCH TYPE D LF | 601.0580 4-INCH SLOPED 36-INCH TYPE R LF | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 2 | 29+76 EB | - | 34+21 EB | RT/LT | --- | 700 | --- | 280 | --- | --- | 0 |
| | | 120+32 NB | - | 124+49 NB | LT | --- | 150 | --- | --- | --- | --- | 0 |
| | | | | | SUBTOTALS | 0 | 850 | 0 | 280 | 0 | 0 | 0 |
| | 3 | 35+07 EB | - | 39+51 EB | RT/LT | --- | 300 | --- | --- | --- | --- | 0 |
| | | 120+32 NB | - | 124+49 NB | RT | --- | 190 | --- | --- | --- | --- | 0 |
| | | 124+49 NB | - | 128+93 NB | RT/LT | --- | 200 | --- | --- | --- | --- | 0 |
| | | | | | SUBTOTALS | 0 | 690 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 120+32 NB | - | 125+19 NB | RT/LT | 264 | 400 | --- | 310 | --- | 350 | 0 |
| | | 125+19 NB | - | 128+91 NB | MEDIAN | --- | 330 | 200 | --- | 230 | --- | 430 |
| | | | | | SUBTOTALS | 264 | 730 | 200 | 310 | 230 | 350 | 430 |
| | | | | | TOTALS | 264 | 2,270 | 200 | 590 | 230 | 350 | 430 |

## CONCRETE BARRIER

| CATEGORY | STAGE | 603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF | 603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF | 603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF |
|---|---|---|---|---|
| 0010 | 2 | 1,850 | 1,850 | 455 |
| | 3 | 785 | 785 | 785 |
| | TOTALS | 2,635 | 2,635 | 1,240 |

## PIPE UNDERDRAIN SUMMARY

| CATEGORY | LOCATION | 612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF | 645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY | 310.0110 BASE AGGREGATE OPEN-GRADED TON |
|---|---|---|---|---|
| 0010 | RAB LOW POINT | 100 | 55 | 6 |
| | SUBTOTAL | 100 | 55 | 6 |
| 0040 | DITCH NEAR 335/345 OUTFALL | 250 | 140 | 15 |
| | SUBTOTAL | 250 | 140 | 15 |
| | TOTALS | 350 | 195 | 21 |

## TEMPORARY DRAINAGE

| CATEGORY | STAGE | LOCATION | 204.0220 REMOVING INLETS EACH | * 204.9060.S.01 REMOVING APRON ENDWALLS EACH | 520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH | 520.2012 CULVERT PIPE TEMPORARY 12-INCH LF | 520.2024 CULVERT PIPE TEMPORARY 24-INCH LF | 520.8000 CONCRETE COLLARS FOR PIPE EACH | 611.3220 INLETS 2X2-FT EACH | 611.0606 INLETS COVERS TYPE B EACH | 611.8120.S COVER PLATES TEMPORARY EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 2 | PIPE A | --- | --- | 1 | --- | 28 | 1 | --- | --- | --- |
| | 2 | PIPE B | --- | --- | 1 | --- | 28 | 1 | --- | --- | --- |
| | 2 | PIPE C | --- | --- | --- | 55 | --- | --- | 1 | 1 | --- |
| | 2 | STA 205+70 S2 LT | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | 4 | PIPE A | --- | 1 | --- | --- | --- | --- | --- | --- | --- |
| | 4 | PIPE B | --- | 1 | --- | --- | --- | --- | --- | --- | --- |
| | 4 | PIPE C | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| | | TOTALS | 1 | 2 | 2 | 55 | 56 | 2 | 1 | 1 | 1 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## MANHOLES AND INLETS SUMMARY

| CATEGORY | STRUCTURE NUMBER | STATION | | OFFSET | 611.2005 MANHOLES 5-FT DIAMETER EACH | 611.3230 INLETS 4-FT 2X3-FT EACH | 611.3004 INLETS 4-FT DIAMETER EACH | 611.3225 INLETS 4-FT 2X2.5-FT EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0627 INLET COVERS TYPE HM EACH | 611.0639 INLET COVERS TYPE H-S EACH | 611.0652 INLET COVERS TYPE T EACH | * 650.4000 CONSTRUCTION STAKING STORM SEWER EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 200 | 32+27.40 | EB | 10.3 'LT | - | 1 | - | - | - | - | 1 | - | 1 |
| | 230 | 1+38.88 | A | 31.5 'RT | - | 1 | - | - | - | - | 1 | - | 1 |
| | 235 | 33+16.19 | EB | 1.5 'LT | - | - | 1 | - | 1 | - | - | - | 1 |
| | 237 | 11+64.90 | E | 1.5 'LT | - | 1 | - | - | 1 | - | - | - | 1 |
| | 245 | 11+44.13 | D | 1.5 'LT | - | 1 | - | - | 1 | - | - | - | 1 |
| | 350 | 120+44.83 | NB | 15.8 'LT | - | 1 | - | - | - | 1 | - | - | 1 |
| | 355 | 120+45.46 | NB | 7.9 'LT | - | 1 | - | - | - | 1 | - | - | 1 |
| | 360 | 121+13.72 | NB | 4.8 'LT | 1 | - | - | - | - | 1 | - | - | 1 |
| | 400 | 125+56.56 | NB | 46.5 'LT | - | 1 | - | - | 1 | - | - | - | 1 |
| | 405 | 0+39.21 | A | 21.5 'RT | - | - | 1 | - | - | - | 1 | - | 1 |
| | 410 | 125+38.21 | NB | 1.5 'LT | - | 1 | - | - | 1 | - | - | - | 1 |
| | 415 | 11+30.01 | C | 1.5 'RT | - | - | 1 | - | 1 | - | - | - | 1 |
| | 425 | 2+39.75 | A | 21.5 'RT | - | - | 1 | - | - | - | 1 | - | 1 |
| | 430 | 2+79.55 | A | 1.7 'LT | - | - | - | 1 | - | - | - | 1 | 1 |
| | 435 | 2+86.37 | A | 1.7 'LT | - | - | 1 | - | - | - | - | 1 | 1 |
| | 440 | 3+13.80 | A | 31.5 'RT | - | - | 1 | - | - | - | 1 | - | 1 |
| | 445 | 35+56.96 | EB | 1.5 'LT | - | - | 1 | - | 1 | - | - | - | 1 |
| | 450 | 35+57+25 | EB | 8.8 'LT | - | 1 | - | - | 1 | - | - | - | 1 |
| | | TOTALS | | | 1 | 9 | 7 | 1 | 8 | 3 | 5 | 2 | 18 |

*ADDITIONAL QUANTITY LISTED ELSEWHERE

## CONCRETE SURFACE DRAIN ITEMS

| CATEGORY | STATION | LOCATION | 602.3010 CONCRETE SURFACE DRAINS CY | * 645.0130 GEOTEXTILE TYPE R SY | * 606.0200 RIPRAP MEDIUM CY |
|---|---|---|---|---|---|
| 0010 | 121+94 NB | RT | 1.5 | 19 | 1 |
| | 32+11 EB | LT | 1.6 | 16 | 2 |
| | 122+67 NB | LT | 2.2 | 15 | 2 |
| | 36+11 EB | RT | 2.2 | 18 | 2 |
| | 36+11 EB | LT | 1.7 | 22 | 2 |
| | TOTALS | | 9.2 | 90 | 9 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## STORM SEWER PIPE REINFORCED CONCRETE

| CATEGORY | FROM STRUCTURE | TO STRUCTURE | 608.0412 CLASS IV 12-INCH LF | 608.0430 CLASS IV 30-INCH LF |
|---|---|---|---|---|
| 0010 | 200 | 205 | 41 | - |
| | 230 | 235 | 13 | - |
| | 235 | 237 | 41 | - |
| | 237 | 240 | 27 | - |
| | 245 | 250 | 29 | - |
| | 340 | 360 | - | 59 |
| | 350 | 355 | 8 | - |
| | 355 | 360 | 68 | - |
| | 360 | 345 | - | 54 |
| | 400 | 405 | 42 | - |
| | 405 | 415 | 70 | - |
| | 410 | 405 | 12 | - |
| | 415 | 420 | 29 | - |
| | 425 | 430 | 51 | - |
| | 430 | 435 | 7 | - |
| | 435 | 440 | 47 | - |
| | 440 | 445 | 47 | - |
| | 445 | 455 | 47 | - |
| | 450 | 445 | 7 | - |
| | TOTALS | | 586 | 113 |

3

## CRASH CUSHIONS TEMPORARY

| CATEGORY | STAGE | STATION | LOCATION | 614.0905 CRASH CUSHIONS TEMPORARY EACH | BACK WIDTH FT | OBJECT MARKING PATTERN | CRASH TEST LEVEL | TRAFFIC DIRECTION | TRAFFIC LOCATION | CRASH CUSHION SHIELDS |
|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | STAGE 2 | 205+32 S2 , 214+76 S2 | RT/LT | 2 | 2 | 1 OM-3R (W05-58R) | TL-3 | BIDIRECTIONAL | L | TEMPORARY BARRIER ON SHOULDER |
| | STAGE 2 | 200+77 S2 , 210+22 S2 | LT/RT | 2 | 2 | 1 OM-3L (W05-58L) | TL-3 | BIDIRECTIONAL | R | TEMPORARY BARRIER ON SHOULDER |
| | | SUBTOTAL STAGE 2 | | 4 | | | | | | |
| | STAGE 3 | 314+30 S3 , 322+28 S3 | LT | 2 | 2 | 1 OM-3R (W05-58R)/1 OM-3L (W05-58L) | TL-3 | BIDIRECTIONAL | L/R | TEMPORARY BARRIER ON SHOULDER |
| | | SUBTOTAL STAGE 3 | | 2 | | | | | | |
| | | TOTAL | | 6 | | | | | | |

## GUARDRAIL ITEMS

| CATEGORY | STATION - STATION | LOCATION | 614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF | 614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH |
|---|---|---|---|---|
| 0010 | 115+50 NB - 117+01 NB | RT | 151 | 26 |

## CONCRETE MEDIAN SLOPED NOSE

| CATEGORY | STAGE | STATION | LOCATION | 620.0300 SF | REMARKS |
|---|---|---|---|---|---|
| 0010 | 2 | 29+80 EB | LT | 70 | TYPE 1 |
| | | 33+27 EB | LT | 30 | TYPE 2 |
| | | 33+25 WB | RT | 30 | TYPE 2 |
| | | | SUBTOTAL | 130 | |
| | 3 | 35+65 EB | LT | 70 | TYPE 1 |
| | | 35+11 EB | LT | 25 | TYPE 2 |
| | | 35+09 WB | RT | 30 | TYPE 2 |
| | | | SUBTOTAL | 125 | |
| | 4 | 120+34 NB | LT | 70 | TYPE 1 |
| | | 123+67 NB | LT | 30 | TYPE 2 |
| | | 123+72 SB | RT | 45 | TYPE 2 |
| | | 125+28 NB | LT | 45 | TYPE 2 |
| | | 125+30 SB | RT | 30 | TYPE 2 |
| | | 128+91 NB | LT | 95 | TYPE 1 |
| | | | SUBTOTAL | 315 | |
| | | | TOTAL | 570 | |

## WATER

| CATEGORY | LOCATION | 624.0100 MGAL | REMARKS |
|---|---|---|---|
| 0010 | PROJECT | 73 | DUST CONTROL |
| | | 220 | COMPACTION |
| | TOTAL | 293 | |

## FINISHING ITEMS

| CATEGORY | STATION - STATION | LOCATION | 625.0500 SALVAGED TOPSOIL SY | 627.0200 MULCHING SY | 629.0210 FERTILIZER TYPE B CWT | 630.0130 SEEDING MIXTURE NO. 30 LB | 630.0200 SEEDING TEMPORARY LB | 630.0300 SEEDING BORROW PIT LB | 630.0500 SEED WATER MGAL |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 26+00 EB - 32+25 EB | RT/LT | 2,490 | --- | 2.0 | 58 | --- | --- | 72 |
| | 36+25 EB - 39+51 EB | RT/LT | 1,180 | --- | 0.9 | 27 | --- | --- | 33 |
| | 115+50 NB - 126+25 NB | RT/LT | 7,560 | --- | 5.2 | 149 | --- | --- | 373 |
| | 126+25 NB - 140+61 NB | RT/LT | 4,120 | --- | 3.1 | 88 | --- | --- | 110 |
| | STAGE 1 | RT/LT | 1,670 | 1,670 | 1.1 | --- | 45 | --- | 37 |
| | STAGE 2 | RT/LT | 3,400 | 3,400 | 2.1 | --- | 92 | --- | 76 |
| | WASTE SITE | --- | --- | 4,620 | 2.9 | --- | --- | 125 | 104 |
| | UNDISTRIBUTED | --- | 5,110 | 2,420 | 4.3 | 80 | 34 | 31 | 201 |
| | SUBTOTALS (0010) | | 25,530 | 12,110 | 21.6 | 402 | 171 | 156 | 1,006 |
| 0040 | DITCH UNDERDRAIN | --- | 230 | --- | 0.1 | 4 | --- | --- | 5 |
| | SUBTOTALS (0040) | | 230 | --- | 0.1 | 4 | --- | --- | 5 |
| | TOTALS | | 25,760 | 12,110 | 21.7 | 406 | 171 | 156 | 1,011 |

## SILT FENCE ITEMS

| CATEGORY | STATION - STATION | LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF |
|---|---|---|---|---|
| 0010 | 36+00 EB - 39+50 EB | RT/LT | 503 | 1006 |
| | 115+50 NB - 126+25 NB | RT | 1002 | 2004 |
| | 126+25 NB - 133+44 NB | RT | 240 | 480 |
| | UNDISTRIBUTED | RT/LT | 436 | 872 |
| | | TOTALS | 2,181 | 4,362 |

## MOBILIZATIONS EROSION CONTROL

| CATEGORY | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|---|---|---|
| 0010 | 12 | 12 |

## EROSION MAT

| CATEGORY | STATION - STATION | LOCATION | 628.2006 URBAN CLASS I TYPE A SY | 628.2008 URBAN CLASS I TYPE B SY | 628.2023 CLASS II TYPE B SY |
|---|---|---|---|---|---|
| 0010 | 26+00 EB - 32+25 EB | RT/LT | 0 | 1,800 | 740 |
| | 36+25 EB - 39+50 EB | RT/LT | 0 | 1,090 | 0 |
| | 115+50 NB - 126+25 NB | RT/LT | 1,750 | 5,810 | 0 |
| | 126+25 NB - 133+44 NB | RT/LT | 90 | 2,660 | 1,380 |
| | UNDISTRIBUTED | --- | 460 | 2,840 | 530 |
| | | SUBTOTALS (0010) | 2,300 | 14,200 | 2,650 |
| 0040 | DITCH UNDERDRAIN | --- | --- | 230 | --- |
| | | SUBTOTALS (0040) | --- | 230 | --- |
| | | TOTALS | 2,300 | 14,430 | 2,650 |

INLET PROTECTION SUMMARY

| CATEGORY | STATION | LOCATION | 628.7005 INLET PROTECTION TYPE A EACH | 628.7015 INLET PROTECTION TYPE C EACH | 628.7020 INLET PROTECTION TYPE D EACH | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | 120+44.8 NB | 15.8' LT | 1 | -- | 1 | |
| | 120+45.5 NB | 7.9' LT | 1 | -- | 1 | |
| | 121+13.7 NB | 4.8' LT | 1 | 1 | -- | |
| | 125+56.6 NB | 46.5' LT | 1 | 1 | -- | |
| | 125+38.2 NB | 1.5' LT | 1 | 1 | -- | |
| | 32+27.4 EB | 10.3' LT | 1 | -- | 1 | |
| | 33+16.2 EB | 1.5' LT | 1 | 1 | -- | |
| | 35+56.4 EB | 1.5' LT | 1 | 1 | -- | |
| | 35+56.7 EB | 8.8' LT | 1 | 1 | -- | |
| | 0+39.2 A | 21.5' RT | 1 | 1 | -- | |
| | 1+39.0 A | 33.5' RT | 1 | 1 | -- | |
| | 2+39.8 A | 21.5' RT | 1 | 1 | -- | |
| | 2+79.6 A | 1.7' LT | 1 | -- | 1 | |
| | 2+86.4 A | 1.7' LT | 1 | -- | 1 | |
| | 3+13.8 A | 33.5' RT | 1 | 1 | -- | |
| | 11+30.0 C | 1.5' RT | 1 | 1 | -- | |
| | 11+44.1 D | 1.5' LT | 1 | 1 | -- | |
| | 11+64.9 E | 1.5' LT | 1 | 1 | -- | |
| | 221+44 EX | 39' LT | -- | -- | 1 | STAGE 1 |
| | 221+33 EX | 39' LT | -- | -- | 1 | STAGE 1 |
| | UNDISTRIBUTED | -- | 2 | 1 | 1 | |
| | TOTALS | | 20 | 14 | 8 | |

TRACKING PADS

| CATEGORY | LOCATION | 628.7560 EACH |
|---|---|---|
| 0010 | UNDISTRIBUTED | 13 |

CULVERT PIPE CHECKS

| CATEGORY | STRUCTURE ID | STATION | LOCATION | 628.7555 EACH |
|---|---|---|---|---|
| 0010 | 220 | 32+77 EB | LT | 5 |
| | 225 | 32+83 EB | LT | 5 |
| | 465 | 35+68 EB | LT | 5 |
| | 467 | 35+77 EB | LT | 5 |
| | 470 | 36+77 EB | RT | 10 |
| | 480 | 37+71 EB | LT | 5 |
| | 490 | 37+79 EB | LT | 5 |
| | 385 | 20+06 NB | LT | 2 |
| | 340 | 21+19 NB | LT | 3 |
| | 330 | 21+29 NB | LT | 3 |
| | 300 | 23+28 NB | LT | 5 |
| | 305 | 23+34 NB | LT | 5 |
| | EXISTING | 24+45 SB | LT | 5 |
| | EXISTING | 24+45 SB | LT | 5 |
| | EXISTING | 24+30 NB | RT | 3 |
| | EXISTING | 37+70 EB | LT/RT | 10 |
| | EXISTING | 37+78 EB | LT/RT | 10 |
| | EXISTING | 37+05 EB | RT | 10 |
| | EXISTING | 23+68 NB | LT/RT | 5 |
| | EXISTING | 23+75 NB | LT/RT | 5 |
| | EXISTING | 37+58 EB | RT | 7 |
| | | | TOTAL | 118 |

TRAFFIC CONTROL ITEMS

| CATEGORY | STAGE | NO. OF DAYS | 643.0300 TRAFFIC CONTROL DRUMS QTY | 643.0300 TRAFFIC CONTROL DRUMS DAY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III QTY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH | 643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A QTY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C QTY | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY | 643.0900 TRAFFIC CONTROL SIGNS QTY | 643.0900 TRAFFIC CONTROL SIGNS DAY | 643.1050 PCMS DAYS QTY | 643.1050 PCMS DAYS DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 1 | 16 | 60 | 960 | --- | --- | --- | --- | --- | --- | 3 | 48 | 11 | 176 | 2 | 14 |
| | 2 | 55 | 50 | 2,750 | 12 | 660 | 12 | 12 | 20 | 1,100 | 34 | 1,870 | 31 | 1,705 | 3 | 21 |
| | 3 | 50 | 72 | 3,600 | 19 | 950 | 17 | 17 | 34 | 1,700 | 15 | 750 | 35 | 1,750 | 3 | 21 |
| | 4 | 35 | --- | --- | 24 | 840 | --- | --- | 48 | 1,680 | --- | --- | 28 | 980 | 2 | 14 |
| | DETOUR | 35 | --- | --- | 3 | 105 | --- | --- | 6 | 210 | --- | --- | 282 | 9,870 | --- | --- |
| | WIDTH RESTRICTION | 156 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 35 | 5,460 | --- | --- |
| | UNDISTRIBUTED | | --- | 366 | --- | 128 | --- | --- | --- | 235 | --- | 133 | --- | 997 | --- | 4 |
| | TOTALS | | | 7,676 | | 2,683 | 29 | 29 | | 4,925 | | 2,801 | | 20,938 | | 74 |

FIELD OFFICE TYPE C

| CATEGORY | PROJECT | 642.5201 EACH |
|---|---|---|
| 0010 | 5845-01-70 | 1 |

TEMPORARY DITCH CHECKS

| CATEGORY | STATION | | LOCATION | 628.7504 LF | REMARKS |
|---|---|---|---|---|---|
| 0010 | 225+32 | EX | RT | 10 | STAGE 1 |
| | 225+89 | EX | RT | 10 | STAGE 1 |
| | 227+13 | EX | RT | 16 | STAGE 1 |
| | 227+85 | EX | RT | 9 | STAGE 1 |
| | 228+25 | EX | RT | 11 | STAGE 1 |
| | 228+61 | EX | RT | 10 | STAGE 1 |
| | 228+95 | EX | RT | 10 | STAGE 1 |
| | 229+30 | EX | RT | 10 | STAGE 1 |
| | 229+70 | EX | RT | 10 | STAGE 1 |
| | 230+05 | EX | RT | 10 | STAGE 1 |
| | 230+45 | EX | RT | 10 | STAGE 1 |
| | 230+87 | EX | RT | 10 | STAGE 1 |
| | 231+30 | EX | RT | 10 | STAGE 1 |
| | 231+85 | EX | RT | 10 | STAGE 1 |
| | 232+36 | EX | RT | 10 | STAGE 1 |
| | 232+87 | EX | RT | 10 | STAGE 1 |
| | 233+40 | EX | RT | 10 | STAGE 1 |
| | 234+10 | EX | RT | 10 | STAGE 1 |
| | 234+65 | EX | RT | 10 | STAGE 1 |
| | 235+30 | EX | RT | 10 | STAGE 1 |
| | 235+85 | EX | RT | 10 | STAGE 1 |
| | 236+30 | EX | RT | 10 | STAGE 1 |
| | 237+05 | EX | RT | 10 | STAGE 1 |
| | 237+55 | EX | RT | 12 | STAGE 1 |
| | 238+10 | EX | RT | 12 | STAGE 1 |
| | 238+85 | EX | RT | 14 | STAGE 1 |
| | 239+50 | EX | RT | 14 | STAGE 1 |
| | 240+25 | EX | RT | 14 | STAGE 1 |
| | 226+20 | EX | LT | 10 | STAGE 2 |
| | 227+40 | EX | LT | 10 | STAGE 2 |
| | 227+90 | EX | LT | 10 | STAGE 2 |
| | 228+30 | EX | LT | 12 | STAGE 2 |
| | 228+70 | EX | LT | 12 | STAGE 2 |
| | 229+10 | EX | LT | 12 | STAGE 2 |
| | 229+50 | EX | LT | 12 | STAGE 2 |
| | 229+86 | EX | LT | 8 | STAGE 2 |
| | 230+20 | EX | LT | 8 | STAGE 2 |
| | 230+65 | EX | LT | 8 | STAGE 2 |
| | 231+15 | EX | LT | 8 | STAGE 2 |
| | 231+60 | EX | LT | 8 | STAGE 2 |
| | 232+10 | EX | LT | 8 | STAGE 2 |
| | 232+60 | EX | LT | 8 | STAGE 2 |
| | 233+10 | EX | LT | 8 | STAGE 2 |
| | 233+55 | EX | LT | 8 | STAGE 2 |
| | 233+95 | EX | LT | 8 | STAGE 2 |
| | 234+35 | EX | LT | 8 | STAGE 2 |
| | 234+90 | EX | LT | 8 | STAGE 2 |
| | 235+40 | EX | LT | 8 | STAGE 2 |
| | 235+95 | EX | LT | 8 | STAGE 2 |
| | 236+45 | EX | LT | 10 | STAGE 2 |
| | 237+05 | EX | LT | 10 | STAGE 2 |
| | 237+45 | EX | LT | 10 | STAGE 2 |
| | 237+95 | EX | LT | 12 | STAGE 2 |
| | 238+55 | EX | LT | 18 | STAGE 2 |
| | 239+10 | EX | LT | 18 | STAGE 2 |
| | 239+50 | EX | LT | 14 | STAGE 2 |
| | 240+00 | EX | LT | 16 | STAGE 2 |
| | 240+50 | EX | LT | 16 | STAGE 2 |
| | 132+93 | NB | LT | 14 | |
| | 132+43 | NB | LT | 14 | |

CON'T ON RIGHT

TEMPORARY DITCH CHECKS (CON'T)

| CATEGORY | STATION | | LOCATION | 628.7504 LF | REMARKS |
|---|---|---|---|---|---|
| 0010 | 132+00 | NB | LT | 14 | |
| | 131+57 | NB | LT | 14 | |
| | 131+08 | NB | LT | 14 | |
| | 130+61 | NB | LT | 14 | |
| | 130+15 | NB | LT | 14 | |
| | 129+67 | NB | LT | 19 | |
| | 129+28 | NB | LT | 18 | |
| | 128+91 | NB | LT | 18 | |
| | 128+54 | NB | LT | 18 | |
| | 128+14 | NB | LT | 12 | |
| | 127+74 | NB | LT | 12 | |
| | 127+36 | NB | LT | 10 | |
| | 126+73 | NB | LT | 12 | |
| | 126+11 | NB | LT | 14 | |
| | 133+06 | NB | RT | 14 | |
| | 132+58 | NB | RT | 14 | |
| | 132+02 | NB | RT | 14 | |
| | 131+46 | NB | RT | 14 | |
| | 130+99 | NB | RT | 15 | |
| | 130+49 | NB | RT | 15 | |
| | 130+11 | NB | RT | 16 | |
| | 129+73 | NB | RT | 15 | |
| | 129+34 | NB | RT | 13 | |
| | 128+93 | NB | RT | 14 | |
| | 128+60 | NB | RT | 12 | |
| | 128+27 | NB | RT | 12 | |
| | 127+93 | NB | RT | 12 | |
| | 127+50 | NB | RT | 16 | |
| | 127+07 | NB | RT | 16 | |
| | 126+64 | NB | RT | 12 | |
| | 126+01 | NB | RT | 10 | |
| | 125+19 | NB | RT | 10 | |
| | 119+21 | NB | LT | 12 | |
| | 116+36 | NB | LT | 12 | |
| | 115+83 | NB | LT | 12 | |
| | 27+12 | EB | LT | 13 | |
| | 27+60 | EB | LT | 13 | |
| | 28+11 | EB | LT | 17 | |
| | 28+67 | EB | LT | 15 | |
| | 29+27 | EB | LT | 17 | |
| | 30+01 | EB | LT | 17 | |
| | 26+84 | EB | RT | 12 | |
| | 27+16 | EB | RT | 12 | |
| | 27+64 | EB | RT | 15 | |
| | 28+14 | EB | RT | 15 | |
| | 28+71 | EB | RT | 15 | |
| | 29+35 | EB | RT | 15 | |
| | 30+17 | EB | RT | 16 | |
| | 30+83 | EB | LT | 12 | |
| | 31+86 | EB | LT | 12 | |
| | 31+23 | EB | RT | 12 | |
| | 32+36 | EB | RT | 10 | |
| | 32+36 | EB | LT | 10 | |
| | 36+07 | EB | RT | 18 | |
| | 38+60 | EB | LT | 14 | |
| | | | TOTAL | 1,400 | |

3

PERMANENT SIGNING SUMMARY

| CATEGORY | SIGN NO. | APPROX. STA. | LOC. | SIGN CODE | SIGN MESSAGE | SIGN SIZE (W x H) IN | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH | 634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH | 634.0618 POSTS WOOD 4x6-INCH x 18-FT EACH | 634.0620 POSTS WOOD 4x6-INCH x 20-FT EACH | 634.0622 POSTS WOOD 4x6-INCH x 22-FT EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | | | | | | | | | | | | | | |
| | 1 - 01 | 33+22 EB | MEDIAN | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 03 | 33+35 EB | RT | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | |
| | 1 - 05 | 123+50 NB | MEDIAN | D1-1 | ONE DESTINATION (ARROW) | 66 x 30 | 13.75 | --- | 2 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 06 | 122+80 NB | LT | W4-2R | LANE REDUCTION TRANSITION SYMBOL - RIGHT | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 1 - 08 | 123+60 NB | MEDIAN | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 10 | 123+75 NB | RT | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | |
| | 1 - 11 | 35+15 EB | MEDIAN | D1-1 | ONE DESTINATION (ARROW) | 36 x 18 | 4.50 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 12 | 36+45 EB | RT | W1-4L | LEFT REVERSE CURVE | 30 x 30 | --- | 6.25 | --- | 1 | --- | --- | --- | |
| | 1 - 13 | 35+60 EB | MEDIAN | R4-7 | KEEP RIGHT | 24 x 30 | 5.00 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 15 | 35+15 EB | MEDIAN | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 16 | 35+15 EB | LT | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | |
| | 1 - 18 | 125+35 NB | MEDIAN | D1-1 | ONE DESTINATION (ARROW) | 42 x 30 | 8.75 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 19 | 126+25 NB | RT | W4-2R | LANE REDUCTION TRANSITION SYMBOL - RIGHT | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 1 - 20 | 125+50 NB | MEDIAN | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 22 | 125+70 NB | LT | R1-2 | YIELD | 36 x 31 | 3.88 | --- | 1 | --- | --- | --- | --- | |
| | 1 - 24 | 33+15 EB | MEDIAN | D1-1 | ONE DESTINATION (ARROW) | 42 x 30 | 8.75 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 1 - 25 | 32+30 EB | LT | M1-5A | COUNTY MARKER | 24 x 24 | 4.00 | --- | 1 | --- | --- | --- | --- | |
| | 1 - 26 | 124+27 NB | MEDIAN | R6-1R | ONE WAY RIGHT ARROW | 36 x 12 | 3.00 | --- | --- | --- | --- | --- | --- | INSTALL ABOVE SIGN 1-27 |
| | 1 - 27 | 124+27 NB | MEDIAN | R6-4B | ROUNDABOUT CHEVRON BANK | 60 x 24 | 10.00 | --- | 2 | --- | --- | --- | --- | 4-FT MOUNTING HEIGHT TO SURFACE OF THE TRUCK APRON |
| | 1 - 28 | 124+18 NB | MEDIAN | R6-1R | ONE WAY RIGHT ARROW | 36 x 12 | 3.00 | --- | --- | --- | --- | --- | --- | INSTALL ABOVE SIGN 1-29 |
| | 1 - 29 | 124+18 NB | MEDIAN | R6-4B | ROUNDABOUT CHEVRON BANK | 60 x 24 | 10.00 | --- | 2 | --- | --- | --- | --- | 4-FT MOUNTING HEIGHT TO SURFACE OF THE TRUCK APRON |
| | 1 - 30 | 124+63 NB | MEDIAN | R6-1R | ONE WAY RIGHT ARROW | 36 x 12 | 3.00 | --- | --- | --- | --- | --- | --- | INSTALL ABOVE SIGN 1-31 |
| | 1 - 31 | 124+63 NB | MEDIAN | R6-4B | ROUNDABOUT CHEVRON BANK | 60 x 24 | 10.00 | --- | 2 | --- | --- | --- | --- | 4-FT MOUNTING HEIGHT TO SURFACE OF THE TRUCK APRON |
| | 1 - 32 | 124+75 NB | MEDIAN | R6-1R | ONE WAY RIGHT ARROW | 36 x 12 | 3.00 | --- | --- | --- | --- | --- | --- | INSTALL ABOVE SIGN 1-33 |
| | 1 - 33 | 124+75 NB | MEDIAN | R6-4B | ROUNDABOUT CHEVRON BANK | 60 x 24 | 10.00 | --- | 2 | --- | --- | --- | --- | 4-FT MOUNTING HEIGHT TO SURFACE OF THE TRUCK APRON |
| | 2 - 01 | 26+50 EB | LT | W6-3 | TWOWAY TRAFFIC SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 2 - 02 | 27+50 EB | RT | D1-62 | ROUNDABOUT DESTINATION - DIRECTION SIGN | 126 x 66 | 57.75 | --- | --- | --- | --- | 2 | 1 | |
| | 2 - 03 | 29+85 EB | LT | R5-1 | DO NOT ENTER | 30 x 30 | 6.25 | --- | 1 | --- | --- | --- | --- | |
| | 2 - 04 | 29+85 EB | MEDIAN | R4-7 | KEEP RIGHT | 24 x 30 | 5.00 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 2 - 05 | 29+85 EB | MEDIAN | W5-54 | CLEARANCE MARKER WITH YELLOW TYPE F SHEETING | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW R4-7; 4-FT MOUNTING HEIGHT |
| | 2 - 06 | 30+90 EB | LT | R2-1 | SPEED LIMIT_ MPH | 24 x 30 | 5.00 | --- | --- | 1 | --- | --- | --- | |
| | 2 - 07 | --- | RT | W6-1 | DIVIDED HIGHWAY AHEAD SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | SEE PLAN SHEET FOR LOCATION |
| | 2 - 08 | 23+50 EB | RT | J1-1 | JUNCTION OR END ASSEMBLY | 24 x 39 | 6.50 | --- | --- | 1 | --- | --- | --- | |
| | 2 - 09 | 25+50 EB | RT | W2-6 | CIRCULAR INTERSECTION SIGN | 30 x 30 | --- | 6.25 | --- | --- | 1 | --- | --- | |
| | 2 - 10 | 25+50 EB | RT | W13-1 | ADVISORY SPEED PLATE (YELLOW BACK) | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 2-9 |
| | 3 - 01 | 126+90 NB | LT | R3-6R | ARROW RIGHT AND AHEAD | 42 x 48 | 14.00 | --- | --- | --- | --- | --- | --- | INSTALL ON S-13-599 |
| | 3 - 02 | 126+90 NB | LT | R3-6X | ARROW LEFT AND AHEAD (ROUNDABOUT) | 42 x 48 | 14.00 | --- | --- | --- | --- | --- | --- | INSTALL ON S-13-599 |
| | 3 - 03 | 127+40 NB | RT | J4-1 | REASSURANCE ASSEMBLY ( 1 HEADED ROUTE PANEL) | 24 x 36 | 6.00 | --- | --- | 1 | --- | --- | --- | |
| | 3 - 04 | 128+75 NB | RT | R2-1 | SPEED LIMIT_ MPH | 24 x 30 | 5.00 | --- | 1 | --- | --- | --- | --- | |
| | 3 - 05 | 128+75 NB | RT | R5-1 | DO NOT ENTER | 30 x 30 | 6.25 | --- | --- | --- | --- | --- | --- | INSTALL BACK-TO-BACK WITH SIGN 3-04 |
| | 3 - 06 | 128+80 NB | MEDIAN | R4-7 | KEEP RIGHT | 24 x 30 | 5.00 | --- | 1 | --- | --- | --- | --- | |
| | 3 - 07 | 128+80 NB | MEDIAN | W5-54 | CLEARANCE MARKER WITH YELLOW TYPE F SHEETING | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 3-6, 4-FT MOUNTING HEIGHT |
| | 3 - 08 | 130+75 NB | LT | D1-62 | ROUNDABOUT DESTINATION - DIRECTION SIGN | 102 x 78 | 55.25 | --- | --- | --- | --- | 1 | 1 | |
| | 3 - 09 | 132+75 NB | LT | W2-6 | CIRCULAR INTERSECTION SIGN | 30 x 30 | --- | 6.25 | --- | --- | 1 | --- | --- | |
| | 3 - 10 | 132+75 NB | LT | W13-1 | ADVISORY SPEED PLATE (YELLOW BACK) | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 3-9 |
| | 3 - 11 | 133+00 NB | RT | W6-3 | TWOWAY TRAFFIC SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 3 - 13 | 135+00 NB | RT | J13-1 | DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL) | 24 x 45 | 7.50 | --- | --- | --- | 1 | --- | --- | MR1-99 AND MR6-4 PLAQUES |
| | 3 - 14 | 135+00 NB | LT | J1-2 | JUNCTION OR END ASSEMBLY (2 HEADED PANEL) | 48 x 39 | 13.00 | --- | --- | 1 | --- | --- | --- | |
| | 3 - 15 | 138+00 NB | LT | W6-1 | DIVIDED HIGHWAY AHEAD SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | E3 - 02 | 130+50 NB | RT | I55-56 | ADOPTAHIGHWAY (SPONSOR) | --- x --- | --- | --- | --- | 1 | --- | --- | --- | MOVE EXISTING SIGN TO NEW POST |
| | 4 - 01 | 37+40 EB | RT | M1-5A | COUNTY MARKER | 24 x 24 | 4.00 | --- | --- | 1 | --- | --- | --- | |
| | 4 - 02 | 37+90 EB | RT | R2-1 | SPEED LIMIT_ MPH | 24 x 30 | 5.00 | --- | --- | 1 | --- | --- | --- | |
| | 4 - 03 | 39+50 EB | LT | W13-1 | ADVISORY SPEED PLATE (YELLOW BACK) | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 4-04 |
| | 4 - 04 | 39+50 EB | LT | W2-6 | CIRCULAR INTERSECTION SIGN | 30 x 30 | --- | 6.25 | --- | 1 | --- | --- | --- | |
| | 4 - 05 | 37+50 EB | LT | D1-62 | ROUNDABOUT DESTINATION - DIRECTION SIGN | 126 x 66 | 57.75 | --- | --- | --- | --- | 3 | --- | |
| | E1 - 05 | 37+40 EB | RT | I55-56 | ADOPTAHIGHWAY (SPONSOR) | 30 x 36 | 7.50 | --- | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 4-01 |
| | 5 - 01 | 116+80 NB | LT | W6-3 | TWOWAY TRAFFIC SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 5 - 02 | 117+25 NB | RT | R1-1 | STOP | 30 x 30 | 5.18 | --- | 1 | --- | --- | --- | --- | |
| | 5 - 03 | 120+40 NB | LT | R5-1 | DO NOT ENTER | 30 x 30 | 6.25 | --- | --- | 1 | --- | --- | --- | |
| | 5 - 04 | 120+40 NB | LT | R2-1 | SPEED LIMIT_ MPH | 24 x 30 | 5.00 | --- | --- | --- | --- | --- | --- | INSTALL BACK-TO-BACK WITH SIGN 5-03 |
| | 5 - 05 | 120+40 NB | MEDIAN | R4-7 | KEEP RIGHT | 24 x 30 | 5.00 | --- | 1 | --- | --- | --- | --- | BOX-OUT REQ'D |
| | 5 - 06 | 120+40 NB | MEDIAN | W5-54 | CLEARANCE MARKER WITH YELLOW TYPE F SHEETING | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW R4-7; 4-FT MOUNTING HEIGHT |
| | 5 - 07 | 121+75 NB | LT | J4-2 | REASSURANCE ASSEMBLY ( 2 HEADED ROUTE PANEL) | 48 x 36 | 12.00 | --- | --- | --- | --- | --- | --- | INSTALL ON PROPOSED LIGHT POLE |
| | 5 - 08 | 122+12 NB | RT | R3-6X | ARROW LEFT AND AHEAD (ROUNDABOUT) | 42 x 48 | 14.00 | --- | --- | --- | --- | --- | --- | INSTALL ON S-13-598 |
| | 5 - 09 | 122+12 NB | RT | R3-6R | ARROW RIGHT AND AHEAD | 42 x 48 | 14.00 | --- | --- | --- | --- | --- | --- | INSTALL ON S-13-598 |
| | 5 - 10 | 111+25 NB | RT | W6-1 | DIVIDED HIGHWAY AHEAD SYMBOL | 36 x 36 | --- | 9.00 | --- | --- | 1 | --- | --- | |
| | 5 - 11 | 113+25 NB | RT | J1-1 | JUNCTION OR END ASSEMBLY | 24 x 39 | 6.50 | --- | --- | 1 | --- | --- | --- | |
| | 5 - 12 | 115+50 NB | RT | W2-6 | CIRCULAR INTERSECTION SIGN | 30 x 30 | --- | 6.25 | --- | --- | 1 | --- | --- | |
| | 5 - 13 | 115+50 NB | RT | W13-1 | ADVISORY SPEED PLATE (YELLOW BACK) | 18 x 18 | --- | 2.25 | --- | --- | --- | --- | --- | INSTALL BELOW SIGN 5-12 |
| | 5 - 14 | 116+60 NB | RT | R2-1 | SPEED LIMIT_ MPH | 24 x 30 | 5.00 | --- | --- | 1 | --- | --- | --- | |
| | E5 - 03 | 118+40 NB | LT | I55-56 | ADOPTAHIGHWAY (SPONSOR) | --- x --- | --- | --- | --- | 1 | --- | --- | --- | MOVE EXISTING SIGN TO NEW POST |
| | 5 - 15 | 117+16 NB | RT | W1-6 | NIGHT ARROW ( SINGLE) | 48 x 24 | --- | 8.00 | --- | 1 | --- | --- | --- | |
| | 5 - 16 | 117+50 NB | RT | D1-62 | ROUNDABOUT DESTINATION - DIRECTION SIGN | 102 x 66 | 46.75 | --- | --- | --- | 1 | 1 | --- | |
| | | | | | TOTALS | | 528.18 | 127.00 | 29 | 14 | 13 | 7 | 2 | |

MOVING/REMOVING SIGN ITEMS

| CATEGORY | SIGN NUMBER | DESCRIPTION | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | E1-01 | US 51 DOUBLE ARROW, CTH B RIGHT | --- | 1 | 1 | |
| | E1-02 | US 51 SOUTH, CTH B | --- | 1 | 1 | |
| | E1-03 | CTH B LEFT, CTH AB RIGHT | --- | 1 | 1 | |
| | E1-04 | CTH AB | --- | 1 | 1 | |
| | E1-05 | ADOPT A HIGHWAY, THE WONG FAMILY CABIN | 1 | --- | 1 | MOVE EXISTING SIGNS TO BELOW SIGN 4-01 |
| | E1-06 | REVERSE CURVE LEFT | --- | 1 | 1 | |
| | E1-07 | US 51 DOUBLE ARROW | --- | 1 | 1 | |
| | E1-08 | CTH AB LEFT, CTH B AHEAD RIGHT | --- | 1 | 1 | |
| | E1-09 | CTH B | --- | 1 | 1 | |
| | E1-10 | STOP | --- | 1 | 1 | |
| | E1-11 | STOP | --- | 1 | 1 | |
| | E1-12 | DO NOT ENTER | --- | 1 | --- | EXISTING SIGN ON THE SAME POST AS STOP SIGN |
| | E1-13 | KEEP RIGHT | --- | 1 | 1 | |
| | E1-14 | DO NOT ENTER | --- | 1 | --- | EXISTING SIGN ON THE SAME POST AS STOP SIGN |
| | E1-15 | STOP | --- | 1 | 1 | |
| | E1-16 | STOP | --- | 1 | 1 | |
| | E2-01 | US 51 JUCTION | --- | 1 | 1 | |
| | E2-02 | STOP AHEAD | --- | 1 | 1 | |
| | E3-01 | US 51 NORTH | --- | 1 | 1 | |
| | E3-02 | ADOPT A HIGHWAY | 1 | --- | 1 | MOVE EXISTING SIGN TO PROPOSED POST |
| | E3-03 | CTH AB JUCTION, CTH B JUNCTION | --- | 1 | 1 | |
| | E3-04 | RUSTIC ROAD, DOUBLE ARROW | --- | 1 | 1 | |
| | E4-02 | STOP AHEAD | --- | 1 | 1 | |
| | E4-03 | SPEED LIMIT 30 | --- | 1 | 1 | |
| | E5-01 | STOP | --- | 1 | 1 | |
| | E5-02 | LEFT ARROW | --- | 1 | 1 | |
| | E5-03 | ADOPT A HIGHWAY | 1 | --- | 1 | MOVE EXISTING SIGN TO PROPOSED POST |
| | E5-04 | CTH B, ADVANCE TURN ARROW LEFT | --- | 1 | 1 | |
| | E5-05 | SPEED LIMIT 25 | --- | 1 | 1 | |
| | | TOTALS | 3 | 26 | 27 | |

TRAFFIC CONTROL SIGNS

| CATEGORY | LOCATION | 643.1000 FIXED MESSAGE SF |
|---|---|---|
| 0010 | DETOUR-DETAIL C | 21 |
| | DETOUR-DETAIL D | 45 |
| | TOTAL | 66 |

TRAFFIC CONTROL COVERING SIGNS

| CATEGORY | TRAFFIC CONTROL OPERATION | NO. OF CYCLES | NO. OF SIGNS | 643.0910 TYPE I EACH | NO. OF SIGNS | 643.0920 TYPE II EACH |
|---|---|---|---|---|---|---|
| 0010 | DETOUR | 1 | 2 | 2 | 10 | 10 |
| | TOTALS | | | 2 | | 10 |

TEMPORARY PAVEMENT MARKING ITEMS

| CATEGORY | STAGE | 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) LF | 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (DOUBLE YELLOW) LF | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) LF | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW) LF | 643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE) LF |
|---|---|---|---|---|---|---|
| 0010 | 2 | 2,689 | 2,058 | 1,444 | 2,441 | 13 |
| | SUBTOTALS | 2,689 | 2,058 | 1,444 | 2,441 | 13 |
| | 3 | 1,233 | 1,235 | 3,869 | 4,066 | 27 |
| | SUBTOTALS | 1,233 | 1,235 | 3,869 | 4,066 | 27 |
| | GRAND TOTALS | 3,922 | 3,293 | 5,313 | 6,507 | 40 |
| | ITEM TOTALS | 7,215 | | 11,820 | | 40 |

REMOVING PAVEMENT MARKING ITEMS

| CATEGORY | STAGE | STATION - STATION | 646.9000 MARKING REMOVAL LINE 4-INCH LF | 646.9100 MARKING REMOVAL LINE 8-INCH LF | 646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF |
|---|---|---|---|---|---|
| 0010 | 2 | 119+64 NB - 133+44 NB | --- | --- | 2,484 |
| | | 133+44 NB - 141+96 NB | 1,918 | 30 | --- |
| | | STAGE 2 SUBTOTALS | 1,918 | 30 | 2,484 |
| | 3 | 115+50 NB - 119+90 NB | 1,055 | --- | --- |
| | | STAGE 3 SUBTOTALS | 1,055 | --- | --- |
| | UNDISTRIBUTED | | 200 | --- | 150 |
| | TOTALS | | 3,173 | 30 | 2,634 |

## PAVEMENT MARKING ITEMS

| CATEGORY | STATION | - | STATION | LOCATION | 646.2020 MARKING LINE EPOXY 6-INCH (WHITE) LF | (YELLOW) LF | (WHITE, 3-FT SEG. 9-FT GAP) LF | (WHITE, 12.5-FT SEG. 37.5-FT GAP) LF | (DOUBLE YELLOW) LF | 646.4020 MARKING LINE EPOXY 10-INCH (WHITE) LF | (WHITE, 6-FT SEG. 3-FT GAP) LF | 646.5020 MARKING ARROW EPOXY EACH | 646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH (2-FT SEG. 2-FT GAP) LF | 646.6466 COLD WEATHER MARKING EPOXY 6-INCH LF | 646.6470 COLD WEATHER MARKING EPOXY 10-INCH LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF | (YELLOW) LF | 646.8120 MARKING CURB EPOXY (YELLOW) LF | 646.8220 MARKING ISLAND NOSE EPOXY EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 26+00 EB | - | 33+35 EB | RT/LT | 1,250 | 680 | 20 | --- | 1,400 | 30 | --- | --- | --- | --- | --- | 10 | 80 | 10 | 1 |
| | 35+07 EB | - | 39+51 EB | RT/LT | 730 | 100 | 20 | --- | 960 | 25 | --- | --- | --- | --- | --- | 8 | 20 | 10 | 1 |
| | 115+50 NB | - | 125+19 NB | RT/LT | 1,350 | 660 | 30 | 30 | 1,600 | 560 | 170 | 6 | 65 | 370 | 75 | 25 | 140 | 10 | 1 |
| | 125+19 NB | - | 142+00 NB | RT/LT | 2,800 | 700 | 45 | 45 | 3,400 | 350 | 20 | 2 | 25 | 700 | 35 | 20 | 90 | 10 | 1 |
| | | | | SUBTOTALS | 6,130 | 2,140 | 115 | 75 | 7,360 | 965 | 190 | 8 | 90 | 1,070 | 110 | 63 | 330 | 40 | 4 |
| | | | | TOTALS | | | 15,820 | | | | 1,155 | 8 | 90 | 1,070 | 110 | 393 | | 40 | 4 |

## CONSTRUCTION STAKING SUMMARY

| CATEGORY | STATION - STATION | LOCATION | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF |
|---|---|---|---|---|---|---|
| 0010 | 26+00 EB - 33+36 EB | LT/RT | 736 | 376 | 360 | 736 |
| | 35+07 EB - 39+51 EB | LT/RT | 444 | 346 | 98 | 444 |
| | 115+50 NB - 125+19 NB | LT/RT | 969 | 135 | 834 | 969 |
| | 125+19 NB - 133+44 NB | LT/RT | 825 | 711 | 195 | 825 |
| | STAGE 1 (TEMPORARY PAVEMENT) | RT | --- | 1,765 | --- | 1,765 |
| | STAGE 2 (TEMPORARY PAVEMENT) | LT | --- | 1,180 | --- | 2,350 |
| | | TOTALS | 2,974 | 4,513 | 1,487 | 7,089 |

## SAWING EXISTING PAVEMENT

| CATEGORY | STAGE | 690.0150 SAWING ASPHALT LF | 690.0250 SAWING CONCRETE LF |
|---|---|---|---|
| 0010 | 1 | --- | 155 |
| | 2 | 24 | 1,212 |
| | 3 | 113 | 40 |
| | 4 | 960 | --- |
| | TOTALS | 1,097 | 1,407 |

## LIGHTING PULL BOX SUMMARY

| CATEGORY | PULL BOX NO. | STATION | LOCATION | 653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH |
|---|---|---|---|---|
| 0010 | LPB-1 | 35+96 WB | 31.5'LT | 1 |
| | LPB-2 | 35+98 EB | 29.1'RT | 1 |
| | LPB-3 | 122+92 NB | 52.7'RT | 1 |
| | LPB-4 | 122+47 NB | 62.1'RT | 1 |
| | LPB-5 | 121+09 NB | 43.6'RT | 1 |
| | LPB-6 | 122+95 SB | 40.0'LT | 1 |
| | LPB-7 | 32+23 EB | 25.3'RT | 1 |
| | LPB-8 | 32+23 WB | 29.3'LT | 1 |
| | LPB-9 | 128+06 SB | 35.8'LT | 1 |
| | LPB-10 | 122+90 NB | 8.3'LT | 1 |
| | LPB-11 | 125+66 SB | 50.2'LT | 1 |
| | LPB-12 | 125+73 NB | 16.0'LT | 1 |
| | LPB-13 | 125+65 NB | 42.1'RT | 1 |
| | | | TOTAL | 13 |

## LIGHTING CONDUIT SUMMARY

| CATEGORY | EQUIP. LOCATION FROM | TO | 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF |
|---|---|---|---|---|
| 0010 | LC-1 | LPB-4 | -- | 45 |
| | LC-1 | LPB-3 | -- | 63 |
| | LPB-4 | LPB-5 | 144 | -- |
| | LPB-5 | L-05 | 81 | -- |
| | LPB-3 | L-04 | 20 | -- |
| | L-04 | L-03 | 67 | -- |
| | L-03 | LPB-2 | 83 | -- |
| | LPB-2 | LPB-1 | -- | 134 |
| | LPB-1 | L-02 | 105 | -- |
| | LBP-1 | L-01 | 36 | -- |
| | L-01 | L-15 | 138 | -- |
| | L-15 | LPB-13 | 23 | -- |
| | LPB-13 | L-14 | 129 | |
| | LPB-3 | LPB-10 | -- | 120 |
| | LPB-10 | LPB-6 | | 100 |
| | LPB-6 | L-06 | 120 | -- |
| | LPB-6 | L-07 | 112 | -- |
| | L-07 | L-08 | 68 | -- |
| | L-08 | LPB-7 | 54 | -- |
| | LPB-7 | L-09 | 228 | -- |
| | LPB-7 | LPB-8 | -- | 134 |
| | LPB-8 | L-10 | 87 | -- |
| | LPB-8 | L-11 | 100 | -- |
| | L-11 | LPB-11 | 47 | -- |
| | LPB-11 | L-12 | 17 | |
| | L-12 | LPB-9 | 202 | -- |
| | LPB-9 | L-13 | 41 | -- |
| | LPB-11 | LPB-12 | -- | 132 |
| | LPB-12 | LPB-13 | -- | 116 |
| | | TOTALS | 1,902 | 844 |

ELECTRICAL WIRE LIGHTING-SYSTEM GROUNDING CONDUCTOR

| | EQUIP. LOCATION | | *655.0610 12 AWG |
|---|---|---|---|
| CATEGORY | FROM | TO | LF |
| 0010 | LC-1 | LPB-3 | 112 |
| | LC-1 | LPB-4 | 30 |
| | LPB-4 | LPB-5 | 159 |
| | LPB-5 | L-05 | 84 |
| | LPB-3 | L-04 | 23 |
| | L-04 | L-03 | 70 |
| | L-03 | LPB-2 | 98 |
| | LPB-2 | LPB-1 | 82 |
| | LPB-1 | L-02 | 108 |
| | LPB-1 | L-01 | 78 |
| | L-01 | L-15 | 141 |
| | L-15 | LPB-13 | 38 |
| | LPB-13 | L-14 | 132 |
| | LPB-3 | LPB-10 | 75 |
| | LPB-10 | LPB-6 | 65 |
| | LPB-6 | L-06 | 246 |
| | LPB-6 | L-07 | 115 |
| | L-07 | L-08 | 71 |
| | L-08 | LPB-7 | 138 |
| | LPB-7 | L-09 | 462 |
| | LPB-7 | LPB-8 | 82 |
| | LPB-8 | L-10 | 180 |
| | LPB-8 | L-11 | 103 |
| | L-11 | LPB-11 | 62 |
| | LPB-11 | L-12 | 20 |
| | L-12 | LPB-9 | 217 |
| | LPB-9 | L-13 | 44 |
| | | TOTAL | 3,035 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ELECTRICAL WIRE LIGHTING

| | EQUIP. LOCATION | | *655.0610 12 AWG |
|---|---|---|---|
| CATEGORY | FROM | TO | LF |
| 0010 | LC-1 | L-04 | 158 |
| | L-04 | L-01 | 578 |
| | L-01 | L-14 | 622 |
| | L-04 | L-06 | 602 |
| | L-06 | L-08 | 642 |
| | L-08 | L-10 | 488 |
| | L-10 | L-12 | 574 |
| | LC-1 | L-03 | 292 |
| | L-03 | L-02 | 582 |
| | L-02 | L-15 | 600 |
| | LC-1 | L-07 | 622 |
| | L-07 | L-09 | 742 |
| | L-09 | L-11 | 862 |
| | L-11 | L-13 | 686 |
| | LC-1 | L-05 | 586 |
| | | TOTAL | 8,636 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

STREET LIGHTING SUMMARY (POLE LUMINAIRE)

| | | | | 654.0105 | *655.0610 | | 657.0322 | 657.0710 | 659.1120 | 657.0255 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CONCRETE BASES | ELECTRICAL WIRE LIGHTING | | POLES | LUMINAIRE ARMS | LUMINAIRES | TRANSFORMER BASES |
| | LIGHT | | | TYPE 5 | 12 AWG | 12 AWG (GROUND) | TYPE 5- ALUMINUM | TRUSS TYPE 4 1/2 INCH CLAMP 12-FT | UTILITY LED B | BREAKAWAY 11 1/2-INCH BOLT CIRCLE |
| CATEGORY | NO. | STATION | LOCATION | EACH | LF | LF | EACH | EACH | EACH | EACH |
| 0010 | L-01 | 35+60.94 WB | 31.47' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-02 | 37+07.27 EB | 32.18' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-03 | 35+17.09 EB | 45.39' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-04 | 123+20.40 NB | 44.35' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-05 | 120+30.62 NB | 39.38' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-06 | 121+72.59 SB | 43.56' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-07 | 123+90.43 SB | 50.97' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-08 | 124+32.91 SB | 103.77' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-09 | 30+03.18 EB | 31.84' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-10 | 31+31.33 WB | 33.49' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-11 | 33+22.69 WB | 43.82' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-12 | 125+91.29 SB | 44.11' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-13 | 128+47.06 SB | 36.99' LT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-14 | 126+95.80 NB | 43.56' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | L-15 | 125+41.97 NB | 41.13' RT | 1 | 90 | 45 | 1 | 1 | 1 | 1 |
| | | | SUBTOTALS | | 1,350 | 675 | | | | |
| | | | TOTALS | 15 | 2,025 | | 15 | 15 | 15 | 15 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

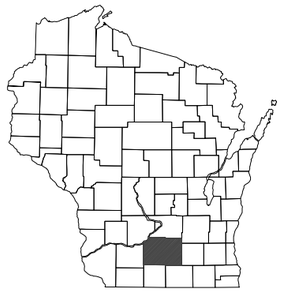
LIGHTING CONTROL SUMMARY

| | | | | 659.2130 | 654.0230 | 656.0201.01 |
|---|---|---|---|---|---|---|
| | CABINET | | | LIGHTING CONTROL CABINETS 120/240 30-INCH | CONCRETE CONTROL CABINET BASES TYPE L30 | ELECTRICAL SERVICE METER BREAKER PEDESTAL |
| CATEGORY | NO. | STATION | LOCATION | EACH | EACH | EACH |
| 0010 | LC-1 | 122+62.07 NB | 63.31' RT | 1 | 1 | 1 |

SANITARY SEWER SUMMARY

| | | SPV.0060.01 CONNECT TO EXISTING SANITARY SEWER MANHOLE | SPV.0060.02 CONNECT TO EXISTING SANITARY SEWER LATERAL | SPV.0060.03 REMOVE EXISTING SANTIARY SEWER MANHOLE | SPV.0060.04 CONSTRUCTION STAKING SANITARY SEWER | SPV.0090.01 CASING PIPE, POLYVINYL CHLORIDE (PVC), SDR 35, 10-INCH | SPV.0090.02 SANITARY SEWER LATERAL 4-INCH | SPV.0090.03 ABANDON EXISTING SANITARY SEWER |
|---|---|---|---|---|---|---|---|---|
| CATEGORY | STATION | EACH | EACH | EACH | EACH | LF | LF | LF |
| 0020 | 120+00 NB | --- | 1 | 3 | --- | 78 | 125 | 164 |
| | SUBTOTALS | --- | 1 | 3 | --- | 78 | 125 | 164 |
| 0030 | 120+00 NB | 1 | --- | --- | 2 | 22 | 100 | 100 |
| | SUBTOTALS | 1 | --- | --- | 2 | 22 | 100 | 100 |
| | TOTALS | 1 | 1 | 3 | 2 | 100 | 225 | 264 |

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION
# TRANSPORTATION PROJECT PLAT TITLE SHEET
# 5845-01-20
## STOUGHTON - MADISON
### CTH B / CTH AB INTERSECTION
## USH 51
## DANE



## CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (3/4-INCH CAPPED REBAR UNLESS NOTED) IP
OFF-PREMISE SIGN

| | COMPENSABLE | NON-COMPENSABLE |
|---|---|---|
| ELECTRIC POLE | | |
| TELEPHONE POLE | | |
| PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.) | | |

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25 — UTILITY NUMBER 40
PARALLEL OFFSETS

## CONVENTIONAL ABBREVIATIONS

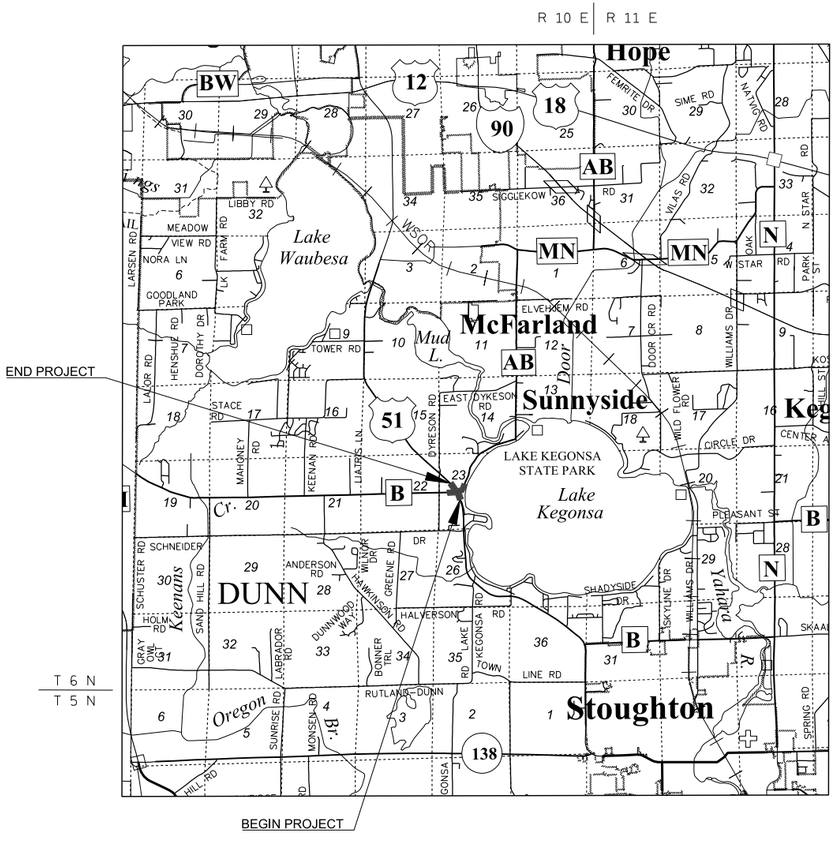
| | | | |
|---|---|---|---|
| ACCESS RIGHTS | AR | POINT OF INTERSECTION | PI |
| ACRES | AC | PROPERTY LINE | PL |
| AHEAD | AH | RECORDED AS | (100') |
| ALUMINUM | ALUM | REEL / IMAGE | R/I |
| AND OTHERS | ET AL | REFERENCE LINE | R/L |
| BACK | BK | REMAINING | REM |
| BLOCK | BLK | RESTRICTIVE DEVELOPMENT EASEMENT | RDE |
| CENTERLINE | C/L | RIGHT | RT |
| CERTIFIED SURVEY MAP | CSM | RIGHT OF WAY | R/W |
| CONCRETE | CONC | SECTION | SEC |
| COUNTY | CO | SEPTIC VENT | SEPV |
| COUNTY TRUNK HIGHWAY | CTH | SQUARE FEET | SF |
| DISTANCE | DIST | STATE TRUNK HIGHWAY | STH |
| CORNER | COR | STATION | STA |
| DOCUMENT NUMBER | DOC | TELEPHONE PEDESTAL | TP |
| EASEMENT | EASE | TEMPORARY LIMITED EASEMENT | TLE |
| EXISTING | EX | TRANSPORTATION PROJECT PLAT | TPP |
| GAS VALVE | GV | UNITED STATES HIGHWAY | USH |
| GRID NORTH | GN | VOLUME | V |
| HIGHWAY EASEMENT | HE | | |
| IDENTIFICATION | ID | | |
| LAND CONTRACT | LC | | |
| LEFT | LT | | |
| MONUMENT | MON | | |
| NATIONAL GEODETIC SURVEY | NGS | | |
| NUMBER | NO | | |
| OUTLOT | OL | | |
| PAGE | P | | |
| POINT OF TANGENCY | PT | | |
| PERMANENT LIMITED EASEMENT | PLE | | |
| POINT OF BEGINNING | POB | | |
| POINT OF CURVATURE | PC | | |
| POINT OF COMPOUND CURVE | PCC | | |

## CURVE DATA

| | |
|---|---|
| LONG CHORD | LCH |
| LONG CHORD BEARING | LCB |
| RADIUS | R |
| DEGREE OF CURVE | D |
| CENTRAL ANGLE | Δ/DELTA |
| LENGTH OF CURVE | L |
| TANGENT | T |
| DIRECTION AHEAD | DA |
| DIRECTION BACK | DB |

## CONVENTIONAL UTILITY SYMBOLS

| | |
|---|---|
| W | WATER |
| G | GAS |
| T | TELEPHONE |
| OH | OVERHEAD TRANSMISSION LINES |
| E | ELECTRIC |
| TV | CABLE TELEVISION |
| FO | FIBER OPTIC |
| FM | FORCE MAIN |
| SAN | SANITARY SEWER |
| SS | STORM SEWER |




LAYOUT
SCALE 0 1 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5845-01-20.

## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83(2011 ), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON AND THE DANE COUNTY HIGHWAY DEPARTMENT.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 5845-01-20-4.01
SHEET 2 OF 3



FILE NAME : S:\MAD\1000--1099\1089\466\DRAWINGS\CAD\58450100\RW\DWG\040101_RT.DWG
LAYOUT NAME: 040101_rt
PLOT DATE : 11/15/2021 8:22 AM PLOT BY : BARTELT, HEATHER PLOT NAME : _____
APPRAISAL PLAT DATE : 11/4/21
USH 51 5845-01-20-4.01

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20-4.01 AMENDMENT NO: 1

ADDS PARCEL 5 AND AMENDS PARCEL 7 AND AMENDS PARCELS 12 AND 16 AND AMENDS PARCEL 9 AND REMOVES PARCELS 13 AND 14 AND AMENDS UTILITY NUMBER 101 OF TRANSPORTATION PROJECT PLAT 5845-01-20-4.01 RECORDED AS DOCUMENT NUMBER 5789446 AT THE DANE COUNTY REGISTER OF DEEDS.

THAT PART OF LOT 1 OF CSM 8334 AND OTHER LANDS LOCATED IN GOVERNMENT LOT 2 AND THAT PART OF GOVERNMENT LOT 3, ALL IN SECTION 23, T 6 N, R 10 E, TOWN OF DUNN, DANE COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNERS | INTERESTS REQUIRED | R/W S.F REQUIRED NEW | S.F REQUIRED EXISTING | S.F REQUIRED TOTAL | TLE S.F. |
|---|---|---|---|---|---|---|
| 1 | R & R FARMS, INC. | FEE,TLE | 6235 | --- | 6235 | 1157 |
| 2 | MICHAEL C. HALL & DIANE M. HALL | TLE | --- | --- | --- | 1997 |
| 3 | JAMES THOMAS BARBER REVOCABLE TRUST | FEE,TLE | --- | 2134 | 2134 | 1499 |
| 4 | JOHN D. OLSEN. & ANISHA S.B. OLSEN | FEE,TLE | 139 | 2155 | 2294 | 2021 |
| 5 | JOSEPH A. & ELIZABETH C. SEMERLING | FEE,TLE | 229 | --- | 229 | 2038 |
| 6 | DOUGLAS JOHNSON & MARLYS JOHNSON | FEE,TLE | 353 | 1690 | 2043 | 2086 |
| 7 | KEGONSA JOINT SANITARY DISTRICT | FEE,TLE | 5446 | 13239 | 18685 | 9631 |
| 8 | DOROTHY E. SCHUMANN | FEE,TLE | 3521 | --- | 3521 | 615 |
| 9 | TAMRA L. MCMAHON | FEE | 3988 | --- | 3988 | --- |
| 11 | ANNE K. DEGREVE & JASON R. FRUIT | FEE | 8601 | --- | 8601 | --- |
| 12 | NICHOLAS D. WEISENSEL & JAMIE WEISENSEL | FEE | 11547 | --- | 11547 | --- |
| 16 | RICHARD J. THOMPSON | FEE | 4182 | --- | 4182 | --- |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTERESTS REQUIRED |
|---|---|---|
| 100 | KEGONSA SANITARY DISTRICT | RELEASE OF RIGHTS |
| 101 | ALLIANT ENERGY - GAS | RELEASE OF RIGHTS |
| 103 | AT&T WISCONSIN | RELEASE OF RIGHTS |
| 104 | FRONTIER COMMUNICATIONS | RELEASE OF RIGHTS |

### R/W COURSE TABLE

| COURSE | BEARING | DISTANCE |
|---|---|---|
| 101-140 | N21° 01' 57"W | 41.48' |
| 120-141 | S01° 02' 04"W | 81.20' |
| 141-142 | S25° 41' 22"E | 90.87' |
| 142-143 | N64° 18' 38"E | 31.02' |
| 143-121 | S23° 45' 53"E | 32.45' |
| 121-122 | S17° 10' 24"E | 81.38' |
| 122-123 | S36° 34' 03"W | 49.68' |
| 123-124 | S19° 59' 05"E | 53.71' |
| 124-125 | S17° 48' 18"E | 96.23' |
| 125-126 | S22° 19' 21"E | 24.16' |
| 126-127 | S68° 38' 43"W | 2.00' |


**STRAND ASSOCIATES, INC.** ®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843


I, HEATHER S. BARTELT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

SIGNATURE: Heather Bartelt DATE: 6/13/22
PRINT NAME: HEATHER S. BARTELT
REGISTRATION NUMBER: S-2797

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Cory Schlagel DATE: 6/13/22
PRINT NAME: CORY SCHLAGEL

SCALE, FEET 0 50 100

PLAT OF SURVEY 2017-00271 BY:PAUL SPETZ DATED: 4/26/2017

PLAT OF SURVEY 12113L BY: GEORGE WEIR DATED: 12/18/92

PLAT OF SURVEY 95-0708 BY: BIRRENKOTT DATED: 8/21/95

PLAT OF SURVEY 7921L BY: GEORGE WEIR DATED: 3/14/73

40' INGRESS/EGRESS EASEMENT SHOWN ON PLAT OF SURVEY BY GEORGE WEIR DATED: 12/18/92

EXISTING ACCESS CONTROL BASED ON CHAPTER 79 OF THE DANE COUNTY CODE OF ORDINANCES.

(100) KEGONSA SANITARY DISTRICT V.12164, P.46, DOC. 2113049 PARCEL 8
KEGONSA SANITARY DISTRICT V.11075 P.49, DOC. 2065654 PARCEL 2
KEGONSA SANITARY DISTRICT V.12164, P.45, DOC. 2113048 PARCEL 9
KEGONSA SANITARY DISTRICT V.11201 P.8, DOC. 2071150 PARCEL 3
KEGONSA SANITARY DISTRICT V.11077 P.33, DOC. 2065834 PARCEL 4
KEGONSA SANITARY DISTRICT V.11075 P.95, DOC. 2065700 PARCEL 6

(101) ALLIANT ENERGY - GAS (WISCONSIN POWER & LIGHT) V.397, P.304, DOC. 1082338 PARCELS 5 & 7
ALLIANT ENERGY - GAS (WISCONSIN POWER & LIGHT) V.397, P.324, DOC. 1082348 PARCEL 3
ALLIANT ENERGY - GAS (WISCONSIN POWER & LIGHT) V.397, P.308, DOC. 1082340 PARCEL 4
ALLIANT ENERGY - GAS (WISCONSIN POWER & LIGHT) V.397, P.306 DOC. 1082339 PARCEL 6

(101) ALLIANT ENERGY - GAS NO RECORDED EASEMENT PARCEL 2

(103) AT&T WISCONSIN NO RECORDED EASEMENT PARCELS 6 & 7

(104) FRONTIER COMMUNICATIONS NO RECORDED EASEMENT PARCELS 11 & 12

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT # 5842355
06/21/2022 11:42 AM
Trans Fee:
Exempt #:
Rec. Fee: 25.00
Pages:
**The above recording information verifies that this document has been electronically recorded and returned to the submitter.**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5845-01-20-4.01
SHEET 1 OF 2
AMENDMENT NO: 1

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS IN DANE COUNTY AS DOCUMENT 5789446.

SEE SHEET 2 OF 2 FOR STATION/OFFSET TABLES, ALIGNMENT DATA, AND NOTES.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOUND IRON PINS ARE 3/4" CAPPED REBARS UNLESS OTHERWISE NOTED.

QUARTER LINE BEARING BASED ON BEST FIT OF IRONS FOUND FROM CSM 10246 AND PLAT OF SURVEY 12113L BY GEORGE WEIR DATED 12/18/92.

ALL NEW RIGHT-OF-WAY MONUMENTS WIL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

R-10-E | R-11-E






FILE NAME : S:\MAD\1000--1099\1089\466\DRAWINGS\CAD\58450100\RW\DWG\040101_RP.DWG
APPRAISAL PLAT DATE : 6/13/22
PLOT DATE : 6/13/2022 9:29 AM
PLOT BY : BARTELT, HEATHER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
USH 51
5845-01-20-4.01 A1

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20-4.01 AMENDMENT NO: 1
# EXTENSION SHEET

ADDS PARCEL 5 AND AMENDS PARCEL 7 AND AMENDS PARCELS 12 AND 16 AND AMENDS PARCEL 9 AND REMOVES PARCELS 13 AND 14 AND AMENDS UTILITY NUMBER 101 OF TRANSPORTATION PROJECT PLAT 5845-01-20-4.01 RECORDED AS DOCUMENT NUMBER 5789446 AT THE DANE COUNTY REGISTER OF DEEDS.

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

PI STA = 292+28.47
Y = 443102.129
X = 848617.546
DELTA = 21°39'51" LT
D = 1°39'20"
T = 662.22'
L = 1308.61'
R = 3460.92'
PC STA = 285+66.25
PT STA = 298+74.86
DB = N00°52'31"E

ALIGNMENT SUB-CURVE
PC 285+66.25 TO STA. 296+34.77
R=3460.92'
L=1068.52'
LCH=1064.28'
LCB= N7° 58' 10"W

ALIGNMENT SUB-CURVE
STA. 296+34.77 TO PT 298+74.86
R=3460.92'
L=240.09'
LCH=240.05'
LCB=N18° 48' 06"W

PI STA = 307+49.33
Y = 444538.761
X = 848072.136
DELTA = 26°31'11" LT
D = 2°00'00"
T = 675.09'
L = 1325.99'
R = 2864.79'
PC STA = 300+74.24
PT STA = 314+00.23
DA = N47°18'32"W

ALIGNMENT SUB-CURVE
PC 300+74.24 TO STA. 309+54.08
R=2864.79'
L=879.84'
LCH=876.38'
LCB=N29° 35' 15"W

ALIGNMENT SUB-CURVE
PC 300+74.24 TO STA. 304+50.53
R=2864.79'
L=376.29'
LCH=376.02'
LCB=N24° 33' 07"W

ALIGNMENT SUB-CURVE
STA. 304+50.53 TO STA. 309+54.08
R=2864.79'
L=503.55'
LCH=502.90'
LCB=N33° 21' 01"W

ALIGNMENT SUB-CURVE
STA. 309+54.08 TO PT 314+00.23
R=2864.79'
L=446.15'
LCH=445.70'
LCB=N42° 50' 50"W

PI STA = 31+37.15 AB
Y = 444234.697
X = 847849.939
DELTA = 17°59'08" LT
D = 11°27'33"
T = 79.13'
L = 156.95'
R = 500.00'
PC STA = 30+58.02 AB
PT STA = 32+14.97 AB
DB = S89°21'37"E

ALIGNMENT SUB-CURVE
PC 30+58.02 AB TO STA. 31+89.96 AB
R=500.00'
L=131.94'
LCH=131.56'
LCB=N83° 04' 48"E

ALIGNMENT SUB-CURVE
STA. 31+89.96 AB TO PT 32+14.97 AB
R=500.00'
L=25.01'
LCH=25.01'
LCB=N74° 05' 14"E

PI STA = 32+92.87 AB
Y = 444281.513
X = 847999.823
DELTA = 40°31'03" RT
D = 49°23'34"
T = 42.81'
L = 82.03'
R = 116.00'
PC STA = 32+50.06 AB
PT/PI STA = 33+32.09 AB
DA = S66°49'42"E

PT/PI STA = 33+32.09 AB
Y = 444264.666
X = 848039.184
DELTA = 33°45'26" LT

PI STA = 35+09.13 AB
Y = 444297.190
X = 848213.217
DELTA = 1°43'49" RT

PI STA = 38+87.92 AB
Y = 444355.501
X = 848587.493
DELTA = 71°40'47" LT
D = 20°27'46"
T = 202.24'
L = 350.29'
R = 280.00'
PC STA = 36+85.68 AB
PT STA = 40+35.98 AB

PI STA = 42+28.68 AB
Y = 444745.066
X = 848652.438
DELTA = 13°55'23" RT
D = 6°21'58"
T = 109.89'
L = 218.70'
R = 900.00'
PC STA = 41+18.79 AB
PT STA = 43+37.49 AB
DA = N23°23'16"E

ALIGNMENT SUB-CURVE
PC 41+18.79 AB TO STA. 41+58.03 AB
R=900.00'
L=39.24'
LCH=39.24'
LCB=N10° 42' 50"E

ALIGNMENT SUB-CURVE
STA. 41+58.03 AB TO PT 43+37.49 AB
R=900.00'
L=179.46'
LCH=179.16'
LCB=N17° 40' 32"E

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS IN DANE COUNTY AS DOCUMENT 5789446.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON AND THE DANE COUNTY HIGHWAY DEPARTMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY ON USH 51 BASED ON PREVIOUS PROJECT: 450-A, 5845-00-21 & 5845-01-21, PLAT OF SURVEY 7921L, AND PLAT OF SURVEY 95-0708.

EXISTING HIGHWAY RIGHT-OF-WAY ON CTH AB BASED ON PREVIOUS PROJECT: 5845-00-21 & 5845-01-21 AND WASHINGTON PARK.

EXISTING HIGHWAY RIGHT-OF-WAY ON CTH B BASED ON PREVIOUS PROJECT: 5845-00-21, 5845-01-21, AND CSM 8334

EXISTING ACCESS CONTROL ALONG USH 51 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT: 5845-00-21 & 5845-01-21.

EXISTING ACCESS CONTROL ALONG CTH B AND CTH AB BASED ON PREVIOUS PROJECT: 5845-00-21, 5845-01-21, CSM 8334, AND CHAPTER 79 OF THE DANE COUNTY CODE OF ORDINANCES.

R/W STATION, OFFSET & COORDINATE TABLE

| POINT | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 100 | 31+89.96 AB | 0.00' | 444251.431 | 847901.416 |
| 101 | 31+76.77 AB | -28.97' | 444276.531 | 847882.100 |
| 102 | 306+48.51 | -97.96 ' | 444368.249 | 847972.819 |
| 103 | 308+47.43 | -75.31 ' | 444540.390 | 847882.947 |
| 104 | 309+51.39 | -74.82 ' | 444621.220 | 847822.004 |
| 105 | 309+54.08 | 0.00 ' | 444669.729 | 847879.030 |
| 106 | 309+56.30 | 65.06 ' | 444711.907 | 847928.612 |
| 107 | 307+12.07 | 92.58 ' | 444525.076 | 848098.279 |
| 108 | 305+44.52 | 137.40 ' | 444400.749 | 848228.322 |
| 109 | 36+40.00 AB | -52.98' | 444369.681 | 848334.369 |
| 110 | 37+21.82 AB | -50.32' | 444380.522 | 848408.833 |
| 111 | 39+23.78 AB | -51.35' | 444478.435 | 848537.566 |
| 112 | 41+24.51 AB | -34.45' | 444648.194 | 848601.378 |
| 113 | 41+66.15 AB | -33.81' | 444690.468 | 848610.370 |
| 114 | 41+58.03 AB | 0.00' | 444675.224 | 848641.662 |
| 115 | 41+50.00 AB | 31.04' | 444661.199 | 848670.453 |
| 116 | 38+26.87 AB | 158.09' | 444254.624 | 848612.743 |
| 117 | 38+05.08 AB | 134.92' | 444254.183 | 848572.287 |
| 118 | 37+92.03 AB | 158.67' | 444223.517 | 848567.977 |
| 119 | 37+88.51 AB | 166.69' | 444213.783 | 848567.206 |
| 120 | 303+63.30 | 91.76 ' | 444213.279 | 848277.771 |
| 121 | 301+73.33 | 88.66 ' | 444033.953 | 848356.732 |
| 122 | 300+94.58 | 81.84 ' | 443956.204 | 848380.759 |
| 123 | 300+68.36 | 39.93 ' | 443916.301 | 848351.161 |
| 124 | 300+14.66 | 39.18 ' | 443865.825 | 848369.517 |
| 125 | 299+18.55 | 34.17 ' | 443774.202 | 848398.943 |
| 126 | 298+94.40 | 34.81 ' | 443751.851 | 848408.120 |
| 127 | 298+94.38 | 32.81 ' | 443751.123 | 848406.257 |
| 128 | 298+50.54 | 33.08 ' | 443709.979 | 848422.073 |
| 129 | 297+19.10 | 61.97 ' | 443593.780 | 848493.363 |
| 130 | 296+34.77 | 0.00 ' | 443493.990 | 848459.873 |
| 131 | 295+44.66 | -61.66 ' | 443391.114 | 848425.348 |
| 132 | 295+58.24 | -59.93 ' | 443404.431 | 848423.465 |
| 133 | 297+25.06 | -50.43 ' | 443564.224 | 848384.751 |
| 134 | 300+22.47 | -70.76 ' | 443834.111 | 848263.962 |
| 135 | 301+72.72 | -92.44 ' | 443963.317 | 848189.973 |
| 136 | 303+10.45 | -102.65 ' | 444080.535 | 848126.263 |
| 137 | 304+50.80 | -156.25 ' | 444175.756 | 848017.821 |
| 138 | 32+10.91 AB | 55.00' | 444204.464 | 847937.560 |
| 140 | 31+70.00 AB | -70.00' | 444315.249 | 847867.212 |
| 141 | 302+92.70 | 55.03' | 444132.096 | 848276.305 |
| 142 | 302+03.60 | 57.28' | 444050.208 | 848315.697 |
| 143 | 302+04.81 | 88.28' | 444063.655 | 848343.653 |

TLE STATION & OFFSET TABLE

| POINT | STATION | OFFSET |
|---|---|---|
| TLE100 | 295+79.66 | -64.89' |
| TLE101 | 297+65.75 | -54.19' |
| TLE102 | 300+71.51 | -78.54' |
| TLE103 | 300+73.14 | -82.96' |
| TLE104 | 302+03.64 | -101.43' |
| TLE105 | 302+00.87 | -95.05' |
| TLE115 | 301+95.18 | 96.23' |
| TLE116 | 301+52.76 | 92.91' |
| TLE117 | 301+34.17 | 187.92' |
| TLE118 | 300+90.69 | 186.28' |
| TLE119 | 301+05.01 | 82.61' |
| TLE120 | 299+62.60 | 76.85' |
| TLE121 | 299+05.39 | 57.02' |
| TLE122 | 297+95.31 | 57.45' |
| TLE123 | 297+83.66 | 72.73' |
| TLE126 | 301+75.07 | 267.32' |
| TLE127 | 301+59.39 | 300.88' |
| TLE128 | 301+40.15 | 290.15' |
| TLE129 | 301+47.52 | 271.77' |

FOUND IRON COORDINATE TABLE

| POINT | NORTHING | EASTING |
|---|---|---|
| 2001 | 444213.209 | 848237.287 |
| 2005 | 444364.889 | 848300.951 |
| 2006 | 444351.549 | 848209.818 |
| 2007 | 444678.333 | 847778.966 |
| 2009 | 444278.167 | 847881.432 |
| 2010 | 444210.912 | 847932.598 |
| 2011 | 444199.930 | 848057.769 |
| 2012 | 444124.397 | 848148.307 |
| 2013 | 443693.710 | 848353.402 |
| 2039 | 443830.008 | 848382.265 |
| 2043 | 443881.853 | 848540.911 |
| 2044 | 443931.606 | 848544.781 |
| 2045 | 443991.823 | 848549.573 |
| 2046 | 444087.600 | 848597.222 |
| 2047 | 444219.149 | 848607.756 |
| 2048 | 444358.496 | 848627.344 |
| 2049 | 444441.470 | 848639.221 |
| 2050 | 444510.935 | 848649.055 |
| 2051 | 444554.353 | 848655.347 |
| 2052 | 444619.632 | 848664.369 |
| 2053 | 444685.004 | 848673.937 |
| 10051 | 443986.740 | 848214.099 |
| 10052 | 443988.981 | 848212.562 |
| 10053 | 444087.167 | 848166.496 |
| 10055 | 443877.467 | 848264.989 |
| 10059 | 443986.482 | 848086.855 |
| 10061 | 444086.394 | 848085.790 |

PROJECT NUMBER 5845-01-20-4.01
SHEET 2 OF 2
AMENDMENT NO: 131

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20 - 4.01

THAT PART OF LOTS 11 & 12 OF WASHINGTON PARK AND THAT PART OF LOT 1 OF CSM 8334 AND OTHER LANDS LOCATED IN GOVERNMENT LOT 2 AND THAT PART OF GOVERNMENT LOT 3, ALL IN SECTION 23, T 6 N, R 10 E, TOWN OF DUNN, DANE COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNERS | INTERESTS REQUIRED | R/W S.F REQUIRED NEW | R/W S.F REQUIRED EXISTING | R/W S.F REQUIRED TOTAL | TLE S.F. |
|---|---|---|---|---|---|---|
| 1 | R & R FARMS, INC. | FEE,TLE | 6235 | --- | 6235 | 1157 |
| 2 | MICHAEL C. HALL & DIANE M. HALL | TLE | --- | --- | --- | 1997 |
| 3 | JAMES THOMAS BARBER REVOCABLE TRUST | FEE,TLE | --- | 2134 | 2134 | 1499 |
| 4 | JOHN D. OLSEN. & ANISHA S.B. OLSEN | FEE,TLE | 139 | 2155 | 2294 | 2021 |
| 6 | DOUGLAS JOHNSON & MARLYS JOHNSON | FEE,TLE | 353 | 1690 | 2043 | 2086 |
| 7 | KEGONSA JOINT SANITARY DISTRICT | FEE,TLE | 9868 | 13239 | 23107 | 7736 |
| 8 | DOROTHY E. SCHUMANN | FEE,TLE | 3521 | --- | 3521 | 615 |
| 9 | TAMRA L. MCMAHON | FEE,TLE | 3988 | --- | 3988 | 6341 |
| 11 | ANNE K. DEGREVE & JASON R. FRUIT | FEE | 8601 | --- | 8601 | --- |
| 12 | NICHOLAS D. WEISENSEL & JAMIE WEISENSEL | FEE,TLE | 11547 | --- | 11547 | 1281 |
| 13 | PAUL R. & LINDA J. MARTENS JOINT REVOCABLE TRUST | TLE | --- | --- | --- | 255 |
| 14 | DENNIS B. WALLING LIVING TRUST | TLE | --- | --- | --- | 418 |
| 16 | RICHARD J. THOMPSON | FEE,TLE | 4182 | --- | 4182 | 932 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTERESTS REQUIRED |
|---|---|---|
| 100 | KEGONSA SANITARY DISTRICT | RELEASE OF RIGHTS |
| 101 | ALLIANT ENERGY - GAS | RELEASE OF RIGHTS |
| 103 | AT&T WISCONSIN | RELEASE OF RIGHTS |
| 104 | FRONTIER COMMUNICATIONS | RELEASE OF RIGHTS |

| R/W COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 101-140 | N21° 01' 57"W | 41.48' |
| 126-127 | S68° 38' 43"W | 2.00' |

SCALE, FEET
0 50 100

TOWN

PLAT OF SURVEY 2017-00271
BY:PAUL SPETZ
DATED: 4/26/2017

GOV'T LOT 3

GOV'T LOT 2

DUNN

CTH B

CTH AB

USH 51

ACCESS RD.

WASHINGTON PARK

LOT 1 CSM 8334 V. 45, P.120-122 DOC. 2793727

LOT A WASHINGTON PARK (PRIVATE ROAD)

FOUND BRASS CAP Y=446931.159 X=846943.294

FOUND BRASS CAP Y=444236.302 X=846930.118

3/4" RBR. 1.64' NORTH 0.67' WEST

QTR. COR. TO TRAVERSE

N89° 22' 34"E 974.83'

N 0°16'48" E 2694.89'

N37° 34' 51"W 31.67' 100 TO 101

N37° 34' 51"W 5.70' QTR. LINE TO 100

N37° 34' 51"W 53.57' 138 TO QTR. LINE

SEE SHEET 5845-01-20-4.02

TLE-BUILDING REMOVAL 6341 S.F.

TLE-SLOPES 615 S.F.

TLE-SLOPES 1157 S.F.

TLE-SLOPES 1499 S.F.

TLE-SLOPES 2021 S.F.

TLE-SLOPES 1997 S.F.

TLE-SLOPES 2086 S.F.

TLE-SLOPES 2412 S.F.

TLE-SLOPES 152 S.F.

TLE-SLOPES 9716 S.F.

TLE-SLOPES 932 S.F.

TLE-SLOPES 1281 S.F.

TLE-SLOPES 418 S.F.

TLE-SLOPES 255 S.F.

TLE-DITCH & SLOPES 5324 S.F.

PLAT OF SURVEY 95-0708 BY: BIRRENKOTT DATED: 8/21/95

PLAT OF SURVEY 7921L BY: GEORGE WEIR DATED: 3/14/73

PLAT OF SURVEY 12113L BY: GEORGE WEIR DATED: 12/18/92

40' INGRESS/EGRESS EASEMENT SHOWN ON PLAT OF SURVEY BY GEORGE WEIR DATED: 12/18/92

EXISTING ACCESS CONTROL BASED ON CHAPTER 79 OF THE DANE COUNTY CODE OF ORDINANCES.

FORMER C/L CTH AB

5845-00-21 R/L

STA. 304+50.53

STA. 304+88.55 = STA. 34+31.85 AB

PT: 298+74.86

PC: 300+74.24

PI: 307+49.33

PI: 38+87.92 AB

PC: 36+85.68 AB

PT: 40+35.98 AB

PC: 41+18.79 AB

PI: 42+28.68 AB

CURVE 1
R=987.93'
L=43.22'
LCH=43.22'
LCB=N12° 00' 31"E

N8° 03' 03"W 13.45'

N13° 37' 07"W 164.42'

S18° 33' 06"W 108.51' 130 TO 131

S18° 33' 06"W 105.26' 129 TO 130

N24° 06' 40"W 295.68'

N29° 47' 50"W 148.89'

N28° 31' 29"W 133.44'

N48° 42' 51"W 144.31'

N70° 19' 08"W 85.24'

N27° 34' 06"W 194.19'

N37° 00' 53"W 101.23'

N49° 36' 49"E 74.87' 104 TO 105

N49° 36' 49"E 65.10' 105 TO 106

S42° 14' 37"E 252.37'

S46° 17' 15"E 179.91'

S23° 40' 15"E 110.50'

S23° 45' 53"E 195.94'

S64° 01' 37"E 34.81' 113 TO 114

S64° 01' 37"E 32.03' 114 TO 115

N81° 43' 01"E 75.25'

S89° 54' 01"W 289.43'

S4° 31' 47"W 9.76'

S8° 00' 06"W 30.97'

S89° 22' 34" W 40.46'

S58° 04' 43"W 410.65'

N09°27'53"E

S17° 48' 18"E 96.23'

S19° 59' 05"E 53.71'

S21° 01' 37"E 44.08'

S22° 19' 21"E 24.16'

S17° 10' 24"E 81.38'

S36° 34' 03"W 49.68'

N20° 47' 20"W

N63° 20' 59"E 118.16'

N27° 34' 06"W 100.15'

N79°24'52"E

(N31°14'00"W 136.15') 136.33'

(N52°19'31"E 161.76') N52° 44' 38"E 161.74'

N20° 36' 04"E 181.36' (N20°10'35"E 181.20')

S4° 31' 47"E 9.76'

S73° 17' 15"E 179.91'

S19° 47' 50"W

N89°10'41"E

N20° 47' 20"W

S36° 34' 03"W

S17° 48' 18"E

S4° 31' 47"E 9.76'

S8° 00' 06"W 30.97'

S89° 22' 34" W 40.46'

S58° 04' 43"W

N09°27'53"E

S64° 01' 37"E 34.81' 113 TO 114

S64° 01' 37"E 32.03' 114 TO 115

N89° 22' 34"E 330.03'

N89° 22' 34"E 416.31'

N89° 22' 34"E 974.83'

N 89° 22' 34" E 330.03'

N 89° 22' 34" E 416.31'

N89° 22' 34"E 974.83'

N 0°16'48" E 2694.89

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20-4.01
# EXTENSION SHEET

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

PI STA = 292+28.47
Y = 443102.129
X = 848617.546
DELTA = 21°39'51" LT
D = 1°39'20"
T = 662.22'
L = 1308.61'
R = 3460.92'
PC STA = 285+66.25
PT STA = 298+74.86
DB = N00°52'31"E

ALIGNMENT SUB-CURVE
PC 285+66.25 TO STA. 296+34.77
R=3460.92'
L=1068.52'
LCH=1064.28'
LCB= N7° 58' 10"W

ALIGNMENT SUB-CURVE
STA. 296+34.77 TO PT 298+74.86
R=3460.92'
L=240.09'
LCH=240.05'
LCB=N18° 48' 06"W

PI STA = 307+49.33
Y = 444538.761
X = 848072.136
DELTA = 26°31'11" LT
D = 2°00'00"
T = 675.09'
L = 1325.99'
R = 2864.79'
PC STA = 300+74.24
PT STA = 314+00.23
DA = N47°18'32"W

ALIGNMENT SUB-CURVE
PC 300+74.24 TO STA. 309+54.08
R=2864.79'
L=879.84'
LCH=876.38'
LCB=N29° 35' 15"W

ALIGNMENT SUB-CURVE
PC 300+74.24 TO STA. 304+50.53
R=2864.79'
L=376.29'
LCH=376.02'
LCB=N24° 33' 07"W

ALIGNMENT SUB-CURVE
STA. 304+50.53 TO STA. 309+54.08
R=2864.79'
L=503.55'
LCH=502.90'
LCB=N33° 21' 01"W

ALIGNMENT SUB-CURVE
STA. 309+54.08 TO PT 314+00.23
R=2864.79'
L=446.15'
LCH=445.70'
LCB=N42° 50' 50"W

PI STA = 31+37.15 AB
Y = 444234.697
X = 847849.939
DELTA = 17°59'08" LT
D = 11°27'33"
T = 79.13'
L = 156.95'
R = 500.00'
PC STA = 30+58.02 AB
PT STA = 32+14.97 AB
DB = S89°21'37"E

ALIGNMENT SUB-CURVE
PC 30+58.02 AB TO STA. 31+89.96 AB
R=500.00'
L=131.94'
LCH=131.56'
LCB=N83° 04' 48"E

ALIGNMENT SUB-CURVE
STA. 31+89.96 AB TO PT 32+14.97 AB
R=500.00'
L=25.01'
LCH=25.01'
LCB=N74° 05' 14"E

PI STA = 32+92.87 AB
Y = 444281.513
X = 847999.823
DELTA = 40°31'03" RT
D = 49°23'34"
T = 42.81'
L = 82.03'
R = 116.00'
PC STA = 32+50.06 AB
PT/PI STA = 33+32.09 AB
DA = S66°49'42"E

PT/PI STA = 33+32.09 AB
Y = 444264.666
X = 848039.184
DELTA = 33°45'26" LT

PI STA = 35+09.13 AB
Y = 444297.190
X = 848213.217
DELTA = 1°43'49" RT

PI STA = 38+87.92 AB
Y = 444355.501
X = 848587.493
DELTA = 71°40'47" LT
D = 20°27'46"
T = 202.24'
L = 350.29'
R = 280.00'
PC STA = 36+85.68 AB
PT STA = 40+35.98 AB

PI STA = 42+28.68 AB
Y = 444745.066
X = 848652.438
DELTA = 13°55'23" RT
D = 6°21'58"
T = 109.89'
L = 218.70'
R = 900.00'
PC STA = 41+18.79 AB
PT STA = 43+37.49 AB
DA = N23°23'16"E

ALIGNMENT SUB-CURVE
PC 41+18.79 AB TO STA. 41+58.03 AB
R=900.00'
L=39.24'
LCH=39.24'
LCB=N10° 42' 50"E

ALIGNMENT SUB-CURVE
STA. 41+58.03 AB TO PT 43+37.49 AB
R=900.00'
L=179.46'
LCH=179.16'
LCB=N17° 40' 32"E

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS IN DANE COUNTY AS SHEET 2 OF 3 OF THIS DOCUMENT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON AND THE DANE COUNTY HIGHWAY DEPARTMENT.

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| 122 | 300+94.58 | 81.84 ' | 443956.204 | 848380.759 |
| 123 | 300+68.36 | 39.93 ' | 443916.301 | 848351.161 |
| 124 | 300+14.66 | 39.18 ' | 443865.825 | 848369.517 |
| 125 | 299+18.55 | 34.17 ' | 443774.202 | 848398.943 |
| 126 | 298+94.40 | 34.81 ' | 443751.851 | 848408.120 |
| 127 | 298+94.38 | 32.81 ' | 443751.123 | 848406.257 |
| 128 | 298+50.54 | 33.08 ' | 443709.979 | 848422.073 |
| 129 | 297+19.10 | 61.97 ' | 443593.780 | 848493.363 |
| 130 | 296+34.77 | 0.00 ' | 443493.990 | 848459.873 |
| 131 | 295+44.66 | -61.66 ' | 443391.114 | 848425.348 |
| 132 | 295+58.24 | -59.93 ' | 443404.431 | 848423.465 |
| 133 | 297+25.06 | -50.43 ' | 443564.224 | 848384.751 |
| 134 | 300+22.47 | -70.76 ' | 443834.111 | 848263.962 |
| 135 | 301+72.72 | -92.44 ' | 443963.317 | 848189.973 |
| 136 | 303+10.45 | -102.65 ' | 444080.535 | 848126.263 |
| 137 | 304+50.80 | -156.25 ' | 444175.756 | 848017.821 |
| 138 | 32+10.91 AB | 55.00' | 444204.464 | 847937.560 |
| 140 | 31+70.00 AB | -70.00' | 444315.249 | 847867.212 |

TLE STATION & OFFSET TABLE

| POINT | STATION | OFFSET |
|---|---|---|
| TLE100 | 295+79.66 | -64.89' |
| TLE101 | 297+65.75 | -54.19' |
| TLE102 | 300+71.51 | -78.54' |
| TLE103 | 300+73.14 | -82.96' |
| TLE104 | 302+03.64 | -101.43' |
| TLE105 | 302+38.04 | -177.87' |
| TLE106 | 303+34.30 | -136.56' |
| TLE107 | 303+19.39 | -106.33' |
| TLE108 | 40+30.00 AB | -52.81' |
| TLE109 | 40+50.00 AB | -60.00' |
| TLE110 | 41+60.00 AB | -40.00' |
| TLE111 | 41+30.16 AB | 39.93' |
| TLE112 | 40+45.00 AB | 40.00' |
| TLE113 | 40+45.00 AB | 34.12' |
| TLE114 | 302+04.81 | 88.28' |
| TLE115 | 301+95.18 | 96.23' |
| TLE116 | 301+52.76 | 92.91' |
| TLE117 | 301+34.17 | 187.92' |
| TLE118 | 300+90.69 | 186.28' |
| TLE119 | 301+05.01 | 82.61' |
| TLE120 | 299+62.60 | 76.85' |
| TLE121 | 299+05.39 | 57.02' |
| TLE122 | 297+95.31 | 57.45' |
| TLE123 | 297+83.66 | 72.73' |
| TLE124 | 306+53.86 | -97.53' |
| TLE125 | 31+74.67 AB | -91.28' |

FOUND IRON COORDINATE TABLE

| POINT | NORTHING | EASTING |
|---|---|---|
| 2001 | 444213.209 | 848237.287 |
| 2005 | 444364.889 | 848300.951 |
| 2006 | 444351.549 | 848209.818 |
| 2007 | 444678.333 | 847778.966 |
| 2009 | 444278.167 | 847881.432 |
| 2010 | 444210.912 | 847932.598 |
| 2011 | 444199.930 | 848057.769 |
| 2012 | 444124.397 | 848148.307 |
| 2013 | 443693.710 | 848353.402 |
| 2039 | 443830.008 | 848382.265 |
| 2043 | 443881.853 | 848540.911 |
| 2044 | 443931.606 | 848544.781 |
| 2045 | 443991.823 | 848549.573 |
| 2046 | 444087.600 | 848597.222 |
| 2047 | 444219.149 | 848607.756 |
| 2048 | 444358.496 | 848627.344 |
| 2049 | 444441.470 | 848639.221 |
| 2050 | 444510.935 | 848649.055 |
| 2051 | 444554.353 | 848655.347 |
| 2052 | 444619.632 | 848664.369 |
| 2053 | 444685.004 | 848673.937 |
| 10051 | 443986.740 | 848214.099 |
| 10052 | 443988.981 | 848212.562 |
| 10053 | 444087.167 | 848166.496 |
| 10055 | 443877.467 | 848264.989 |
| 10059 | 443986.482 | 848086.855 |
| 10061 | 444086.394 | 848085.790 |

4

4

PROJECT NUMBER 5845-01-20-4.01
SHEET 3 OF 3
133

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20-4.02 AMENDMENT NO: 1

AMENDS PARCEL 16 OF TRANSPORTATION PROJECT PLAT 5845-01-20-4.02 RECORDED AS DOCUMENT NUMBER 5790456 AT THE DANE COUNTY REGISTER OF DEEDS.

THAT PART OF LOT 1 OF CSM 8334 IN GOVERNMENT LOT 2 AND THAT PART OF GOVERNMENT LOT 3, ALL IN SECTION 23, T 6 N, R 10 E, TOWN OF DUNN, DANE COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNERS | INTERESTS REQUIRED | R/W S.F REQUIRED | | | TLE S.F. |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 11 | ANNE K. DEGREVE & JASON R. FRUIT | FEE | 12930 | 21577 | 34507 | --- |
| 16 | RICHARD J. THOMPSON | FEE | 12362 | 18157 | 30519 | --- |

PI STA = 26+39.45 AB
Y = 444240.254
X = 847352.273
DELTA = 1°00'00" RT

PI STA = 31+37.15 AB
Y = 444234.697
X = 847849.939
DELTA = 17°59'08" LT
D = 11°27'33"
T = 79.13'
L = 156.95'
R = 500.00'
PC STA = 30+58.02 AB
PT STA = 32+14.97 AB
DA = N72° 39' 15"E

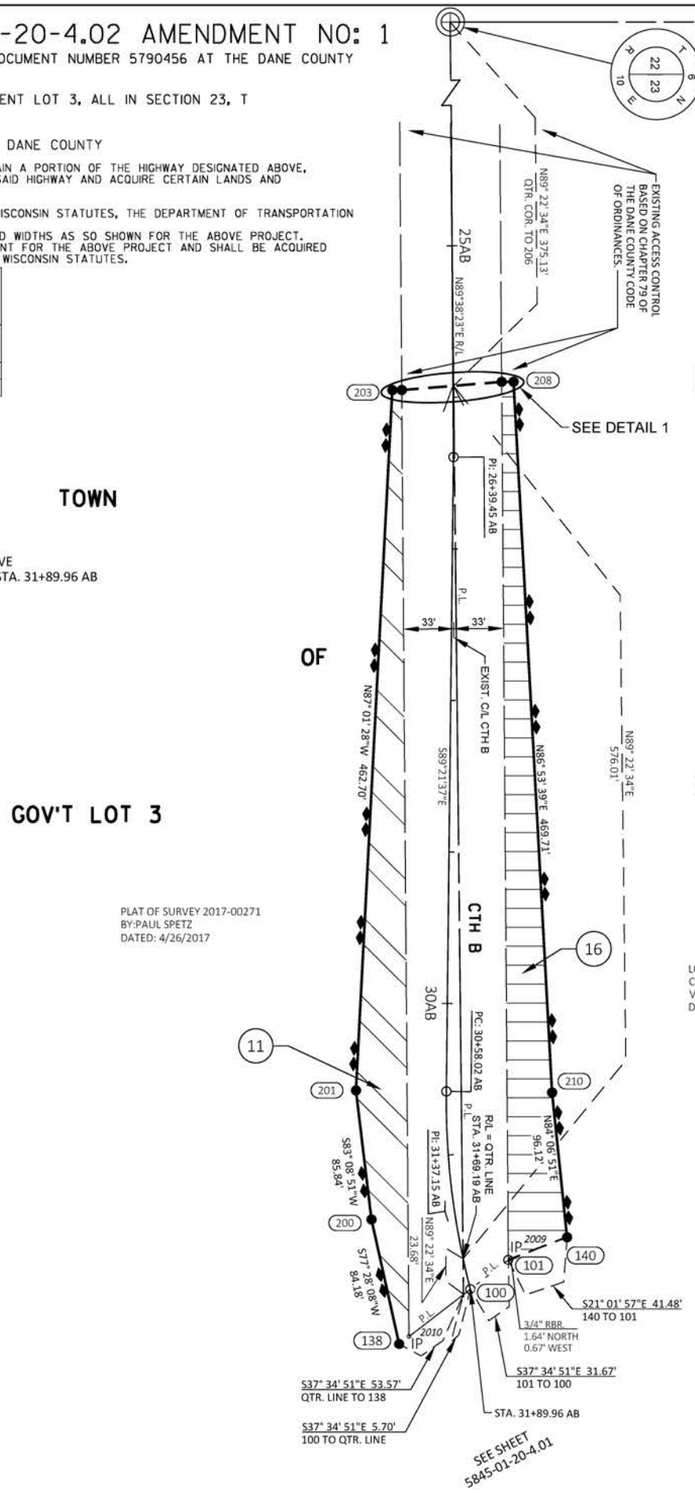
ALIGNMENT SUB-CURVE
PC 30+58.02 AB TO STA. 31+69.19 AB
R=500.00'
L=111.18'
LCH=110.95'
LCB=N84° 16' 11"E

ALIGNMENT SUB-CURVE
STA. 31+89.96 AB TO PT 32+14.97 AB
R=500.00'
L=25.01'
LCH=25.01'
LCB=N74° 05' 14"E

ALIGNMENT SUB-CURVE
STA. 31+69.19 AB TO STA. 31+89.96 AB
R=500.00'
L=20.76'
LCH=20.76'
LCB=N76° 42' 37"E

| R/W STATION, OFFSET & COORDINATE TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | NORTHING | EASTING |
| 100 | 31+89.96 AB | 0.00' | 444251.431 | 847901.416 |
| 101 | 31+76.77 AB | -28.97' | 444276.531 | 847882.100 |
| 138 | 32+10.91 AB | 55.00' | 444204.464 | 847937.560 |
| 140 | 31+70.00 AB | -70.00' | 444315.249 | 847867.212 |
| 200 | 31+35.00 AB | 55.00' | 444186.198 | 847855.382 |
| 201 | 30+58.02 AB | 59.63' | 444175.956 | 847770.150 |
| 203 | 25+95.00 AB | 40.00' | 444199.975 | 847308.076 |
| 204 | 25+95.00 AB | 33.81' | 444206.170 | 847308.037 |
| 205 | 25+92.44 AB | 0.00' | 444239.959 | 847305.263 |
| 206 | 25+92.41 AB | -0.43' | 444240.386 | 847305.228 |
| 207 | 25+90.00 AB | -32.19' | 444272.131 | 847302.622 |
| 208 | 25+90.00 AB | -40.00' | 444279.942 | 847302.573 |
| 210 | 30+58.02 AB | -69.82' | 444305.391 | 847771.596 |

| FOUND IRON COORDINATE TABLE | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 2009 | 444278.167 | 847881.432 |
| 2010 | 444210.912 | 847932.598 |




GOV'T LOT 3

GOV'T LOT 2

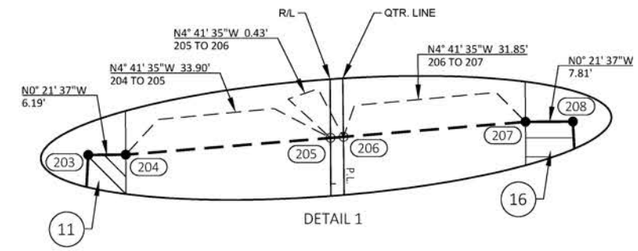
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OF

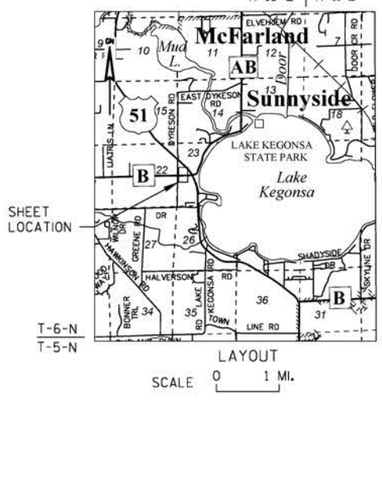
TOWN

PLAT OF SURVEY 2017-00271
BY:PAUL SPETZ
DATED: 4/26/2017

LOT 1
CSM 8334
V. 45, P.120-122
DOC. 2793727




DETAIL 1




LAYOUT
SCALE 0 1 MI.

SCALE, FEET
0 50 100

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT # 5842356
06/21/2022 11:42 AM
Trans Fee:
Exempt #:
Rec. Fee: 25.00
Pages:
**The above recording information verifies that this document has been electronically recorded and returned to the submitter.**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5845-01-20-4.02
AMENDMENT NO: 1

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON AND THE DANE COUNTY HIGHWAY DEPARTMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOUND IRON PINS ARE 3/4" CAPPED REBARS UNLESS OTHERWISE NOTED.

EXISTING HIGHWAY RIGHT-OF-WAY ON CTH B BASED ON PREVIOUS PROJECT: 5845-00-21, 5845-01-21, AND CSM 8334

EXISTING ACCESS CONTROL ALONG CTH B BASED ON CHAPTER 79 OF THE DANE COUNTY ORDINANCES.

QUARTER LINE BEARING BASED ON BEST FIT OF IRONS FOUND FROM CSM 10246 AND PLAT OF SURVEY 12113L BY GEORGE WEIR DATED 12/18/92.

ALL NEW RIGHT-OF-WAY MONUMENTS WIL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS IN DANE COUNTY AS DOCUMENT 5789446.


**STRAND ASSOCIATES, INC.** ®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843


I, HEATHER S. BARTELT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

SIGNATURE: Heather Bartelt DATE: 6/13/22
PRINT NAME: HEATHER S. BARTELT
REGISTRATION NUMBER: S-2797

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Cory Schlagel DATE: 6/13/22
PRINT NAME: CORY SCHLAGEL



FILE NAME : S:\MAD\1000--1099\1089\466\DRAWINGS\CAD\58450100\RW\DWG\040101_RP.DWG
APPRAISAL PLAT DATE : 6/13/22
PLOT DATE : 6/13/2022 9:28 AM
PLOT BY : BARTELT, HEATHER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
USH 51
5845-01-20-4.02 A1

# TRANSPORTATION PROJECT PLAT NO: 5845-01-20 - 4.02

THAT PART OF LOT 1 OF CSM 8334 IN GOVERNMENT LOT 2 AND THAT PART OF GOVERNMENT LOT 3, ALL IN SECTION 23, T 6 N, R 10 E, TOWN OF DUNN, DANE COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 STOUGHTON - MADISON (CTH B/CTH AB INTERSECTION) DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNERS | INTERESTS REQUIRED | R/W S.F REQUIRED | | | TLE S.F. |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 11 | ANNE K. DEGREVE & JASON R. FRUIT | FEE | 12930 | 21577 | 34507 | --- |
| 16 | RICHARD J. THOMPSON | FEE,TLE | 12362 | 18157 | 30519 | 177 |

PI STA = 26+39.45 AB
Y = 444240.254
X = 847352.273
DELTA = 1°00'00" RT

PI STA = 31+37.15 AB
Y = 444234.697
X = 847849.939
DELTA = 17°59'08" LT
D = 11°27'33"
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PC STA = 30+58.02 AB
PT STA = 32+14.97 AB
DA = N72° 39' 15"E

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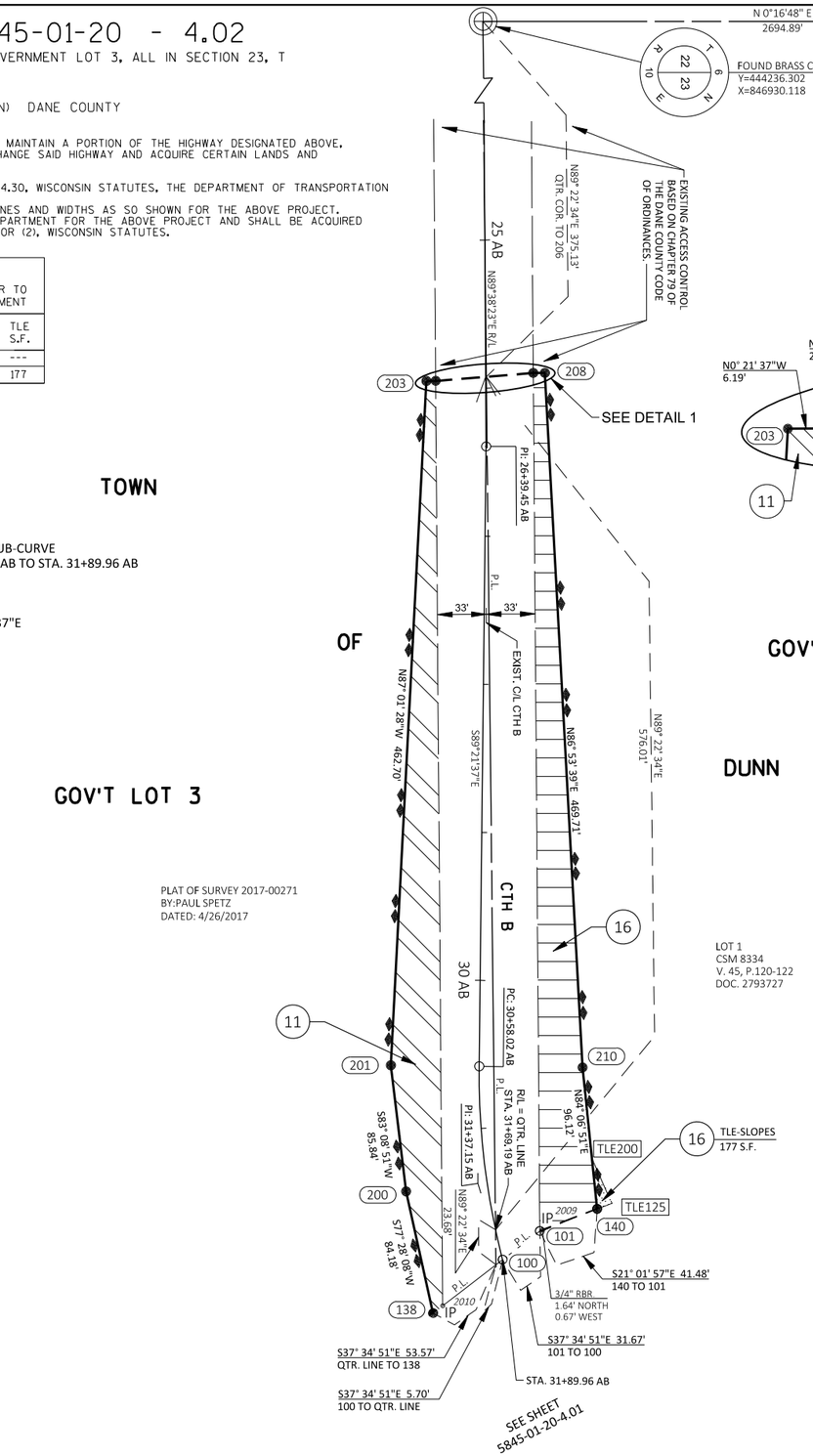
ALIGNMENT SUB-CURVE
STA. 31+89.96 AB TO PT 32+14.97 AB
R=500.00'
L=25.01'
LCH=25.01'
LCB=N74° 05' 14"E

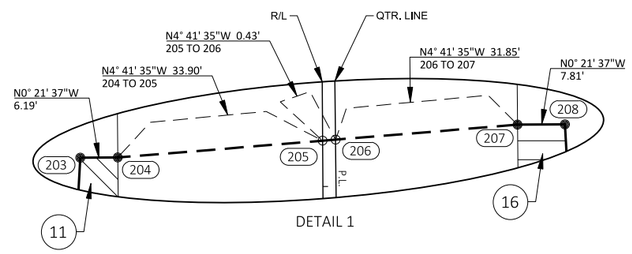
ALIGNMENT SUB-CURVE
STA. 31+69.19 AB TO STA. 31+89.96 AB
R=500.00'
L=20.76'
LCH=20.76'
LCB=N76° 42' 37"E

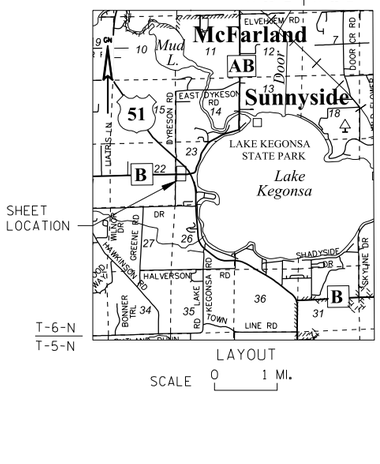
| R/W STATION, OFFSET & COORDINATE TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | NORTHING | EASTING |
| 100 | 31+89.96 AB | 0.00' | 444251.431 | 847901.416 |
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| 138 | 32+10.91 AB | 55.00' | 444204.464 | 847937.560 |
| 140 | 31+70.00 AB | -70.00' | 444315.249 | 847867.212 |
| 200 | 31+35.00 AB | 55.00' | 444186.198 | 847855.382 |
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| 205 | 25+92.44 AB | 0.00' | 444239.959 | 847305.263 |
| 206 | 25+92.41 AB | -0.43' | 444240.386 | 847305.228 |
| 207 | 25+90.00 AB | -32.19' | 444272.131 | 847302.622 |
| 208 | 25+90.00 AB | -40.00' | 444279.942 | 847302.573 |
| 210 | 30+58.02 AB | -69.82' | 444305.391 | 847771.596 |

| TLE STATION & OFFSET TABLE | | |
|---|---|---|
| POINT | STATION | OFFSET |
| TLE125 | 31+74.67 AB | -91.28' |
| TLE200 | 31+29.99 AB | -72.41' |

| FOUND IRON COORDINATE TABLE | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 2009 | 444278.167 | 847881.432 |
| 2010 | 444210.912 | 847932.598 |




KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
5790456
11/18/2021 10:56 AM
Trans Fee:
Exempt #:
Rec. Fee: 25.00
Pages:
**The above recording information verifies that this document has been electronically recorded and returned to the submitter.**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5845-01-20-4.02

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON AND THE DANE COUNTY HIGHWAY DEPARTMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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EXISTING ACCESS CONTROL ALONG CTH B BASED ON CHAPTER 79 OF THE DANE COUNTY ORDINANCES.

QUARTER LINE BEARING BASED ON BEST FIT OF IRONS FOUND FROM CSM 10246 AND PLAT OF SURVEY 12113L BY GEORGE WEIR DATED 12/18/92.

ALL NEW RIGHT-OF-WAY MONUMENTS WIL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS IN DANE COUNTY AS DOCUMENT 5789446.


**STRAND ASSOCIATES, INC.** ®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843


I, HEATHER S. BARTELT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

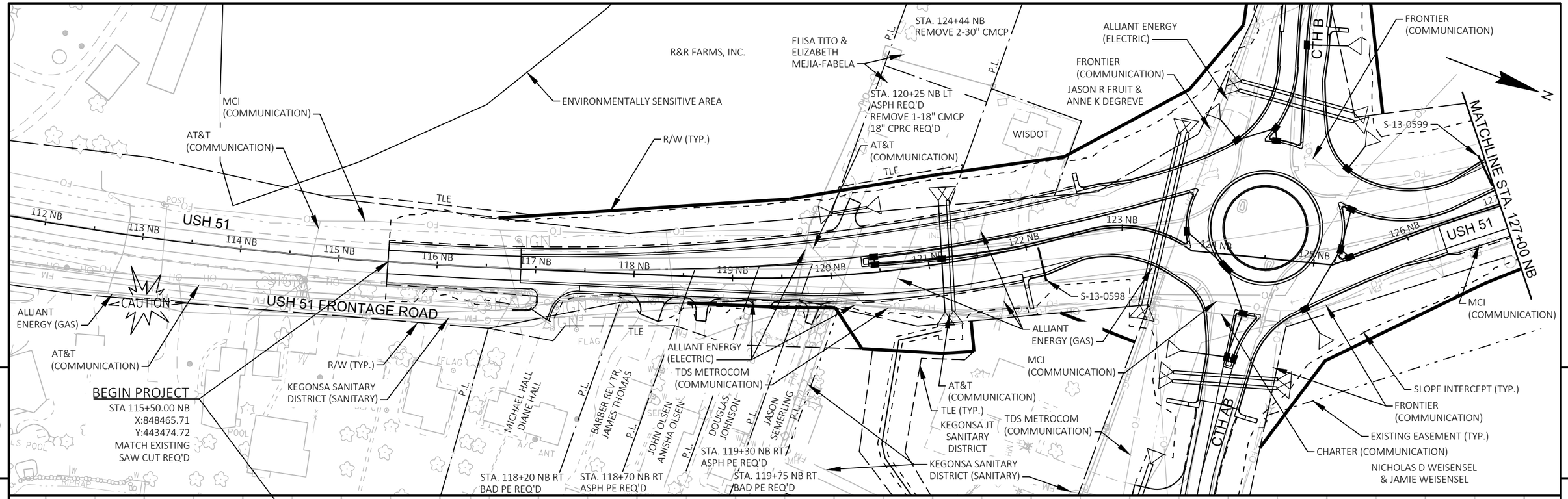
WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

SIGNATURE: Heather Bartelt DATE: 11/17/21
PRINT NAME: HEATHER S. BARTELT
REGISTRATION NUMBER: S-2797

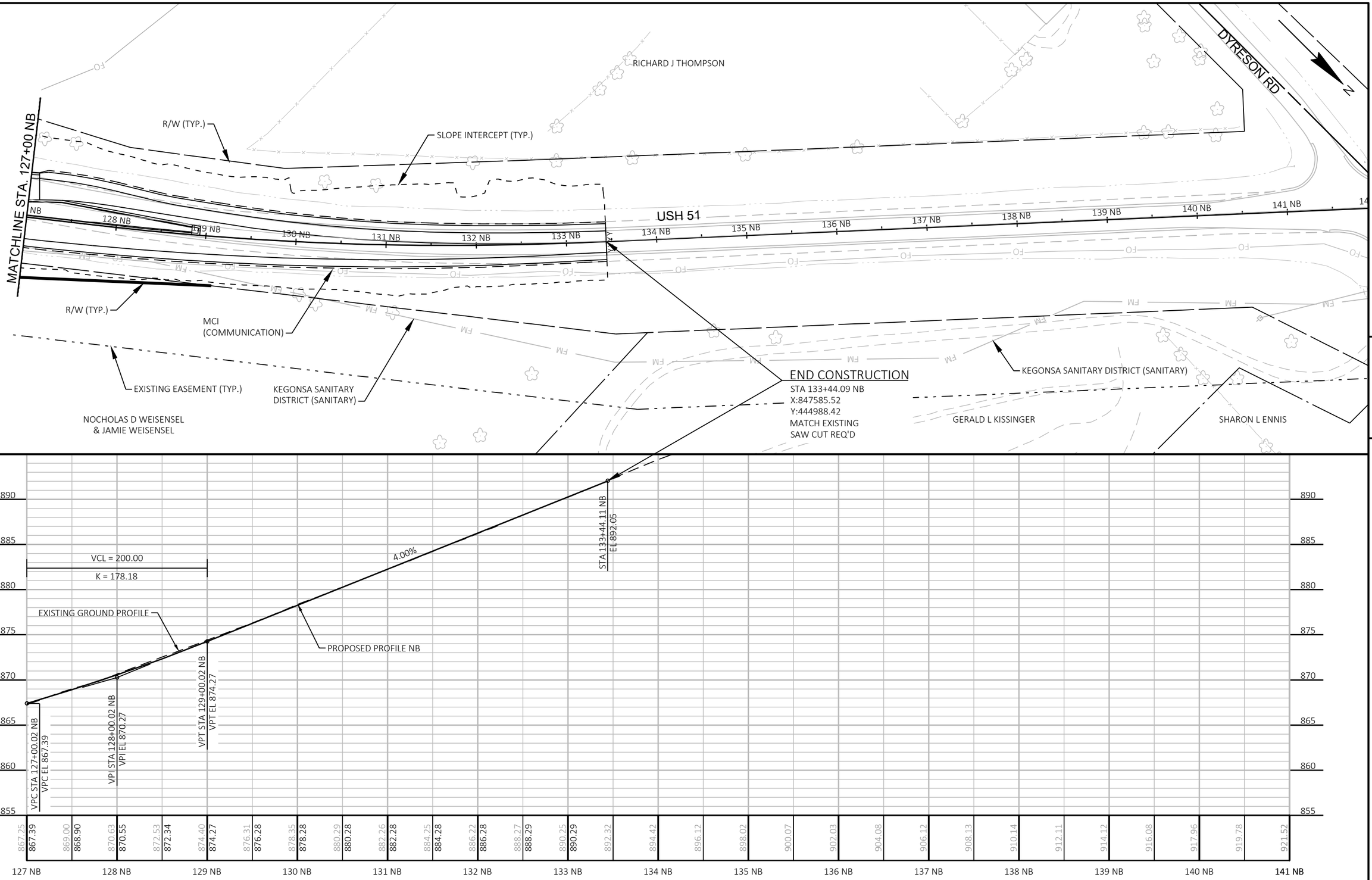
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: Cory Schlagel DATE: 11/17/21
PRINT NAME: CORY SCHLAGEL



FILE NAME : S:\MAD\1000--1099\1089\466\DRAWINGS\CAD\58450100\RW\DWG\040101_RP.DWG
APPRAISAL PLAT DATE : 11/17/21
PLOT DATE : 11/17/2021 4:48 PM
PLOT BY : BARTELT, HEATHER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: NORTHBOUND USH 51 (NB) | SHEET 136 E |
|---|---|---|---|---|

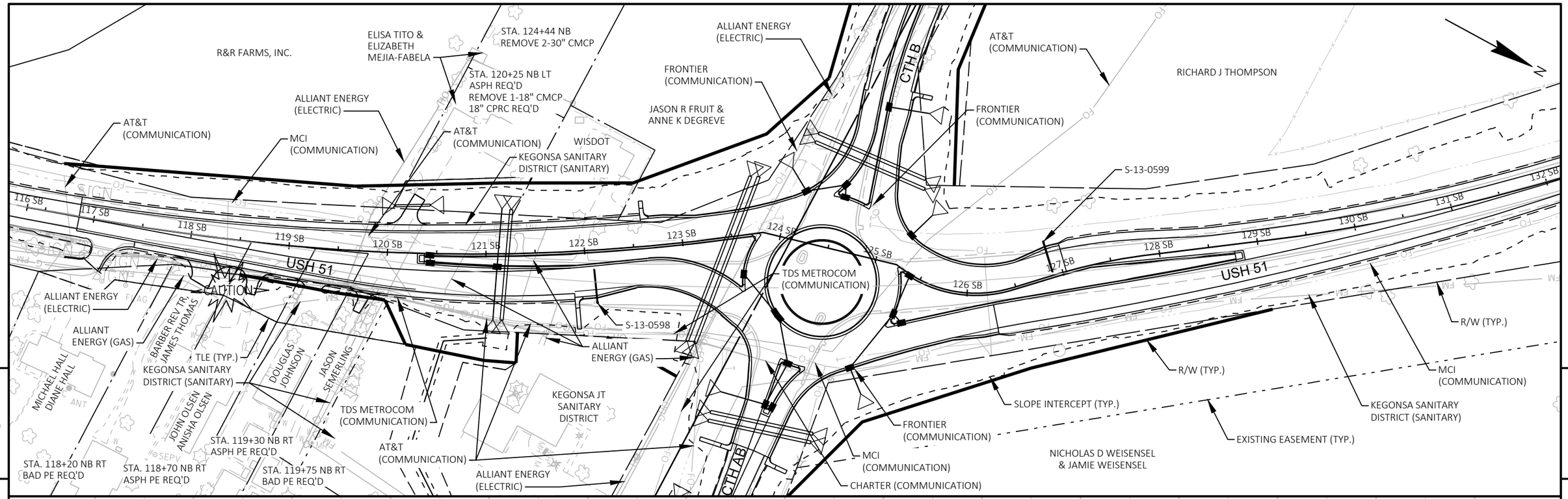


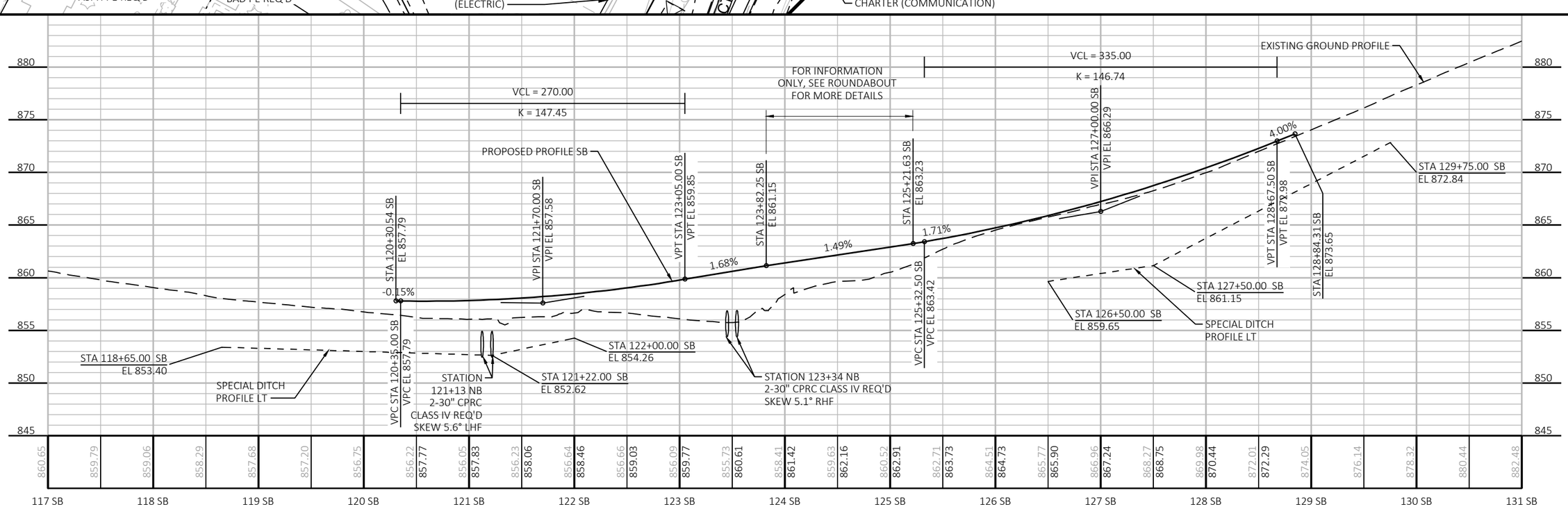

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: NORTHBOUND USH 51 (NB) | SHEET 137 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050102_pp

PLOT DATE : 8/30/2023 8:41 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:100 FT

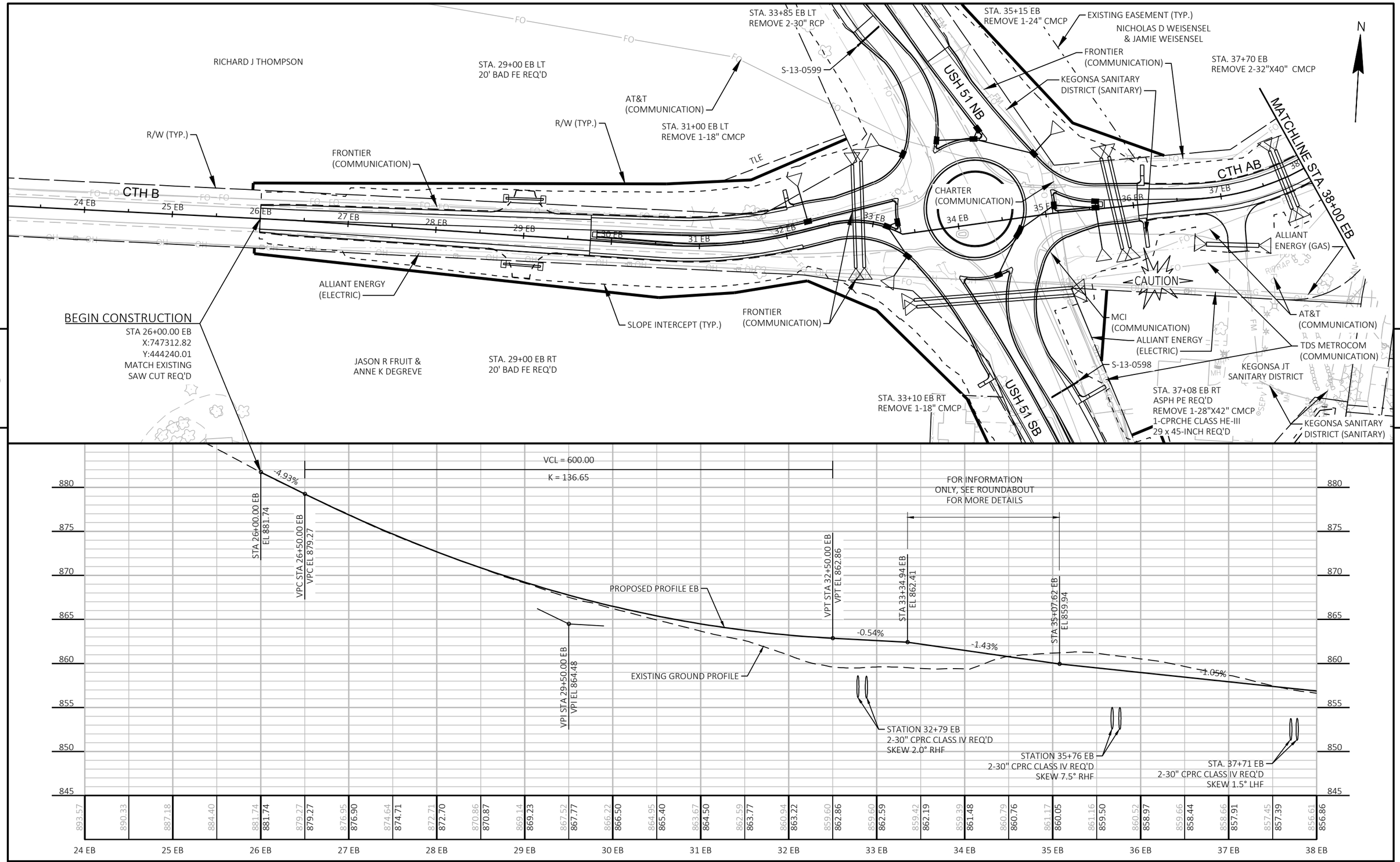
WISDOT/CADDS SHEET 44



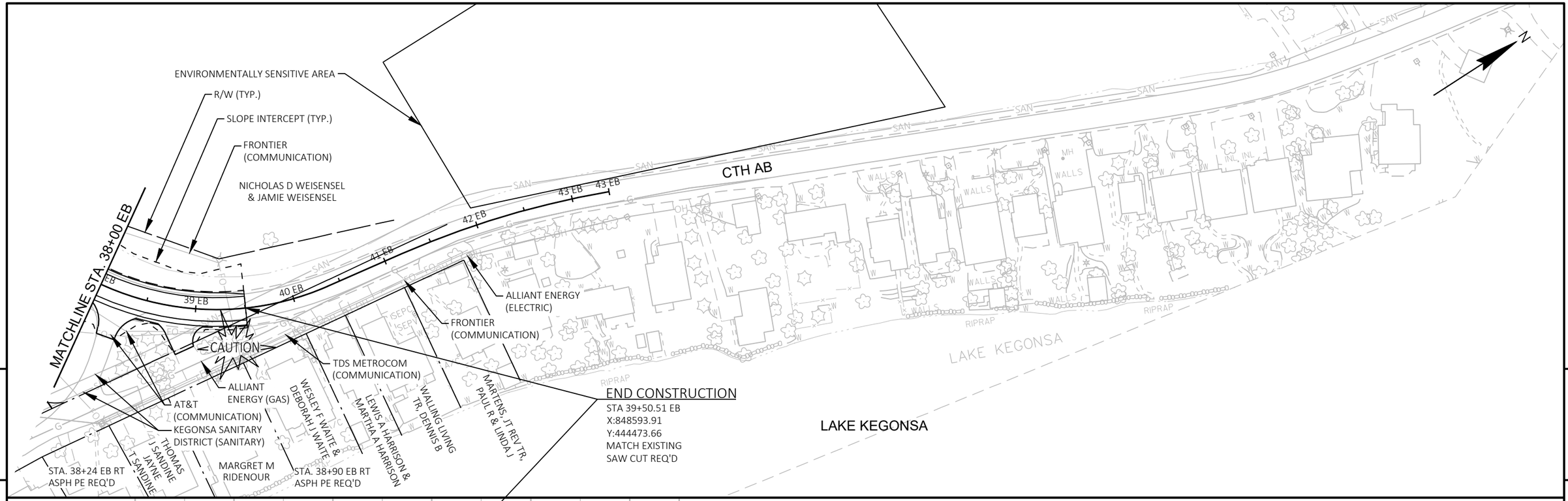



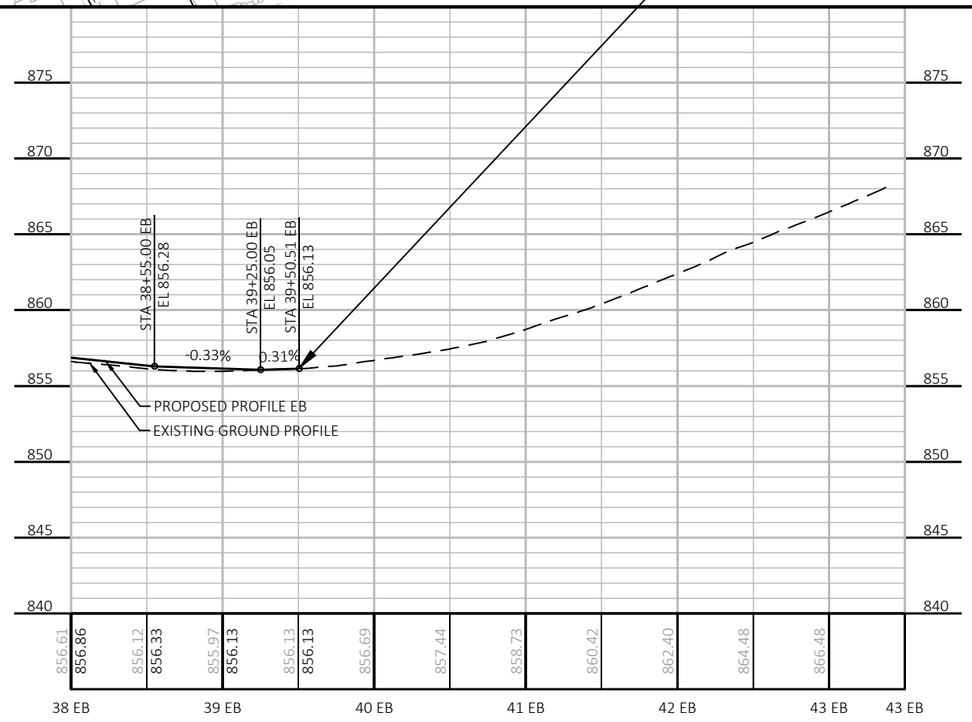

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: SOUTHBOUND USH 51 (SB) | SHEET 138 | E |
|---|---|---|---|---|---|


FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050103_pp
PLOT DATE : 8/30/2023 8:41 AM
PLOT BY : SCHMIDT, BRAD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: CTH B / CTH AB (EB) | SHEET 139 | E |
|---|---|---|---|---|---|



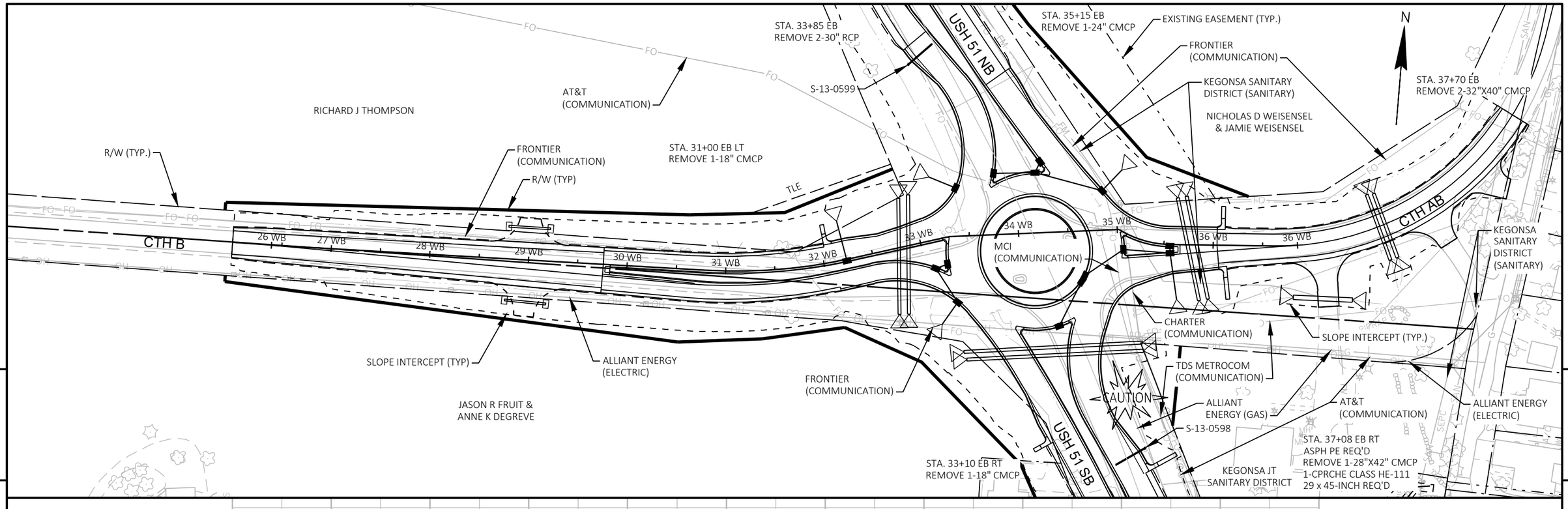



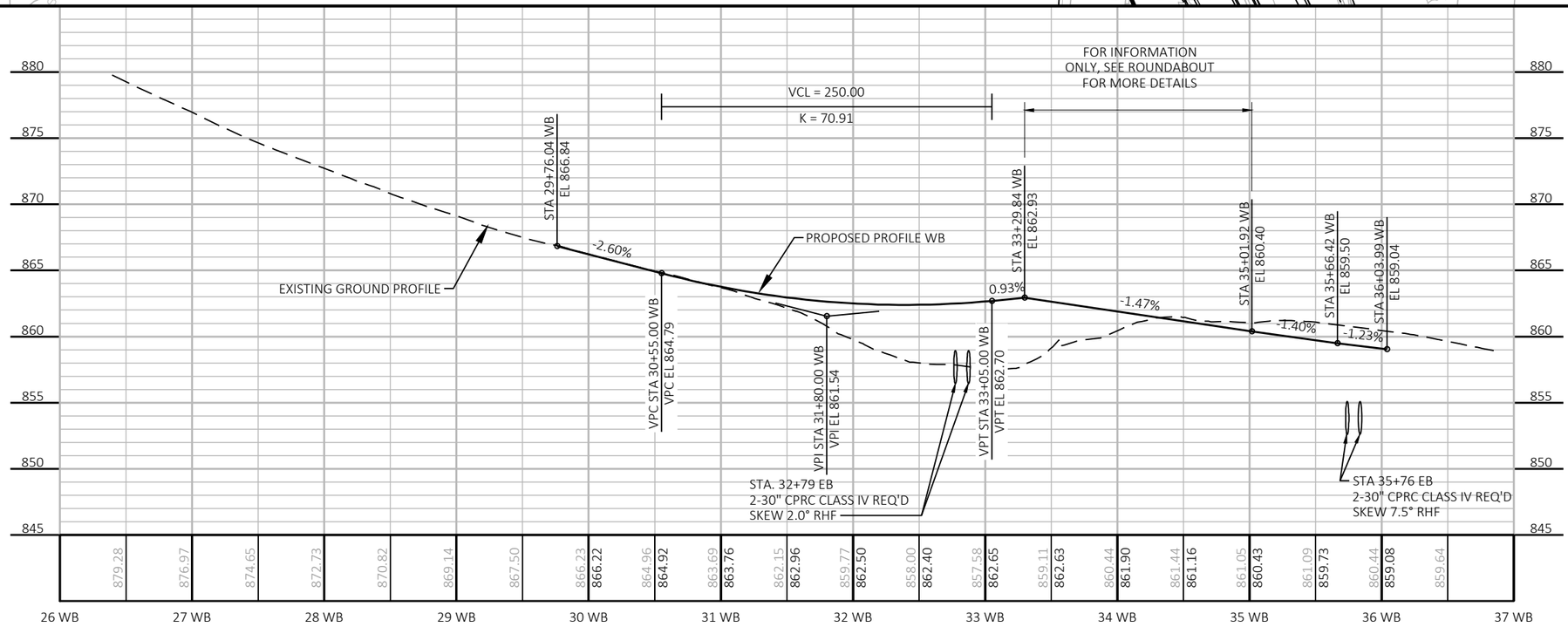

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: CTH B / CTH AB (EB) | SHEET 140 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050105_pp

PLOT DATE : 8/30/2023 8:43 AM PLOT BY : SCHMIDT, BRAD PLOT NAME : PLOT SCALE : 1 IN:100 FT

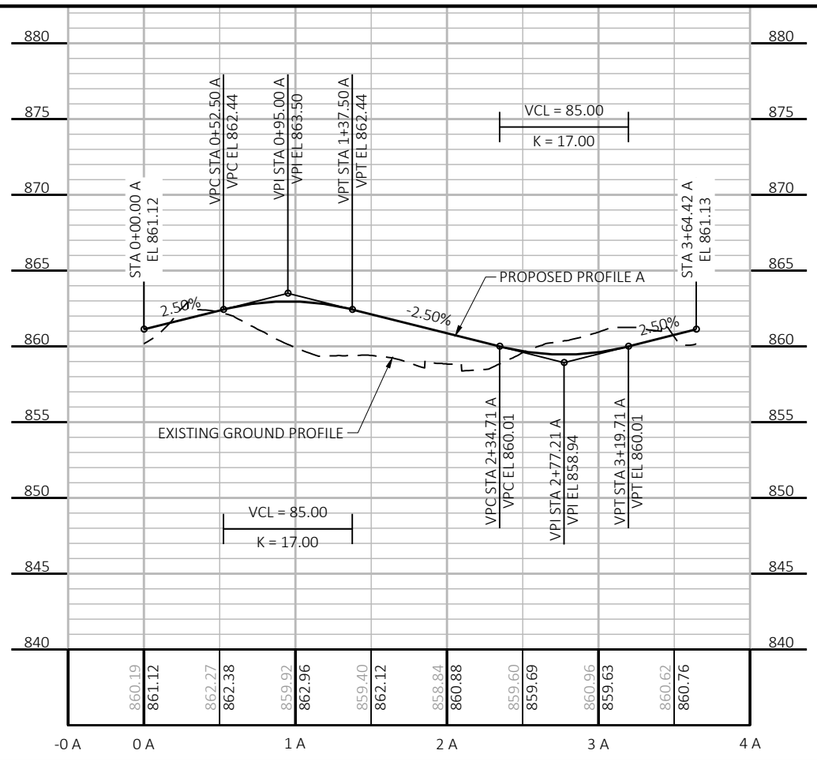
WISDOT/CADDS SHEET 44

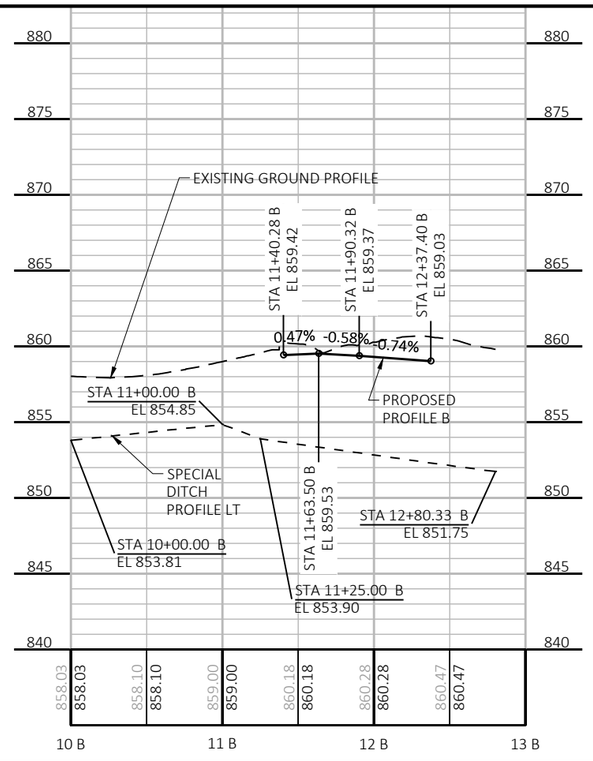


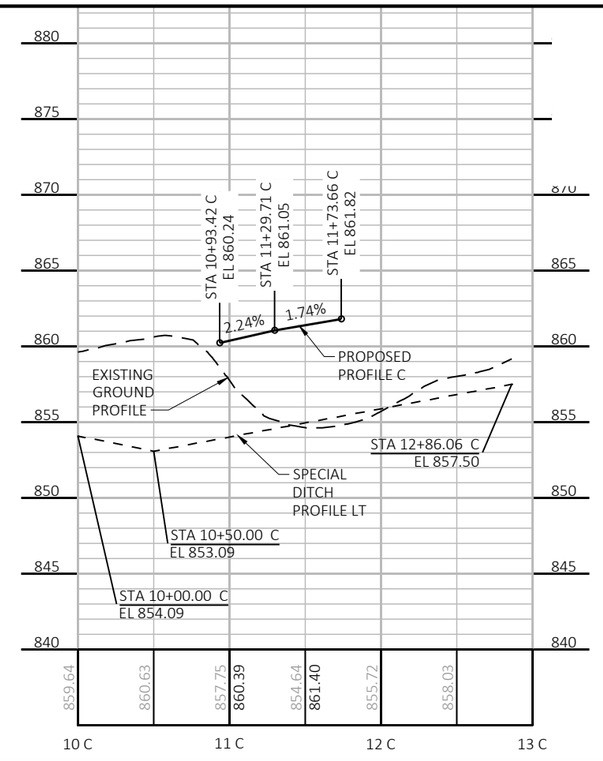



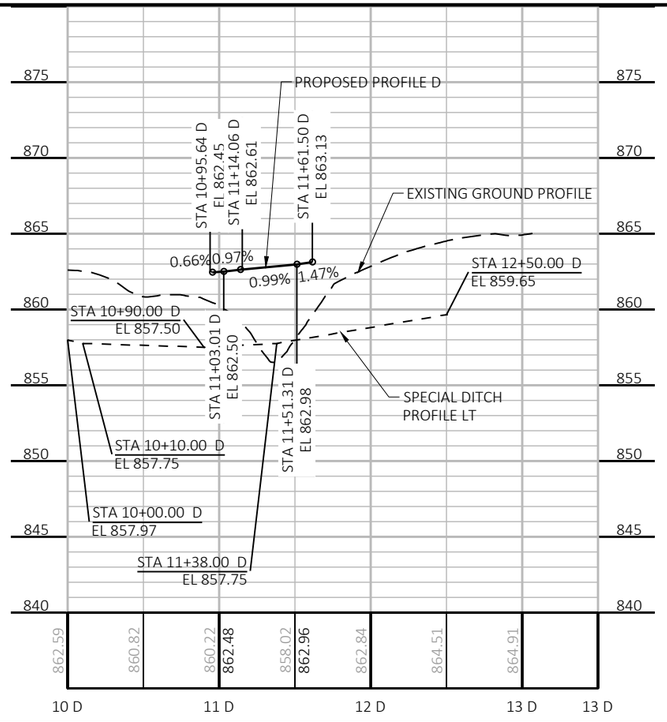

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: CTH B / AB (WB) | SHEET 141 | E |
|---|---|---|---|---|---|

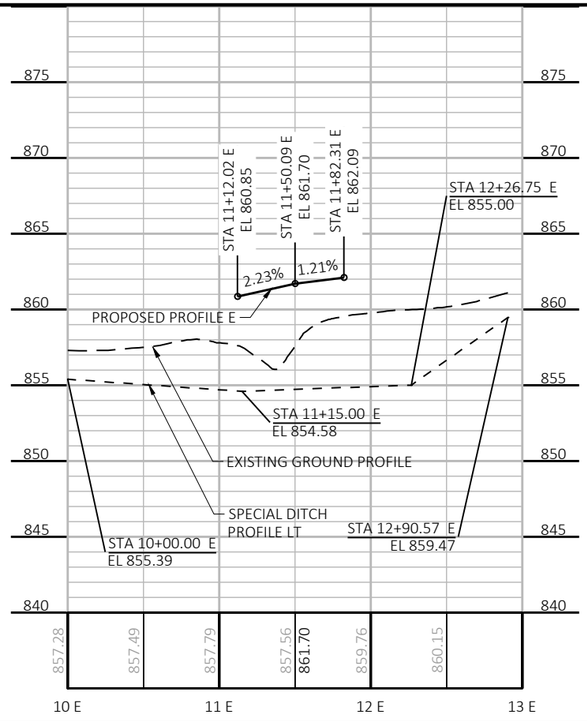

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LAYOUT NAME - 050106_pp
PLOT DATE : 8/30/2023 8:44 AM
PLOT BY : SCHMIDT, BRAD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | PLAN AND PROFILE: ROUNDABOUT PROFILES | SHEET 142 | E |
|---|---|---|---|---|---|

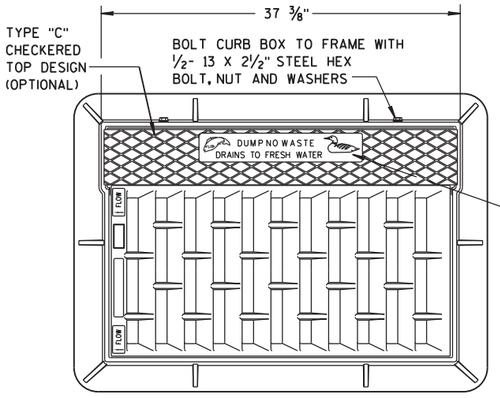
# Standard Detail Drawing List

| | |
|---|---|
| 08A05-19A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08A05-19B | INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM |
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08B09-03 | MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER |
| 08C06-02 | INLETS 3-FT AND 4-FT DIAMETER |
| 08C07-02 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT |
| 08D01-23A | CONCRETE CURB & GUTTER |
| 08D01-23B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D04-07 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D21-01 | DRIVEWAYS WITHOUT CURB & GUTTER |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E14-01 | TRACKING PAD |
| 08E15-01 | CULVERT PIPE CHECK |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F02-01 | APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE |
| 08F04-08 | JOINT TIES FOR CONCRETE PIPE  AND CONCRETE COLLAR DETAIL |
| 09B02-10 | CONDUIT |
| 09B16-02 | PULL BOX  NON-CONDUCTIVE |
| 09C02-09 | CONCRETE BASES, TYPES 1, 2,  5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09C14-03 | CONCRETE CONTROL CABINET BASE, TYPE L |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09D04-03 | LIGHTING CONTROL CABINET 120/240 VOLT |
| 09E01-15D | POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET) |
| 09E01-15G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E03-06 | NON-FREEWAY LIGHTING UNIT POLE WIRING |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A04-03 | STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD  SIGN SUPPORTS & TRAFFIC SIGNALS |
| 13C01-19 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C11-14A | RURAL DOWELED CONCRETE PAVEMENT |
| 13C11-14B | RURAL DOWELED CONCRETE PAVEMENT |
| 13C13-11 | URBAN DOWELED CONCRETE PAVEMENT |
| 13C18-08A | CONCRETE PAVEMENT JOINTING |
| 13C18-08B | CONCRETE PAVEMENT STEEL REINFORCEMENT |
| 13C18-08C | CONCRETE PAVEMENT JOINT TYPES |
| 13C18-08D | CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES |
| 13C18-08E | CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS |
| 13C18-08F | CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 14B07-16A | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16B | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16C | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16D | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16E | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16F | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16G | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16H | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16I | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16J | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16K | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16L | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16M | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B07-16N | CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" |
| 14B08-02A | CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS |
| 14B08-02B | CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS |
| 14B08-02C | CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS |
| 14B08-02D | CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS |
| 14B08-02E | CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS |
| 14B29-01 | SAFETY EDGE |
| 14B42-07A | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07B | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07C | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07D | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B44-04A | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-04B | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |

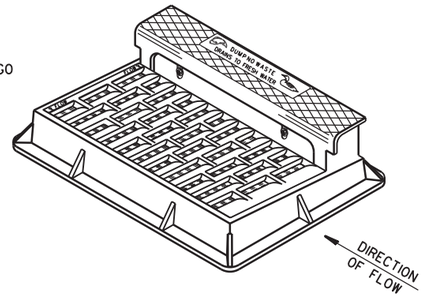
6

# Standard Detail Drawing List

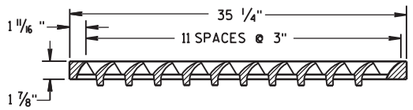
| | |
|---|---|
| 14B44-04C | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 15A01-13A | MARKER POST FOR RIGHT-OF-WAY |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-09A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-09B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C02-09C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C02-09F | ADVANCED WIDTH RESTRICTION SIGNING |
| 15C02-09H | MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING |
| 15C04-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS |
| 15C07-15A | PAVEMENT MARKING SYMBOLS |
| 15C07-15B | PAVEMENT MARKING WORDS |
| 15C07-15C | PAVEMENT MARKING ARROWS |
| 15C07-15D | ROUNDABOUT ARROWS |
| 15C08-23A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS |
| 15C08-23B | TEMPORARY LONGITUDINAL PAVEMENT MARKING |
| 15C11-10A | CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST |
| 15C11-10B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C18-08A | MEDIAN ISLAND MARKING PAVEMENT MARKINGS |
| 15C18-08B | MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE |
| 15C33-04 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15C35-06A | PAVEMENT MARKING (INTERSECTIONS) |
| 15D06-06 | TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION |
| 15D28-04 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY |
| 15D40-05A | TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER |
| 15D40-05C | TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER |

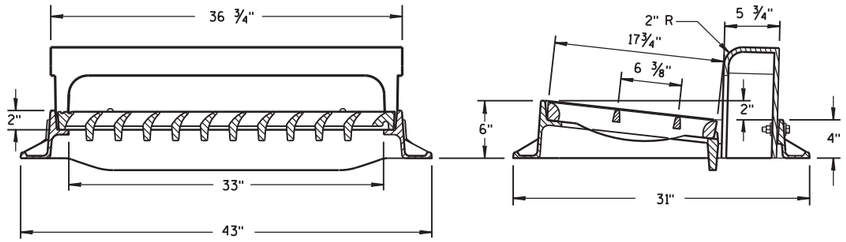


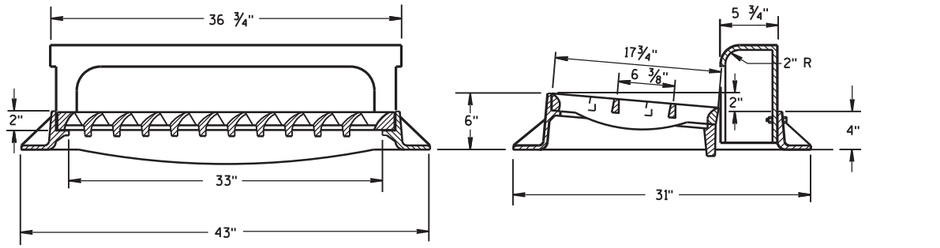

**NOTE:**
**GRATE IS REVERSIBLE.**




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

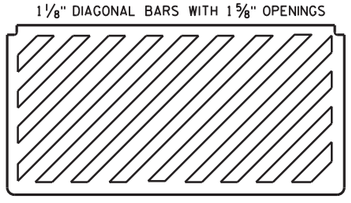



## TYPE "H"

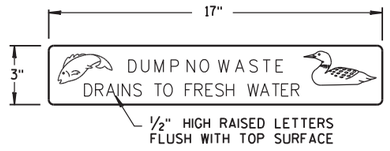
**NOTE: EITHER CASTING IS ACCEPTABLE**



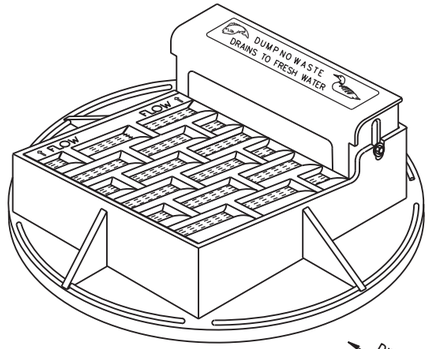

## SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

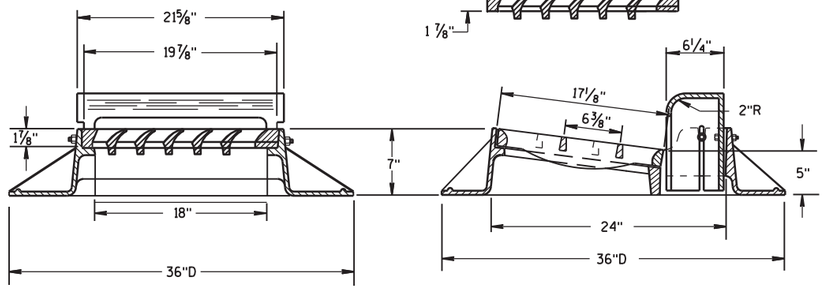



## LOGO DETAIL




NOTE: CURB BOX ADJUSTABLE 4" TO 9"

**NOTE:**
**GRATE IS REVERSIBLE.**



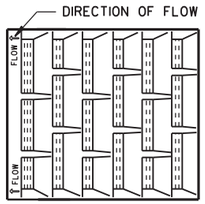

## TYPE "A"

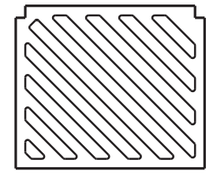
## GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

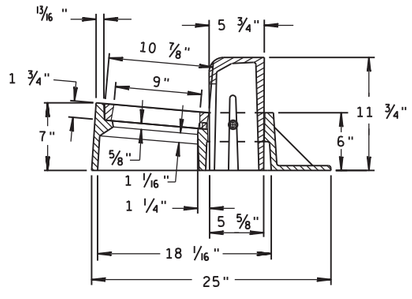


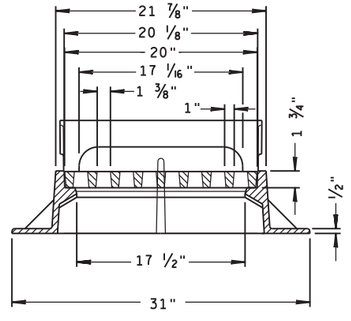




## SPECIAL GRATE FOR TYPE "A" COVER

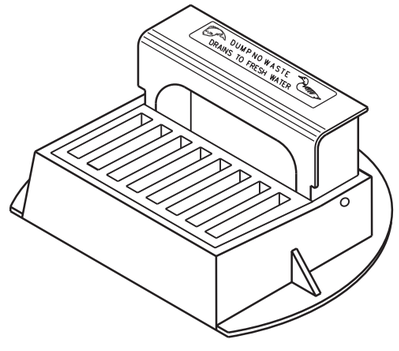
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)




## TYPE "Z"




## INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

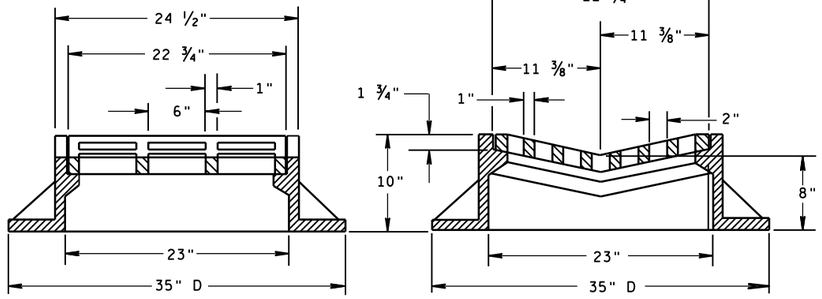
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

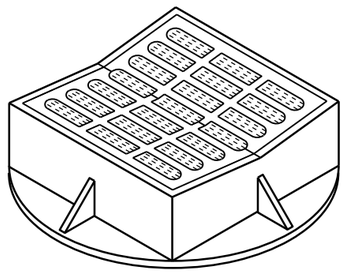


6

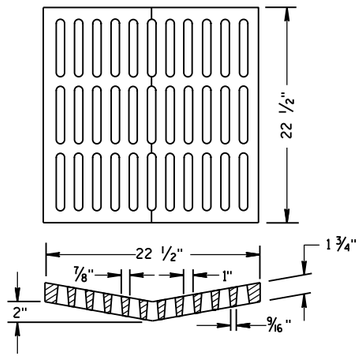


S.D.D. 8 A 5-19a



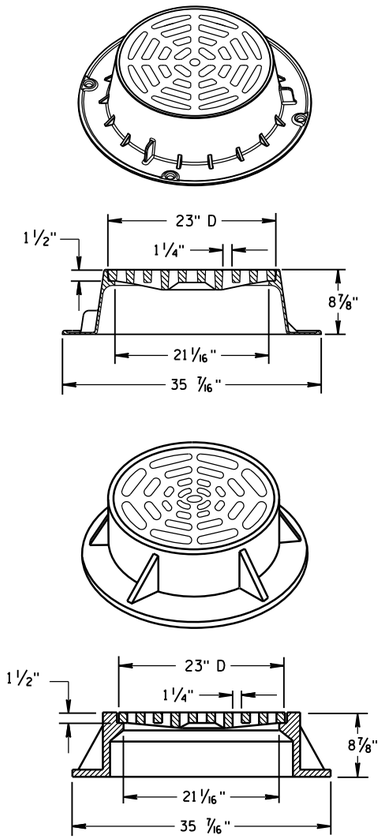



TYPE "B"




ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE




TYPE "C"

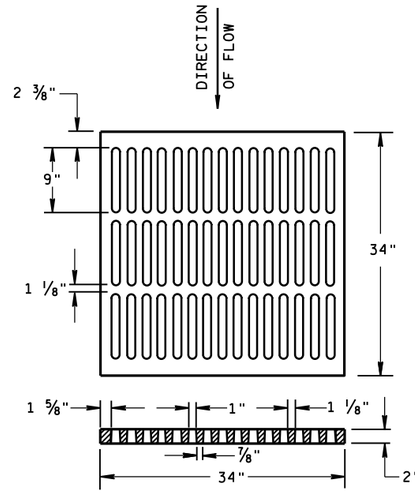
NOTE: EITHER CASTING IS ACCEPTABLE

## GENERAL NOTES

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

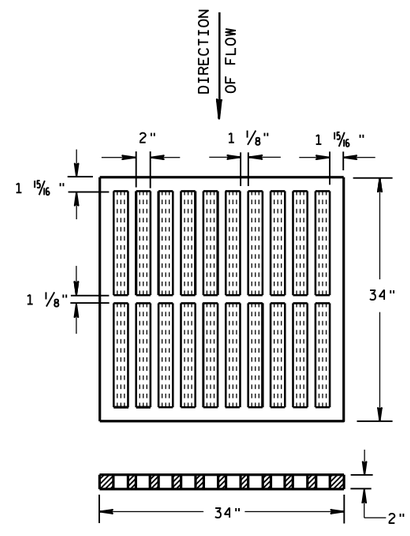
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



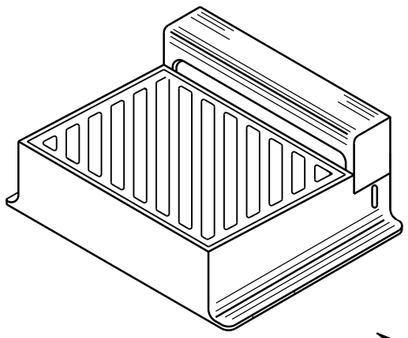

ALTERNATIVE TYPE "MS"

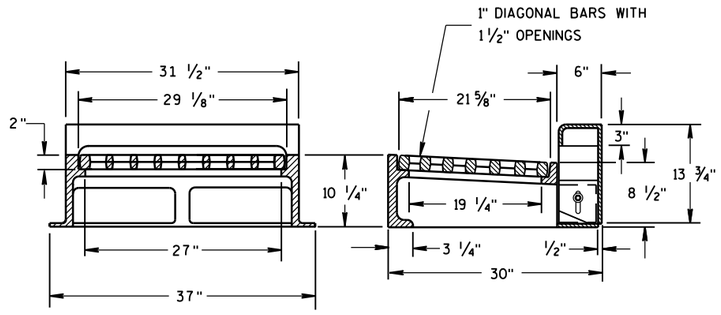
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE




TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE






NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

**INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM**

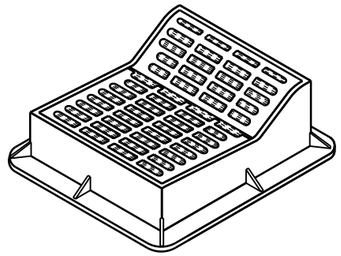
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

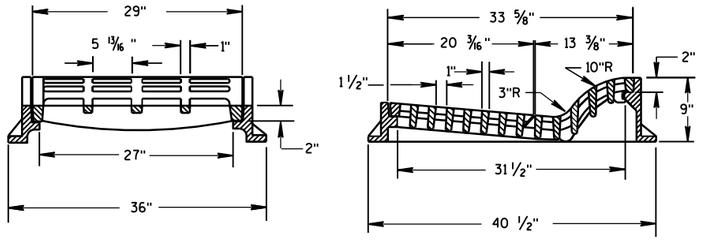
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA



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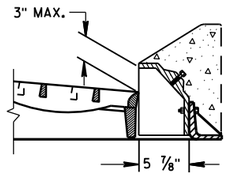
S.D.D. 8 A 5-19b






## TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

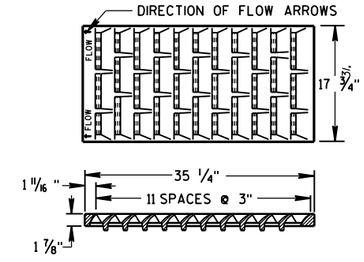
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

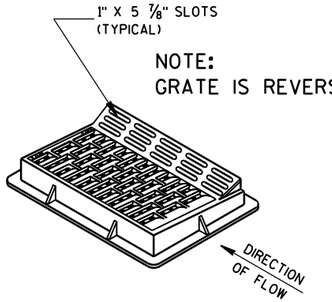
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

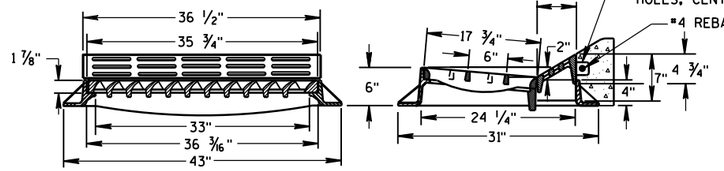
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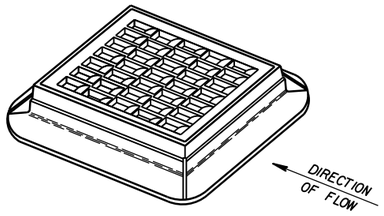



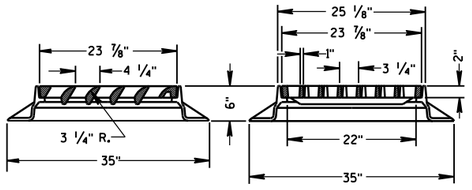




## TYPE "HM"

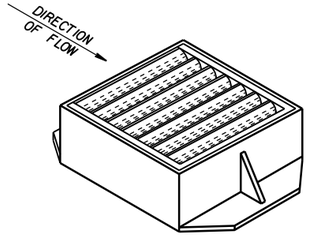
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

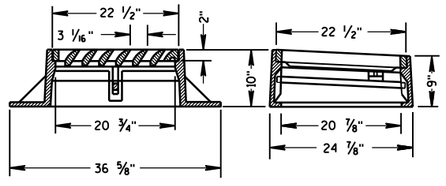
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



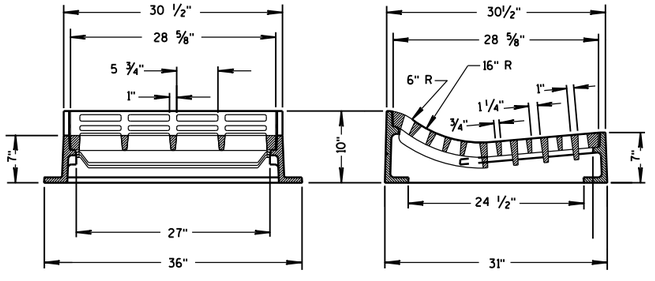




## TYPE "S"



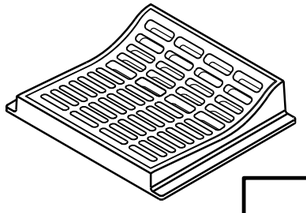




## TYPE "V"




## TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



## INLET COVERS
## TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

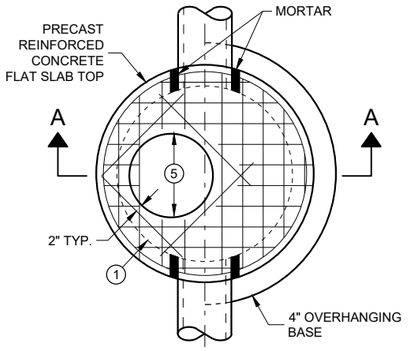
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

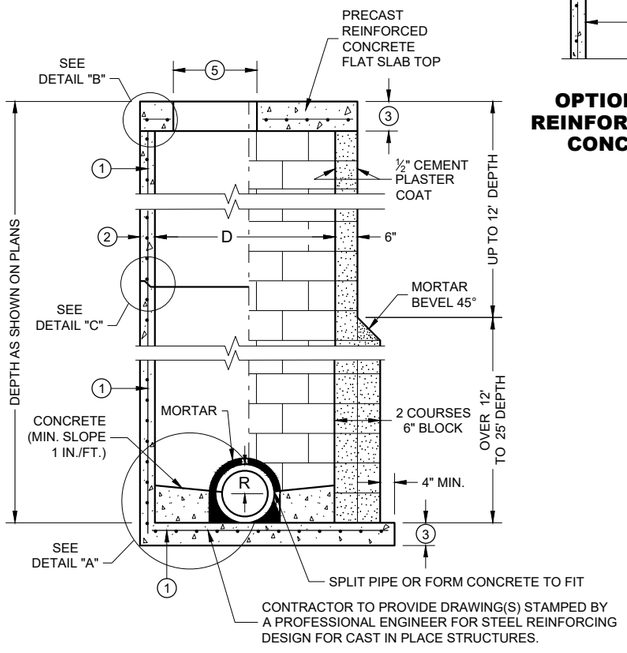



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S.D.D. 8 A 5-19c



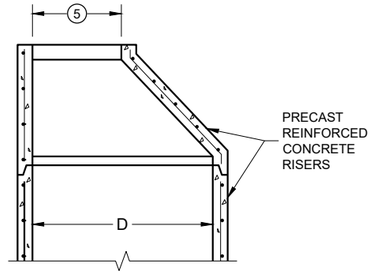

**PLAN VIEW**
**CIRCULAR OPENING**



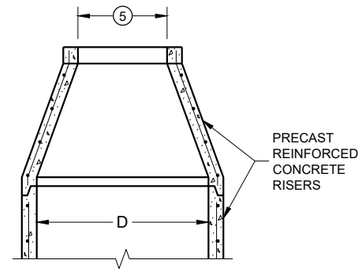

**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)**




**OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP**




**OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP**

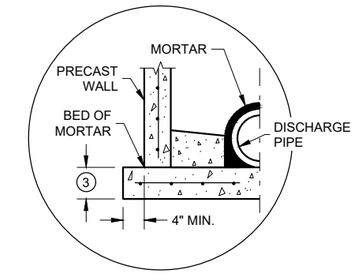
## MANHOLE COVER OPENING MATRIX

| OPENING SIZE (FT.) \ MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

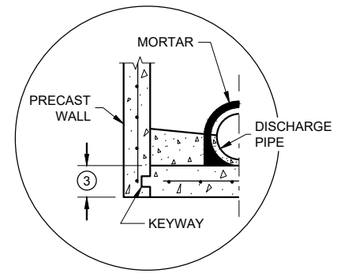
## PIPE MATRIX

| MANHOLE SIZE (DIA.) | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | | MINIMUM WALL THICKNESS (IN) | MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS |
|---|---|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) | | |
| 3-FT | 15 | 12 | 4 | 6 |
| 4-FT | 24 | 18 | 4 | 6 |
| 5-FT | 36 | 24 | 5 | 8 |
| 6-FT | 42 | 36 | 6 | 8 |
| 7-FT | 48 | 36/42* | 7 | 8 |
| 8-FT | 60 | 42 | 8 | 8 |
| 9-FT | 66 | 54 | 9 | 10 |
| 10-FT | 72 | 60 | 10 | 10 |

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

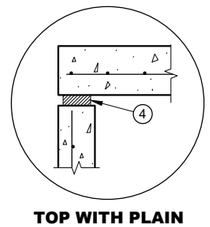



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

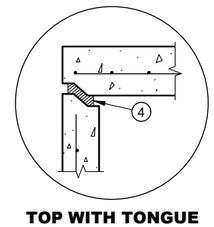



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

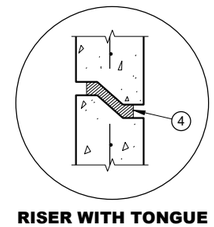
**DETAIL "A"**




**TOP WITH PLAIN END JOINT**




**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**

## GENERAL NOTES

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UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

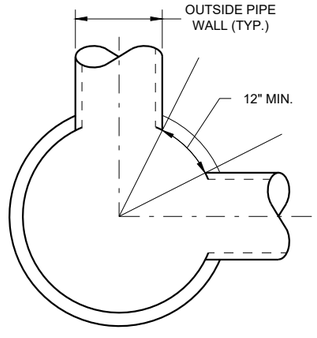
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

(5) SEE MANHOLE COVER OPENING MATRIX.




**MINIMUM HORIZONTAL PIPE SEPARATION**

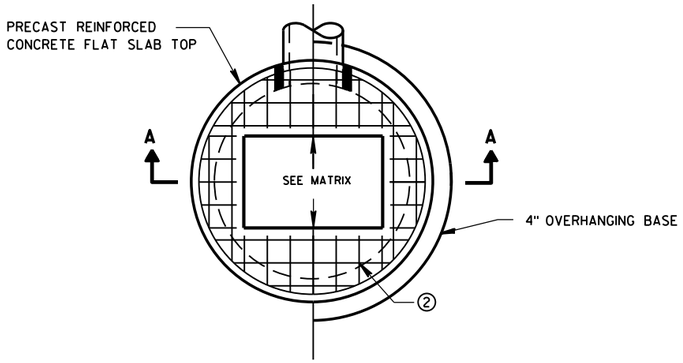
**MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

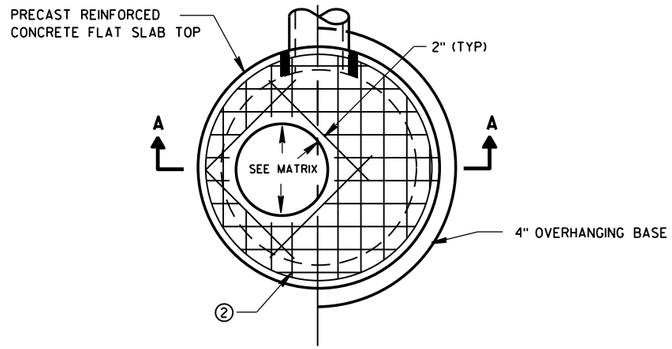
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
148
FHWA

**MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

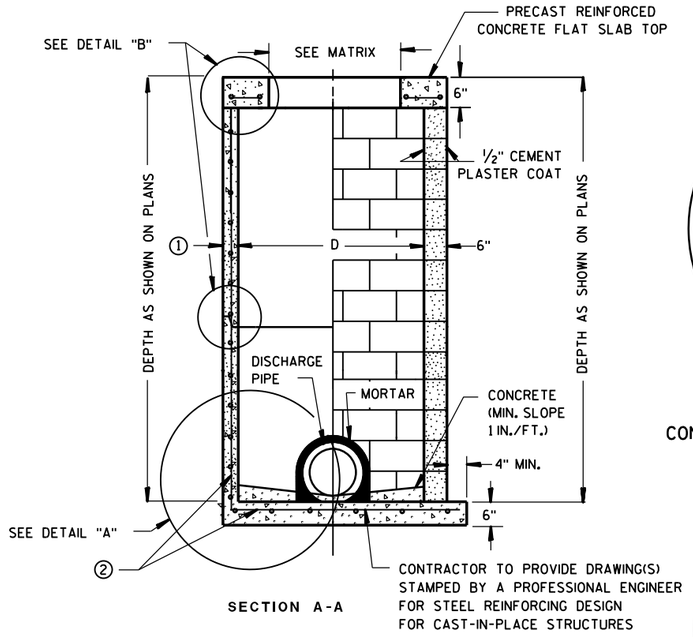

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SDD 08B09 - 03




PLAN VIEW RECTANGULAR OPENING




PLAN VIEW CIRCULAR OPENING

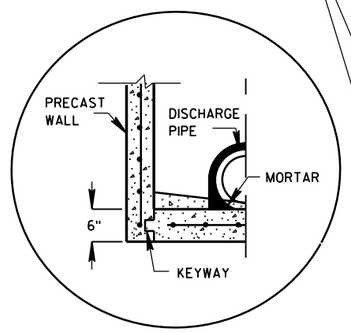



SECTION A-A

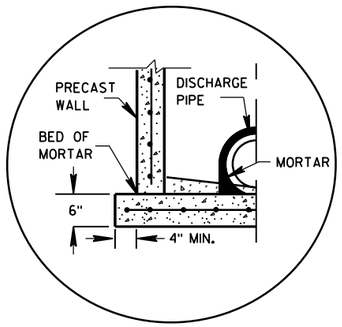
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

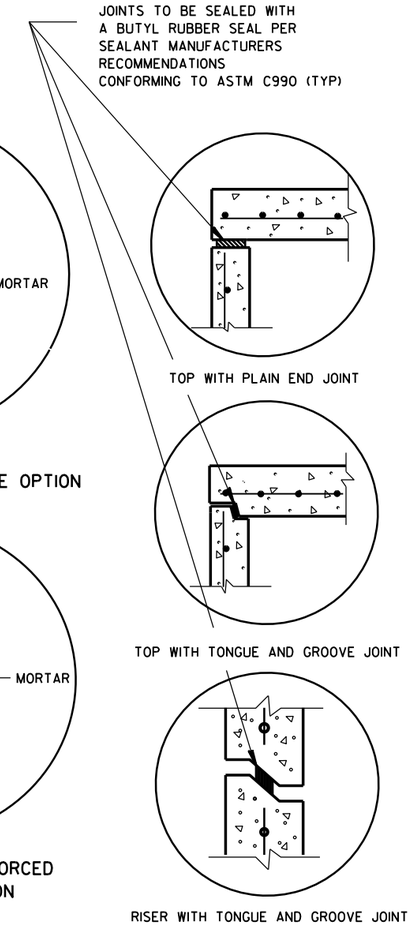



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"




TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

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

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PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

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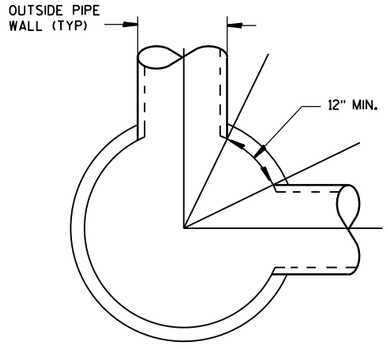
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

## INLET COVER OPENING MATRIX

| | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INLET SIZE | OPENING SIZE (FT) | | | | | | | | | | | |
| 3-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| 4-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| | 2X2.5 | | | X | | | | X | X | X | X | |
| | 2X3 | | | | | | X | | | | | |
| | 2.5X3 | | | | | X | | | | | | |




DETAIL "C"

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |

INLETS 3-FT AND 4-FT DIAMETER

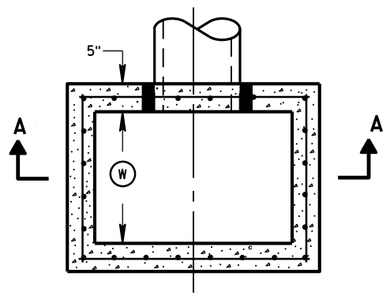
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

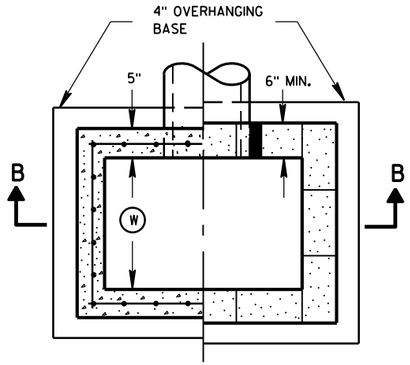
INLETS 3-FT AND 4-FT DIAMETER

6

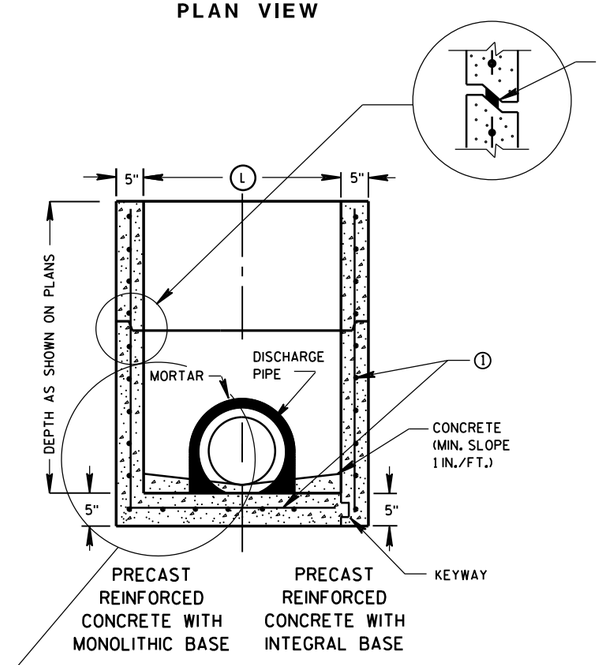
S.D.D. 8 C 6-2



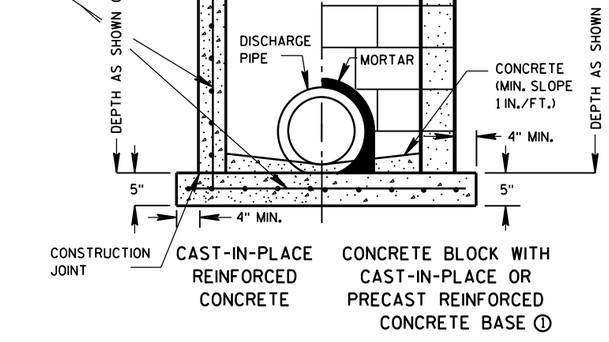

PLAN VIEW



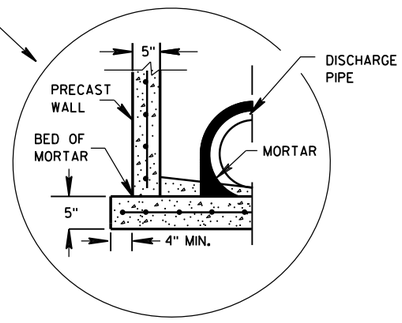

PLAN VIEW




SECTION A-A




SECTION B-B




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

## GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

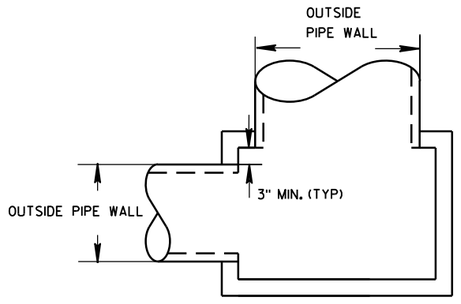
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## INLET COVER MATRIX

| INLET SIZE | | INLET COVER TYPE | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH (W) (FT) | LENGTH (L) (FT) | | | | | | | | | |
| 2X2-FT | 2 | 2 | X | X | | | | X | | X | |
| 2X2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X |
| 2X3-FT | 2 | 3 | | | | | X | | | | |
| 2.5X3-FT | 2.5 | 3 | | | | X | | | | | |

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2X2-FT | 12 | 12 |
| 2X2.5-FT | 12 | 18 |
| 2X3-FT | 12 | 24 |
| 2.5X3-FT | 18 | 24 |




DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

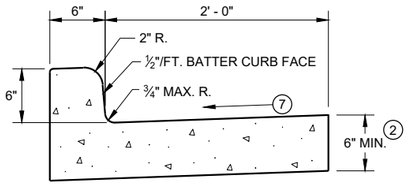
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

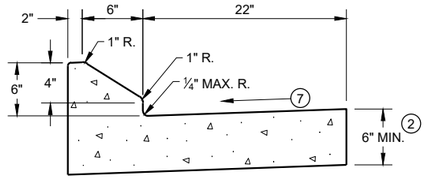




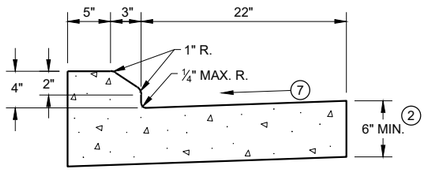
6
S.D.D. 8 C 7-2



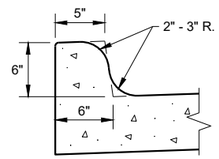

**TYPES A (1) & D**



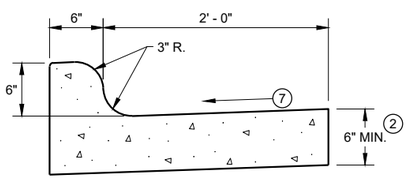

**6" SLOPED CURB TYPES G (1) & J**




**4" SLOPED CURB TYPES G (1) & J**

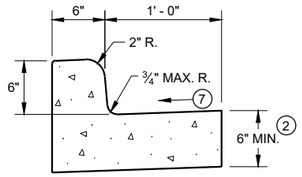



**TYPES K (1) & L**
(OPTIONAL CURB SHAPE)



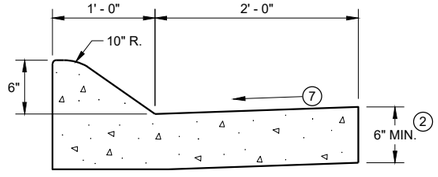

**TYPES K (1) & L**

**CONCRETE CURB AND GUTTER 30"**

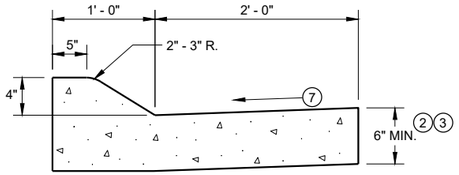



**TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 18"**

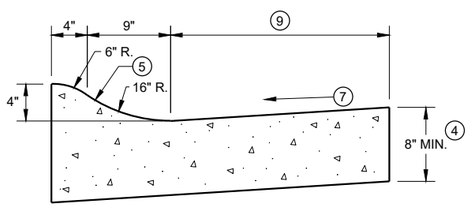



**6" SLOPED CURB TYPES A (1) & D**



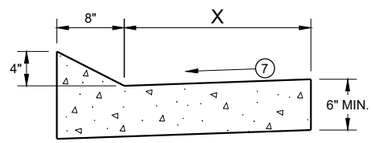

**4" SLOPED CURB TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 36"**




**4" SLOPED CURB TYPES R (1) & T**

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

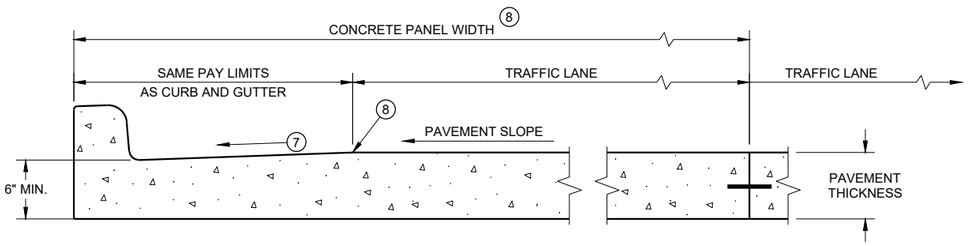



**TYPES TBT & TBTT (1)**

**CONCRETE CURB AND GUTTER**

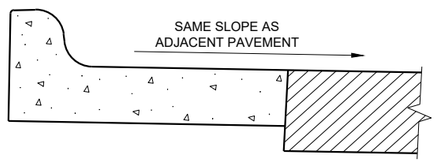
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

| PAVEMENT THICKNESS | MAXIMUM PANEL WIDTH |
|---|---|
| LESS THAN 10" | 12' |
| 10" & ABOVE | 15' |




**PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER**

* BIKE LANE IS NOT SHOWN




**REVERSE SLOPE GUTTER (6)**
(TYPICAL FOR ALL CURB & GUTTER TYPES)

## GENERAL NOTES

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

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

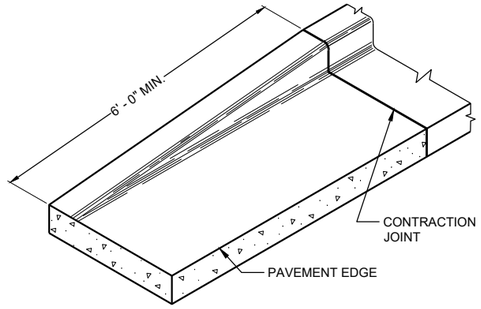
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

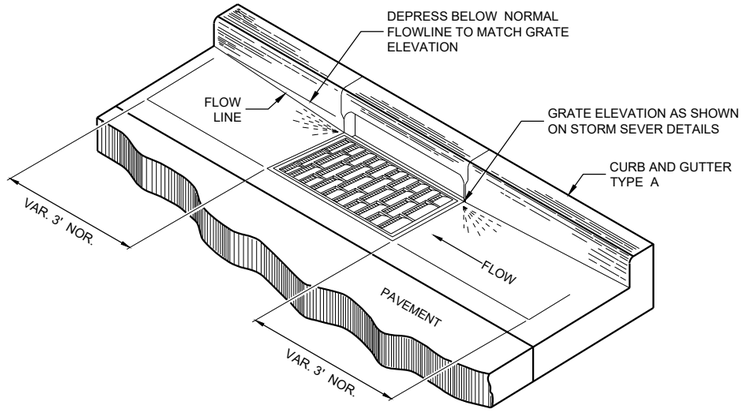
**CONCRETE CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


6
SDD 08D01 - 23a




**END SECTIONCURB AND GUTTER**




**DETAIL OF CURB AND GUTTER AT INLETS**

(TYPICAL H INLET COVER SHOWN)

## GENERAL NOTES

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

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

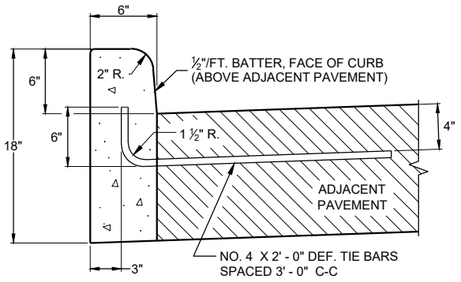
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

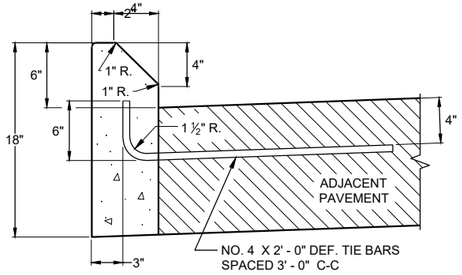
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

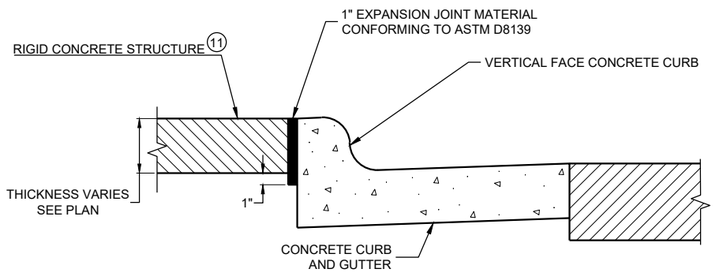



**TYPES A (1) & D**

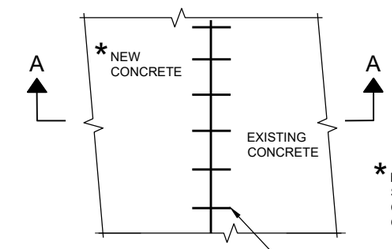



**TYPES G (1) & J**

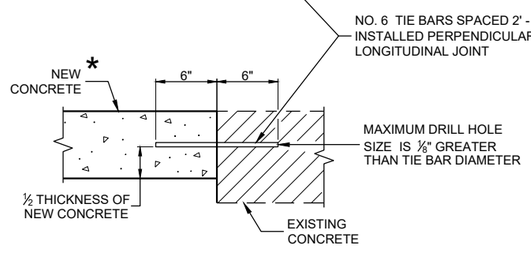
**CONCRETE CURB**




**EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)**

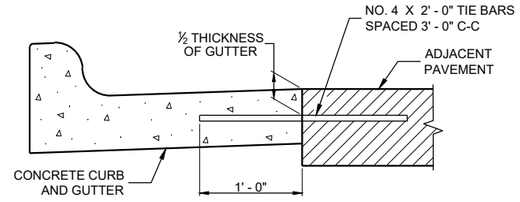



**PLAN VIEW**

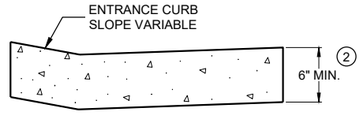



**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**




**TYPICAL TIE BAR LOCATION (1)**




**DRIVEWAY ENTRANCE CURB (10)**

(WHEN DIRECTED BY THE ENGINEER)

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA





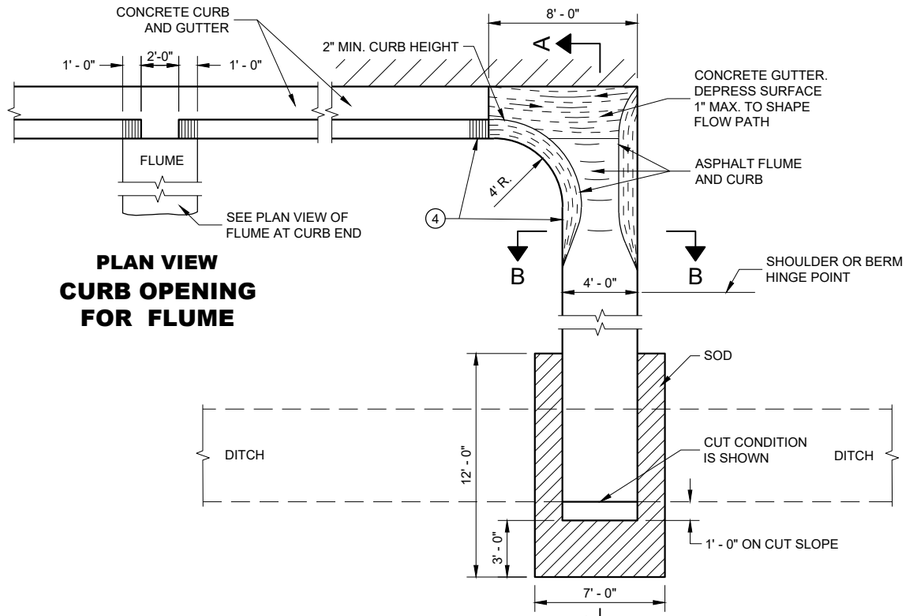
6



SDD08D01 - 23b

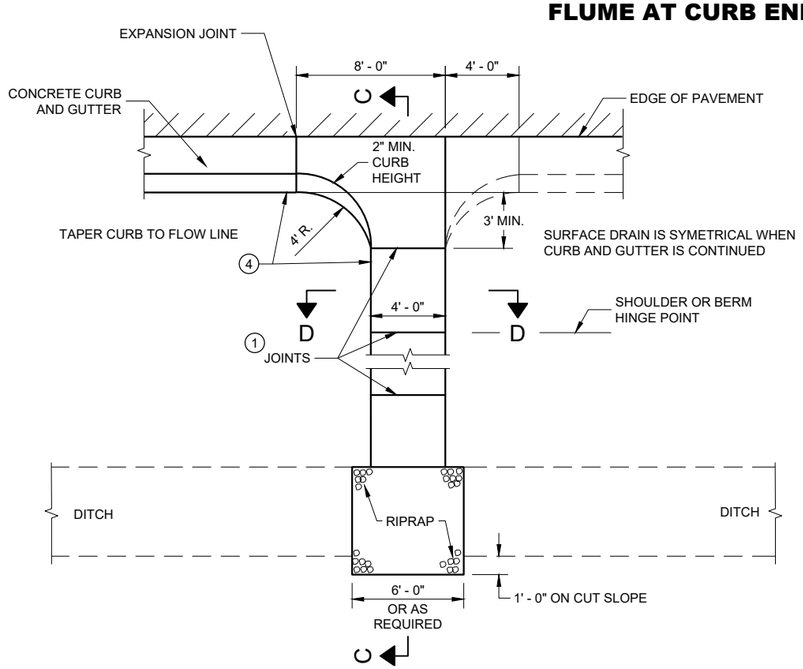
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

## ASPHALTIC FLUME




**PLAN VIEW**
**CURB OPENING FOR FLUME**

**PLAN VIEW**
**FLUME AT CURB END**



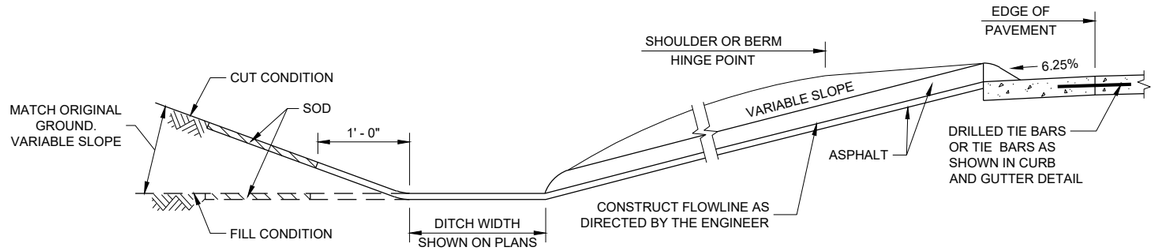

**PLAN VIEW**
**CONCRETE SURFACE DRAIN**

## GENERAL NOTES

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

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

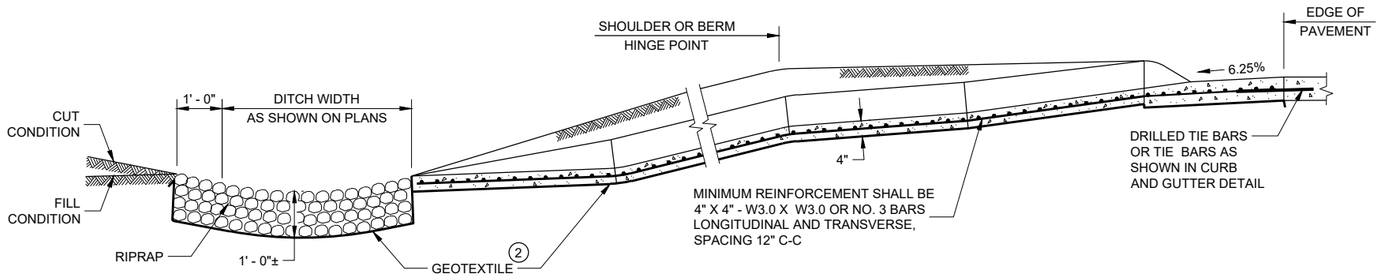
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



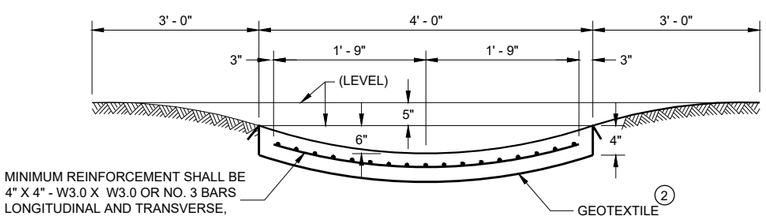

**SECTION A - A**




**SECTION B - B**




**SECTION C - C**




**SECTION D - D**

**CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

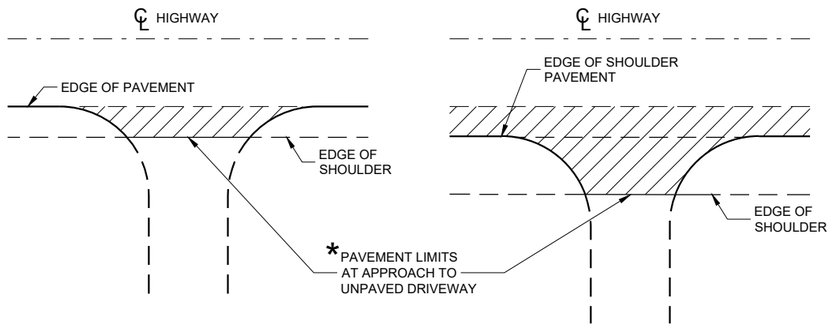


6

SDD 08D04 - 07

6

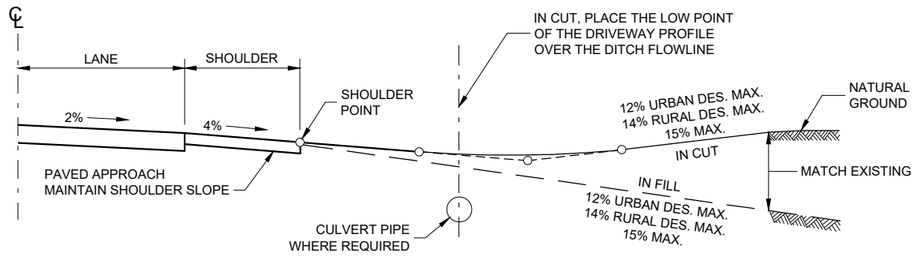
SDD 08D04 - 07



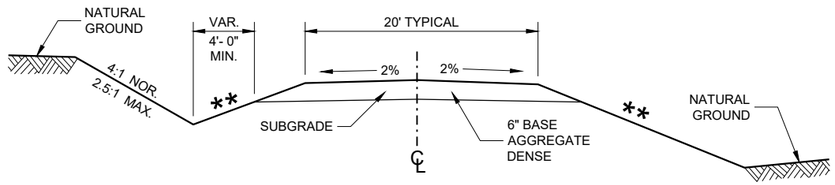

**PLAN VIEW**
(UNPAVED SHOULDER ON HIGHWAY)

**PLAN VIEW**
(PAVED SHOULDER ON HIGHWAY)

## RURAL DRIVEWAY INTERSECTION DETAIL
## (NO CURB AND GUTTER OR SIDEWALK)




## TYPICAL DRIVEWAY PROFILES

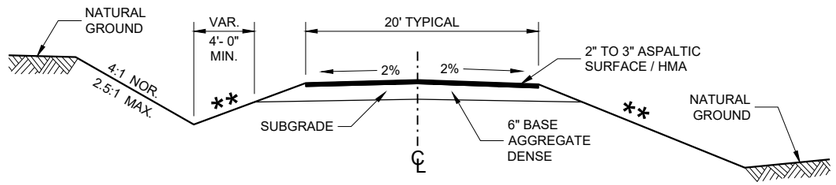



**IN CUT** **IN FILL**

## TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

| POSTED SPEED MPH | MAX. SLOPE |
|---|---|
| <35 | 4:1 |
| ≥ 35 TO < 60 | 6:1 |
| ≥60 | 10:1 |




**IN CUT** **IN FILL**

## TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

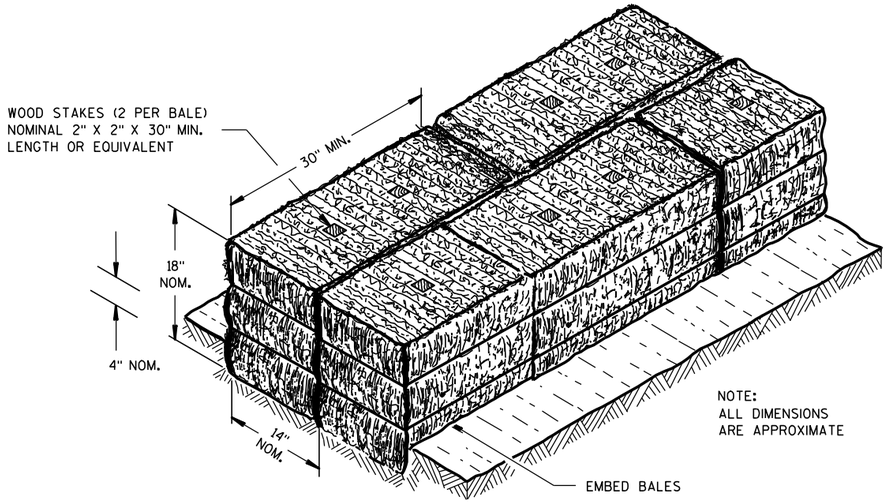
## DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

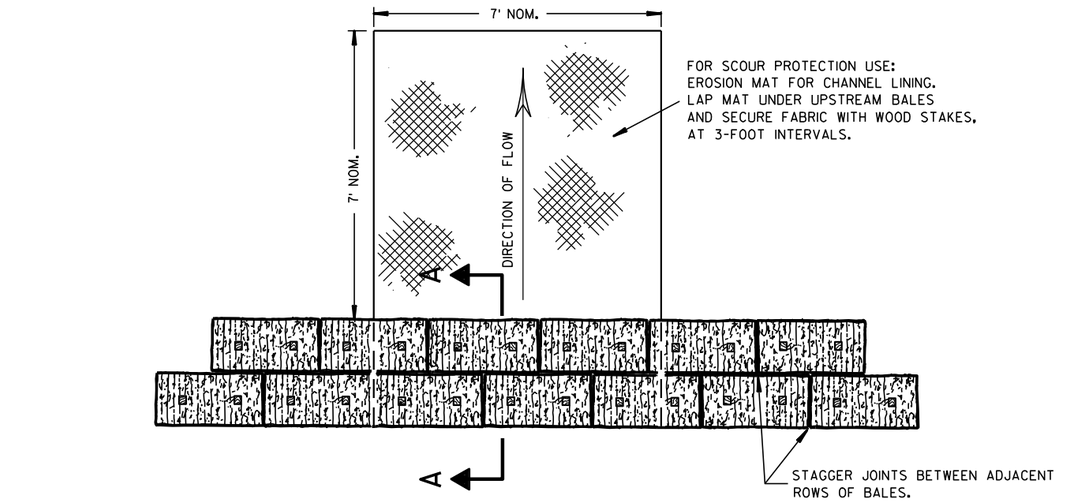
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

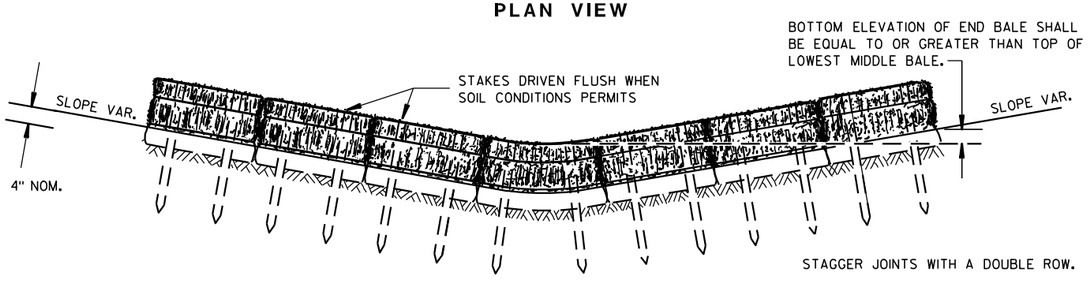
FHWA




**SECTION A-A**




**PLAN VIEW**



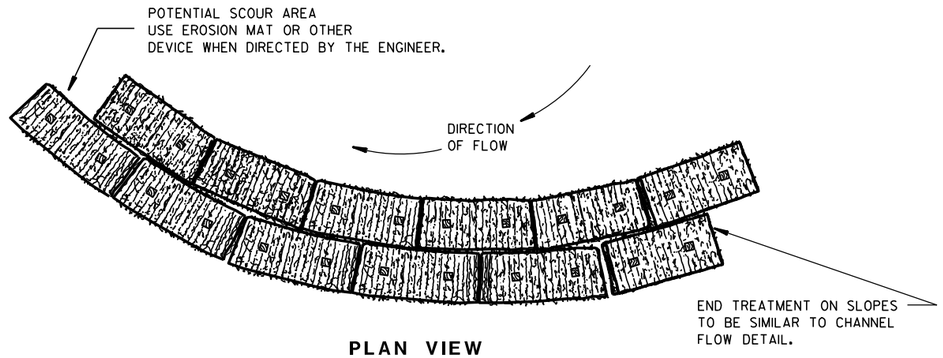

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

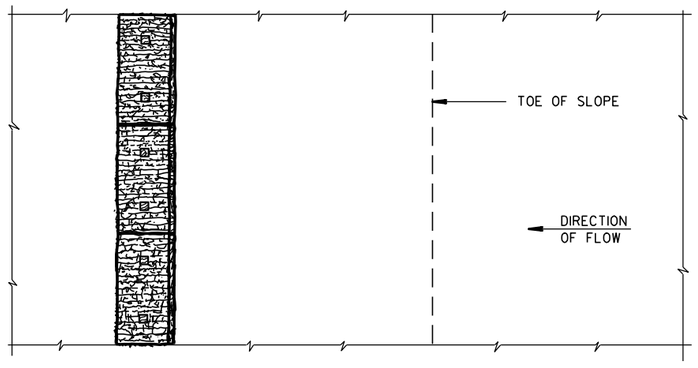
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

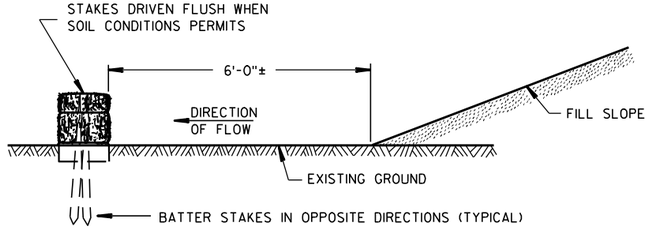



**PLAN VIEW**

WHEN ALTERING THE DIRECTION OF FLOW




**PLAN VIEW**




**FRONT ELEVATION**

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

## EROSION BALES FOR SHEET FLOW

## TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

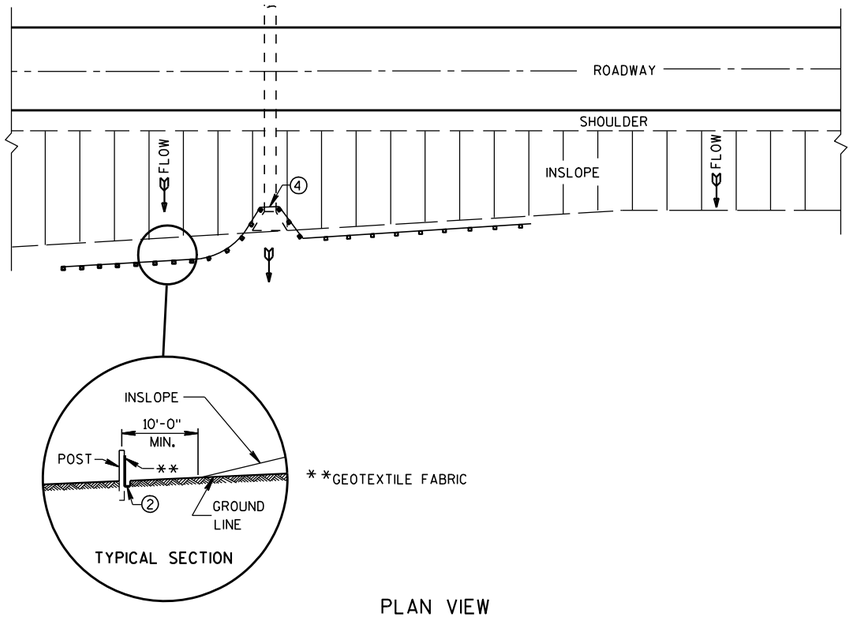


6

S.D.D. 8 E 8-3

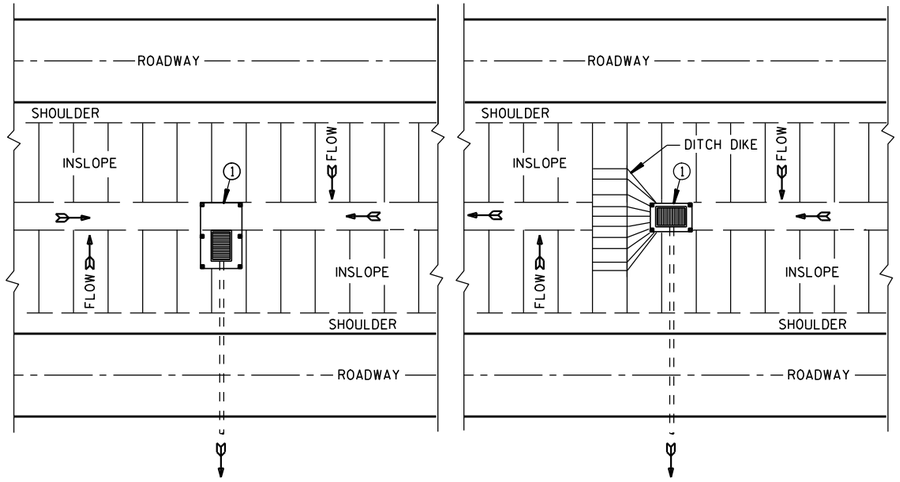
6

S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE




PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

## GENERAL NOTES

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

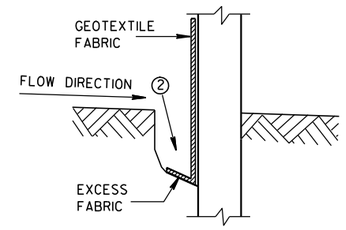
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

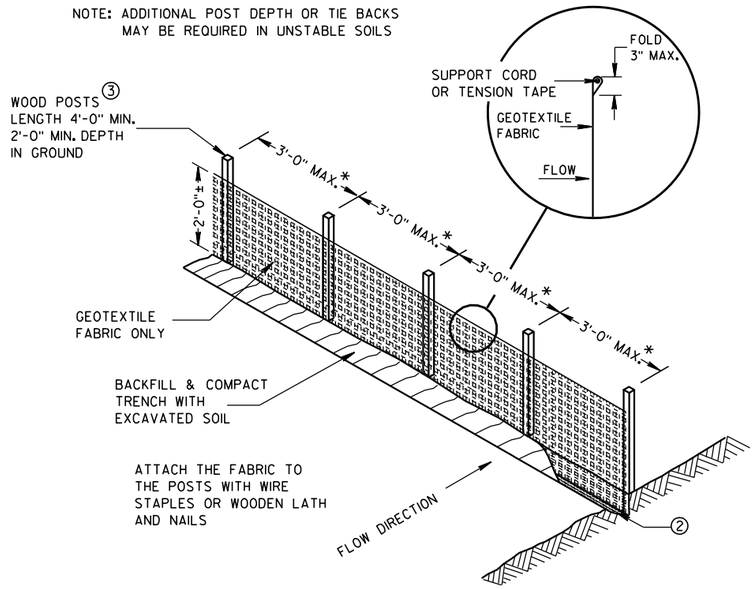
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

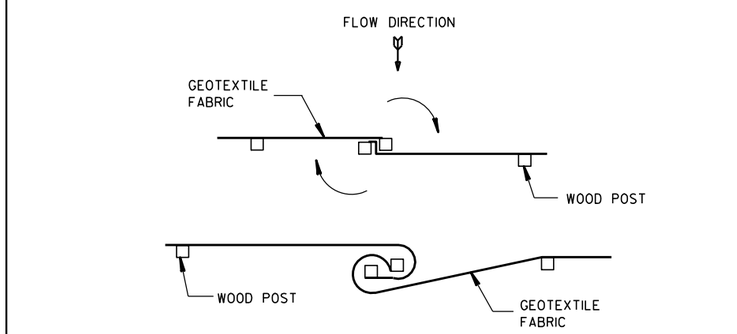
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



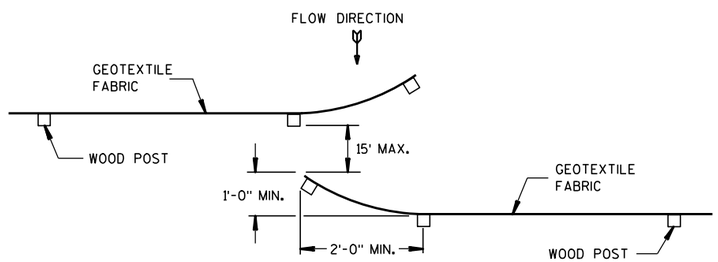

## TRENCH DETAIL




## SILT FENCE

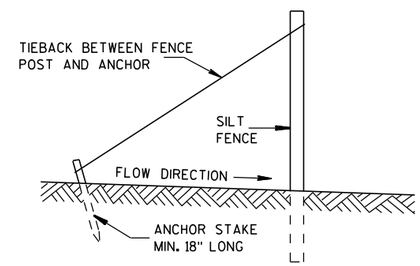



TWIST METHOD




HOOK METHOD

## JOINING TWO LENGTHS OF SILT FENCE ⑤




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

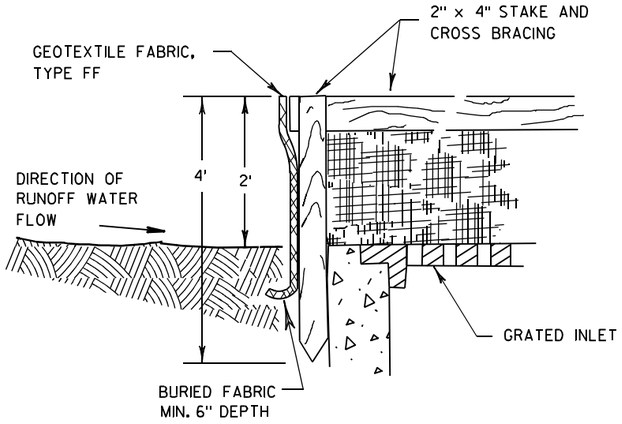


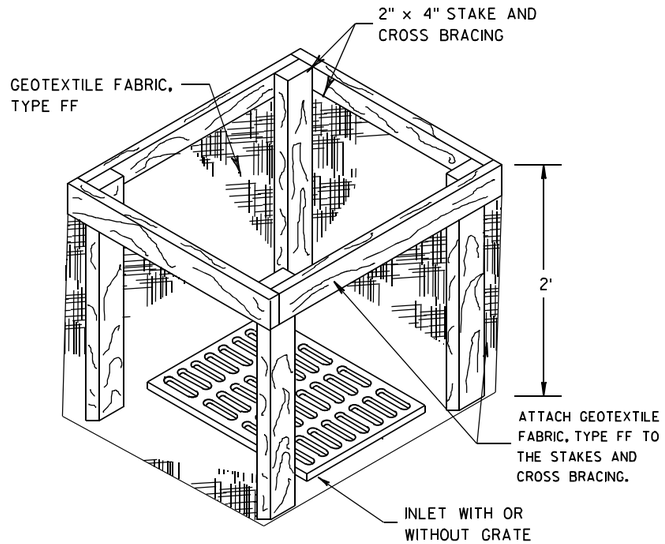
6

S.D.D. 8 E 9-6

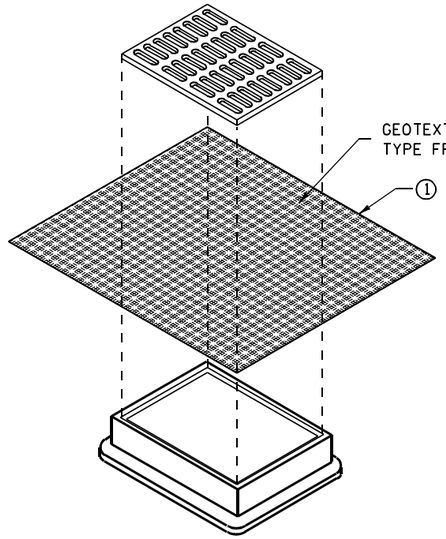
6

S.D.D. 8 E 9-6



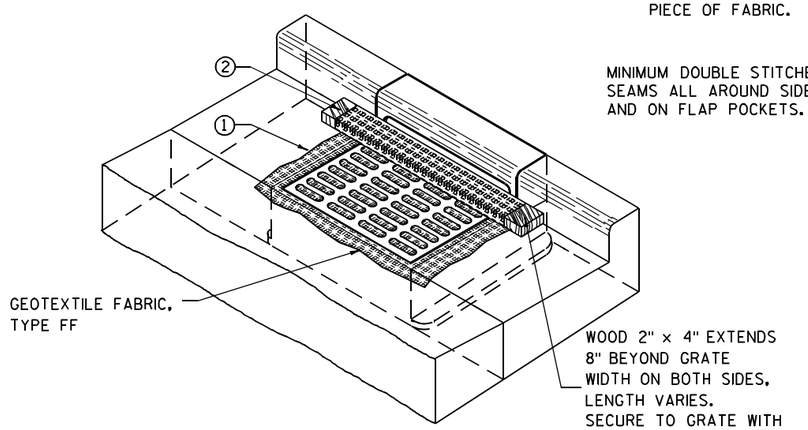




## INLET PROTECTION, TYPE A

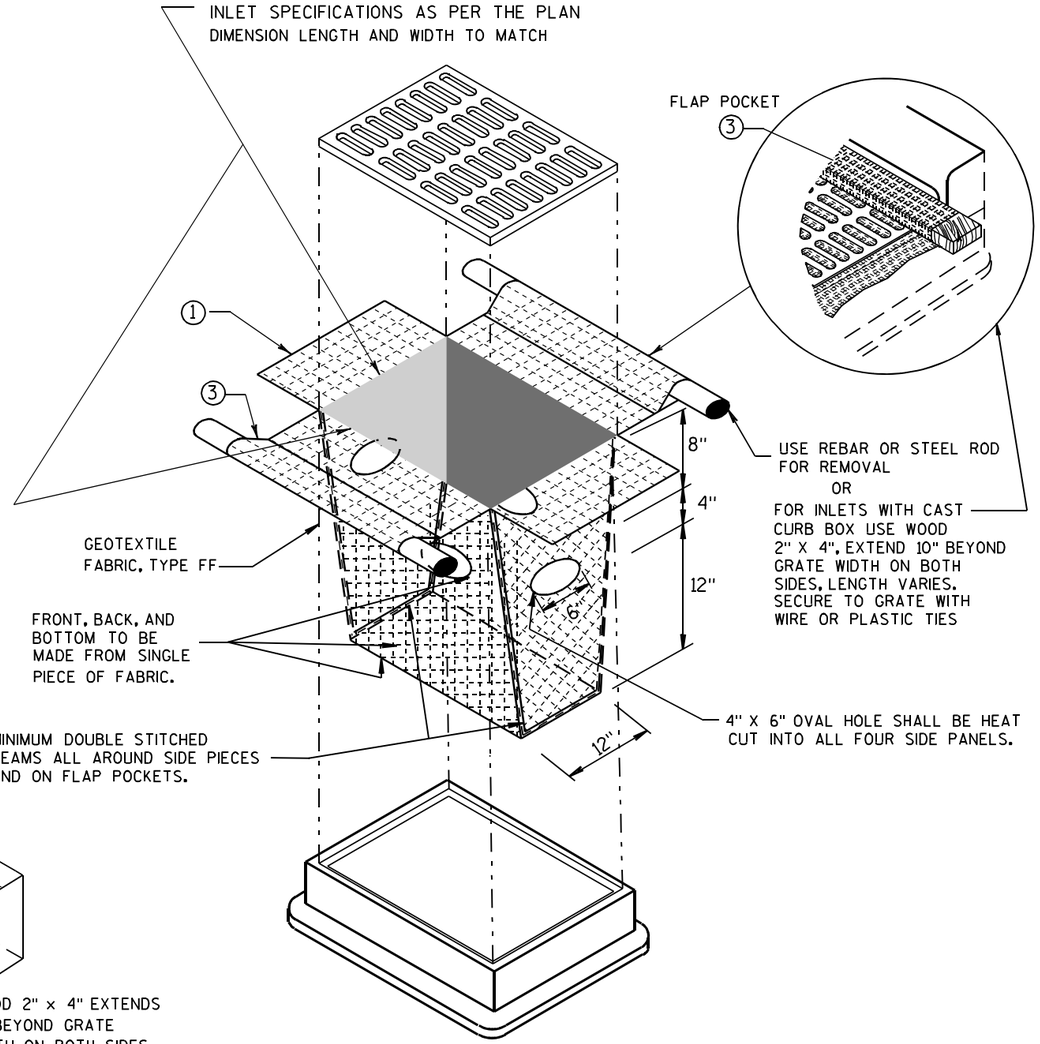



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

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




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




## INLET PROTECTION, TYPE D

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

## GENERAL NOTES

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

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

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

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

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

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

## INSTALLATION NOTES

### TYPE B & C

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

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

### TYPE D

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

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

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

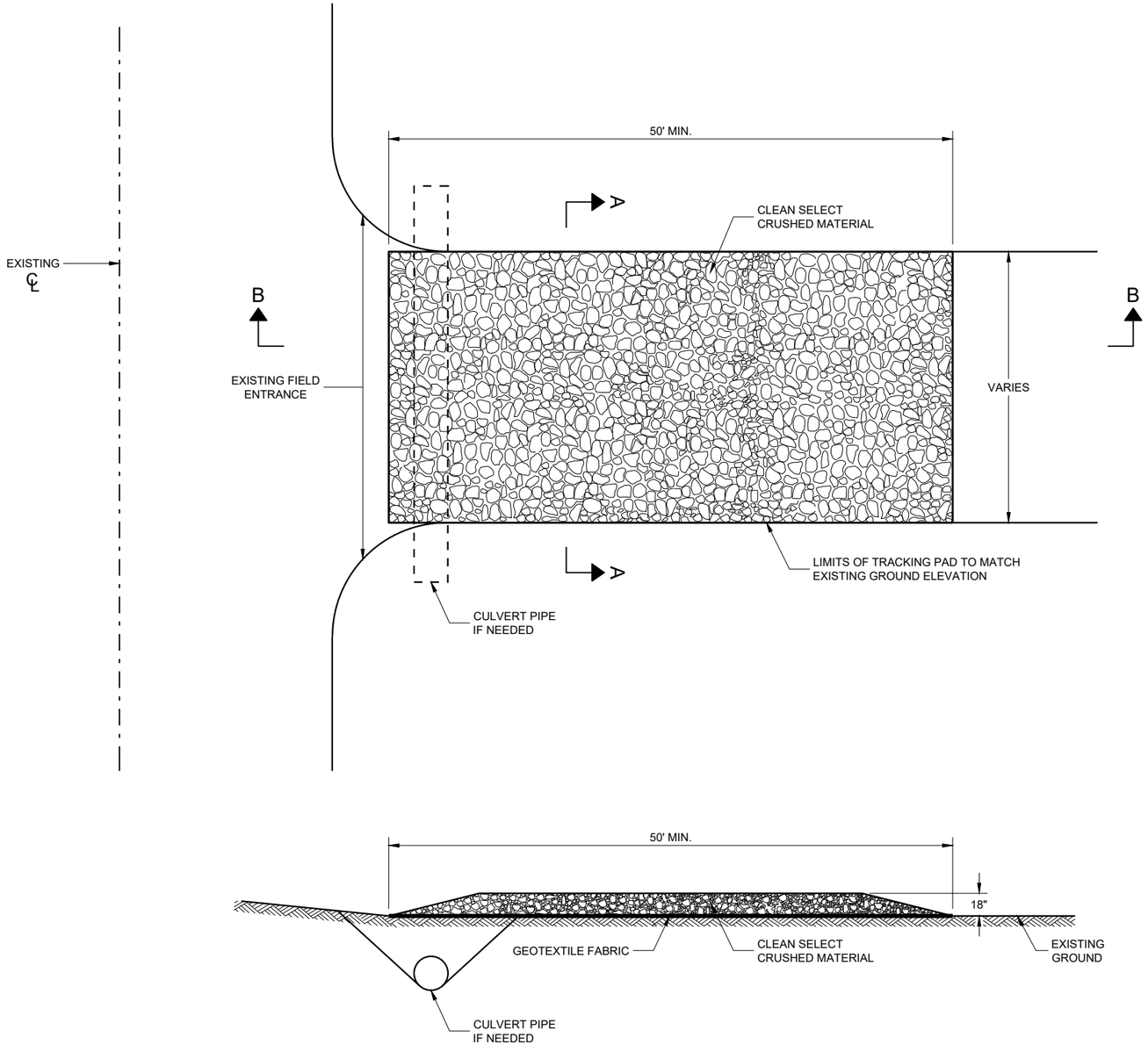
**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 8 E 10-2







**SECTION B - B**

## GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

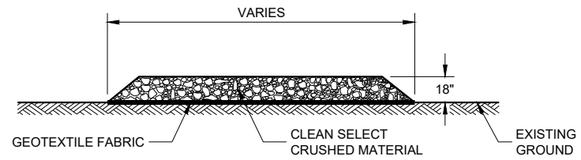
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.




**SECTION A - A**

6

SDD 08E14 - 01

# TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

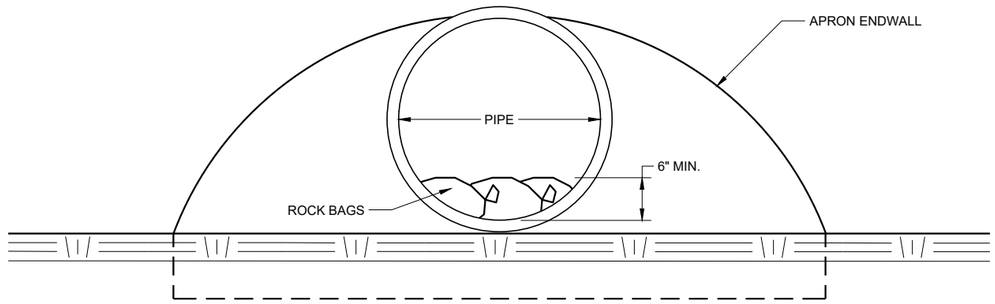
APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

FHWA

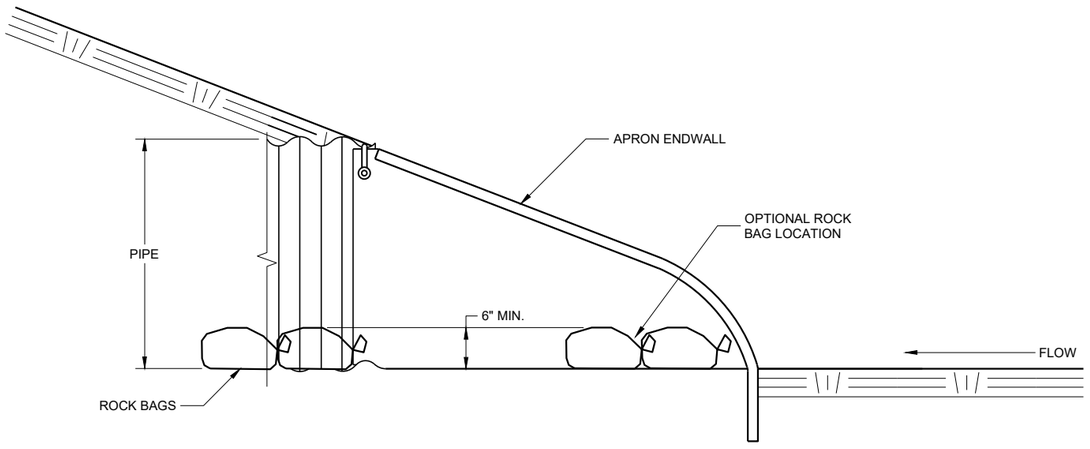


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SDD 08E14 - 01




**END VIEW**




**SIDE VIEW**

## CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

**CULVERT PIPE CHECK**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA



6

SDD 08E15 - 01

6

SDD 08E15 - 01

## METAL APRON ENDWALLS

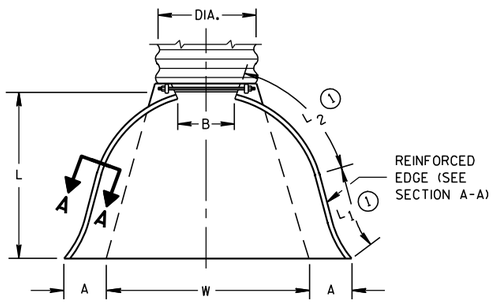
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 to 1 | 1 Pc. |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21 3/4 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28 1/4 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29 5/8 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37 1/4 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52 1/4 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59 3/4 | 72 | 2 1/2 to 1 | 2 Pc. |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75 5/8 | 84 | 2 1/2 to 1 | 2 Pc. |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2 1/4 to 1 | 3 Pc. |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85 1/2 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | .109× | .105× | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109× | .105× | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109× | .105× | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109× | .105× | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109× | .105× | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109× | .105× | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109× | .105× | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

× EXCEPT CENTER PANEL SEE GENERAL NOTES

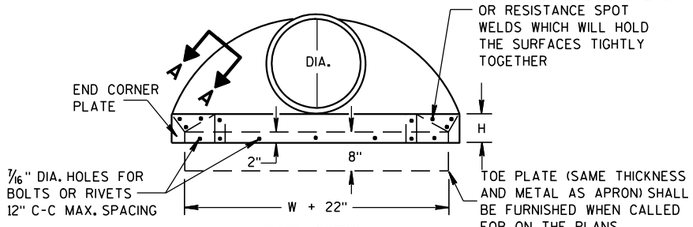
## REINFORCED CONCRETE APRON ENDWALLS

| PIPE DIA. (IN.) | DIMENSIONS (Inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 72 1/8 | 24 | 2 | 3 to 1 |
| 15 | 2 1/4 | 6 | 27 | 46 | 73 | 30 | 2 1/4 | 3 to 1 |
| 18 | 2 1/2 | 9 | 27 | 46 | 73 | 36 | 2 1/2 | 3 to 1 |
| 21 | 2 3/4 | 9 | 36 | 37 1/2 | 73 1/2 | 42 | 2 3/4 | 3 to 1 |
| 24 | 3 | 9 1/2 | 43 1/2 | 30 | 73 1/2 | 48 | 3 | 3 to 1 |
| 27 | 3 1/4 | 10 1/2 | 49 1/2 | 24 | 73 1/2 | 54 | 3 1/4 | 3 to 1 |
| 30 | 3 1/2 | 12 | 54 | 19 3/4 | 73 1/2 | 60 | 3 1/2 | 3 to 1 |
| 36 | 4 | 15 | 63 | 34 3/4 | 97 3/4 | 72 | 4 | 3 to 1 |
| 42 | 4 1/2 | 21 | 63 | 35 | 98 | 78 | 4 1/2 | 3 to 1 |
| 48 | 5 | 24 | 72 | 26 | 98 | 84 | 5 | 3 to 1 |
| 54 | 5 1/2 | 27 | 65 | * 33 1/4 - ** 35 | * 98 1/4 - ** 100 | 90 | 5 1/2 | 2 2/5 to 1 |
| 60 | 6 | * 30 - ** 35 | 60 | 39 | 99 | 96 | 5 | 2 to 1 |
| 66 | 6 1/2 | * 24 - ** 30 | * 72 - ** 78 | * 21 - ** 27 | 99 | 102 | 5 1/2 | 2 to 1 |
| 72 | 7 | * 24 - ** 36 | 78 | 21 | 99 | 108 | 6 | 2 to 1 |
| 78 | 7 1/2 | * 24 - ** 36 | 78 | 21 | 99 | 114 | 6 1/2 | 2 to 1 |
| 84 | 8 | 36 | 90 1/2 | 21 | 111 1/2 | 120 | 6 1/2 | 1 1/2 to 1 |
| 90 | 8 1/2 | 41 | 87 1/2 | 24 | 111 1/2 | 132 | 6 1/2 | 1 1/2 to 1 |

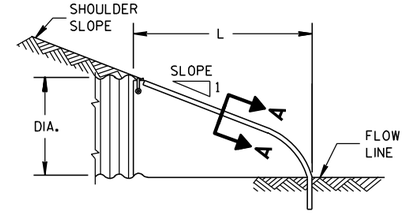
*MINIMUM
**MAXIMUM




PLAN VIEW

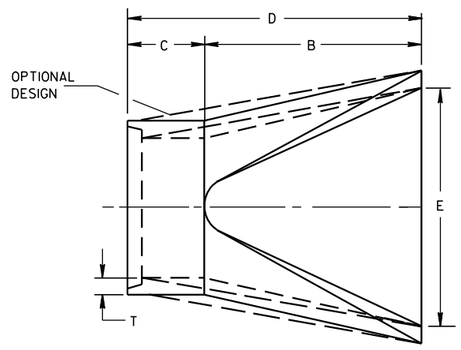



END VIEW

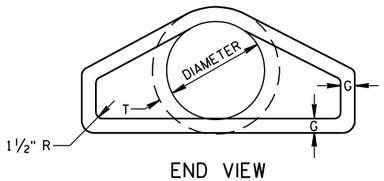



SIDE ELEVATION

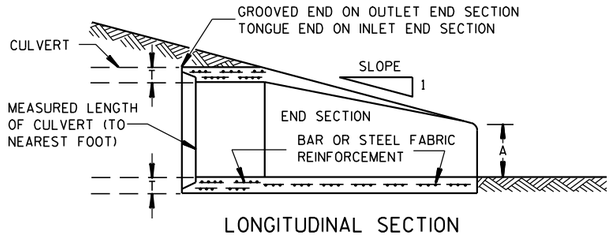
## METAL ENDWALLS




PLAN

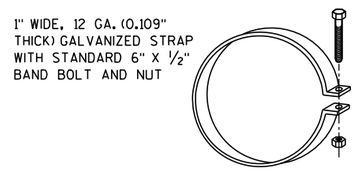



END VIEW



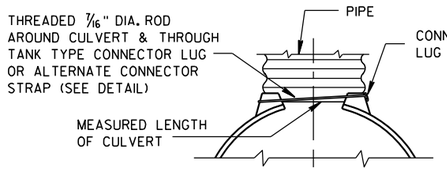

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

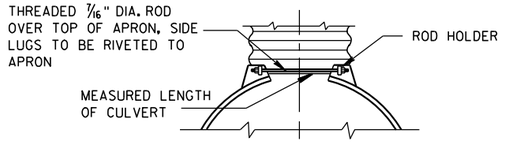



ALTERNATE FOR TYPE 1 CONNECTION

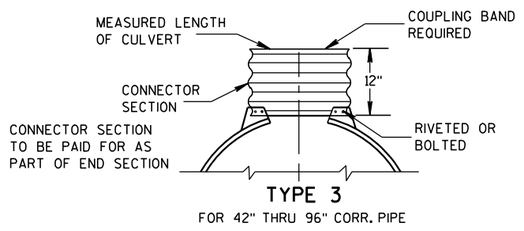
## END SECTION CONNECTOR STRAP



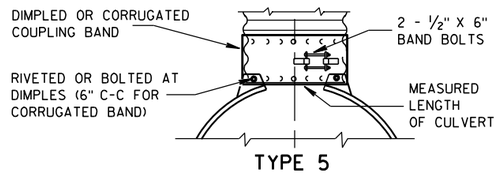

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

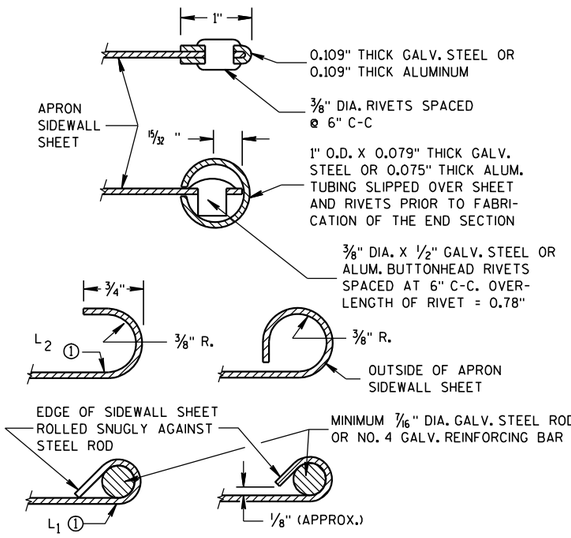
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

## CONNECTION DETAILS




## SECTION A-A

## GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

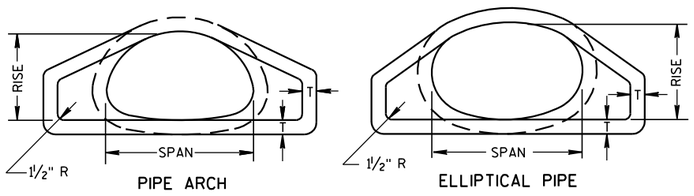
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

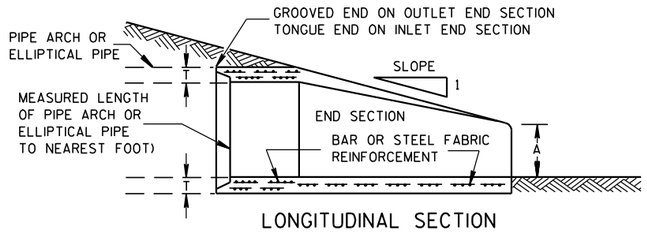


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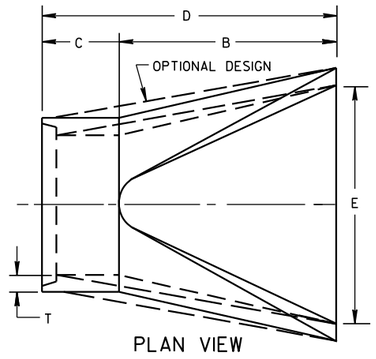
S.D.D. 8 F 1-11




END VIEW

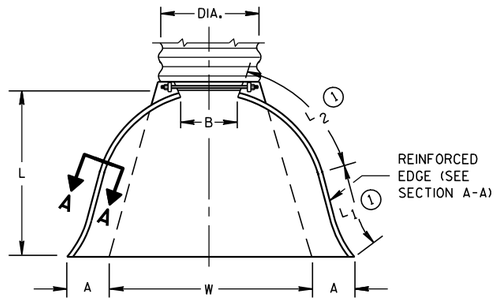



LONGITUDINAL SECTION

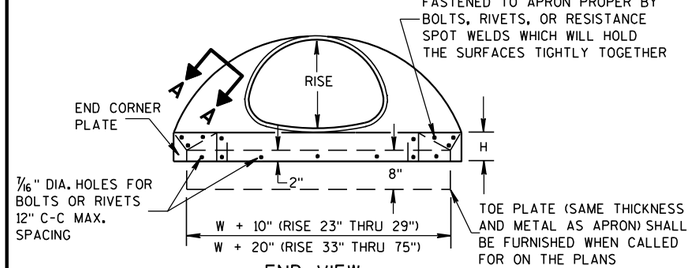



PLAN VIEW

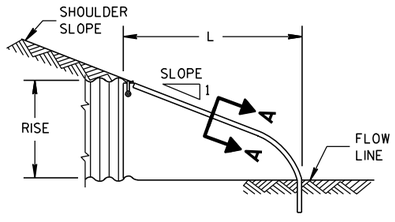
# CONCRETE ENDWALLS




PLAN VIEW

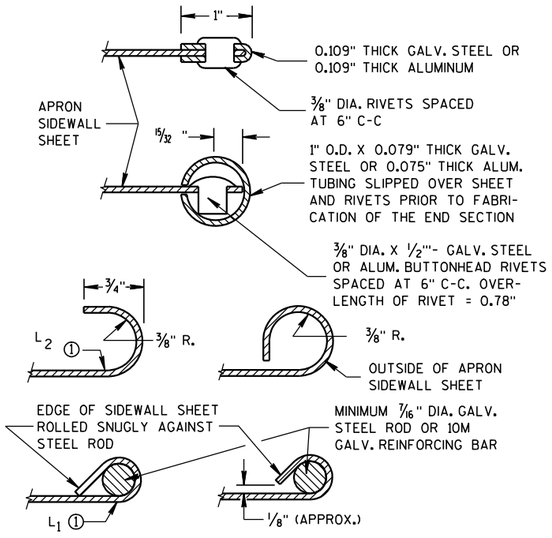



END VIEW




SIDE ELEVATION

# METAL ENDWALLS




# SECTION A-A

## 2- ⅔" X ½" CORRUGATIONS

| EQUIV. DIA. (Inches) | (Inches) SPAN | (Inches) RISE | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1½") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 17 | 13 | .064 | .060 | 7 | 9 | 6 | 19 | 14 | 16 | 30 | 2½ to 1 | 1 Pc. |
| 18 | 21 | 15 | .064 | .060 | 7 | 10 | 6 | 23 | 14 | 19⅜ | 36 | 2½ to 1 | 1 Pc. |
| 21 | 24 | 18 | .064 | .060 | 8 | 12 | 6 | 28 | 18 | 21¾ | 42 | 2½ to 1 | 1 Pc. |
| 24 | 28 | 20 | .064 | .060 | 9 | 14 | 6 | 32 | 18 | 27½ | 48 | 2½ to 1 | 1 Pc. |
| 30 | 35 | 24 | .079 | .075 | 10 | 16 | 6 | 39 | 18 | 37⅝ | 60 | 2½ to 1 | 1 Pc. |
| 36 | 42 | 29 | .079 | .075 | 12 | 18 | 8 | 46 | 24 | 45⅜ | 75 | 2½ to 1 | 1 Pc. |
| 42 | 49 | 33 | .109 | .105 | 13 | 21 | 9 | 53 | 24 | 54¾ | 85 | 2½ to 1 | 2 Pc. |
| 48 | 57 | 38 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 68 | 90 | 2½ to 1 | 3 Pc. |
| 54 | 64 | 43 | .109 | .105 | 18 | 30 | 12 | 70 | 24 | 72¾ | 102 | 2¼ to 1 | 3 Pc. |
| 60 | 71 | 47 | .109* | .105* | 18 | 33 | 12 | 77 | 30 | 82¼ | 114 | 2¼ to 1 | 3 Pc. |
| 66 | 77 | 52 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 2 to 1 | 3 Pc. |
| 72 | 83 | 57 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |

## 3" X 1" CORRUGATIONS

| EQUIV. DIA. (Inches) | (Inches) SPAN | (Inches) RISE | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1½") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | 53 | 41 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 72¾ | 90 | 2½ to 1 | 2 Pc. |
| 54 | 60 | 46 | .109 | .105 | 18 | 30 | 12 | 70 | 30 | 82¼ | 102 | 2 to 1 | 2 Pc. |
| 60 | 66 | 51 | .109* | .105* | 18 | 33 | 12 | 77 | — | — | 114 | 1½ to 1 | 3 Pc. |
| 66 | 73 | 55 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 1½ to 1 | 3 Pc. |
| 72 | 81 | 59 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |
| 78 | 87 | 63 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 148 | 1½ to 1 | 3 Pc. |
| 84 | 95 | 67 | .109* | .105* | 22 | 34 | 12 | 77 | — | — | 162 | 1½ to 1 | 3 Pc. |
| 90 | 103 | 71 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |
| 96 | 112 | 75 | .109* | .105* | 24 | 40 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

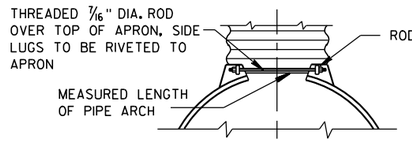
## REINFORCED CONCRETE PIPE ARCH

| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) ** SPAN | ** RISE | T | A | B | C | D | E | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 29 | 18 | 3 | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 36 | 22 | 3½ | 9½ | 50 | 46 | 96 | 60 | 3 to 1 |
| 36 | 44 | 27 | 4 | 11⅛ | 60 | 36 | 96 | 72 | 3 to 1 |
| 42 | 51 | 31 | 4½ | 15 13/16 | 60 | 36 | 96 | 78 | 3 to 1 |
| 48 | 58 | 36 | 5 | 21 | 60 | 36 | 96 | 84 | 3 to 1 |
| 54 | 65 | 40 | 5½ | 25½ | 60 | 36 | 96 | 90 | 3 to 1 |
| 60 | 73 | 45 | 6 | 31 | 60 | 36 | 96 | 96 | 3 to 1 |
| 72 | 88 | 54 | 7 | 31 | 60 | 39 | 99 | 120 | 2 to 1 |
| 84 | 102 | 62 | 8 | 28½ | 83 | 19 | 102 | 144 | 2 to 1 |

## REINFORCED CONCRETE ELLIPTICAL PIPE

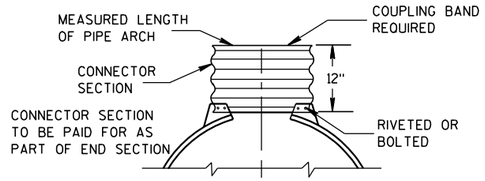
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) ** SPAN | ** RISE | T | A | B | C | D | E | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 30 | 19 | 3¼ | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 38 | 24 | 3¾ | 9½ | 54 | 18 | 72 | 60 | 3 to 1 |
| 36 | 45 | 29 | 4½ | 11⅛ | 60 | 24 | 84 | 72 | 2½ to 1 |
| 42 | 53 | 34 | 5 | 15¾ | 60 | 36 | 96 | 78 | 2½ to 1 |
| 48 | 60 | 38 | 5½ | 21 | 60 | 36 | 96 | 84 | 2½ to 1 |
| 54 | 68 | 43 | 6 | 25½ | 60 | 36 | 96 | 90 | 2½ to 1 |
| 60 | 76 | 48 | 6½ | 30 | 60 | 36 | 96 | 96 | 2½ to 1 |

**NOMINAL SIZE



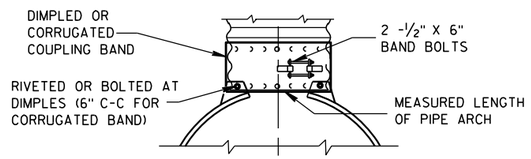

TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH




TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH




TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

# CONNECTION DETAILS

# GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

**APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

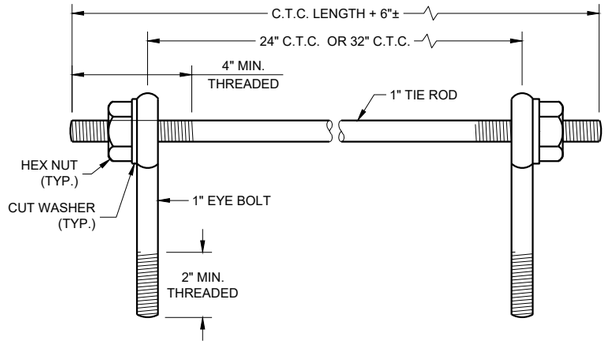


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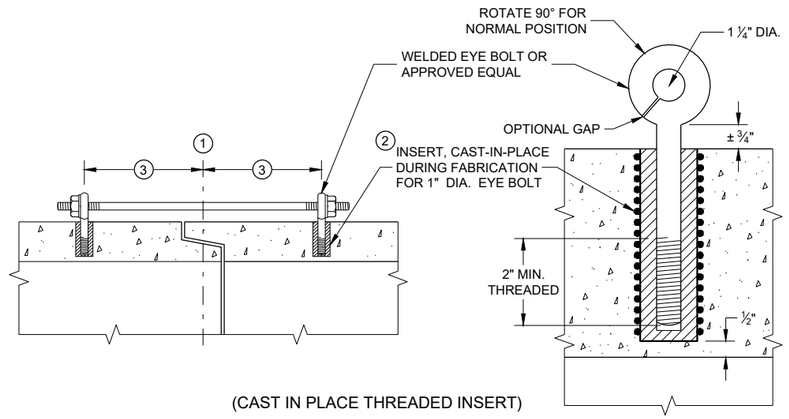
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1




**EYE BOLTS AND TIE ROD**




(CAST IN PLACE THREADED INSERT)

**LONGITUDINAL SECTIONS**

## EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

## GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

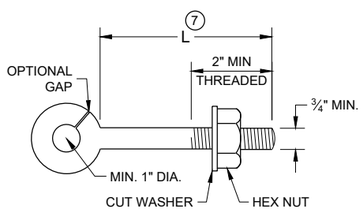
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

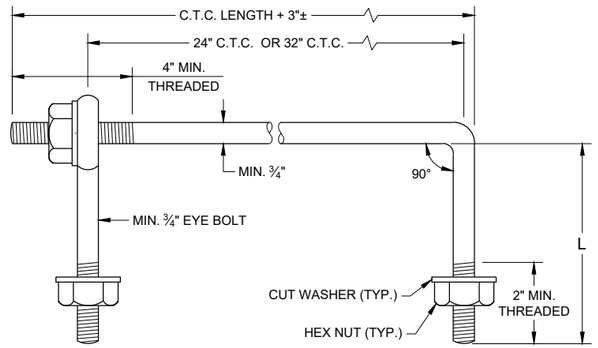
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

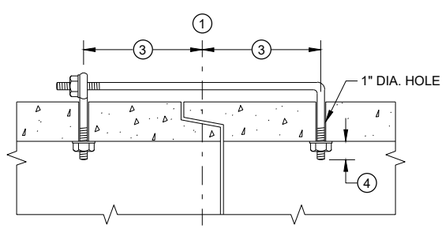



**EYE BOLT** (7)

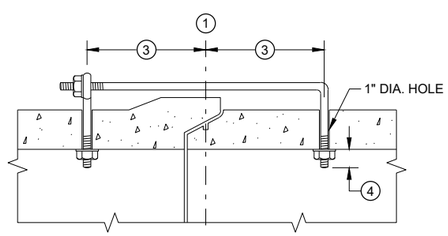
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




**EYE BOLT AND TIE ROD**




(TONGUE AND GROOVE PIPE)




(MODIFIED BELL PIPE)

**LONGITUDINAL SECTION**

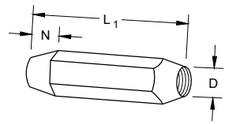
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

## EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

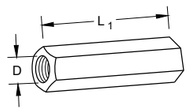
ADJUSTABLE TIE ROD TABLE

| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12 - 60 | ⅝ | ⅝ | 5 | ½ |
| 66 - 84 | ¾ | ¾ | 5 | ½ |
| 90 - 144 | 1 | 1 | 7 | 1 7/16 |

DIMENSIONS SHOWN ARE IN INCHES



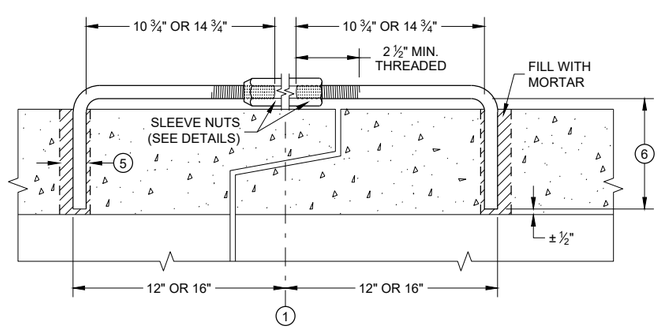

TAPERED




PLAIN

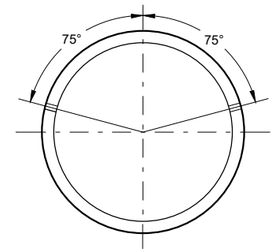
RIGHT AND LEFT THREADS

**SLEEVE NUTS**



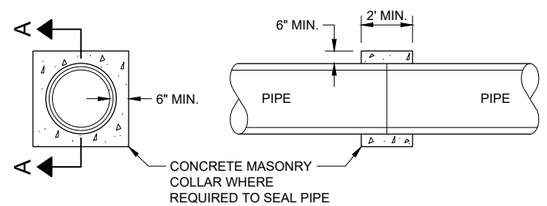

**LONGITUDINAL SECTION**

## ADJUSTABLE TIE ROD (ALTERNATE NO. 3)




PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

**TRANSVERSE SECTION**




**SECTION A - A**

## CONCRETE COLLAR DETAIL

**JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

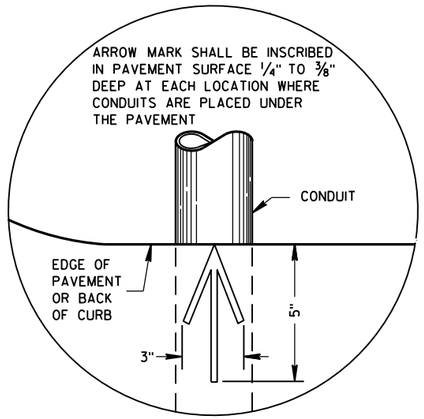
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA



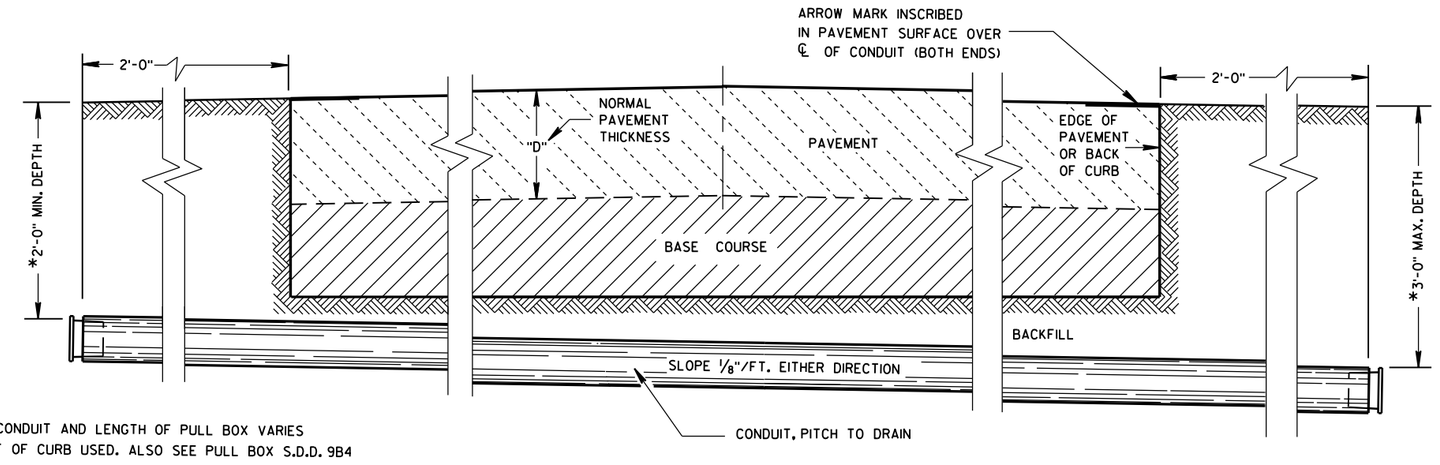
SDD 08F04 - 08

SDD 08F04 - 08




**PLAN VIEW**

## ARROW MARK




*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

**SIDE ELEVATION**

## DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

## GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

# CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




6

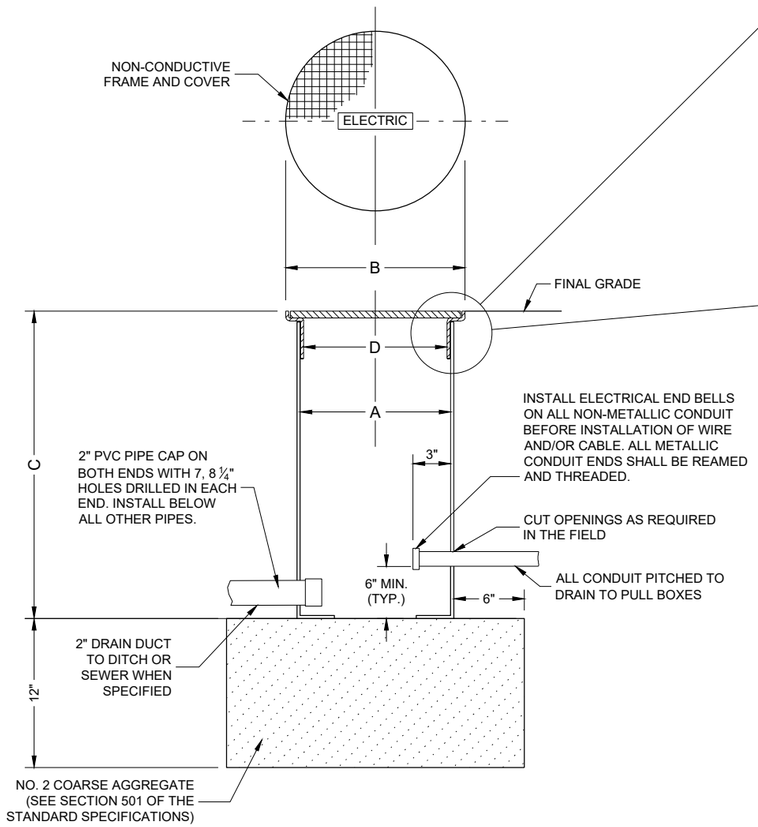
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

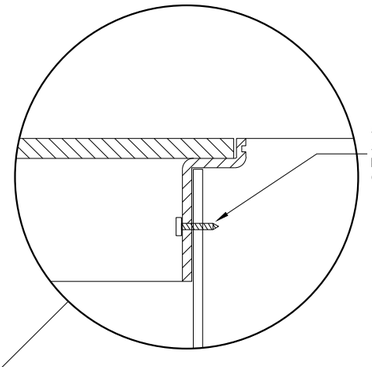
| DIMENSION IN INCHES | | NON- CONDUCTIVE PULL BOX | |
|---|---|---|---|
| BOX DIAMETER ** (INSIDE) | A | 24 | 24 |
| BOX OVERALL OUTSIDE DIAMETER | B | 27 | 27 |
| BOX LENGTH | C | 36 | 42 |
| FRAME OPENING | D | 22 ½ | 22 ½ |
| WEIGHT IN POUNDS * | | | |
| COVER | | 50 | 50 |
| BOX ONLY | | 75 | 85 |

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

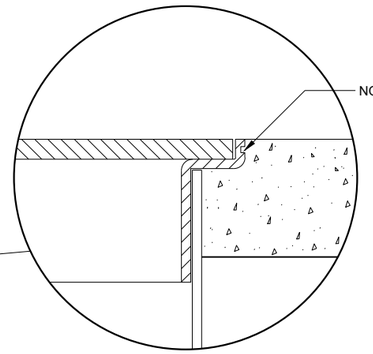
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



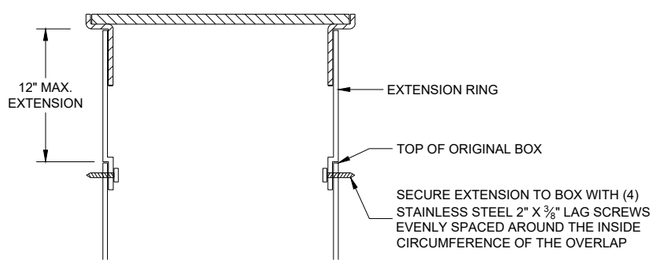

**NON-CONDUCTIVE PULL BOX**




**INSTALLED IN SOD OR CRUSHED AGGREGATE**




**INSTALLED IN SIDEWALK**




**BOX EXTENSION**

## GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

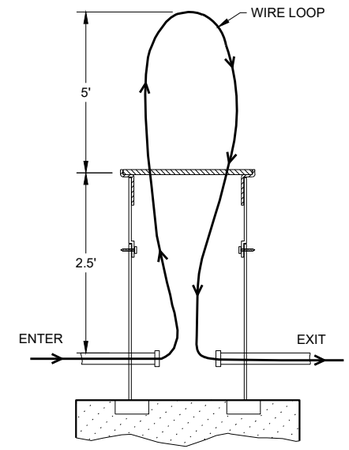
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.




**MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX**

**PULL BOXES NON-CONDUCTIVE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA



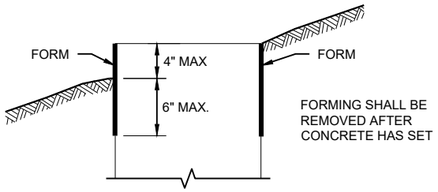


6



SDD 09B16 - 02

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




**FORMING DETAIL**

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

# GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

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

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

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

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

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

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

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

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

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

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

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

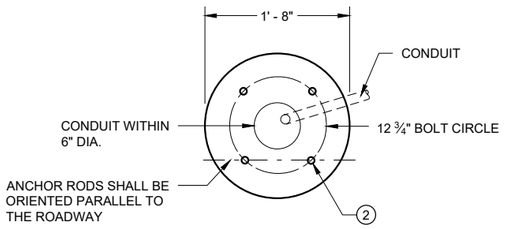
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

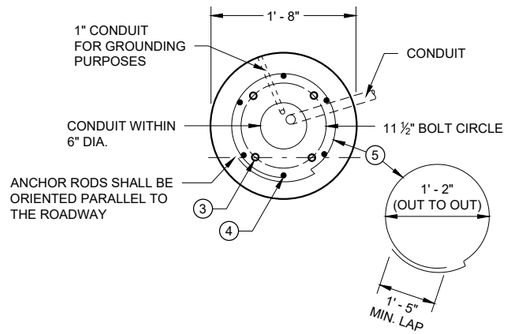
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

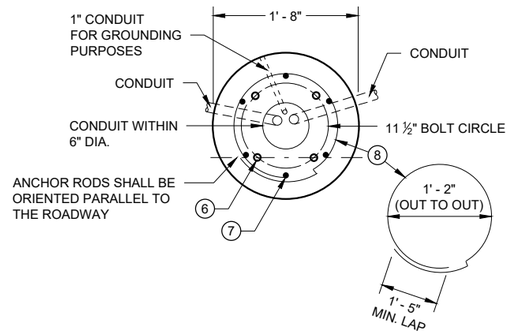
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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




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

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

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

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

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

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

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

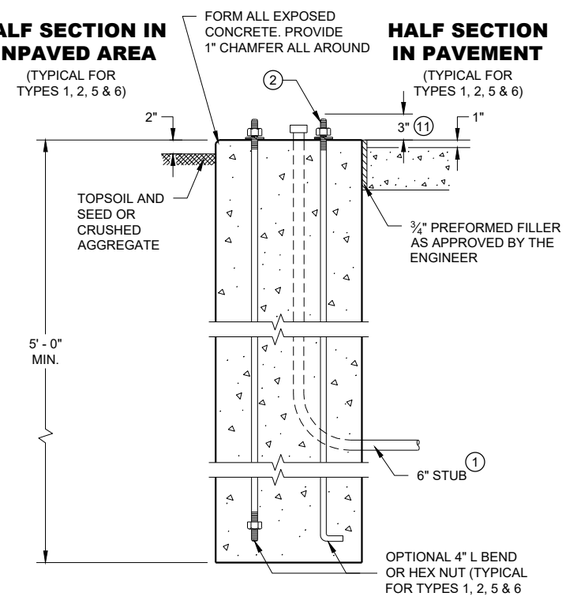
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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

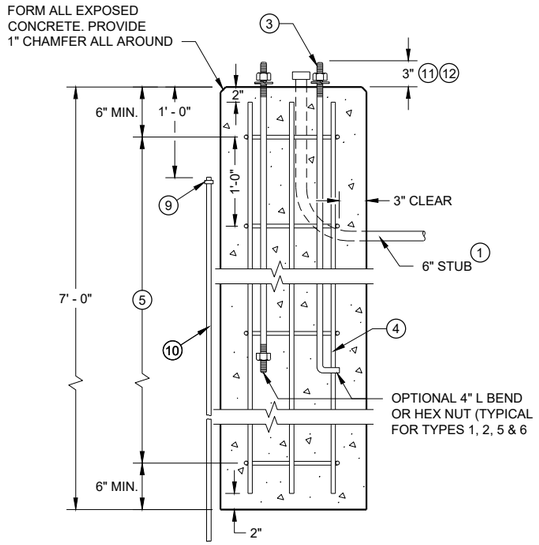
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**HALF SECTION IN UNPAVED AREA**
(TYPICAL FOR TYPES 1, 2, 5 & 6)

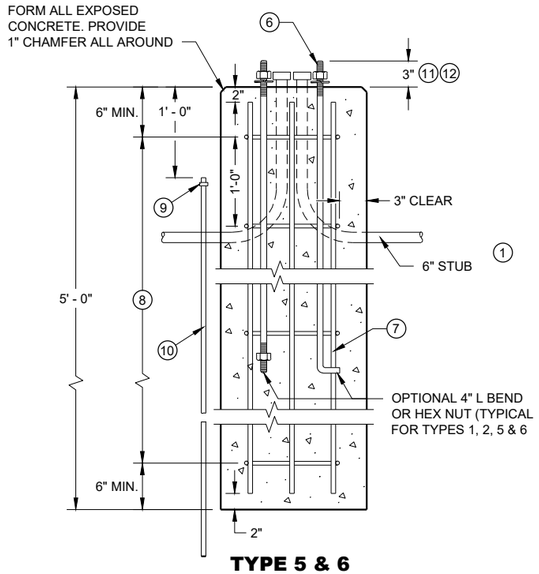
**HALF SECTION IN PAVEMENT**
(TYPICAL FOR TYPES 1, 2, 5 & 6)




**TYPE 1**




**TYPE 2**




**TYPE 5 & 6**

**CONCRETE BASES**

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

## GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

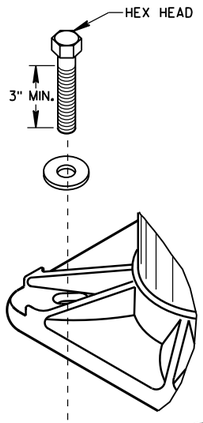
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

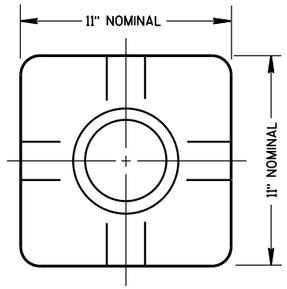
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

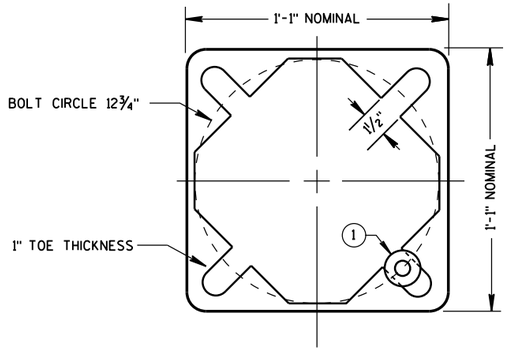
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

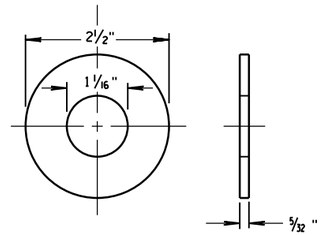



TOP VIEW
(PEDESTAL BASE)

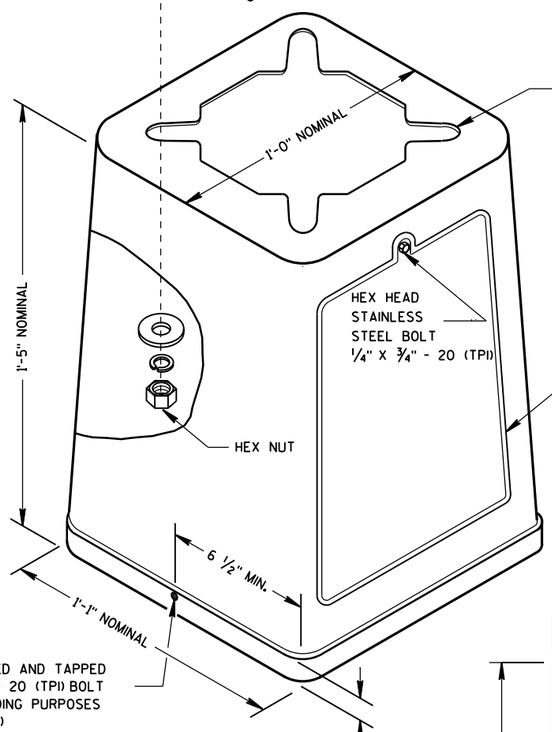



BOTTOM VIEW
(PEDESTAL BASE)

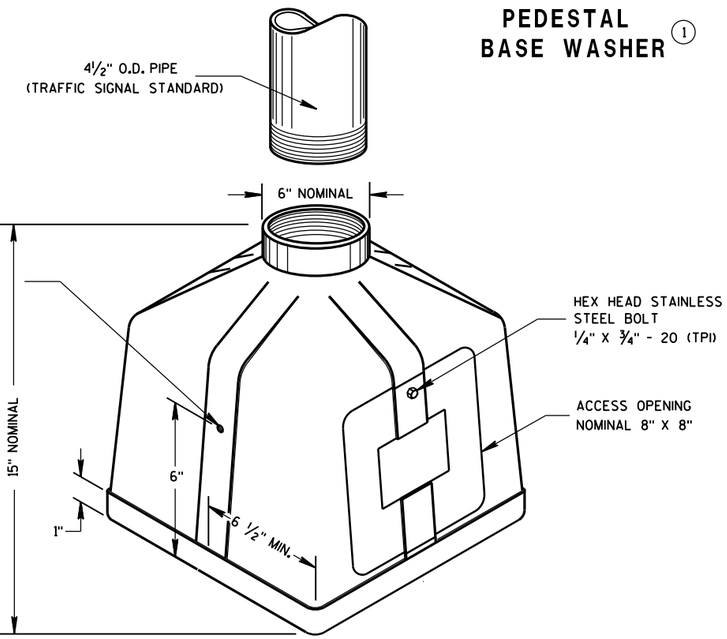



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

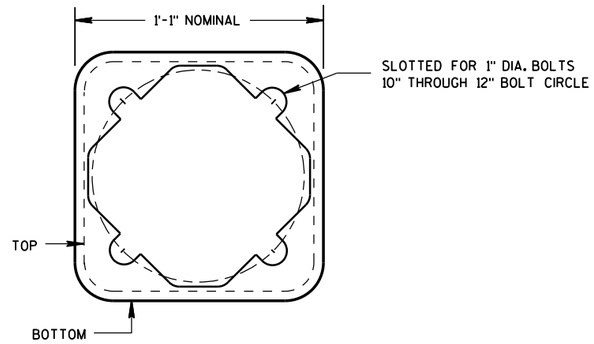
**PEDESTAL BASE WASHER** (1)



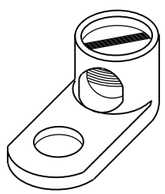

ISOMETRIC VIEW




ISOMETRIC VIEW
**PEDESTAL BASE**

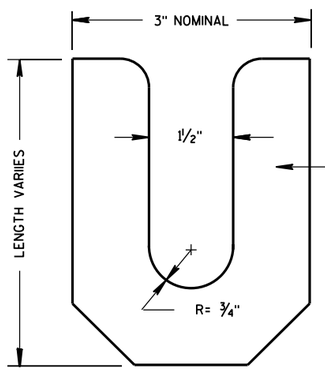



BOTTOM VIEW
(TRANSFORMER BASE)



**TYPICAL MECHANICAL CONNECTOR LUG**
TO BE FURNISHED WITH EACH BASE

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




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

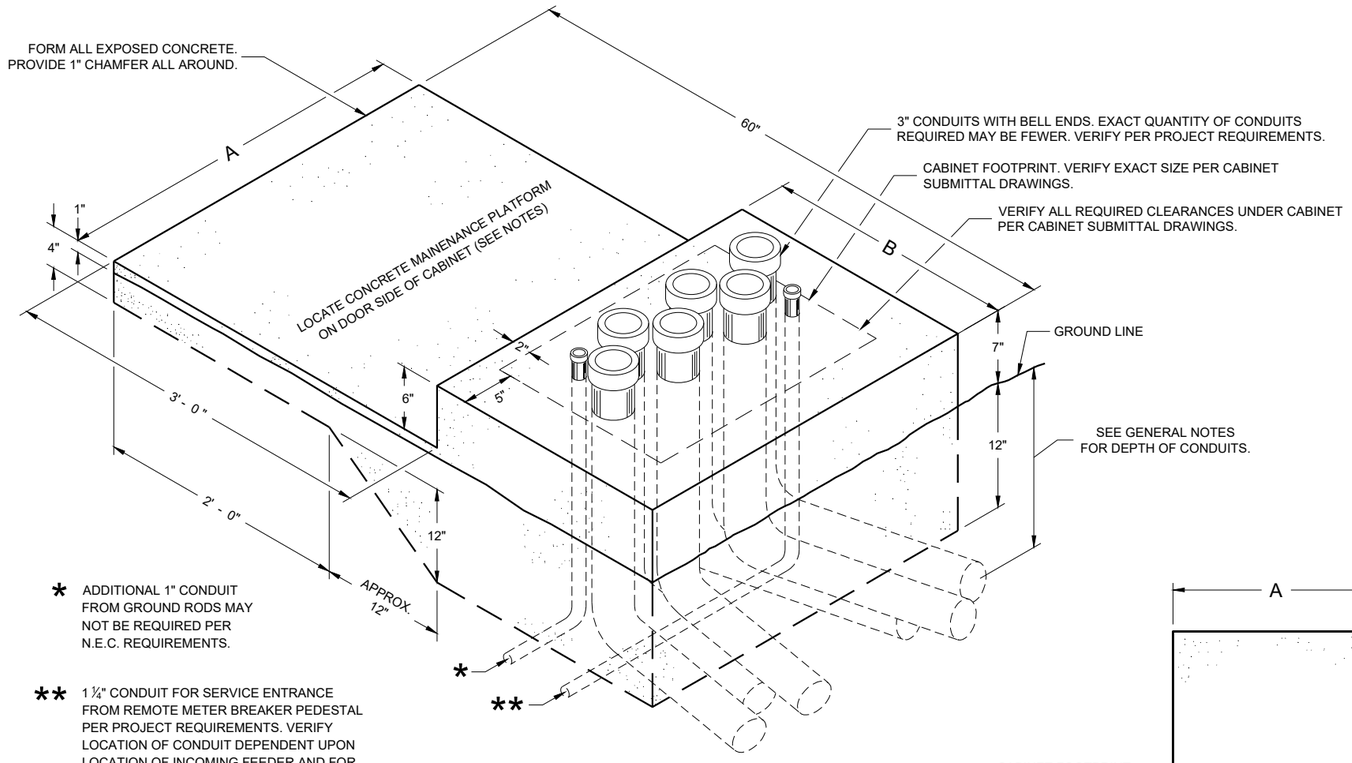
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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

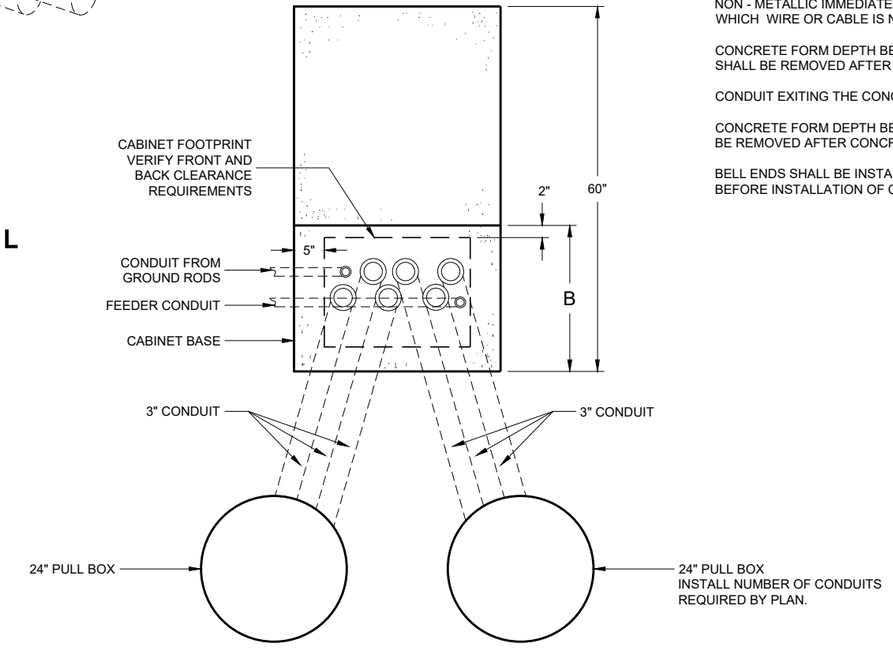
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

**ISOMETRIC VIEW**

## CONCRETE CONTROL CABINET BASE, TYPE L

( C.Y. CONCRETE = APPROX. 0.4 )

| CONCRETE BASE TYPE | CABINET WIDTH | DIMENSIONS | | MAXIMUM 3" CONDUITS |
|---|---|---|---|---|
| | | A | B | |
| L24 | 24" | 34" | 24" | 4 |
| L30 | 30" | 40" | 24" | 6 |




**PLAN VIEW**

## CONCRETE CONTROL CABINET BASE, TYPE L

## GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

**CONCRETE CONTROL CABINET BASE, TYPE L**

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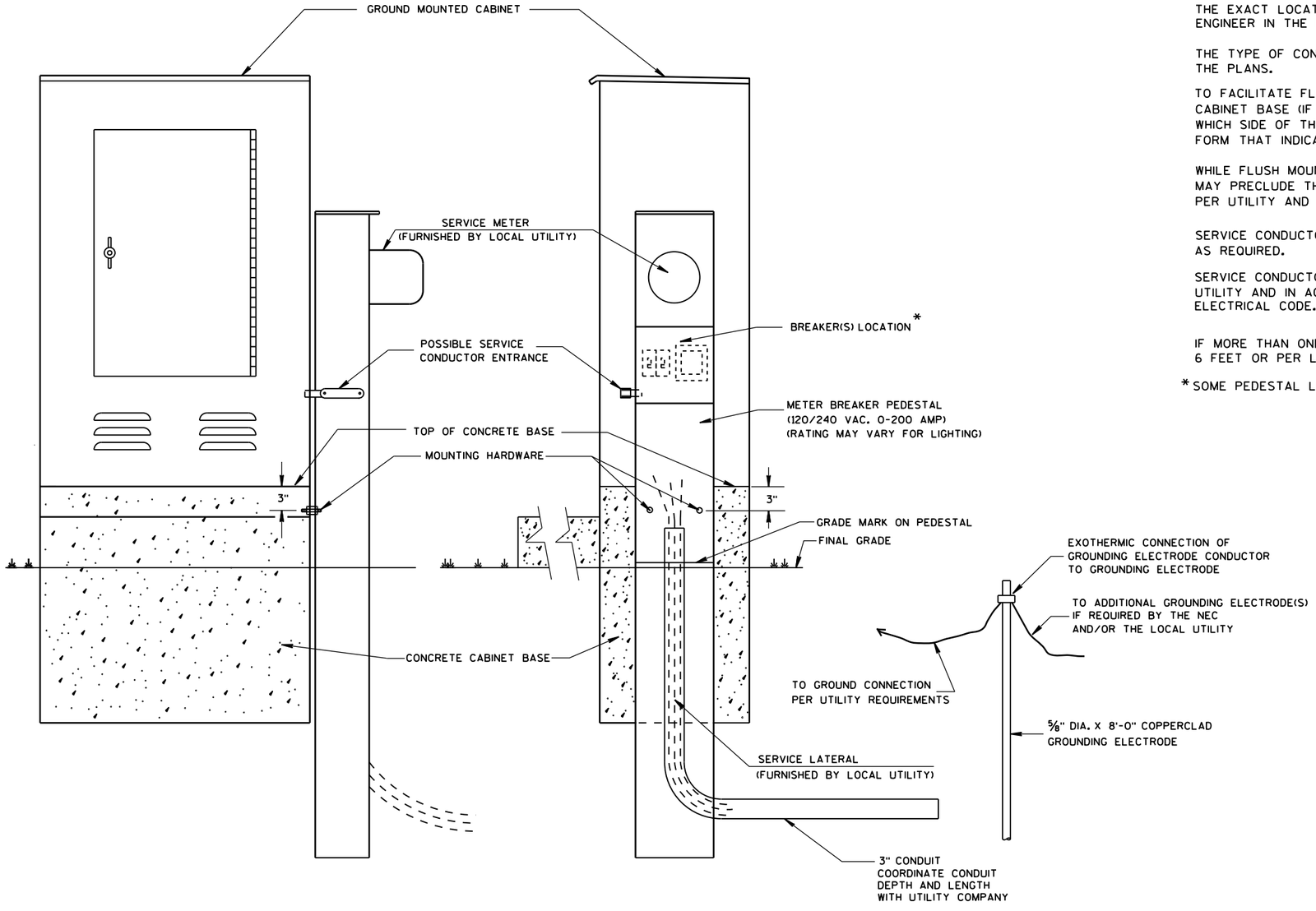




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**TYPICAL CABINET SERVICE INSTALLATION**

## GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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**CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)**

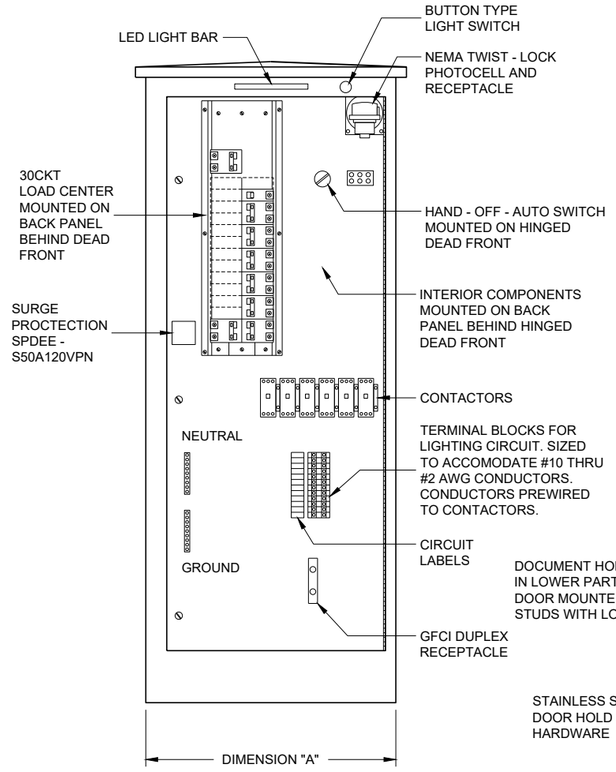
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Sept. 2014
DATE

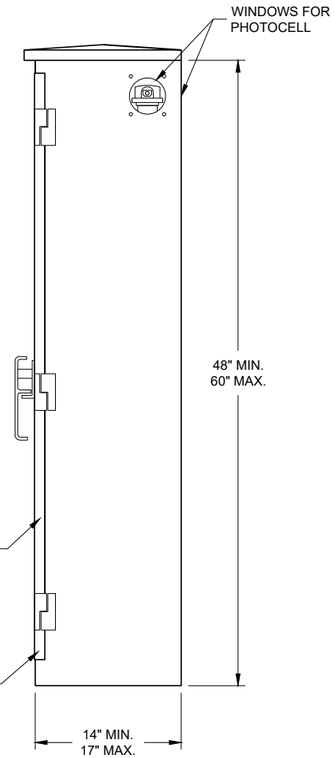
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STATE ELECTRICAL

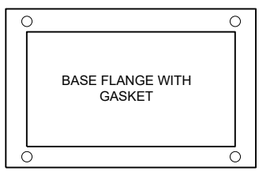
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## FRONT INTERIOR ELEVATION



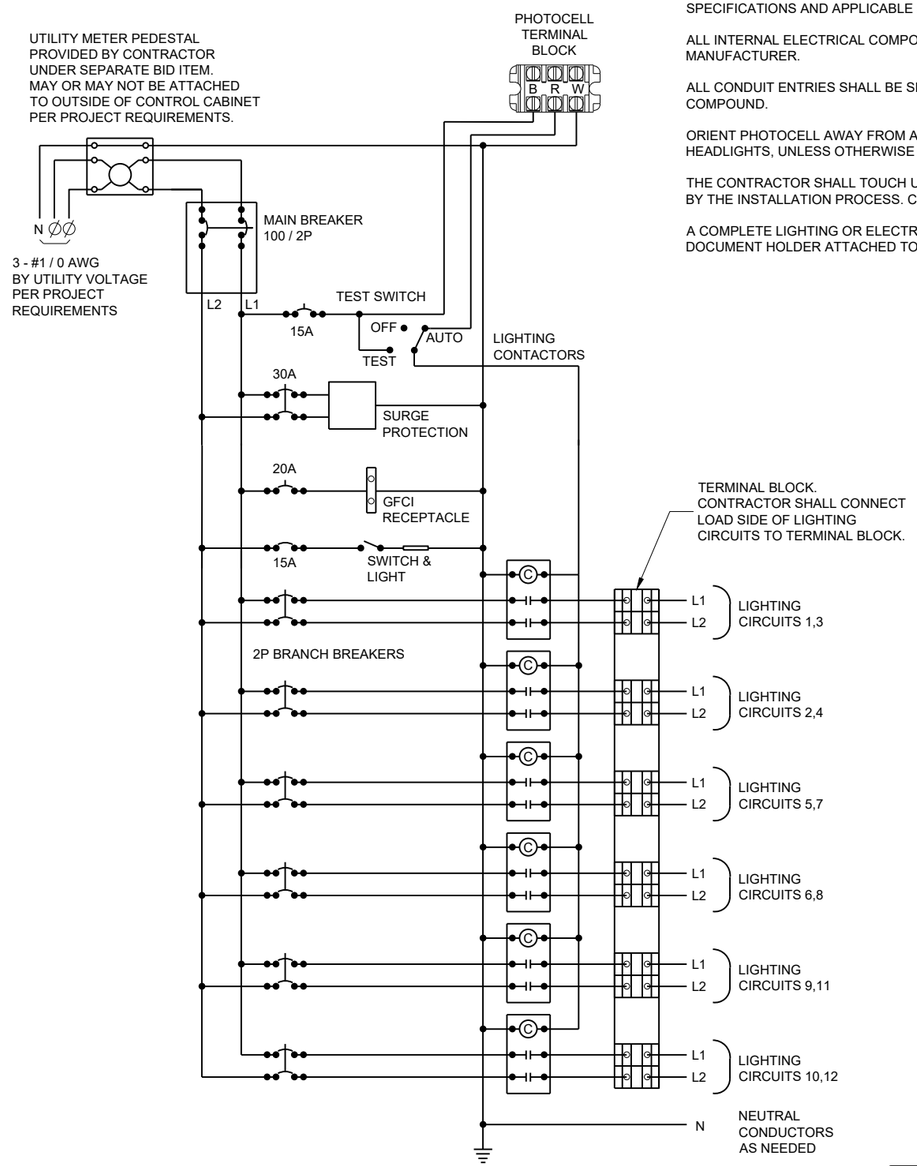

## SIDE VIEW




| TABLE OF DIMENSIONS (INCHES) | | |
|---|---|---|
| CONCRETE BASE TYPE | CABINET WIDTH | DIMENSION "A" |
| L24 | 24" | 24" |
| L30 | 30" | 30" |

## LIGHTING CONTROL CABINET




## CONTROL CABINET SCHEMATIC

## GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

**LIGHTING CONTROL CABINET**
**120 / 240 VOLT**

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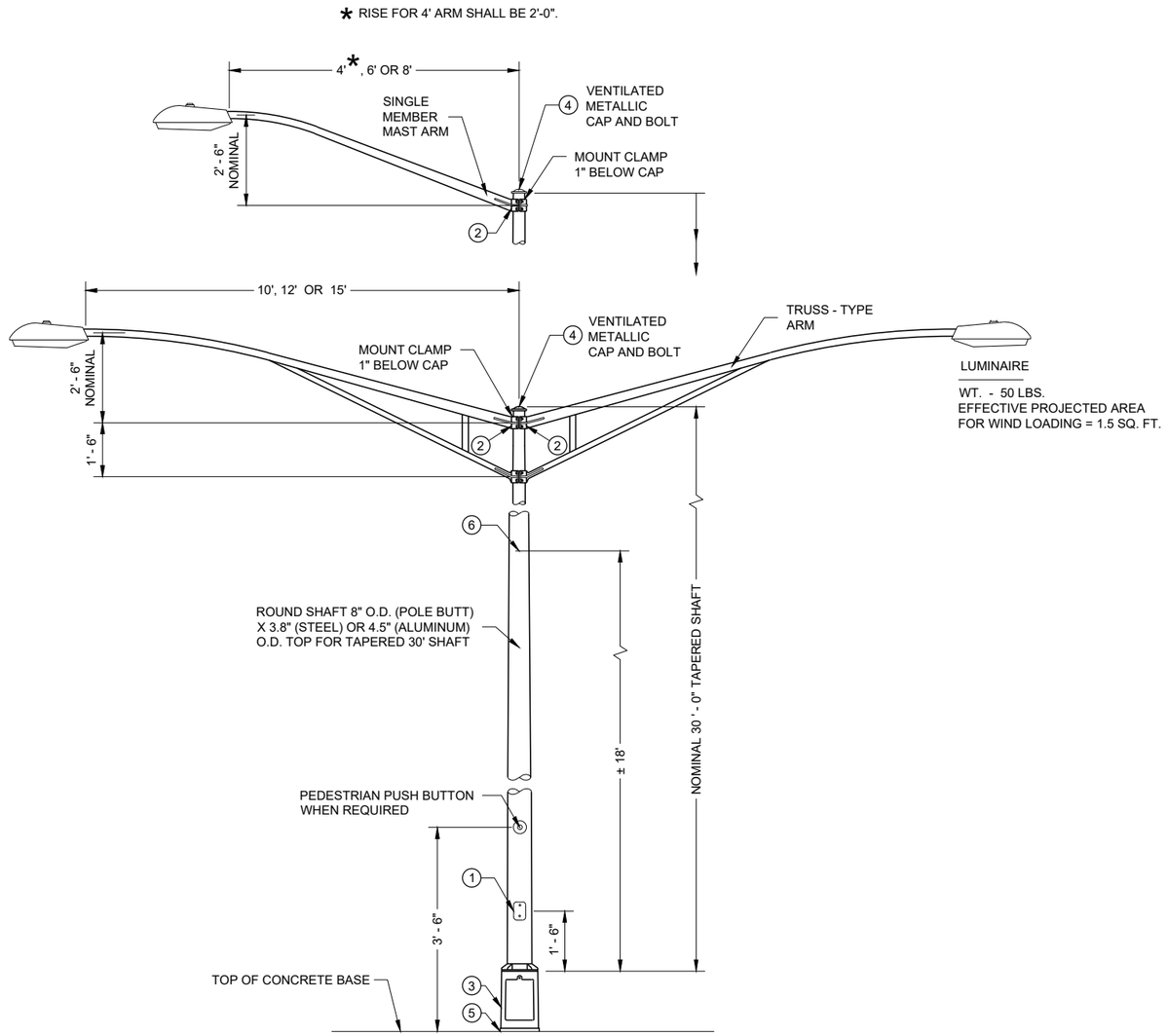
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**TYPE 5 POLE MOUNTING CONFIGURATION**
**(MAXIMUM LOAD)**
**LIGHTING ONLY**

## GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

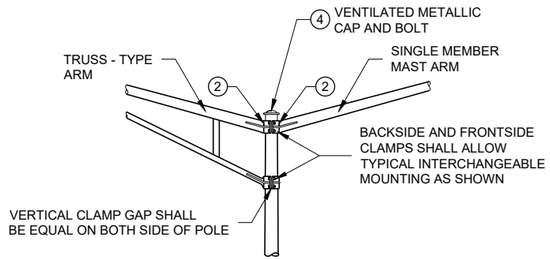
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

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

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

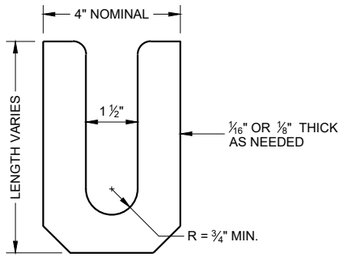



**INTERCHANGEABLE MOUNTING DETAIL**

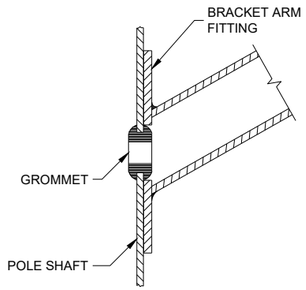
**POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 ( 30 FEET )**



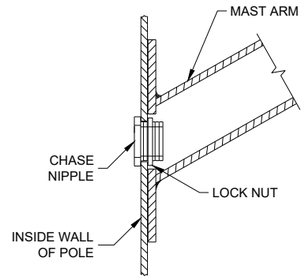
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**LEVELING SHIM** (1)
SHALL BE ALUMINUM




**TYPICAL APPLICATION OF GROMMET IN POLE SHAFT**




**TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT**

## GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

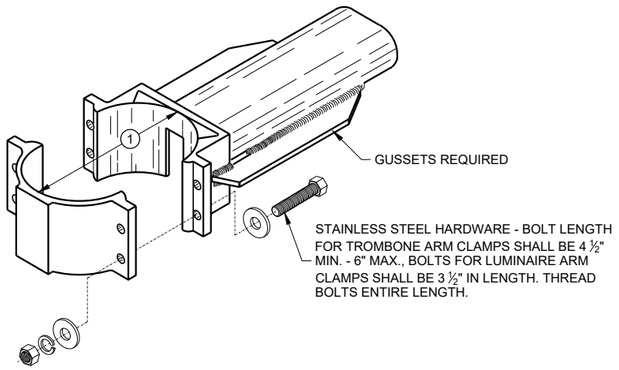
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

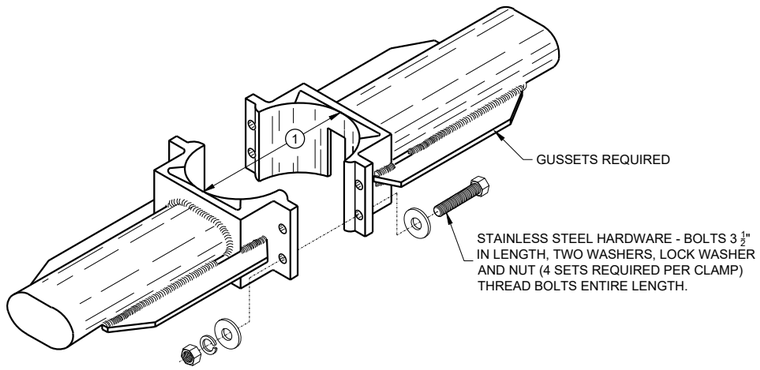
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

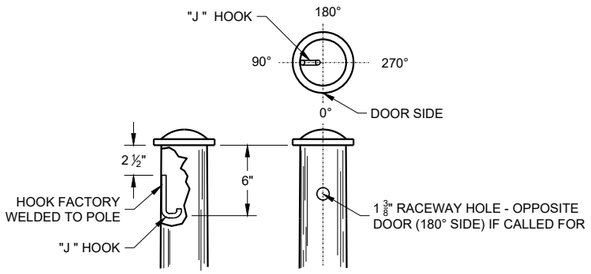
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



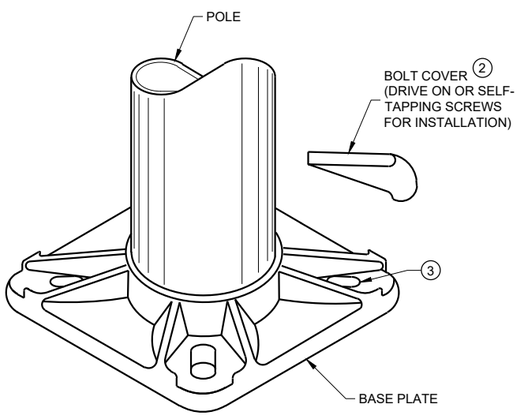

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



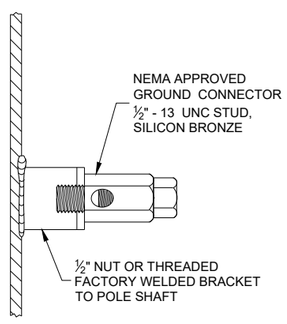

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

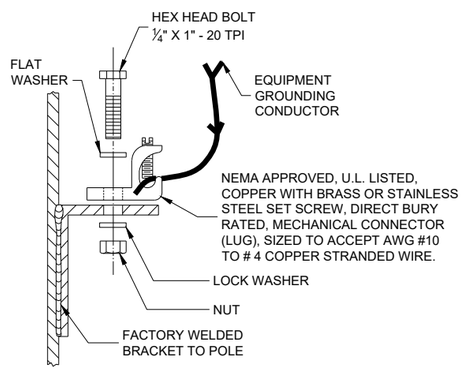


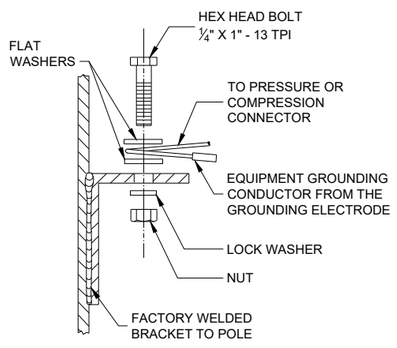

**TYPICAL "J" HOOK LOCATION**




**BASE PLATE**




**TYPICAL GROUNDING CONNECTIONS**
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

**HARDWARE DETAILS FOR POLE MOUNTING**

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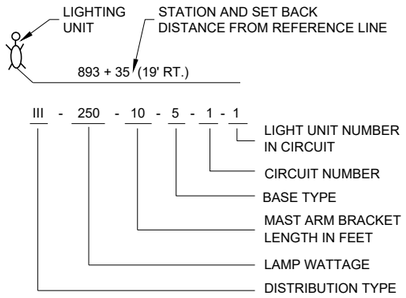

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## GENERAL NOTES

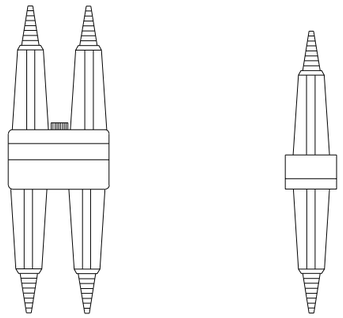
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



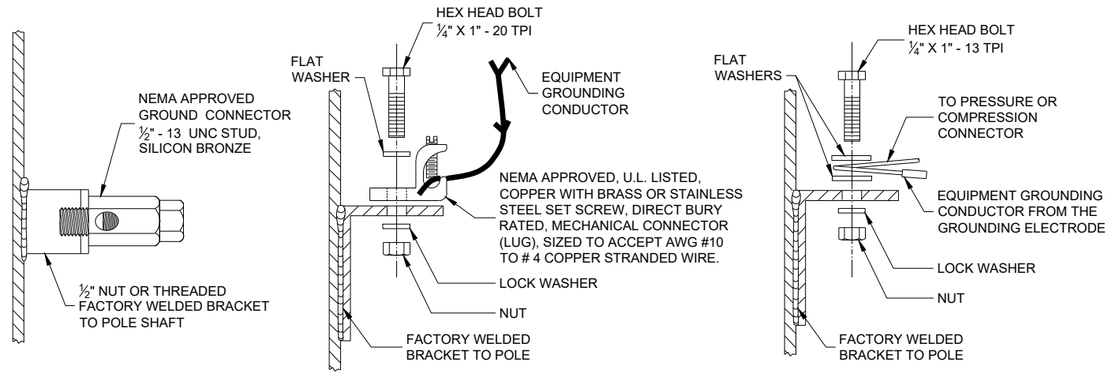

**LIGHTING UNIT CODE**
**(TYPICAL)**



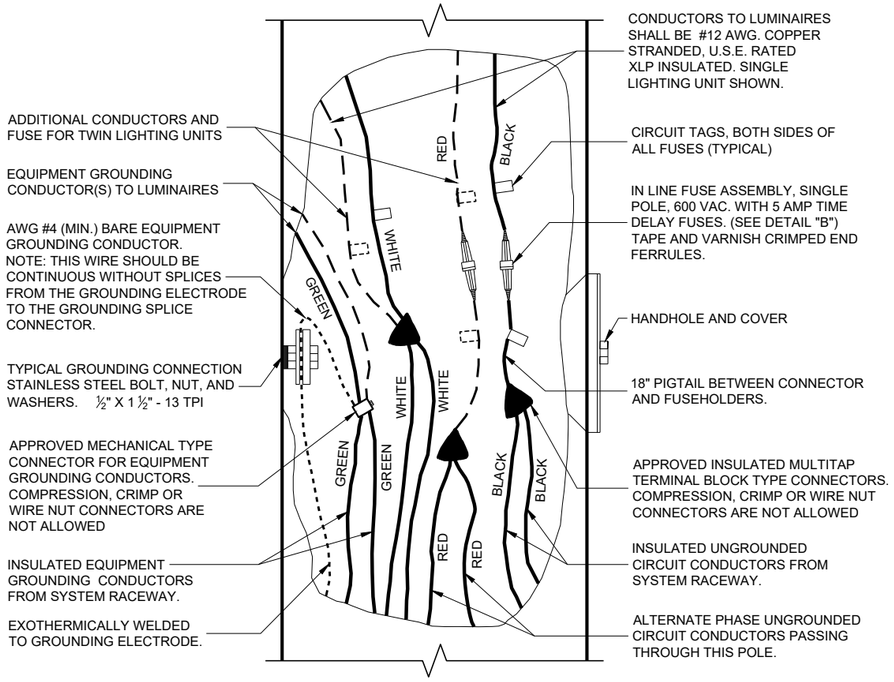
**DETAIL "A"**
**BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT**



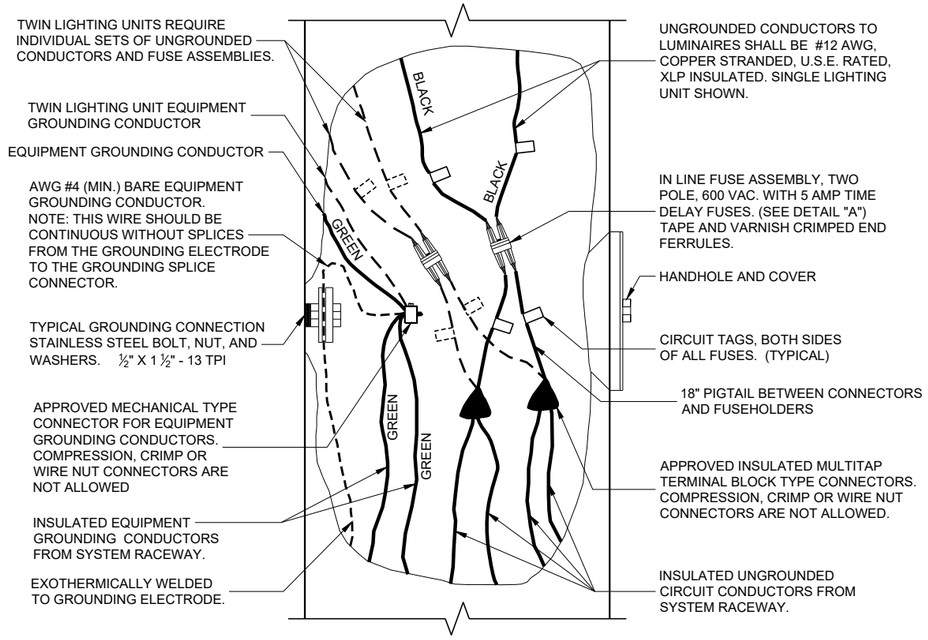
**DETAIL "B"**
**BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT**




**TYPICAL GROUNDING CONNECTIONS**
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




**3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR**




**2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR**

**NON - FREEWAY LIGHTING UNIT POLE WIRING**

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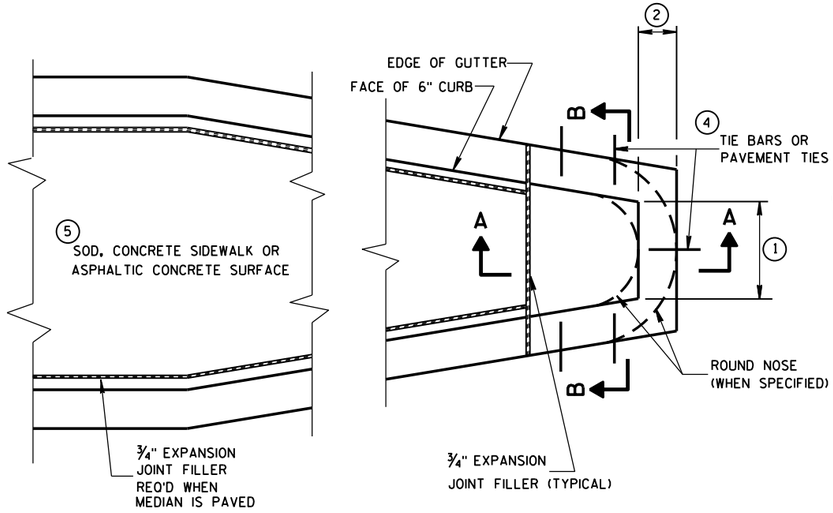
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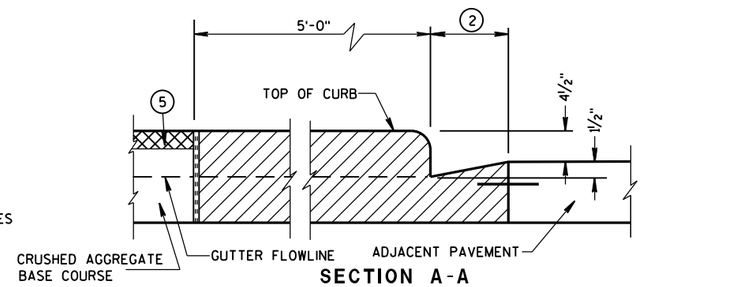
FHWA

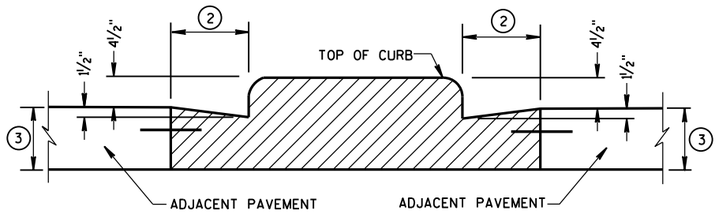



6


SDD 09E03 - 06




## CONCRETE MEDIAN BLUNT NOSE DETAIL

## GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

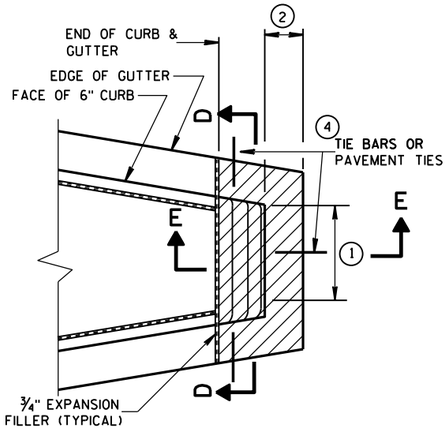
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

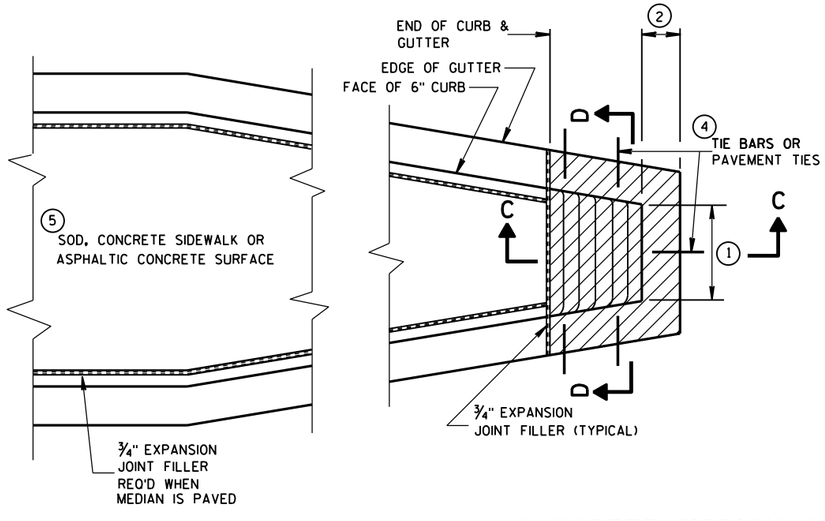
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

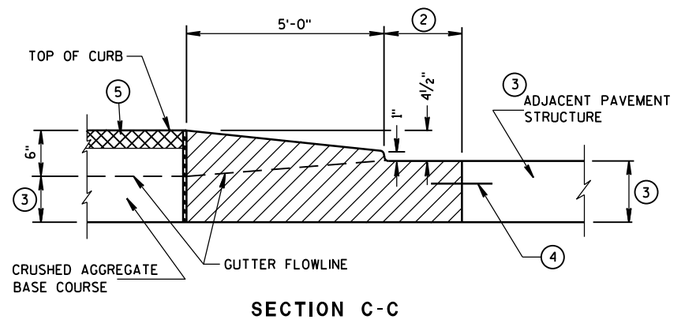
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

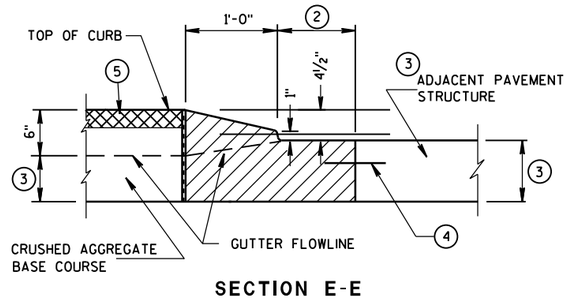
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



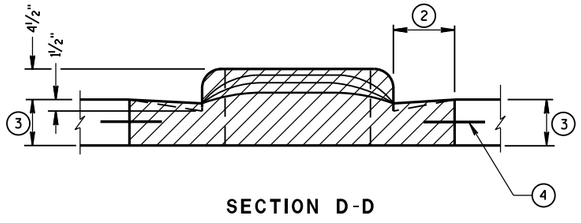




## CONCRETE MEDIAN SLOPED NOSE TYPE 1




## CONCRETE MEDIAN SLOPED NOSE TYPE 2




CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

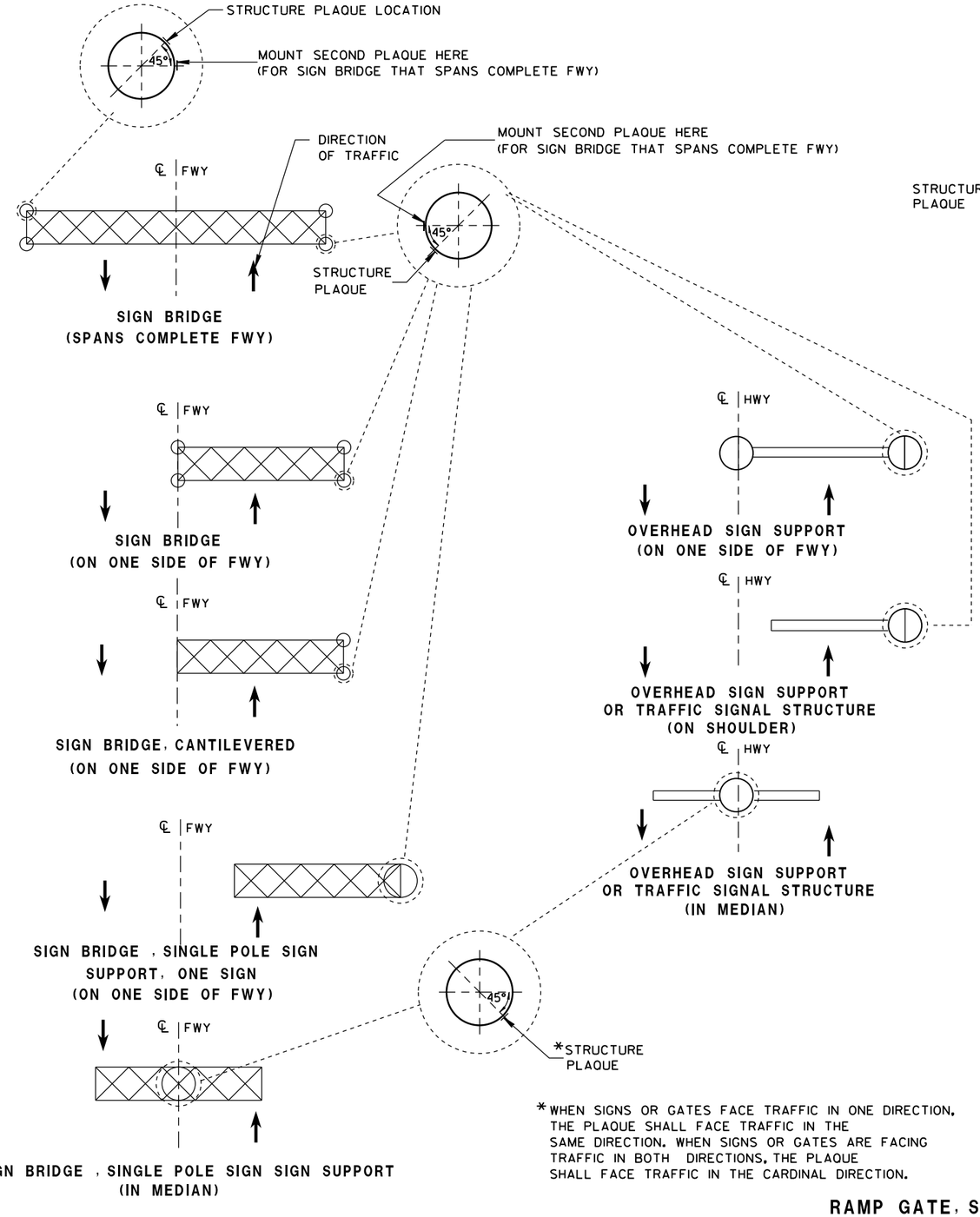


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S.D.D. 11 B 2-2

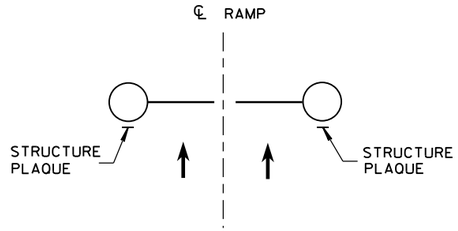
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S.D.D. 11 B 2-2

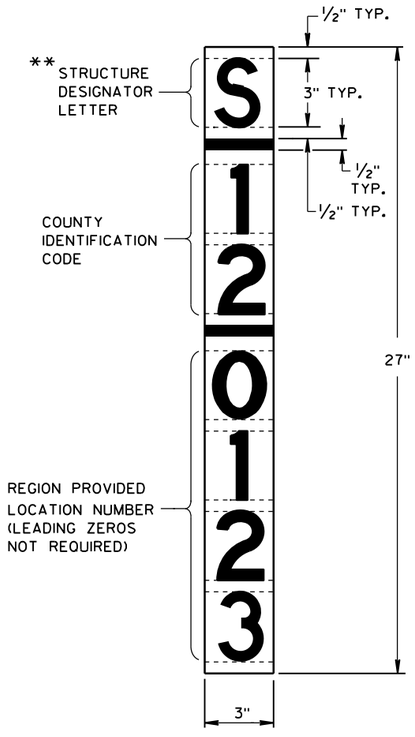



*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

**LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES**




**RAMP GATE
(ACROSS FWY ON-RAMP)**




**RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED**

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

## GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

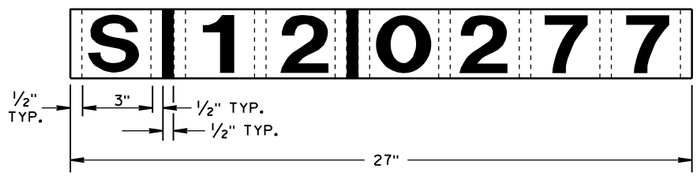
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.




**IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED**

**STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS**

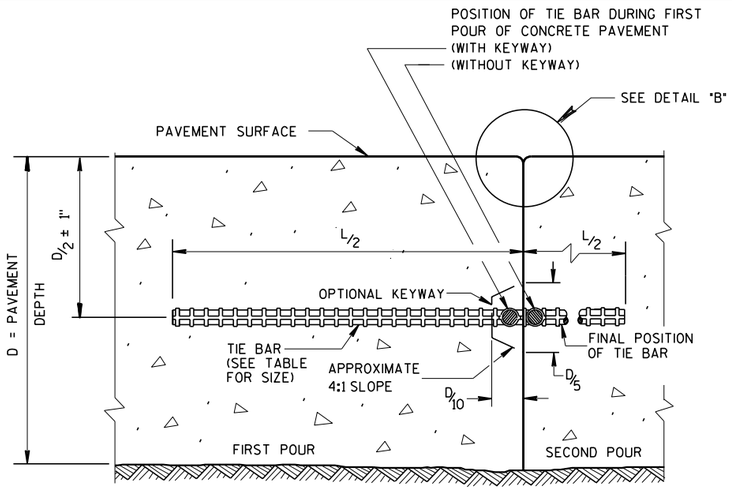
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

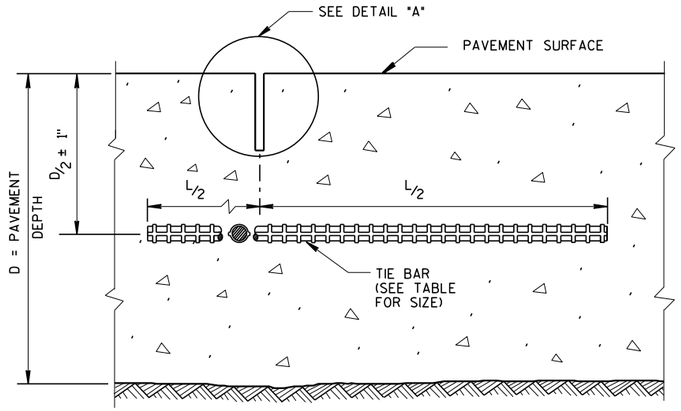



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S.D.D. 12 A 4-3




## CONSTRUCTION JOINT




## SAWED JOINT

## GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.




PLAN VIEW




SECTION A-A

## LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT




DETAIL "A"




DETAIL "B"




DETAIL "C"

## TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.




PLAN VIEW
SHOWING LOCATION OF TIE BARS

## CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp, PE
PAVEMENT SUPE
FHWA

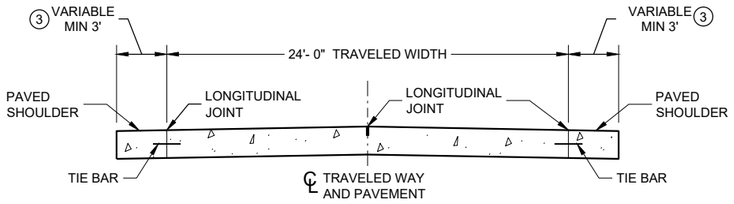


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S.D.D. 13 C 1-19

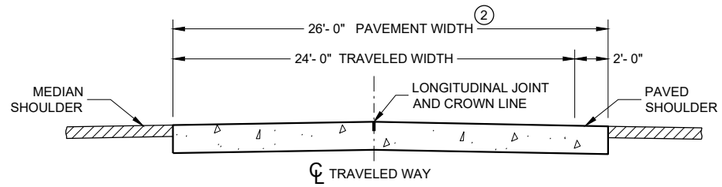
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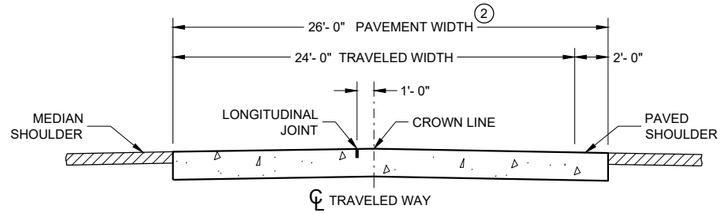



**SECTION A - A**

**TWO-LANE TWO-WAY HIGHWAY** (1)




**SECTION B - B**




**ALTERNATIVE SECTION B - B**

**DIVIDED HIGHWAY** (1)

## GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

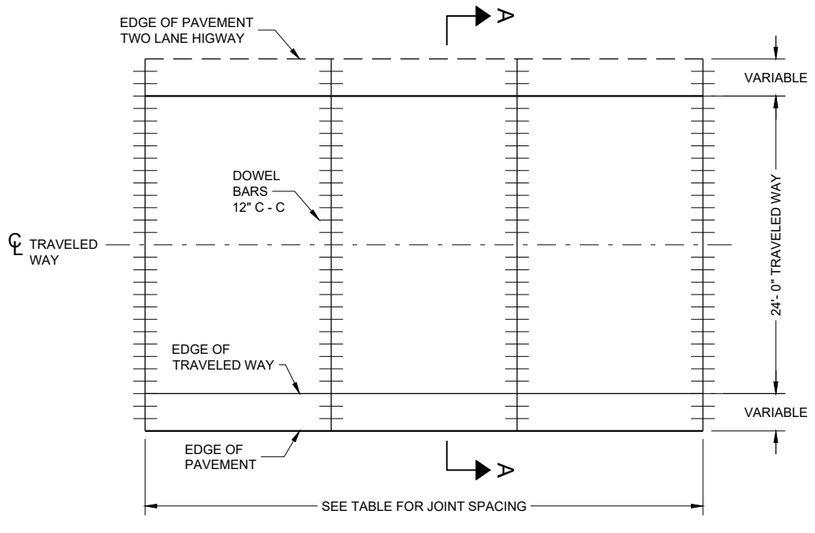
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

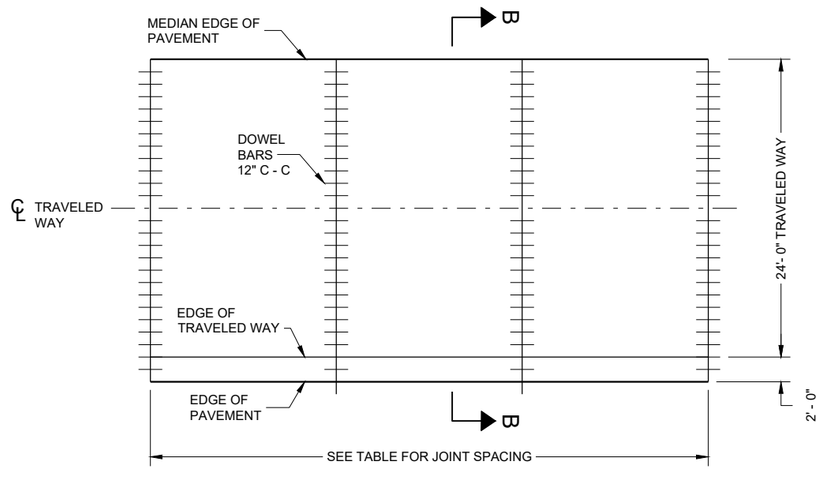
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8" & ABOVE | 1 ¼" | 15' |




**CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY**




**CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY**

**RURAL DOWELED CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

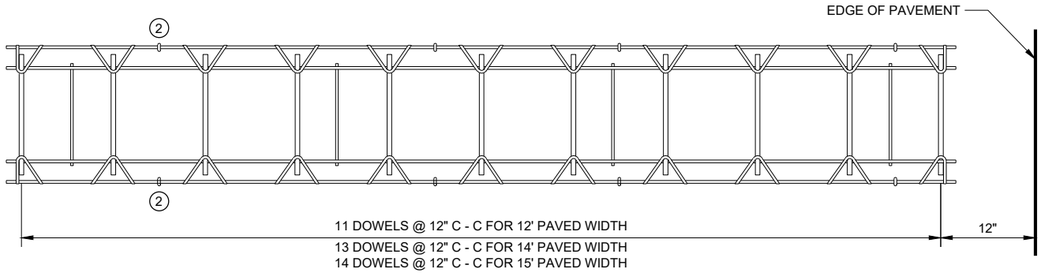


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SDD 13C11 - 14a

6

SDD13C11 - 14a




**PLAN VIEW**




**SIDE VIEW**

(NORMAL TO CENTERLINE)

## CONTRACTION JOINT DOWEL ASSEMBLY (1)

## GENERAL NOTES

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

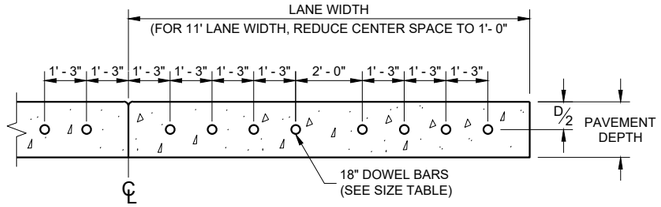
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

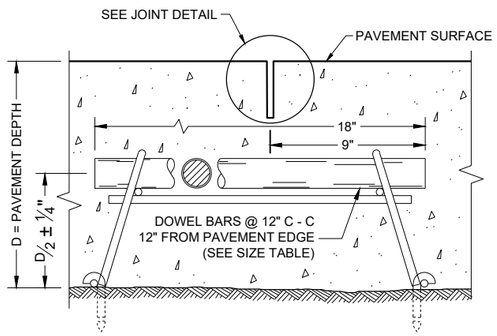
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

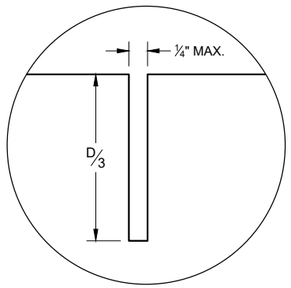
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



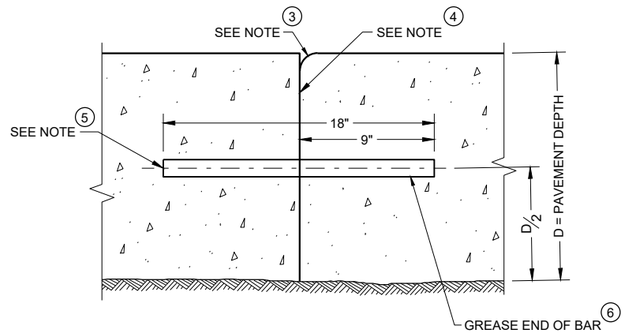

## DRILLED DOWEL BAR CONSTRUCTION JOINT (7)




## DOWELED CONTRACTION JOINT




**JOINT DETAIL**




## TRANSVERSE CONSTRUCTION JOINT

**RURAL DOWELED CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

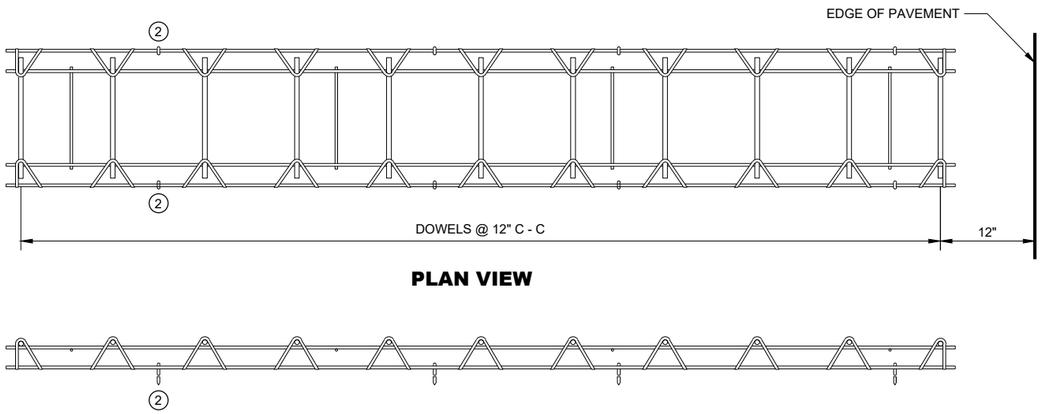
FHWA



6

SDD 13C11 - 14b

SDD 13C11 - 14b

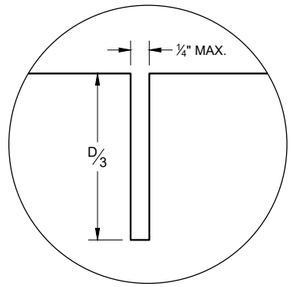



**PLAN VIEW**




**SIDE VIEW**

## CONTRACTION JOINT DOWEL ASSEMBLY (1)




**JOINT DETAIL**

## GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

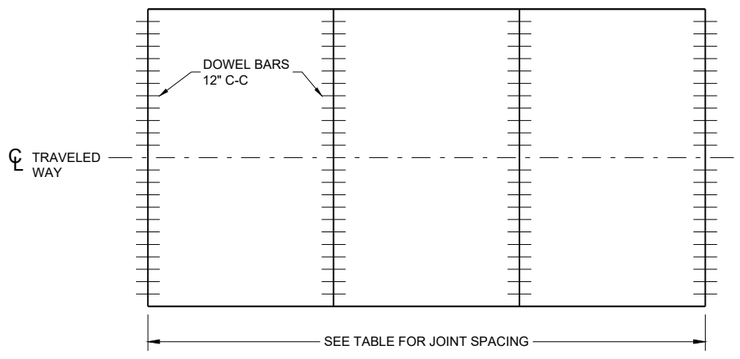
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(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

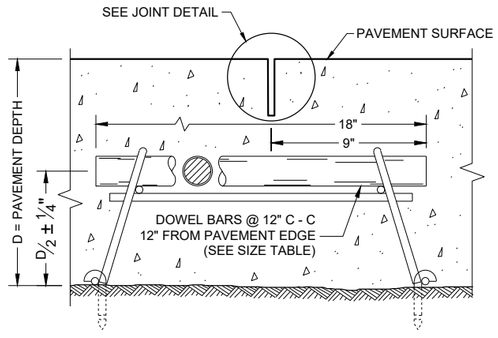
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



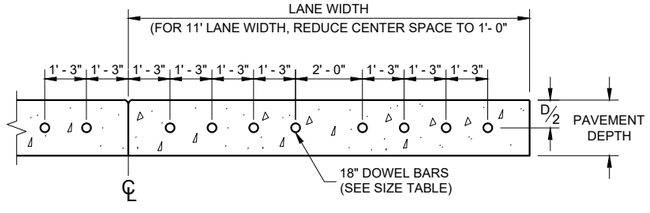

**CONTRACTION JOINT LOCATIONS**



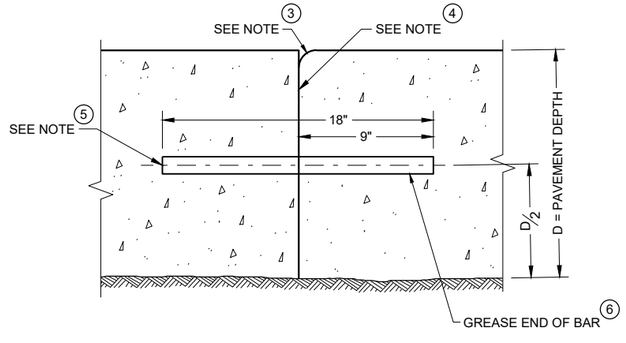

**DOWELED CONTRACTION JOINT**

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8" & ABOVE | 1 ¼" | 15' |




**DRILLED DOWEL BAR CONSTRUCTION JOINT (7)**




**TRANSVERSE CONSTRUCTION JOINT**

**URBAN DOWELED CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

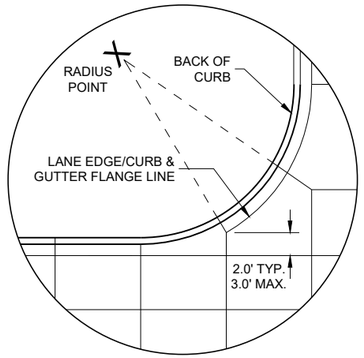




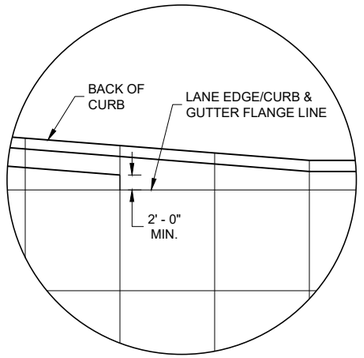
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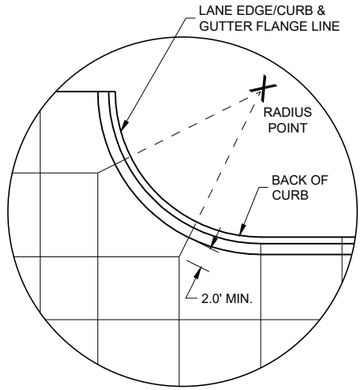
SDD 13C13 - 11



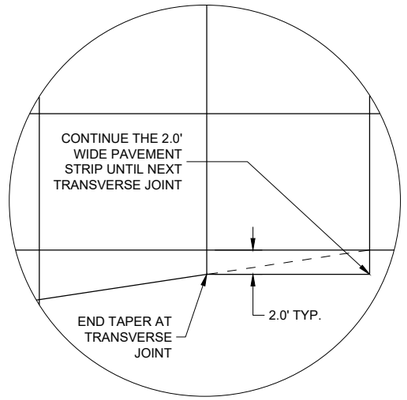

**DETAIL "A"**




**DETAIL "B"**




**DETAIL "C"**




**DETAIL "D"**

## GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

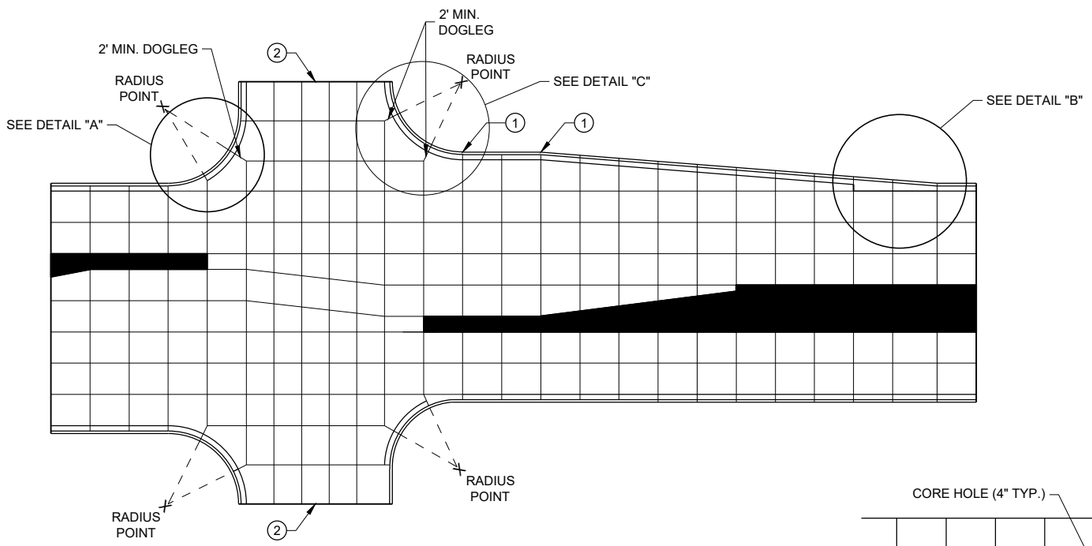
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

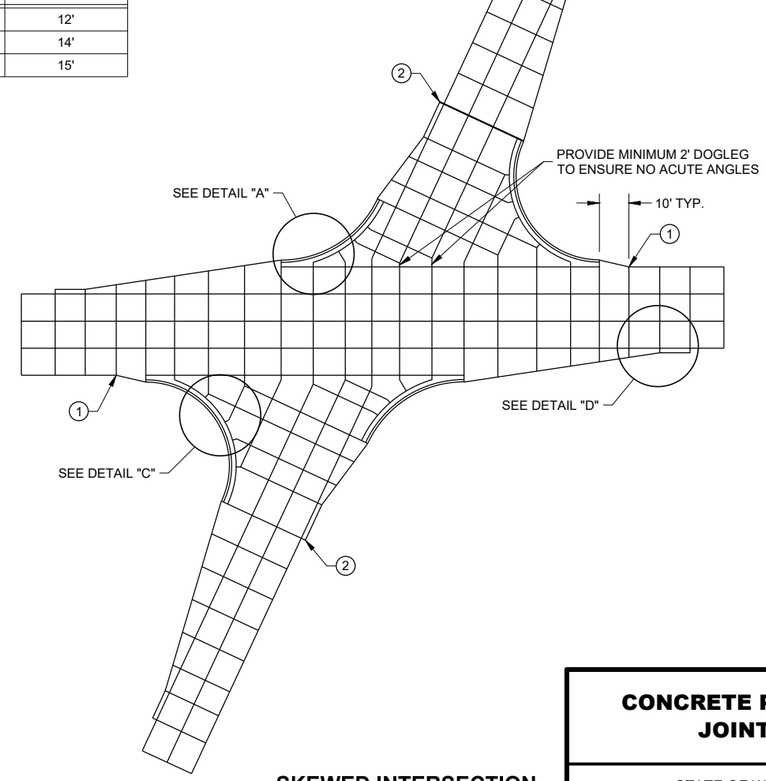
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



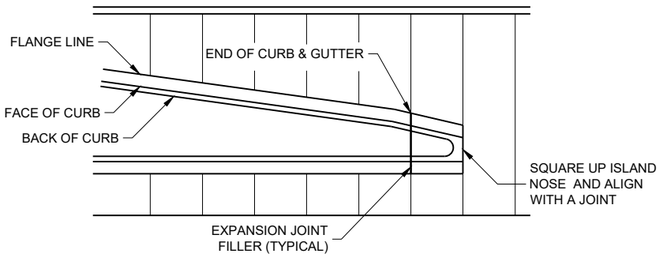

**STANDARD INTERSECTION**

PAVEMENT DEPTH AND JOINT SPACING TABLE

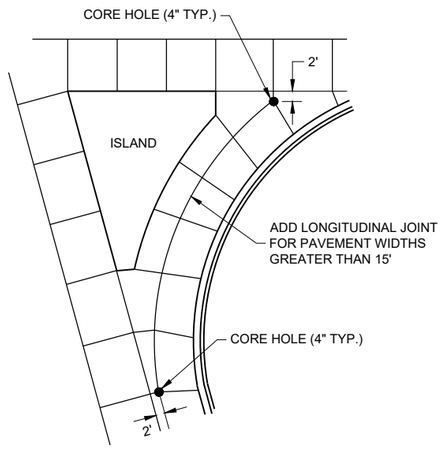
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|---|---|
| 6", 6 ½" | 12' |
| 7", 7 ½" | 14' |
| 8" & ABOVE | 15' |




**SKEWED INTERSECTION**




**APPROACH TO MEDIAN**




**LARGE RIGHT TURN**

**CONCRETE PAVEMENT JOINTING**

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6

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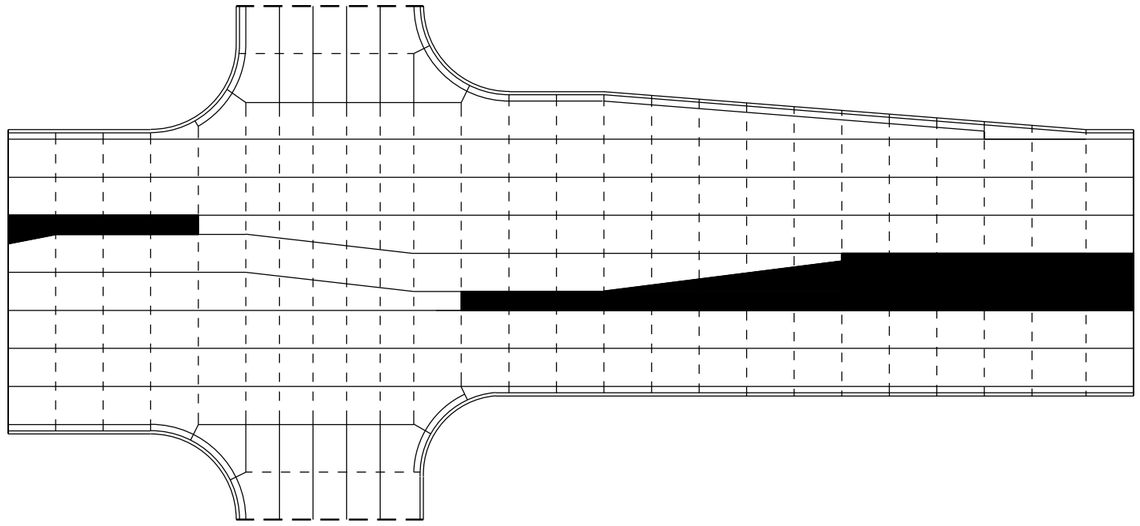
SDD 13C18 - 08a

## LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

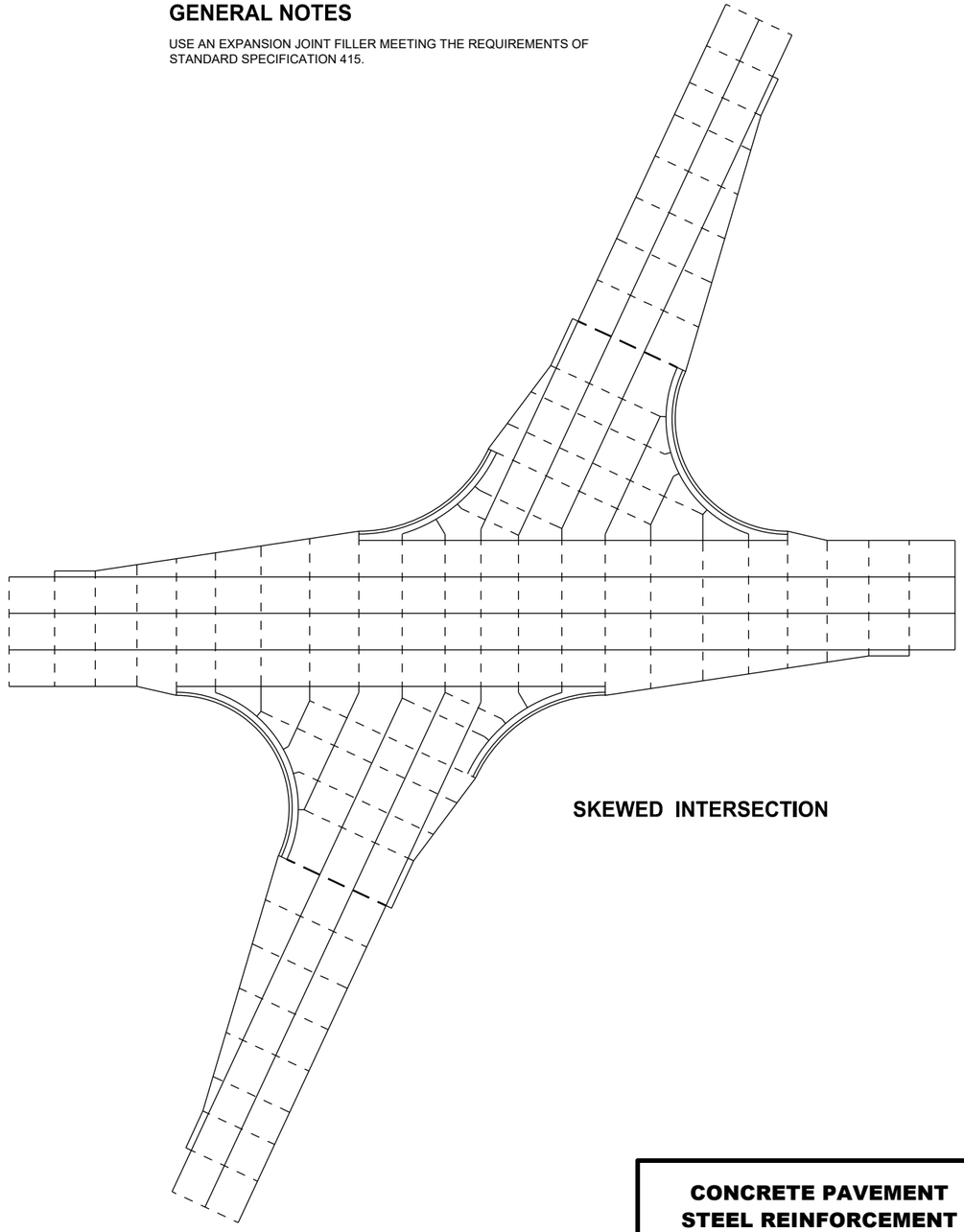
TIED JOINT



STANDARD INTERSECTION

## GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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SDD 13C18 - 08b

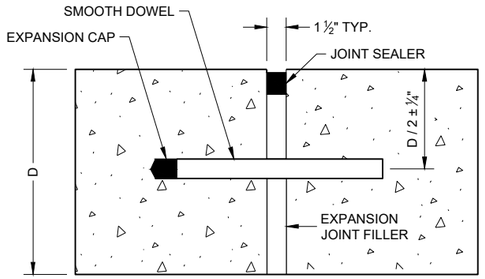
**CONCRETE PAVEMENT STEEL REINFORCEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

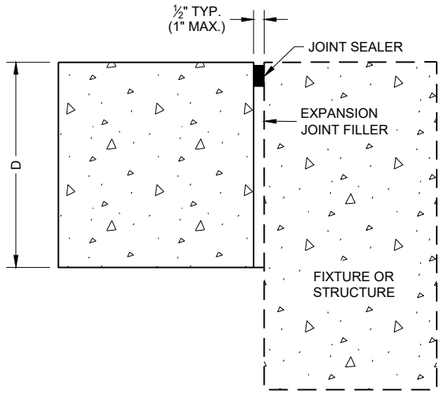


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SDD 13C18 - 08b




**DOWELED TRANSVERSE** (1)




**UNTIED - LONGITUDINAL**

## EXPANSION JOINTS

### TIE BAR TABLE

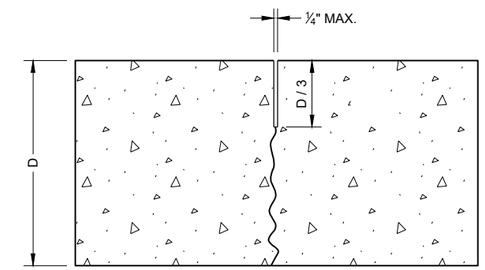
| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

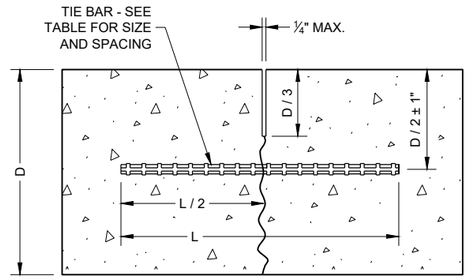
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### GENERAL NOTES

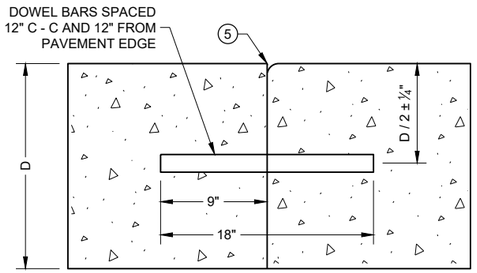
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



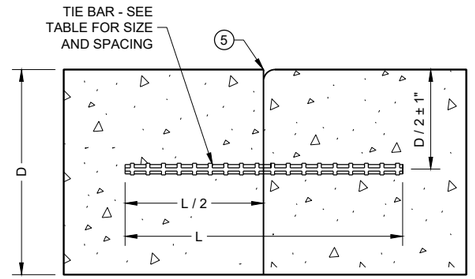

**UNDOWELED TRANSVERSE**



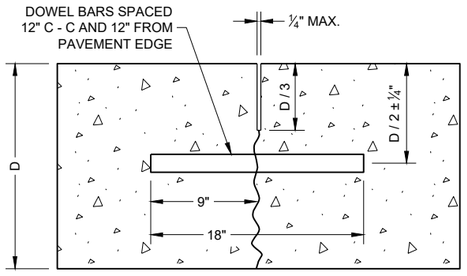

**TIED LONGITUDINAL**



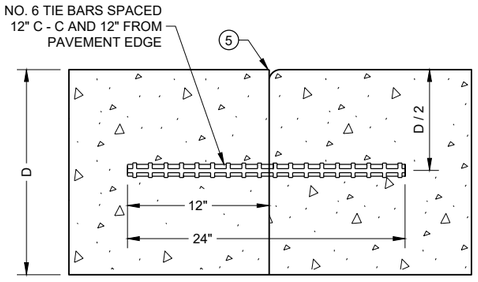

**DOWELED TRANSVERSE** (3)



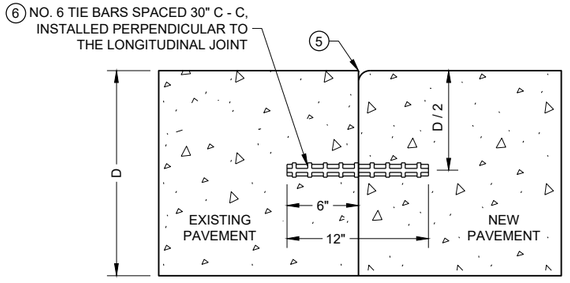

**TIED LONGITUDINAL**




**DOWELED TRANSVERSE**




**TIED TRANSVERSE** (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

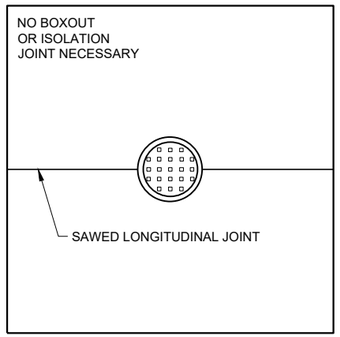



**TIED LONGITUDINAL TO EXISTING**

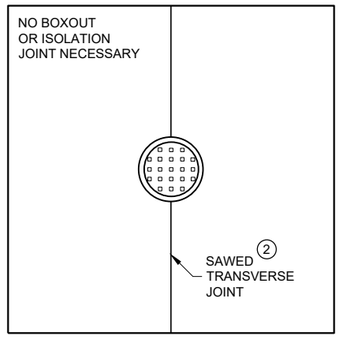
## CONTRACTION JOINTS (2)

## CONSTRUCTION JOINTS (4)

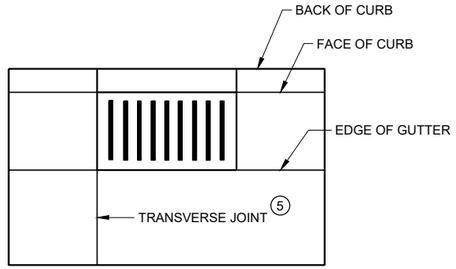
**CONCRETE PAVEMENT JOINT TYPES**




**MANHOLE WITH LONGITUDINAL JOINT**



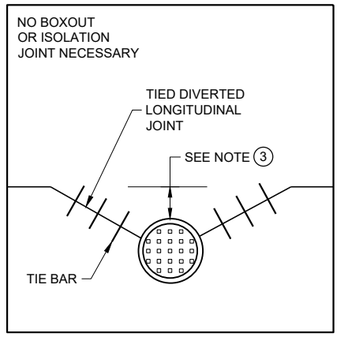

**MANHOLE WITH TRANSVERSE JOINT**



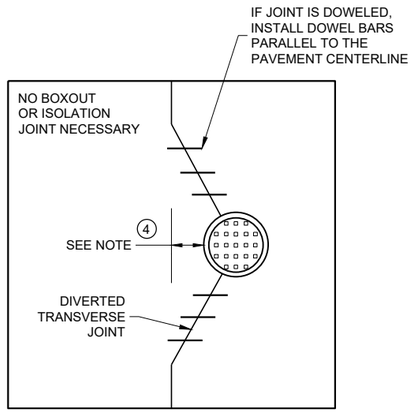

**INLET WITH TRANSVERSE JOINT**

## GENERAL NOTES

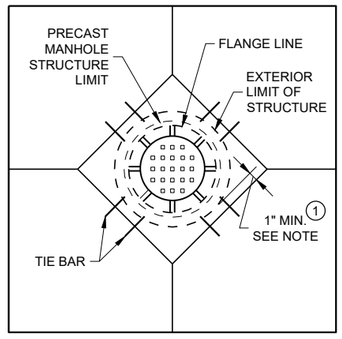
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.




**MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT**




**MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT**




**DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS**

**CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

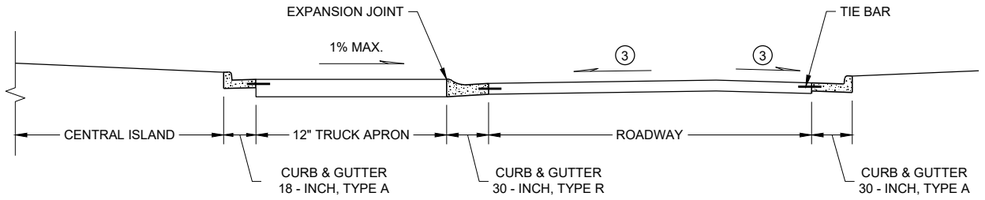
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

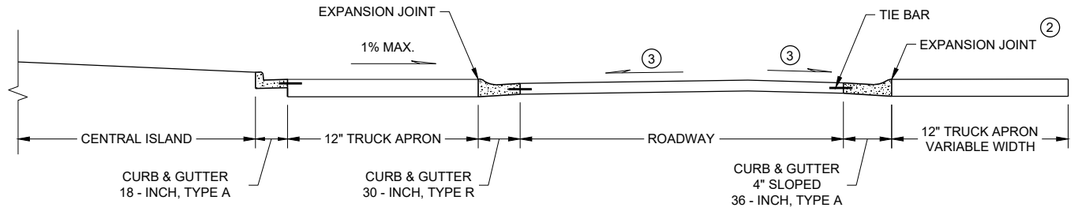



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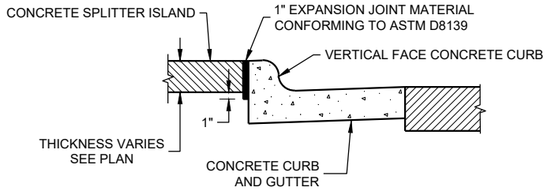
SDD13C18 - 08d
SDD13C18 - 08d



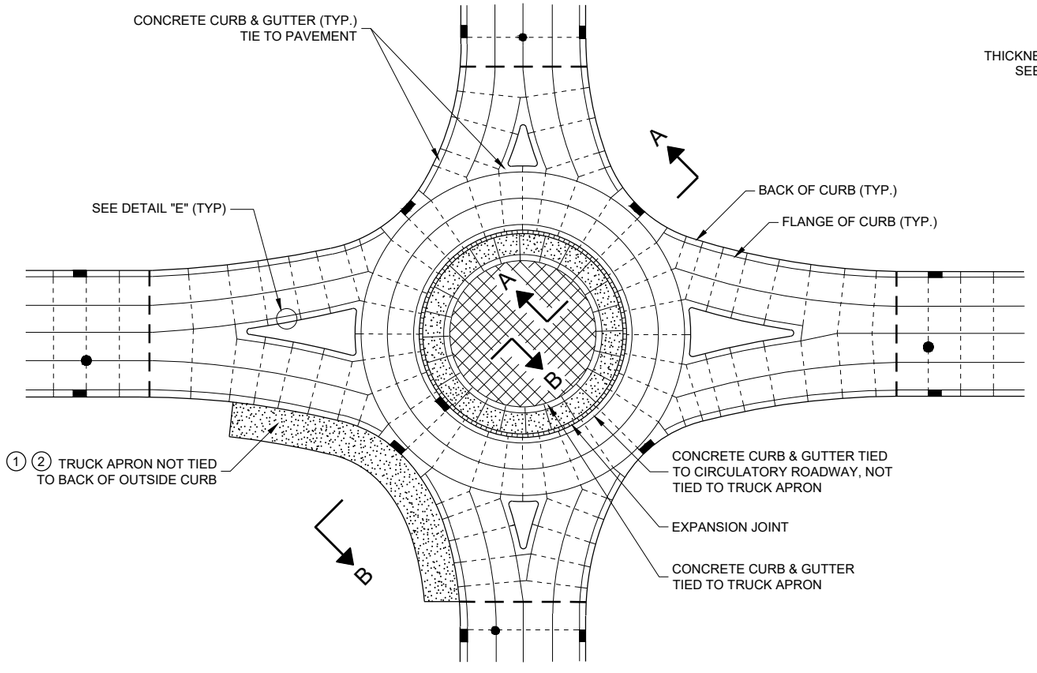

**SECTION A - A**



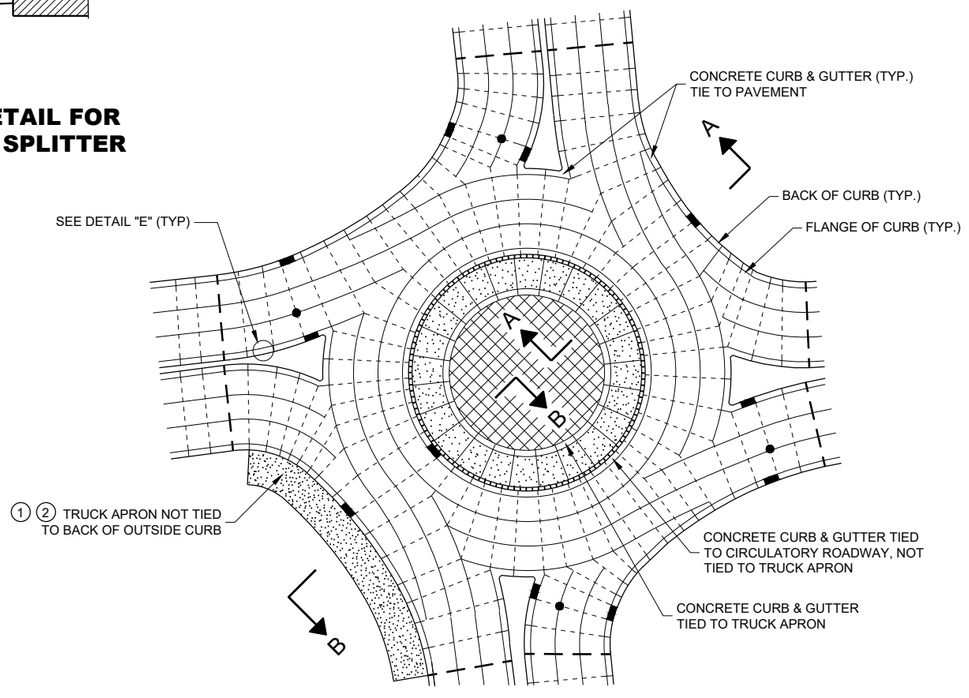

**SECTION B - B**




**DETAIL 'E'**
**EXPANSION JOINT DETAIL FOR VERTICAL CURB AT A SPLITTER ISLAND**




**ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS**




**PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS**

## GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

## LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

**CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS**

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May 2023
DATE

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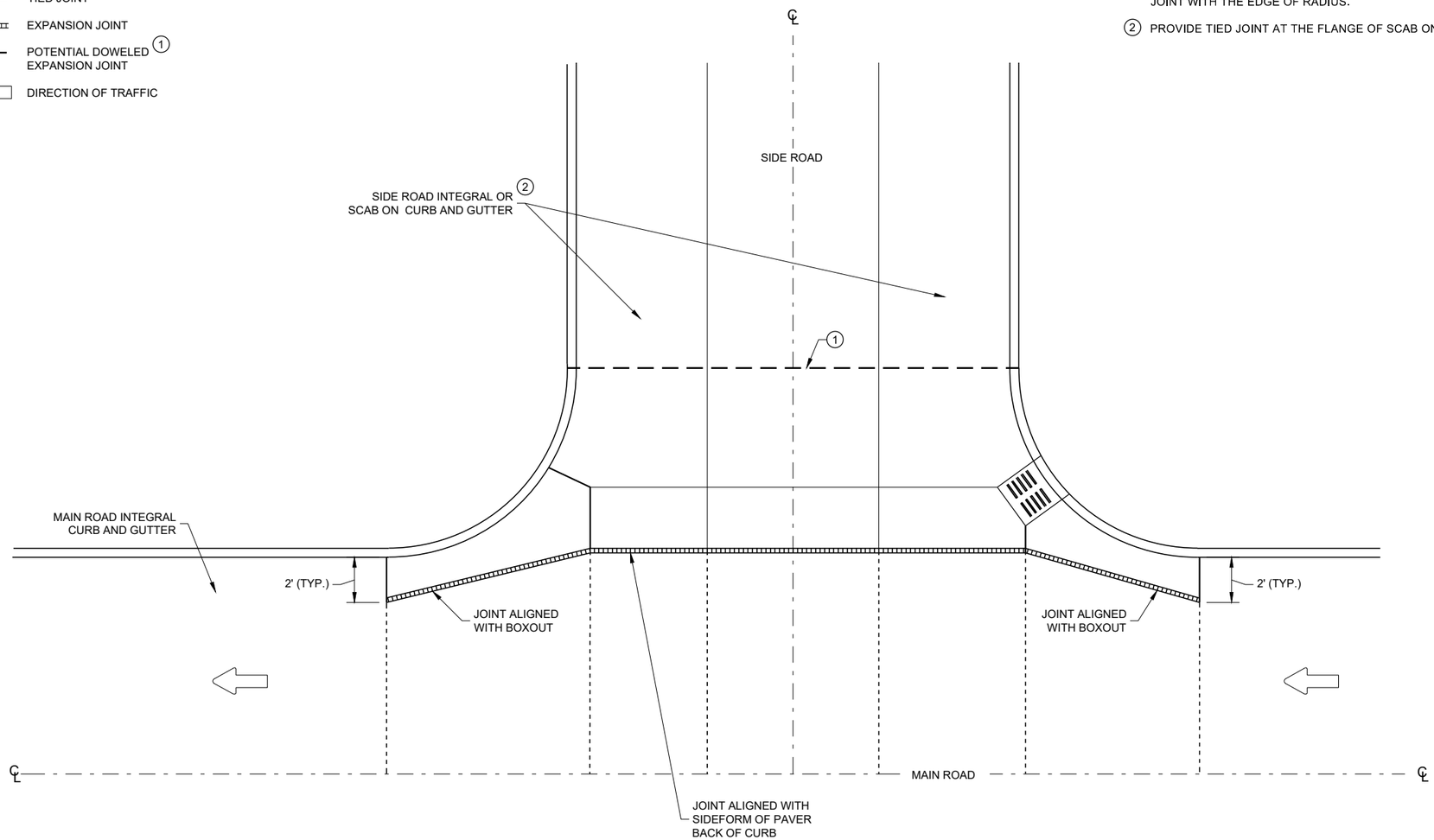
SDD 13C18 - 08e

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SDD 13C18 - 08e

## LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC




## GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

**INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER**

**CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May 2023
DATE

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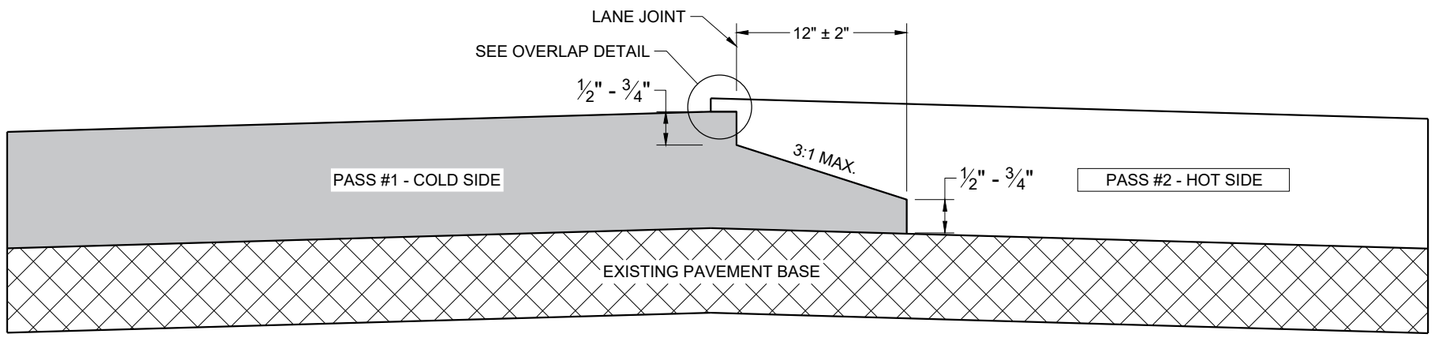


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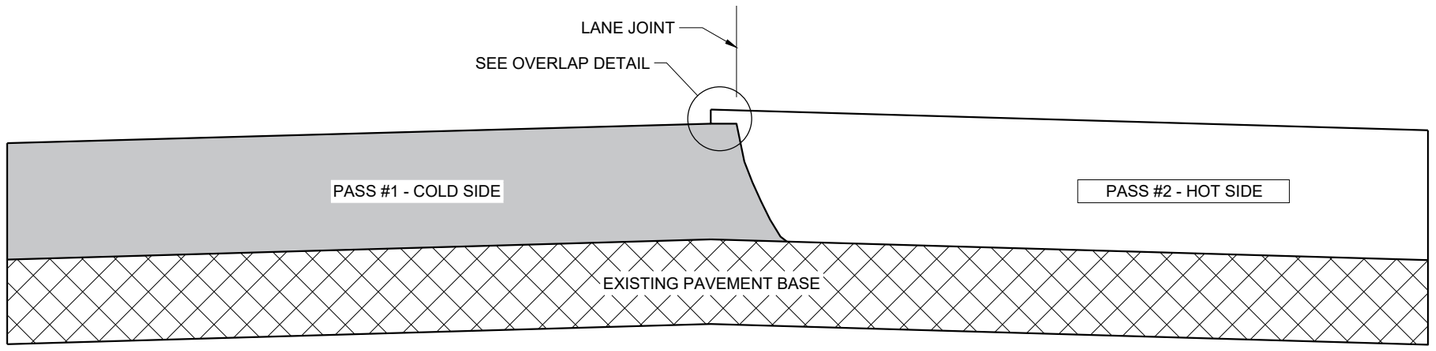
SDD 13C18 - 08f

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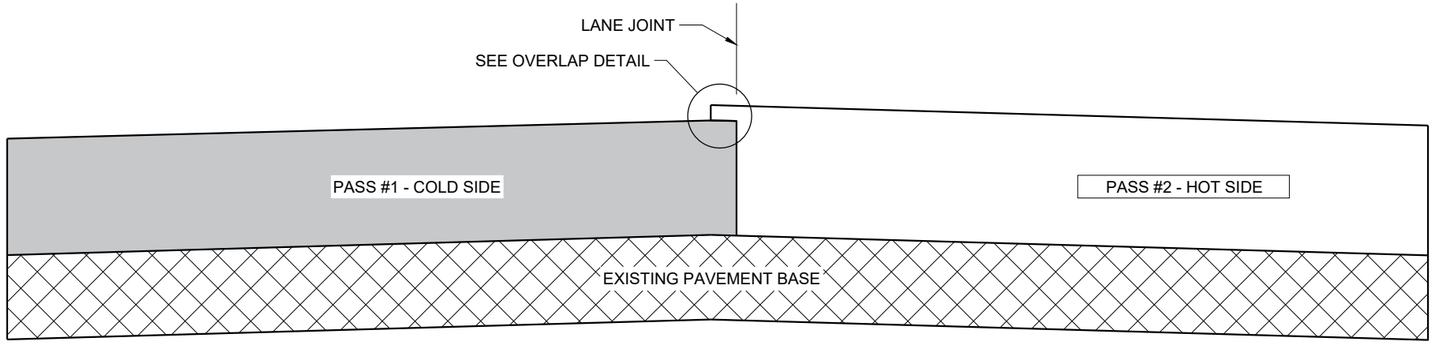
SDD 13C18 - 08f




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

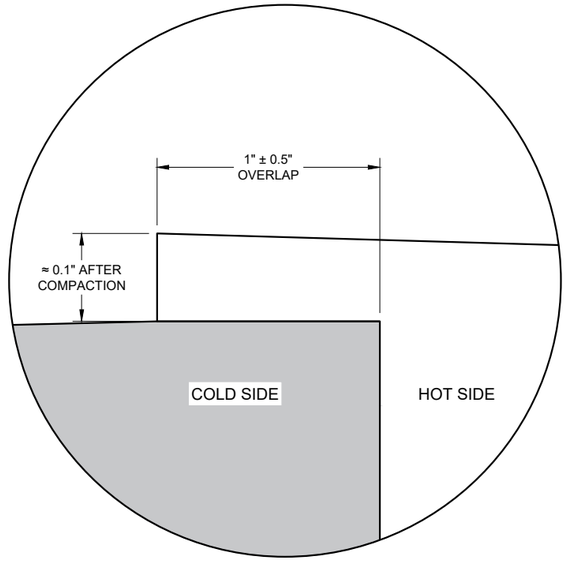
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.




**OVERLAP DETAIL (TYPICAL)**

6

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SDD 13C19 - 03

SDD 13C19 - 03

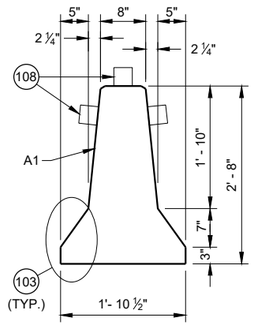
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

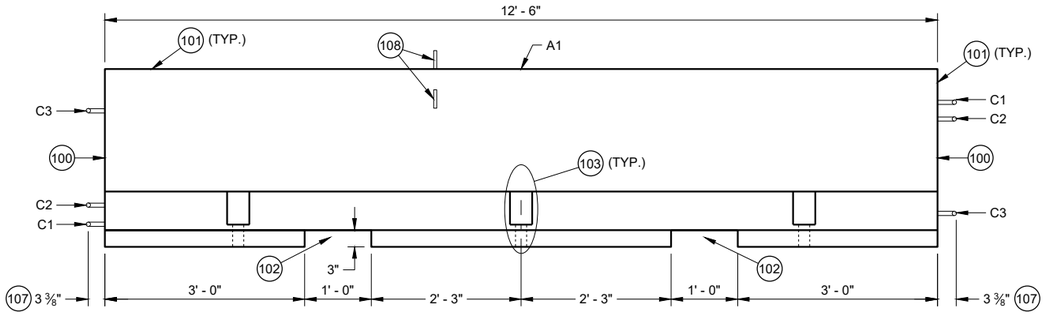
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA




**CROSS SECTION**




**PROFILE VIEW**

## GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

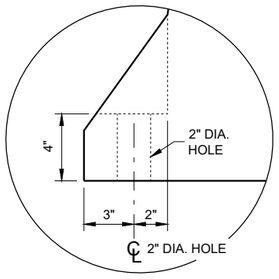
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

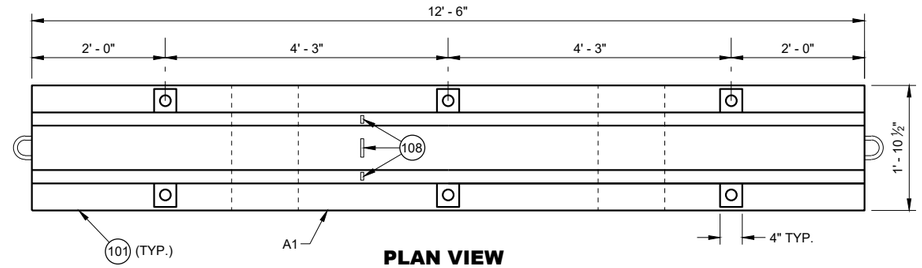
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TO MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

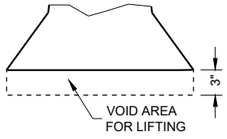



**ANCHOR BLOCK DETAIL**

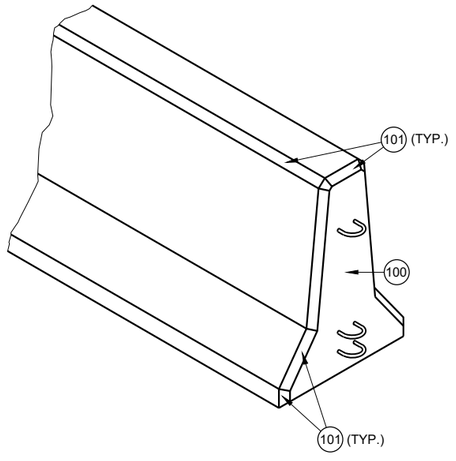


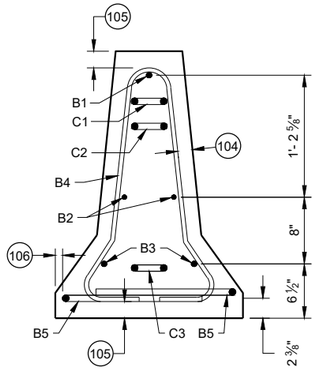

**PLAN VIEW**

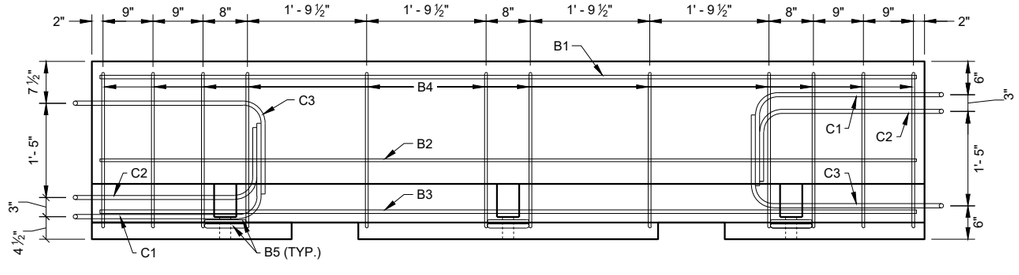
**TEMPORARY BARRIER**




**LIFTING SLOT DETAIL (TYP.)**




**PROFILE VIEW**

**TEMPORARY BARRIER REINFORCEMENT**

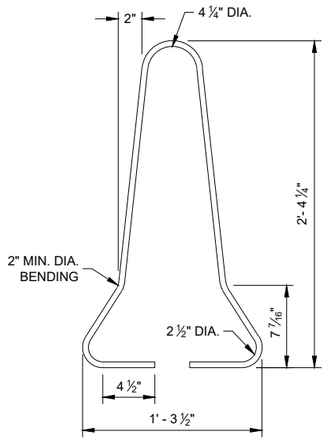
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

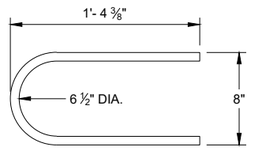




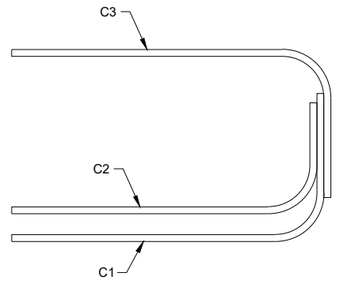
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**B4 BAR DETAIL**

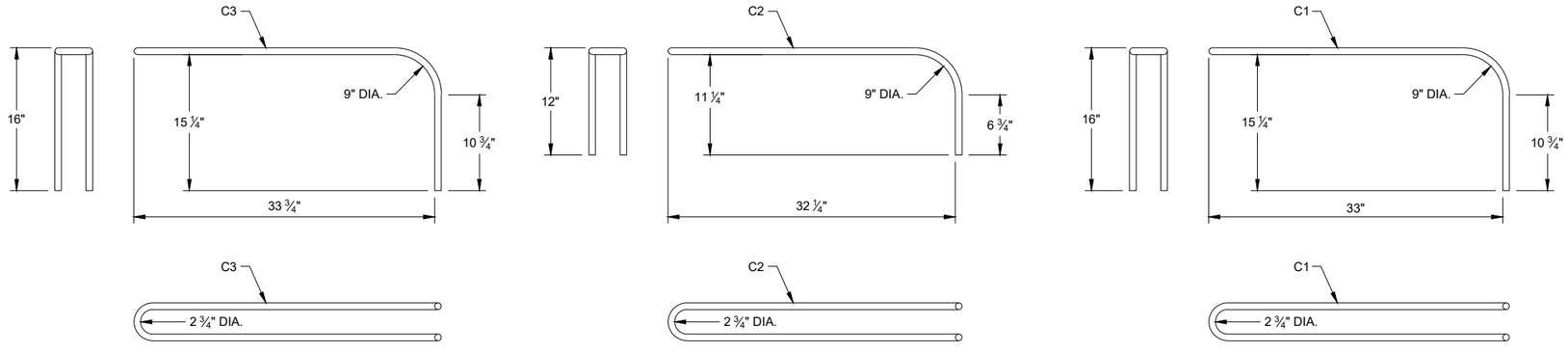



**B5 BAR DETAIL**




**PROFILE VIEW**

**LOOP BAR ASSEMBLY**




**C BAR DETAILS**

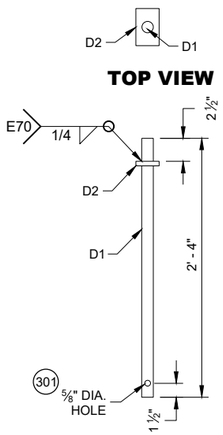
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



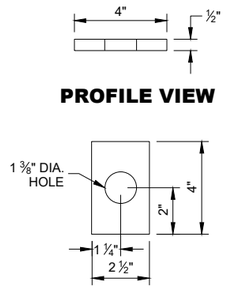

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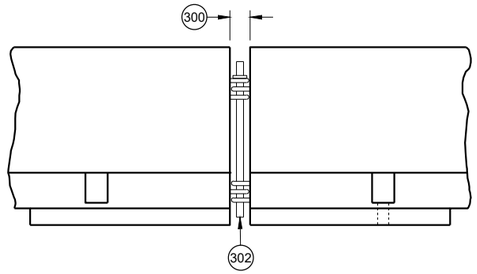



PROFILE VIEW

**CONNECTOR PIN ASSEMBLY**




**TOP VIEW D2**




**CONNECTING TEMPORARY BARRIER SECTIONS**

## GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

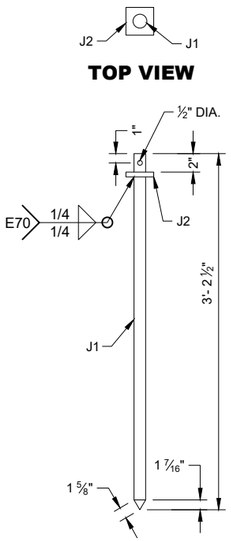
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

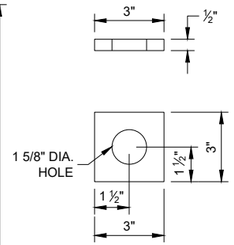
308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.

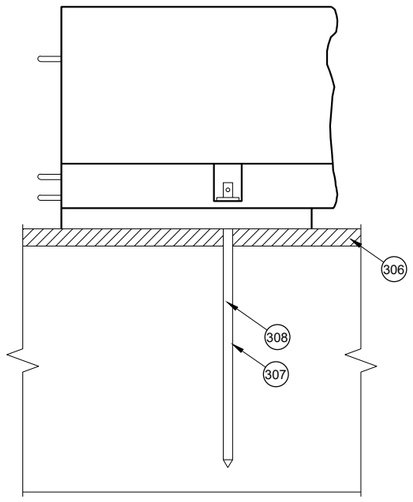



PROFILE VIEW

**ASPHALT ANCHOR PIN ASSEMBLY**

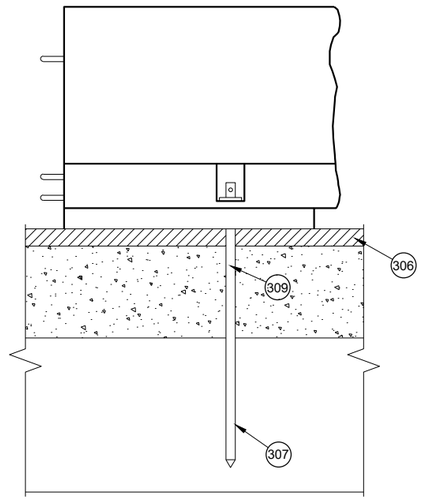



**TOP VIEW J2**



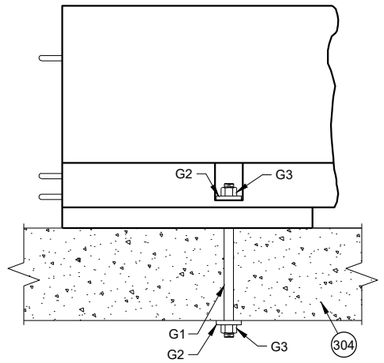

SIDE VIEW

**ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT**



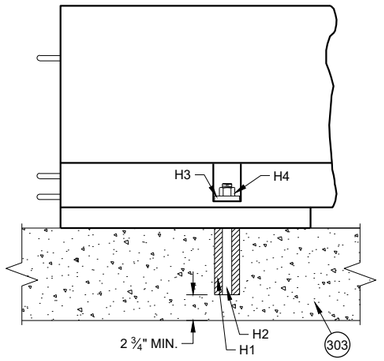

SIDE VIEW

**ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT**




SIDE VIEW

**THROUGH BOLT ANCHOR INSTALLATION** 305




SIDE VIEW

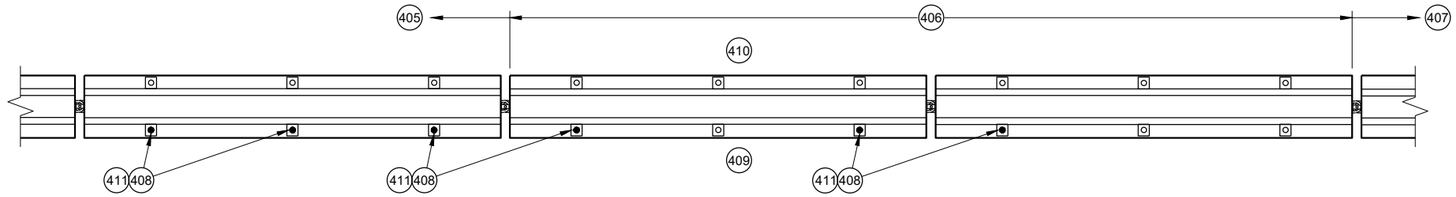
**ADHESIVE ANCHOR INSTALLATION** 305

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



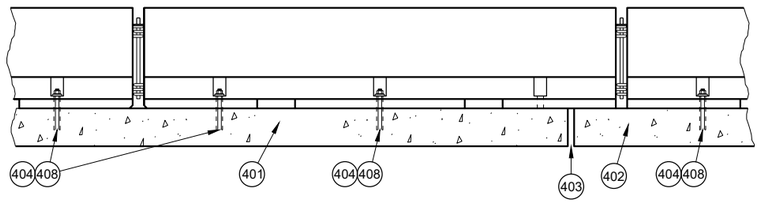

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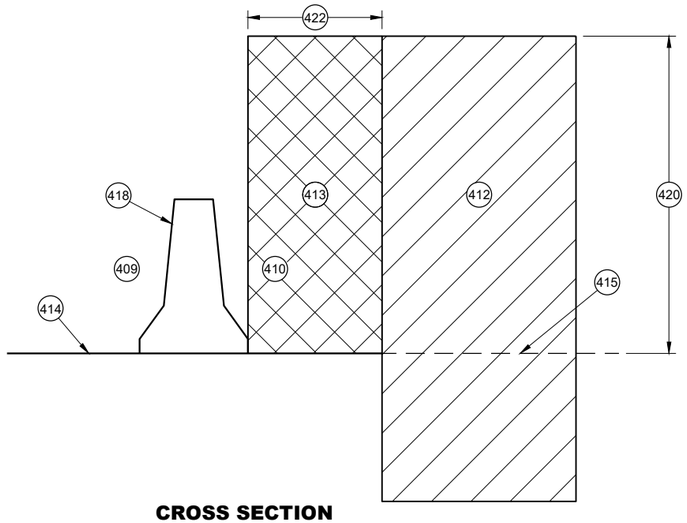

PLAN VIEW

## TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



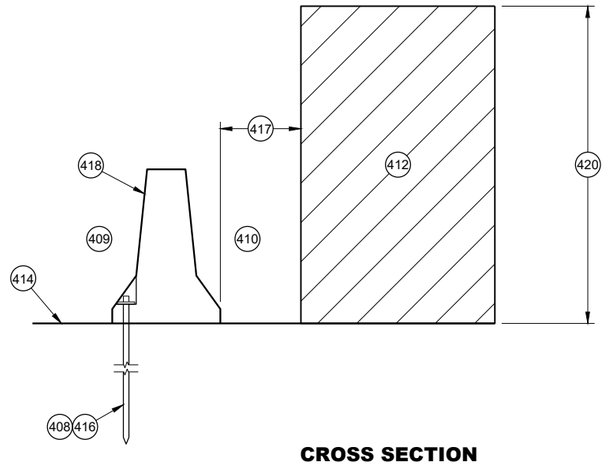

PROFILE VIEW

## ANCHORED BARRIER NEAR EXPANSION JOINT (400)



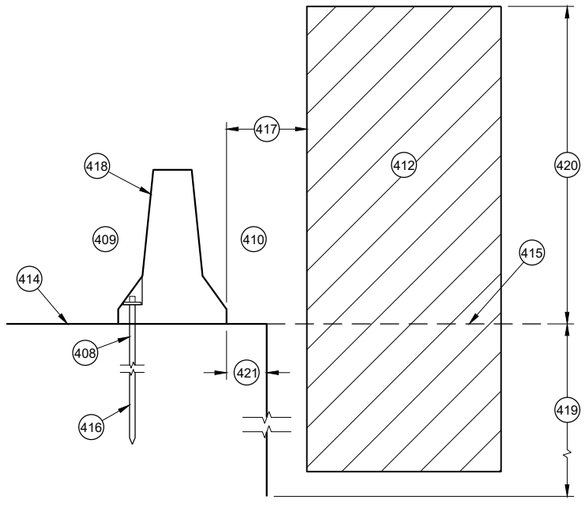

CROSS SECTION

## FREE STANDING BARRIER



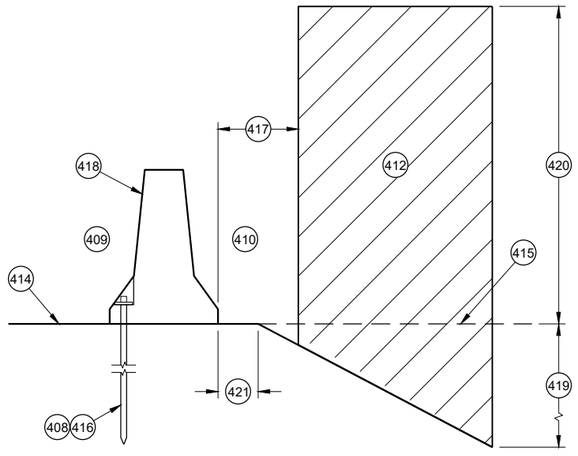

CROSS SECTION

## ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER




CROSS SECTION

## ANCHORED BARRIER NEAR VERTICAL DROP OFF




CROSS SECTION

## ANCHORED BARRIER NEAR A SLOPE

## GENERAL NOTES

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

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

| | |
|---|---|
| CONCRETE PAVEMENT | 0.5' |
| ASPHALT | 0.5' |

(422) POSTED SPEED (MPH):

| | |
|---|---|
| 45 OR GREATER | 4.0' |
| 40 OR LOWER | 2.0' |

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





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## GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

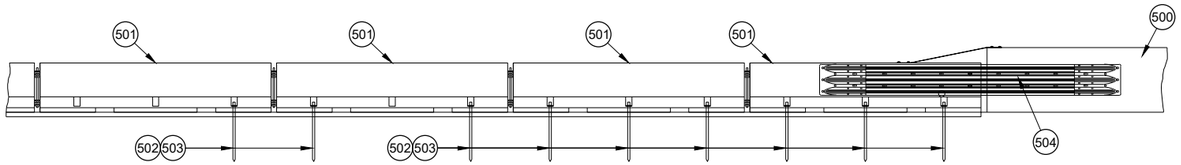
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

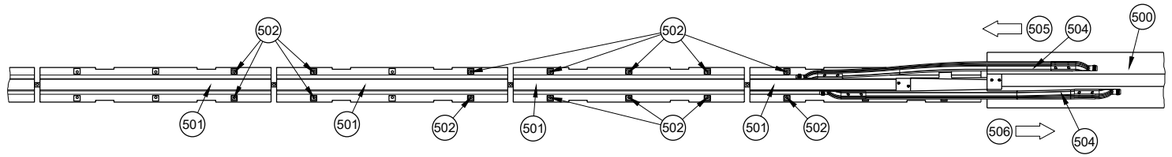
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

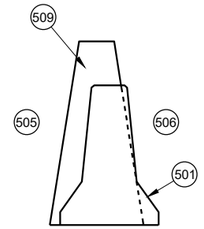
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



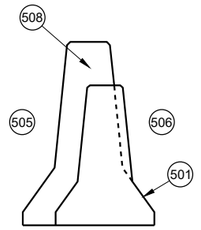

**PROFILE VIEW**



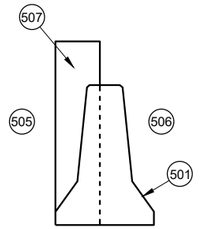

**PLAN VIEW**
**TRANSITION TO RIGID BARRIER**



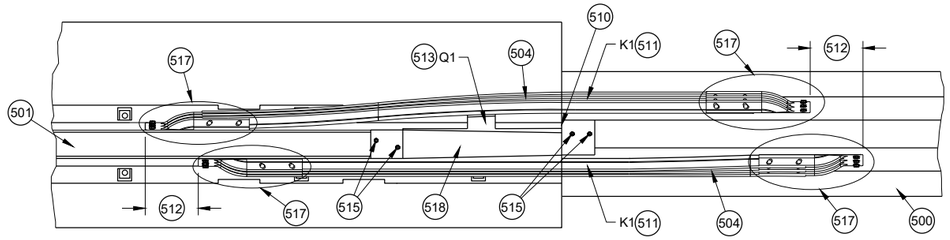

**CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE**



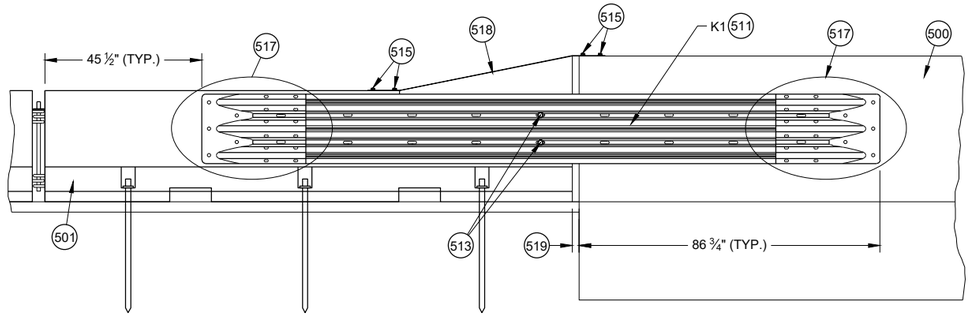

**CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE**



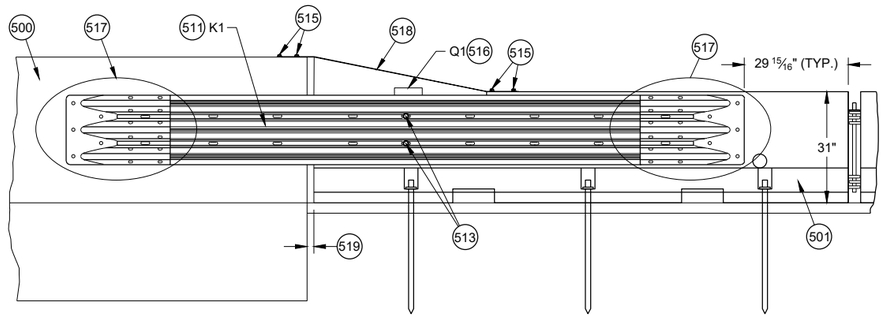

**CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL**



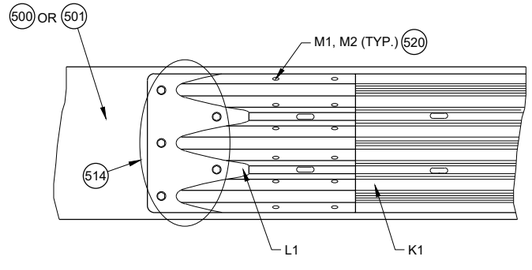

**PLAN DETAIL VIEW**
**TRANSITION TO RIGID BARRIER**




**FRONT DETAIL VIEW**
**TRANSITION TO RIGID BARRIER**




**BACK DETAIL VIEW**
**TRANSITION TO RIGID BARRIER**



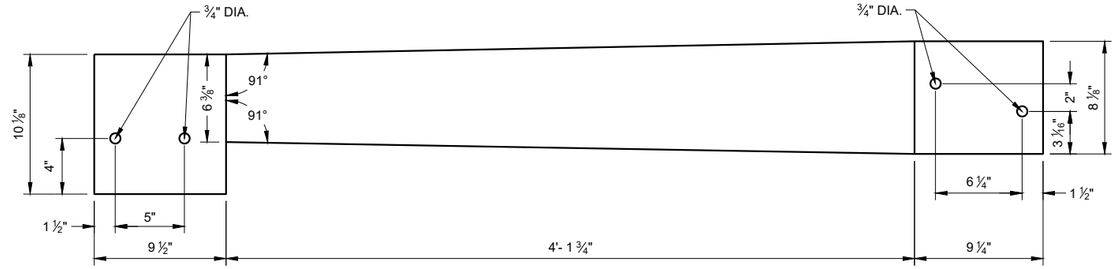

**(517) DETAIL PLAN VIEW**
**THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY**

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



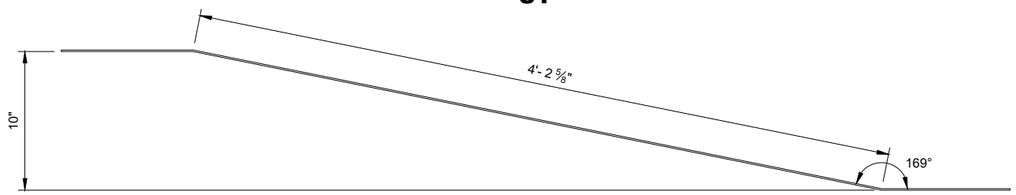

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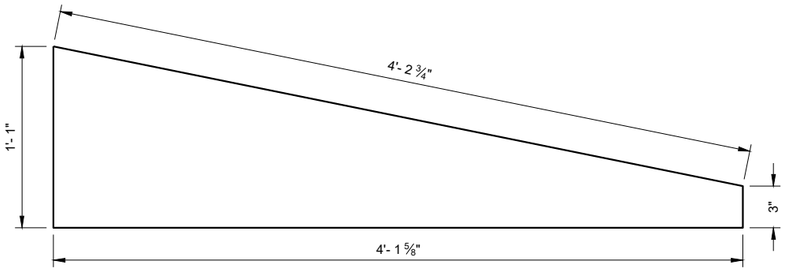

**TOP VIEW**

**S1**



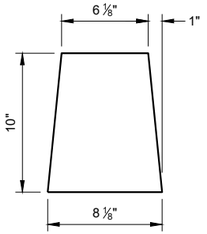

**ELEVATION VIEW**

**S1**

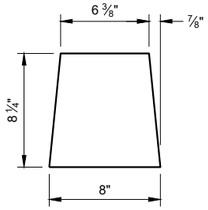



**SIDE VIEW**

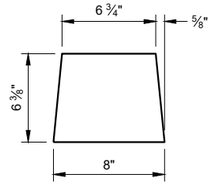
**S3**



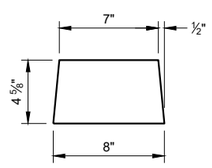

**S2**



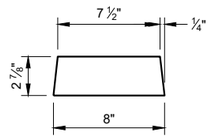

**S4**



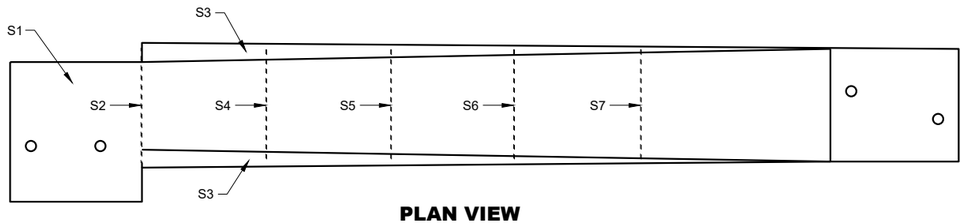

**S5**



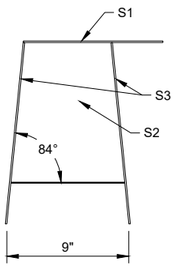

**S6**



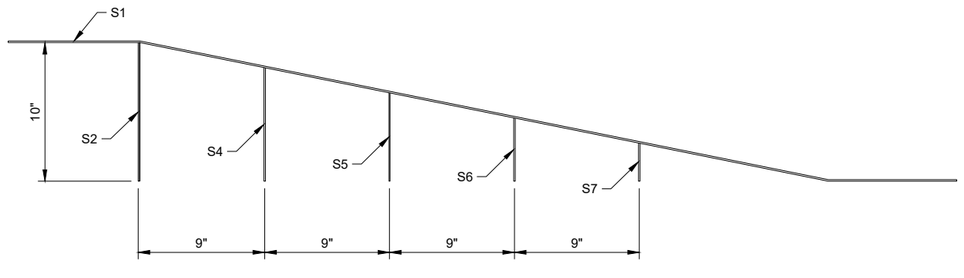

**S7**




**PLAN VIEW**




**BACK VIEW**




**SIDE VIEW** (600)

**42" TOP CAP ASSEMBLY**

**GENERAL NOTES**

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

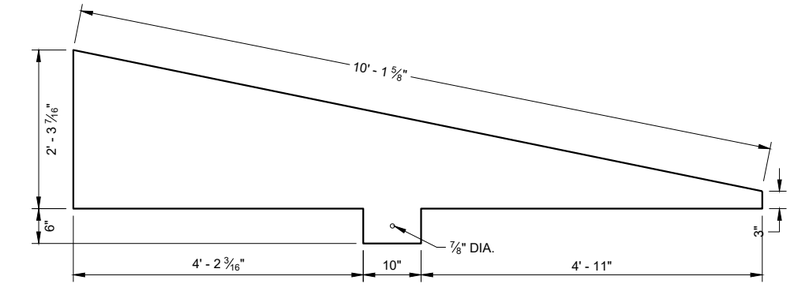




6



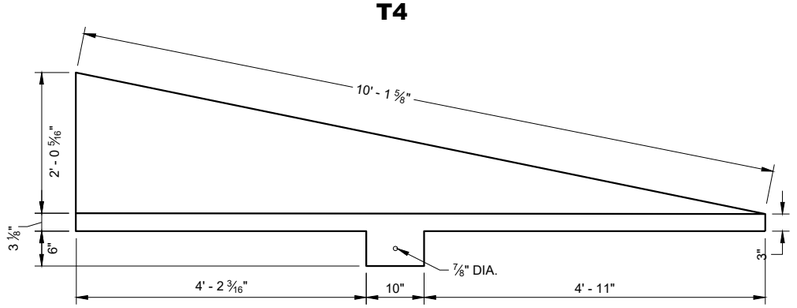
SDD 14B07-16f




**SIDE VIEW**
**T4**




**END VIEW**




**SIDE VIEW**
**T3**




**END VIEW**

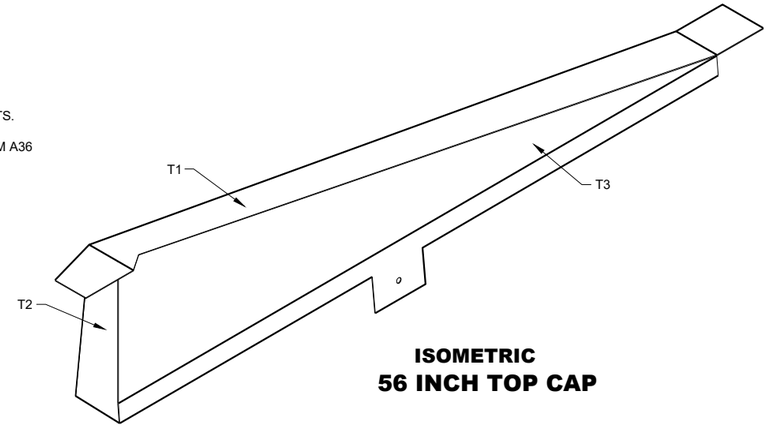
**GENERAL NOTES**

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

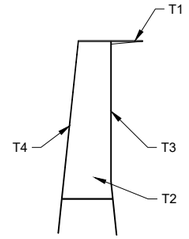
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

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

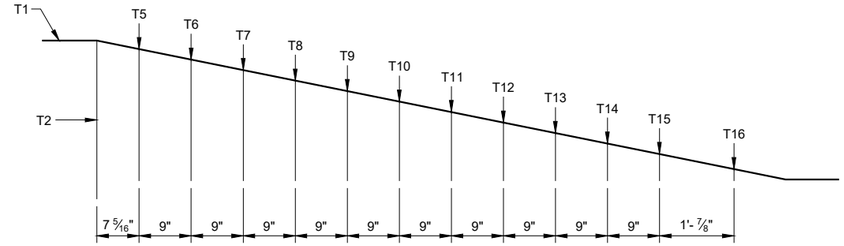
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



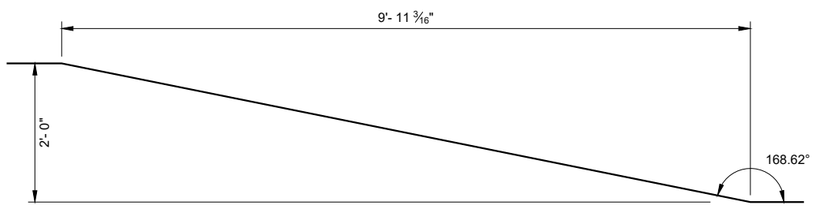

**ISOMETRIC**
**56 INCH TOP CAP**



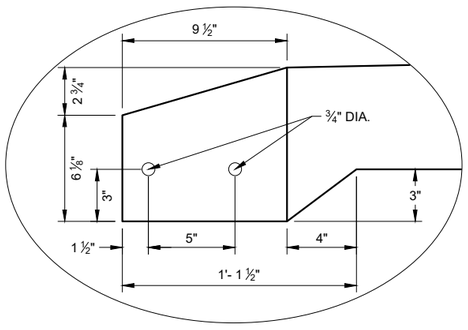

**END VIEW**
**56 INCH TOP CAP**



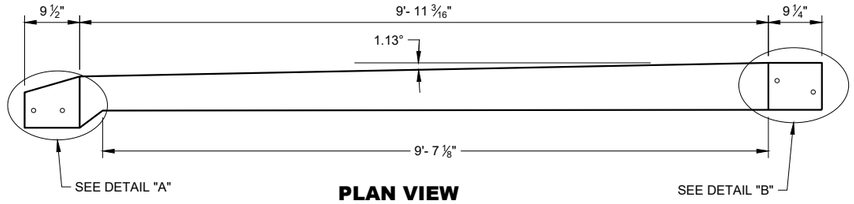

**SIDE VIEW** (700)
**56 INCH TOP CAP**



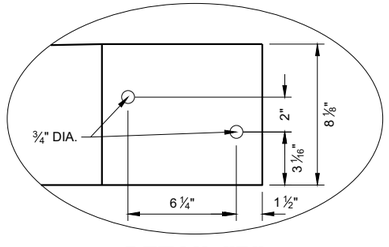

**SIDE VIEW**
**TOP PLATE T1**



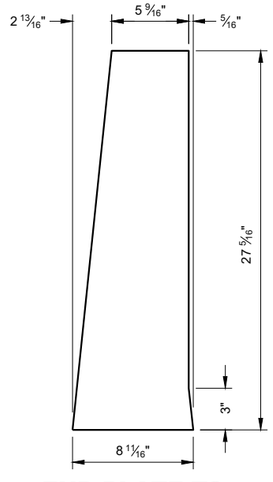

**DETAIL "A"**



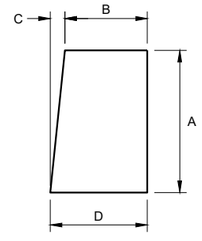

**PLAN VIEW**
**TOP PLATE T1**




**DETAIL "B"**




**END PLATE T2**




**GUSSET PLATES**
**T5 - T16**

| GUSSET DIMENSIONS | | | | |
|---|---|---|---|---|
| GUSSET NO. | A | B | C | D |
| T5 | 22 13/16" | 5 1/16" | 2 5/16" | 8 1/16" |
| T6 | 21" | 5 7/8" | 2 3/16" | 8 1/16" |
| T7 | 19 3/16" | 6 1/16" | 1 15/16" | 8 1/16" |
| T8 | 17 3/8" | 6 1/4" | 1 13/16" | 8 1/16" |
| T9 | 15 5/16" | 6 7/16" | 1 9/16" | 8 1/16" |
| T10 | 13 3/4" | 6 5/8" | 1 7/16" | 8 1/16" |
| T11 | 11 15/16" | 6 13/16" | 1 1/4" | 8 1/16" |
| T12 | 10 1/8" | 7" | 1 1/16" | 8 1/16" |
| T13 | 8 5/16" | 7 3/16" | 7/8" | 8 1/16" |
| T14 | 6 1/2" | 7 3/8" | 1 1/16" | 8 1/16" |
| T15 | 4 11/16" | 7 9/16" | 1/2" | 8" |
| T16 | 2 7/8" | 7 3/4" | 1/4" | 8" |

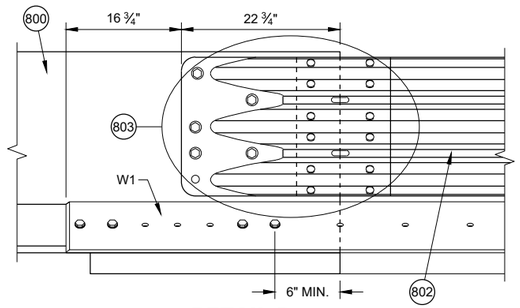
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

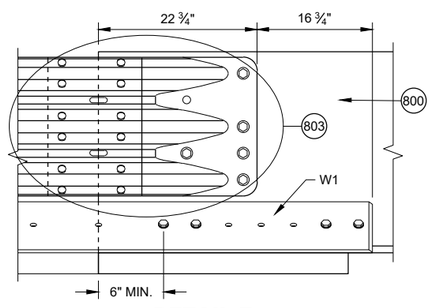




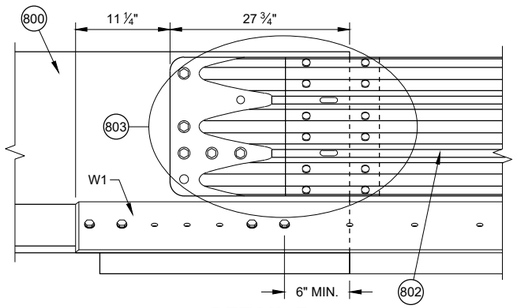
6
SDD 14B07-16g



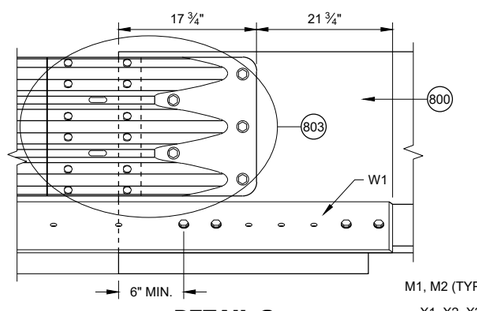

**DETAIL D**



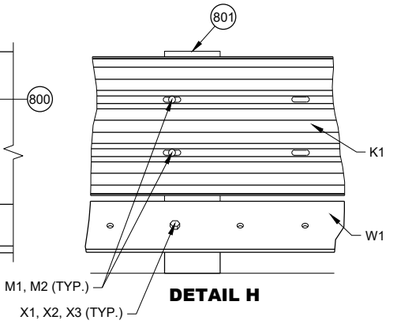

**DETAIL E**



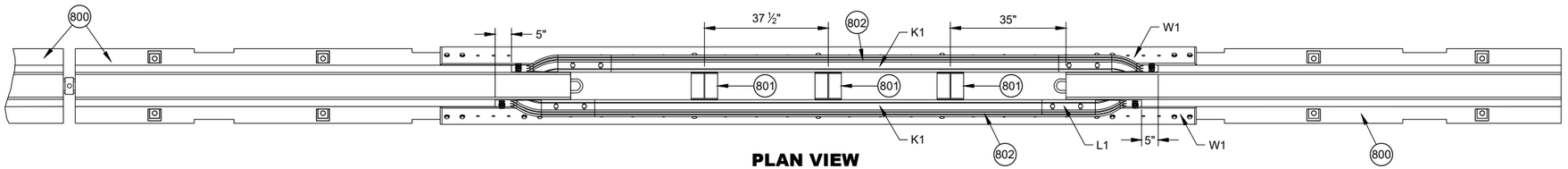

**DETAIL F**




**DETAIL G**




**DETAIL H**




**PLAN VIEW**

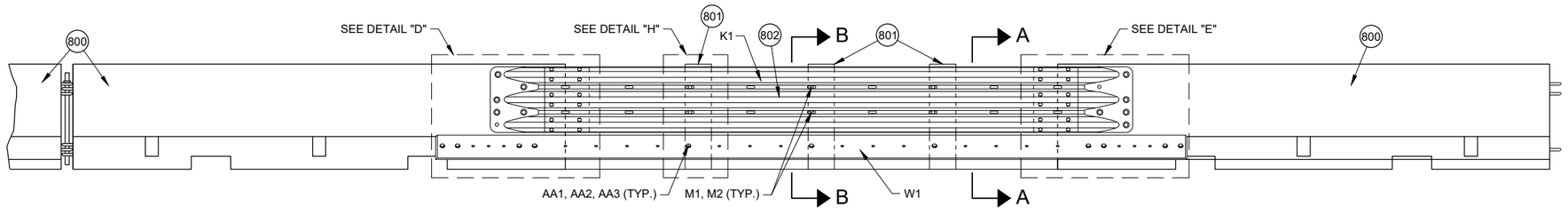
## GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

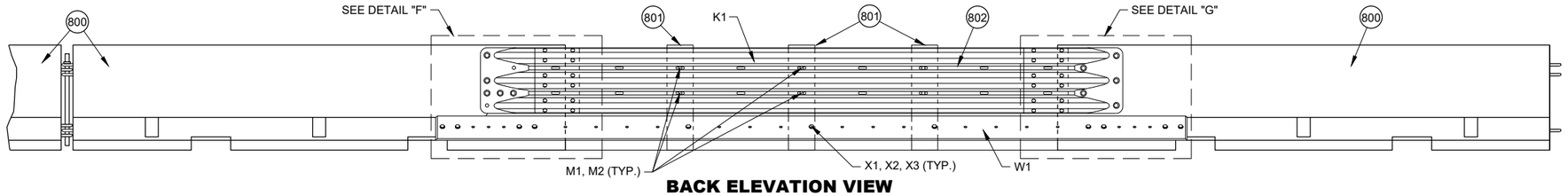
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL




**FRONT ELEVATION VIEW**




**BACK ELEVATION VIEW**

**PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER**

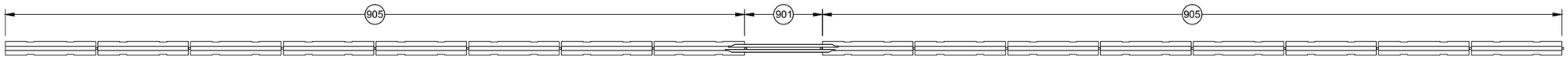
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

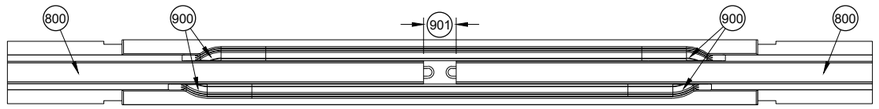




6
SDD 14B07-16h



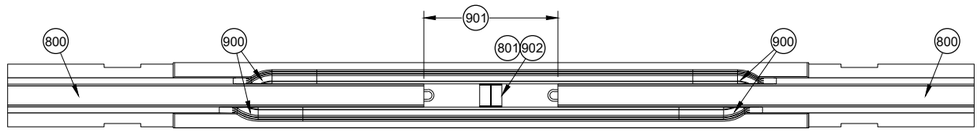

**PLAN VIEW**
**GAP WITHIN SPACING**



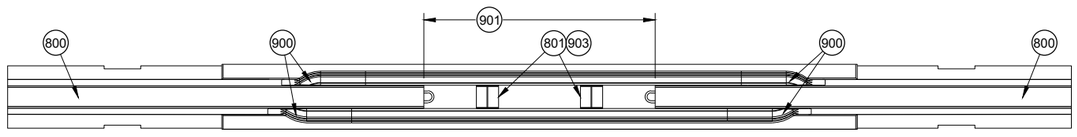

**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 4" TO 1' MAX.** (904)

## GENERAL NOTES

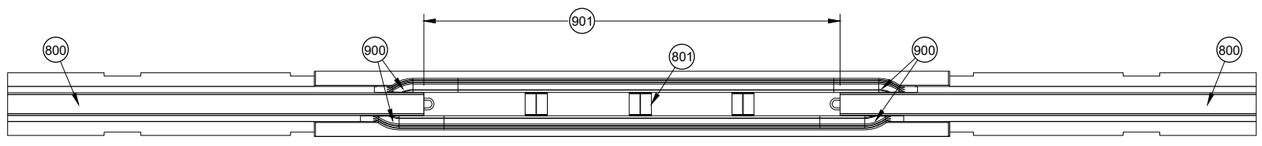
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS




**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 1' TO 4' MAX.** (904)



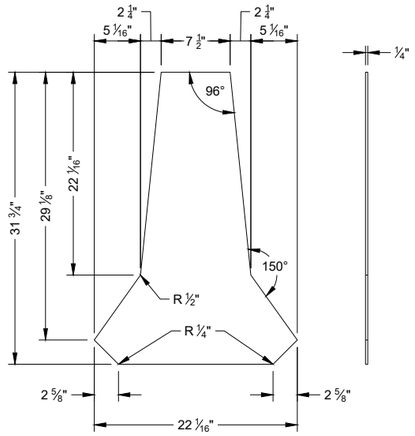

**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 4' TO 7' MAX.** (904)




**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX.** (904)

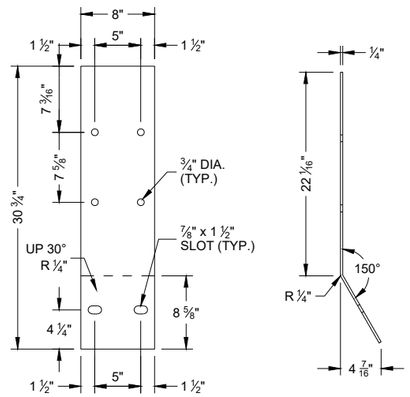
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**


6
SDD 14B07-16i



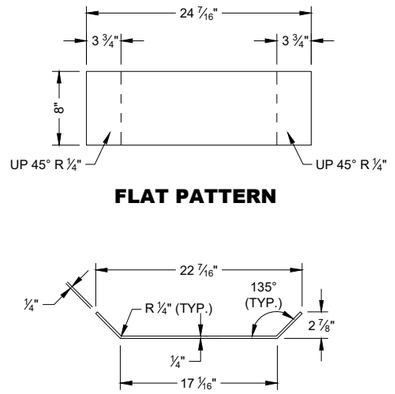

**PROFILE VIEW** **SIDE VIEW**

## STIFFENER ASSEMBLY CENTER PANEL U1




**FLAT PATTERN** **SIDE VIEW**

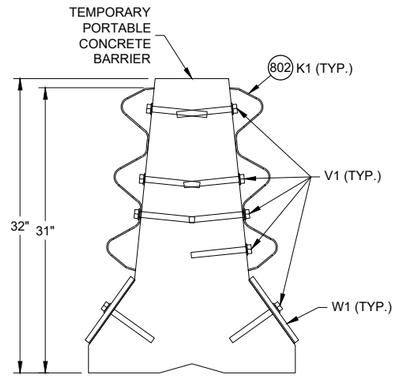
## STIFFENER ASSEMBLY SIDE PANEL U2



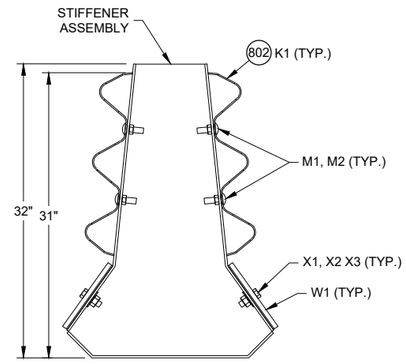

**FLAT PATTERN**

**PROFILE VIEW**

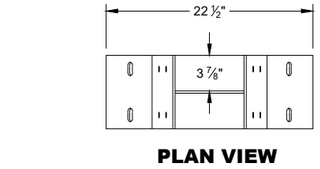
## STIFFENER ASSEMBLY BOTTOM PANEL U3



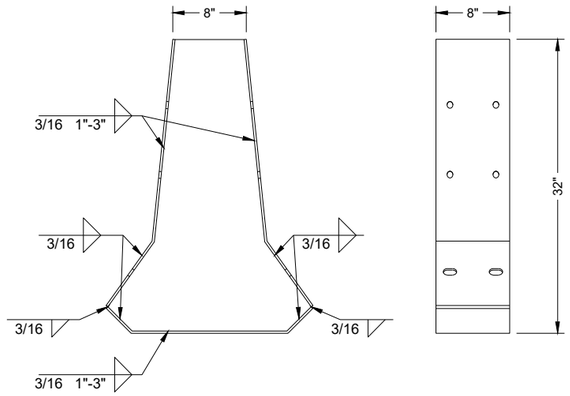

## SECTION A - A




## SECTION B - B



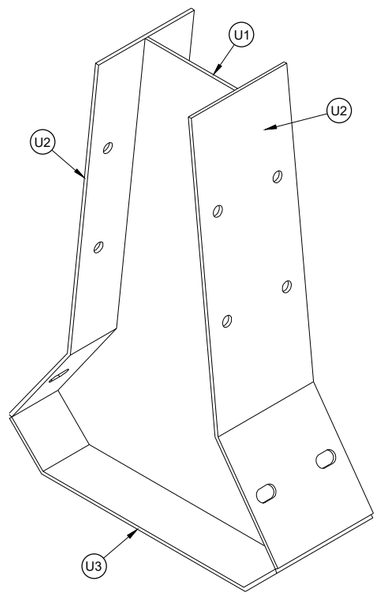

**PLAN VIEW**




**PROFILE VIEW**

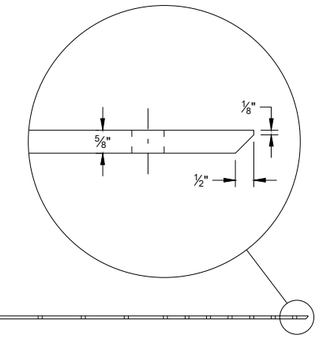



**SIDE VIEW**

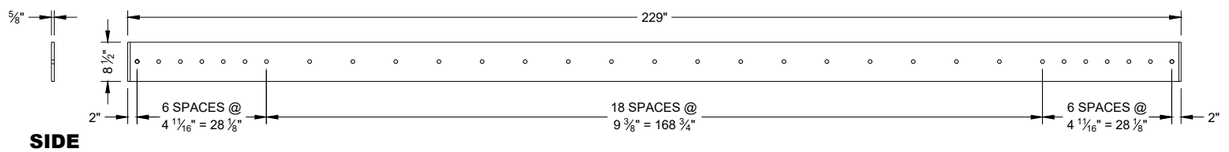



**ISOMETRIC**

## GAP STIFFENER ASSEMBLY




**PLAN VIEW**




**SIDE VIEW**

**ELEVATION VIEW**

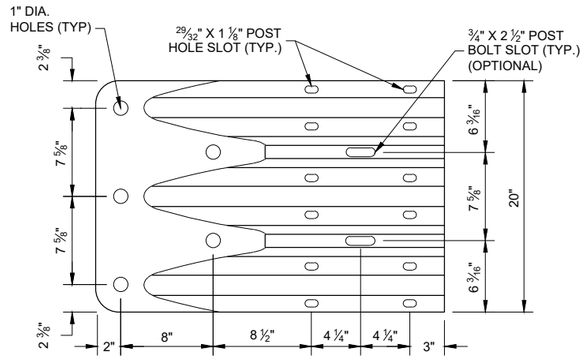
## W1 TOE PLATE

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



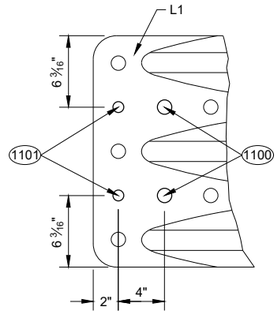

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SDD 14B07-16j



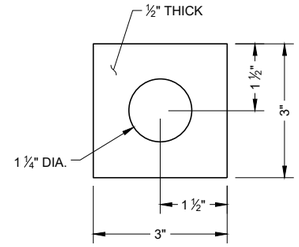

**ELEVATION VIEW**

## THRIE BEAM TERMINAL CONNECTOR




**ELEVATION VIEW**

## ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL



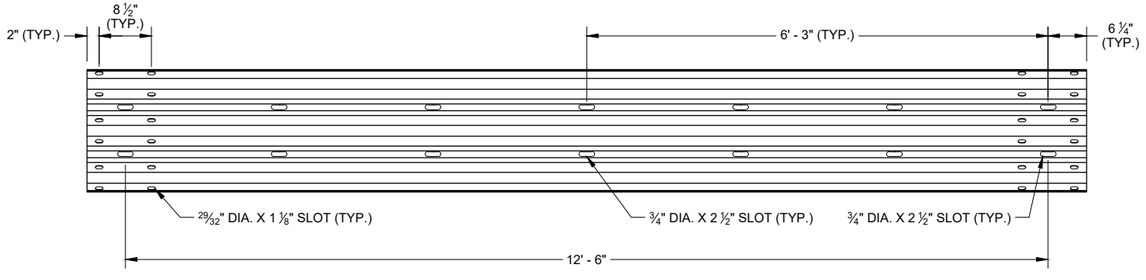

## PLATE WASHER DETAIL G2, H3

## GENERAL NOTES

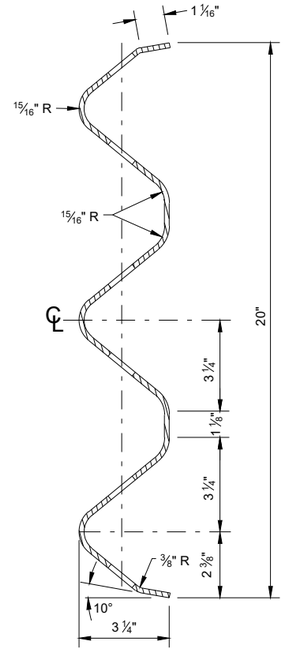
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.




## SLOTTED THRIE BEAM RAIL K1




## SECTION THROUGH BEAM K1

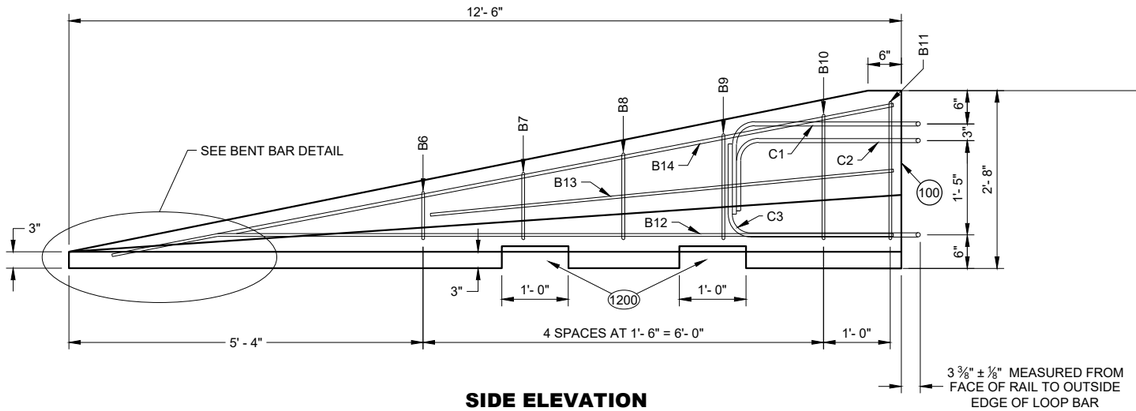
## CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

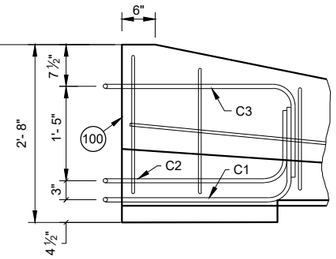




6
SDD 14B07-16k



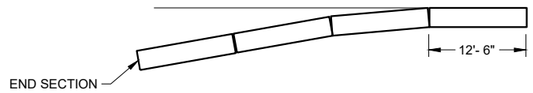

**SIDE ELEVATION**
(FOR CONNECTION TO LEFT END OF BARRIER)




**SIDE ELEVATION**
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

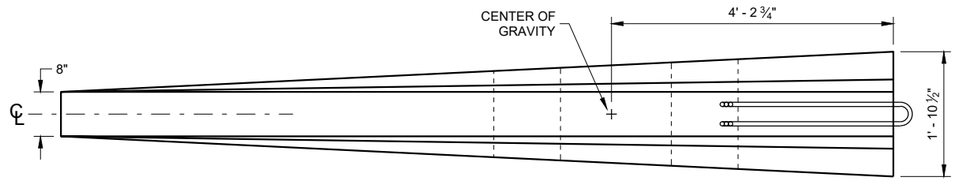
## GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

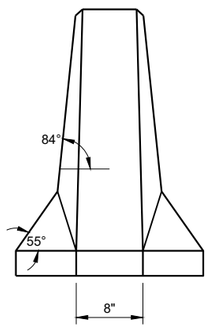



**FLARE AT BARRIER END**

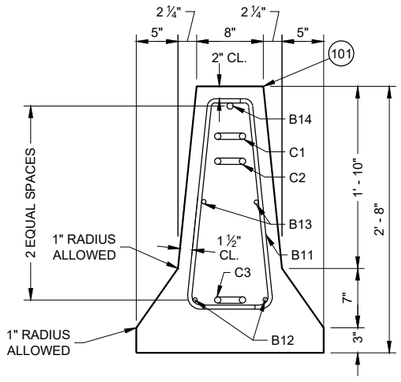
| POSTED SPEED, (MPH) | FLARE RATE |
|---|---|
| 40 OR LESS | 6:1 |
| 45 OR GREATER | 8:1 |




**PLAN VIEW**

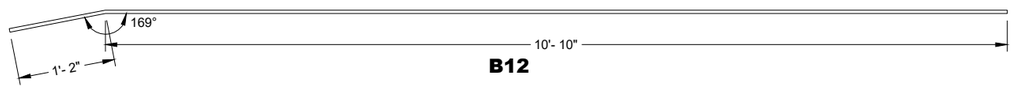



**FRONT ELEVATION**

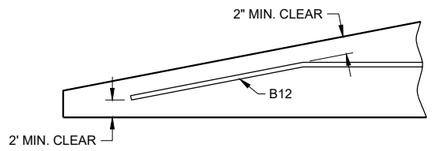



**END SECTION**

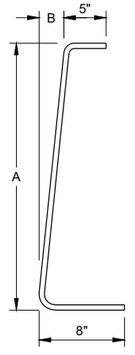
**DETAILS OF BARRIER TAPER SECTION**




**B12**




**BENT BAR DETAIL**




| BAR | A | B |
|---|---|---|
| B6 | 10" | 1" |
| B7 | 1'- 1" | 1 ¼" |
| B8 | 1'- 5" | 1 ⅝" |
| B9 | 1'- 8" | 1 ⅞" |
| B10 | 2'- 0 ½" | 2 ⅜" |
| B11 | 2'- 3" | 2 ¾" |

**B BARS**

2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

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

# BILL OF MATERIALS - CONCRETE BARRIER PRECAST

| PART | DESCRIPTION | MATERIALS SPECIFICATIONS | NOTES |
|---|---|---|---|
| A1 | PRECAST TEMPORARY BARRIER - CONCRETE | MIN. = f'c 5000 PSI | |
| B1 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #5 REBAR, LENGTH 12'-2" |
| B2 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 12'-2" |
| B3 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #5 REBAR, LENGTH 12'-2" |
| B4 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 6'-0" |
| B5 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #6 REBAR, LENGTH 2'-11" |
| B6 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 1'-11" |
| B7 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 2'-2" |
| B8 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 2'-6" |
| B9 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 2'-9" |
| B10 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 3'-2" |
| B11 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 3'-4" |
| B12 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 12'-0" |
| B13 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #4 REBAR, LENGTH 7'-9" |
| B14 | REBAR | STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR | #5 REBAR, LENGTH 11'-9" |
| C1 | LOOP BAR | ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED | ¾" DIA. |
| C2 | LOOP BAR | ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED | ¾" DIA. |
| C3 | LOOP BAR | ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED | ¾" DIA. |
| D1 | CONNECTION PIN - ROD | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | 1 ¼" DIA. |
| D2 | CONNECTION PIN - TOP PLATE | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | |
| G1 | BOLT THROUGH ANCHOR - THREADED ROD | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC | 1 ⅛" DIA. |
| G2 | BOLT THROUGH ANCHOR - WASHER, SQUARE | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | |
| G3 | BOLT THROUGH ANCHOR - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | |
| H1 | ADHESIVE ANCHOR - ADHESIVE | ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS. | |
| H2 | ADHESIVE ANCHOR - THREADED ROD | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC | 1 ⅛" DIA. |
| H3 | ADHESIVE ANCHOR - WASHER, SQUARE | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | |
| H4 | ADHESIVE ANCHOR - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | |
| J1 | ASPHALT ANCHOR PIN - ROD | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | 1 ½" DIA. |
| J2 | ASPHALT ANCHOR PIN - STOP PLATE | ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI | |
| K1 | THRIE BEAM RAIL | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER | 12 GAUGE |
| L1 | THRIE BEAM RAIL - TERMINAL | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER | 12 GAUGE |

| PART | DESCRIPTION | MATERIALS SPECIFICATIONS | NOTES |
|---|---|---|---|
| M1 | SPLICE BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36 | ⅝" DIA. |
| M2 | SPLICE BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | |
| N1 | THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | ¾" DIA. LENGTH 6" |
| N2 | THRIE BEAM RAIL TERMINAL - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 | |
| N3 | THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR | MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS. | |
| P1 | THRIE BEAM RAIL CONNECTION 1-BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | ¾" DIA. |
| P2 | THRIE BEAM RAIL CONNECTION 1-WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 | |
| P3 | THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR | MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS. | |
| Q1 | BLOCK WOOD | SEE STANDARD SPEC. 614 | |
| R1 | CAP - BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | ⅝" DIA. |
| R2 | CAP- BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 | |
| R3 | CAP - BOLT - MECHANICAL ANCHOR | MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS. | 12 GAUGE |
| S1 | CAP 42-INCH TOP PLATE | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S2 | CAP 42-INCH END PLATE | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S3 | CAP 42-INCH SIDE PLATE | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S4 | CAP 42-INCH GUSSET 1 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S5 | CAP 42-INCH GUSSET 2 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S6 | CAP 42-INCH GUSSET 3 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| S7 | CAP 42-INCH GUSSET 4 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |

6

SDD 14B07-16m

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 14B07-16m

## BILL OF MATERIALS - CONCRETE BARRIER PRECAST

| PART | DESCRIPTION | MATERIALS SPECIFICATIONS | NOTES |
|---|---|---|---|
| T1 | CAP 56-INCH TOP PLATE | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T2 | CAP 56-INCH END PLATE | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T3 | CAP 56-INCH SIDE PLATE 1 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T4 | CAP 56-INCH SIDE PLATE 2 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T5 | CAP 56-INCH GUSSET 1 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T6 | CAP 56-INCH GUSSET 2 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T7 | CAP 56-INCH GUSSET 3 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T8 | CAP 42-INCH GUSSET 4 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T9 | CAP 42-INCH GUSSET 5 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T10 | CAP 42-INCH GUSSET 6 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T11 | CAP 42-INCH GUSSET 7 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T12 | CAP 42-INCH GUSSET 8 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T13 | CAP 42-INCH GUSSET 9 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T14 | CAP 42-INCH GUSSET 10 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T15 | CAP 42-INCH GUSSET 11 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| T16 | CAP 42-INCH GUSSET 12 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | 12 GAUGE |
| U1 | GAP STIFFENER | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | |
| U2 | GAP STIFFENER - CONNECTOR PLATE 1 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | |
| U3 | GAP STIFFENER - CONNECTOR PLATE 2 | AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | |

| PART | DESCRIPTION | MATERIALS SPECIFICATIONS | NOTES |
|---|---|---|---|
| V1 | THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR | MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS. | ¾" DIA. |
| V2 | GAP STIFFENER - BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | |
| W1 | TOE PLATE | AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI | |
| X1 | TOE PLATE - CONNECTION BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT. | ¾" DIA. |
| X2 | TOE PLATE - CONNECTION BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY) | |
| X3 | TOE PLATE - CONNECTION BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 | |

6

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

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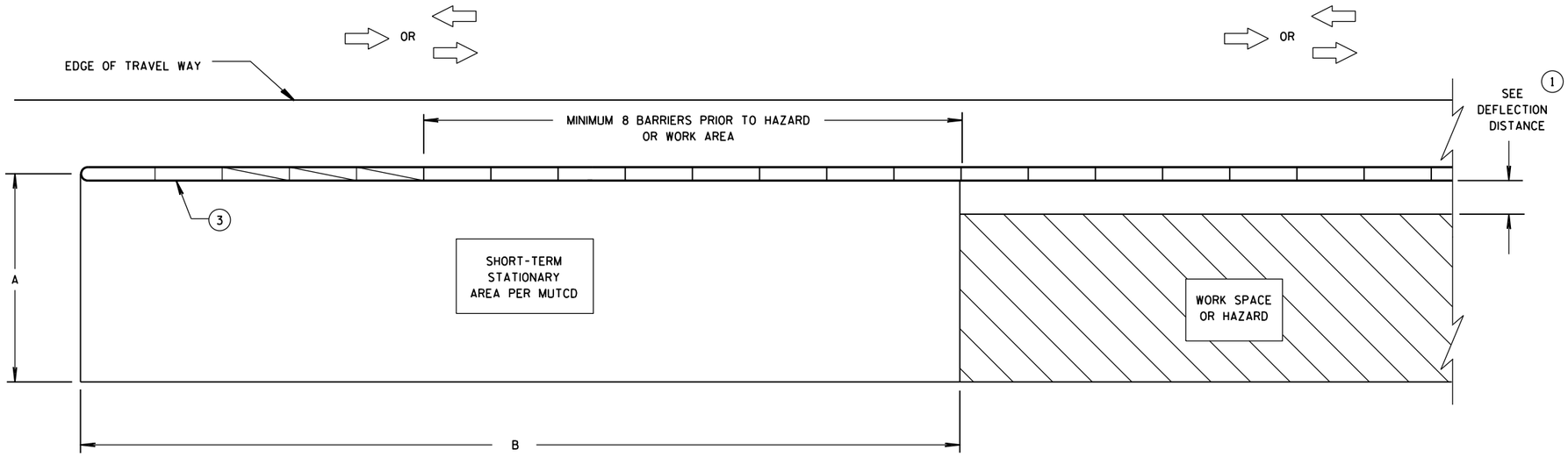
APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



6

SDD 14B07-16n



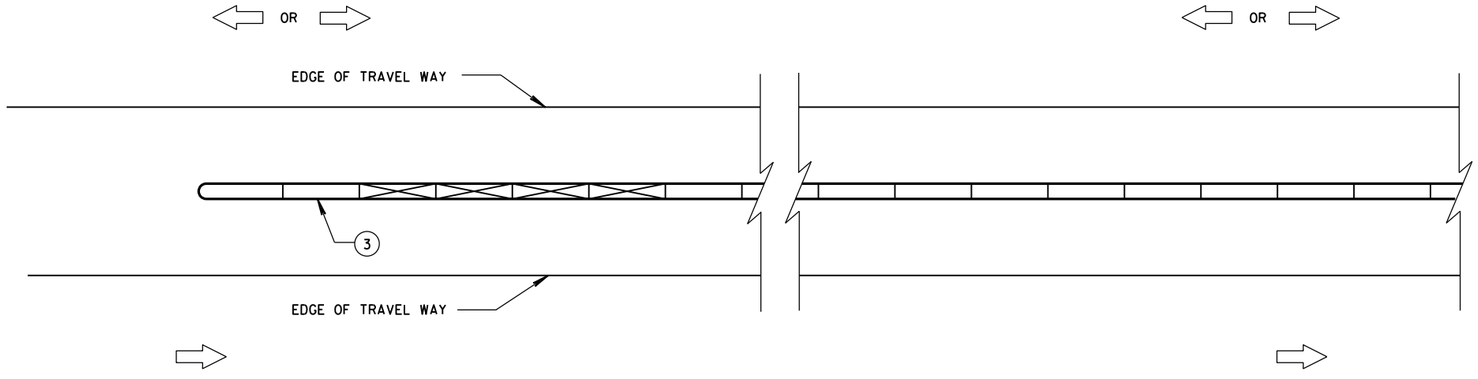

## CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

### DIMENSION A TABLE (2)

| FACILITY | POSTED SPEED MPH | DIMENSION A | |
|---|---|---|---|
| | | MIN. FT | MAX. FT |
| FREEWAY/EXPRESSWAY | ALL | 15 | 20 |
| NON-FREEWAY/EXPRESSWAY | GREATER THAN OR EQUAL TO 45 | 10 | 15 |
| NON-FREEWAY/EXPRESSWAY | LESS THAN 45 | 8 | 10 |
| AADT LESS THAN 1,500 | ALL | 8 | 10 |

### DIMENSION B TABLE (2)

| POSTED SPEEDS MPH | DIMENSION B FT |
|---|---|
| 20 | 115 |
| 25 | 155 |
| 30 | 200 |
| 35 | 250 |
| 40 | 305 |
| 45 | 360 |
| 50 | 425 |
| 55 | 495 |
| 60 | 570 |
| 65 | 645 |




## CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

### LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

### GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

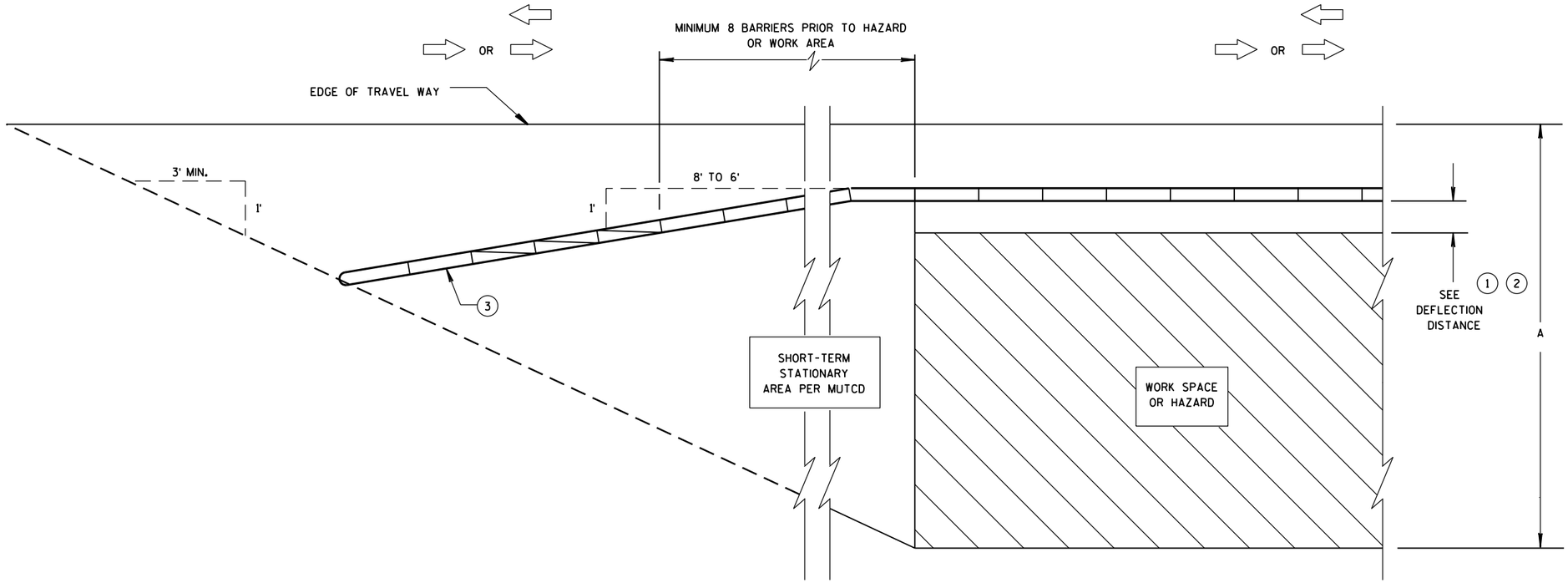
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

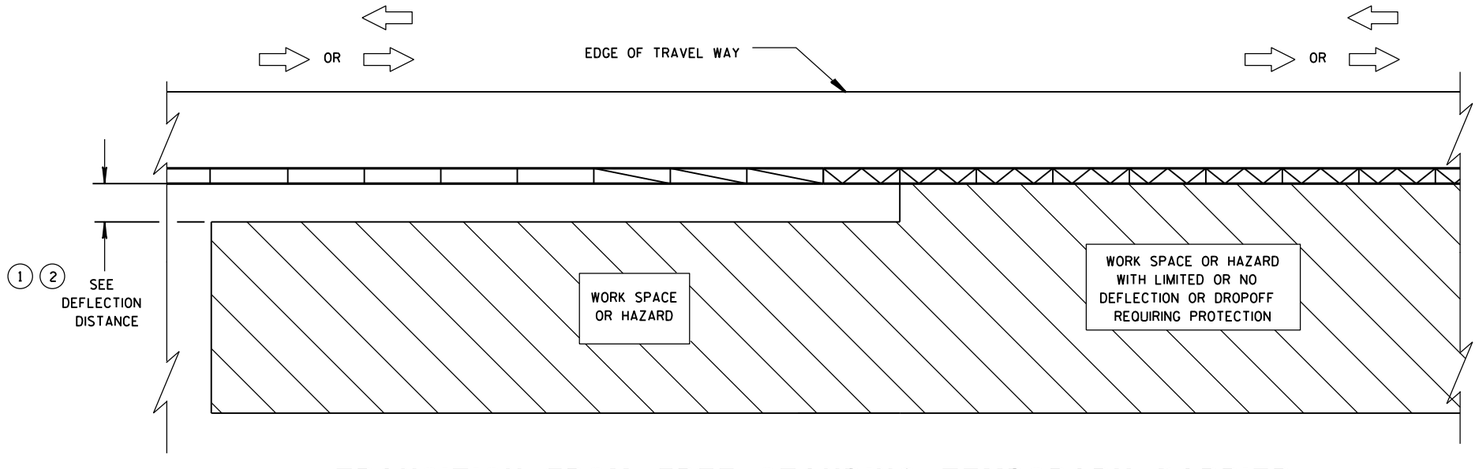
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S.D.D. 14 B 8-2a




## CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION




## TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

**LEGEND**

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

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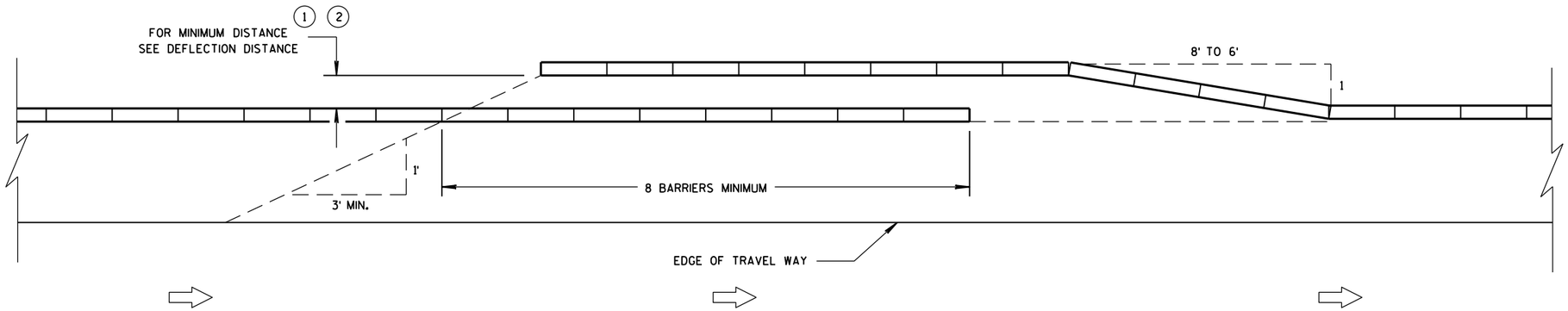


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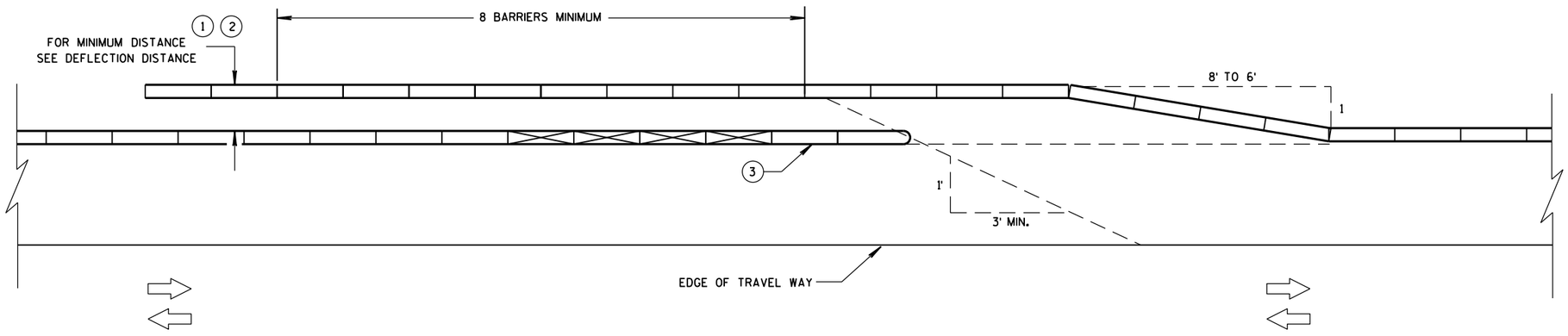
S.D.D. 14 B 8-2b

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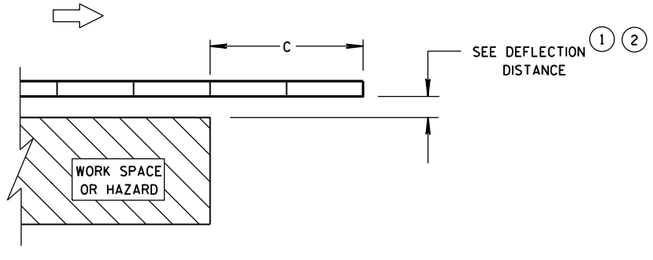
S.D.D. 14 B 8-2b



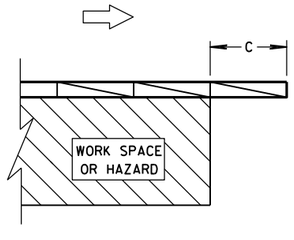

## TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC




## TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC




## ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED




## ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

### LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

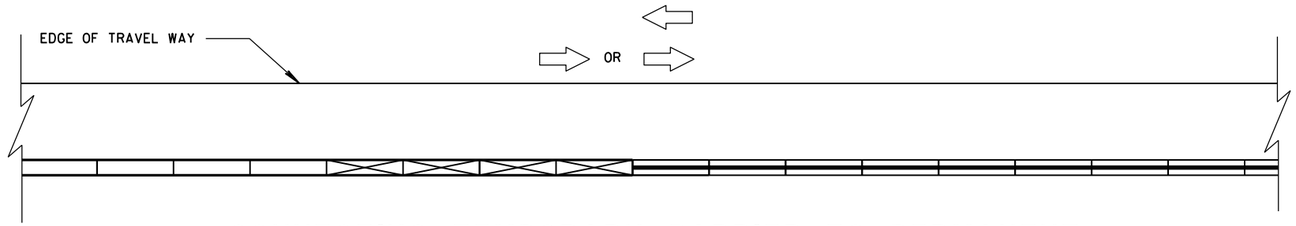
**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

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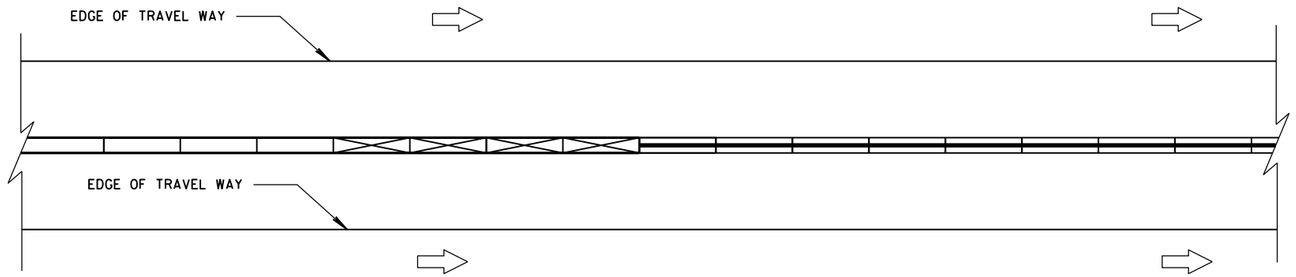



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S.D.D. 14 B 8-2c



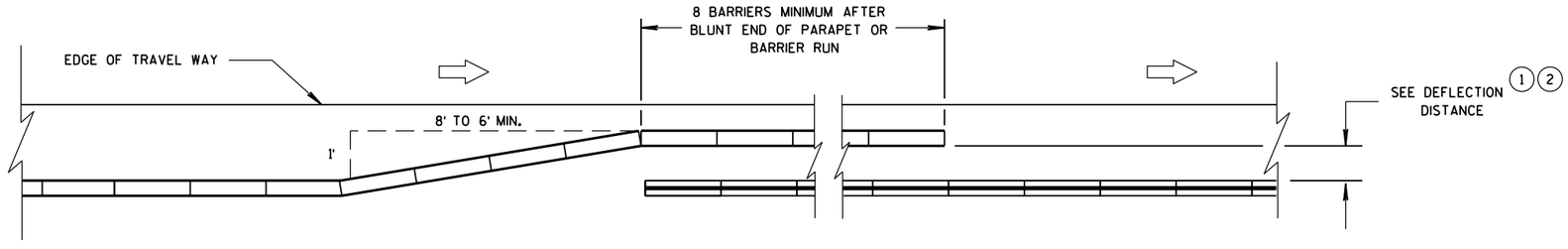

CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



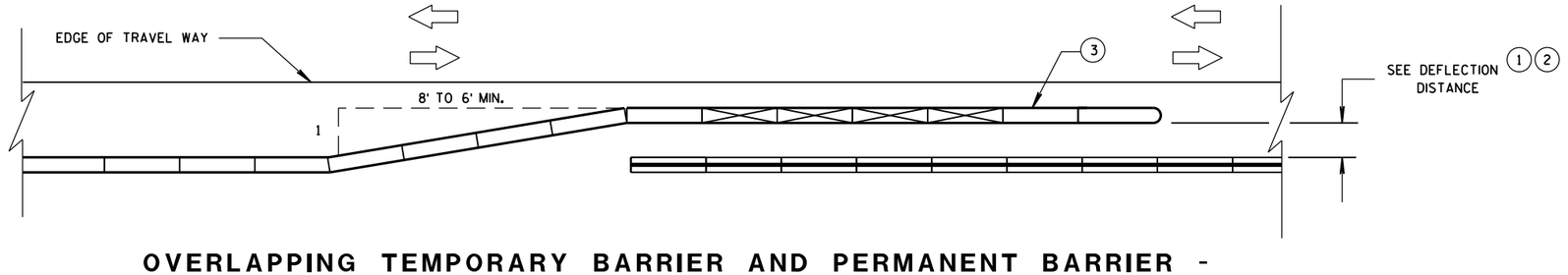

CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

## LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER




OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC




OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
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6

S.D.D. 14 B 8-2d

## LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

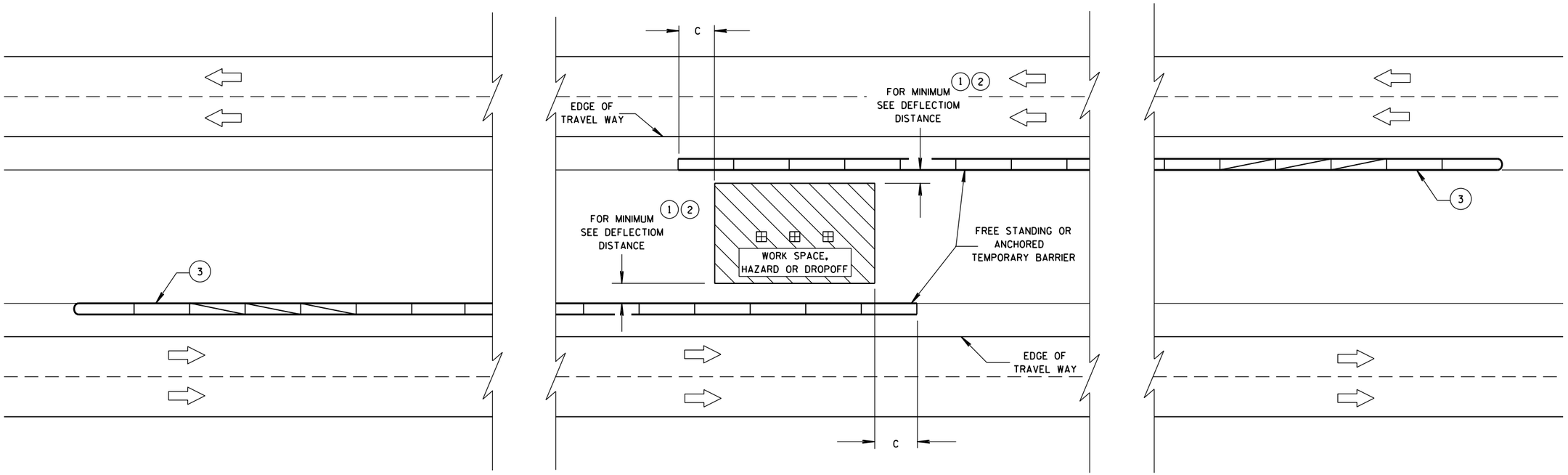
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

## DIMENSION C TABLE (2)

| AVAILABLE DEFLECTION DISTANCE | MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT |
|---|---|
| GREATER THAN 8' | 12.5 |
| LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4' | 50 |
| LESS THAN OR EQUAL TO 4' | 100 |




# CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

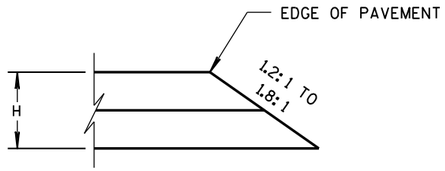
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DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINNER
FHWA



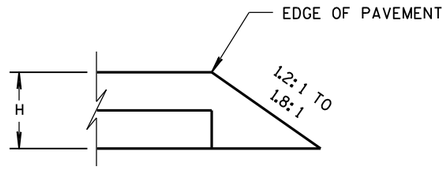

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S.D.D. 14 B 8-2e



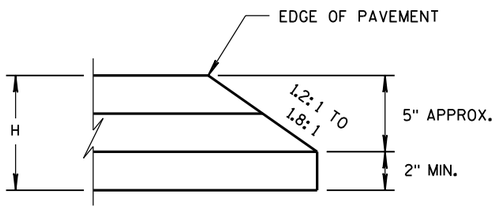

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



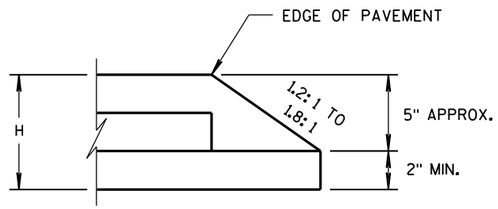

CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS




CONSTRUCTED WITH FINAL TWO LAYERS

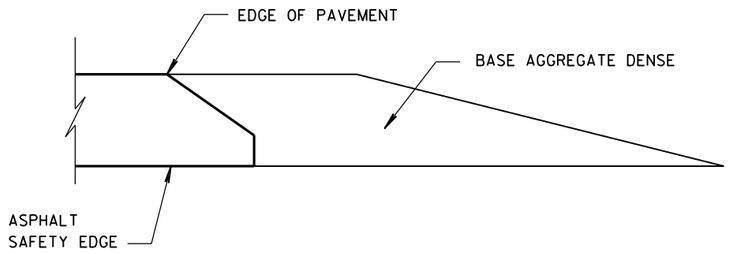
FOR H GREATER THAN 5"




CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

## HMA PAVEMENT AND HMA OVERLAYS




## FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

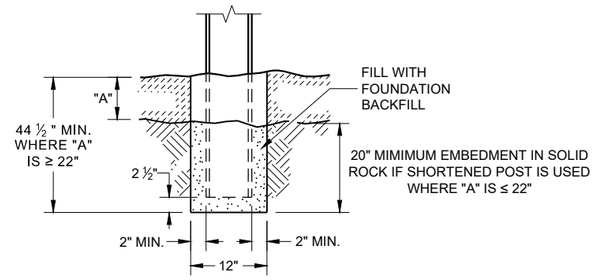
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

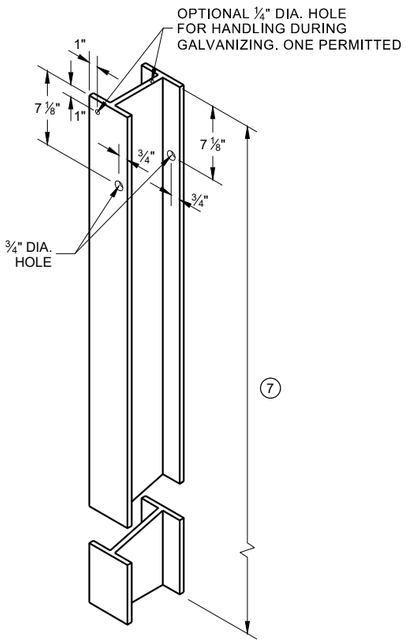
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

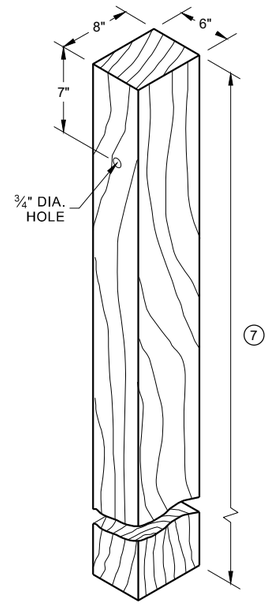
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



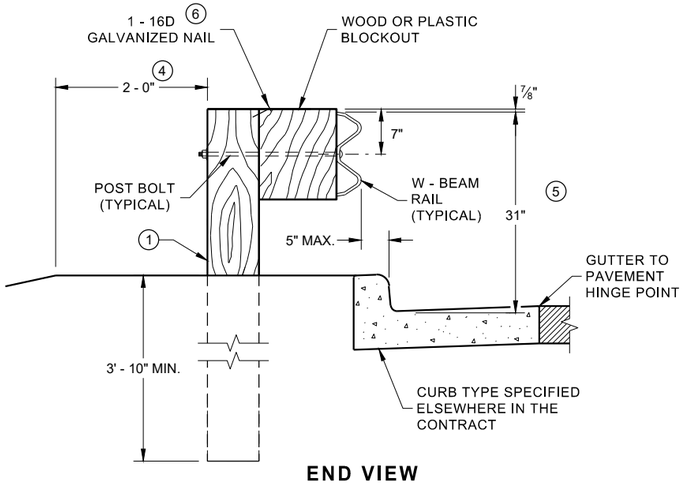

END VIEW
**SETTING STEEL OR WOOD POST IN ROCK** (3)



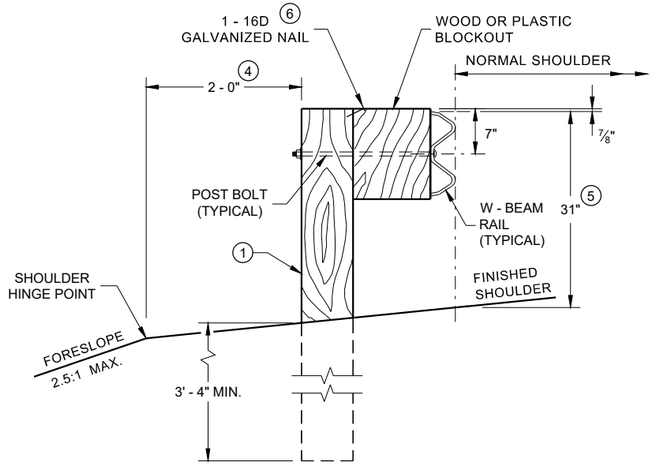

**STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9)** (1)



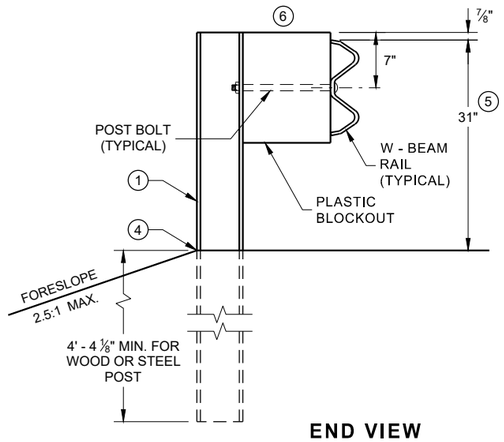

**WOOD POST (6" X 8") NOMINAL** (1)



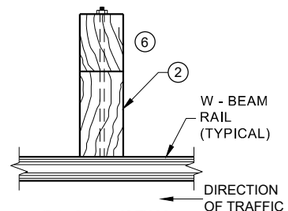

END VIEW
**LOCATED ALONG A CURBED ROADWAY**



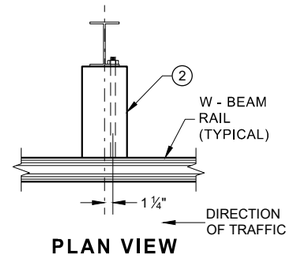

END VIEW
**LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION**



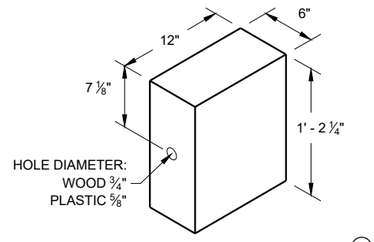

END VIEW
**MGS LONGER POST AT HALFPOST SPACING W BEAM (K)**




PLAN VIEW
**WOOD POST, BLOCKOUT & BEAM**




PLAN VIEW
**STEEL POST, PLASTIC BLOCKOUT & BEAM**




**WOOD OR PLASTIC BLOCKOUT** (2)

**MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL**

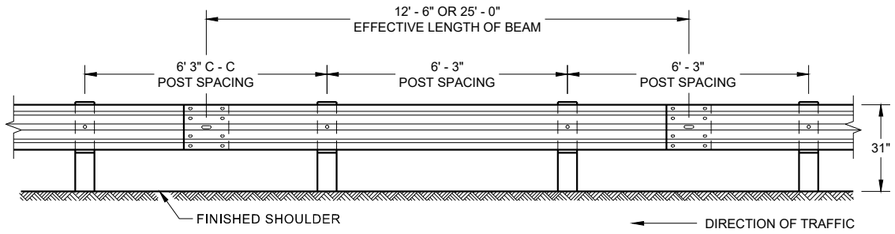
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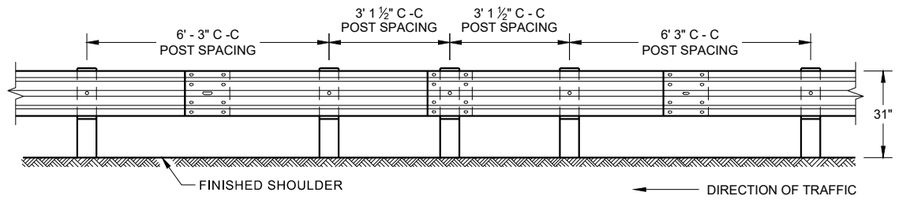
SDD 14B42 - 07a

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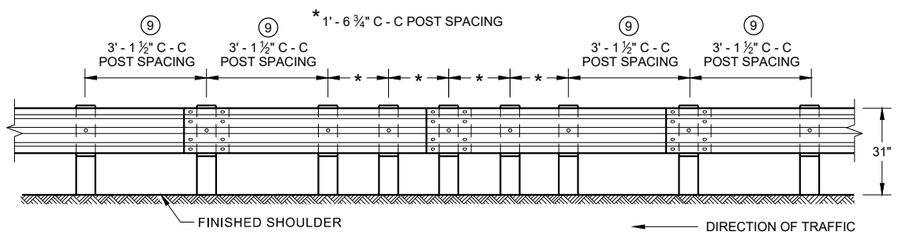
SDD 14B42 - 07a



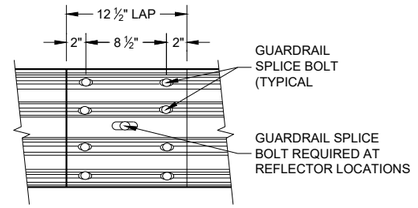

**FRONT VIEW**
## POST SPACING STANDARD INSTALLATION



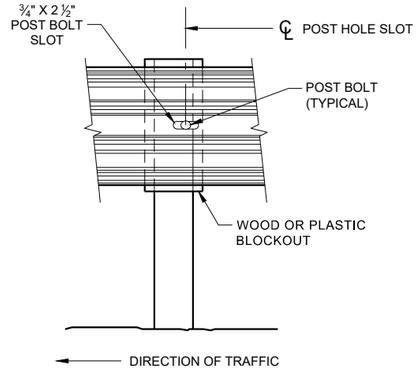

**FRONT VIEW**
## HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



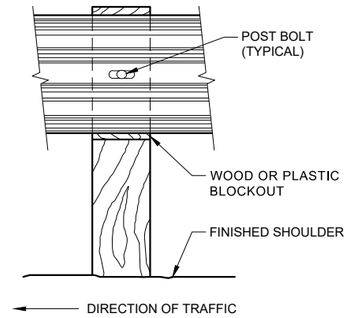

**FRONT VIEW**
## QUARTER POST SPACING (QS)



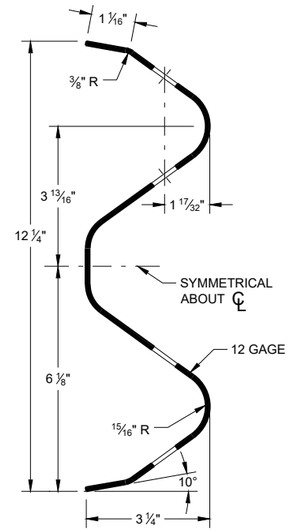

**FRONT VIEW**
## MID-SPAN BEAM SPLICE



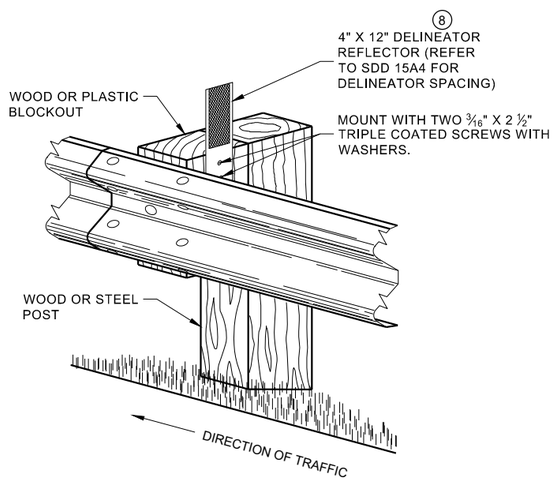

## FRONT VIEW AT STEEL POST




## FRONT VIEW AT WOOD POST




## SECTION THRU W-BEAM RAIL




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

## GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

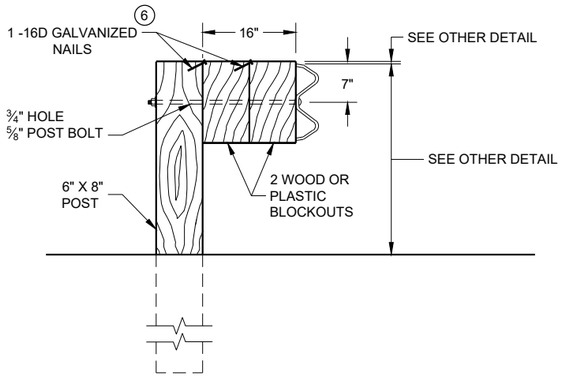
**MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6


SDD 14B42 - 07b

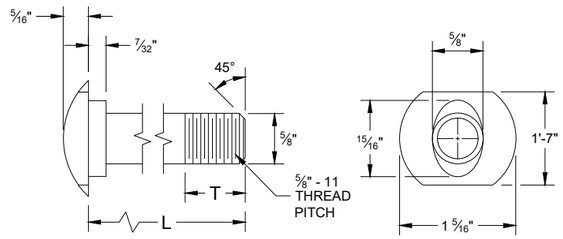



## DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

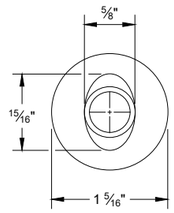
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

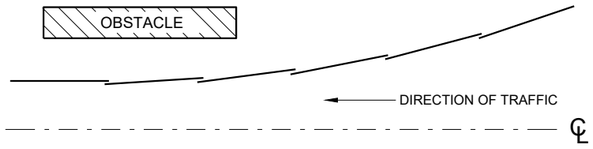



## POST BOLT TABLE

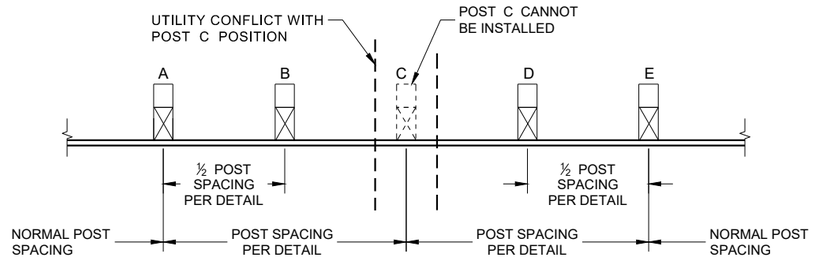
| L | T (MIN.) |
|---|---|
| 1 ¼" | 1 ⅛" |
| 2" | 1 ¾" |
| 10" | 4" |
| 14" | 4 1⁄16" |
| 18" | 4" |
| 21" | 4 1⁄16" |
| 25" | 4" |



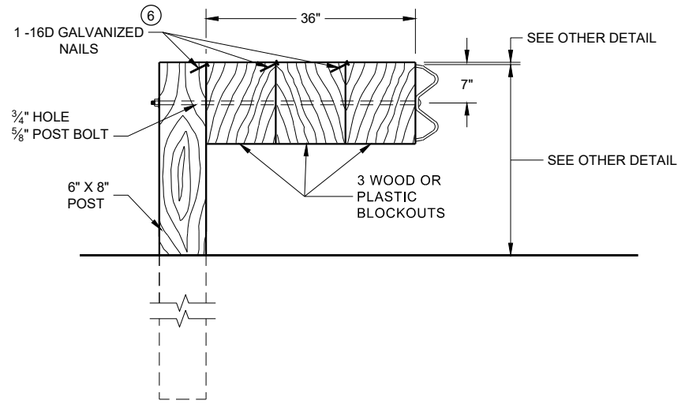

## ALTERNATE BOLT HEAD



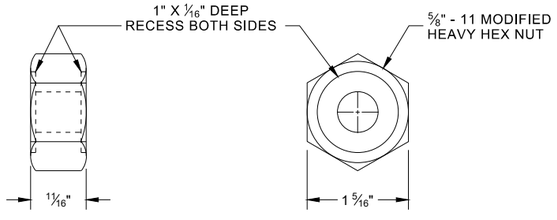

## PLAN VIEW
## BEAM LAPPING DETAIL



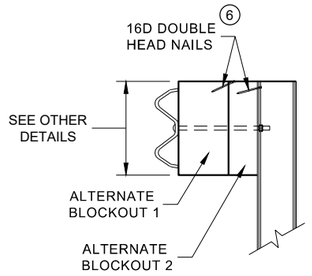

## POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



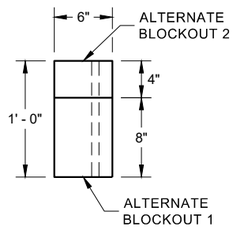

## DETAIL FOR 36" BLOCKOUT DEPTH




## POST BOLT, SPLICE BOLT AND RECESS NUT




SIDE VIEW




PLAN VIEW

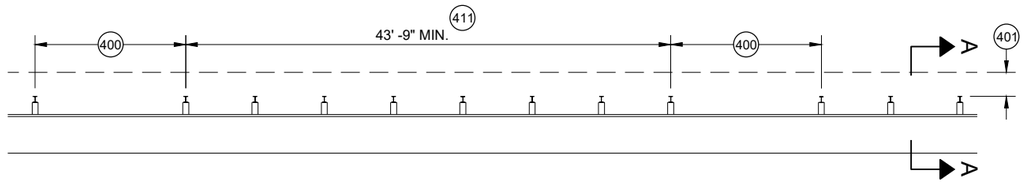
## ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

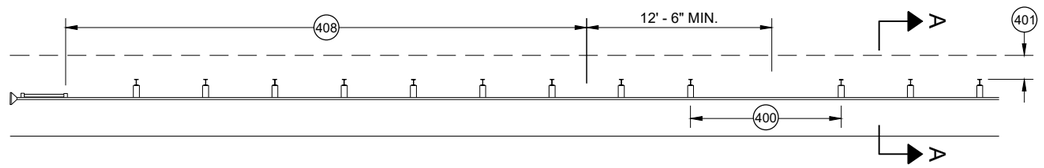
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

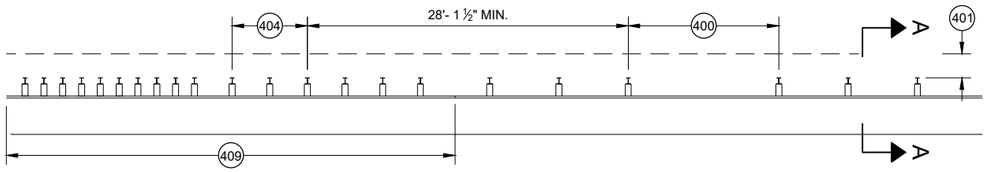
**MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL**



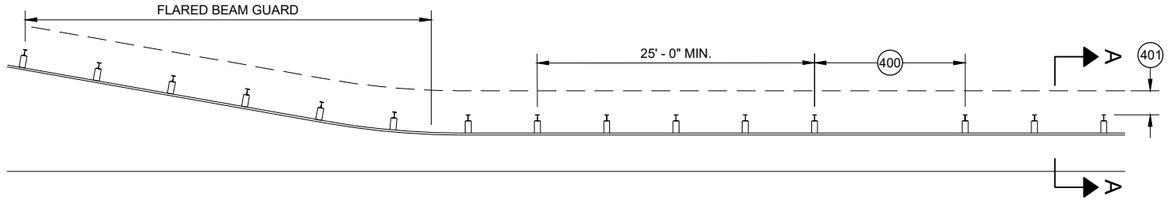

**MISSING POST IN MGS GUARDRAIL**



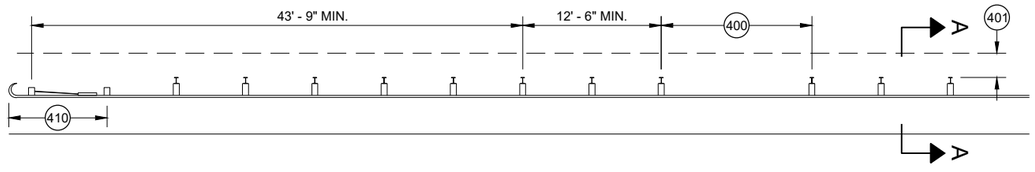

**MISSING POST IN MGS GUARDRAIL NEAR EAT**



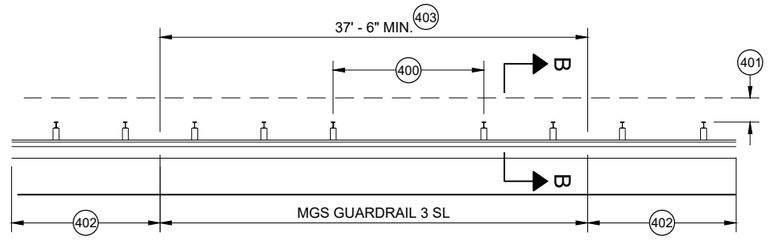

**MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION**




**MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD**

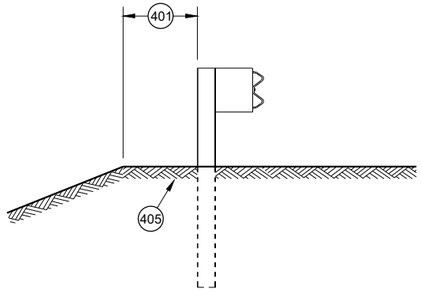



**MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL**

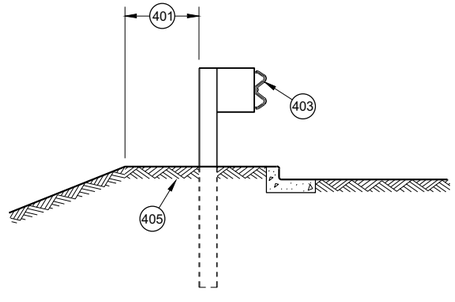



**MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)** 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.




**SECTION A - A** 406




**SECTION B - B** 406

**MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA




6


SDD 14B42 - 07d

## GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

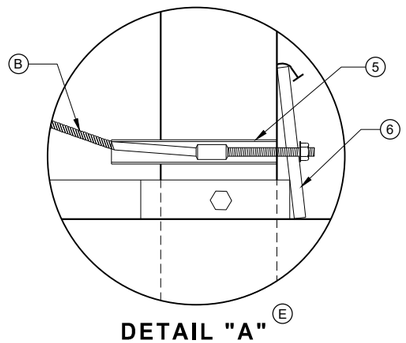
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

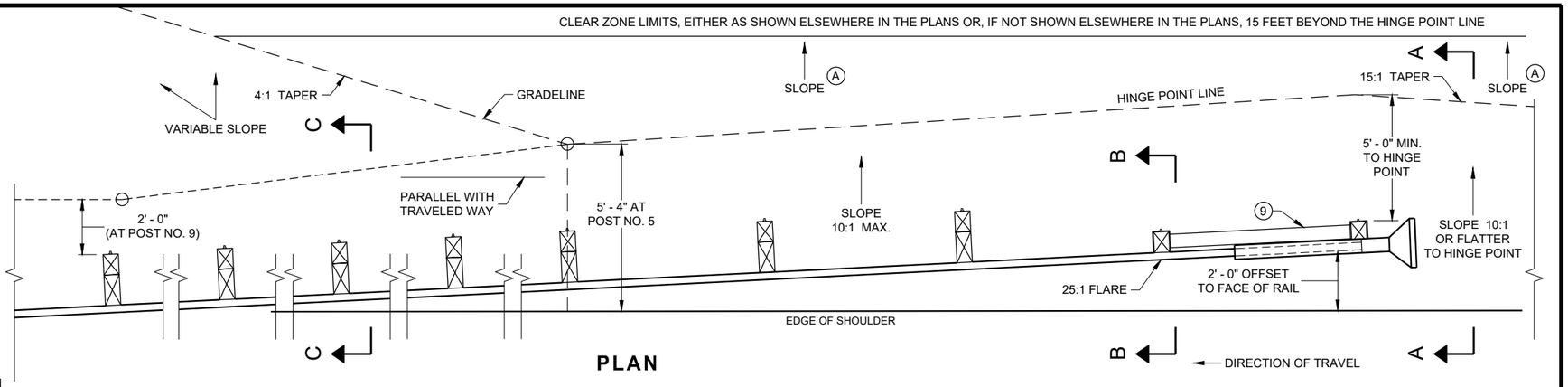
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

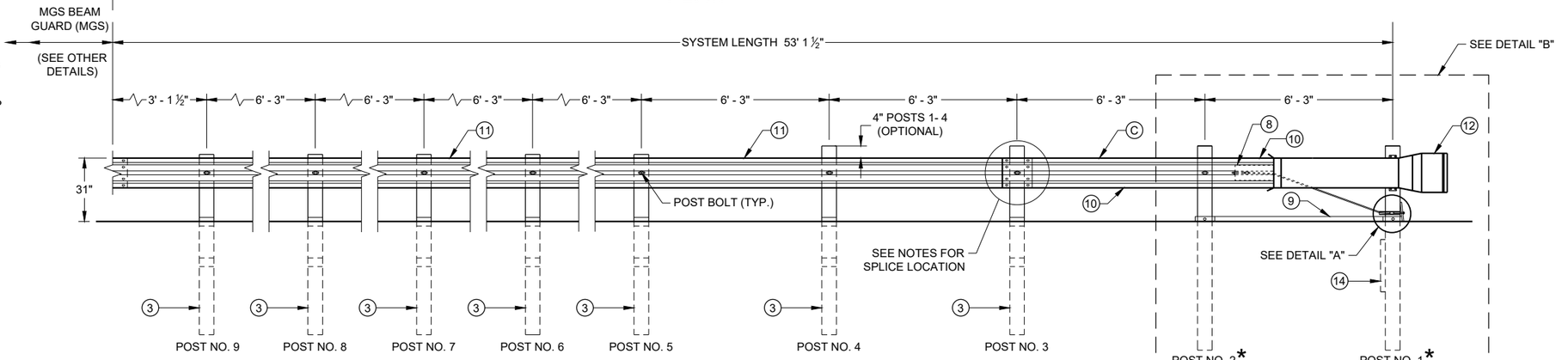
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



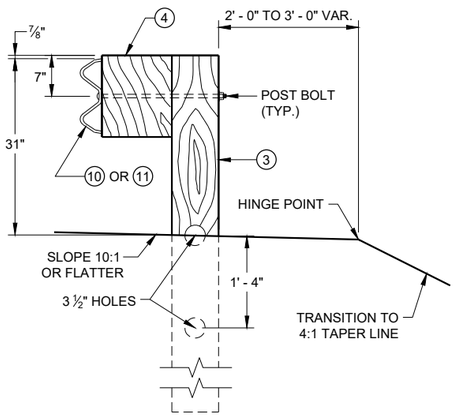

DETAIL "A" (E)



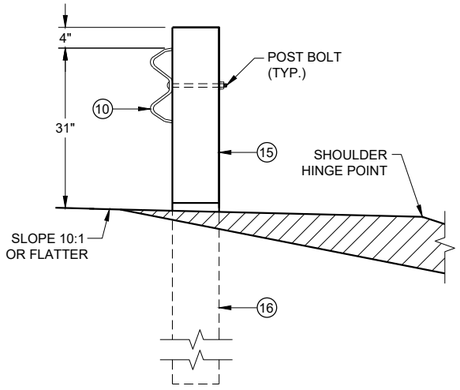

PLAN



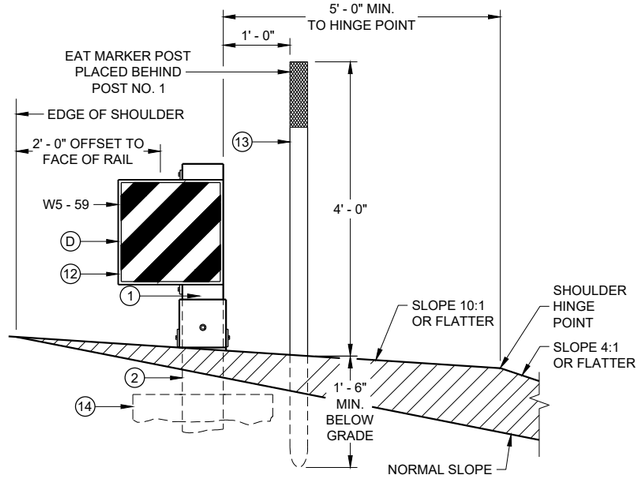

ELEVATION



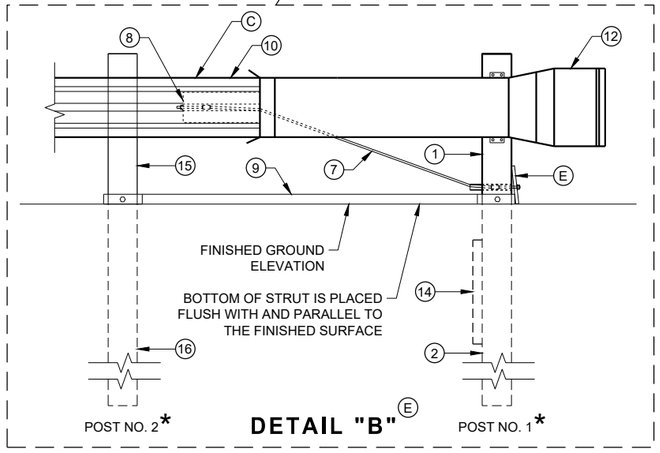

SECTION C - C
TYPICAL AT POST NOS. 3 - 9




SECTION B - B
TYPICAL AT POST NO. 2*




SECTION A - A
TYPICAL AT POST NO. 1*




DETAIL "B" (E)

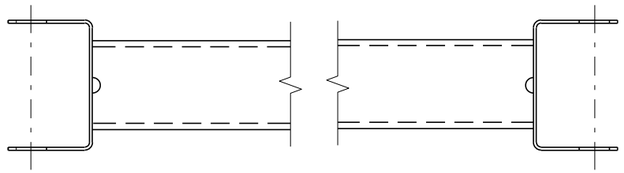
**MIDWEST GUARDRAIL SYSTEM**
**ENERGY ABSORBING TERMINAL (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SDD 14B44 - 04a

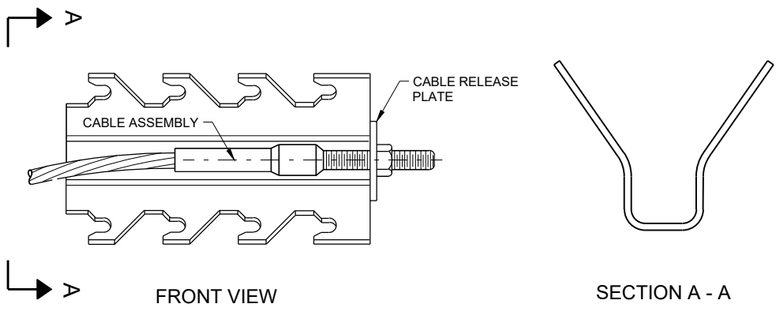
SDD 14B44 - 04a



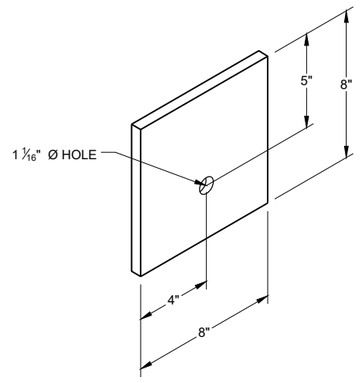
GENERIC GROUND STRUT (9) (E)

## BILL OF MATERIALS

| PART NO. | DESCRIPTION<br>MATERIALS PROVIDED BY MGS EAT MANUFACTURER.<br>SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION. |
|---|---|
| (1) | UPPER POST NO. 1 6" X 6" TUBE |
| (2) | LOWER POST NO. 1 |
| (3) | WOOD CRT |
| (4) | WOOD BLOCKOUT |
| (5) | PIPE SLEEVE |
| (6) | BEARING PLATE |
| (7) | BCT CABLE ASSEMBLY |
| (8) | ANCHOR CABLE BOX |
| (9) | GROUND STRUT |
| (10) | PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG. |
| (11) | STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED.<br>SECTIONS VARY IN LENGTH. |
| (12) | IMPACT HEAD |
| (13) | EAT MARKER POST - YELLOW<br>(SEE APPROVED PRODUCTS LIST) |
| (14) | SOIL PLATE |
| (15) | UPPER POST NO. 2 |
| (16) | LOWER POST NO. 2 |




GENERIC ANCHOR CABLE BOX (9) (E)




BEARING PLATE (6) (E)

6

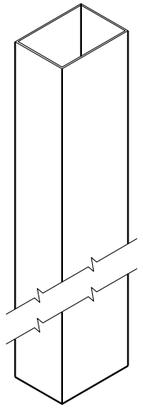
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SDD 14B44 - 04b

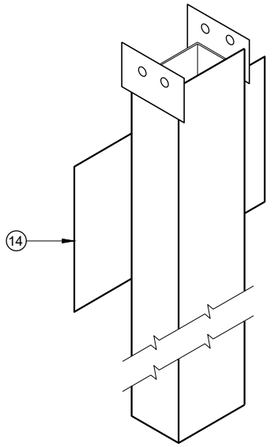
SDD 14B44 - 04b

**MIDWEST GUARDRAIL SYSTEM**
**ENERGY ABSORBING TERMINAL**
**(MGS)**

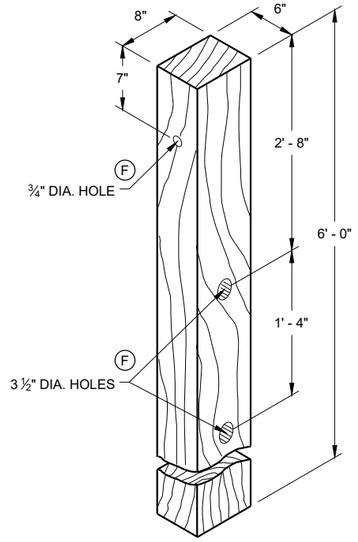
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



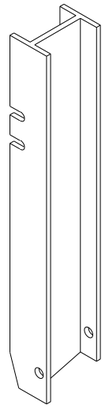
**UPPER POST NO. 1** (1) (E)



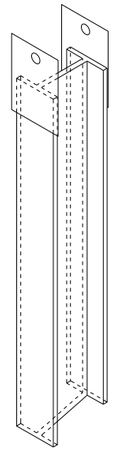

**LOWER POST NO. 1** (2) (E)



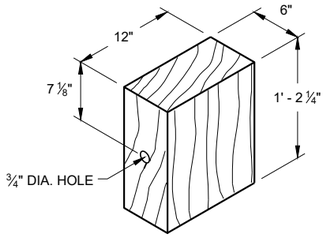

**WOOD CRT POST** (3) (E)
POSTS NUMBER 3-9



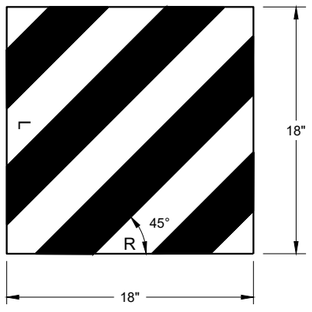
**UPPER POST NO. 2** (15) (E)



**LOWER POST NO. 2** (16) (E)

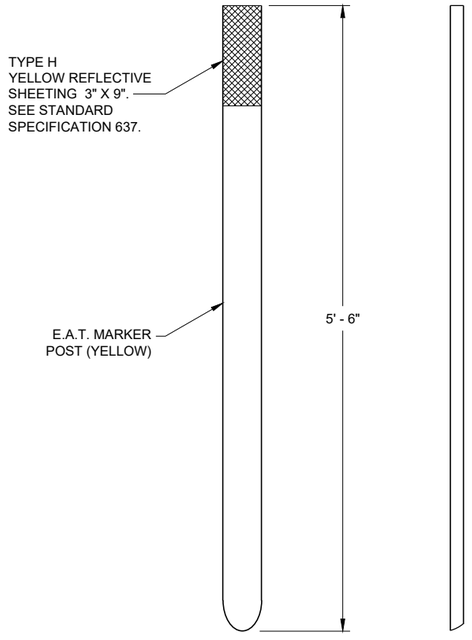



**WOOD BLOCKOUT** (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



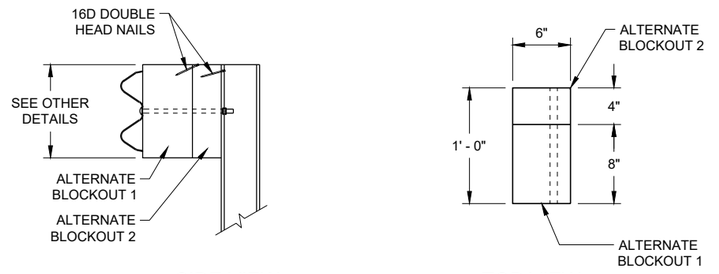

W5 - 59

**REFLECTIVE SHEETING DETAIL** (E)




FRONT VIEW SIDE VIEW

**E.A.T. MARKER POST** (13)




SIDE VIEW TOP VIEW

**ALTERNATE WOOD BLOCKOUT DETAIL**

**MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

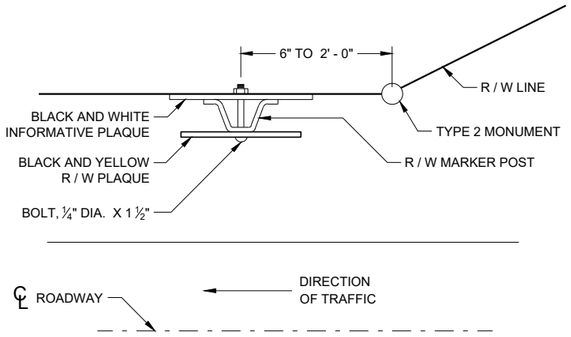
APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

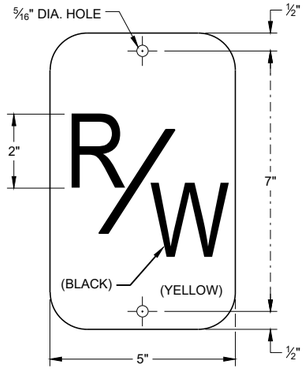



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SDD 14B44 - 04c

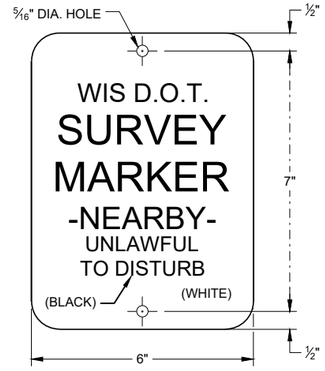



**PLAN VIEW**
**STEEL MARKER POST**




**R / W PLAQUE**

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.




**INFORMATIVE PLAQUE**

## 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.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFROMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



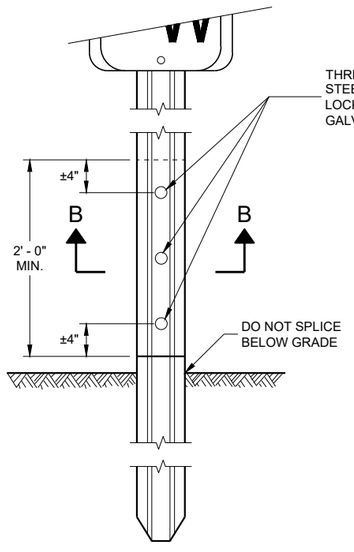

**FRONT VIEW**
**STEEL MARKER POST**



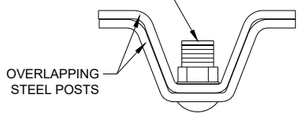

**FRONT VIEW**
**ROCK INSTALLATION** (1)




MIN. WEIGHT 1.12 LB./FT.
**SECTION A - A**




**FRONT VIEW**
**SPLICE DETAIL**




**SECTION B - B**

**MARKER POST FOR RIGHT - OF - WAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA ENGINEER

FHWA

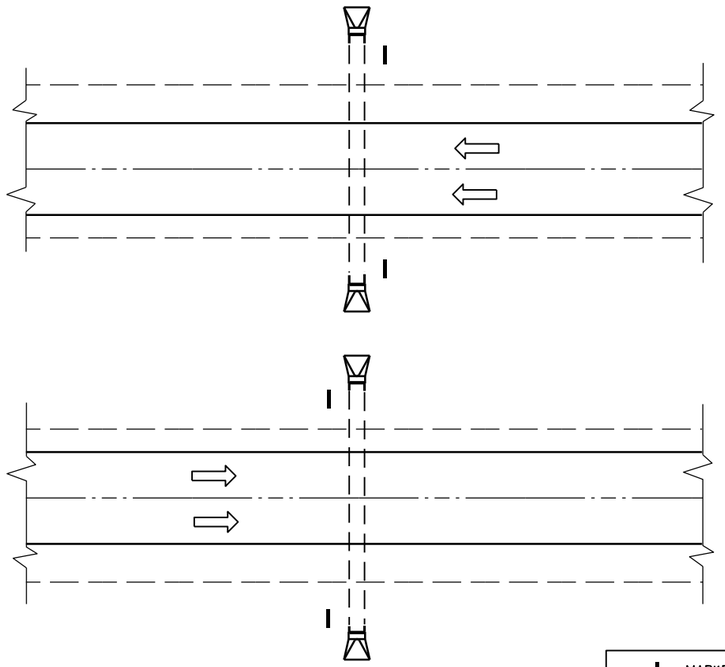


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SDD 15A01 - 13a

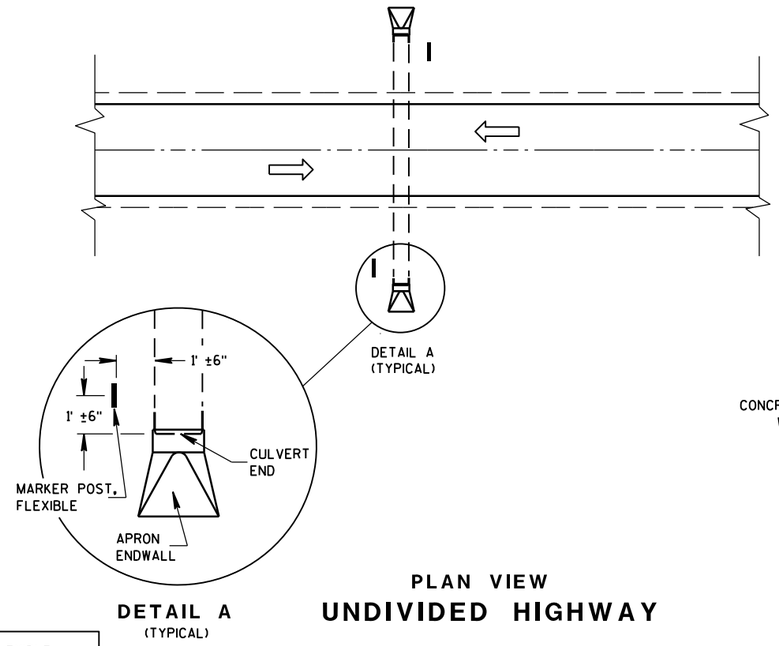
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SDD15A01 - 13a



PLAN VIEW

## DIVIDED HIGHWAY




DETAIL A
(TYPICAL)

PLAN VIEW

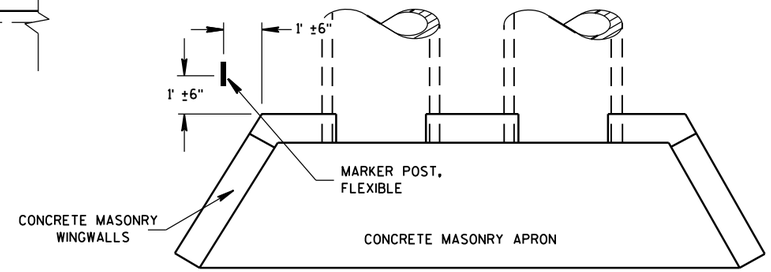
## UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

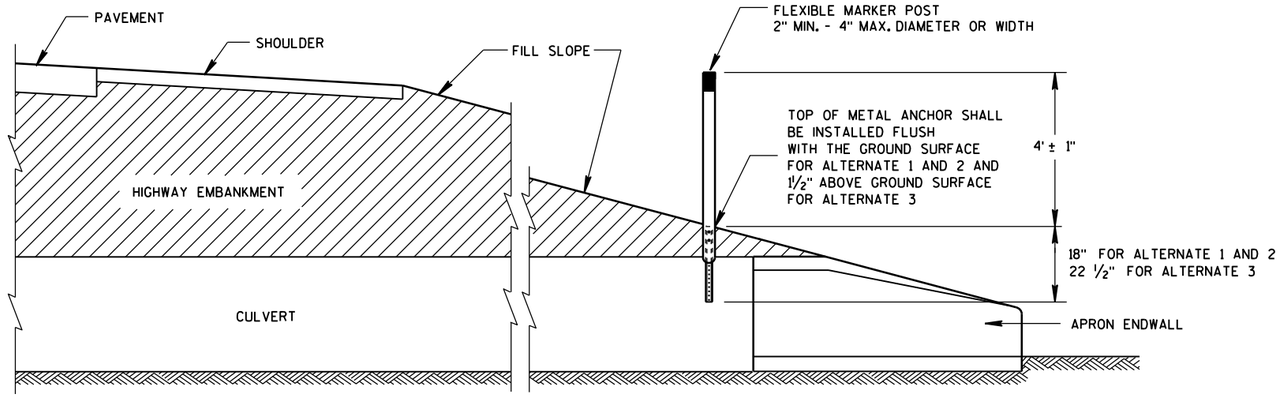
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




PLAN VIEW

## CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

## FLEXIBLE MARKER POST LOCATION




CROSS SECTION

## FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

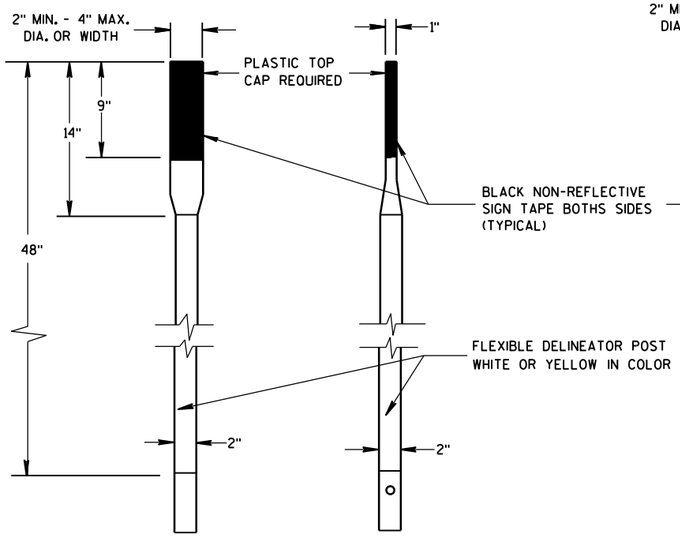


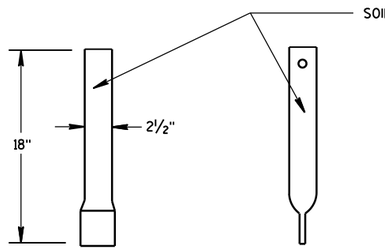
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S.D.D. 15 A 3-2a

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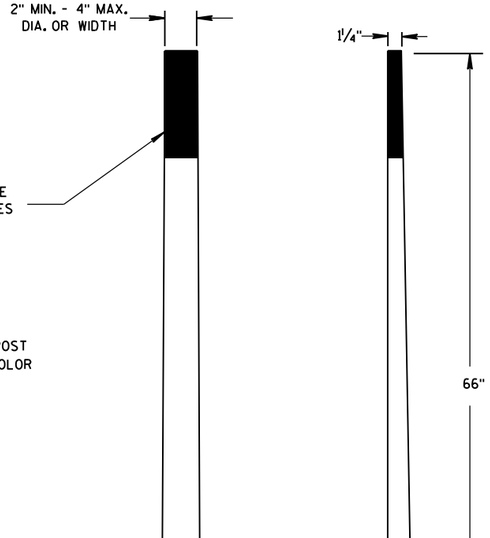
S.D.D. 15 A 3-2a



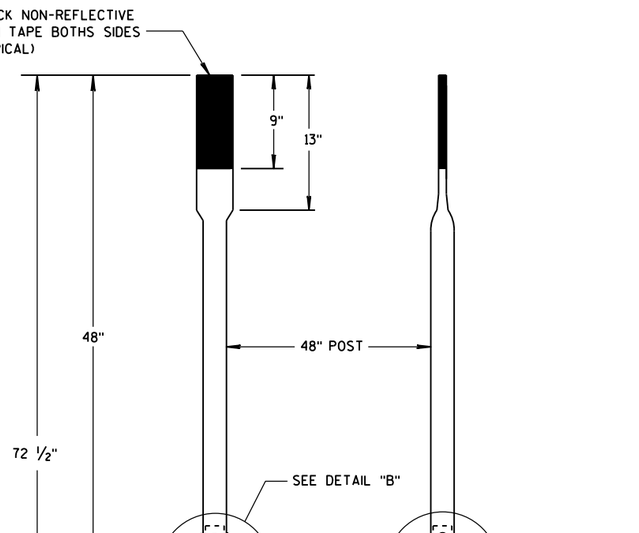

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

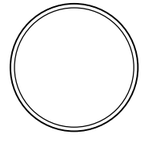
ALTERNATE 2



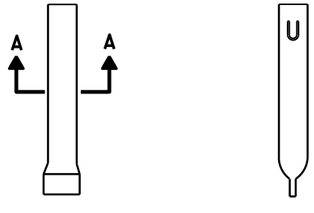

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POSTS

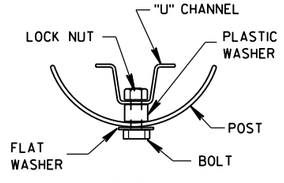


SECTION A-A

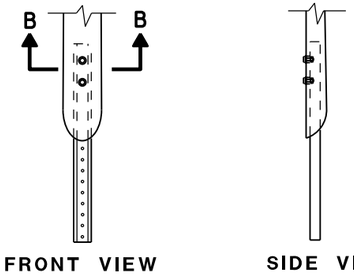



FRONT VIEW SIDE VIEW

ALTERNATE 1

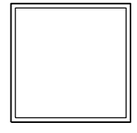



SECTION B-B

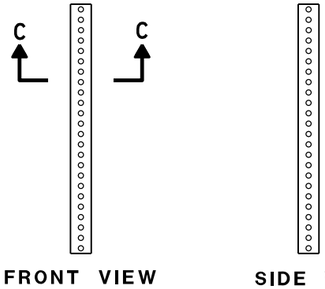



FRONT VIEW SIDE VIEW

ALTERNATE 2



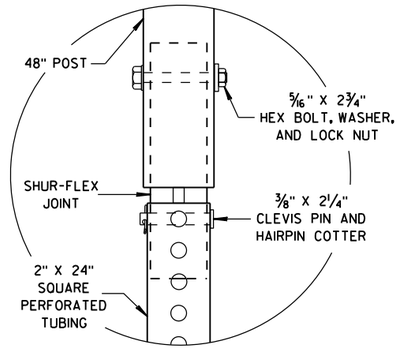
SECTION C-C



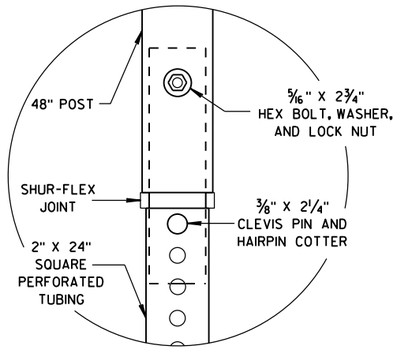

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS




DETAIL B




DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

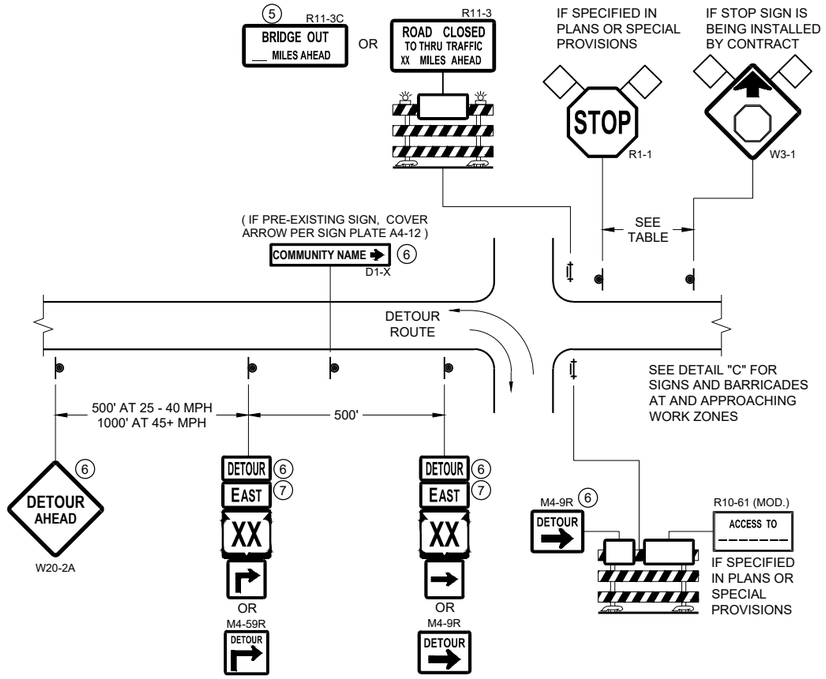


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S.D.D. 15 A 3-2b

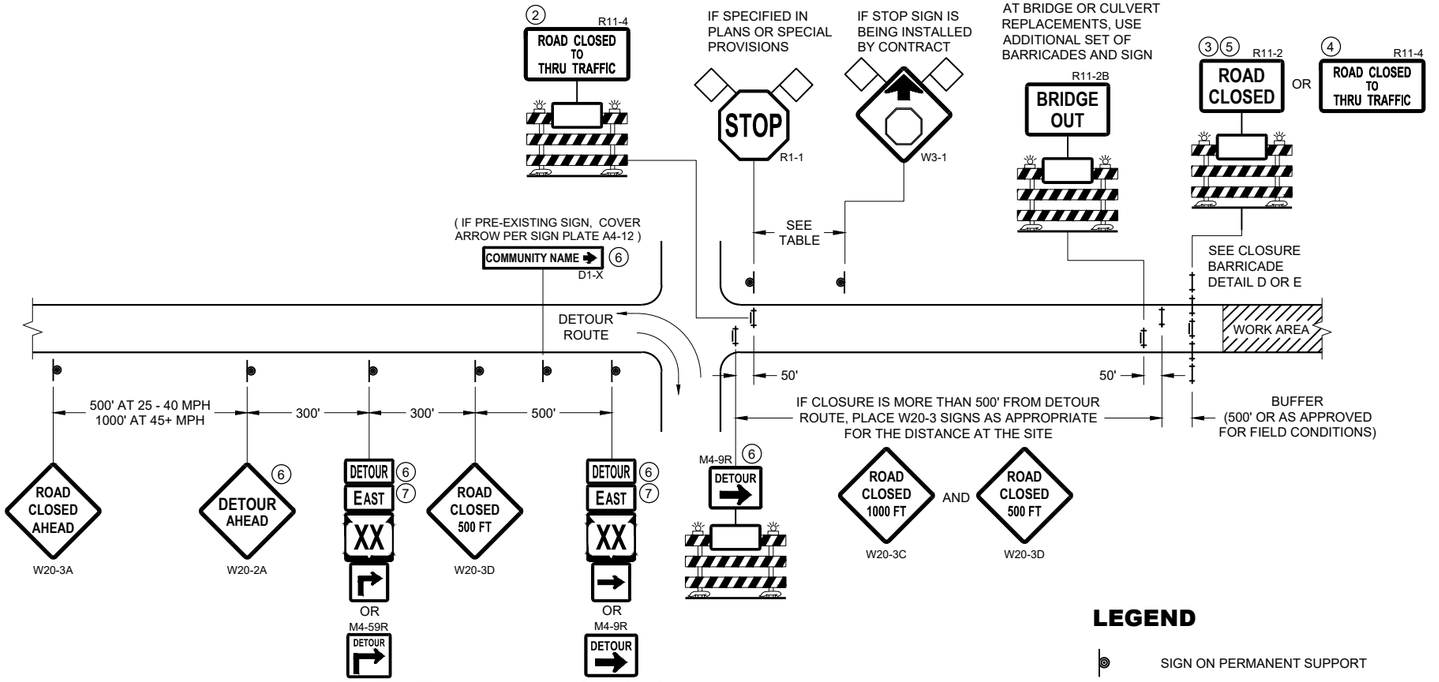
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S.D.D. 15 A 3-2b



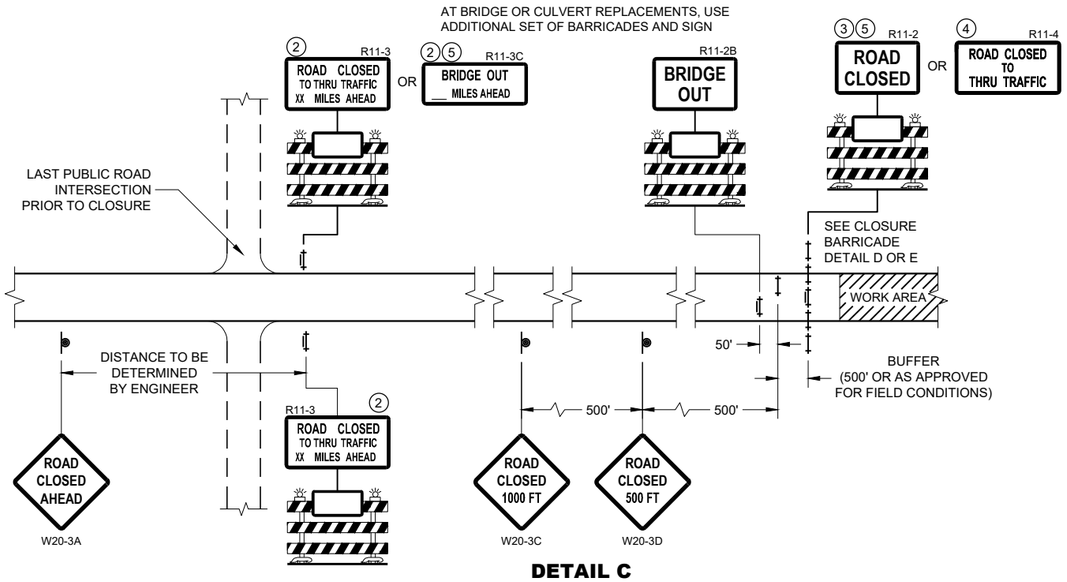

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

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




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

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

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

## LEGEND

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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

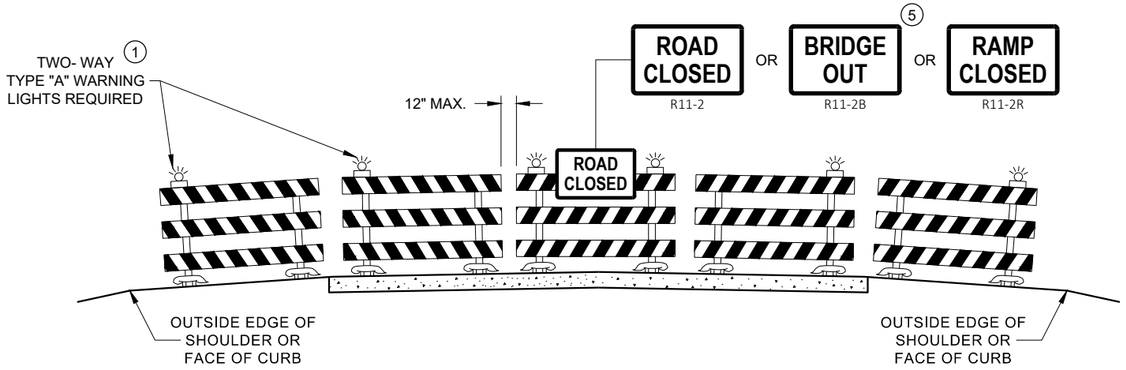
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

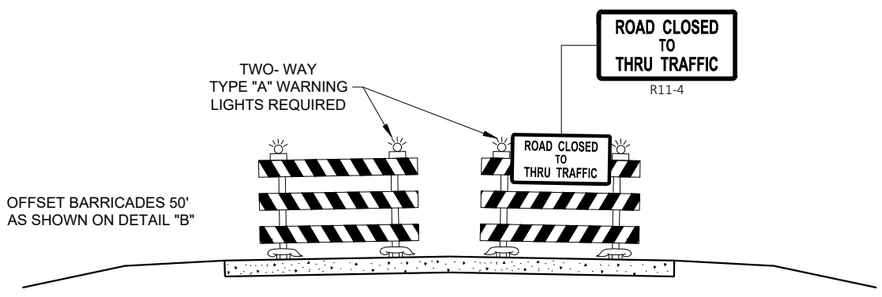


SDD 15C02 - 09a

SDD 15C02 - 09a




**DETAIL D**
**ROAD CLOSURE BARRICADE DETAIL**
**APPROACH VIEW**




**DETAIL E**
**LANE CLOSURE BARRICADE DETAIL**
**APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA




6


SDD 15C02 - 09b

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

## LEGEND

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

## GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

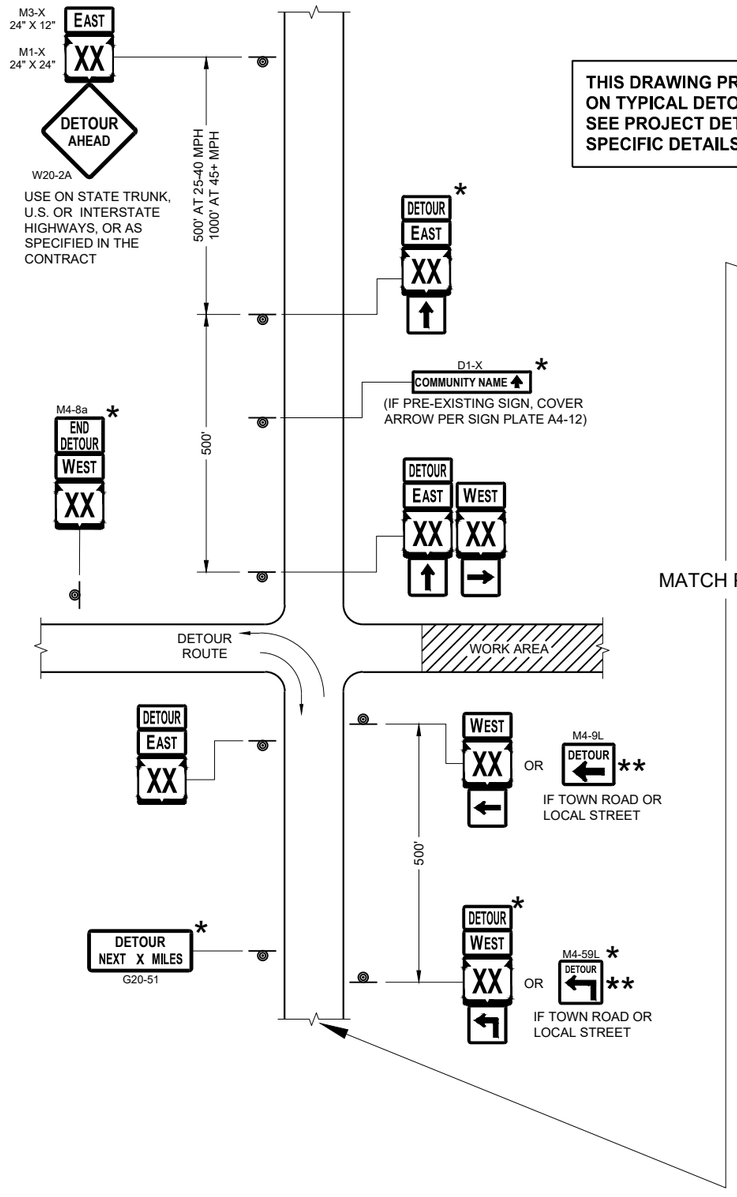
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

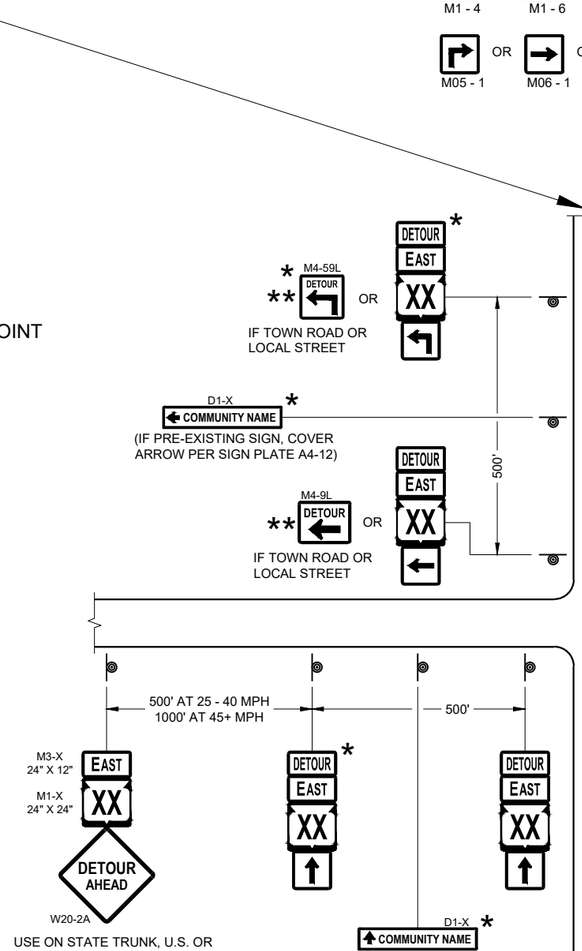
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

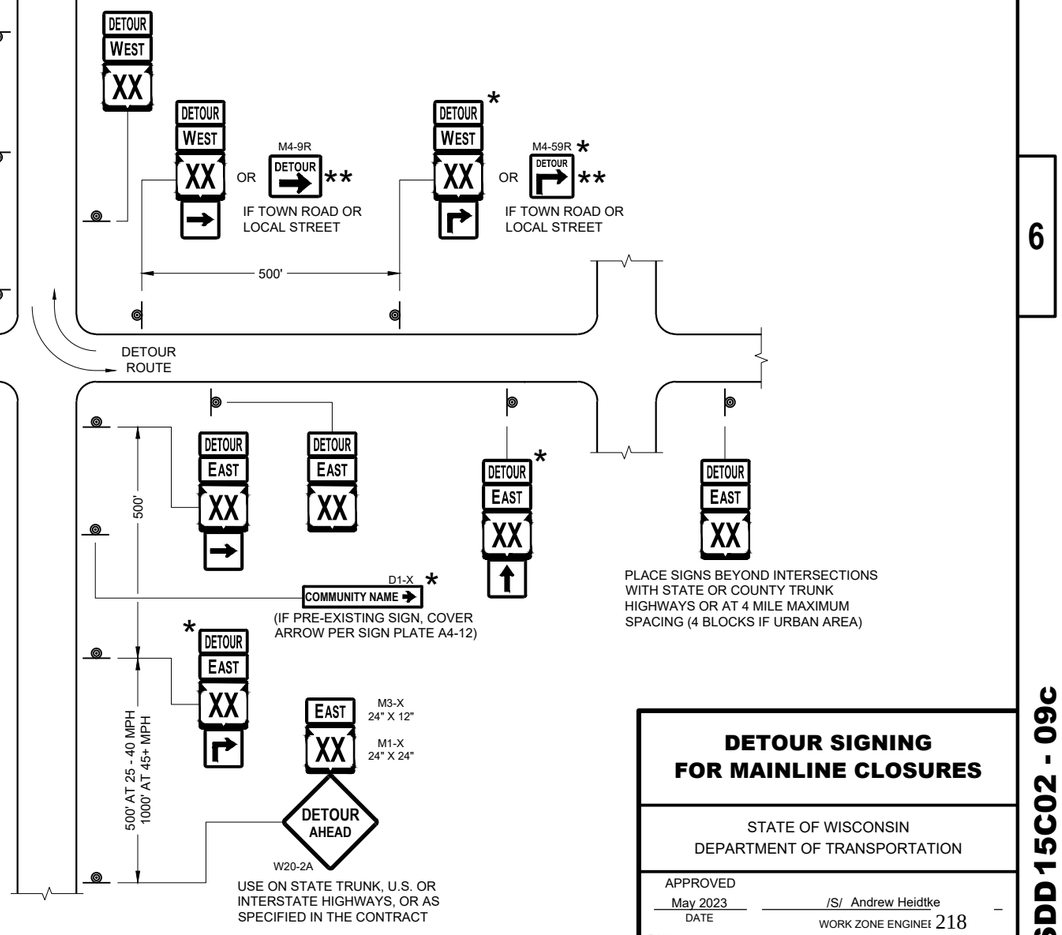
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

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




MATCH POINT




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

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

**DETOUR SIGNING FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

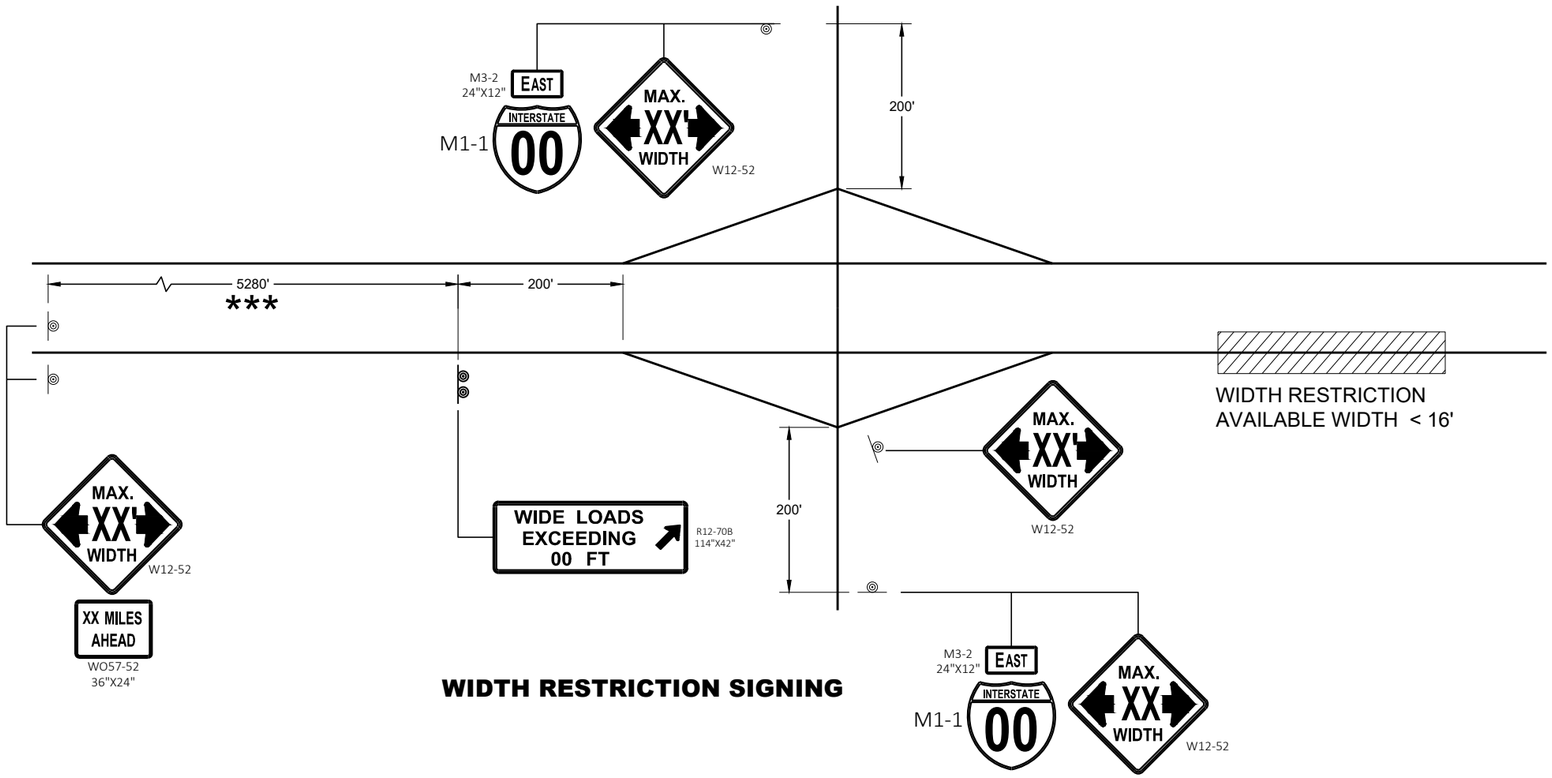
FHWA



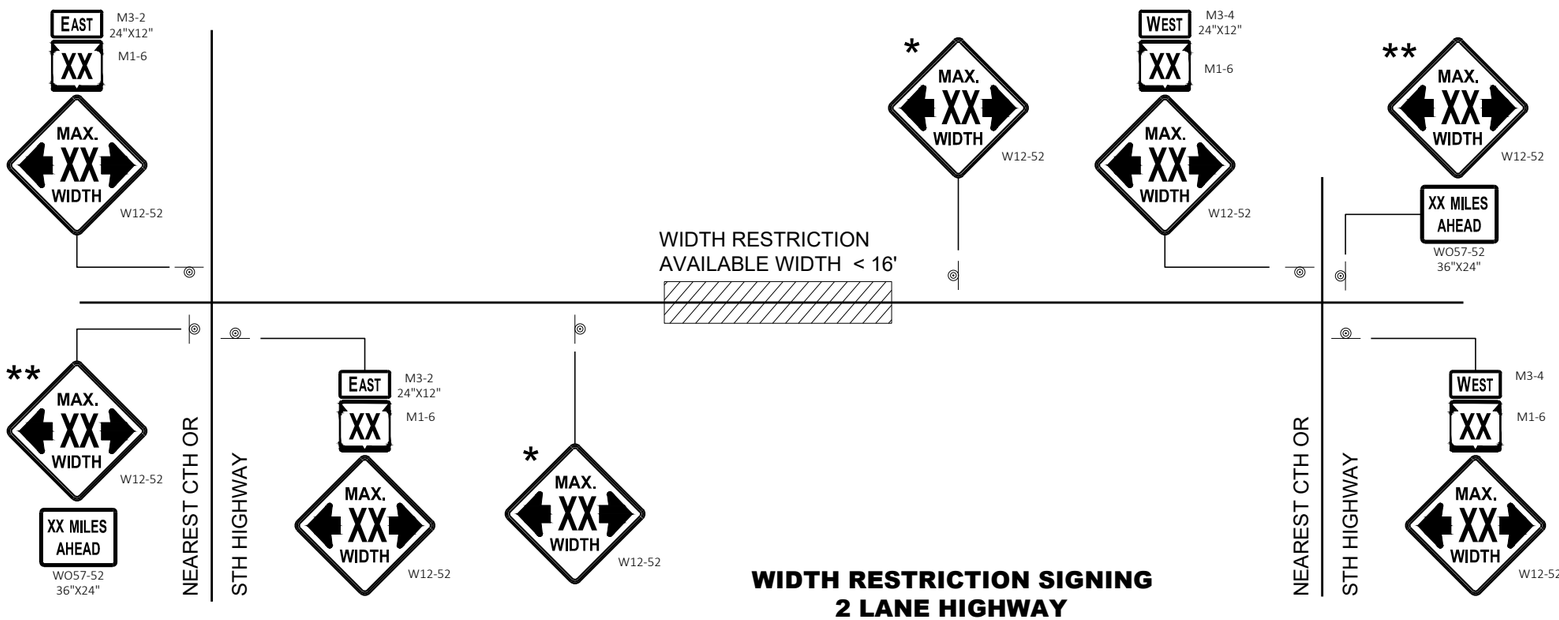


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SDD 15C02 - 09c




## WIDTH RESTRICTION SIGNING




## WIDTH RESTRICTION SIGNING
## 2 LANE HIGHWAY

## LEGEND

SIGN ON PERMANENT SUPPORT

## GENERAL NOTES

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

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

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

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

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

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

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

** SIGN SHALL BE VISIBLE FROM ROADWAY.

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




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

**ADVANCED WIDTH RESTRICTION SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



6

SDD 15C02 - 09f

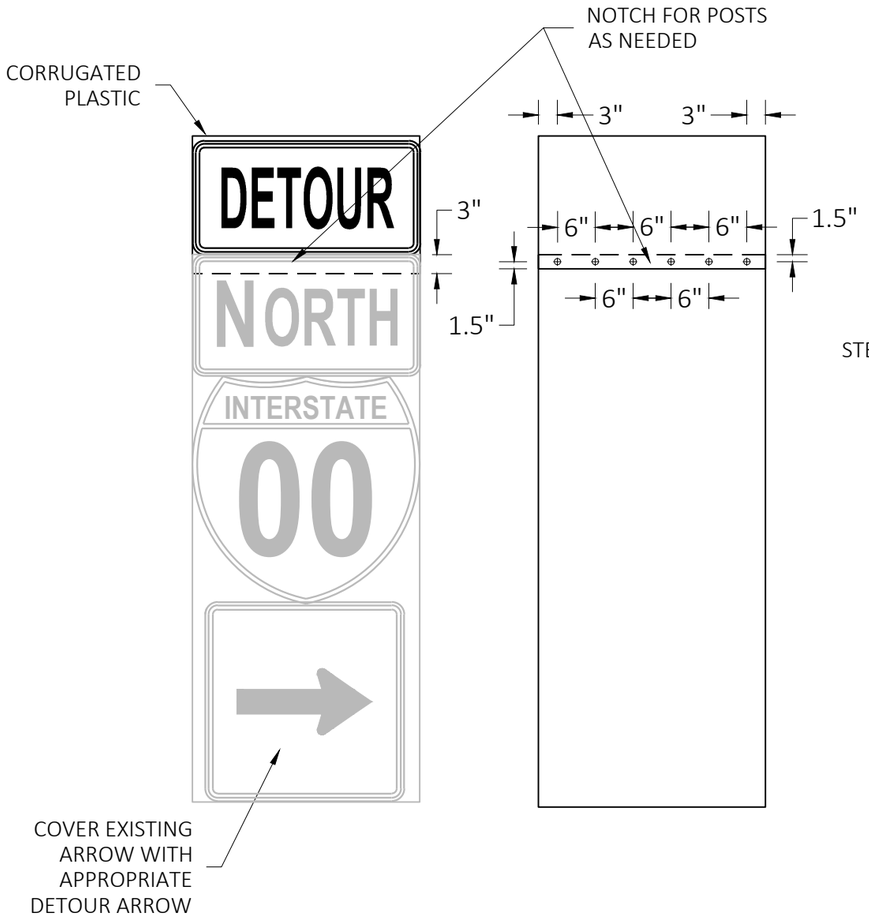
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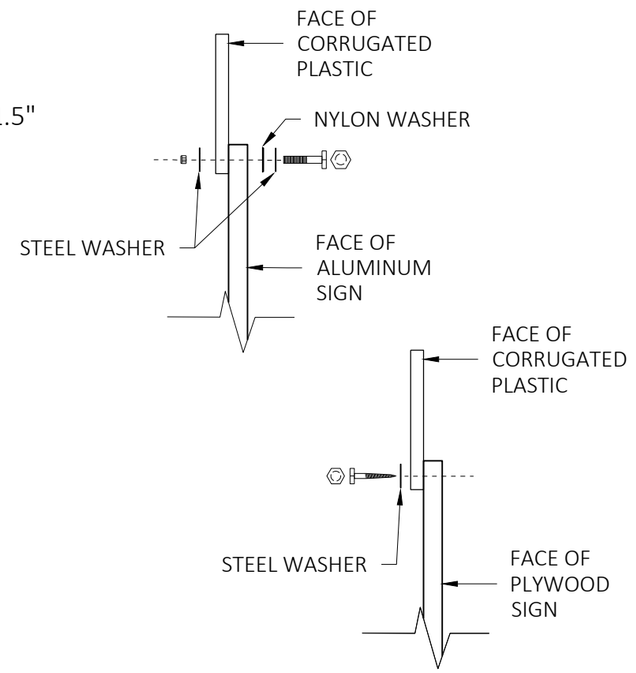
SDD 15C02 - 09f

FRONT SIDE

BACK SIDE

SIDE VIEW




## GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

# MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

**MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA




6
SDD 15C02-09h

## GENERAL NOTES

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

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

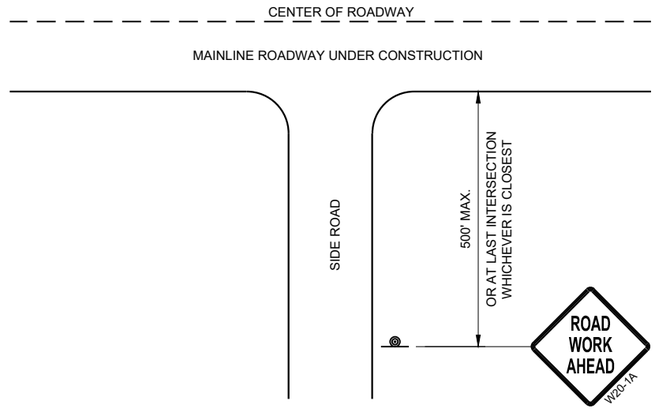
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



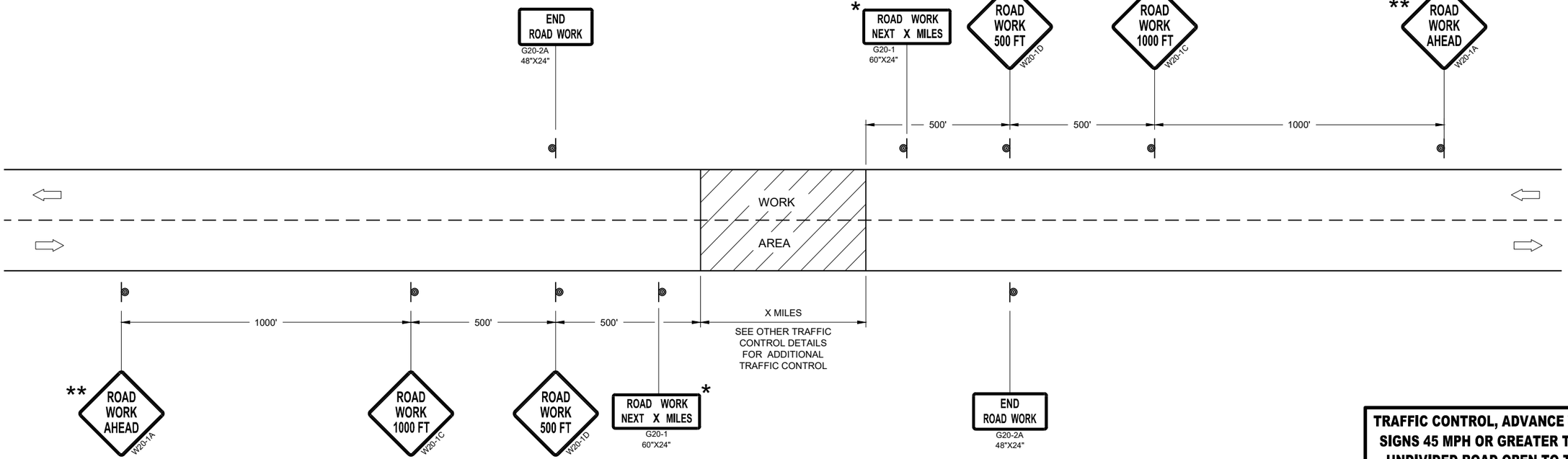

**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA




**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER**

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




6


SDD 15C04 - 05

## GENERAL NOTES

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

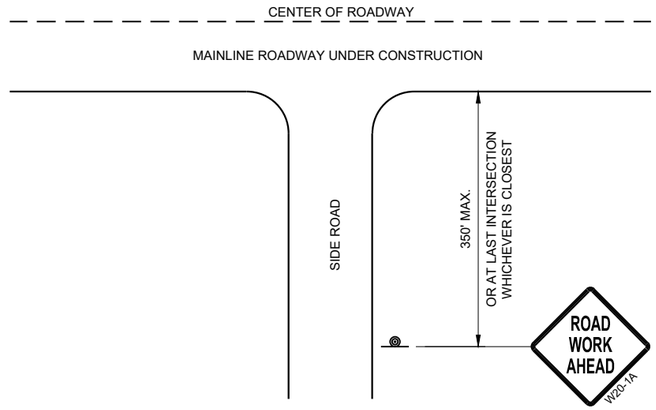
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



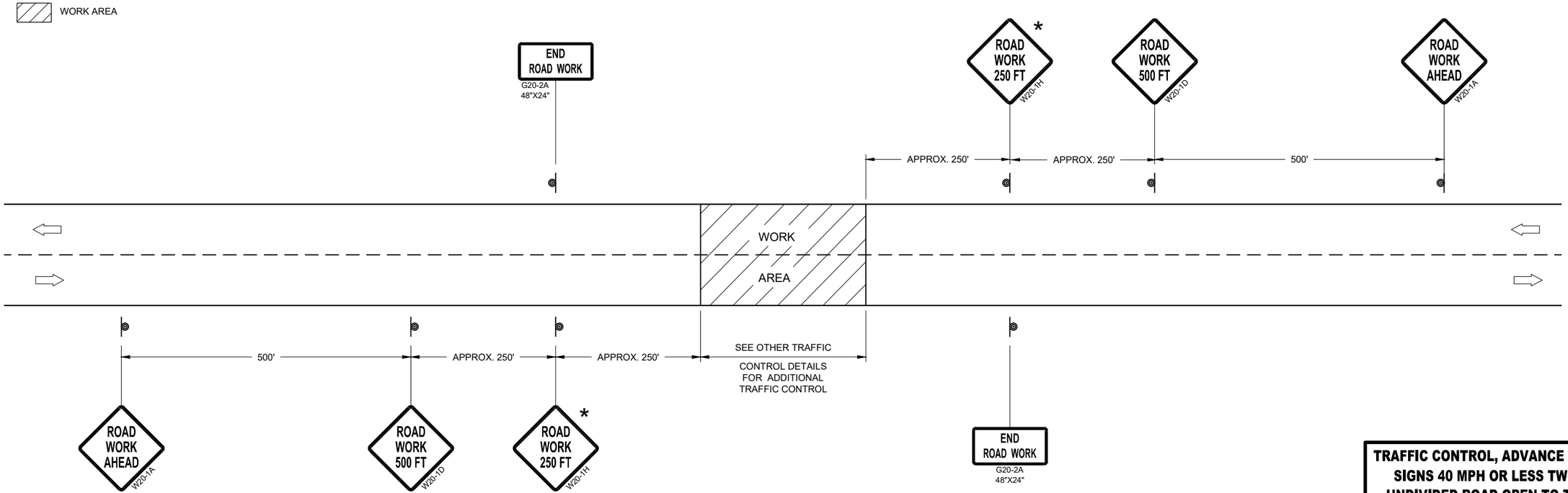

**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA




**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS**

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

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July 2018
DATE

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WORK ZONE ENGINEE

FHWA

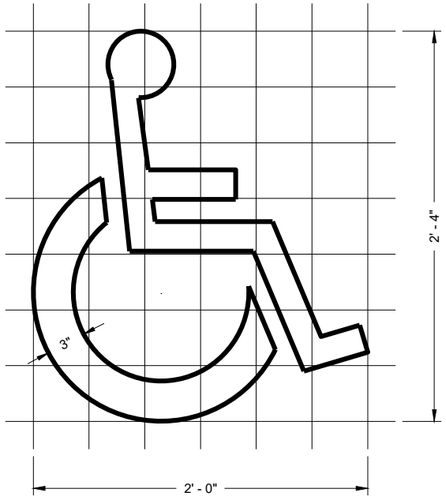



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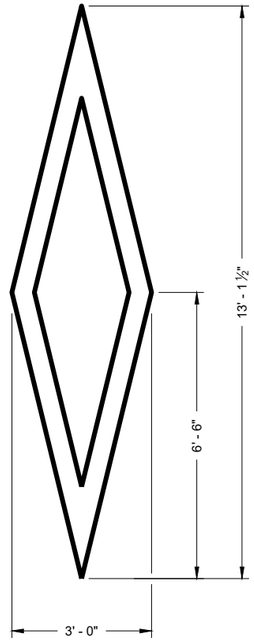

SDD 15C05 - 05

## 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.




**HANDICAP SYMBOL**




**PREFERENTIAL LANE SYMBOL**

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

**PAVEMENT MARKING SYMBOLS**

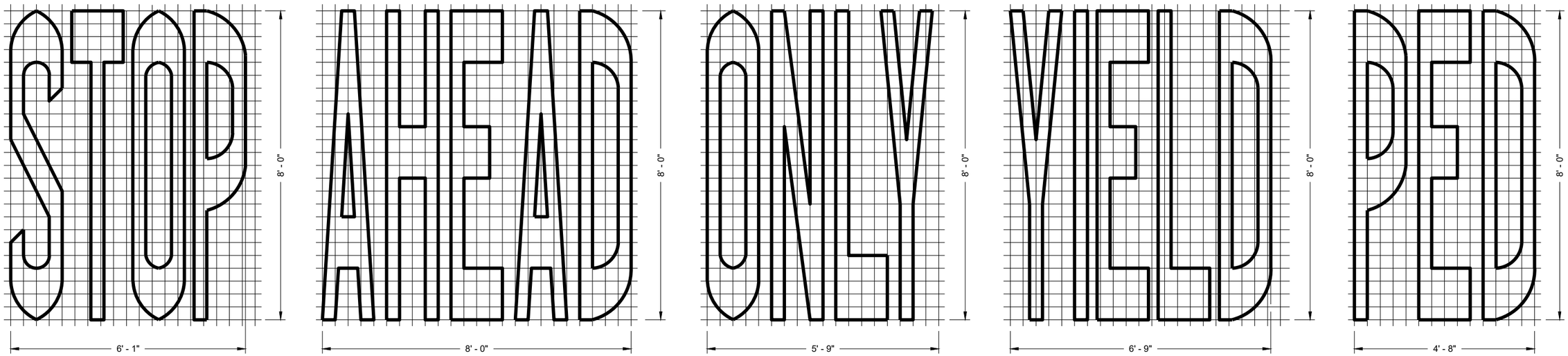
STATE OF WISCONSIN
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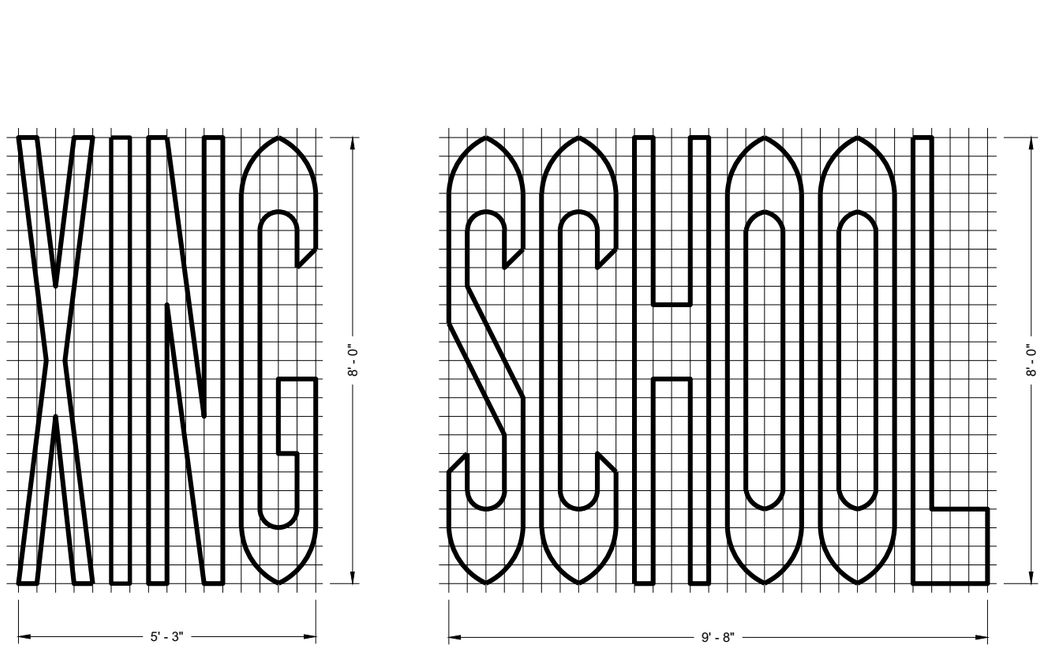
APPROVED

November 2019
DATE

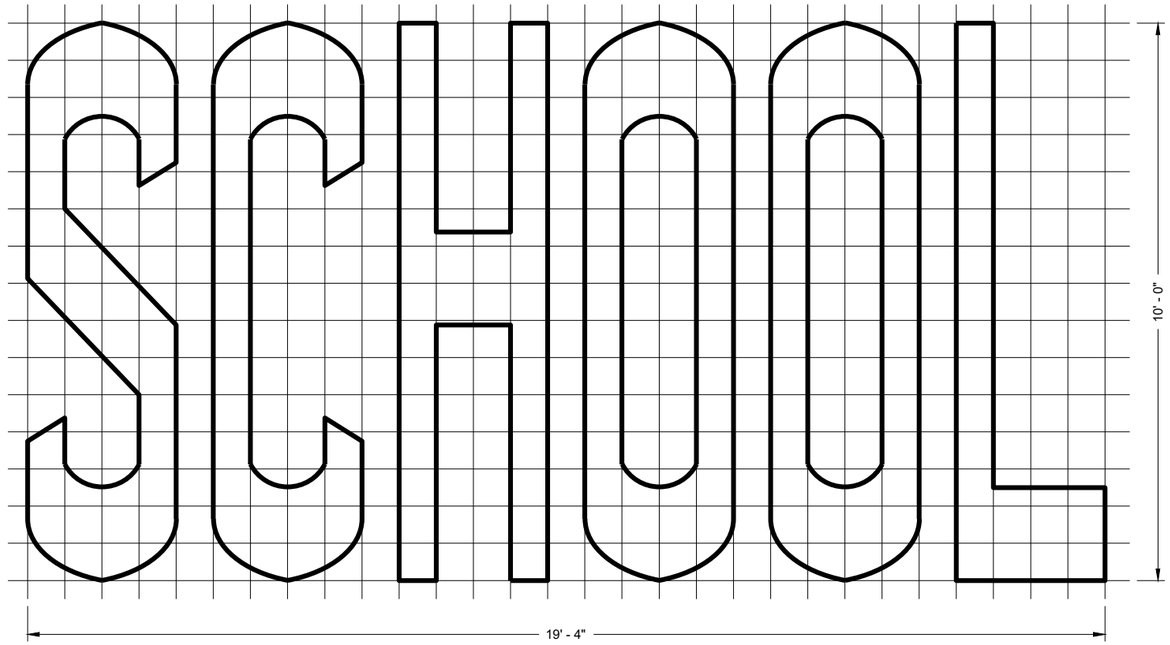
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

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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**

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November 2019
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STATE SIGNING AND MAF ENGINEER

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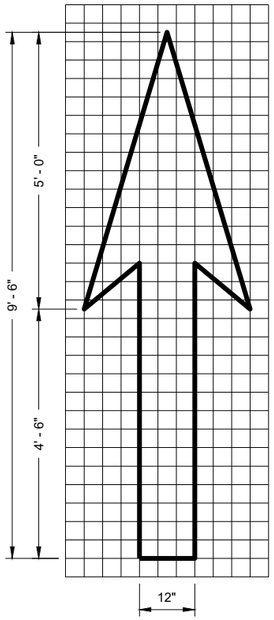
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SDD 15C07 - 15b

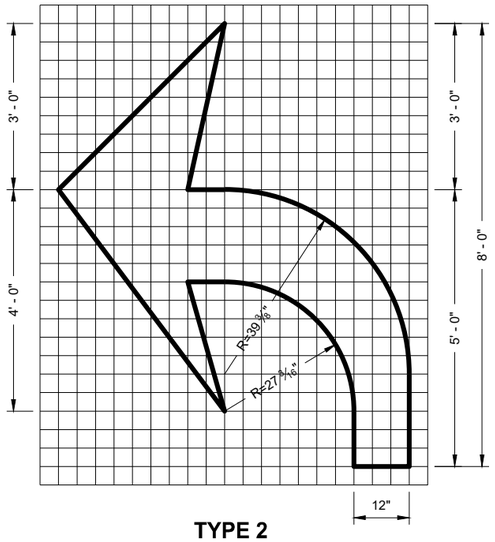
SDD 15C07 - 15b

## GENERAL NOTES

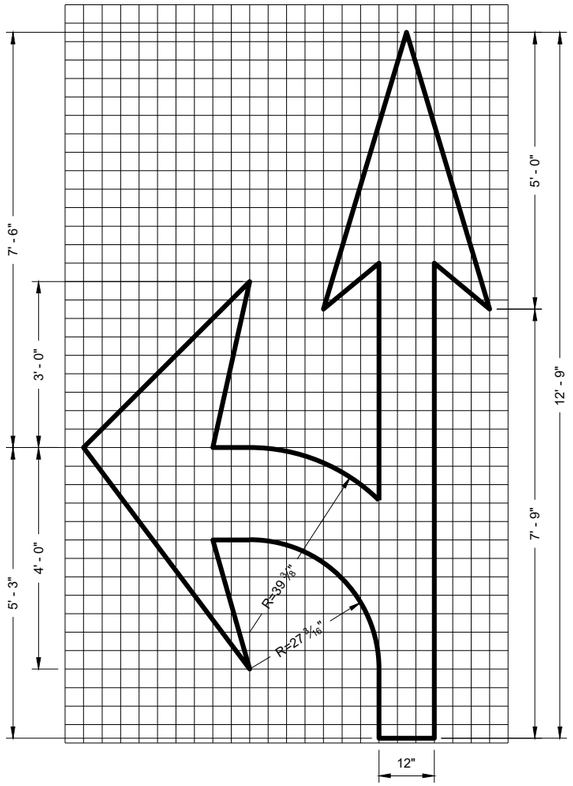
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



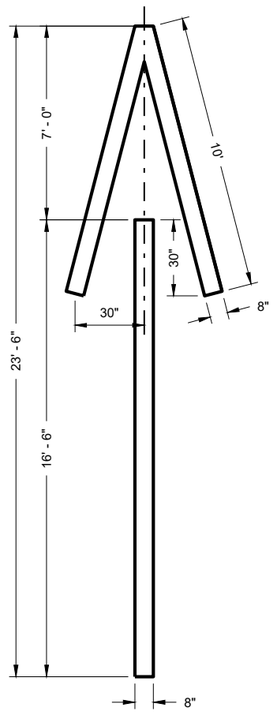

TYPE 1



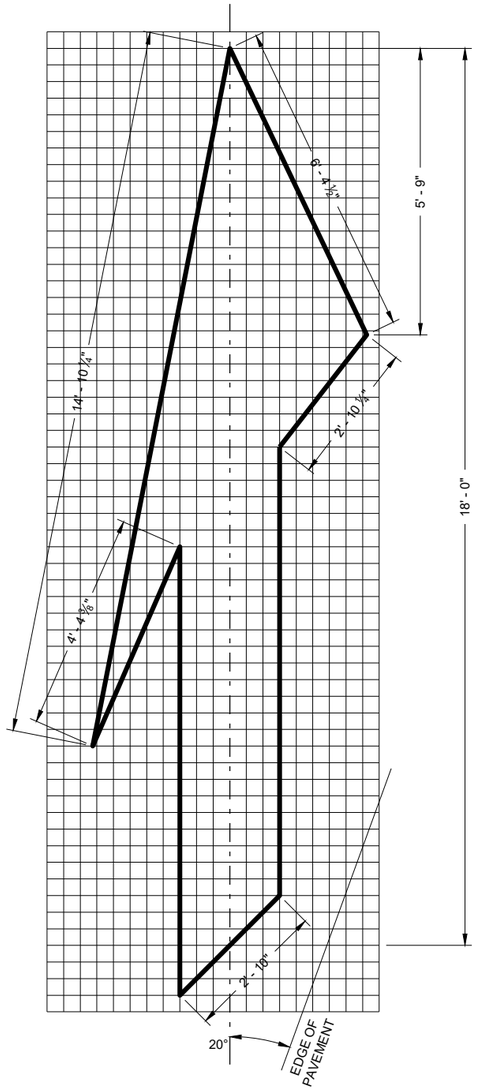

TYPE 2



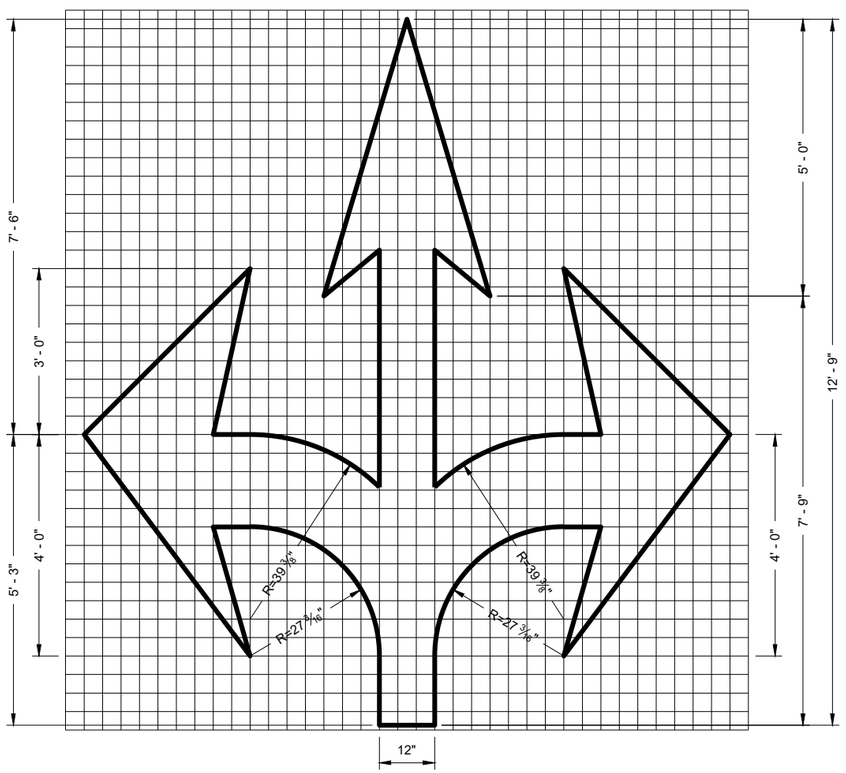

TYPE 3



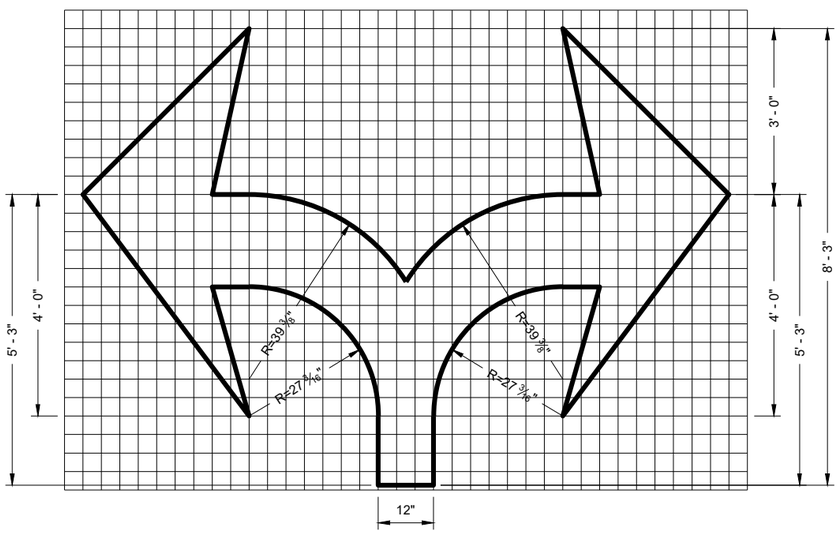

TYPE 4




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

**PAVEMENT MARKING ARROWS**

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DEPARTMENT OF TRANSPORTATION

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DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



6

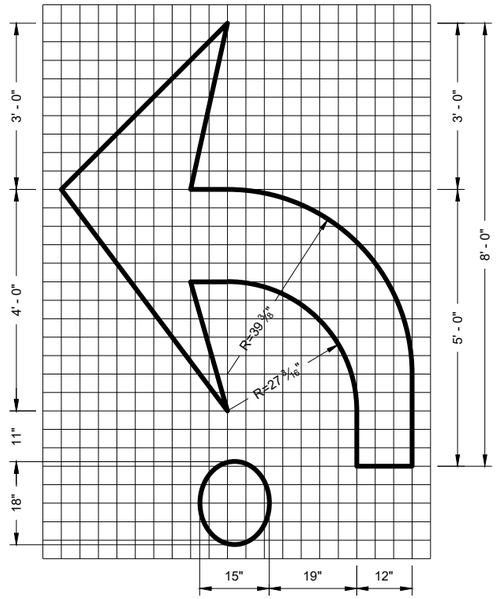
SDD 15C07 - 15c

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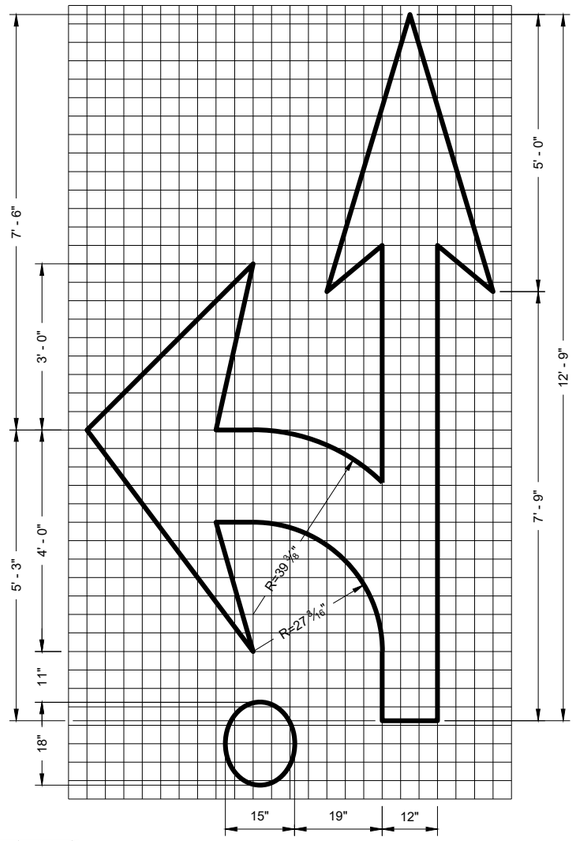
SDD 15C07 - 15c

## GENERAL NOTES

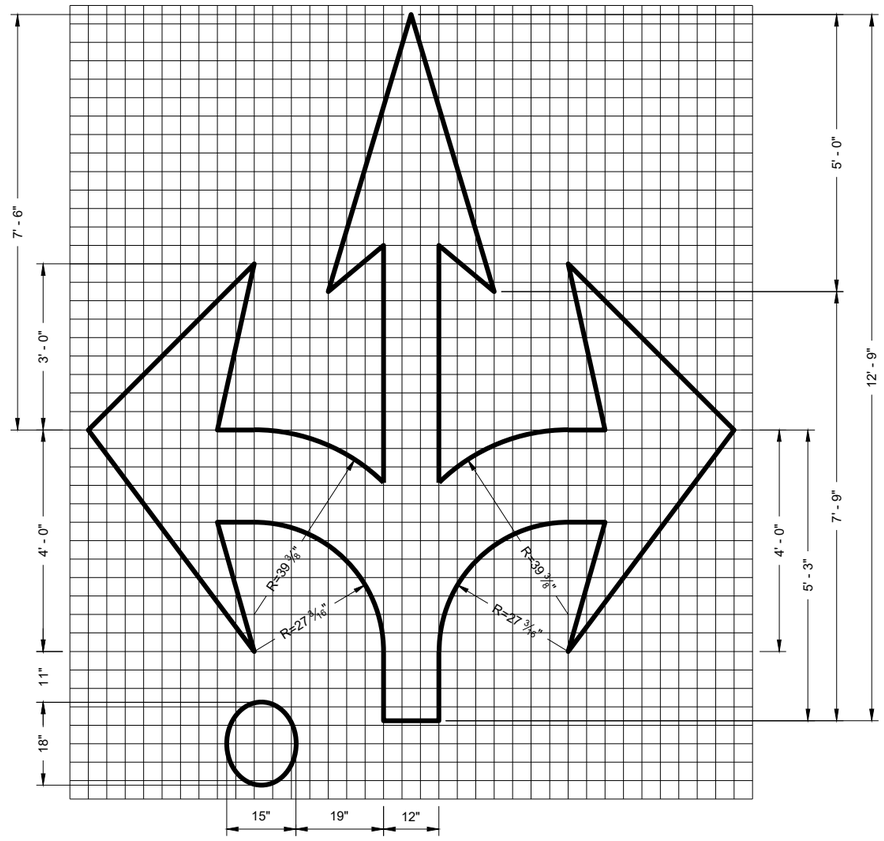
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



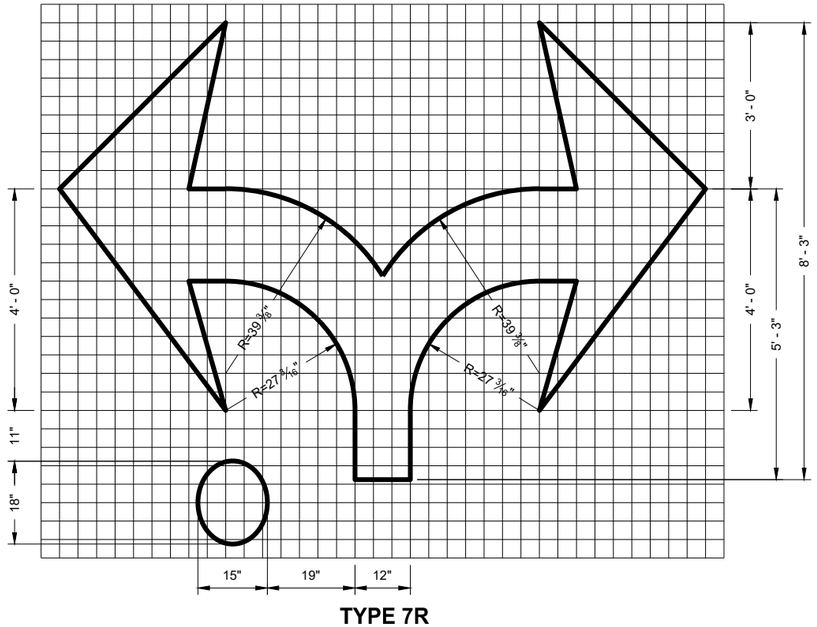

**TYPE 2R**




**TYPE 3R**




**TYPE 6R**




**TYPE 7R**

**ROUNDABOUT MARKING ARROWS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C07 - 15d

6

SDD 15C07 - 15d

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

## 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

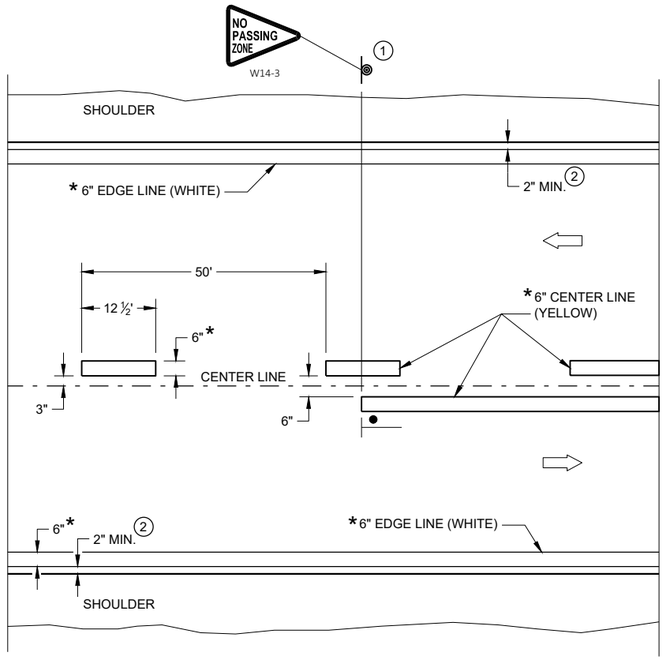
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

## LEGEND

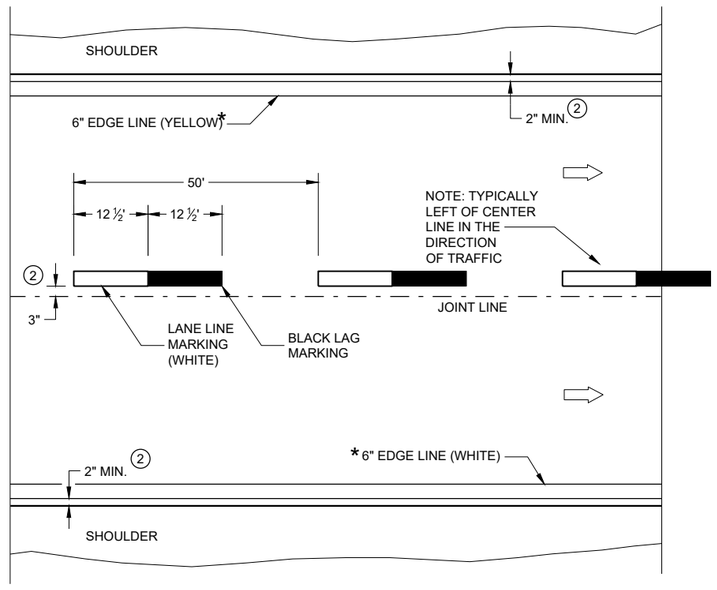
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC




TWO WAY TRAFFIC




ONE WAY TRAFFIC

**PERMANENT PAVEMENT MARKING**

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

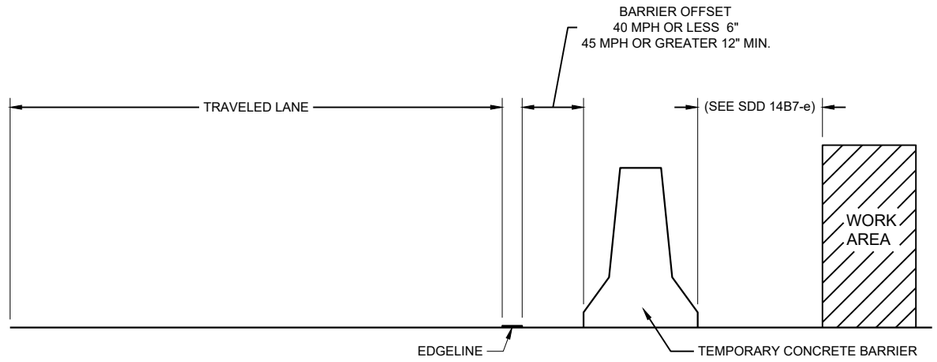
APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER
FHWA



6



SDD 15C08-23a




**TEMPORARY BARRIER OFFSET FROM EDGELINE**

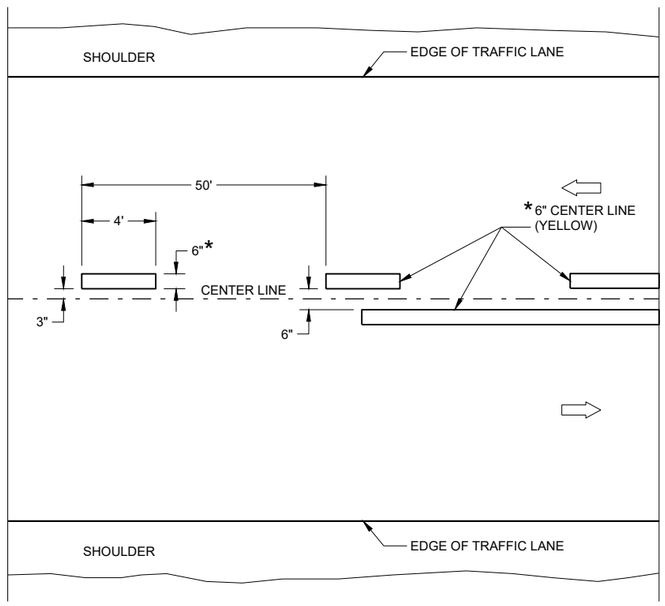
## GENERAL NOTES

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

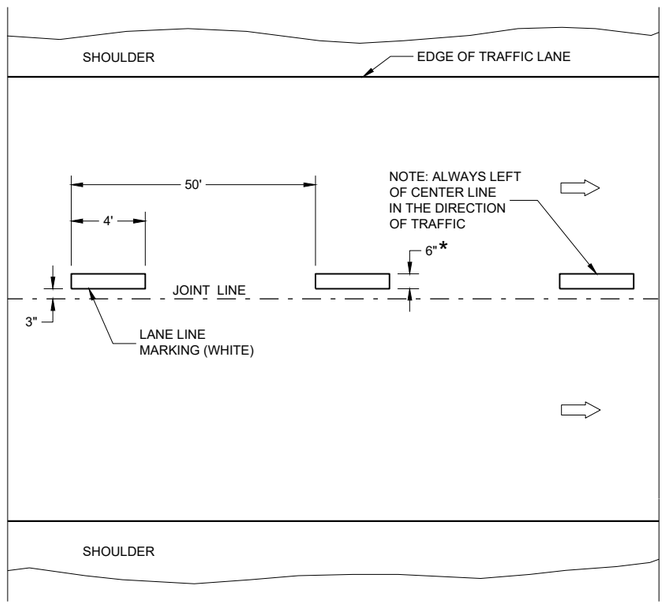
## LEGEND

⇨ DIRECTION OF TRAFFIC

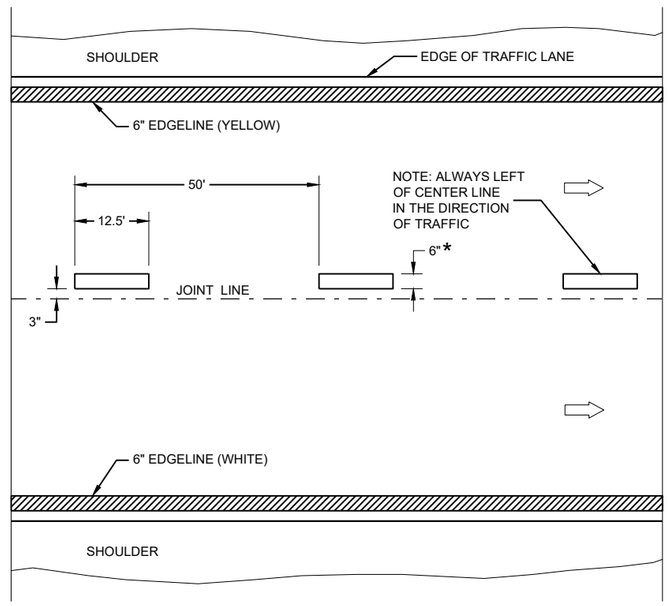
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**TWO WAY TRAFFIC**




**ONE WAY TRAFFIC**




**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

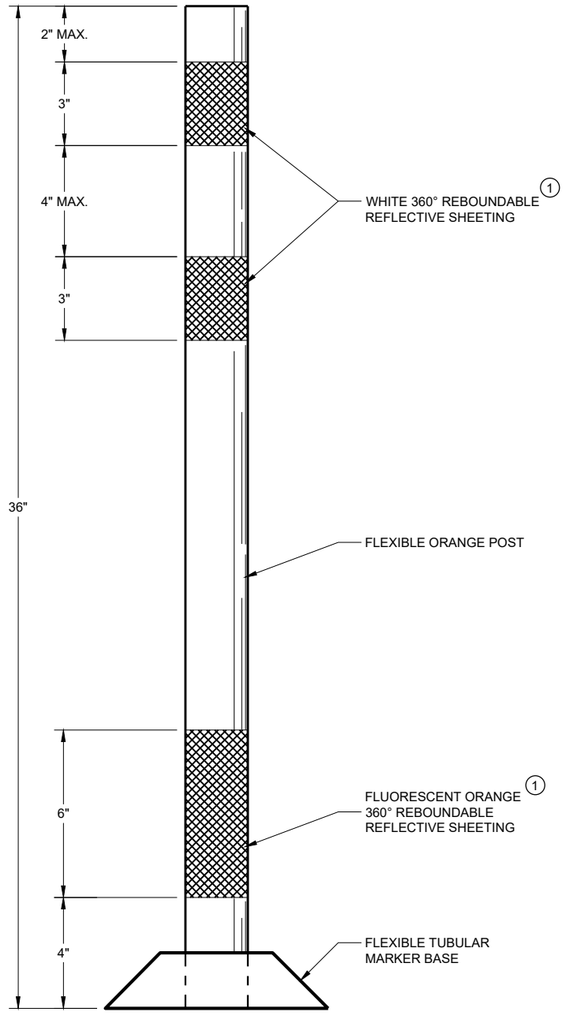


6

SDD 15C08-23b

6

SDD 15C08-23b




**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.

**CHANNELIZING DEVICES**
**FLEXIBLE TUBULAR MARKER POST**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



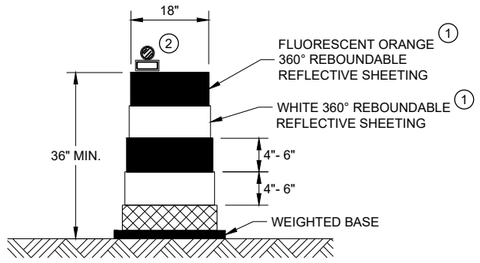
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SDD 15C11 - 10a

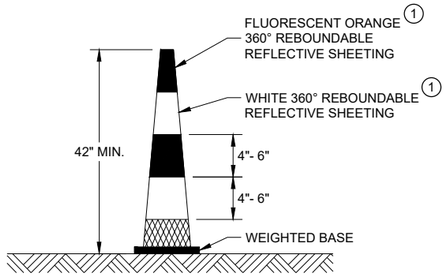
## GENERAL NOTES

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.




### DRUM

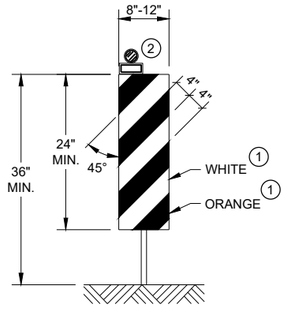
BALLAST WIDTHS
RANGE FROM 24"-36"




### 42" CONE

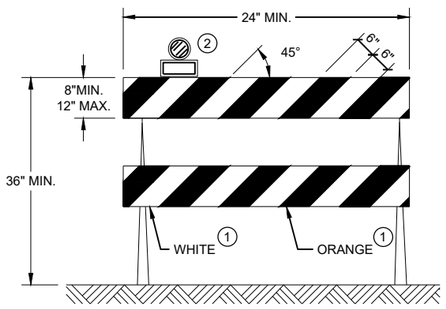
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



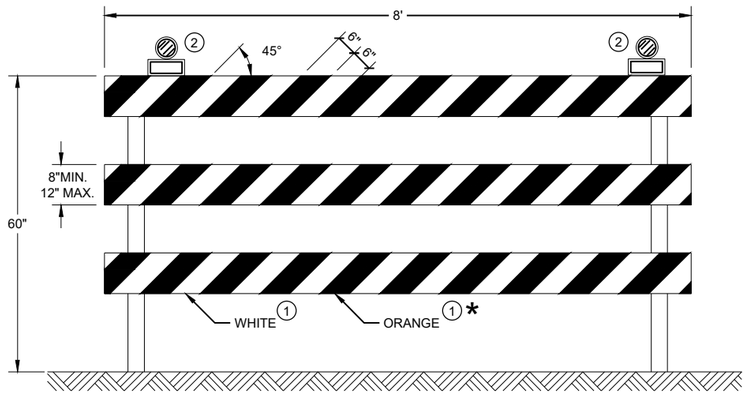

### VERTICAL PANEL

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.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




6

SDD 15C11 - 10b
SDD 15C11 - 10b

## LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

## GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

## FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

## TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

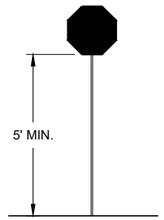
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.




**STOP/SLOW PADDLE ON SUPPORT STAFF**

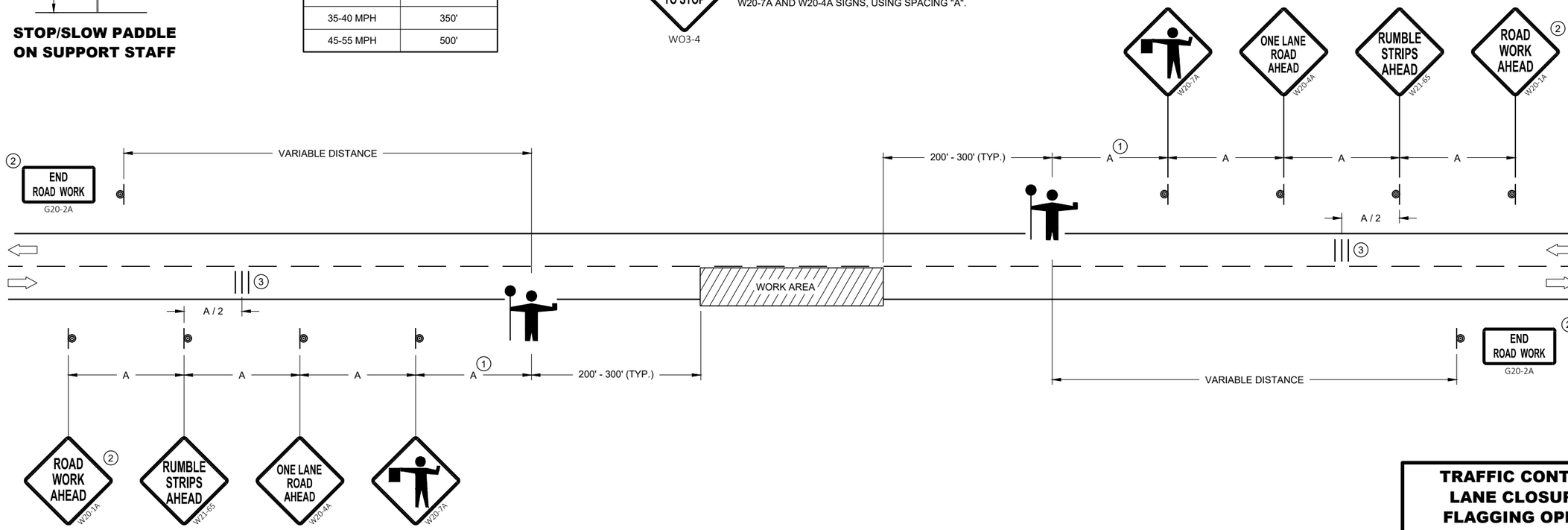
## SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING "A" |
|---|---|
| 25-30 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |




WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".




**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

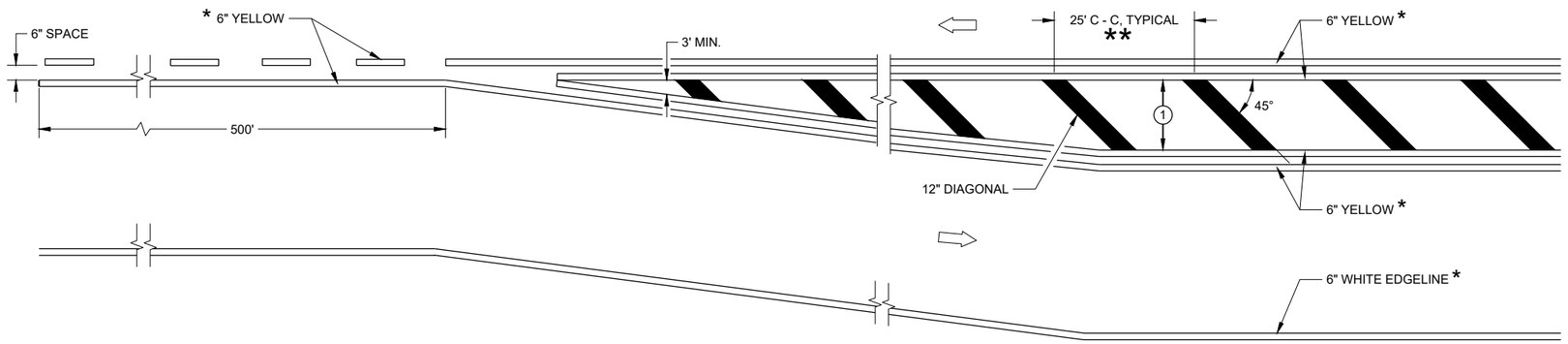
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

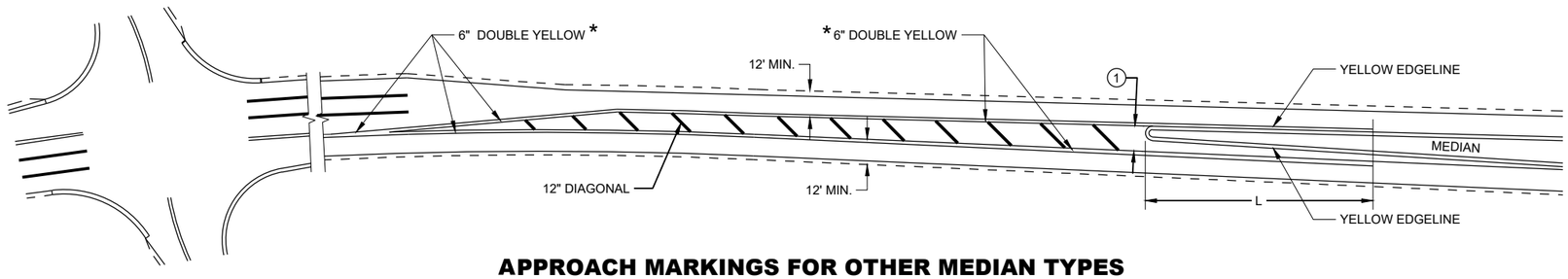


SDD 15C12 - 09a

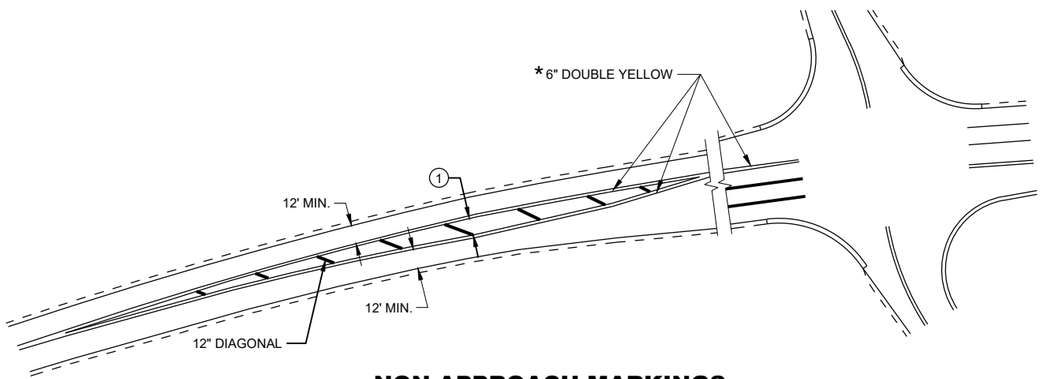
SDD 15C12 - 09a




## MEDIAN ISLAND DETAIL




## APPROACH MARKINGS FOR OTHER MEDIAN TYPES




## NON-APPROACH MARKINGS

## GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

| SPEED LIMIT | L |
|---|---|
| <35 MPH | 5' |
| 35> MPH | 50' |

**MEDIAN ISLAND PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

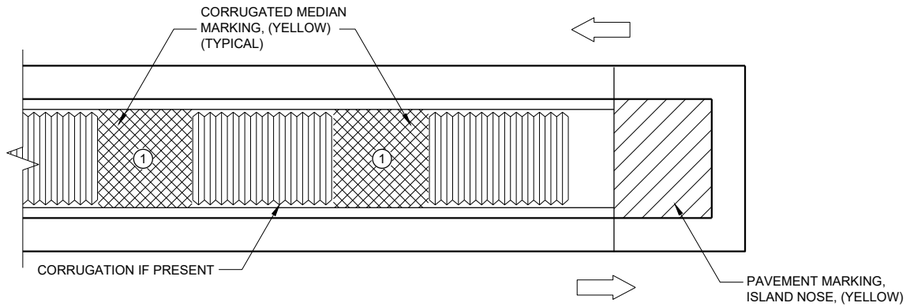


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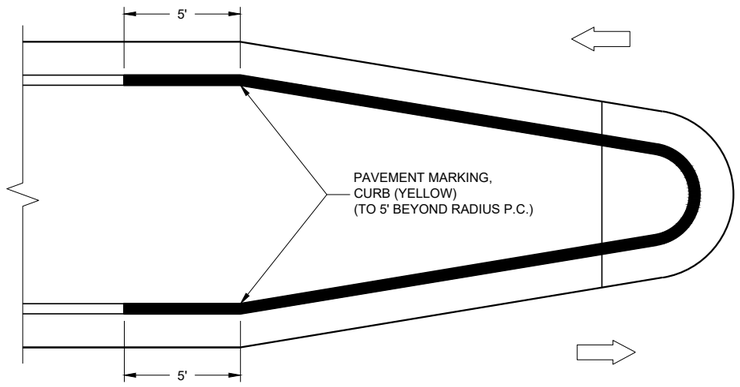
SDD 15C18-08a

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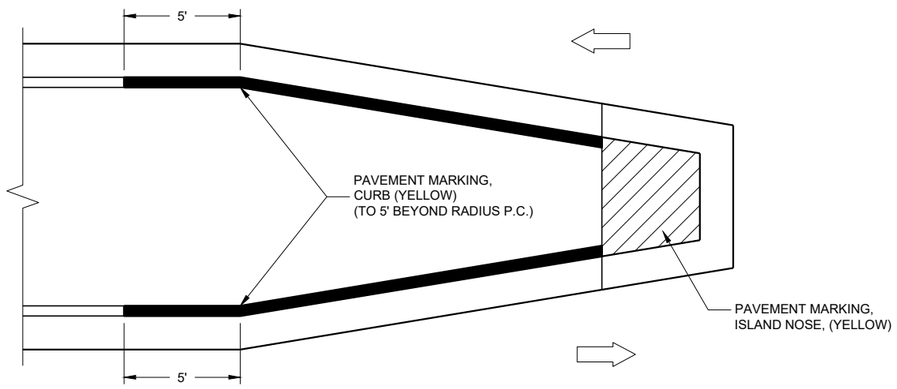
SDD 15C18-08a




**MEDIAN ISLAND WITH SQUARE BLUNT NOSE**




**MEDIAN ISLAND WITH ROUND BLUNT NOSE**




**MEDIAN ISLAND WITH SLOPED NOSE**

## TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

## GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS, MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR ENGINEER

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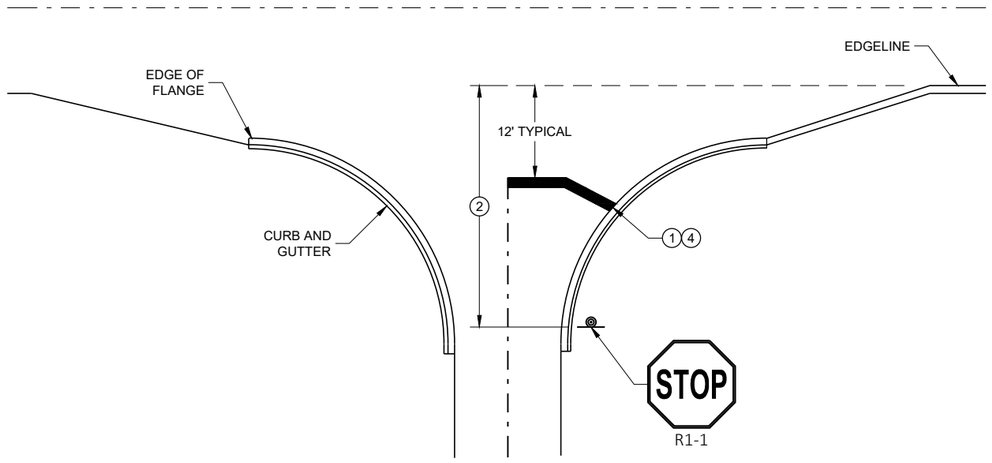


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SDD 15C18-08b

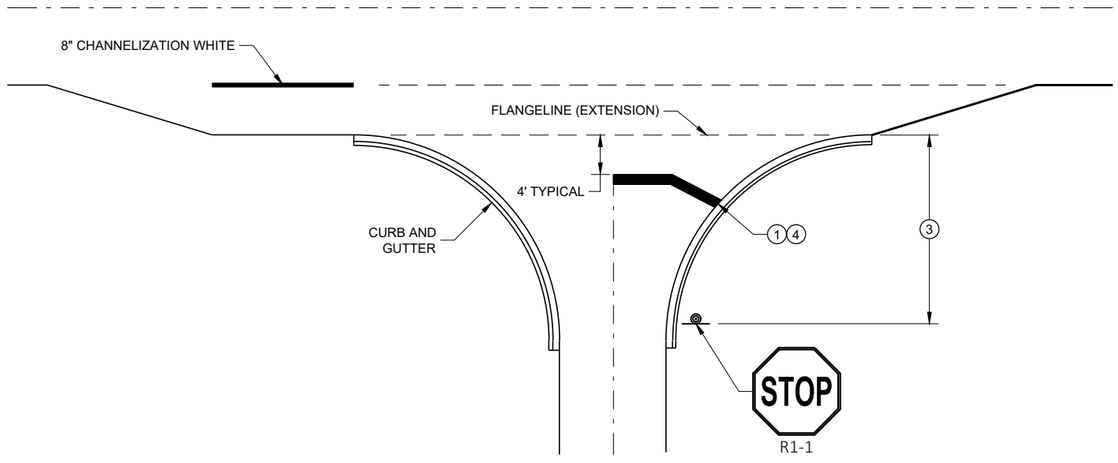
## GENERAL NOTES

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

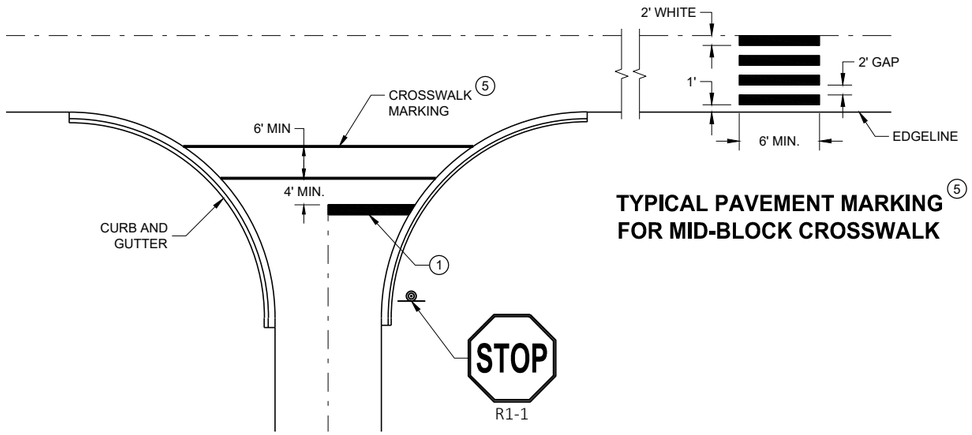
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.




**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**

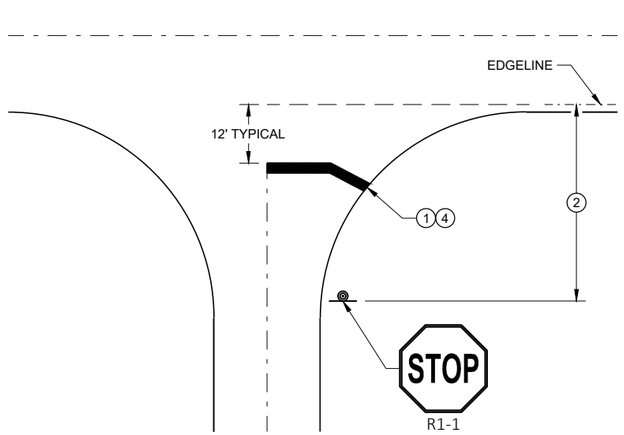



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**




**TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK** 5

**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**




**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

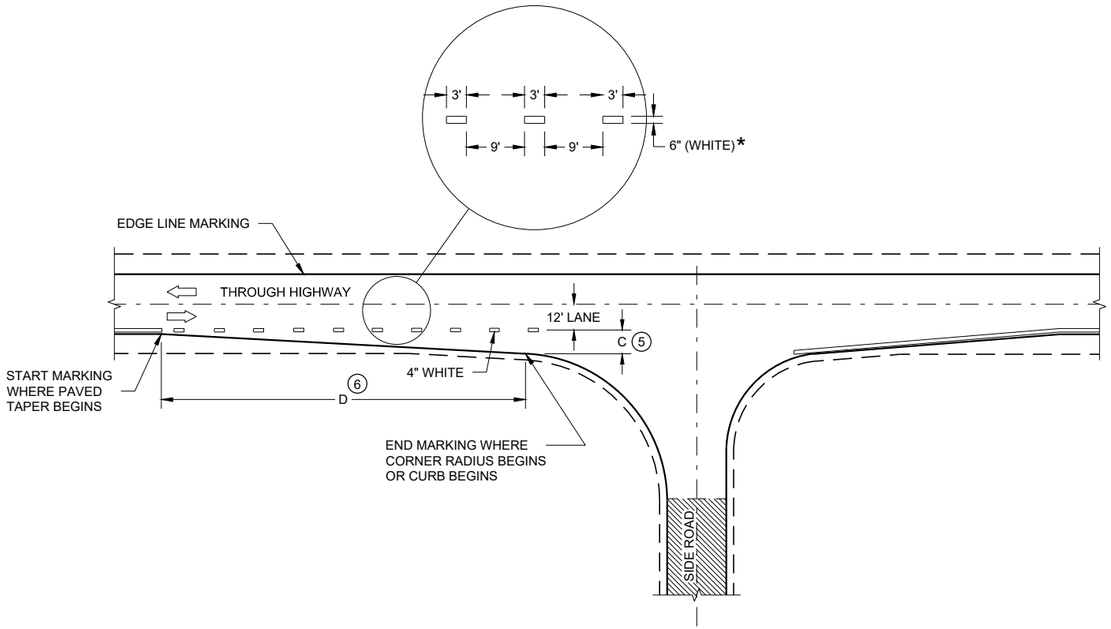
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

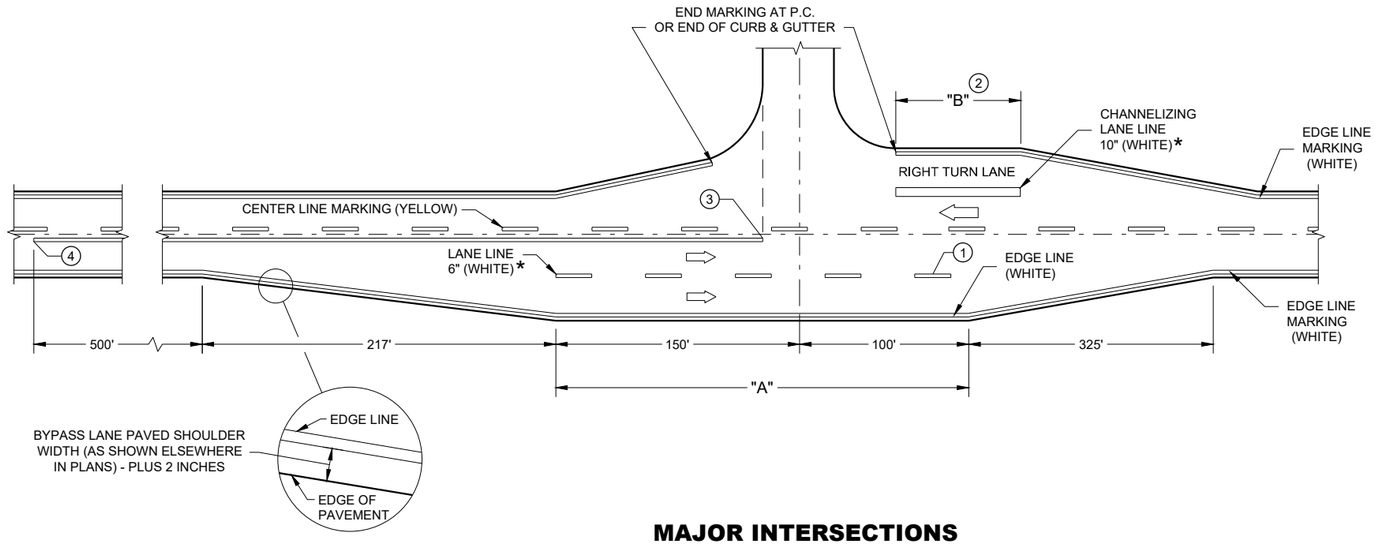
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SDD 15C33 - 04




**MINOR INTERSECTION**




**MAJOR INTERSECTIONS**

**(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

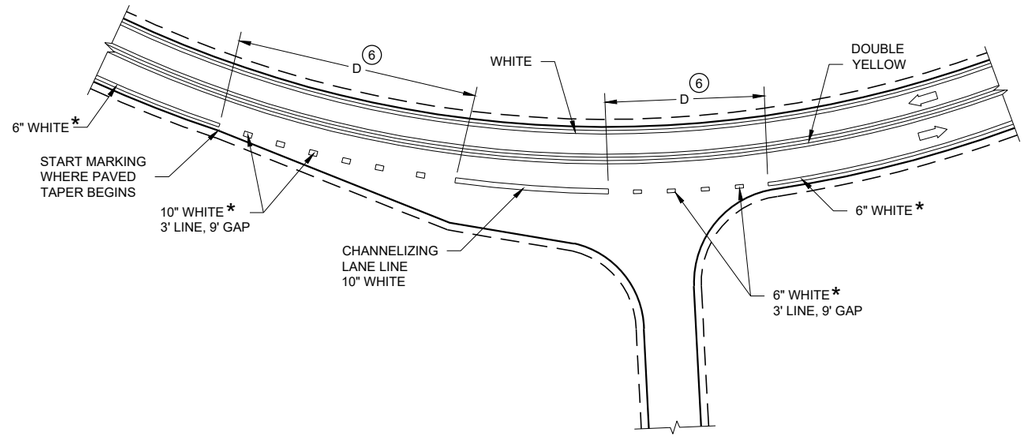
## GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

## LEGEND

DIRECTION OF TRAVEL




**INTERSECTION ON OUTSIDE OF CURVE**

**PAVEMENT MARKING (INTERSECTIONS)**



SDD 15C35-06a

6

## LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

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

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' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW.

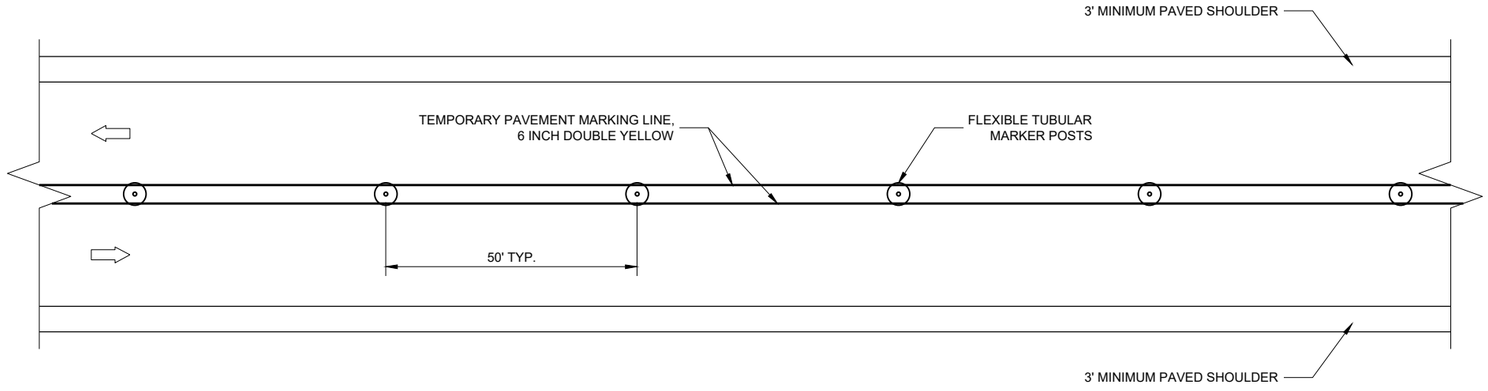






1. THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

2. CONVENTIONAL: 24" X 30"
   FREEWAY AND EXPRESSWAY: 36" X 48"




**TWO LANE, TWO WAY OPERATION**

6

SDD 15D06-06

**TRAFFIC CONTROL**
**TWO LANE TWO WAY OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15D06-06

## LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

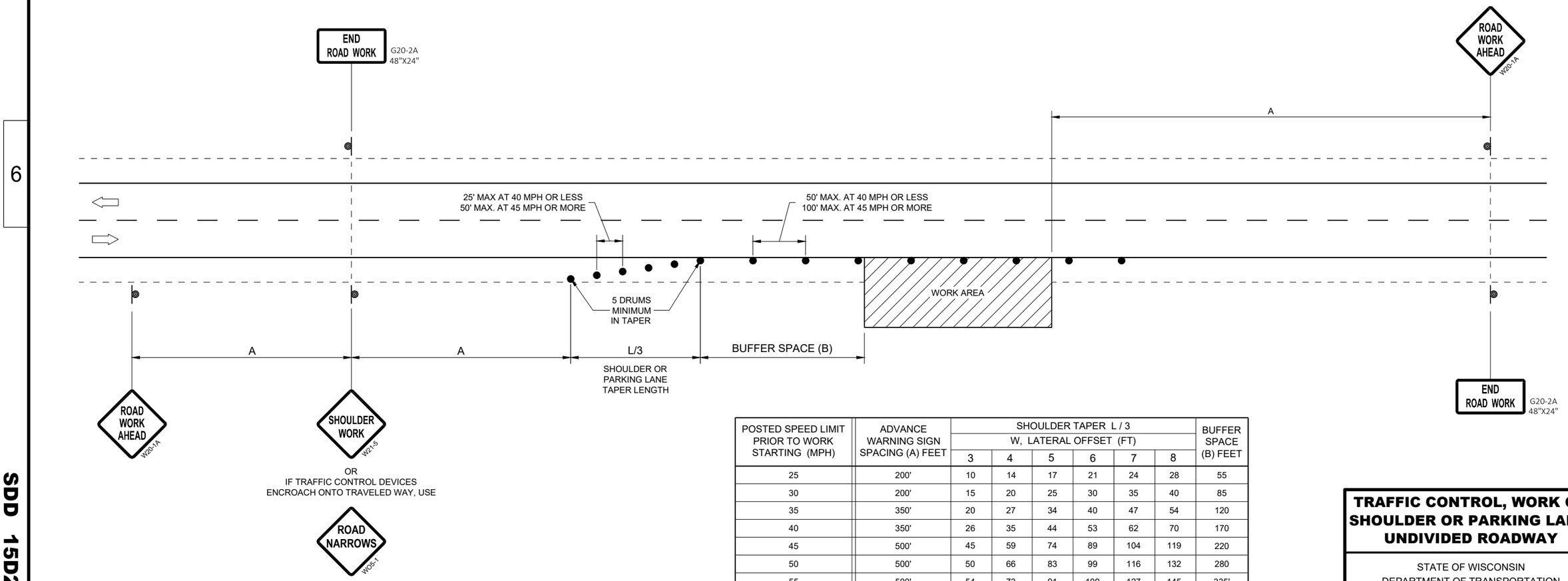
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.




| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT) | | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|---|
| | | 3 | 4 | 5 | 6 | 7 | 8 | |
| 25 | 200' | 10 | 14 | 17 | 21 | 24 | 28 | 55 |
| 30 | 200' | 15 | 20 | 25 | 30 | 35 | 40 | 85 |
| 35 | 350' | 20 | 27 | 34 | 40 | 47 | 54 | 120 |
| 40 | 350' | 26 | 35 | 44 | 53 | 62 | 70 | 170 |
| 45 | 500' | 45 | 59 | 74 | 89 | 104 | 119 | 220 |
| 50 | 500' | 50 | 66 | 83 | 99 | 116 | 132 | 280 |
| 55 | 500' | 54 | 73 | 91 | 109 | 127 | 145 | 335' |

# TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA




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SDD 15D28 - 04

## LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

## 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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES 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.

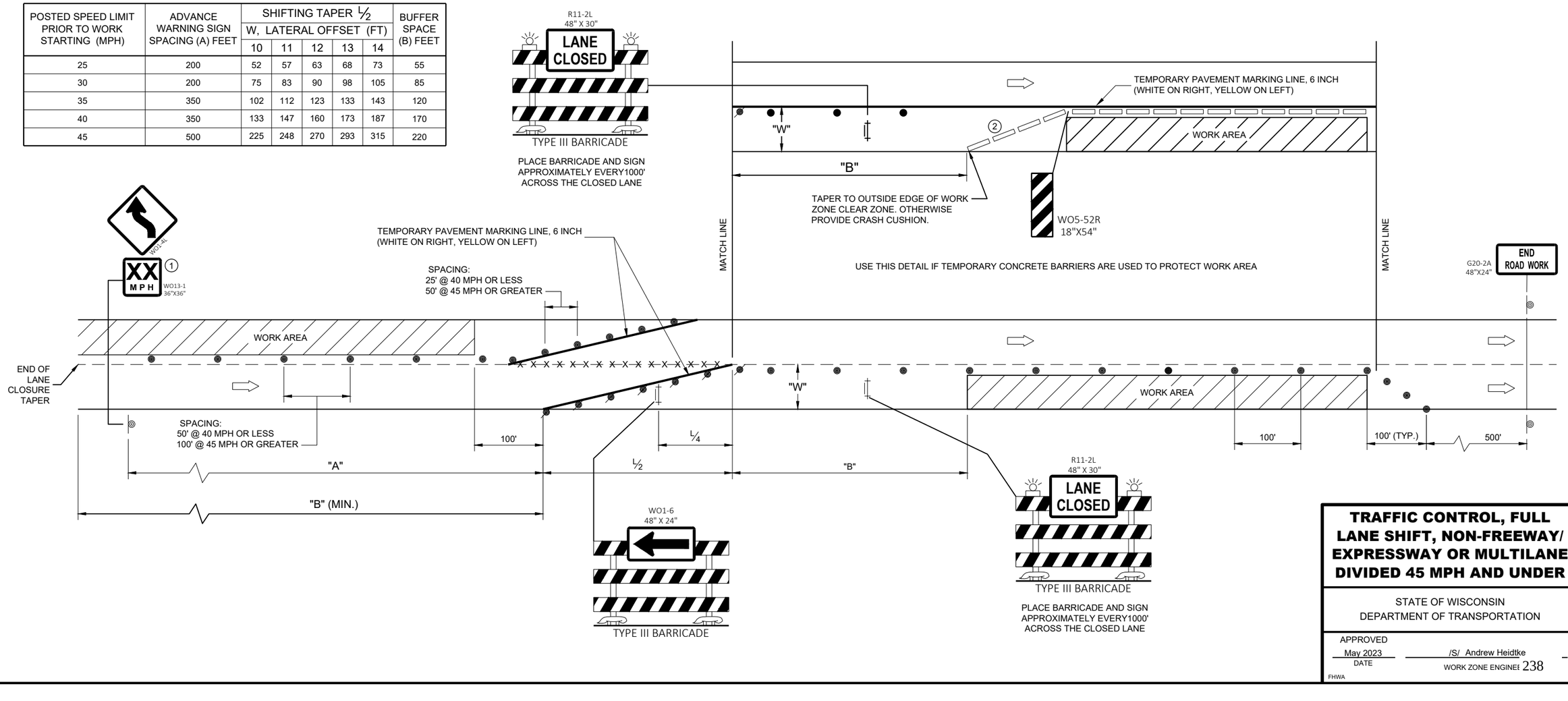
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHIFTING TAPER L/2 W, LATERAL OFFSET (FT) | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|
| | | 10 | 11 | 12 | 13 | 14 | |
| 25 | 200 | 52 | 57 | 63 | 68 | 73 | 55 |
| 30 | 200 | 75 | 83 | 90 | 98 | 105 | 85 |
| 35 | 350 | 102 | 112 | 123 | 133 | 143 | 120 |
| 40 | 350 | 133 | 147 | 160 | 173 | 187 | 170 |
| 45 | 500 | 225 | 248 | 270 | 293 | 315 | 220 |




# TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



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SDD 15D40-05a

6

SDD 15D40-05a

## LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

## 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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES 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.

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

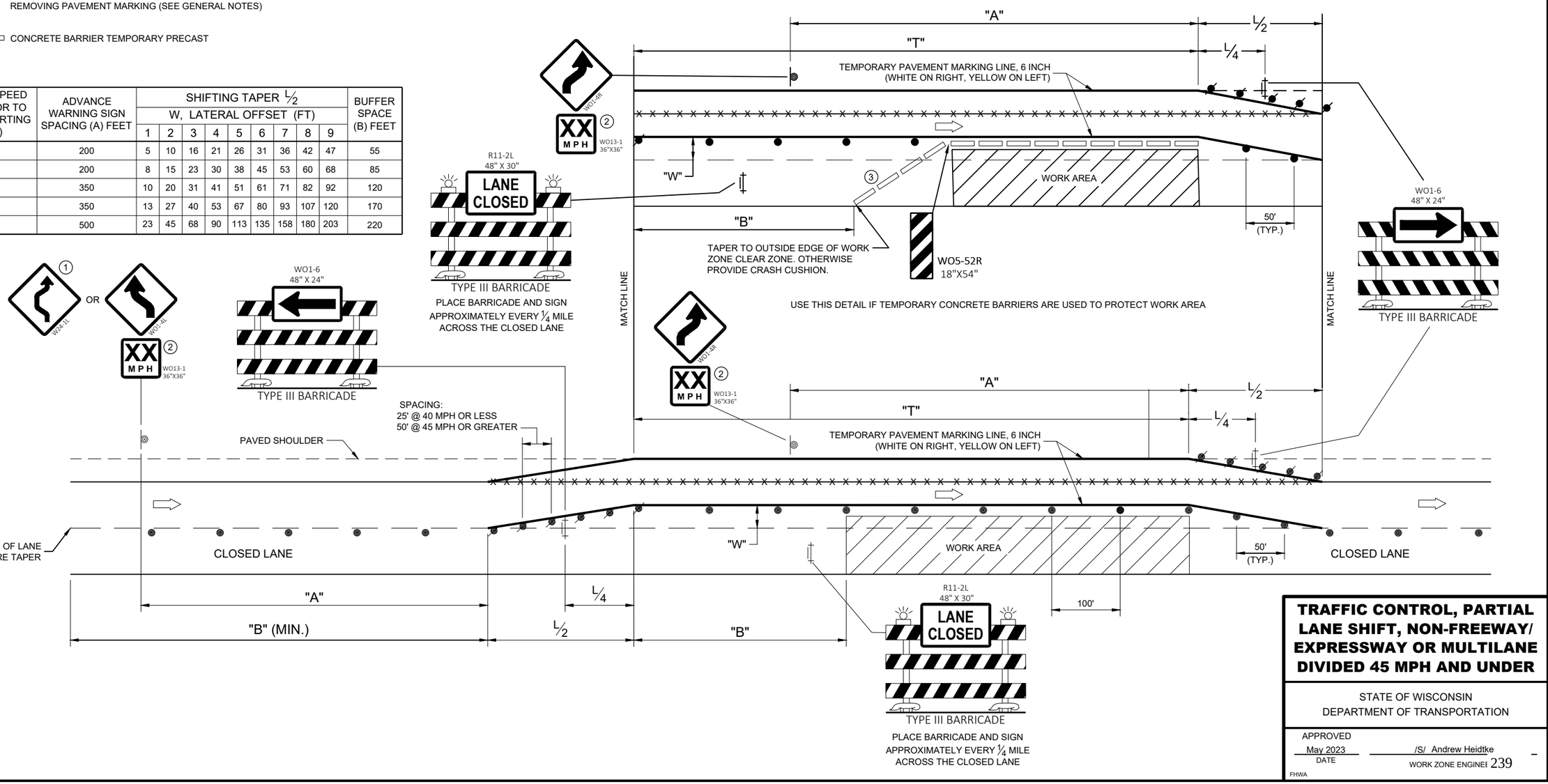
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP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

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHIFTING TAPER L/2 W, LATERAL OFFSET (FT) | | | | | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 25 | 200 | 5 | 10 | 16 | 21 | 26 | 31 | 36 | 42 | 47 | 55 |
| 30 | 200 | 8 | 15 | 23 | 30 | 38 | 45 | 53 | 60 | 68 | 85 |
| 35 | 350 | 10 | 20 | 31 | 41 | 51 | 61 | 71 | 82 | 92 | 120 |
| 40 | 350 | 13 | 27 | 40 | 53 | 67 | 80 | 93 | 107 | 120 | 170 |
| 45 | 500 | 23 | 45 | 68 | 90 | 113 | 135 | 158 | 180 | 203 | 220 |




# TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

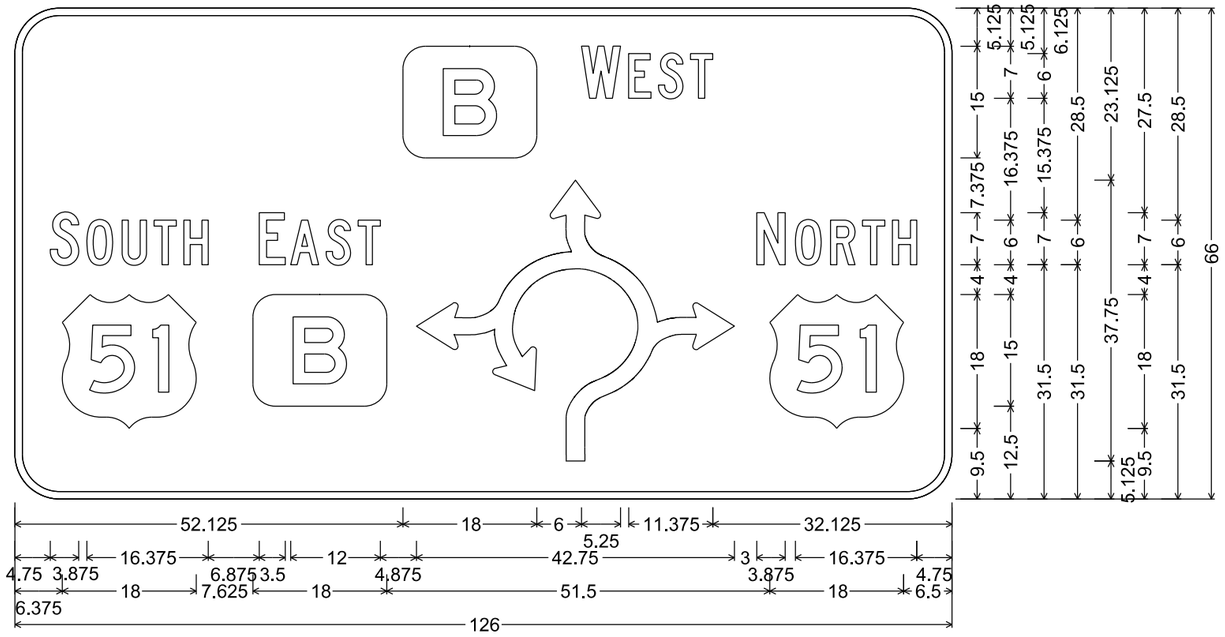
FHWA



SDD 15D40-05c

6

4-05




D1-62; 6.000" Radius, 1.000" Border

## NOTES

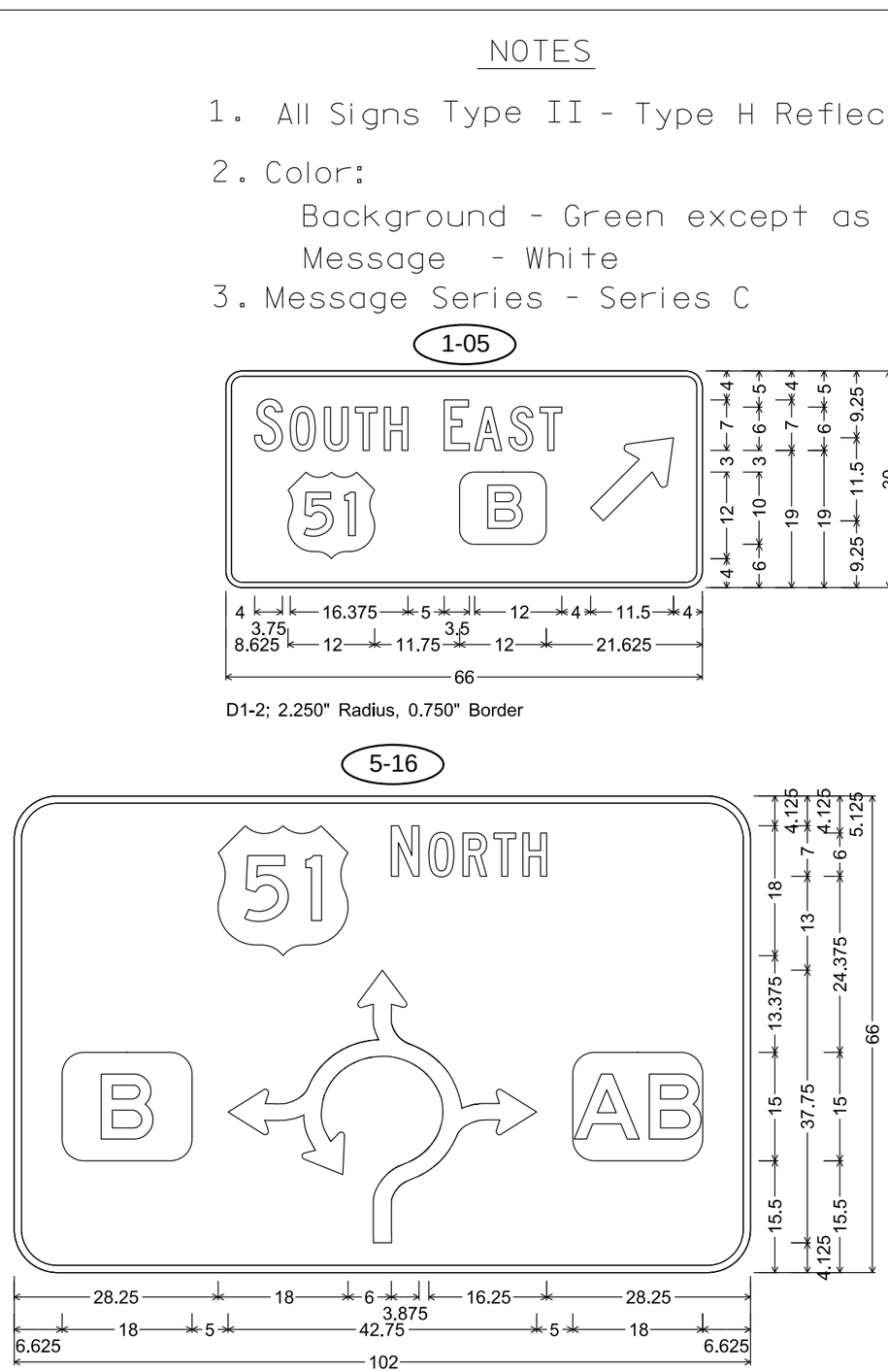
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - Series C

1-05



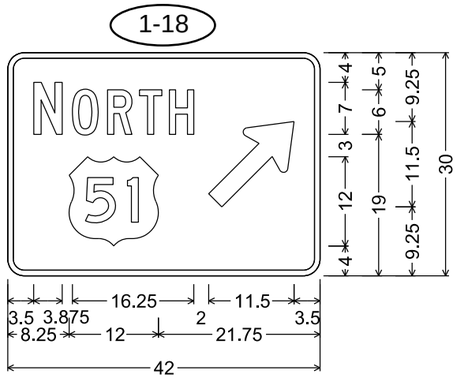

D1-2; 2.250" Radius, 0.750" Border

5-16



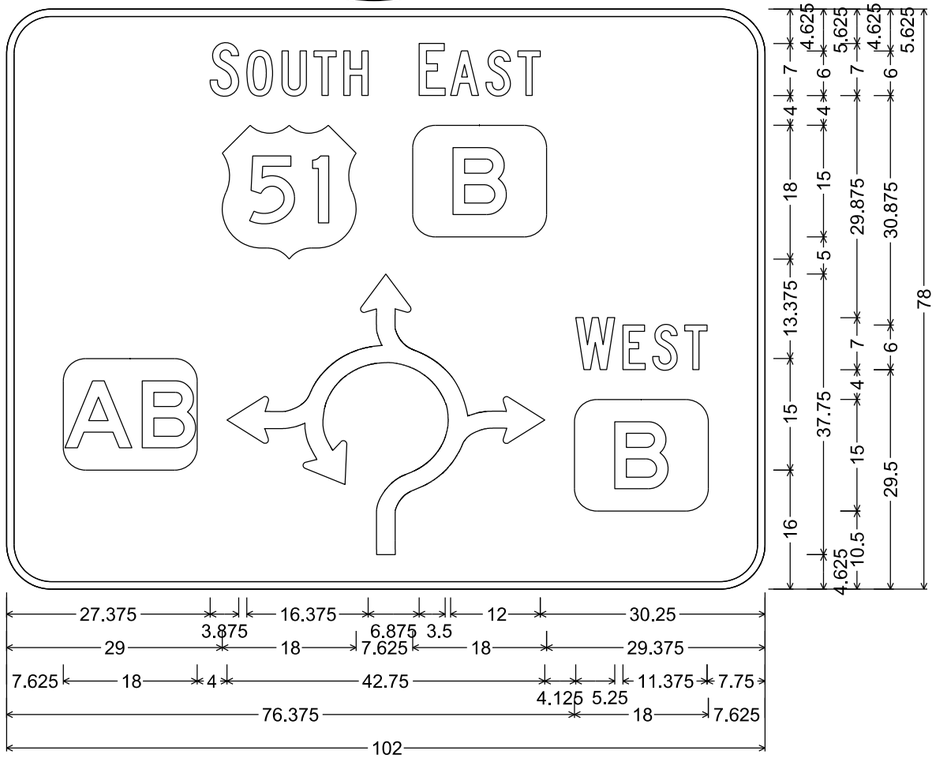

D1-62; 6.000" Radius, 1.000" Border

1-18



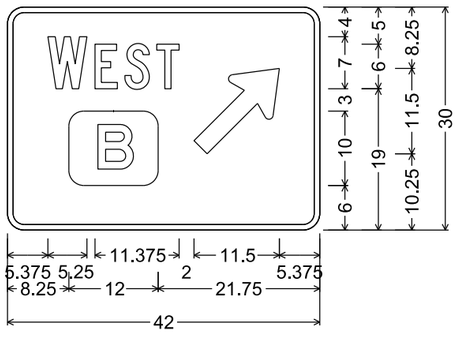

D1-1; 2.250" Radius, 0.750" Border

3-08




D1-62; 6.000" Radius, 1.000" Border

1-24

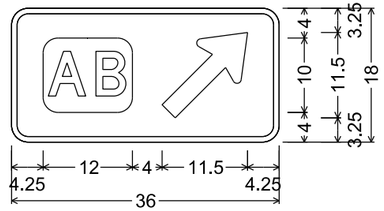



D1-1; 2.250" Radius, 0.750" Border

## NOTES

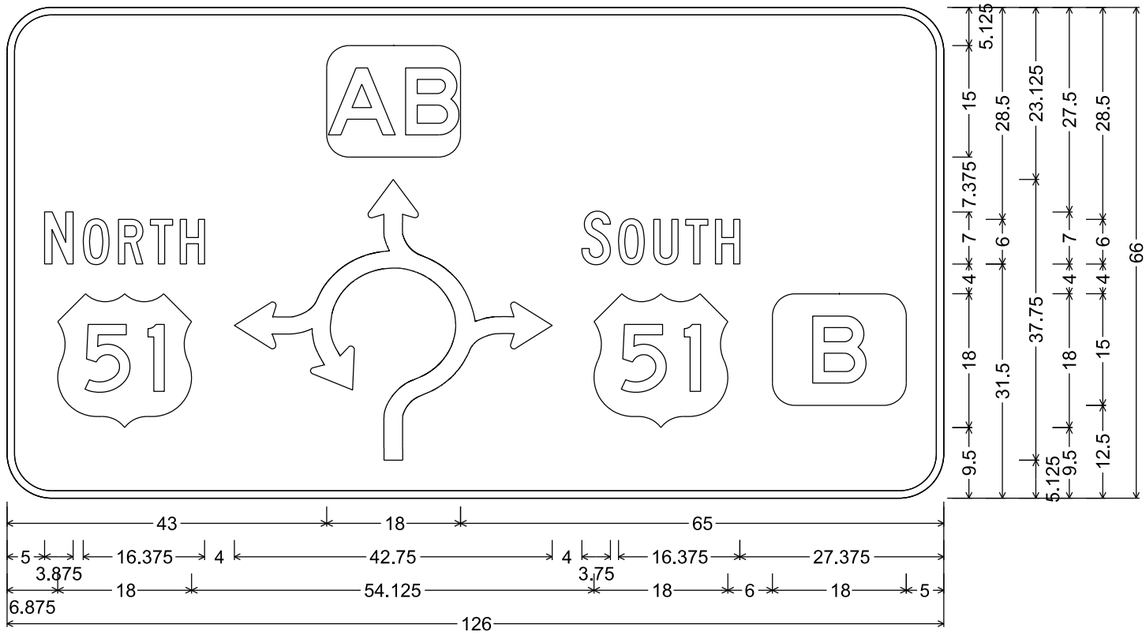
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - Series C

1-11



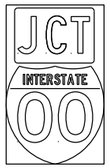

D1-1; 2.250" Radius, 0.750" Border

2-02

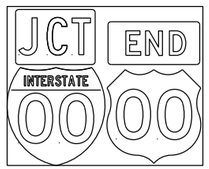



D1-62; 6.000" Radius, 1.000" Border

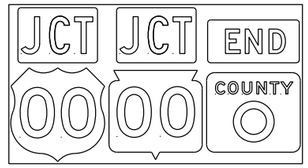
# TYPICAL ASSEMBLIES



J1-1



J1-2



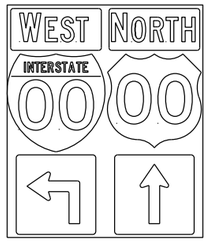
J1-3



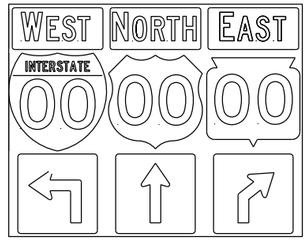
JR1-1



J2-1



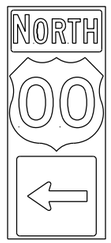
J2-2



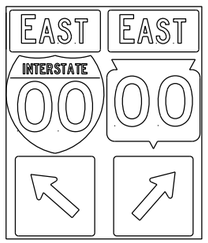
J2-3



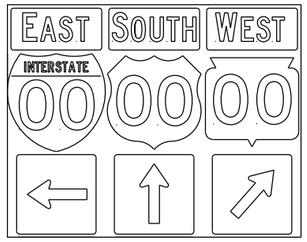
JV
( Typical Vertical J-Assembly
See Note 10 and 11 )



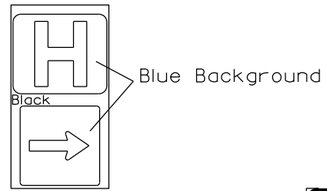
J3-1



J3-2



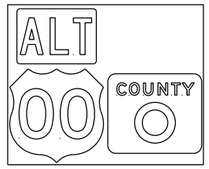
J3-3



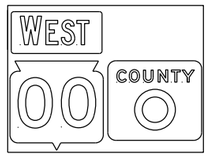
JH-1



J4-1



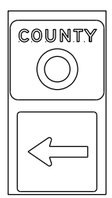
J4-2



J4-2



J12-1



J13-1



J32-1



J33-1



J22-1



J23-1



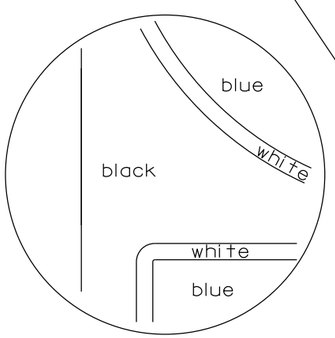
JR13-1



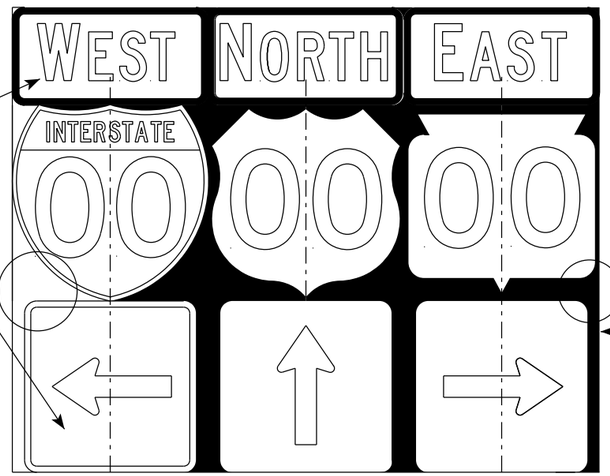
JR23-1

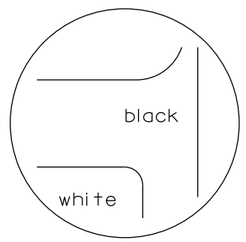


JR99-1




blue background
with interstate




black background

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 242 E

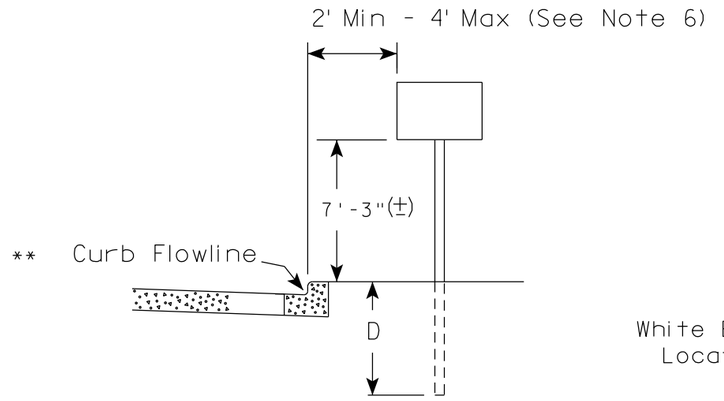
FILE NAME : C:\CAEfiles\Projects\tr_stdplate_A21S.dgn PLOT DATE : 18-MAR 2021 1:37 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

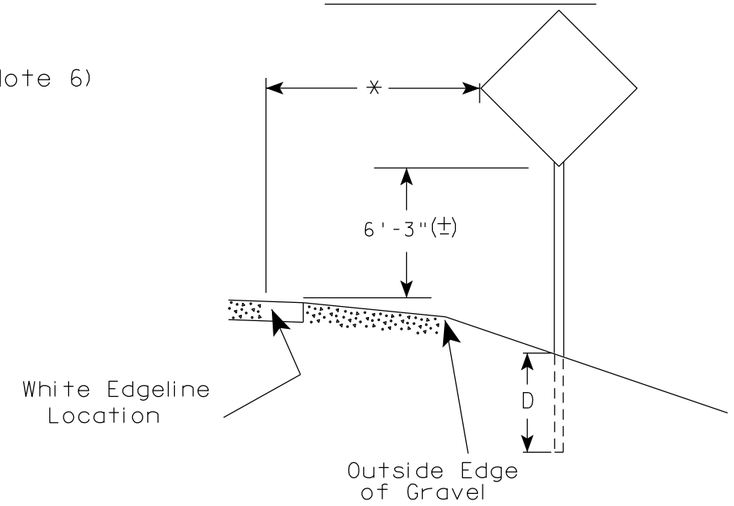
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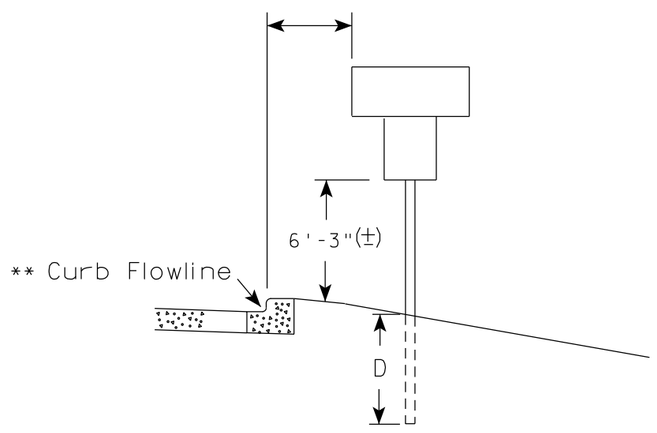
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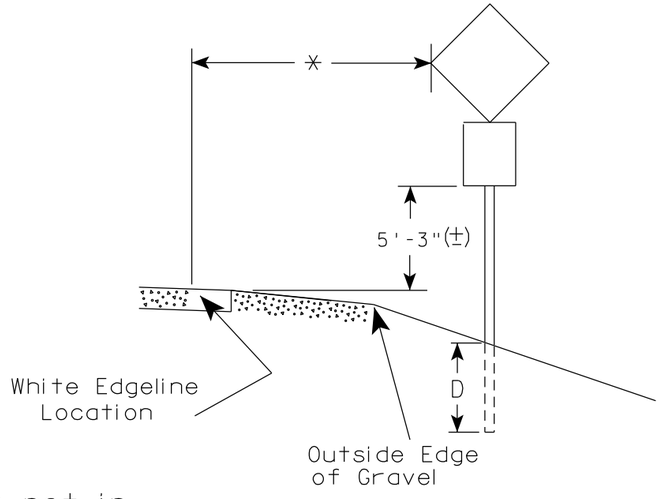
## URBAN AREA




## RURAL AREA (See Note 2)




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

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

### POST EMBEDMENT DEPTH

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

### GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

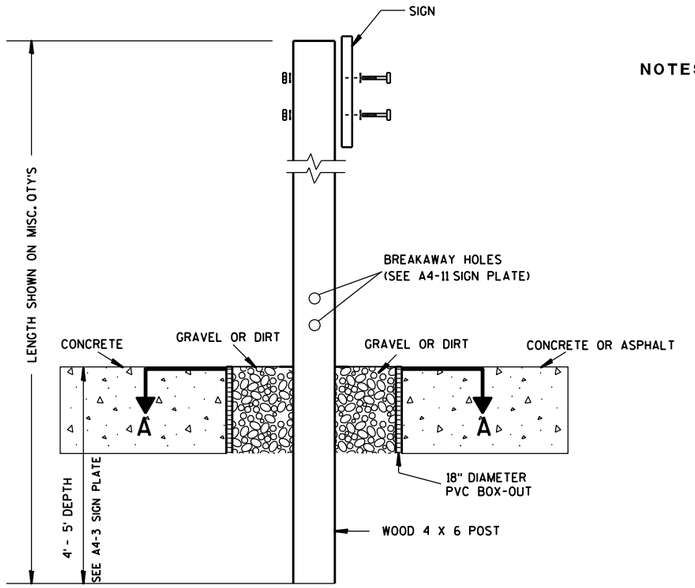
# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

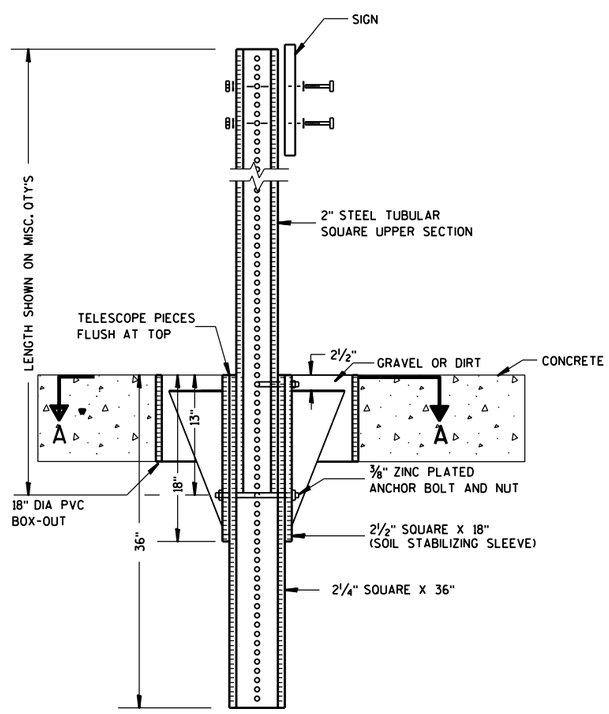
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 243 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

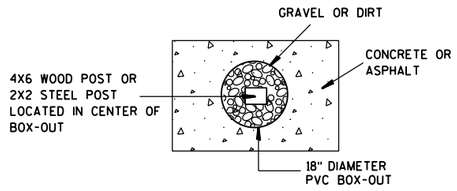
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

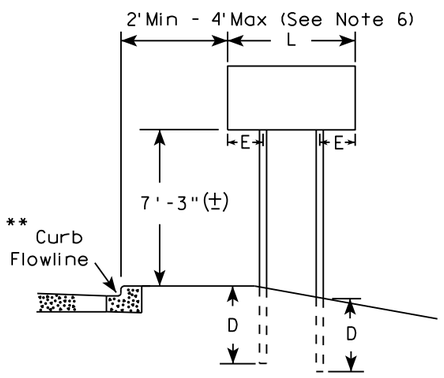
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

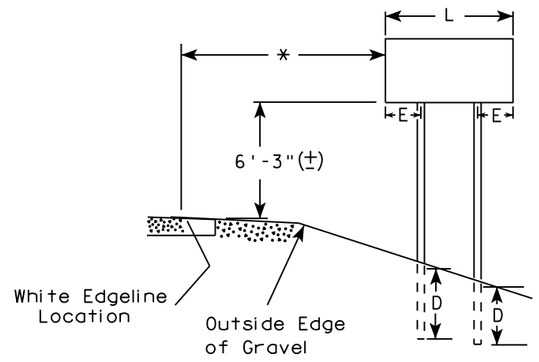


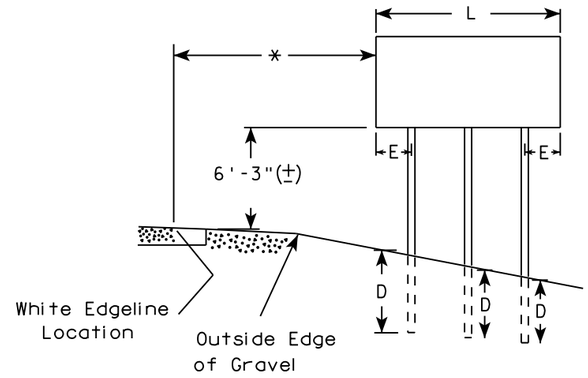
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

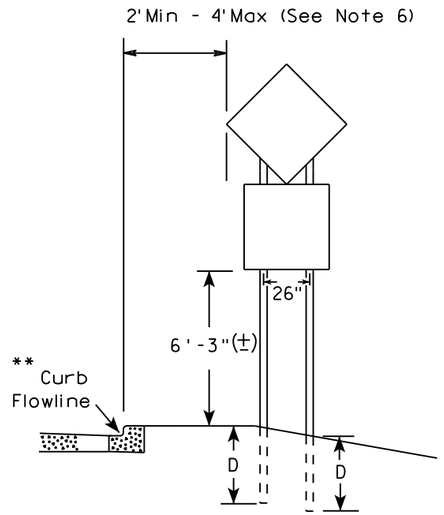
## URBAN AREA



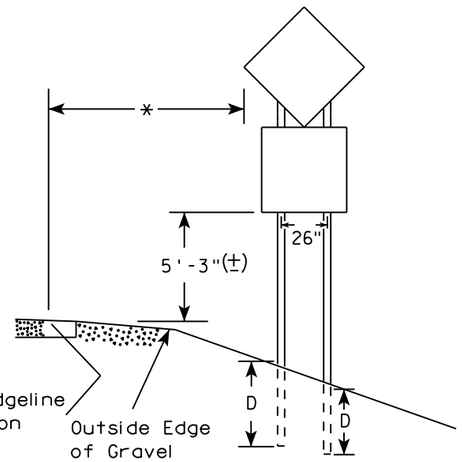

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

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

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

### GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

### POST EMBEDMENT DEPTH

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

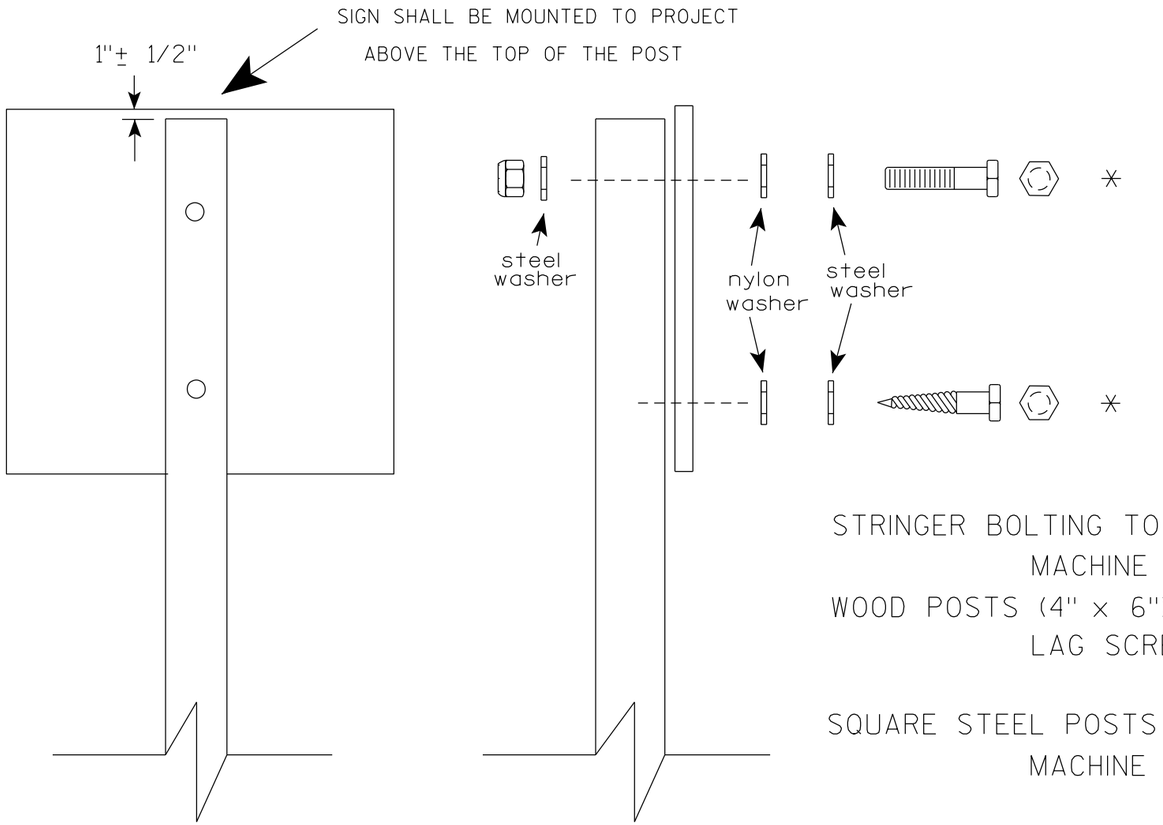
**TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS**

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 245 | E |
|---|---|---|---|---|---|




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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

# ATTACHMENT OF SIGNS TO POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

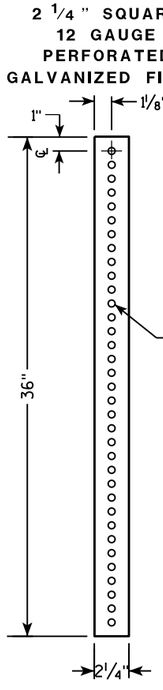
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

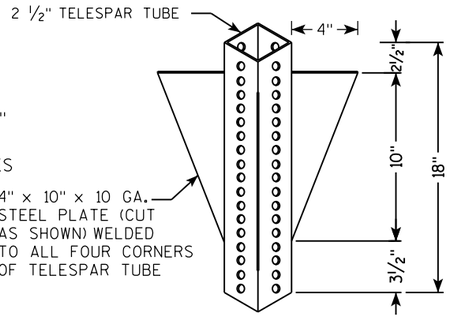
SHEET NO: 246 E

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

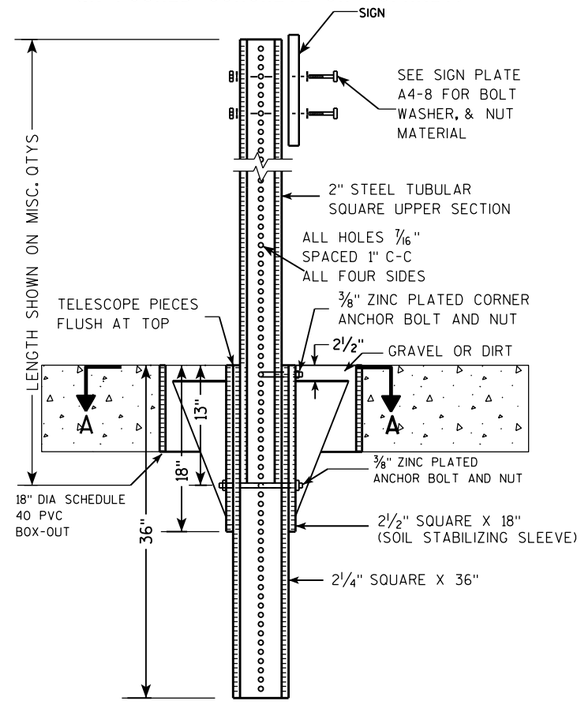
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



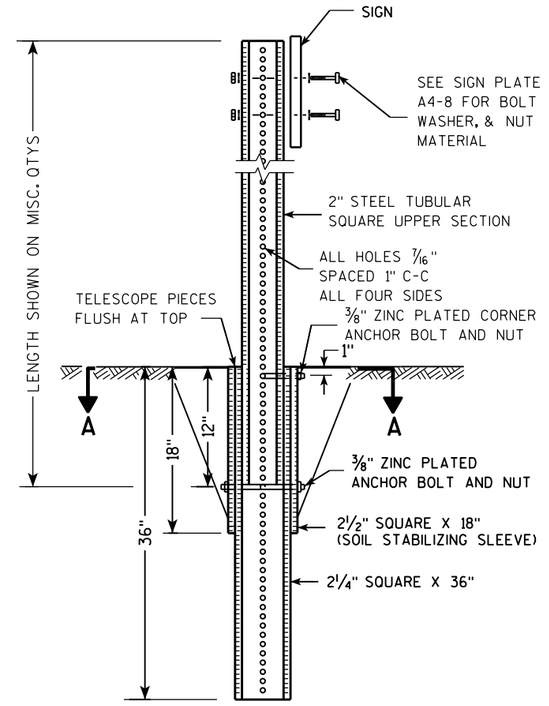

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

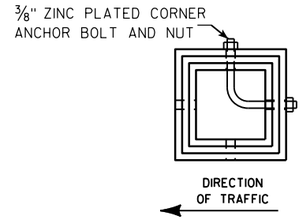



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

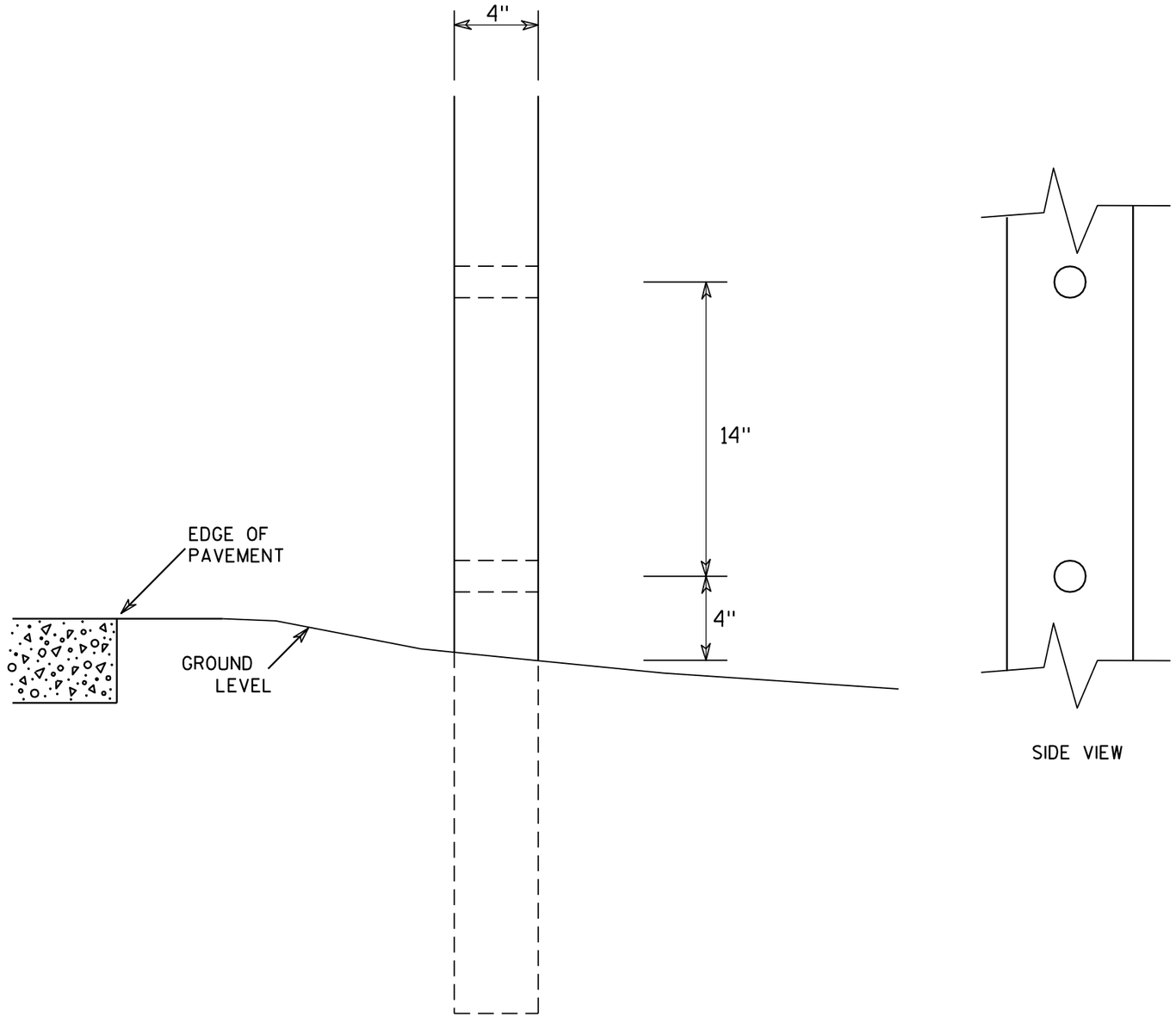
TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 247 A4-9.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|






SIDE VIEW

GENERAL NOTES

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

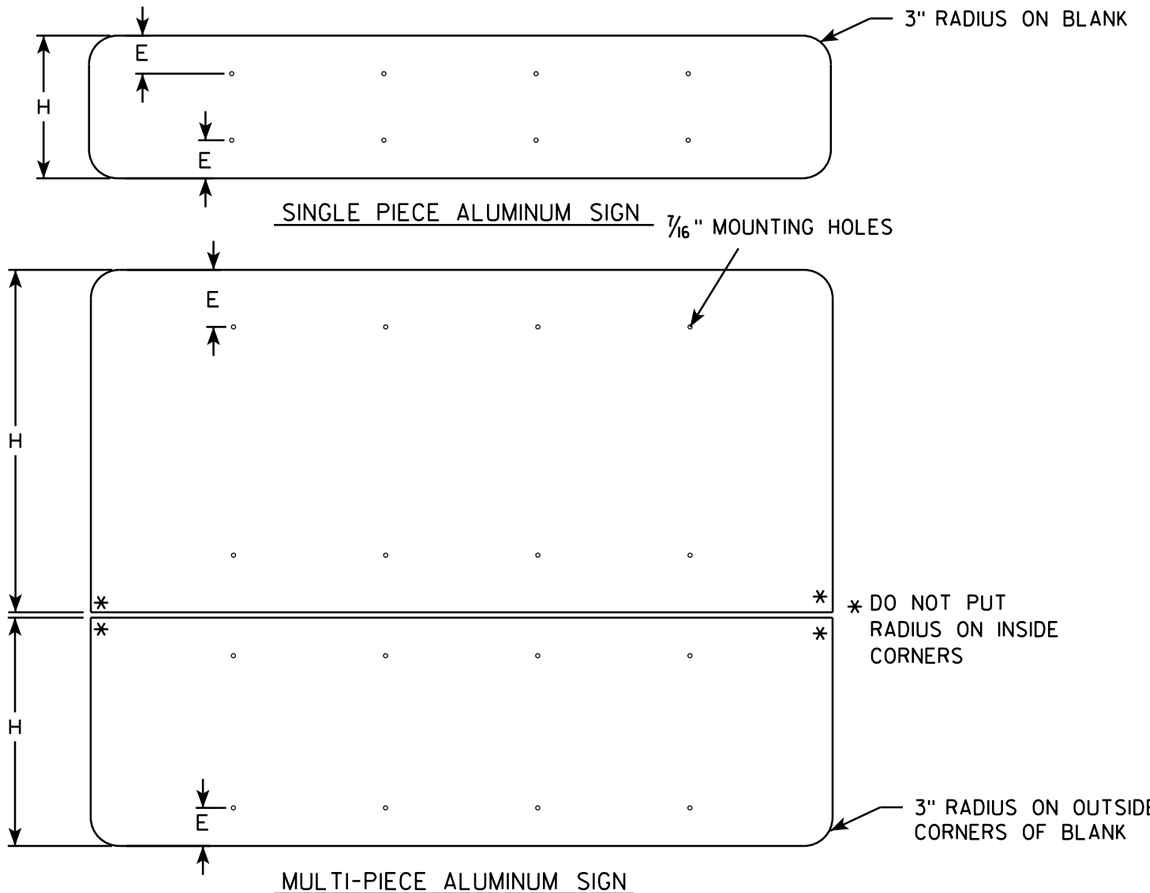
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

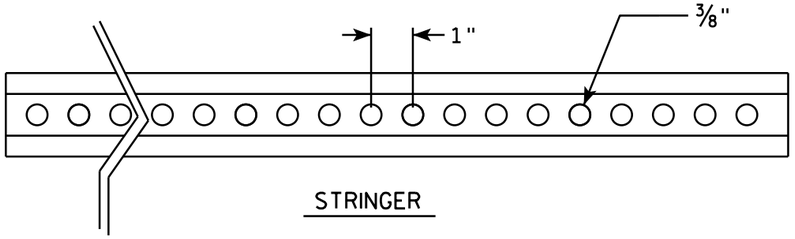
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 248 | E |
|---|---|---|---|---|---|




# GENERAL NOTES

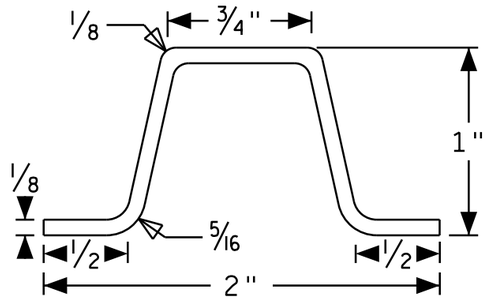
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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" | 16½" 33½" 50½" 67½" |
| 90" | 72" | 2 | 18" | 18" 36" 54" 72" |
| 96" | 90" | 2 | 19" | 19½" 38½" 57½" 76½" |
| 102" | 90" | 2 | 20" | 21" 41" 61" 81" |
| 108" | 90" | 2 | 21" | 22½" 43½" 64½" 85½" |
| 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" |

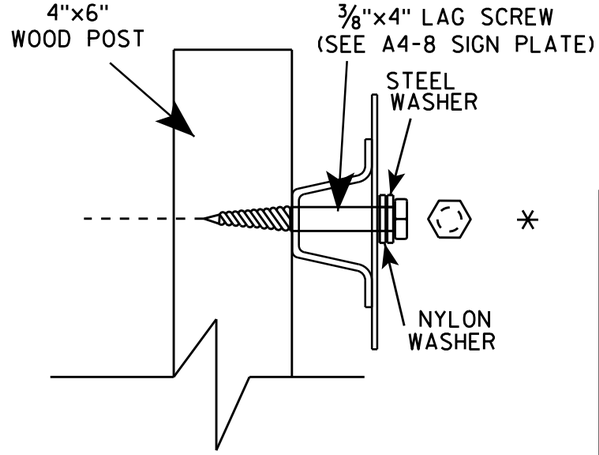



STRINGER

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

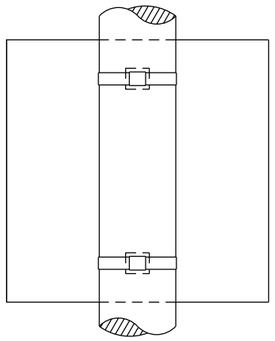
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

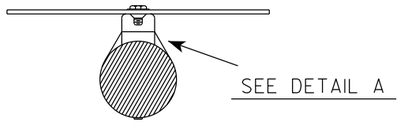


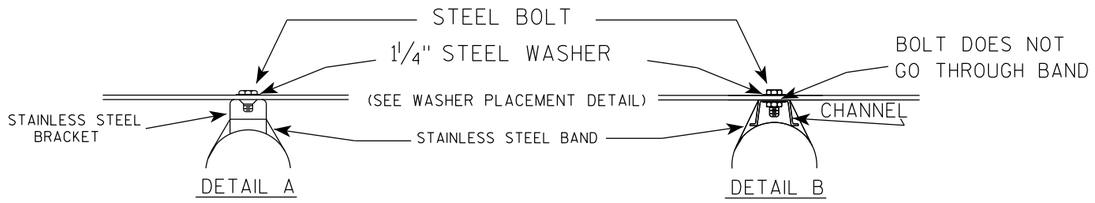
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

# BANDING

SINGLE SIGN



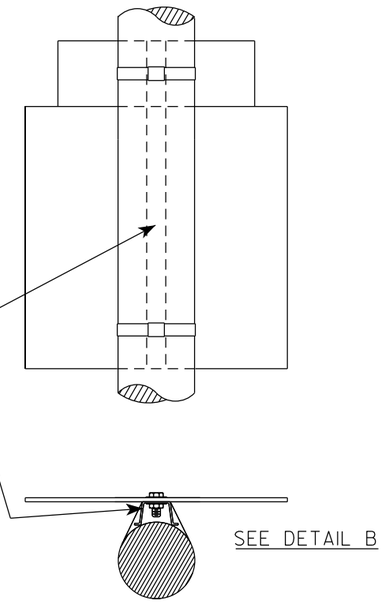


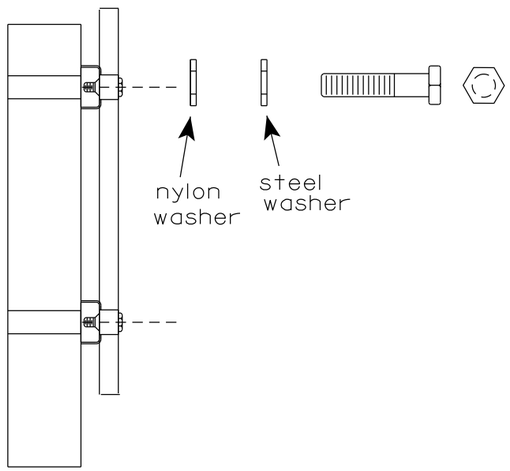

## GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
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




WASHER PLACEMENT




WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

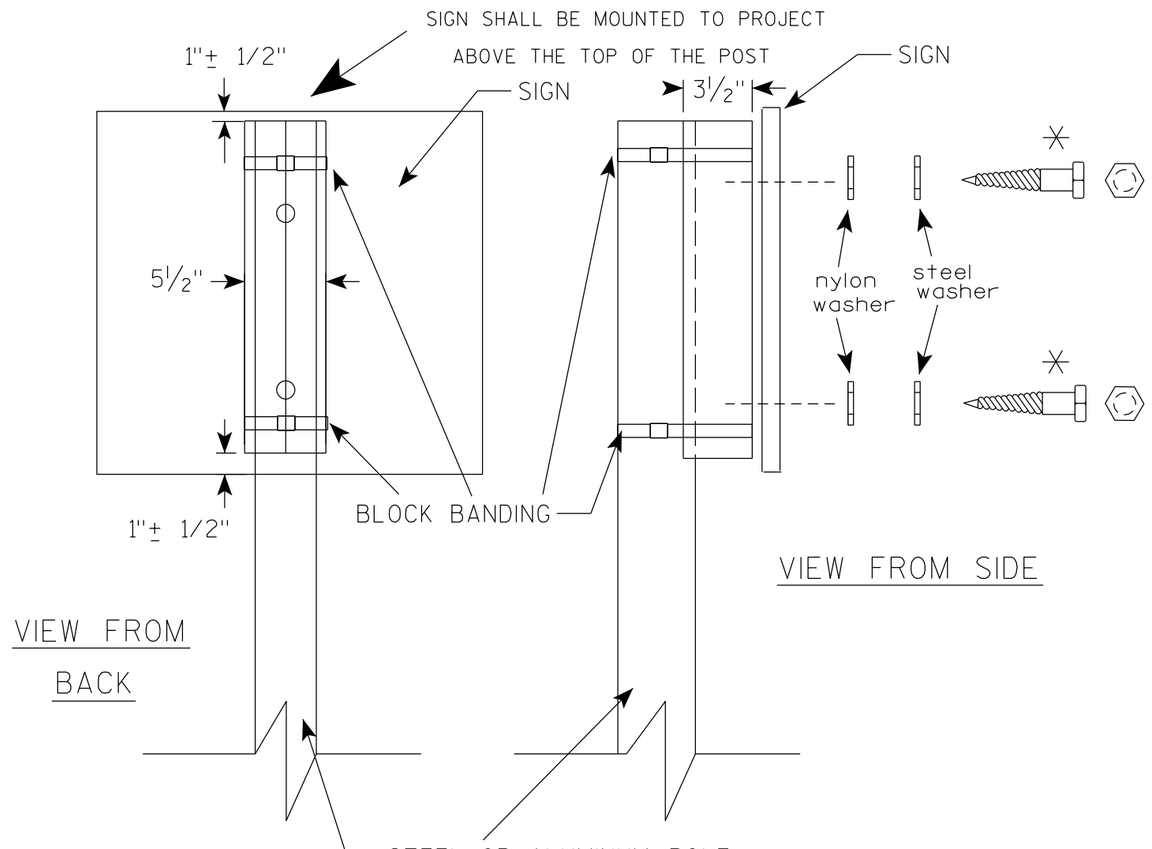
*WISCONSIN DEPT OF TRANSPORTATION*

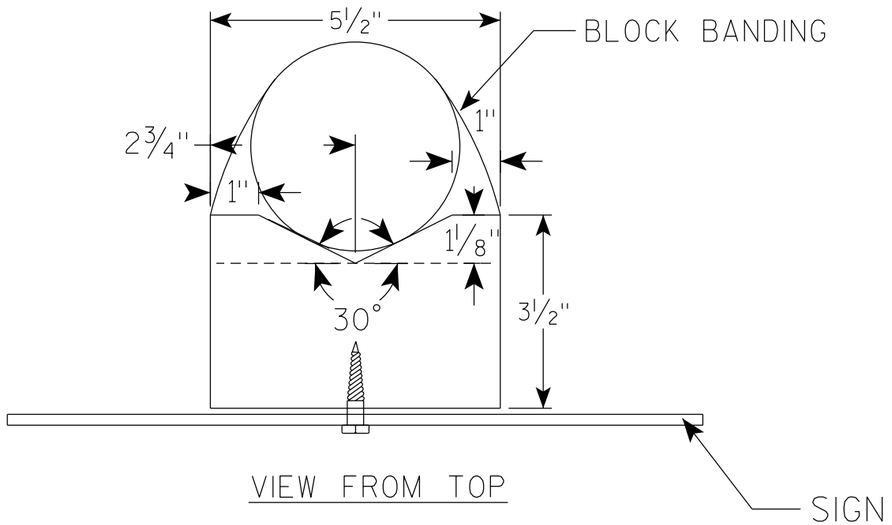
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 250 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$




## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   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 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

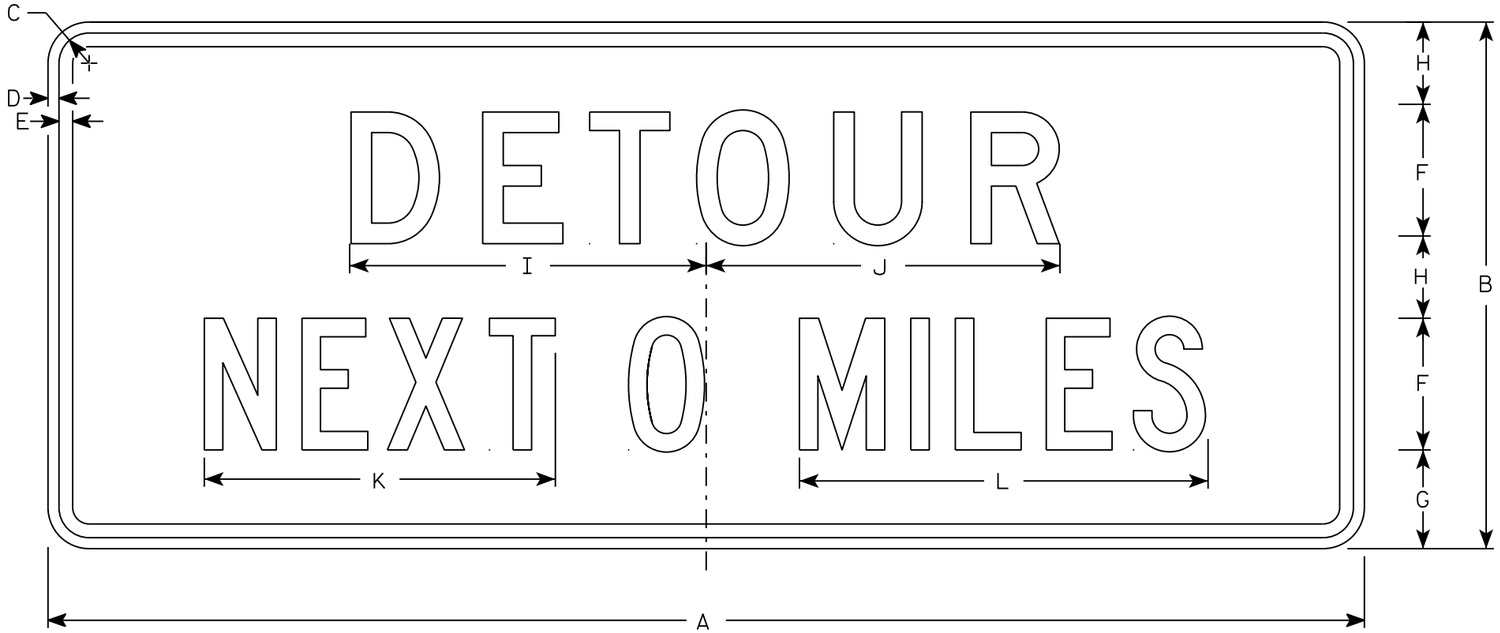
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 251 E




G20-51

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Line 1 is D and Line 2 is C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 16 1/4 | 16 1/8 | 16 | 18 5/8 | | | | | | | | | | | | | | | 10 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 16 1/4 | 16 1/8 | 16 | 18 5/8 | | | | | | | | | | | | | | | 10 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
G20-51

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

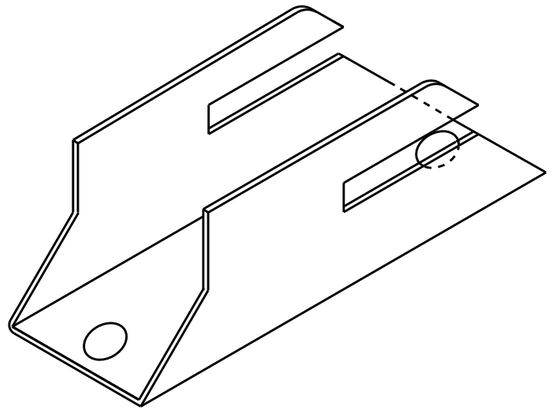
DATE 3/14/17 PLATE NO. G20-51.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E

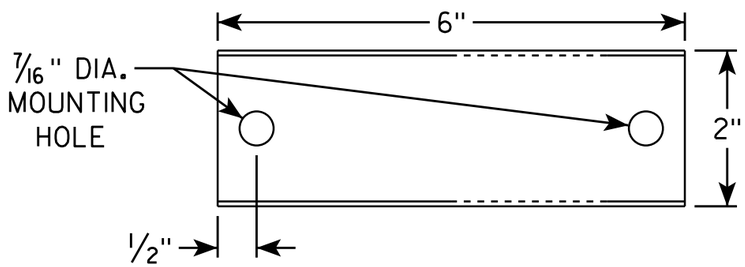
## NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

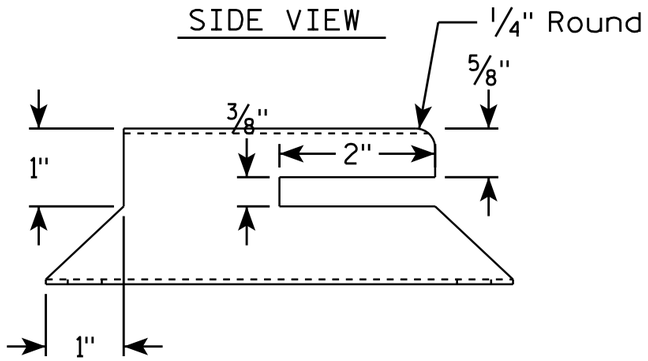
## ISOMETRIC VIEW



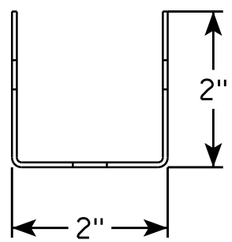
## TOP VIEW



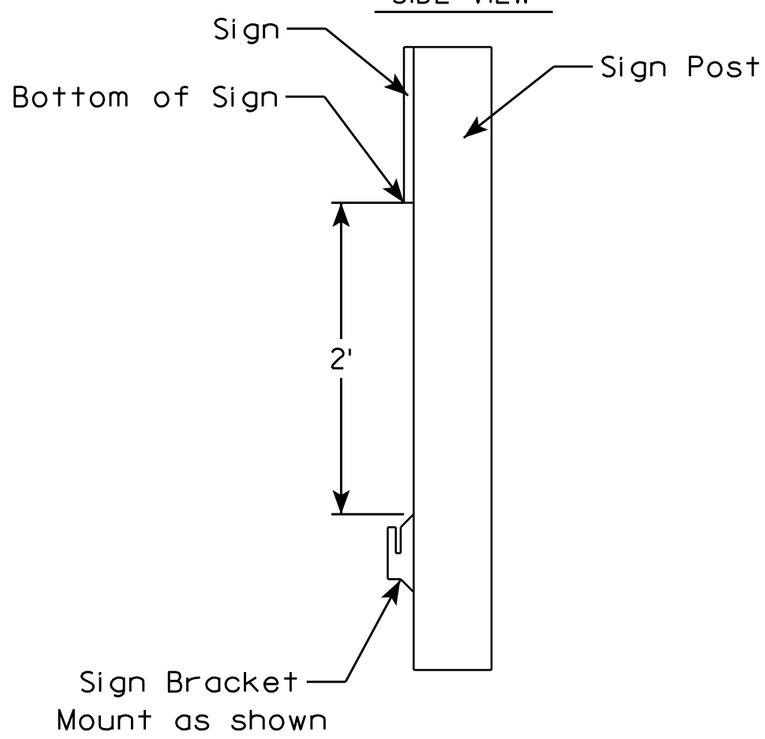

## SIDE VIEW




## END VIEW




## SIDE VIEW




ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

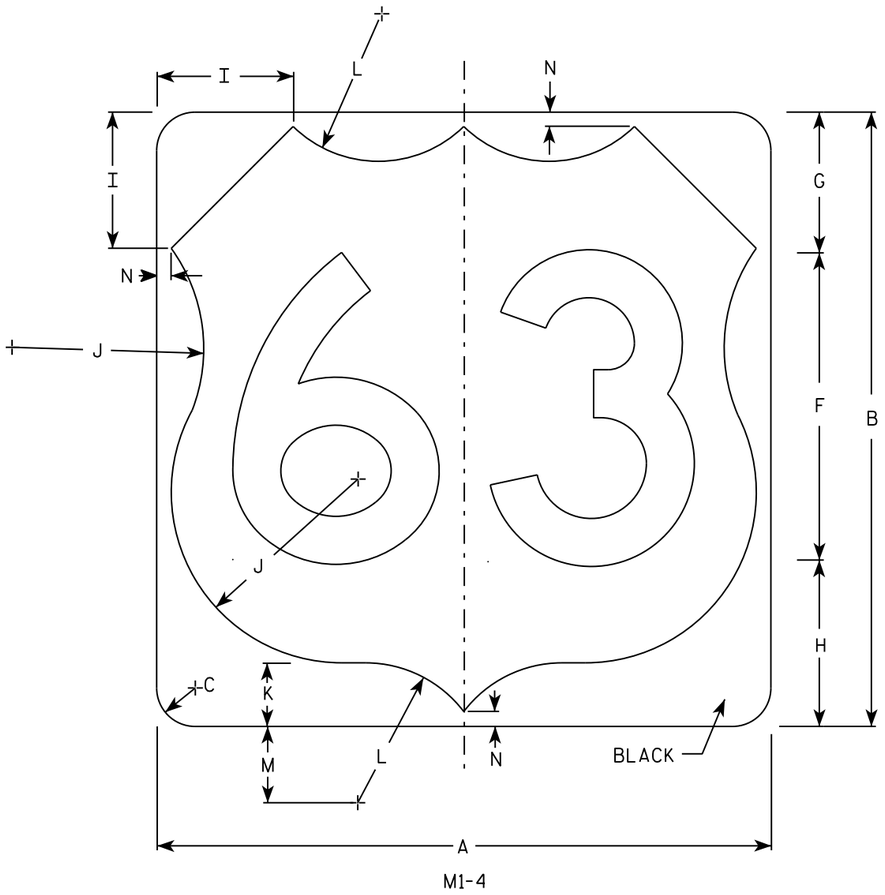
DATE 4/26/16 PLATE I55-56B.2



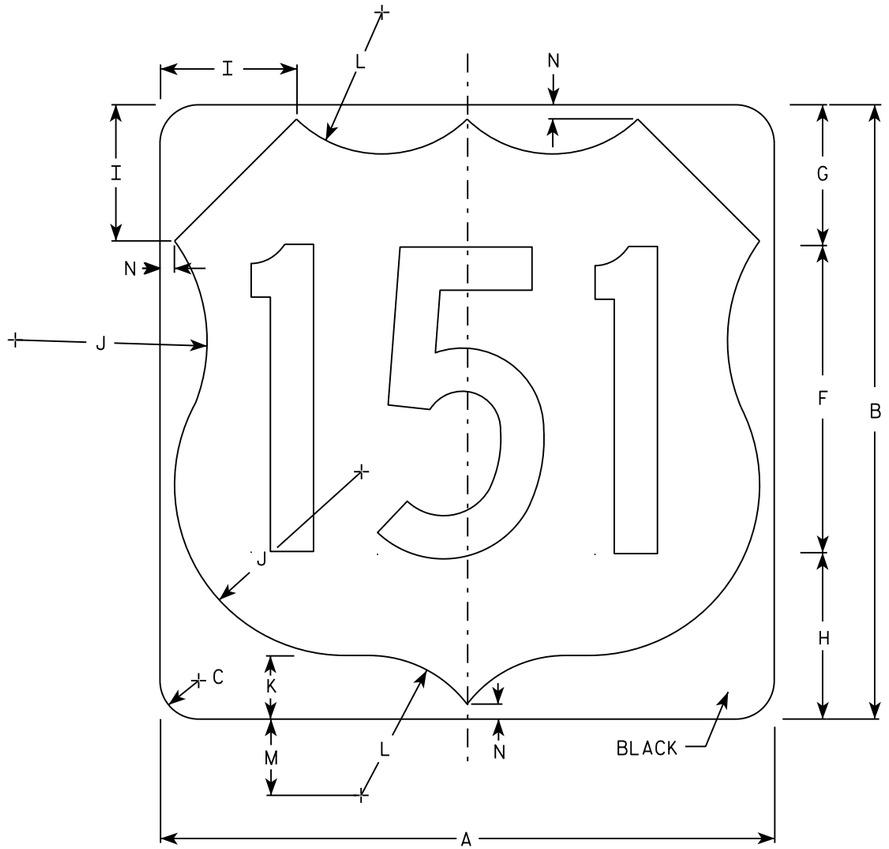
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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.




M1-4




M1-4

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

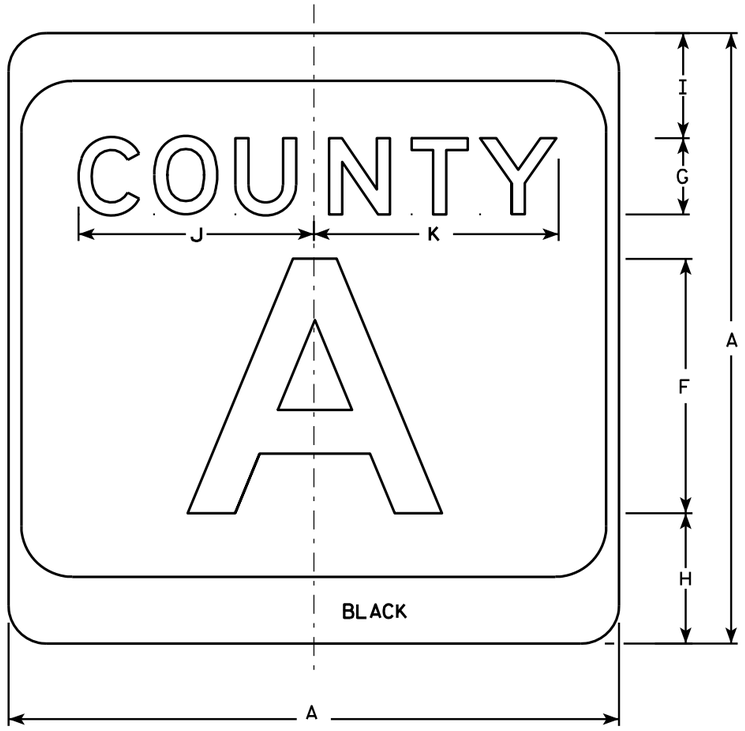
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

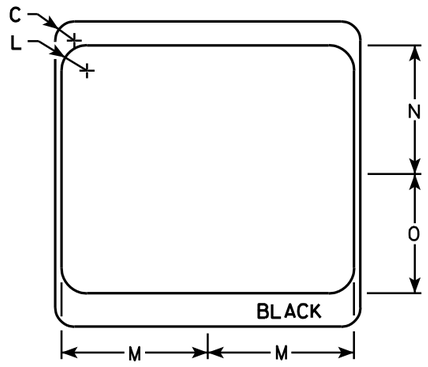
APPROVED Matthew R Rauch
for State Traffic Engineer

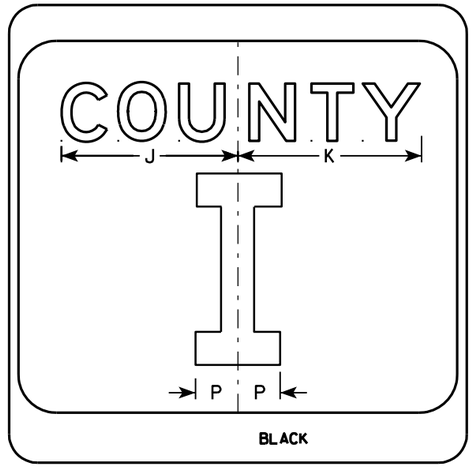
DATE 3/16/18 PLATE NO. M1-4.10

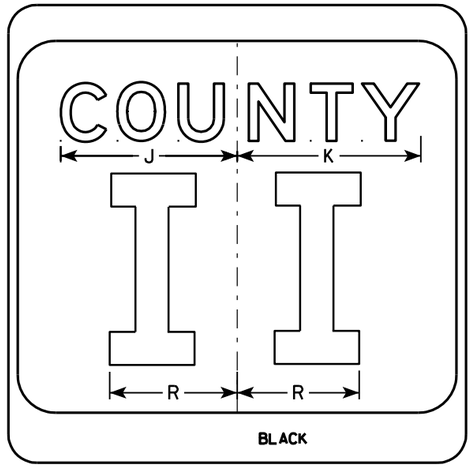
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 254 | E |
|---|---|---|---|---|---|




M1-5A




NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4 | 9 5/8 | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 | | 6 5/8 | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |

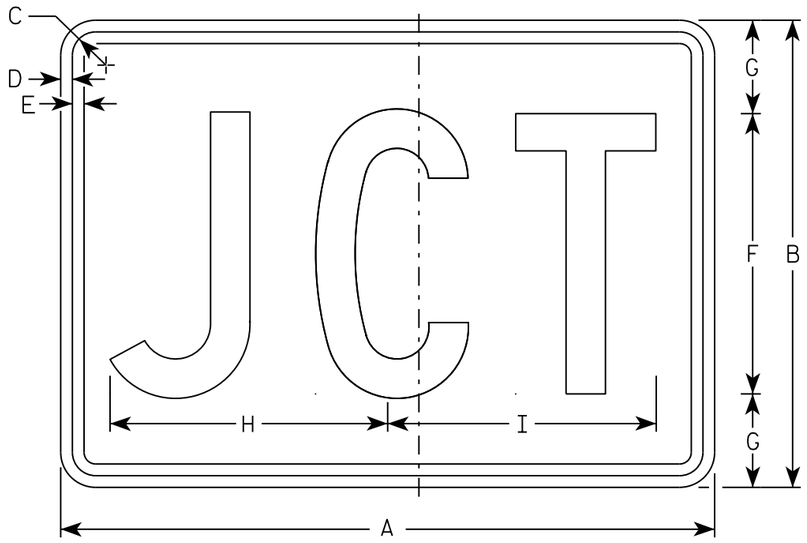
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

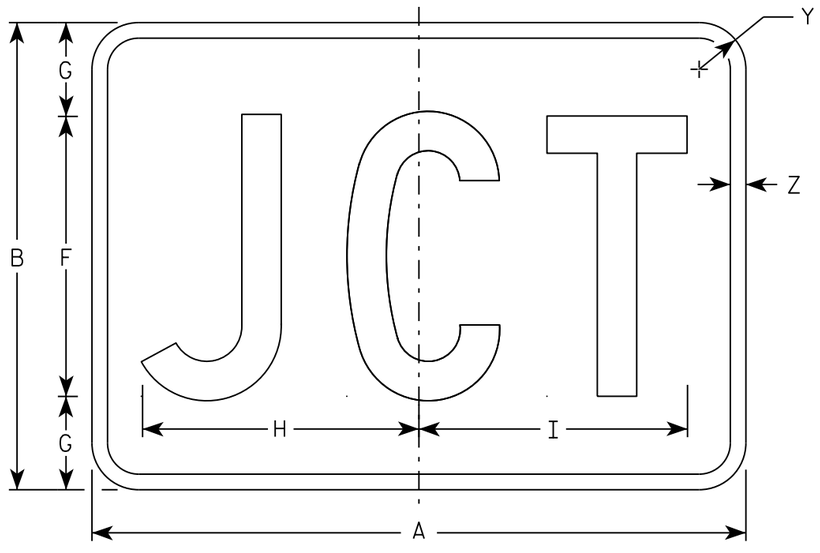
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 255 | E |
|---|---|---|---|---|---|




M2-1
MM2-1
MP2-1




MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is 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. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 15 | 1 1/8 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |

STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

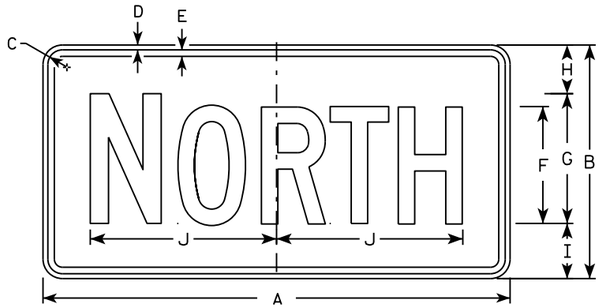
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 256 12-1.12

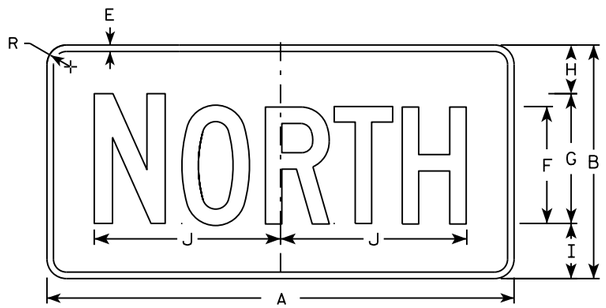
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000




M3-1
MM3-1
MP3-1



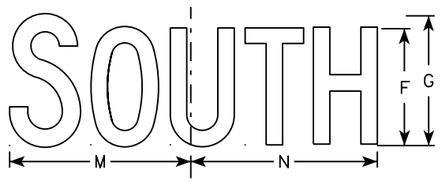

MB3-1
MK3-1
MN3-1



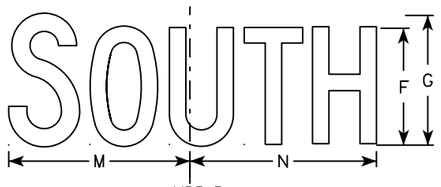

M3-2
MM3-2
MP3-2



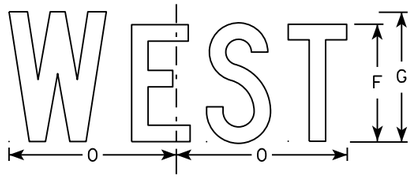

MB3-2
MK3-2
MN3-2



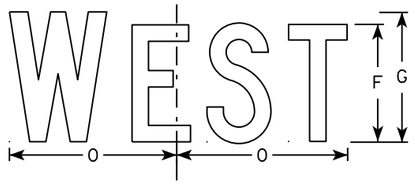

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

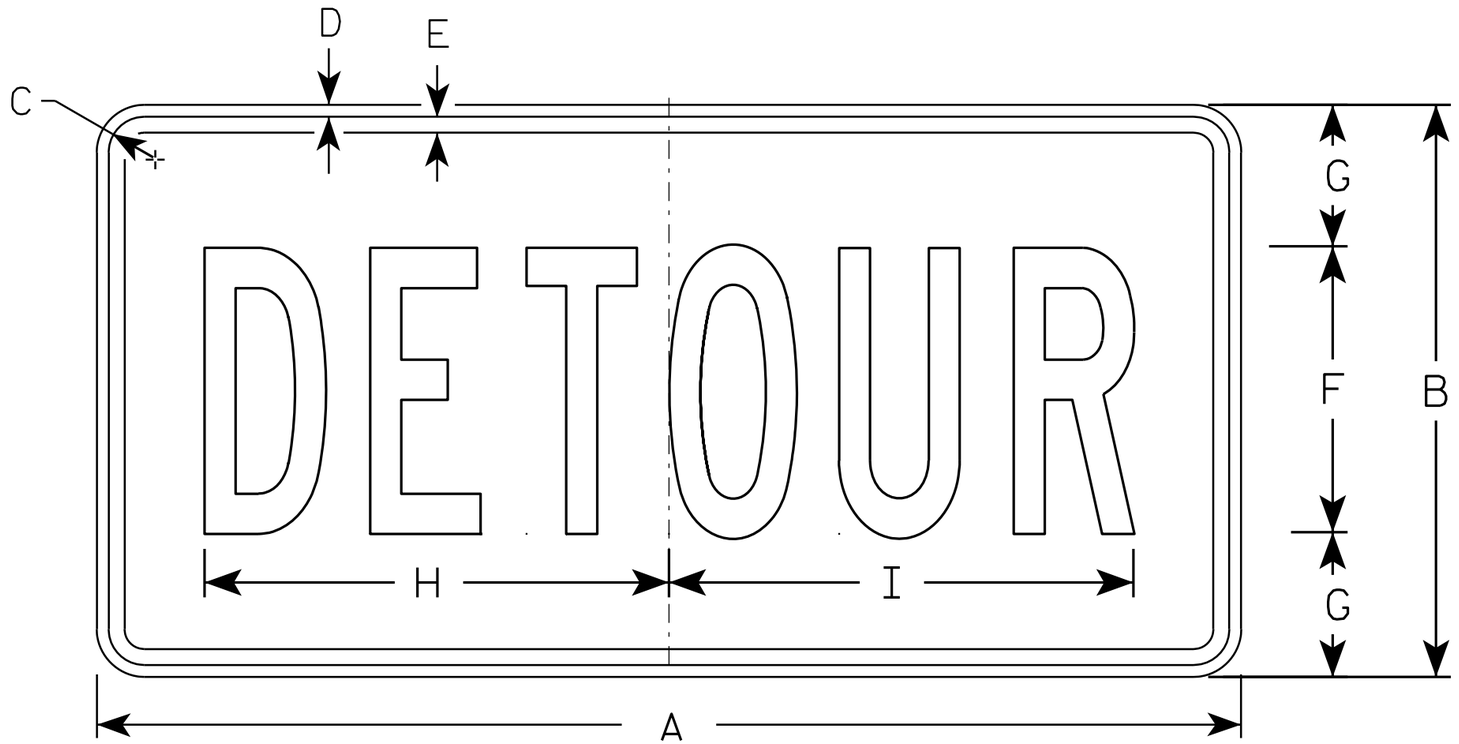
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




M4-8

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

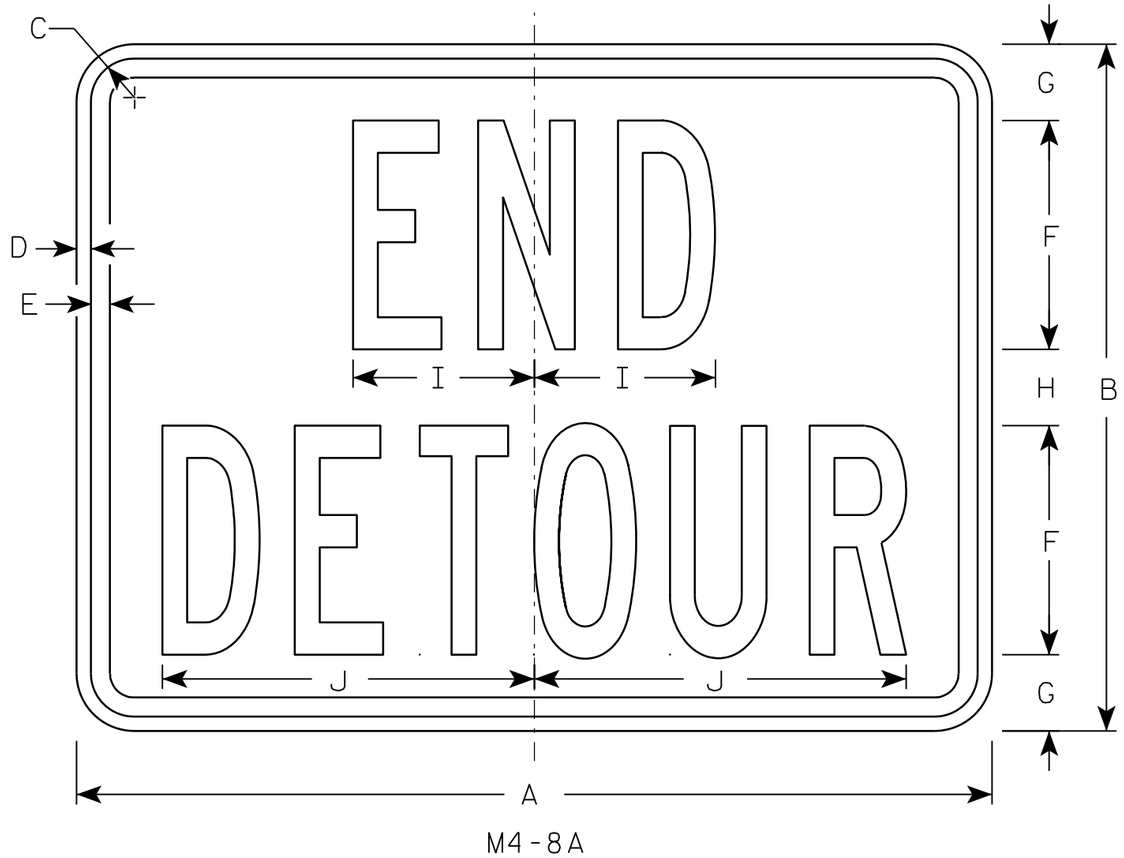
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 258 | E |
|---|---|---|---|---|---|

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48.DGN PLOT DATE : 10-NOV-2010 13:18 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.767233:1.000000

WISDOT/CADDS SHEET 42

7

7




M4-8A

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/8 | 3/8 | 1/2 | 6 | 2 | 2 | 4 3/4 | 9 3/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 8 | 2 1/2 | 3 | 6 3/4 | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

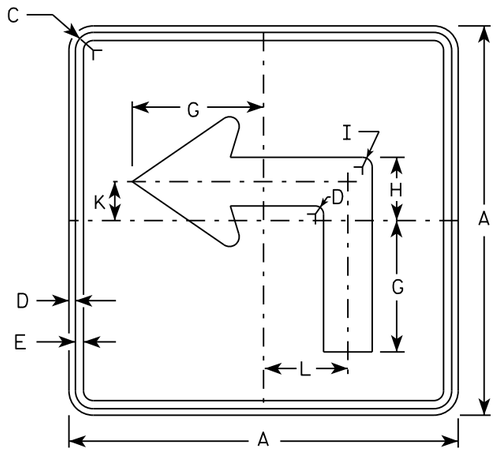
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

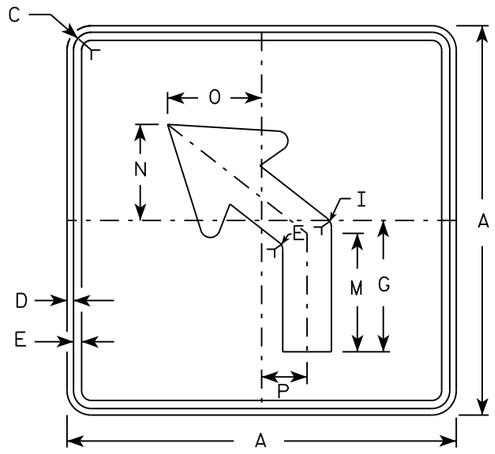
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

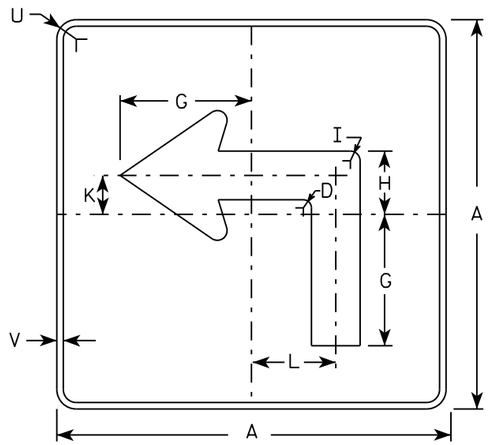
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 259 | E |
|---|---|---|---|---|---|



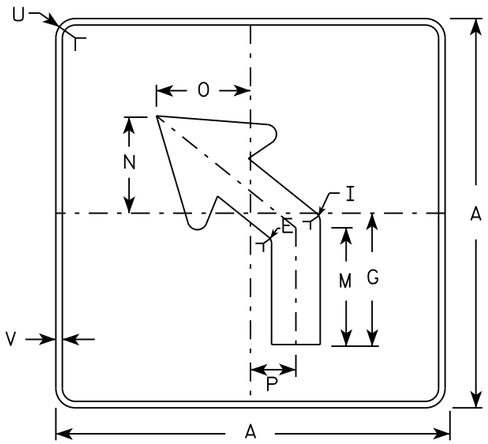

M5-1L
MM5-1L
MO5-1L
MP5-1L



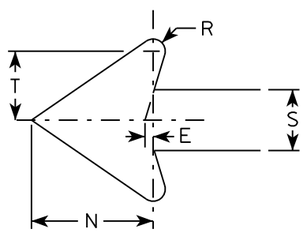

M5-2L
MM5-2L
MO5-2L
MP5-2L




MB5-1L
MK5-1L
MN5-1L
MR5-1L




MB5-2L
MK5-2L
MN5-2L
MR5-2L




NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

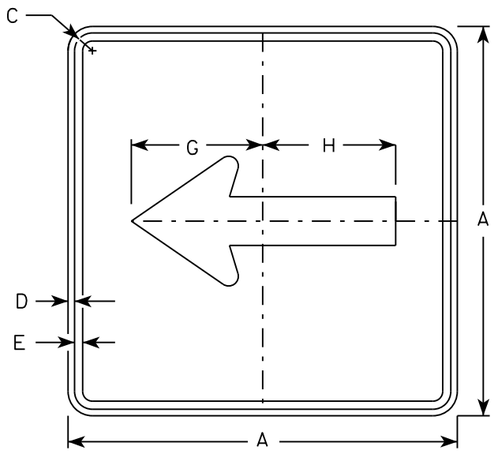
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

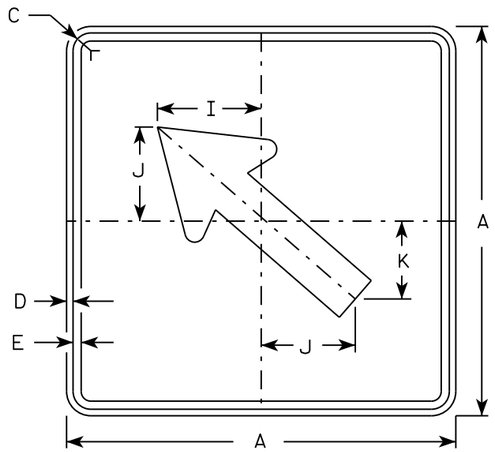


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



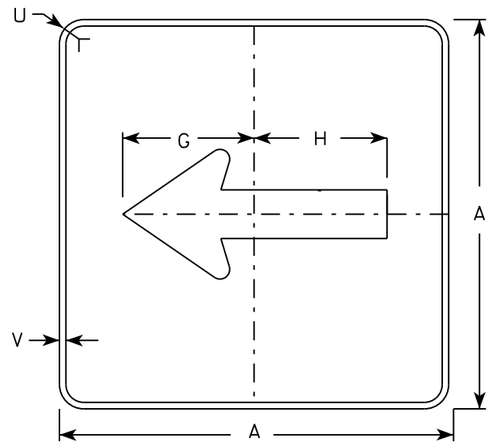

M6-1
MM6-1
MO6-1
MP6-1



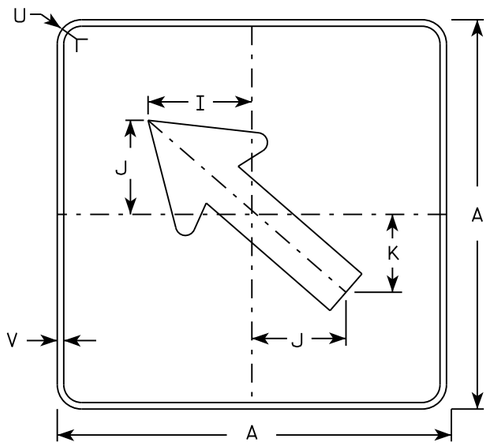

M6-2
MM6-2
MO6-2
MP6-2

NOTES

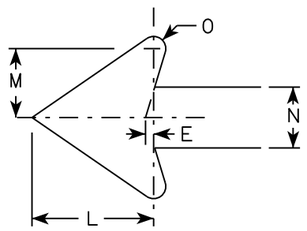
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow




MB6-1
MK6-1
MN6-1
MR6-1




MB6-2
MK6-2
MN6-2
MR6-2




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

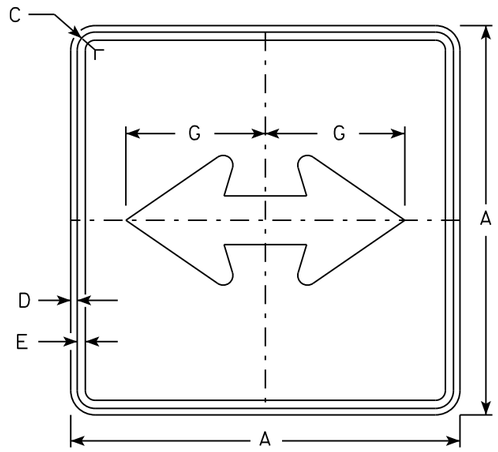
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLAT 261 M6-1.15

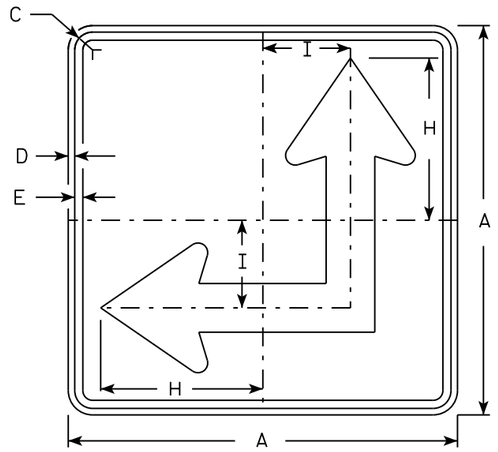
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



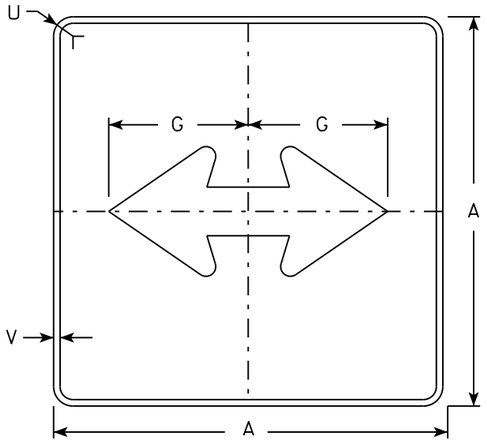

M6-4
MM6-4
MO6-4
MP6-4



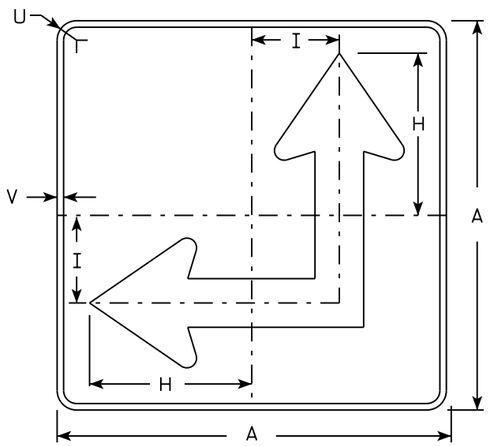

M6-6
MM6-6
MO6-6
MP6-6

NOTES

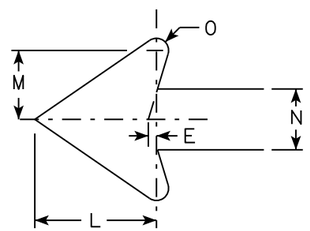
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.




MB6-4
MK6-4
MN6-4
MR6-4




MB6-6
MK6-6
MN6-6
MR6-6




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

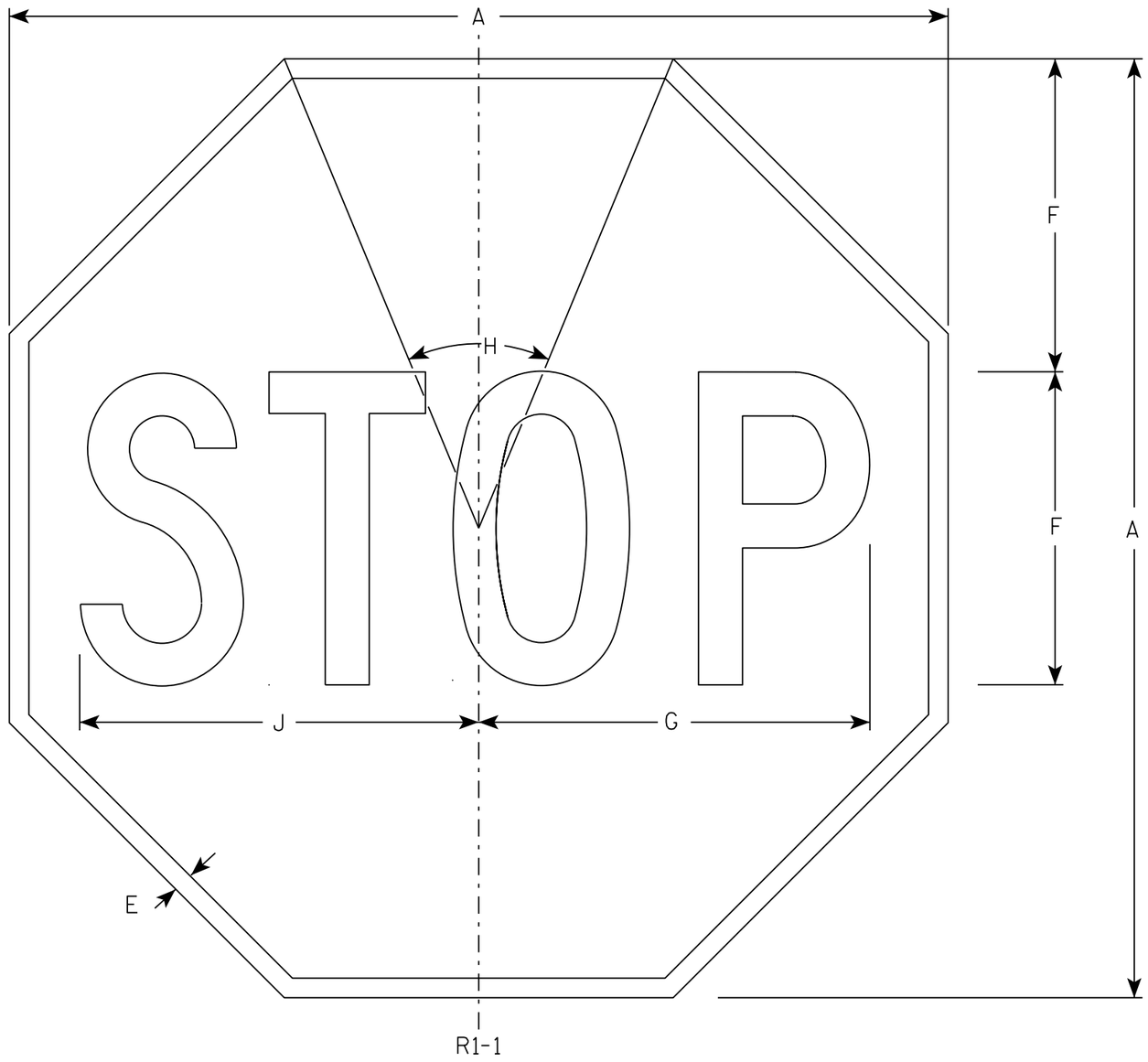
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 262 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 4 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 5 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 6 | 18 | | | | 3/8 | 6 | 7 3/4 | 45° | | 7 3/4 | | | | | | | | | | | | | | | | | 1.86 |
| 7 | 12 | | | | 1/4 | 4 | 5 | 45° | | 5 1/8 | | | | | | | | | | | | | | | | | 0.78 |

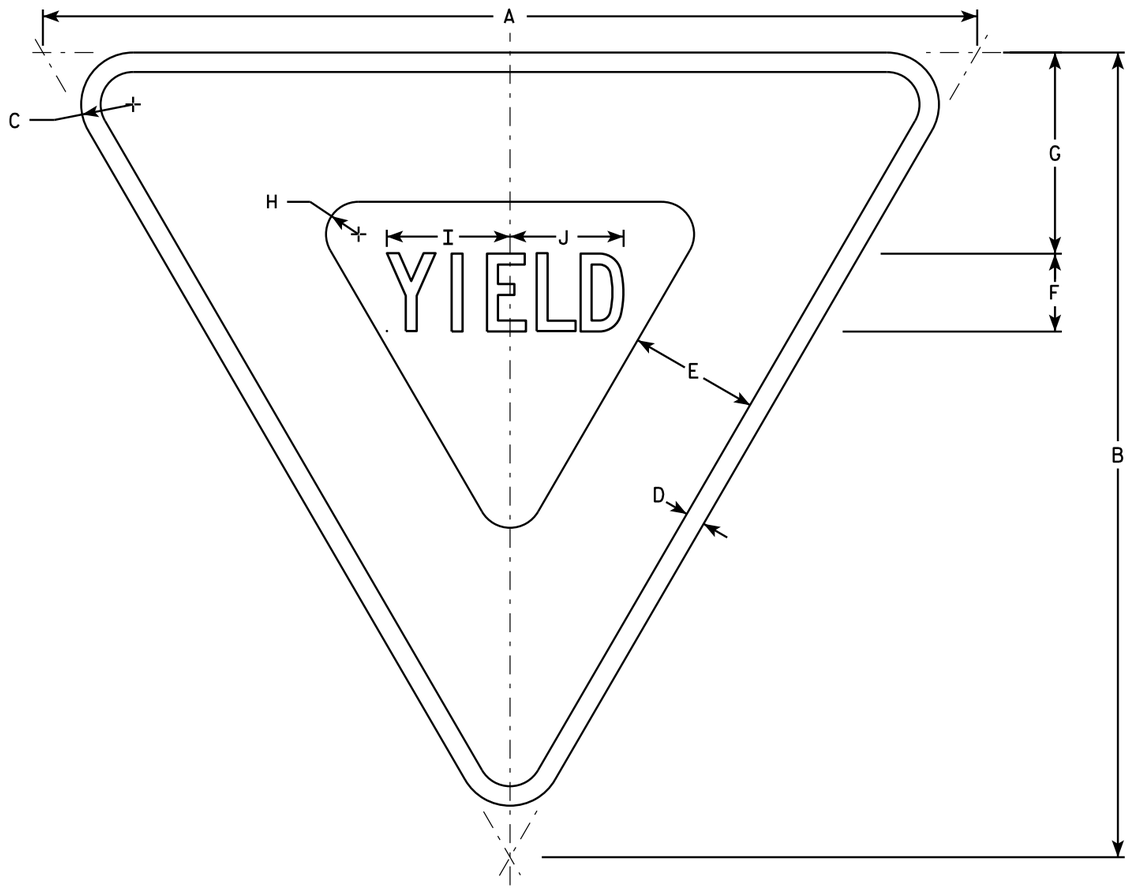
# STANDARD SIGN
# R1-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 263 | E |
|---|---|---|---|---|---|




R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 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. The border strip and word message are reflectorized red.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 26 | 1 1/2 | 5/8 | 4 | 2 1/2 | 6 3/8 | 7/8 | 4 | 3 5/8 | | | | | | | | | | | | | | | | | 2.71 |
| 2S | 36 | 31 | 2 | 3/4 | 5 | 3 | 7 3/4 | 1 1/4 | 4 3/4 | 4 3/8 | | | | | | | | | | | | | | | | | 3.88 |
| 2M | 48 | 42 | 3 | 1 | 6 | 4 | 9 3/4 | 2 | 6 1/4 | 5 7/8 | | | | | | | | | | | | | | | | | 7.00 |
| 3 | 48 | 42 | 3 | 1 | 6 | 4 | 9 3/4 | 2 | 6 1/4 | 5 7/8 | | | | | | | | | | | | | | | | | 7.00 |
| 4 | 48 | 42 | 3 | 1 | 6 | 4 | 9 3/4 | 2 | 6 1/4 | 5 7/8 | | | | | | | | | | | | | | | | | 7.00 |
| 5 | 60 | 52 | 3 | 1 1/2 | 8 | 5 | 13 | 2 1/2 | 7 7/8 | 7 1/4 | | | | | | | | | | | | | | | | | 10.83 |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 18 | 15 1/2 | 1 | 3/8 | 2 1/2 | 1 1/2 | 3 7/8 | 5/8 | 2 3/8 | 2 1/4 | | | | | | | | | | | | | | | | | 0.97 |

STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

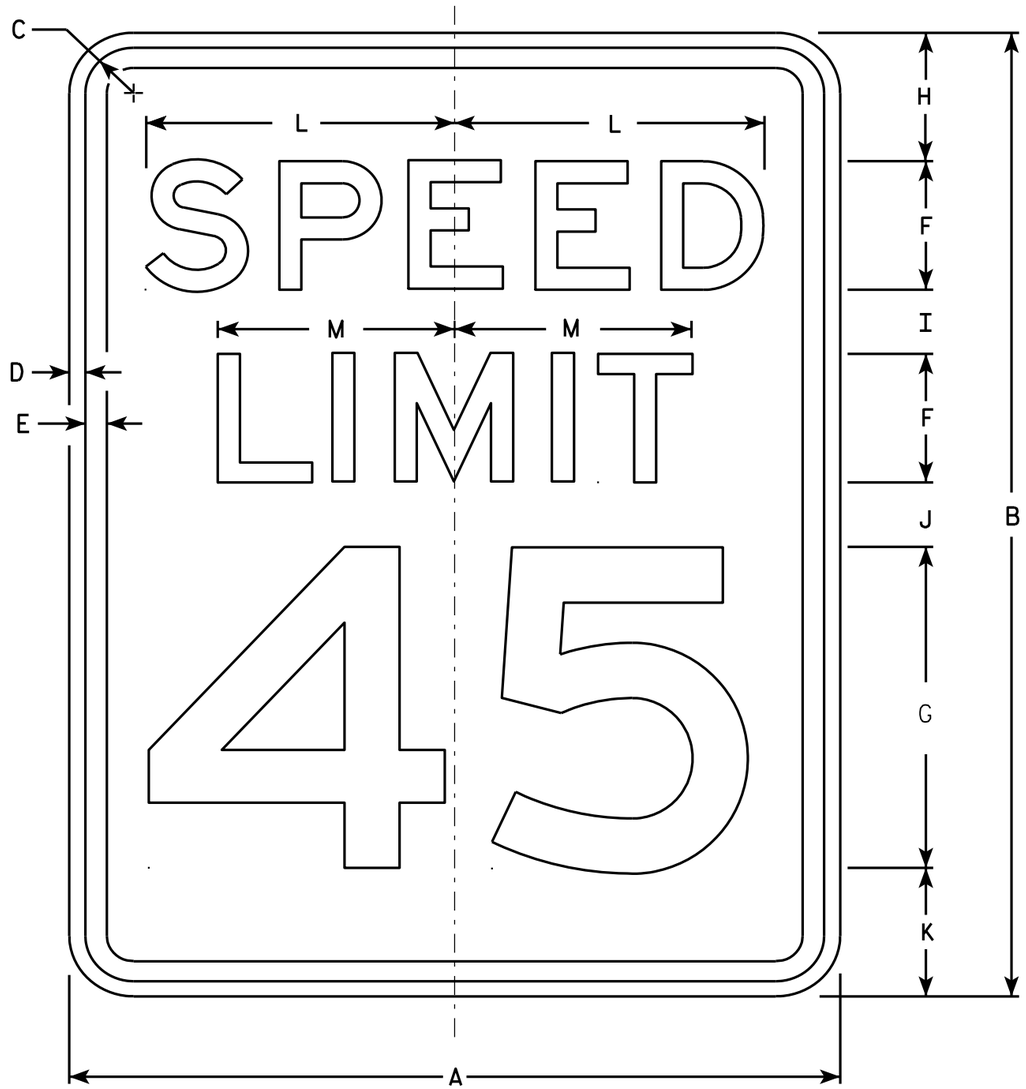
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42




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 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 |

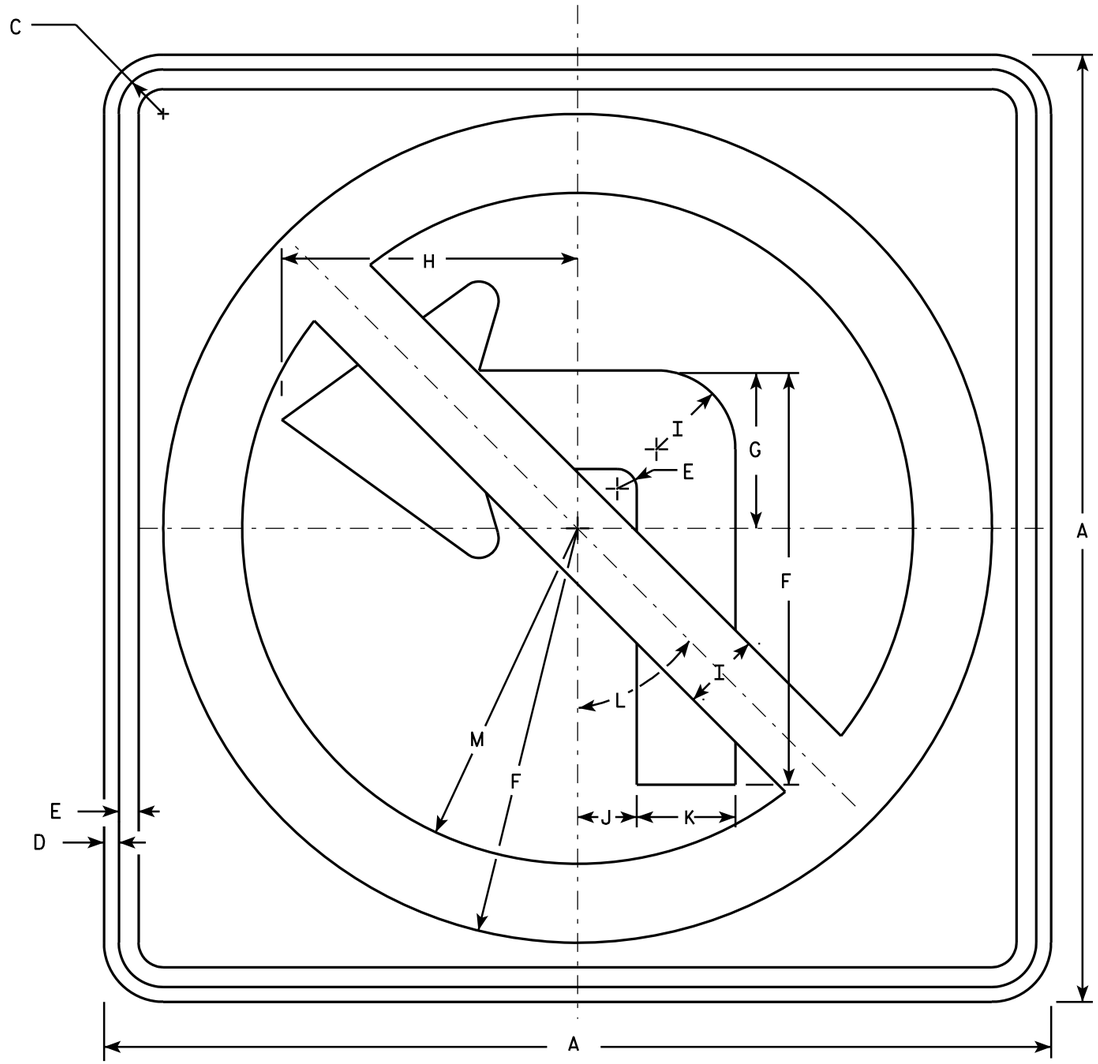
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

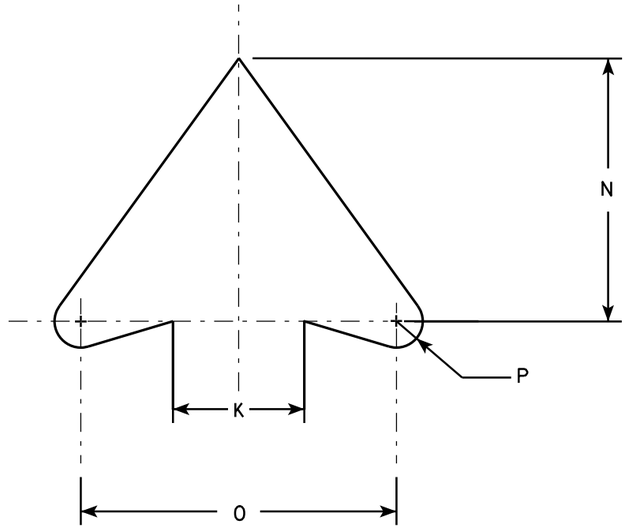
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 265 | E |
|---|---|---|---|---|---|




R3-2

NOTES

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




ARROW DETAIL

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

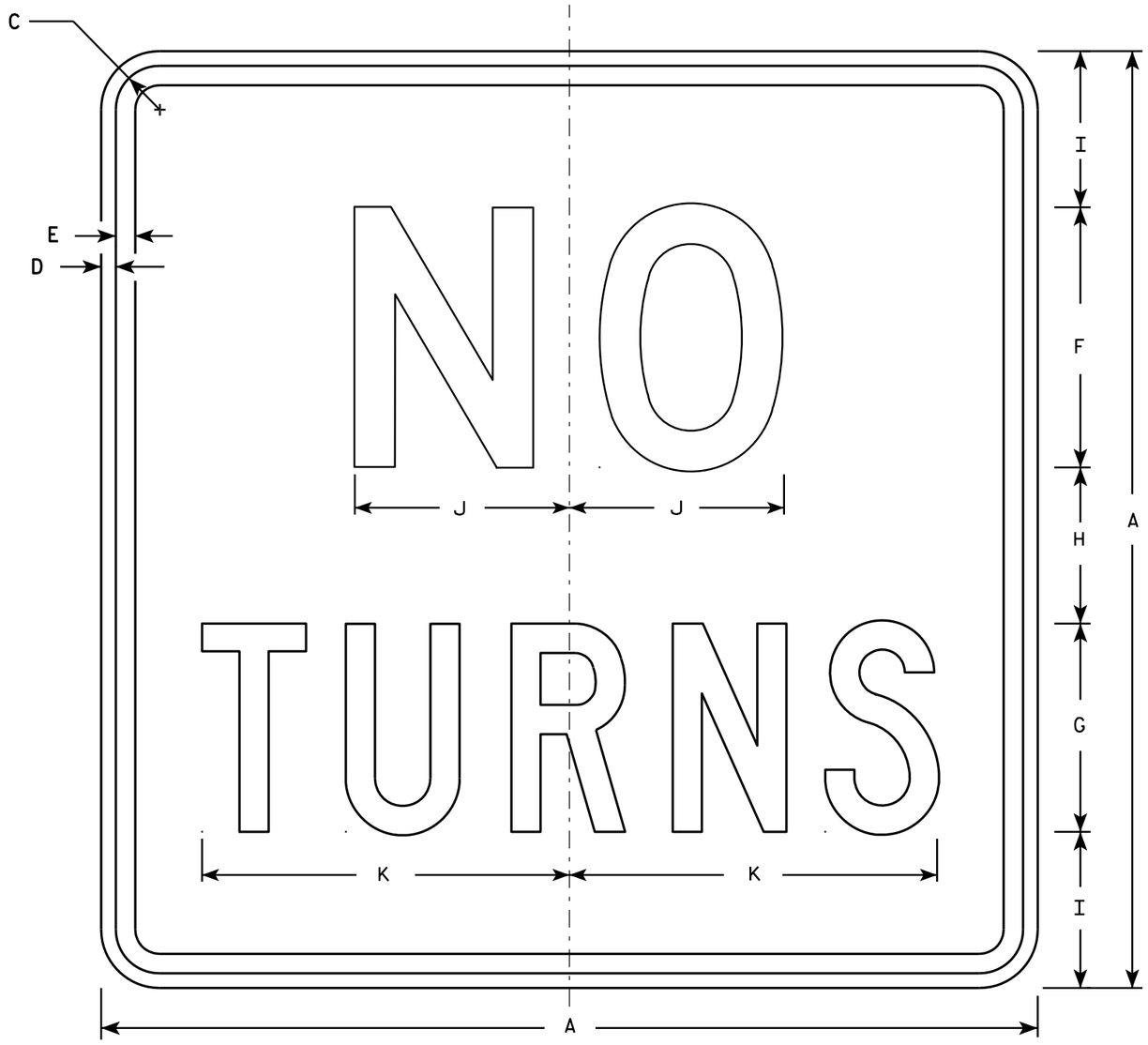
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 266 | E |
|---|---|---|---|---|---|




R3-3

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 - 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. Line 1 is Series D and Line 2 is Series C.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 6 | 5 | 4 | 4 1/2 | 5 1/8 | 8 3/4 | | | | | | | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 10 | 8 | 6 | 6 | 8 1/4 | 14 1/8 | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 10 | 8 | 6 | 6 | 8 1/4 | 14 1/8 | | | | | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 10 | 8 | 6 | 6 | 8 1/4 | 14 1/8 | | | | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 12 | 10 | 8 | 9 | 10 1/4 | 17 5/8 | | | | | | | | | | | | | | | | 16.0 |

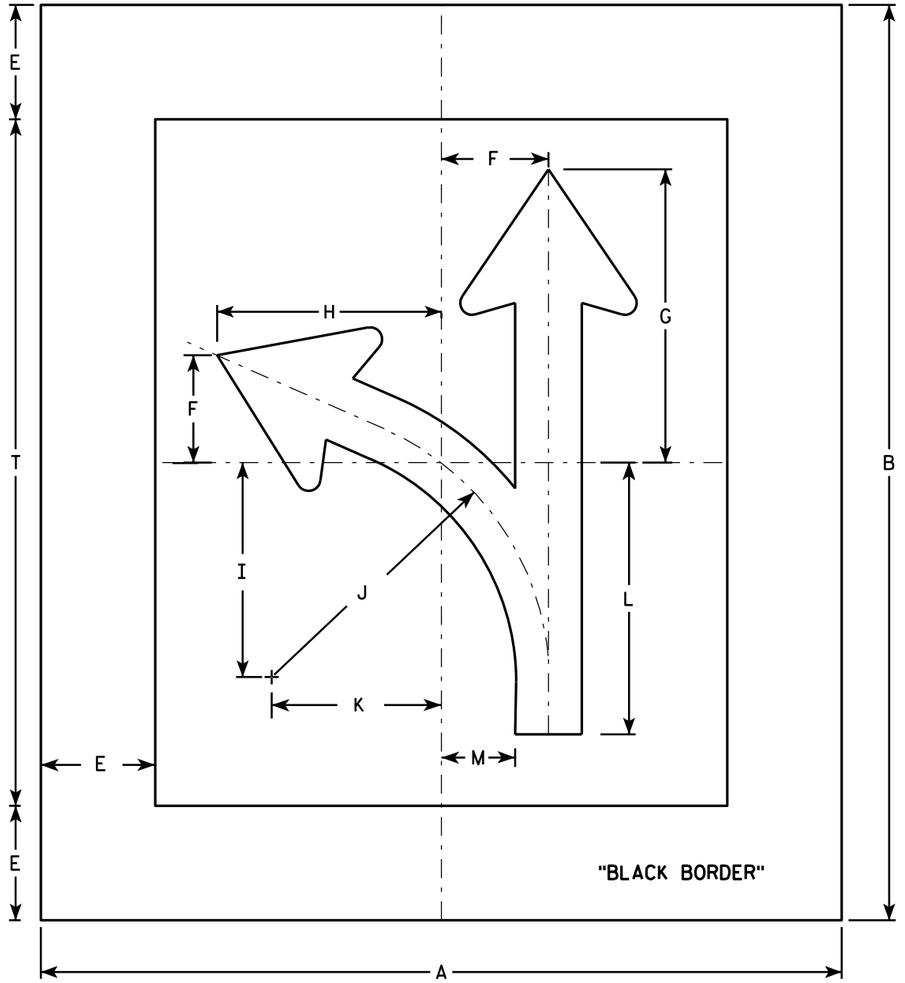
STANDARD SIGN
R3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-3.10

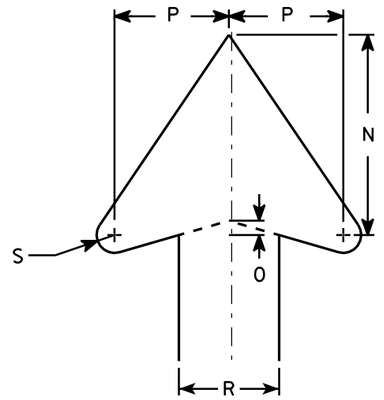
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 267 | E




R3-6L

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. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. R3-6R is the same as R3-6L except curved portion of arrow points right.
5. The 6" border is non-reflective black.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | | 3 1/2 | 5/8 | 36 | | | | | | | 14.0 |
| 2M | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | | 3 1/2 | 5/8 | 36 | | | | | | | 14.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# STANDARD SIGN
# R3-6

WISCONSIN DEPT OF TRANSPORTATION

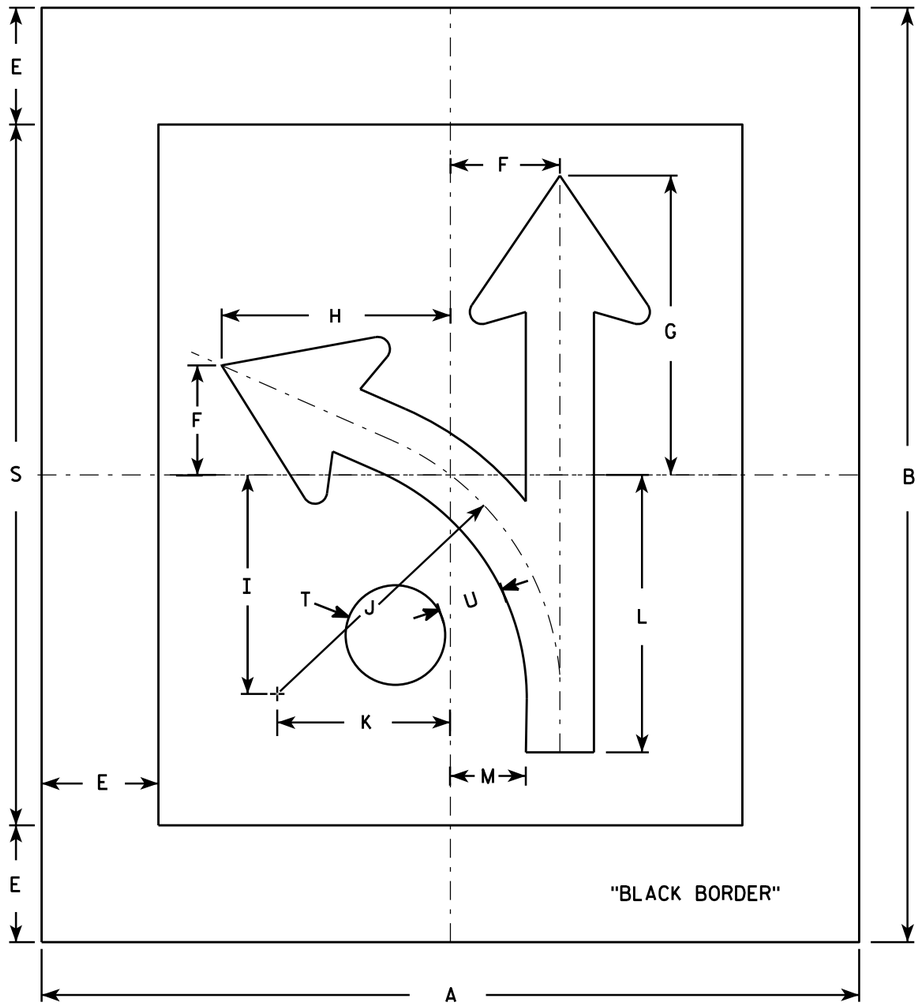
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-6.5

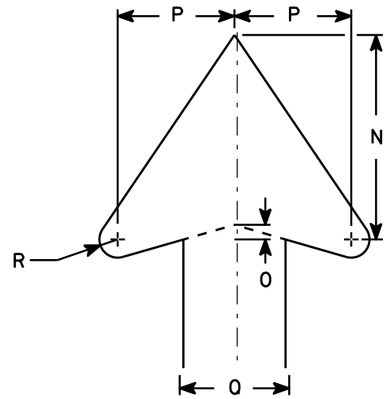
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 268 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. The 6" border is non-reflective black.




R3-6X




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | 3 1/2 | 5/8 | 36 | 5 | 3 1/2 | | | | | | 14.0 |
| 2M | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | 3 1/2 | 5/8 | 36 | 5 | 3 1/2 | | | | | | 14.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-6X

WISCONSIN DEPT OF TRANSPORTATION

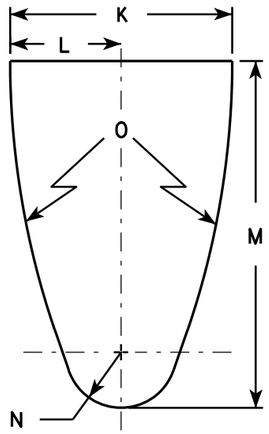
APPROVED Matthew R Rauch
for State Traffic Engineer

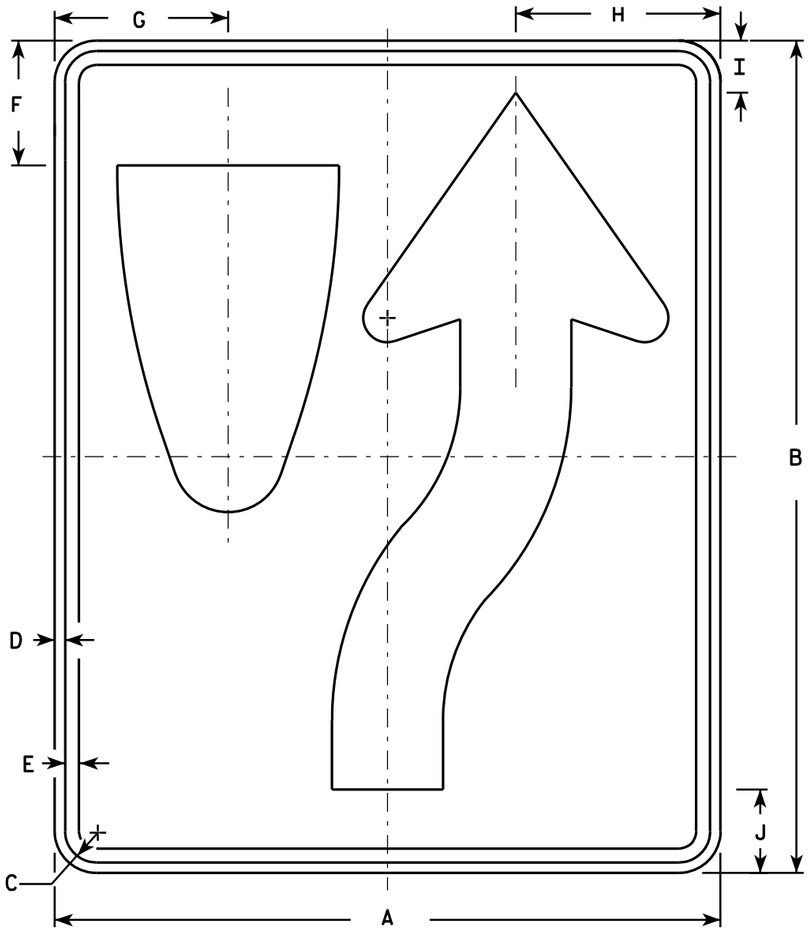
DATE 2/05/15 PLATE ... P3-6X.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R36X.DGN PLOT DATE : 05-FEB-2015 14:49 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000 WISDOT/CADDS SHEET 42

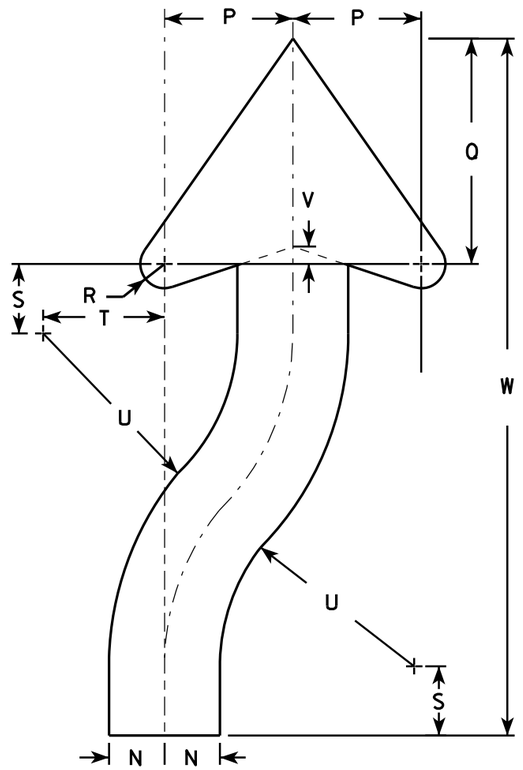



R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 3/8 | 4 3/4 | 5 1/2 | 1 3/8 | 2 1/4 | 6 | 3 | 9 3/8 | 1 1/2 | 22 1/2 | 3 1/2 | 6 1/8 | 5/8 | 1 7/8 | 3 1/4 | 6 3/4 | 1/2 | 20 3/8 | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 3 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 4 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 9 | 12 1/2 | 14 3/4 | 3 3/4 | 6 | 16 | 8 | 25 | 4 | 60 | 9 1/4 | 16 1/4 | 1 5/8 | 5 | 8 3/4 | 18 | 1 1/4 | 50 1/4 | | | | 20.0 |

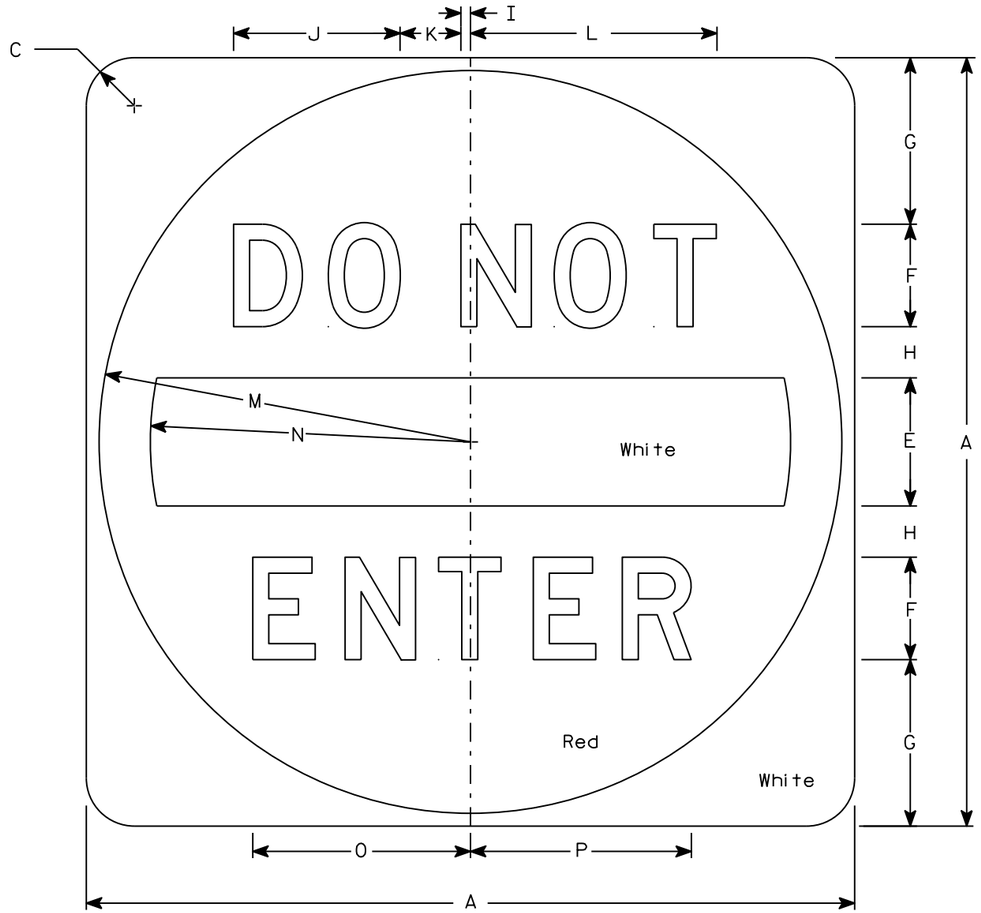
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 270 | E |
|---|---|---|---|---|---|




R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 7/8 | | 5 | 4 | 6 1/2 | 2 | 3/8 | 6 1/2 | 2 3/8 | 9 5/8 | 14 1/2 | 12 1/2 | 8 1/2 | 8 5/8 | | | | | | | | | | | 6.25 |
| 2M | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | | 8 | 6 | 11 | 3 | 5/8 | 9 3/4 | 3 5/8 | 14 1/2 | 23 1/2 | 20 | 12 3/4 | 12 7/8 | | | | | | | | | | | 16.0 |

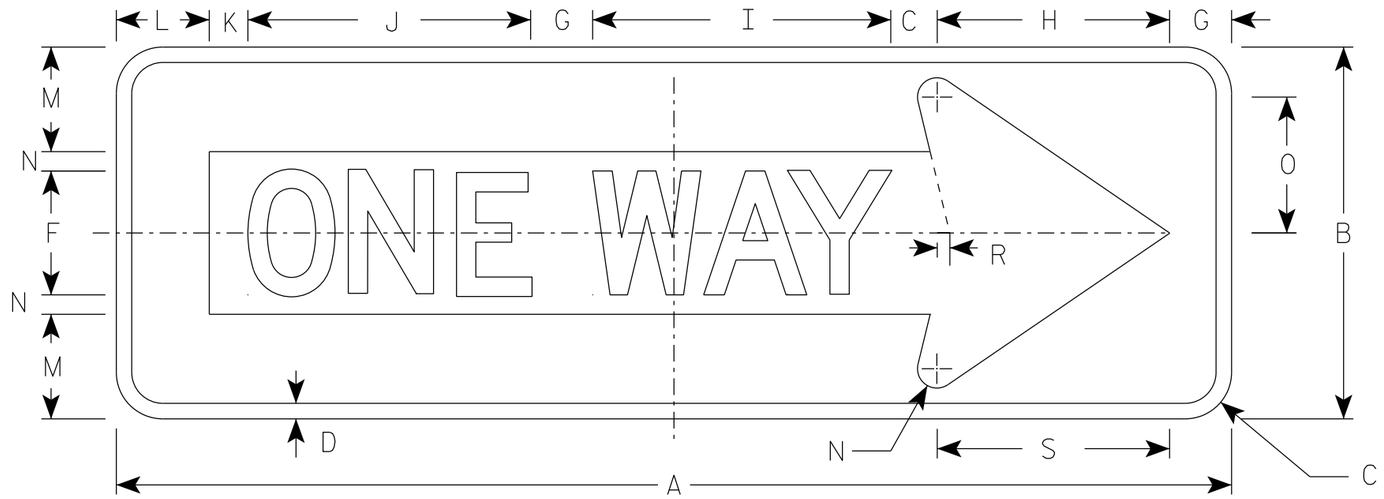
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

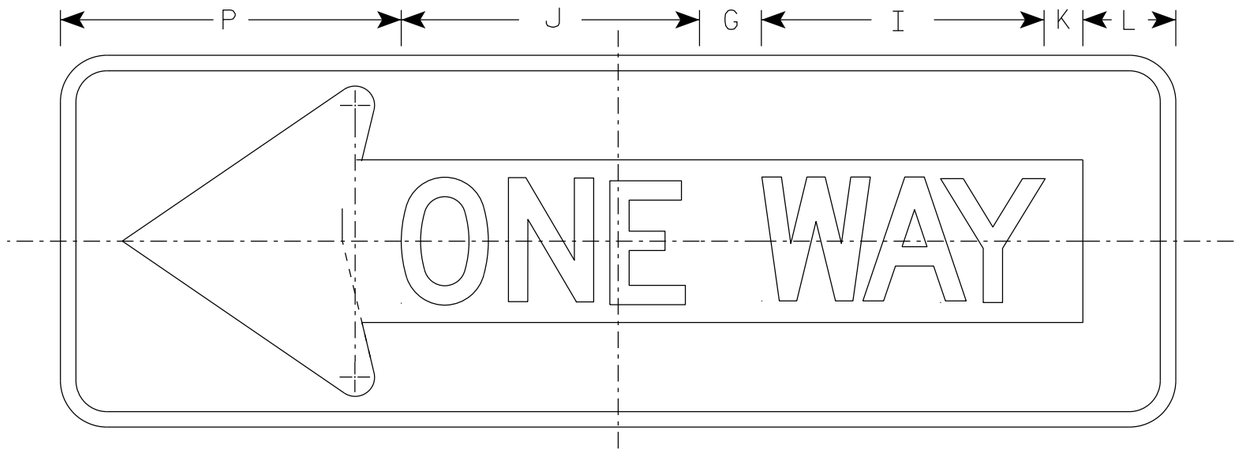
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 271 | E




R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D




R6-1L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | 12 | 1 1/2 | 1/2 | | 4 | 2 | 7 1/2 | 9 5/8 | 9 1/8 | 1 1/4 | 3 | 3 3/8 | 5/8 | 4 3/8 | 11 | | 3/8 | 7 1/2 | | | | | | | | 3.0 |
| 2M | 54 | 18 | 2 1/4 | 3/4 | | 6 | 3 | 11 1/4 | 13 5/8 | 14 1/2 | 1 7/8 | 4 1/2 | 5 | 1 | 6 1/2 | 16 1/2 | | 5/8 | 11 1/4 | | | | | | | | 6.75 |
| 3 | 54 | 18 | 2 1/4 | 3/4 | | 6 | 3 | 11 1/4 | 13 5/8 | 14 1/2 | 1 7/8 | 4 1/2 | 5 | 1 | 6 1/2 | 16 1/2 | | 5/8 | 11 1/4 | | | | | | | | 6.75 |
| 4 | 54 | 18 | 2 1/4 | 3/4 | | 6 | 3 | 11 1/4 | 13 5/8 | 14 1/2 | 1 7/8 | 4 1/2 | 5 | 1 | 6 1/2 | 16 1/2 | | 5/8 | 11 1/4 | | | | | | | | 6.75 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R6-1 L & R

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

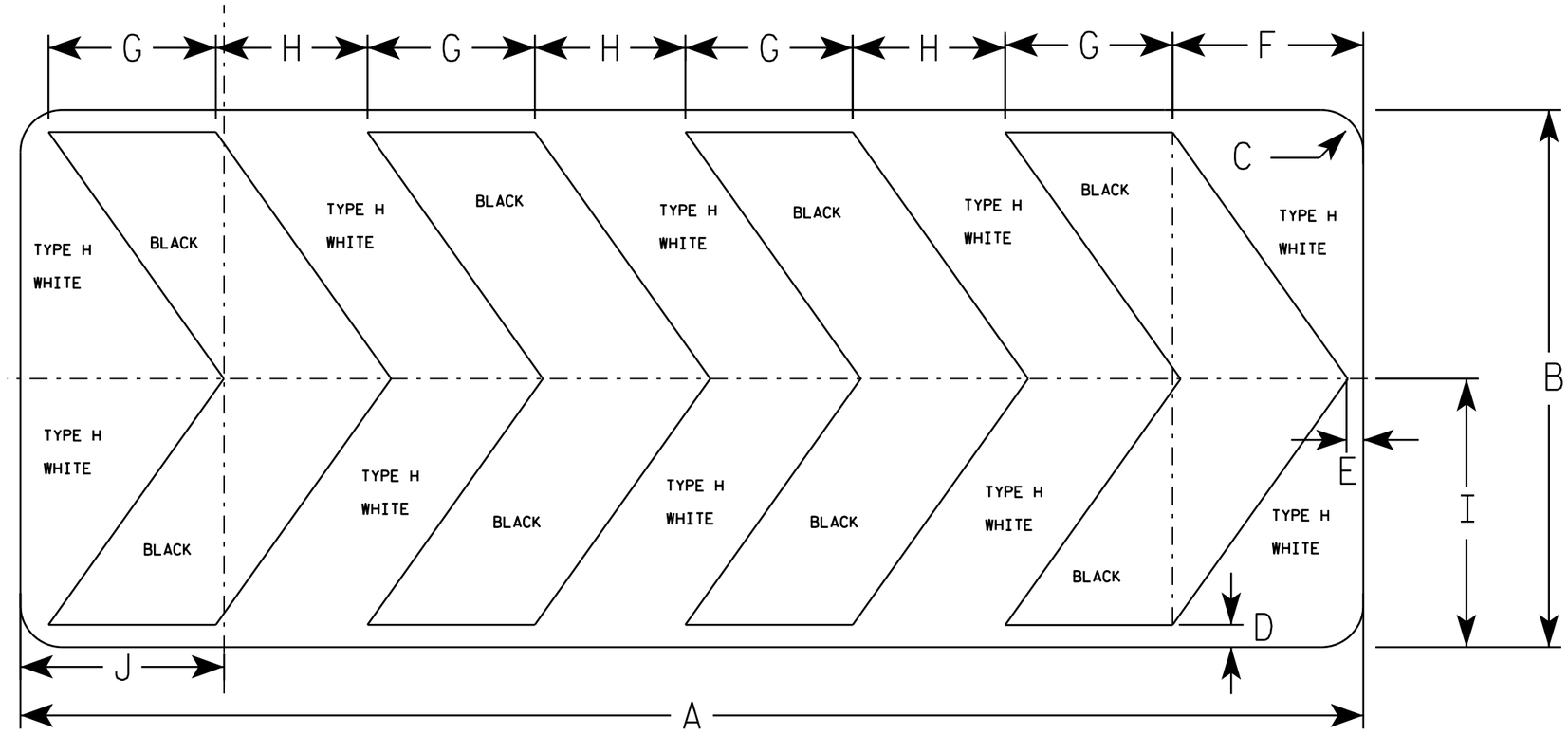
DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

SHEET NO: 272 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




R6-4B

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 60 | 24 | 1 7/8 | 1 | 3/4 | 8 1/2 | 7 1/2 | 6 3/4 | 12 | 9 1/8 | | | | | | | | | | | | | | | | | 10.0 |
| 2M | 60 | 24 | 1 7/8 | 1 | 3/4 | 8 1/2 | 7 1/2 | 6 3/4 | 12 | 9 1/8 | | | | | | | | | | | | | | | | | 10.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

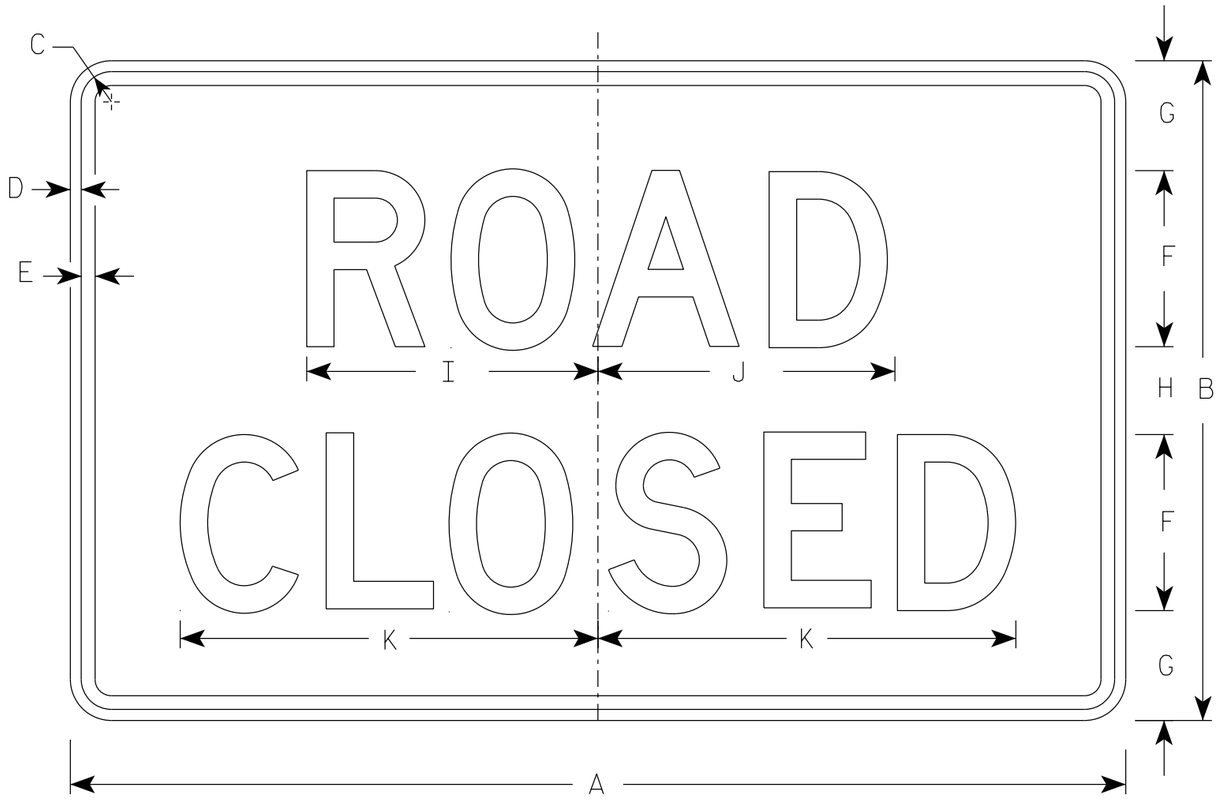
DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

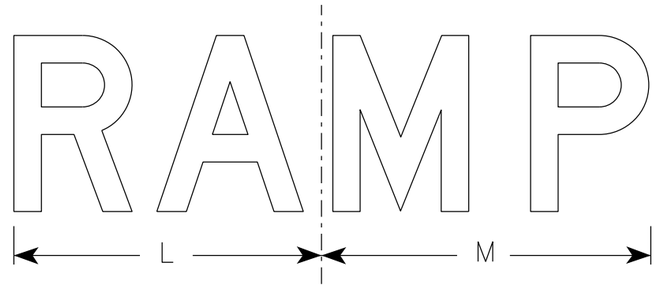
WISDOT/CADDS SHEET 42



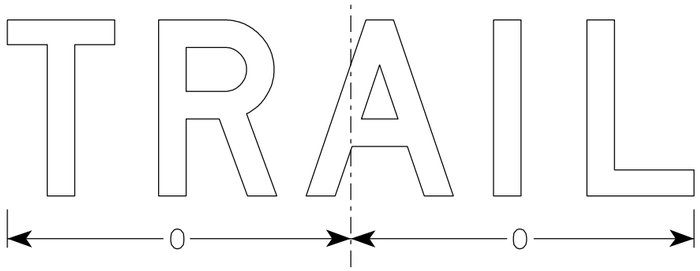

R11-2

NOTES

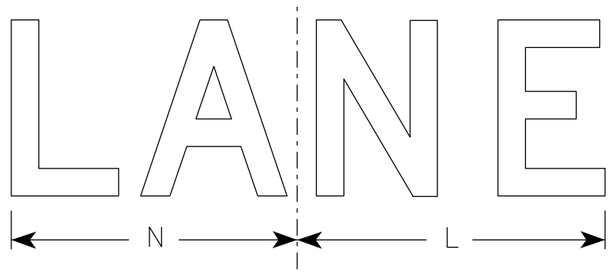
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.




R11-2R




R11-2T




R11-2L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

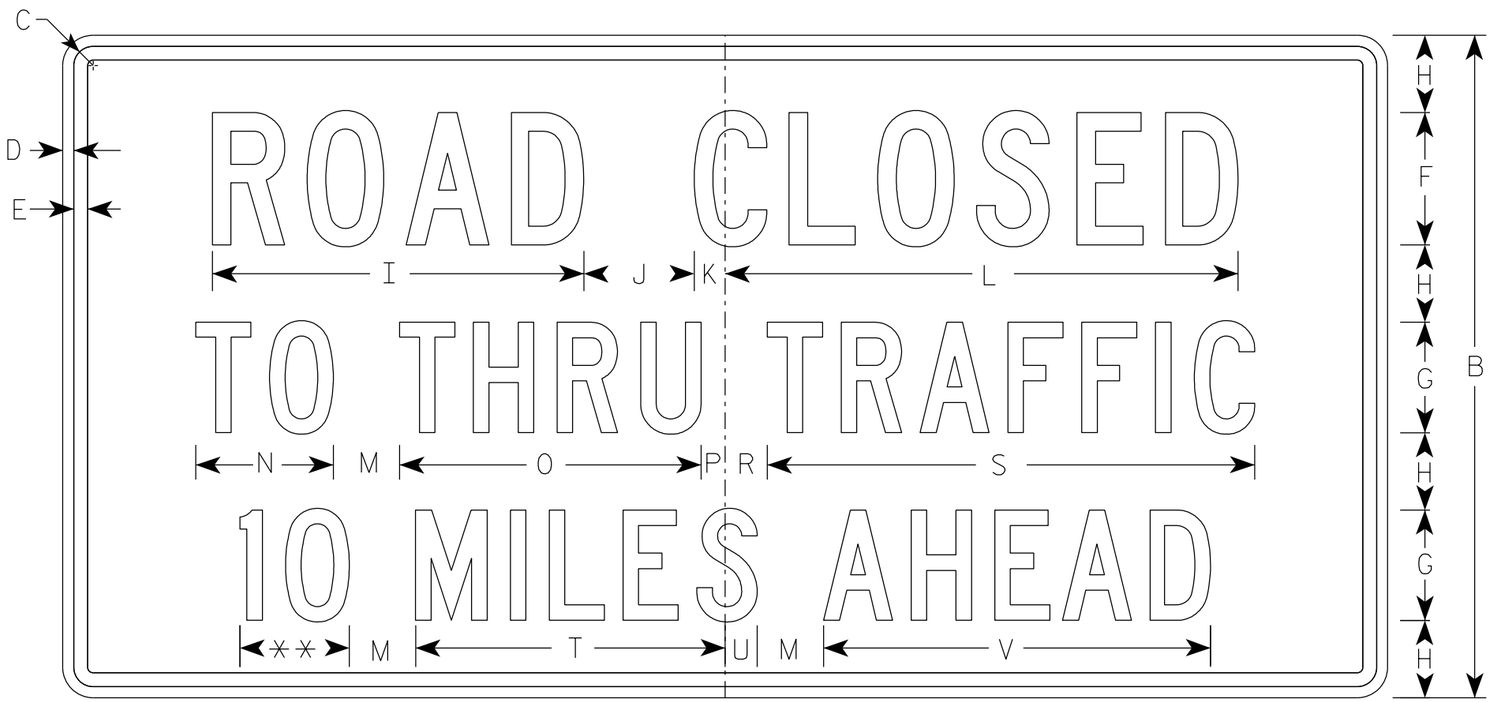
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 274 E

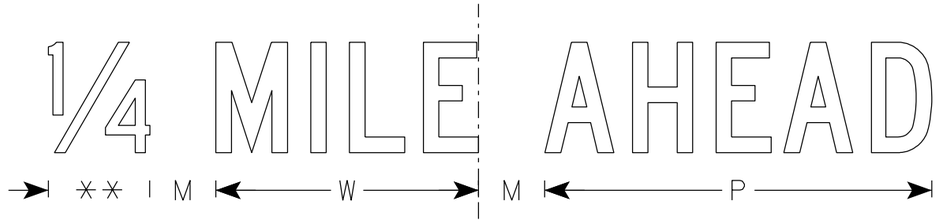
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3

** See Note 5



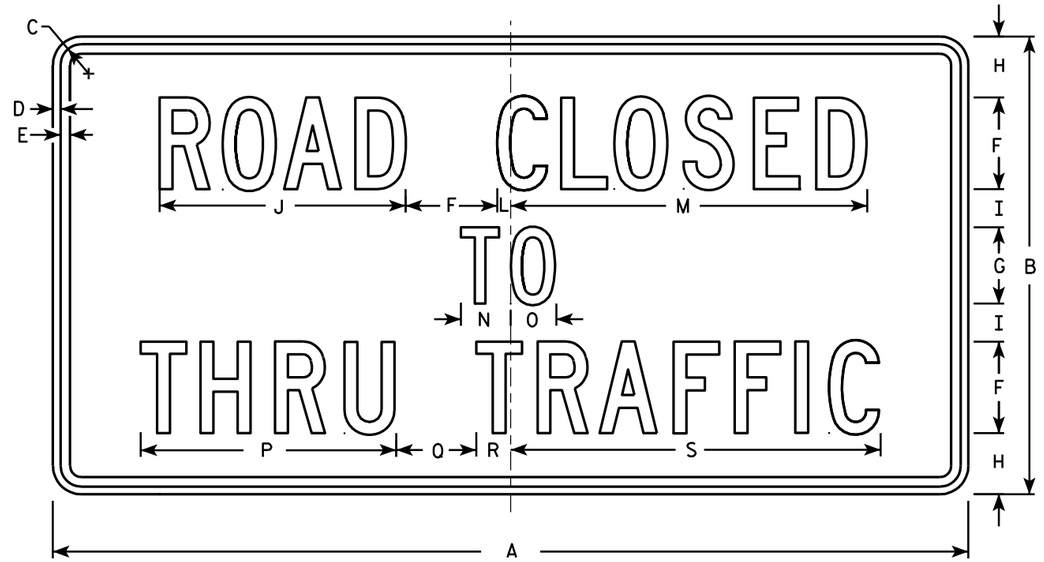

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/4 | 3/8 | 3/8 | 4 | 3 | 2 | 11 1/4 | 3 | 1 1/8 | 15 3/8 | 2 | 3 3/4 | 8 1/4 | 5/8 | | 1 3/8 | 13 1/4 | 8 3/8 | 7/8 | 10 1/2 | 7 1/8 | | | | 4.5 |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 275 | E |
|---|---|---|---|---|---|




R11-4

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

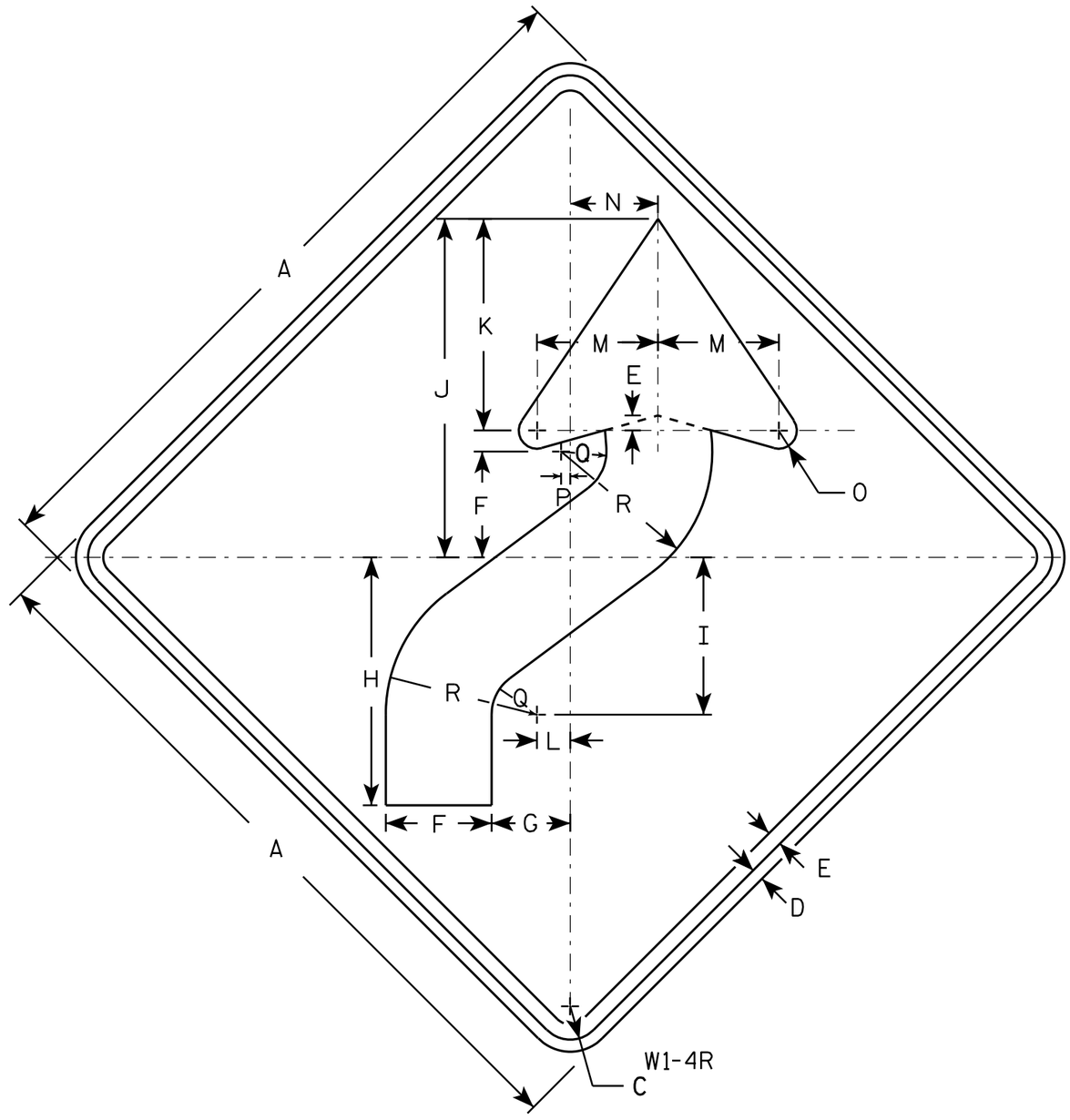
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 276 | E |
|---|---|---|---|---|---|




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 3 1/2 | 2 5/8 | 8 1/4 | 5 1/4 | 11 1/4 | 7 | 1 1/8 | 4 | 3 | 5/8 | 1/4 | 1 1/2 | 5 | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 4 3/8 | 3 1/4 | 10 1/4 | 6 1/2 | 14 | 8 3/4 | 1 3/8 | 5 | 3 5/8 | 3/4 | 3/8 | 1 7/8 | 6 1/4 | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

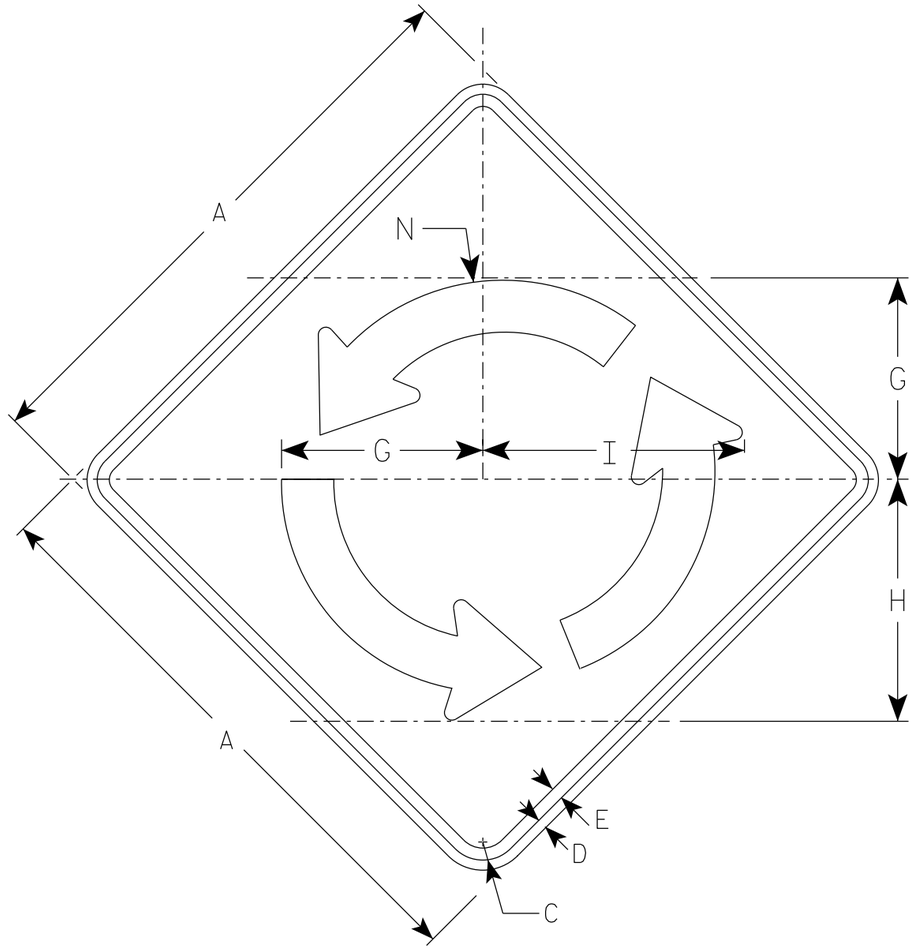
# STANDARD SIGN
## W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 277 | E

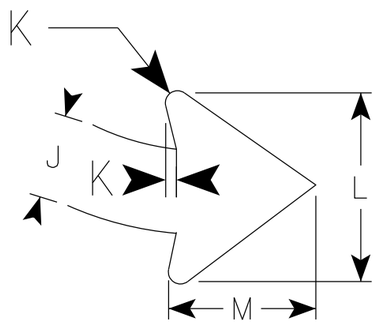



W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

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 | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/8 | 12 1/2 | 13 1/2 | 2 3/4 | 3/8 | 6 | 4 3/4 | 11 1/8 | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/8 | 12 1/2 | 13 1/2 | 2 3/4 | 3/8 | 6 | 4 3/4 | 11 1/8 | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 1/2 | 15 | 16 1/4 | 3 1/4 | 1/2 | 7 3/8 | 5 3/4 | 13 3/8 | | | | | | | | | | | 9.00 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 16 5/8 | 20 | 16 1/4 | 4 3/8 | 5/8 | 9 3/4 | 7 5/8 | 17 7/8 | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W2-6

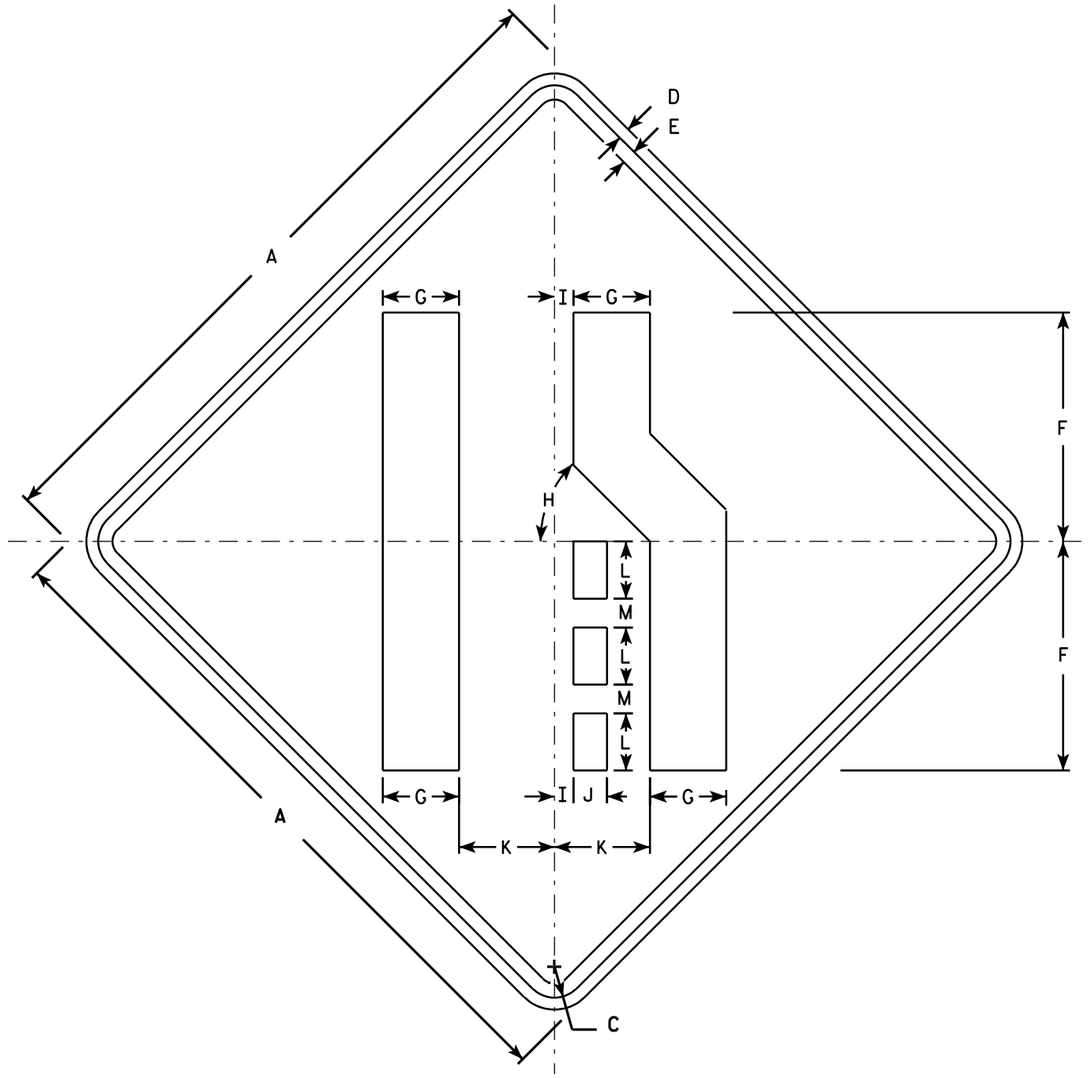
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/21 PLATE NO. W2-6.7

PROJECT NO:

SHEET NO: 278 E




W4-2R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 10 | 3 3/8 | 45° | 7/8 | 1 1/2 | 4 1/4 | 2 1/2 | 1 1/4 | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W4-2

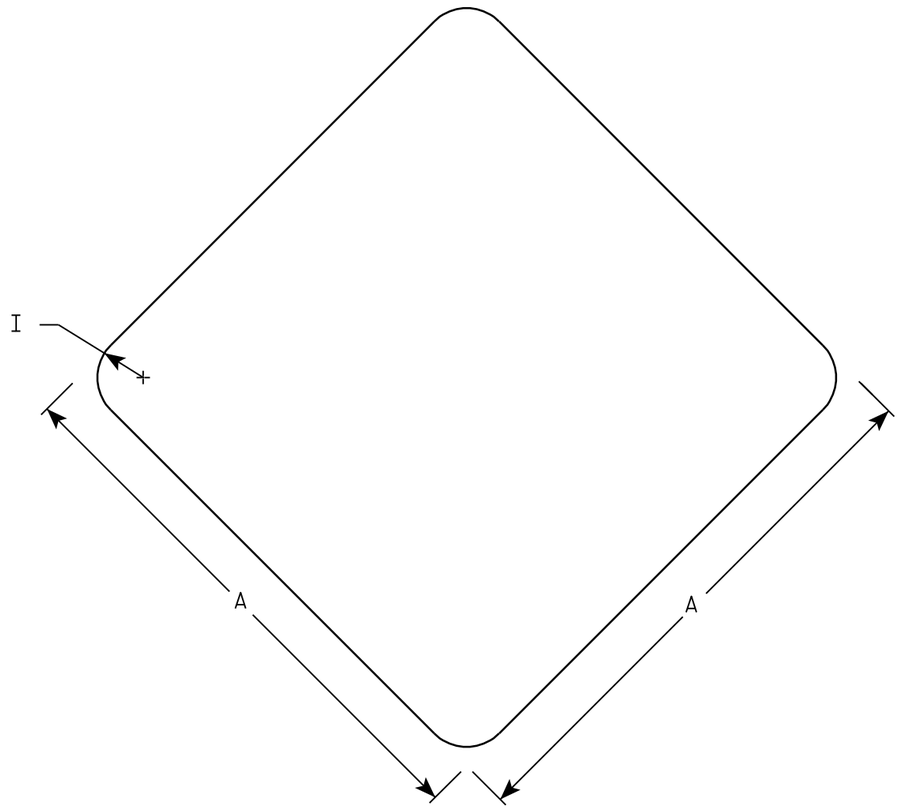
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 279 E




W5-54

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1.0 |
| 2S | 18 | | | | | | | | 1 ½ | | | | | | | | | | | | | | | | | | 2.25 |
| 2M | 18 | | | | | | | | 1 ½ | | | | | | | | | | | | | | | | | | 2.25 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

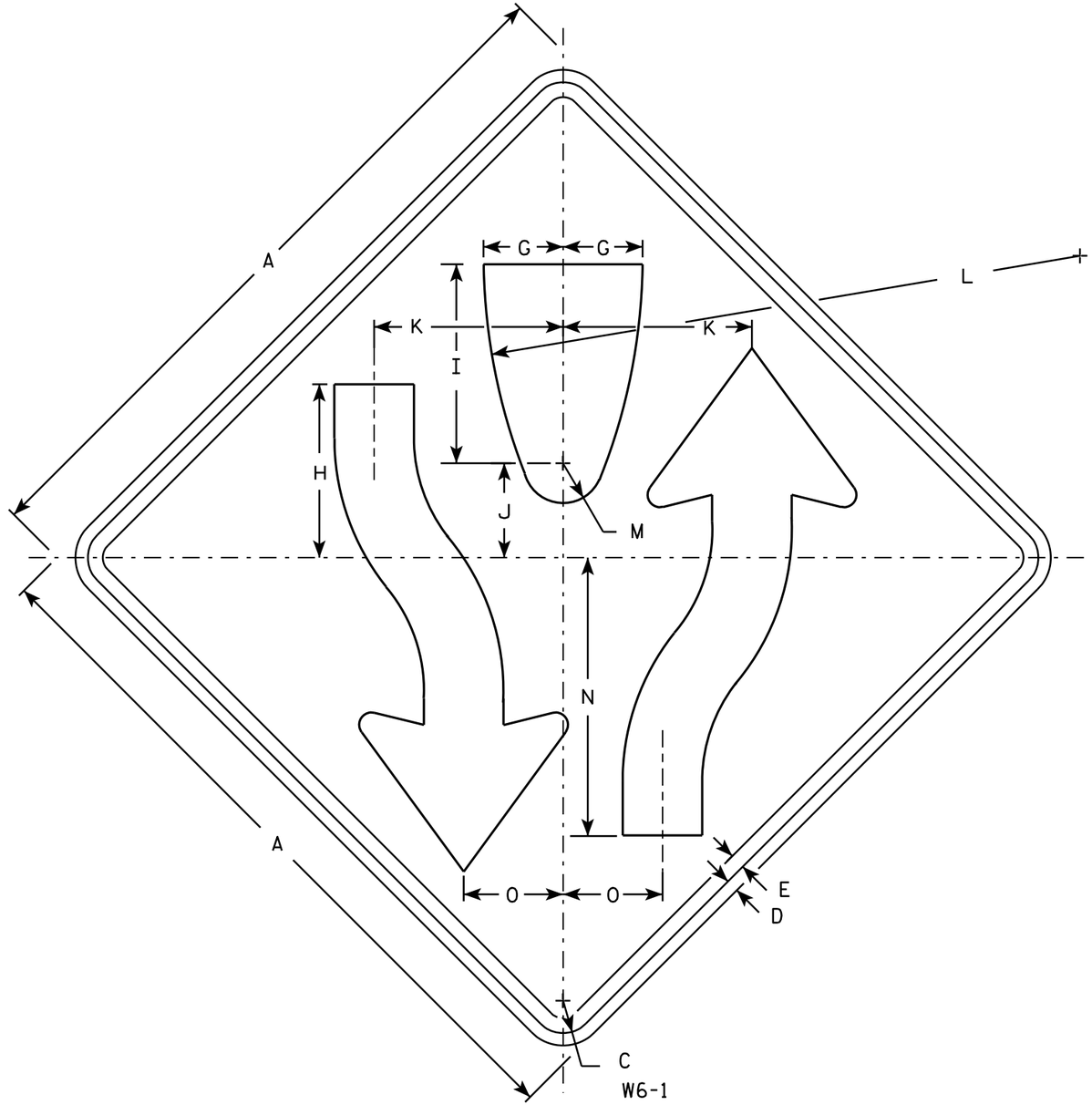
STANDARD SIGN
W5-54

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

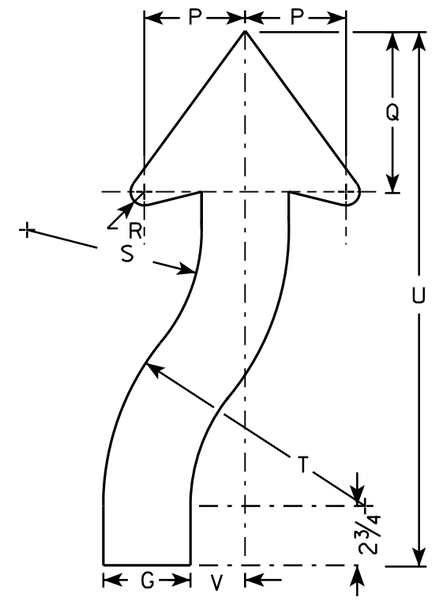
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 280 | E




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 3 1/4 | 8 | 8 1/4 | 4 1/8 | 7 7/8 | 25 | 1 3/4 | 11 5/8 | 4 1/8 | 3 7/8 | 6 3/4 | 5/8 | 6 5/8 | 9 7/8 | 21 5/8 | 2 | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | | 4 | 8 3/4 | 10 | 4 3/4 | 9 1/2 | 30 | 2 | 14 | 5 | 4 5/8 | 7 3/8 | 7/8 | 8 | 12 | 24 1/2 | 2 1/2 | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 4 | 8 3/4 | 10 | 4 3/4 | 9 1/2 | 30 | 2 | 14 | 5 | 4 5/8 | 7 3/8 | 7/8 | 8 | 12 | 24 1/2 | 2 1/2 | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 |

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

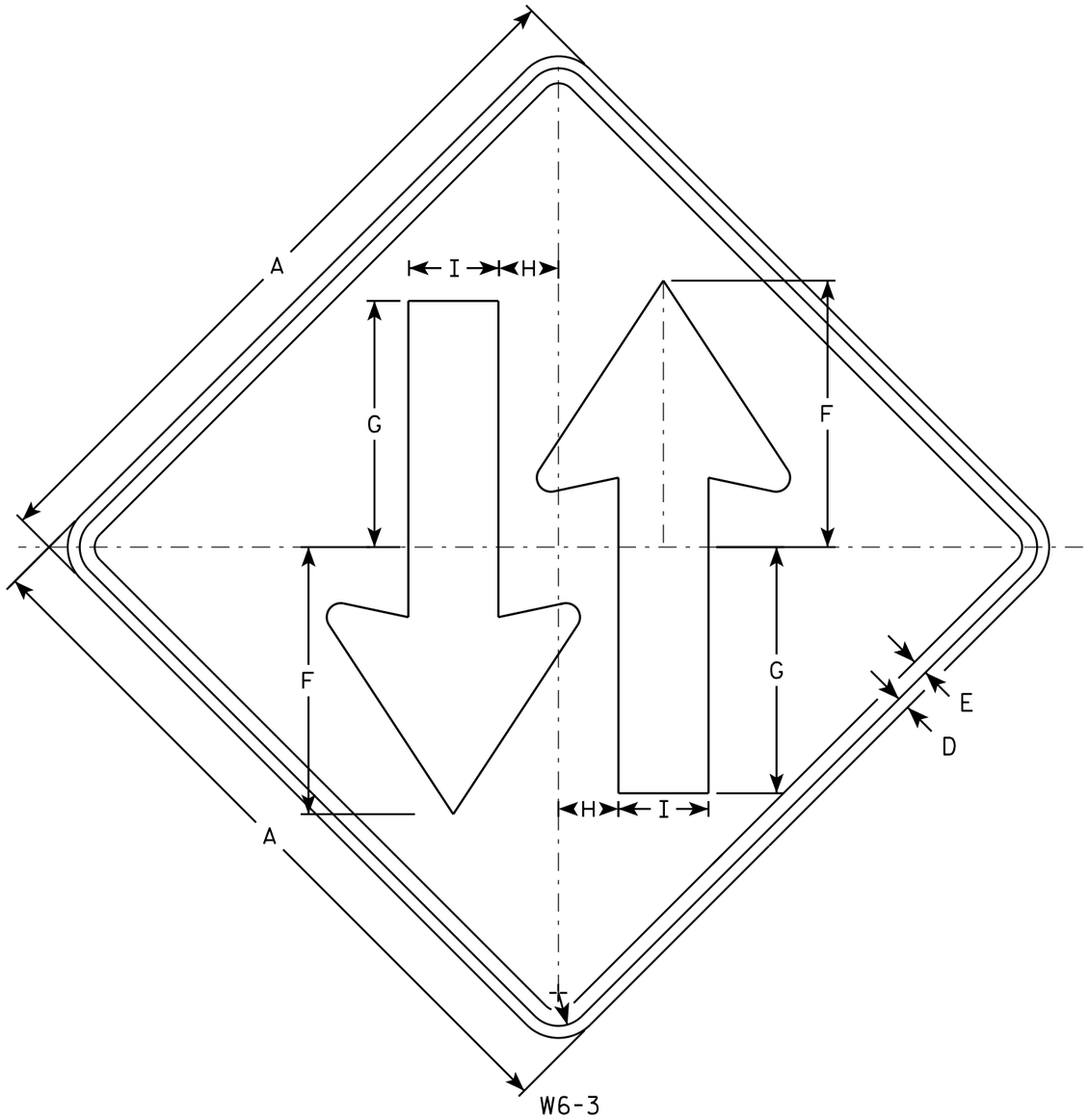
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 281 | E |
|---|---|---|---|---|---|


7

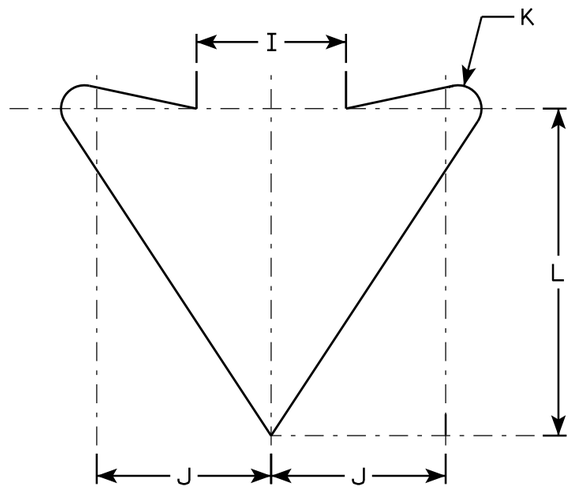
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42




W6-3

NOTES

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




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 11 1/8 | 10 1/4 | 2 1/2 | 3 3/4 | 4 3/8 | 5/8 | 8 1/4 | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

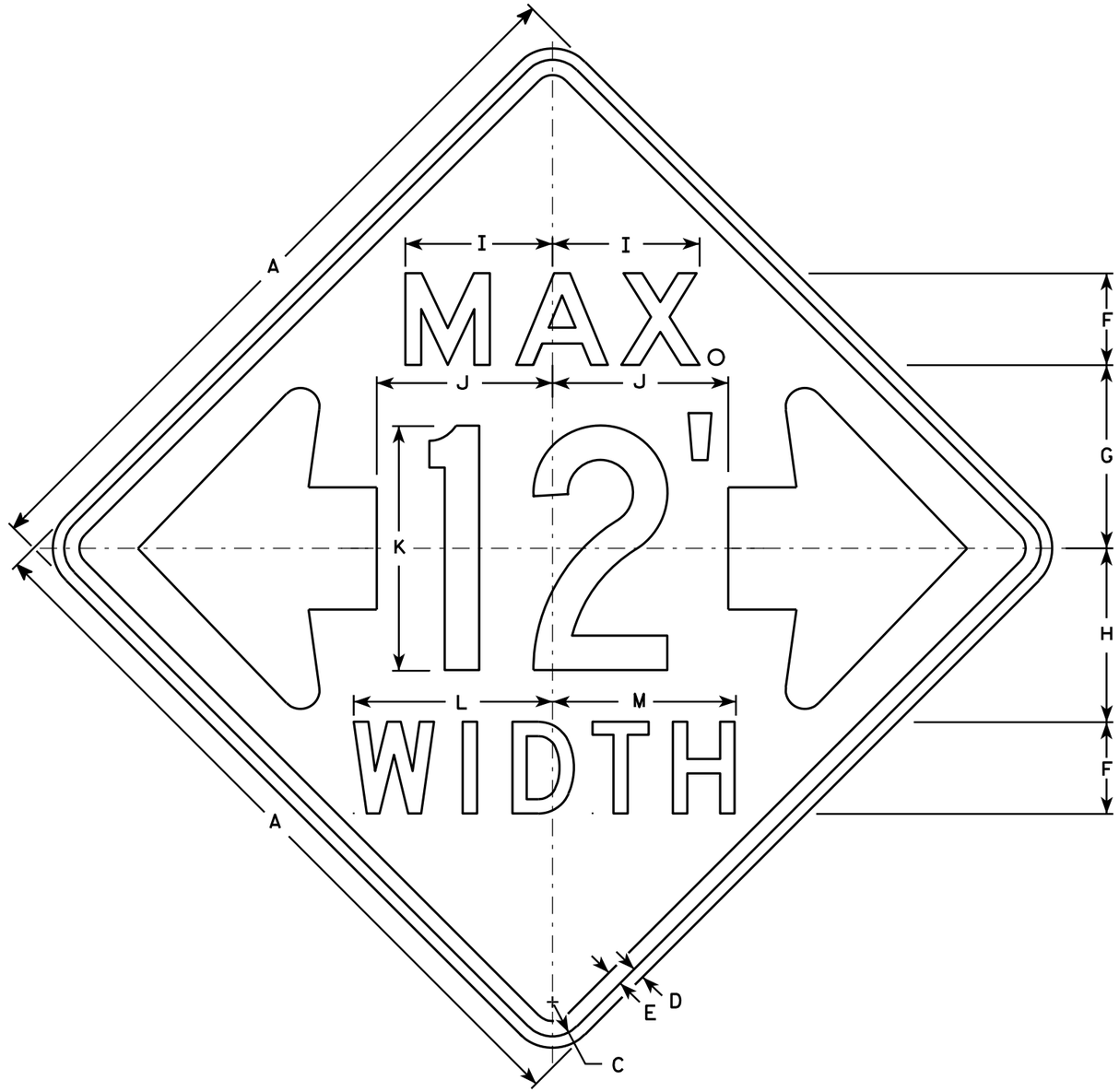
DATE 3/10/16 PLATE 16-3.11



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



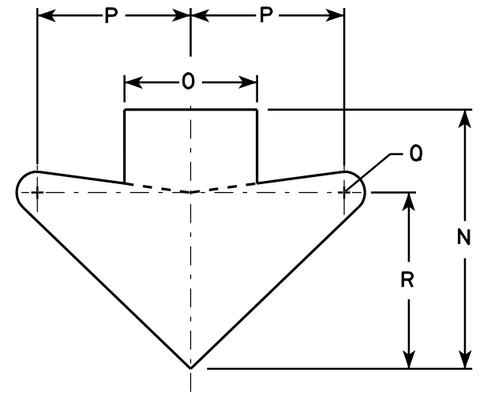
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42




W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

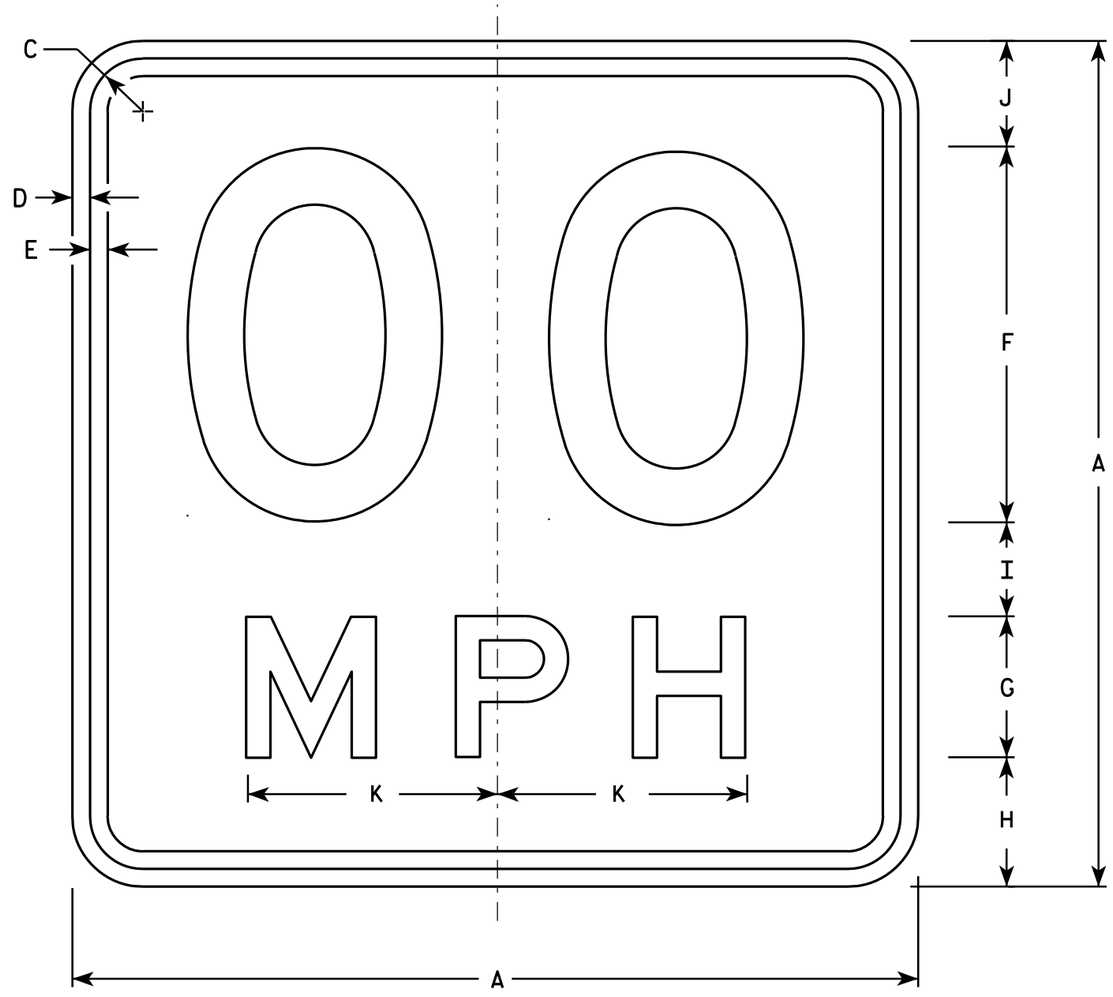
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 283 | E |
|---|---|---|---|---|---|




W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

| | SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 18 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| * | 2S | 18 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| * | 2M | 18 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| | 3 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 | 4 | 4 | 2 3/4 | 3 1/4 | 6 5/8 | | | | | | | | | | | | | | | | 4.00 |
| | 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| | 5 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |

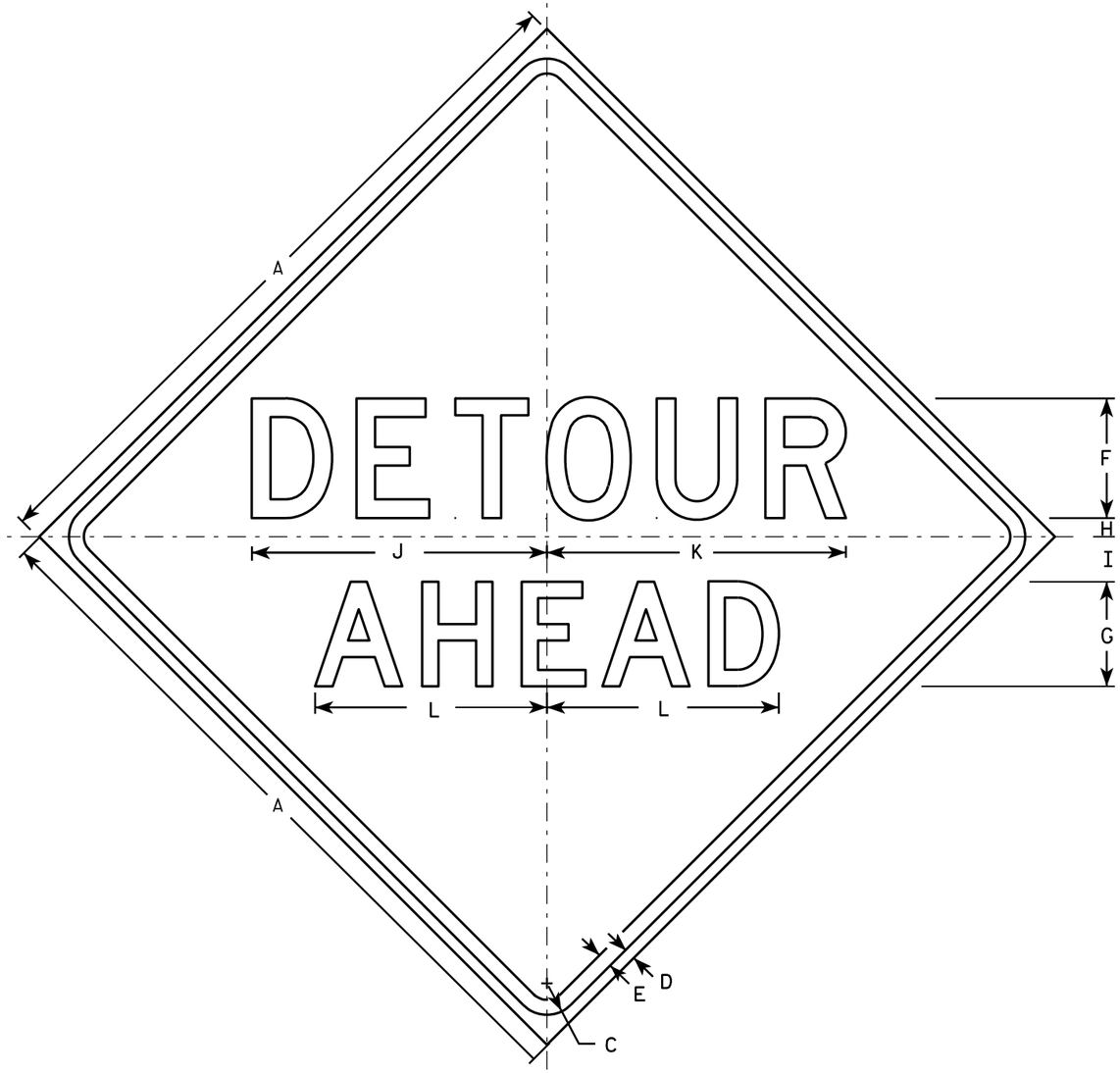
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

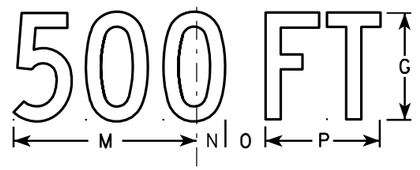
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

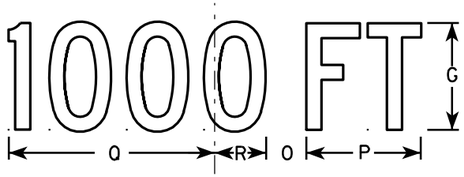
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 284 | E



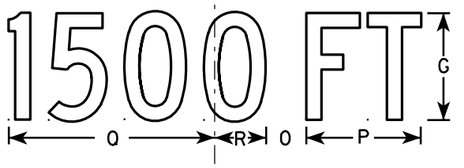

W20-2A



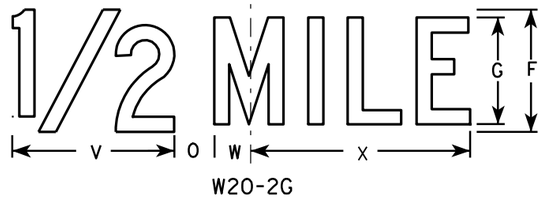

W20-2D




W20-2C




W20-2B




W20-2G




W20-2F

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. Line 1 is Series D.
   Line 2 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 | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 9 | 1 3/8 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 1/8 | 4 1/2 | 3 1/2 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

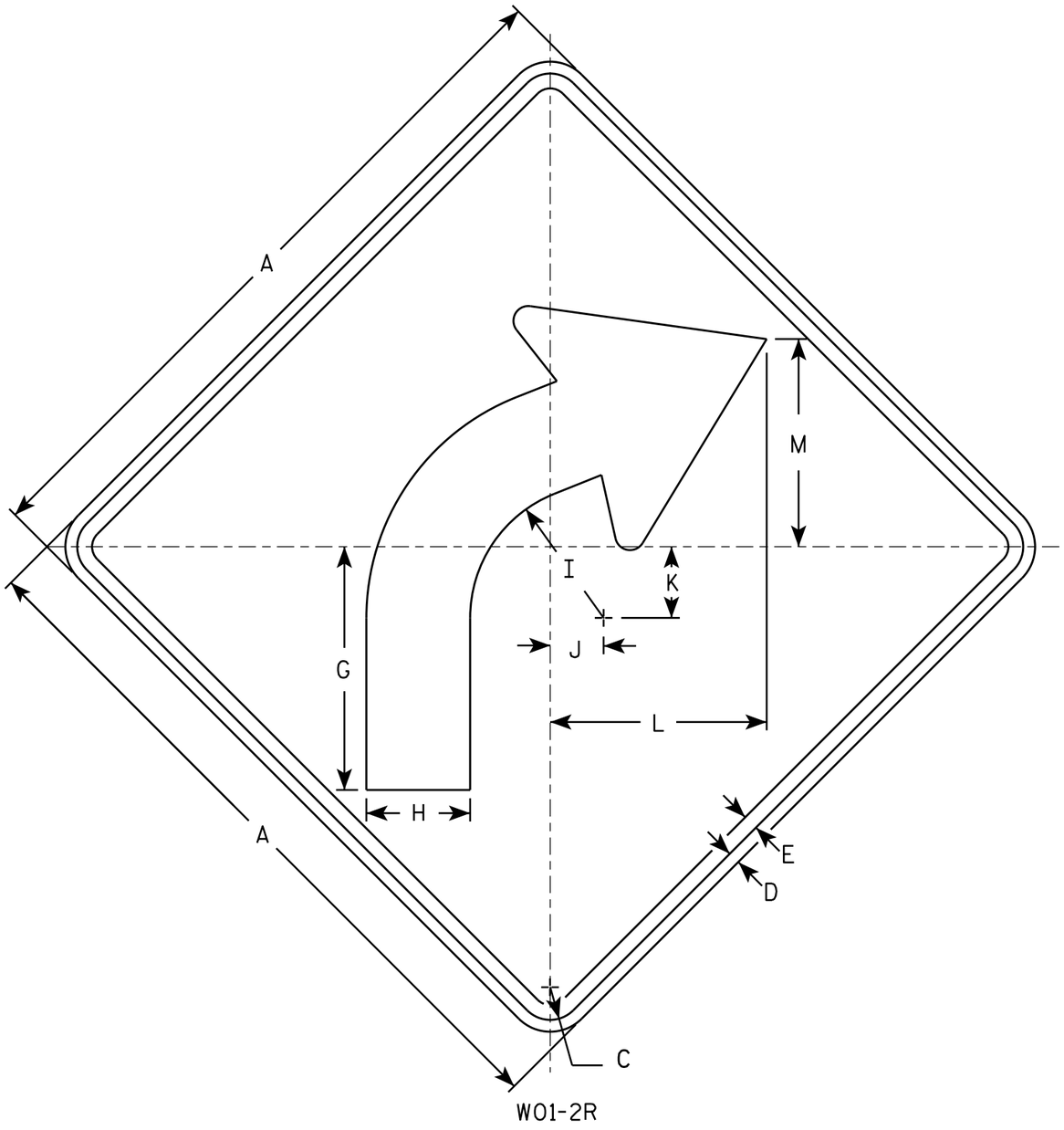
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

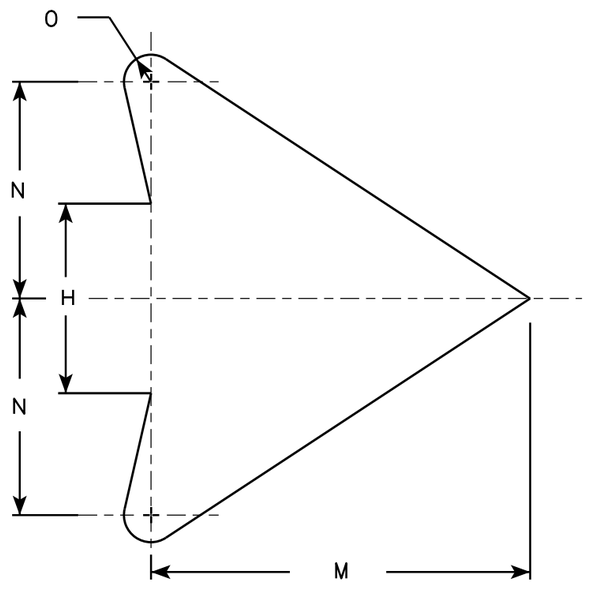
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 285 | E |
|---|---|---|---|---|---|




W01-2R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 4.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

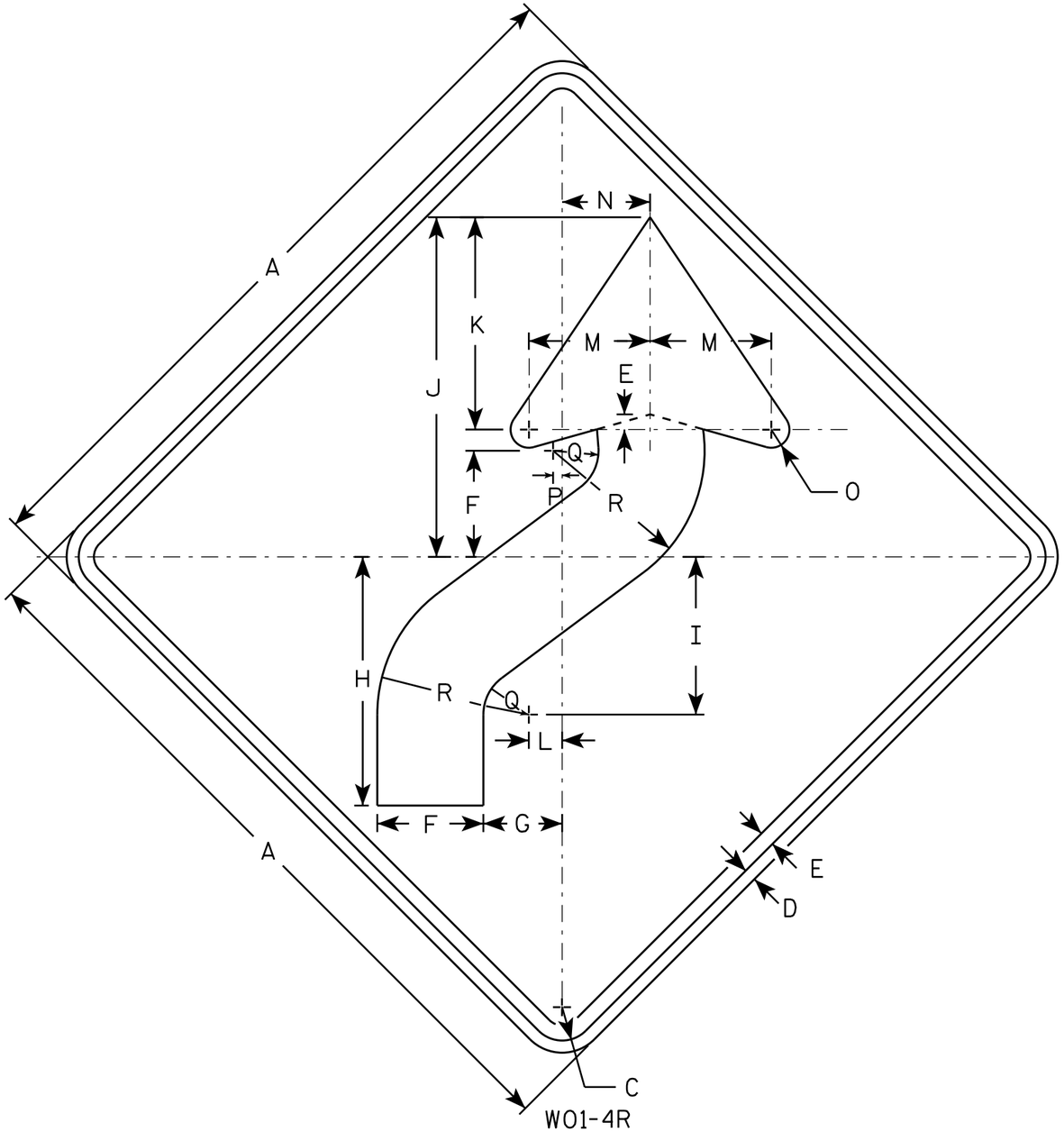


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000 WISDOT/CADDS SHEET 42




W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4

WISCONSIN DEPT OF TRANSPORTATION

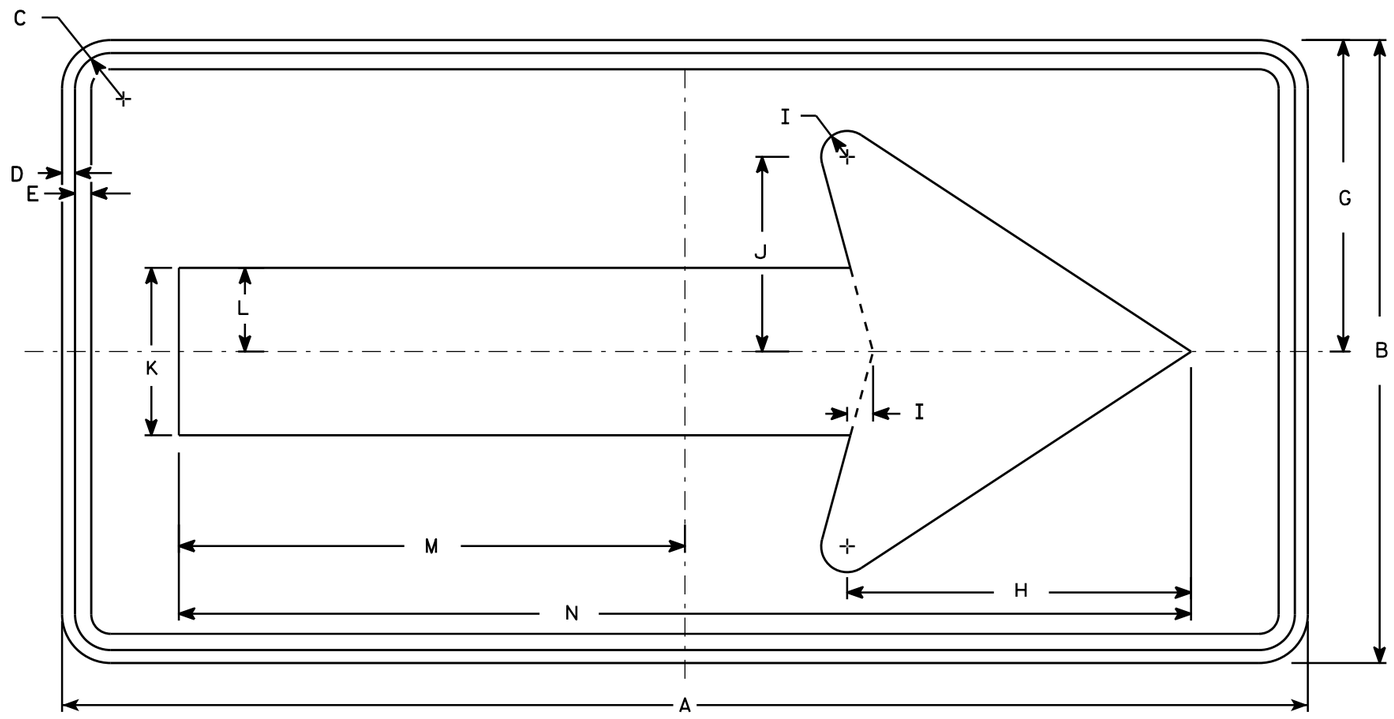
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42




W01-6

## NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

# STANDARD SIGN
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

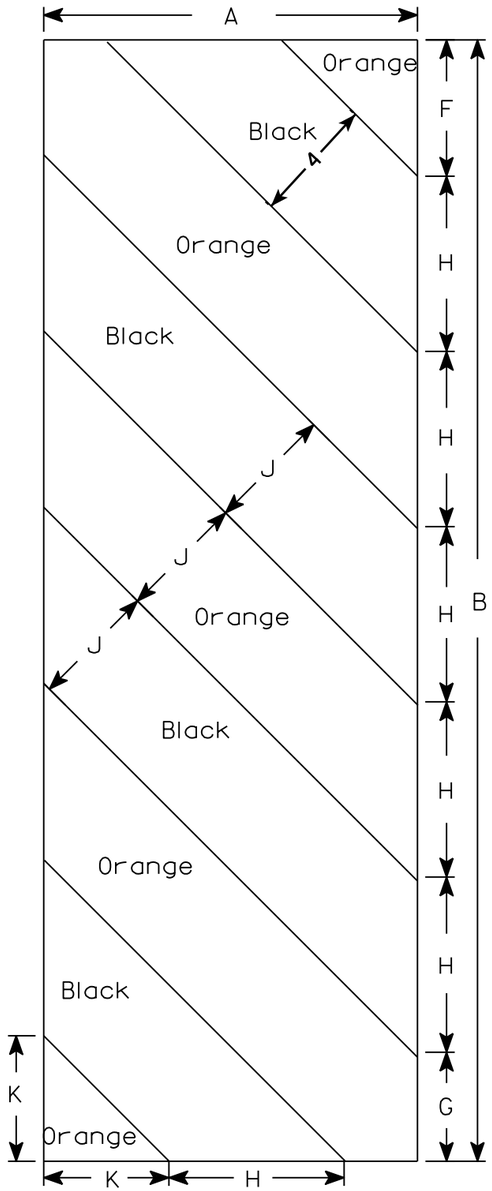
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

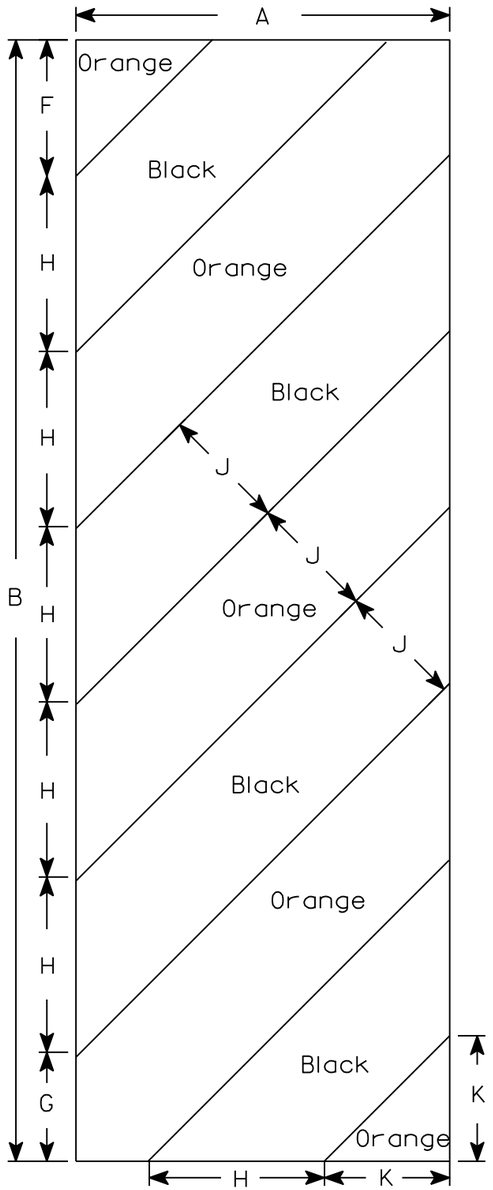


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




W05-52L




W05-52R

## NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 12 | 36 | | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 2M | 12 | 36 | | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 3 | 18 | 54 | | | | 6 | 5 1/2 | 8 1/2 | 45° | 6 | 6 9/16 | | | | | | | | | | | | | | | | 6.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

W05-52L & W05-52R

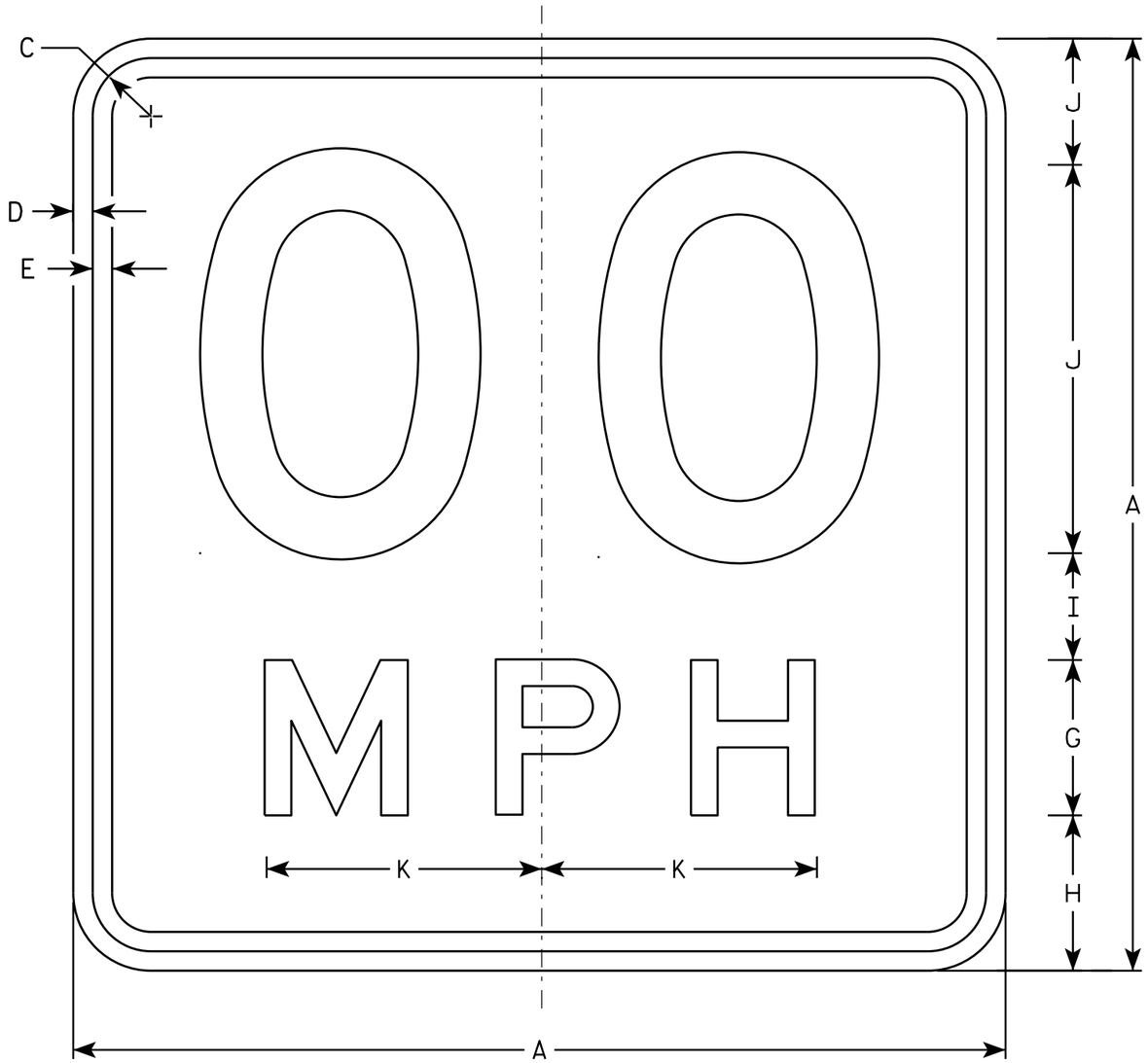
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1



| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|




W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 | 4 | 4 | 2 3/4 | 3 1/4 | 7 1/8 | | | | | | | | | | | | | | | | 4.00 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 5 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |

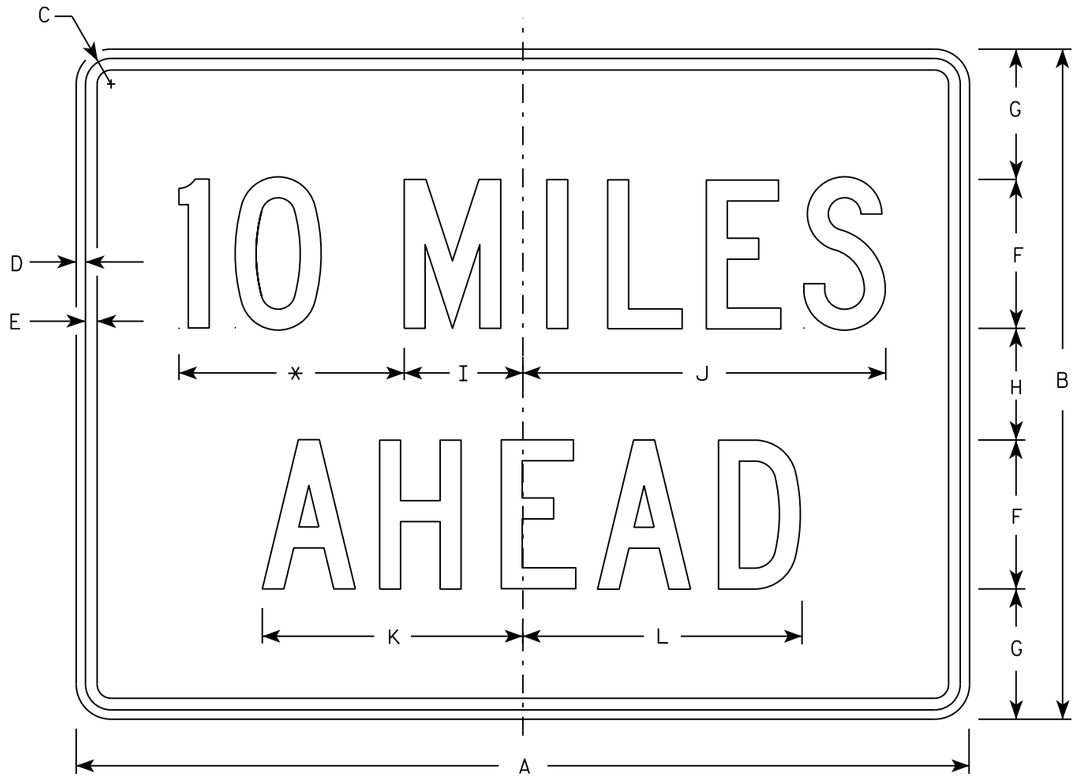
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

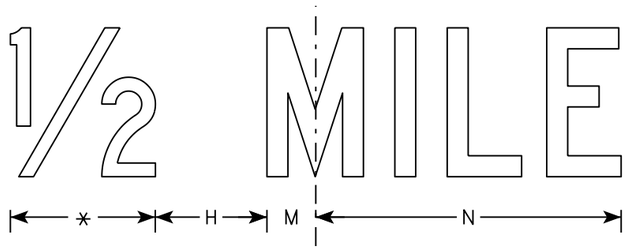
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 290 W013-1.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|




W057-52




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.

* See note 5

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 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: 291 | E |
|---|---|---|---|---|---|

## DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONs DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

| | |
|---|---|
| DEAD LOAD: | WT. OF SIGN AND SUPPORTING STRUCTURE |
| ICE LOAD: | 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS |
| WIND PRESSURE: | 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS (700 YEAR MEAN RECURRENCE INTERVAL) |

| WIND COMPONENTS | NORMAL | TRANSVERSE |
|---|---|---|
| LOAD CASE 1: | 1.00 | 0.00 |
| LOAD CASE 2: | 0.00 | 1.00 |
| LOAD CASE 3: | 0.75 | 0.75 |

| LOAD COMBINATIONS | |
|---|---|
| STRENGTH I: | 1.25 DC + 1.6 LL |
| EXTREME I (MAX DC): | 1.1 DC + 1.0 W + 1.0 ICE |
| EXTREME I (MIN DC): | 0.9 DC + 1.0 W |
| SERVICE I: | 1.0 DC + 1.0 W |
| FATIGUE: | 1.0 NW (NATURAL WIND GUST) |
| | 1.0 TrG (TRUCK INDUCED GUST) |
| | 1.0 GVW (GALLOPING - CANTILEVER ONLY) |

## MATERIAL PROPERTIES

CONCRETE MASONRY ——— $f'_c$ = 3,500 PSI

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60 ——— $f_y$ = 60,000 PSI

STRUCTURAL ANGLES, PLATES & BARS - ASTM A709 GRADE 36 ——— $f_y$ = 36,000 PSI

HIGH STRENGTH BOLTS - ASTM A3125 GRADE A325 ——— $f_y$ = 92,000 PSI

ANCHOR RODS - ASTM F1554 GRADE 55 ——— $f_y$ = 55,000 PSI

HEAVY HEX NUTS - ASTM A563 GRADE DH OR ASTM A194 GRADE 2H

WASHERS - ASTM F436

DTI WASHERS - ASTM F959 TYPE 325

## FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGN FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING THE DRILLING OF THE SHAFT HOLE TO CONFRIM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DANE COUNTY ZONE, NAD 83 (1997). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

## STRUCTURE DATA

| STRUCTURE ID | SIGN AREA | SIGN DEPTH | FOUNDATION TYPE | TRUSS TYPE |
|---|---|---|---|---|
| S-13-0598 | 28 SF | 4'-0" | TYPE MC-III | MC-III |
| S-13-0599 | 28 SF | 4'-0" | TYPE MC-III | MC-III |

## LIST OF DRAWINGS:

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-13-0598
3. LAYOUT S-13-0599

## LIST OF STANDARD DESIGN DRAWINGS

4. I. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1
5. II. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2
6. III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
7. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

STATE PROJECT NUMBER

**5845-01-70**

## TRAFFIC VOLUME

A.D.T. (2044) = 13,000
R.D.S. = 60 MPH

## TOTAL ESTIMATED QUANTITES

| BID ITEM NO. | BID ITEM | UNIT | S-13-0598 | S-13-0599 |
|---|---|---|---|---|
| 531.2042 | DRILLING SHAFT 42-INCH | LF | 18 | 18 |
| 531.5130 | FOUNDATION SINGLE-SHAFT TYPE MC-III | EA | 1 | 1 |
| 532.5130 | MONOTUBE CANTILEVER TYPE III | EA | 1 | 1 |

THESE ARE STANDARD DESIGN PLANS DEVELOPED AND MAINTAINED BY THE WISDOT. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISDOT BRIDGE MANUAL CHAPTER 39.

WISCONSIN
KYLE R. HENDERSON
E-42361
MADISON
WI
PROFESSIONAL ENGINEER
8/28/23


**STRUCTURE DESIGN CONTACTS:**
AARON BONK 608-261-0261
KYLE HENDERSON 608-251-4843


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |


STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608) 251-4843
(608) 251-8655 FAX
WWW.STRAND.COM


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 08/28/23
CHIEF STRUCTURES DESIGN ENGINEER DATE

**MONOTUBE & 2-CHORD**

LOCATION DESCRIPTION

| COUNTY | TOWN |
|---|---|
| DANE | DUNN |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGNED CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| KRH | BMO | KRH | BMO |

**GENERAL NOTES & DESIGN DATA**

SHEET 1 OF 3
292

I.D.

DATE:

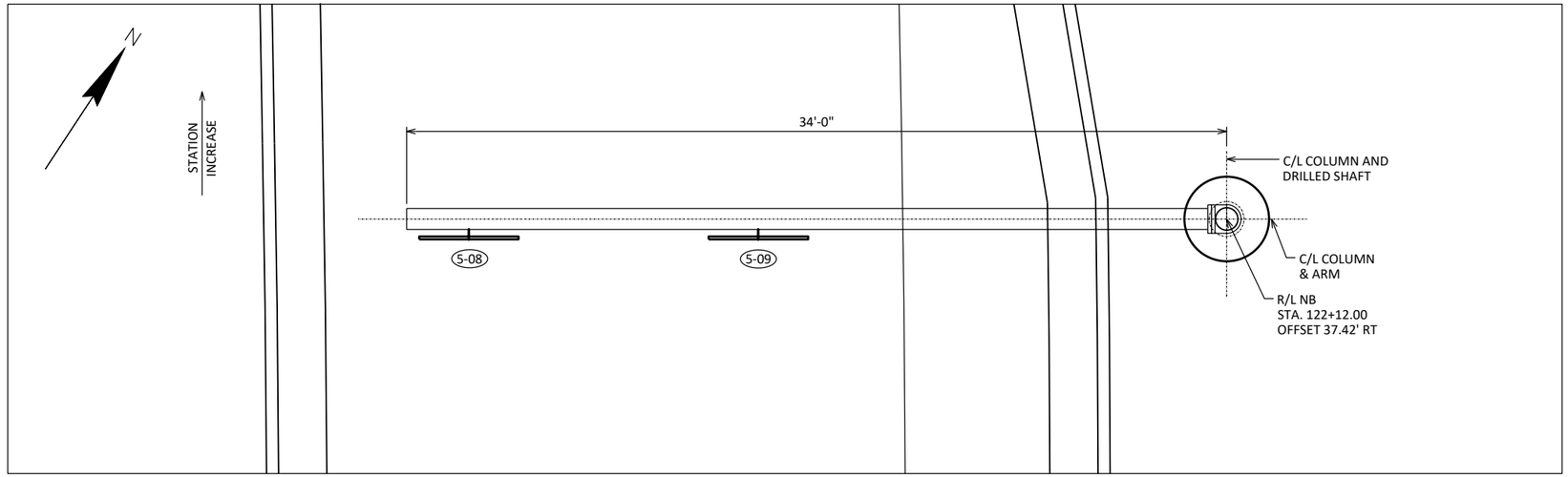
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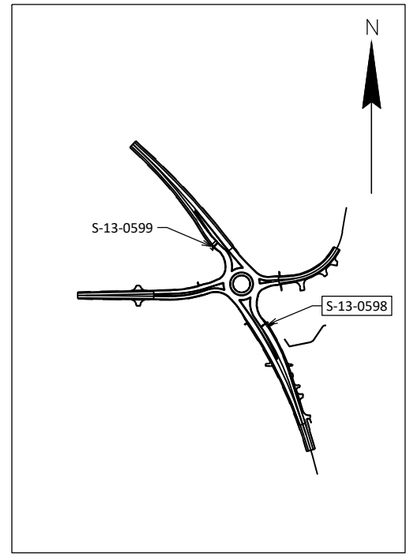
STATE PROJECT NUMBER

**5845-01-70**

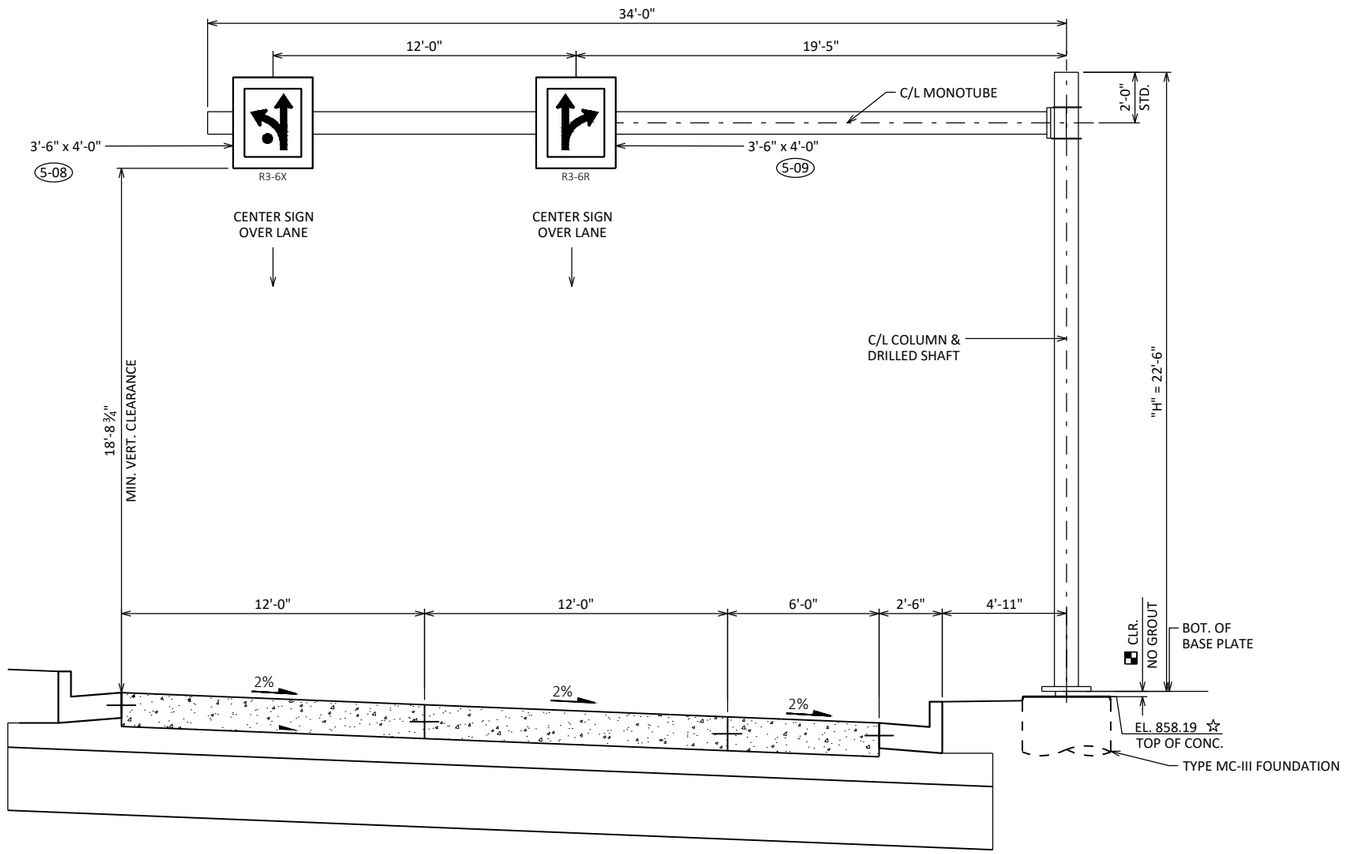



## PLAN

STA. 122+12.00 NB (USH 51 NB)
200 FT SOUTH OF CTH B/AB




## LOCATION MAP




## ELEVATION

LOOKING UPSTATION AT F.F. OF SIGN

## LEGEND

☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE S-13-0598**

| DRAWN BY | KRH | PLANS CK'D | BMO |
|---|---|---|---|

**LAYOUT**

SHEET 2 OF 3
293

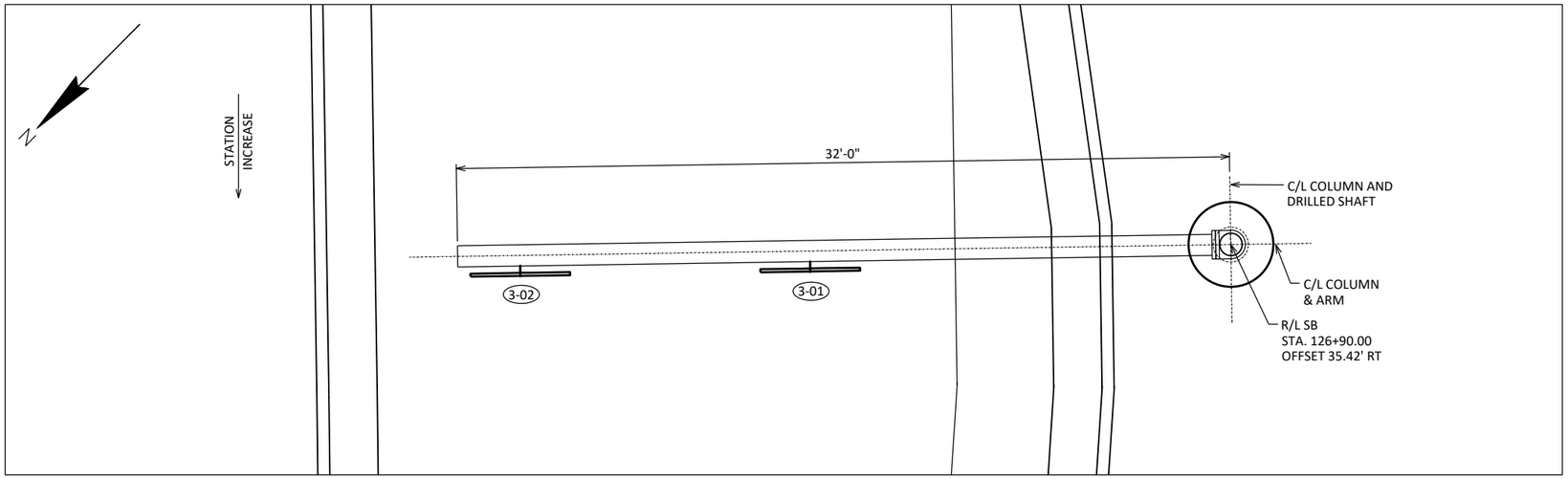
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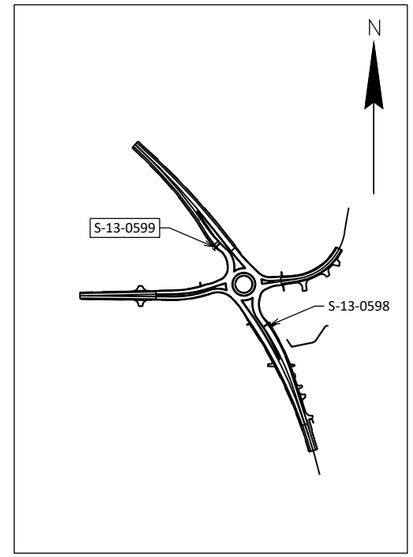
STATE PROJECT NUMBER

**5845-01-70**

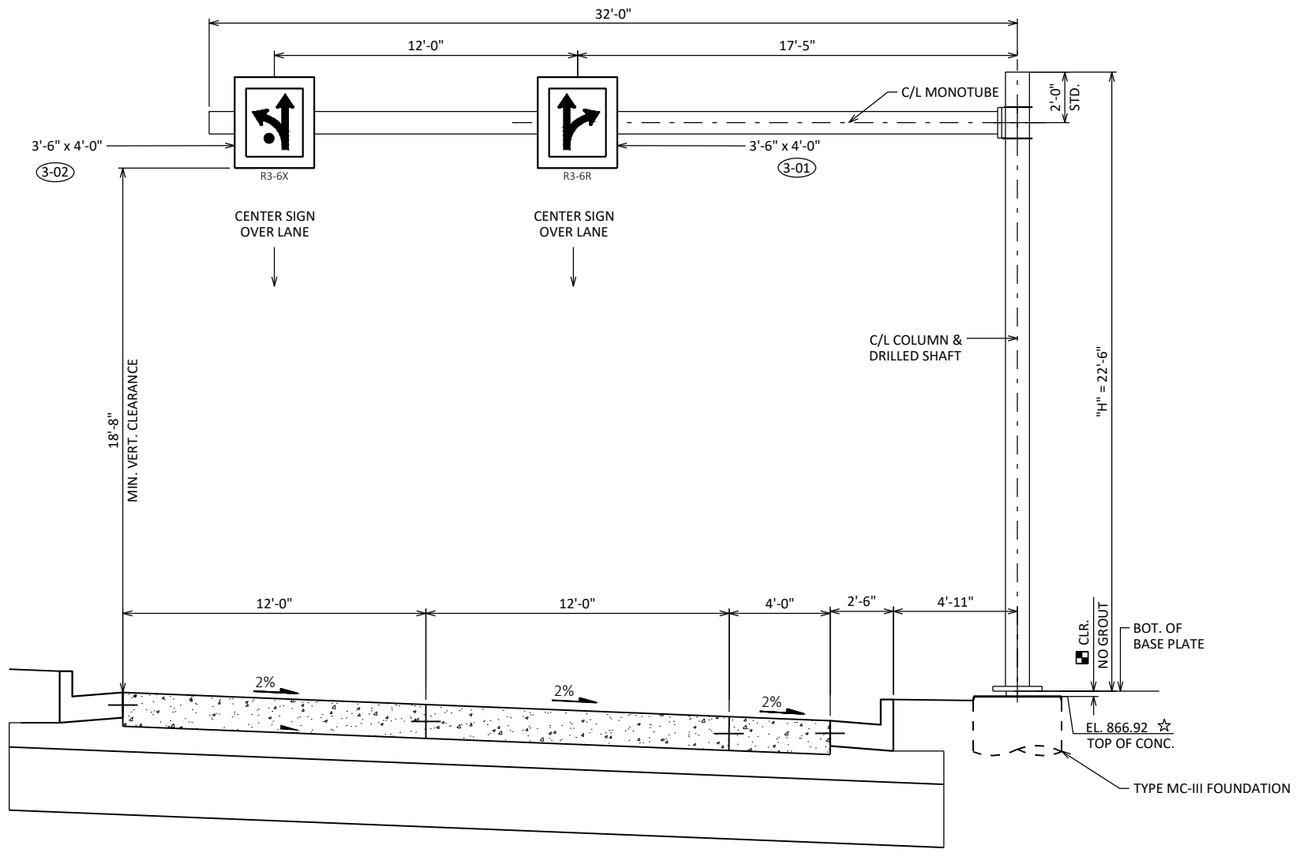



## PLAN

STA. 126+90.00 SB (USH 51 SB)
200 FT NORTH OF CTH B/AB




## LOCATION MAP




## ELEVATION

LOOKING DOWNSTATION AT F.F. OF SIGN

## LEGEND

☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

■ STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE S-13-0599**

DRAWN BY KRH | PLANS CK'D BMO

**LAYOUT**

SHEET 3 OF 3
294

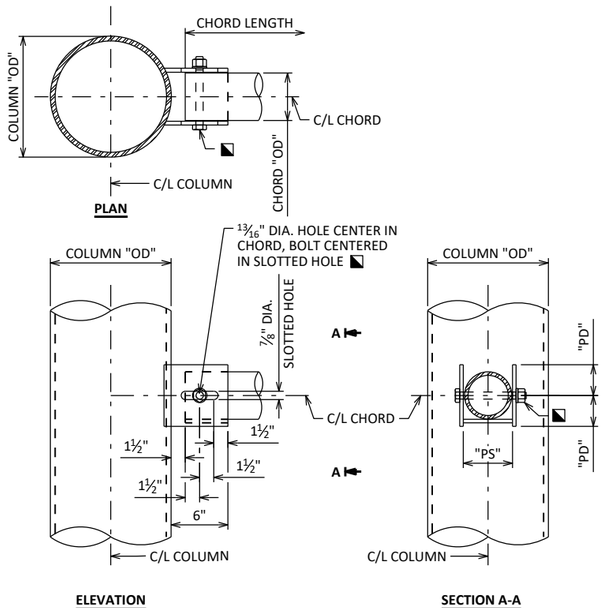
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STATE PROJECT NUMBER

**STANDARD**



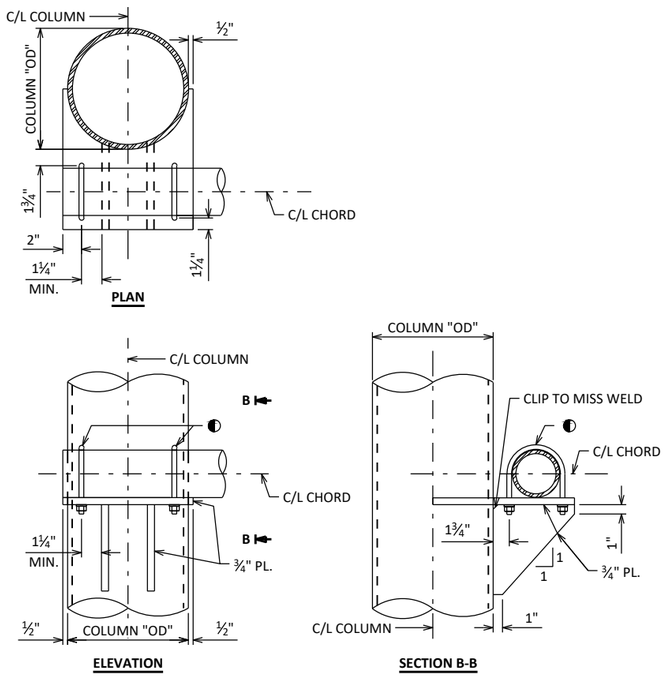

## FULL SPAN SADDLE CONNECTION

PREFERRED OPTION

¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT AND WASHER SNUG TIGHT ONLY, DO NOT OVER TIGHTEN

"PD" = CHORD "OD"/2 + ¾"

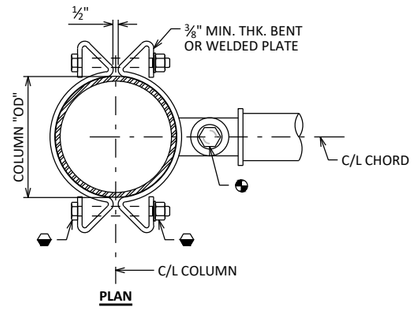
"PS" = CHORD "OD" + 1/16"

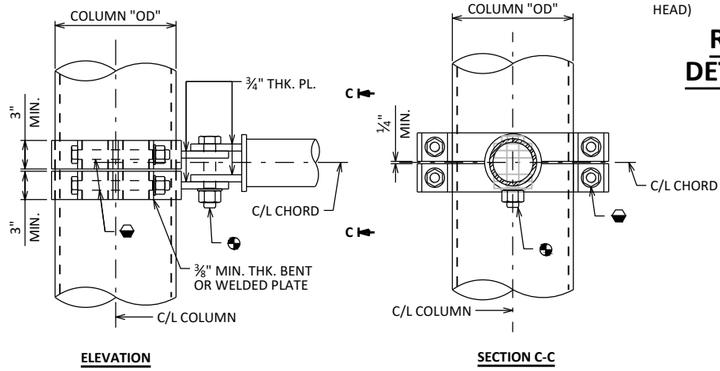



## FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

MIN. (2) ½" MIN. GALVANIZED OR STAINLESS U-BOLT, LOCK NUT AND WASHER



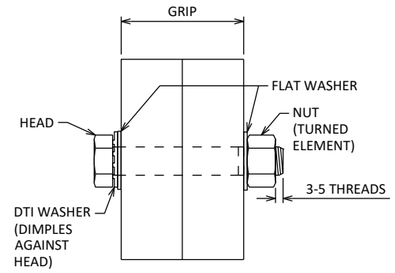




## FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

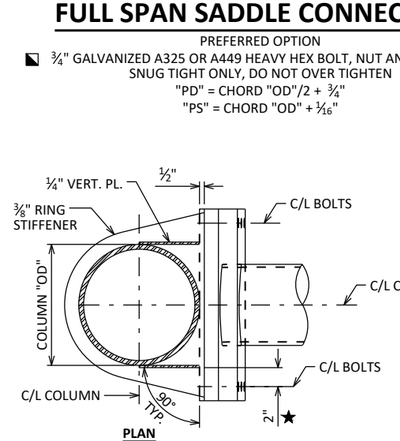
1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

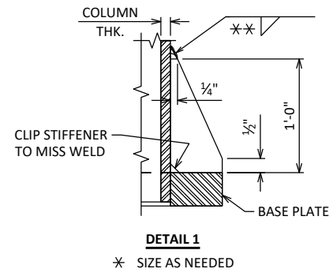
1" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

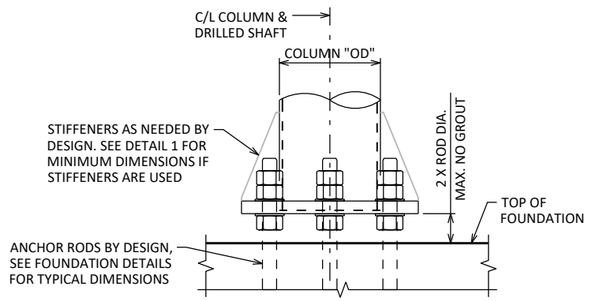



## RECOMMENDED BOLT DETAIL WITH DTI WASHER

NUT IS TURNED ELEMENT



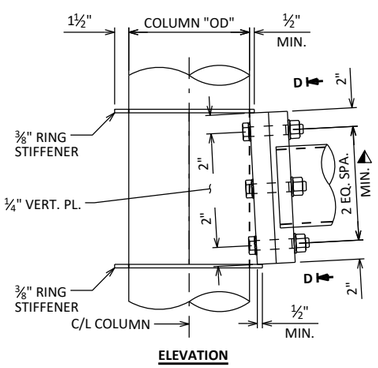



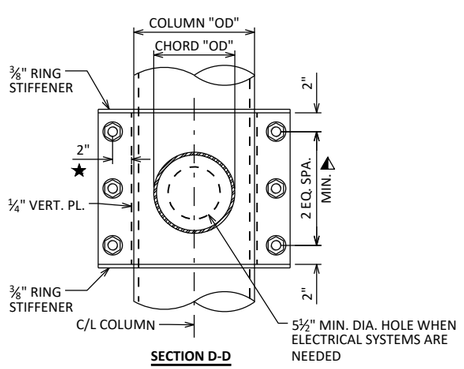




## PREFERRED BASE PLATE CONNECTION

LOOKING AT F.F. OF STRUCTURE.

ALTERNATE BASE PLATE DESIGNS ALLOWED.

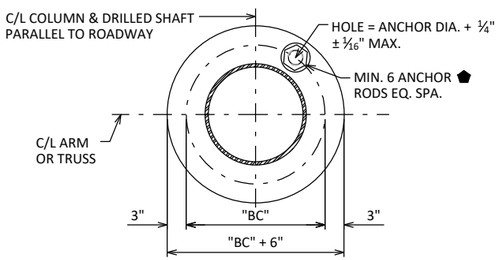



## CANTILEVER POST TO CHORD CONNECTION

MIN. (6) 1" GALVANIZED A325 HEAVY HEX BOLT, NUT, DTI WASHER AND WASHER

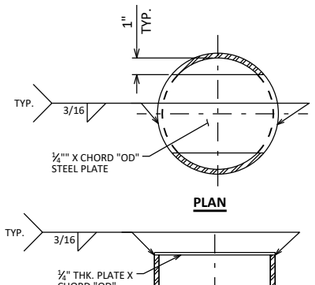
★ MIN. DIMENSIONS MEASURED FROM EXT. FACE OF VERTICAL PLATE.




## BASE PLATE

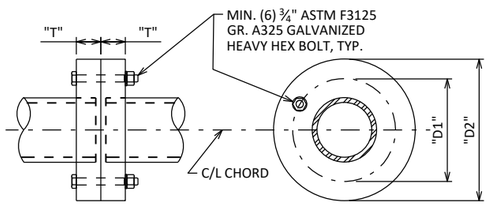
"BC" = COLUMN "OD" + 6"

⬟ ANCHOR SIZE AND ORIENTATION TO BE VERIFIED WITH SHOP DRAWINGS.




## CHORD CAP DETAIL

CANTILEVERS ONLY



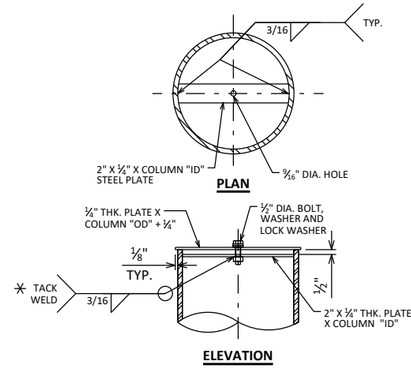

## CHORD SPLICE DETAIL

"D1" = COLUMN "OD" + (1.5 x DB)

"D2" = COLUMN "OD" + (3 x DB)

"T" = (BY DESIGN)

DB = BOLT DIAMETER (BY DESIGN)




## TOWER CAP DETAIL

✳ PLACE TACK WELD EVERY OTHER FLAT TO SECURE NUT. ALTERNATE: USE ½" THK. PL. AND DRILL AND TAP HOLE FOR BOLT.

## NOTES:

MINIMUM VALUES SHOWN. ALL CONNECTIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURAL LOADS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: JAN. 2023**

DRAWN BY: BOS | PLANS CK'D: BOS

**MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1**

SHEET 1 — 295

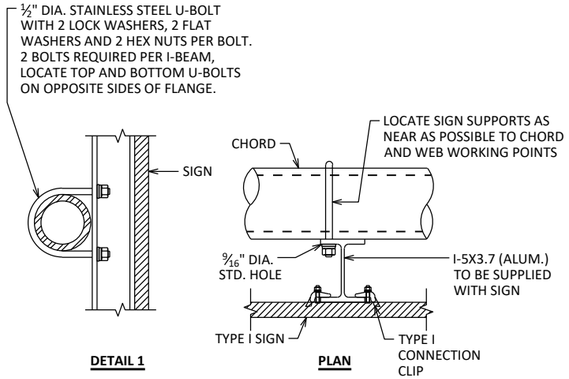
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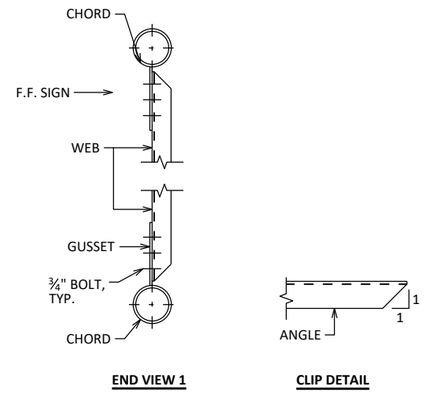
STATE PROJECT NUMBER

**STANDARD**



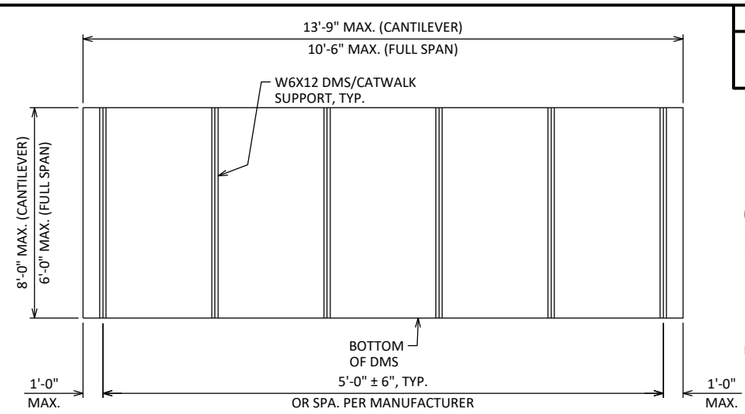

## 2-CHORD TRUSS SIGN CONNECTION

TYPE I SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7BFOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



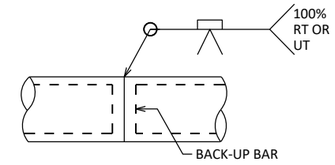

## TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR



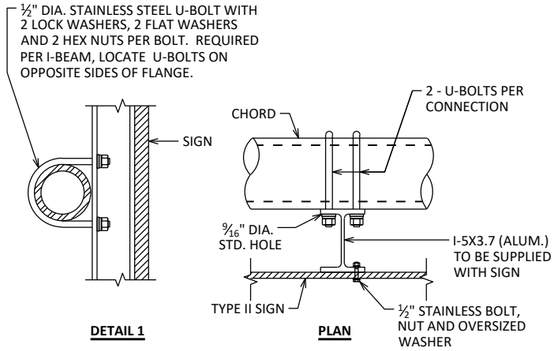

## DMS MOUNTING POST DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



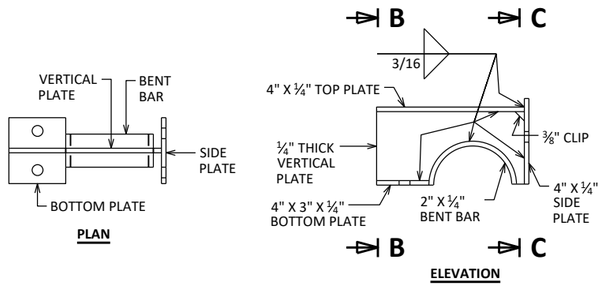

## CHORD SPLICE

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.

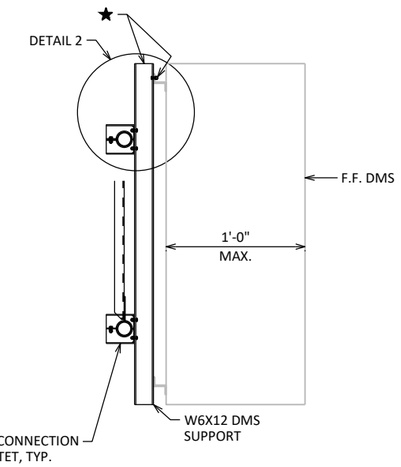



## MONOTUBE SIGN CONNECTION

TYPE II SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.




## DMS WELDED PLATE CONNECTION DETAILS

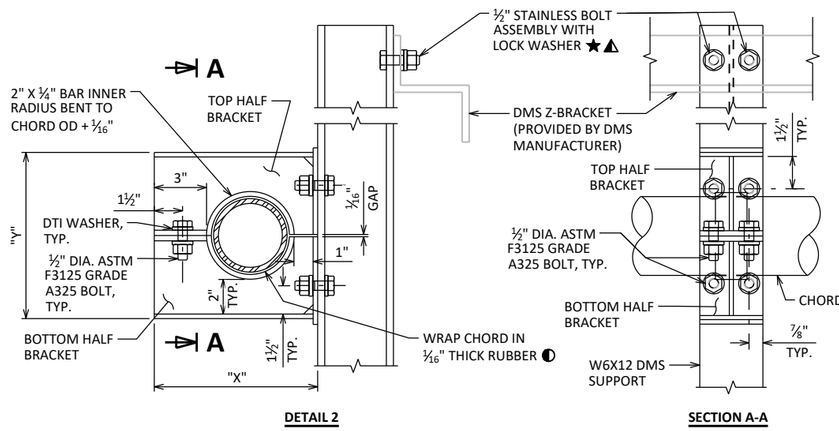



## SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.

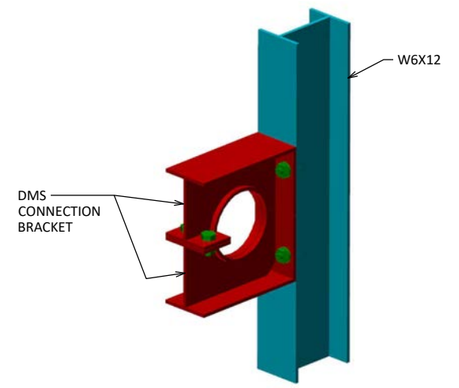



| CHORD "OD" | "X" | "Y" |
|---|---|---|
| "OD" | "OD" + $4\frac{13}{16}$" | "OD" + $5\frac{5}{16}$" |

## TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1

⚠ IF DMS CONNECTION BRACKET IS USED WITH A TYPE II SIGN PANEL, THE BOLT HOLE MUST BE GALVANIZED AND A STAINLESS WASHER USED BETWEEN THE I-BEAM AND SIGN PANEL.




## 3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: JAN. 2023**

DRAWN BY BOS | PLANS CK'D BOS

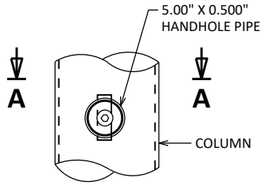
**MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2**

SHEET II
296

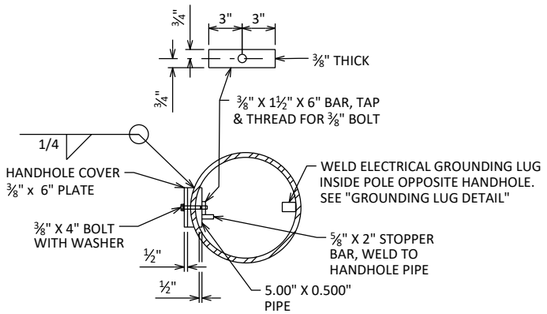
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**ELEVATION**

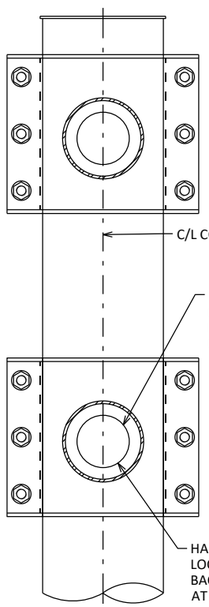



**SECTION A-A**

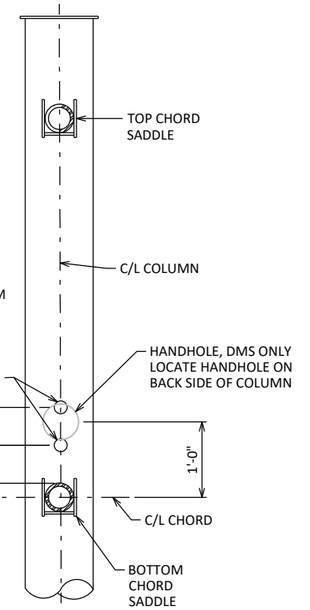
## HANDHOLE DETAILS

HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.




**2-CHORD CANTILEVER**

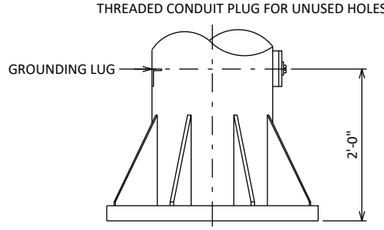



**2-CHORD FULL SPAN**

SADDLE CONNECTION SHOWN,
OTHERS SIMILAR

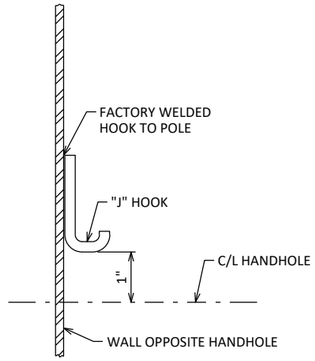
## CONDUIT HOLE LOCATIONS

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



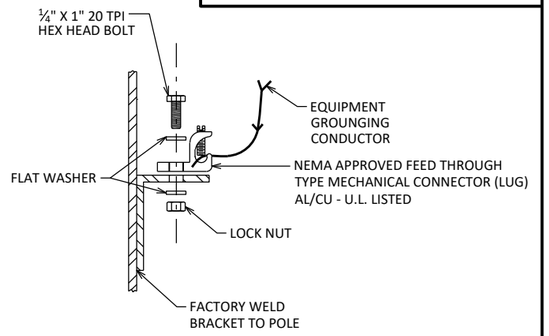

## GROUNDING LUG LOCATION

LOOKING AT THE F.F. OF STRUCTURE



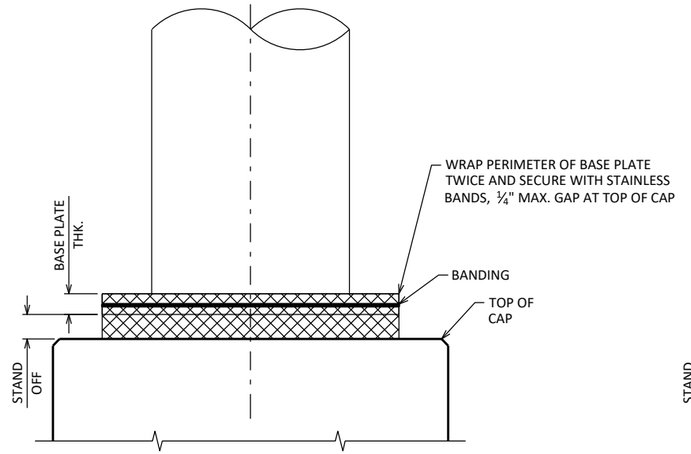

## TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



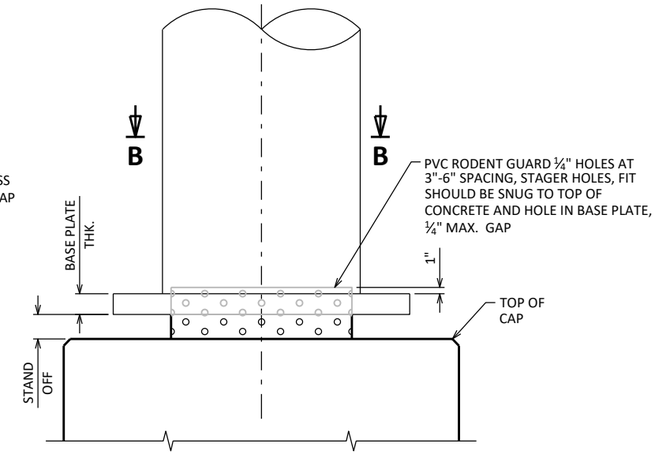

## GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



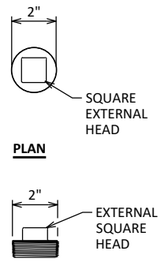

## RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN




## RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN

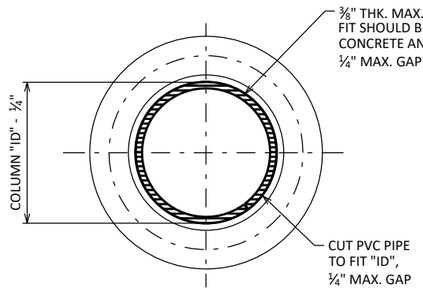



**PLAN**




**ELEVATION**

## CONDUIT PLUG DETAILS




## SECTION B-B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: JAN. 2023**

DRAWN BY: BOS | PLANS CK'D: BOS

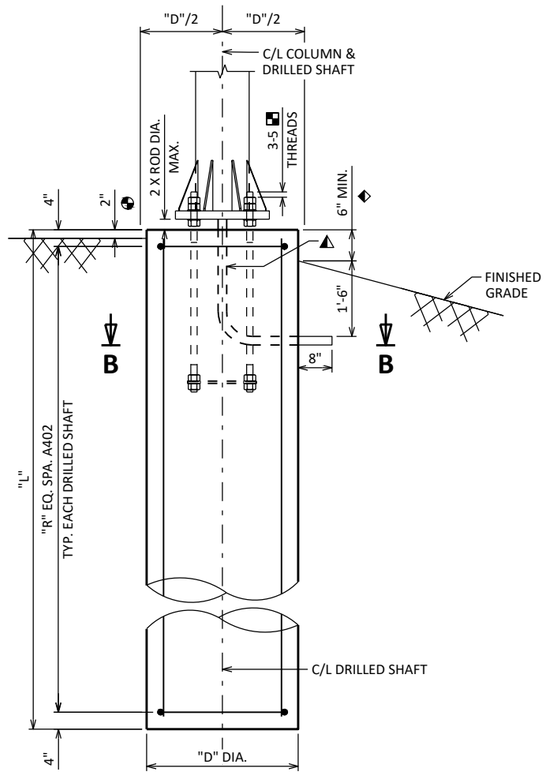
**MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS**

SHEET III
297

SCALE = 2.0

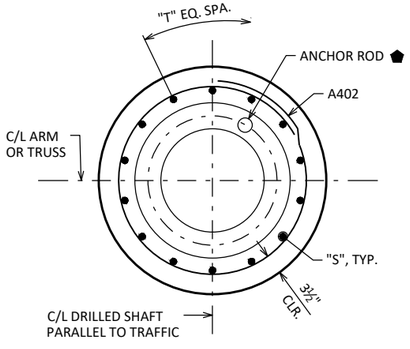
8

8




## ELEVATION

- TYPICAL FOR DRILLED SHAFT FOOTINGS INSTALLED ADJACENT TO SIDEWALKS OR BEHIND CURB AND GUTTER ON LOW SPEED ROADS. TOP OF SHAFT SHALL BE FLUSH IF SURROUNDED BY CONCRETE AND 2" ABOVE FINISHED GRADE FOR ALL OTHER SURFACES.
- TYPICAL FOR EACH DRILLED SHAFT FOOTING INSTALLED ADJACENT TO ROADWAY FACILITIES OR ON SIDE SLOPES WITHIN CLEAR ZONE. BARRIER OR BEAMGUARD MAY BE REQUIRED.




## SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

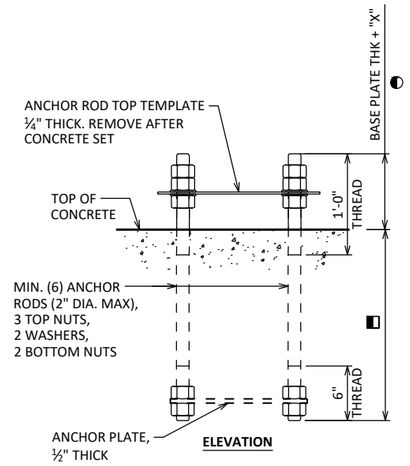
## FOUNDATION DIMENSION DATA

| STANDARD DESIGN TYPE | FOUNDATION DIMENSIONS | | | | | |
|---|---|---|---|---|---|---|
| | "D" | "L" | "R" | "S" | "T" | "BC" MAX. |
| MFI | 2'-0" | 12'-0" | 12 | A801 | 6 | 1'-0" |
| MFII | 2'-6" | 13'-0" | 13 | A801 | 10 | 1'-5" |
| MCI/MCII/TFI | 2'-6" | 17'-0" | 17 | A801 | 10 | 1'-5" |
| TCI | 3'-0" | 18'-0" | 18 | A801 | 14 | 1'-10" |
| TFII | 3'-0" | 20'-0" | 20 | A801 | 14 | 1'-10" |
| MCIII/TCII/TFIII | 3'-6" | 18'-0" | 18 | A901 | 14 | 2'-4" |
| MCIV/TFIV | 3'-6" | 23'-0" | 23 | A901 | 14 | 2'-4" |
| TCIII | 4'-0" | 23'-0" | 23 | A1001 | 14 | 2'-10" |
| TCIV | 4'-0" | 28'-0" | 28 | A1001 | 14 | 2'-10" |

## ESTIMATED QUANTITIES - FOUNDATION

| STANDARD DESIGN TYPE | CONCRETE MASONRY | STEEL REINFORCEMENT HS | FOUNDATION DRILLING (DIA.) (LF) | | | | |
|---|---|---|---|---|---|---|---|
| | (CY) | (LBS) | 24" | 30" | 36" | 42" | 48 |
| MFI | 2 | 240 | 12 | --- | --- | --- | --- |
| MFII | 3 | 410 | 88 | 13 | --- | --- | --- |
| MCI/MCII/TFI | 4 | 540 | --- | 17 | --- | --- | --- |
| TCI | 5 | 780 | --- | --- | 18 | --- | --- |
| TFII | 6 | 860 | --- | --- | 20 | --- | --- |
| MCIII/TCII/TFIII | 7 | 970 | --- | --- | --- | 18 | --- |
| MCIV/TFIV | 9 | 1,250 | --- | --- | --- | 23 | --- |
| TCIII | 11 | 1,560 | --- | --- | --- | --- | 23 |
| TCIV | 13 | 1,900 | --- | --- | --- | --- | 28 |

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON A SINGLE DRILLED SHAFT. MULTIPLY BY 2 FOR FULL SPAN STRUCTURES.



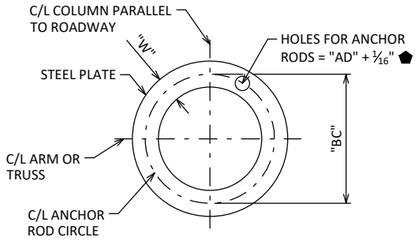

## ANCHOR ROD ASSEMBLY DETAILS

◧ ANCHOR RODS PER ASSEMBLY TO BE DESIGNED BY CONTRACTOR AND SHOWN ON SHOP DRAWINGS. SHOW DIAMETER, NUMBER, ORIENTATION AND EMBEDMENT OF ANCHOR RODS.

CENTER ANCHOR ROD ASSEMBLY AND ENSURE ASSEMBLY IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

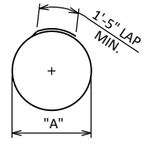
| ANCHOR DIAMETER | MAX. STICK OUT ◐ |
|---|---|
| | "X" |
| 1" | 5" |
| 1¼" | 6" |
| 1½" | 7" |
| 1¾" | 8" |
| 2" | 9" |

◐ ADD BASE PLATE THICKNESS TO VALUE SHOWN FOR MAX. STICK OUT DIMENSION. CONTRACTOR TO COORDINATE WITH FABRICATOR FOR PROPER ANCHOR PLACEMENT.




## ANCHOR PLATE & TOP TEMPLATE

⬟ ANCHOR SIZE AND POSITION TO BE VERIFIED WITH SHOP DRAWINGS.




**A402**

## LEGEND

◪ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

◭ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

## BILL OF BARS

**STANDARD TYPE MFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 6 | 11'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 13 | 5'-10" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE MFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 10 | 12'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 14 | 9'-4" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCI/MCII/TFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 10 | 16'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 18 | 9'-4" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 14 | 17'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 10'-10" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 19'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 21 | 10'-10" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCIII/TCII/TFIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 17'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 12'-5" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCIV/TFIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 22'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 12'-5" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 22'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 14'-0" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 27'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 29 | 14'-0" | X | | DRILLED SHAFT - HORIZONTAL |

✶✶ VALUES IN BAR TABLES ARE FOR A SINGLE FOUNDATION ONLY. MULTIPLY BY 2 FOR FULL ✶✶ SPAN STRUCTURES.

STATE PROJECT NUMBER

**STANDARD**

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: JUNE 2023**

DRAWN BY BOS | PLANS CK'D BOS

**MONOTUBE & 2-CHORD TRUSS FOUNDATIONS**

SHEET IV
298

SCALE = 3.0

8

8

DIVISION 1 (STAGE 1)

STAGE 1 - TEMPORARY WIDENING (51-EX CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 | MASS ORDINATE |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 222+40.00 | 0.00 | 5.39 | 0.00 | 0.27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 222+50.00 | 10.00 | 5.25 | 0.00 | 0.26 | 2 | 0 | 0 | 2 | 0 | 0 | 2 |
| 223+00.00 | 50.00 | 6.67 | 0.55 | 0.33 | 11 | 1 | 1 | 13 | 1 | 1 | 12 |
| 223+50.00 | 50.00 | 10.85 | 0.77 | 0.54 | 16 | 1 | 1 | 29 | 3 | 3 | 27 |
| 225+00.00 | 0.00 | 9.49 | 78.28 | 0.47 | 0 | 0 | 0 | 29 | 3 | 3 | 27 |
| 225+50.00 | 50.00 | 4.57 | 110.43 | 0.23 | 13 | 175 | 1 | 42 | 221 | 4 | -179 |
| 226+00.00 | 50.00 | 4.22 | 128.49 | 0.21 | 8 | 221 | 0 | 50 | 498 | 4 | -448 |
| 226+50.00 | 50.00 | 5.00 | 152.63 | 0.25 | 9 | 260 | 0 | 59 | 823 | 4 | -764 |
| 227+00.00 | 50.00 | 5.75 | 163.80 | 0.29 | 10 | 293 | 0 | 69 | 1,189 | 4 | -1,120 |
| 227+50.00 | 50.00 | 5.49 | 153.56 | 0.27 | 10 | 294 | 1 | 79 | 1,556 | 5 | -1,477 |
| 228+00.00 | 50.00 | 8.07 | 129.43 | 0.40 | 13 | 262 | 1 | 92 | 1,884 | 6 | -1,792 |
| 228+50.00 | 50.00 | 7.48 | 104.93 | 0.37 | 14 | 217 | 1 | 106 | 2,155 | 8 | -2,049 |
| 229+00.00 | 50.00 | 7.12 | 87.61 | 0.36 | 14 | 178 | 1 | 120 | 2,378 | 9 | -2,258 |
| 229+50.00 | 50.00 | 8.48 | 52.30 | 0.42 | 14 | 130 | 1 | 134 | 2,540 | 10 | -2,406 |
| 230+00.00 | 50.00 | 8.80 | 36.70 | 0.44 | 16 | 82 | 1 | 150 | 2,643 | 11 | -2,493 |
| 230+50.00 | 50.00 | 9.80 | 26.16 | 0.49 | 17 | 58 | 1 | 167 | 2,715 | 13 | -2,548 |
| 231+00.00 | 50.00 | 10.38 | 20.34 | 0.52 | 19 | 43 | 1 | 186 | 2,769 | 14 | -2,583 |
| 231+50.00 | 50.00 | 9.64 | 13.79 | 0.48 | 19 | 32 | 1 | 205 | 2,809 | 15 | -2,604 |
| 232+00.00 | 50.00 | 9.12 | 12.87 | 0.46 | 17 | 25 | 1 | 222 | 2,840 | 16 | -2,618 |
| 232+50.00 | 50.00 | 8.12 | 12.86 | 0.41 | 16 | 24 | 1 | 238 | 2,870 | 18 | -2,632 |
| 233+00.00 | 50.00 | 7.17 | 12.92 | 0.36 | 14 | 24 | 1 | 252 | 2,900 | 19 | -2,648 |
| 233+50.00 | 50.00 | 10.38 | 3.08 | 0.52 | 16 | 15 | 1 | 268 | 2,919 | 20 | -2,651 |
| 234+00.00 | 50.00 | 13.24 | 0.35 | 0.66 | 22 | 3 | 1 | 290 | 2,923 | 21 | -2,633 |
| 234+50.00 | 50.00 | 11.18 | 1.23 | 0.56 | 23 | 1 | 1 | 313 | 2,924 | 23 | -2,611 |
| 235+00.00 | 50.00 | 11.05 | 2.03 | 0.55 | 21 | 3 | 1 | 334 | 2,928 | 24 | -2,594 |
| 235+50.00 | 50.00 | 10.20 | 1.20 | 0.51 | 20 | 3 | 1 | 354 | 2,931 | 25 | -2,577 |
| 236+00.00 | 50.00 | 10.08 | 0.53 | 0.50 | 19 | 2 | 1 | 373 | 2,934 | 26 | -2,561 |
| 236+50.00 | 50.00 | 9.85 | 0.07 | 0.49 | 18 | 1 | 1 | 391 | 2,935 | 28 | -2,544 |
| 237+00.00 | 50.00 | 7.97 | 1.49 | 0.40 | 16 | 1 | 1 | 407 | 2,936 | 29 | -2,529 |
| 237+50.00 | 50.00 | 7.20 | 0.41 | 0.36 | 14 | 2 | 1 | 421 | 2,939 | 30 | -2,518 |
| 238+00.00 | 50.00 | 9.03 | 0.00 | 0.45 | 15 | 0 | 1 | 436 | 2,939 | 31 | -2,503 |
| 238+50.00 | 50.00 | 6.90 | 0.00 | 0.35 | 15 | 0 | 1 | 451 | 2,939 | 33 | -2,488 |
| 239+00.00 | 50.00 | 7.07 | 0.00 | 0.35 | 13 | 0 | 1 | 464 | 2,939 | 34 | -2,475 |
| 239+50.00 | 50.00 | 6.43 | 0.00 | 0.32 | 12 | 0 | 1 | 476 | 2,939 | 35 | -2,463 |
| 240+00.00 | 50.00 | 6.85 | 0.00 | 0.34 | 12 | 0 | 1 | 488 | 2,939 | 36 | -2,451 |
| 240+50.00 | 50.00 | 5.53 | 0.00 | 0.28 | 11 | 0 | 1 | 499 | 2,939 | 38 | -2,440 |
| | COLUMN TOTALS | | | | 499 | 2,351 | 30 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.

2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .

3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.

4) EBS CALCULATED AT 5 PERCENT OF CUT.

5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.

6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2 (STAGE 2)
STAGE 2 - CTH B (EB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 26+00.00 | 0.00 | 85.58 | 5.07 | 4.28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26+50.00 | 50.00 | 93.33 | 14.59 | 4.67 | 166 | 18 | 8 | 166 | 23 | 10 | 144 |
| 27+00.00 | 50.00 | 106.01 | 13.62 | 5.30 | 185 | 26 | 9 | 351 | 55 | 21 | 296 |
| 27+50.00 | 50.00 | 112.61 | 16.09 | 5.63 | 202 | 28 | 10 | 553 | 90 | 34 | 463 |
| 28+00.00 | 50.00 | 130.29 | 16.00 | 6.51 | 225 | 30 | 11 | 778 | 128 | 48 | 651 |
| 28+50.00 | 50.00 | 150.22 | 11.57 | 7.51 | 260 | 26 | 13 | 1,038 | 160 | 64 | 878 |
| 29+00.00 | 50.00 | 164.04 | 5.95 | 8.20 | 291 | 16 | 15 | 1,329 | 180 | 83 | 1,149 |
| 29+50.00 | 50.00 | 167.94 | 7.88 | 8.40 | 307 | 13 | 15 | 1,636 | 196 | 101 | 1,440 |
| 30+00.00 | 50.00 | 99.92 | 1.65 | 5.00 | 248 | 9 | 12 | 1,884 | 208 | 116 | 1,677 |
| 30+50.00 | 50.00 | 91.62 | 2.23 | 4.58 | 177 | 4 | 9 | 2,061 | 213 | 128 | 1,849 |
| 31+00.00 | 50.00 | 77.32 | 4.23 | 3.87 | 156 | 6 | 8 | 2,217 | 220 | 138 | 1,997 |
| 31+50.00 | 50.00 | 67.06 | 5.62 | 3.35 | 134 | 9 | 7 | 2,351 | 231 | 146 | 2,120 |
| 32+00.00 | 50.00 | 27.70 | 1.46 | 1.38 | 88 | 7 | 4 | 2,439 | 240 | 151 | 2,199 |
| 32+50.00 | 50.00 | 34.58 | 48.31 | 1.73 | 58 | 46 | 3 | 2,497 | 298 | 155 | 2,200 |
| 33+00.00 | 50.00 | 79.24 | 52.88 | 3.96 | 105 | 94 | 5 | 2,602 | 415 | 161 | 2,187 |
| 33+34.94 | 34.94 | 0.00 | 43.81 | 0.00 | 51 | 63 | 3 | 2,653 | 494 | 165 | 2,159 |
| | COLUMN TOTALS | | | | 2,653 | 395 | 132 | | | | |

DIVISION 2 (STAGE 2)
STAGE 2 - CTH B (WB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 30+00.00 | 0.00 | 76.64 | 7.63 | 3.83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30+50.00 | 50.00 | 87.50 | 5.44 | 4.37 | 152 | 12 | 8 | 152 | 15 | 10 | 137 |
| 31+00.00 | 50.00 | 113.10 | 0.00 | 5.65 | 186 | 5 | 9 | 338 | 21 | 21 | 317 |
| 31+50.00 | 50.00 | 100.38 | 0.00 | 5.02 | 198 | 0 | 10 | 536 | 21 | 34 | 515 |
| 32+00.00 | 50.00 | 111.84 | 3.95 | 5.59 | 197 | 4 | 10 | 733 | 26 | 46 | 707 |
| 32+50.00 | 50.00 | 85.03 | 28.46 | 4.25 | 182 | 30 | 9 | 915 | 64 | 58 | 851 |
| 33+00.00 | 50.00 | 62.38 | 63.64 | 3.12 | 136 | 85 | 7 | 1,051 | 170 | 66 | 881 |
| 33+29.84 | 29.84 | 0.00 | 128.29 | 0.00 | 34 | 106 | 2 | 1,085 | 303 | 69 | 783 |
| | COLUMN TOTALS | | | | 1,085 | 242 | 55 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2 (STAGE 2)
STAGE 2 - ROUNDABOUT (A CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 0+64.39 | 0.00 | 45.66 | 0.00 | 2.28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0+75.00 | 10.61 | 18.60 | 0.00 | 0.93 | 13 | 0 | 1 | 13 | 0 | 1 | 13 |
| 1+00.00 | 25.00 | 46.57 | 190.86 | 2.33 | 30 | 88 | 2 | 43 | 110 | 4 | -67 |
| 1+25.00 | 25.00 | 0.00 | 43.29 | 0.00 | 22 | 108 | 1 | 65 | 245 | 5 | -180 |
| 1+50.00 | 25.00 | 0.00 | 14.53 | 0.00 | 0 | 27 | 0 | 65 | 279 | 5 | -214 |
| 1+75.00 | 25.00 | 70.34 | 111.77 | 3.52 | 33 | 58 | 2 | 98 | 351 | 8 | -253 |
| 2+00.00 | 25.00 | 3.04 | 62.59 | 0.15 | 34 | 81 | 2 | 132 | 453 | 10 | -321 |
| 2+25.00 | 25.00 | 12.83 | 0.18 | 0.64 | 7 | 29 | 0 | 139 | 489 | 10 | -350 |
| 2+28.80 | 3.80 | 15.50 | 0.01 | 0.77 | 2 | 0 | 0 | 141 | 489 | 10 | -348 |
| | COLUMN TOTALS | | | | 141 | 391 | 8 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

9

9

PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EARTHWORK DATA | SHEET: 301 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : PLOT SCALE : 1" = 1" WISDOT/CADDS SHEET 42

DIVISION 2 (STAGE 2)
STAGE 2 - USH 51 (51-EX CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 217+51.00 | 0.00 | 44.48 | 0.01 | 2.22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 218+00.00 | 49.00 | 50.32 | 0.00 | 2.52 | 86 | 0 | 4 | 86 | 0 | 5 | 86 |
| 218+50.00 | 50.00 | 54.60 | 0.62 | 2.73 | 97 | 1 | 5 | 183 | 1 | 11 | 182 |
| 219+00.00 | 50.00 | 56.24 | 2.31 | 2.81 | 103 | 3 | 5 | 286 | 5 | 18 | 281 |
| 219+50.00 | 50.00 | 53.86 | 3.38 | 2.69 | 102 | 5 | 5 | 388 | 11 | 24 | 377 |
| 220+00.00 | 50.00 | 56.77 | 5.85 | 2.84 | 102 | 9 | 5 | 490 | 23 | 30 | 468 |
| 220+50.00 | 50.00 | 79.62 | 10.18 | 3.98 | 126 | 15 | 6 | 616 | 41 | 38 | 575 |
| 221+00.00 | 50.00 | 59.21 | 34.72 | 2.96 | 129 | 42 | 6 | 745 | 94 | 45 | 651 |
| 221+50.00 | 50.00 | 45.39 | 68.50 | 2.27 | 97 | 96 | 5 | 842 | 214 | 51 | 628 |
| 226+00.00 | 0.00 | 76.09 | 82.77 | 3.80 | 0 | 0 | 0 | 842 | 214 | 51 | 628 |
| 226+50.00 | 50.00 | 68.67 | 82.87 | 3.43 | 134 | 153 | 7 | 976 | 405 | 60 | 571 |
| 227+00.00 | 50.00 | 60.34 | 70.71 | 3.02 | 119 | 142 | 6 | 1,095 | 583 | 68 | 513 |
| 227+50.00 | 50.00 | 67.06 | 57.58 | 3.35 | 118 | 119 | 6 | 1,213 | 731 | 75 | 482 |
| 228+00.00 | 50.00 | 58.11 | 52.51 | 2.91 | 116 | 102 | 6 | 1,329 | 859 | 83 | 470 |
| 228+50.00 | 50.00 | 59.71 | 43.95 | 2.99 | 109 | 89 | 5 | 1,438 | 970 | 89 | 468 |
| 229+00.00 | 50.00 | 88.73 | 43.01 | 4.44 | 137 | 81 | 7 | 1,575 | 1,071 | 98 | 504 |
| 229+50.00 | 50.00 | 97.63 | 14.35 | 4.88 | 173 | 53 | 9 | 1,748 | 1,138 | 109 | 611 |
| 230+00.00 | 50.00 | 88.52 | 0.63 | 4.43 | 172 | 14 | 9 | 1,920 | 1,155 | 120 | 765 |
| 230+50.00 | 50.00 | 83.71 | 0.00 | 4.19 | 159 | 1 | 8 | 2,079 | 1,156 | 130 | 923 |
| 231+00.00 | 50.00 | 75.09 | 0.00 | 3.75 | 147 | 0 | 7 | 2,226 | 1,156 | 139 | 1,070 |
| 231+50.00 | 50.00 | 74.00 | 0.58 | 3.70 | 138 | 1 | 7 | 2,364 | 1,158 | 148 | 1,207 |
| 232+00.00 | 50.00 | 68.71 | 0.98 | 3.44 | 132 | 1 | 7 | 2,496 | 1,159 | 156 | 1,337 |
| 232+50.00 | 50.00 | 78.81 | 1.47 | 3.94 | 137 | 2 | 7 | 2,633 | 1,161 | 165 | 1,472 |
| 233+00.00 | 50.00 | 68.76 | 4.04 | 3.44 | 137 | 5 | 7 | 2,770 | 1,168 | 174 | 1,603 |
| 233+50.00 | 50.00 | 13.25 | 4.61 | 0.66 | 76 | 8 | 4 | 2,846 | 1,178 | 179 | 1,669 |
| 234+00.00 | 50.00 | 5.63 | 9.19 | 0.28 | 17 | 13 | 1 | 2,863 | 1,194 | 180 | 1,669 |
| 234+50.00 | 50.00 | 4.94 | 10.03 | 0.25 | 10 | 18 | 0 | 2,873 | 1,216 | 180 | 1,657 |
| 235+00.00 | 50.00 | 4.81 | 11.36 | 0.24 | 9 | 20 | 0 | 2,882 | 1,241 | 180 | 1,641 |
| 235+50.00 | 50.00 | 5.57 | 5.96 | 0.28 | 10 | 16 | 0 | 2,892 | 1,261 | 180 | 1,631 |
| 236+00.00 | 50.00 | 6.62 | 4.55 | 0.33 | 11 | 10 | 1 | 2,903 | 1,274 | 181 | 1,629 |
| 236+50.00 | 50.00 | 6.17 | 2.64 | 0.31 | 12 | 7 | 1 | 2,915 | 1,283 | 183 | 1,633 |
| 237+00.00 | 50.00 | 5.39 | 6.05 | 0.27 | 11 | 8 | 1 | 2,926 | 1,293 | 184 | 1,634 |
| 237+50.00 | 50.00 | 6.22 | 1.66 | 0.31 | 11 | 7 | 1 | 2,937 | 1,301 | 185 | 1,636 |
| 238+00.00 | 50.00 | 6.67 | 2.92 | 0.33 | 12 | 4 | 1 | 2,949 | 1,306 | 186 | 1,643 |
| 238+50.00 | 50.00 | 6.04 | 3.47 | 0.30 | 12 | 6 | 1 | 2,961 | 1,314 | 188 | 1,647 |
| 239+00.00 | 50.00 | 5.96 | 1.96 | 0.30 | 11 | 5 | 1 | 2,972 | 1,320 | 189 | 1,652 |
| 239+50.00 | 50.00 | 6.06 | 0.07 | 0.30 | 11 | 2 | 1 | 2,983 | 1,323 | 190 | 1,661 |
| 240+00.00 | 50.00 | 7.16 | 0.00 | 0.36 | 12 | 0 | 1 | 2,995 | 1,323 | 191 | 1,673 |
| 240+50.00 | 50.00 | 6.12 | 0.00 | 0.31 | 12 | 0 | 1 | 3,007 | 1,323 | 193 | 1,685 |
| COLUMN TOTALS | | | | | 3,007 | 1,058 | 154 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

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PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EARTHWORK DATA | SHEET: 302 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : PLOT SCALE : 1" = 1" WISDOT/CADDS SHEET 42

DIVISION 3 (STAGE 3)
STAGE 3 - USH 51 (NB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 121+55.21 | 0.00 | 114.24 | 0.00 | 5.71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 122+00.00 | 44.79 | 78.06 | 0.00 | 3.90 | 160 | 0 | 8 | 160 | 0 | 10 | 160 |
| 122+50.00 | 50.00 | 53.29 | 3.21 | 2.66 | 122 | 3 | 6 | 282 | 4 | 18 | 278 |
| 123+00.00 | 50.00 | 58.86 | 2.53 | 2.94 | 104 | 5 | 5 | 386 | 10 | 24 | 376 |
| 123+50.00 | 50.00 | 83.95 | 0.00 | 4.20 | 132 | 2 | 7 | 518 | 13 | 33 | 506 |
| 123+75.49 | 25.48 | 103.73 | 16.94 | 5.19 | 89 | 8 | 4 | 607 | 23 | 38 | 585 |
| 125+19.05 | 0.00 | 61.88 | 124.14 | 3.09 | 0 | 0 | 0 | 607 | 23 | 38 | 585 |
| 125+50.00 | 30.95 | 90.64 | 126.79 | 4.53 | 87 | 144 | 4 | 694 | 203 | 43 | 492 |
| 126+00.00 | 50.00 | 127.90 | 106.88 | 6.39 | 202 | 216 | 10 | 896 | 473 | 55 | 424 |
| 126+50.00 | 50.00 | 153.77 | 26.29 | 7.69 | 261 | 123 | 13 | 1,157 | 626 | 71 | 531 |
| 127+00.00 | 50.00 | 160.61 | 9.33 | 8.03 | 291 | 33 | 15 | 1,448 | 668 | 90 | 781 |
| 127+50.00 | 50.00 | 188.26 | 0.00 | 9.41 | 323 | 9 | 16 | 1,771 | 679 | 110 | 1,092 |
| 128+00.00 | 50.00 | 182.85 | 0.00 | 9.14 | 344 | 0 | 17 | 2,115 | 679 | 131 | 1,436 |
| 128+50.00 | 50.00 | 168.89 | 0.00 | 8.44 | 326 | 0 | 16 | 2,441 | 679 | 151 | 1,762 |
| 129+00.00 | 50.00 | 114.55 | 0.00 | 5.73 | 262 | 0 | 13 | 2,703 | 679 | 168 | 2,024 |
| 129+50.00 | 50.00 | 106.85 | 0.00 | 5.34 | 205 | 0 | 10 | 2,908 | 679 | 180 | 2,229 |
| 130+00.00 | 50.00 | 105.07 | 0.00 | 5.25 | 196 | 0 | 10 | 3,104 | 679 | 193 | 2,425 |
| 130+50.00 | 50.00 | 93.65 | 0.00 | 4.68 | 184 | 0 | 9 | 3,288 | 679 | 204 | 2,609 |
| 131+00.00 | 50.00 | 94.14 | 0.00 | 4.71 | 174 | 0 | 9 | 3,462 | 679 | 215 | 2,783 |
| 131+50.00 | 50.00 | 90.02 | 0.04 | 4.50 | 171 | 0 | 9 | 3,633 | 679 | 226 | 2,954 |
| 132+00.00 | 50.00 | 82.61 | 1.49 | 4.13 | 160 | 1 | 8 | 3,793 | 680 | 236 | 3,113 |
| 132+50.00 | 50.00 | 83.84 | 0.26 | 4.19 | 154 | 2 | 8 | 3,947 | 683 | 246 | 3,265 |
| 133+00.00 | 50.00 | 87.06 | 0.15 | 4.35 | 158 | 0 | 8 | 4,105 | 683 | 256 | 3,423 |
| 133+44.00 | 44.00 | 81.02 | 1.41 | 4.05 | 137 | 1 | 7 | 4,242 | 684 | 265 | 3,558 |
| | COLUMN TOTALS | | | | 4,242 | 547 | 212 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

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DIVISION 3 (STAGE 3)
STAGE 3 - CTH AB (EB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 35+07.62 | 0.00 | 129.14 | 62.28 | 6.46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35+50.00 | 42.38 | 115.58 | 77.36 | 5.78 | 192 | 110 | 10 | 192 | 138 | 13 | 55 |
| 35+68.27 | 18.27 | 219.59 | 95.71 | 10.98 | 113 | 59 | 6 | 305 | 211 | 20 | 94 |
| 35+82.19 | 13.92 | 201.67 | 61.70 | 10.08 | 109 | 41 | 5 | 414 | 263 | 26 | 152 |
| 36+00.00 | 17.81 | 196.10 | 13.66 | 9.81 | 131 | 25 | 7 | 545 | 294 | 35 | 251 |
| 36+50.00 | 50.00 | 171.39 | 0.00 | 8.57 | 340 | 13 | 17 | 885 | 310 | 56 | 575 |
| 37+00.00 | 50.00 | 152.91 | 0.00 | 7.65 | 300 | 0 | 15 | 1,185 | 310 | 75 | 875 |
| 37+08.00 | 8.00 | 147.62 | 0.00 | 7.38 | 45 | 0 | 2 | 1,230 | 310 | 78 | 920 |
| 37+50.00 | 42.00 | 99.49 | 0.00 | 4.97 | 192 | 0 | 10 | 1,422 | 310 | 90 | 1,112 |
| 37+69.20 | 19.20 | 85.69 | 20.02 | 4.28 | 66 | 7 | 3 | 1,488 | 319 | 94 | 1,169 |
| 37+75.89 | 6.69 | 83.56 | 29.07 | 4.18 | 21 | 6 | 1 | 1,509 | 326 | 95 | 1,183 |
| 38+00.00 | 24.11 | 91.47 | 11.89 | 4.57 | 78 | 18 | 4 | 1,587 | 349 | 100 | 1,238 |
| 38+23.00 | 23.00 | 90.90 | 11.80 | 4.55 | 78 | 10 | 4 | 1,665 | 361 | 105 | 1,304 |
| 38+50.00 | 27.00 | 89.01 | 9.13 | 4.45 | 90 | 10 | 4 | 1,755 | 374 | 110 | 1,381 |
| 38+90.00 | 40.00 | 82.51 | 4.10 | 4.13 | 127 | 10 | 6 | 1,882 | 386 | 118 | 1,496 |
| 39+00.00 | 10.00 | 84.73 | 2.67 | 4.24 | 31 | 1 | 2 | 1,913 | 388 | 120 | 1,526 |
| 39+50.00 | 50.00 | 111.17 | 0.00 | 5.56 | 181 | 2 | 9 | 2,094 | 390 | 131 | 1,704 |
| | COLUMN TOTALS | | | | 2,094 | 312 | 105 | | | | |

DIVISION 3 (STAGE 3)
STAGE 3 - CTH AB (WB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 35+05.30 | 0.00 | 77.61 | 60.44 | 3.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35+25.00 | 19.70 | 114.88 | 48.46 | 5.74 | 70 | 40 | 4 | 70 | 50 | 5 | 20 |
| 35+50.00 | 25.00 | 121.54 | 41.14 | 6.08 | 109 | 41 | 5 | 179 | 101 | 11 | 78 |
| | COLUMN TOTALS | | | | 179 | 81 | 9 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

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PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EARTHWORK DATA | SHEET: 304 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : PLOT SCALE : 1" = 1" WISDOT/CADDS SHEET 42

DIVISION 3 (STAGE 3)
STAGE 3 - ROUNDABOUT (A CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 | MASS ORDINATE |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 0+00.00 | 0.00 | 58.40 | 153.78 | 2.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0+25.00 | 25.00 | 90.77 | 0.00 | 4.54 | 69 | 71 | 3 | 69 | 89 | 4 | -20 |
| 0+50.00 | 25.00 | 73.19 | 0.00 | 3.66 | 76 | 0 | 4 | 145 | 89 | 9 | 56 |
| 0+64.39 | 14.39 | 45.66 | 0.00 | 2.28 | 32 | 0 | 2 | 177 | 89 | 11 | 88 |
| 2+28.80 | 0.00 | 15.50 | 0.01 | 0.77 | 0 | 0 | 0 | 177 | 89 | 11 | 88 |
| 2+50.00 | 21.20 | 54.41 | 0.00 | 2.72 | 27 | 0 | 1 | 204 | 89 | 13 | 115 |
| 2+75.00 | 25.00 | 138.32 | 40.56 | 6.92 | 89 | 19 | 4 | 293 | 113 | 18 | 181 |
| 3+00.00 | 25.00 | 136.89 | 0.00 | 6.84 | 127 | 19 | 6 | 420 | 136 | 25 | 284 |
| 3+25.00 | 25.00 | 117.77 | 0.00 | 5.89 | 118 | 0 | 6 | 538 | 136 | 33 | 402 |
| 3+50.00 | 25.00 | 43.81 | 174.56 | 2.19 | 75 | 81 | 4 | 613 | 238 | 38 | 376 |
| | COLUMN TOTALS | | | | 613 | 190 | 30 | | | | |

DIVISION - 51-EX
STAGE 3 - USH 51 (51-EX CHAIN)

| STATION | DISTANCE | AREA (SF) | | | CREMENTAL VOL (CY) (UNADJUSTE | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 | MASS ORDINATE |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 233+50.00 | 0.00 | 14.95 | 0.00 | 0.75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234+00.00 | 50.00 | 11.38 | 0.00 | 0.57 | 24 | 0 | 1 | 24 | 0 | 1 | 24 |
| 234+50.00 | 50.00 | 10.84 | 0.00 | 0.54 | 21 | 0 | 1 | 45 | 0 | 3 | 45 |
| 235+00.00 | 50.00 | 11.02 | 0.00 | 0.55 | 20 | 0 | 1 | 65 | 0 | 4 | 65 |
| 235+50.00 | 50.00 | 9.91 | 0.00 | 0.50 | 19 | 0 | 1 | 84 | 0 | 5 | 84 |
| 236+00.00 | 50.00 | 8.36 | 0.00 | 0.42 | 17 | 0 | 1 | 101 | 0 | 6 | 101 |
| 236+50.00 | 50.00 | 6.55 | 0.00 | 0.33 | 14 | 0 | 1 | 115 | 0 | 8 | 115 |
| 237+00.00 | 50.00 | 7.39 | 0.00 | 0.37 | 13 | 0 | 1 | 128 | 0 | 9 | 128 |
| 237+50.00 | 50.00 | 5.10 | 0.00 | 0.26 | 12 | 0 | 1 | 140 | 0 | 10 | 140 |
| 238+00.00 | 50.00 | 3.20 | 0.27 | 0.16 | 8 | 0 | 0 | 148 | 0 | 10 | 148 |
| 238+50.00 | 50.00 | 2.81 | 0.02 | 0.14 | 6 | 0 | 0 | 154 | 0 | 10 | 154 |
| 239+00.00 | 50.00 | 2.21 | 0.66 | 0.11 | 5 | 1 | 0 | 159 | 1 | 10 | 158 |
| 239+50.00 | 50.00 | 1.84 | 0.66 | 0.09 | 4 | 1 | 0 | 163 | 3 | 10 | 161 |
| 240+00.00 | 50.00 | 1.36 | 1.41 | 0.07 | 3 | 2 | 0 | 166 | 5 | 10 | 161 |
| 240+50.00 | 50.00 | 0.64 | 1.13 | 0.03 | 2 | 2 | 0 | 168 | 8 | 10 | 161 |
| | COLUMN TOTALS | | | | 168 | 6 | 8 | | | | |

NOTES:
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 4 (STAGE 4)

STAGE 4 - USH 51- NORTH LEG (SB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT NOTE 1 | FILL NOTE 3 | EBS NOTE 4 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 NOTE 5 | MASS ORDINATE NOTE 6 |
| 125+23.00 | 0.00 | 22.02 | 53.58 | 1.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125+50.00 | 27.00 | 27.13 | 7.86 | 1.36 | 25 | 31 | 1 | 25 | 39 | 1 | -14 |
| 126+00.00 | 50.00 | 36.96 | 9.61 | 1.85 | 59 | 16 | 3 | 84 | 59 | 5 | 25 |
| 126+50.00 | 50.00 | 41.10 | 9.37 | 2.05 | 72 | 18 | 4 | 156 | 81 | 10 | 75 |
| 127+00.00 | 50.00 | 38.03 | 1.92 | 1.90 | 73 | 10 | 4 | 229 | 94 | 15 | 135 |
| 127+50.00 | 50.00 | 18.02 | 0.00 | 0.90 | 52 | 2 | 3 | 281 | 96 | 19 | 185 |
| 128+00.00 | 50.00 | 18.20 | 0.00 | 0.91 | 34 | 0 | 2 | 315 | 96 | 21 | 219 |
| 128+50.00 | 50.00 | 24.78 | 0.00 | 1.24 | 40 | 0 | 2 | 355 | 96 | 24 | 259 |
| 128+83.00 | 33.00 | 25.15 | 0.00 | 1.26 | 31 | 0 | 2 | 386 | 96 | 26 | 290 |
| | COLUMN TOTALS | | | | 386 | 77 | 21 | | | | |

DIVISION 4 (STAGE 4)

STAGE 4 - USH 51- SOUTH LEG (SB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT NOTE 1 | FILL NOTE 3 | EBS NOTE 4 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 NOTE 5 | MASS ORDINATE NOTE 6 |
| 120+50.00 | 0.00 | 45.66 | 3.64 | 2.28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 121+00.00 | 50.00 | 63.12 | 1.91 | 3.16 | 101 | 5 | 5 | 101 | 6 | 6 | 95 |
| 121+50.00 | 50.00 | 85.51 | 0.36 | 4.28 | 138 | 2 | 7 | 239 | 9 | 15 | 230 |
| | COLUMN TOTALS | | | | 239 | 7 | 12 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.

2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .

3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.

4) EBS CALCULATED AT 5 PERCENT OF CUT.

5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.

6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

9

9

PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EARTHWORK DATA | SHEET: 306 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : PLOT SCALE : 1" = 1" WISDOT/CADDS SHEET 42

DIVISION 4 (STAGE 4)
STAGE 4 - USH 51- SOUTH LEG (NB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT | EXPANDED FILL | EXPANDED EBS BACKFILL | MASS ORDINATE |
| | | | | | | | | 1.00 | 1.25 | 1.25 | |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 115+50.00 | 0.00 | 119.94 | 15.93 | 6.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 116+00.00 | 50.00 | 157.48 | 0.00 | 7.87 | 257 | 15 | 13 | 257 | 19 | 16 | 238 |
| 116+50.00 | 50.00 | 180.16 | 0.00 | 9.01 | 313 | 0 | 16 | 570 | 19 | 36 | 551 |
| 116+50.65 | 0.65 | 180.38 | 0.00 | 9.02 | 4 | 0 | 0 | 574 | 19 | 36 | 555 |
| 116+75.64 | 24.99 | 192.14 | 0.00 | 9.61 | 172 | 0 | 9 | 746 | 19 | 48 | 727 |
| 117+00.00 | 24.36 | 191.04 | 0.00 | 9.55 | 173 | 0 | 9 | 919 | 19 | 59 | 900 |
| 117+00.62 | 0.61 | 191.42 | 0.00 | 9.57 | 4 | 0 | 0 | 923 | 19 | 59 | 904 |
| 117+50.00 | 49.39 | 161.97 | 2.27 | 8.10 | 323 | 2 | 16 | 1,246 | 21 | 79 | 1,225 |
| 118+00.00 | 50.00 | 164.09 | 2.43 | 8.20 | 302 | 4 | 15 | 1,548 | 26 | 98 | 1,522 |
| 118+20.00 | 20.00 | 169.64 | 1.08 | 8.48 | 124 | 1 | 6 | 1,672 | 28 | 105 | 1,645 |
| 118+50.00 | 30.00 | 169.36 | 0.70 | 8.47 | 188 | 1 | 9 | 1,860 | 29 | 116 | 1,831 |
| 118+70.00 | 20.00 | 168.16 | 0.66 | 8.41 | 125 | 1 | 6 | 1,985 | 30 | 124 | 1,955 |
| 119+00.00 | 30.00 | 175.70 | 0.02 | 8.79 | 191 | 0 | 10 | 2,176 | 30 | 136 | 2,146 |
| 119+30.00 | 30.00 | 179.57 | 0.03 | 8.98 | 197 | 0 | 10 | 2,373 | 30 | 149 | 2,343 |
| 119+50.00 | 20.00 | 183.70 | 0.88 | 9.19 | 135 | 0 | 7 | 2,508 | 30 | 158 | 2,478 |
| 119+80.00 | 30.00 | 196.12 | 2.88 | 9.81 | 211 | 2 | 11 | 2,719 | 33 | 171 | 2,687 |
| 120+00.00 | 20.00 | 197.60 | 5.28 | 9.88 | 146 | 3 | 7 | 2,865 | 36 | 180 | 2,829 |
| 120+25.00 | 25.00 | 202.60 | 6.16 | 10.13 | 185 | 5 | 9 | 3,050 | 43 | 191 | 3,008 |
| 120+50.00 | 25.00 | 95.20 | 3.71 | 4.76 | 138 | 5 | 7 | 3,188 | 49 | 200 | 3,139 |
| 121+00.00 | 50.00 | 100.05 | 0.02 | 5.00 | 181 | 3 | 9 | 3,369 | 53 | 211 | 3,317 |
| 121+50.00 | 50.00 | 111.56 | 0.02 | 5.58 | 196 | 0 | 10 | 3,565 | 53 | 224 | 3,513 |
| | COLUMN TOTALS | | | | 3,565 | 42 | 179 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

9

9

DIVISION 4 (STAGE 4)

STAGE 4 - USH 51- NORTH LEG (NB CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 | MASS ORDINATE |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 129+00.00 | 0.00 | 24.54 | 0.00 | 1.23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 129+50.00 | 50.00 | 24.70 | 0.00 | 1.24 | 46 | 0 | 2 | 46 | 0 | 3 | 46 |
| 130+00.00 | 50.00 | 31.62 | 0.47 | 1.58 | 52 | 0 | 3 | 98 | 0 | 6 | 98 |
| 130+50.00 | 50.00 | 43.01 | 0.00 | 2.15 | 69 | 0 | 3 | 167 | 0 | 10 | 167 |
| 131+00.00 | 50.00 | 47.58 | 0.01 | 2.38 | 84 | 0 | 4 | 251 | 0 | 15 | 251 |
| 131+50.00 | 50.00 | 40.38 | 0.04 | 2.02 | 81 | 0 | 4 | 332 | 0 | 20 | 332 |
| 132+00.00 | 50.00 | 32.26 | 0.89 | 1.61 | 67 | 1 | 3 | 399 | 1 | 24 | 398 |
| 132+50.00 | 50.00 | 31.55 | 2.86 | 1.58 | 59 | 3 | 3 | 458 | 5 | 28 | 453 |
| 133+00.00 | 50.00 | 30.24 | 2.92 | 1.51 | 57 | 5 | 3 | 515 | 11 | 31 | 504 |
| 133+44.00 | 44.00 | 30.85 | 1.82 | 1.54 | 50 | 4 | 2 | 565 | 16 | 34 | 549 |
| | COLUMN TOTALS | | | | 565 | 13 | 27 | | | | |

DIVISION 4 (STAGE 4)

STAGE 4 - USH 51- (51-EX CHAIN)

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | FILL | EBS | CUT | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | EXPANDED EBS BACKFILL 1.25 | MASS ORDINATE |
| | | | | | NOTE 1 | NOTE 3 | NOTE 4 | NOTE 1 | | NOTE 5 | NOTE 6 |
| 233+50.00 | 0.00 | 13.87 | 0.00 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 234+00.00 | 50.00 | 14.04 | 0.00 | 0.70 | 26 | 0 | 1 | 26 | 0 | 1 | 26 |
| 234+50.00 | 50.00 | 14.51 | 0.00 | 0.73 | 26 | 0 | 1 | 52 | 0 | 3 | 52 |
| 235+00.00 | 50.00 | 14.20 | 0.00 | 0.71 | 27 | 0 | 1 | 79 | 0 | 4 | 79 |
| 235+50.00 | 50.00 | 12.79 | 0.00 | 0.64 | 25 | 0 | 1 | 104 | 0 | 5 | 104 |
| 236+00.00 | 50.00 | 12.23 | 0.00 | 0.61 | 23 | 0 | 1 | 127 | 0 | 6 | 127 |
| 236+50.00 | 50.00 | 10.92 | 0.00 | 0.55 | 21 | 0 | 1 | 148 | 0 | 8 | 148 |
| 237+00.00 | 50.00 | 11.11 | 0.00 | 0.56 | 20 | 0 | 1 | 168 | 0 | 9 | 168 |
| 237+50.00 | 50.00 | 8.42 | 0.00 | 0.42 | 18 | 0 | 1 | 186 | 0 | 10 | 186 |
| 238+00.00 | 50.00 | 9.36 | 0.00 | 0.47 | 16 | 0 | 1 | 202 | 0 | 11 | 202 |
| 238+50.00 | 50.00 | 8.40 | 0.00 | 0.42 | 16 | 0 | 1 | 218 | 0 | 13 | 218 |
| 239+00.00 | 50.00 | 7.06 | 0.00 | 0.35 | 14 | 0 | 1 | 232 | 0 | 14 | 232 |
| 239+50.00 | 50.00 | 4.51 | 0.00 | 0.23 | 11 | 0 | 1 | 243 | 0 | 15 | 243 |
| 240+00.00 | 50.00 | 3.56 | 0.13 | 0.18 | 7 | 0 | 0 | 250 | 0 | 15 | 250 |
| 240+50.00 | 50.00 | 2.71 | 0.00 | 0.14 | 6 | 0 | 0 | 256 | 0 | 15 | 256 |
| | COLUMN TOTALS | | | | 256 | 0 | 12 | | | | |

NOTES:

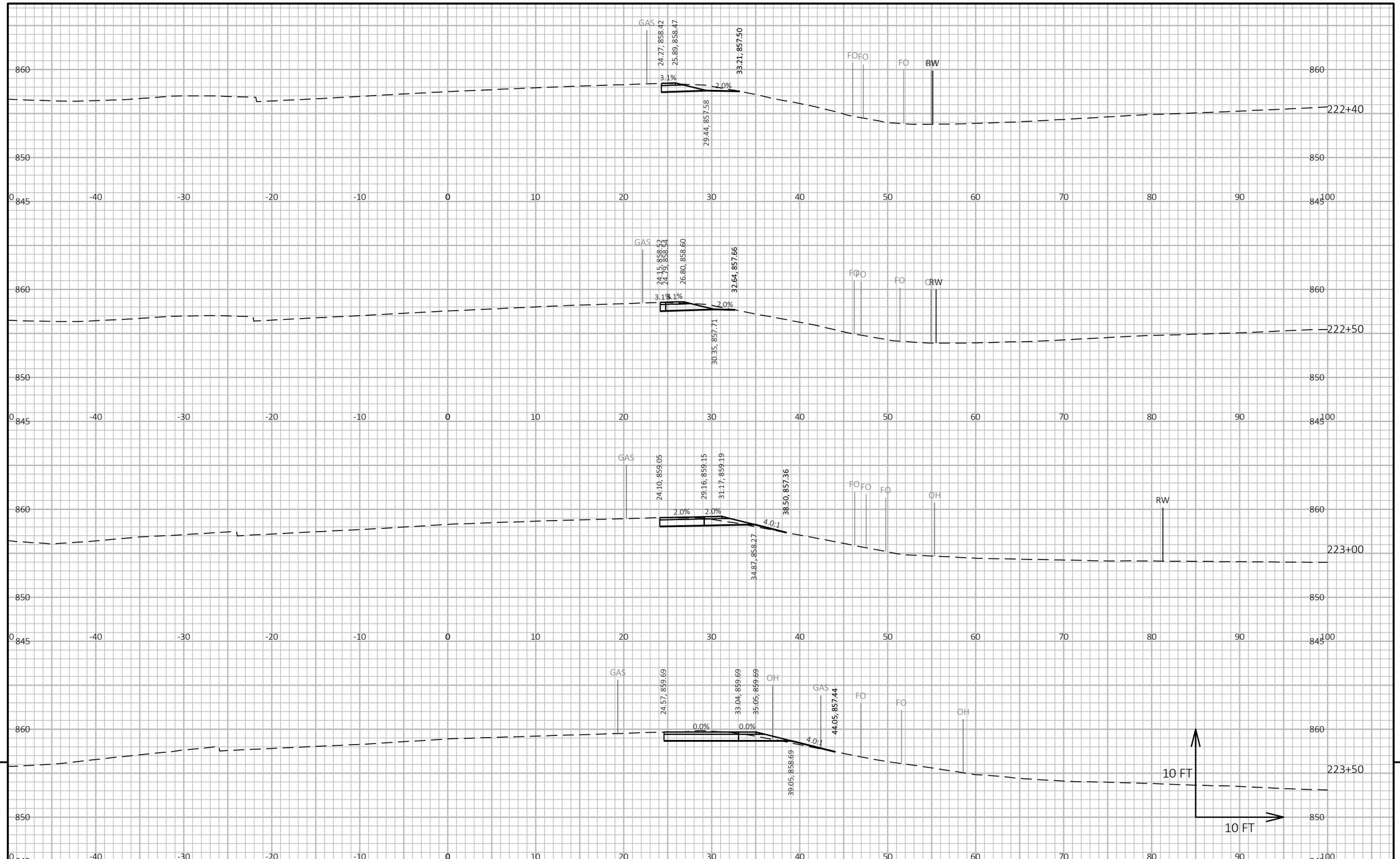
1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL: NOT SHOWN IN CROSS SECTIONS .
3) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
4) EBS CALCULATED AT 5 PERCENT OF CUT.
5) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
6) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

9

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PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | EARTHWORK DATA | SHEET: 308 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : PLOT SCALE : 1" = 1" WISDOT/CADDS SHEET 42




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 309 E |

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090201-xs-s1

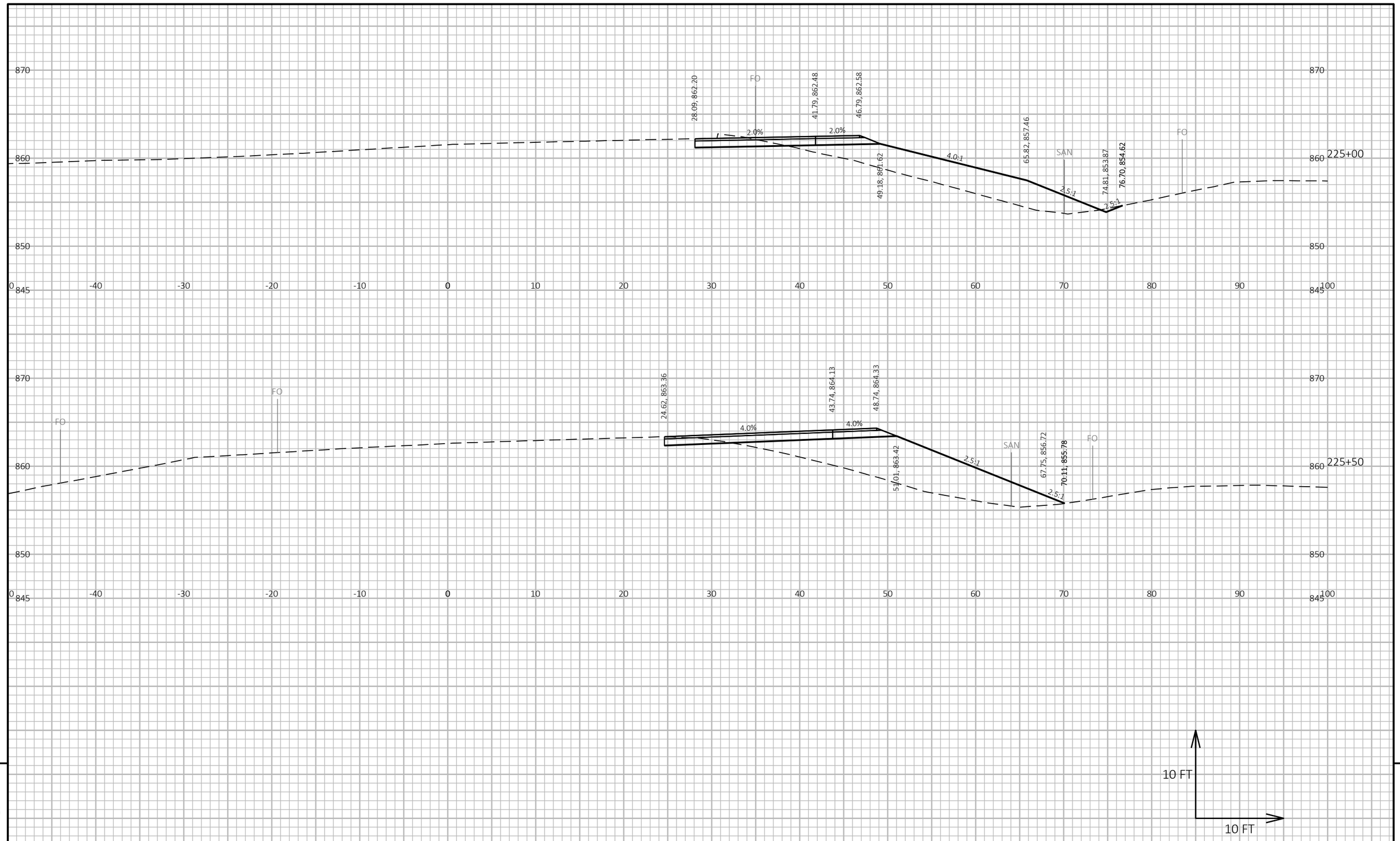
PLOT DATE : 8/1/2023 8:56 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

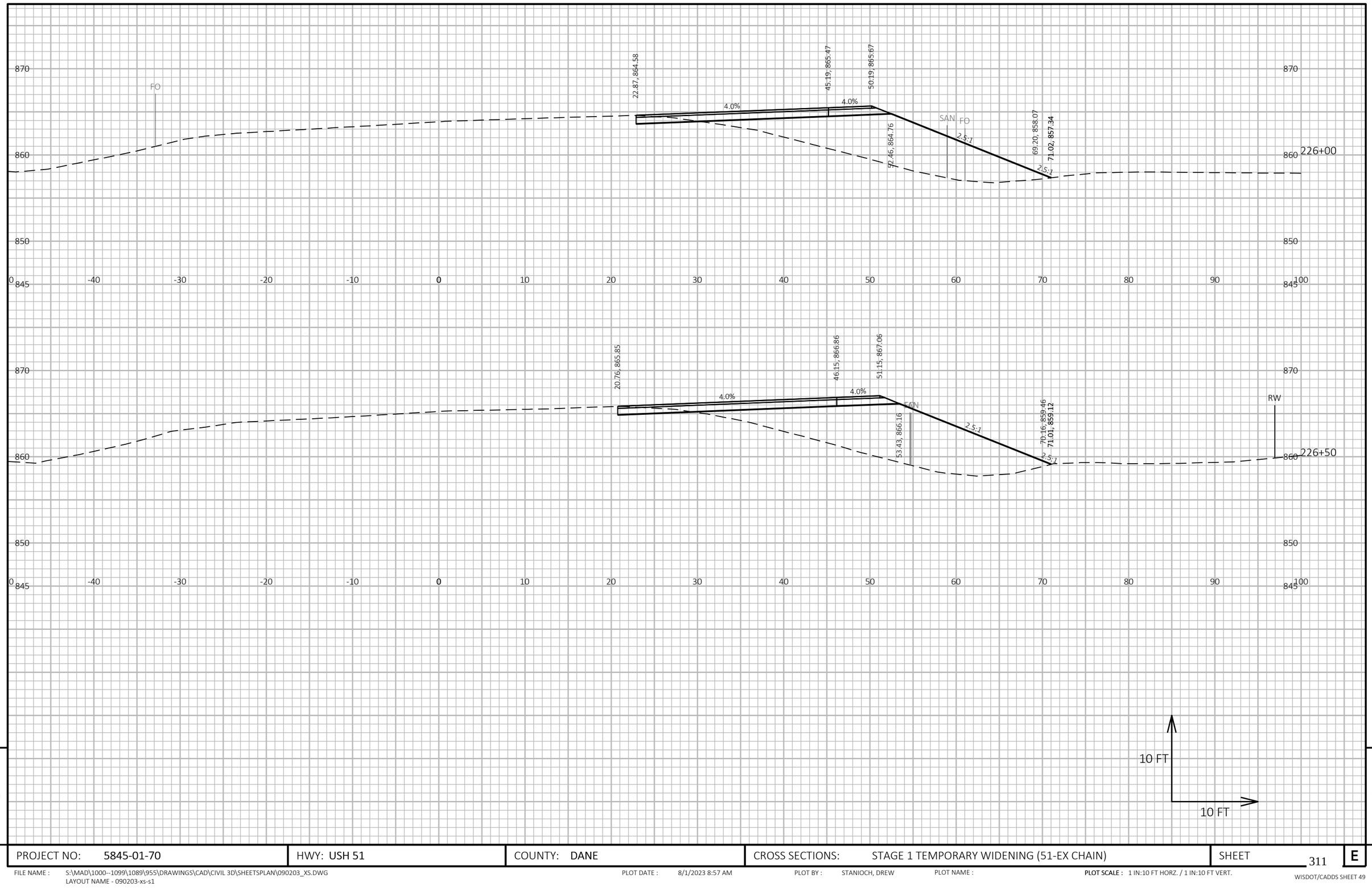
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 310 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090202-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

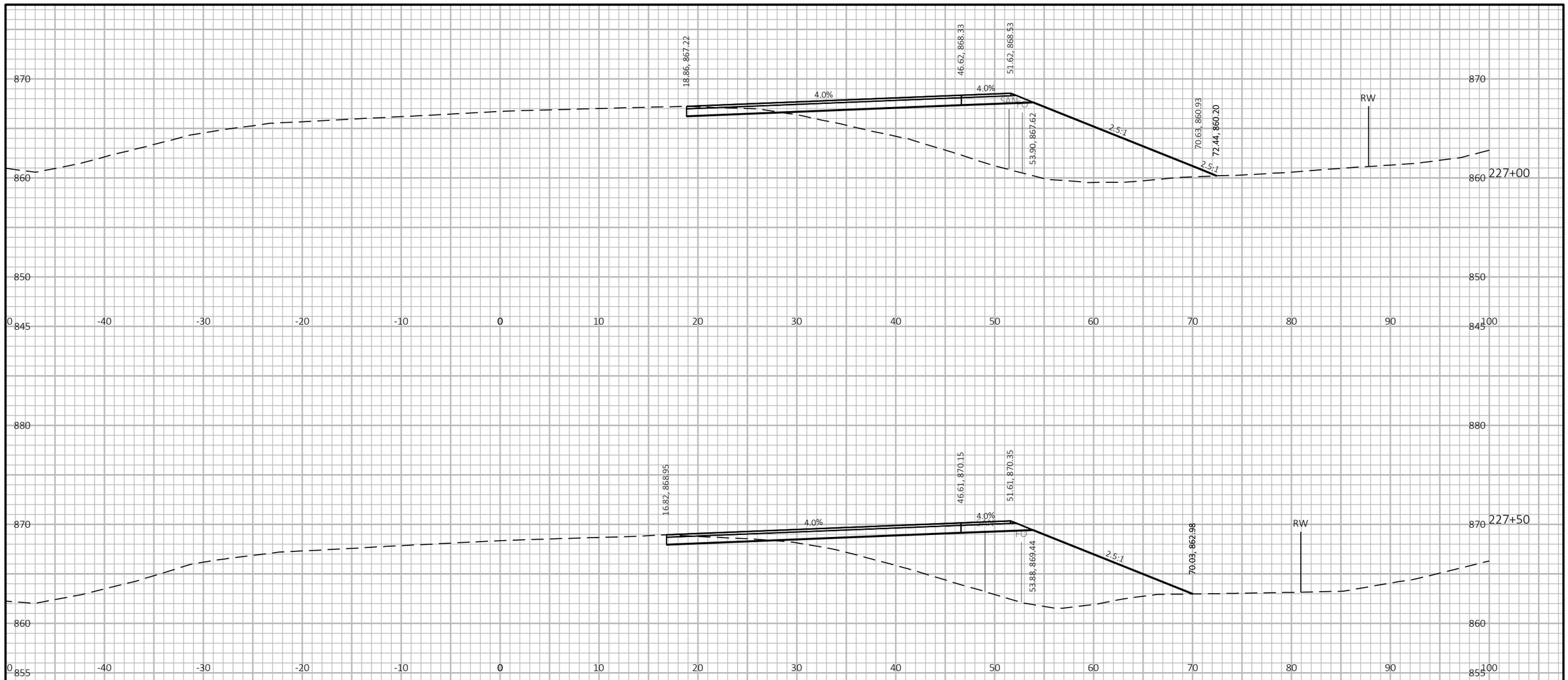
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 311 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090203-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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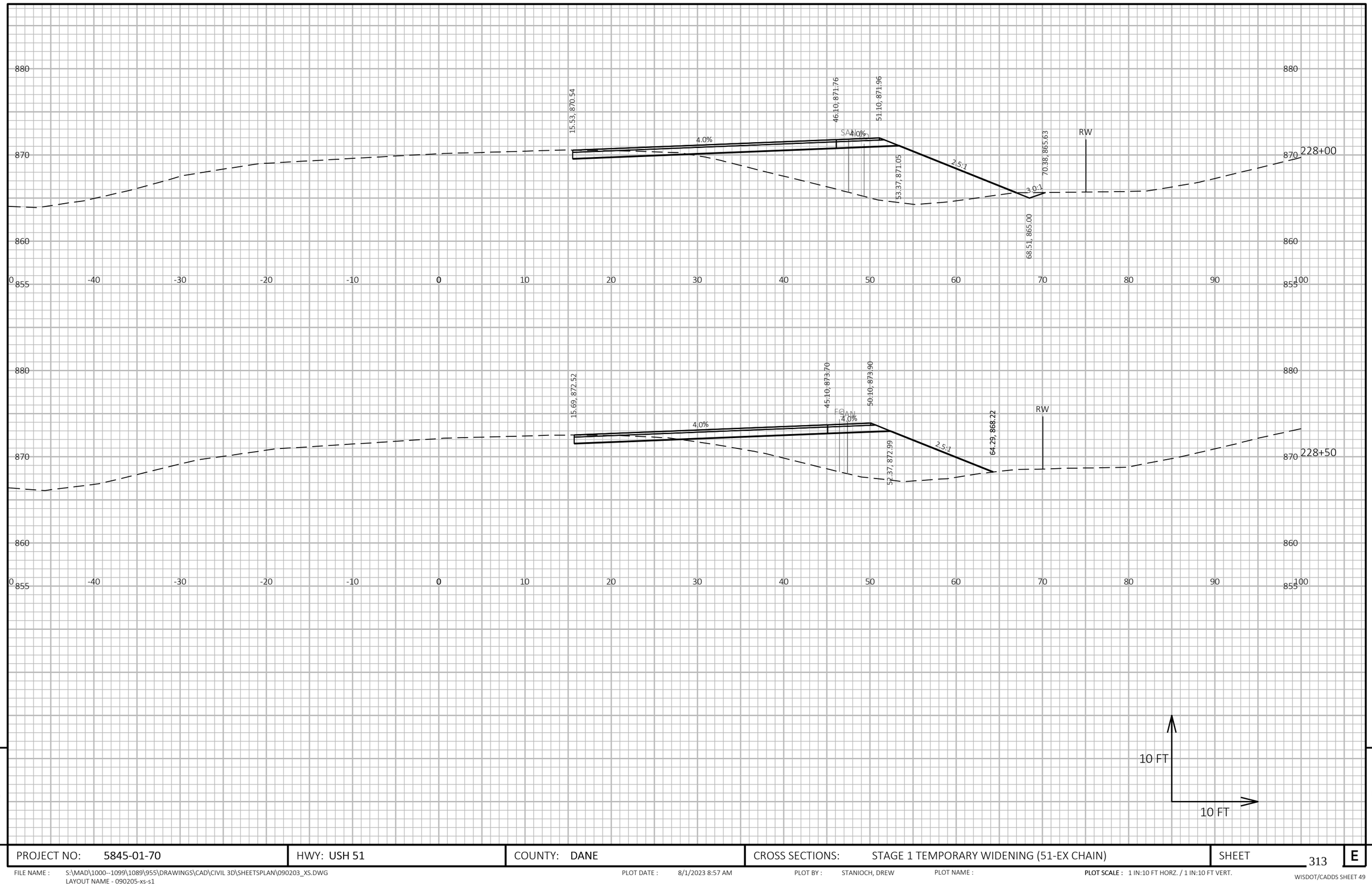
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 312 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090204-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 313 | E |
|---|---|---|---|---|---|

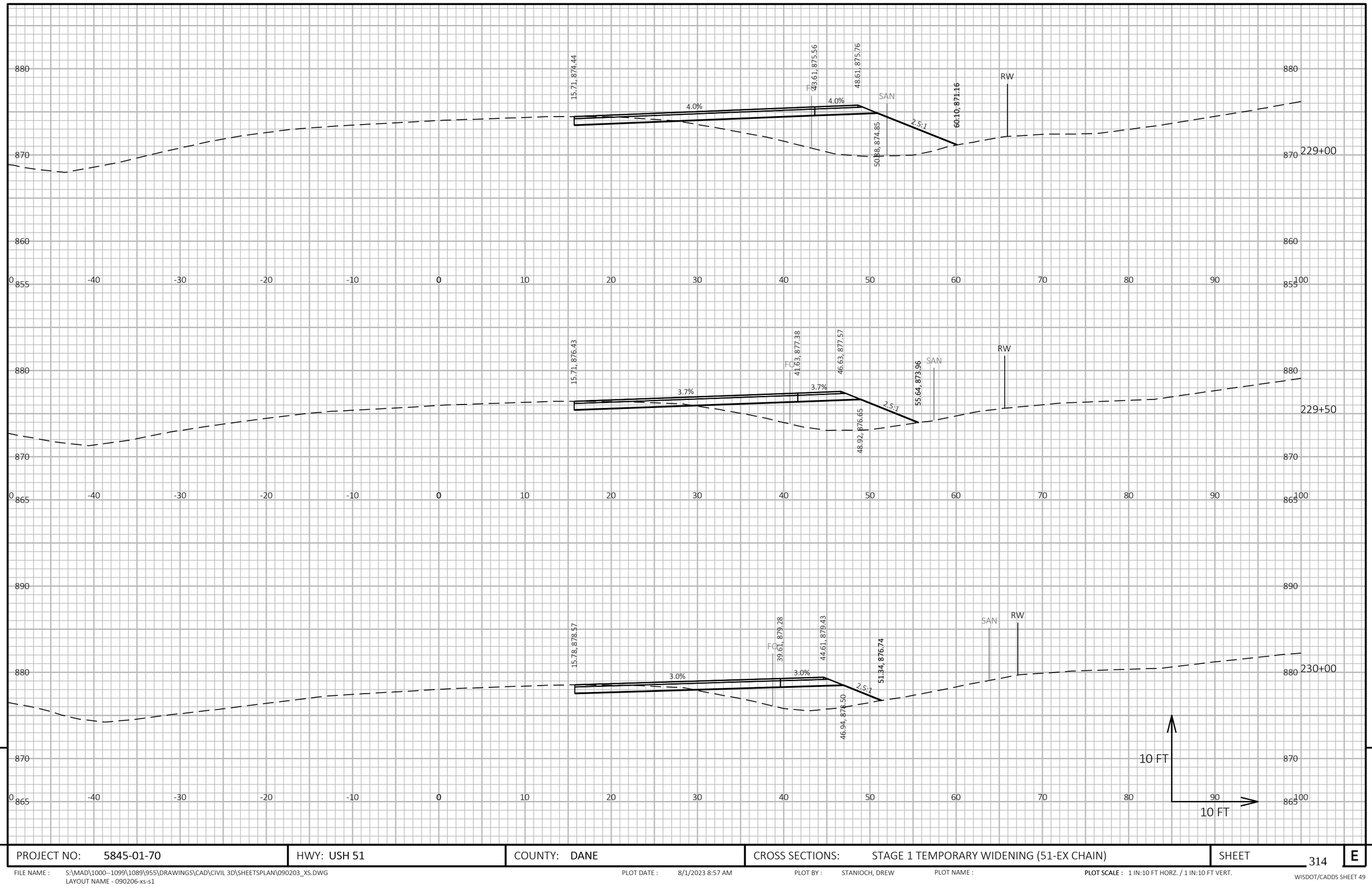
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LAYOUT NAME - 090205-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9




9

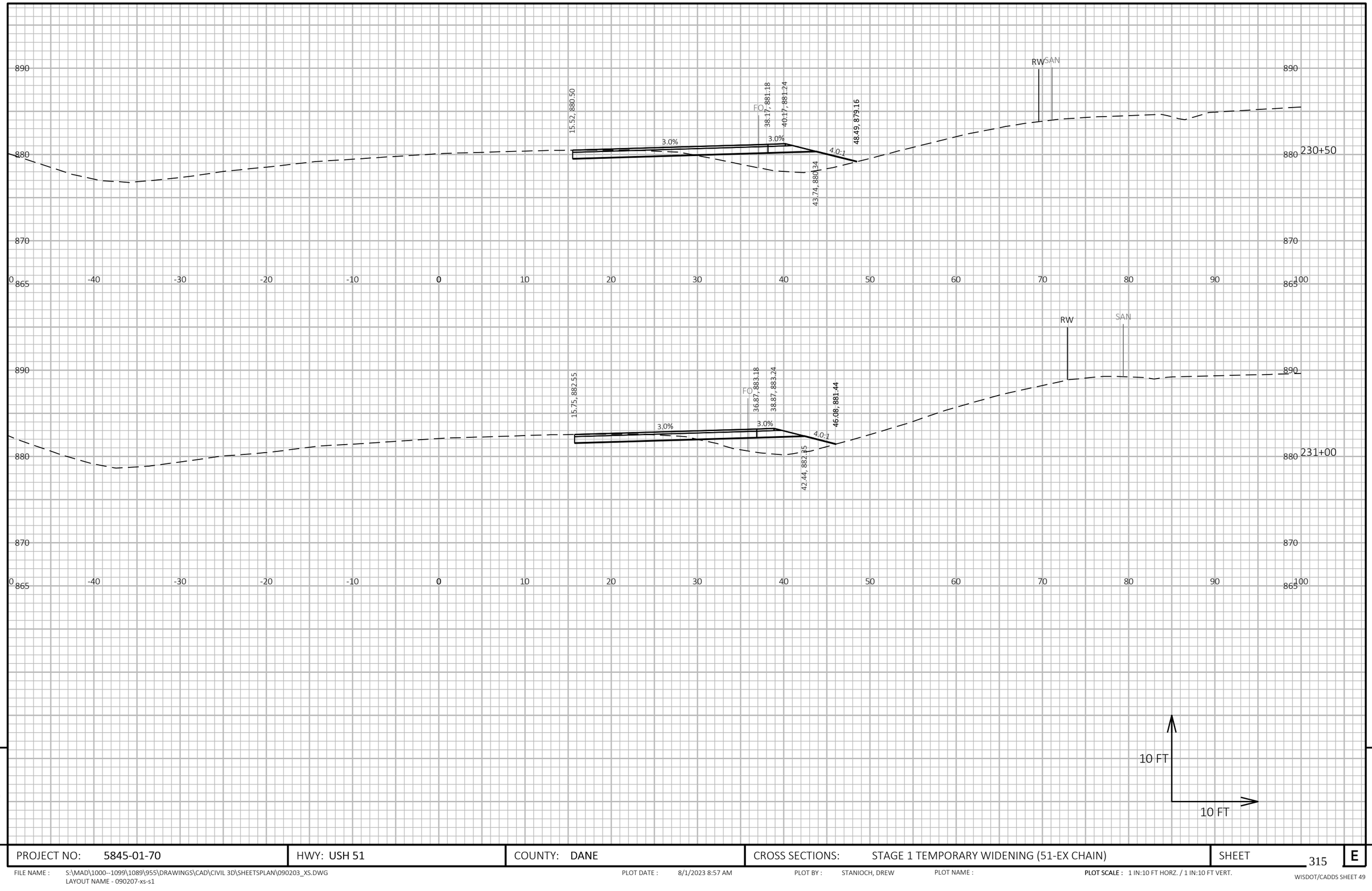
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 314 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090206-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

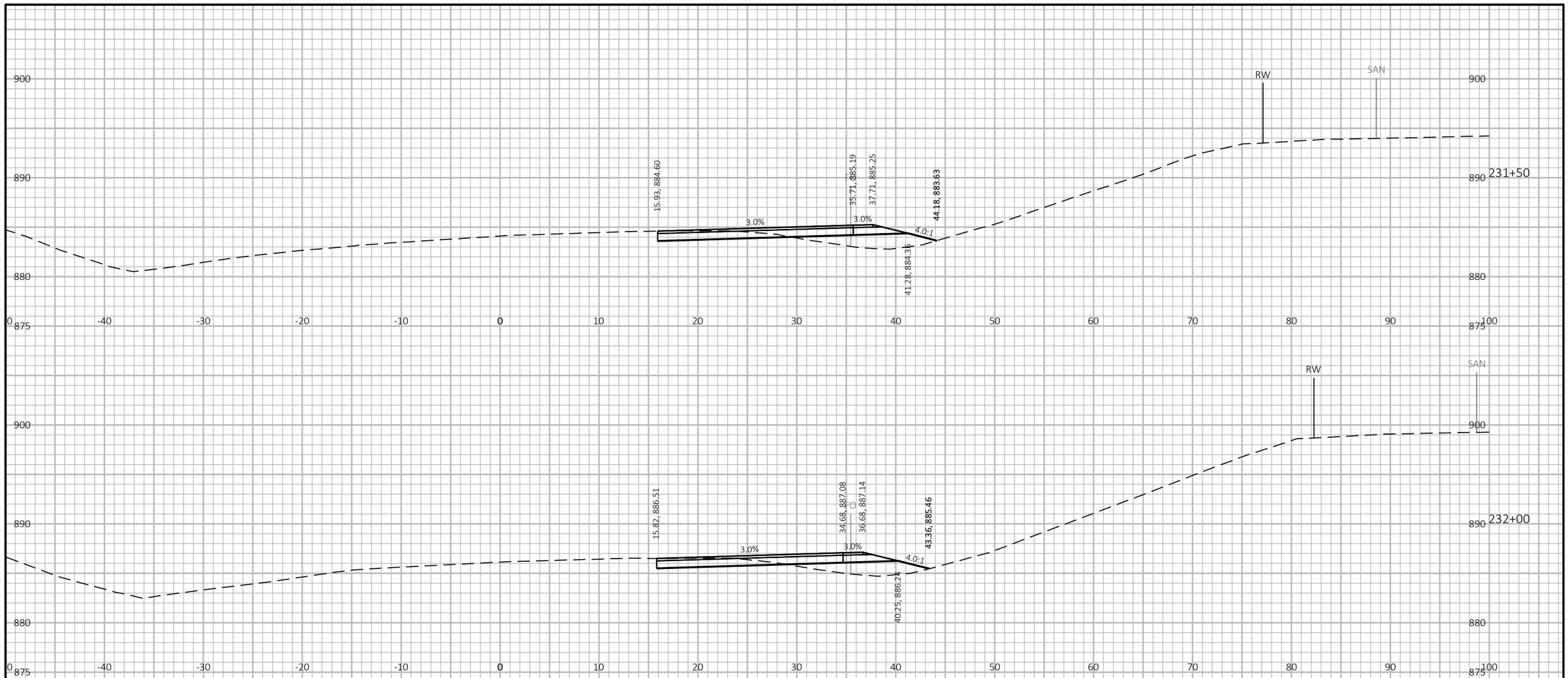
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 315 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090207-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

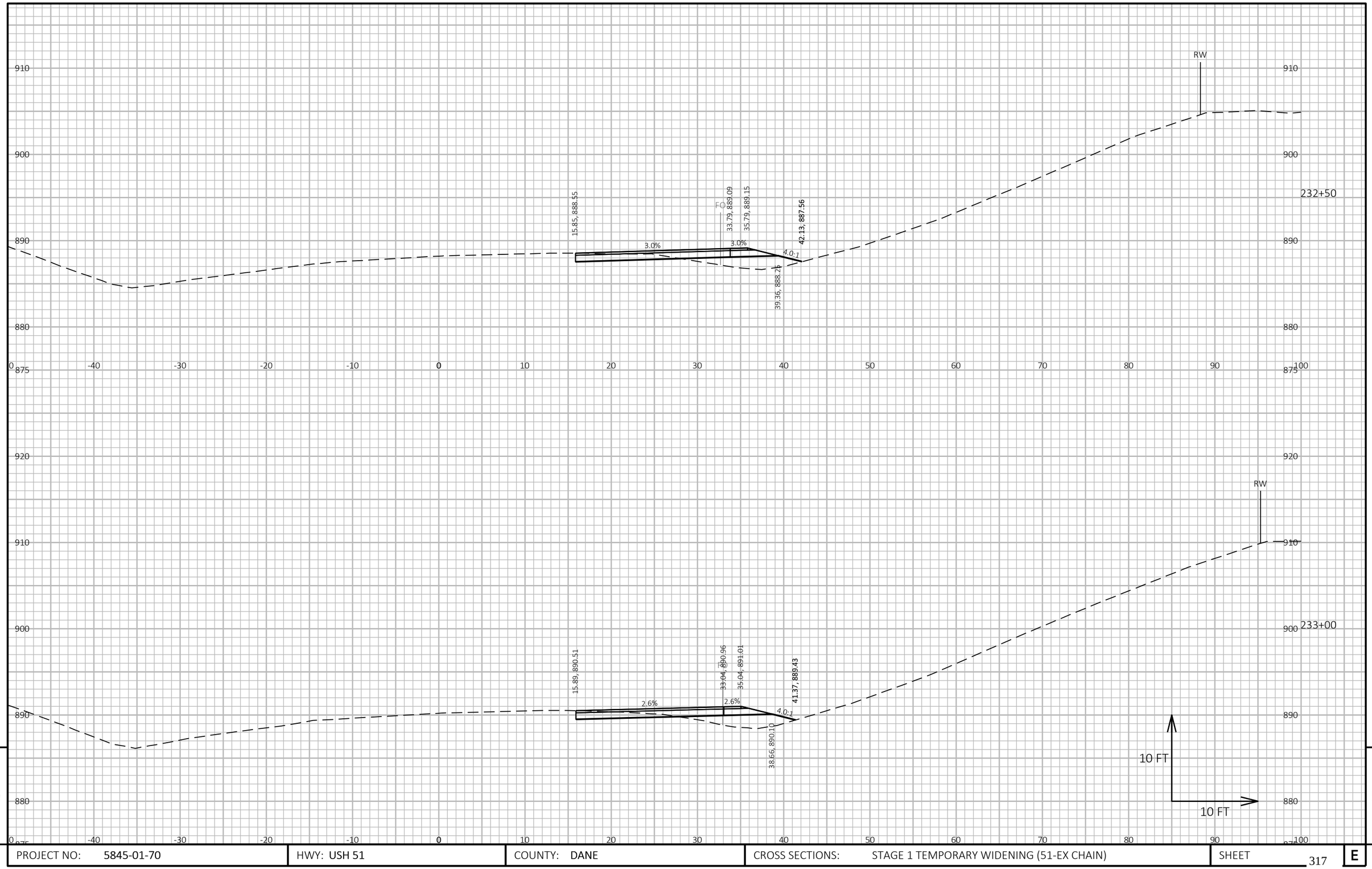
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 316 | E |
|---|---|---|---|---|---|


FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090208-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 317 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090209-xs-s1

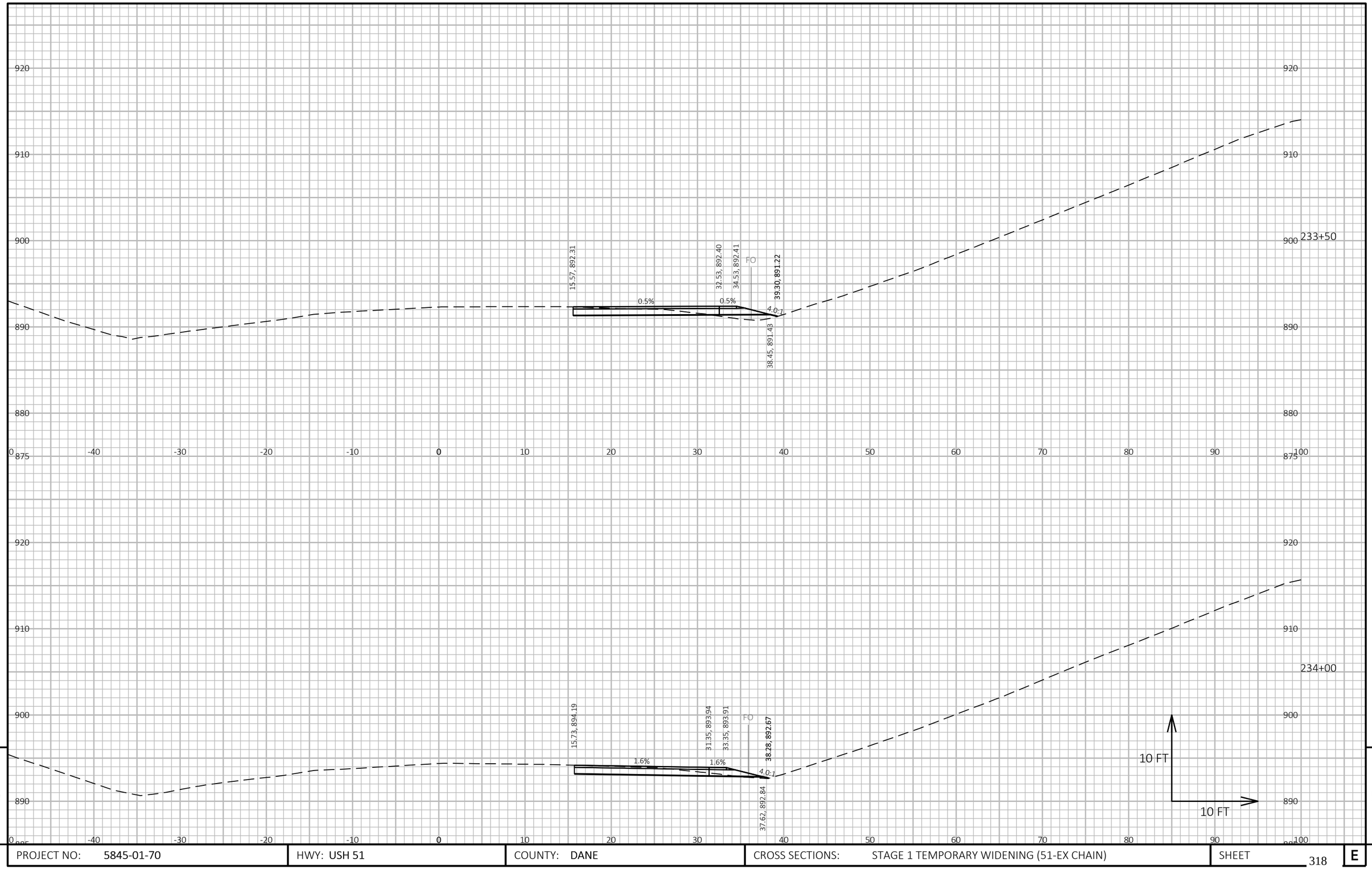
PLOT DATE : 8/1/2023 8:57 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

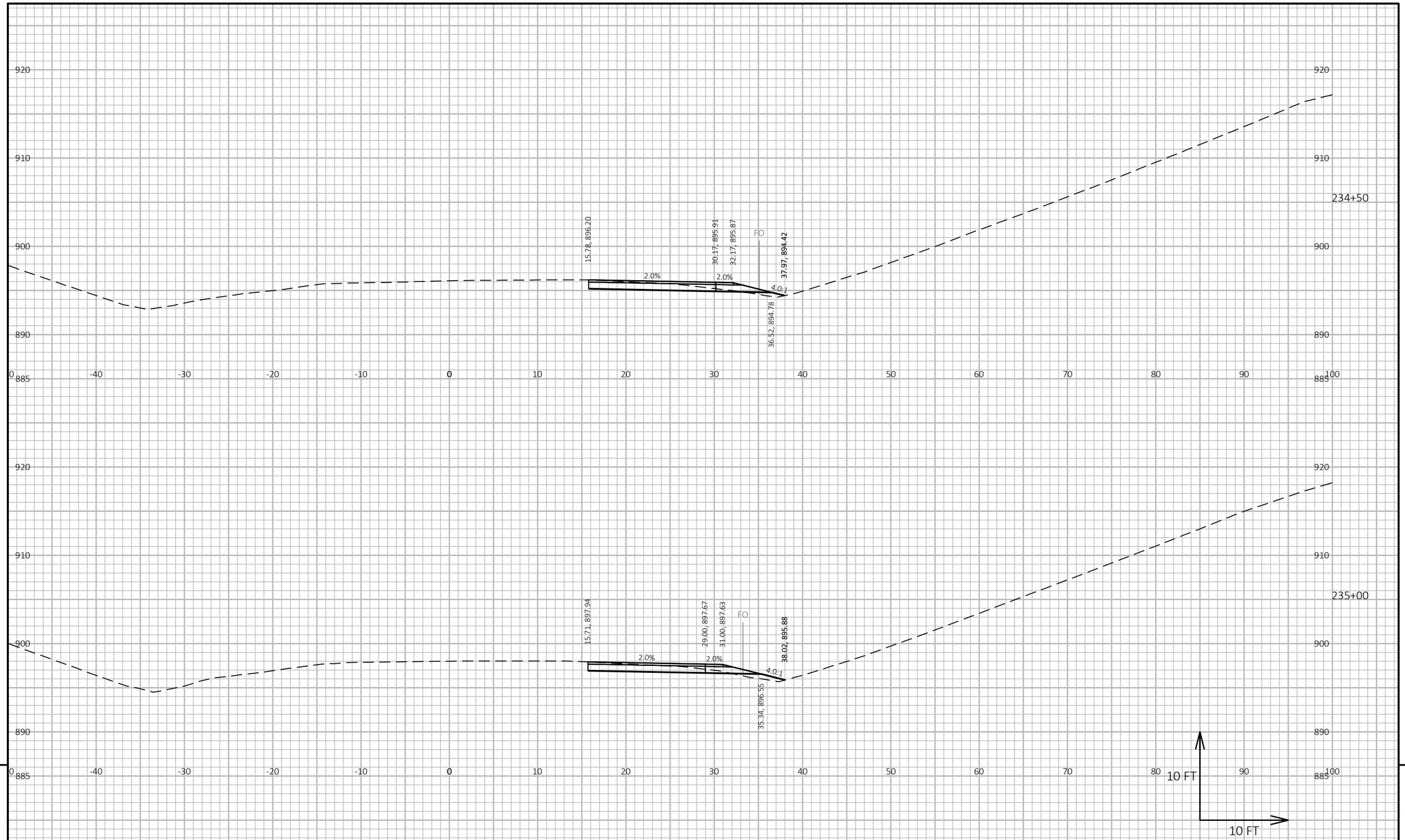
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 318 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090210-xs-s1

PLOT DATE : 8/1/2023 8:57 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 319 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090211-xs-s1

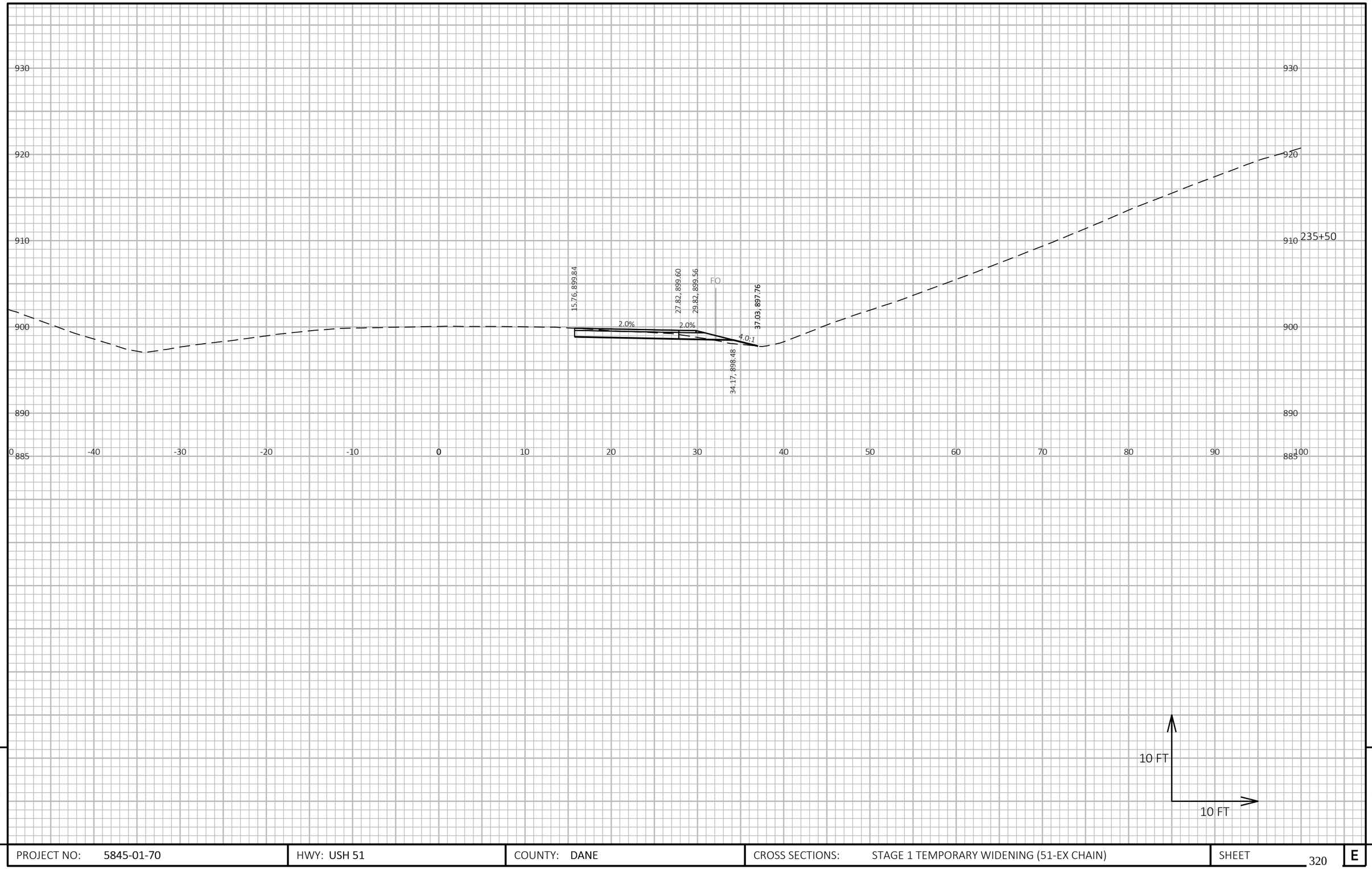
PLOT DATE : 8/1/2023 8:57 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

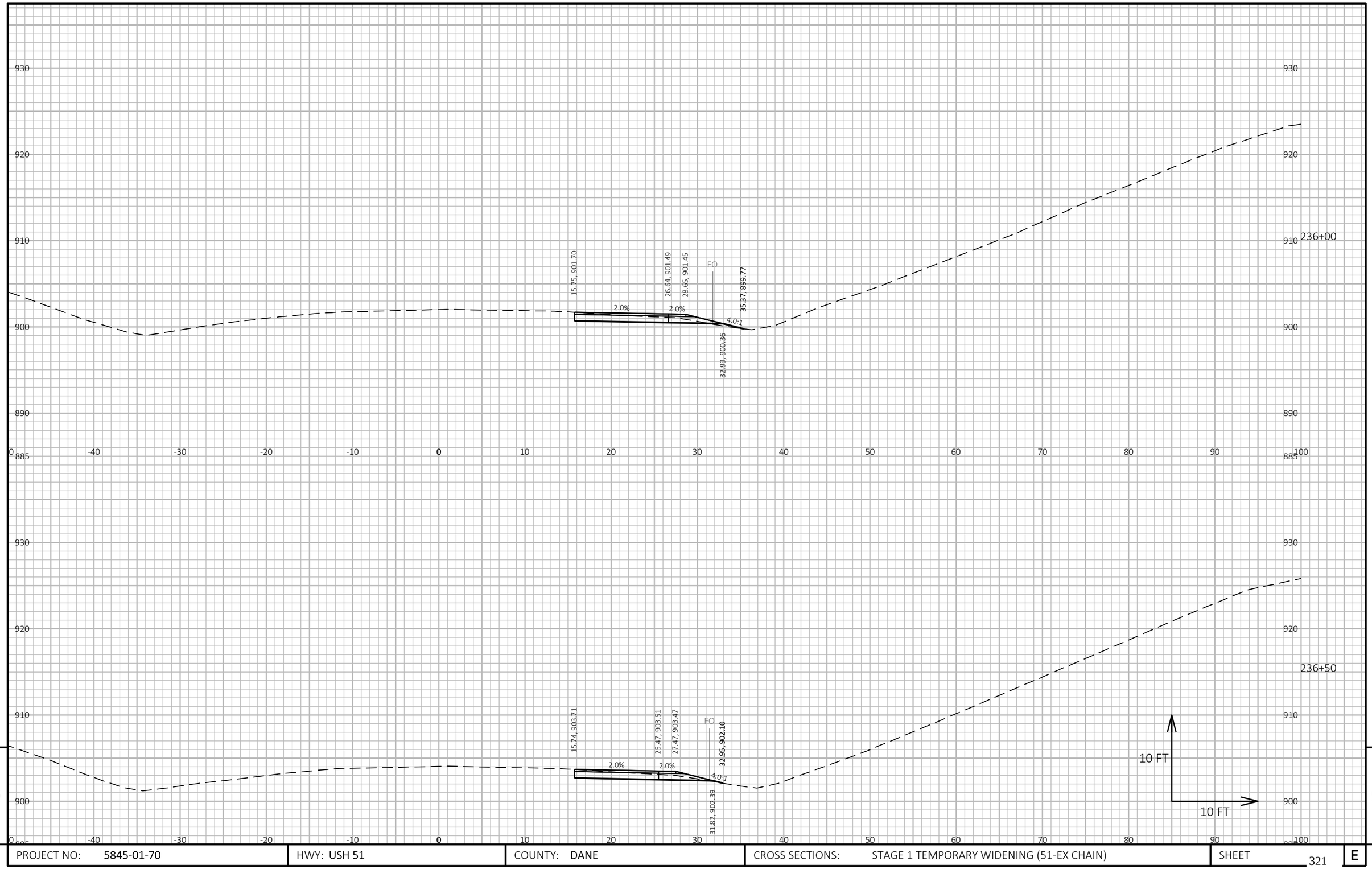
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 320 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090212-xs-s1

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 321 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090213-xs-s1

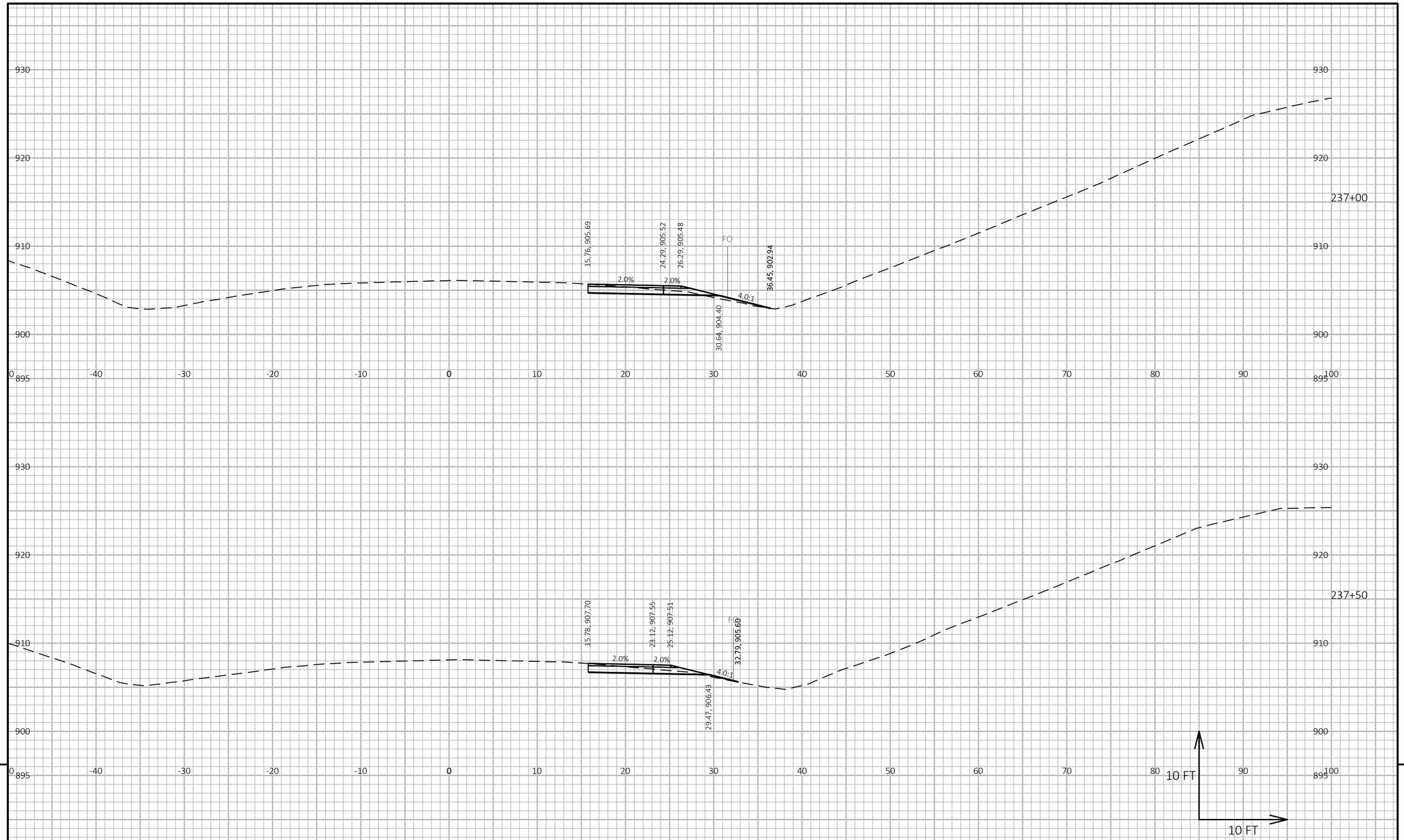
PLOT DATE : 8/1/2023 8:58 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

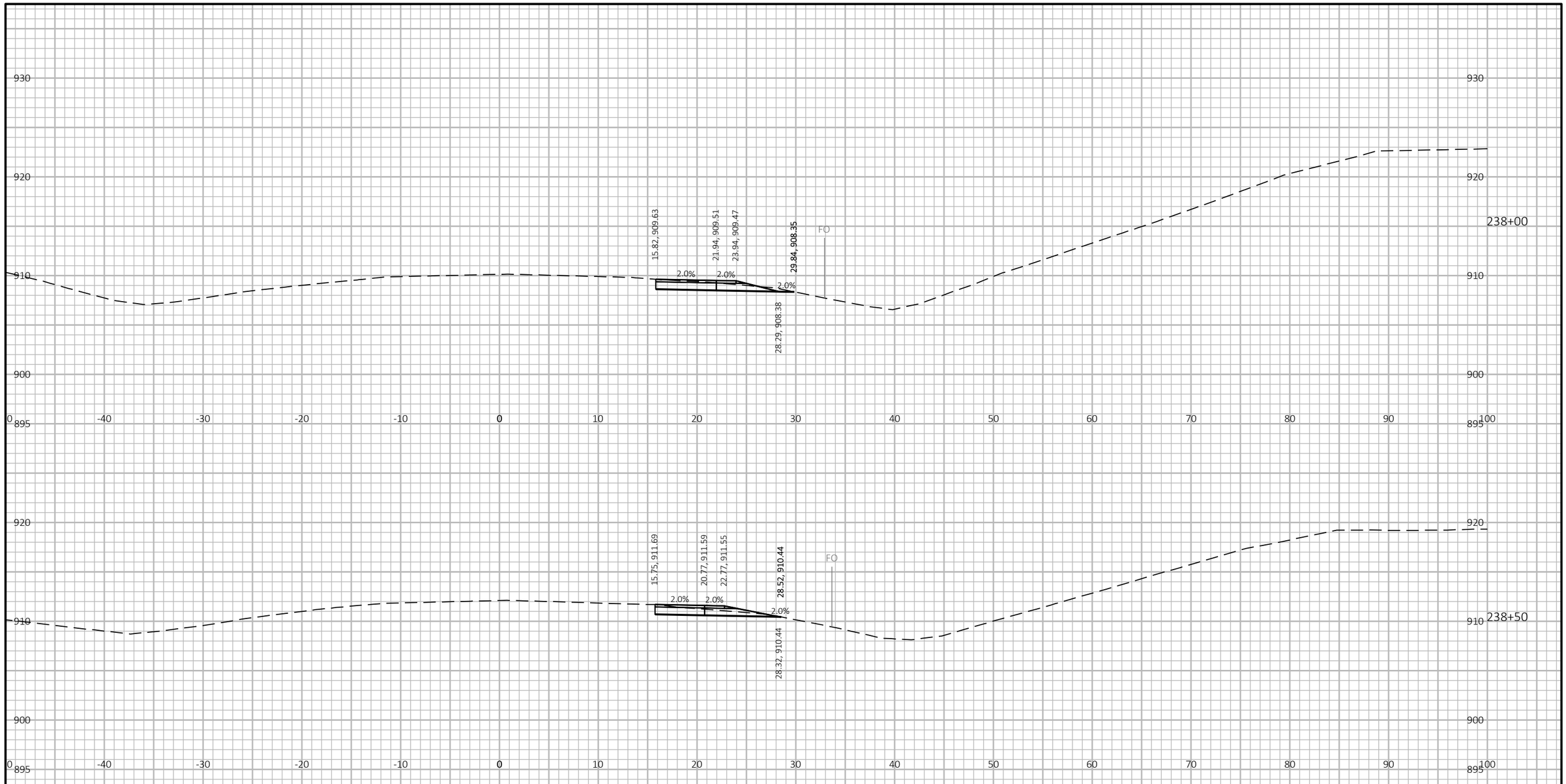
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 322 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090214-xs-s1

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

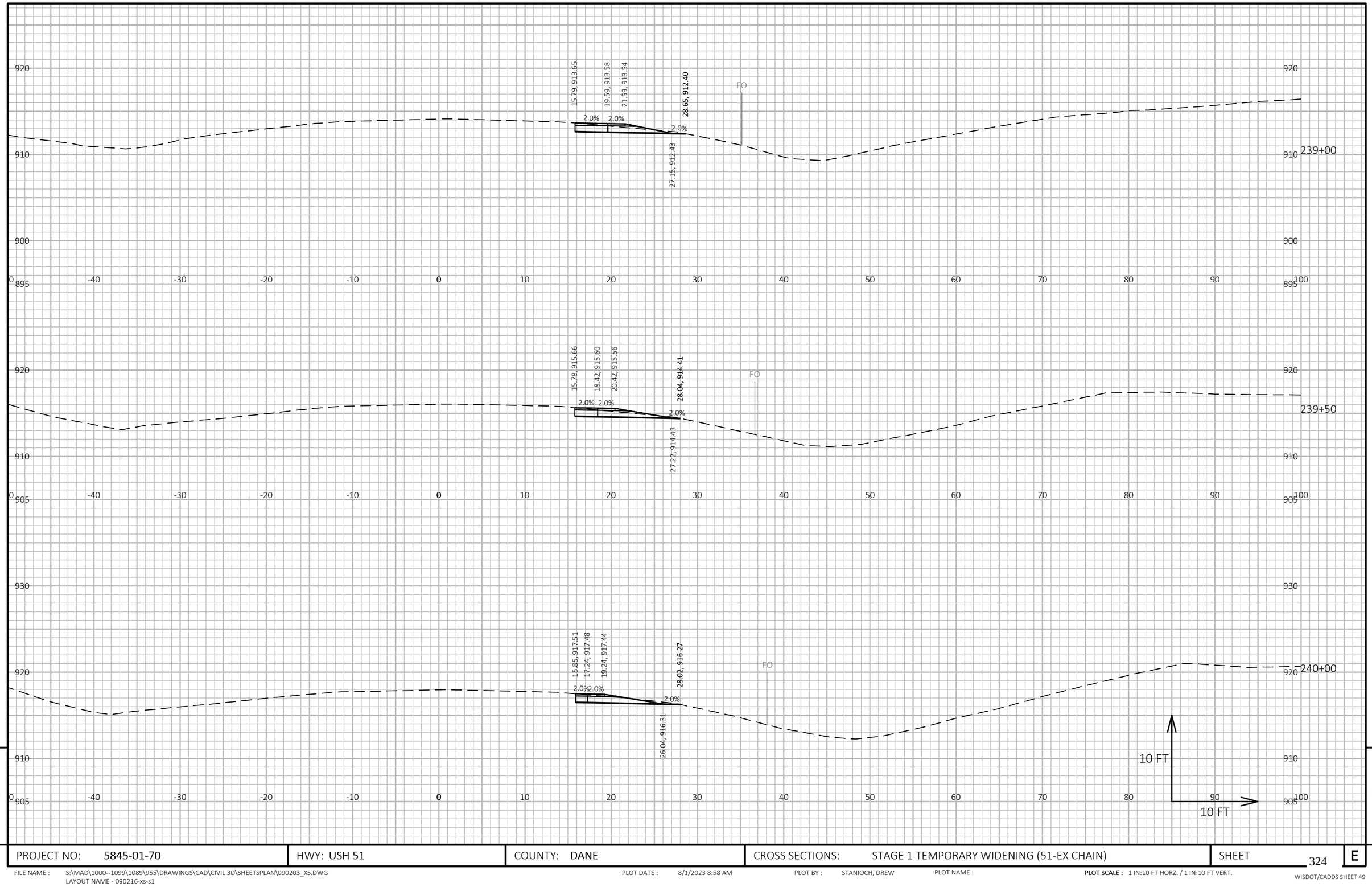
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 323 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090215-xs-s1

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

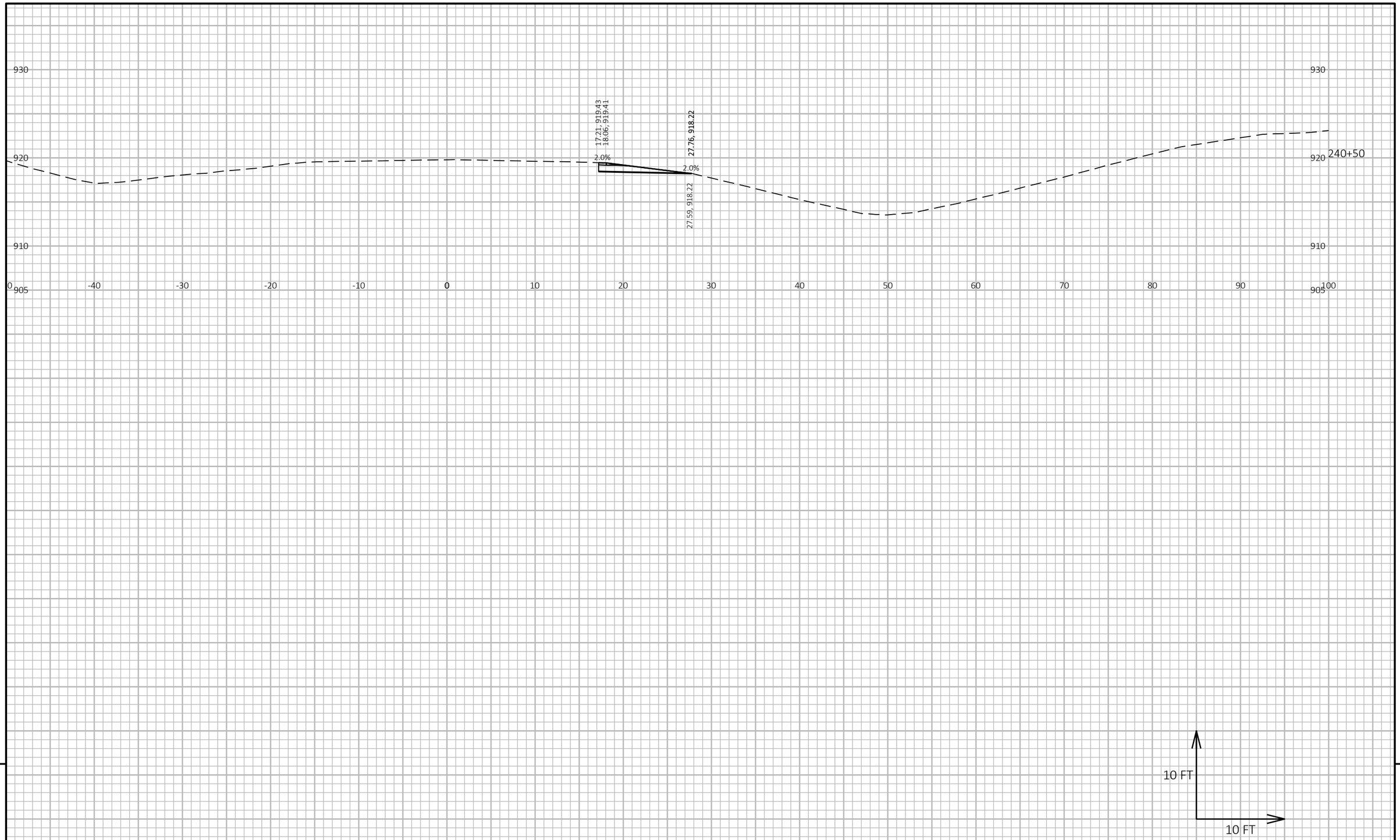



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 324 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090216-xs-s1

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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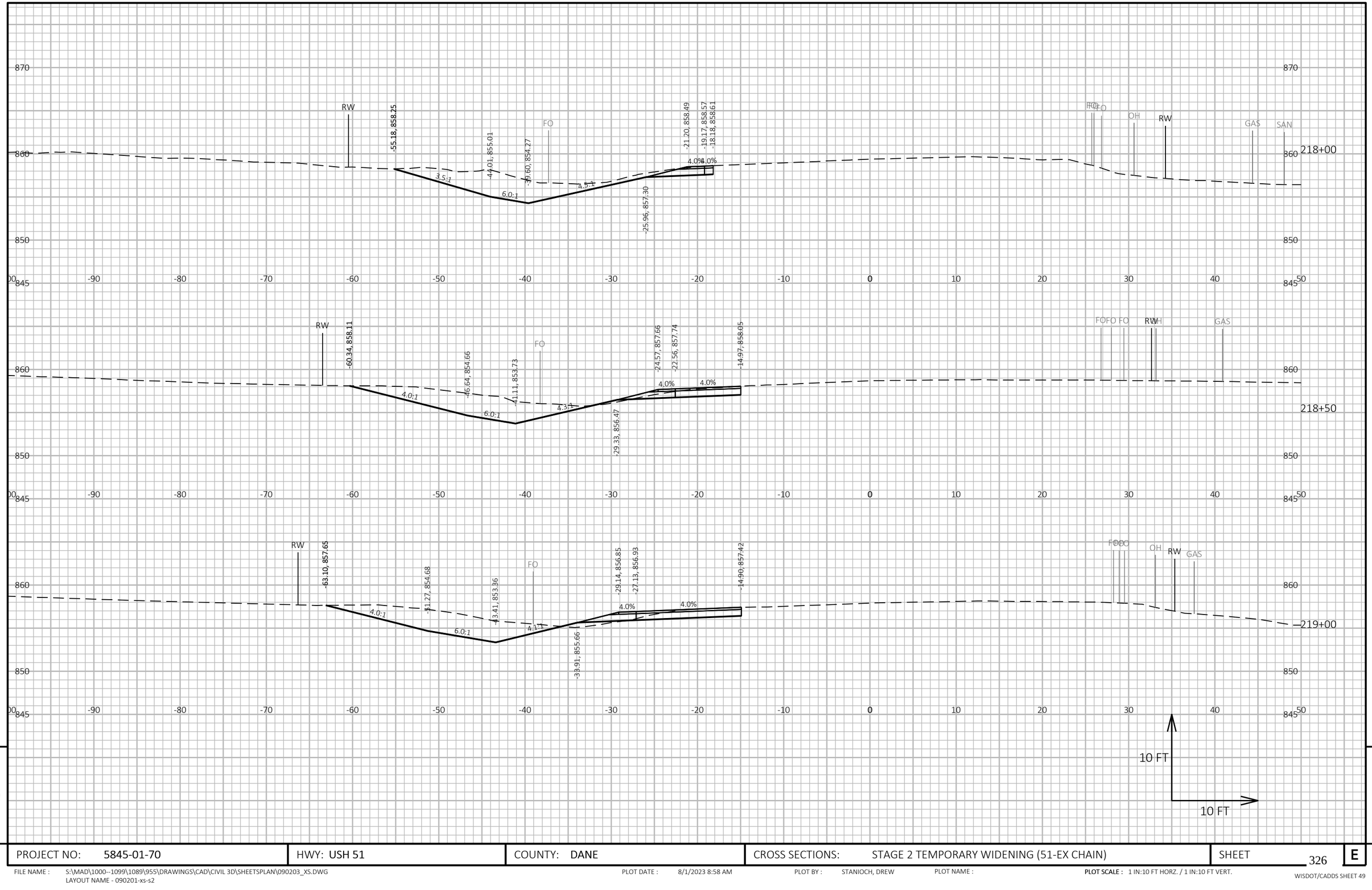
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 1 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 325 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090217-xs-s1

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

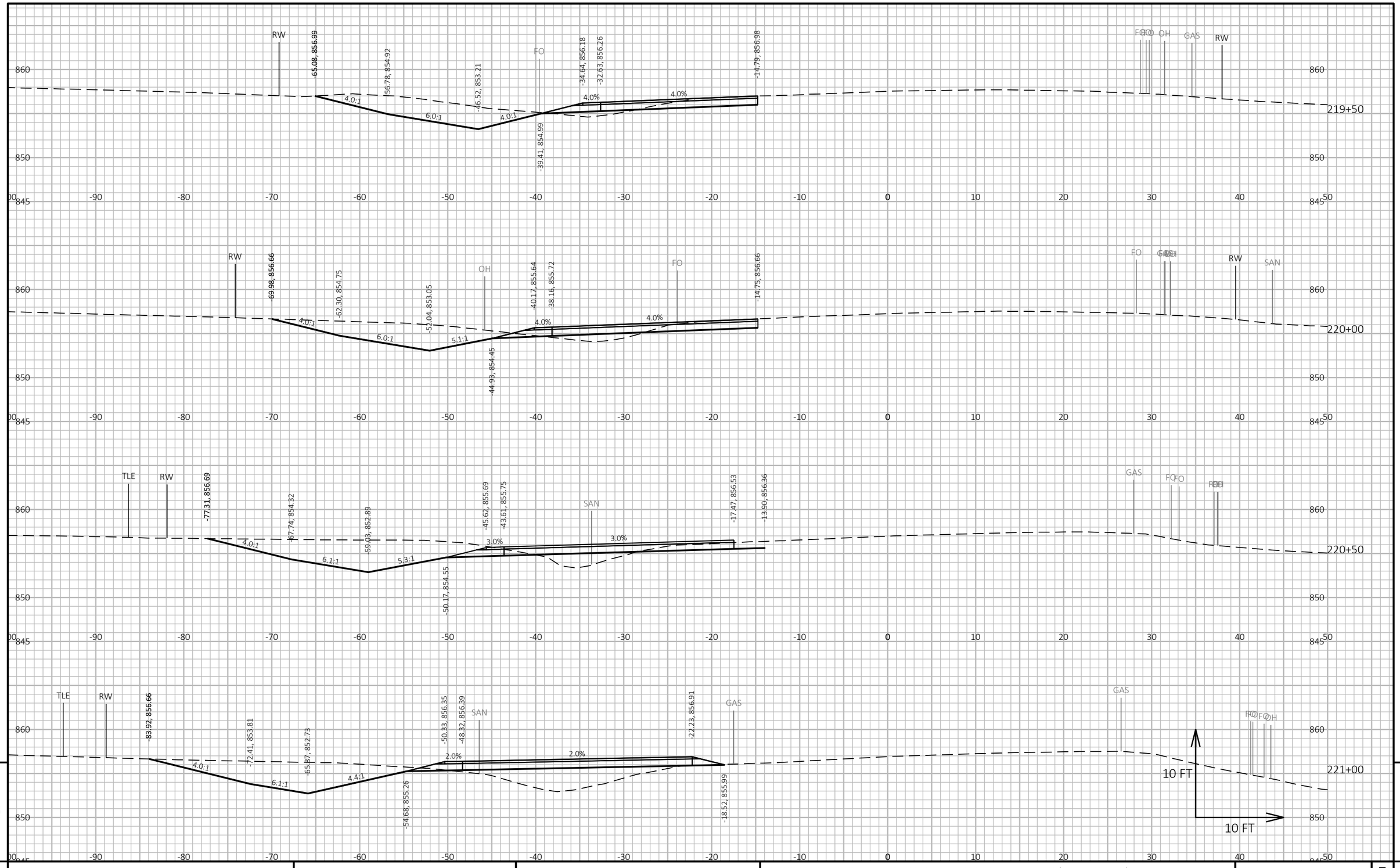



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 326 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090201-xs-s2

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

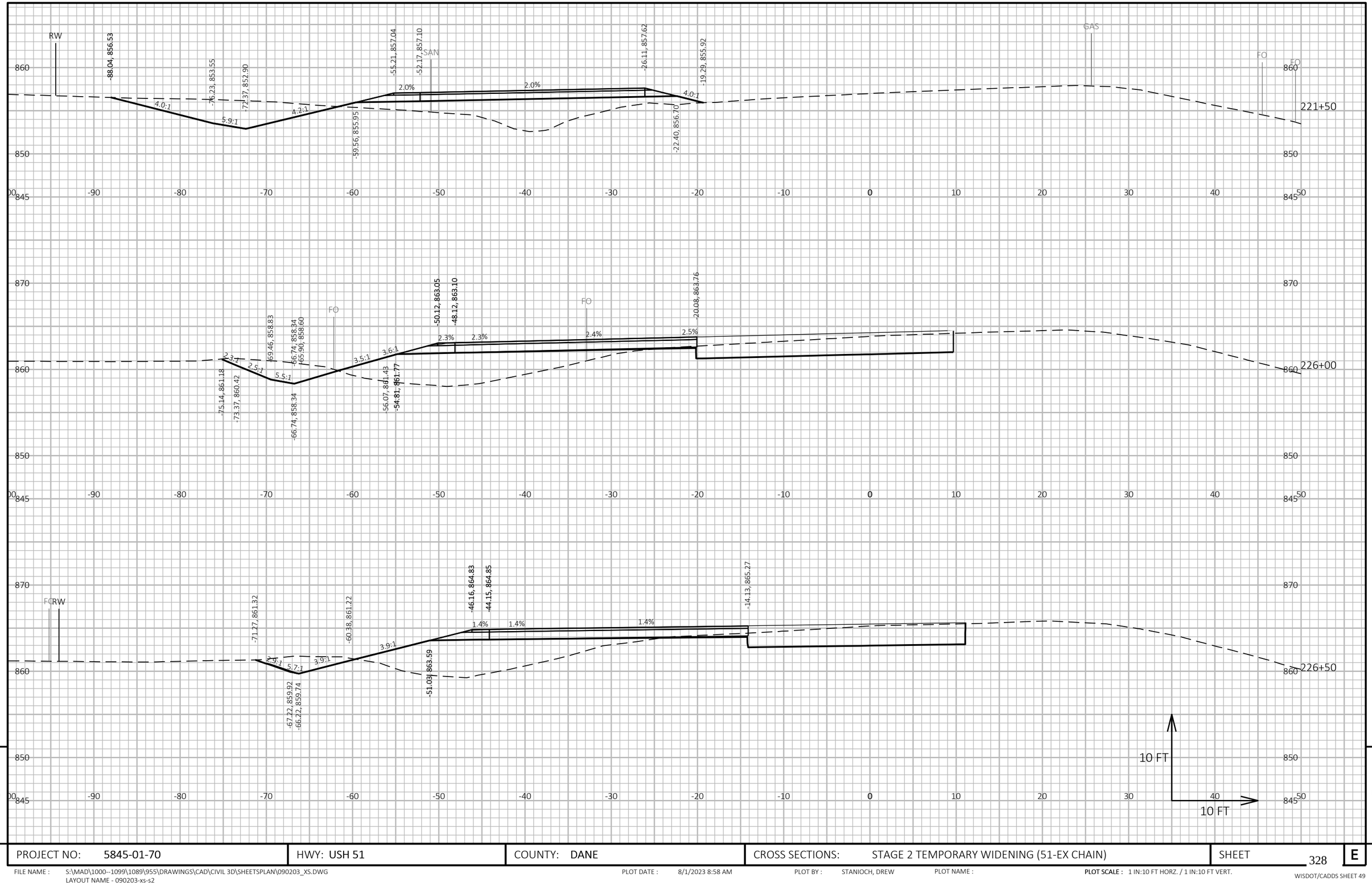



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 327 E |

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090202-xs-s2

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

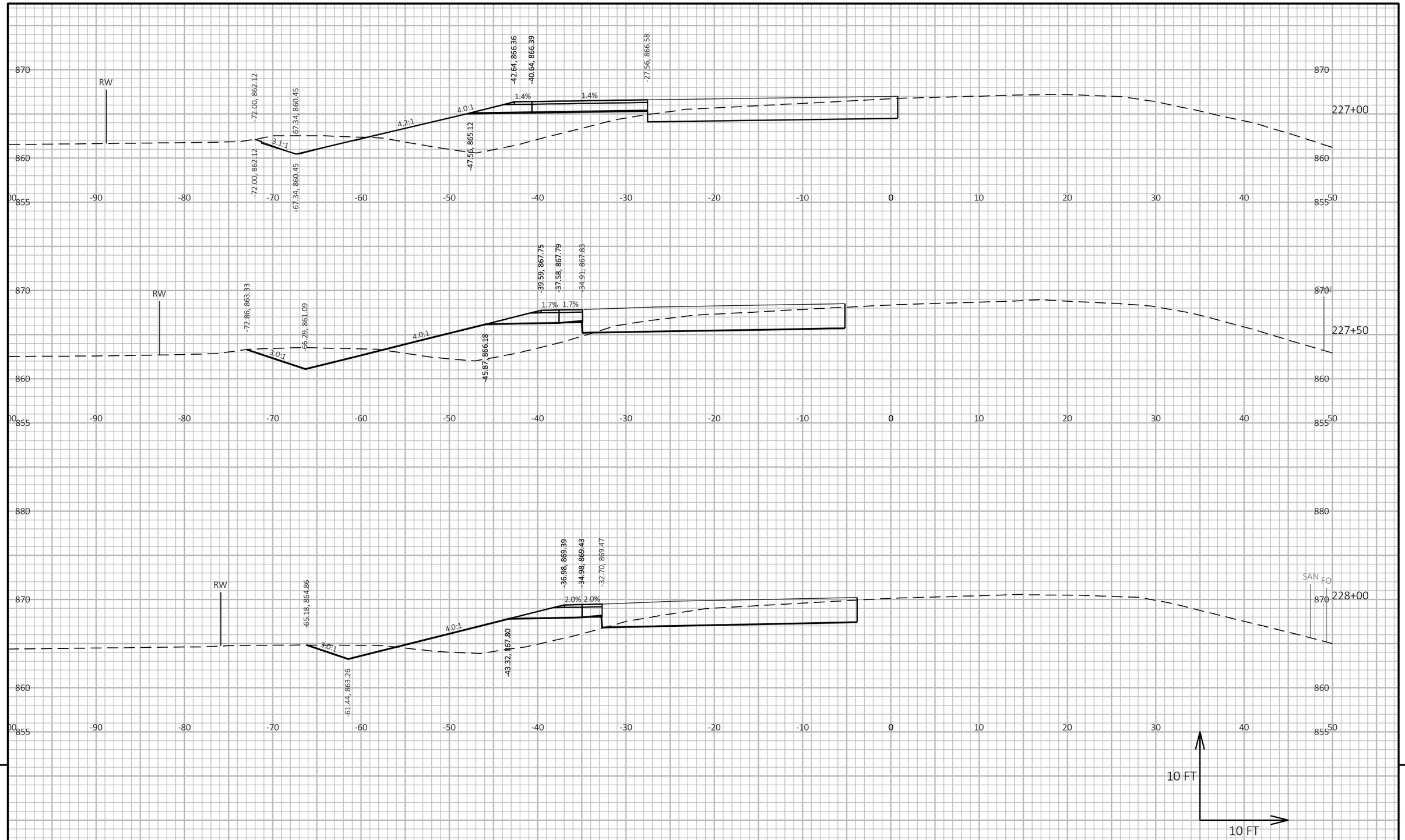



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 328 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090203-xs-s2

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

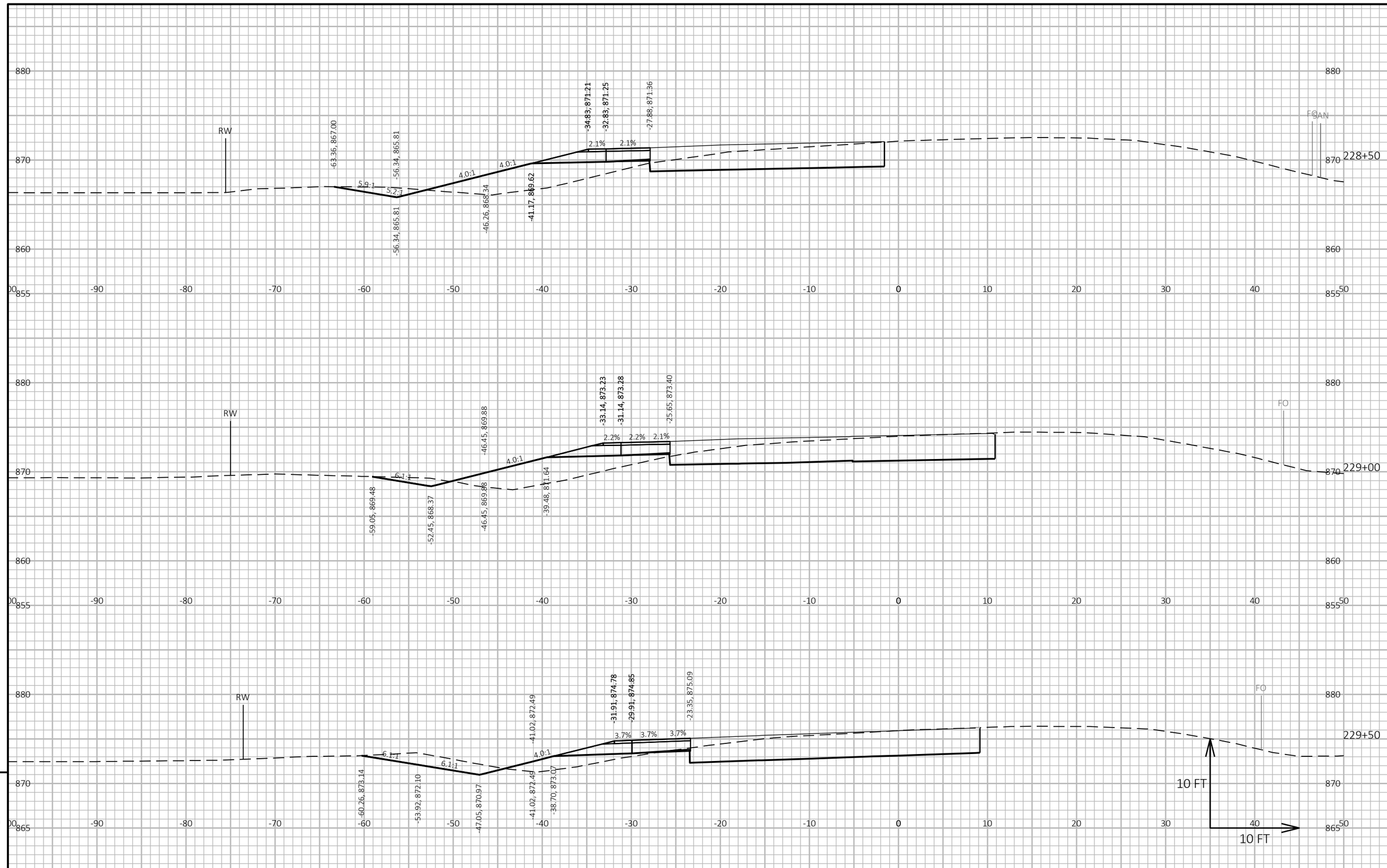



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 329 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090204-xs-s2

PLOT DATE : 8/1/2023 8:58 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



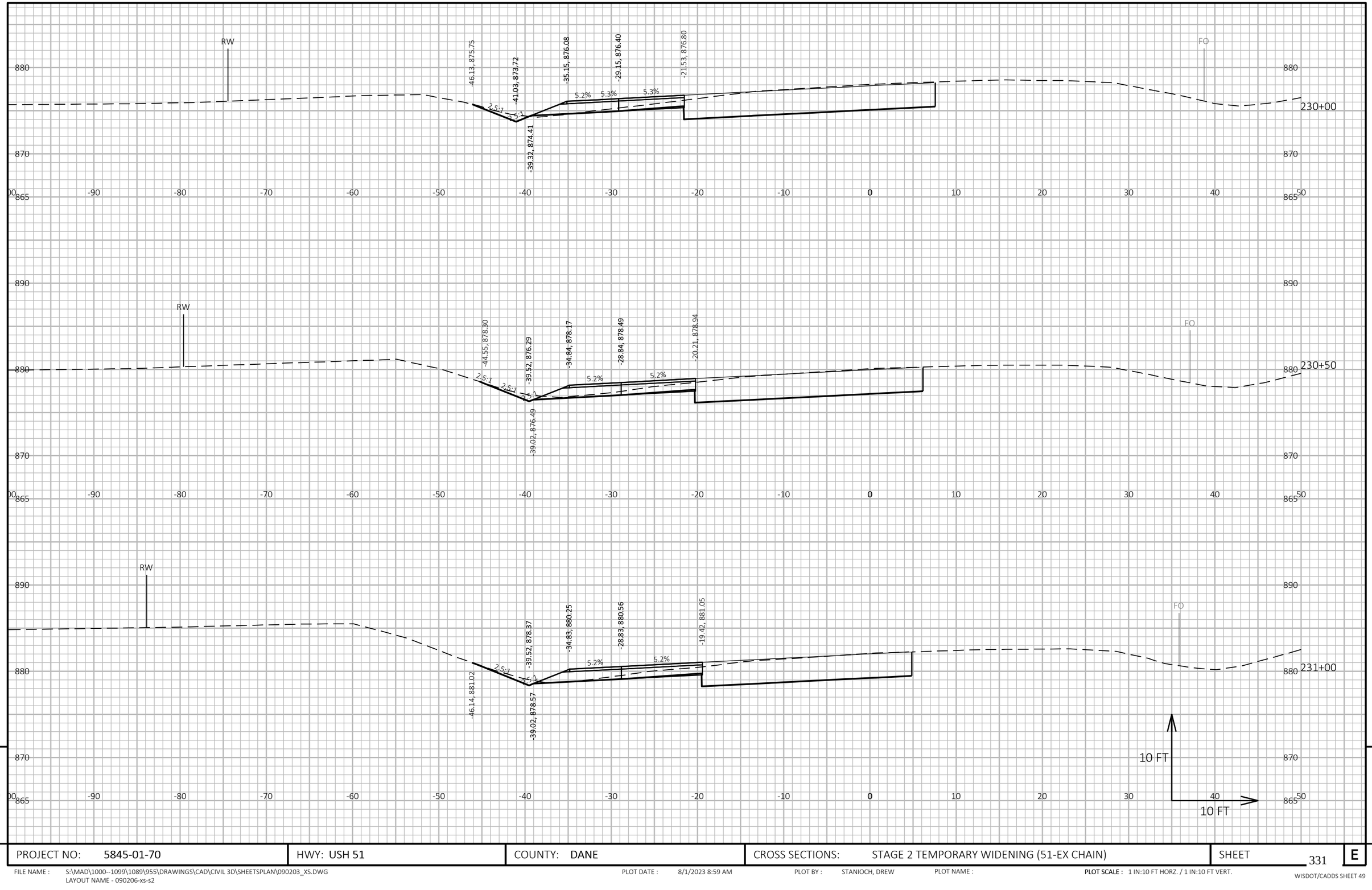

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 330 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090205-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

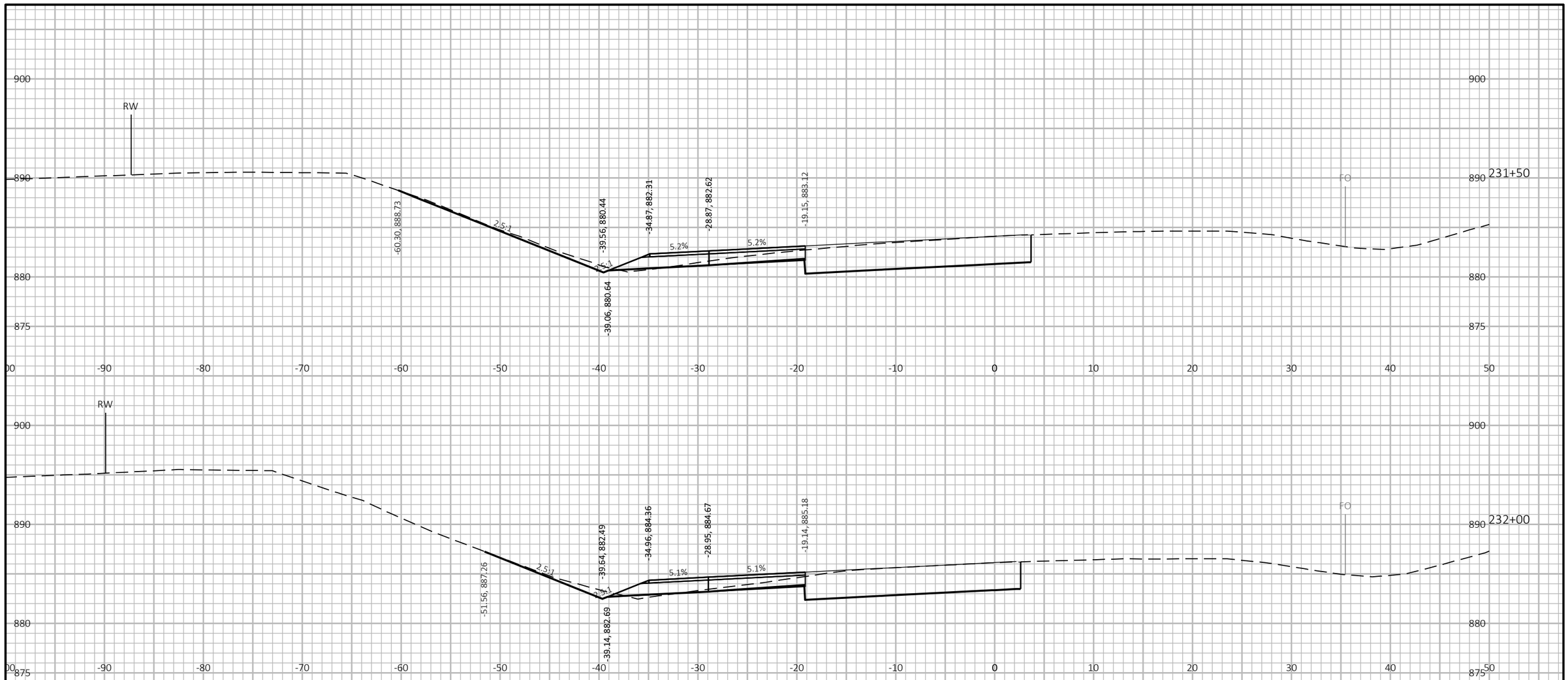



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 331 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090206-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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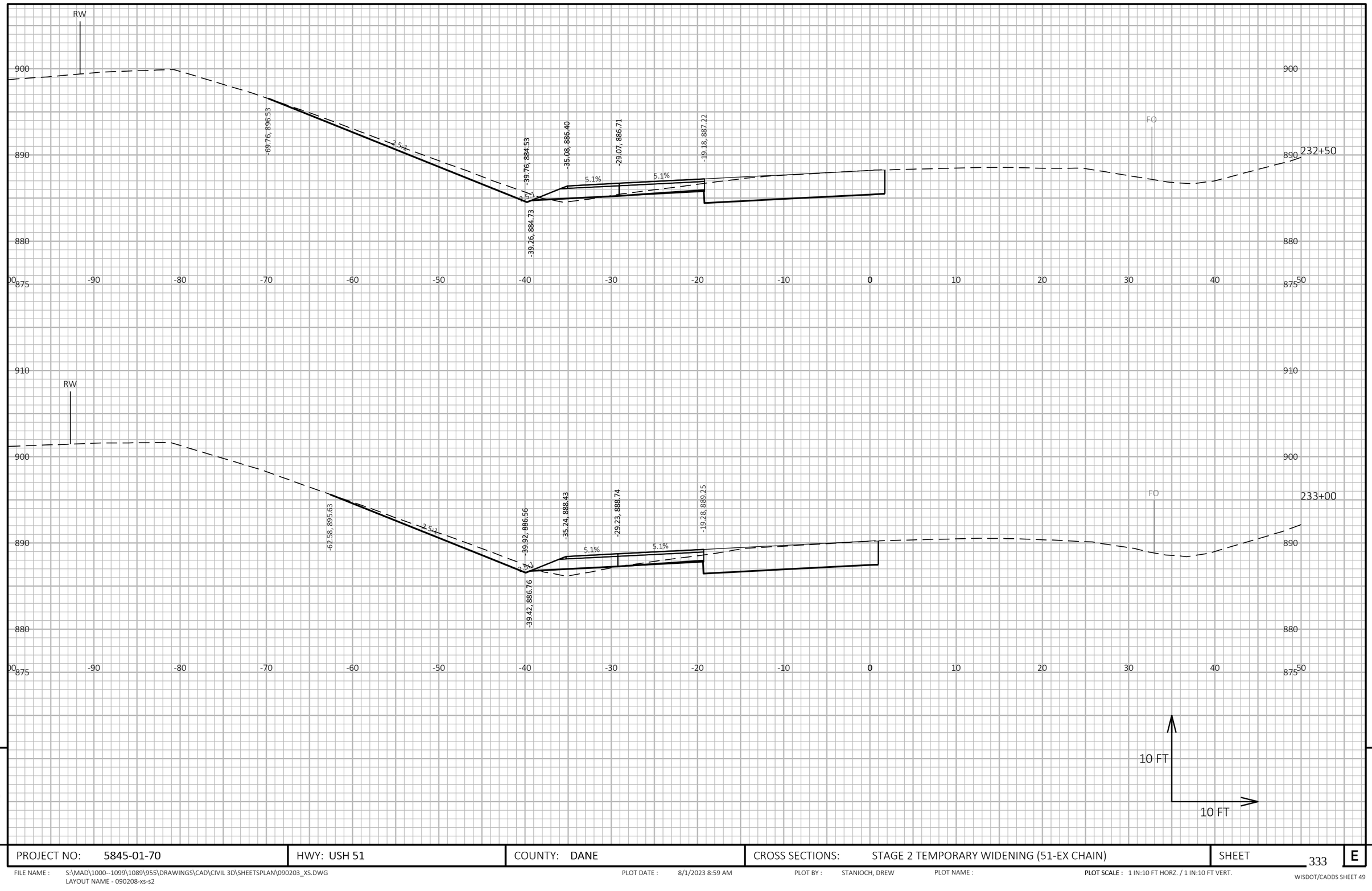
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 332 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090207-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

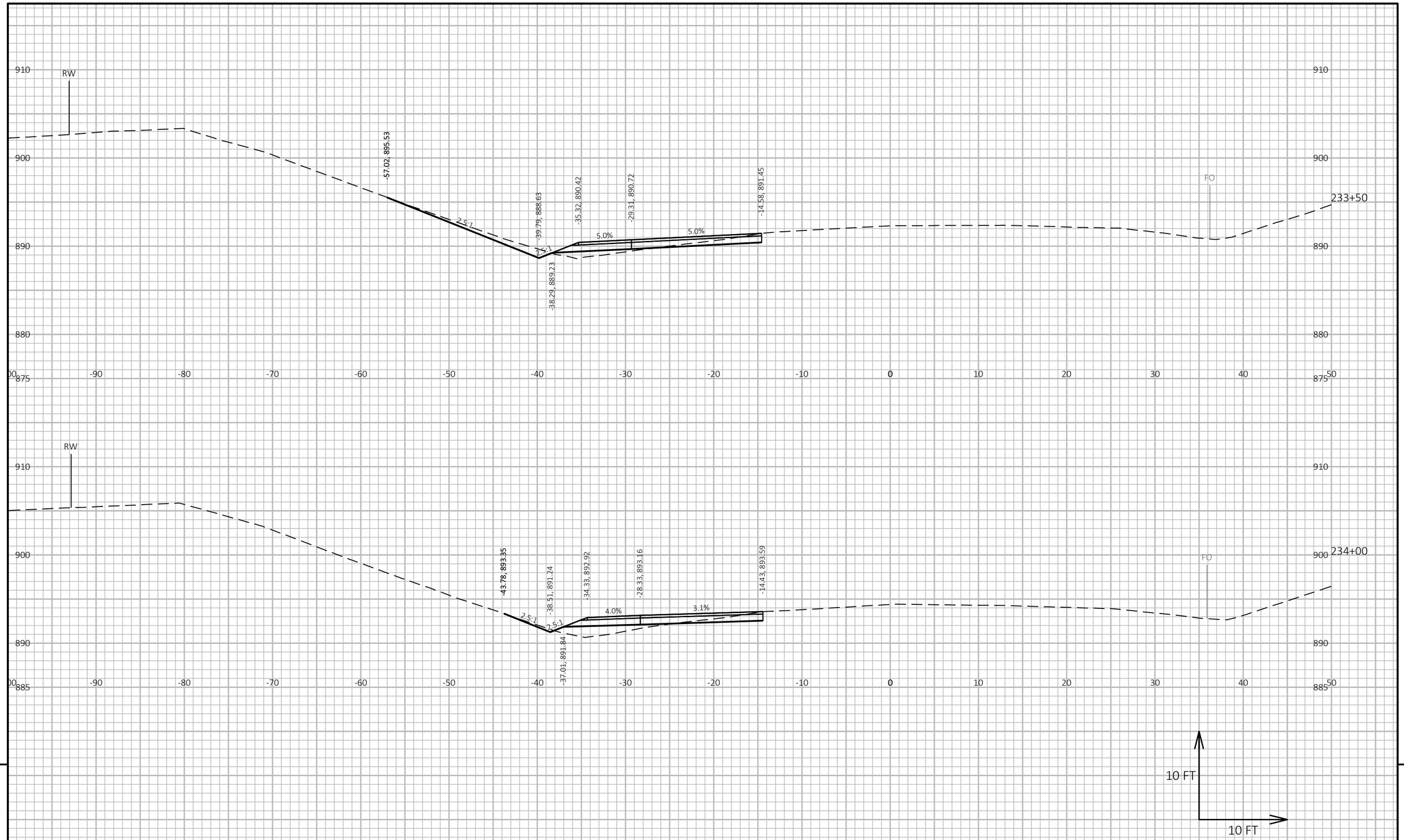
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 333 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090208-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

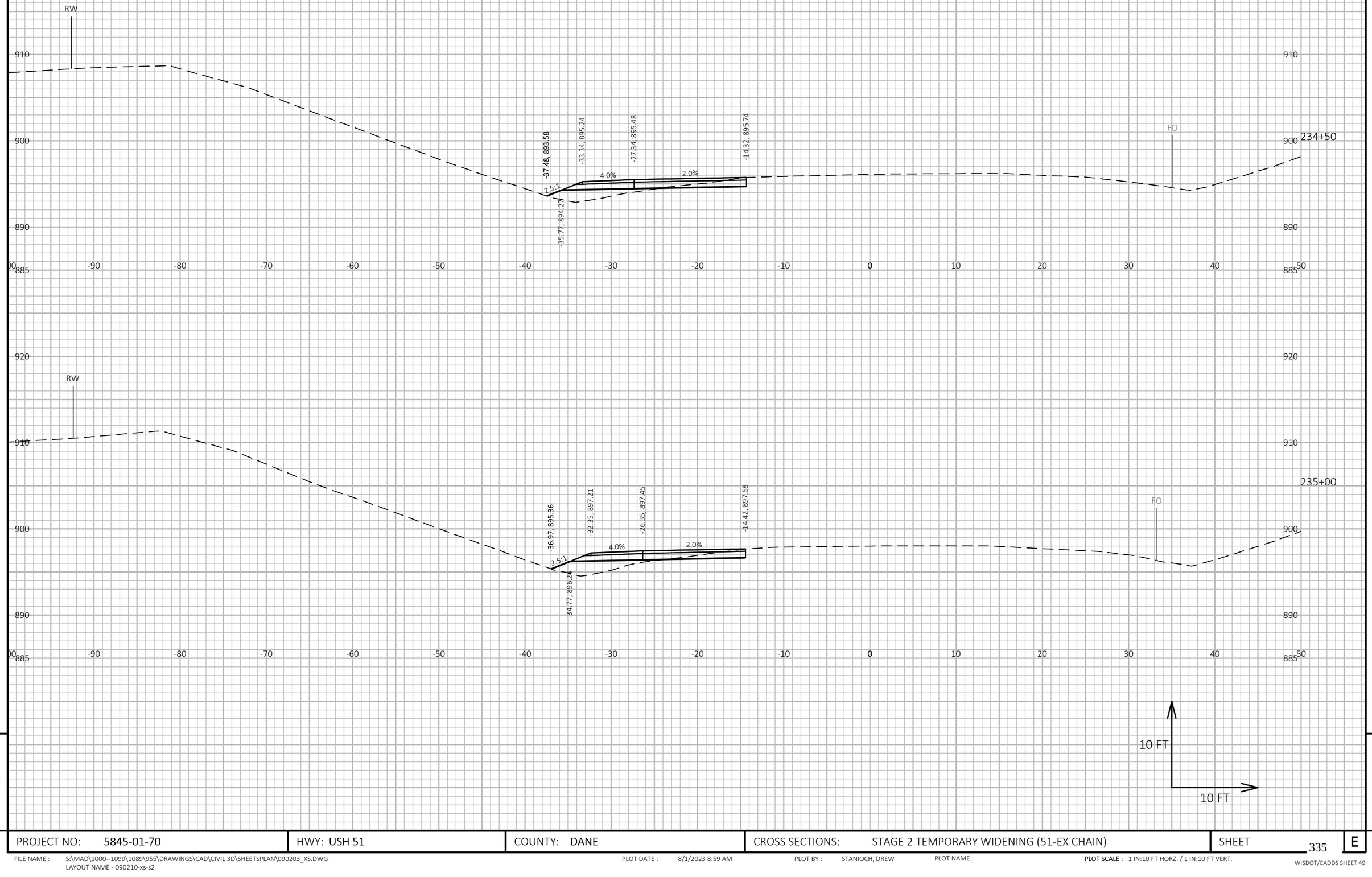



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 334 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090209-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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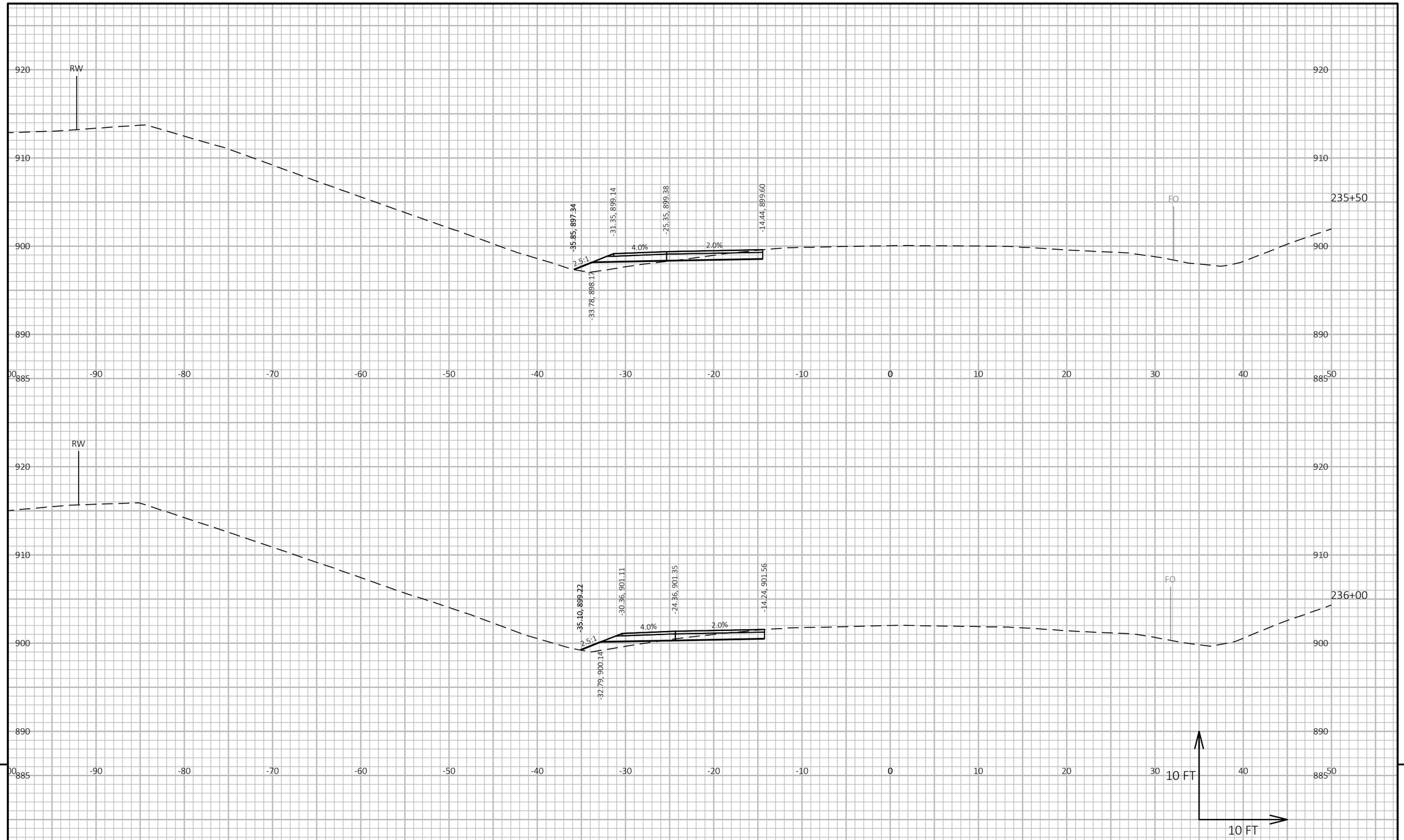
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 335 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090210-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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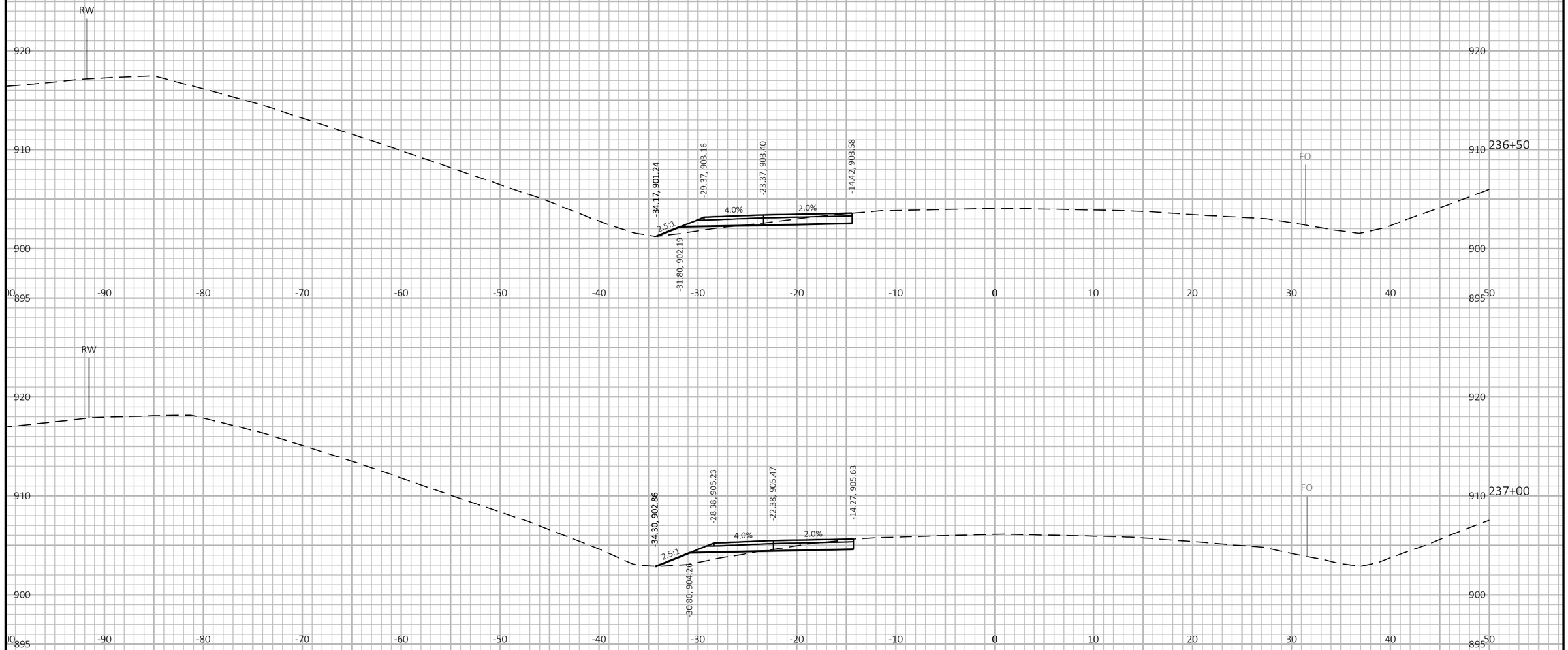
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 336 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090211-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 337 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090212-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

RW

920

910

900

895

-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50

-31.73, 905.52

-27.39, 907.26

-21.38, 907.50

-14.38, 907.64

2.5:1

4.0%

2.0%

-29.81, 906.29

FO

237+50

RW

920

910

900

895

-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50

-35.25, 907.12

-26.39, 909.34

-20.39, 909.46

-14.17, 909.58

4.0:1

2.0%

2.0%

-30.92, 908.21

FO

238+00

10 FT

10 FT

9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 338 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090213-xs-s2

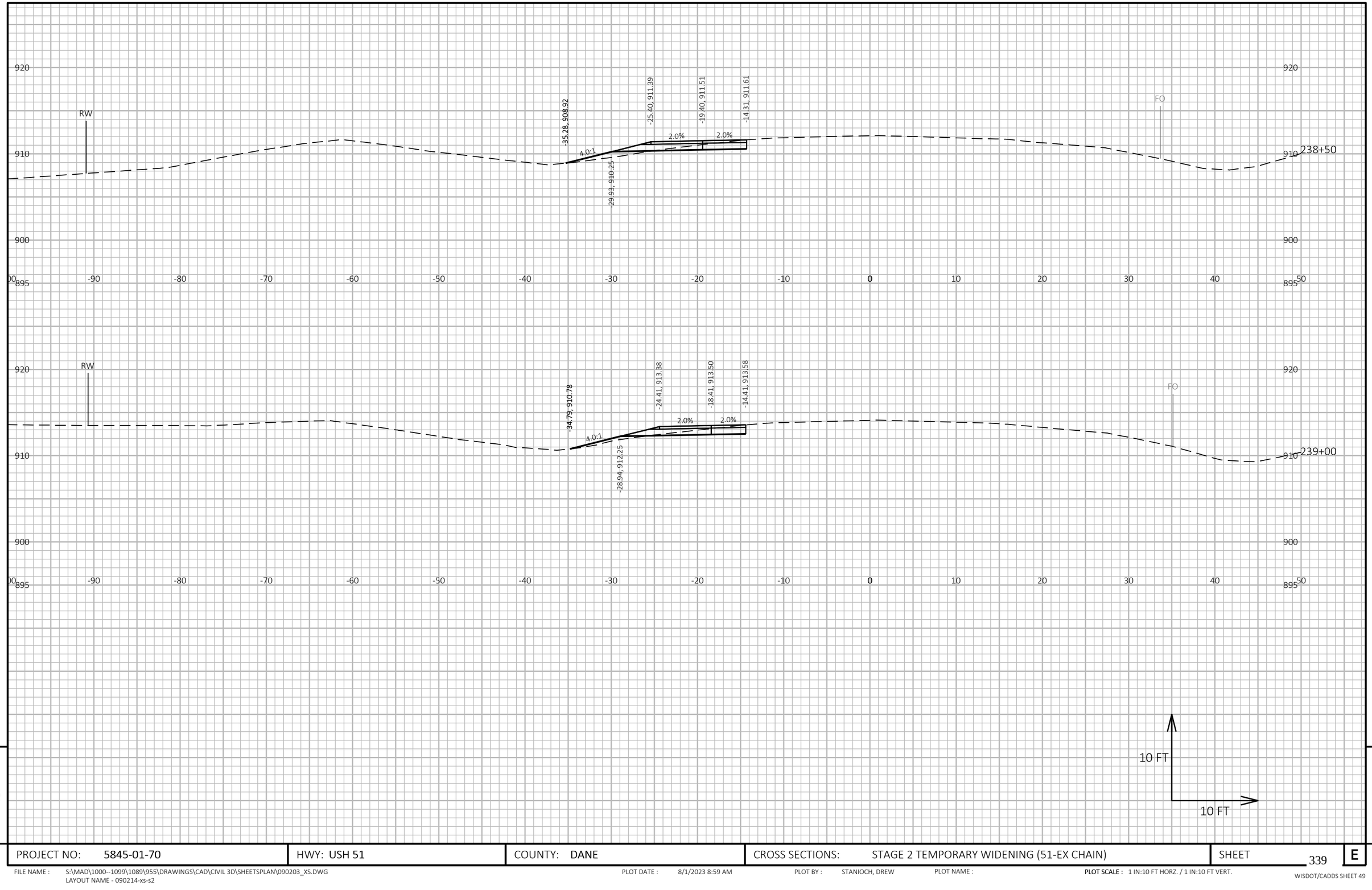
PLOT DATE : 8/1/2023 8:59 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

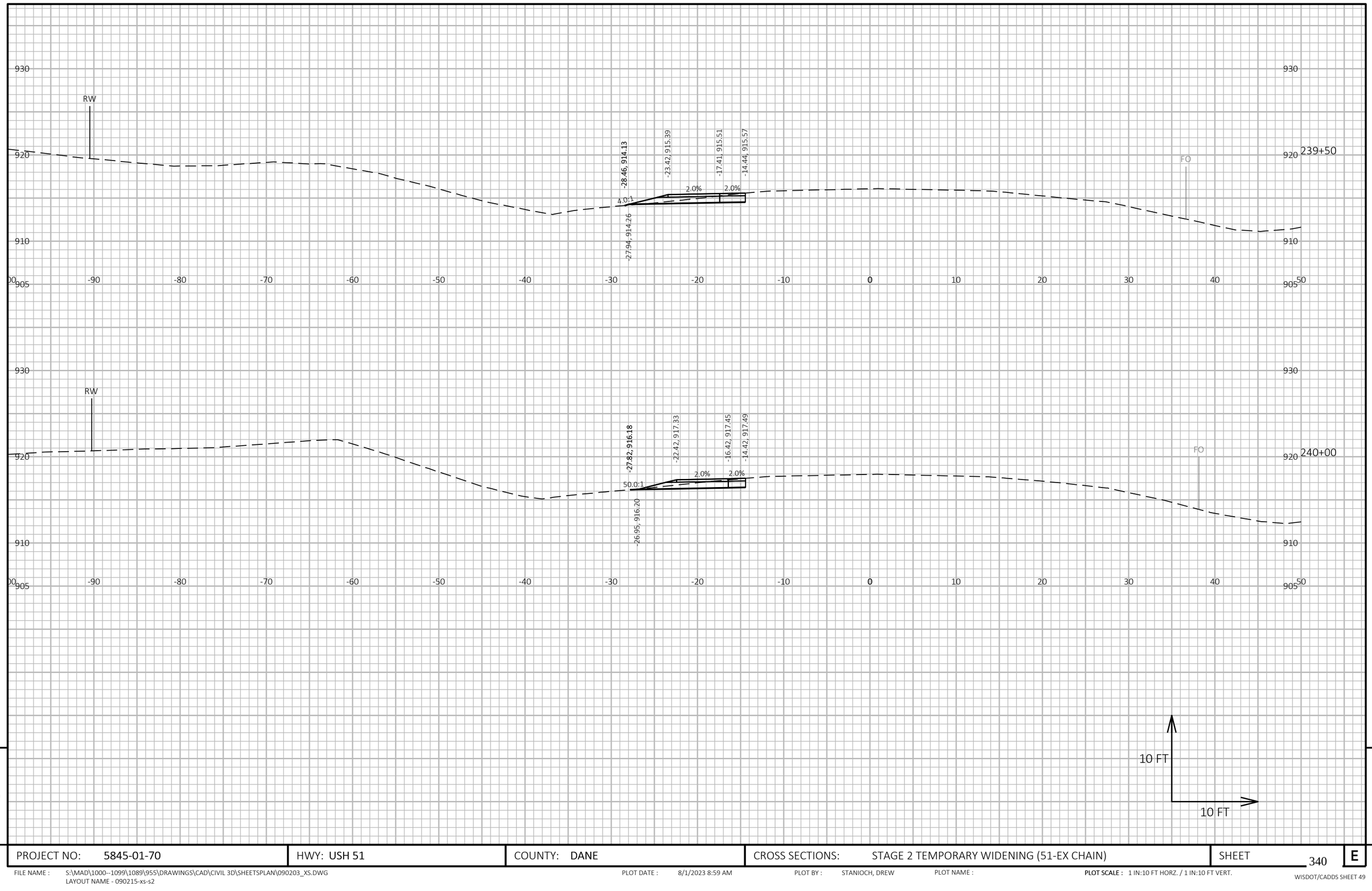
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 339 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090214-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



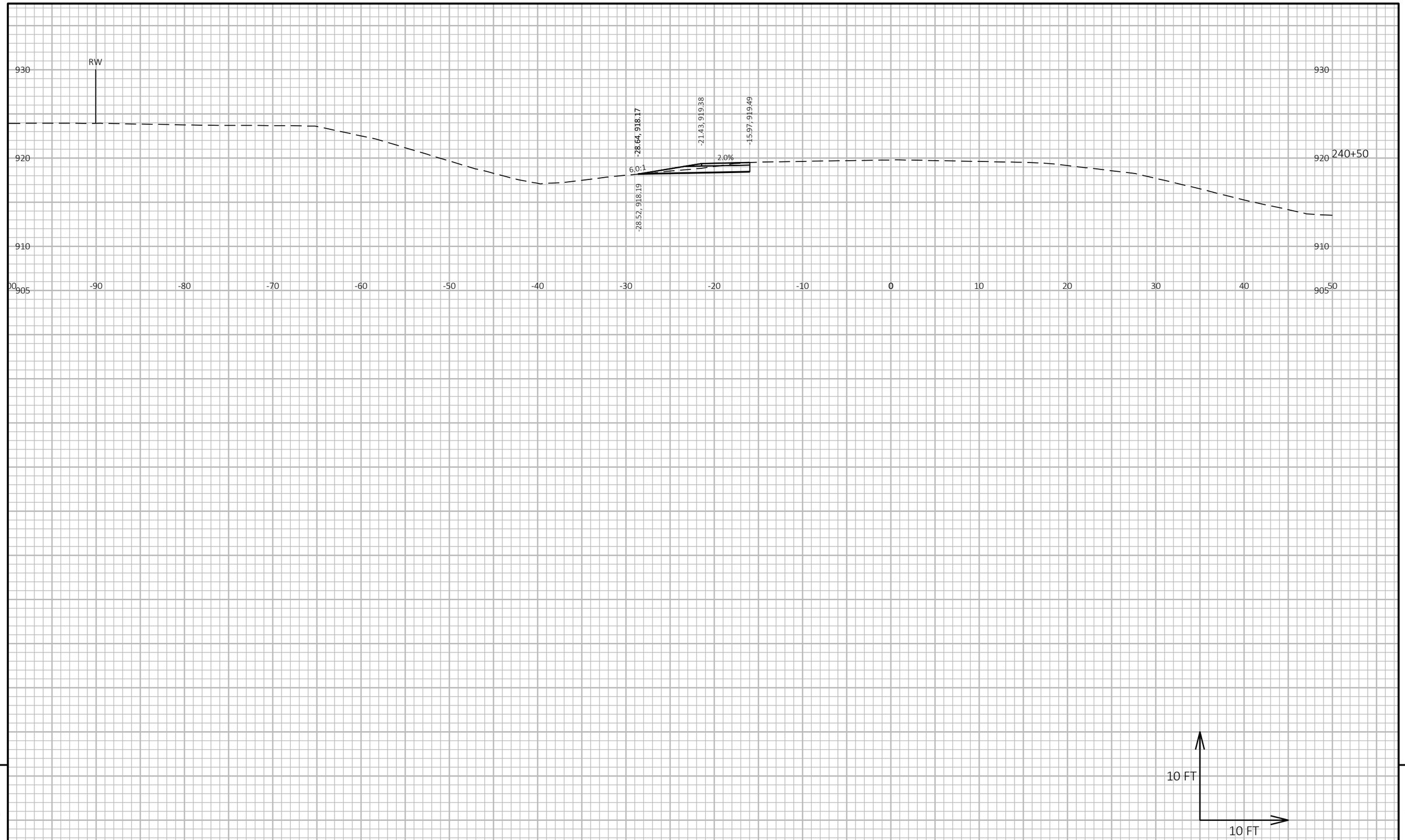

9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 340 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090215-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.




9

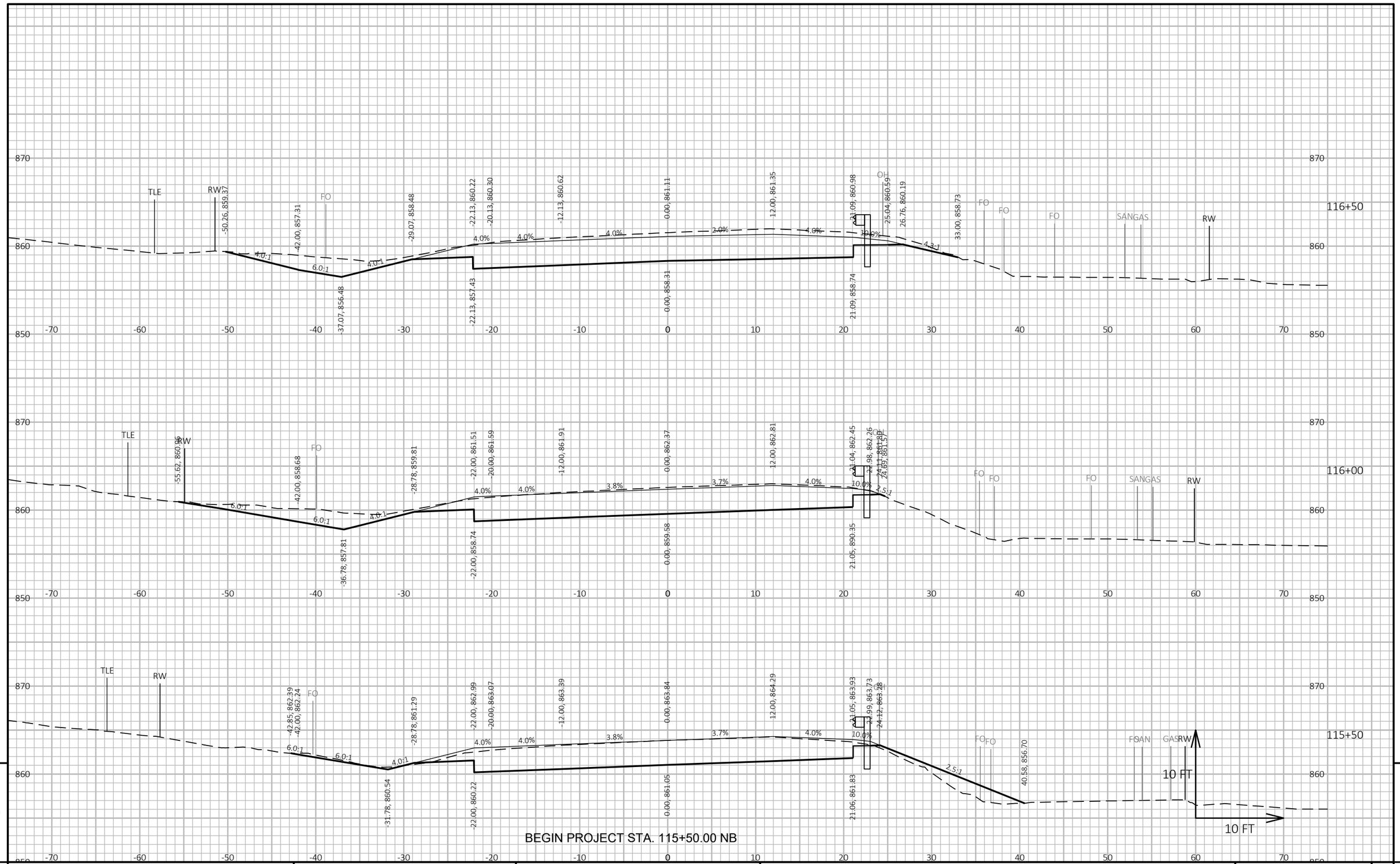
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 2 TEMPORARY WIDENING (51-EX CHAIN) | SHEET 341 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090216-xs-s2

PLOT DATE : 8/1/2023 8:59 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 342 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 01

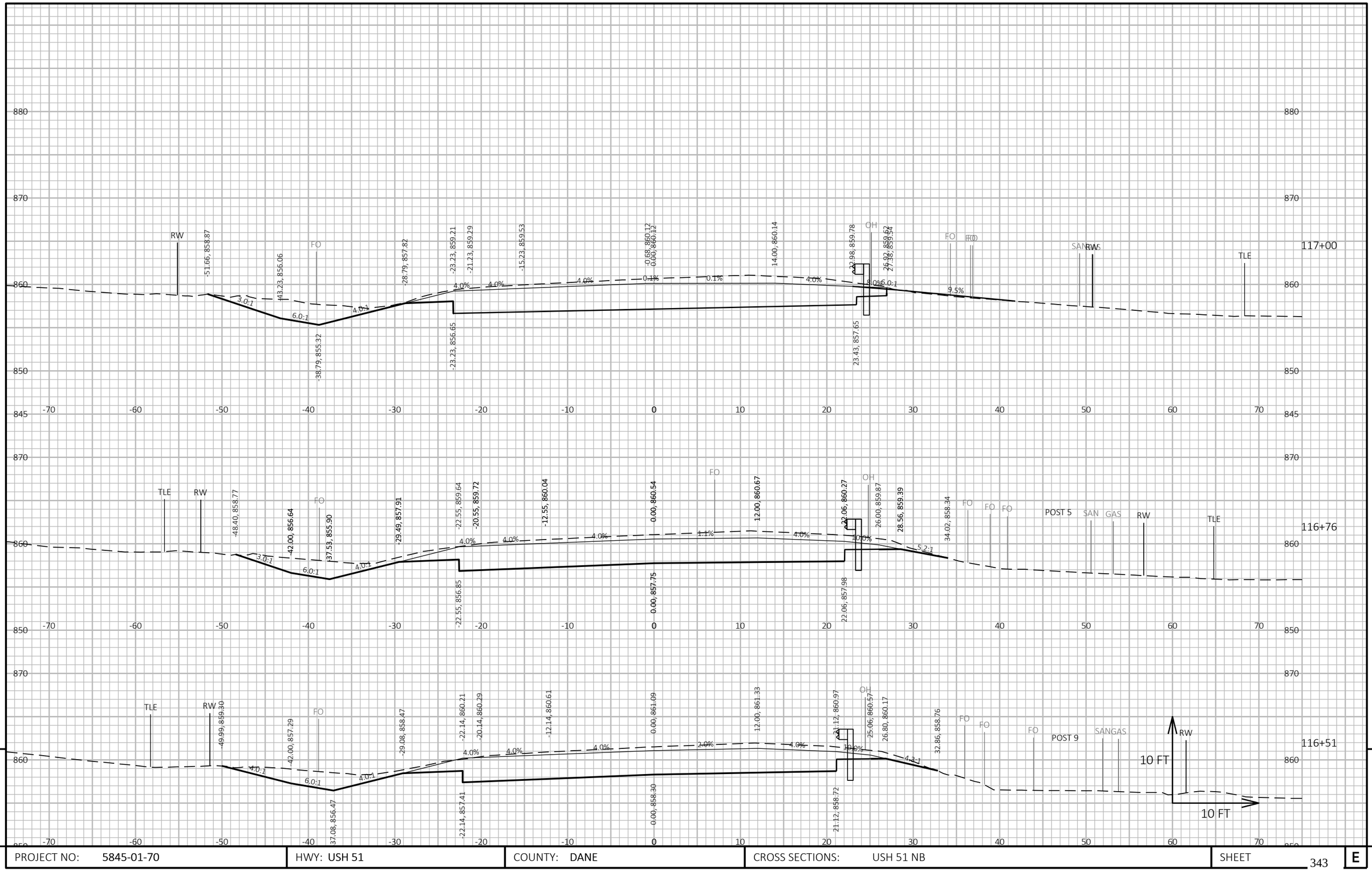
PLOT DATE : 8/1/2023 9:00 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 343 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 02

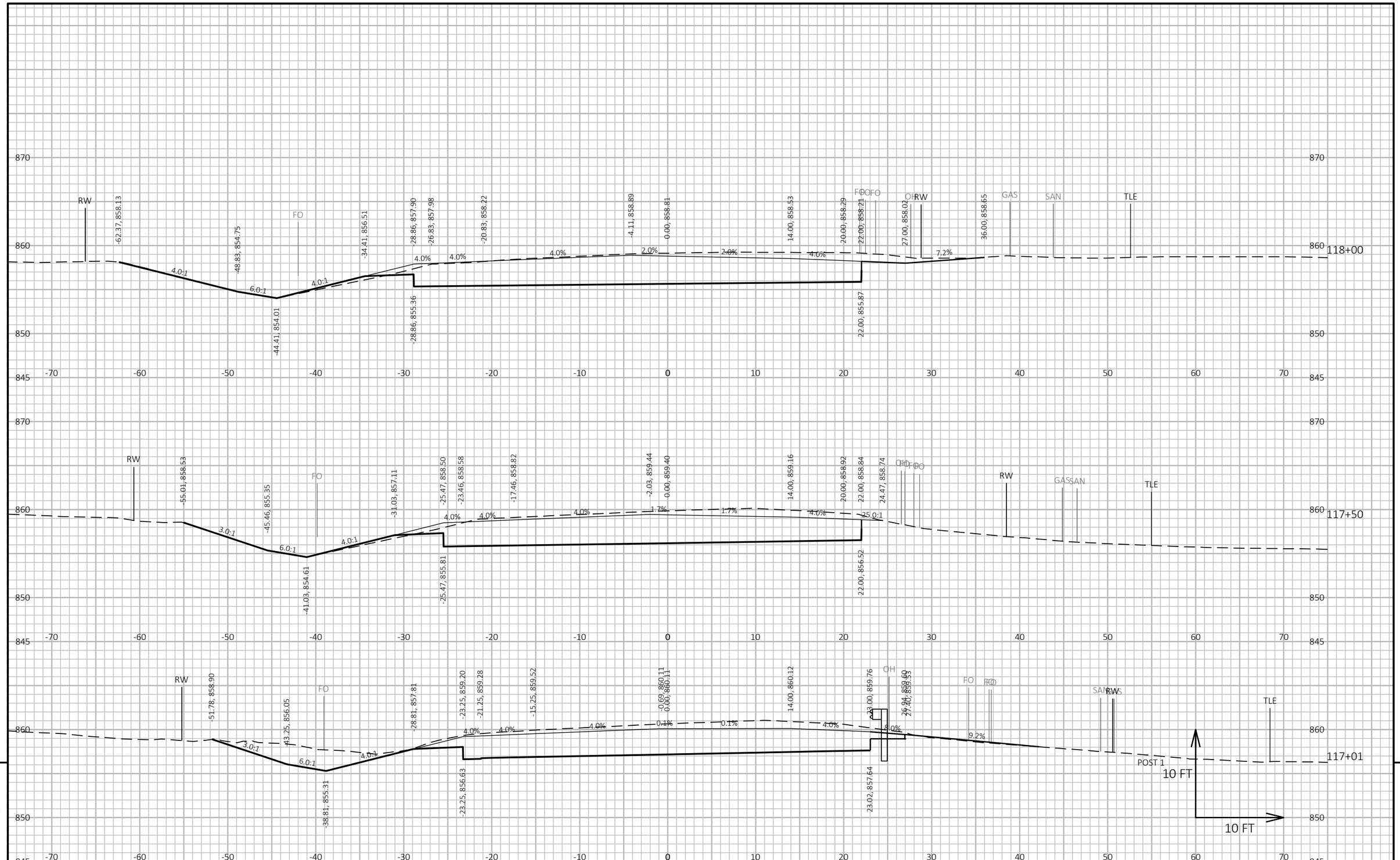
PLOT DATE : 8/1/2023 9:00 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 344 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 03

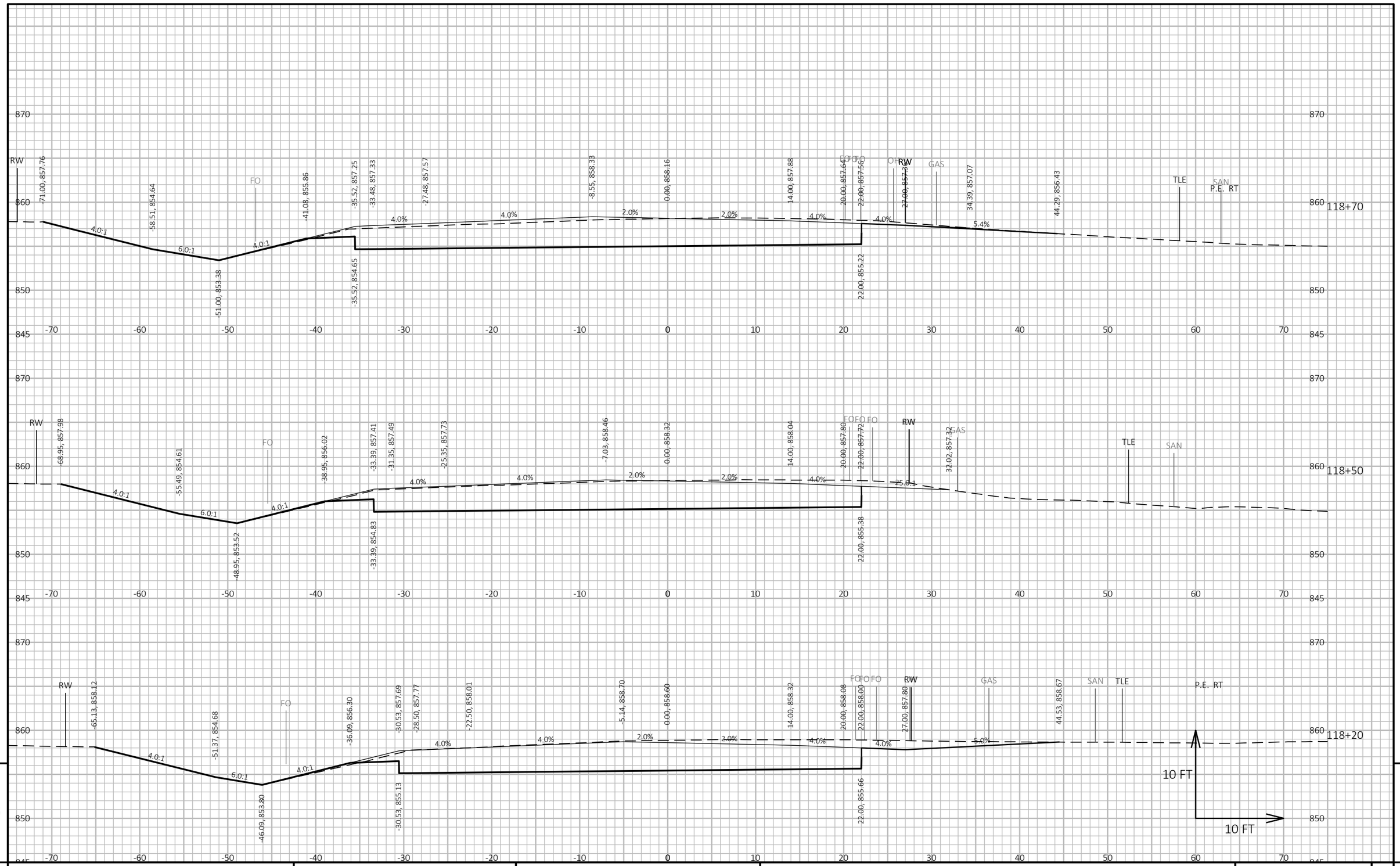
PLOT DATE : 8/1/2023 9:00 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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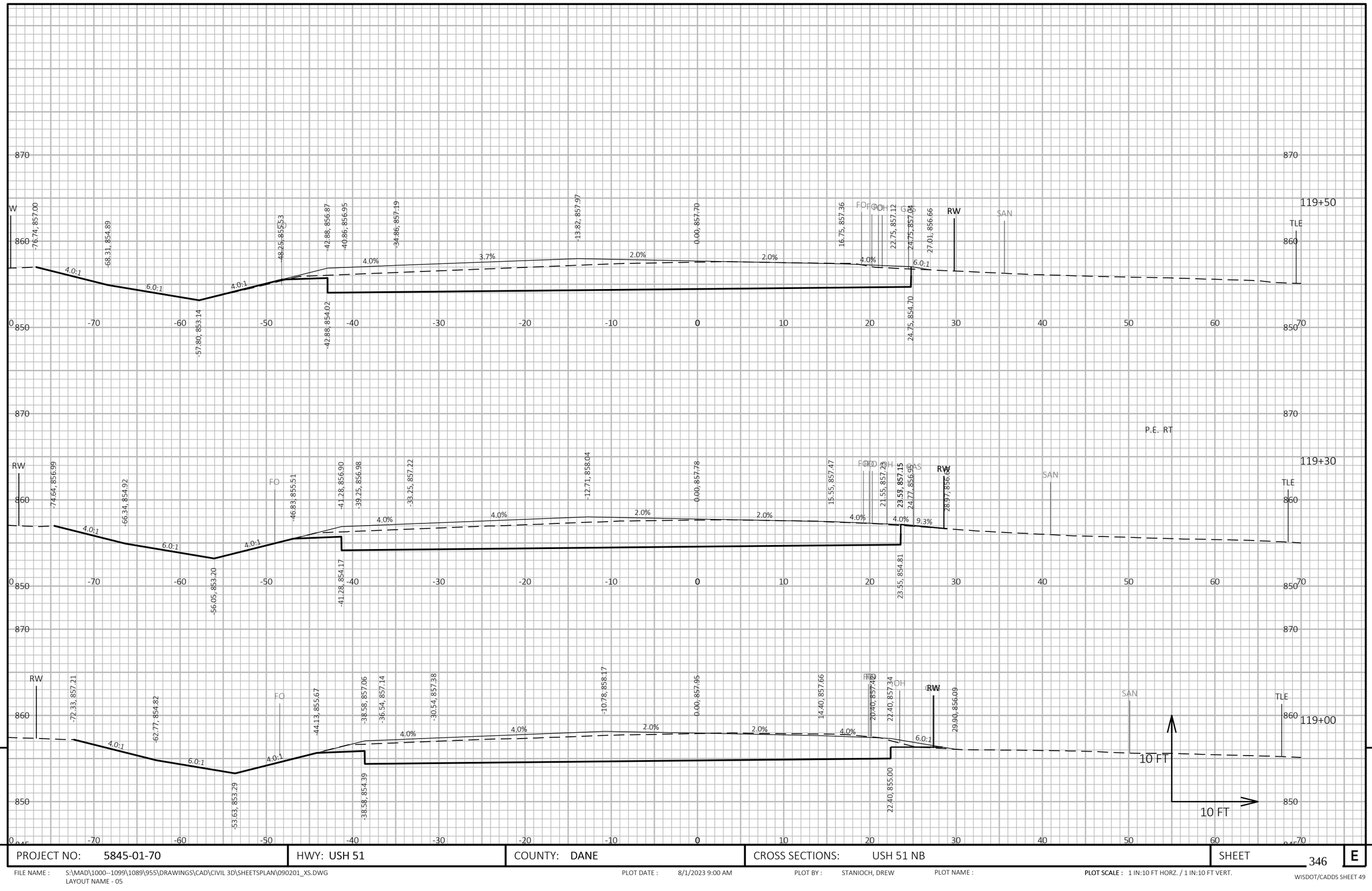
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 345 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/1/2023 9:00 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 346 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 05

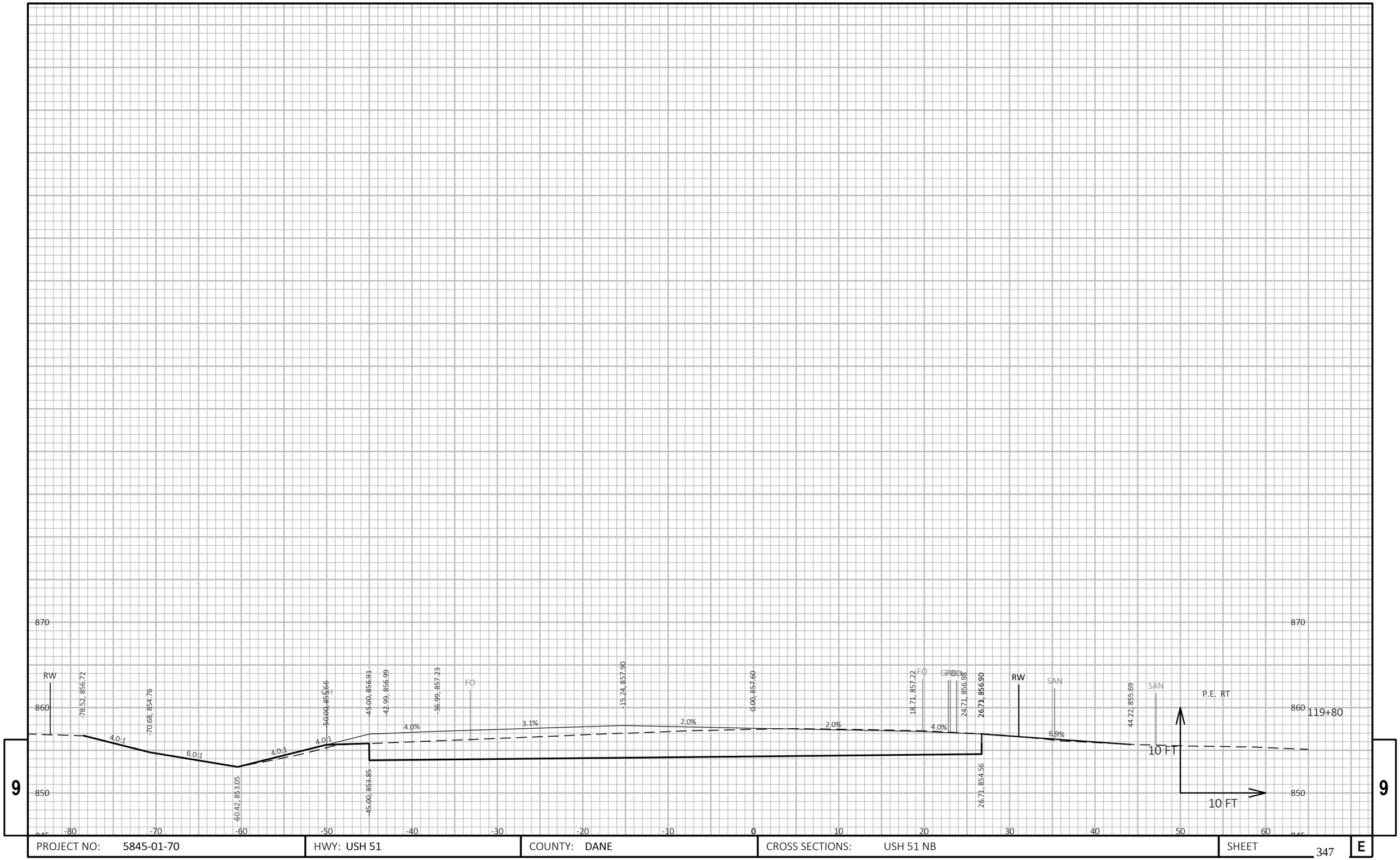
PLOT DATE : 8/1/2023 9:00 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 347 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/1/2023 9:01 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 348 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 07

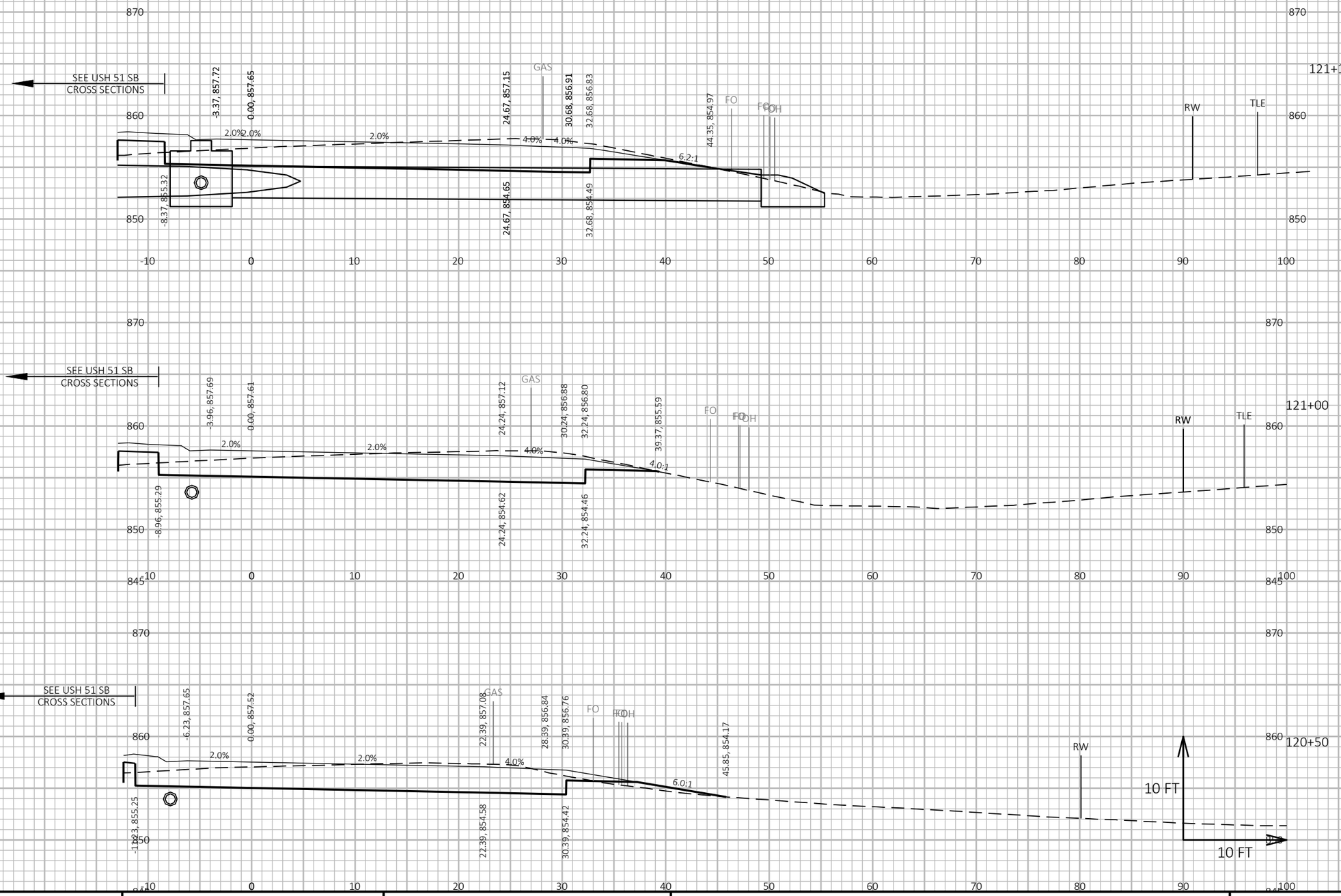
PLOT DATE : 8/1/2023 9:01 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 349 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 08

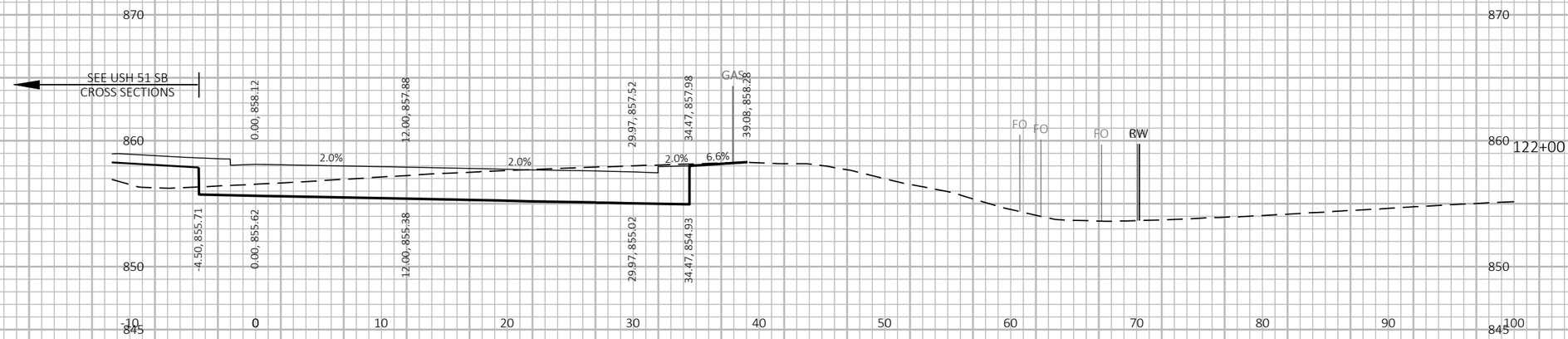
PLOT DATE : 8/1/2023 9:01 AM

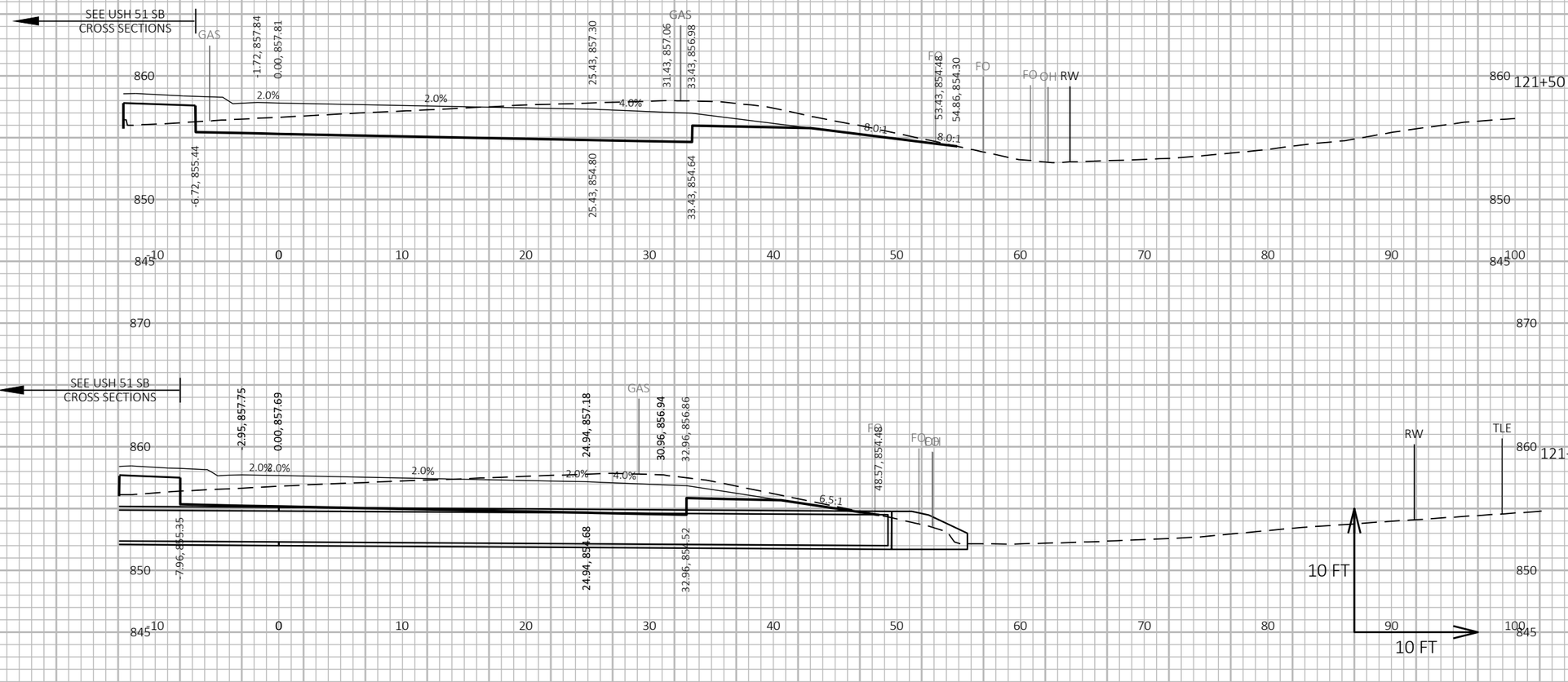
PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 350 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 09

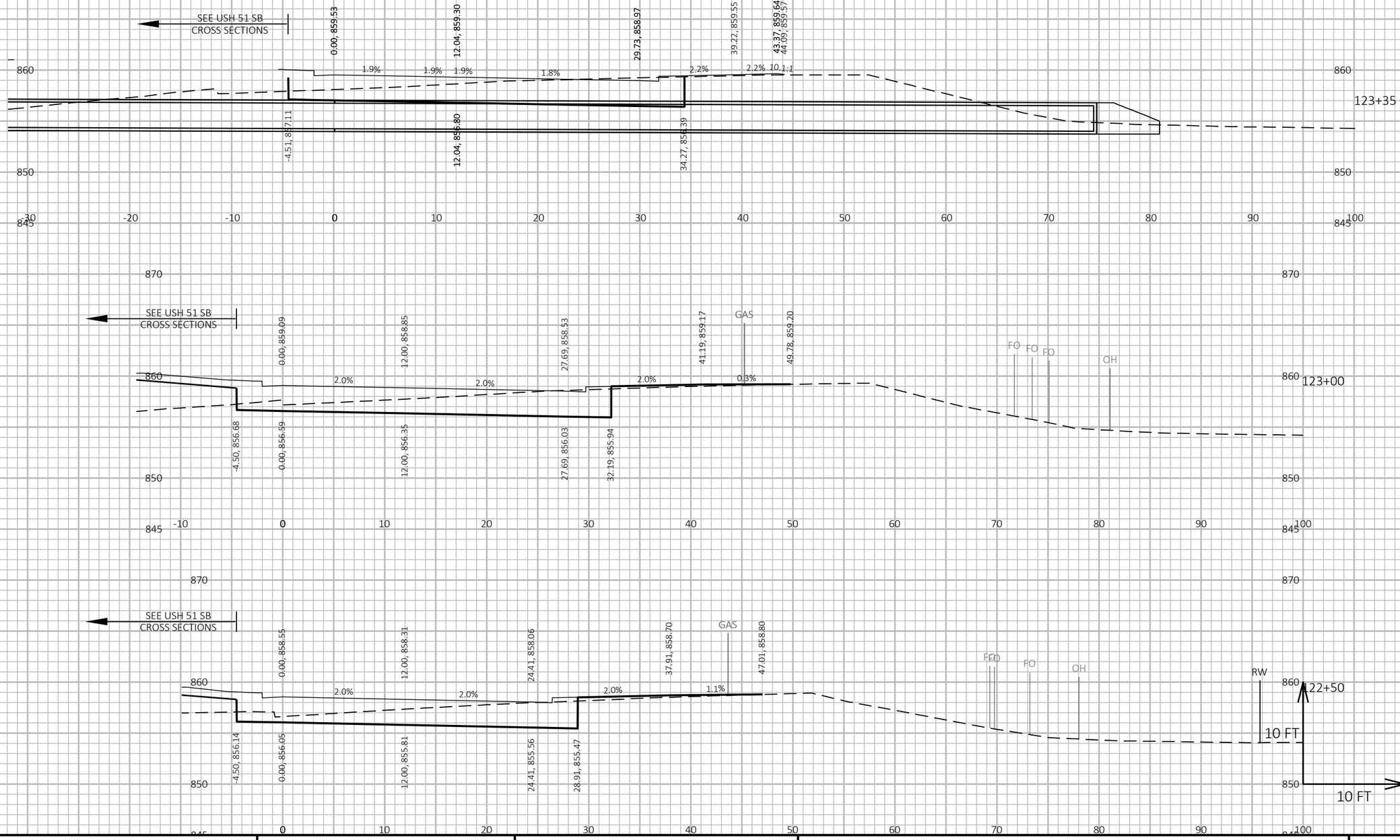
PLOT DATE : 8/1/2023 9:01 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 351 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 10

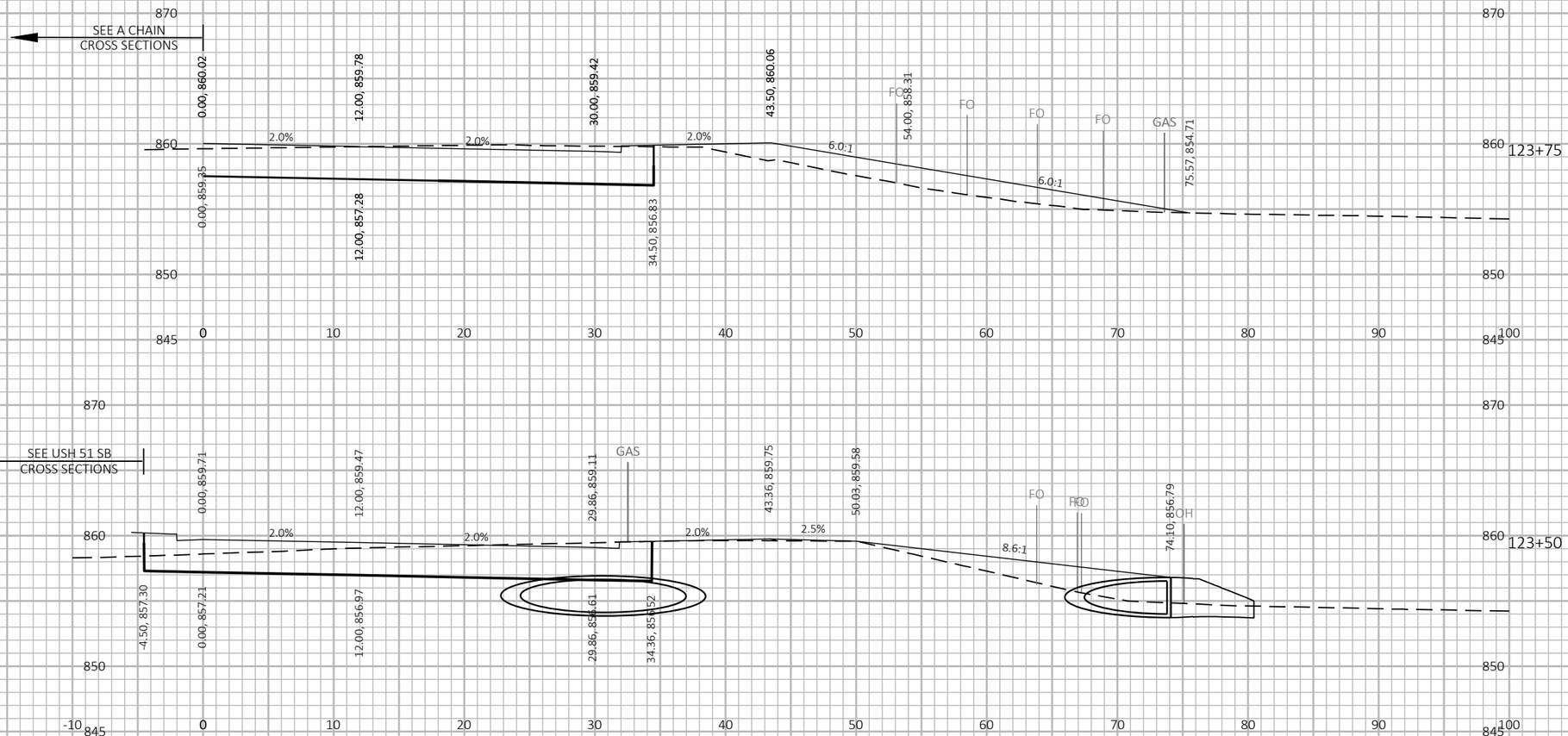
PLOT DATE : 8/1/2023 9:01 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 352 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 11

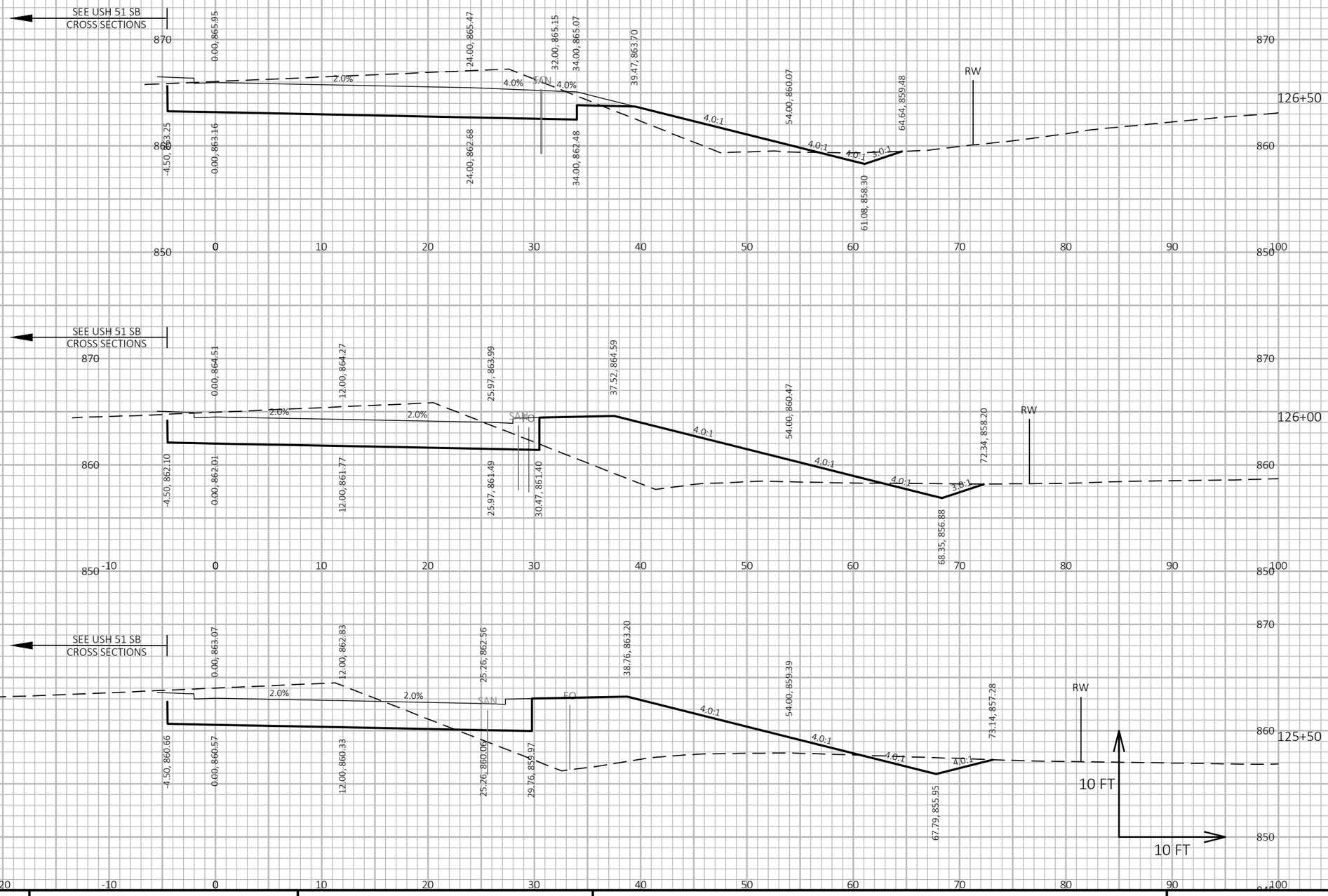
PLOT DATE : 8/1/2023 9:01 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 353 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 12

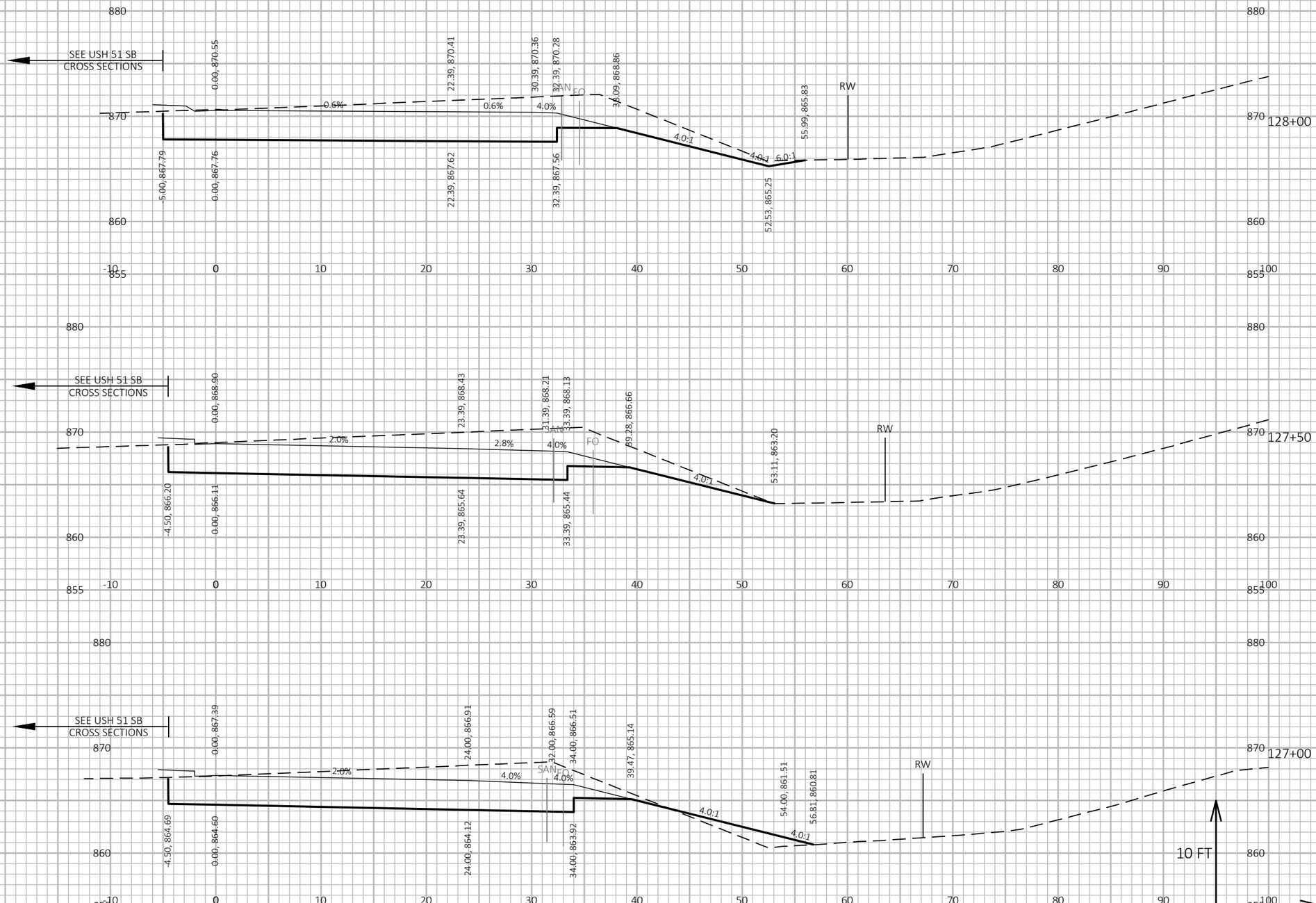
PLOT DATE : 8/1/2023 9:01 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



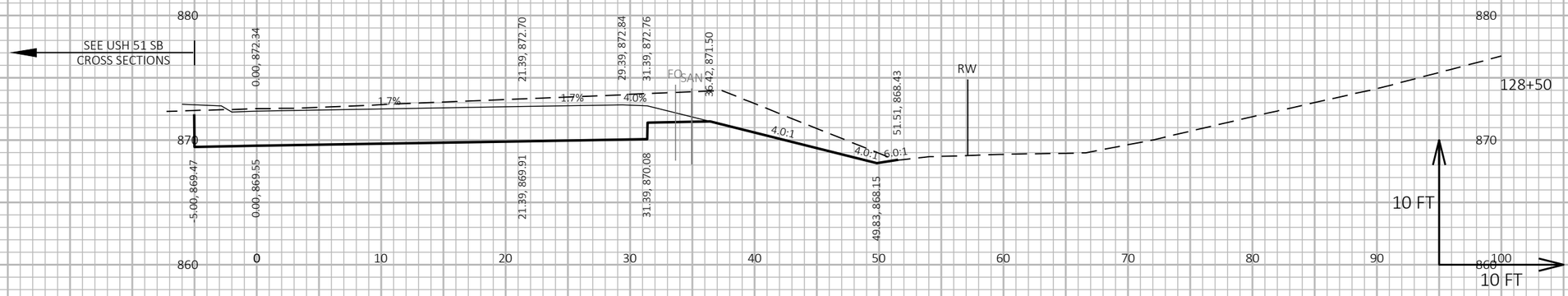

9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 354 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/1/2023 9:02 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

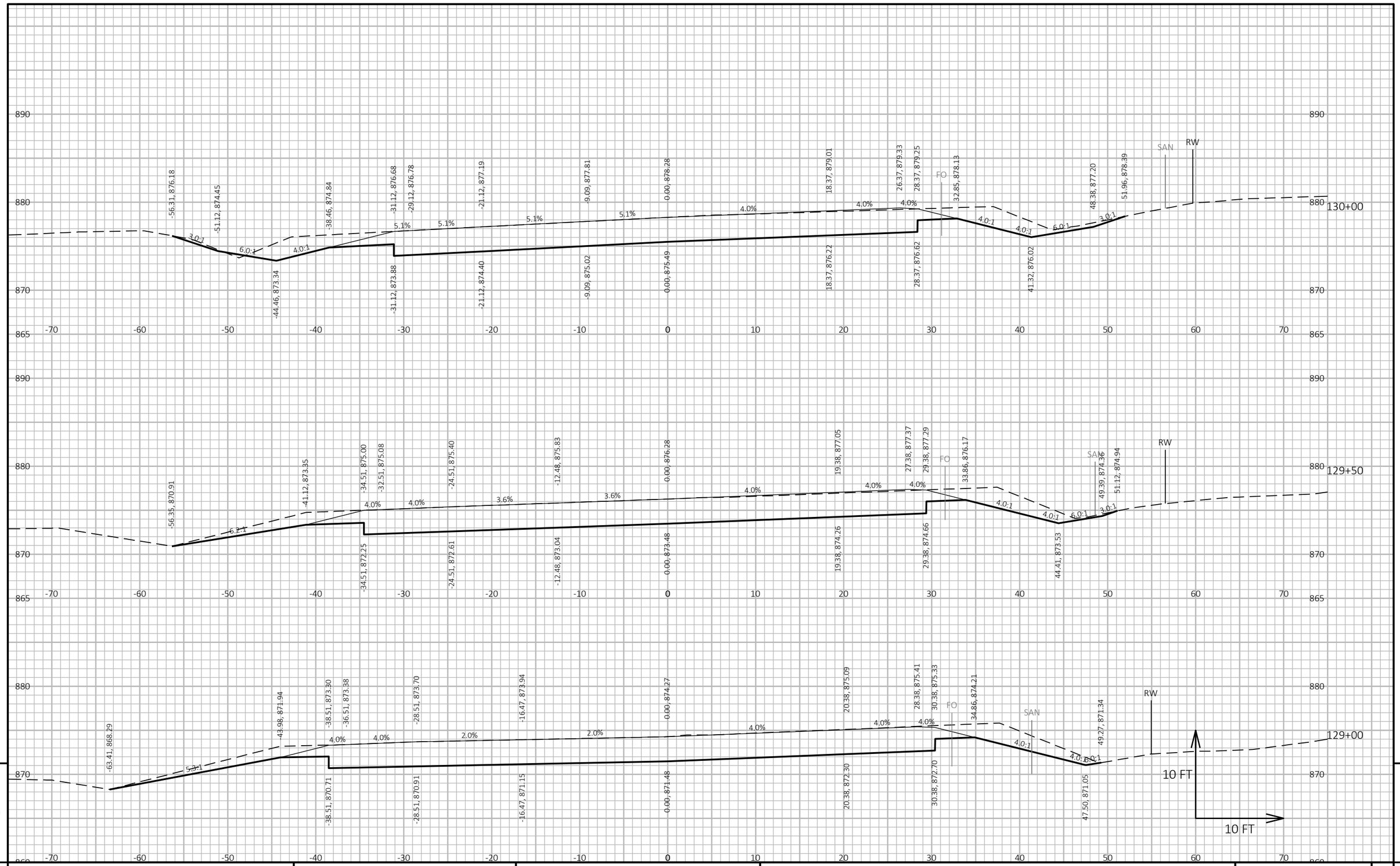



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 355 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/1/2023 9:02 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

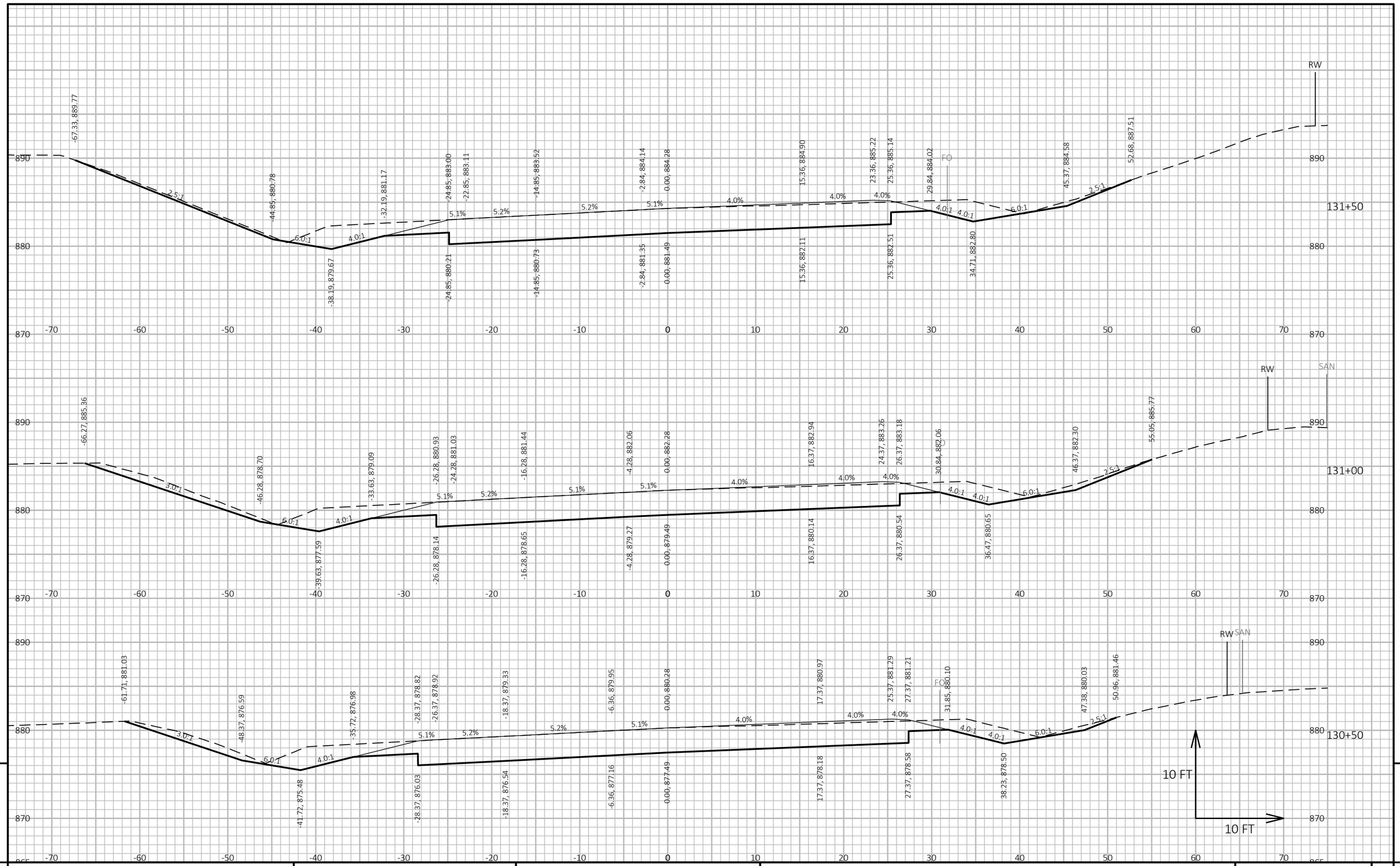
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 356 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 8/1/2023 9:02 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 357 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 16

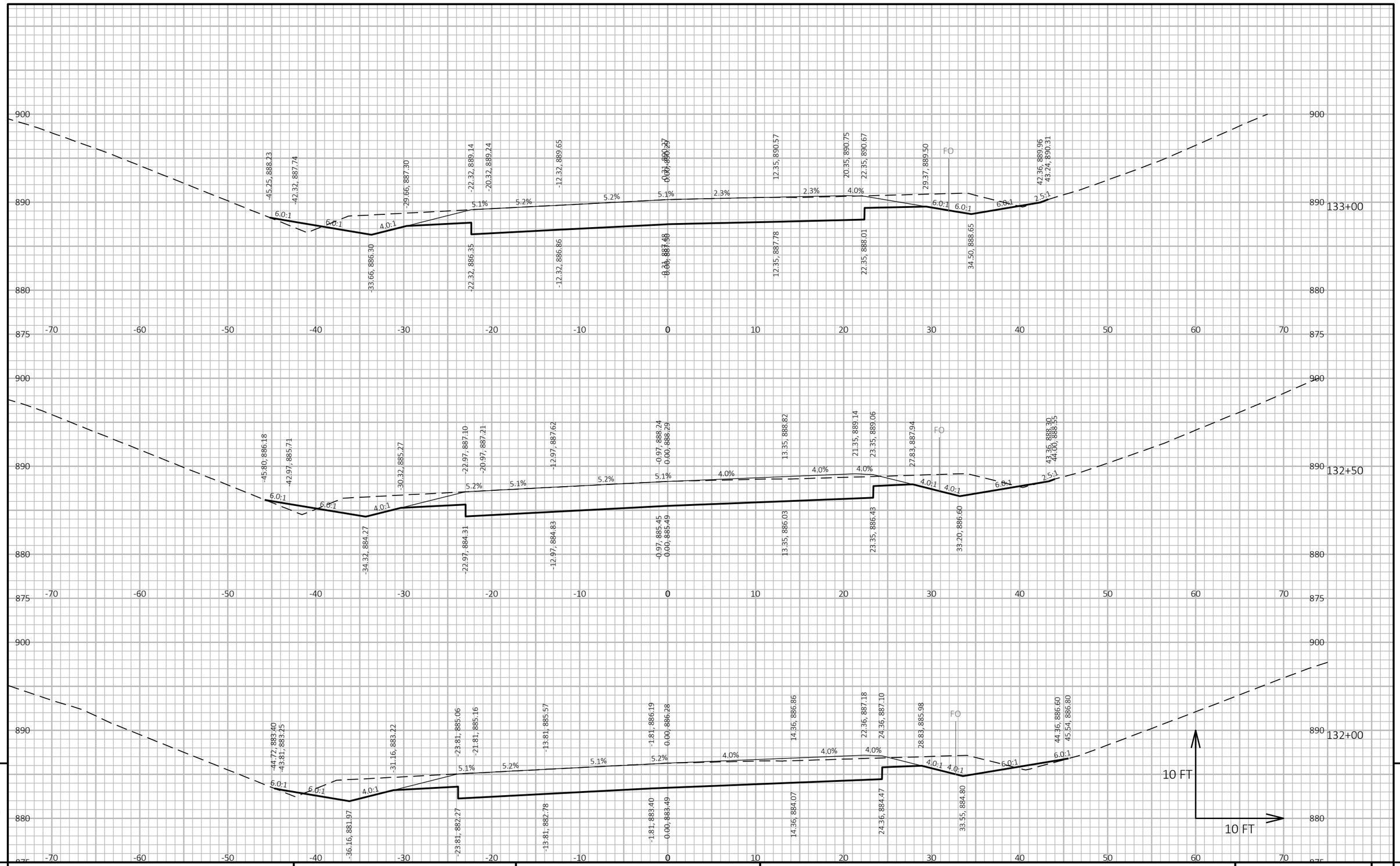
PLOT DATE : 8/1/2023 9:02 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 358 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 8/1/2023 9:02 AM

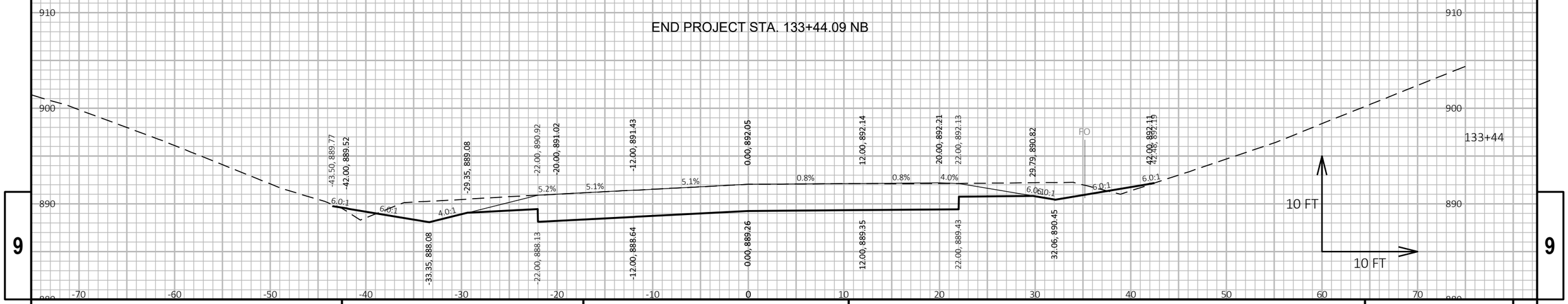
PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PROJECT STA. 133+44.09 NB




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 NB | SHEET 359 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 18

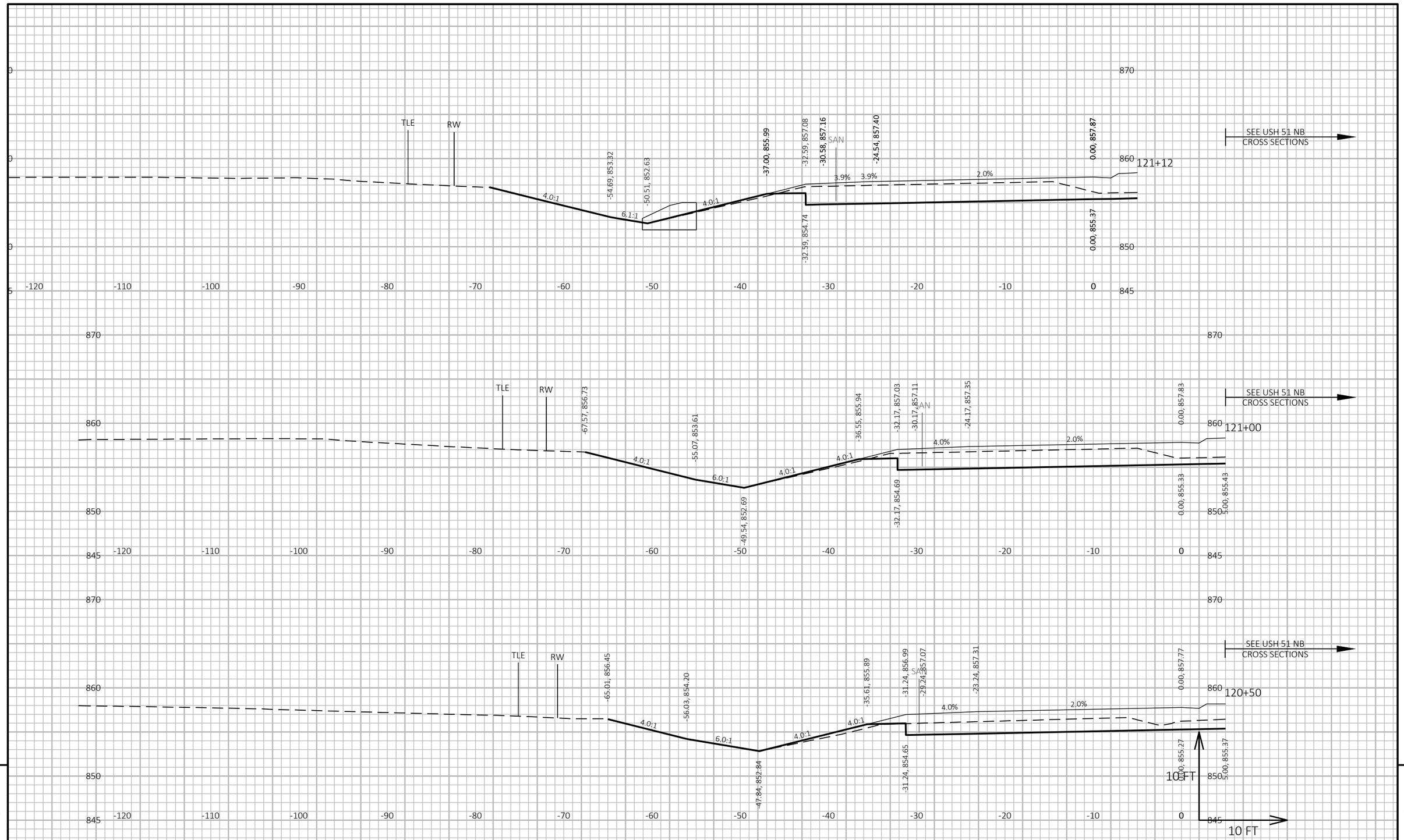
PLOT DATE : 8/1/2023 9:02 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

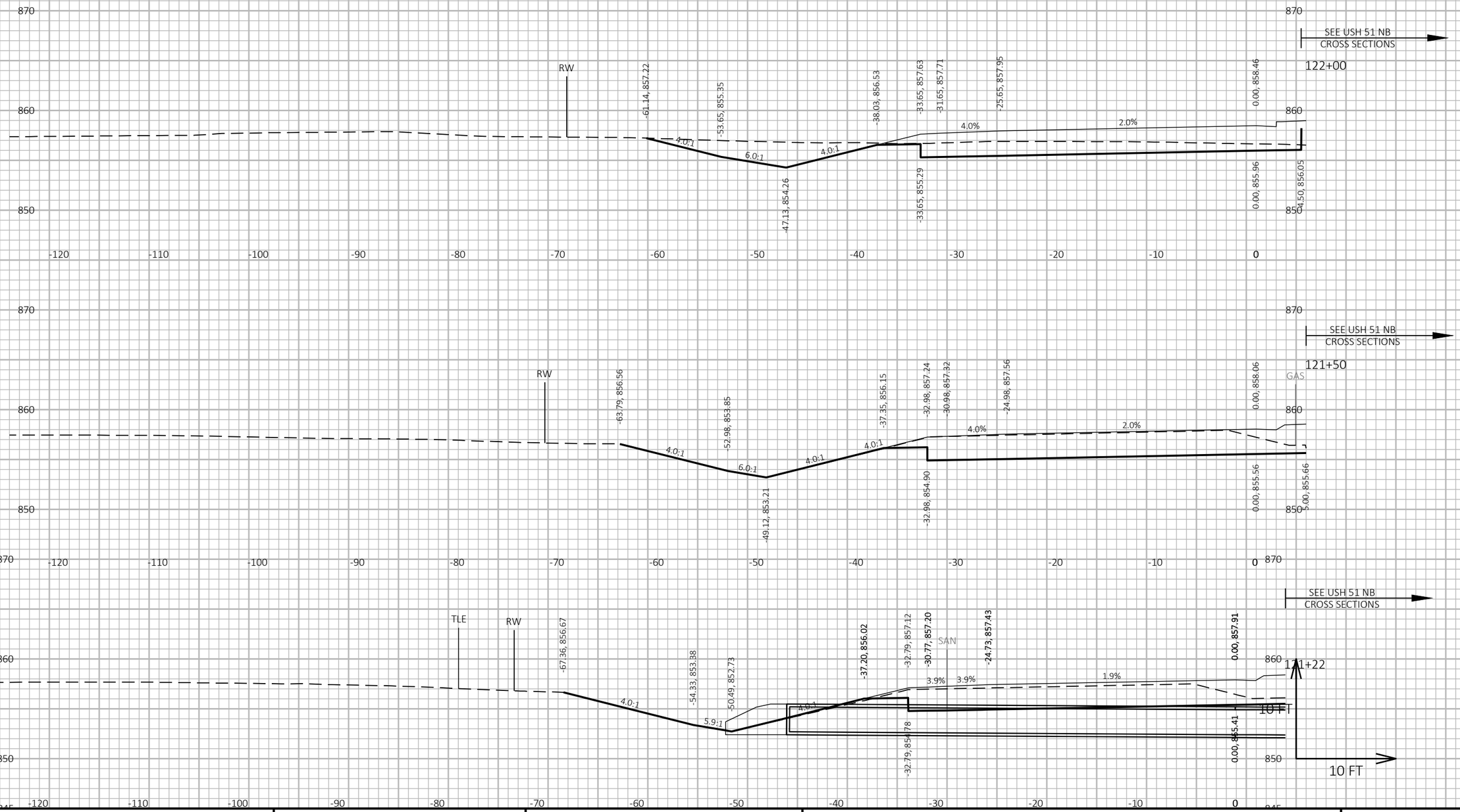



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 360 E |

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/1/2023 9:02 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 361 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 20

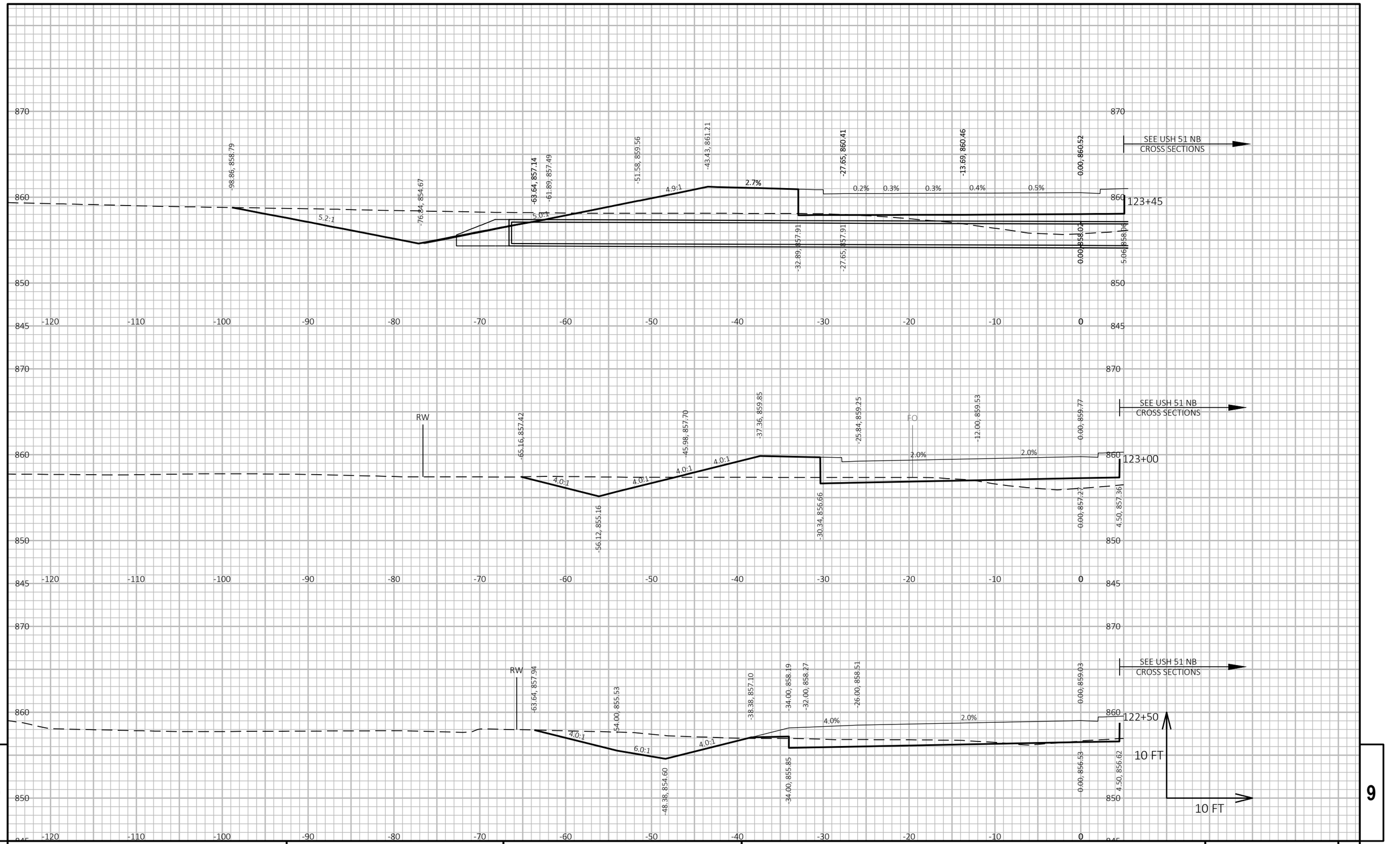
PLOT DATE : 8/1/2023 9:02 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 362 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 21

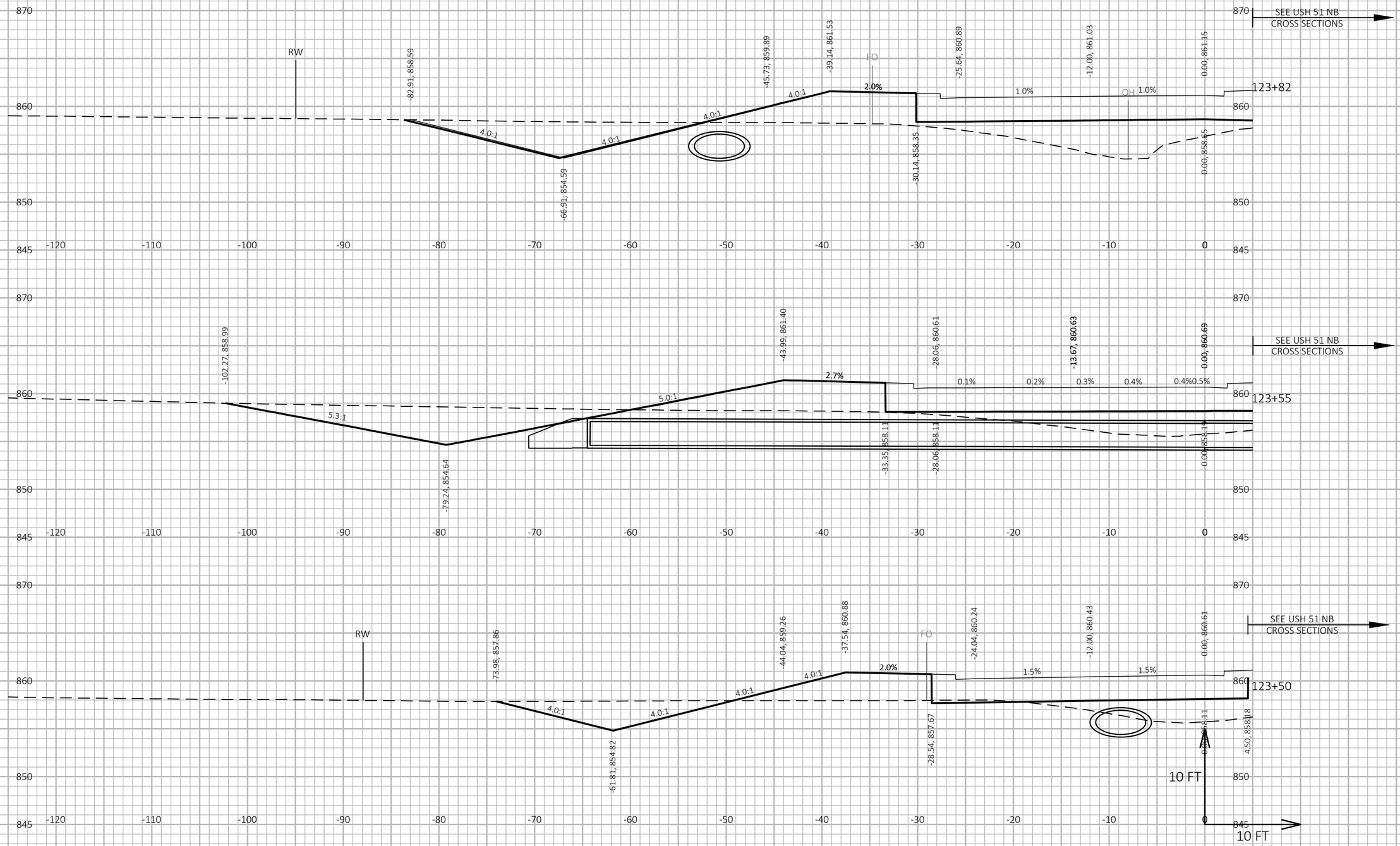
PLOT DATE : 8/1/2023 9:03 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 363 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 22

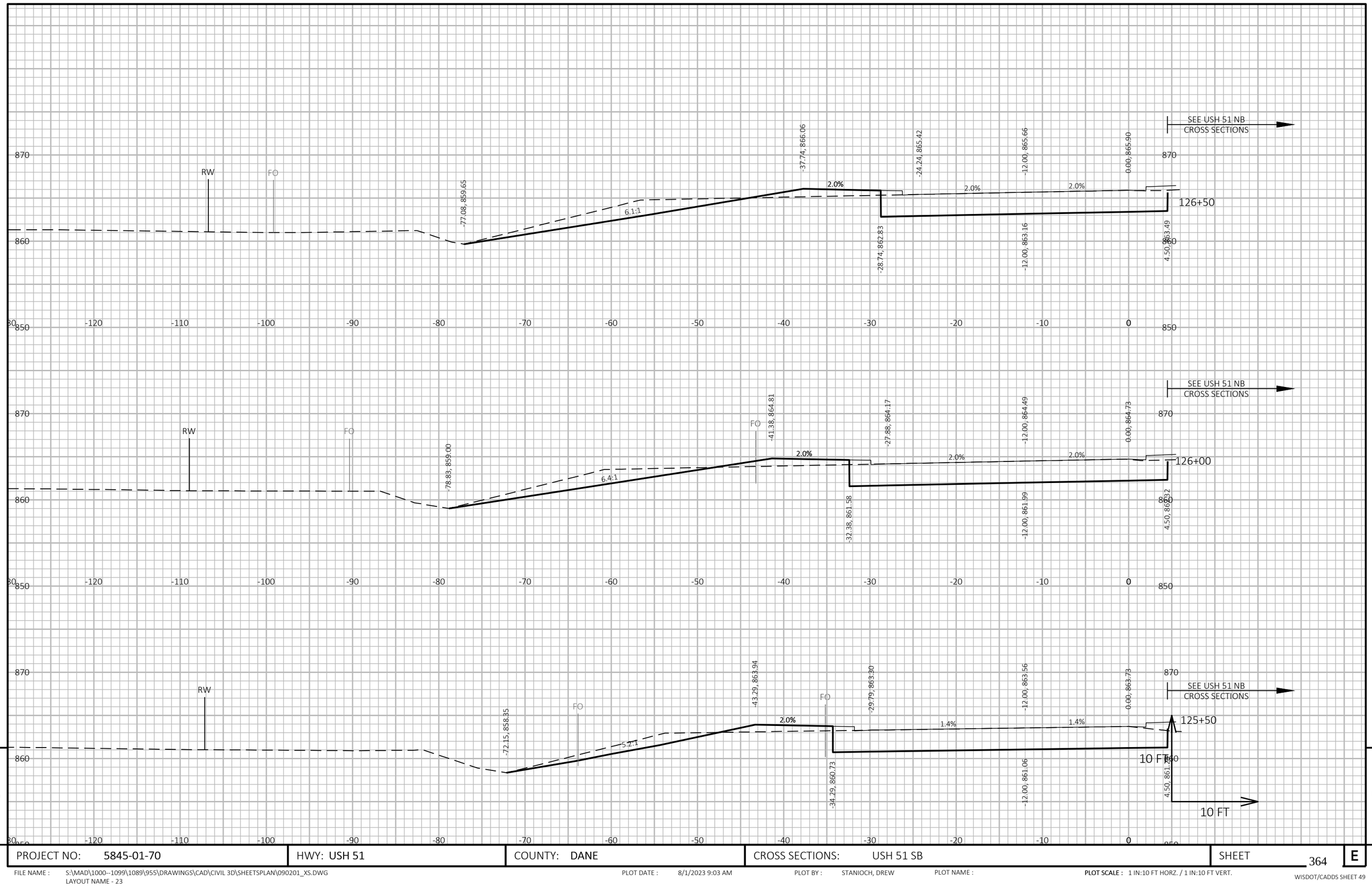
PLOT DATE : 8/1/2023 9:03 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 364 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 23

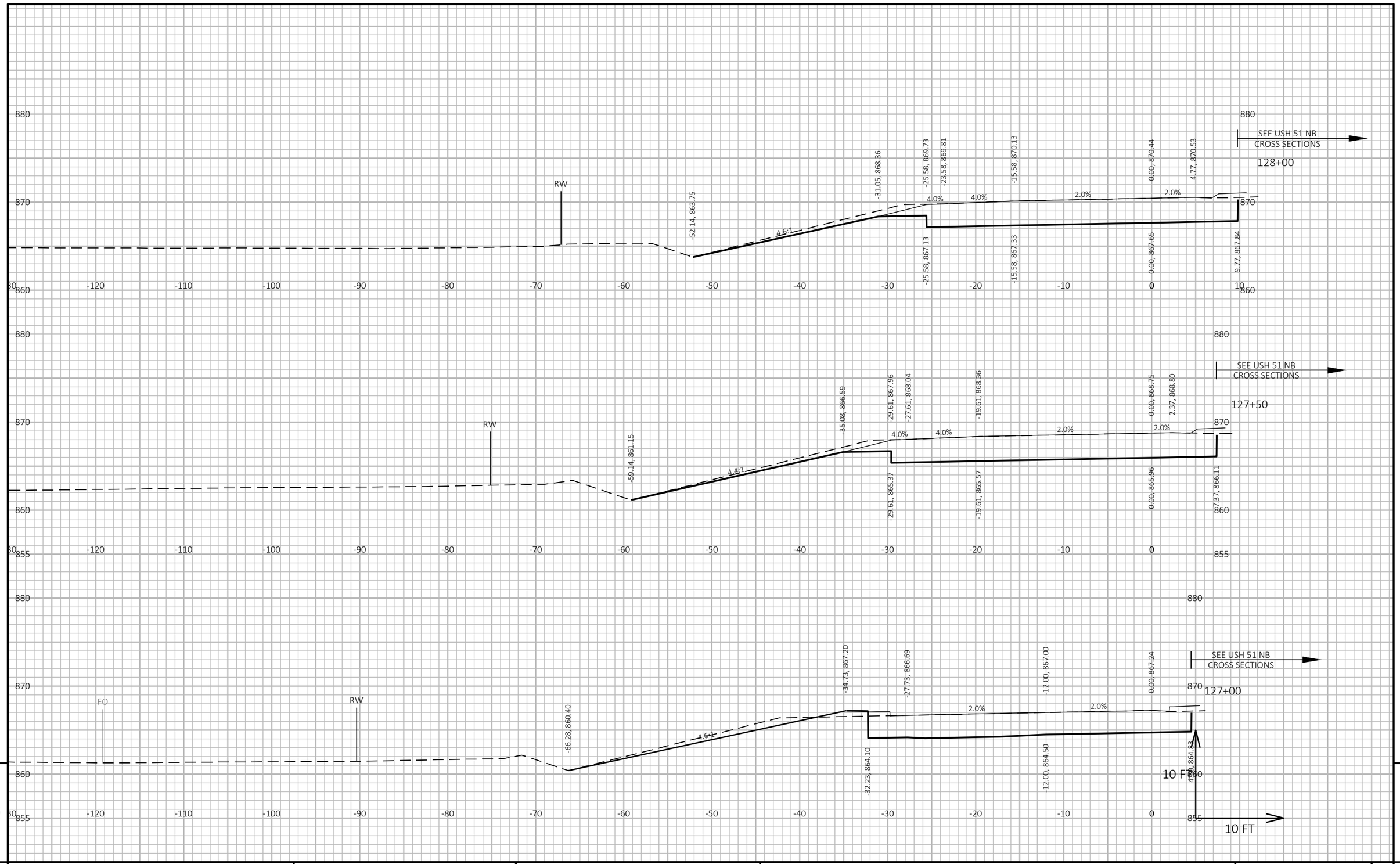
PLOT DATE : 8/1/2023 9:03 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

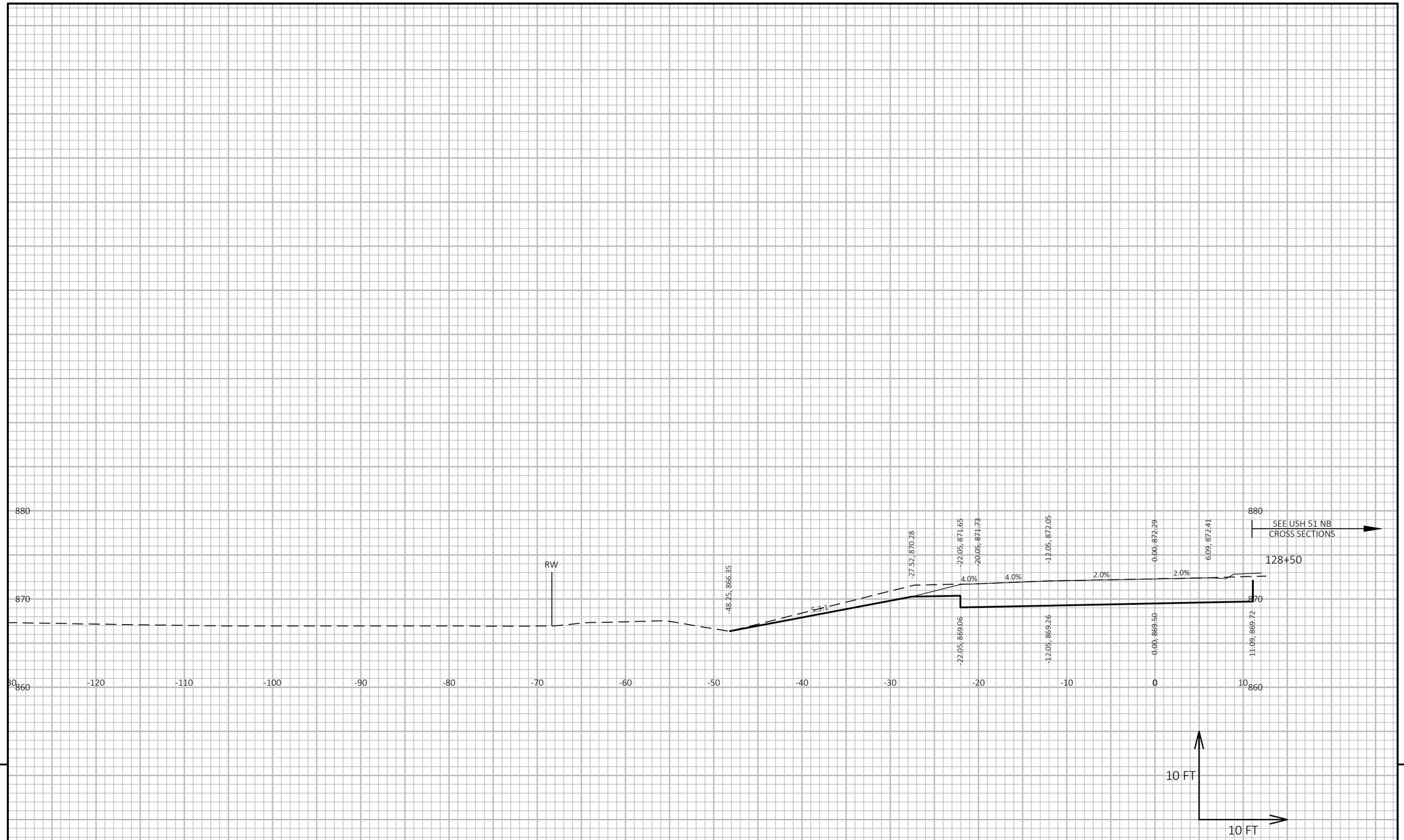
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 365 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 24

PLOT DATE : 8/1/2023 9:03 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

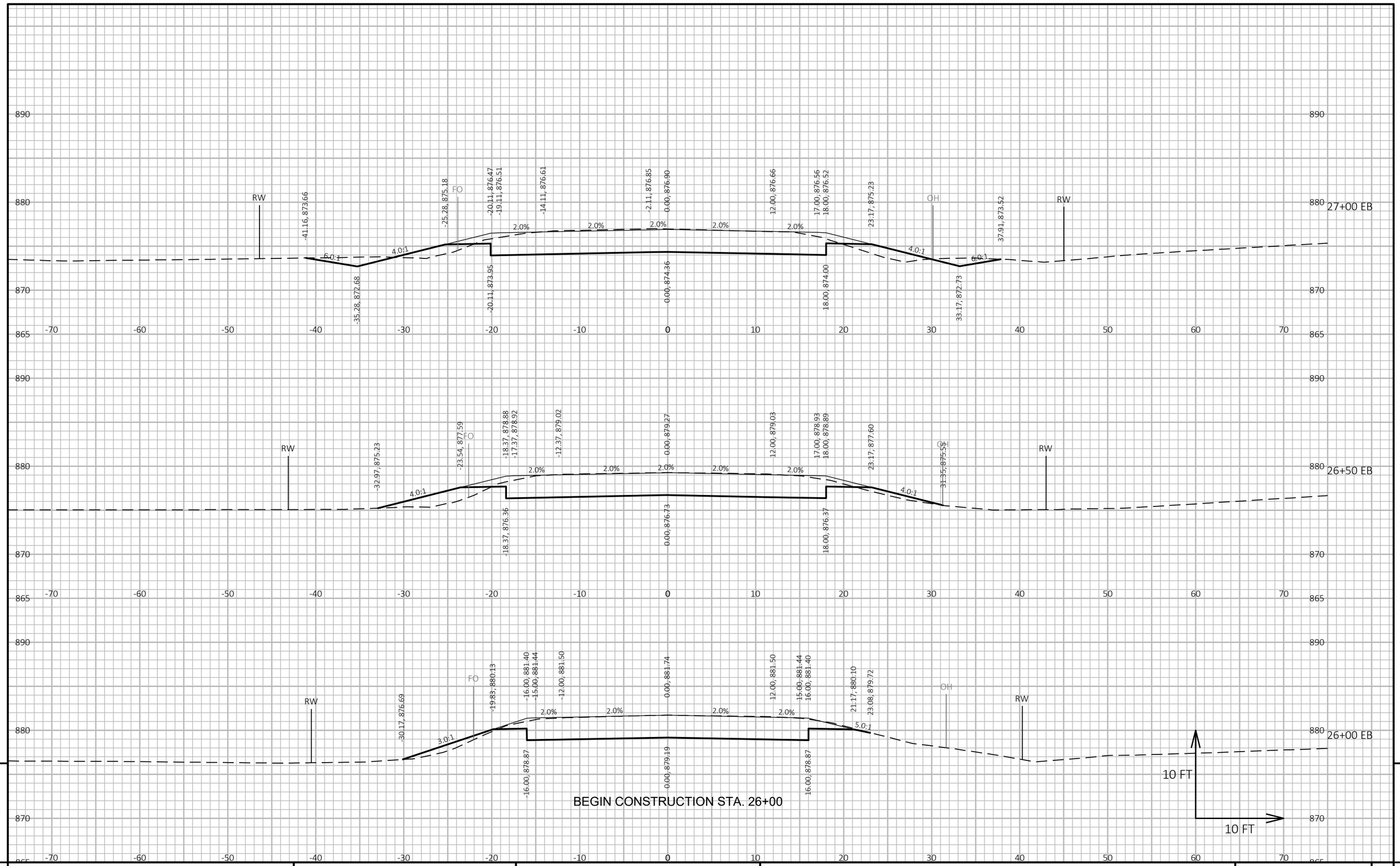
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: USH 51 SB | SHEET 366 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 25

PLOT DATE : 8/1/2023 9:03 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 367 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 01

PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 368 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 02

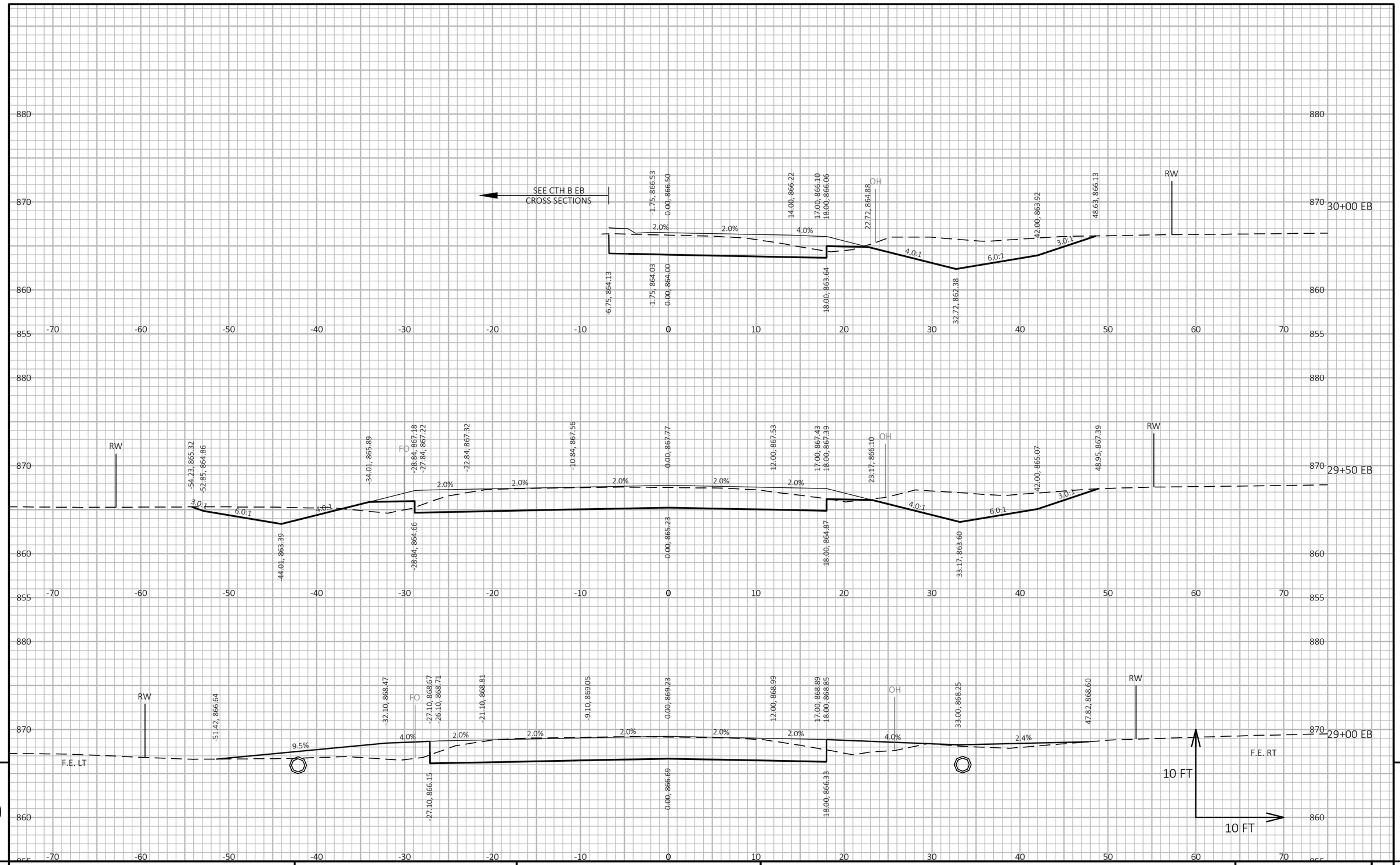
PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 369 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 03

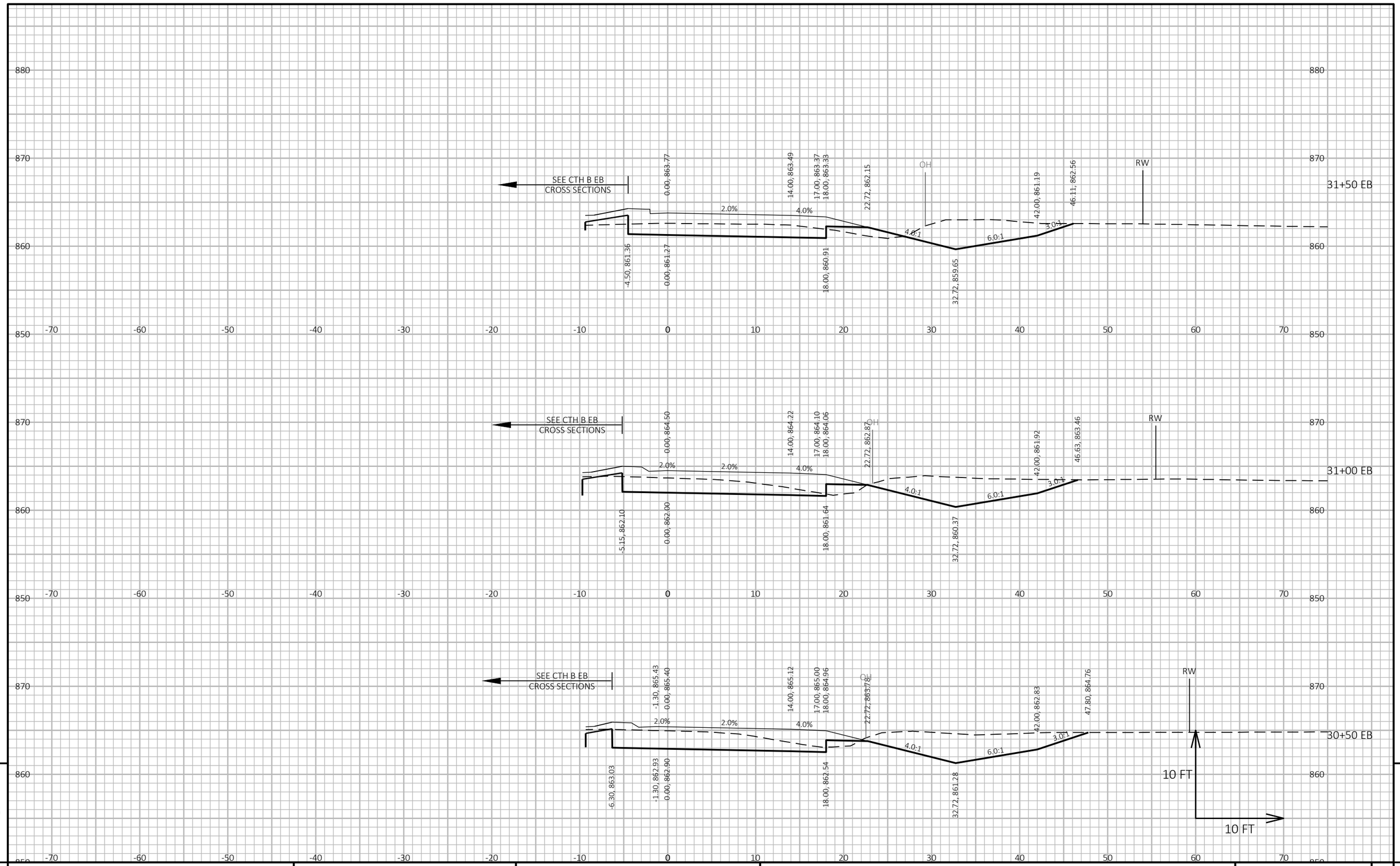
PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

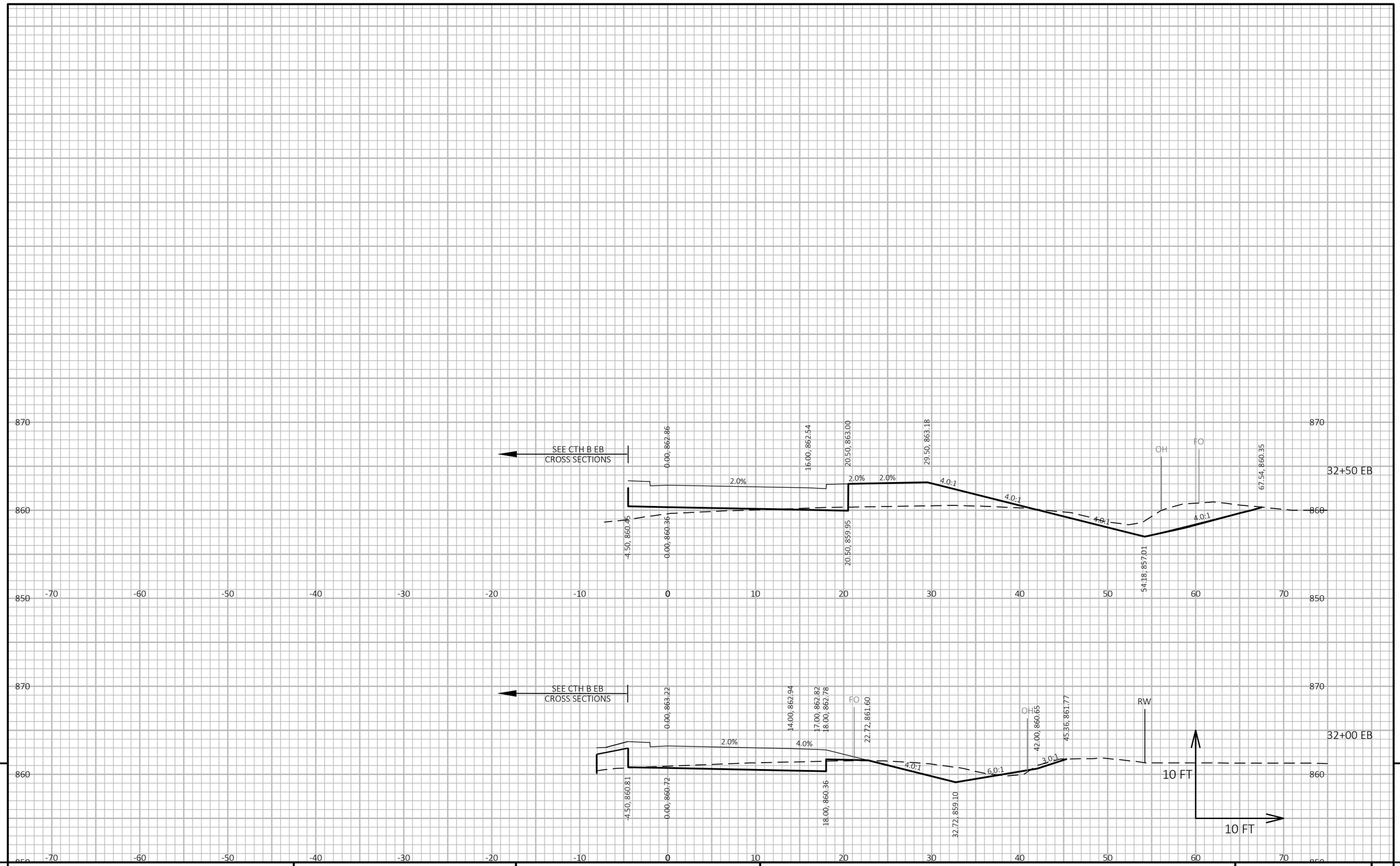
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 370 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/1/2023 9:04 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 371 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 05

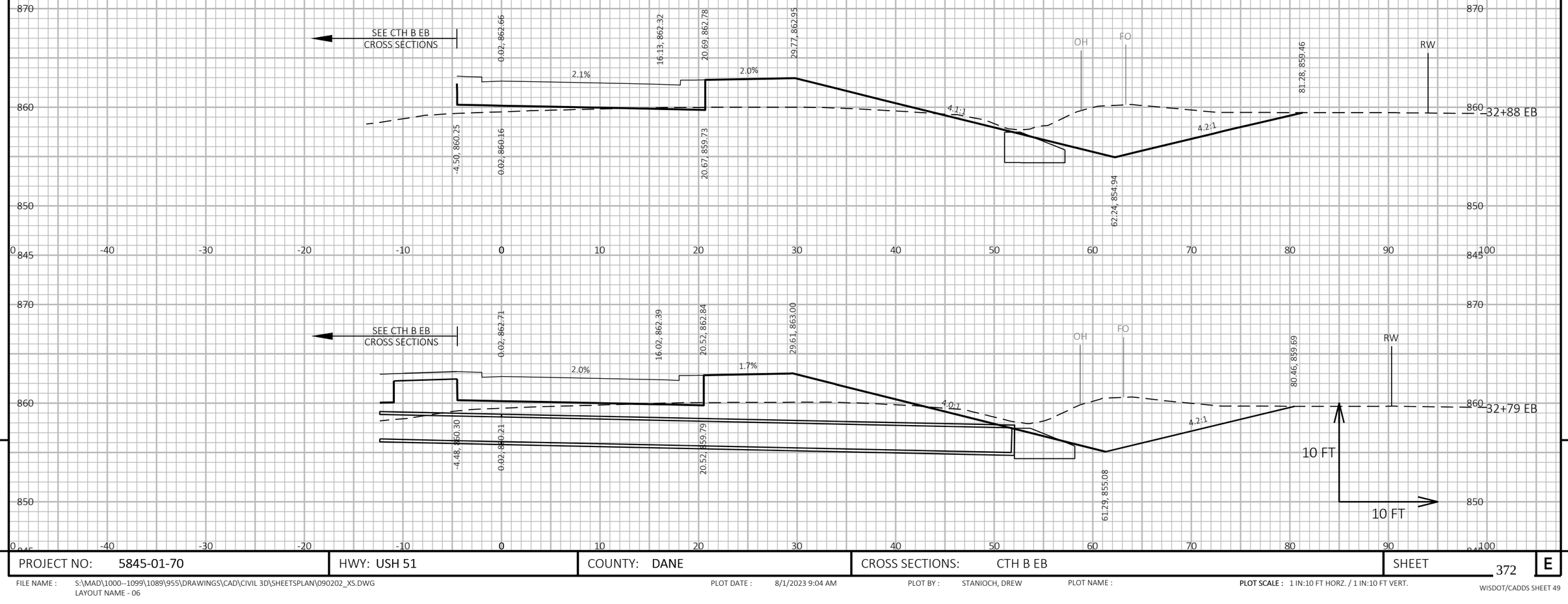
PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 372 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 06

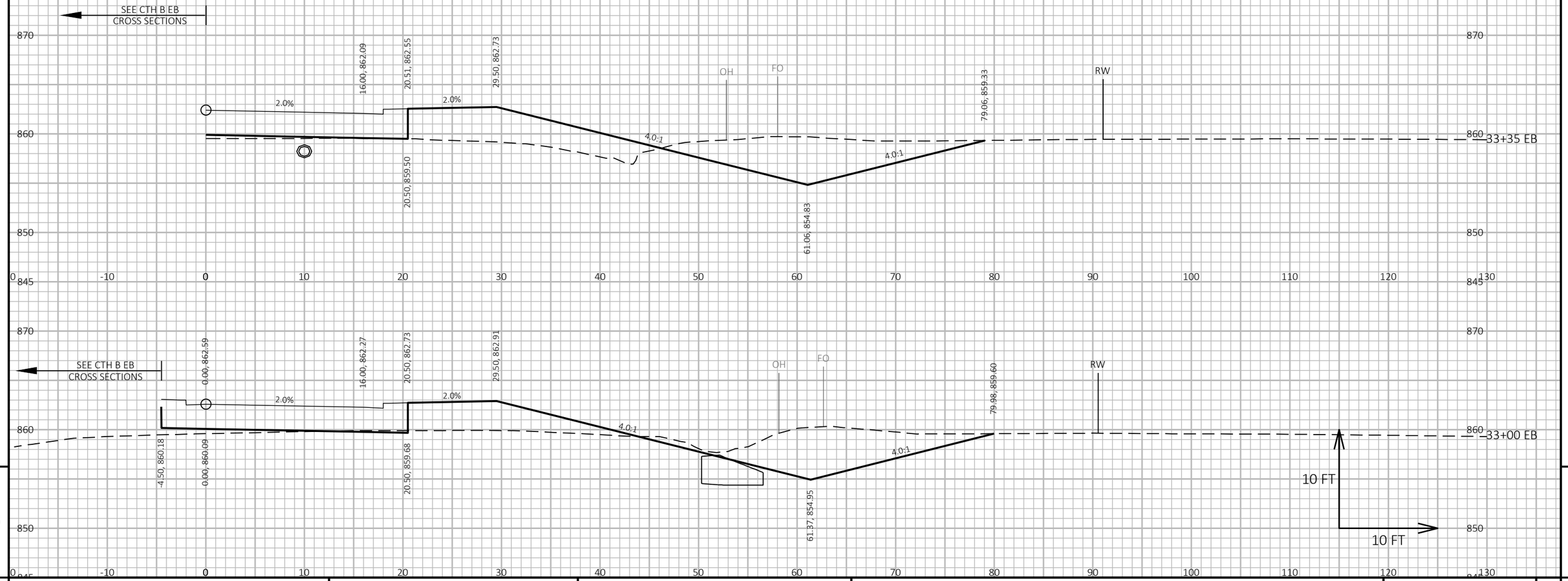
PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B EB | SHEET 373 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 07

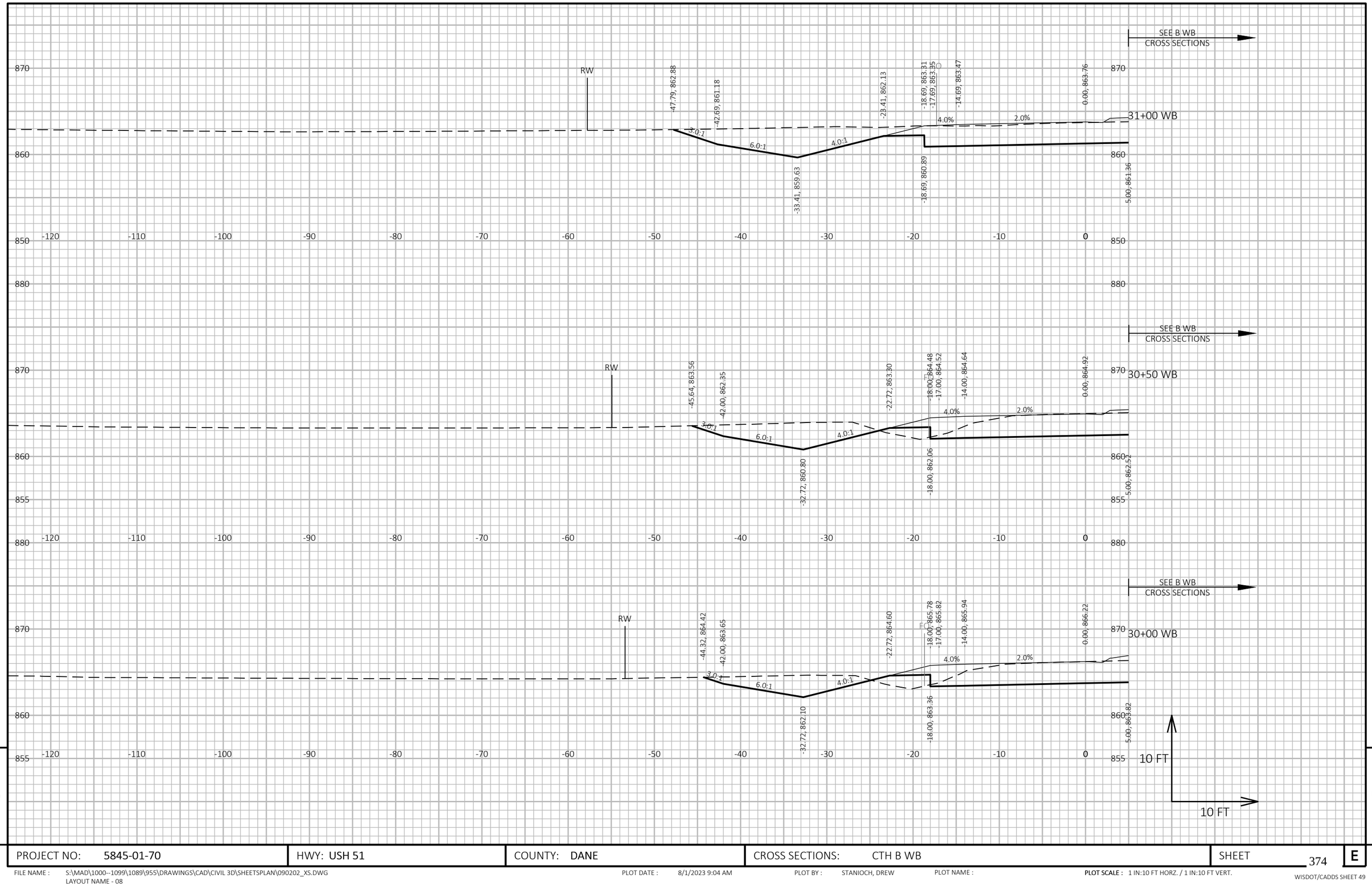
PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

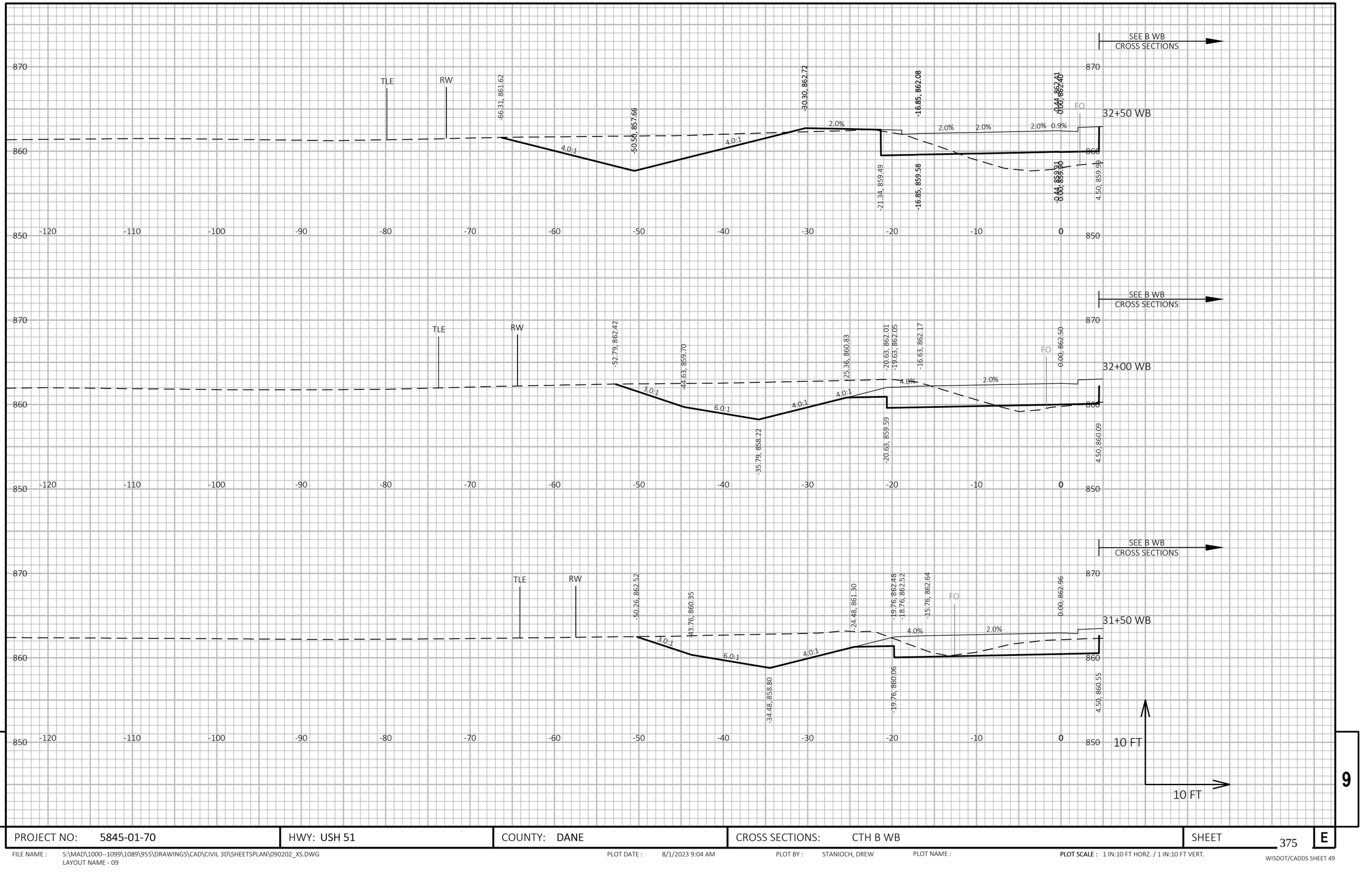
9

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B WB | SHEET 374 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 8/1/2023 9:04 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B WB | SHEET 375 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 8/1/2023 9:04 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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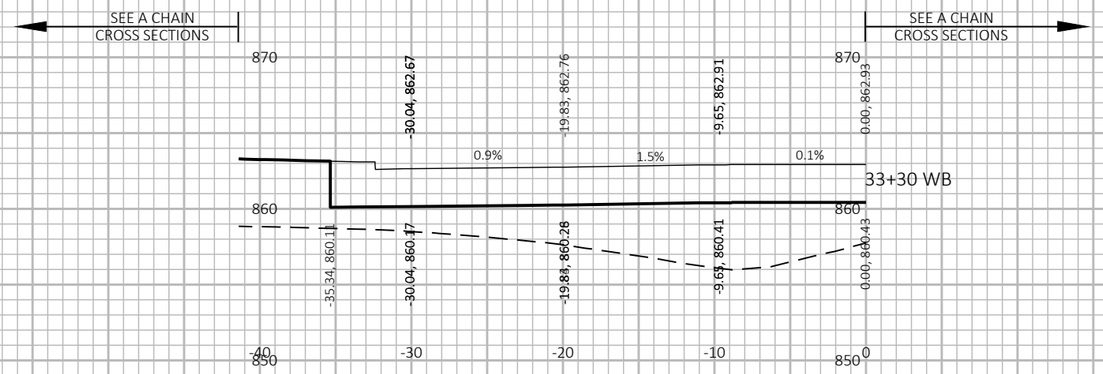
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B WB | SHEET 376 | E |
|---|---|---|---|---|---|

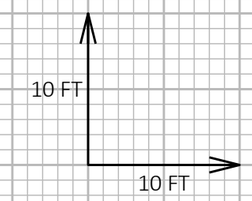
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/1/2023 9:04 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH B WB | SHEET 377 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 11

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

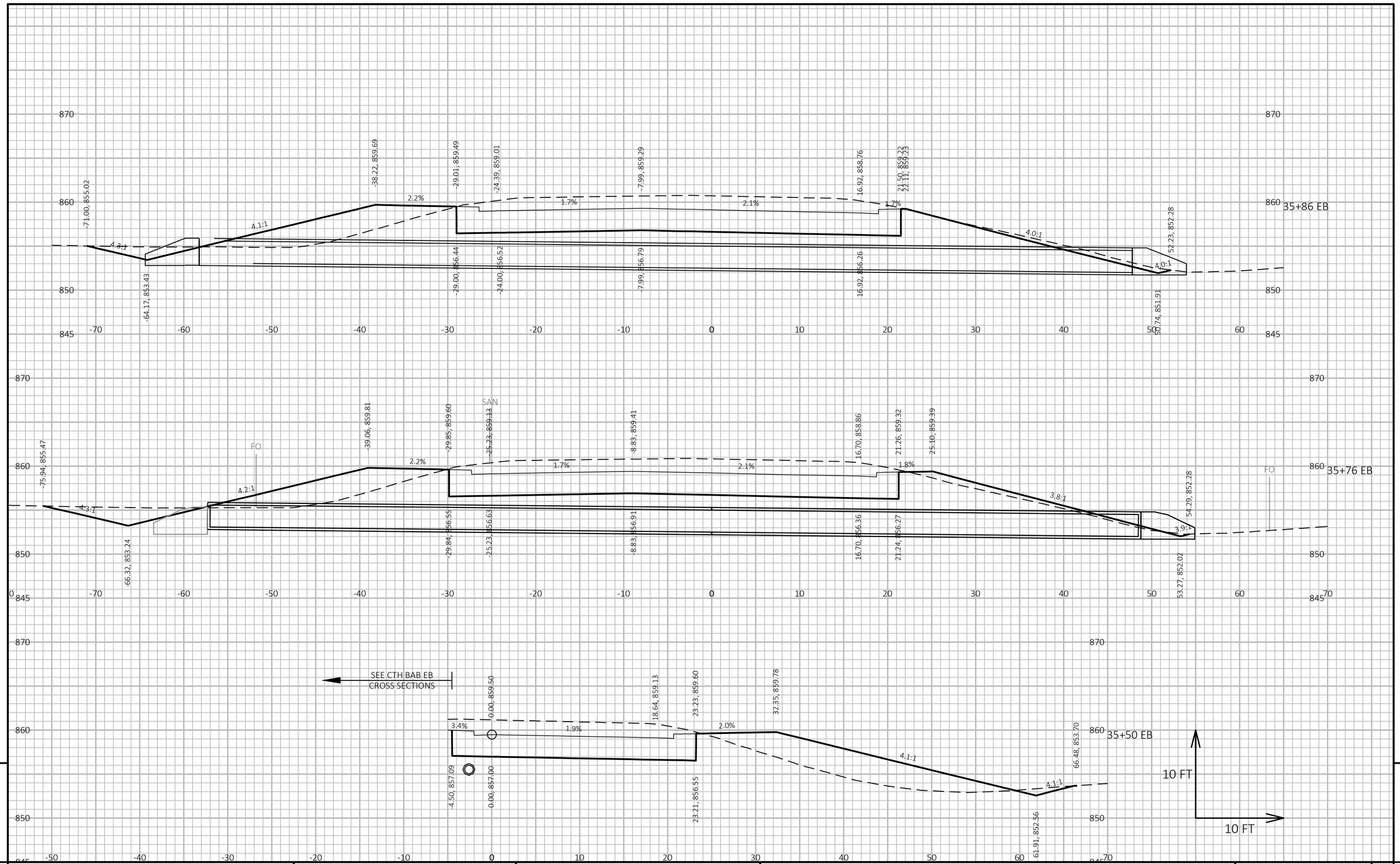
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 378 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

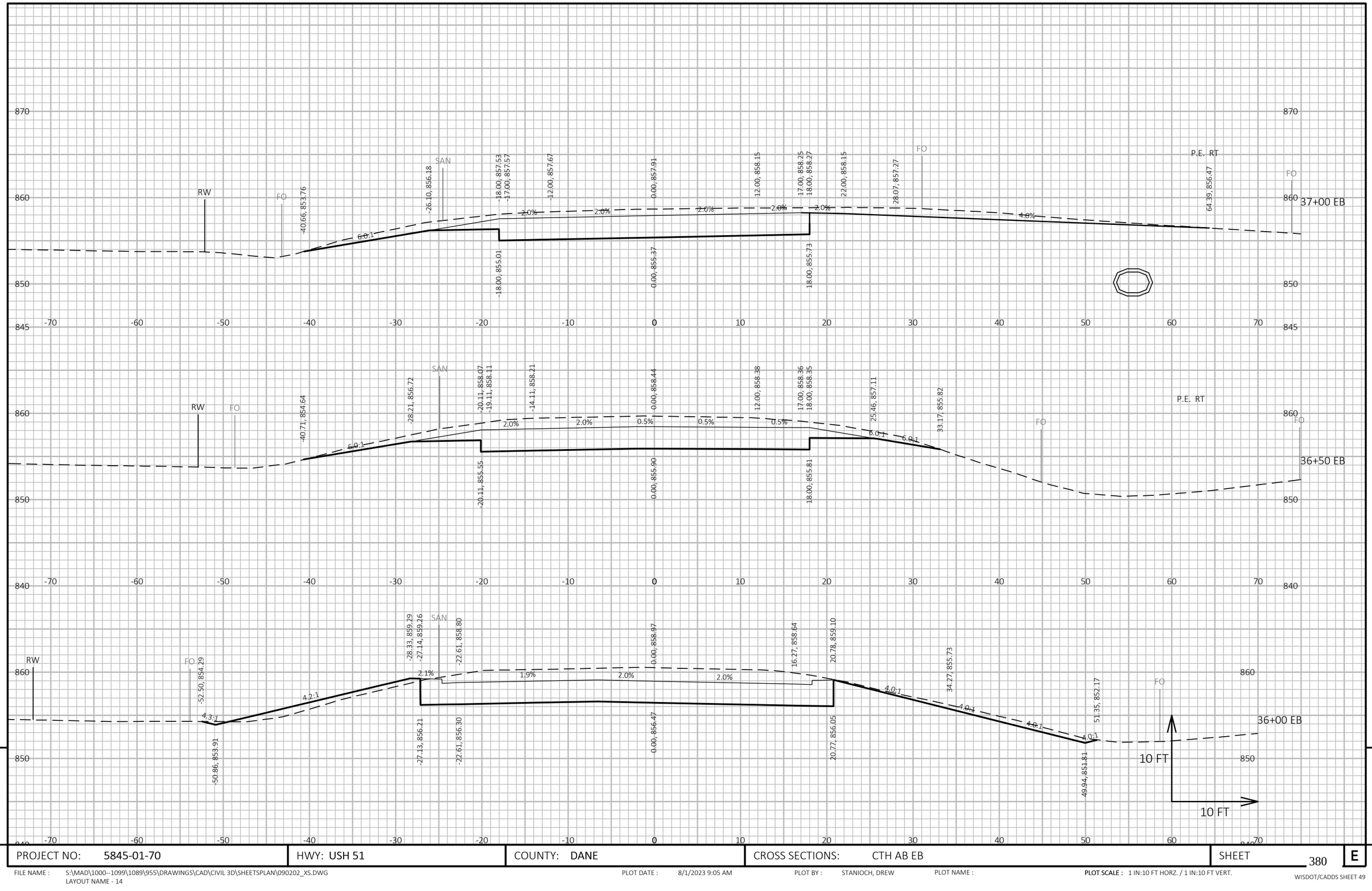
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 379 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

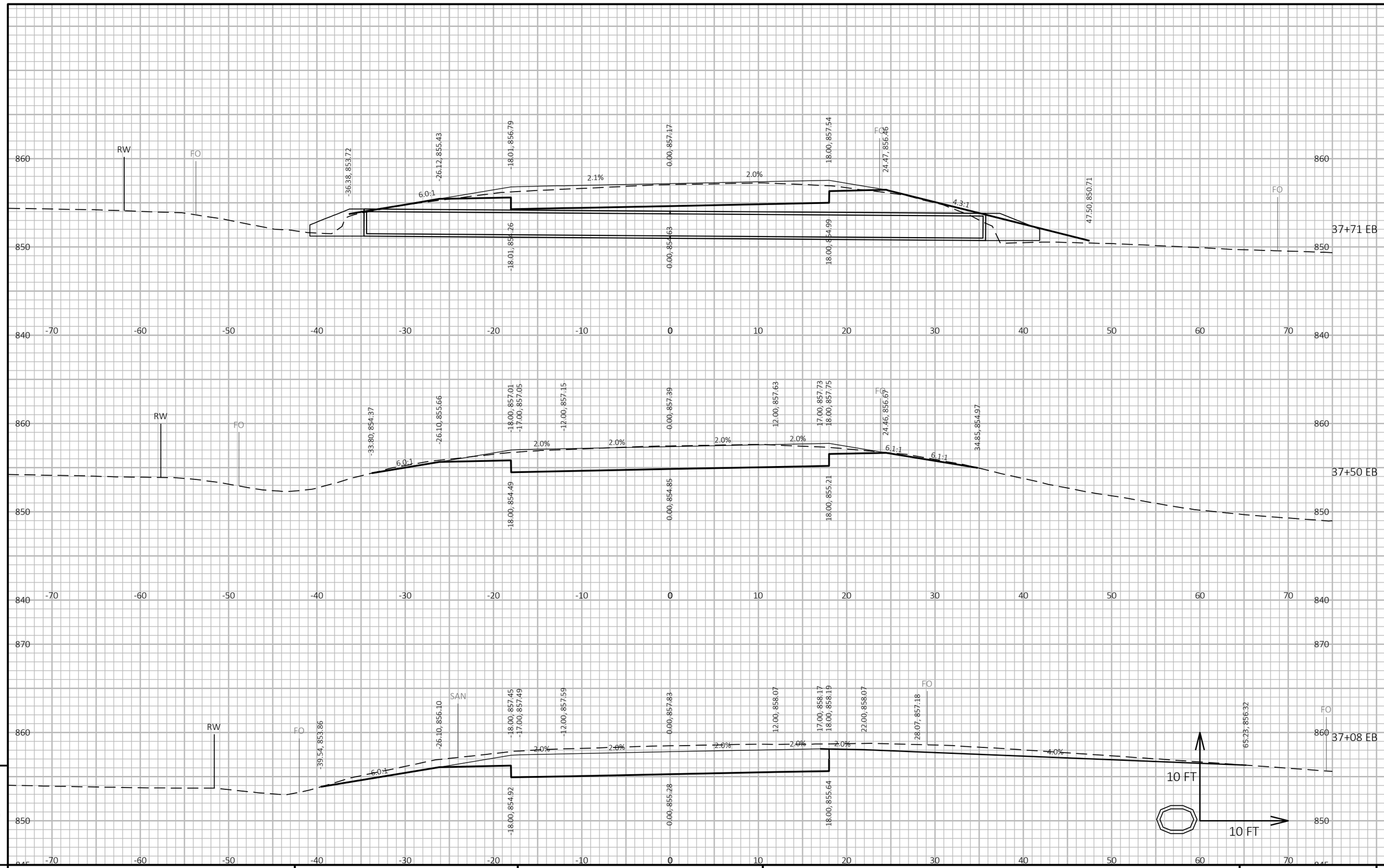


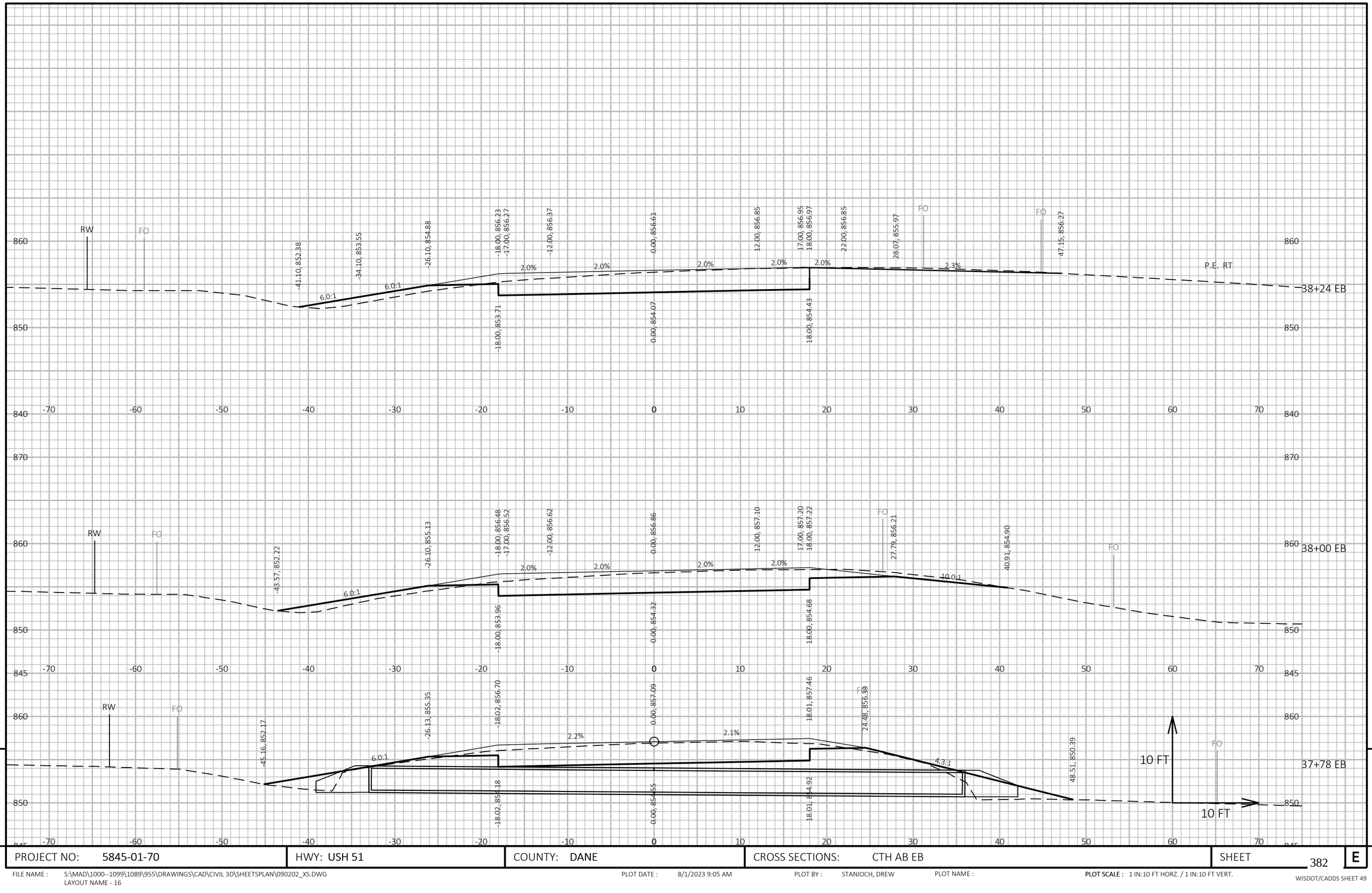

| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 380 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49


RW
FO
-36.38, 853.72
-26.12, 855.43
-18.01, 856.79
0.00, 857.17
18.00, 857.54
24.47, 856.46
47.50, 850.71
6.0:1
2.1%
2.0%
4.3:1
-18.01, 854.26
0.00, 854.63
18.00, 854.99
37+71 EB
RW
FO
-33.80, 854.37
-26.10, 855.66
-18.00, 857.01
-17.00, 857.05
-12.00, 857.15
0.00, 857.39
12.00, 857.63
17.00, 857.73
18.00, 857.75
24.46, 856.67
34.85, 854.97
6.0:1
2.0%
6.1:1
-18.00, 854.49
0.00, 854.85
18.00, 855.21
37+50 EB
RW
FO
SAN
-39.54, 853.86
-26.10, 856.10
-18.00, 857.45
-17.00, 857.49
-12.00, 857.59
0.00, 857.83
12.00, 858.07
17.00, 858.17
18.00, 858.19
22.00, 858.07
28.07, 857.18
65.23, 856.32
6.0:1
2.0%
4.0%
-18.00, 854.92
0.00, 855.28
18.00, 855.64
37+08 EB
10 FT
10 FT
9
9
PROJECT NO: 5845-01-70
HWY: USH 51
COUNTY: DANE
CROSS SECTIONS: CTH AB EB
SHEET 381
E
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 15
PLOT DATE : 8/1/2023 9:05 AM
PLOT BY : STANIOCH, DREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 382 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 16

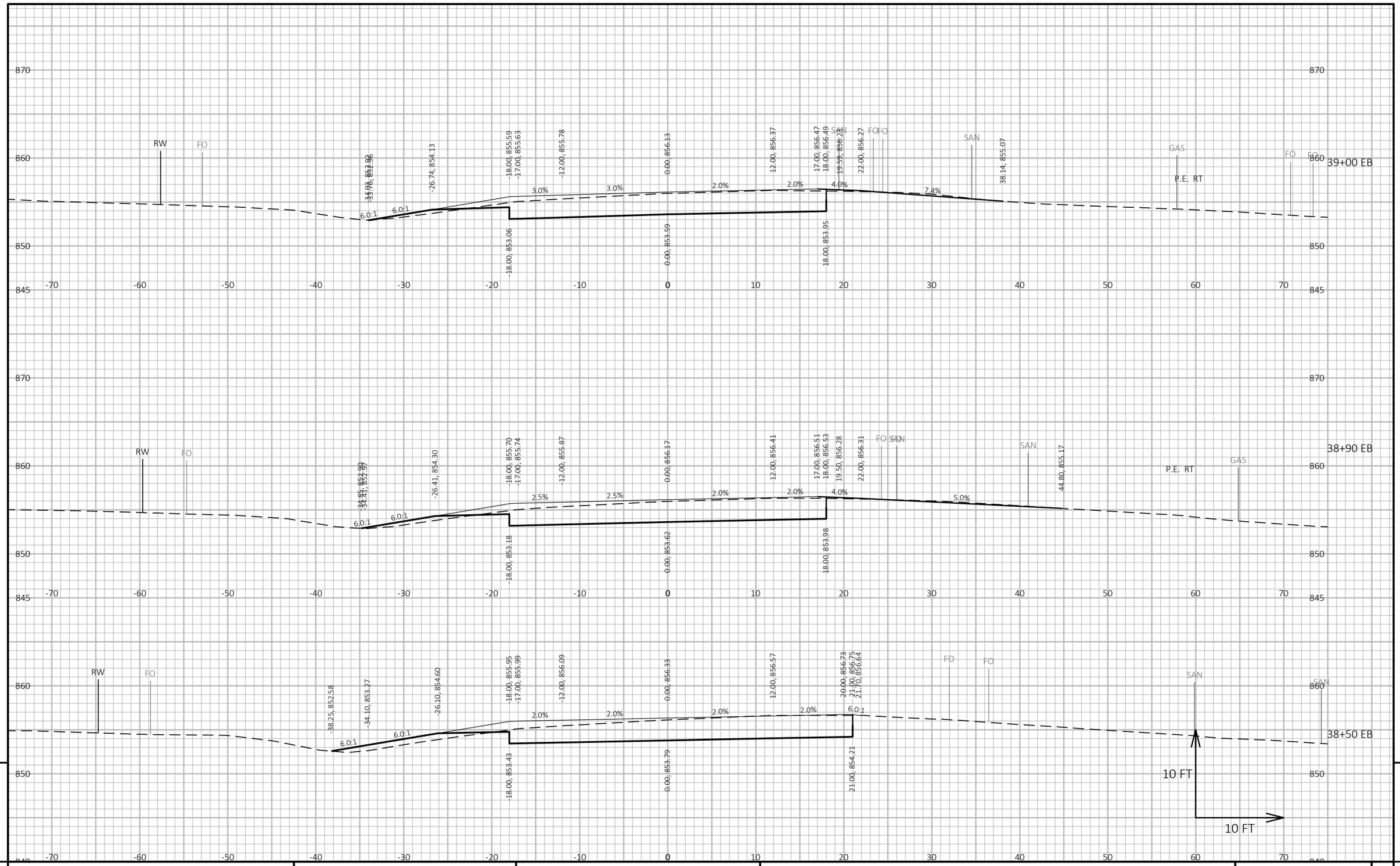
PLOT DATE : 8/1/2023 9:05 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 383 | E |
|---|---|---|---|---|---|

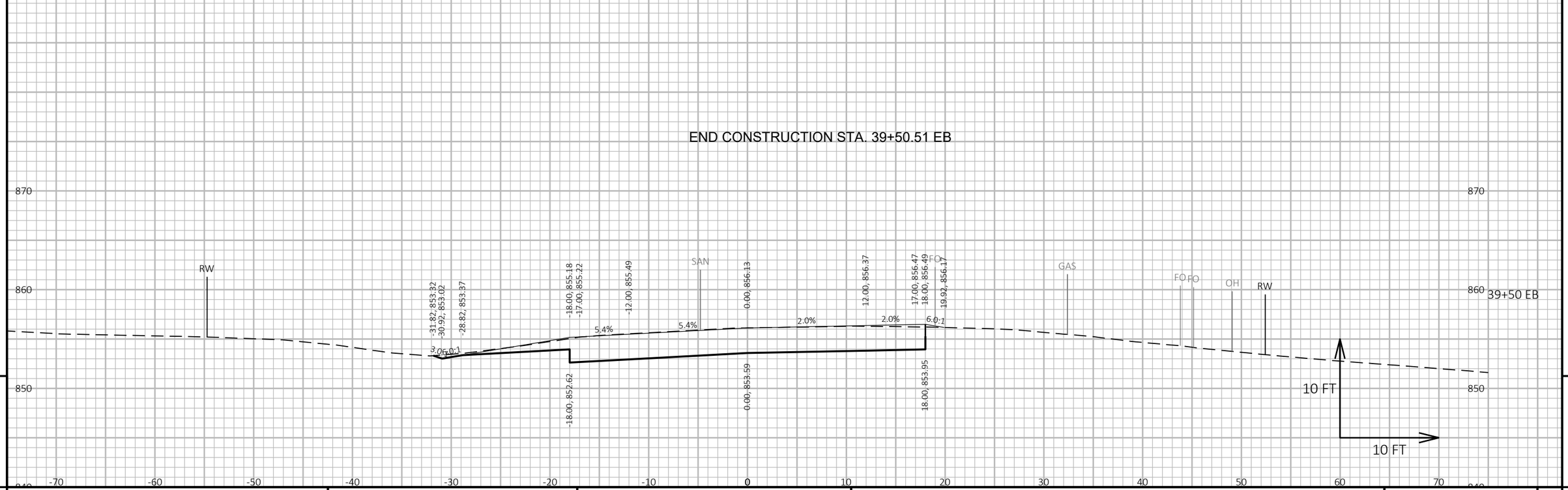
FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 8/28/2023 10:31 AM PLOT BY : BECKER, ELISA PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION STA. 39+50.51 EB



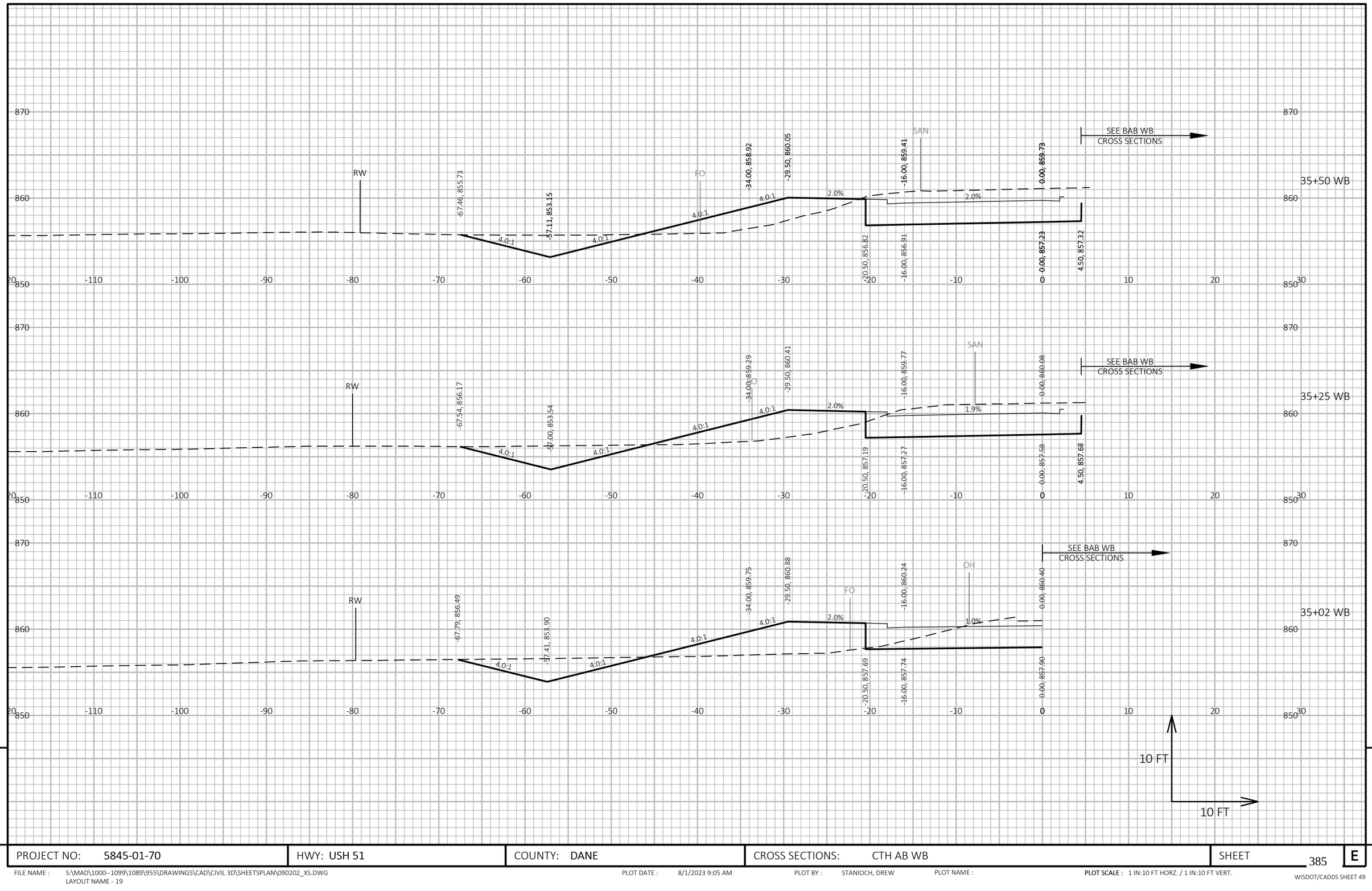

9

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB EB | SHEET 384 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 8/28/2023 10:31 AM PLOT BY : BECKER, ELISA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

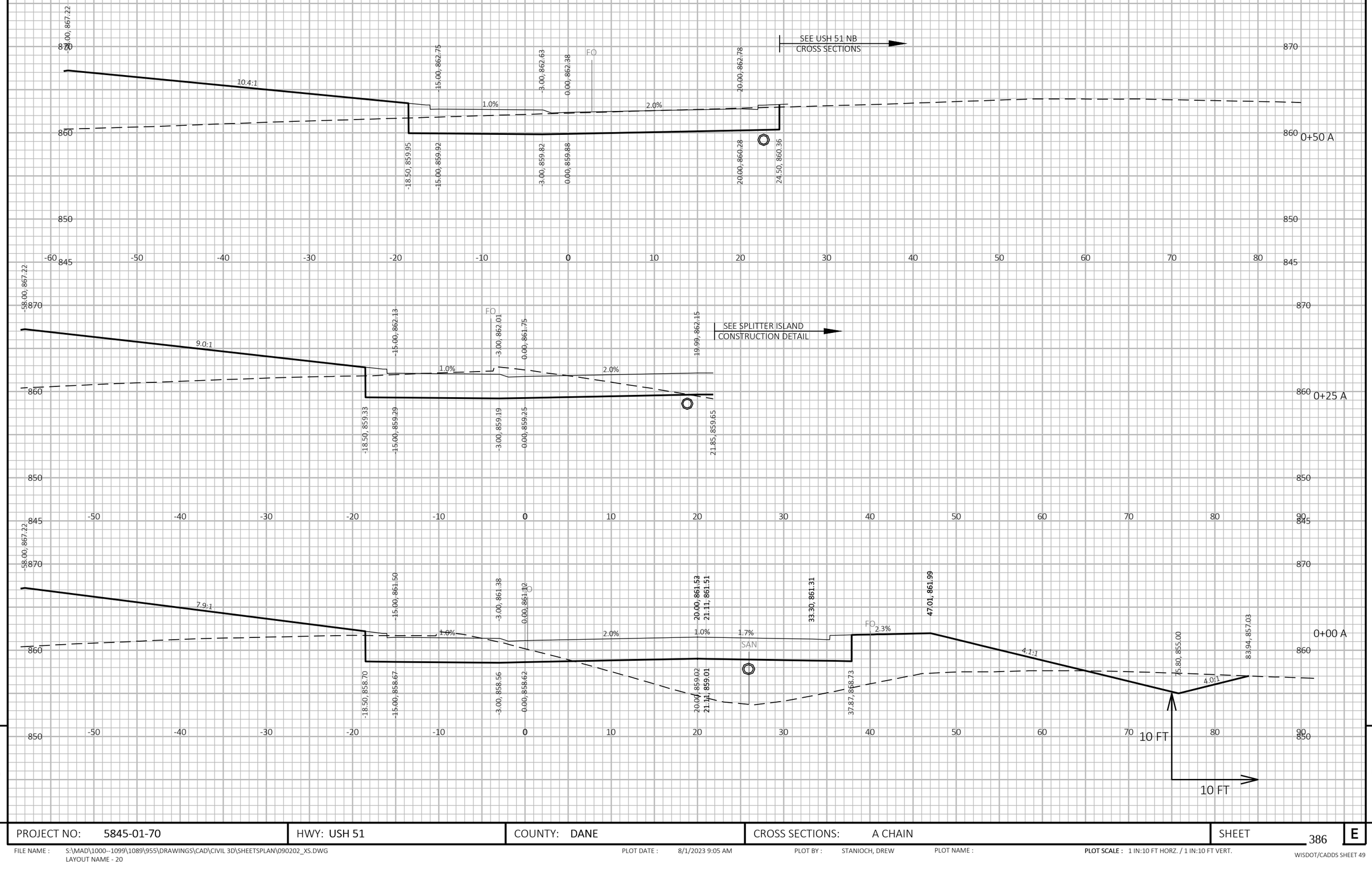



| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: CTH AB WB | SHEET 385 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



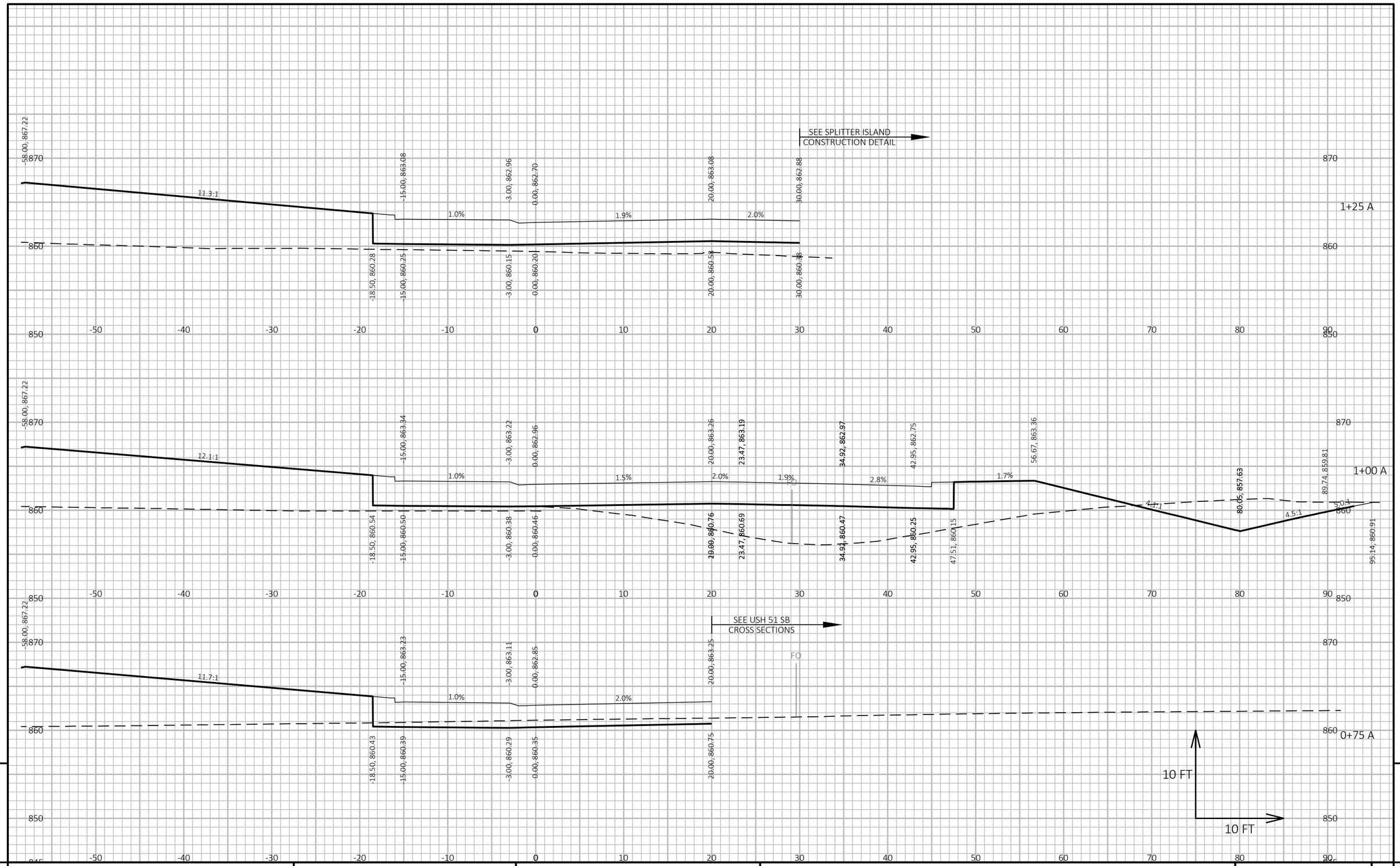

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|---|---|---|---|---|
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: A CHAIN | SHEET 386 E |

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 20

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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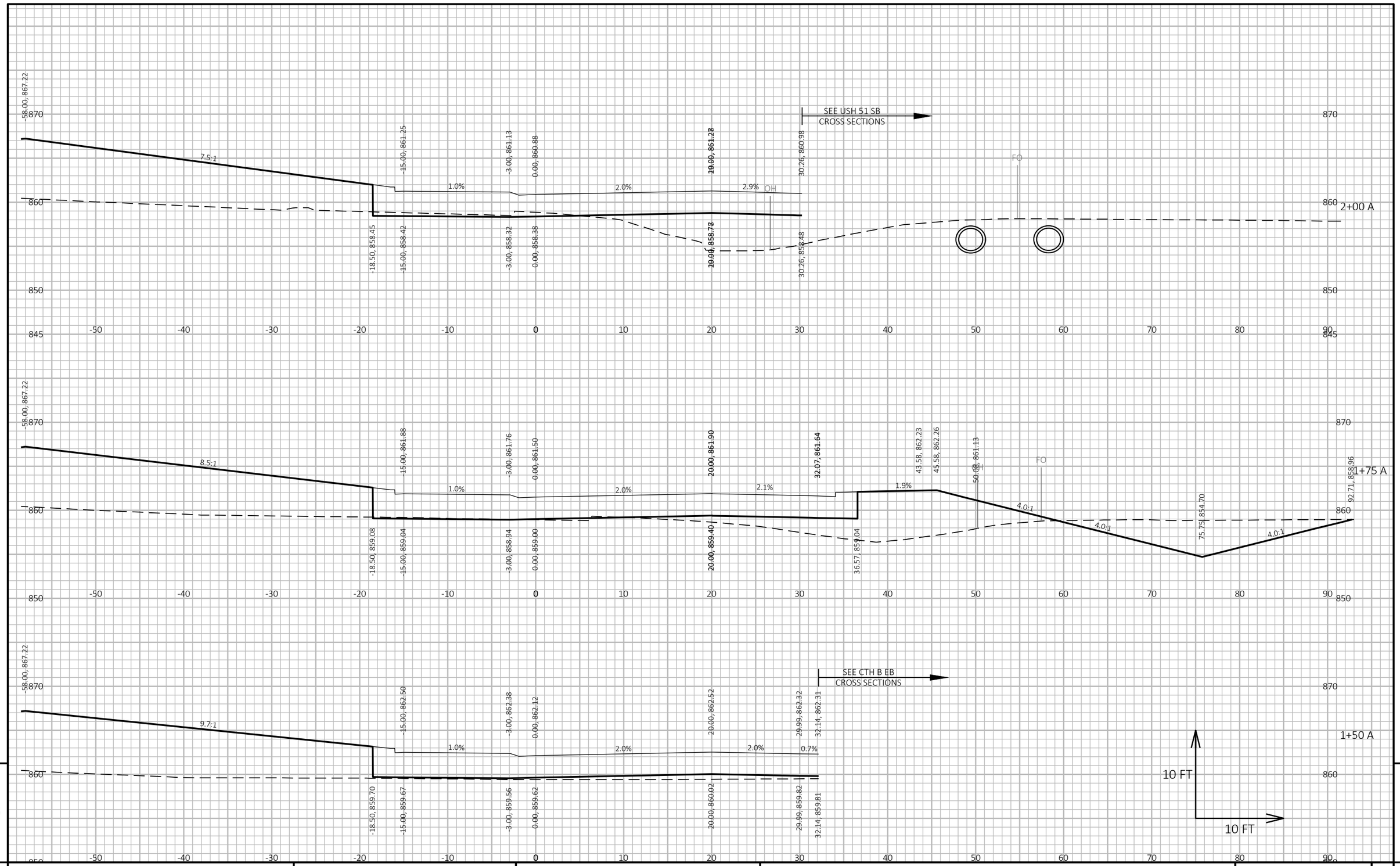
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: A CHAIN | SHEET 387 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 21

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

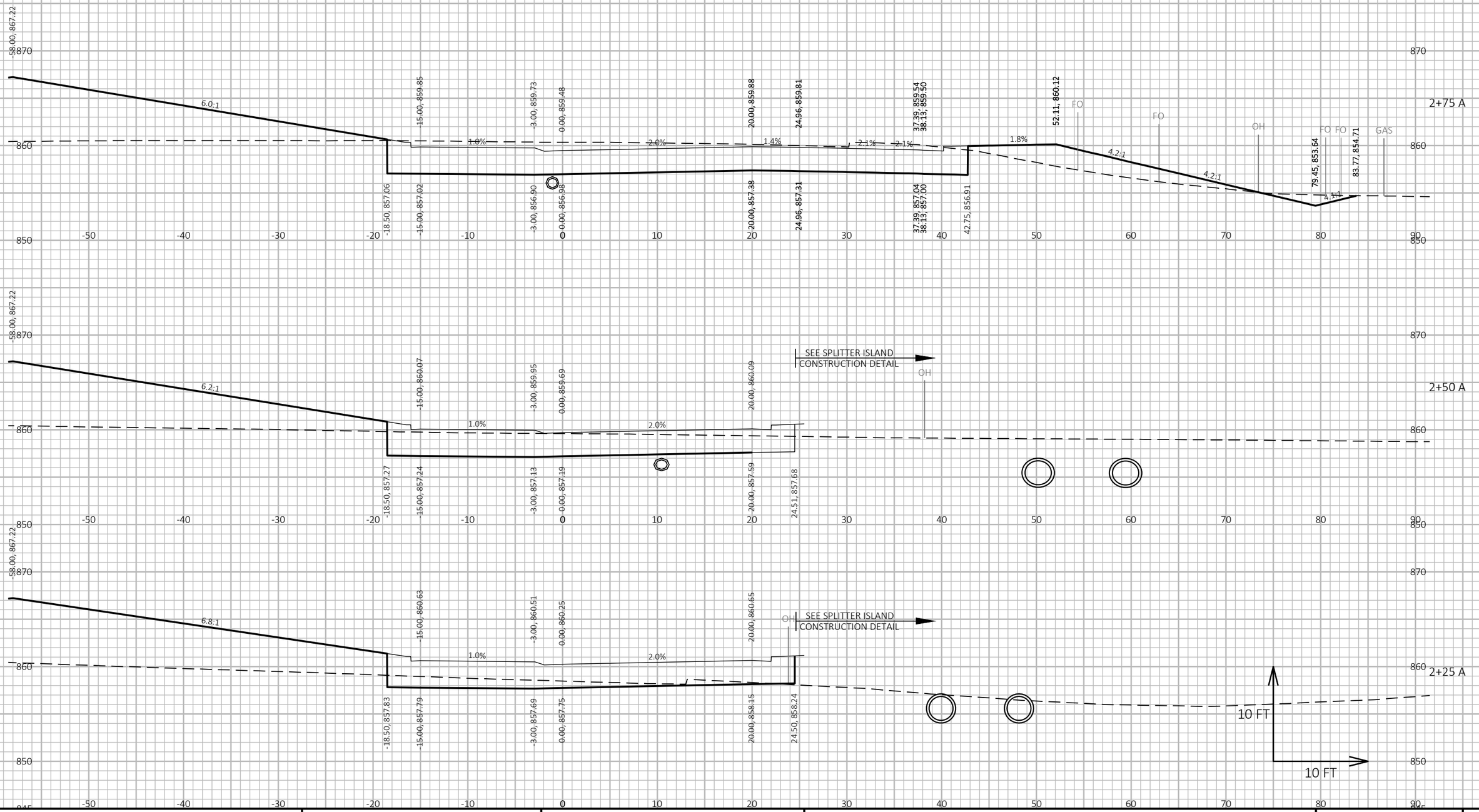
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: A CHAIN | SHEET 388 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 22

PLOT DATE : 8/1/2023 9:05 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: A CHAIN | SHEET 389 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 23

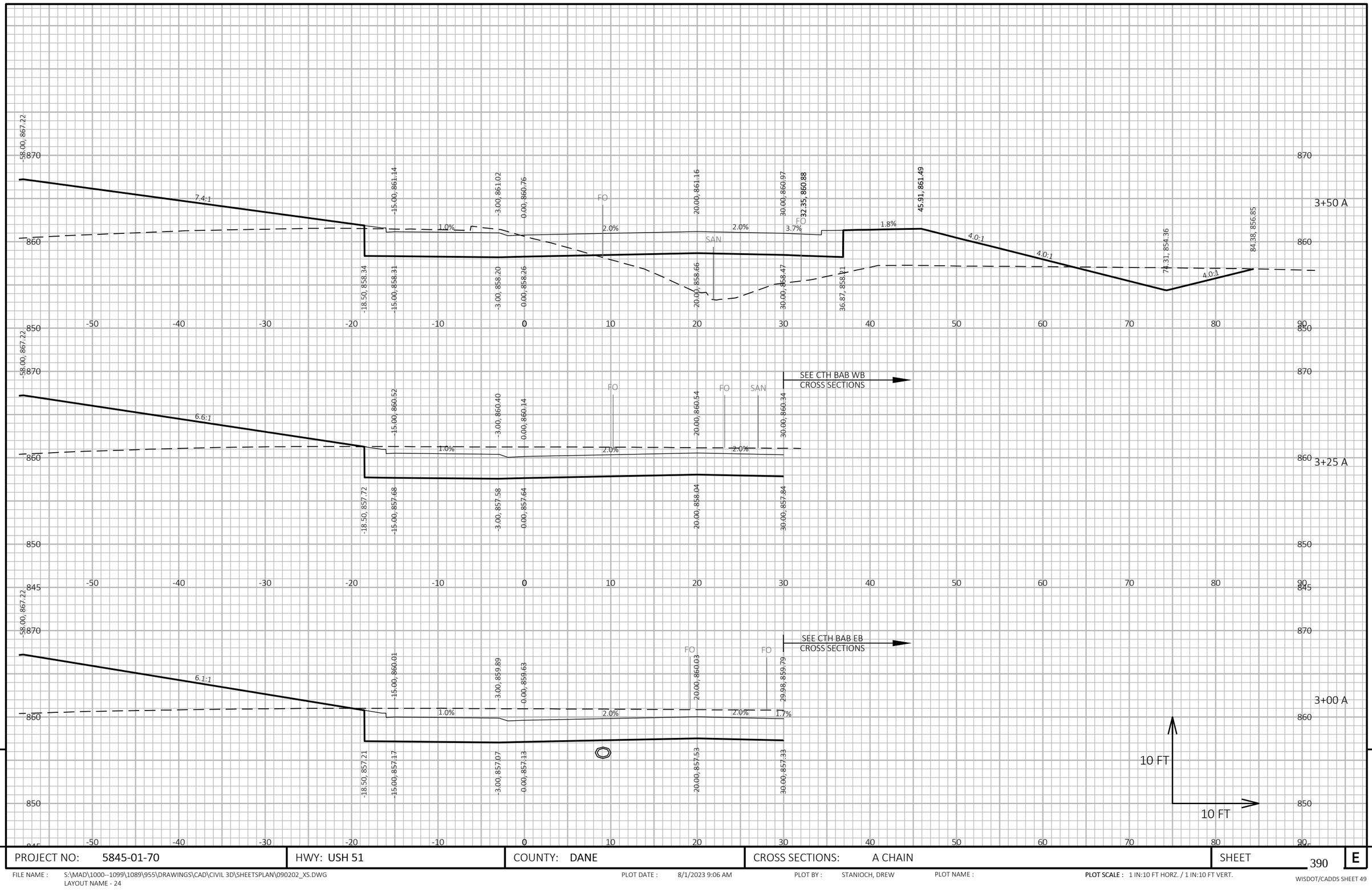
PLOT DATE : 8/1/2023 9:05 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: A CHAIN | SHEET 390 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 24

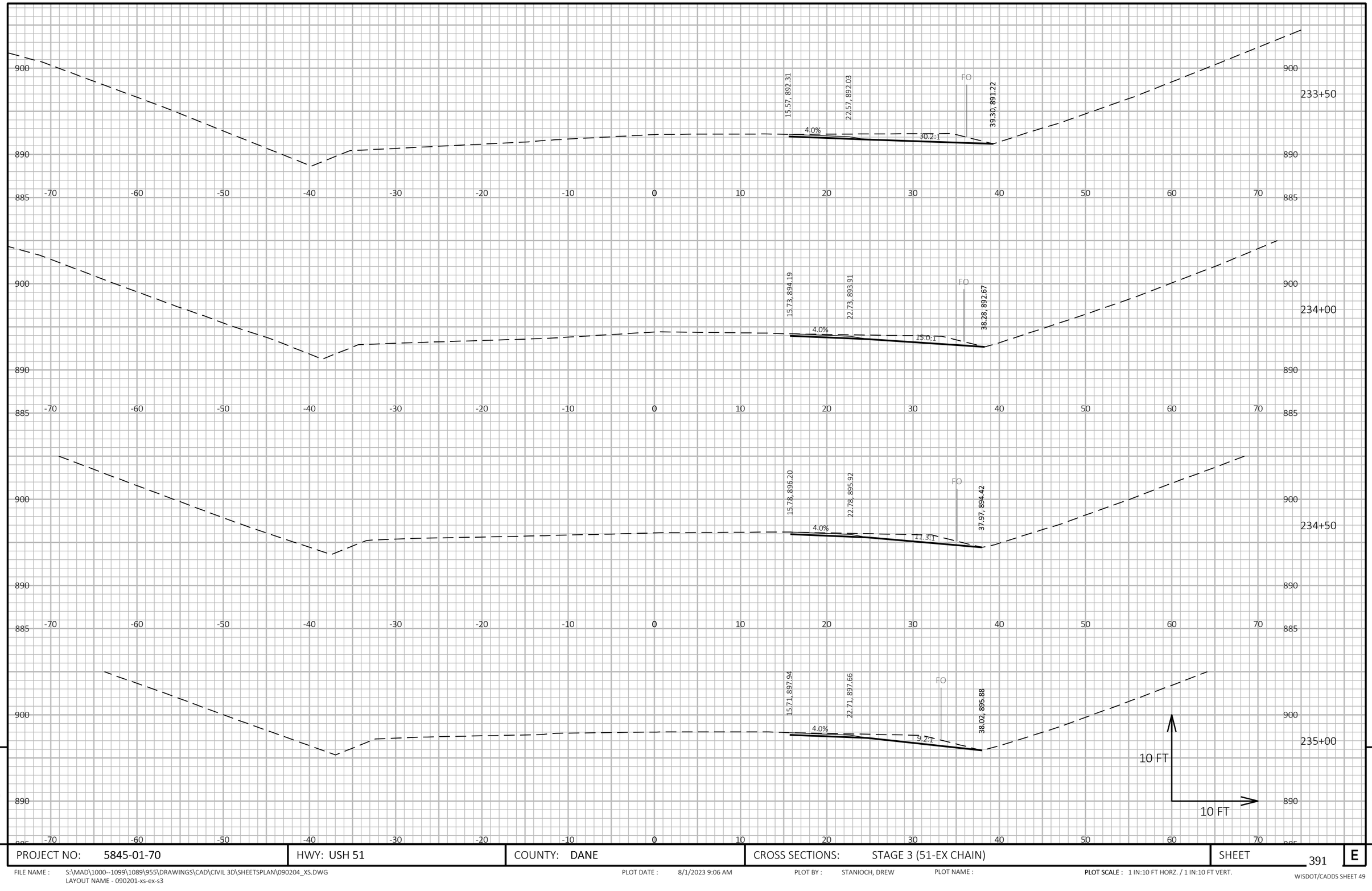
PLOT DATE : 8/1/2023 9:06 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 3 (51-EX CHAIN) | SHEET 391 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090201-xs-ex-s3

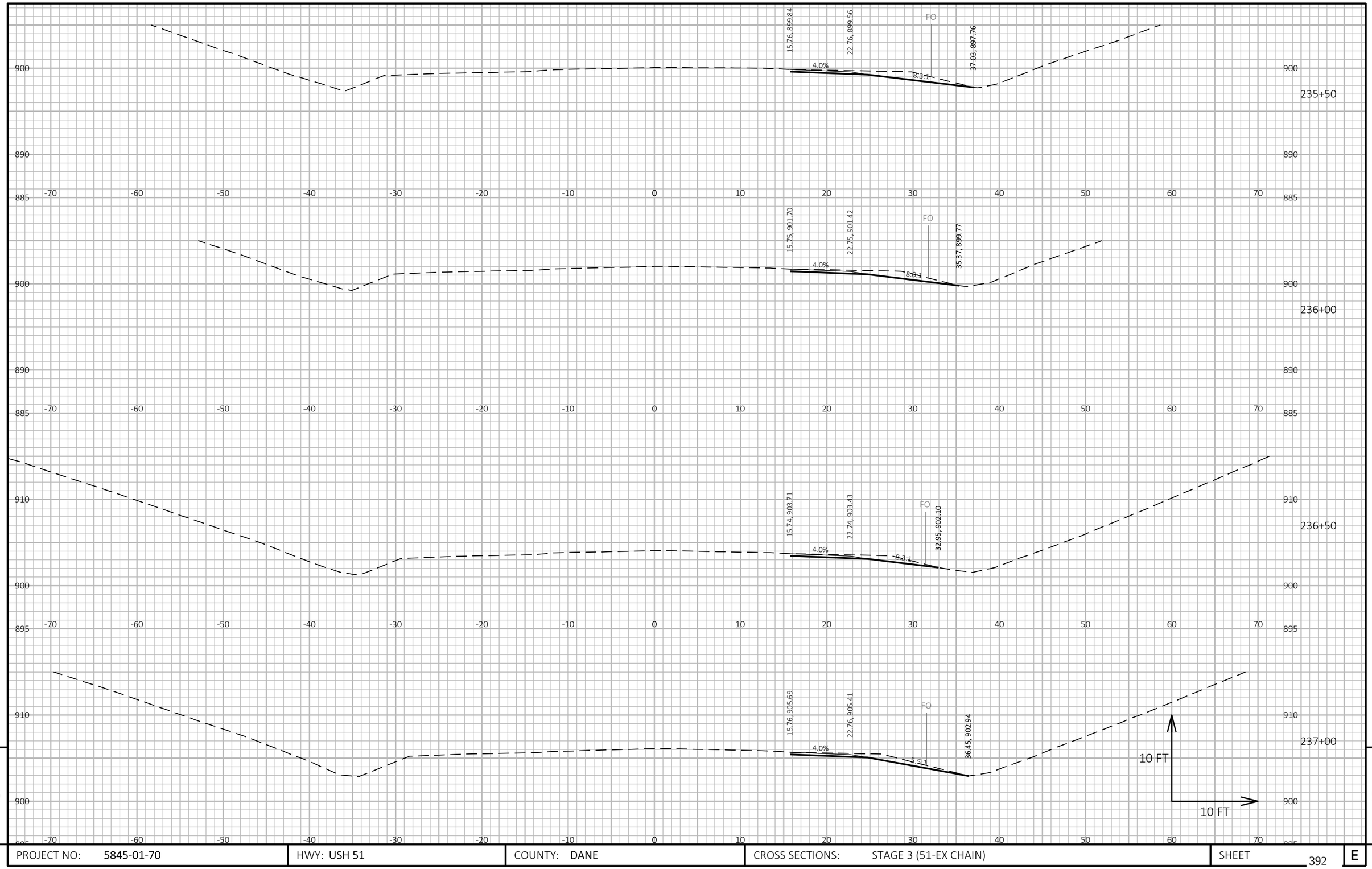
PLOT DATE : 8/1/2023 9:06 AM

PLOT BY : STANIOCH, DREW

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

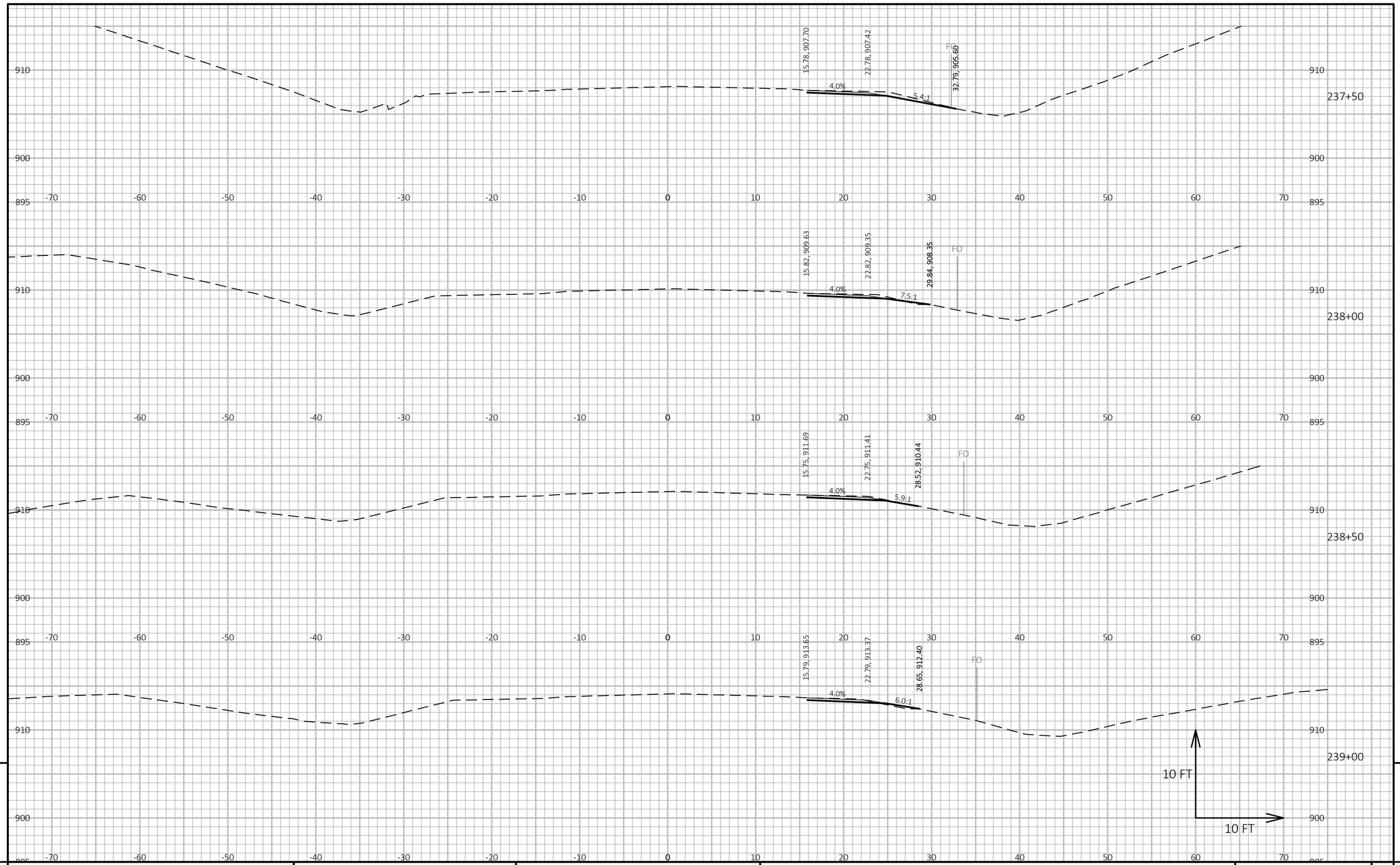
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 3 (51-EX CHAIN) | SHEET 392 | E |
|---|---|---|---|---|---|

9

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090202-xs-ex-s3

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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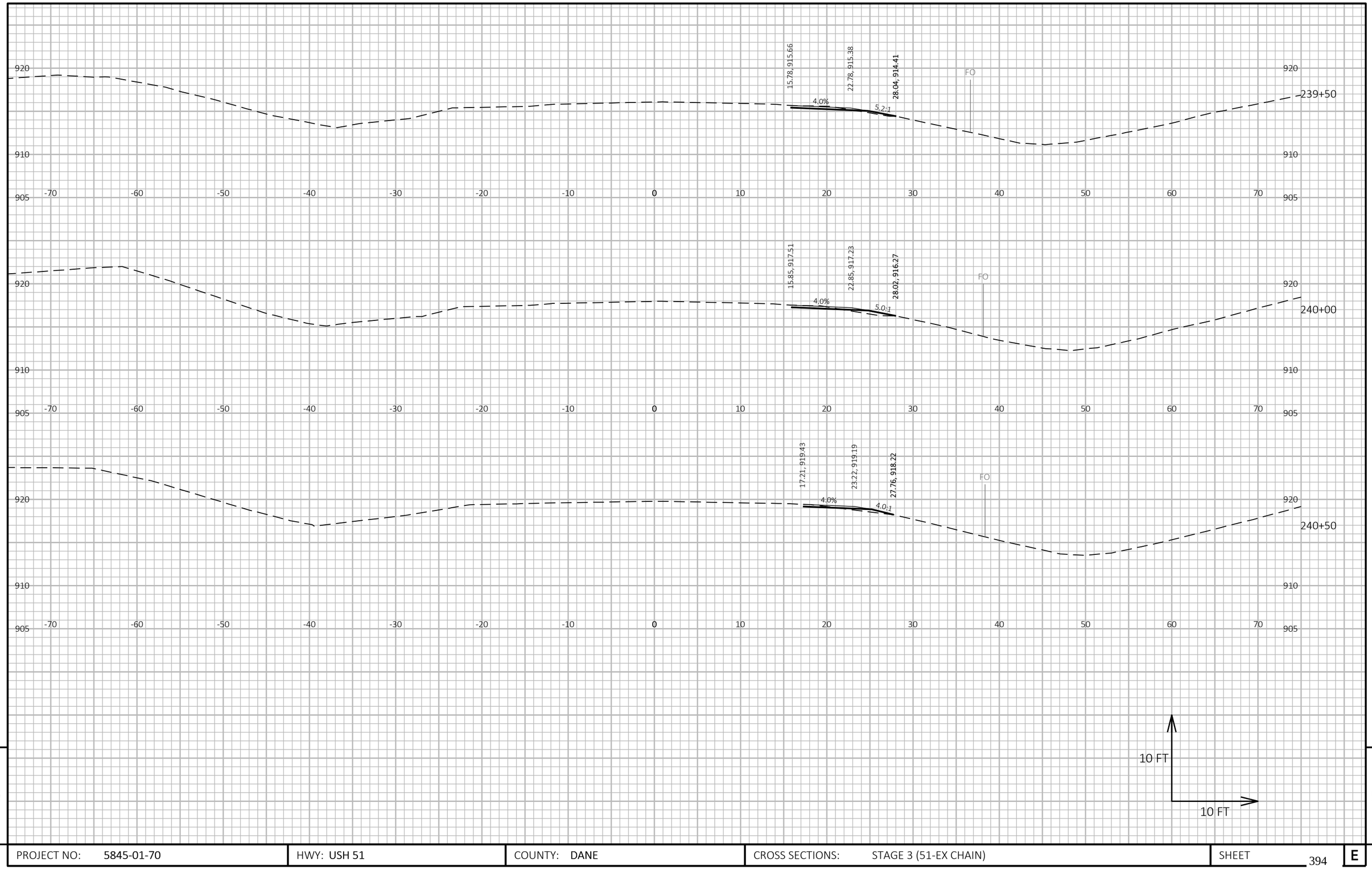
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 3 (51-EX CHAIN) | SHEET 393 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090203-xs-ex-s3

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

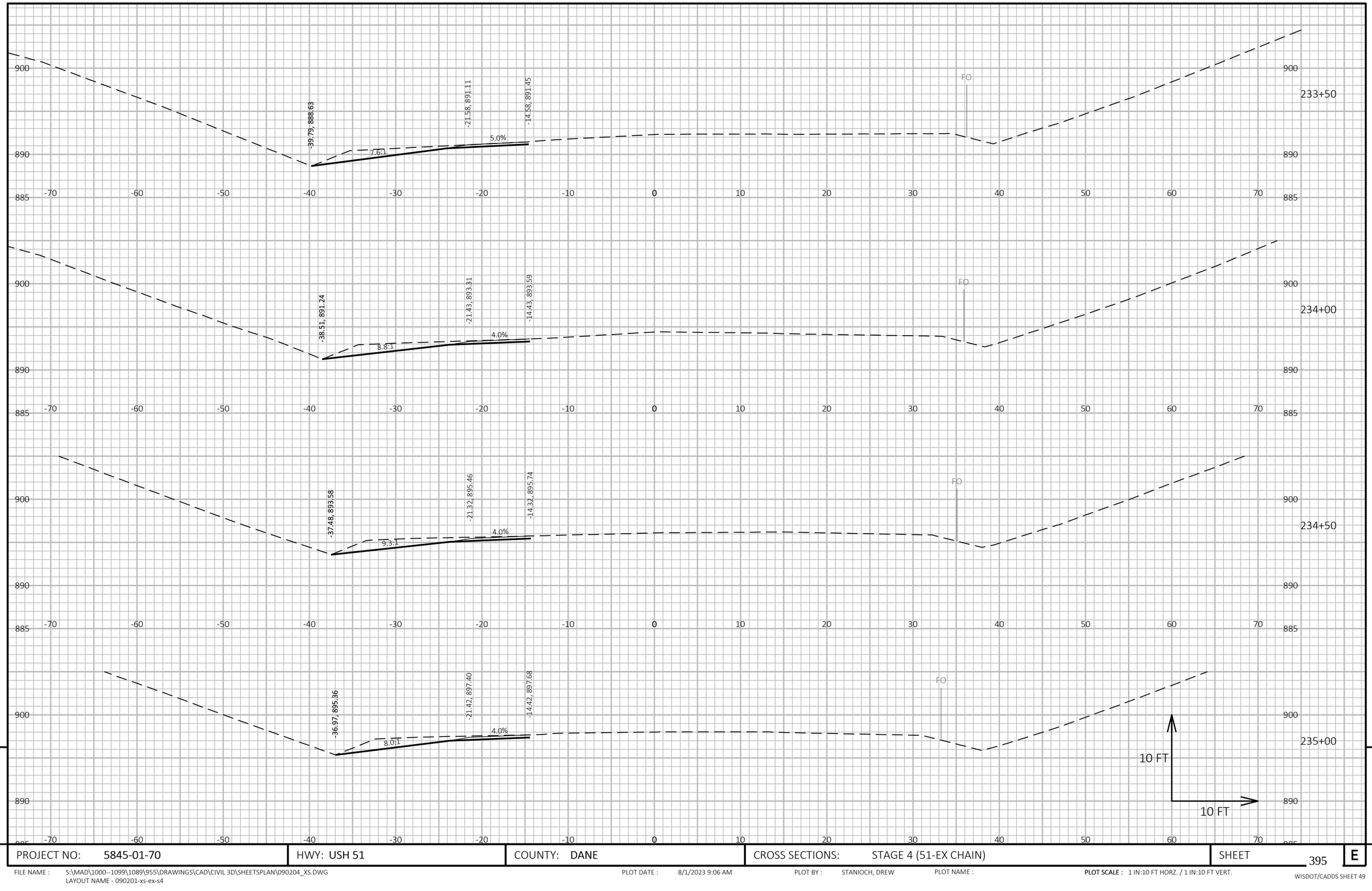
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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 3 (51-EX CHAIN) | SHEET 394 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090204-xs-ex-s3

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

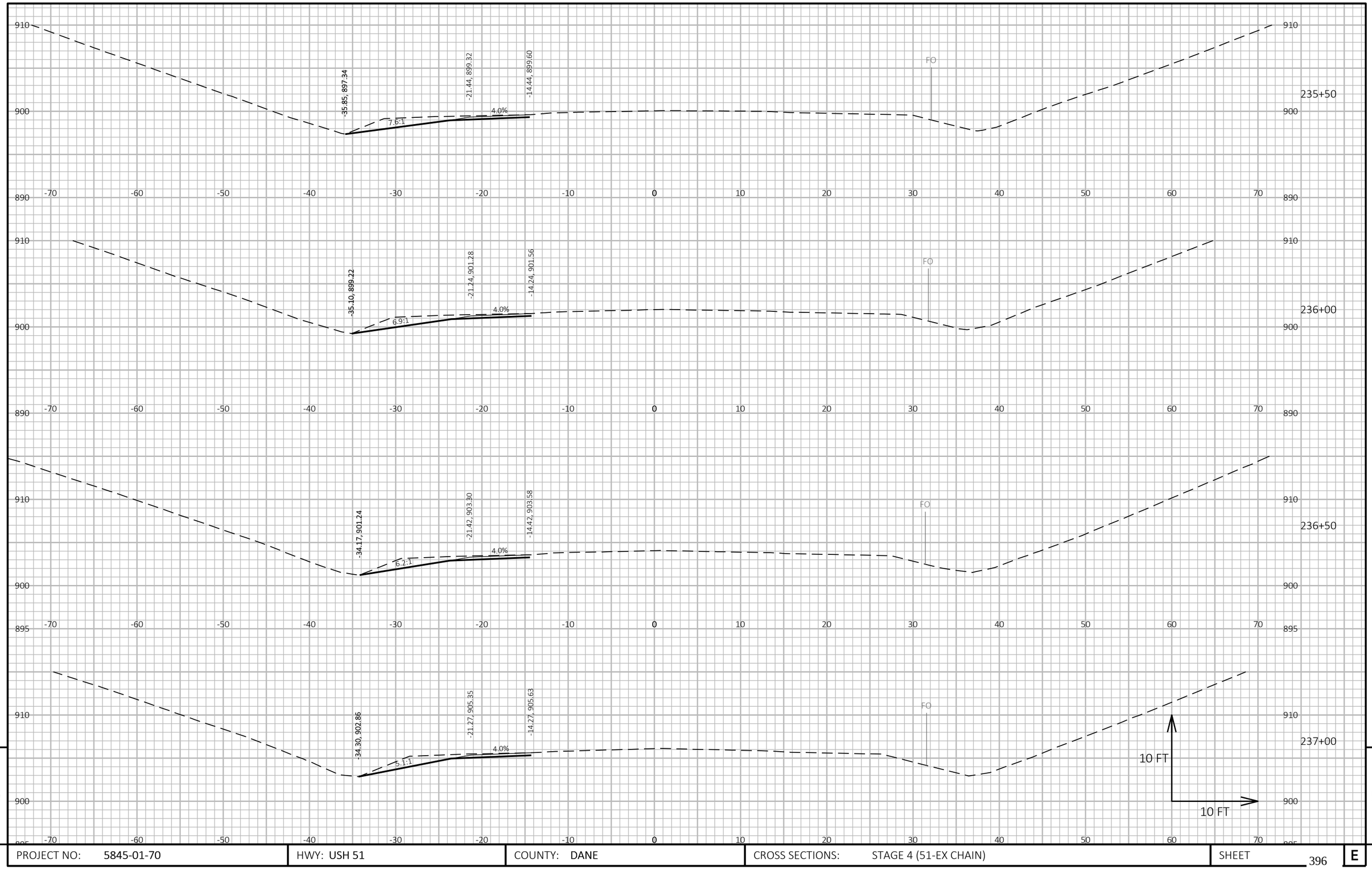



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 4 (51-EX CHAIN) | SHEET 395 E |

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090201-xs-ex-s4

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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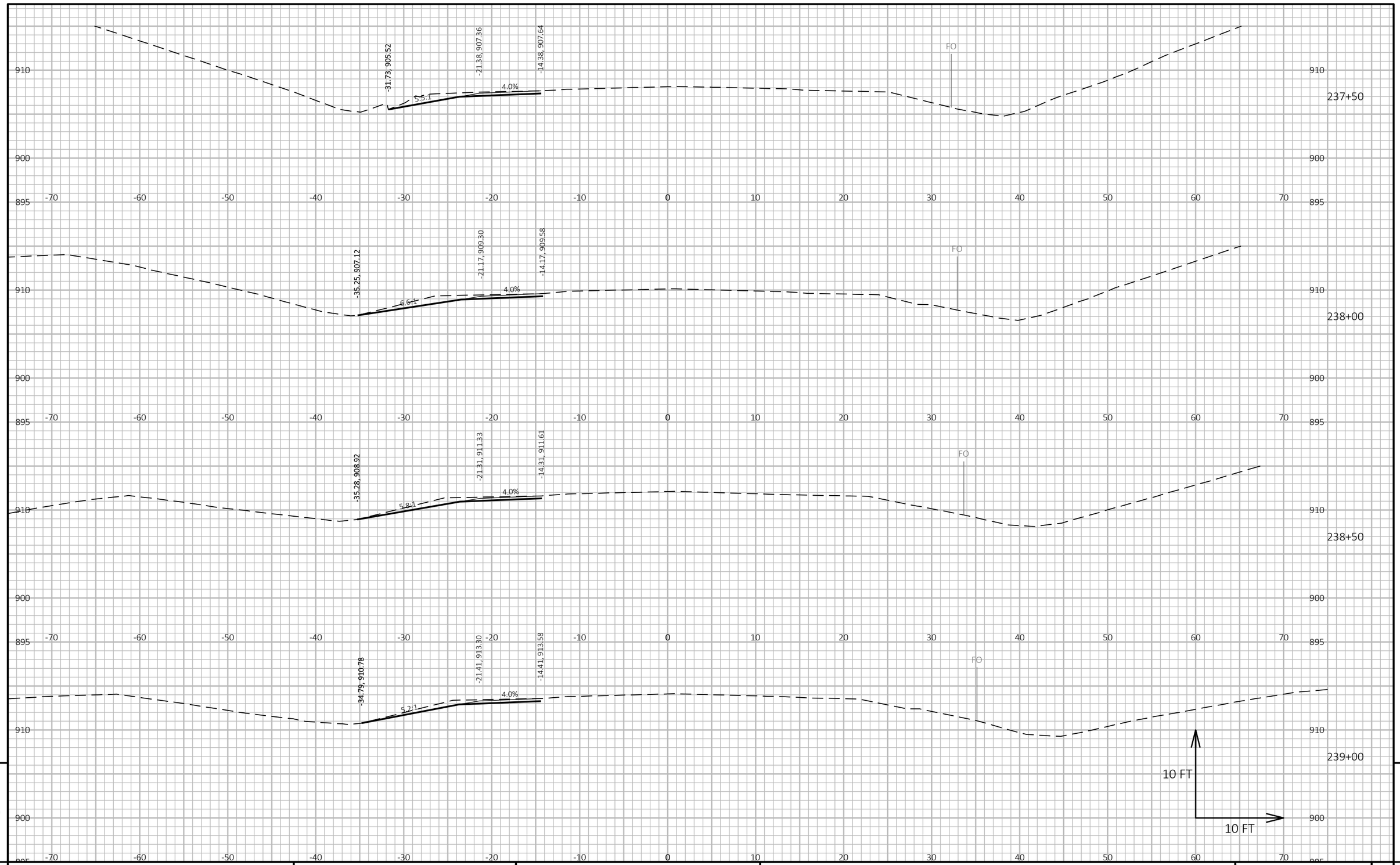
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 4 (51-EX CHAIN) | SHEET 396 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090202-xs-ex-s4

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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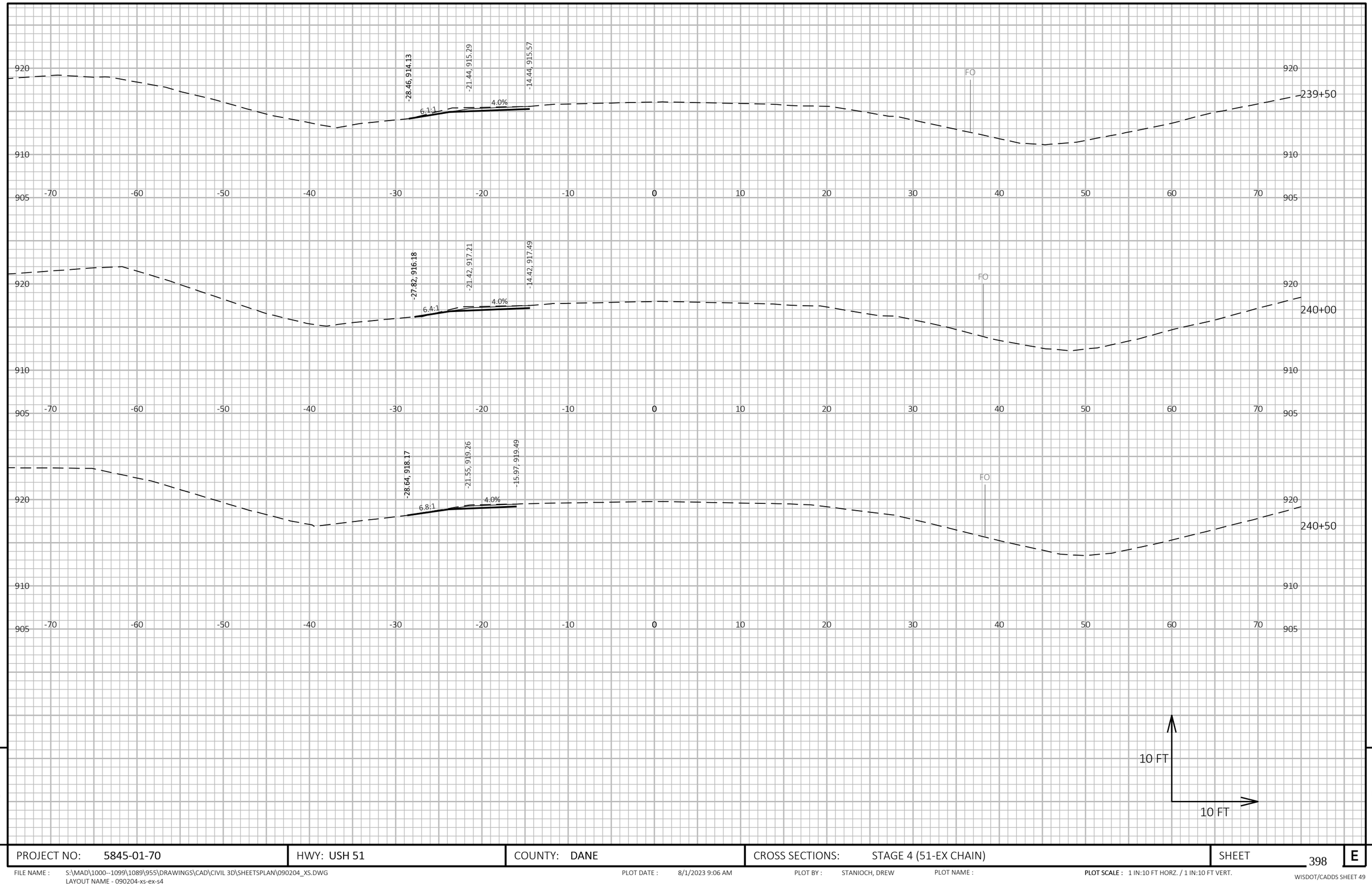
| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 4 (51-EX CHAIN) | SHEET 397 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090203-xs-ex-s4

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




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| PROJECT NO: 5845-01-70 | HWY: USH 51 | COUNTY: DANE | CROSS SECTIONS: STAGE 4 (51-EX CHAIN) | SHEET 398 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\1000--1099\1089\955\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090204_XS.DWG
LAYOUT NAME - 090204-xs-ex-s4

PLOT DATE : 8/1/2023 9:06 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

*Wisconsin Department of Transportation*

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov